

PRODUCT CATALOG 2016



Fasteners for threaded members

Pipe and cable fasteners

Panel fasteners

Other fasteners





“ It is individual talent and commitment that have forged our success and sustainability. The solidity of our expertise, our creativity and our desire for excellence exists thanks to the people who make up our company. ”

MORE THAN FASTENING

Our family company is proud of its 150-year history, and I am always impressed by how far we have come. Our first innovations were designed to meet the needs of gloves and shoes manufacturers in our local area, and since 1865, we have combined our skills and knowledge to gradually master the technologies of assembly and fastening and place them at the service of high-tech industries around the world.

It is to the «cooperative entrepreneur» spirit of our engineers and technicians that we owe our industrial development : it is to their expertise, carefully passed down from generation to generation, that we owe our mastery of technology. It is their capacity for innovation, their sense of initiative and their anticipation that have allowed us to diversify our activities, expand our ranges and adapt to changes in the market.

In keeping with our growth internationally, we have established a networked organization which promotes the exchange and sharing of ideas and experiences, propels initiatives towards completion, and creates value for both our customers and our 5,500 employees.

Innovation has shaped our development from the press-stud for clothing to plastic injection moulding for the automotive sector . Today, we invest 6% of our turnover in research. We are the proud holders of more than 1,000 patents and our Centre of Expertise allows us to grasp new opportunities for innovation.

What we have achieved so far is quite remarkable. We have consolidated our acquisitions and developed our skills sets, sharing our technologies and establishing five areas of expertise: engineering services, metal processing, plastic injection, adhesive production and assembly.

It is individual talent and the commitment of people that has forged our success and sustainability. The solidity of our expertise, our unlimited creativity and our commitment to excellence exist thanks to the people who make up our company.

●
Antoine Raymond
President
ARaymond Network

ABOUT THE PRODUCT CATALOG

The purpose of this catalogue is to give basic information to assist your choice of parts.

Please request a technical drawing and samples to confirm it meets your functional requirements (Important: at all times the latest technical drawing is binding). In case there are any doubts, you should to contact us.

For special design requests and tasks, do not hesitate to ask us.

'000'S OF FASTENING SOLUTIONS IN 4 CATALOGUES

To assist your search, our collection is divided up into several fastening principle "FAMILIES" and each family is determined by:

1 - The function of the part

Each catalogue presents one or several of the fastening principle families.
For example: Nuts, pipe and cable fasteners, ...

2 - The assembly conditions

The fastening principles proposed in each catalogue are listed by their fitting conditions.
For example: Fasteners to be assembled, to be inserted into a hole, ...

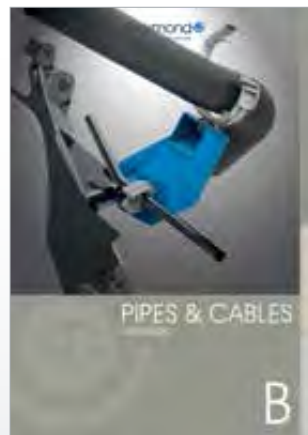
FASTENERS

FOR THREADED MEMBERS



PIPES & CABLES

FASTENERS



PANEL

FASTENERS




OTHER

FASTENERS



TO ASSIST YOUR SEARCH

?	REF.	M	A	B	F	ØR	h	l x b	s	Form
	019074	6,0	8,5	17,5	3,5...4	10,5...10,7	7,5	19,6 x 18	0,8	1
	015463	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,9 x 15	0,5	2
A	015371	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,9 x 15	0,5	2
A	015370	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,9 x 15	0,5	2

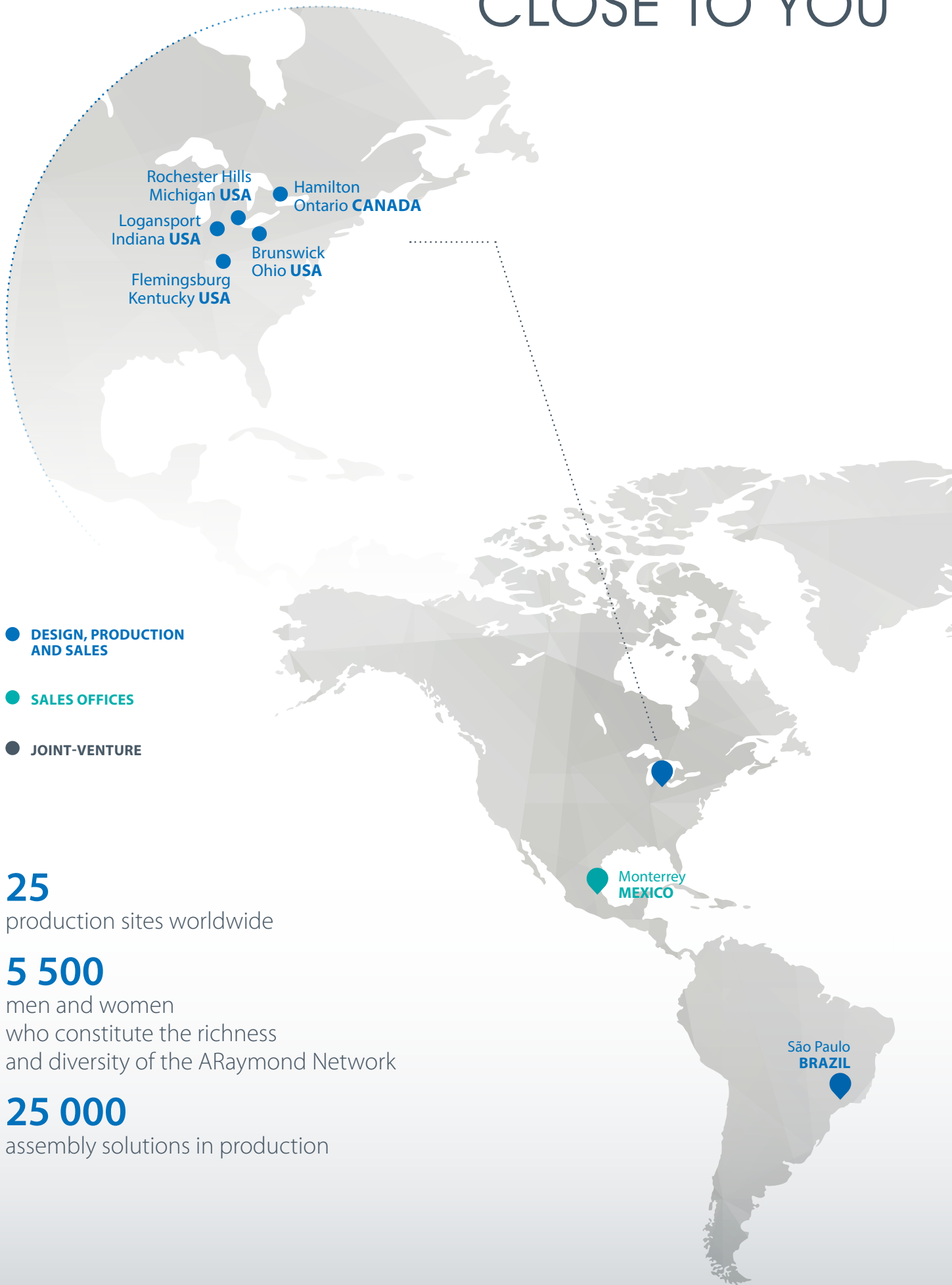


? Feature of the part

A	selbstsichernd - self-locking
B	für selbstformende Schraube - self tapping screw
C	geräuschkämmende Halter AR-Bag® - 2K Teile - AR-Bag® anti noise insulation - Bi-injection
D	mit hochgezogenen Kanten - with raised edges
E	mit Haltezungen für variable Durchmesser - legs within the bore for varying diameter hoses
F	mit Kupplungsstück - with connector
G	für Wellrohre - for corrugated tubes
H	montage durch Vierteldrehung - for quarter turn insertion
I	rostfreier Stahl - stainless steel
z	auf Anfrage - on request



CLOSE TO YOU



- DESIGN, PRODUCTION AND SALES
- SALES OFFICES
- JOINT-VENTURE

25
production sites worldwide

5 500
men and women
who constitute the richness
and diversity of the ARaymond Network

25 000
assembly solutions in production

EVERYWHERE



SHARING YOUR NEEDS, CLOSE TO YOU

EUROPE

FRANCE, Grenoble / Fastening systems

Industrial capabilities

Type of machines (metal): Slitting machine, Stamping presses, Bending machines, Degreasing machines, Heat treatment, Packaging lines, Automated sorters

Type of machines (plastic): Injection presses (Five bi-material injection moulding machines), Packaging lines

Assembly machines: Assembly lines

Types of equipment: Laboratory dedicated to raw materials, Logistics centre

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001
OHSAS 18001

FRANCE, Grenoble,

A.RAYMOND SARL

St-Egreve:

Rue des Abattoirs
38120 Saint Egrève

Grenoble Berriat:

113 Cours Berriat - BP 157
38019 Grenoble cedex 1

Grenoble Technisud:

ZA technisud
123 rue Hilaire de Chardonnet
38030 Grenoble Cedex 2
Tel. +33 476 33 49 49

contact.fr@araymond.com

FRANCE, Saint-Louis, Meyzieu / Bonding solutions

Industrial capabilities

Type of machines: Fully-integrated high-speed bonding lines

Competences

- Adhesive formulation and production

Quality certifications

ISO/TS 16949

FRANCE,

Saint-Louis, Meyzieu

A.RAYBOND SARL

1 Rue Alexandre Freund
68300 Saint-Louis

Tel. +33 389 89 77 60

5 Avenue Lionel Terray

Le Mas des Entreprises de Meyzieu
69330 Meyzieu

Tel. : +33 4 72 44 67 50

contact.bonding.fr@araymond.com

GERMANY, Lörrach, Weil am Rhein / Fastening systems

Industrial capabilities

Type of machines (metal): Stamping presses, Bending machines, Heat treatment, Surface treatment

Type of machines (plastic): Injection presses, Injection moulding machines with Quick Connectors

Types of equipment: 3D measurement, 2D optical measurement, Measurement of tensile strength, Measurement of melt volume index (MVI) and of density and water content (Karl Fischer)

Equipment for testing: Stress testing, Microscope testing, Metallographic testing, Corrosion resistance testing, Mechanical testing

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001
ISO 50001

GERMANY,

A Raymond GmbH & Co. KG
Teichstrasse 57,
79539 Lörrach

[Werk Weil am Rhein]
Hegenheimer Str. 22,
79576 Weil am Rhein

[Werk Bremgarten]

Max-Immelmann-Allee 25,
Tel. +49 7621 174 0

contact.de@araymond.com



Germany-Weil am Rhein

Germany-Lörrach

Russia -Nizhniy Novgorod

EUROPE

GERMANY, Bremgarten, FRANCE, Grenoble Fluid connectors (Quick Connectors)

Industrial capabilities

FRANCE (Grenoble)

Type of machines (plastic): Injection presses
Assembly machines: Semi-automated and fully automated lines, Clean room assembly

GERMANY (Bremgarten)

Type of machines (plastic): Injection presses
Assembly machines: Semi-automated and fully automated lines, Clean room assembly
Types of equipment: Laboratory dedicated to materials

Competences

- Engineering & Services
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001
OHSAS 18001

FRANCE, RAYCONNECT INTERNATIONAL SASU
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123, rue Hilaire de Chardonnet
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79427 Eschbach/Breisgau
GERMANY
Tel. +49 7634 5080-433
contact.connecting.de@araymond.com

ITALY, Carisio / Fastening systems

Industrial capabilities

Type of machines (metal): Stamping presses, Bending machines, Heat treatment

Type of machines (plastic): Injection presses

Types of equipment:

Each injection moulding machine is equipped with:
- Magnetic map
- Pick & Place system for removal of core

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001

ITALY, Carisio
A.RAYMOND ITALIANA S.R.L.
Via Provinciale Torino-Svizzera,
41 13040 Carisio (Vercelli)
Tel. +39 0161 93 73 11
contact.it@araymond.com

RUSSIA, Nijni Novgorod / Fastening systems

Industrial capabilities

Type of machines (plastic): Injection presses, Moulding machines

Assembly machinery: Manual and semi-automated assembly

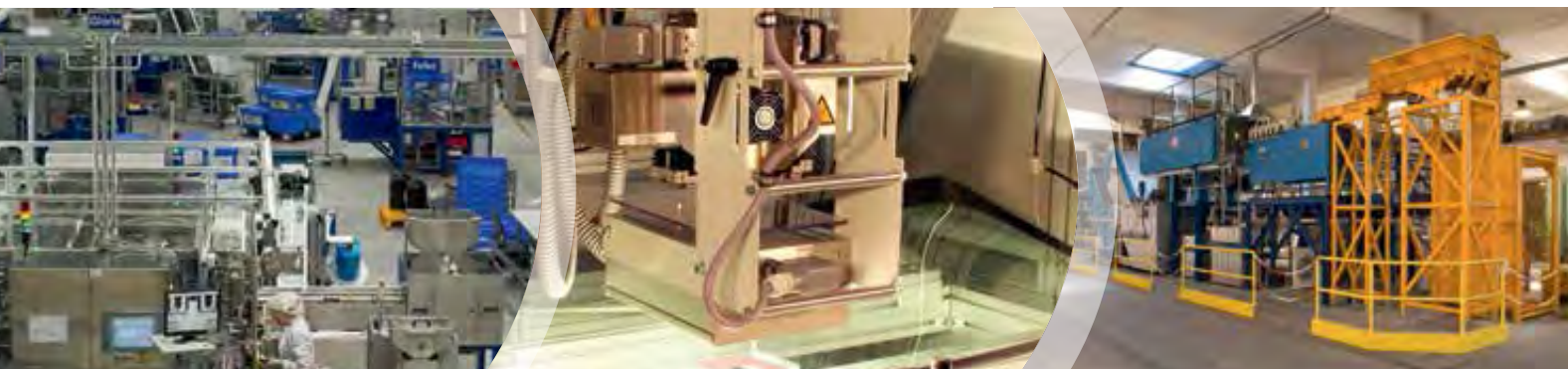
Competences

- Plastic injection
- Assembly

Quality certifications

ISO 9001

RUSSIA,
A. Raymond RUS LLC
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Dzerzhinsk,
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606019 Russia
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contact.ru@araymond.com



Germany-Bremgarten

France -Saint Louis - Bonding solutions

Italy-Carisio -Metal transformation

EUROPE

SPAIN, Sant-Fruitos-de-Bages / Fastening systems

Industrial capabilities

Type of machines (metal): Stamping presses, Bending machines, Heat treatment

Type of machines (plastic): Injection presses

Types of equipment: Dimensional and functional testing, Testing of weight and appearance, Temperature testing, Testing of surface treatment

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001

SPAIN,

Sant-Fruitos-de-Bages
A RAYMOND TECNACERO SAU
Carretera Manresa a Berga,
Km 0.5
08272 Sant-Fruitos-de-Bages
(Barcelona)
Tel. +34 93 87 71 314
contact.es@araymond.com

THE CZECH REPUBLIC, Jablonec / Fastening systems

Industrial capabilities

Type of machines (plastic): Injection presses, Presses, with capacity to be checked during RFQ

Types of equipment: 3D measuring equipment, 3D scanner

Competences

- Engineering & Services
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001

THE CZECH REPUBLIC,

Jablonec
A.RAYMOND JABLONEC S.R.O.
Cs. Armady 27
CZ 6 466 05 Jablonec
Tel. +420 4833 58 111
contact.cz@araymond.com

TURKEY, Kocaeli / Fastening systems

Industrial capabilities

Type of machines (plastic): Injection presses

Types of equipment: 3D measurement, 2D optical measurement, measurement of tensile strength, measurement of melt volume index (MVI), and of density and water content (Karl Fischer)

Competences

- Engineering & Services
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001
OHSAS 18001

TURKEY, Kocaeli

A RAYMOND BAĞLANTI
ELEMENLARI
SANAYI VE TİCARET LTD. ŞTİ.
TOSB Taysad Organize Sanayi
Bölgesi
1.Cadde 14. Sokak N°:9
41420 Gebze - Kocaeli
Tel. +90 262 658 1058
contact.tr@araymond.com



Spain – Sant-Fruitos-de-Bages
Metal transformation

Turkey – Kocaeli

Czech Republic – Jablonec

AMERICA

BRAZIL, São Paulo / Fastening systems & Fluid connectors

Industrial capabilities

Type of machines (metal): Stamping presses, Bending machines

Type of machines (plastic): Injection moulding

Assembly machines

Types of equipment: Tests on raw materials and finished products, 3D printer

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001

BRAZIL, São Paulo

A. RAYMOND BRASIL LTDA
Avenida Comendador
Joao Lucas, 555
Distrito Industrial
CEP 13.280-000 Vinhedo
Tel. +55 19 3836 6900
contact.br@araymond.com

CANADA, Hamilton / Fastening systems

Industrial capabilities

Types of machines (metal): Vertical presses for steel stamping, Bending machines, Heat treatment, Surface treatment

Types of equipment: Performance tests for metal fastenings

Competences

- Engineering & Services
- Metal transformation

Quality certifications

ISO/TS 16949
ISO 14001

CANADA, Hamilton

A. RAYMOND TINNEMAN
MANUFACTURING HAMILTON, Inc.
686 Parkdale Avenue North
Box 2492
Hamilton, Ontario
L8N 3K1
Tel +1 248 260 2121
contact.ca@araymond.com

USA, Brunswick / Fastening systems & Bonding solutions

Industrial capabilities

Type of machines (metal): Stamping presses, Bending machines

Type of machines (plastic): Horizontal injection presses, Vertical injection presses

Types of equipment: Traction bench, Torque measurement, Coordinate measuring machine

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Adhesive production
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001

THE UNITED STATES,

Brunswick
A. RAYMOND TINNEMAN
INDUSTRIAL, Inc.
1060 W. 130th Street
Brunswick, OH 44212, Ohio
Tel. +1 330 220 5100
contact.us@araymond.com



USA – Hamilton

Brazil – Sao Paulo
Engineering and services

USA – Brunswick

AMERICA

USA, Flemingsburg / Fastening systems

Industrial capabilities

Type of machines (metal): Stamping presses, Roller mills, Welding machines

Type of machines (plastic): Injection moulding

Types of equipment: Coordinate measuring machine, EDM wire cutting machines

Competences

- Metal transformation
- Plastic injection

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001

THE UNITED STATES,

Flemingsburg
A.RAYMOND TINNERMAN
MANUFACTURING Inc.
525 Mount Carmel Avenue
Flemingsburg, KY 41041
Tel,+ 1 606 845 2511
contact.us@araymond.com

USA, Logansport / Fastening systems

Industrial capabilities

Type of machines (metal): Stamping presses, Stamping line systems, Bending machines with several carriages

Special machinery: Incorporating assembly, Welding, Tapping and visual inspection

Treatments: 2 Heat treatment lines, 1 Galvanising line, 1 Cleaning line, 1 Phosphating line, 1 Mechanical galvanising line, 2 Painting lines.

Competences

- Engineering & Services
- Metal transformation
- Assembly

Quality certifications

ISO/TS 16949
ISO 9001
ISO 14001

THE UNITED STATES,

Logansport
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MANUFACTURING, Inc.
800 W County Road 250 S
Logansport, In
46947-8269
Tel. +1 574 722 5168
contact.us@araymond.com

USA, Rochester Hills, Fastening systems / Fastening systems

Industrial capabilities

Type of machines (plastic): Horizontal injection presses, Bi-injection presses

Competences

- Engineering & Services
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001

THE UNITED STATES,

Rochester Hills
A.RAYMOND TINNERMAN
AUTOMOTIVE, Inc.
3091 Research Drive
Rochester Hills Mi. 48309
Tel. +1 248 226 5900
contact.us@araymond.com

USA, Rochester Hills / Fluid connectors (Quick Connectors)

Industrial capabilities

Type of machines (plastic): Injection presses, Semi-automated and fully automated assembly machinery

Types of equipment: Instron, Vibrator, Thermotron / Life tester, Burst chamber

Competences

- Engineering & Services
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001

THE UNITED STATES,

Rochester Hills
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USA – Rochester Hills

USA – Logansport

Brazil – Sao Paulo

ASIA

CHINA, Zhenjiang

Fastening systems & Fluid connectors (Quick Connectors)

Industrial capabilities

Type of machines (plastic): Injection presses, Manual line

Type of machines (metal): Stamping presses, Bending machines, Assembly machines, Assembly lines

Types of equipment: Laboratory equipped for performance testing of fasteners and raw materials, Dimensional and functional testing, Mechanical testing, Stress testing, Testing of resistance to corrosion and temperature

Competences

- Engineering & Services
- Metal transformation
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001
BS OHSAS 18001

CHINA, Zhenjiang

A. RAYMOND AUTOMOTIVE FASTENERS (Zhenjiang) Co., Ltd
19 Wei Si Road
Ding Mao New Area
Zhenjiang 212009
Jiang Su
Tel. +86 0511-85309100
contact.cn@araymond.com

INDIA, Pune

Fastening systems & Fluid connectors (Quick Connectors)

Industrial capabilities

Type of machines (plastic): Injection presses, Moulding machines

Assembly machinery: Assembly

Types of equipment: Tensile strength test bench, Hardness tester, MFI Test (melt flow index), Profile projector, 3D printer

Competences

- Engineering & Services
- Plastic injection
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001
OHSAS 18001

INDIA, Pune

A RAYMOND FASTENERS INDIA Pvt. Ltd
Gat no 259, 276/8b, nighoje-chakan, taluka- khed, pune 410 501.
Saghavi complex 128/2 Telco road/Chinchwad Pune 411019 Maharashtra
Tel. +91 02135 676 200
contact.in@araymond.com

JAPAN, Kanagawa

Fastening systems, Fluid connectors (Quick Connectors) & Bonding solutions

Industrial capabilities

Type of machines (plastic): Injection presses

Assembly machines: Semi-automated and fully automated assembly lines

Types of equipment: Load measuring apparatus, Digital dynamometer, Electronic scales, Electronic specific gravity meter, Air leakage tester, High-temperature dryer, Thermo-humidistat

Competences

- Engineering & Services
- Plastic injection
- Adhesive production
- Assembly

Quality certifications

ISO/TS 16949
ISO 14001

JAPAN, Kanagawa

A RAYMOND JAPAN Co., Ltd.
86-8, Soya, Hadano-shi
Kanagawa 257-0031
Tel. +81 463 40 8600
contact.jp@araymond.com



China – Zhenjiang

India – Pune

Japan – Kanagawa

PRODUCT DEVELOPMENT PROCESS



We capitalize on a complete spectrum of capabilities in the product development lifecycle to design innovative assembly solutions.



FASTENERS

FOR THREADED MEMBERS



A

A NUTS

NUTS CLAMPED ONTO PANEL EDGE



PRESTOLE CLIPS C TYPE	A-01
PRESTOLE CLIPS J TYPE	A-09
CLIPS WITH DRAWN BARREL FOR METRIC SCREW	A-10
CLIPS WITH DRAWN BARREL FOR METRIC SCREW (for automatic assembling)	A-12
CAGE NUTS FOR METRIC SCREWS	A-13
PLASTIC NUTS FOR SOFT MATERIAL SCREWS	A-14

NUTS WELDED OR BONDED



CAGE NUTS AND PRESTOLE NUT TYPE	A-15
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NUTS PRESSED IN HOLE



PLASTIC NUTS	A-16
METAL NUTS	A-21

NUTS NAILED



ANCHOR NUT	A-23
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NUTS SCREWED



SELF-TAPPING NUTS FOR PLAIN SMOOTH RODS	A-24
PRESTOLE TYPE NUTS FOR THREADED STUD	A-25
PLASTIC NUTS FOR THREADED STUD	A-26
METAL NUTS FOR METRIC THREADED STUD	A-27

NUTS DRIVEN IN



PRESTOLE TYPE NUTS WITH GRIPS	A-28
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ANTI-CREEPING NUTS



ELASTIC ANTI-CREEPING RINGS - TO SWAGE	A-29
NON-ELASTIC ANTI-CREEPING RINGS - TO SWAGE, TO PUSH-IN	A-31



NUTS TO OVERMOULD



CLIPS WITH DRAWN BARREL	A-32
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REGULATING SCREWS



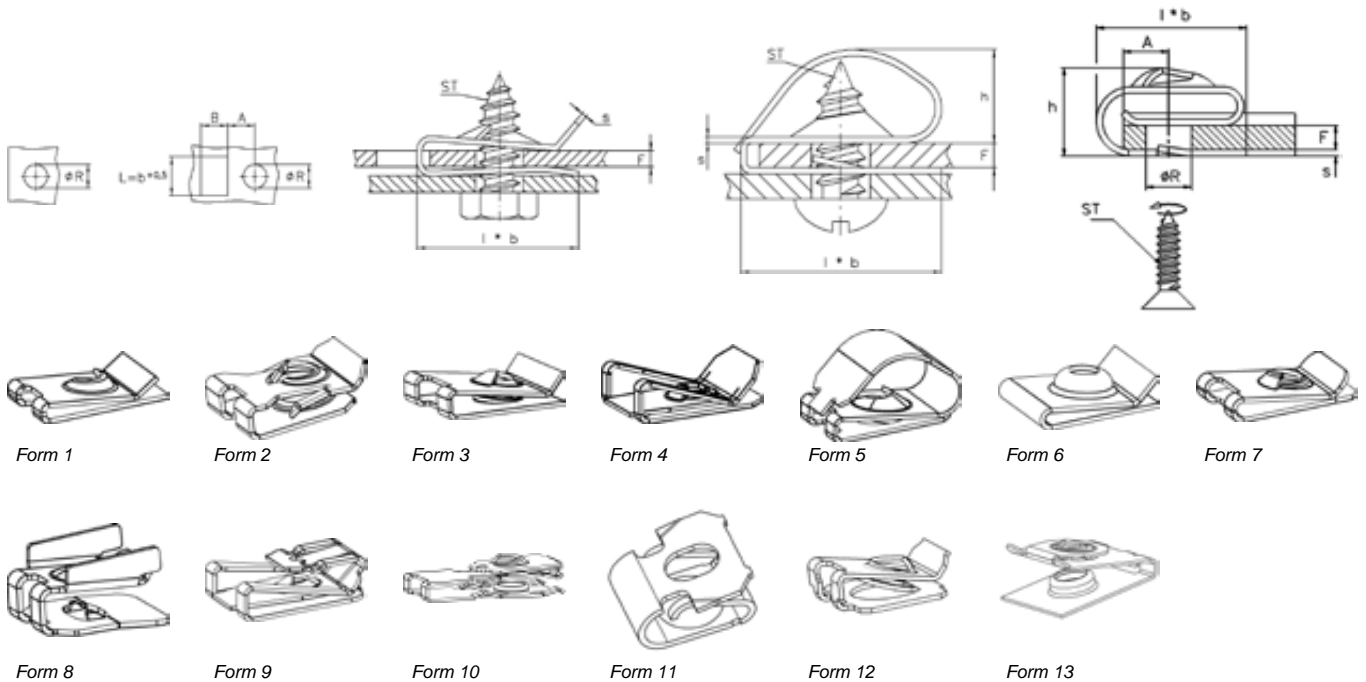
PLASTIC NUTS HAND-TURNING DEVICE FOR METRIC SCREW	A-33
SCREW GAP REGULATOR / ADJUSTER	A-34

TO HELP YOUR SEARCH, PARTS ARE IDENTIFIED BY SCREW/BOLT SIZE AND FORM TYPE

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

MATERIAL:
Spring steel C45

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

- Form 4 and 9 : available with or without locking ring for fixing into hole
- Form 5 : with cover to protect the screw tip
- Form 6 : for self-cutting screw
- Form 10 and 11 : with support sleeve to compensate for creep of plastic parts.

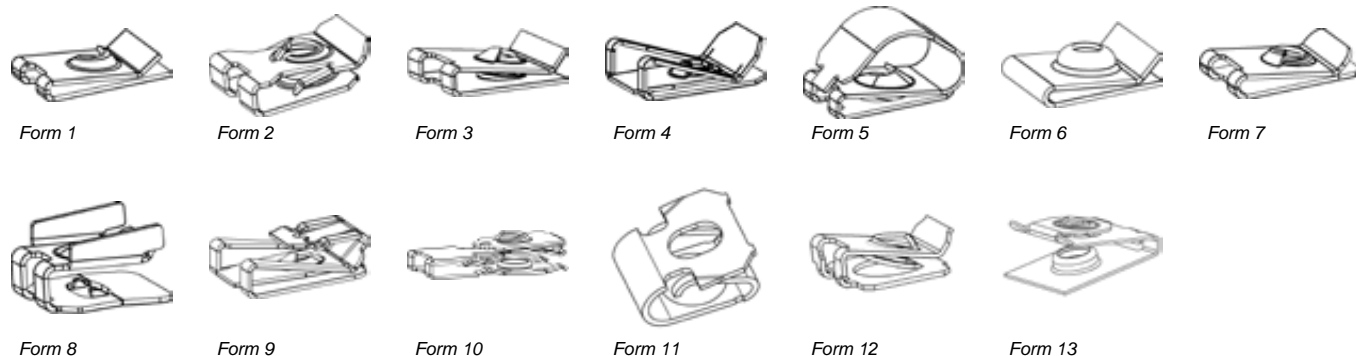
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	014565	ST 2,9	4,2	8,75 x 6	1,5...2	5,0	9,6 x 8	-	0,5	1
	013234	ST 2,9	5,0	11,8 x 7,5	2,2...2,8	4,0	12,2 x 11	-	0,5	1
	012929	ST 2,9	6,0	11,9 x 8,5	3...4	4,0	15,5 x 11	-	0,5	1
	013802	ST 2,9	11,0	11,75 x 10	0,5...1,25	4,0	20,5 x 11	-	0,5	1
	013486	ST 3,5	4,0	15,8 x 6	0,9...1,1	5,0	8 x 15	-	0,5	1
	013824	ST 3,5	4,2	8,7 x 6	2,2...2,5	5,0	9,6 x 8	-	0,5	1
	012896	ST 3,5	4,2	8,8 x 6	1,5...2	5,0	9,6 x 8	-	0,5	1
	016999	ST 3,5	4,5	-	1...1,5	4,0	9,3 x 8	-	0,5	1
	013658	ST 3,5	4,5	8,75 x 6	1,2...1,7	4,0	9,3 x 8	-	0,5	1
	015969	ST 3,5	5,0	-	2...3	5,0	12 x 8	-	0,5	1
	013695	ST 3,5	5,0	11,8 x 7	3,7...5,2	5,0	12 x 11	-	0,5	1
	016472	ST 3,5	7,0	15,8 x 5,7	1,4...2,3	7,0	11,2 x 15	-	0,5	1
	011912	ST 3,5	5,8	11,75 x 7	2,5	6,0	12,5 x 11	-	0,5	1
	013309	ST 3,5	6,0	8,8 x 7	0,9...1,2	6,0	14 x 8	-	0,5	1
	013199	ST 3,5	6,5	11,9 x 8,5	3...4	6,0	15,5 x 11	-	0,5	1
	016128	ST 3,5	6,5	13,55 x 8,5	3,5...4,5	6...7,2	11,5 x 12,7	-	0,5	1
	014620	ST 3,5	7,25	12 x 7,5	1,6...2,2	6,0	16,5 x 11	-	0,5	1
	013972	ST 3,5	7,5	12 x 7,5	1,6...1,8	6,0	16,5 x 11	-	0,5	1
	013704	ST 3,9	4,0	11,75 x 7	2,5...3	5,0	9,2 x 11	-	0,5	1
	015834	ST 3,9	5,7	8,75 x 8,5	3...4	6,0	11,5 x 8	-	0,5	1
	013733	ST 3,9	7,0	-	2,8...3	6,0	16 x 11	-	0,5	1
	011728	ST 3,9	7,0	11,75 x 8,5	1,5...3	7,0	16 x 11	-	0,5	1
	012595	ST 3,9	7,2	16,5 x 7,5	2...2,2	6,0	17 x 15	-	0,5	1
	013245	ST 4,2	4,2	8,8 x 6	1,5...2	5,0	9,6 x 8	-	0,5	1
	205944	ST 4,2	4,4	-	5,5...6,5	6,0	10,1 x 10	-	0,6	1
	019027	ST 4,2	4,5	-	3...4	4,8	12,6 x 8	-	0,5	1
	016401	ST 4,2	4,5	8,7 x 6	0,5	5,0	10 x 8	-	0,5	1

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

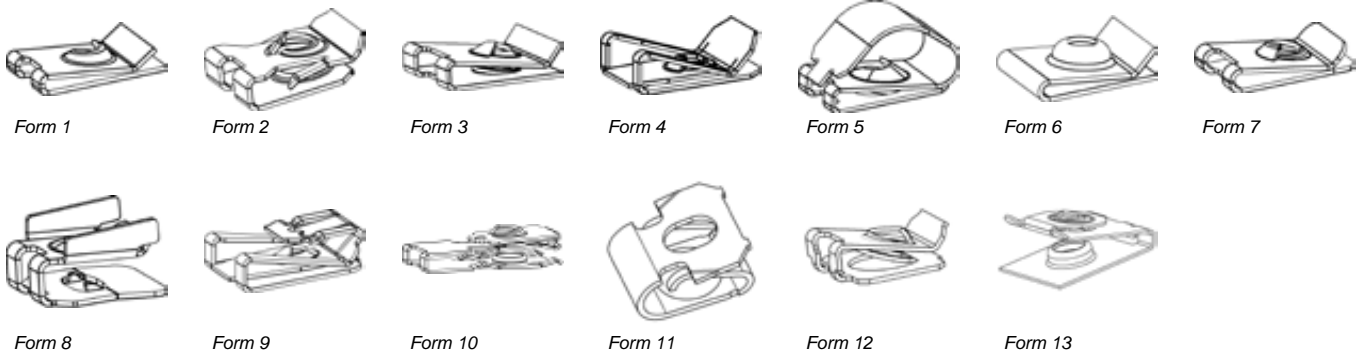


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	012667	ST 4,2	4,5	8,7 x 6	1...1,25	4,5	10 x 8	-	0,5	1
	012988	ST 4,2	5,0	8,5 x 7	2...3	5,0	12,3 x 8	-	0,5	1
	015135	ST 4,2	5,0	8,5 x 7	2...3	4,8	12,25 x 8	-	0,5	1
	012661	ST 4,2	5,5	12,1 x 7	2...2,5	6,0	12,6 x 11	-	0,6	1
	015199	ST 4,2	5,5	12,2 x 7	2,25...2,75	5,5	12,7 x 11	-	0,7	1
	015347	ST 4,2	5,5	12,2 x 7	2,25...2,75	5,5	12,7 x 11	-	0,7	1
	015076	ST 4,2	5,8	12,2 x 7	2,3...2,7	6,0	12,7 x 11	-	0,7	1
	011809	ST 4,2	5,5	12,2 x 7	2,2...2,5	6,0	12,7 x 11	-	0,7	1
	012893	ST 4,2	6,0	11,75 x 6,5	1,5...2	6,0	12,7 x 11	-	0,7	1
	011745	ST 4,2	6,5	11,75 x 8,5	3...4	6,0	16,0 x 11	-	0,5	1
	014789	ST 4,2	7,0	11,75 x 8,5	5...6	6,0	15,5 x 11	-	0,5	1
	014149	ST 4,2	7,0	11,8 x 8,5	2,7...3,0	6,0	16 x 11	-	0,5	1
	015407	ST 4,2	7,5	-	0,88...1,5	5,0	18 x 8	-	0,5	1
	013778	ST 4,2	7,5	8,75 x 7,5	0,7...1,75	5,0	16,5 x 8	-	0,5	1
	011958	ST 4,2	7,5	13,25 x 7,5	0,7...1,7	6,0	16,5 x 12,75	-	0,5	1
	013983	ST 4,2	8,5	11,8 x 10	3...4	6,0	19 x 11	-	0,5	1
	019065	ST 4,2	8,5	-	3...4	6,0	19 x 11	-	0,5	1
	015005	ST 4,2	9,0	8,75 x 9,5	4...4,8	5,0	18,5 x 8	-	0,5	1
	204663	ST 4,2	8,0	-	4,9...5,1	7,0	20 x 11	-	0,7	1
	015682	ST 4,2	11,0	-	1,75...2,25	6,5	19 x 16	-	0,5	1
	013699	ST 4,2	11,0	16,75 x 9,5	1,75...2,25	6,0	19,1 x 16	-	0,6	1
	013324	ST 4,2	12,7	16,8 x 14	1...2,3	6,0	24,5 x 16	-	0,5	1
	013251	ST 4,2	14,0	11,8 x 9	1,75...2,75	6,0	22 x 11	-	0,5	1
	014481	ST 4,2	14,0	11,5 x 9	1,75...2,75	6,0	22 x 9,5	-	0,5	1
	054649	ST 4,8	6,0	-	3...4	6,2	15,5 x 11	-	0,5	1
	011905	ST 4,8	6,5	11,8 x 8,5	3...4	6,0	15,5 x 11	-	0,5	1
	015101	ST 4,8	6,5	12 x 8,5	3...4	6,0	15,6 x 11	-	0,6	1
	013473	ST 4,8	6,5	20,5 x 7,5	3,5...4,5	6,0	13,05 x 20	-	0,55	1
	055301	ST 4,8	7,0	13,5 x 17	2...3,5	7,9	15 x 12	-	0,6	1
	018465	ST 4,8	7,5	-	1,4...1,6	6,0	17 x 13	-	0,8	1
	011844	ST 4,8	7,5	11,8 x 7,5	0,75...1,75	6...8	16,5 x 11	-	0,5	1
	018650	ST 4,8	8,0	-	0,5...2,5	8,0	20 x 15	-	0,7	1
	018959	ST 4,8	8,0	-	2,5...5	8,0	20 x 15	-	0,7	1
	015891	ST 4,8	8,7	13,5 x 10	0,8...1,4	6,0	17,6 x 12,5	-	0,6	1
	012816	ST 4,8	8,8	13,5 x 10	1...3	6,0	19,5 x 12,5	-	0,6	1
	016032	ST 4,8	8,8	13,5 x 12	0,8...1,4	6,0	19,7 x 12,5	-	0,7	1
	015515	ST 4,8	8,8	13,5 x 11	0,8...1,4	6,0	19,6 x 12,5	-	0,6	1
	013832	ST 4,8	8,8	13,5 x 10	1...3	6,0	19,5 x 12,5	-	0,5	1
	020340	ST 4,8	10,0	-	5...6	6,0	18,5 x 10,85	-	0,5	1
	015232	ST 4,8	10,5	15,5 x 17,5	4...5	6,0	21 x 15	-	0,6	1
	012109	ST 4,8	11,0	16,75 x 12	0,8...1,7	6,0	19,2 x 16	-	0,7	1
	013576	ST 4,8	11,0	16,75 x 14	5...6	6,0	22,6 x 16	-	0,6	1
	012078	ST 4,8	12,0	16,8 x 14	3...4	7,2	23,7 x 16	-	0,7	1
	018960	ST 4,8	12,0	-	0,5...2,5	8,0	24 x 15	-	0,7	1
	012829	ST 4,8	12,7	15,25 x 15	1,5...2,3	6,0	24,7 x 14,5	-	0,7	1
	012139	ST 4,8	12,7	16,8 x 14	1,5...2,3	6,0	24,7 x 16	-	0,7	1
Z	016699	ST 4,8	13,6	-	1,5...2	6,0	25 x 20,5	-	0,5	1
	012763	ST 4,8	14,0	21 x 10	1,5...2	6,0	25 x 20,5	-	0,5	1
	013864	ST 4,8	15,5	11,8 x 11	2...3	7,2	24,5 x 11	-	0,5	1

A = self-tapping B = for self-cutting screw
D = with raised edges I = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

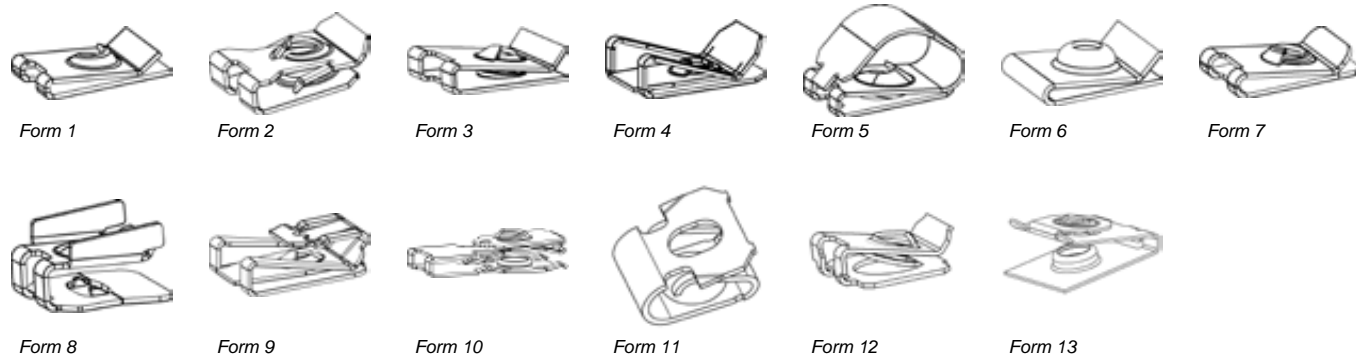


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	019129	ST 4,8	16,0	-	0,5...2,5	8,0	28 x 15	-	0,7	1
	017142	ST 4,8	22,5	-	2...5	7,2	31,5 x 11	-	0,5	1
	014226	ST 4,8	23,5	16,75 x 25	0,8...2	6,0	35,5 x 16	-	0,7	1
	017126	ST 5,5	6,0	-	3,2...4,5	6,0	14,7 x 13	-	0,7	1
	014421	ST 5,5	7,2	15,5 x 8,5	4,0	6,0	16,2 x 14	-	0,7	1
	013948	ST 5,5	8,5	-	2,2...3,2	7,5...8,5	16,6 x 54	-	0,6	1
	080695	ST 6,3	9,2	16 x 12	0,8...1,8	8,7	20,5 x 14,5	-	0,6	1
	012883	ST 6,3	10,5	14,3 x 12	0,8...1,5	7...9	19,3 x 13	-	0,8	1
	201449	ST 6,3	12,0	-	3...4	8,7	23,7 x 16	-	0,7	1
	151178	ST 6,3	12,7	-	0,7...2	8,7	24,3 x 15	-	0,8	1
Z	013946	ST 6,3	12,2	15,8 x 14	0,7...2	8,7	24,1 x 15	-	0,6	1
	013708	ST 6,3	15,0	16,75 x 14	6,5...7	7,5	24,5 x 16	-	0,8	1
	014407	ST 6,3	21,0	16,75 x 14	0,75...1,5	8,7	30,8 x 16	-	0,8	1
	210014	ST 4,8	6,5	-	2,5	6,0	14,2 x 12	-	0,7	1
	212948	ST 4,2	4,2	-	1,5...2	5,0	9,6 x 8	-	0,5	1
	014235	M4	9,75	-	0,8...1,2	6,5	13,25 x 11	-	0,5	1
	014026	ST 2,9	4,3	8,7 x 6	1,2...1,6	5,0	9,8 x 8	-	0,5	1
	012668	ST 3,5	5,0	12 x 7	2,2...2,7	6,7	12,5 x 11	-	0,5	2
	052924	ST 3,5	10,0	-	0,6...1,6	5,0	21,5 x 12	-	0,6	2
A	019618	ST 4,2	7,0	10,5 x 8,5	3,6...4	4,8	14,2 x 10	-	0,7	2
	011362	ST 4,2	7,5	11,5 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	2
	013483	ST 4,8	5,0	13,5 x 7,5	7,7...8,2	8,0	14,2 x 13	-	0,7	2
	012653	ST 4,8	8,75	-	2,5...2,8	7,9	16,5 x 12,5	-	0,6	2
	017928	ST 4,8	10,0	15,5 x 7,5	2,1...3,1	8,0	18,2 x 15	-	0,6	2
	210067	ST 2,9	3,8	-	2,5	5,5	9,4 x 12	-	0,5	3
	013174	ST 2,9	4,5	8,7 x 6	0,7...1,6	5,5	9,9 x 8	-	0,5	3
	211439	ST 4,8	7,0	14 x 10	2,0...3,5	7,9	15 x 12	6,1	0,6	3
	012999	ST 2,9	4,5	8,7 x 6	0,5...1,2	5,5	9,9 x 8	-	0,5	3
	013765	ST 2,9	5,8	11,75 x 7,5	1,25...2,5	6,8	12,5 x 11	-	0,5	3
	011956	ST 2,9	6,0	11,75 x 6,5	0,5...1,5	6,8	13 x 11	-	0,5	3
	015392	ST 2,9	6,0	11,9 x 8,5	3...4	7,2	15,5 x 11	-	0,5	3
	012009	ST 2,9	7,2	12 x 7,5	0,5...1,7	7,2	16,5 x 11	-	0,5	3
	015990	ST 3,5	5,8	11,6 x 7	1,2...2	7,0	12,5 x 11	-	0,5	3
	014503	ST 3,5	5,8	-	2...2,75	6,8	12,5 x 11	-	0,5	3
	013825	ST 3,5	5,8	11,75 x 7	2...2,8	6,8	12,5 x 11	-	0,5	3
	013624	ST 3,5	6,0	11,75 x 7	0,5...1,5	6,8	13 x 11	-	0,5	3
	012090	ST 3,5	7,0	-	0,5...1,75	7,2	16 x 11	-	0,5	3
	011736	ST 3,5	7,2	12 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	3
	012564	ST 3,5	7,2	12 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	3
	018419	ST 3,5	8,5	-	2,1	8,0	16 x 22,5	-	0,5	3
	014333	ST 3,5	11,0	11,75 x 10	0,4...1,25	5,5	20,5 x 11	-	0,5	3
	012217	ST 3,9	3,2	-	1,25...1,5	5,6	9,5 x 15	-	0,5	3
	011359	ST 3,9	3,5	-	0,7...1	5,6	9,5 x 15	-	0,5	3
	012515	ST 3,9	5,0	-	1...2,5	5,0	12,6 x 8	-	0,6	3
	011725	ST 3,9	6,0	12 x 8,5	2...4	7,2	15,5 x 11	-	0,5	3
	014119	ST 3,9	6,0	11,75 x 6,5	1...1,7	6,5	13 x 11	-	0,5	3
	014637	ST 3,9	7,0	11,75 x 7,5	1...2,5	7,5	16 x 11	-	0,5	3

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

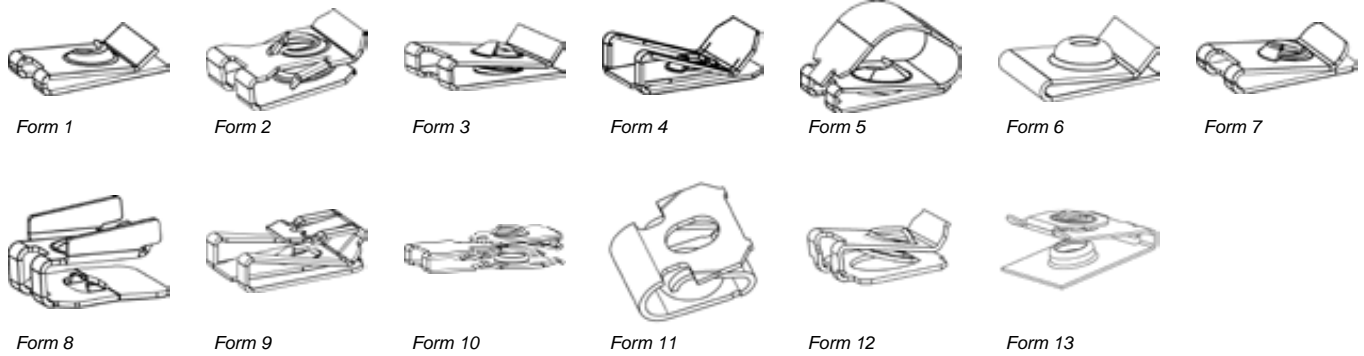


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	011347	ST 3,9	7,0	11,75 x 8,5	1...3	7,2	16 x 11	-	0,5	3
	013939	ST 3,9	7,2	-	1,5	6,0	16,6 x 11	-	0,6	3
	012594	ST 3,9	7,2	11,75 x 7,5	0,5...1,75	7,2	16,6 x 11	-	0,6	3
	011346	ST 3,9	7,5	11,75 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	3
	014867	ST 3,9	7,5	12 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	3
	011997	ST 3,9	7,5	11,75 x 7,5	0,8...1,7	6,0	16,5 x 11	-	0,5	3
	013535	ST 3,9	7,8	11,75 x 7,5	0,5...1	7,2	16,8 x 11	-	0,5	3
	015087	ST 3,9	7,75...20	20,5 x 23	0,7...1,5	7,5 x 23	29,5 x 20	-	0,5	3
	012267	ST 3,9 / ST 4,2	4,5	8,7 x 6	0,5...1,5	5,5	10 x 8	-	0,5	3
	013896	ST 4,2	4,3	10,7 x 7,5	3,5...5	6,0	12,6 x 10	-	0,55	3
	015683	ST 4,2	4,3	-	3,5...5	5,5	10,1 x 10	-	0,6	3
	012367	ST 4,2	5,0	-	1...2,5	5,0	12,6 x 8	-	0,6	3
	015320	ST 4,2	5,0	8,5 x 6,5	0,5...1,5	5,5	10,6 x 8	-	0,5	3
	011667	ST 4,2	5,8	11,8 x 6,8	1,25 ... 2	6,8	12,75 x 11	-	0,5	3
	014729	ST 4,2	5,8	11,8 x 6,5	1,25...2	6,8	12,75 x 11	-	0,5	3
	014154	ST 4,2	5,8	10,7 x 7	0,5...1,5	6,8	11,5 x 10	-	0,5	3
	151165	ST 4,2	6,0	-	0,5...1,5	6,8	13,1 x 11	-	0,6	3
	014316	ST 4,2	6,0	11,5 x 6,5	0,5...1,5	6,8	13 x 11	-	0,5	3
	012240	ST 4,2	6,0	11,5 x 6,5	0,5...1,5	6,8	13 x 11	-	0,5	3
	014339	ST 4,2	6,0	11,5 x 6,5	2,5...3	6,4	13 x 11	-	0,5	3
	052230	ST 4,2	6,5	-	1,2...2,1	6,5	14,5 x 12	-	0,5	3
	019361	ST 4,2	6,5	-	4...5	4,3 / 7	15 x 10	-	0,5	3
	151108	ST 4,2	5,5...6	10,5 x 7,6	0,7	7,0	13 x 9,5	-	0,6	3
	055111	ST 4,2	6,5	-	1,5...2,5	6,2	13,5 x 10	-	0,5	3
	014861	ST 4,2	6,5	11,5 x 8,5	3...4	7,2	15,5 x 11	-	0,5	3
	012173	ST 4,2	6,5	11,5 x 8,5	3...4	7,2	15,5 x 11	-	0,5	3
	018024	ST 4,2	7,2	-	2...2,8	7,2	16,5 x 11	-	0,5	3
	012433	ST 4,2	7,2	11,5 x 8,5	2...2,8	7,2	16,5 x 11	-	0,5	3
	054911	ST 4,2	7,2	-	1,2...2,1	6,0	16,5 x 11,5	-	0,5	3
	012697	ST 4,2	7,2	11,5 x 8,5	2...2,8	7,2	16,6 x 11	-	0,6	3
	151588	ST 4,2	7,2	-	2...3,5	7,2	17 x 10,4	-	0,5	3
	013371	ST 4,2	7,2	11,5 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	3
	014839	ST 4,2	7,5	11,5 x 7,5	0,5...1,75	7,2	16,7 x 11	-	0,7	3
	018301	ST 4,2	7,2	-	2...2,8	7,2	16,5 x 11	-	0,5	3
	015075	ST 4,2	7,2	11,75 x 7,5	2...2,8	7,2	16,6 x 11	-	0,6	3
	014731	ST 4,2	7,2	11,5 x 8,5	2...2,8	7,2	16,5 x 11	-	0,5	3
	011974	ST 4,3	7,5	11,5 x 7,5	0,5...2	7,2	16,5 x 11	-	0,5	3
	013597	ST 4,2	7,5	13,25 x 7,5	1,5...2,05	7,2	16,6 x 12,75	-	0,5	3
	012555	ST 4,2	7,5	11,5 x 7,5	1...2,05	7,2	16,5 x 11	-	0,5	3
	013764	ST 4,2	7,5	-	0,7...1,75	4,5	16,5 x 8	-	0,5	3
	013742	ST 4,2	7,0	11,5 x 7	0,5...1,2	7,2	14,3 x 11	-	0,5	3
	013690	ST 4,2	7,5	-	0,5...1,5	4,5	16,6 x 11	-	0,6	3
	015818	ST 4,2	7,5	11,5 x 7,5	0,5...1,75	7,2	16,5 x 11	-	0,5	3
	012757	ST 4,2	7,5	11,5 x 7,5	0,5...1,75	7,2	16,6 x 11	-	0,6	3
	015041	ST 4,2	7,5	11,5 x 7,5	0,5...1,7	7,2	16,6 x 11	-	0,6	3
	017013	ST 4,2	7,8	-	1...1,5	7,5	13,8 x 12,5	-	0,5	3
	013679	ST 4,2	10,0	16,5 x 9	3...4,5	7,9	18,2 x 16	-	0,7	3
	206003	ST 4,2	10,0	-	5...6	7,0	18,6 x 10,85	-	0,6	3
	215635	ST 4,2/4,3	10,8	-	1,25...2	8,0	20,7 x 13	-	0,7	3

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

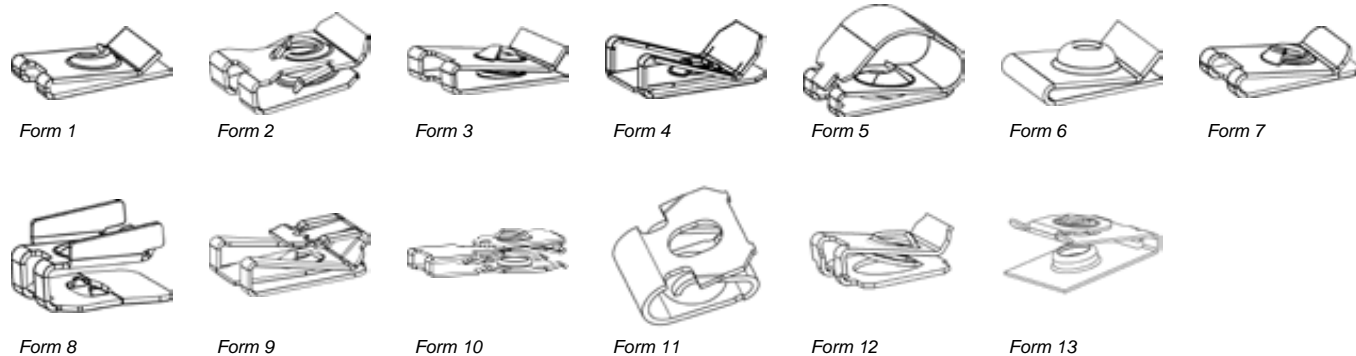


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	012577	ST 4,2	11,0	16,5 x 9	1,75...2,25	7,9	19 x 16	-	0,5	3
	015098	ST 4,2	11,0	11,5 x 8	1,75...2,75	7,2	20 x 11	-	0,5	3
	201661	ST 4,2	10,5	-	2,5...3,1	8,0	19,1 x 16	-	0,6	3
	014057	ST 4,2	14,0	11,5 x 9	1,5...2,75	7,2	22 x 11	-	0,5	3
	012438	ST 4,2	14,5	12 x 12	0,75...1,25	7,5	22,5 x 11,3	-	0,5	3
	012007	ST 4,2	16,5	13,2 x 12	3,5...5	7,2	25,5 x 12,7	-	0,5	3
	014656	ST 4,2	17,5	-	2...3,5	7,2	26,5 x 12,7	-	0,5	3
	015294	ST 4,8	6,0	13,5 x 7,5	3,8...4,2	8,0	14,2 x 13	-	0,7	3
	018435	ST 4,8	6,5	-	5...6	7,0	15,5 x 11	-	0,5	3
	015477	ST 4,8	6,5	-	11,5	8,0	16,95 x 16	-	0,95	3
	019598	ST 4,8	6,5	-	2...3	7,2	15,6 x 14	-	0,6	3
	051808	ST 4,8	6,5	-	1,2...2,1	7,0	14,5 x 12	-	0,5	3
	051739	ST 4,8	6,5	-	0,45...1,2	6,5	14,5 x 12	-	0,5	3
	018115	ST 4,8	6,8	-	2,5	7,2	16 x 11	-	0,5	3
	011967	ST 4,8	6,75	11,5 x 8,5	2,4...3	7,2	16 x 11	-	0,5	3
	013003	ST 4,8	7,0	16,5 x 8,5	0,75...1,7	7,5	14,6 x 16	-	0,7	3
	019941	ST 4,8	7,14	-	3,2...4,1	7,14	18,4 x 11	-	0,7	3
	012756	ST 4,8	7,2	11,5 x 7,5	1,7...2,3	7,2	16,6 x 11	-	0,6	3
	013133	ST 4,8	7,2	11,5 x 8,5	0,6...1,7	7,2	14,7 x 11	-	0,7	3
	016441	ST 4,8	7,2	11,5 x 8,5	2,5...3,5	7,2	16,7 x 11	-	0,7	3
	018320	ST 4,8	7,2	-	1,7...2,3	7,2	16,2 x 15	-	0,5	3
	015954	ST 4,8	7,2	11,5 x 7,5	1,7...2,3	7,2	16,6 x 11	-	0,6	3
	013956	ST 4,8	7,2	-	1,7...2,3	7,2	16,5 x 11	-	0,5	3
	012282	ST 4,8	7,2	11,5 x 7,5	1,7...2,3	7,2	16,5 x 11	-	0,5	3
	017498	ST 4,8	7,2	-	2...2,8	7,2	16,5 x 11	-	0,5	3
	017634	ST 4,8	7,2	-	1,7...2,3	7,2	16,5 x 11	-	0,8	3
	011321	ST 4,9	7,2	11,5 x 7,5	0,75...1,5	7,2	16,5 x 11	-	0,5	3
	012171	ST 4,8	7,2	11,5 x 8,5	2,5...3,5	7,2	16,5 x 11	-	0,5	3
	020880	ST 4,8	7,2	-	4,2...4,5	7,2	16,2 x 11	-	0,7	3
	012239	ST 4,8	7,5	16,5 x 7,5	0,85...1,7	7,9	15,5 x 16	-	0,5	3
	011365	ST 4,8	7,5	15 x 8,5	0,6...1,7	8,0	15,7 x 14,5	-	0,7	3
	013384	ST 4,8	7,5	11,5 x 7,5	0,5...1,7	7,2	16,7 x 11	-	0,7	3
	012138	ST 4,8	7,5	16,5 x 8,5	1...2	8,0	15,7 x 16	-	0,7	3
	013623	ST 4,8	7,5	15 x 9	0,6...1,7	8,0	15,7 x 14,5	-	0,7	3
	013649	ST 4,8	7,5	13,25 x 7,5	0,5...1,7	7,2	16,5 x 12,75	-	0,5	3
A	208764	ST 4,8	7,2	-	0,6...1,7	7,2	14,7 x 11	-	0,7	3
	013605	ST 4,8	8,5	13 x 11	2,5	7,9	19 x 12,5	-	0,6	3
	012888	ST 4,8	8,5	13 x 11	2,5...3,5	8,0	19,3 x 12,5	-	0,6	3
	012556	ST 4,8	8,75	13 x 11	2,5...2,8	7,9	19,3 x 12,5	-	0,6	3
	015027	ST 4,8	8,75	13 x 10	2,5...2,8	7,9	19,5 x 12,5	-	0,6	3
	019641	ST 4,8	9,0	-	0,5...3,1	7,0	19,5 x 12	-	0,7	3
	151161	ST 4,2	9,25	-	0,9...2	7,8	19,8 x 12,7	-	0,7	3
	014972	ST 4,8	9,25	13 x 10	0,9...2	7,9	19,8 x 12,5	-	0,5	3
	012517	ST 4,8	9,25	13 x 10	0,9...2	7,9	20 x 12,5	-	0,6	3
	204190	ST 4,8	10,0	-	5...6	7,0	18,5 x 10,85	-	0,5	3
	014065	ST 4,8	10,5	16,5 x 13	2,5...3,2	8,0	18,6 x 16	-	0,6	3
	012119	ST 4,8	10,5	-	2,5	8,0	18,95 x 16	-	0,7	3
	018382	ST 4,8	10,5	-	2,5...3,2	8,0	18,6 x 16	-	0,6	3
	012373	ST 4,8	10,5	16,5 x 12	1,8...2,8	8,0	18,95 x 16	-	0,7	3

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

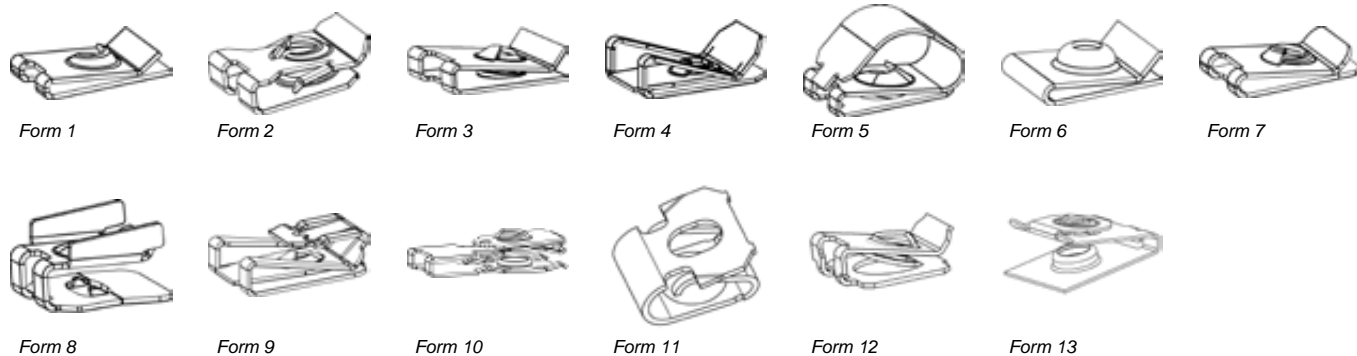


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	018068	ST 4,8	10,5	-	1...2,8	7,8	18,6 x 16	-	0,6	3
	014625	ST 4,8	11,0	-	3...4	7,8	20,2 x 16	-	0,6	3
	016661	ST 4,8	11,0	-	3...4	7,9	20,1 x 16	-	0,6	3
	016810	ST 4,8	11,0	-	2...3	7,8	20,5 x 16	-	0,6	3
	011470	ST 4,8	11,0	16,5 x 12	0,85...1,7	7,9	19,7 x 16	-	0,7	3
	015473	ST 4,8	12,0	-	5...5,5	6,0	21,6 x 13	-	0,6	3
	013198	ST 4,8	12,0	16,5 x 14	3...4	7,9	23,7 x 16	-	0,7	3
	012679	ST 4,8	14,5	11,8 x 12	0,75...1,25	7,5	23 x 11,3	-	0,5	3
	013219	ST 4,8	16,0	11,5 x 10	0,5...1,7	7,2	24,9 x 11	-	0,5	3
	016406	ST 4,8	23,5	-	0,8...2	8,5	35,7 x 16	-	0,7	3
	014174	ST 5,5	7,2	-	3...4	8,5	16,2 x 14	-	0,7	3
	013637	ST 5,5	7,2	15,5 x 10	3...4	6,0	16,2 x 14,5	-	0,7	3
	017028	ST 5,5	7,4	-	2,5...3,5	8,2	16,6 x 13	-	0,6	3
	014933	ST 5,5	7,7	15 x 8,7	1,5...3	8,7	16,7 x 14,5	-	0,7	3
	012004	ST 5,5	10,5	13,5 x 12	0,8...1,5	7,9...9,5	20,8 x 13	-	0,8	3
	201989	ST 5,5	10,5	-	0,8...1	7,9...9,5	20,8 x 13	-	0,8	3
	012144	ST 5,5	10,7	13,5 x 12	1,2...2	8,0	20,8 x 13	-	0,8	3
	011577	ST 5,5	10,7	13,5 x 12	1,2...2	7,9...9,5	20,8 x 13	-	0,8	3
	018350	ST 5,5	11,0	-	3...4	7,9	20,2 x 16	-	0,6	3
	013806	ST 5,5	12,0	16,5 x 14	3...4	8,7	23,7 x 16	-	0,7	3
	012198	ST 5,5	16,0	-	0,7...1,5	8,7	22,3 x 15	-	0,8	3
	011404	ST 6,3	7,5	16,5 x 10	0,8...1,7	8,7	16,8 x 16	-	0,8	3
	013492	ST 6,3	7,5	16,5 x 10	0,8...2	8,7	16,8 x 16	-	0,8	3
	015767	ST 6,3	7,5	-	1,2...1,7	8,7	16,8 x 16	-	0,8	3
	020275	ST 6,3	7,5	-	0,8...2	8,7	16,8 x 16	-	0,8	3
	017764	ST 6,3	7,5	-	2,85...3,7	8,7	16,8 x 16	-	0,8	3
	014232	ST 6,3	7,7	-	1,5...3	8,7	16,7 x 14,5	-	0,7	3
	018461	ST 6,3	7,7	-	1,5...3	8,7	16,7 x 14,5	-	0,7	3
	019162	ST 6,3	7,0	-	1,5	10,0	19,1 x 30	-	0,8	3
	011670	ST 6,3	11,0	16,5 x 14	5...6	8,7	22,6 x 16	-	0,6	3
	014312	ST 6,3	12,0	16,5 x 14	3...4	8,7	23,7 x 16	-	0,7	3
	013402	ST 6,3	12,7	15 x 14	0,7...2	8,7	24,3 x 14,5	-	0,8	3
	012843	ST 6,3	12,7	16,5 x 14	0,7...2	8,7	24,3 x 16	-	0,8	3
	011427	ST 6,3	13,0	16,5 x 14	0,7...1,5	8,7	24,8 x 16	-	0,8	3
	015719	ST 6,3	15,0	-	2,5...3	7,0	24,8 x 15	-	0,8	3
	012499	ST 6,3	15,0	15,5 x 14	2,5...3	7...9	24,8 x 15	-	0,8	3
	012355	ST 6,3	16,0	15,5 x 14	0,7...1,5	8,7	25,8 x 15	-	0,8	3
	012021	ST 6,3	16,0	-	0,7...1,5	8,7	22,3 x 15	-	0,8	3
	151793	ST 6,3	12,7	-	0,7...2	8,7	24,4 x 14,5	-	0,8	3
	012652	ST 6,3	10,3	-	1,2...2	8,7	22,8 x 16	-	0,8	3
	012201	ST 6,5	15,0	16,5 x 14	1...1,75	8,7	24,8 x 16	-	0,8	3
	011369	ST 6,5	13,0	16,5 x 14	0,7...1,5	8,7	24,8 x 16	-	0,8	3
	012974	ST 8	10,0	18,5 x 14	3...4	11...13	21,8 x 18	-	0,8	3
	011761	ST 8	11,0	18,5 x 14	1,25...2	11...13	22,8 x 18	-	0,8	3
	211042	ST 4,2	7,2	-	2...2,8	7,2	15,5 x 11	-	0,6	3
	211006	ST 4,2	7,2	-	1,25...1,26	7,2	16,4 x 11	-	0,6	3
	015189	ST 4,2	7,2	11,5 x 8,5	2...2,8	7,2	16,6 x 11	-	0,6	3
	102014	ST 4,8	7,0	-	2,5...3,5	7,9	15 x 12	-	10,6	3
	151518	M4	6,0	-	1,5...2	6,5	13,25 x 11	-	0,5	3

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE

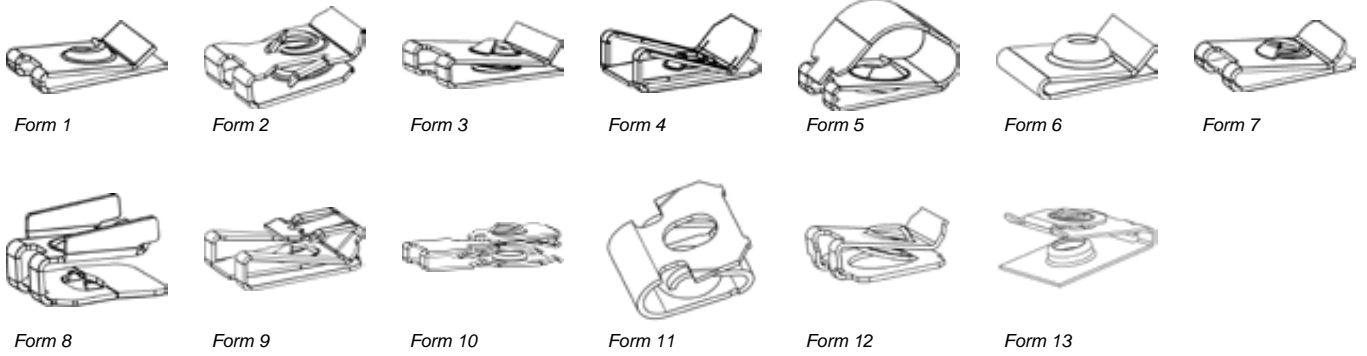


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	015029	ST 3,5	7,75	-	0,75...5,5	7,2	20,5 x 15	-	0,5	4
	014334	ST 4,2	7,5	15,5 x 11	7...11	6,0	18 x 15	-	0,6	4
	013039	ST 4,2	7,75	-	0,75...6,0	7,2	20,5 x 15	-	0,5	4
	014519	ST 4,2	10,5	15,5 x 11	0,5...4,5	6,0	20 x 15	-	0,6	4
	014208	ST 4,2	10,5	-	0,5...4,5	7,2	20,3 x 15	-	0,5	4
	014217	ST 4,2	10,5	-	0,75...6	7,2	23,5 x 15	-	0,5	4
	014043	ST 4,8	10,5	15,5 x 11	0,5...4,5	6,0	21 x 15	-	0,6	4
	018594	ST 4,8	10,5	15,5 x 11	0,5...4,5	6,0	21 x 15	-	0,7	4
	017703	ST 4,8	10,5	15,5 x 11	0,5...4,5	6,0	21 x 15	-	0,7	4
	015319	ST 4,8	10,5	15,5 x 11	0,5...4,5	6,0	20 x 15	-	0,6	4
	151150	ST 4,8	10,5	-	3...4,3	6,0	20,4 x 15	-	0,6	4
	014431	ST 4,8	10,5	15,5 x 11	3,5...4,5	6,0	21 x 15	-	0,6	4
A	018140	ST 4,8	10,5	15,5 x 11	0,5...4,5	6,0	21 x 15	-	0,6	4
	203797	ST 4,8	9,0	-	0,7...3	7,5	18,6 x 15	-	0,6	4
	053535	ACME 6,35	9,0	-	0,5...4	9,0	19 x 16	-	0,8	4
	015970	ST 3,5	7,5	-	0,8...2	7,1	16,5 x 11	7,5	0,5	5
	016364	ST 4,2	6,0	-	0,5...1,4	6,8	13,6 x 11	13,6	0,6	5
	015348	ST 4,2	7,5	-	0,8...2	7,1	16,5 x 11	8,4	0,5	5
D	014623	ST 4,2	7,6	-	0,8...2	7,2	16,5 x 11	10,0	0,5	5
D	014624	ST 4,2	7,6	11,5 x 11	0,8...2	7,8	16,5 x 11	10,0	0,5	5
D	015619	ST 4,2	7,6	-	0,8...2	7,2	16,2 x 11	9,5	0,5	5
D	015620	ST 4,2	7,6	-	0,8...2	7,8	16,2 x 11	10,0	0,5	5
D	017370	ST 4,8	7,0	-	2...3,5	8,0	17,9 x 16	7,7	0,6	5
D	015291	ST 4,8	7,5	-	0,8...2	7,2	16,5 x 11	10,0	0,5	5
	018535	ST 4,8	9,25	-	1...2	7,9	20 x 12,5	20,8	0,6	5
A	016668	ST 4,8	7,0	-	0,8...2	8,0	18 x 13	-	0,6	5
D	015609	ST 6,3	12,0	-	1,8...2,5	8,7	25,5 x 16	27,5	0,8	5
D	015158	ST 6,3	13,0	-	0,7...1,5	8,7	26 x 16	27,5	0,8	5
	215264	ST 4,2	7,6	-	0,8...2	7,2	16,2 x 11	10,0	0,5	5
	014718	M3,5	5,5	-	4...5,5	5,0	12,7 x 11	-	0,5	6
B	014848	M4	5,5	-	4...5,5	5,0	12,7 x 11	-	0,5	6
B	015095	M4	6,0	-	0,5...1,5	6,8	13 x 11	-	0,5	6
B	014885	M4	6,0	-	1,5...2	6,5	12,75 x 11	-	0,5	6
B	015367	M4	6,2	-	1...2,8	7,2	16,5 x 11	-	0,5	6
B	014581	M4	6,2	-	2...2,8	7,2	16,5 x 11	-	0,5	6
B	015617	M5	7,5	-	0,6...1,7	8,0	15,7 x 14,5	-	0,7	6
B	205812	M5	8,0	-	0,5...0,7	7,0	20 x 11	-	0,7	6
B	016770	M6	11,0	-	2,0	8,7	24,8 x 16	-	0,8	6
	019055	ST 3,5	7,0	-	0,5...2,5	6,0	17 x 11	-	0,5	7
	018912	ST 4,2	8,0	-	2,5...5	7,0	20 x 11	-	0,7	7
	019013	ST 4,2	12,0	-	0,5...2,5	7,0	24 x 11	-	0,7	7
	019069	ST 4,2	12,0	-	2,5...5	7,0	24 x 11	-	0,7	7
	019072	ST 4,8	12,0	-	2,5...5	8,0	24 x 15	-	0,7	7
	019185	ST 4,8	16,0	-	2,5...5	8,0	28 x 15	-	0,7	7
	019298	ST 6,3	8,0	-	0,5...2,5	9,0	20 x 16	-	0,7	7
	019283	ST 6,3	12,0	-	0,5...2,5	9,0	24 x 16	-	0,7	7

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

PRESTOLE CLIPS C TYPE CLAMPED ONTO PANEL EDGE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M / ST	A	L x B	F	ØR	l x b	h	s	Form
	019041	ST 6,3	12,0	-	2,5...5	9,0	24 x 16	-	0,7	7
	018248	ST 4,2	5,0	-	1,2...2,5	5,0	11,8 x 11	-	0,5	8
	201838	ST 4,2	6,3	-	3,4...3,6	6,2	14,9 x 12	-	0,6	8
	017623	ST 4,2	6,5	-	3,5...5	6,5	16 x 12	-	0,5	8
	208272	ST 4,2	5,6	-	2...3	6,0	15,8 x 11	-	0,6	8
	208715	ST 4,2	6,5	-	3,5...5	6,5	18 x 11	-	0,5	8
	017561	ST 4,2	6,5 / 7,4	-	0,8...2	6,5	16 x 12	-	0,5	8
	017562	ST 4,2	6,5	-	2...3,5	6,5	16 x 12	-	0,5	8
A	016027	ST 4,2	7,0	-	0,8...1,9	7,2	19,6 x 15	-	0,6	9
A	016376	ST 4,2	7,0	-	0,7...2	8,0	17,9 x 13	-	0,6	9
A	015525	ST 4,2	10,0	-	0,5...4	7,5	22 x 18	-	0,55	9
A	015436	ST 4,2	13,0	22 x 21	0,5...4	9,5	25 x 21	-	0,6	9
A	015379	ST 4,8	7,0	-	2,3...5	6,0	18 x 13	-	0,6	9
A	018862	ST 4,8	7,0	-	3...3,5	8,0	17,9 x 13	-	0,6	9
A	015387	ST 4,8	7,0	-	4,5...5	7,2	18 x 13	-	0,6	9
A	016847	ST 4,8	7,0	-	0,8...1,8	7,2	19,6 x 15	-	0,6	9
A	015220	ST 4,8	7,0	-	0,8...1,8	7,2	19,6 x 15	-	0,6	9
A	015874	ST 4,8	7,0	-	0,8...1,9	7,2	19,6 x 15	-	0,6	9
A	015854	ST 4,8	7,0	-	0,8...1,8	7,2	19,6 x 17	-	0,6	9
A	016354	ST 4,8	7,0	-	0,8...2	8,0	17,9 x 13	-	0,6	9
A	015386	ST 4,8	7,0	-	2,3...5	8,0	16,3 x 13	-	0,6	9
A	020535	ST 4,8	7,5	-	0,5...1,7	7,2	17,1 x 11	-	0,7	9
A	016174	ST 4,8	10,0	-	1,5...2,5	6,0	21,3 x 18,5	-	0,7	9
A	015526	ST 4,8	13,0	-	0,5...4	9,0	25,2 x 22	-	0,7	9
A	211692	ST 4,8	10,0	-	0,5...4,5	7,5	22 x 15	-	0,7	9
A	015527	ST 6,3	13,0	-	0,5...4	9,0	25 x 22	-	0,7	9
A	216170	ST 4,8	13,0	-	0,5...4	9,0	25,3 x 22	-	0,7	9
	017954	ST 6,3	25,0	-	1,5...3	10...12	39,3 x 17	-	0,7	10
	054923	ST 4,2	6,5	-	0,67...3	6...6,5	9,5 x 14	11,6	0,6	11
	055543	ST 4,2	6,0	-	0,7...3	6,0	14,1 x 13	9,7	0,6	11
	055639	ST 4,2	6,8	-	2...3	6,0	13,8 x 13	4,35	0,5	12
	210457	ST 4,8	6,5	-	1,8...2,8	8,0	26 x 18	-	0,7	12
	130312	ST 4,2	12,0	22 x 18	3,5	9,0	22 x 18	8,0	0,5	13

A = self-tapping B = for self-cutting screw
D = with raised edges l = stainless steel

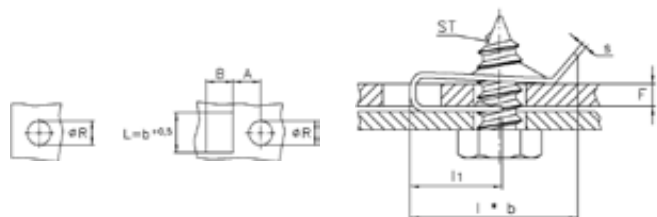
PRESTOLE CLIPS J TYPE CLAMPED ONTO PANEL EDGE

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ST	A	B	F	ØR	I x b	I1	s	Form
	012265	2,9	4,2	5,5	0,75...1,25	4,8	9,7 x 8	5,2	0,5	1
	014963	3,5	4,2	5,5	2,2...2,6	4,8	9,3 x 8	5,0	0,5	1
	014249	3,5	5,3	6,5	4...4,5	6,8	13,5 x 9,7	6,9	0,55	1
	013136	3,5	6,3	6,5	2,8...3,1	6,8	13,4 x 12,75	7,0	0,5	1
	012550	3,9	4,0	4,0	0,8...1,2	4,2	10 x 8	5,0	0,5	1
	011719	3,9	7,2	6,5	0,7...1,5	6,8	14,5 x 12,5	8,0	0,5	1
	016232	4,2	4,3	-	3,5...5	6,0	10,1 x 10	10,1	0,6	1
	011672	4,2	7,2	6,5	0,7...1,5	7,2	14,5 x 12,5	8,0	0,5	1
	012143	4,2	7,4	6,5	0,5..1	7,2	14,7 x 12,7	8,2	0,5	1
	014810	4,2	10,0	-	2,5...5	6,0	18 x 12,75	15,0	0,5	1
	013390	4,8	7,2	-	0,7...1,5	7,2	14,6 x 11	7,5	0,6	1
	019266	4,8	8,8	-	2,5...3	6,0	15 x 12,5	6,7	0,5	1
	011563	4,8	9,5	8,0	0,7...1,5	7,9...9,5	20,7 x 13	10,0	0,7	1
	013548	4,8	11,5	10,0	3...3,2	6,0	18,7 x 16	10,7	0,7	1
	015051	4,8	13,0	-	3,5...4	7...9	23,5 x 20	14,5	0,6	1
	014599	4,8	13,0	10,0	5,8...6,2	7...9	23,5 x 12,5	14,5	0,6	1
	011334	4,9	7,2	6,5	0,9...1,3	6,8	14,5 x 12,5	8,0	0,5	1
	011489	5,5	9,5	8,0	0,75...1	8,7	20,8 x 13	10,0	0,8	1
	016710	6,3	9,5	-	0,5...1,2	8,7	20,8 x 13	10,0	0,8	1
	013714	6,3	9,0	9,0	2...2,8	8,7	20,3 x 13	9,5	0,8	1
	011940	6,3	9,5	8,0	0,8...1,5	8,7	20,8 x 13	10,0	0,8	1
	013204	6,3	12,7	10,0	0,7...1,5	8,7	24,7 x 14,5	13,2	0,7	1

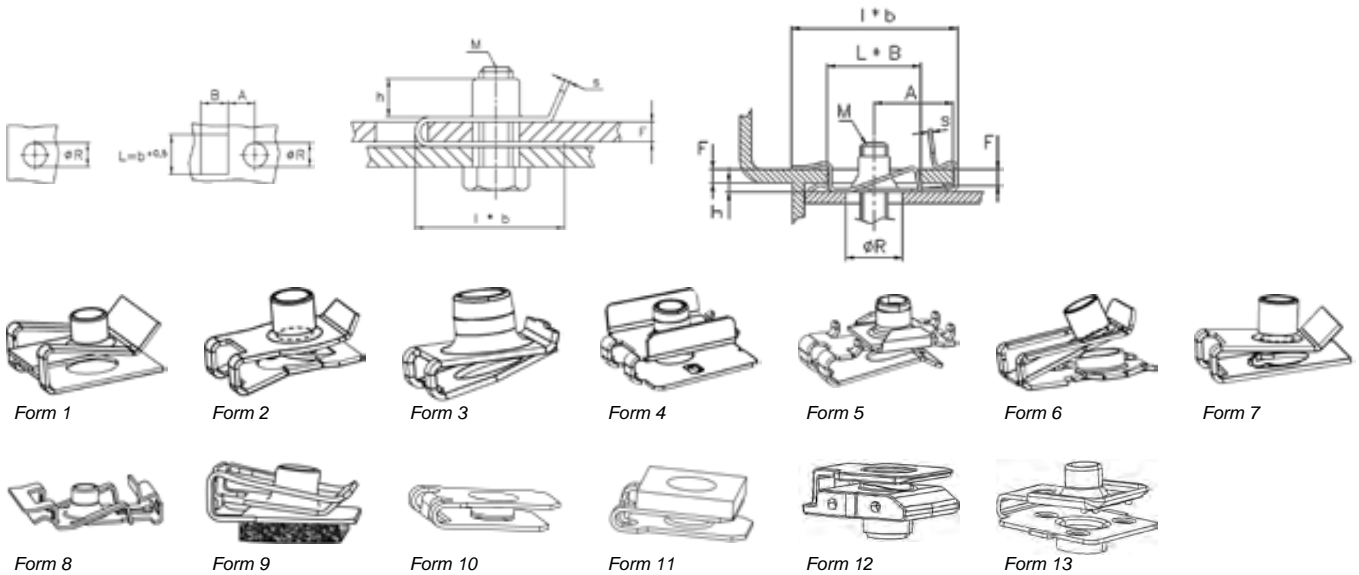
CLIPS WITH DRAWN BARREL FOR METRIC SCREW CLAMPED ONTO PANEL EDGE

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips can be mounted on a panel edge or in a central hole location. Note: (Form 1, 6 & 9), owing to their features these clips perfectly position onto both sides of the assembly interface, thus providing excellent alignment for ease of screw insertion. It also enhances the strength of the joint and retains its position if the screw is removed. Overall complexity is reduced as all parts are suitable for a range of panel thicknesses.

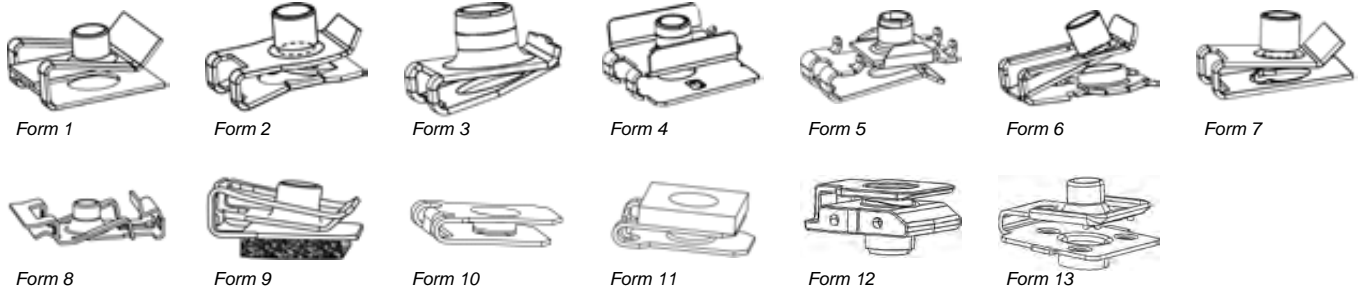
? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	M	A	B	F	ØR	I x b	h	s	Form
	208323	5,0	8,8	-	1,5...3	12 x 8,2	19,8 x 15	5,7	0,6	1
	210214	5,0	7,0	14,0	1,2...4	6,0	16,6 x 15	5,7	0,6	1
	206960	5,0	10,0	-	0,5...4	7,3...7,7	19,9 x 13,8	5,4	0,6	1
	054044	5,0	6,8	10,0	0,5...4	6,0	15,2 x 12	6,9	0,6	1
	015226	5,0	7,0	14,0	0,8...4,3	6,0	17,1 x 15	5,7	0,6	1
A	015888	5,0	7,0	14,0	0,8...4,3	6,0	17,1 x 15	5,7	0,6	1
A	016381	5,0	10,0	-	0,8...4,3	7,5	21 x 15	5,5	0,6	1
	018665	5,0	10,0	11,0	4...5,5	6,0	20,9 x 15	5,5	0,6	1
	014100	5,0	10,0	11,0	4...5,5	6,0	19,9 x 15	5,7	0,6	1
A	016391	5,0	10,3	11,0	0,8...4,3	6,0	21 x 15	5,7	0,6	1
A	203269	5,0	10,5	11,0	2...4	6,0	20,4 x 15	5,5	0,6	1
	020265	5,0	10,5	17,5	3...4,3	7,5	20,6 x 15	5,5	0,6	1
A	015460	5,0	10,5	17,5	0,8...4,3	7,5	21 x 15	5,7	0,6	1
	013184	5,0	10,5	11,0	0,8...4,3	6,0	21 x 15	5,5	0,6	1
	019688	5,0	10,5	11,5	0,8...2,5	7,5	21 x 15	5,5	0,6	1
A	016728	5,0	10,5	17,5	0,8...4,3	7,5	21 x 15	5,7	0,6	1
	014079	5,0	10,5	11,0	0,8...4,3	6,0	21 x 15	5,5	0,6	1
	016205	5,0	10,5	17,5	0,8...4,3	7,5	21 x 15	5,5	0,6	1
A	206923	5,0	13,5	-	2...4	6,0	26,8 x 17	5,5	0,6	1
	102013	6,0	8,4	15,0	0,7	10,5	18,3 x 16,5	7,3	0,8	1
	020037	6,0	9,3	-	0,7...4	9,0	21,6 x 16	7,6	0,8	1
	053312	6,0	11,0	17,0	0,5...4	9...9,2	24 x 16	8,0	0,8	1
	017099	6,0	11,5	13,0	0,5...4,8	7,0	23,5 x 16	7,6	0,8	1
	015109	6,0	11,5	13,0	0,5...4	7,0	21,1 x 16	7,6	0,8	1
A	014914	6,0	11,5	20,0	0,7...4	7,0	23,8 x 16	7,6	0,8	1
	018759	6,0	11,5	13,0	0,5...4	10,0	24,1 x 16	7,6	0,8	1
I/A	019319	6,0	11,5	13,0	1,5...6	7,0	23,4 x 16	7,0	0,8	1
	130793	6,0	11,0	-	0,5...4	8,5...8,7	22,3 x 15	5,2	0,8	1
Z	055420	6,0	11,0	15,0	0,5...4	9...9,4	24 x 17	6,0	0,7	1
	054836	6,0	11,0	15,0	0,5...4	9,2	24 x 17	5,2	0,7	1
	054913	6,0	11,0	15,0	0,5...1	9...9,4	23,7 x 17	6,4	0,7	1

A = self-tapping
I = stainless steel

CLIPS WITH DRAWN BARREL FOR METRIC SCREW CLAMPED ONTO PANEL EDGE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M	A	B	F	ØR	l x b	h	s	Form
	053313	8,0	13,0	18,0	0,5...4	11,2	25,5 x 17	9,0	1,0	1
	013938	8,0	13,0	18,0	0,8...4	9,0	28 x 18	9,0	1,0	1
	013965	8,0	13,0	18,0	0,8...4	9,0	28 x 18	9,0	1,0	1
	210860	8,0	13,0	18,0	0,8...2,7	9,0	28 x 18	9,0	1,0	1
	055634	8,0	13,5	16,0	0,5...4	11...11,4	25 x 17	8,0	1,0	1
	054046	6,0	12,0	-	3...4,5	6,5	30,5x20,5	9,0	1,0	1
A	229642	6,0	11,5	20,0	0,7...4	7,0	24 x 16	7,6	0,8	1
	016398	6,0	12,0	-	0,8...4	10,0	23,5 x 14,5	7,4	0,8	2
I	015325	6,0	12,0	-	0,8...4	10,0	23,5 x 14,5	7,4	0,8	2
A	019211	6,0	12,0	-	0,8...4	10,0	23,5 x 14,5	7,4	0,8	2
A	018504	4,0	6,0	8,5	1,6...2,2	5,8	13,6 x 15	4,8	0,5	3
	020217	4,0	7,0	-	0,8...1,2	5,0	13 x 10	4,0	0,6	3
A	018113	5,0	6,2	-	2,2...2,3	6,8	13,6 x 11,5	5,7	0,6	3
	019549	5,0	20,5	-	0,7...1	7,5	29,1 x 20	4,2	0,6	3
A	203561	5,0	6,2	12,5	0,6...2,2	6,8	13,4 x 11,5	5,7	0,6	3
	016820	5,0	6,2	-	0,6...2,2	6,8	13,6 x 11,5	5,7	0,6	3
	055318	6,0	13,0	-	3...4	8,5	31 x 22,5	11,7	0,8	3
A	016157	5,0	6,5	-	0,6...2,2	6,8	13,6 x 11,5	5,7	0,6	3
A	017948	8,0	15,2	-	4,5...5	9,0	32,5 x 36	9,25	1,0	4
A	018399	5,0	13,3	14,0	3...3,8	6,0	23,2 x 13,5	7,0	0,6	5
	055819	6,0	11,0	-	0,5...4	8,5	22,3 x 15	5,2	0,8	5
Z	053524	6,0	11,0	15,0	0,5...4	6,8...7,2	24 x 17	7,1	0,8	5
	130288	6,0	11,7	-	0,5...4	7,0	22,3 x 15	5,2	0,8	5
A	204919	6,0	16,0	-	2,0	9,5	26,4 x 20	7,5	0,8	6
	017210	6,0	16,0	-	2,5...3	9,5	26,4 x 20	7,5	0,8	6
	018174	6,0	11,0	-	2,0	9,5	21,84 x 7,5	0,8	0,8	6
	209872	6,0	11,5	13,0	3,0...4,2	12,0	23,7 x 17	7,5	0,8	7
	129459	6,0	11,6	20,0	2,45...3,5	9,2	35,7 x 21	1,5	0,7	8
	129458	6,0	11,0	1,4	0,5...4	8,5...8,7	22,3 x 15	5,2	0,8	9
	055526	6,0	10,0	-	2,5	7,5	23,5 x 15	0,0	0,7	10
	055548	6,0	15,0	-	4,0	8,7	31 x 22,5	0,0	0,8	10
	055407	6,0	10,5	-	2,5	10,0	22 x 15	4,0	0,7	10
	203882	6,0	10,0	-	2,5	10,0	22 x 15	7,0	0,7	11
	208223	6,0	11,4	-	2,0	11,2	22,35 x 19,9	9,0	-	12
	203658	6,0	15,0	-	3,0	12 x 7,5	26,0 x 25,4	3,5	0,8	13

A = self-tapping
I = stainless steel

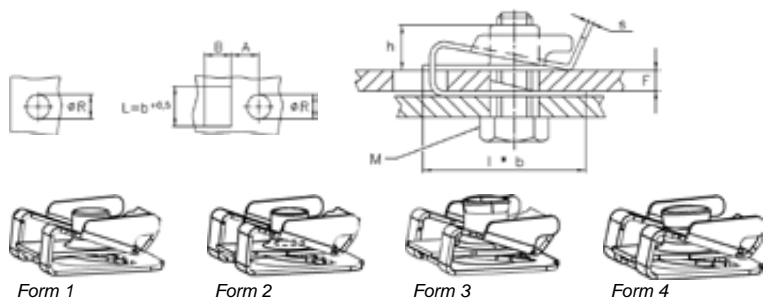
CLIPS WITH DRAWN BARREL FOR METRIC SCREW CLAMPED ONTO PANEL EDGE (for automated assembly)

MATERIAL:

Spring steel C45, stainless steel 1.4303

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are suitable for automatic / robot-dispensing



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

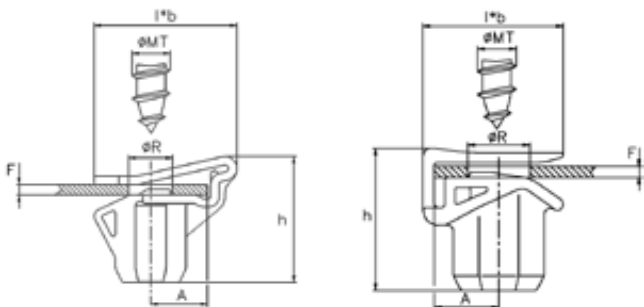
?	REF.	M	A	B	F	ØR	h	l x b	s	Form
	019074	6,0	8,5	17,5	3,5...4	10,5...10,7	7,5	19,6 x 18	0,8	1
	015463	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,9 x 15	0,5	2
A	015371	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,9 x 15	0,5	2
A	015370	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,9 x 15	0,5	2
	015461	4,0	7,0	14,0	0,8...4,3	7,0	4,8	16,7 x 15	0,5	2
	015501	5,0	7,0	14,0	0,8...4,3	8,0	5,5	16,9 x 17	0,6	2
A	019877	5,0	7,2	14,0	1,5	8,4	5,0	16,6 x 17	0,6	2
A	019128	5,0	7,0	14,0	0,8...4,3	7,8	6,5	17,5 x 17	0,6	2
A	015493	5,0	7,0	14,0	0,8...4,3	8,0	5,5	16,9 x 17	0,6	2
	015494	5,0	7,0	14,0	0,8...4,3	8,0	5,5	16,9 x 17	0,6	2
A	206070	5,0	7,2	-	1...4	8,2	6,5	17 x 17	0,6	2
A	018765	5,0	7,0	14,0	1...4,5	7,8 x 9	4,9	16,9 x 17	0,6	2
	015462	6,0	8,2	17,5	0,5...4	10,5	7,5	19,9 x 18	0,8	3
	017129	6,0	11,5	-	0,5...4	10,5	7,5	25 x 18	0,8	3
	015464	6,0	8,2	17,5	0,5...4	10,5	7,5	19,9 x 18	0,8	3
	015265	6,0	8,2	17,5	0,5...4	10,5	7,5	19,9 x 18	0,8	3
	015973	6,0	11,5	-	0,5...4	10,5	7,5	25 x 18	0,8	3
	015372	6,0	8,2	17,5	0,5...4	10,5	7,5	19,9 x 18	0,8	3
	015605	5,0	13,5	-	0,8...4,3	8,5	5,5	30,4 x 17	0,6	4
	018307	5,0	7,0	9,0	2...4,3	-	5,5	30,5 x 17	0,6	4

A = self-tapping

PLASTIC NUTS FOR SOFT MATERIAL SCREWS CLAMPED ONTO PANEL EDGE

MATERIALS:
POMC

COLOURS:
Natural, Black




Form 1

Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

Plastic nut element to improve screwing performance with soft material screws.

 Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØMT	A	F	ØR	l x b	h	Form
	201169	5,0	8,0	1,5...3,5	6,2	20,2 x 15	12,1	1
	203985	6,0	8,5	1,5...2	8,2	18,35 x 17	14,55	2

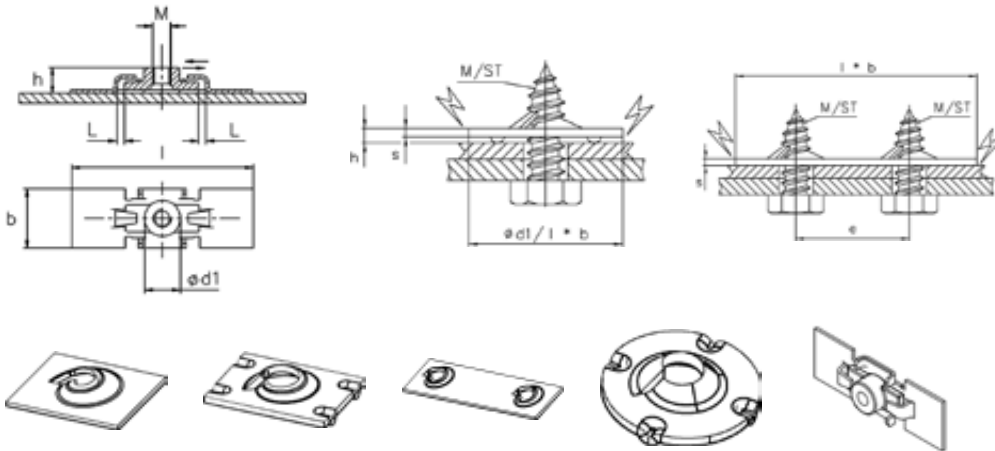
CAGE NUTS AND PRESTOLE NUT TYPE SPOT WELDED OR BONDED

MATERIAL:

Steel C15 ... C22, Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1 Form 2 Form 3 Form 4 Form 5

Sketches for illustration purposes only, please request latest detailed drawing.

These low-cost and lightweight "PRESTOLE" nuts, in most instances, include 2 or 4 spherical bosses that make them suitable for spot welding. They are permanently secured in place which avoids damage/ mis-alignment during handling. The parts act as a substitute for conventional nuts whilst reducing complexity at the joint. They allow two panels to be fastened, where there is access from one side only and provide re-enforcement through their seating surface.

Ç: Number of bosses per nut, see the column below. Please consult with us regarding the boss location.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	M / ST	l x b	Ød1	e	Ç	h	L	s	Form
	012789	ST 3,5	14 x 10	-	-	-	-	-	0,5	1
	013797	ST 3,9	30 x 10	-	-	-	-	-	0,75	1
	012500	ST 4,2	14 x 10	-	-	-	-	-	0,7	1
	012368	ST 4,2	16 x 12	-	-	-	-	-	0,75	1
Z	012616	ST 4,2	31,8 x 14	-	-	-	-	-	0,75	1
	016221	ST 4,8	20 x 11	-	-	-	-	-	1,0	1
	051843	ST 4,8	30 x 15	-	-	-	-	-	1,0	1
	014455	ST 4,8	16 x 12	-	-	-	-	-	0,8	1
	013404	ST 6,3	22 x 15	-	-	-	-	-	1,25	1
	013791	ST 6,3	28,5 x 16	-	-	-	2,35	-	1,25	1
	012016	ST 6,3	22 x 15	-	-	-	-	-	1,0	1
	013190	ST 6,3	30 x 15	-	-	-	-	-	1,0	1
	013359	ST 6,3	28,5 x 16	-	-	-	-	-	1,4	1
	204786	M 12	86 x 34,5	-	-	-	17,2	53,0	-	1
	012024	ST 4,8	16 x 12	-	-	2,0	1,5	-	0,75	2
	011904	ST 5,5	46 x 16	-	-	2,0	2,25	-	1,25	2
	011933	ST 6,5	28,5 x 16	-	-	2,0	2,5	-	1,4	2
	014780	ST 3,5	40 x 10	-	27,0	-	-	-	0,75	3
	012867	ST 3,9	28 x 10	-	14,0	-	-	-	0,5	3
	013891	ST 4,2	30 x 16	-	16,0	3,0	-	-	0,6	3
	012228	ST 4,8	30 x 16	-	16,0	2,0	1,75	-	1,0	3
	013244	ST 4,8	30 x 16	-	16,0	-	-	-	0,6	3
	012806	M 4	32 x 8	-	25,0	-	-	-	0,4	3
	012476	M 4	35 x 8	-	25,0	-	-	-	0,4	3
	013021	ST 6,3	-	19,5	-	4,0	2,05	-	1,25	4
	011935	ST 6,5	-	22,0	-	4,0	2,2	-	1,4	4
	206342	M 6	61 x 20	12,0	-	-	8,7	2,0	1,2	5

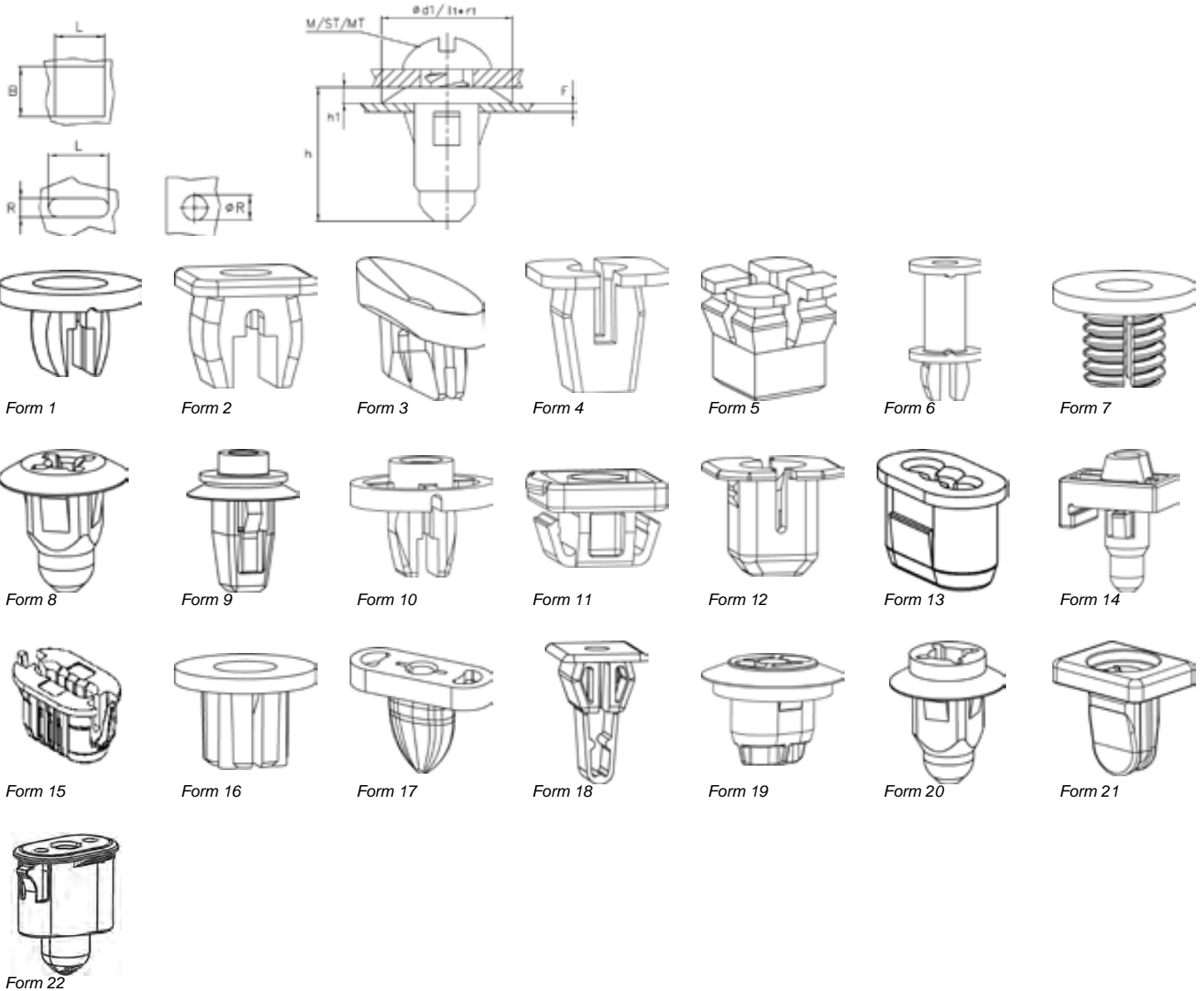
PLASTIC NUTS PRESSED IN HOLE

MATERIAL:

Polyamide; Polyoxymethylene

COLOUR :

Nature, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

The shape of these spread nuts take various forms. They are usually pre-assembled and offer an anti-rotation fastening into the hole.

The screw cuts its own thread as it is tightened, this guarantees a strong fit of the screw and nut. We, nevertheless recommend the use of MT screws.

Normally self-cutting screws are used, however, metric screws are suitable for some special forms only.

Depending on the application the nut may also be re-usable once removed.

In addition to the normal spread nuts there are some special forms available, eg ;

Form 3, to fix angled attachments.

Forms 8 and 9, have a sealing function. Note the exterior shape is not deformed following the insertion and tightening of the screw.

Forms 13 and 14 offer tolerance compensation.

If assembling the screw by means of an electric screw driver then the optimum tightening torque will be dependent upon the chosen screw type.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	M/ST/MT	ØR	L x B/R	F	Ød1	l x b	h1	h	Form
	017831	ST 4,2	-	7,8 x 7,8	0,7...1	15,0	-	6,5	16,5	1

PLASTIC NUTS PRESSED IN HOLE



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



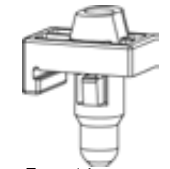
Form 11



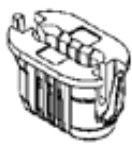
Form 12



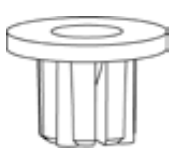
Form 13



Form 14



Form 15



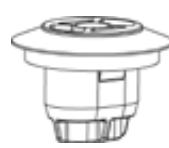
Form 16



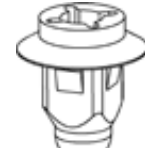
Form 17



Form 18



Form 19



Form 20



Form 21



Form 22

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M/ST/MT	ØR	L x B/R	F	Ød1	l x b	h1	h	Form
	016793	ST 4,8	-	11,5 x 7,5	2...5,5	20,0	-	2,5	13,7	1
	015356	ST 4,8	-	11 x 11	0,8...2	18,0	-	4,8	14,0	1
	014974	ST 4,8	-	16,2 x 8,2	0,9	20,0	-	2,5	12,5	1
	016675	ST 4,8	-	11 x 11	0,8...2	18,0	-	4,8	14,0	1
	013966	ST 3,5	-	7 x 7	0,5	-	9,5 x 9,5	1,2	8,3	2
	017259	ST 4,2	-	6,5 x 6,5	6...6,5	-	10 x 10	2,0	15,0	2
	017109	ST 4,2	-	6,5 x 6,5	2...8	-	10 x 10	2,0	18,0	2
	053853	ST 4,2	-	7,2 x 7,2	0,5...3	-	9,5 x 9,5	1,2	8,3	2
	053067	ST 4,8	-	8,22 x 8,22	0,7...2	15,0	-	2,5	8,5	2
	053093	ST 4,8	-	7 x 7	0,5...3	-	16 x 16	5,0	12,1	2
	015335	Hi-Lo 4,8	-	6,5 x 6,5	2...8	-	10 x 10	2,0	18,7	2
	012230	ST 4,8	-	12,8 x 9,4	0,7...0,8	14,5	-	3,0	12,0	3
	013958	ST 4,8	-	12,8 x 9,45	0,7...0,8	18,5	-	4,5	21,2	3
	200887	Hi-Lo 4,8	-	11 x 5,3	0,84	-	22 x 12	0,7	5,7	3
	017308	ST 6,3	-	12,3 x 9,5	0,7...0,9	22,0	-	9,3	16,7	3
	013793	ST 6,3	-	10,4 x 10,4	0,7...0,9	-	15 x 14	7,0	11,9	3
	019747	M5	-	12 x 9,125	0,7...0,8	14,0	-	1,0	10,0	3
	014586	ST 3,5	-	5,1 x 5,1	0,5...1,5	-	9 x 9	0,8	8,4	4
	017871	ST 3,5	-	6,5 x 6,5	0,5	-	10,5 x 16	1,2	8,0	4
	016509	ST 3,5	-	7 x 8	1,2	-	20 x 14	2,0	13,5	4
	175046	ST 4,2	-	7 x 7	0,7	-	9,4 x 9,4	1,0	12,6	4
	014860	ST 4,2 / 4,8	-	9,4 x 7	2,0	-	9,5 x 9,5	1,2	8,5	4
	013469	ST 4,2 / 4,8	-	9,4 x 6,85	0,9	-	9,5 x 9,5	1,15	8,4	4
	207747	ST 4,2 / 4,8	-	7 x 7	0,7...1	-	12 x 12	1,0	12,0	4
	019503	Hi-Lo 5,8	-	8,2 x 8,2	1,2...1,6	-	11 x 11	0,8	10,0	4
	020207	Hi-Lo 5,8	-	8,5 x 8,5	1,2...1,6	-	11 x 11	0,8	10,0	4
	015197	Hi-Lo 5,8	-	8,2 x 8,2	0,8...1,2	-	11 x 11	0,8	12,0	4
	017980	ST 3,5	-	7,6 x 7,6	1,2...1,5	-	10 x 10	1,0	10,0	5

PLASTIC NUTS PRESSED IN HOLE



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



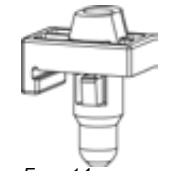
Form 11



Form 12



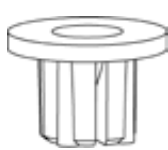
Form 13



Form 14



Form 15



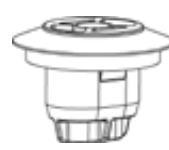
Form 16



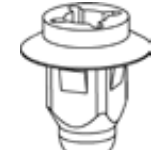
Form 17



Form 18



Form 19



Form 20



Form 21



Form 22

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M/ST/MT	ØR	L x B/R	F	Ød1	l x b	h1	h	Form
	053178	M5	-	8 x 8	0,8...1,2	-	11 x 11	0,6...1	11,2	5
	019451	M5	-	8,2 x 8,2	0,8...1,2	-	11 x 11	0,8	12,0	5
	013263	ST 4,2	-	7 x 7	0,7...2	-	12 x 12	25,0	18,0	6
	017141	ST 4,2	-	7,5 x 7,5	1,1	14,0	-	19,0	27,0	6
	018421	ST 4,2 / 4,8	-	7 x 7	0,5	12,0	-	8,2	15,2	6
	016909	ST 4,8	-	11,5 x 7,5	2...5,5	20,0	-	21,5	32,7	6
	019161	ST 4,8	-	7 x 7	0,7...2	12,0	-	18,0	25,0	6
	017879	ST 4,2	M8	-	-	14,0	-	1,5	9,5	7
	056490	ST 4,2	-	8,2 x 8,2	0,7...1,5	15,5	-	2,1	16,5	8
	056351	ST 4,2	-	8...8,2 x 8,1...8,2	0,7...1,5	15,5	-	3,0	16,1	8
	016371	ST 4,2	-	7 x 7	0,7...1,1	14,0	-	1,7	21,0	8
	014994	ST 4,2	-	7 x 7	0,9	14,0	-	1,7	14,3	8
	130914	MT 4,5	-	8,2 x 8,2	0,7...1,2	15,5	-	2,1	14,25	8
	014224	ST 4,8	-	8 x 8	0,7...0,8	16,0	-	1,7	20,0	8
	015514	ST 4,8	-	8 x 8	2...2,2	13,0	-	1,7	18,5	8
	019781	ST 4,8	-	8,5 x 8,5	0,7...0,8	16,0	-	1,7	20,0	8
	020659	ST 4,8	-	15 x 10	0,7...0,9	24,0	-	2,6	17,1	8
	016065	ST 4,8	-	7 x 7	1,2...1,4	14,0	-	1,7	14,3	8
	016911	Hi-Lo 4,8	-	8 x 8	0,8...2,3	18,0	-	1,7	17,2	8
	204249	ST 4,2 / MT 5	-	8,2 x 8,2	0,67...1,5	15,5	-	2,4	14,1	8
	018291	PT 6	-	10 x 10	0,8...1	20,0	-	2,0	20,0	8
	018676	PT 7	-	10 x 10	0,9...2,1	25,0	-	3,2	20,0	8
	014327	ST 4,8	-	9,5 x 9,5	0,8...0,9	24,0	-	4,2	18,5	9
	015222	ST 4,8	8,0	-	0,8...0,9	12,0	-	4,7	23,2	9
	014967	ST 4,8	8,0	-	0,8...0,9	12,0	-	8,2	26,7	9
	014686	ST 4,8	8,0	-	0,8...1,6	-	26 x 15	7,2	23,2	9
	014996	ST 4,8	-	8,1 x 8,1	1,8	22,0	-	7,0	20,0	9
	017738	Hi-Lo 4,8	-	8 x 8	1,3...2,3	18,0	-	6,4	22,4	9

PLASTIC NUTS PRESSED IN HOLE



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



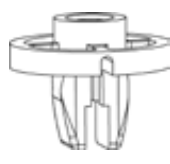
Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



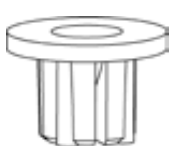
Form 13



Form 14



Form 15



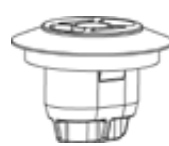
Form 16



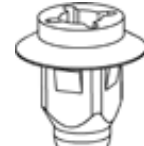
Form 17



Form 18



Form 19



Form 20



Form 21



Form 22

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M/ST/MT	ØR	L x B/R	F	Ød1	l x b	h1	h	Form
	016719	Hi-Lo 4,8	-	8 x 8	0,8...2,25	15,0	-	7,2	23,2	9
	015648	Hi-Lo 4,8	-	8 x 8	2...2,2	18,0	-	7,2	23,2	9
	016190	Hi-Lo 4,8	-	8 x 8	1,3...2,3	18,0	-	6,4	23,2	9
	014895	Hi-Lo 4,8	-	8 x 8	0,8...0,9	15,0	-	7,0	23,2	9
	017184	ST 4,8	-	8 x 8	0,7	20,0	-	6,0	16,0	10
	019397	ST 4,8	-	8 x 8	0,7	20,0	-	5,0	15,0	10
	018880	ST 4,8	-	8 x 8	0,7...0,9	20,0	-	6,1	16,1	10
	175152	ST 4,8	-	8,2 x 8,2	0,8	20,0	-	6,0	21,5	10
	200874	Hi-Lo 4,8	-	11,5 x 7,5	2...5,5	20,0	-	7,5	18,7	10
	018635	M5	-	12 x 12	1,2...1,3	-	15 x 15	4,5	11,8	11
	020835	M5	-	14 x 14	1,45...1,55	-	18,5 x 17	4,5	12,0	11
	055995	ST 4,2	-	8,2 x 8,2	0,6...3	-	13 x 13	2,2	12,2	12
	055973	ST 4,2	-	7,2 x 7,2	0,6...3	-	8,7 x 8,7	1,2	8,3	12
	053282	ST4,2 ...4,8	-	14,2 x 7,2	0,6...3	-	20,2 x 13,2	2,0	17,0	12
	015989	ST 4,8	-	8,1 x 8,1	1,5	-	20 x 20	3,0	22,0	12
	175135	ST 4,8	-	8,2 x 8,2	0,65...1,5	-	12,8 x 12,8	0,8	10,8	12
	012799	ST 4,8	-	13...15 x 8,2...8,5	0,8...0,9	-	14 x 23	1,0	7,0	12
	014754	ST 4,8	-	20 x 8,1	0,8...1,5	-	16 x 16	2,5	16,8	12
	015833	ST 3,5	-	15 x 4,8	0,9...1,2	-	21 x 10,8	1,6	13,0	13
	014110	ST 3,5	-	15 x 4,8	0,9...1,2	-	21 x 10,8	1,6	17,0	13
	017322	ST 3,5	-	15 x 4,8	1,2...1,8	-	21 x 10,8	1,6	13,0	13
	015177	ST 4,2	-	8 x 13	0,75...0,8	-	19 x 14	3,0	13,2	13
	053670	ST 4,2	-	14,2 x 7,2	0,5...1,2	-	20 x 13	2,0	17,0	13
	056293	ST 4,2	-	13...13,2 x 11	0,7...1	-	23,8 x 15	1,5	16,8	13
	055975	ST 4,2	-	14 x 7,2	0,6...3	-	15,2 x 8,8	1,2	10,4	13
	204692	ST 4,2	-	14 x 7,2	3,0	-	15,2 x 8,8	1,2	10,2	13
	056256	ST 4,2 / MT 4,5	-	14,2 x 7,2	0,6...3	-	20,2 x 13,2	2,0	17,0	13
	056592	MT 4,5	-	14 x 7,2	0,6...3	-	15,2 x 8,8	1,2	9,9	13

PLASTIC NUTS PRESSED IN HOLE



Form 1



Form 2



Form 3



Form 4



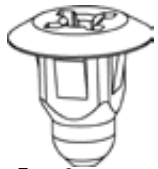
Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



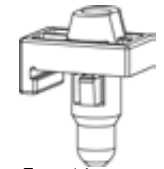
Form 11



Form 12



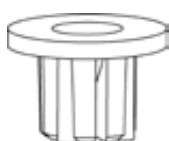
Form 13



Form 14



Form 15



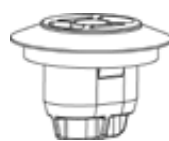
Form 16



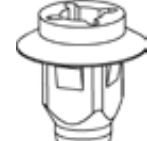
Form 17



Form 18



Form 19



Form 20



Form 21



Form 22

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	M/ST/MT	ØR	L x B/R	F	Ød1	l x b	h1	h	Form
	014687	ST 4,8	8,0	-	0,8...0,9	-	19 x 12	9,2	25,2	14
	204819	MT4,5x15	-	14,2 x 7,2	0,67...3	-	17,6 x 9,8	1,2	10,2	15
	210296	ST 4,5	-	18,2 x 9,2	0,7...4	-	23,8 x 17,8	3,0	19,5	15
	012684	ST 6,3	8,5	-	1,5	14,0	-	1,5	9,5	16
	020077	ST 3,5	-	11 x 5,3	0,88	-	8 x 22	3,5	15,3	17
	015374	ST 4,2	-	11,5 x 9	1...2	-	15 x 13	1,0	20,0	18
	082609	ST 4,8	-	15 x 10	0,7...0,9	24,0	-	2,6	17,1	19
	016951	ST 4,2	-	13 x 8	0,9	-	21 x 18	3,4	14,1	20
	017164	ST 4,8	-	10 x 12	0,8	-	18 x 16	2,3	16,0	20
	020555	PT 4	-	11 x 6,7	0,9...1,1	-	18 x 14	3,5	17,65	21
	212945	MT 4,5	-	14,2 x 7,2	0,7...1,0	-	16,2 x 13,3	0,9	18	22

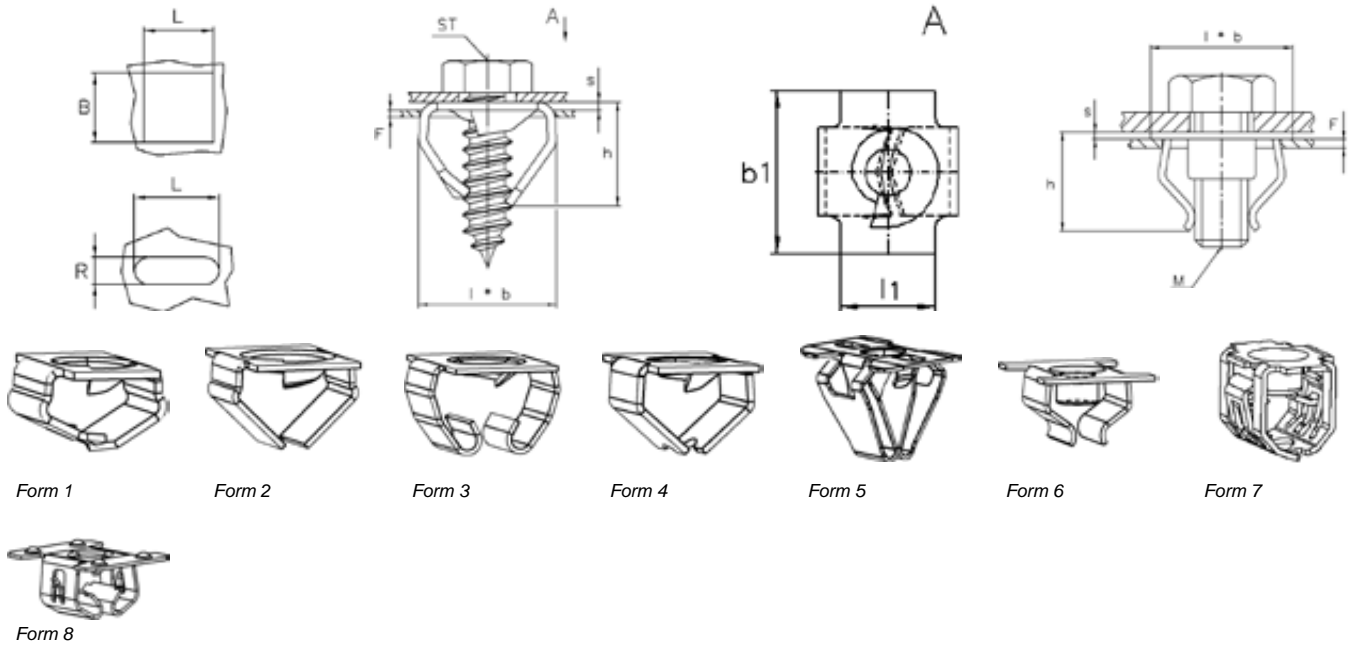
METAL NUTS PRESSED IN HOLE

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These press-in type "PRESTOLE" nuts are ideally suited for performing blind assembly operations into panels, tubular items etc. They give simple press-in installation and are fastened using a self-tapping screw. These parts resist vibration-induced loosening, due to their tapered form and the expanding legs of the nut. Subject to their design, they may be fitted into round, rectangular or square shaped fixing holes.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

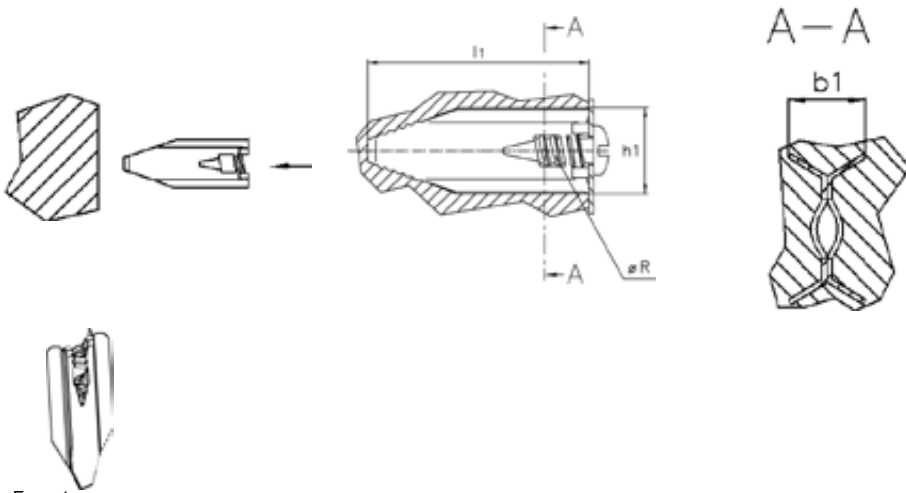
Samples available on request

?	REF.	M/ST/PT	L x B	F	l x b	l1 x b1	h	s	Form
	020097	ST 4,2	9 x 9	0,9...1,1	9,7 x 6	6,6 x 11	6,3	0,55	1
	016714	ST 3,5	9 x 9	0,7...1	9,25 x 7,5	8 x 15	6,2	0,5	2
	012482	ST 3,9	6,3 x 7	0,75...1,35	7,3 x 6	5,8 x 9	6,0	0,5	2
	013078	ST 3,9	7 x 7	0,75...1,25	7,3 x 6	5,8 x 10	6,0	0,5	2
	011432	ST 3,9	9 x 9	0,75...1,25	9,2 x 8,6	8 x 15	6,3	0,5	2
	012418	ST 4,2	9 x 7	0,75...1	9,7 x 6	8 x 9	6,4	0,6	2
	015548	ST 4,2	9 x 7	0,8...1,5	10 x 6,5	8,6 x 11	5,6	0,5	2
	015282	ST 4,2	9 x 7	0,8...1,5	10 x 6,5	8,6 x 12	5,6	0,5	2
	012991	ST 4,2	9 x 9	1,5...2	9,2 x 7,6	8 x 15	6,0	0,4	2
	012036	ST 4,2	13 x 11	0,75...2	11,2 x 10	15,75 x 18	7,0	0,6	2
	012415	ST 4,8	9 x 9	0,75...1	9,3 x 7,6	8 x 15	6,3	0,55	2
	014419	ST 4,8	11,1 x 14	0,75...2	11,25 x 13	9,5 x 18	7,0	0,7	2
	011463	ST 4,8	11 x 13	0,75...2	11,25 x 10,5	16 x 18	7,0	0,6	2
Z	013134	ST 6,3	9 x 13	0,75...1,25	13,4 x 7,2	11 x 15	9,0	0,6	2
	015600	ST 3,5	14 x 16	0,7...2	16,4 x 13,5	12 x 18	7,6	0,5	3
	019329	ST 3,9	8 x 8	1,2...1,4	8,4 x 7,5	5,6 x 11	8,1	0,5	3
	012331	ST 4,8	8 x 13	1,75...2	13,8 x 7,2	11 x 14,5	9,0	0,6	3
	205669	ST 4,8	9,1 x 13,1	0,8	14,1 x 7,2	11 x 14,5	9,2	0,5	3
	018981	ST 4,8	11 x 13	2...3	13,8 x 10	11 x 18	10,0	0,6	3
	020540	ST 4,8	11 x 13	2...2,5	12 x 12	16 x 20	9,5	0,6	3
	012389	ST 5,5	13 x 11	0,75...1	13,4 x 7,2	11 x 15	9,0	0,6	3
	012524	ST 6,3	8 x 13,5	0,75...2	13,8 x 7,2	11 x 15,5	9,0	0,6	3
	012446	ST 6,3	8 x 13,5	0,75...2	13,8 x 7,2	11 x 15,5	9,0	0,6	3
	015398	ST 6,3	8 x 13,5	0,75...2	13,8 x 7,2	16 x 20	9,0	0,7	3
	015143	ST 6,3	11 x 13	0,75...1	13,4 x 7,2	11 x 15	9,0	0,6	3
	020251	ST 6,3	11 x 13	0,75...1	13,4 x 7,2	11 x 15	9,0	0,6	3

ANCHOR NUT NAILED

MATERIAL:
Spring steel C45, Spring steel 67S austempered

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

This anchor has been designed to be nailed into plaster partition wall and laminated door and for fixing all items by screwing. Good tear-off and shearing-off resistance.

TRACTION RESISTANCE:
Plaster board 15kg
Isorel 25kg

SHEARING-OFF RESISTANCE:
Plaster board 30kg
Isorel 70kg

COMPATIBLE SCREWING:
In order to obtain these results, with a woodscrew type 3,5 to 5 mm are needed. The selection of the screws depends on what you have to fix.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØR	l1	h1	b1	Form
	017232	4...4,5	43,0	16,4	7,0	1
	055340	4,5	37,2	22,3	7,0	1
	055813	4...5	29,0	10,6	-	1

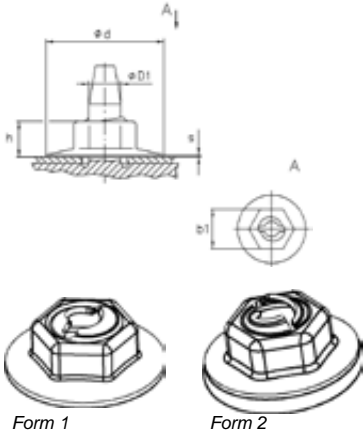
SELF-TAPPING NUTS FOR PLAIN SMOOTH RODS SCREWED

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

The nut's head includes a centre impression that will cut threads into a plain, smooth rod. This gives a quick, positive and re-usable assembly.
It should be noted that the rod surface hardness should not exceed 50 kg/mm².
All nuts listed below may be installed with a sealing element or plastic plug.

? Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	ØD1	Ød	b1	h	s	Form
	011914	3,0	13,5	8,0	4,25	0,5	1
	011993	4,0	14,5	9,0	4,5	0,5	1
	012269	5,0	14,5	9,0	4,5	0,5	1
	053243	5	15,1	11,0	5,75	0,5	1
	052835	6,0	15,1	11,0	5,75	0,5	1
	080581	3,0	13,5	8,0	4,25	0,5	2
	080594	4,0	14,5	9,0	4,5	0,5	2

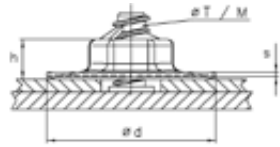
PRESTOLE TYPE NUTS FOR THREADED STUD SCREWED

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3

Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

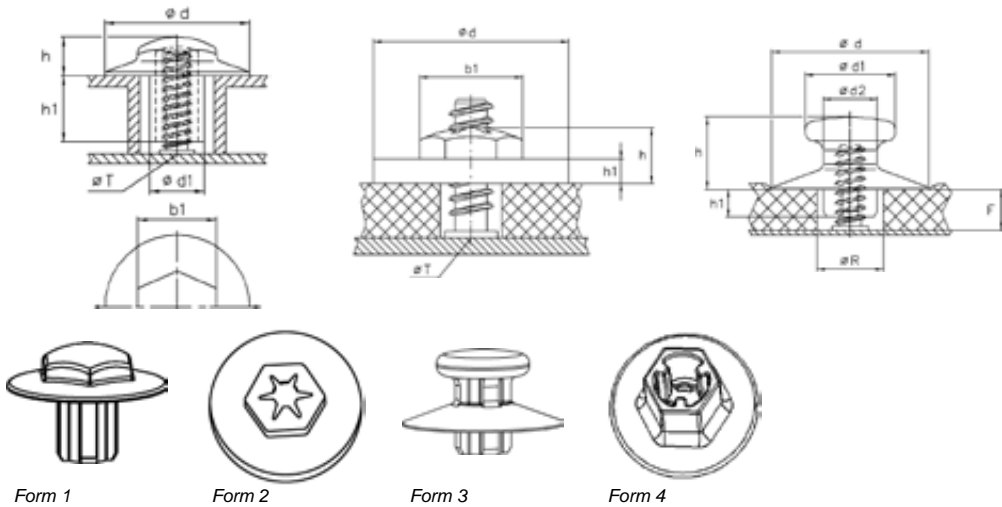
Samples available on request

?	REF.	M / ØT	Ød	h	b	b1	s	Form
	012604	M 4	13,0	5,2	-	9,0	0,4	1
	012470	M 5	14,5	5,0	-	9,0	0,45	1
	012148	M 6	15,0	6,5	-	11,0	0,55	1
	020879	5,0	22,5	5,3	-	10,0	0,5	2
	054336	5,0	12,0	4,5	-	7,0	0,5	2
	019300	5,0	19,0	10,5	-	13,0	0,6	3
	017668	5,0	25,0	10,5	-	13,0	0,6	3
	017581	5,0	16,0	10,0	-	8,0	0,6	3
	016559	5,0	16,0	10,0	-	8,0	0,6	3
	017144	5,0	25,0	10,5	-	8,0	0,6	3
	016664	5,0	16,0	10,0	13,0	8,0	0,6	3
	016159	5,0	19,0	10,0	16,0	8,0	0,6	3

PLASTIC NUTS FOR THREADED STUD PRESSED ONTO - UNSCREWED

MATERIAL:
Polyoxymethylene

COLOURS:
Black



Sketches for illustration purposes only, please request latest detailed drawing.

Plastic nuts for fixing acoustic insulators and floor carpets.
Assembled by pushing on the welded threaded stud. Possibility of disassembly by unscrewing.
The parts are generally designed for studs type H: 14.2 mm. For use of stud H: 18 mm, a preliminary test is necessary.

Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

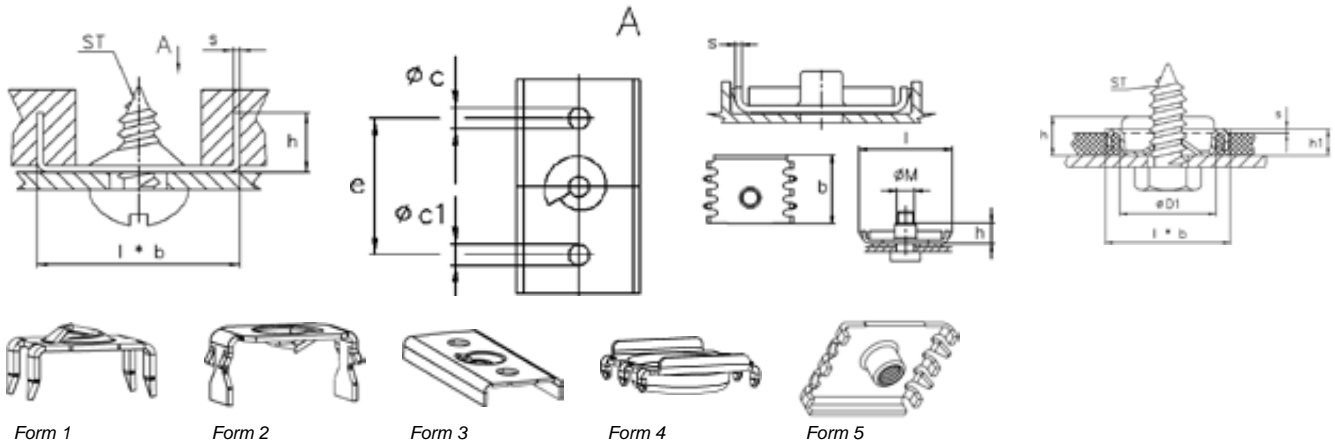
?	REF.	ØT	Ød	Ød1	h	h1	b1	Form
	015649	5,0	24,0	9,0	6,5	11,0	13,0	1
	015938	5,0	24,0	9,0	6,9	3,5	13,0	1
	018680	5,0	24,0	9,0	6,5	9,0	13,0	1
Z	055389	5,0	22,0	-	-	6,3	10,0	2
	014445	5,0	22,0	-	5,3	2,8	10,0	2
	017883	5,0	26,0	15,0	12,0	4,6	-	3
	216785	5,0	22,0	-	9,5	1,5	10,0	4

Z = on request

PRESTOLE TYPE NUTS WITH GRIPS DRIVEN IN

MATERIAL:
Spring steel C67S austempered

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

The "PRESTOLE" nut plate includes claws that are driven into wood, plywood, fibreboard etc. and generally all materials into which the steel claws may penetrate.
Once the claws are anchored into the underlying substrate, the assembly operation may be performed from one side only.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ST / M	l x b	s	h	h1	ØD1	Øc	Øc1	e	Form
	014817	ST 3,5	14 x 10	0,6	5,6	-	-	-	-	-	1
l	013163	ST 3,9	13 x 10	0,5	5,0	-	-	-	-	-	1
	015864	ST 3,9	18 x 10	0,6	5,6	-	-	-	-	-	1
	011405	ST 4,2	16,2 x 10	0,75	6,5	-	-	-	-	-	1
	013447	ST 4,2	18 x 10	0,6	5,6	-	-	-	-	-	1
	016302	ST 4,8	14 x 10	0,6	5,6	-	-	-	-	-	1
	013568	ST 4,8	18 x 10	0,6	5,6	-	-	-	-	-	1
	014113	ST 3,5	16 x 10	0,6	8,6	-	-	-	-	-	2
	015621	ST 4,2	13,5 x 9,5	0,6	3,75	-	-	-	-	-	2
	014086	ST 4,2	13,5 x 9,5	0,5	3,75	-	-	-	-	-	2
	013293	ST 4,8	13,5 x 9,5	0,6	4,1	-	-	-	-	-	2
	013092	ST 3,9	33 x 16	0,6	4,0	-	-	4,0	4,0	20,0	3
	016335	ST 5,5	18,6 x 19,1	0,7	4,0	4,0	14,0	-	-	-	4
	130910	M 8	41,4 x 30,8	1,5	9,0	-	-	-	-	-	5

ELASTIC ANTI-CREEPING RINGS TO SWAGE

MATERIAL:

Steel FM 66, steel XC 68G

PROTECTIVE FINISH:

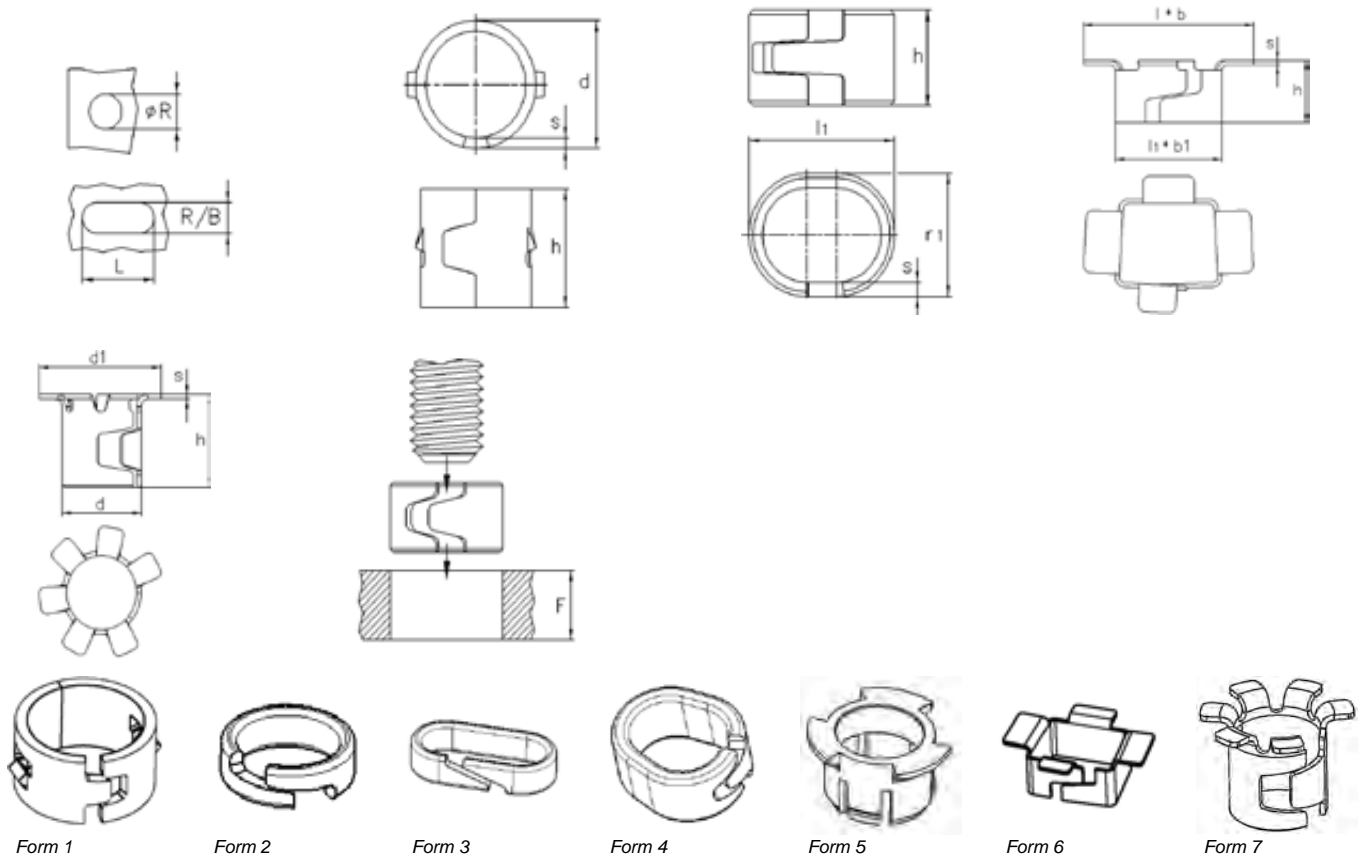
According to the drawings or taking into account the required corrosion resistance.

MATERIAL:

Polyoxymethylen

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

ANTI-CREEPING-RINGS are used to provide structural support to plastic components.

Once in place, they allow screw/ bolt compression without the risk of torque relaxation.

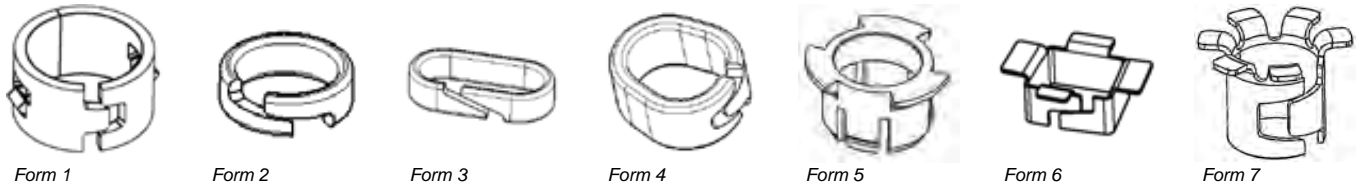
Assembly should be with purpose-designed tooling, please contact us for details/ assistance.

? Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	ØR	L x R/B	F	d/l1xr1/b1	Ød1/l x b	h	s	Form
	020596	11,6...11,8	-	6...6,2	11,5	-	6,2	0,95	1
	018031	11,4...11,6	-	6,0	11,3	-	10,8	0,95	1
	210754	20,3...20,5	-	3,45	20,7	-	3,45	1,5	2
	202527	7,1...7,2	-	3...3,2	7,7	-	3,1	0,5	2
	055438	8,3...8,5	-	5,9...6,5	8,6	-	6,0	0,5	2
	131473	8,5...8,7	-	4,0	8,9	-	4,0	1,2	2
	130037	8,6...8,8	-	2,9...3,1	9,1	-	3,0	1,0	2
	202105	9,9...10,1	-	2,9...3,1	10,4	-	3,0	1,0	2
	129754	9,3...9,7	-	5,5	10,3	-	5,5	0,5	2
	128688	10,65...11,05	-	12,0	11,4	-	11,8	0,8	2
	128689	10,9...11,1	-	7,8	11,4	-	7,8	0,8	2
	055404	12,6...12,8	-	5,8	13,0	-	5,8	0,5	2
	132644	18,5...18,7	-	6,3	19,0	-	6,3	0,8	2
	055312	14...14,5	-	6,0	14,3	-	6,0	0,8	2
	128344	25,2...25,5	-	3...3,2	25,3	-	3,45	1,5	2

ELASTIC ANTI-CREEPING RINGS TO SWAGE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØR	L x R/B	F	d/l1xr1/b1	Ød1/l x b	h	s	Form
	131318	-	14,5 x 9	7,0	15,3 x 8,5	-	7,0	1,0	3
	202409	-	22,7 x 12,7	4,1	23 x 13	-	4,1	0,5	3
	203758	-	17,7 x 14,2	4,0	17,7 x 13,8	-	4,0	1,2	3
	130562	-	14,2 x 10	4,0	14,7 x 9,5	-	4,0	1,2	3
	131424	-	15,1 x 9,4	4,2...4,6	15,7 x 8,9	-	4,0	1,2	3
	131459	-	17,9 x 9,4	4,0	18,4 x 8,9	-	4,0	1,2	3
	130330	-	18,6 x 16,2	4,8	19,2 x 15,9	-	4,8	1,2	3
	055505	-	15,2 x 13,2	3,0	15,8 x 13,5	-	3,0	0,8	3
	128949	-	16,9 x 11,8	3,0	17,4 x 11,3	-	3,0	1,0	3
	131474	-	18 x 12,9	4,0	18,4 x 12,4	-	4,0	1,2	3
	207393	-	16,5 x 13,5	9,9...10,1	16,2 x 12,8	-	10,0	1,5	3
	209874	-	15,2 x 9,4	4,0	15,7 x 8,9	-	4,0	0,8	3
	201754	-	9 x 6,5	5,4	12 x 10,4	-	5,4	1,5	4
	214885	-	11,6 x 10,1	4,0	11,6 x 10,7	-	4,0	0,8	4
	204804	-	14,0 x 10,0	4,9...5,1	14,35 x 11,05	-	4,7	0,8	4
	205838	-	16,85x12,75	4,9...5,1	17,19 x 13,49	-	4,7	0,8	4
	057374	12,2	-	6,4...6,8	12,1	16,25	8,8	-	5
	132922	-	10,8 x 8,95	6...6,4	10,8 x 8,95	17,8 x 15,95	6,8	0,4	6
	202514	13,3...13,7	-	14,65	22,1	14,0	15,45	0,8	7

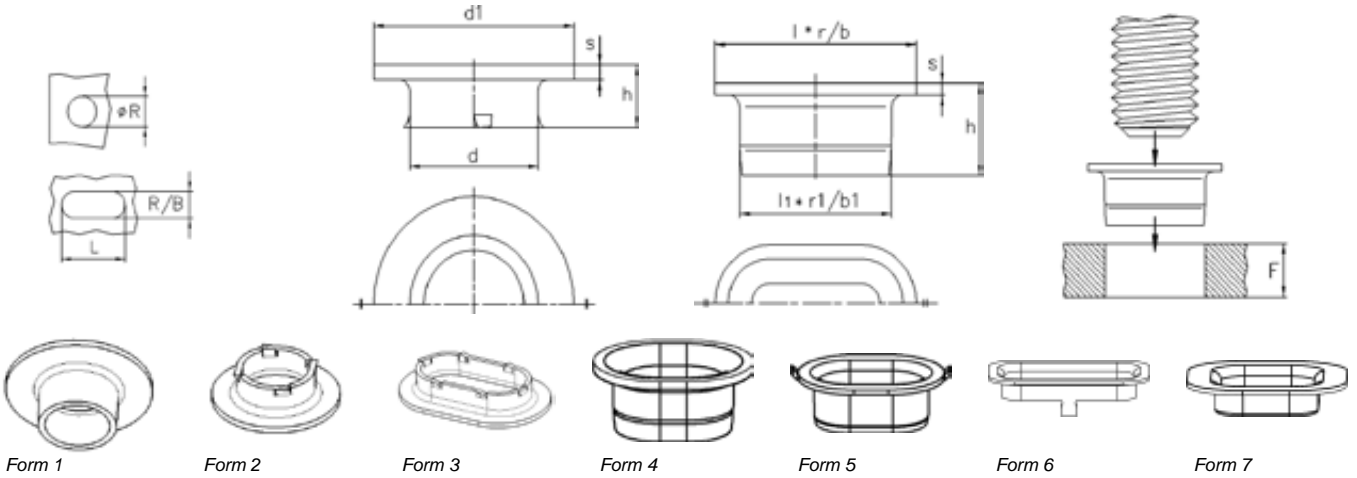
NON-ELASTIC ANTI-CREEPING RINGS TO SWAGE, TO PUSH-IN

MATERIAL:

Spring steel C67S austempered, steel FM 66

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

Anti-creeping nuts can be swaged, pushed-in or overmoulded into plastic parts.

Their function is to resist the tightening torque while assembling the different elements with a bolt, to avoid creeping and relaxation of the plastic elements onto which they are assembled.

These rings can be mounted in different ways, semi-automatic tool or with a fixing gun.

Whatever the solution, it is necessary to consult us in order to identify the best surface-treatment / assembly method.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

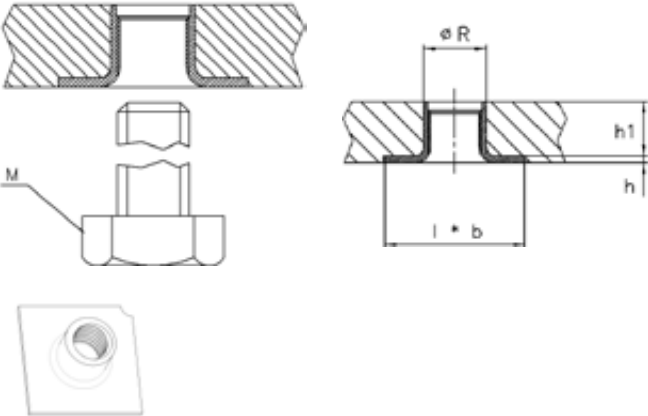
Samples available on request

?	REF.	ØR	L x B/R	F	Ød1/lxr/b	d/l1xr1/b1	h	s	Form
	132494	-	-	5,45	18,0	9,6	6,65	0,8	1
	132999	10,1...10,3	-	3,4...3,6	11,2	9,9	4,65	0,8	2
	213797	10,85...11,15	-	4,7...5,1	16,7	10,7	4,9	1,2	2
	055504	11,1...11,3	-	2,65...2,75	25,0	11,0	3,5	0,5	2
	133001	-	21 x 10,2	3,4...3,6	26,8 x 16	20,7 x 9,9	4,65	0,8	3
	201641	-	21 x 14,2	3,3	27,3 x 20,5	20,7 x 13,9	4,65	0,8	3
	055749	-	40 x 10	2,5...2,7	50 x 20	40 x 10	3,4	0,5	3
	055535	-	28 x 15	2,4...2,6	33 x 26	26,4 x 13,4	4,5	0,7	3
	201054	-	13,9 x 10,9	7,0	18 x 15	13,5 x 10	8,0	1,0	4
	015808	-	13,5 x 8,5	5,3...5,5	18,6 x 13	13,2 x 8,2	6,0	0,6	5
	019753	-	19 x 8,6	3,2	29 x 14,5	19 x 8,6	4,0	0,75	5
	019854	-	25,5 x 12,2	3,5	30 x 17	25,2 x 12,2	4,1	0,6	6
	020215	-	11,5 x 12,5	2,8...2,9	17 x 18	11 x 12	3,3	0,5	7

CLIPS WITH DRAWN BARREL NUTS TO OVERMOULD

MATERIAL:
Steel C45

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

Feature(s) of the part
see Reference Page 4
Dimensions in mm

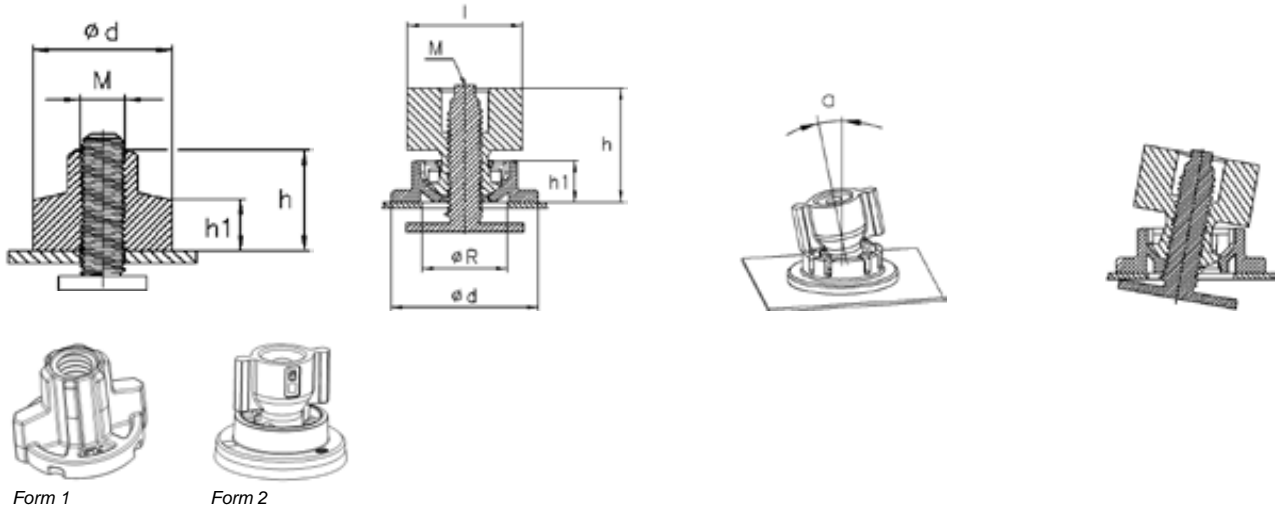
Samples available on request

?	REF.	M	ØR	l x b	h	h1	Form
	055310	6,0	7,15	16 x 16	6,2	0,8	1

PLASTIC NUTS HAND-TURNING DEVICE FOR METRIC SCREW SCREWED

MATERIAL :
PA66 - GF - (other materials available on request)

COLOURS :
Black - (other colours available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Plastic nut manually screwed.
Nevertheless a tool can be used to increase the tightening torque : 25Nm \pm 25%
Example of use : fastening of 3rd rear stop light.

Form 1 : standard
Form 2 : permits angular play ajustments

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

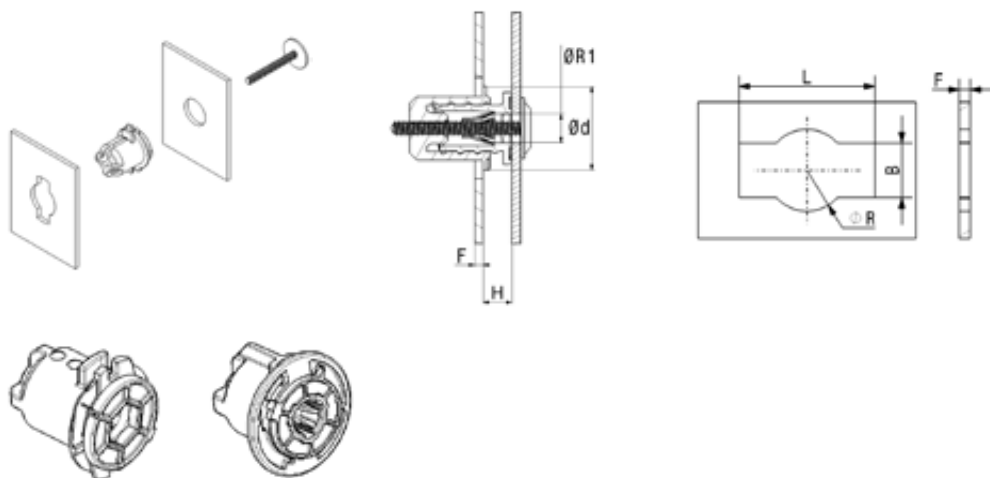
Samples available on request

?	REF.	M	ØR	Ød	l	a°	h	h1	Form
	209640	6,0	-	17,5	-	-	14,0	7,0	1
	207822	6,0	15,0	25,5	19,7	10,0	19,3	9,0	2

REGULATING SCREWS SCREW GAP REGULATOR / ADJUSTER

MATERIAL:
PBT

COLOUR:
Natural



Form 1 Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

Allows adjustment between the supporting material and the part to be assembled.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØR	L x B	ØR1	F	H	Ød	Form
	202424	22,5	34 x 11	5,5 mini	3,0	0...10	33,0	1
	205069	18,5	25 x 8	5,5 mini	1,8	0...10	27,0	2

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016401	A-01	017954	A-08	019300	A-25	054046	A-11	130037	A-29	204692	A-19
016406	A-06	017980	A-17	019319	A-10	054336	A-25	130288	A-11	204786	A-15
016441	A-05	018024	A-04	019329	A-21	054649	A-02	130312	A-08	204804	A-30
016472	A-01	018031	A-29	019361	A-04	054836	A-10	130330	A-30	204819	A-20
016509	A-17	018052	A-22	019397	A-19	054911	A-04	130562	A-30	204919	A-11
016559	A-25	018068	A-06	019417	A-22	054913	A-10	130793	A-10	205069	A-34
016632	A-27	018113	A-11	019451	A-18	054923	A-08	130910	A-28	205669	A-21
016661	A-06	018115	A-05	019503	A-17	055111	A-04	130914	A-18	205812	A-07
016664	A-25	018140	A-07	019549	A-11	055301	A-02	131318	A-30	205838	A-30
016668	A-07	018174	A-11	019598	A-05	055310	A-32	131424	A-30	205944	A-01
016675	A-17	018248	A-08	019618	A-03	055312	A-29	131459	A-30	206003	A-04
016699	A-02	018291	A-18	019641	A-05	055318	A-11	131473	A-29	206070	A-12
016710	A-09	018301	A-04	019685	A-22	055340	A-23	131474	A-30	206342	A-15
016714	A-21	018307	A-12	019688	A-10	055389	A-26	132494	A-31	206923	A-10
016719	A-19	018320	A-05	019747	A-17	055404	A-29	132644	A-29	206960	A-10
016728	A-10	018350	A-06	019753	A-31	055407	A-11	132922	A-30	207393	A-30
016770	A-07	018382	A-05	019781	A-18	055420	A-10	132968	A-22	207747	A-17
016793	A-17	018386	A-22	019854	A-31	055438	A-29	132999	A-31	207822	A-33
016810	A-06	018399	A-11	019877	A-12	055504	A-31	133001	A-31	207905	A-22
016820	A-11	018419	A-03	019941	A-05	055505	A-30	151108	A-04	207999	A-22
016847	A-08	018421	A-18	020037	A-10	055526	A-11	151150	A-07	208223	A-11
016909	A-18	018435	A-05	020077	A-20	055535	A-31	151161	A-05	208244	A-13
016911	A-18	018461	A-06	020097	A-21	055543	A-08	151165	A-04	208272	A-08
016951	A-20	018465	A-02	020207	A-17	055548	A-11	151178	A-03	208323	A-10
016999	A-01	018504	A-11	020215	A-31	055634	A-11	151518	A-06	208715	A-08
017013	A-04	018535	A-07	020217	A-11	055639	A-08	151532	A-22	208764	A-05
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PIPES & CABLES

PIPES & CABLES

FASTENERS



B

B PIPE AND CABLE FASTENERS

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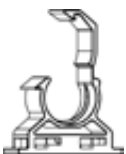
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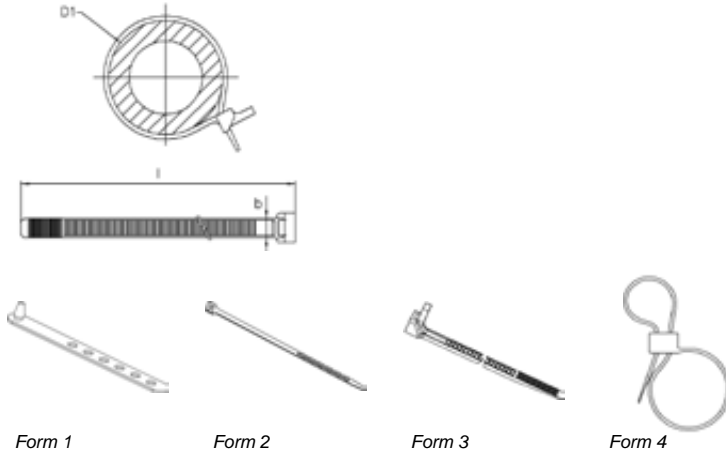
CABLE STRAPS BASIC

MATERIAL:

Polyamide, polyethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

FORM 1: HOLE TYPE STRAPS. These fasten cables or cable bundles by simply pressing the stud into the holes in the cable band.

FORM 2 and 3: NOTCHED TYPE STRAPS. These use the multiple notches to provide a gradual clamping action onto the cable/ bundle. Strap form 3 is fitted with a releasable latch which can be unlocked after clamping.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	b	l	Form
	011887	7...20	11,0	85,5	1
	110018	4...75	8,0	275,0	2
	012468	10...26	6,2	118,0	2
	012216	11...35	6,0	150,0	2
	012234	28...40	10,0	170,0	2
	012089	37...58	10,0	220,0	2
	013427	4...20	4,5	87,0	2
	014818	6...20	4,0	91,0	2
	013428	6...30	6,0	128,7	2
	013429	6...60	6,0	218,7	2
	014819	6...45	4,0	156,0	2
	013430	60...135	6,0	459,0	2
	014691	6...45	4,0	161,5	3
	014690	6...20	4,0	96,5	3
	012526	8...20	7,0	100,0	3
	012528	10...70	9,0	250,0	3
	014580	24...52	9,0	200,0	3
	015375	11...26	2,8	126,0	3
	014749	24...85	9,0	300,0	3
	014019	26...28	2,8	138,0	3
	014904	26...30	2,8	138,0	3
	015068	29...31	2,8	144,0	3
	110048	30...100	7,6	374,0	3
	015004	35...37	2,8	163,0	3
	018428	47...55	3,5	-	3
	152261	3...35	3,6	156,5	3
	053583	15...35	6,2	132,7	3
	208596	3...38	4,8	151,6	4

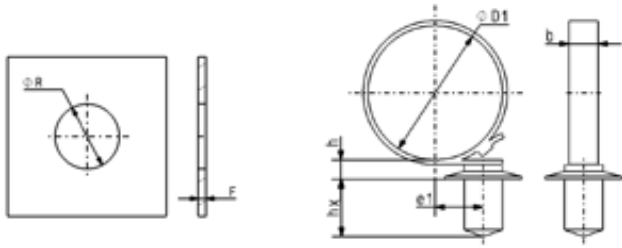
CABLE STRAPS PRESSED INTO A ROUND HOLE

MATERIAL:

Polyamide, polyethylene

COLOUR:

Natural, Black (other colours are available on request)



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

Form 1 with pin

Form 2, 3, 4 and 7 with anchor

Form 5 with various fir tree designs

Form 6 and 8 with rivet



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	F	ØR	b	h	hx	e1	Form
	011978	7...12	1,5	6,0	11,0	1,3	9,0	-	1
	011797	7...20	1,5	6,0	11,0	1,3	9,0	-	1
	011883	7...32	1,5	6,0	11,0	1,3	9,0	-	1
	015246	3...45	0,8...2,5	6,2	7,0	5,5	7,0	-	2
	016231	3...56	0,8...2,5	6,2	7,0	5,5	7,0	-	2
	200435	40...60	0,5...1,9	11,0	7,0	9,7	10,3	-	2
	175179	2...29	0,8...5	8,0	4,8	-	9,8	-	2
	200014	1,5...13	1,7...1,9	5,0	4,5	-	5,3	-	2
	205246	0,5...25	0,8...1,3	6,5	-	-	-	-	3
	019813	0,75...20	1,9...2,2	16,0	5,0	-	-	-	3
	175200	1...40	0,6...3	6,2...7,2	4,8	-	8,8	-	3
	175149	1,5...43	0,6...5	6,5	4,8	-	10,0	-	3
	175057	2...40	0,7...1,8	6,5	4,8	-	6,8	-	3
	056350	3...40	0,5...3	6,5...6,9	4,5	6,2	11,7	-	3
	014832	24,0	0,8...1,8	6,5	4,2	4,0	7,3	-	3
	014568	8...35	0,7...1,5	6,5	4,5	6,8	7,3	-	3
	206327	0,5...25	0,5...1,3	6,5	-	-	-	-	3
	056299	3...40	0,5...3	6,2 x 12,2	4,5	-	6,5	-	3
	015578	14...32	0,7...3	6,5	10,0	6,2	7,0	-	4
	082211	15...35	0,7...1,5	6,5	10,0	-	-	-	4
	020250	1,5...43	0,6...2,5	6,5	4,5	-	-	-	5

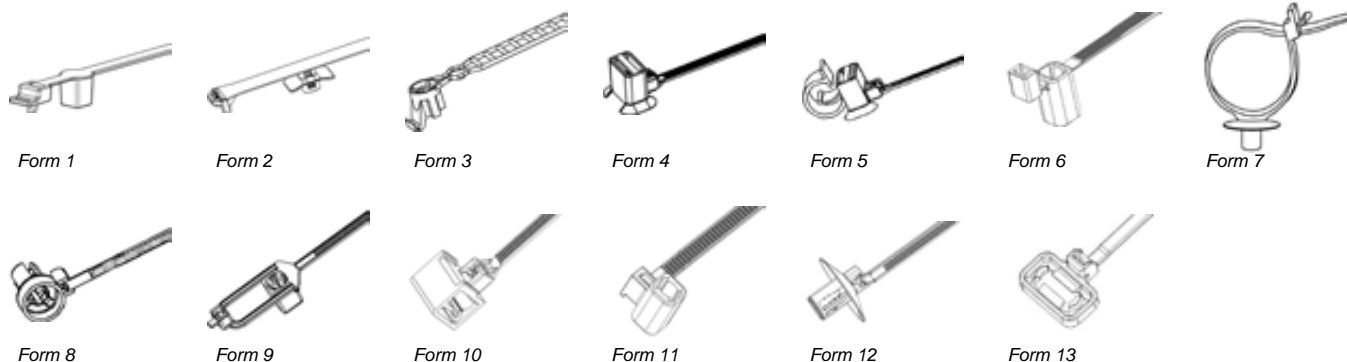
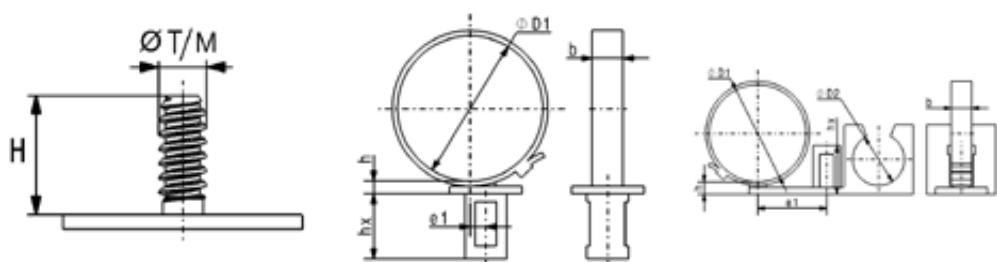
CABLE STRAPS PUSHED ONTO A STUD

MATERIAL:

Polyamide

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.

To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

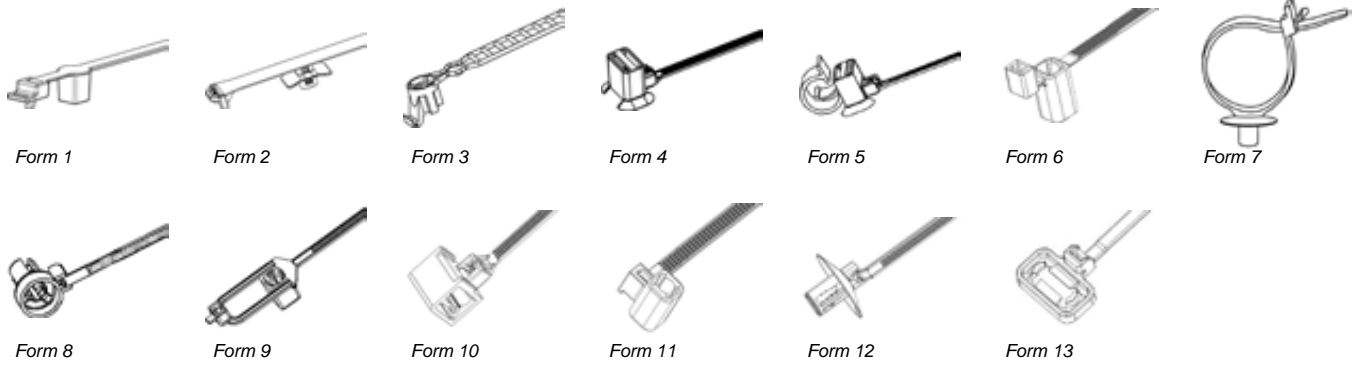
? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	b	h	hx	e1	ØT / M	H	Form
	016324	3...56	-	7,0	1,0	12,5	-	5,0	12,0	1
	015474	3...40	-	7,0	1,0	12,5	-	5,0	12,0	1
	019805	20...60	-	25,0	-	6,0	-	5,0	14,2	2
	015556	10...28	-	10,0	-	-	-	5,0	9,0	3
*	205247	0,5...25	-	3,6	2,5	15,0	-	5,0	16,0	4
	203449	2...40	-	4,5	2,75	14,75	-	5 / 6	14,2	4
	018062	2,5...41	-	4,5	2,0	16,5	-	5,0	14,2	4
	205241	1...40	-	-	-	-	-	5,0	14,2	4
	200598	2,5...41	12...15	4,5	12,5	18,5	-	5,0	14,2	5
	201335	1,5...40	-	4,8	2,0	13,0	-	5,0	14,2	6
	061168	12...40	-	7,0	3,8	12,0	-	5,0	14,2	7
	061260	28...55	-	9,0	3,8	12,0	-	5,0	14,2	7
	056462	5...20	-	9,0	4,3	12,5	-	5,0	14,2	7
	020494	2...25	-	4,5	-	27,5	-	M8	-	8
	202587	2...40	-	4,8	-	27,5	15,0	8,0	25,0	8
	055081	13...44	-	4,5	1,2	13,8	25,0	5,0	14,2	9
	015458	13...44	-	4,5	1,2	13,8	-	5,0	14,2	9
	015770	10...55	-	6,0	1,2	8,8	-	5,0	9,0	9
	020361	10...55	-	6,0	1,2	8,8	-	6,0	9,0	9

* = external teeth

CABLE STRAPS PUSHED ONTO A STUD



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	b	h	hx	e1	ØT / M	H	Form
	017412	13...44	-	4,5	1,2	13,8	-	5,0	14,2	9
	175170	2...40	-	4,5	-	15,0	-	M6	16,0	10
	175207	1...40	-	5,0	-	-	-	5,0	14,2	11
	175084	2...22	-	4,8	-	-	-	5,0	14,2	11
	201614	1,5...40	-	4,5	9,5	12,0	-	5/M6	12,0	12
	214658	0,5...25	-	3,8	1,1	3,5	-	5,0	14,0	13

* = external teeth

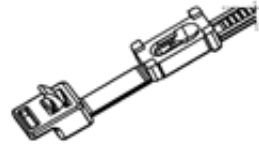
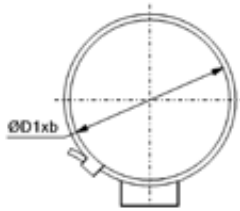
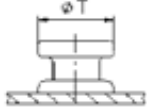
CABLE STRAPS CLIPPED ONTO T-STUD

MATERIAL:

Polyamide

COLOUR:

Black



Detail



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	b	ØT	Form
	015242	3...40	7,0	5,0	1
	015576	3...55	7,0	5,0	1
	013235	16...22	7,0	5,0	1
	108019	10...40	10,0	5,0	1
	013236	20...35	9,0	5,0	1
	013740	28...55	9,0	5,0	1
	014605	20...42	9,0	5,0	1

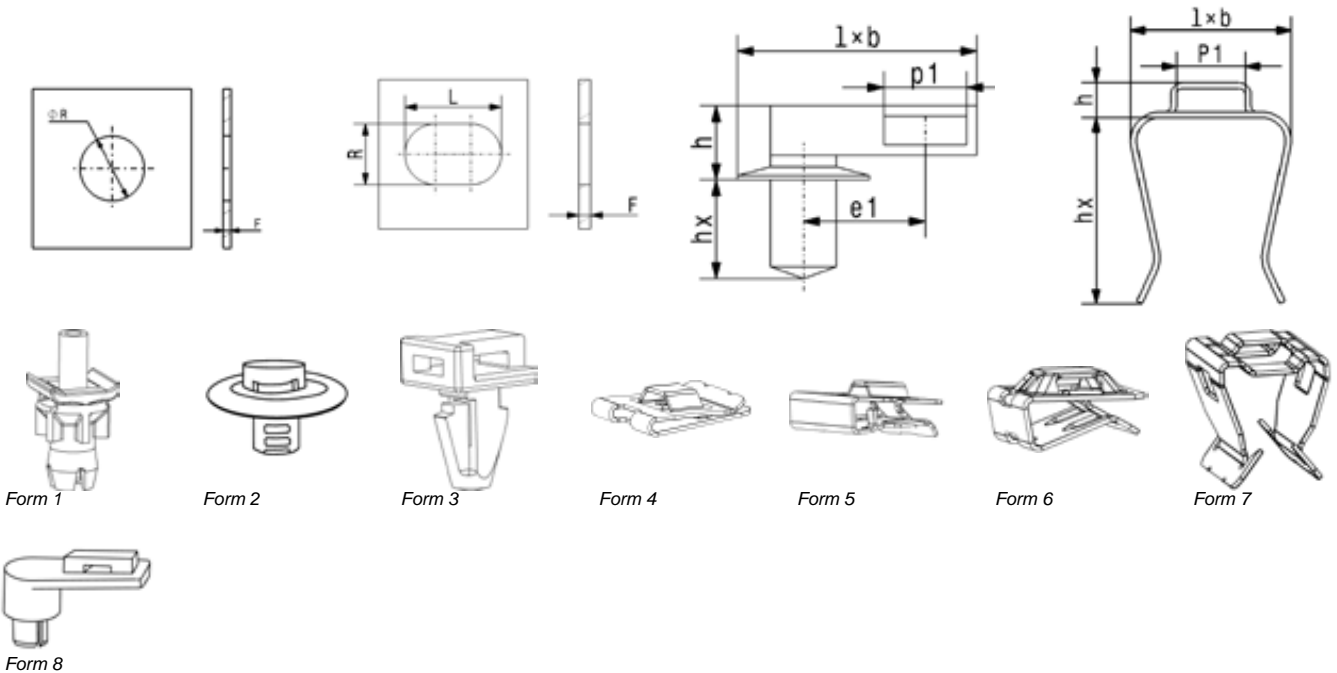
MOUNTS FOR CABLE STRAPS

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These strap adaptors provide the interface between the strap and the underlying fixing.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	p1	F	ØR/ L x R	Ød/ l x b	h	hx	e1	Form
	014114	9,2	8,0	14,2	25 x 25	17,0	18,0	-	1
	013888	9,2	4,5...6	11,0	18 x 18	13,0	13,0	-	1
	081827	9,2	4,5	14,9	25 x 25	17,0	18,0	-	1
	013886	9,2	8,0	14,9	25 x 25	17,0	18,0	-	1
	175022	11,0	4,5...6	13,0	21 x 21	13,0	13,0	-	1
	055969	9,5	0,5...4	7...7,2	31 x 13	9,5	7,0	-	1
	054096	8,0	8,5	9,2...9,8	30,8	7,1	8,5	-	2
	016116	6,6	2,5...2,6	6,3 x 5	11 x 10	6,5	11,0	-	3
	014130	6,6	2,5...2,6	6,5 / 6,3 x 5	11 x 10	5,0	11,0	-	3
	018563	5,0	0,9...1,1	-	2,2 x 16	2,5	15,7	-	4
	019752	5,0	0,8...1,2	-	2,4 x 16	2,5	15,7	-	4
	017890	5,8	1,5...4,5	-	6,2 x 25	3,6	17,8	-	5
	208738	5,0	1,5...4	-	8 x 15	2,5	14,2	-	6
	019408	5,0	1...3	-	13 x 18	3,1	14,0	-	7
	020848	5,0	9,0	-	13 x 18	3,1	15,1	-	7
	056251	-	7,0	11,0	49...55 x 20	17,5	11,0	27,0	8

SWIVEL SPACER CLIPS APPLICATIONS

MATERIAL:

Polyoxymethylene, Polyamide

COLORS:

Black, natural (other colours are available on request)



MONTAGE

The swivel type clips are made up of a number of individual components that are assembled together by means of their male / female connecting feature(s).

This allows cables/ tubular items to be fastened and oriented in any desired direction.

Available designs:

- Clips (or straps) produced with one male or female connection

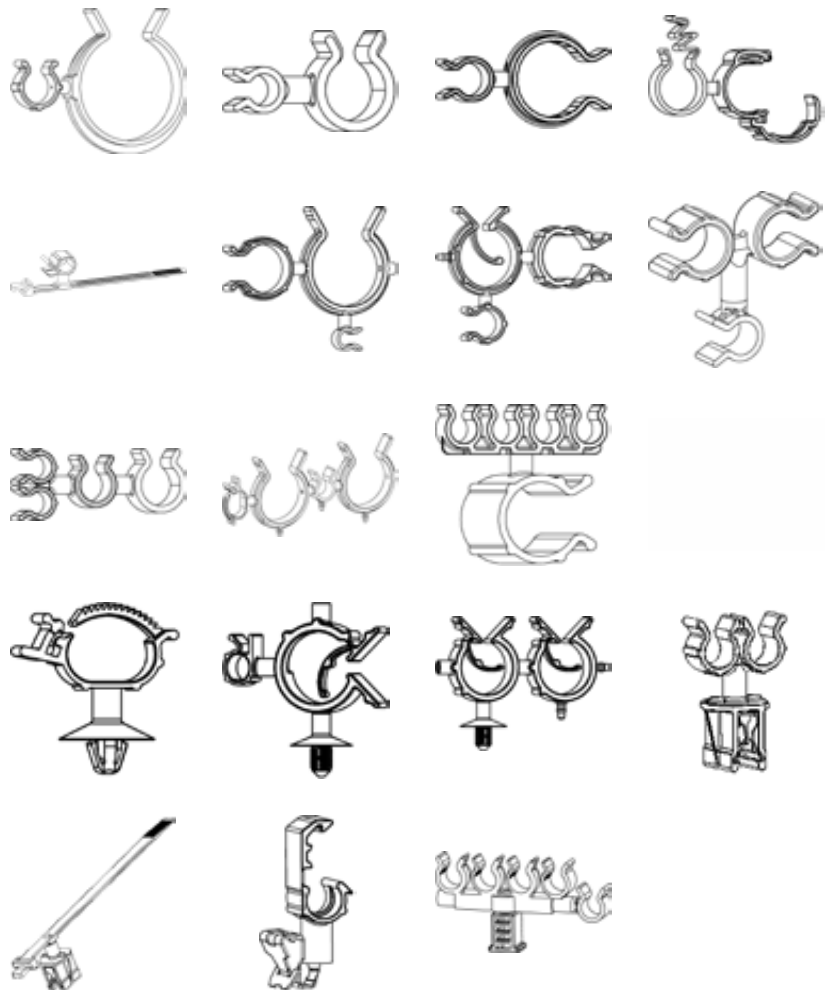
- Clips/ adaptors produced with multiple male or female connections

- Adaptors for clips (or straps)

Any desired combination is achievable. The double, triple, four-way etc... combinations shown on this data sheet and on the following pages, do not illustrate all available options.

Please contact us if you require more detailed information.

Sketches for illustration purposes only, please request latest detailed drawing.



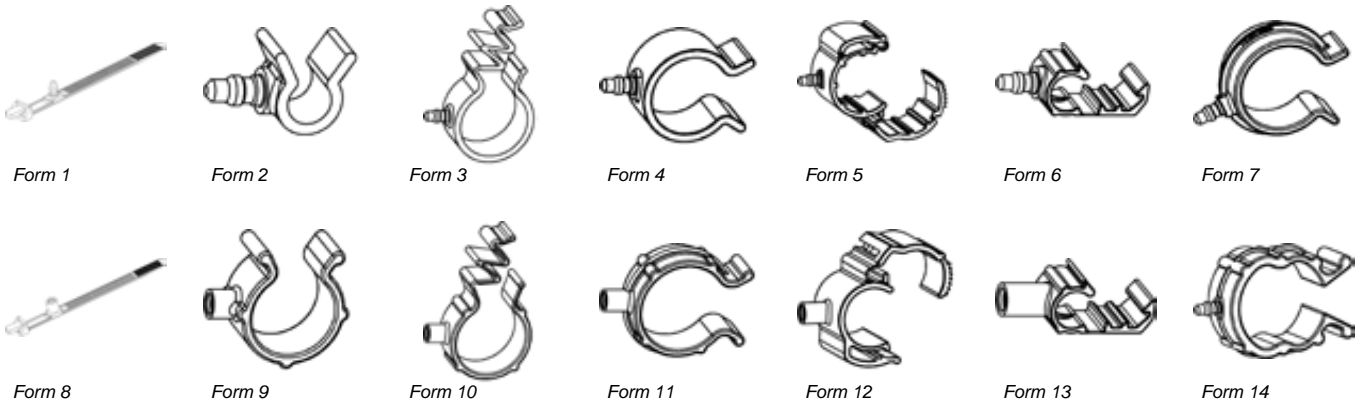
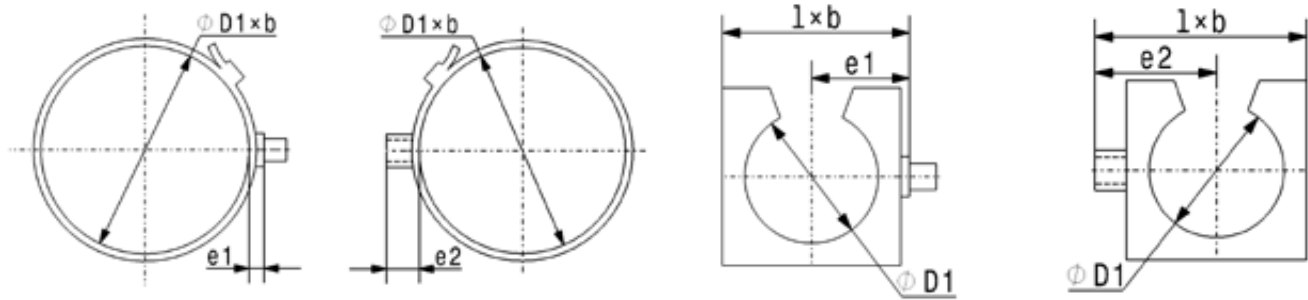
BASIC ASSEMBLY ELEMENTS FOR SPACER 1-WAY WITH SINGLE CONNECTION

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These components, once assembled using their male or female connections, become swivelling type clips. These then allow cables/ tubular items to be fastened and oriented in any desired direction.

Such clips may be supplied in the pre-assembled condition

Form 1-7 with male connection!

Form 8-13 with female connection

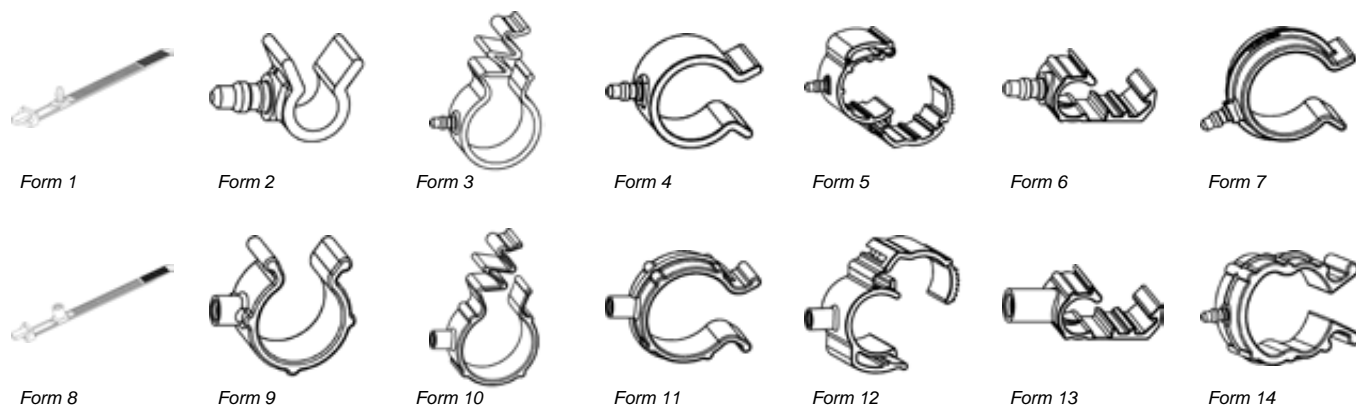
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	l	b	e1	e2	Form
	016817	8...50	219,5	11,0	3,0	-	1
	013976	8...75	279,0	11,0	3,0	-	1
	013224	8...20	106,0	11,0	3,0	-	1
	053997	8...50	-	11,0	3,0	-	1
	014269	10...52	206,0	11,0	3,0	-	1
	152175	48...80	-	7,0	-	-	1
	014048	46...95	348,0	11,0	3,0	-	1
	013389	46...75	279,0	11,0	3,0	-	1
	054293	48...80	-	11,0	3,0	-	1
	056383	48...80	-	13,0	3,0	-	1
	054461	90...135	-	11,0	3,0	-	1
	015779	6...6,5	10,0	8,0	5,5	-	2
	016166	8...9	14,0	8,0	8,5	-	2
	055753	8...9	14,0	8,0	8,5	-	2
	175003	4,3...5,2	7,35	10,0	4,0	-	2
E	054450	6...10	15,0	10,0	7,0	-	2
	053870	9,5...10,5	14,0	10,0	7,15	-	2
	013379	9,5...10,5	14,0	10,0	7,25	-	2
	012937	11,5...13	16,0	10,0	8,25	-	2
	053792	11...13	15,5	10,0	8,0	-	2
	054369	13...14	17,0	10,0	8,5	-	2
	013721	14...15	18,5	10,0	9,5	-	2
	056653	14...15	18,5	10,0	9,5	-	2
	054458	15...16	19,0	10,0	9,5	-	2

E = with securing tang for variable bore G = for corrugated tubes C = AR-Bag® anti noise insulation - Bi-injection *NW10

BASIC ASSEMBLY ELEMENTS FOR SPACER 1-WAY WITH SINGLE CONNECTION

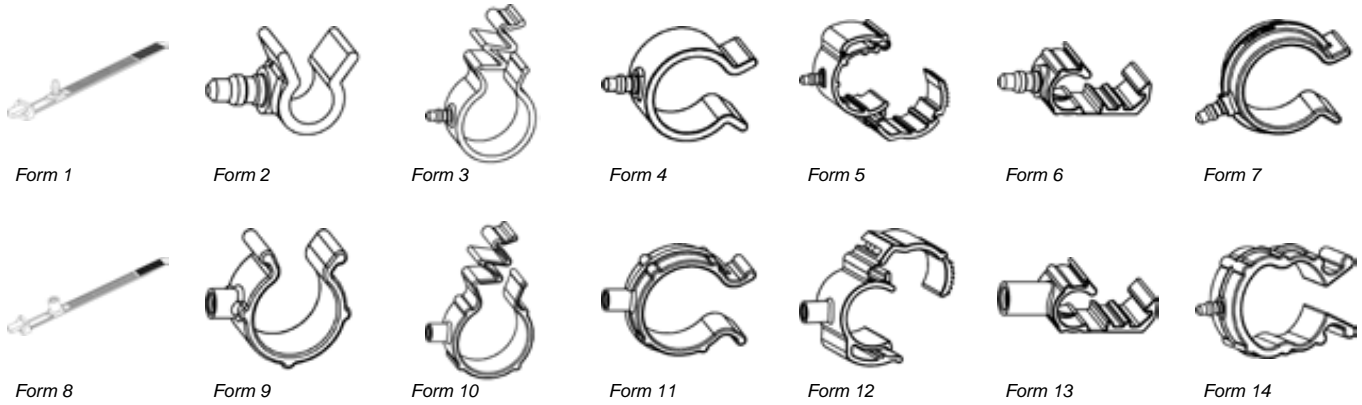


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	l	b	e1	e2	Form
	152222	12...13	17,0	10,0	8,5	-	2
	152226	9,5...10,5	14,0	10,0	7,25	-	2
	152244	12...14	16,75	10,0	8,5	-	2
	152451	12...13	16,5	10,0	8,5	-	2
	020379	34...36	43,0	10,0	20,0	-	2
	132598	8...9	24,2	10,0	13,5	-	2
	053768	4,8...5,2	7,35	10,0	4,0	-	2
	015125	7,8...8,5	10,4	12,0	5,2	-	2
	055480	15,8...17	43,35	12,0	33,35	-	2
	016175	16...18	20,5	12,0	10,5	-	2
	014609	22...24	26,5	12,0	13,5	-	2
	055554	22...24	26,5	12,0	12,5	-	2
	018809	22...24	50,0	12,0	37,0	-	2
	019758	28...30	35,5	12,0	17,0	-	2
	056160	48...53	64,5	12,0	26,65	-	2
	016387	22,0	26,5	12,0	13,5	-	3
	016183	25,0	29,5	12,0	15,0	-	3
	013380	10...12	16,5	10,0	7,5	-	4
	054373	11...13	18,0	10,0	8,0	-	4
	016708	13...14	21,0	10,0	9,0	-	4
	054380	20...22	28,9	10,0	12,5	-	4
	152478	15,5	25,8	12,0	11,5	-	4
	053794	18...20	25,8	12,0	11,5	-	4
	013105	18...20	26,0	12,0	11,5	-	4
	152223	28...31	38,5	12,0	17,0	-	4
	152478	15,5	25,8	12,0	12,05	-	4
	014067	28...30	40,0	12,0	17,5	-	4
	054360	29...33	40,0	12,0	17,2	-	4
	015745	35...38	46,0	12,0	20,0	-	4
	200950	60...65	81,0	15,0	36,0	-	4
	152224	18...20	25,3	11,6	11,3	-	4
	018129	33...35	42,5	16,0	22,0	-	5
	019099	33...38	41,0	16,0	20,0	-	5
	018923	35...37	40,5	16,0	20,5	-	5
	206176	39...41	45,0	16,0	23,0	-	5
	201163	19...21	-	20,0	12,8	-	5
	017078	10...14	18,0	9,2	9,0	-	5
	017080	16...22	25,0	9,2	12,5	-	5
G	018851	21,0	25,0	20,0	12,5	-	5
G	017979	6,8...7,4	10,3	10,0	5,05	-	6
G	018175	9,6...10,2	13,4	15,0	6,45	-	6
G	018176	12,6...13,2	16,4	15,0	8,35	-	6
G	018714	15,5...16,1	19,0	20,0	9,8	-	6

E = with securing tang for variable bore G = for corrugated tubes C = AR-Bag® anti noise insulation - Bi-injection *NW10

BASIC ASSEMBLY ELEMENTS FOR SPACER 1-WAY WITH SINGLE CONNECTION

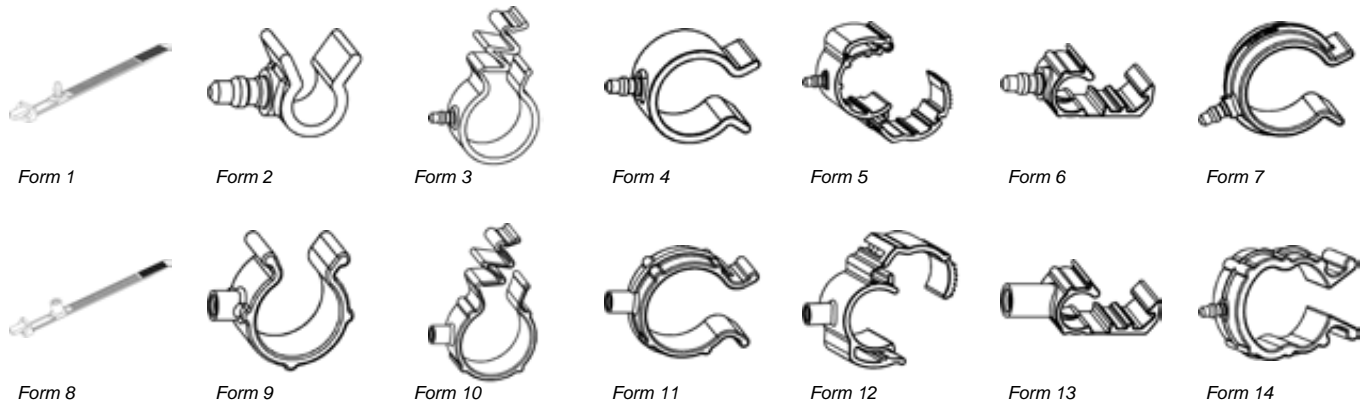


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	l	b	e1	e2	Form
	152493	29...30	70,5	12,0	51,7	-	7
	019653	22...24	30,5	12,0	15,5	-	7
	018723	28...30	38,0	12,0	17,0	-	7
	013223	8...20	106,0	11,0	-	10,0	8
	013326	8...33	146,0	11,0	-	10,0	8
	055663	30...80	-	12,5	-	6,5	8
	019869	8...33	140,0	8,5	-	8,75	8
	205712	20...24,5	32,6	7,0	-	18,3	9
	013569	4...4,5	13,5	8,0	-	10,0	9
	054054	6...6,5	15,5	8,0	-	11,0	9
	013129	6...6,5	15,5	8,0	-	11,0	9
	013525	8...9	17,5	8,0	-	12,0	9
	054055	8...9	15,5	8,0	-	12,0	9
	152133	8...9	17,5	8,0	-	12,0	9
	016399	4,3...5,2	13,85	10,0	-	10,5	9
	016258	7,8...8,5	17,6	10,0	-	12,4	9
	056655	9,5...11	22,0	10,0	-	15,0	9
	013897	10...12	22,0	10,0	-	15,0	9
	054092	10...12	21,0	10,0	-	13,5	9
	016896	11...13	21,0	10,0	-	13,5	9
	054977	13...14	23,0	10,0	-	14,5	9
	054260	13...14	22,2	10,0	-	14,4	9
	053868	15...16	24,5	10,0	-	15,0	9
	017018	15...16	25,5	10,0	-	15,0	9
	152189	15...16	24,5	10,0	-	15,0	9
	152243	12...14	18,5	10,0	-	10,25	9
	055189	39...45	50,0	10,0	-	26,5	9
	015782	13...14	23,0	10,0	-	14,5	9
	054370	13...14	19,3	10,0	-	10,80	9
	175035	13...14	22,2	12,0	-	14,4	9
	152230	18...20	27,0	12,0	-	16,25	9
	017688	18...20	28,5	12,0	-	16,5	9
	053869	18...20	27,5	12,0	-	16,5	9
	012938	19...24,5	29,5	12,0	-	17,5	9
	053793	20...22	29,5	12,0	-	17,5	9
	018105	19...24,5	29,5	30,0	-	17,5	9
	054459	15...16	21,0	10,0	-	11,0	9
	016184	14,0	24,5	10,0	-	15,5	10
	020402	22,0	32,2	12,0	-	19,2	10
	017984	25,0	34,5	12,0	-	20,5	10
	018457	6...6,5	18,0	8,0	-	11,0	11
	152477	6,0	20,5	8,0	-	11,0	11
	014669	7,2...7,5	18,6	8,0	-	11,6	11

E = with securing tang for variable bore G = for corrugated tubes C = AR-Bag® anti noise insulation - Bi-injection *NW10

BASIC ASSEMBLY ELEMENTS FOR SPACER 1-WAY WITH SINGLE CONNECTION



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	l	b	e1	e2	Form
	015416	12...13	25,5	8,0	-	14,5	11
	152477	6,0	20,5	8,0	-	11,0	11
	016705	10...12	22,5	10,0	-	13,5	11
	016709	13...14	27,0	10,0	-	15,0	11
	054074	16...18	28,5	12,0	-	15,5	11
	013104	16...18	30,0	12,0	-	16,5	11
	016423	25...27	41,5	12,0	-	22,0	11
	175045	43,0	54,5	16,0	-	30,0	12
	018234	17,0	28,1	20,0	-	17,8	12
G	020486	23,1...23,3	34,8	20,0	-	21,0	12
G	019175	20,6...21,4	31,0	20,0	-	18,5	12
	201162	22...24	-	20,0	-	19,5	12
G	019508	25,1...25,9	36,0	20,0	-	20,75	12
	020727	25,1...25,9	36,0	20,0	-	20,75	12
	017077	10...14	25,5	9,2	-	16,5	12
	017079	16...22	32,5	9,2	-	20,0	12
G	018226	6,8...7,4	18,0	10,0	-	12,55	13
C	020825	9,8...10	27,5	10,0	-	15,8	13
G	018777	9,6...10,2	20,9	15,0	-	13,95	13
G	018623	12,6...13,2	22,5	15,0	-	14,5	13
G	020312	15,5...16,1	25,8	20,0	-	16,5	13
	016904	22...30	40,5	16,0	17,5	-	14

E = with securing tang for variable bore G = for corrugated tubes C = AR-Bag® anti noise insulation - Bi-injection *NW10

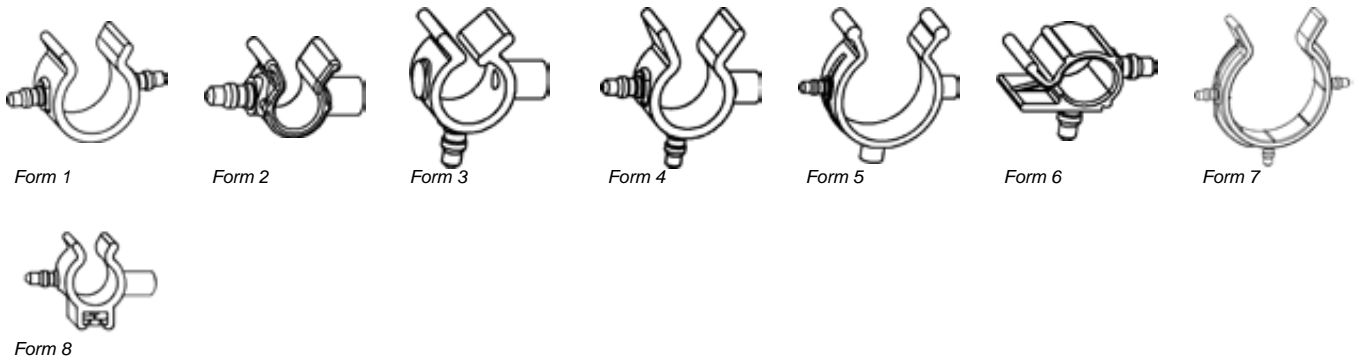
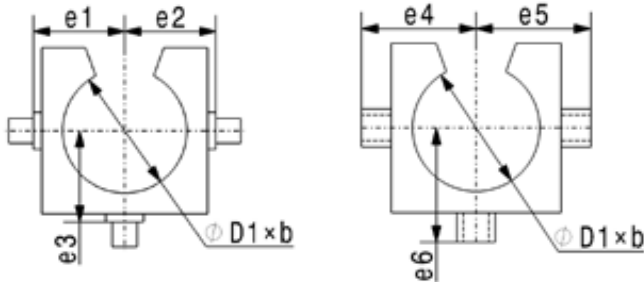
BASIC ASSEMBLY ELEMENTS FOR SPACER 1-WAY WITH MULTIPLE CONNECTIONS

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These components, once assembled using their male or female connections, become swivelling type clips. These then allow cables/ tubular items to be fastened and oriented in any desired direction. Such clips may be supplied in the pre-assembled condition

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	b	e1	e2	e3	e4	e5	e6	Form
	015156	15...16	12,0	10,0	10,0	-	-	-	-	1
	017846	3,5...5	10,0	-	5,5	-	11,5	-	-	2
	017851	7,5...8	10,0	6,25	-	-	-	11,75	-	2
	053953	9...9,5	10,0	7,0	-	-	-	12,0	-	2
	054073	11...13	10,0	8,0	-	-	-	13,5	-	2
	013911	11...13	10,0	8,0	-	-	-	13,5	-	2
	053879	14...16	12,0	9,5	-	-	-	15,0	-	2
	175034	23...25	12,0	14,0	-	-	-	19,0	-	2
	152227	9...10	10,0	-	-	-	-	-	-	2
	053860	23,5...25	12,0	14,0	-	-	-	19,0	-	2
	054285	13...14	12,0	7,9	-	-	-	14,4	-	2
	055197	10...11,5	10,0	-	-	-	-	13,3	-	3
E	054050	3,5...6	10,0	5,5	-	5,5	-	11,5	-	4
E	053970	6...10	10,0	8,0	-	8,0	-	13,0	-	4
	054775	6...6,5	10,0	5,5	-	5,5	-	11,0	-	4
E	053975	10...16	10,0	11,5	-	11,5	-	16,8	-	4
	015858	11...13	10,0	8,0	-	8,0	-	13,5	-	4
	015857	13...14	10,0	9,0	-	9,0	-	14,5	-	4
	055756	13,0	10,0	9,0	-	9,0	-	14,5	-	4
	054777	16...18	10,0	12,0	-	12,0	-	16,8	-	4
E	016866	16...24	10,0	15,4	-	15,4	-	21,3	-	4
	018609	23...30	10,0	19,75	-	19,75	-	25,55	-	4
	054553	24,0	10,0	15,4	-	15,4	-	21,3	-	4
	175208	30...32	10,0	19,75	-	19,75	-	25,55	-	4
	054693	30...32	10,0	19,5	-	19,5	-	25,3	-	4

E = with securing tang for variable bore

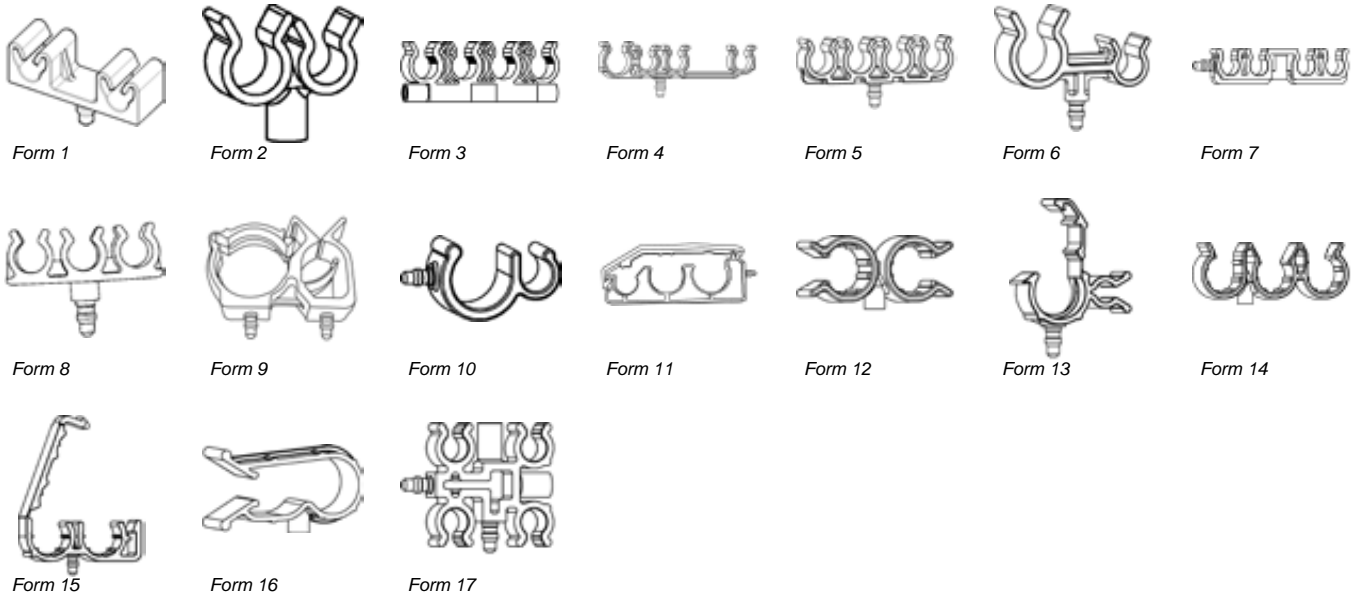
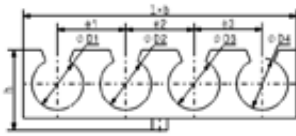
BASIC ASSEMBLY ELEMENTS FOR SPACER MULTI-WAY WITH SINGLE OR MULTIPLE CONNECTIONS

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These components, once assembled using their male or female connections, become swivelling type clips. These then allow cables/ tubular items to be fastened and oriented in any desired direction. Such clips may be supplied in the pre-assembled condition

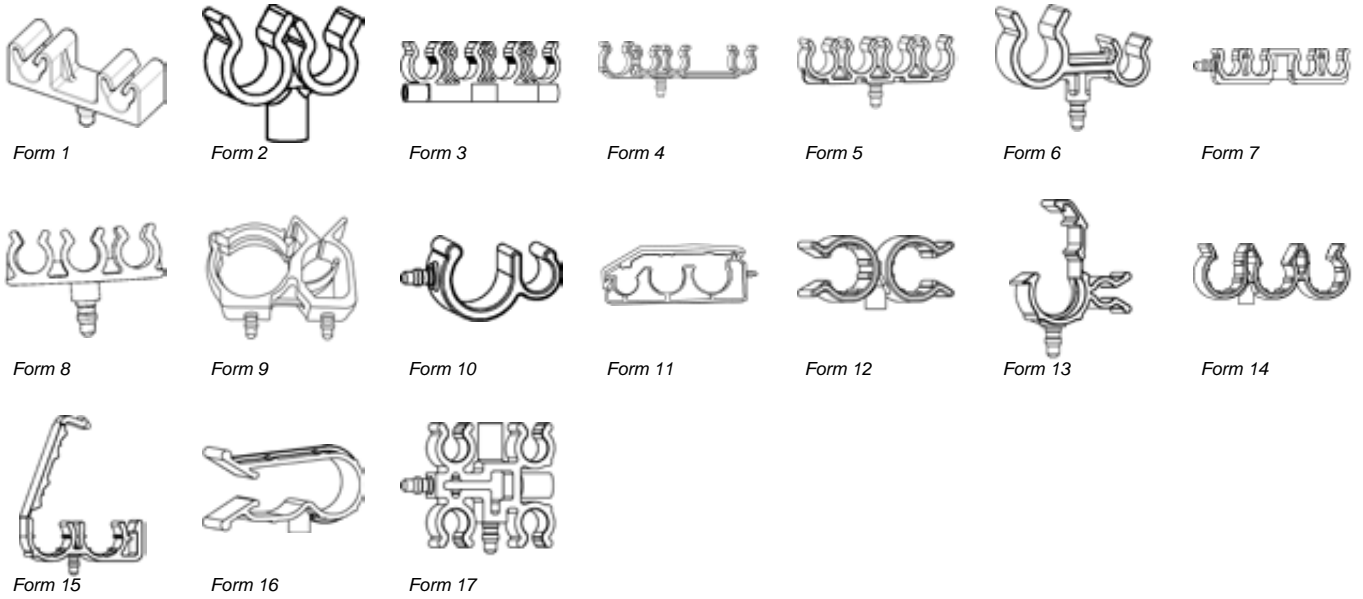
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	h	e1	e2	e3	Form
	053990	4,7...4,9	4,7...4,9	-	-	30,6 x 10	10,5	20,6	-	-	1
	014570	13...14	13...14	-	-	36 x 10	26,0	19,0	-	-	2
	054770	13...15	13...15	-	-	36 x 10	26,0	19,0	-	-	2
	014551	13...14	16...18	-	-	38,5 x 10	26,0	20,0	-	-	2
	016277	16...17	16...17	-	-	42 x 10	26,0	22,0	-	-	2
	016445	25...27	25...27	-	-	64 x 11	36,5	32,0	-	-	2
	017624	4,0	4,0	-	-	22,5 x 8	17,5	12,0	-	-	2
	020593	5,0	5,0	-	-	26,5 x 9	18,0	16,0	-	-	2
	016903	6,0	6,0	-	-	26 x 9	18,5	14,0	-	-	2
	013165	8...9	8...9	-	-	26 x 8	19,5	12,0	-	-	2
	015856	8...9	6...6,5	-	-	21 x 8	19,5	11,0	-	-	2
	054169	8...9	8...9	-	-	23 x 8	19,5	12,0	-	-	2
	016347	13,5	13,5	-	-	40 x 11	23,5	21,0	-	-	2
	055882	9...10,5	9...10,5	-	-	29 x 10	21,25	16,0	-	-	2
	054750	8,5...10,5	8,5...10,5	8,5...10,5	8,5...10,5	53,9 x 12	20,0	14,0	14,0	14,0	3
	018209	10,0	7,0	7,0	7,0	62,5 x 8	14,5	12,0	12,0	27,0	4
	015415	7,6	7,6	7,6	7,6	46,6 x 8	13,3	12,0	12,0	12,0	5
	015703	13...14	7,5...8	-	-	38,5 x 10	23,5	25,0	-	-	6
	055568	8...9	8...9	-	-	23 x 10	13,1	12,0	-	-	6
	055892	7,0	7,0	-	-	23 x 8	13,5	12,0	-	-	6

G = for corrugated tubes

BASIC ASSEMBLY ELEMENTS FOR SPACER MULTI-WAY WITH SINGLE OR MULTIPLE CONNECTIONS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	h	e1	e2	e3	Form
	018397	6,8	6,8	6,8	6,8	50,5 x 8	12,5	11,0	18,0	11,0	7
	054960	6,5...7	6,5...7	6,5...7	-	32 x 10	15,0	10,8	10,8	24,0	8
	055153	9...14	22,0	-	-	46 x 14	30,0	22,0	-	-	9
	017214	15,0	8,0	-	-	31,4 x 12	18,55	14,05	-	-	10
	055394	14,0	21,0	22,0	-	33,6 x 12	33,6	27,0	25,0	-	11
	017920	11...13	11...13	-	-	40,5 x 10	23,0	20,5	-	-	12
	018409	13,5	13,5	-	-	45 x 11	20,25	21,0	-	-	12
G	019664	17,0	5,0	-	-	28,4 x 12	-	11,6	-	-	13
	018555	13,5	13,5	13,5	-	61 x 11	23,5	21,0	21,0	-	14
	018165	14...14,5	14...14,5	-	-	42,4 x 15	16,0	19,0	-	-	15
	200595	16,0	16,0	-	-	46,5 x 12	24,6	16,0	-	-	16
	018407	6,5	6,5	6,5	6,5	30 x 8	30,0	18,0	20,0	-	17

G = for corrugated tubes

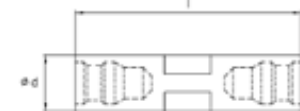
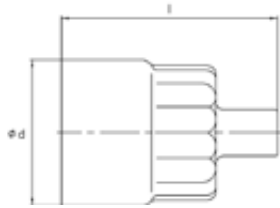
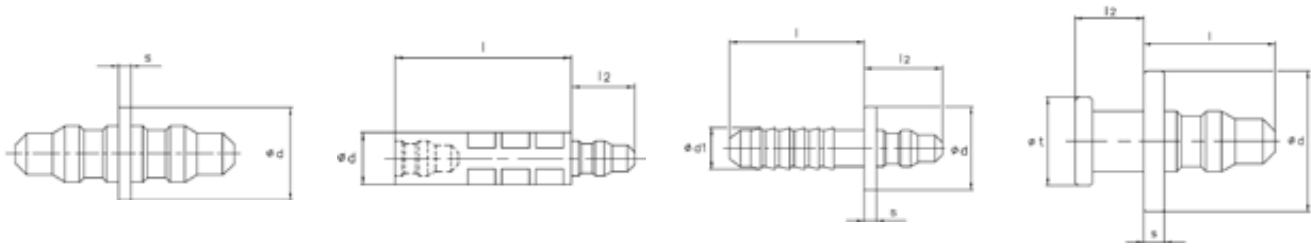
BASIC ASSEMBLY ELEMENTS FOR SPACER SPACER CONNECTORS

MATERIAL:

Polyoxymethylene

COLOUR:

Black, natural (other colours are available on request)



Form 1

Form 2

Form 3

Form 4

Form 5

Form 6

Sketches for illustration purposes only, please request latest detailed drawing.

These spacer type connectors allow not only assembly of swivel clips with each other (see form 1, 2, and 6), but also with any compatible fastener:

- for assembly onto threaded weld studs (form 3)
- for assembly onto welded T- studs (form 4)
- for assembly onto Metric thread studs (e.g. form 5 for M10 screw)

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	Ød	l	l2	Ød1	Øt	s	Form
	014369	6,0	-	-	-	-	1...1,5	1
	014619	6,0	-	-	-	-	10,0	1
	018519	6,0	10,0	7,5	-	-	-	2
	015871	6,0	35,0	7,5	-	-	-	2
	017617	6,0	16,5	7,5	-	-	-	2
	016943	6,0	23,5	7,5	-	-	-	2
	055168	6,0	36,0	7,5	-	-	-	2
	054794	10,0	14,0	8,7...9	5...5,2	-	1,5	3
	055198	10,0	7,5	6,8	-	5,3	1,5	4
	015838	21,8	31,0	-	-	-	-	5
	016801	6,0	24,0	-	-	-	-	6

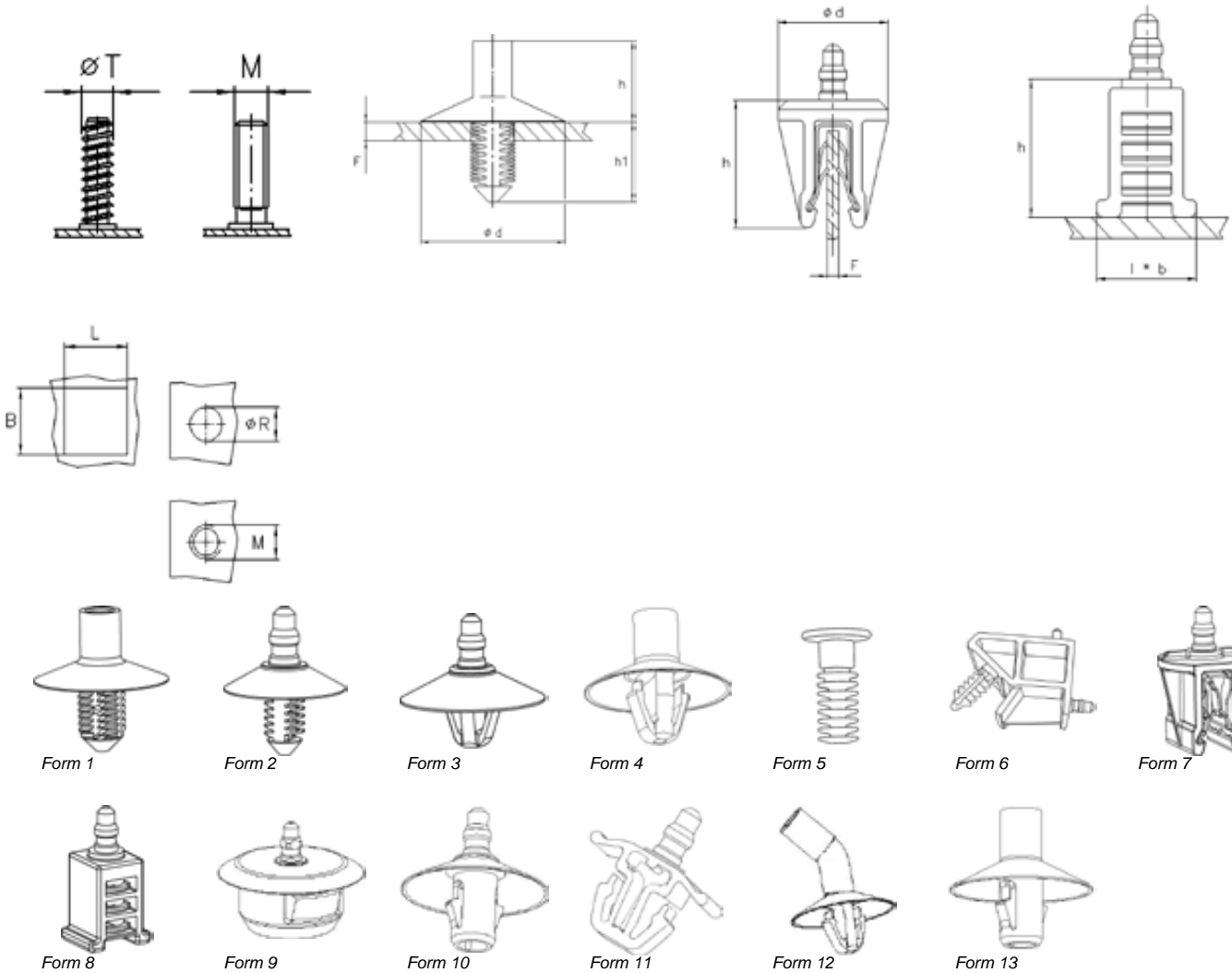
BASIC ASSEMBLY ELEMENTS FOR SPACER SPACER MOUNTINGS

MATERIAL:

Polyoxymethylene

COLOUR:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

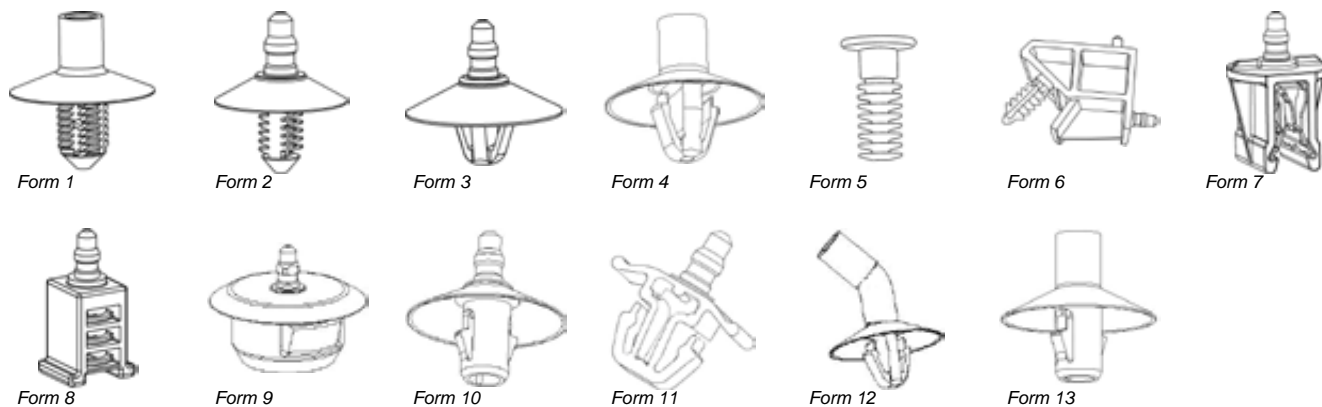
These adaptors provide a connection with a swivel type clip/ mount, for subsequent installation into a panel. They can be installed into a plain round or threaded hole and can be supplied pre-assembled with straps or clips.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØR/ M/ LxB	Ød/ l x b	h	h1	T/ M	Form
	017051	0,8...6	6,5...6,7	20,0	10,6	10,5	-	1
	202672	0,8...6	6,5...6,7	16,0	10,0	12,75	-	1
	019405	0,8...6	4,8...5,2/M6	16,0	10,8	8,6	-	2
	017050	0,8...6	6,5...6,7	20,0	10,9	10,5	-	2
	018783	0,8...6	12...12,2	24,0	10,4	12,1	-	2
	202589	1,5...3,5	5...5,2/M6	16,0	10,8	8,9	-	2
	210651	0,8...8	7,8...8,2/M10	20,0	10,3	13,0	-	2
	054592	0,5...3	6,35...6,7	22,0	9,4...11,9	7...9,5	-	3
	175036	0,5...3	6,3...6,7	21,0	9,7...12,2	7,3...9,8	-	3
	055080	0,7...2	6,35...6,7	16,0	9,2...10,5	7,2...9,5	-	3
	054591	0,7...2	6,2...6,4	16,0	10,0	8,0	-	4

BASIC ASSEMBLY ELEMENTS FOR SPACER SPACER MOUNTINGS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	ØR/ M/ LxB	Ød/ l x b	h	h1	T/ M	Form
	016360	0,8...2	6,5...6,7	20,0	9,5...10,7	7,3...8,5	-	4
	055790	-	6,86...6,9	13,0	1,0	17,6	-	5
	056192	-	M7	31,9 x 23,5	38,7	15,5	-	6
	082607	2...4	-	16 x 15	17,5	13,8	-	7
	019181	-	-	12 x 10	16,0	-	M6	8
	205384	-	-	11 x 11	19,0	-	5,0	8
	019243	1,0	11...11,2	16,5	9,7	12,7	-	9
	020611	1,5...1,8	16...16,2	26,0	10,3	10,6	-	9
	019512	1,65...1,85	20...20,2	28,0	9,85...10,05	10,85...11,05	-	9
	206418	2,2...3,5	6,5	21,0	12,4	8,5...9,8	-	10
	220453	3,8...4,2	8,3...8,7 x 9	18 x 9	9,2	10,8	-	11
	206369	1,3...2,5	6,5...6,7	20,0	19,37	7,8...9	-	12
	206428	2,2...3,5	6,5	21,0	11,8	8,5...9,8	-	13

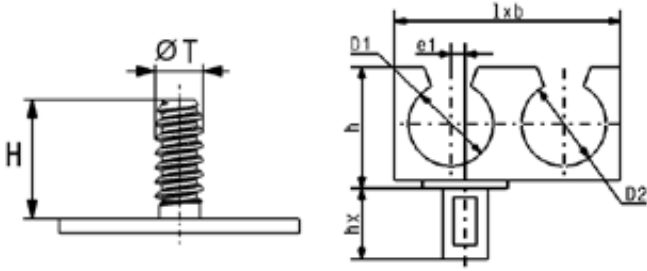
BASIC ASSEMBLY ELEMENTS FOR SPACER PIPE CLIP WITH SPACER MOUNTING

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black



Form 1



Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

These clips are assembled onto a threaded weld stud. In addition they also provide male or female connections.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	H	ØT	l x b	h	hx	e1	Form
	053956	4,8...8	4,8...8	14,3	5,0	51,5 x 10	18,5	-	12,2	1
	055057	4,7...5,1	-	15,0	6,0	48,7 x 14	17,0	-	12,0	2

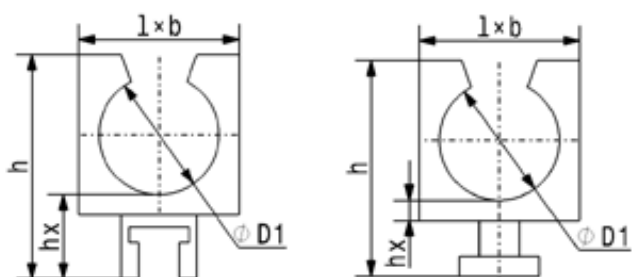
BASIC T-SHAPED ELEMENTS FOR SPACER 1-WAY WITH SINGLE CONNECTION

MATERIAL:

Polyoxymethylene, Polyamide

COLOUR:

Black



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7

Sketches for illustration purposes only, please request latest detailed drawing.

These swivel type clips are made up of individual components that are assembled together by means of their male/ female T-connection feature. This allows cables/ tubular items to be fastened and oriented in any desired direction.

Form 1 and 2: Clips fitted with male connection.

Form 3 and 4: Clips fitted with female connection.

Form 7: These clips are automatically locked by applying a downward pressure onto the tubular item to be fastened. They may subsequently be re-opened as required.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

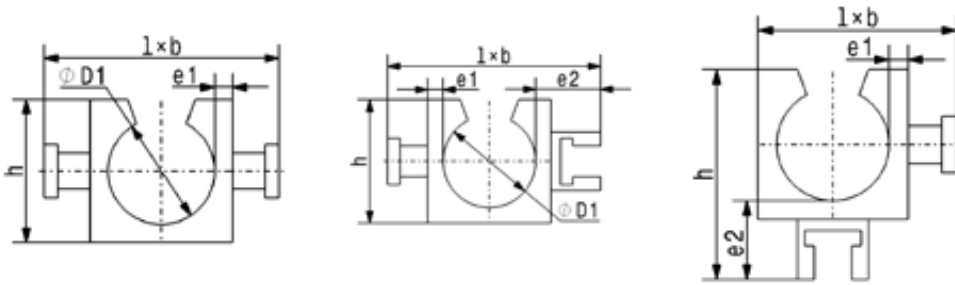
?	REF.	ØD1	l x b	h	hx	Form
	030405	3,5...5	9 x 8	12,6	3,0	1
	030387	4,5...6	11 x 8	16,0	5,0	1
	030469	5,5...7	12 x 8	15,6	3,0	1
	030253	6,0	11 x 8	16,6	5,5	1
	030395	6...7,5	13 x 8	16,0	3,0	1
	030393	7,5...9	14 x 8	17,9	3,0	1
	030287	10,5...12,5	18,2 x 11	21,6	3,0	1
	030046	12,5...14,5	18,5 x 11,5	22,0	3,0	1
	030398	14...16	22 x 12	24,1	2,0	1
	030006	15,0	28 x 16	24,6	-	1
	030390	15,5...17,5	24 x 12	27,1	3,2	1
	030389	17,5...19,5	25 x 12	29,1	3,2	1
	030425	19,5...21,5	27,3 x 12	31,2	3,2,0	1
	030472	23,5...25,5	32,5 x 12	35,1	3,2	1
	030426	25,5...27,5	37 x 12	37,1	3,2	1
	030400	41...44	45 x 12	58,0	6,0	1
	030025	5...6	29 x 14	28,5	-	2
	030018	8,5...10	17,5 x 10	15,5	2,5	2
	030498	12...14	20 x 11	29,1	3,0	2
	030027	19,0	32 x 15	28,0	3,0	2
	030041	20...21,5	35 x 15	32,0	-	2
	030029	24,0	37 x 15	38,5	-	2
	030013	5...6	12 x 11	15,0	7,0	3
	030394	7,5...9	14,1 x 11	18,0	7,0	3
	030291	9...10,5	18 x 11	20,5	7,0	3
	030252	10,5...12,5	18,2 x 11	22,5	7,0	3
	030288	12,5...14,5	22 x 11	24,0	7,0	3
	030381	14...16	21 x 12	26,0	7,0	3
	030005	14,5	30 x 16	24,5	8,8	3

E = with securing tang for variable bore

BASIC T-SHAPED ELEMENTS FOR SPACER 1-WAY WITH MULTIPLE CONNECTIONS

MATERIAL:
Polyoxymethylene, polyamide

COLOUR:
Black



Form 1 Form 2 Form 3

Sketches for illustration purposes only, please request latest detailed drawing.

These swivel type clips are made up of individual components that can be assembled together by means of their male/ female T-connection feature. This allows cables/ tubular items to be fastened and oriented in any desired direction.

? **Feature(s) of the part**
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	l x b	h	e1	e2	Form
	030379	10,5...12,5	23,2 x 11	18,5	3,1	-	1
	030511	7,5...9	21,1 x 8	14,0	3,0	7,0	2
	030378	9,5...10,5	21,5 x 11	16,0	-	7,0	2
	030292	10,5...12,5	23,8 x 11	18,0	-	7,0	2
	030295	12,5...14	26,1 x 11	20,0	3,0	7,0	2
	030298	14...16	27,5 x 12	21,0	-	7,0	2
	030043	16,0	29,5 x 12	23,5	-	-	2
	030015	17,5...19,5	31,1 x 12	25,0	3,5	7,0	2
	030016	19,5...21,5	33,3 x 12	27,2	3,2	7,0	2
	030042	20...21,5	41 x 15	29,5	-	9,3	2
	030258	21,5...23,5	35,1 x 12	30,0	-	7,0	2
	030036	22...23	38 x 25	36,0	-	-	2
	030205	23,5...25,5	37,1 x 12	32,5	3,2	-	2
	030328	25,5...28,5	52,8 x 12	33,5	-	7,0	2
	030534	10,5...12,5	21,6 x 11	23,0	3,1	7,0	3

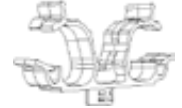
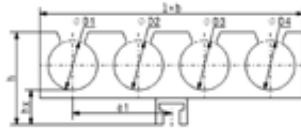
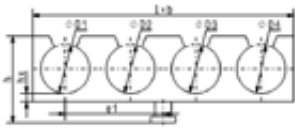
BASIC T-SHAPED ELEMENTS FOR SPACER MULTI-WAY WITH SINGLE CONNECTION

MATERIAL:

Polyoxymethylene, Polyamide

COLOUR:

Black



Form 1

Form 2

Form 3

Form 4

Form 5

Form 6

Form 7

Sketches for illustration purposes only, please request latest detailed drawing.

These swivel type clips are made up of individual components that can be assembled together by means of their male/ female T-connection feature. This allows cables/ tubular items to be fastened and oriented in any desired direction.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	h	hx	e1	Form
	030003	7,5...9	7,5...9	-	-	22,5 x 11	20,5	-	6,0	1
	030502	7,5...9	7,5...9	-	-	31 x 11	17,0	5,0	9,5	2
	030417	8,5...10	5,5...7	-	-	25,5 x 12	20,0	7,5...9	6,5	2
	030427	14,5...16	14,5...16	-	-	41,5 x 12	23,0	-	12,0	2
	030429	7,5...9	7,5...9	-	-	35 x 11	16,0	-	9,5	3
	030391	12,5...14	12,5...14	-	-	40 x 12	18,0	-	16,0	3
	056090	8,0	10,0	8,0	-	17 x 12	51,0	-	0,0	4
	030024	7,5...9	7,5...9	7,5...9	-	35 x 8	20,2	8,0	12,0	5
	030021	6...8	6...8	6...8	-	46 x 11	26,0	-	14,5	5
	030009	8,0	8,0	8,0	8,0	46 x 8	20,0	8,0	18,0	6
	030028	14,5	14,5	-	-	70 x 16	26,8	-	16,0	7

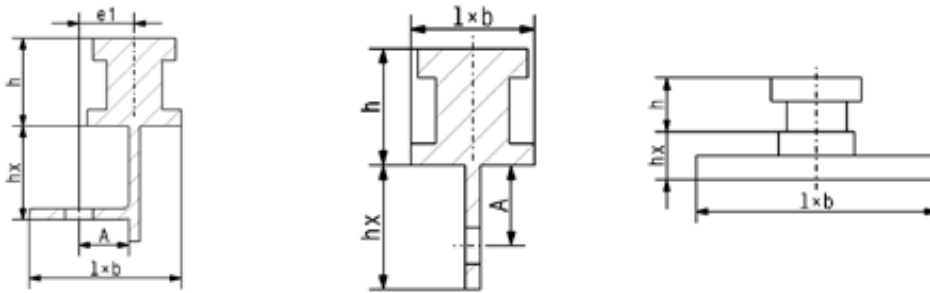
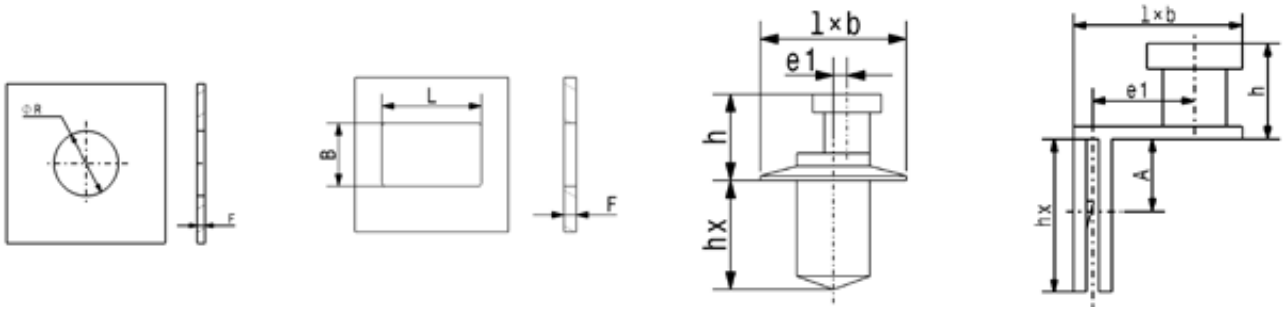
BASIC T-SHAPED ELEMENTS FOR SPACER MOUNTINGS (different systems)

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

These T-shaped system adaptors allow the assembly of a mating pipe clip into a panel mounting hole.

- Form 1: To be pressed into a hole in the middle of a panel.
- Form 2 & 3: To be clipped into a hole on the edge of a panel.
- Form 4 & 5: To be fixed with screw or expansion rivet etc.
- Form 6: To be plastic welded.
- Form 7: To be expansion riveted into a hole in the middle of the panel.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

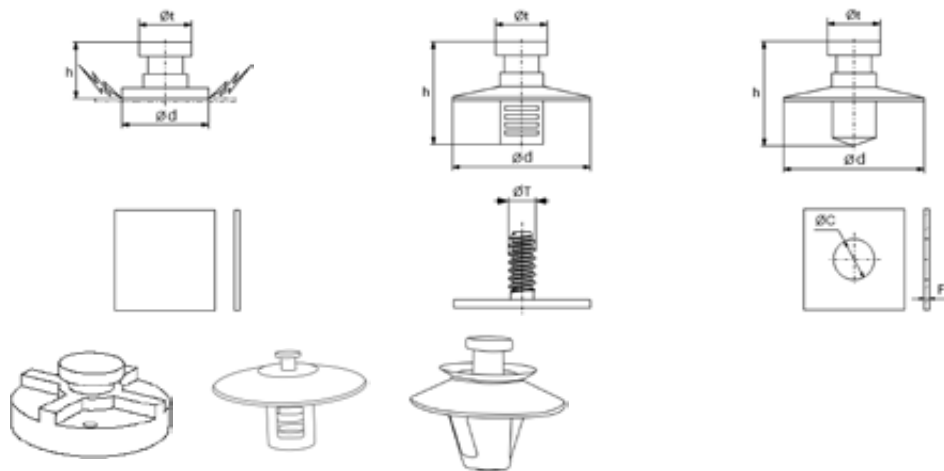
Samples available on request

?	REF.	F	ØR/ L x B	A	Ød/ l x b	h	hx	e1	Form
	030471	0,7...1,5	6,2 x 6,2	-	16,5	9,8	6,5	-	1
	030611	0,7...1,5	8 x 12	-	25,5 x 16	-	-	-	1
	030297	0,7...1,5	7,5...8	-	21,0	8,3	6,5	-	1
	030039	4,5	9 x 12	-	11,0	10,5	20,5	-	1
	038042	0,7...2	8,0	-	46,0	8,1	6,0	30,0	2
	030007	2,0	5,9...6,7	10,0	35,0	7,1	41,0	25,0	3
	030501	2,0	6,5	10,5	10,0	5,1	20,5	-	4
	030465	-	6,5	17,0	31 x 18	25,6	5,0	18,0	5
	030183	-	6,5	28,0	11 x 16	3,6	36,0	-	6
	030010	-	9,5	28,0	11 x 16	5,6	36,0	-	6
	055877	-	-	-	18,0	2,9	5,0	-	7

BASIC T-SHAPED ELEMENTS FOR SPACER MOUNTINGS (welded, into stud, into round hole)

MATERIAL:
Polyamide, polyoxymethylene, polyethylene

COLOUR:
Black



Form 1 Form 2 Form 3

Sketches for illustration purposes only, please request latest detailed drawing.

These couplings are designed to connect a panel with a fastening housing a tee-shaped rivet.
Form 1: COUPLING FOR WELDING particularly suited for certain cable clips .
Form 2: COUPLINGS FOR PUSHING onto a welded threaded stud or metric pitch stud.
Form 3: COUPLINGS FOR PRESSING into a round hole.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØT	Øc	F	Øt	ØD	h	Form
	114003	-	-	-	10,3	25,0	8,5	1
	054174	5,0	9,5	12,5	4,8...5,2	30,0	19,3	2
	054968	5,0	6,5...6,9	0,7...2	4,9...5,3	16,0	14,8	3

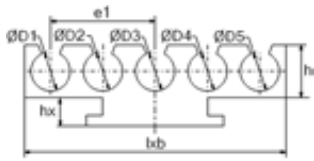
BASIC T-SHAPED ELEMENTS FOR SPACER MOUNTINGS (into T-shaped slide)

MATERIAL:

Polyamide

COLOUR:

Black



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7

Sketches for illustration purposes only, please request latest detailed drawing.

The cable clip forms 1, 2, 4, 5, 6, 7 are fixed by sliding into a T-shaped groove. Only clip form 3 is pressed onto a T-shaped groove. The clip forms 1, 4, 5, 6, 7 are equipped with a stopper to block the element onto the sliding surface. In contrast, form 2 disposes of a female displacement protection that is clipped onto a male one, assembled with the sliding surface.



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	ØD5	l x b	e1	h	hx	Form
	055852	26,0	-	-	-	-	38,5 x 30	-	35,5	6,4	1
	056272	17,5...22,5	-	-	-	-	36,6 x 25	-	32,0	2,8	2
	056475	10...11	-	-	-	-	25 x 25,2	-	20,5	2,8	2
	056489	13...14	-	-	-	-	39 x 12	-	20,0	9,25	3
	055979	13...15	13...15	-	-	-	41 x 35,5	-	28,5	6,5	4
	056871	13,0	13,0	-	-	-	40 x 25	-	28,5	6,5	4
	055482	13...15	13...15	-	-	-	161 x 21	-	28,5	2,8	5
	056453	10,0	10,0	5...8	8...10	13,4	78,5 x 29,75	-	54,0	2,8	6
	056785	10,0	10,0	10,0	-	-	63,5 x 28	-	45,2	2,8	7

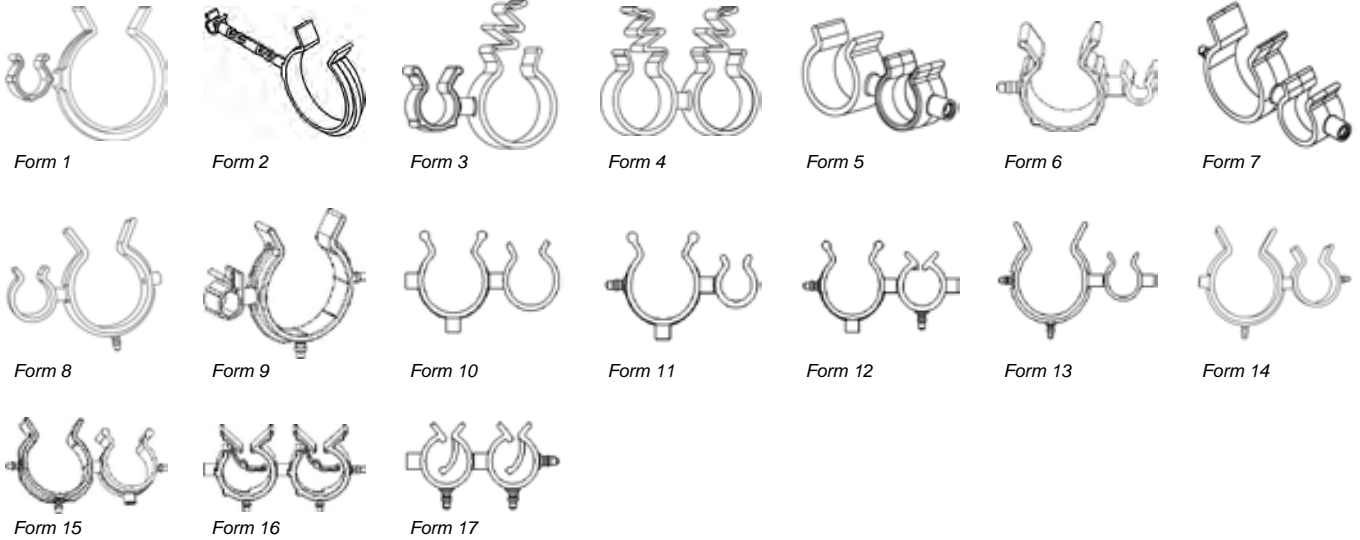
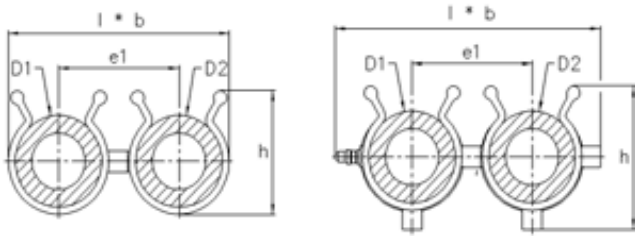
2-WAY - RECORDINGS FROM ABOVE

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

CAUTION!

The clips listed below may incorporate additional components or features (such as additional male or female connections, retaining legs for varying pipe diameters, etc.) that are not shown in the sketches.

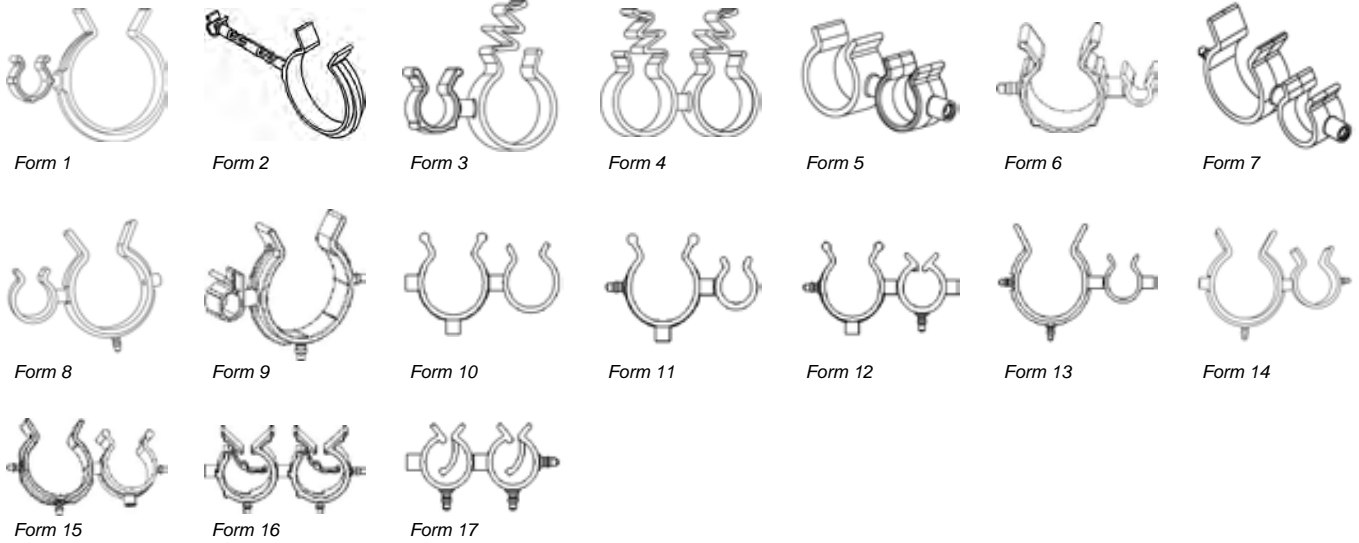
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	080484	4...4,5	4,3...5,2	20,75 x 10	9,5	14,0	1
	060643	4...4,5	4,8...5,2	23 x 10	9,4	14,15	1
F	080489	4...4,5	6...6,5	32 x 8	11,5	22,0	1
	081183	4...4,5	7,8...8,5	24,65 x 12	16,9	15,2	1
	060747	4...4,5	9,5...10,5	27 x 10	17,0	17,0	1
	080455	4...4,5	9,5...10,5	28 x 10	16,0	17,25	1
	080447	4...4,5	11,5...13	30 x 10	17,75	18,25	1
	060855	4...4,5	11...13	29 x 10	18,0	18,7	1
	080453	4...4,5	14...15	32 x 10	21,0	19,5	1
	061074	4...4,5	14...16	39 x 12	22,0	18,0	1
	081232	4...4,5	22...24	40 x 12	29,0	23,5	1
F	082388	4,3...5,2	8...9	48 x 10	13,5	39,5	1
	081626	4,3...5,2	11,5...13	29,4 x 10	17,5	18,75	1
F	081490	4,3...5,2	4,3...5,2	28,8 x 10	9,4	22,0	1
	017543	4,3...5,2	6...6,5	23,35 x 10	12,0	15,0	1
F	082185	4,3...5,2	9,5...10,5	44,5 x 10	16,0	34,25	1
	081299	4,3...5,2	14...15	32,4 x 10	21,0	20,0	1
	081226	4,3...5,2	4,3...5,2	21,25 x 10	9,4	14,5	1
	081751	4,3...5,2	6...6,5	23,9 x 10	11,5	16,0	1
	060689	4,8...5,2	15...16	29,8 x 10	22,0	19,0	1
	081745	4,3...5,2	16...18	34,4 x 12	23,0	21,0	1
	080905	4,3...5,2	6...6,5	22,85 x 10	11,5	15,0	1
	060705	4,8...5,2	6...6,55	23 x 10	11,75	14,9	1
	081275	4,3...5,2	8...9	24,85 x 10	13,5	16,0	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

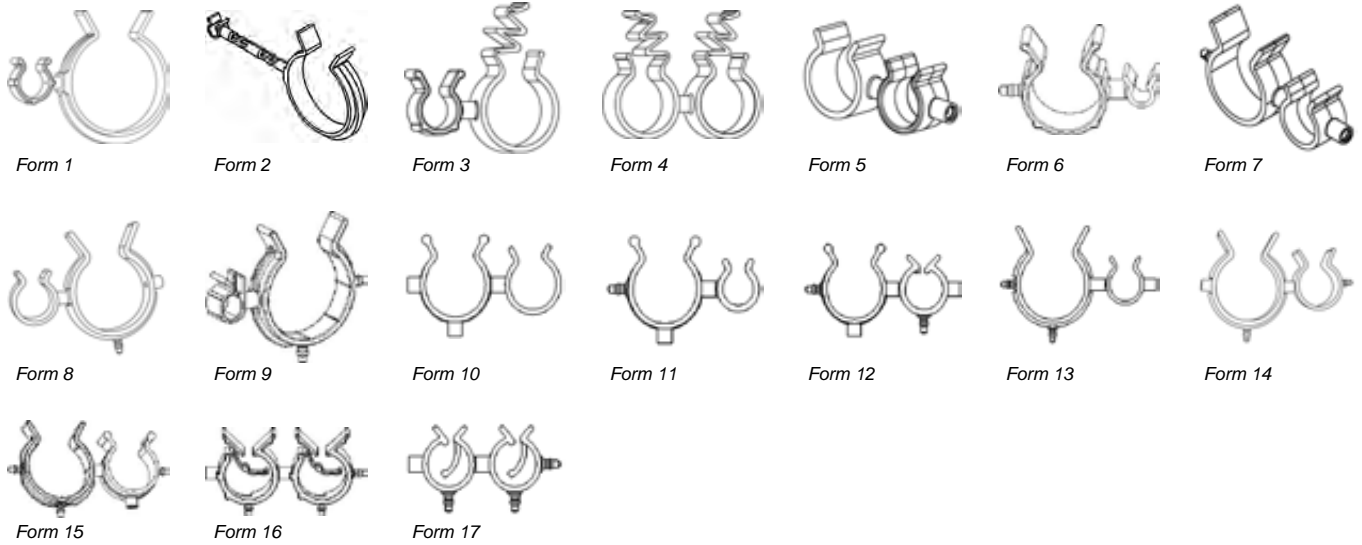


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	081032	4,3...5,2	11...13	28,35 x 10	17,5	17,5	1
	060808	4,8...5,2	10...16	44,35 x 10	31,5	20,7	1
	061016	4,8...5,2	11...13	30,4 x 10	18,5	19,5	1
	081191	4,3...5,2	13...14	30,35 x 10	22,5	18,5	1
	060914	4,8...5,2	20...22	37,5 x 12	28,5	21,5	1
	081053	4,3...5,2	15...16	32,85 x 10	22,5	19,0	1
	081082	4,3...5,2	20...24,5	36,85 x 12	28,0	21,8	1
	060881	4,8...5,2	18...19	34,8 x 12	16,0	20,2	1
	081180	18...20	4,3...5,2	35,85 x 12	26,0	20,5	1
	060638	4,8...5,2	8...9	26 x 10	13,5	16,0	1
	082513	6...6,5	10...12	32 x 10	16,0	20,5	1
E	082491	6...10	11...13	34,2 x 10	17,5	21,0	1
F	201645	6...6,5	6...6,5	107 x 8	11,5	98,0	1
E	082462	6...6,5	6...10	31 x 10	15,35	18,5	1
	060766	6...6,5	9,5...10,5	29,65 x 10	16,0	18,0	1
	060657	6...6,5	11...13	31,2 x 10	18,0	19,0	1
	080443	6...6,5	11,5...13	31 x 10	17,5	19,25	1
	080445	6...6,5	9,5...10,5	29,5 x 10	16,0	18,25	1
	081205	6...6,5	8...9	25,5 x 8	13,5	19,5	1
	081253	6...6,5	8...9	27,5 x 8	13,5	17,5	1
F	081406	6...6,5	8...9	43 x 8	13,5	33,0	1
	081106	6...6,5	7,8...8,5	25,9 x 12	16,9	16,2	1
	081513	6...6,5	11...13	31 x 10	17,5	19,0	1
	081279	6...6,5	15...16	35,5 x 10	22,5	20,5	1
	081083	6...6,5	6...6,5	25,5 x 8	11,5	16,5	1
	081015	6...6,5	22...24	42 x 12	29,0	24,5	1
	061798	6...6,5	48...53	73,5 x 12	66,5	38,6	1
	081005	6...6,5	14...15	34 x 10	21,0	20,5	1
	155058	6...6,5	11...13	- x 10	17,0	19,8	1
F	080956	6...6,5	19...24,5	46 x 12	28,0	29,1	1
	081277	6...6,5	19...24,5	39,5 x 10	28,0	22,6	1
	081148	6...6,5	18...20	38,5 x 12	26,0	22,0	1
	081414	6...6,5	16...18	36 x 12	23,0	21,5	1
F	081409	6...6,5	15...16	42 x 10	22,5	27,0	1
	081156	6...6,5	13...14	33 x 10	22,5	20,0	1
	081887	6...6,5	13...14	32,2 x 12	23,0	19,9	1
	082028	7,8...8,5	16...18	38,1 x 12	23,0	22,9	1
	018881	7,8...8,5	18...20	38,9 x 12	26,0	21,7	1
E	061075	6...10	18...20	40,5 x 12	36,0	24,0	1
	081424	7,8...8,5	7,8...8,5	28 x 12	16,9	17,6	1
F	081738	7,8...8,5	14...15	59 x 10	21,25	45,4	1
	081274	7,8...8,5	14...15	59 x 10	21,25	45,4	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

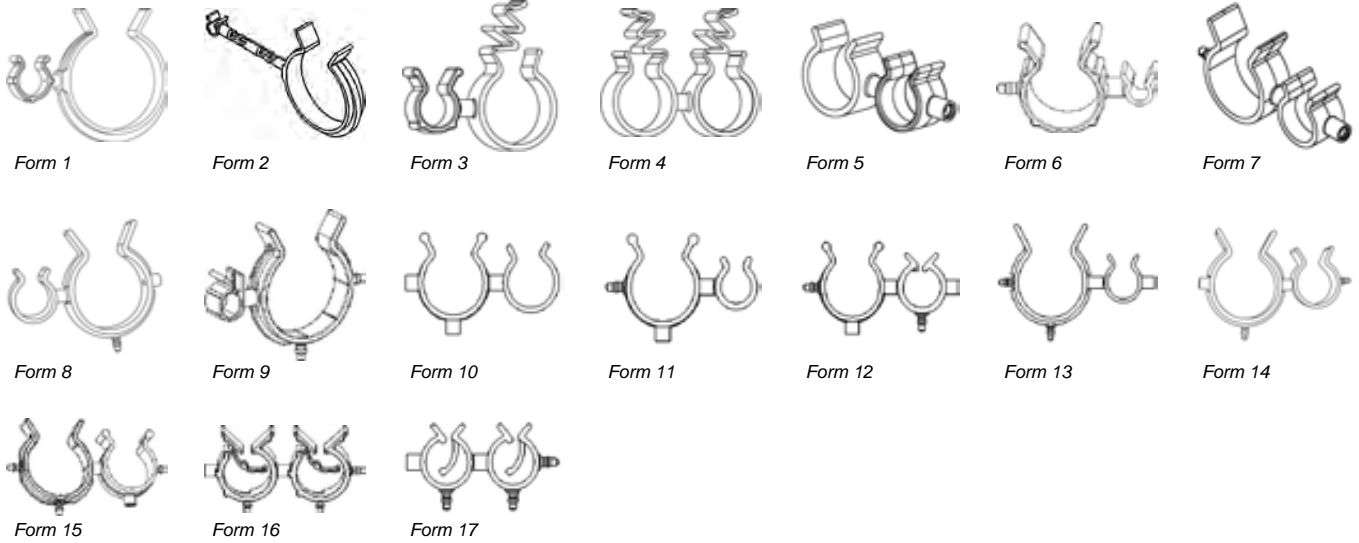


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	081592	7,8...8,5	15...16	35,9 x 12	22,5	20,2	1
	081645	7,8...8,5	22...24	44 x 12	29,5	25,9	1
F	082443	8...9	8...9	55 x 8	13,5	44,0	1
F	082511	8...9	11...13	45 x 10	17,5	32,0	1
	080900	8...9	14...15	36 x 10	21,25	21,5	1
F	082076	8...9	10...12	40,5 x 10	16,0	28,0	1
	082218	8...9	18...20	47 x 12	26,0	29,5	1
	081257	8...9	22...24	44 x 12	29,5	25,5	1
	061349	8...9	22...24	46 x 12	31,0	25,5	1
	081105	7,8...8,5	20...24,5	39,9 x 12	28,25	22,95	1
F	082148	8...9	10...12	46 x 10	16,0	33,5	1
	061496	8...9	18...20	41,5 x 12	25,0	25,0	1
	081111	7,8...8,5	18...20	38,9 x 12	26,0	21,7	1
	081431	8...9	16...18	38 x 12	23,0	22,5	1
	081340	8...9	15...16	39,5 x 10	22,5	23,5	1
F	081596	8...9	11...13	48,5 x 10	17,5	35,5	1
F	081670	8...9	11...13	51,5 x 10	17,5	38,5	1
	081249	8...9	11...13	35 x 10	17,5	22,0	1
	081766	8...9	13...14	37 x 10	22,5	23,0	1
	080985	8...9	11,5...13	33 x 10	17,75	20,25	1
	060942	8...9	11...13	33 x 10	18,0	20,0	1
	082206	8...9	18...20	42,5 x 12	26,0	25,0	1
	082259	8...9	38...45	64 x 10	34,5	35,0	1
	081878	8...9	48...53	74,5 x 12	67,0	39,65	1
	081149	8...9	7,8...8,5	27,9 x 12	16,9	17,2	1
F	081778	8...9	8...9	36 x 8	13,5	25,0	1
F	201098	8...9	8...9	44,4 x 8	13,5	37,0	1
	080466	8...9	9,5...10,5	31,5 x 10	16,0	19,25	1
	152242	12...14	12...14	30 x 10	19,5	19,0	1
	155059	6...6,5	6...6,5	- x 8	11,5	24,2	1
	060696	8...9	9,5...10,5	31,65 x 10	16,0	19,0	1
F	081654	8...9	15...16	53 x 10	22,5	37,0	1
	082501	8...9	34...36	58,5 x 10	47,0	32,0	1
	080499	9,5...10,5	20...24,5	43,5 x 12	28,25	25,05	1
	060648	9,5...10,5	15...16	38,65 x 10	21,5	21,5	1
	081027	9,5...10,5	18...20	42,5 x 12	26,0	23,75	1
	060649	9,5...10,5	18...20	41,65 x 12	25,0	23,0	1
	080937	9,5...10,5	10...12	36 x 10	16,0	22,25	1
	060677	9,5...10,5	10,0	36,20 x 10	16,0	21,5	1
	060781	9,5...10,5	20...22	43,7 x 12	28,0	25,0	1
	081085	9,5...10,5	13...14	37 x 10	22,5	21,75	1
	081207	9,5...10,5	11...13	35 x 10	17,5	20,75	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

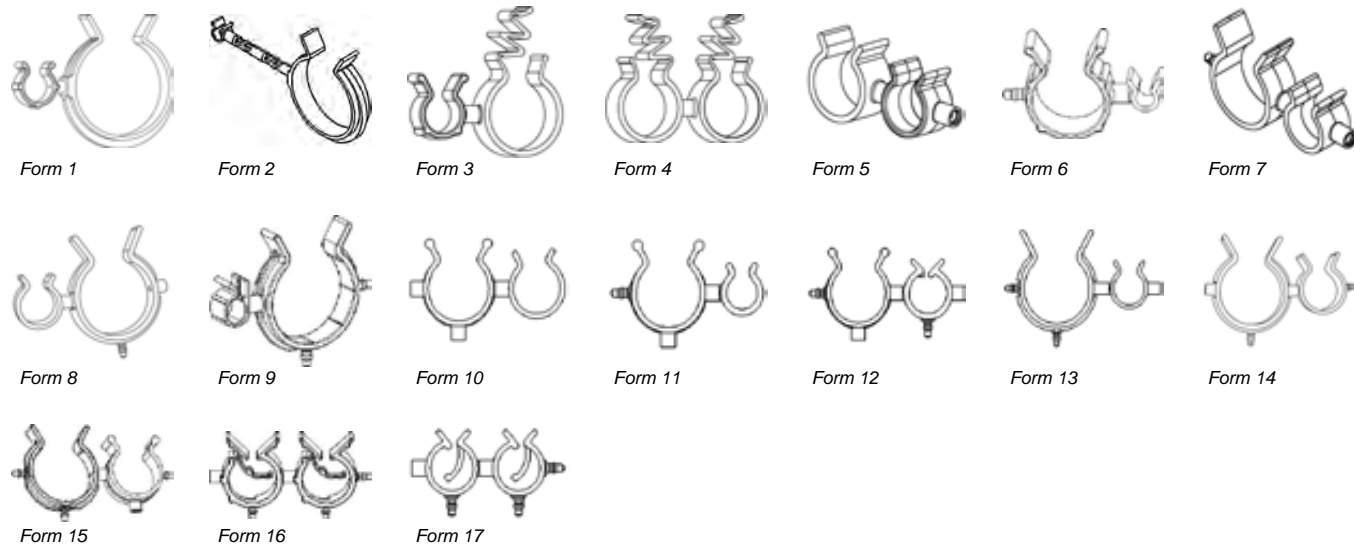


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	080901	9,5...10,5	15...16	39,5 x 10	22,5	22,25	1
F	082199	9,5...10,5	15...16	75,3 x 10	22,5	57,25	1
F	082301	9,5...10,5	20...24,5	53,5 x 12	28,25	35,0	1
	081830	9,5...10,5	38...45	64 x 10	53,5	33,75	1
	060710	10...11	11...13	36,5 x 10	17,5	21,5	1
	081119	11...13	11,5...13	37 x 10	17,75	21,75	1
	080476	10...12	11,5...13	38 x 10	17,75	23,25	1
F	082588	10...12	16...18	59 x 12	23,0	42,0	1
	081098	10...12	14...15	40,5 x 10	21,25	24,5	1
	081430	10...12	16...18	42,5 x 12	23,0	25,5	1
	081687	10...12	48...53	86,5 x 12	67,0	42,65	1
	080478	11,5...13	15...16	41,5 x 10	22,5	23,0	1
	080924	11,5...13	18...20	44,5 x 12	26,0	24,5	1
	081151	11,5...13	13...14	39 x 10	22,5	22,5	1
F	081962	11,5...13	11...13	47 x 10	17,5	31,75	1
	018858	11...13	8...9	51,5 x 10	17,5	38,5	1
	060619	11...13	20...22	45 x 12	28,0	25,5	1
F	082138	11...13	11...13	43 x 10	17,5	28,0	1
F	081961	11...13	11...13	52 x 10	17,5	37,0	1
F	081208	11...13	15...16	56 x 10	22,5	38,5	1
F	081760	11...13	18...20	50,5 x 12	26,0	31,0	1
	081204	11...13	14...15	39,5 x 10	21,25	23,0	1
F	081647	11,5...13	14...15	58,5 x 10	21,5	41,5	1
	060682	11...13	18...20	42,5 x 12	25,25	24,2	1
	080428	11,5...13	20...24,5	45,5 x 12	28,25	26,05	1
	061327	11...13	39...45	65,5 x 10	53,5	34,0	1
F	081157	13...14	13...14	47 x 10	22,5	30,0	1
	081494	13...14	22...24	49,5 x 12	29,5	28,0	1
F	082016	13...14	19...24,5	62,5 x 12	28,25	41,6	1
	061000	13...14	13...14	36,3 x 10	20,0	19,0	1
F	081454	13...14	13...14	56 x 10	22,5	39,0	1
F	082317	13...14	22...24	73 x 12	29,5	51,5	1
	081797	13...14	48...53	80 x 12	67,0	42,15	1
F	201604	14...15	8...9	52,5 x 10	21,25	38,0	1
	017808	14...15	15...16	45 x 10	22,5	24,5	1
	080923	14...15	15...16	44 x 10	22,5	24,5	1
	060729	14...15	15...16	43 x 10	21,5	24,5	1
	080906	14...15	19...24,5	48 x 12	28,25	26,6	1
	017143	14...15	19...24,5	47,5 x 12	28,0	26,5	1
	081011	14...15	18...20	47 x 12	26,0	26,0	1
F	082395	14...15	38...45	92 x 10	53,5	59,5	1
F	081729	15...16	15...16	52 x 10	22,5	31,0	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

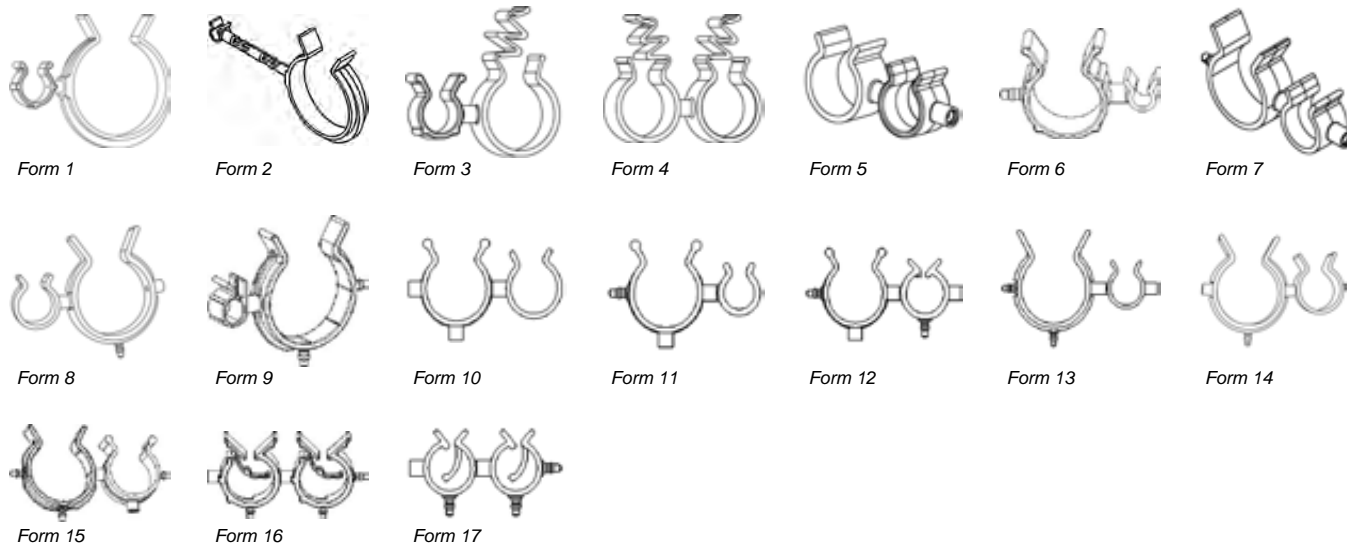


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	081808	15...16	16...18	46 x 12	23,0	25,5	1
F	081733	15...16	19...24,5	56 x 12	28,25	33,1	1
	081973	15...16	48...53	90 x 12	67,0	42,65	1
F	082196	15...16	16...18	69,5 x 12	23,0	49,0	1
	081462	16...18	18...20	49 x 12	26,0	27,0	1
	017894	16...18	20...25	50,5 x 12	28,0	28,0	1
	081168	16...18	20...24,5	50 x 12	28,25	28,3	1
	152326	16...18	28...30	-	-	34,0	1
F	082540	16...18	38...45	87 x 12	53,5	53,5	1
	061073	18...20	22...24	54 x 12	29,0	30,0	1
	081013	18...20	22...24	38,5 x 12	29,5	30,0	1
F	081666	18...20	22...24	55 x 12	29,5	46,5	1
	201102	19...24,5	16...18	50 x 30	28,0	28,0	1
	080973	19...24,5	22...24	56 x 12	29,5	31,0	1
	201268	22...24	13...14	48,8 x 12	29,5	27,9	1
	081675	22...24	15...16	52 x 12	29,5	28,5	1
	155055	22...24	15...16	-	-	28,5	1
F	082579	22...24	38...45	93 x 12	53,5	56,5	1
	201059	28...30	7,8...8,5	53,1 x 12	41,0	29,4	1
	081978	38...45	48...53	114,5 x 12	67,0	54,15	1
	208204	4...4,5	9,5...10,5	28,2 x 10	15,75	17,25	1
	061000	13...14	13...14	-	-	19,3	1
	061073	18...20	22...24	54 x 12	29,0	29...31	1
	060677	9,5...10,5	9,5...11	36,2 x 10	16,0	20,5...22,5	1
	061626	6...6,5	8...9	29,5 x 8	13,5	19,5	1
	061858	8...9	8...9	31,70 x 8	13,5	20,5	1
	132762	4,8...5,2	9,5...11	29,2 x 10	16,0	18,9	1
	060619	11...13	20...22	45 x 12	28,0	24,5...26,5	1
	060638	4,8...5,2	8...9	26 x 10	13,5	16...17	1
	060649	9,5...10,5	18...20	41,65 x 12	25,0	23,65...24,65	1
	060643	4...4,8	4,8...5,2	21,4 x 10	9,5	14,15	1
	060648	9,5...10,5	14,5...16	38,5 x 10	21,5	21...22	1
	060657	6...6,5	11...13	31,2 x 10	18,0	18...20	1
	060682	11...13	18...20	42,5 x 12	25,25	23,2...25,2	1
	060696	8...9	9,5...10,5	31,65 x 10	16,0	18...20	1
	060705	4,8...5,2	6...6,5	23,1 x 10	11,5	14,9	1
	060710	11...13	11...13	36,5 x 10	17,5	21,5...23,5	1
	060766	6...6,5	9,5...10,5	29,65 x 10	16,0	18,15	1
	060781	9,5...10,5	20...22	43,7 x 12	28,0	23,7...27,2	1
	060942	8...9	11...13	33 x 10	17,9	19...21	1
	061000	13...14	13...14	36,3 x 10	20,0	19,3	1
	061415	13...14	39...45	81,5 x 12	58,0	34,4	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

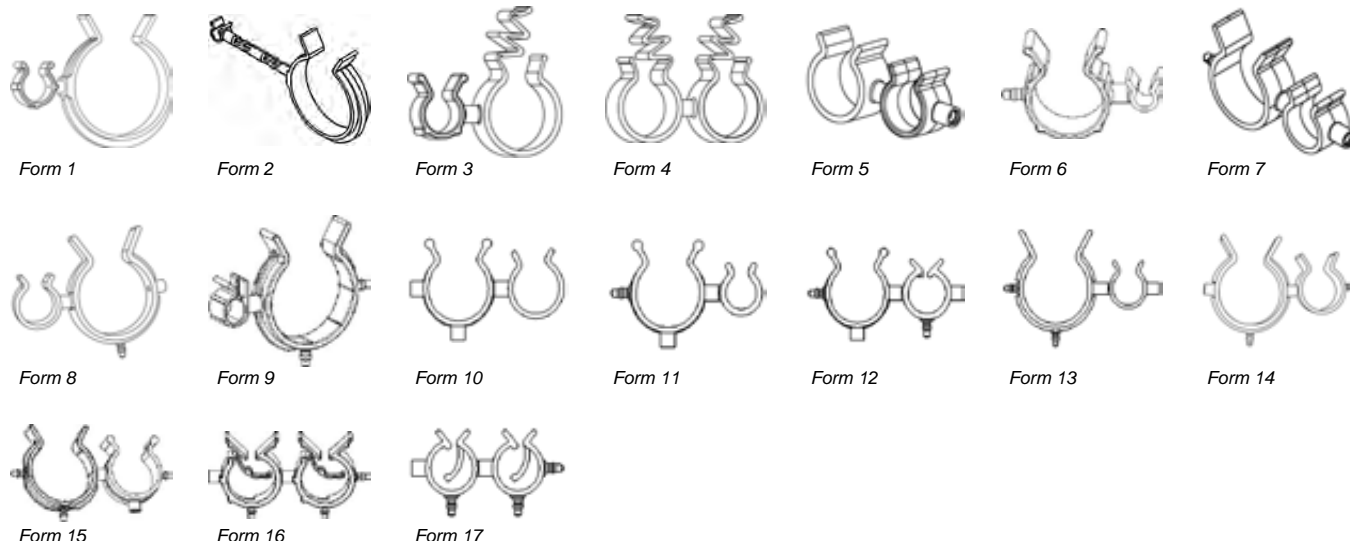


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	061419	13...14	18...20	49,8 x 12	25,0	24,0	1
	061418	11...13	13...14	47,5 x 12	24,2	21,4	1
	061029	15...16	15...16	40 x 10	21,5	21,0	1
	061649	11...13	13...14	38,5 x 10	20,0	22,50	1
	061294	13,0...14,0	13,0...14,0	47,0 x 10,0	20,0	16,0...18,0	1
	207396	6,0...6,5	48,0...53,0	118,4 x 12,0	65,0	82,8...88,5	2
	081264	7,8...8,5	14,0	34,9 x 12	23,0	20,7	3
	082146	8...9	14,0	38,5 x 10	23,0	24,0	3
	081773	4...4,5	25,0	43 x 12	37,7	25,0	3
	081598	4,3...5,2	25,0	43 x 12	37,7	25,5	3
F	082376	4,3...5,2	25,0	58,5 x 12	37,7	41,0	3
	081957	6...6,5	14,0	34,5 x 10	23,0	21,0	3
	081572	22,0	6...6,5	42 x 12	34,5	24,5	3
	082586	7,8...8,5	25,0	44,9 x 12	37,2	25,7	3
	081265	7,8...8,5	25,0	47,1 x 12	37,7	27,4	3
	082647	8...9	22,0	44 x 12	34,5	25,5	3
	081861	8...9	25,0	47 x 12	37,7	27,0	3
	082056	9,5...10,5	25,0	48,5 x 12	37,7	27,75	3
	081394	10...12	25,0	51,5 x 12	37,7	30,0	3
	081359	11...12	14,0	40,5 x 10	23,0	23,5	3
	081255	11...13	22,0	47,5 x 12	34,5	27,0	3
E	081793	11...13	23...30	82,8 x 10	53,25	49,75	3
F	081796	11...13	25,0	67 x 12	37,7	45,0	3
	081913	15...16	22,0	52 x 12	34,5	28,5	3
	082290	13...14	22,0	49,5 x 12	34,5	28,0	3
	081848	13...14	22,0	48,8 x 12	34,5	27,9	3
	081446	13...14	25,0	52,5 x 12	37,7	29,5	3
	081449	13...14	25,0	51,8 x 12	37,7	29,4	3
F	081787	14,0	11,5...13	64 x 10	23,0	47,0	3
	081786	14,0	14...15	43 x 10	23,0	25,0	3
	082238	14,0	28...30	60 x 12	41,0	32,5	3
F	081648	14...15	25,0	72 x 12	37,7	48,5	3
	081574	14,0	16...18	45 x 12	23,0	26,0	3
	081986	18...20	22,0	55 x 12	34,5	30,0	3
	081594	25,0	18...20	58 x 12	37,7	31,5	3
	190009	19...24,5	25,0	59 x 12	37,7	32,1	3
	081219	19...24,5	22,0	56 x 12	34,5	31,3	3
	201466	22,0	22...24	58,7 x 12	34,5	32,7	3
	081985	22...24	14,0	51 x 12	29,5	29,0	3
	081847	23...25	25,0	70 x 12	37,7	34,0	3

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

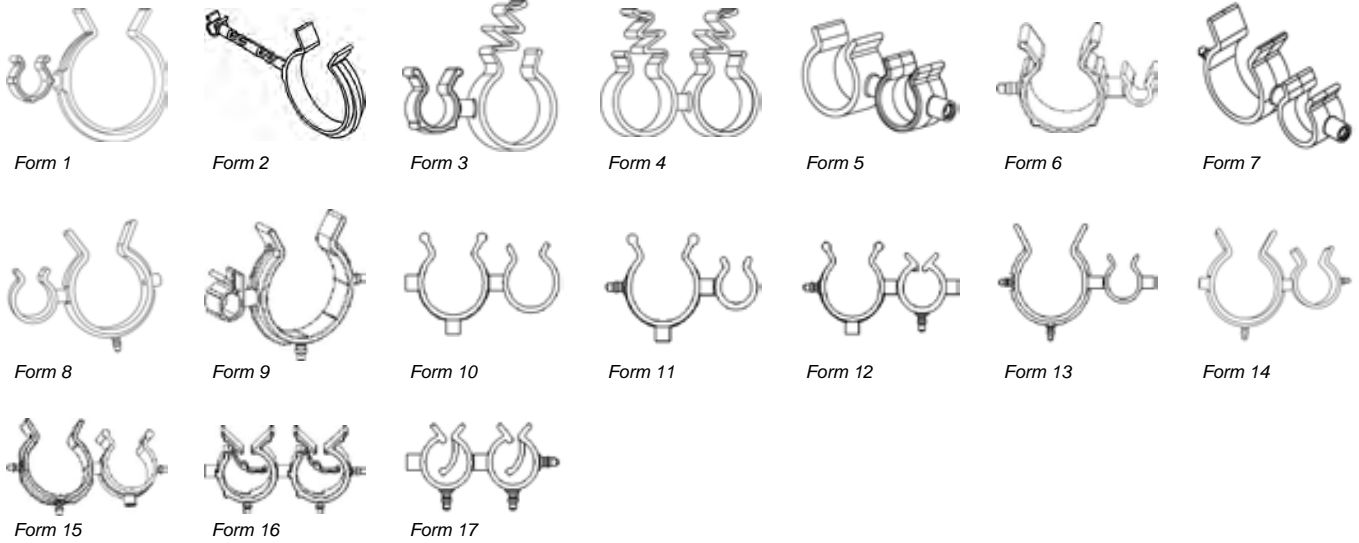


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	081885	26...28	26...28	79,5 x 12	40,5	36,0	3
	082439	30...32	22,0	79,3 x 12	53,25	39,05	3
	082500	48...53	14,0	81,5 x 12	67,0	43,15	3
	082692	25,0	22...24	73 x 12	45,0	34,0	3
	206465	4,8...5,2	22,0	43 x 12	36,0	23,5	3
	081756	22,0	7,8...8,5	44 x 12	34,5	25,9	3
F	082437	22,0	10...12	107,8 x 12	34,5	87,0	3
	081230	14,0	22,0	51 x 12	34,5	29,0	4
	081172	14,0	25,0	54 x 12	37,7	30,5	4
	082508	22,0	22,0	58,7 x 12	34,5	32,7	4
	081638	22,0	25,0	61 x 12	37,2	34,5	4
F	082699	25,0	22,0	80 x 12	37,7	52,5	4
F	081625	25,0	25,0	83 x 12	37,7	54,0	4
	081637	25,0	25,0	64 x 12	37,2	36,0	4
	060720	6...6,5	23,5...25	50 x 12	33,5	25,0	5
	060847	6...6,5	14...16	40 x 12	21,0	20,5	5
	060929	8...9	23,5...25	54,3 x 12	34,5	26,0	5
	060831	8...9	14...16	46 x 12	22,0	21,5	5
	080479	8...9	9...9,5	36,5 x 10	15,5	19,0	5
	080926	8...9	23...25	50,5 x 12	33,5	26,0	5
	081076	9...9,5	11...13	40 x 10	17,5	20,5	5
	081844	9...9,5	19...24,5	48,5 x 12	28,25	24,1	5
	061009	9...9,5	23,5...25	68 x 12	33,5	25,5	5
	061707	10...12	13...14	47 x 10	21,0	24,0	5
	081042	10...12	23...25	55 x 12	33,5	29,0	5
	061477	13...14	14...16	47,5 x 12	21,0	24,0	5
	060692	14...16	20...22	54 x 12	28,0	27,0	5
	060686	15...16	23,5...25	57,5 x 12	33,5	28,2	5
	080939	19...24,5	23...25	62,5 x 12	33,5	31,1	5
	081140	19...24,5	11...13	51 x 12	28,25	25,1	5
	061112	20...22	23,5...25	64,5 x 12	34,5	31,5	5
	060662	18...20	14...16	50 x 12	25,25	26,0	5
	061157	18...20	23...25	60,5 x 12	33,0	30...32	5
	208544	37,3	26,3	82,5 x 12	53,5	40,0	5
	080999	4,3...5,2	9...9,5	34,15 x 10	15,75	16,0	6
	080929	4,3...5,2	11...13	36 35 x 10	17,5	17,5	6
	061018	4,8...5,2	23,5...25	51,75 x 12	34, 5	21,0	6
	081690	6...6,5	23...25	43 x 12	33,5	24,5	6
E	061015	6...10	23,5...25	58,5 x 12	34,5	28,5	6

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE

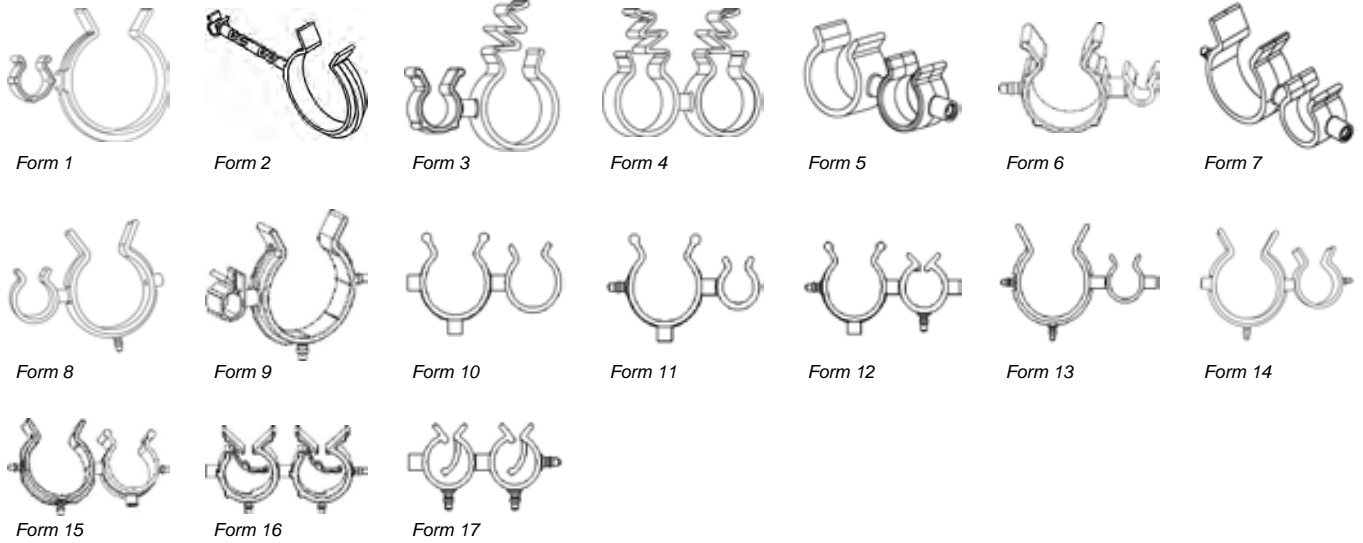


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	081103	7,8...8,5	23...25	50,9 x 12	33,5	24,2	6
	082534	8...9	14...16	46 x 12	21,0	23,5	6
	200811	9...9,5	8...9	33 x 10	15,5	20,5	6
	060761	9...9,5	11...13	42 x 10	20,0	20,0	6
	080952	9,5...10,5	23...25	54,5 x 12	33,5	26,25	6
	061025	9,5...10,5	11...13	43,5 x 10	17,5	21,5	6
	060676	9,5...10,5	23,5...25	56 x 12	33,5	26,0	6
F	081014	10...12	11...13	61 x 10	17,5	38,5	6
	080492	11,5...13	23...25	56,5 x 12	33,5	27,0	6
	060684	11...13	23,5...25	56,15	33,5	27,15	6
	060807	11...13	14...16	48,5 x 12	21,5	23,5	6
	080935	14...15	23...25	59 x 12	33,5	28,5	6
	081241	14...16	14...15	50,5 x 12	21,0	24,5	6
	082130	14...16	22...24	58,5 x 12	29,5	28,5	6
	080978	15...17	19...24,5	57 x 12	28,25	27,8	6
	060763	9...9,5	14...16	51 x 12	22,0	21,5	7
	080962	14...16	14...16	56,5 x 12	21,0	24,5	7
	060655	14...16	14...16	56,5 x 12	21,0	24,5	7
	060637	23,5...25	23,5...25	74,5 x 12	33,5	34,5	7
	060945	23...25	14...16	65 x 12	33,5	26...31	7
	060690	9,0	9,0	45,5 x 10	16,0	18...20	7
	081202	6...6,5	38...45	71,7 x 10	62,0	33,0	8
	060910	6...6,5	39...45	65,3 x 10	62,5	33,0	8
E	061558	6...6,5	18...20	46,8 x 12	26,0	22,0	8
	061705	8...9	30...32	64,3 x 10	55,0	31,5	8
	061408	11...13	11...13	42,5 x 10	25,5	21,5	8
	081906	15...16	38...45	74,2 x 10	62,0	37,0	8
	081097	18...20	38...45	77,2 x 12	62,0	38,5	8
	080940	19...24,5	38...45	78,2 x 12	62,0	39,1	8
	060862	20...22	39...45	78,3 x 12	54,0	40,0	8
E,F	201345	3,5...6	8...9	34,5 x 10	20,0	17,5	8
E	082262	4...4,5	23...30	59 x 10	53,25	29,75	8
	060764	18...20	39...45	75 x 12	61,5	36,6...40,6	8
F	208913	15,0...16,0	39,0...45,0	90,3 x 10,0	61,5	51,5	8
E	060785	4,8...5,2	6...10	37,8 x 10	25,5	17,0	9
E	061167	4,8...5,2	23...30	60 x 10	55,0	31,5	9
	081029	4,3...5,2	38...45	63,5 x 10	62,0	30,5	9
F	081229	6...6,5	38...45	81,7 x 10	62,0	47,5	9
	081198	7,8...8,5	34...36	65,4 x 10	53,5	32,4	9

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDINGS FROM ABOVE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1	Form
	082187	7,8...8,5	38...45	66,6 x 10	62,0	34,4	9
	081117	7,8...8,5	23...30	63,25 x 12	53,25	30,75	9
E	081169	7,8...8,5	16...24	54,6 x 12	44,9	26,5	9
	060749	9,5...10,5	39...45	69,5 x 10	61,5	36,3	9
	081591	10...12	34...36	69,5 x 10	53,5	35,0	9
	081010	11,5...13	38...45	72,2 x 10	62,0	34,5	9
	081370	11...13	34...36	68,5 x 10	53,5	33,5	9
E	081537	11...13	23...30	45,5 x 10	45,75	33,25	9
	081650	13...14	34...36	69,7 x 12	53,5	34,4	9
F	081438	14...15	38...45	113,5 x 10	62,0	71,0	9
	081099	14...15	38...45	75 x 10	62,0	36,0	9
F	061494	15,8...17	30...32	99 x 12	53,0	58,5	9
	081618	16...18	38...45	76,7 x 12	62,0	37,0	9
	081325	19...24,5	34...36	77 x 12	53,5	37,5	9
	061561	20...22	26...28	70,8 x 12	45,0	33,0	10
	061432	11...13	26...28	63,5 x 12	42,5	28,2	11
	061543	16...18	26...28	72 x 12	40,5	31,5	12
	061342	14...16	39...45	90,5 x 12	66,5	36,5	13
	060868	23...25	39...45	88 x 12	-	40...42	14
	082475	26...28	34...36	91 x 12	53,5	40,5	15
E	081328	16...24	38...45	92,9 x 10	62,0	43,3	16
E	081379	16...24	16...24	80,9 x 10	44,9	36,7	16
E	081995	23...30	23...30	98 x 10	45,75	45,3	16
	061182	24...25	24...25	80,9 x 10	44,9	36,0	16
	081382	38...45	38...45	104,9 x 10	62,0	48,7	16
	061202	39...45	39...45	104,3 x 10	61,8	49,0	16
E	060722	6...10	23...30	75,1 x 10	55,0	31,0	17
	060776	6...10	6...10	51,1 x 10	26,0	21,3	17
E	060742	10...16	10...16	63,5 x 10	33,85	28,5	17

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

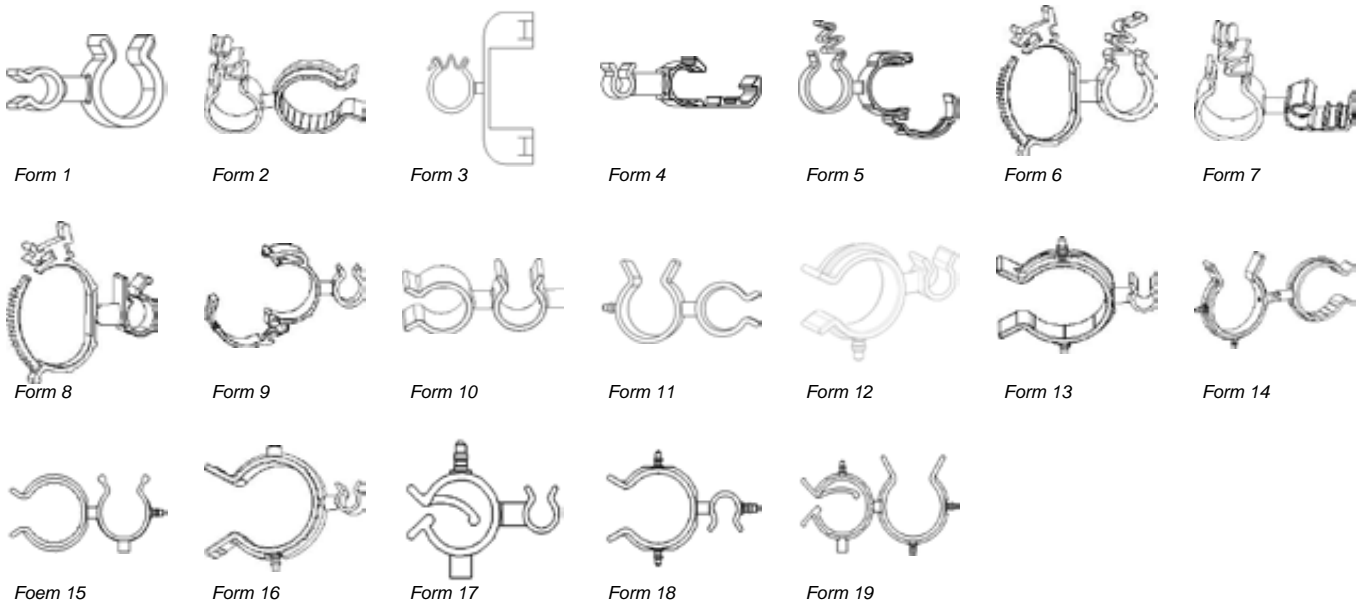
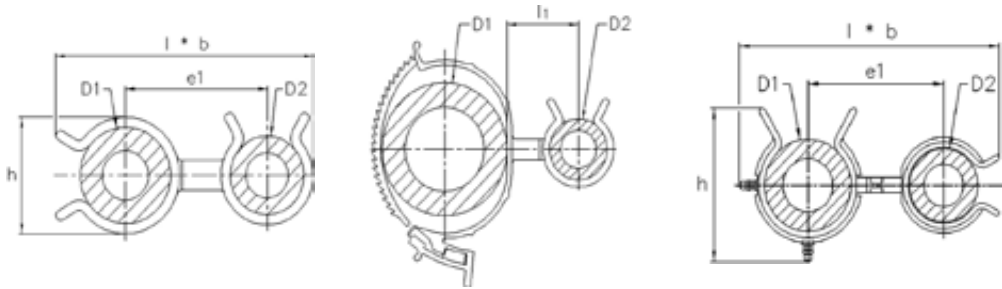
2-WAY - RECORDING FROM ABOVE AND SIDWAYS

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

CAUTION!

The clips listed below may incorporate additional components or features (such as additional male or female connections, retaining legs for varying pipe diameters, etc.) that are not shown in the sketches.

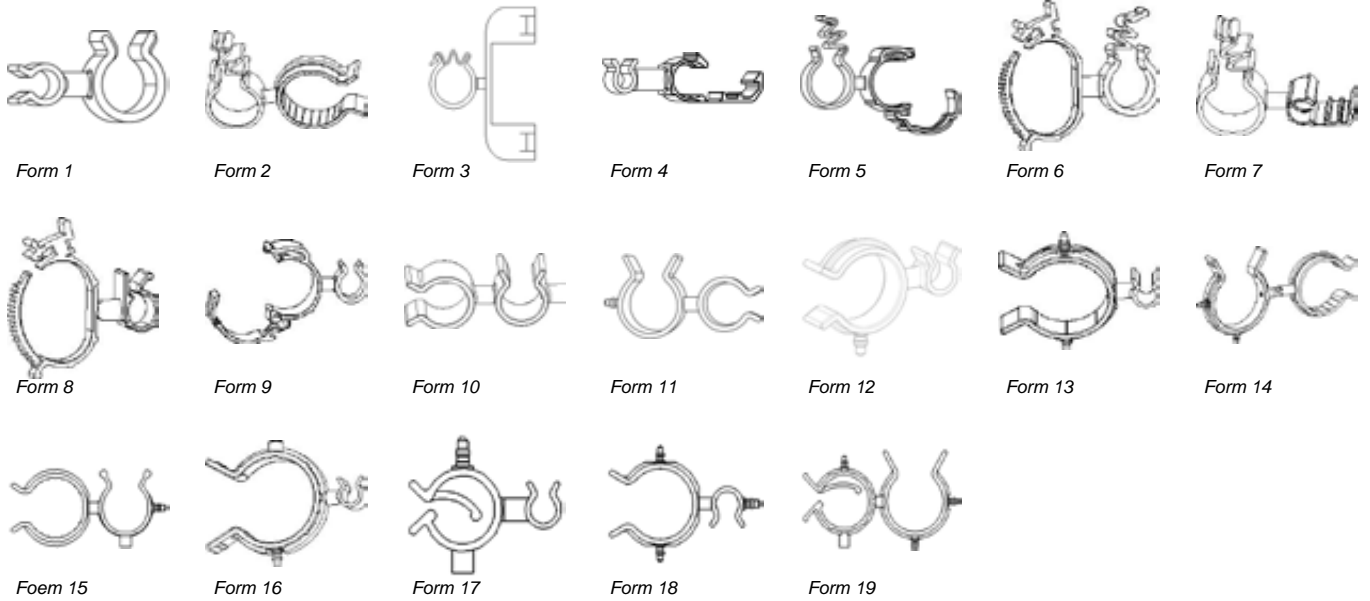
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	061651	7,2...7,5	16...18	39,6 x 12	23,0	22,0	1
	081870	4,3...5,2	10...12	30,4 x 10	14,0	18,0	1
	200182	4,3...5,2	13...14	34,35 x 10	17,0	19,0	1
	200184	4,3...5,2	28...30	53,9 x 12	37,0	27,5	1
	082519	4,3...5,2	35...38	59,9 x 12	43,0	30,5	1
	080434	6...6,5	18...20	41,5 x 12	22,0	22,5	1
	081904	7,0	30,0	50,3 x 12	41,5	24,3	1
	081000	7,2...7,5	4,3...5,2	25,95 x 10	10,2	15,6	1
	081130	7,2...7,5	6...6,5	28,6 x 8	10,2	17,1	1
	081597	7,2...7,5	7,8...8,5	29 x 12	16,9	16,8	1
	081458	7,2...7,5	9,5...10,5	32,6 x 10	15,75	18,85	1
	081048	7,2...7,5	14...15	37,1 x 10	21,25	21,1	1
	061559	7,2...7,5	14...16	37,1 x 10	21,25	21,2	1
	190037	7,2...7,5	16...18	39,1 x 12	23,0	22,1	1
	080922	7,2...7,5	22...24	45,1 x 12	29,5	25,1	1
F	081159	7,2...7,5	8...9	46,1 x 8	13,5	33,6	1
F	081886	7,8...8,5	25...27	61,9 x 12	32,0	37,2	1
	080995	10...12	4...4,5	30 x 10	14,0	17,5	1
	081125	10...12	6...6,5	32 x 10	14,0	18,5	1
	081499	10...12	6...6,5	32,5 x 10	14,0	19,0	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDING FROM ABOVE AND SIDEWAYS

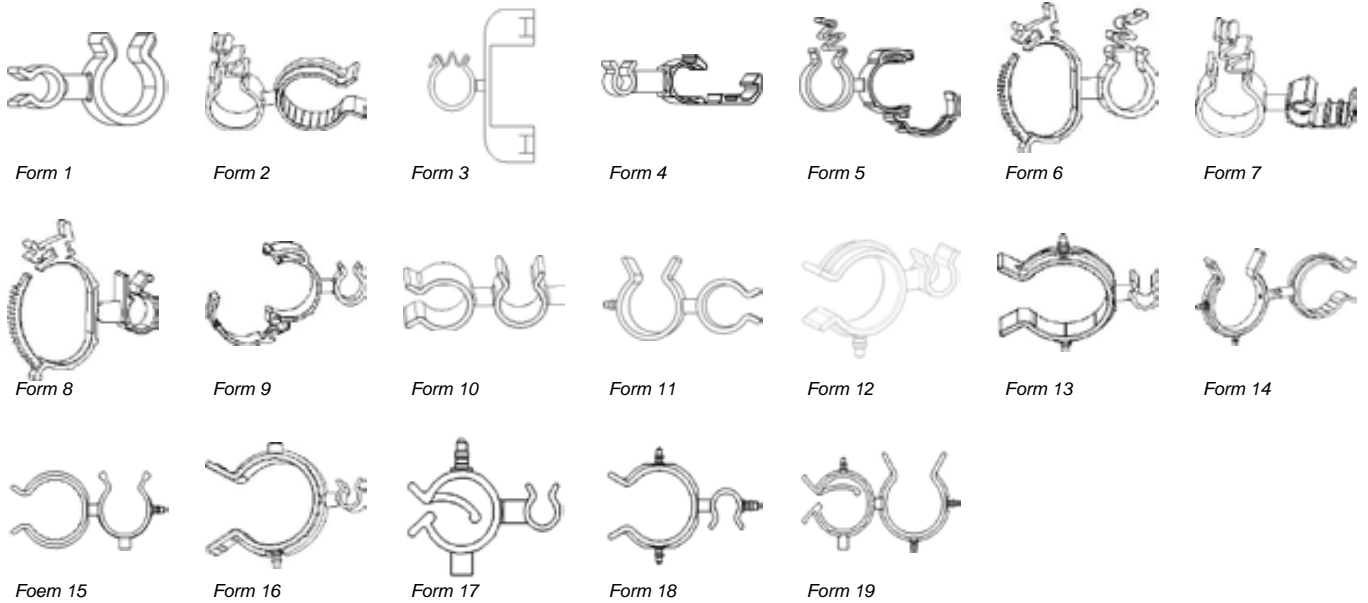


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	081669	10...12	7,8...8,5	32,9 x 12	18,0	18,7	1
	082649	10...12	8...9	36,5 x 10	15,0	22,0	1
	081077	10...12	8...9	34 x 10	15,0	19,5	1
F	082650	10...12	8...9	53 x 10	15,0	38,5	1
	080458	10...12	10...12	38,5 x 10	16,0	22,5	1
	082291	10...12	13...14	38,8 x 12	23,0	21,9	1
	081919	10...12	14...15	41 x 10	21,25	23,0	1
	081044	10...12	15...16	39 x 10	22,5	22,5	1
	080996	10...12	19...24,5	46 x 12	28,25	25,3	1
	081129	11,5...13	7,2...7,5	34,6 x 10	17,75	19,6	1
	081153	12...13	4,3...5,2	32,85 x 10	16,0	18,5	1
	081481	12...13	6...6,5	35,5 x 8	16,0	20,0	1
	081641	12...13	7,8...8,5	35,9 x 12	19,0	19,7	1
	082113	12...13	8...9	39,5 x 8	16,0	23,0	1
	082463	12...13	9,5...10,5	39,5 x 10	17,0	21,75	1
F	082212	12...13	13...14	49,5 x 10	22,5	30,0	1
	081133	12...13	14...15	44 x 10	21,25	24,0	1
	081539	13...14	4...4,5	34,5 x 10	17,0	19,0	1
	081469	13...14	7,8...8,5	37,4 x 12	19,5	20,2	1
	081715	13...14	9,5...10,5	41 x 10	17,5	22,25	1
	082111	13...14	13...14	44 x 10	22,5	23,5	1
F	082565	13...14	20...24,5	66,5 x 12	28,25	42,75	1
	060605	16...18	4,8...5,2	36 x 12	20,0	19,5	1
	081288	16...18	6...6,5	39,5 x 12	20,0	22,0	1
F	081139	16...18	6...6,5	46 x 12	20,0	28,5	1
	081220	16...18	7,8...8,5	39,9 x 12	21,0	21,7	1
	081289	16...18	8...9	43,5 x 12	20,0	25,0	1
	080450	16...18	9,5...10,5	43,5 x 12	20,0	23,75	1
F	201228	16...18	10...12	52,5 x 12	20,0	32,5	1
	060714	16...18	11...13	44 x 12	20,0	24,5	1
	080449	16...18	11...13	45,5 x 12	20,0	24,5	1
F	081529	16...18	13...14	53,5 x 12	24,0	32,0	1
	080496	16...18	14...15	48 x 12	22,0	26,0	1
	081425	16...18	16...18	50 x 12	23,0	27,0	1
	061632	16...18	22...24	55 x 12	29,0	29,0	1
	080992	16...18	22...24	54 x 12	29,5	30,0	1
	060620	18...20	20...22	55 x 12	28,0	29,0	1
	080444	18...20	19...24,5	55,5 x 12	28,25	28,6	1
	080975	18...20	18...20	54,5 x 12	26,0	28,0	1
	060687	18...20	18...20	53 x 12	25,0	27,7	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDING FROM ABOVE AND SIDEWAYS

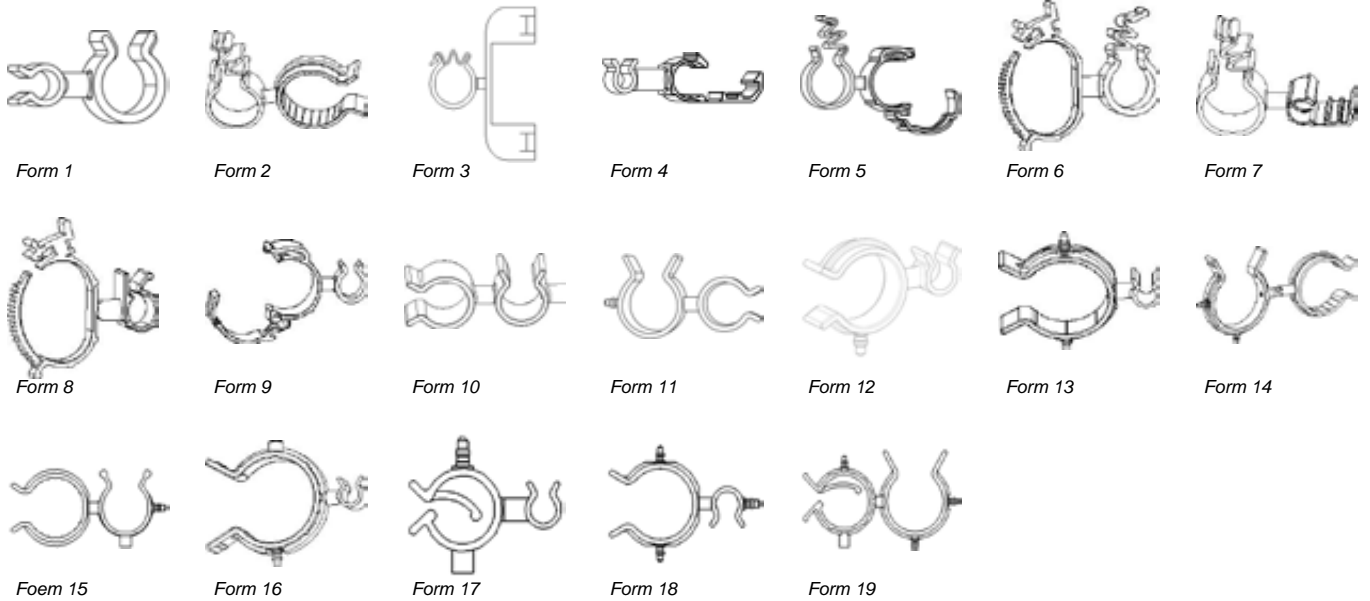


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	080943	18...20	4...4,5	39,5 x 12	22,0	21,5	1
	081281	18...20	4,3...5,2	39,9 x 12	22,0	22,0	1
	060728	18...20	6...6,5	41 x 12	22,0	22,5	1
	080446	18...20	8...9	43,5 x 12	22,0	23,5	1
	060678	18...20	8...9	43 x 12	22,0	23,5	1
	080934	18...20	10...12	48 x 12	22,0	26,5	1
	081012	18...20	15...16	51,5 x 12	23,0	26,5	1
F	082106	18...20	15...16	7,5 x 12	23,0	50,0	1
F	082295	18...20	18...20	7,1 x 12	26,0	44,5	1
	061012	20...22	13...14	51,1 x 10	26,6	26,9	1
	061145	20...22	20...22	58 x 12	28,0	30,0	1
	082444	22...30	8...9	58 x 16	-	29,5	1
	081327	25...27	4,3...5,2	48,85 x 12	32,0	26,0	1
	082042	25...27	8...9	55,5 x 12	32,0	30,5	1
F	082457	25...27	8...9	60 x 12	32,0	35,0	1
	200597	25...27	9,5...10,5	55,5 x 12	32,0	29,25	1
	081602	25...27	11,5...13	57,25 x 12	32,0	30,25	1
	081672	25...27	15...16	68 x 12	32,0	38,0	1
F	200539	25...27	16...18	72 x 12	32,0	42,5	1
	081845	25...27	22...24	68 x 12	32,0	35,5	1
	082396	25...27	38...45	92,5 x 12	54,5	49,5	1
	081017	28...30	4...4,5	53,5 x 12	37,0	26,7	1
	080481	28...30	6...6,5	55,5 x 12	37,0	28,0	1
	081937	28...30	7,8...8,5	57,6 x 12	37,0	29,4	1
	080483	28...30	8...9	57,5 x 12	37,0	29,0	1
	081142	28...30	10...12	62 x 12	37,0	32,0	1
	081644	28...30	13...14	63 x 12	37,0	31,5	1
	081331	28...30	14,0	64 x 12	36,6	32,5	1
	081004	28...30	15...16	65,5 x 12	37,0	32,0	1
	081671	28...30	19...24,5	69,5 x 30	37,0	34,5	1
	080944	28...30	19...24,5	69,5 x 12	37,0	34,0	1
F	082189	28...30	19...24,5	79,5 x 12	37,0	44,5	1
	082029	28...30	18...20	68,5 x 12	37,0	33,5	1
	060824	29...33	6...6,5	55,7 x 12	36,6	28,0	1
	060826	29...33	8...9	57 x 12	36,6	29,0	1
	061161	29...33	10...11	61,2 x 12	36,6	30,0	1
	061290	29...33	13...14	62,4 x 12	36,6	31,8	1
	060758	29...33	18...20	66,5 x 12	36,6	32,5	1
	060724	29...33	20...22	69,7 x 12	36,6	34,4	1
	081075	35...38	4...4,8	59,5 x 12	43,0	30,0	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDING FROM ABOVE AND SIDEWAYS

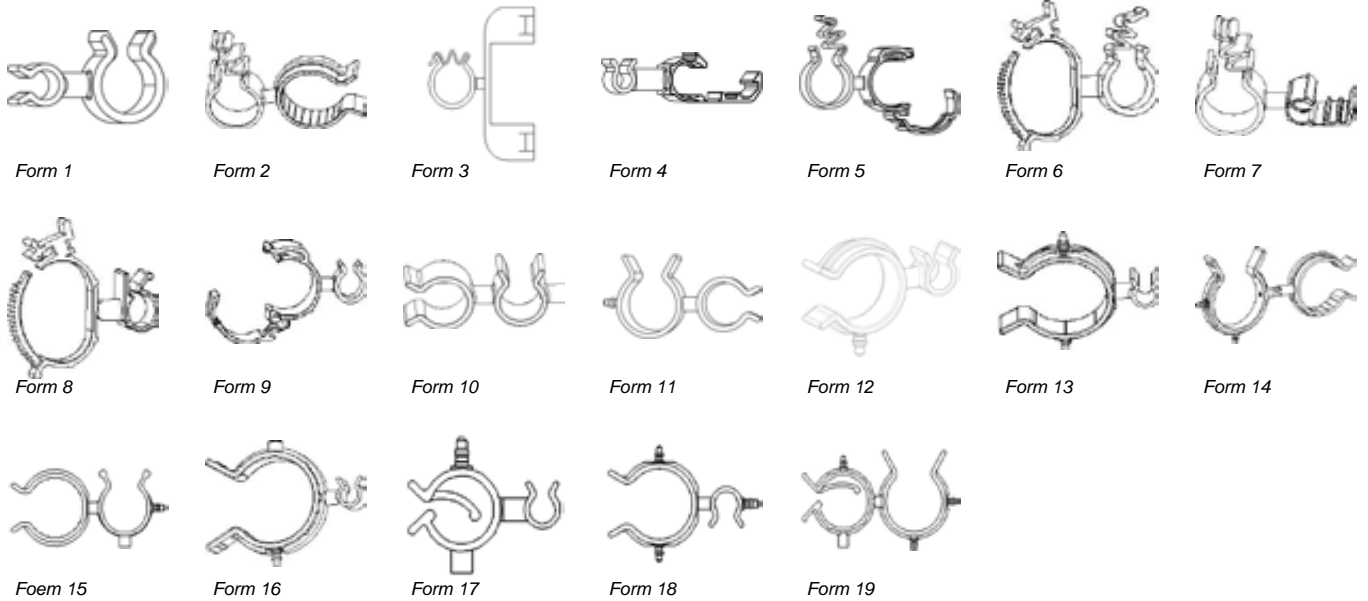


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	081443	35...38	6...6,5	61,5 x 12	43,0	31,0	1
	081971	35...38	7,8...8,5	63,6 x 12	43,0	32,4	1
	081551	35...38	8...9	63,5 x 12	43,0	32,0	1
	081268	35...38	10...12	68 x 12	43,0	35,0	1
	081321	35...38	13...14	69 x 12	43,0	34,5	1
	082641	35...38	15...16	71,5 x 12	43,0	35,0	1
	081928	35...38	18...20	74,5 x 12	43,0	36,5	1
F	081160	7,5	13,0	42,6 x 10	22,5	27,1	1
	060678	8...9	18...20	43 x 12	24,0	24,5	1
	060826	8...9	29...31	58,5 x 12	39,0	32,0	1
	060758	18...20	29...33	67,5 x 12	42,0	37,7	1
	204898	9,5...10,5	25...27	55,1 x 12	31,0	28,6	1
E	061130	16...24	4...4,8	51,5 x 12	44,5	28,6	1
	081515	25,0	25...27	71 x 12	39,2	37,0	2
	190003	13...14	25,0	56,5 x 12	37,7	30,0	2
	081331	14,0	28...30	64,5 x 12	37,0	32,5	2
	201467	22,0	28...30	72,2 x 12	40,0	36,2	2
	081563	35...38	14,0	70,5 x 12	43,0	35,5	2
	081634	16...24	11...13	58,4 x 10	44,2	28,9	3
	081332	10,0	22,0	55,5 x 14	85,0	38,3	3
G	201227	15,5...16,1	18...20	64 x 20	26,0	42,8	4
G	081837	6,8...7,4	4,3...5,2	27,2 x 10	11,6	15,55	4
G	200245	9,6...10,2	11,5...13	36,9 x 15	17,75	22,2	4
G	082058	12,6...13,2	18...20	44,9 x 15	26,0	24,85	4
G	082036	15,5...16,1	8...9	36,5 x 20	22,4	21,8	4
G	190010	6,8...7,4	6...6,5	25,8 x 10	11.50,0	16,05	4
G	081707	6,8...7,4	7,8...8,5	27,9 x 10	16,9	17,45	4
G	081659	6,8...7,4	8...9	27,8 x 10	13,5	17,05	4
G	081636	6,8...7,4	11...13	31,3 x 10	17,5	18,55	4
G	081726	6,8...7,4	19...24,5	39,8 x 12	28,25	22,85	4
G	081732	9,6...10,2	4,3...5,2	27,3 x 15	14,4	16,95	4
G	200110	9,6...10,2	4,3...5,2	28,25 x 15	15,0	17,95	4
G	081714	9,6...10,2	15...16	38,9 x 15	22,5	21,45	4
G	082479	12,6...13,2	7,8...8,5	32,9 x 15	19,0	19,7	4
G	200127	12,6...13,2	4,3...5,2	29,85 x 15	19,0	18,5	4
G	082559	12,6...13,2	10...12	38,4 x 15	19,0	23,35	4
G	082619	15,5...16,1	16...18	46,3 x 20	23,0	27,0	4

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDING FROM ABOVE AND SIDEWAYS

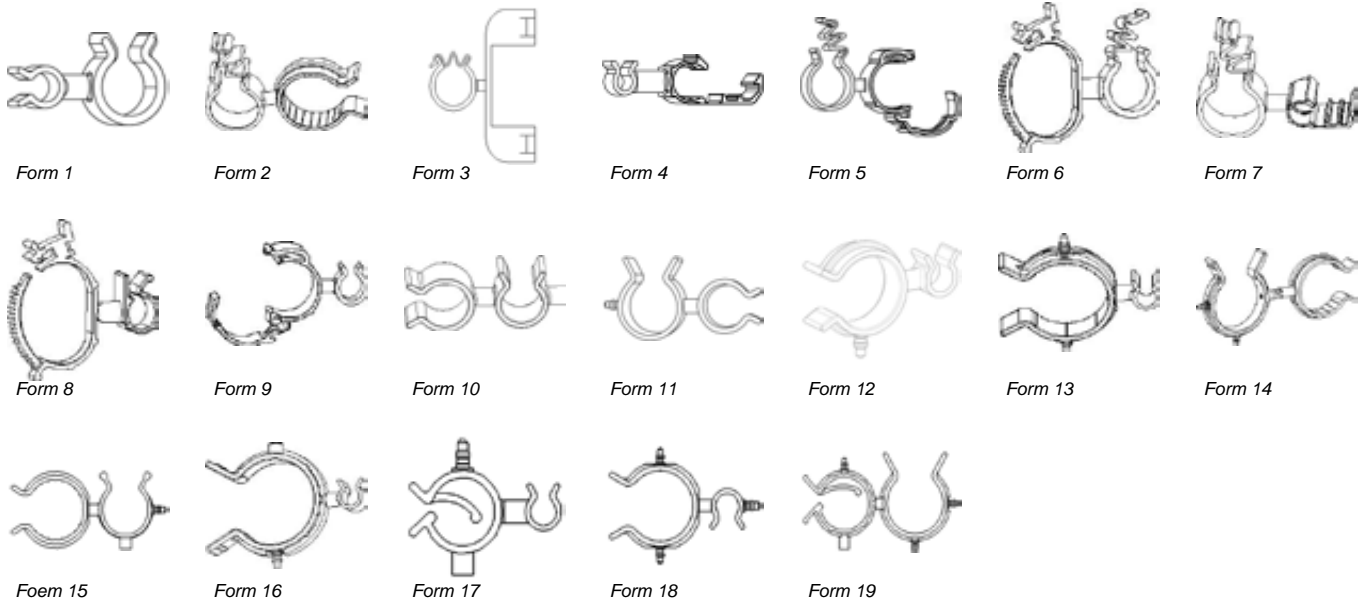


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
E	208914	6,8...7,4	6,0...10,0	43,2 x 10,0	17,5	20,0	4
	082405	25,1...25,9	22,0	62,30 x 20	37,6	34,25	5
	200562	25,1...25,9	22,0	62,5 x 20	37,6	34,25	5
	082662	16...22	14,0	49,5 x 10	45,5	16,9	6
	081724	16...22	22,0	59 x 12	45,5	22,4	6
G	200782	15,5...16,1	22,0	55 x 20	34,5	30,0	7
G	082572	9,6...10,2	22,0	47,4 x 15	34,5	27,45	7
G	082393	15,5...16,1	25,0	53,5 x 20	34,5	30,3	7
	081788	9,5...10,5	17,0	42,1 x 20	29,0	25,05	9
E G	201314	20,6...21,4	6...10	46 x 20	32,0	26,0	9
G	082543	23,1...23,3	11,5...13	50,8 x 20	34,0	29,25	9
G	082645	23,1...23,3	22...24	61,3 x 20	34,0	34,5	9
	082623	25,1...25,9	7,8...8,5	46,4 x 20	37,0	25,95	9
	200397	25,1...25,9	11,5...13	52 x 20	37,6	29,0	9
G	082554	25,1...25,9	9,5...10,5	49,8 x 20	37,6	28,0	9
G	082436	25,1...25,9	14...15	54,3 x 20	37,6	30,25	9
G	082705	25,1...25,9	16...18	56,3 x 20	37,6	31,25	9
G	081676	33...35	10...12	64,5 x 16	49,0	35,5	9
F G	081708	33...35	34...36	114 x 16	53,5	64,5	9
EF G	082402	33...35	23...30	95,5 x 16	53,25	46,05	9
G	201408	20,6...21,4	19...24,5	54,5 x 20	33,0	30,3	9
G	082529	25,1...25,9	22...24	60 x 20	37,6	34,25	9
	206956	33...38	13...14	62,1 x 16	29,0	34,75	9
	209248	25,5	34,0...36,0	97,28 x 47,0	37,25	40,75	9
	081144	12...13	23...25	58,5 x 12	33,5	28,5	10
	060700	16...18	9...9,5	47,5 x 12	20,0	22,5	10
	061108	16...18	14...16	53 x 12	22,0	25,0	10
	080976	16...18	14...16	54 x 12	22,0	26,0	10
	080459	10...12	11...13	45,5 x 10	17,5	21,0	11
	081137	28...30	11...13	62,5 x 12	37,0	30,5	11
	060950	29...33	23,5...25	80 x 12	36,6	36,0	11
	060685	23...25	18...20	65,8 x 12	-	29,5	11

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDING FROM ABOVE AND SIDEWAYS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	082078	22...23	8...9	47,4 x 10	35,5	25,5	12
	082254	8...9	34...36	63,5 x 10	55,0	32,0	13
	081470	34...36	15...16	71,5 x 10	55,0	35,0	13
	081514	34...36	18...20	74,5 x 12	55,0	36,5	13
	080993	10...12	39...45	72,5 x 10	62,0	34,0	14
F	081595	35...38	38...45	118,7 x 12	62,0	63,0	14
	081662	35...38	26...28	89,5 x 12	43,0	40,5	15
	081464	38...45	8...9	72 x 10	56,2	35,5	16
	080997	38...45	4...4,5	68 x 10	56,2	33,5	16
	080954	38...45	6...6,5	70 x 10	56,2	34,5	16
	061069	39...45	8...9	72 x 10	55,8	35,5	16
	080972	38...45	10...12	76,5 x 10	56,2	38,5	16
	061193	39...45	15...16	78,5 x 10	55,8	38,0	16
	080994	38...45	15...16	80 x 10	56,2	38,5	16
	081222	38...45	19...24,5	84 x 12	56,2	40,6	16
	130297	9,5...11,0	39,0...45,0	55,5 x 10,0	76,0	38,5	16
	061226	6...10	8...9	37,5 x 10	29,0	20,0	17
E	061093	10...16	4...4,8	39,85 x 10	35,5	23,5	17
	061681	26...28	8...9	57,5 x 12	47,5	29,0	17
E	081434	16...24	13...14	59,7 x 12	44,2	29,8	17
	081197	34...36	11...13	75 x 10	55,0	33,5	18
	061187	23...30	39...45	104,8 x 10	61,5	44,0	19

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

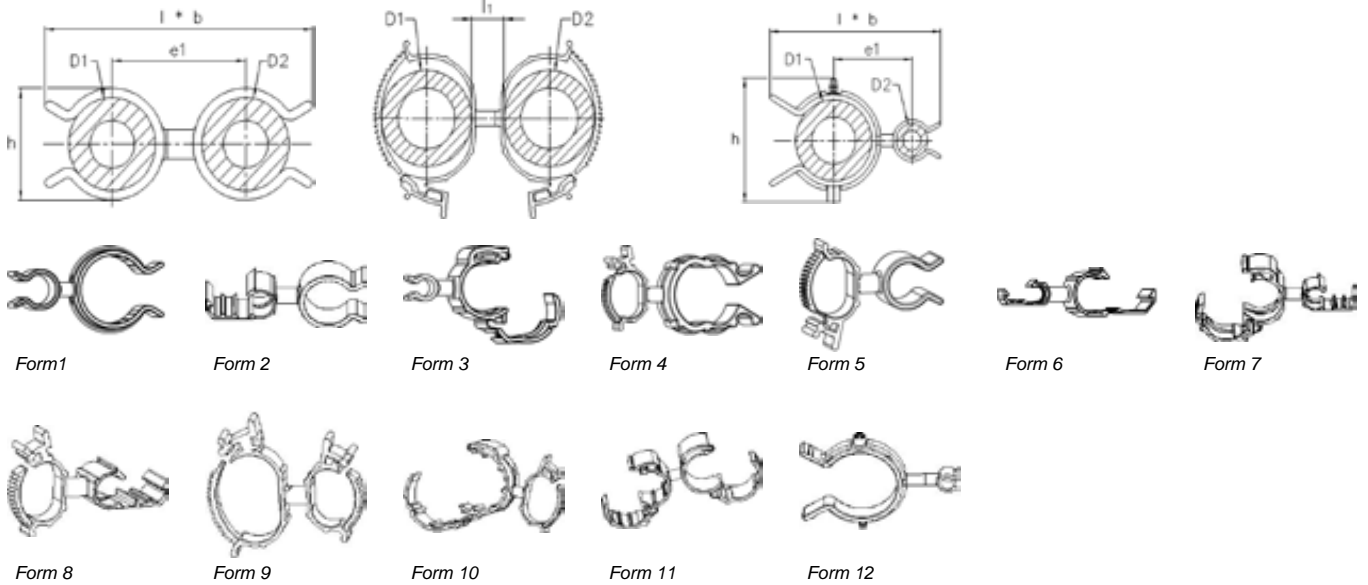
2-WAY - RECORDING FROM SIDEWAYS

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

CAUTION!

The clips listed below may incorporate additional components or features (such as additional male or female connections, retaining legs for varying pipe diameters, etc.) that are not shown in the sketches.

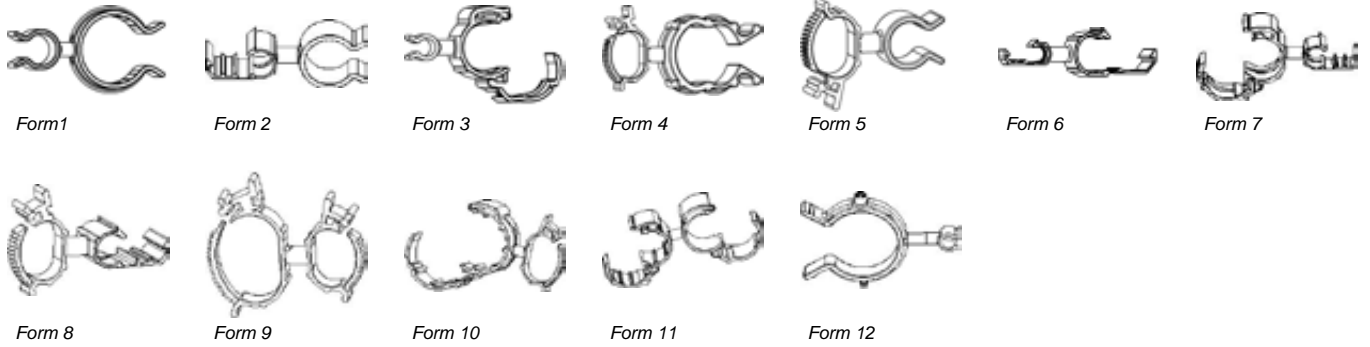
? Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	081942	10...14	16...18	62x30	19,3	19,3	1
	200230	7,8...8,5	16...22	32,9 x 12	45,5	14,1	1
	190011	10...14	6...6,5	33,5 x 9,2	34,4	12,3	1
	081693	10...14	22...24	52 x 12	34,4	22,3	1
	082672	16...22	4,3...5,2	38,9 x 10	45,5	11,9	1
E	190012	16...22	6...10	40 x 10	45,5	16,4	1
	082552	16...22	8...9	42,5 x 9,2	45,5	13,4	1
	082575	16...22	10...12	47 x 10	45,5	16,4	1
	201511	16...22	11...13	46 x 10	45,5	14,9	1
	081653	16...22	14...15	43,5 x 10	45,5	18,4	1
	200238	16...22	16...18	45,5 x 12	45,50	19,4	1
	081528	16...22	18...20	53,5 x 12	45,5	17,9	1
	155053	6,0	15,5	-	-	-	1
F	200233	6...6,5	10...12	41,5 x 10	14,0	25,5	1
F	081518	7,2...7,5	28...30	74,6 x 12	37,0	45,1	1
	081194	7,2...7,5	28...30	58,1 x 12	37,0	28,6	1
F	081562	7,2...7,5	25...27	70,1 x 12	32,0	43,6	1
	081126	7,2...7,5	18...20	44,6 x 12	22,0	23,1	1
	081459	7,2...7,5	13...14	39,6 x 10	17,0	20,6	1
	081079	7,2...7,5	10...12	35,1 x 10	14,0	19,1	1
	081522	10...12	18...20	48 x 12	22,0	25,0	1
	080463	10...12	16...18	46 x 12	20,0	24,0	1
	081143	10...12	12...13	42 x 10	16,0	22,0	1
	081622	10...12	10...12	39 x 10	14,0	21,0	1
	081606	10...12	13...14	43,5 x 10	17	22,5	1
	081330	10...12	25...27	58 x 12	32,0	29,5	1
	081373	12...13	18...20	51 x 12	22,0	26,0	1
	081224	12...13	28...30	65 x 12	37,0	31,5	1
	081540	13...14	25...27	62,5 x 12	32,0	31,0	1
	081504	13...14	28...30	66,5 x 12	37	32,0	1
F	080951	16...18	16...18	60 x 12	20,0	34,0	1

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

2-WAY - RECORDING FROM SIDEWAYS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	l x b	h	e1 / l1	Form
	080451	16...18	18...20	55 x 12	22,0	28,0	1
	060704	16...18	18...20	54 x 12	22,0	27,0	1
	060949	16...18	29...33	68,5 x 12	36,6	32,5	1
	081450	16...18	28...30	69 x 12	37	33,5	1
	082690	16...18	35...38	75,5 x 12	43,0	36,5	1
	081465	18...20	25...27	67,5 x 12	32,0	33,5	1
F	082657	25...27	25...27	100,5 x 12	32,0	61,5	1
	081576	25...27	28...30	81,5 x 12	37,0	39,0	1
	200951	60...65	10...12	103,5 x 15	74,0	49,5	1
G	082643	7,2...7,5	9,6...10,2	32 x 15	14,4	18,05	2
G	082487	12...13	6,8...7,4	35,8 x 10	16,0	19,55	2
G	200860	9,6...10,2	16...18	42,95 x 15	20,0	22,95	2
F	082570	25...27	25,1...25,9	75 x 20	37,6	43,75	2
G	201512	9,6...10,2	18...20	46,9 x 15	22,0	25,45	2
G	200781	20,6...21,4	7,2...7,5	43,6 x 20	33,0	24,1	3
G	201717	20,6...21,4	35...38	77 x 20	43,0	38,5	3
G	201718	20,6...21,4	25...27	73,5 x 20	32,0	41,5	3
	081480	10...14	22...30	73,5 x 16	35,2	26,3	4
	060857	16...18	48...80	83 x 13	113,0	-	4
	082459	10...14	7,2...7,5	36,6 x 9,2	34,4	12,9	5
	082446	10...14	13...14	46,5 x 10	34,4	17,8	5
G	082585	4,5	4,5	28,3 x 10	11,6	17,6	6
G	082482	6,8...7,4	15,5...16,1	37 x 20	22,4	22,35	6
G	200320	12,6...13,2	9,6...10,2	37,3 x 15	18,2	22,3	6
G	200385	20,6...21,4	12,5...13,2	47,5 x 20	33,0	27,0	6
G	082496	9,6...10,2	20,6...21,4	45,9 x 20	33,0	26,45	7
G	082017	6,8...7,4	17,0	38,4 x 20	29,0	22,85	7
G	081992	6,8...7,4	16...22	42,8 x 10	45,5	13,95	8
G	201356	10...14	9,6...10,2	38,9 x 15	34,4	15,25	8
	200530	10...14	10...14	43,5 x 9,2	34,4	10,1	9
	200033	10...14	16...22	50,5 x 9,2	45,5	10,2	9
	201446	16...22	10...14	50,5 x 9,2	45,5	10,2	9
	200074	10...14	33...35	68 x 16	49,0	29,3	10
G	082448	16...22	33...35	75 x 16	49,0	37,4...40,4	10
	201398	33...38	10...14	- x 16	29,0	29,3	10
	081819	17,0	33...35	70,6 x 20	49,0	38,3	11
G	082033	20,6...21,4	33...35	73,5 x 20	49,0	39,0	11
	201164	22...24	19...21	64 x 20	34,4	33,6	11
	200561	33...38	17,0	- x 20	-	38,3	11

E = legs within the bore for varying diameter hoses; F = with connector; G = for corrugated Tubes

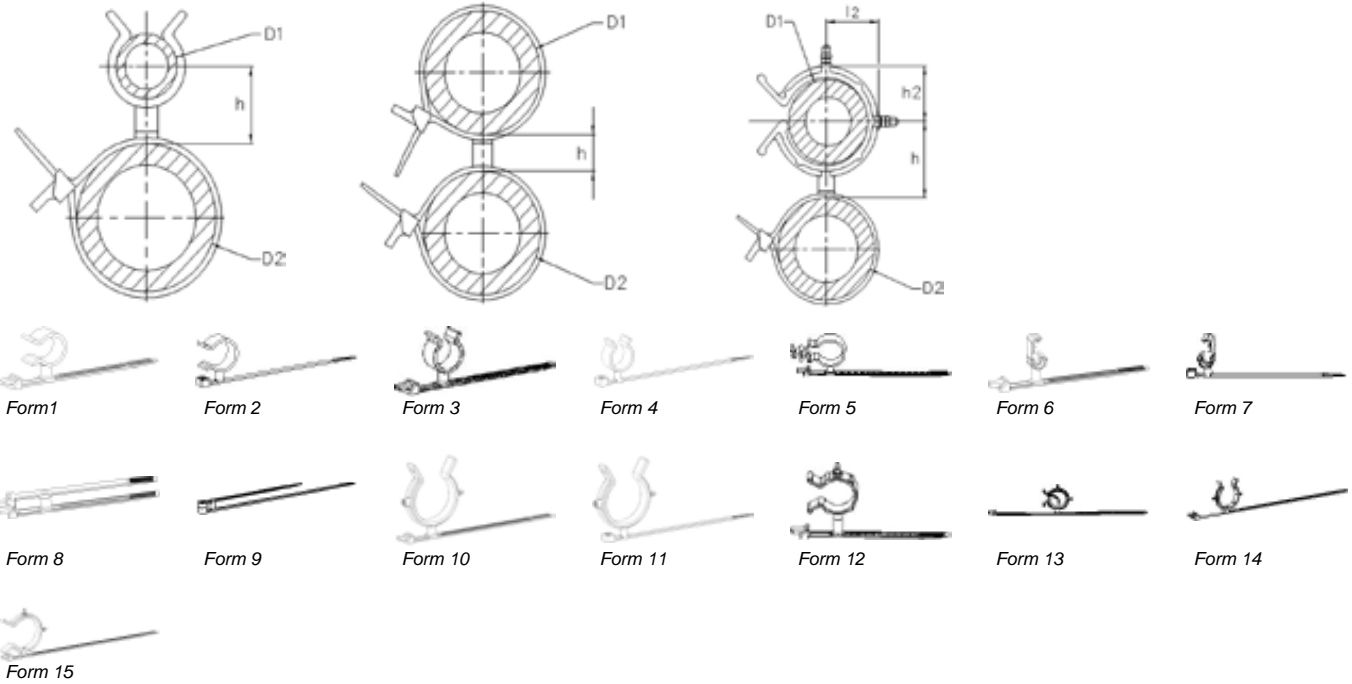
2-WAY - WITH STRAP

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

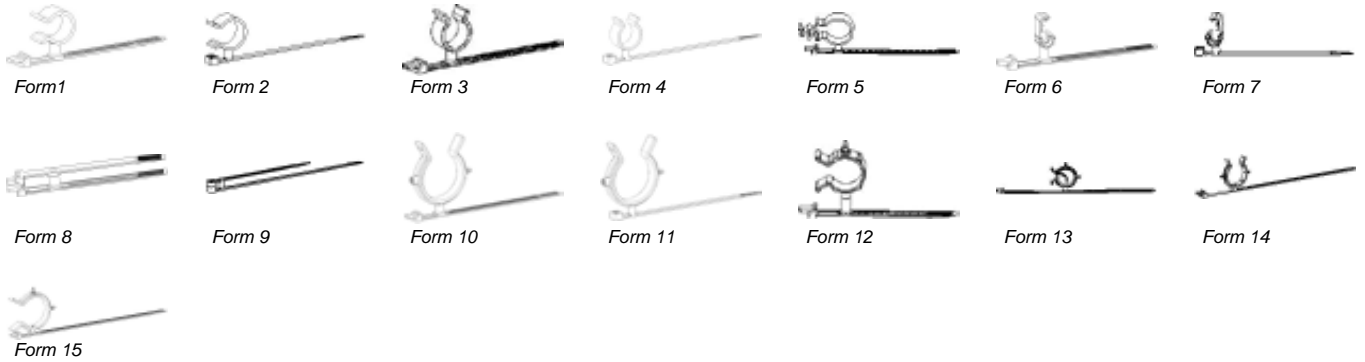
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	h2	l2	h	Form
	081047	4,3...5,2	8...20	-	-	14,0	1
	060828	6...6,5	8...20	-	-	14,0	1
	081987	6...6,5	8...20	-	-	15,5	1
	081506	7,8...8,5	8...20	-	-	15,2	1
	080472	8...9	8...20	-	-	15,0	1
	080456	9,5...10,5	8...20	-	-	17,25	1
	081007	10...12	8...20	-	-	18,0	1
	060698	11...13	8...20	-	-	20,0	1
	081231	11...13	8...20	-	-	18,0	1
	081691	15...16	8...20	-	-	18,0	1
	081530	16...18	8...20	-	-	20,5	1
	081849	18...20	8...20	-	-	19,5	1
	081531	22...24	8...20	-	-	23,5	1
	082550	28...30	8...20	-	-	27,0	1
	201022	28...30	8...33	-	-	27,0	1
	201024	34...36	8...20	-	-	30,0	1
	081043	4,3...5,2	8...33	-	-	14,0	1
F	081132	6,0	8...33	-	-	22,0	1
	201377	6...6,5	8...33	-	-	15,5	1
	081217	7,8...8,5	8...33	-	-	15,2	1
	082061	8...9	8...33	-	-	18,5	1
F	081046	8...20	8...33	-	-	27,5	1
	080497	9,5...10,5	8...33	-	-	17,25	1
	061414	11...13	8...33	-	-	21,0	1
	080909	14...15	8...33	-	-	19,5	1
	081536	16...18	8...33	-	-	20,5	1
F	082486	18...20	8...33	-	-	36,5	1
F	081566	19...24,5	8...33	-	-	37,1	1
	081190	22...24	8...33	-	-	23,5	1

F = with connector
G = for corrugated tubes

2-WAY - WITH STRAP

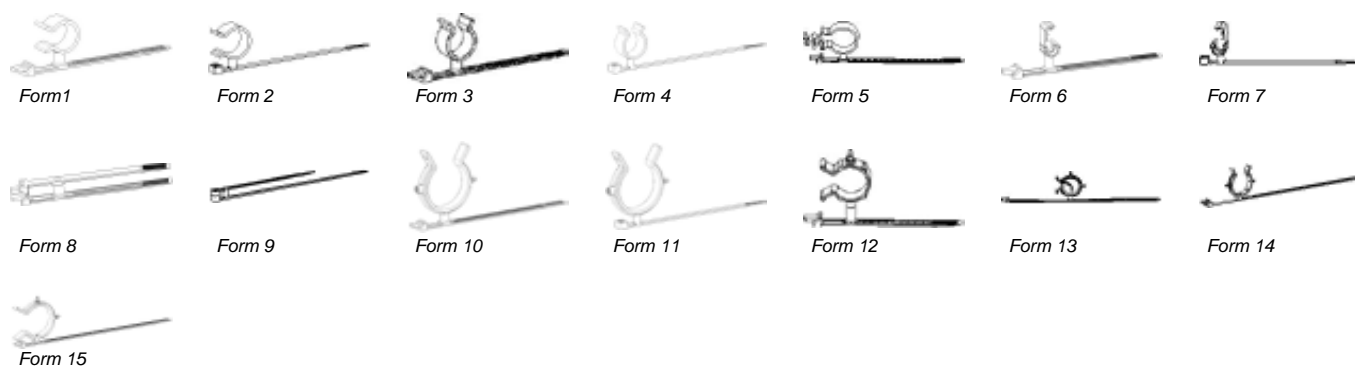


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	h2	l2	h	Form
	061275	6...6,5	8...50	-	-	14,0	1
	081124	6...6,5	8...50	-	-	14,0	1
	060787	8...9	8...50	-	-	15,0	1
	081291	8...9	8...50	-	-	15,0	1
	081080	10...12	8...50	-	-	18,0	1
	061430	10...12	8...50	-	-	18,0	1
	081725	11...13	8...50	-	-	16,5	1
F	200116	11,5...13	8...33	-	-	34,75	1
	082021	13...14	8...50	-	-	17,5	1
	061169	15...16	8...50	-	-	18,0	1
F	082542	19...24,5	8...50	-	-	30,75	1
	061299	18...20	8...50	-	-	19,5	1
	081037	18...20	8...50	-	-	19,5	1
	081154	19...24,5	8...50	-	-	20,1	1
	061037	20...22	8...50	-	-	20,5	1
	082157	38...45	8...50	-	-	29,5	1
	080471	6...6,5	8...75	-	-	14,0	1
	080482	8...9	8...75	-	-	15,0	1
	081138	11...13	8...75	-	-	16,5	1
	081868	15...16	8...75	-	-	18,0	1
	061114	15...16	8...75	-	-	18,0	1
	080953	11,5...13	8...33	-	-	18,0	1
	080477	6...6,5	10...52	-	-	14,0	1
	080487	8...9	10...52	-	-	15,0	1
	081051	4...4,5	10...52	-	-	13,0	1
	081354	4,3...5,2	10...52	-	-	13,5	1
	082400	7,8...8,5	10...52	-	-	15,4	1
	081284	10...12	10...52	-	-	18,0	1
	081104	11...13	10...52	-	-	16,5	1
	081363	13...14	10...52	-	-	17,5	1
	081295	19...24,5	10...52	-	-	20,1	1
	082394	38...45	10...52	-	-	29,5	1
	081704	14...15	30...80	-	-	16,0	1
	082604	16...18	30...80	-	-	17,0	1
	081179	4...4,5	46...95	-	-	13,0	1
	061368	13...14	46...95	-	-	17,5	1
	081120	11...13	46...95	-	-	16,5	1
	081035	10...12	46...95	-	-	18,0	1
	080486	6...6,5	46...75	-	-	14,0	1
	080465	10...12	46...75	-	-	18,0	1
	081127	13...14	46...75	-	-	17,5	1
	081287	15...16	46...75	-	-	18,0	1
	081128	18...20	46...75	-	-	19,5	1
	081136	19...24,5	46...75	-	-	20,1	1
	081929	7,8...8,5	46...95	-	-	15,4	1
	082050	15...16	46...95	-	-	18,0	1
	081966	19...24,5	46...95	-	-	20,5	1
	060827	6...6,5	48...80	-	-	14,0	1
	060823	8...9	48...80	-	-	15,0	1

F = with connector
G = for corrugated tubes

2-WAY - WITH STRAP



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	h2	l2	h	Form
	155107	8...9	48...80	-	-	-	1
	061051	10...11	48...80	-	-	16,5	1
	061140	13...14	48...80	-	-	17,4	1
	060725	20...22	48...80	-	-	21,0	1
	061303	15...16	90...135	-	-	18,0	1
	060787	8...9	8...50	-	-	15,0	1
	061169	15...16	8...50	-	-	18,0	1
	205363	15...16	8...20	-	-	15,0	1
	131059	39...45	8...50	-	-	26,5	1
	203081	10,0...11,5	8...50	-	-	15,0	1
	061309	16...18	45...95	-	-	10,5	1
	082520	9,5...10,5	8...33	-	-	16,0	2
	082293	4,3...5,2	8...33	-	-	12,75	2
	082660	6...10	8...33	-	-	16,25	2
	082646	7,8...8,5	8...33	-	-	13,95	2
	082294	8...9	8...33	-	-	17,25	2
	082281	11...13	8...33	-	-	16,75	2
	082516	14...15	8...33	-	-	18,25	2
	082282	16...18	8...33	-	-	19,25	2
F	201172	16...18	8...33	-	-	35,75	2
	082280	22...24	8...33	-	-	22,25	2
	204818	10...12	8...50	-	-	18,0	2
	082635	10...12	8...20	-	-	16,5	3
	081410	16...18	8...20	-	-	19,5	3
	081445	25...27	8...20	-	-	25,0	3
	081439	35...38	8...33	-	-	30,0	3
	082693	12...13	8...50	-	-	17,5	3
	081558	25...27	8...50	-	-	25,0	3
	082615	10...12	10...52	-	-	16,5	3
	081078	16...18	10...52	-	-	19,5	3
	082610	18...20	8...33	-	-	20,25	4
	201182	13...14	8...33	-	-	17,75	4
	201183	35...38	8...33	-	-	28,75	4
	081549	25,0	8...33	-	-	25,0	5
	200183	25,0	30...80	-	-	21,5	5
	210152	48...53	30...80	-	-	34,15	5
F	216336	25,0	30...80	-	-	28,0	5
G	082397	6,8...7,4	8...20	-	-	15,55	6
G	208039	9,6...10,2	10...52	-	-	16,95	6
G	215782	6,8...7,4	8...50	-	-	15,55	6
G	215723	6,8...7,4	8...75	-	-	15,6	6
G	082142	9,6...10,2	-	-	-	16,95	6
	229604	12,6...13,2	8...33	-	-	17,1	7

F = with connector
G = for corrugated tubes

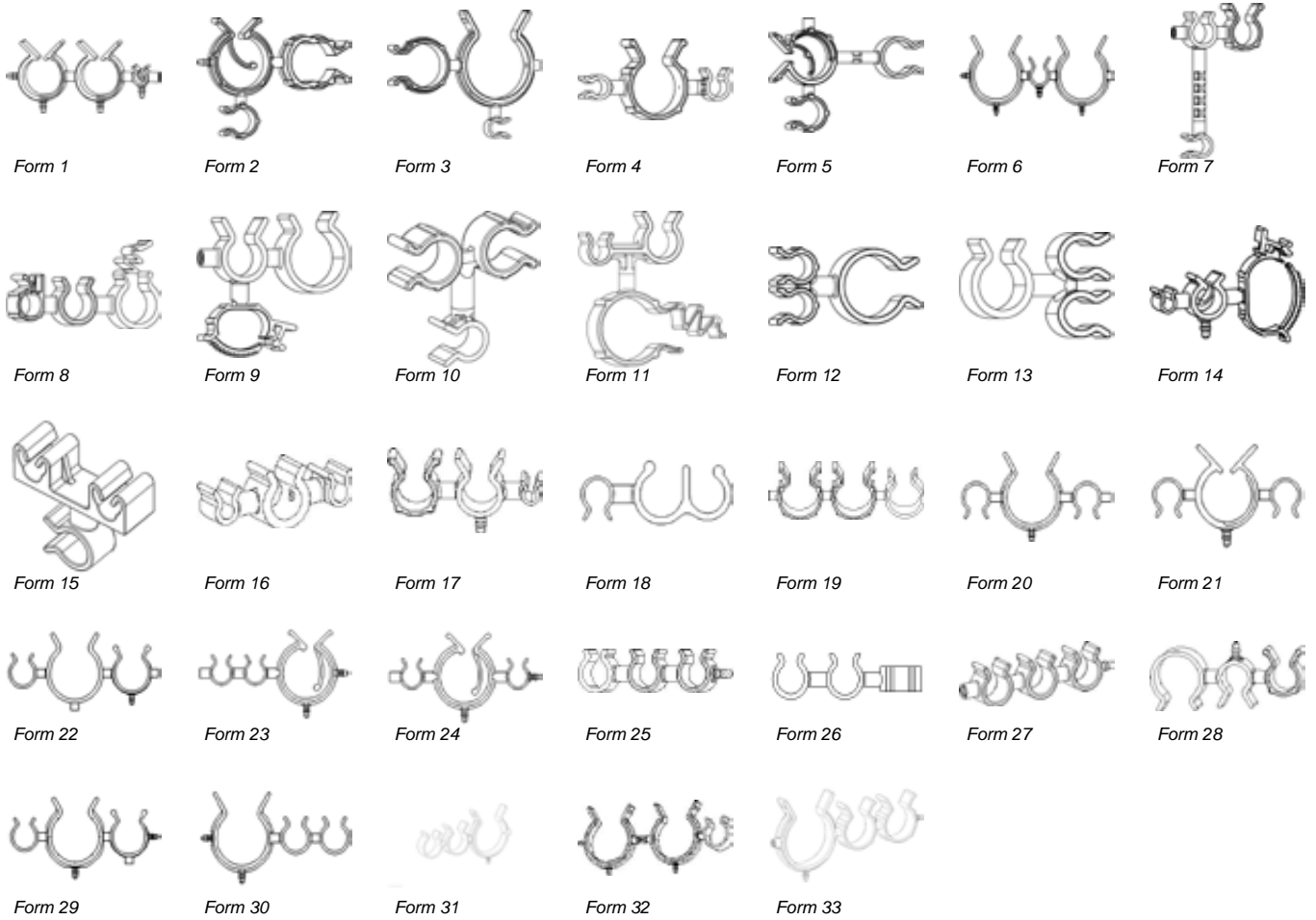
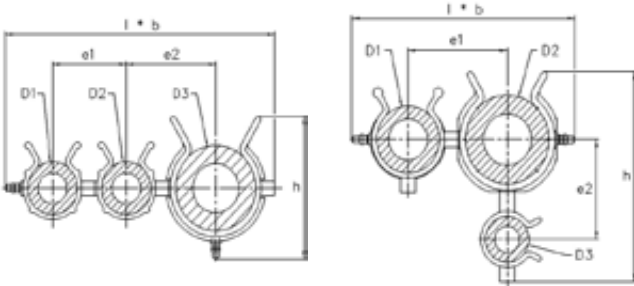
3-WAY - SWIVEL SPACER CLIPS

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

CAUTION!

The clips listed below may incorporate additional components or features (such as additional male or female connections, retaining legs for varying pipe diameters, etc.) that are not shown in the sketches.

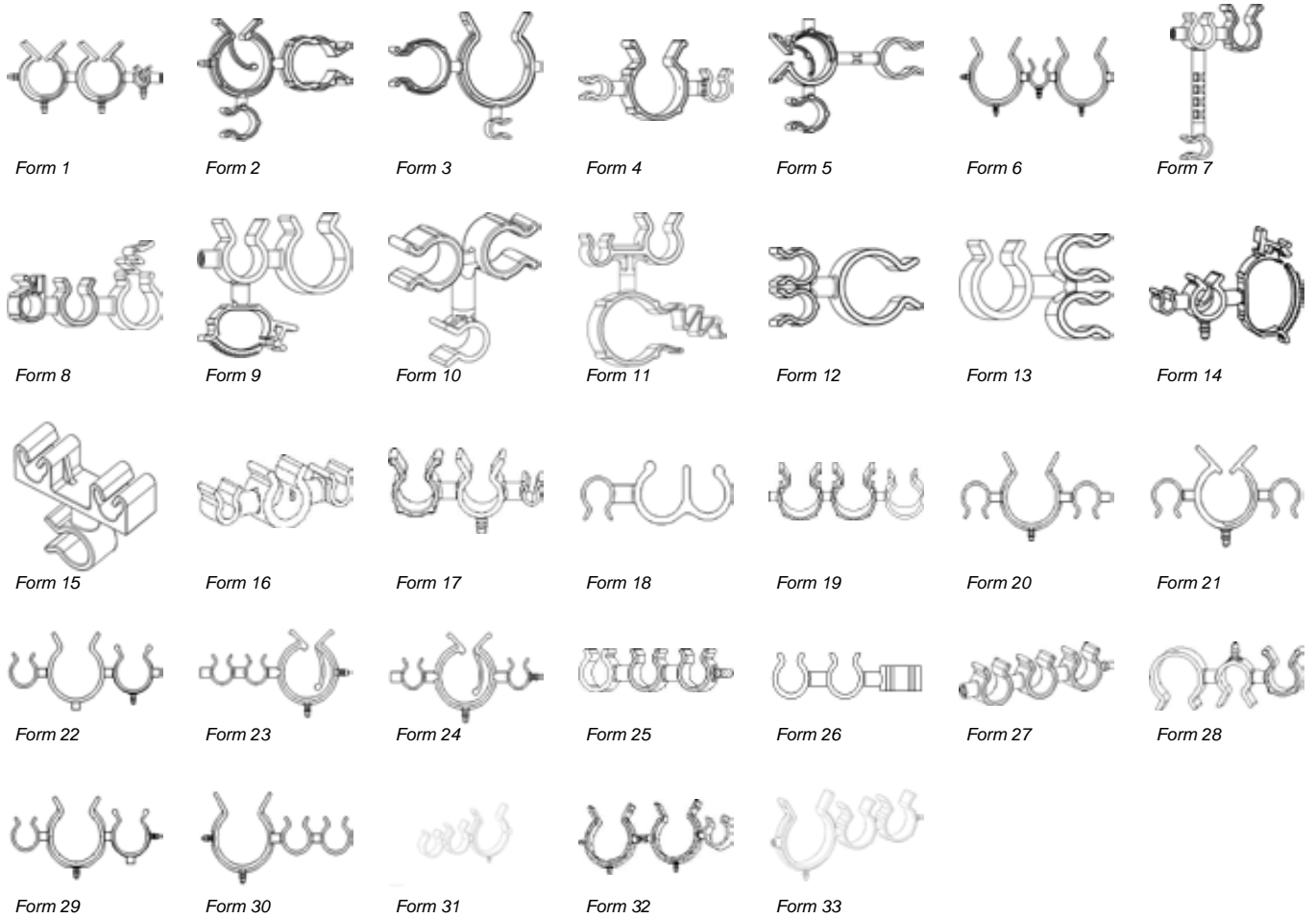
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	082263	3,5...6	24,0	24,0	97,9 x 10	45,0	26,8	36,7	1
	060878	4,8...5,2	10...16	10...16	71,55 x 10	33,85	20,7	28,5	1
	060733	11...13	23,5...25	23,5...25	89 x 12	34,0	27,0	34,0	1
	190001	34...36	6...6,5	4...4,5	-	-	31,0	15,5	2
G	081635	6,8...7,4	11...13	8...9	-	-	18,55	20,0	2
F	081713	22...24	11...13	13...14	-	-	45,5	23,0	2
	081821	13...14	13...14	13...14	-	-	23,5	23,5	2

E = with securing tang for variable bore
F = with connector
G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

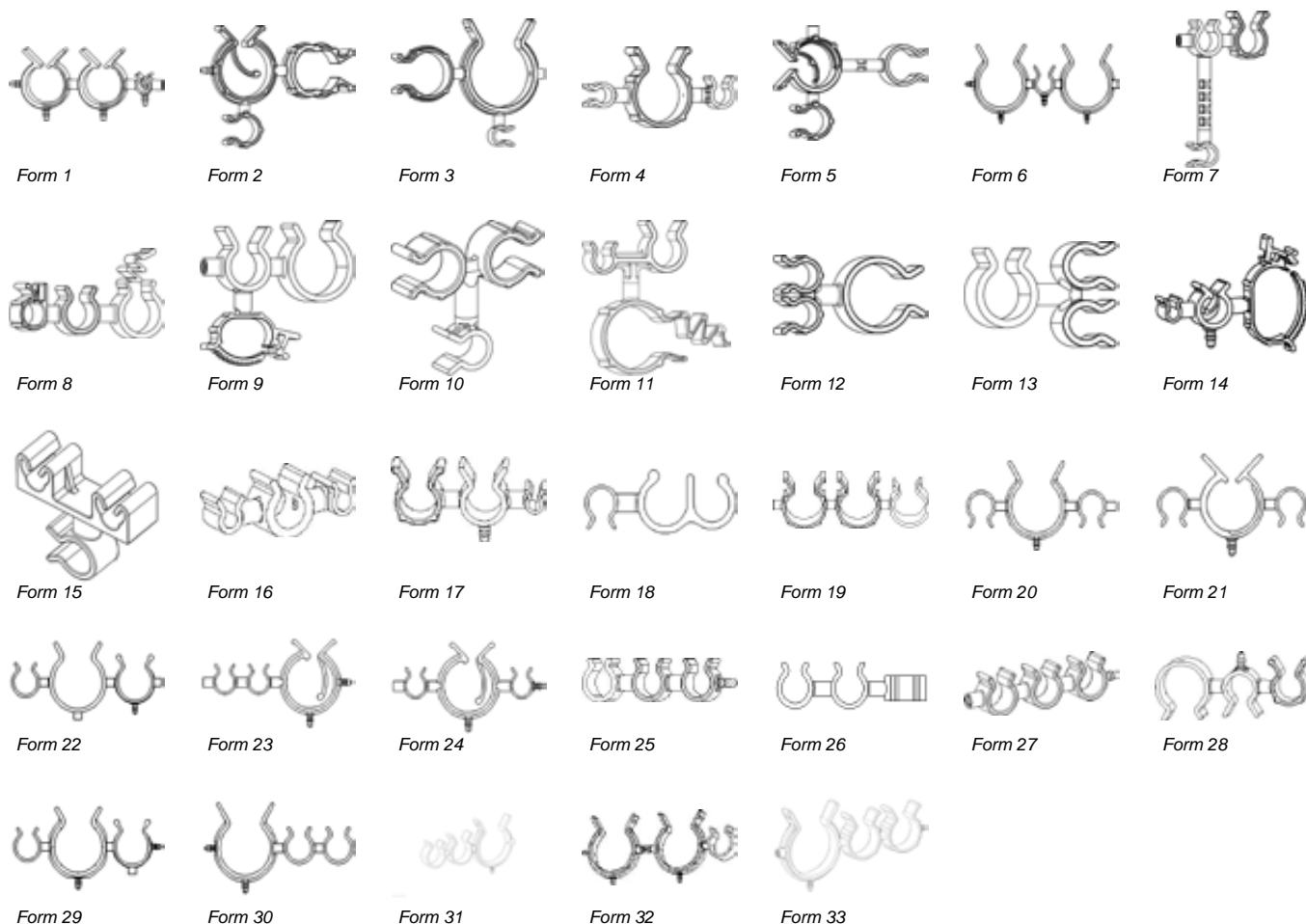


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	082458	8...9	22...23	8...9	-	-	25,5	25,5	2
	082563	25...27	22...23	7,8...8,5	-	-	35,5	25,9	2
	061731	29...33	23...24	13...14	85,7 x 12	62,4	38,3	23,9	2
E	201107	22...30	23...30	15...16	-	-	43,05	34,75	2
	082289	25...27	38...45	8...9	-	-	44,0	35,5	2
	061593	13...14	16...18	9,5...11	59,8 x 10	52,0	26,5	27,0	2
	061554	13...14	16...18	15...16	55,3 x 10	52,0	27,0	26,5	2
	061574	20...22	16...18	11...13	53 x 12	61,3	29,5	25,5	2
	061710	20...22	10...16	8...9	59,5 x 12	46,0	32,0	23,5	2
	081976	6...6,5	13...14	6...6,5	-	-	20,0	20,0	2
	082274	18...20	34...36	18...20	-	-	36,5	36,5	2
	061404	18...20	16...18	11...13	58,5 x 12	54,65	28,5	24,7	3
	081908	19...24,5	38...45	12...13	-	-	40,6	36,5	3
	061663	18...20	24,0	4,8...5,2	66,9 x 12	53,1	31,9	25,7	3
	061070	6...10	24,0	6...10	63 x 10	70,0	28,7	28,7	3
	061708	13...14	13,0	9,5...11	48 x 10	29,5	23,5	24,0	3
	061472	9,5...11	10...16	8...9	52,3 x 10	47,15	30,0	26,0	3
	061331	11...13	10...11,5	6...6,5	39 x 10	36,25	21,0	19,0	3
	061536	13...14	13,0	8...9	49 x 10	43,5	23,5	21,0	3
	061641	14,5...16	13,0	15...16	51,7 x 10	49,5	24,3	24,0	3
	061049	15...16	10...16	9...9,5	55 x 10	55,4	26,4	23,4	3
	061700	23,5...25	10...11,5	18...20	56,5 x 12	57,0	27,3	24,6	3
	061508	23...30	16...24	11...13	91 x 10	74,9	33,7	31,5	3
	081293	6...6,5	11...13	38...45	-	-	19,0	37,0	4
	061236	6...6,5	6...6,5	18...20	59,75 x 12	24,0	16,5	22,5	4
	081771	7,2...7,5	23,5...25	11...13	-	-	25,6	27,0	4

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

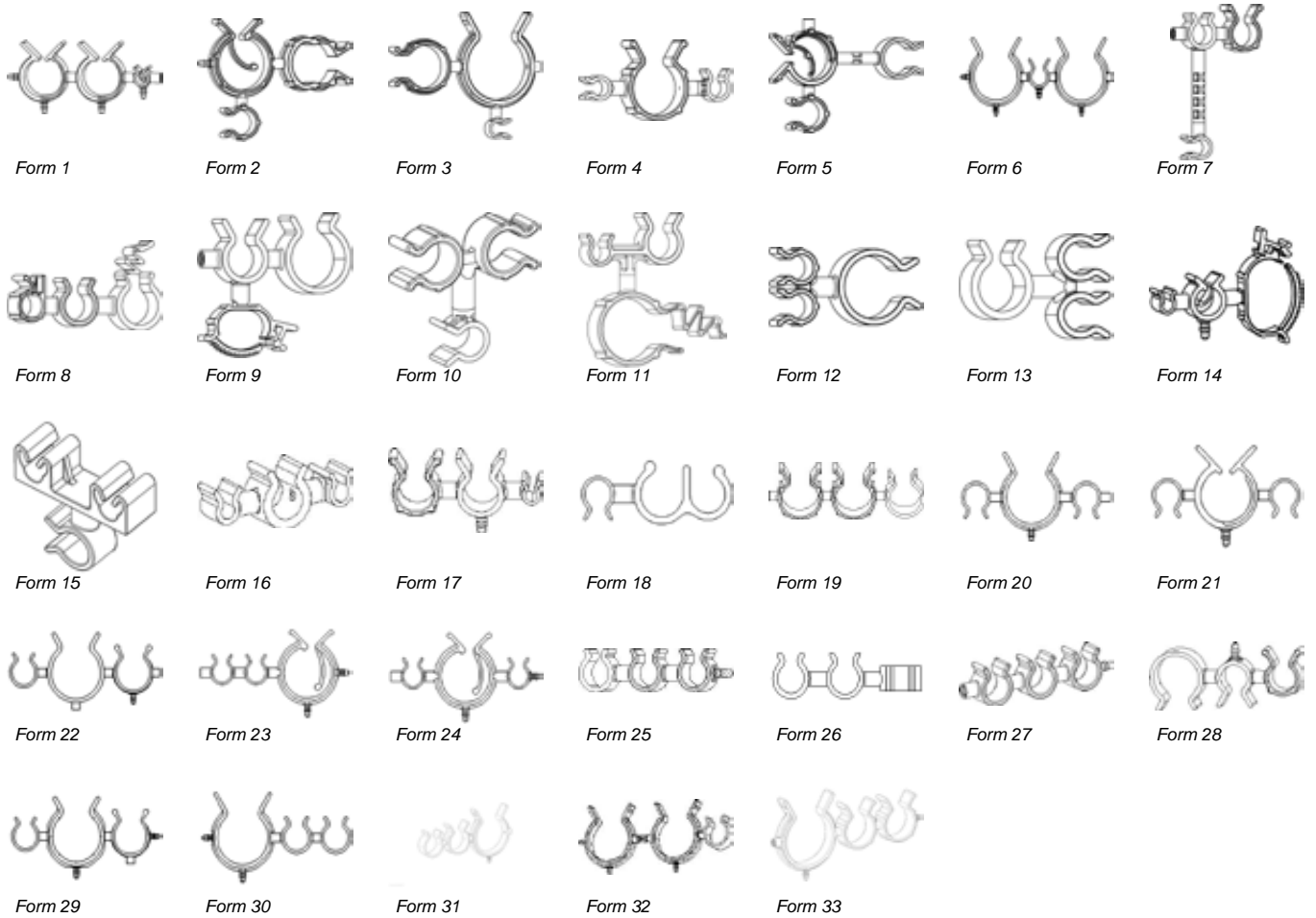


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
G	082027	8...9	9...9,5	6,8...7,4	-	-	20,5	19,55	4
	082122	7,2...7,5	23...25	8...9	-	-	25,6	27,5	4
	081164	7,2...7,5	38...45	7,8...8,5	-	-	33,6	31,7	4
	061721	9...9,5	9...9,5	16...18	65 x 12	21,0	19,0	22,5	4
	081486	11,5...13	11...13	7,2...7,5	-	-	21,5	19,6	4
	082340	11...13	11...13	10...12	-	-	21,5	21,0	4
G	200632	11...13	14...16	6,8...7,4	-	-	23,0	20,05	4
	082283	13...14	13...14	11,5...13	-	-	24,0	22,75	4
	081668	13...14	9...9,5	18...20	-	-	21,5	23,5	4
	081396	13...14	14...16	14...15	-	-	24,5	24,5	4
	081527	10...12	11...13	19...24,5	-	-	21,0	25,1	4
	081063	38...45	16...24	28...30	-	-	42,3	38,0	4
	082174	25...27	14...16	48...53	-	-	31,5	42,65	4
	081116	13...14	11...13	7,2...7,5	-	-	22,5	19,6	5
	081520	8...9	13...14	7,2...7,5	-	-	23,0	20,6	5
	082022	14...15	11...13	13...14	-	-	23,0	23,0	5
	081731	11,5...13	13...14	13...14	-	-	22,5	24,0	5
	082488	18...20	16...24	15...16	-	-	50,9	30,4	5
	081095	16...18	38...45	10...12	-	-	40,0	37,0	5
	082084	38...45	13...14	38...45	128,2 x 10	62,0	35,5	36,5	6
	081248	10...12	38...45	4...4,5	-	-	38,5	32,0	7
	081683	11...13	7,8...8,5	4...4,5	-	-	19,6	15,2	7
	061870	6...6,5	22...23	6...6,5	45,7 x 12	47,6	24,5	24,5	7
	081699	6...6,5	6...6,5	19...24,5	-	-	16,5	22,6	7
E	200034	7,8...8,5	23...30	25...27	-	-	32,15	41,75	7

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

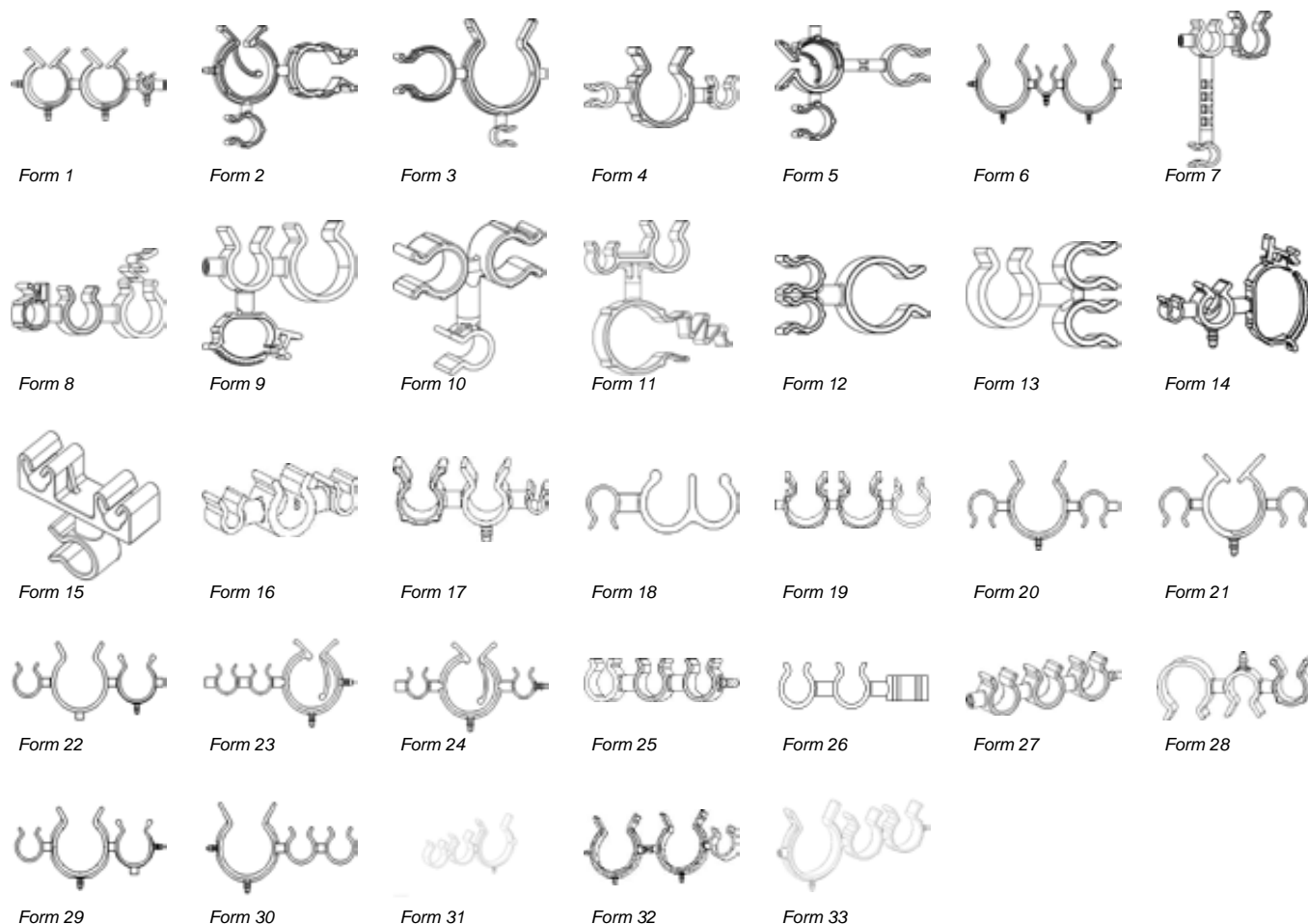


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	201389	8...9	34...36	11...13	-	-	32,0	33,5	7
	081335	19...24,5	16...24	9,5...10,5	-	-	32,5	28,55	7
	081734	11,5...13	10...16	7,8...8,5	-	-	24,5	23,9	7
	081712	11...13	13...14	11...13	-	-	22,5	22,5	7
	082139	11...13	11...13	11...13	-	-	21,5	21,5	7
E	200835	11...13	16...24	18...20	-	-	28,9	31,9	7
F	081108	8...9	11...13	13...14	-	-	55,0	22,5	7
	081102	13...14	11...13	8...9	-	-	22,5	20,0	7
	190007	13...14	6...6,5	6...6,5	-	-	20,0	16,5	7
	081176	13...14	11...13	10...12	-	-	22,5	23,0	7
	081495	13...14	13...14	19...24,5	-	-	23,5	26,1	7
F	081283	13...14	11...13	8...9	-	-	38,0	20,0	7
	082149	13...14	38...45	8...9	-	-	36,5	35,0	7
	081441	7,8...8,5	16...24	7,8...8,5	-	-	26,5	27,8	7
	081467	16...24	3,5...6	4...4,5	-	-	26,8	15,5	7
	081954	18...20	13...14	15...16	-	-	25,5	24,0	7
	081243	22...24	38...45	19...24,5	-	-	40,0	40,6	7
	200007	28...30	38...45	8...9	-	-	43,5	33,5	7
	081034	15...16	38...45	38...45	-	-	38,5	54,0	7
G	082671	4,3...5,2	3,5...5	20,6...21,4	-	-	16,0	24,0	8
	081914	7,8...8,5	11...13	14,0	-	-	18,7	23,5	8
	201368	13...14	9...9,5	25,0	-	-	21,4	27,0	8
	190039	15...16	9...9,5	25,0	-	-	22,0	27,0	8
G	082548	11,5...13	7,5...8	9,6...10,2	-	-	20,0	20,2	8
	201348	19...24,5	13...14	10...14	-	-	26,5	24,8	9

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

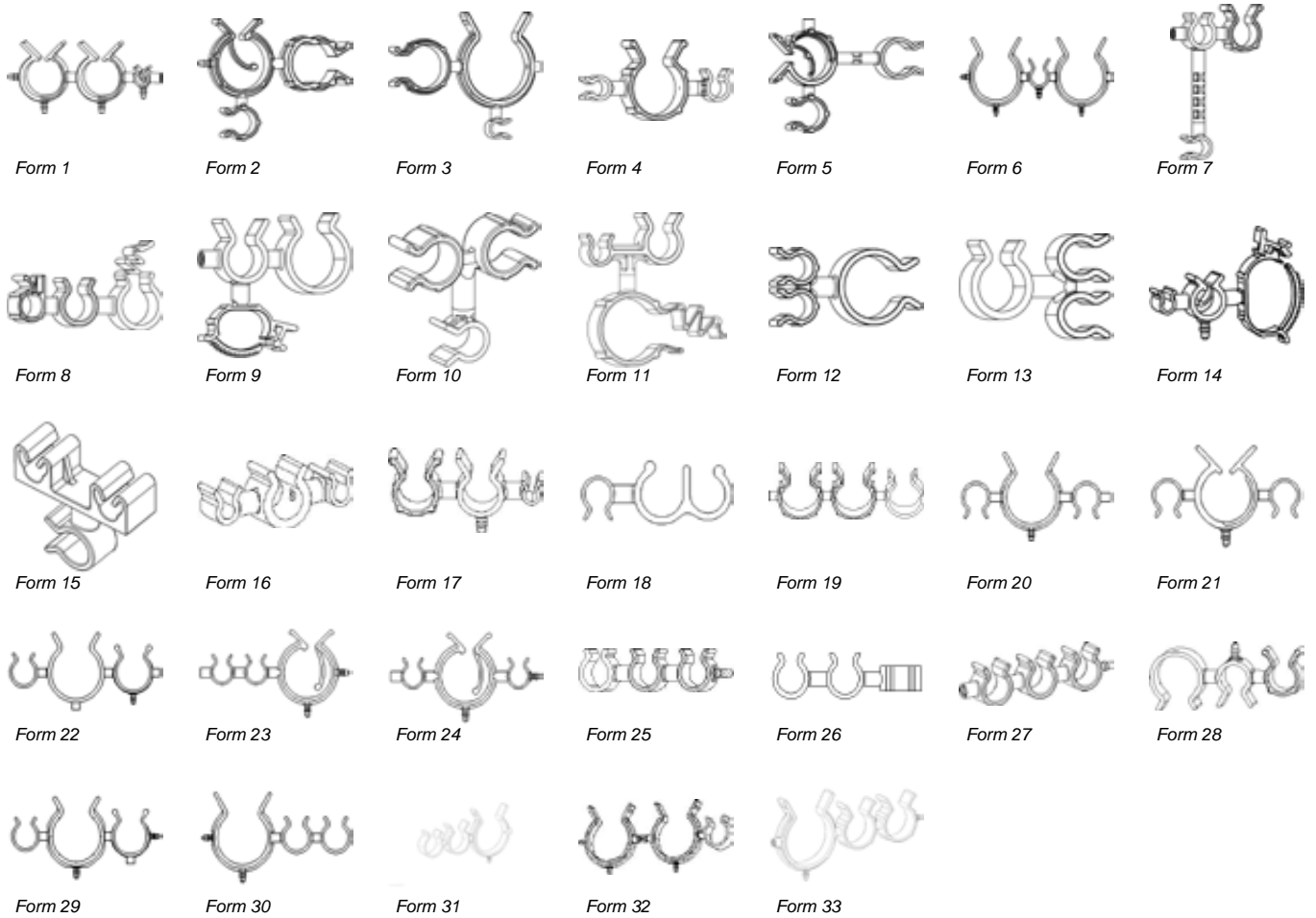


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	081617	11...12	11...12	13...14	-	-	20,5	24,0	10
	081770	13,5	13,5	7,8...8,5	-	-	21,0	16,7	10
G	082697	4,0	4,0	20,6...21,4	-	-	12,0	24,0	11
	081851	4,0	4,0	22,0	-	-	12,0	25,0	11
G	082590	5,0	5,0	12,6...13,2	-	-	16,0	19,85	11
G	082215	5,0	12,6...13,2	17,0	-	-	11,6	26,15	11
	082618	6,0	6,0	10...14	-	-	14,0	18,8	11
	081824	6,0	6,0	22,0	-	-	14,0	25,0	11
	081953	13...14	7,5...8	25,0	-	-	25,0	32,5	11
G	082046	8...9	8...9	6,8...7,4	-	-	12,0	16,55	11
G*	082169	8...9	8...9	9,6...10,2	-	-	12,0	17,95	11
	082481	8...9	8...9	16...22	-	-	12,0	22,4	11
	082673	9...10,5	9...10,5	16...22	-	-	16,0	24,9	11
	082205	9...10,5	9...10,5	25,0	-	-	16,0	29,0	11
	082703	25...27	25...27	33...35	-	-	32,0	37,0	11
	061195	4,8	4,8	8...10	22 x 12	28,5	12,0	12,0	12
	200946	4,0	4,0	18...20	-	43,5	12,0	23,0	12
	081416	6,0	6,0	13...14	-	39,5	14,0	20,5	12
	081452	6...6,5	8...9	35...38	-	64,5	11,0	31,5	12
	081461	6...6,5	8...9	18...20	-	45,0	11,0	23,0	12
	081485	6...6,5	8...9	13...14	-	40,5	11,0	20,5	12
	081101	6...6,5	8...9	10...12	-	36,0	11,0	19,0	12
	081343	6,0	6,0	22...30	-	59,0	14,0	29,0	12
	081552	13...14	7,5...8	13...14	-	50,5	25,0	27,0	12
	081028	8...9	8...9	10...12	-	36,0	12,0	19,0	12
	201106	8...9	8...9	20...22	-	46,75	12,0	23,75	12

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

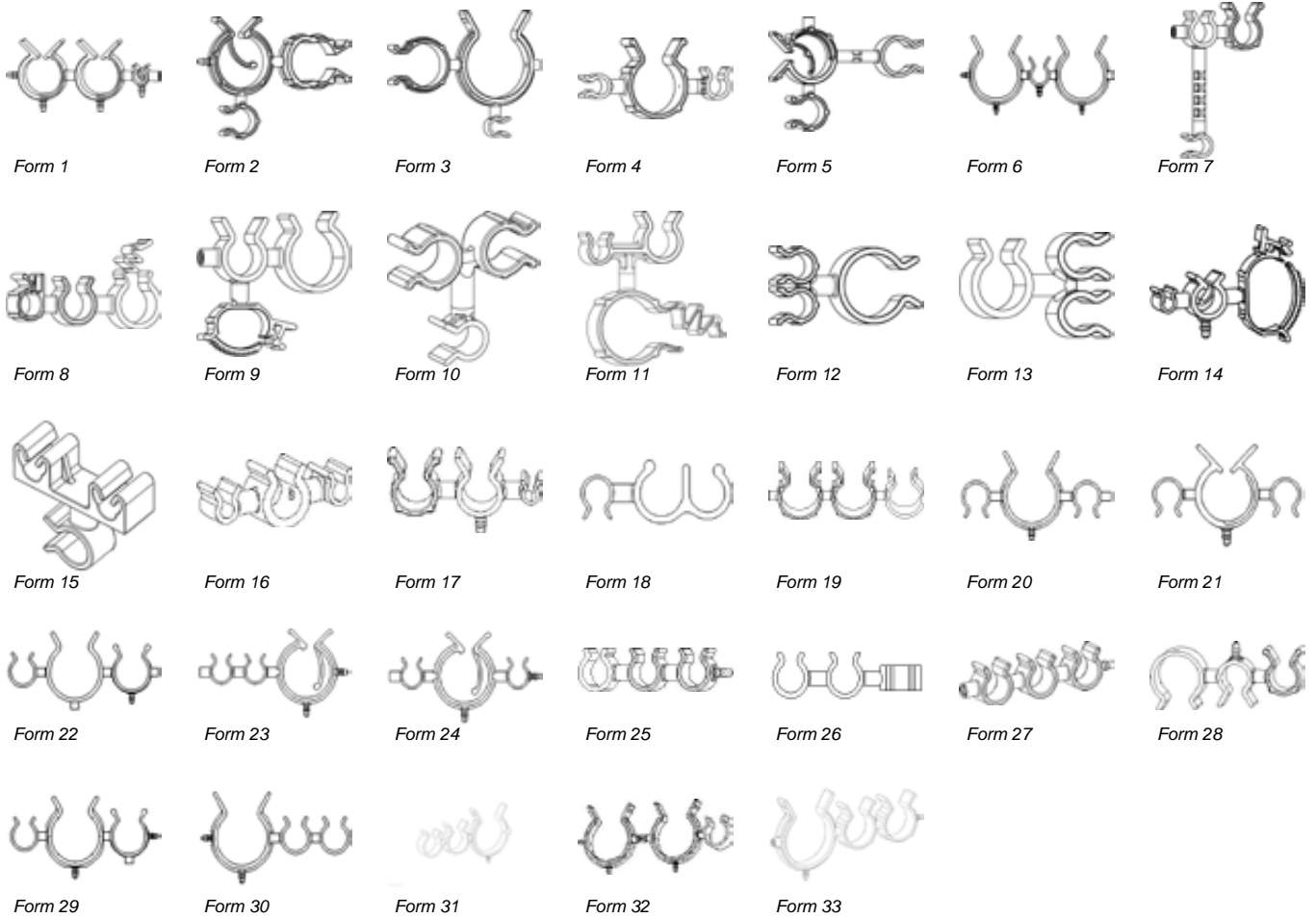


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	061695	8...9	8...9	34...36	57 x 10	67,5	12,0	31,5	12
	060869	8...9	8...9	18...20	25 x 12	46,0	12,0	23,0	12
	081616	8...9	8...9	28...30	-	59,0	12,0	28,5	12
	081779	9...10,5	9...10,5	10...12	-	39,5	16,0	21,5	12
	081941	9...10,5	9...10,5	18...20	-	48,5	16,0	25,5	12
	081780	13,5	13,5	13...14	-	-	21,0	20,5	12
	061101	13...15	13...15	18...20	38 x 12	52,5	19,0	23,5	12
	081423	13...14	7,5...8	7,2...7,5	-	42,1	25,0	23,6	12
	081114	13...14	13...14	18...20	-	51,5	19,0	23,5	12
	081427	13...14	13...14	28...30	-	65,5	19,0	29,0	12
	061440	13...15	13...15	16...18	41 x 10	55,9	19,0	23,9	12
	081302	13,5	13,5	10...12	-	40,0	21,0	19,0	12
	061421	13...15	13...15	23...24	45,2 x 10	64,4	19,0	27,4	12
	061635	13...15	13...15	30...32	47 x 10	73,5	19,0	31,5	12
	061216	13...15	13...15	39...45	57,3 x 10	82,0	19,0	36,0	12
	061431	13...15	13...15	29...33	36 x 12	71,20	19,0	28,9	12
	081810	16...17	16...17	4,3...5,2	-	-	22,0	16,0	12
	082551	16...17	16...17	35...38	-	72,0	22,0	32,0	12
	081310	16...17	16...17	38...45	-	80,5	22,0	35,5	12
	081472	16...17	16...17	28...30	-	65,5	22,0	29,0	12
	081347	25...27	25...27	29...30	-	76,5	32,0	33,5	12
	081605	4,0	4,0	6...6,5	-	-	12,0	17,0	13
	082297	4,0	4,0	11,5...13	-	-	12,0	19,5	13
	081584	6,0	6,0	9,5...10,5	-	-	14,0	18,75	13
	081759	6,0	6,0	14...15	-	-	14,0	21,0	13
	081523	6,0	6,0	16...18	-	-	14,0	22,0	13
	081398	6,0	6,0	22...24	-	-	14,0	25,0	13

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

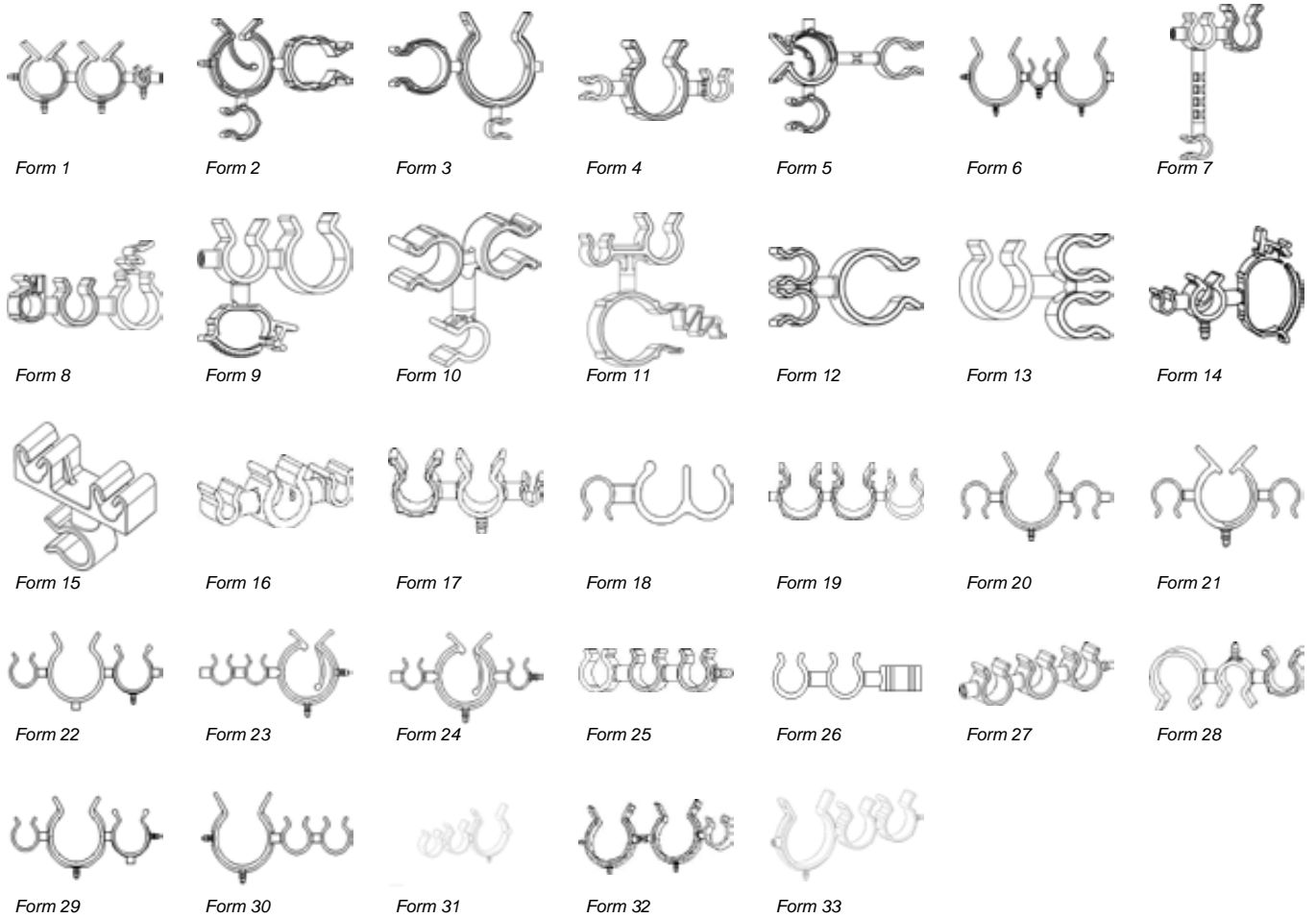


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	082037	8...9	6...6,5	4,3...5,2	-	-	11,0	15,5	13
	082622	8...9	6...6,5	6...6,5	-	-	11,0	17,0	13
	081889	8...9	6...6,5	22...24	-	-	11,0	48,5	13
	081247	8...9	6...6,5	11...13	-	-	11,0	19,5	13
	081487	8...9	6...6,5	11,5...13	-	-	11,0	19,5	13
F	081453	8...9	6...6,5	22...24	-	-	11,0	48,5	13
	081678	8...9	6...6,5	9,5...10,5	-	-	11,0	18,75	13
	081969	6...6,5	6...6,5	8...9	-	-	14,0	20,0	13
	081473	6...6,5	6...6,5	4,3...5,2	-	-	14,0	15,5	13
	061628	7,0	7,0	6...6,5	25 x 8	30,5	12,0	15,5	13
	060879	8...9	8...9	10...16	33,5 x 10	49,3	12,0	23,5	13
	060884	8...9	8...9	11...13	23 x 10	36,0	12,0	19,5	13
	200338	8...9	8...9	16...18	-	-	12,0	22,0	13
	061328	8...9	8...9	4,2...5,2	23 x 10	27,8	12,0	14,3	13
	081152	8...9	8...9	7,8...8,5	-	-	12,0	16,7	13
	080490	8...9	8...9	14...15	-	-	12,0	21,0	13
	081639	8...9	8...9	6...6,5	-	-	12,0	17,0	13
F	080493	8...9	8...9	19...24,5	-	-	12,0	30,0	13
	060816	8...9	8...9	14...15	25,3 x 12	46,0	12,0	21,0	13
F	080915	8...9	8...9	19...24,5	-	-	12,0	39,0	13
	081094	8...9	8...9	22...24	-	-	12,0	25,0	13
	061254	8...9	8...9	9,5...10,5	27 x 10	35,0	12,0	19,0	13
F	081685	8...9	8...9	18...20	-	-	12,0	29,0	13
	081317	8...9	8...9	8...9	-	-	12,0	20,0	13
	081451	8...9	8...9	38...45	-	-	12,0	33,5	13
F	081869	8...9	8...9	6...6,5	-	-	12,0	23,5	13
	081784	8...9	8...9	11,5...13	-	-	12,0	19,75	13
	082352	8...9	8...9	4,3...5,2	-	-	12,0	15,5	13

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

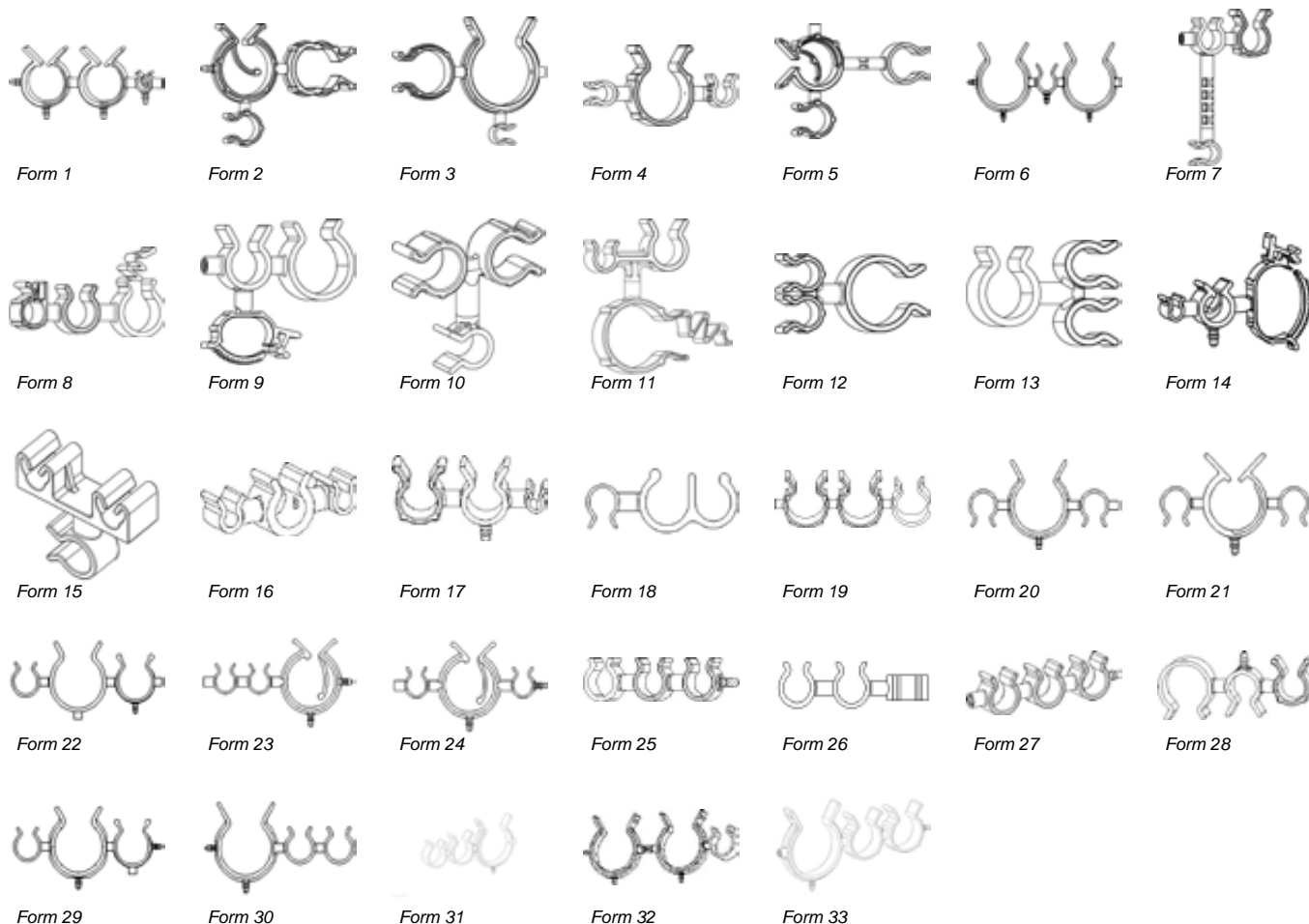


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	082237	9...10,5	9...10,5	14...15	-	-	16,0	23,5	13
	061639	9...10,5	9...10,5	22...24	31,25 x 12	49,75	16,0	25,0	13
	082121	11...13	11...13	14...15	-	-	20,5	24,5	13
	081276	13...14	13...14	6...6,5	-	-	19,0	17,5	13
	081278	13...14	13...14	16...18	-	-	19,0	22,5	13
G	082240	13,5	13,5	6,8...7,4	40x11	33,8	21,0	16,55	13
	082347	13,5	13,5	9,5...10,5	-	-	21,0	18,75	13
	081311	13,5	13,5	14...15	-	-	21,0	21,0	13
F	082066	13...14	13...14	14...15	-	-	19,0	38,0	13
	081581	13,5	13,5	7,8...8,5	-	-	21,0	16,7	13
	081556	13,5	13,5	11...13	-	-	21,0	19,5	13
	081225	13,5	13,5	22...24	-	-	21,0	25,0	13
	061229	13...15	13...15	14...16	39 x 10	45,5	19,0	21,5	13
	060957	13...15	13...15	4,8...5,2	41 x 10	36,0	19,0	16,0	13
	061398	13...15	13...15	11...13	43 x 10	46,5	19,0	20,0	13
	061185	13...15	13...15	14...16	41 x 12	52,5	19,0	21,5	13
	081501	13...14	13...14	7,8...8,5	-	-	19,0	17,2	13
	080910	13...14	13...14	14...15	-	-	19,0	21,5	13
	081066	13...14	13...14	23...25	-	-	19,0	26,0	13
	081084	13...14	13...14	9,5...10,5	-	-	19,0	19,0	13
	081579	13...14	7,5...8	38...45	-	-	25,0	38,0	13
	081065	13...14	13...14	4,3...5,2	-	-	19,0	16,0	13
	081436	13...14	16...18	9,5...10,5	-	-	20,0	19,25	13
	080907	13...14	13...14	22...24	-	-	19,0	25,5	13
	081110	13...14	13...14	11,5...13	-	-	19,0	20,25	13
	082634	14...14,5	14...14,5	13...14	-	-	19,0	21,0	13
	081435	16...17	16...17	22...24	-	-	22,0	25,5	13
	081193	16...17	16...17	11,5...13	-	-	22,0	20,0	13

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

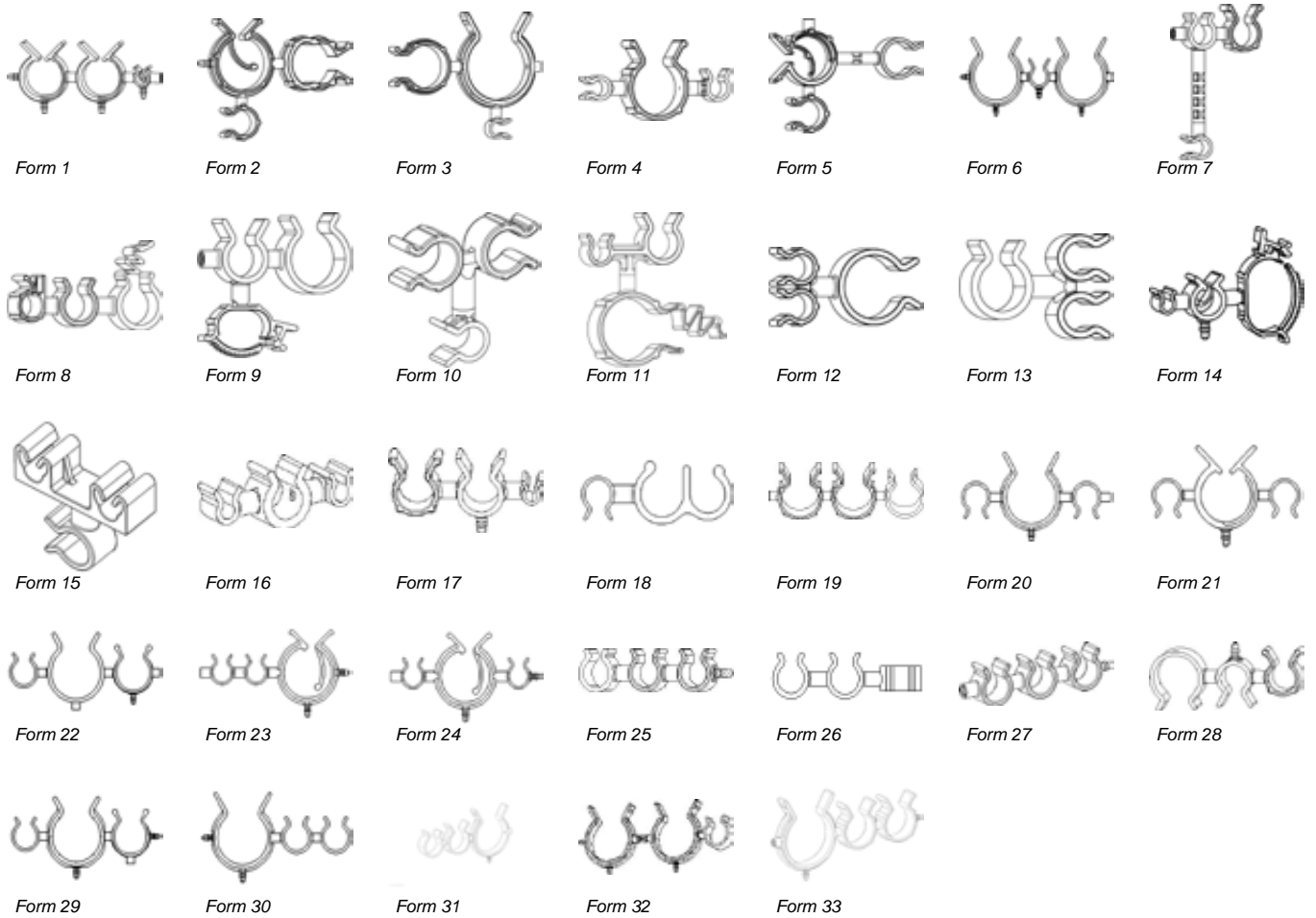


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	081234	25...27	25...27	14...15	-	-	32,0	26,0	13
	082213	9...10,5	9...10,5	16...18	-	-	16,0	24,5	13
	081836	6,0	6,0	11,5...13	-	-	14,0	19,75	13
	208620	8...9	8...9	23,5...25	33,5 x 12	52,5	12,0	25,5	13
	061701	8...9	8...9	22...24	28 x 12	46,0	12,0	25,75	13
E	082413	4,3...5,2	6...10	16...22	-	-	17,0	27,9	14
E	190013	6...6,5	6...6,5	16...22	-	-	16,5	25,4	14
E	190005	7,8...8,5	6...6,5	10...14	-	-	17,9	19,3	14
	131609	4,7...4,9	4,7...4,9	8...9	30,6 x 10	28,0	20,6	17,0	15
	081419	4...4,5	9...9,5	4,3...5,2	39,85 x 10	15,5	17,0	16,0	16
	080942	4...4,5	14...16	4,3...5,2	45,35 x 12	21,0	19,5	19,0	16
E	081582	8...9	3,5...5	4,3...5,2	42,41 x 10	13,5	15,5	17,5	16
	081642	4,3...5,2	11...13	14...15	54 x 10	21,25	18,5	23,0	16
	081651	4,3...5,2	14...16	14...15	57 x 12	21,0	20,0	24,5	16
	081270	8...9	14...16	4,3...5,2	49,35 x 12	21,0	21,5	19,0	16
	081147	4,3...5,2	14...16	15...16	57,71 x 12	21,5	19,0	24,5	16
	081282	19...24,5	23,5...25	4,3...5,2	70,21 x 12	33,5	31,1	23,0	16
	081210	11...12	11...13	6...6,5	52,5 x 10	18,0	21,5	19,0	16
	081554	6...6,5	15...16	6...6,5	51 x 12	21,0	21,0	21,0	16
	081559	6...6,5	23,5...25	15...16	70 x 12	33,5	24,5	29,0	16
	081271	6...6,5	11...13	6...6,5	47 x 10	17,5	19,0	19,0	16
	082630	8...9	7,5...8	8...9	49,5 x 10	10,5	18,25	20,25	16
	082471	19...24,5	7,5...8	8...9	61,5 x 12	28,3	23,75	20,25	16
	081091	8...9	11...13	11,5...13	54,7 x 10	17,5	20,0	21,5	16
	081491	14...15	11...13	8...9	57,75 x 10	21,25	23,0	20,0	16

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

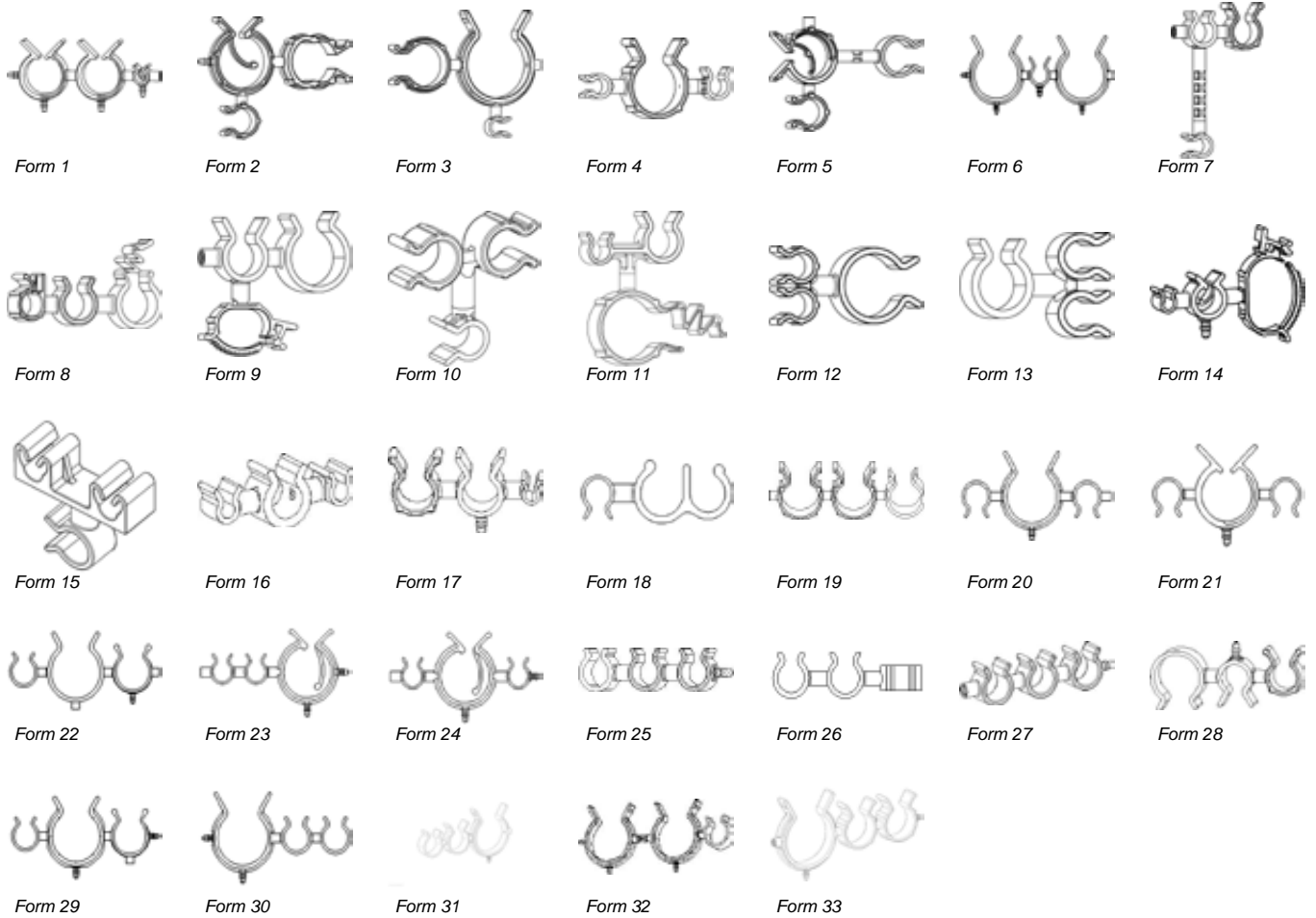


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	081380	18...20	11...13	8...9	64,2 x 12	25,0	24,5	22,0	16
	081072	8...9	11...13	7,8...8,5	49,4 x 12	17,5	20,0	18,7	16
	081269	8...9	14...16	8...9	56 x 12	21,0	21,5	23,5	16
	061715	8...9	14...16	8...9	58 x 12	22,0	21,5	23,5	16
	061312	9,5...10,5	9...9,5	11...13	59,5 x 10	18,5	19,5	20,5	16
	061295	9,5...10,5	13...14	13...14	63,2 x 10	20,5	21,7	23,5	16
	080931	19...24,5	23...25	9,5...10,5	76,5 x 12	33,5	31,8	26,25	16
	081214	10...12	11...13	14...15	62,25 x 10	17,5	23,0	23,0	16
	081092	19...24,5	11...13	11,5...13	66,5 x 12	28,25	25,5	21,5	16
	201010	11...13	14...16	28...30	80 x 12	40,8	23,0	32,0	16
	060812	11...13	11...13	18...20	66,4 x 12	26,8	21,5	24,5	16
	080970	19...24,5	9...9,5	11,5...13	64,3 x 12	28,25	24,5	20,0	16
	082685	11,5...13	23...25	11...13	69,5 x 12	33,5	27,0	27,5	16
	081062	19...24,5	23,5...25	11,5...13	78 x 12	33,5	31,0	27,0	16
	081502	13...14	23,5...25	7,8...8,5	67,4 x 12	33,5	28,5	24,2	16
	081342	14...15	14...16	19...24,5	73,3 x 12	28,25	24,5	27,3	16
	081306	18...20	14...16	14...15	70,75 x 12	25,0	26,0	24,5	16
	081610	14...15	14...16	13...14	78,25 x 12	22,5	24,5	24,0	16
	061652	14...16	23,5...25	18...20	81 x 12	34,5	29,0	31,0	16
	081448	15...16	15...16	15...16	69 x 12	21,5	25,0	25,0	16
	082606	38...45	23...25	16...18	103,39 x 12	53,39	40,5	29,5	16
	200456	18...20	11...13	11,5...13	65,5 x 12	25,0	24,5	21,5	16
	081254	22...24	14...16	19...24,5	80,8 x 12	28,25	28,5	27,0	16
	081016	19...24,5	23...25	22...24	89 x 12	33,5	31,1	32,5	16
	061718	20...22	9...9,5	22...24	78,3 x 12	30,0	24,5	25,5	16
	081245	13...14	13...14	11,5...13	61,79 x 12	22,5	22,4	22,4	16
	061523	4,8...5,2	3,5...6	6...6,5	40 x 10	20,0	14,9	17,3	17

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS

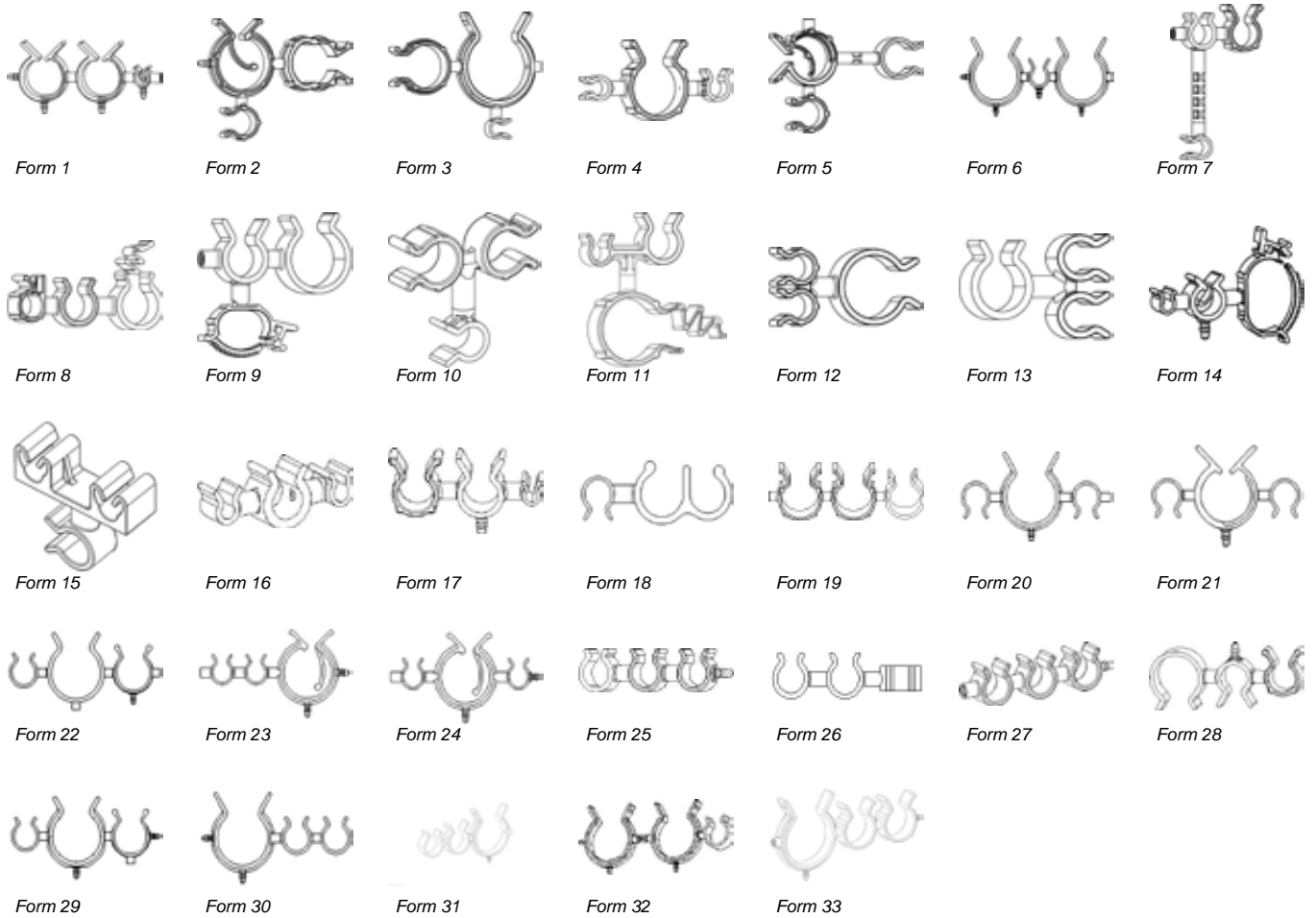


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
E F	081533	6...6,5	3,5...6	8...9	68 x 10	20,0	17,0	41,0	17
	190002	7,8...8,5	6...6,5	11,5...13	49,6 x 10	20,0	17,9	19,0	17
	061534	8...9	16...18	11...13	66,8 x 10	35,5	24,5	25,0	17
	061595	8...9	16...18	8...9	63,3 x 10	35,5	25,3	24,0	17
E	081561	9,5...10,5	10...16	10...12	64 x 10	33,85	23,75	26,5	17
	081460	10...12	38...45	11,5...13	86 x 10	62,0	37,0	34,5	17
	081646	11,5...13	6...6,5	15...16	56,5 x 10	20,0	19,0	20,5	17
E	081175	13...14	16...24	22...24	87,2 x 12	44,9	29,9	34,8	17
	081571	13...14	13...14	4,3...5,2	55,2 x 10	30,5	23,5	18,5	17
	200013	19...24,5	34...36	13...14	93,5 x 12	53,5	37,5	34,5	17
	061513	14...16	39...45	18...20	108,3 x 12	62,0	37,2	39,5	17
	061315	18...20	39...45	39...45	104 x 12	63,0	39,0	40,5	17
	081421	6...6,5	15,0	8,0	46,34 x 12	18,8	21,8	14,05	18
	060901	6...6,5	23,5...25	23,5...25	88,5 x 12	33,5	25,5	34,0	19
	061402	8...9	13...14	13...14	67,5 x 10	20,0	21,0	23,5	19
	061644	13...14	14...16	23,5...25	82,5 x 12	35,5	24,0	29,0	19
	061258	14...16	14...16	18...20	82,5 x 12	26,0	24,5	26,0	19
	061007	15...16	14...16	23,5...25	86 x 12	33,5	29,0	28,5	19
	060863	18...20	14...16	23,5...25	85 x 12	33,5	26,0	29,5	19
	082539	23...25	23...25	19...24,5	95,5 x 12	33,5	33,0	31,1	19
	060993	8...9	39...45	11...13	90 x 10	63,5	34,0	34,5	20
	061600	8...9	23...24	11...13	72,7 x 10	46,7	27,4	29,3	21

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

3-WAY - SWIVEL SPACER CLIPS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	l x b	h	e1	e2	Form
	061389	8...9	26...28	16...18	85,3 x 12	42,8	27,5	32,4	22
E	061104	9...9,5	9...9,5	23...30	93,5 x 10	55,0	19,0	29,0	23
	061509	11...13	9...9,5	23...30	89,3 x 10	55,0	20,1	30,0	23
	061297	9...9,5	23...30	9...9,5	90,1 x 10	53,0	31,8	32,2	24
	060892	9,5...10,5	11...13	11...13	66,5 x 10	17,5	20,0	21,5	25
	061227	9,5...10,5	23,5...25	23,5...25	92,8 x 12	33,5	27,0	34,0	25
	081018	11,5...13	11...13	11...13	66 x 10	17,5	21,5	21,5	25
	061326	23,5...25	11...13	11...13	83,8 x 12	34,5	24,5	27,0	25
	061572	11...13	11...13	15...16	68,5 x 10	23,0	21,5	23,0	26
	061063	11...13	14...16	14...16	80 x 12	22,0	23,2	24,5	27
	060990	11...13	11...13	11...13	78 x 10	18,5	21,5	21,5	27
	081030	11...13	11...13	11...13	72 x 10	17,5	21,5	21,5	27
	061062	14...16	11...13	14...16	80 x 12	22,0	23,2	23,2	27
	061333	23,5...25	23,5...25	23,5...25	112 x 12	34,5	34,0	34,0	27
	081385	22...24	13...14	13...14	74 x 12	30,5	28,0	23,5	28
	201055	13...14	34...36	26...28	107,5 x 12	53,5	34,5	40,5	29
	082592	38...45	15...16	15...16	101,5 x 12	62,0	36,5	25,0	30
	081185	15...16	23,5...25	38...45	107 x 12	62,0	29,0	41,0	31

E = with securing tang for variable bore
 F = with connector
 G = for corrugated tubes

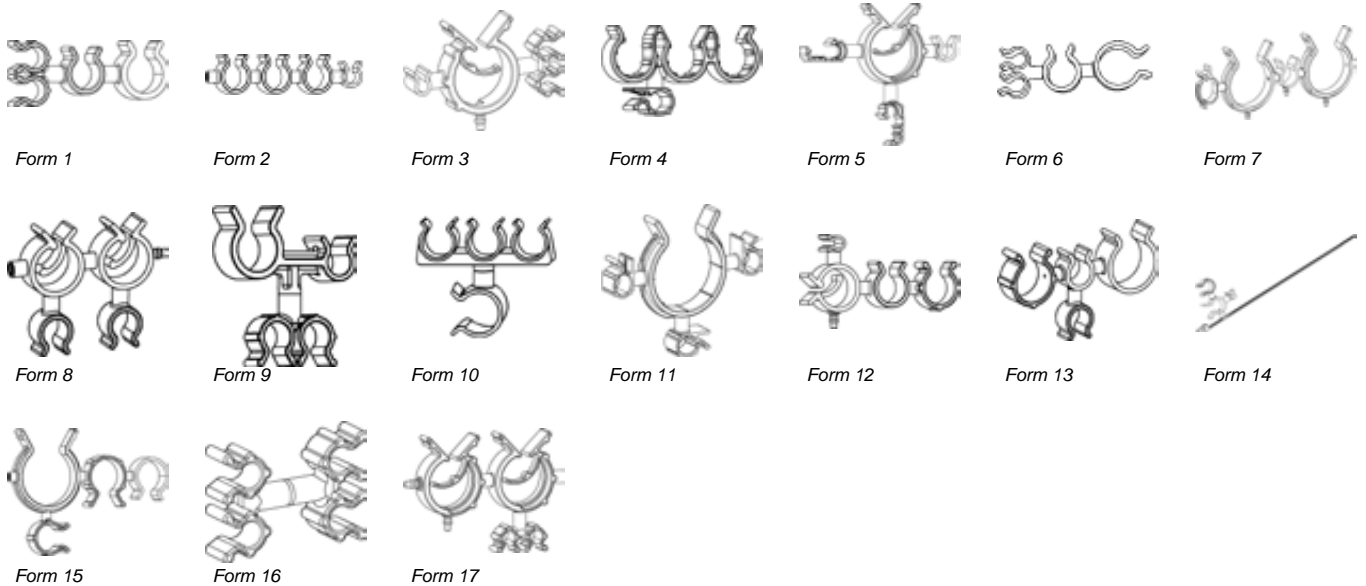
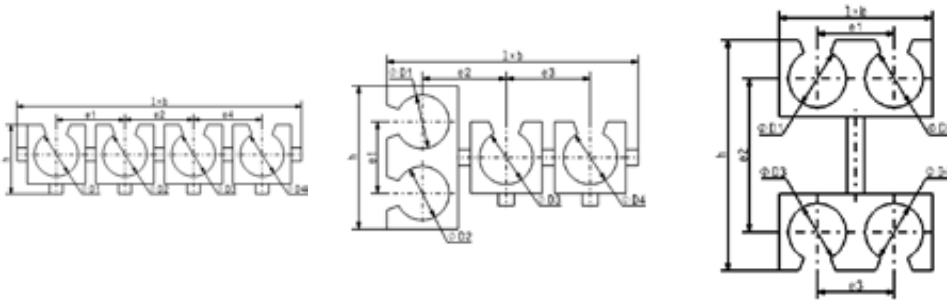
4 -WAY - SWIVEL SPACER CLIPS

MATERIAL:

Polyoxymethylene, Polyamide

COLORS:

Black, natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

CAUTION!

The clips listed below may incorporate additional components or features (such as additional male or female connections, retaining legs for varying pipe diameters, etc.) that are not shown in the sketches.

? Feature(s) of the part see Reference Page 4
 ↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	h	e1	e2	e3	Form
	081060	8...9	8...9	11,0	14...15	59,5 x 10	25,0	12,0	19,5	23,0	1
	081977	8...9	8...9	11...13	22...24	67,5 x 12	25,0	12,0	19,5	27,0	1
	061024	8,0	8,0	11...13	14...16	67,5 x 12	-	12,0	19,5	23,0	1
	082192	8...9	14...16	14...16	14...16	91 x 12	21,0	21,5	24,5	24,5	2
	081090	4...4,5	11...13	11...13	22...24	83 x 12	29,5	18,0	21,5	27,0	2
	060930	8...9	14...16	14...16	4,8...5,2	20 x 12	75,8	19,0	24,5	21,5	2
	081649	11,5...13,5	11...13	11...13	11...13	87,75 x 10	17,5	21,5	21,5	21,5	2
	081705	6,0	6,0	16...24	4,3...5,2	62,55 x 10	25,0	14,0	26,9	25,3	3
	082198	13,5	13,5	13,5	7,8...8,5	61 x 12	-	21,0	21,0	16,7	4
	081818	13,5	13,5	13,5	11,5...13	61 x 11	39,25	21,0	21,0	19,5	4
G	082638	6,8...7,4	16...24	6...6,5	6,8...7,4	- x 10	-	27,95	26,8	27,95	5
	061443	8...9	8...9	14...16	18...20	67,5 x 12	24,0	12,0	21,0	26,5	6
	082085	10...14	38...45	13...14	38...45	137 x 10	60,0	30,8	35,5	36,5	7

G = for corrugated Tubes

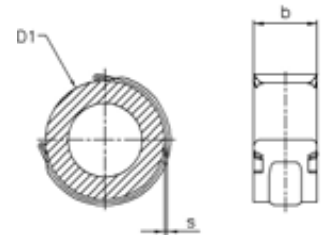
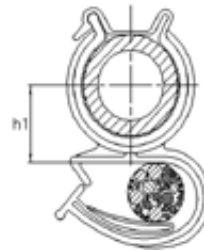
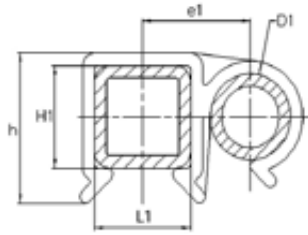
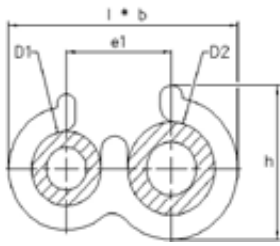
FIXED SPACER CLIPS 1 AND 2-WAY

MATERIAL:

Polyoxymethylene, polymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



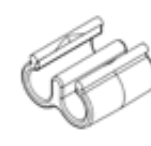
Form 16



Form 17



Form 18



Form 19



Form 20



Form 21



Form 22



Form 23



Form 24



Form 25



Form 26



Form 27

Sketches for illustration purposes only, please request latest detailed drawing.

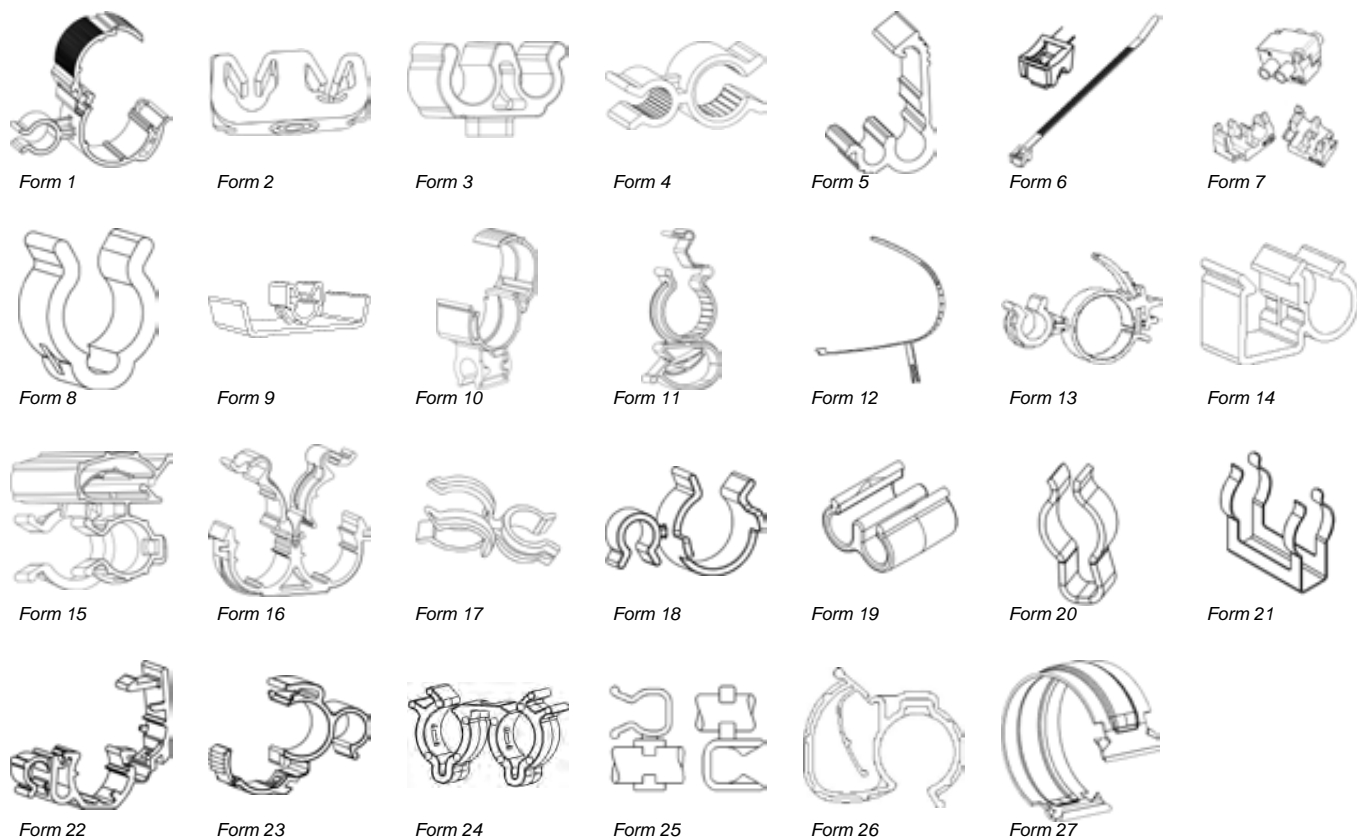
These clips, for pipe-to-pipe installation, allow cables/ tubular items to be fastened together. They do not provide a swivelling action.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	ØD2	l x b	e1 / h1	h	s	Form
	020757	11...13	27,0	60 x 20	30,0	31,0	-	1
	054892	3,5...3,8	6,0	31 x 10	15,5	15,5	-	2
	054361	4,7...4,9	4,7...4,9	30 x 10	15,0	12,5	-	2
	110013	5,0	5,0	22 x 10	12,0	10,0	-	2
	110042	6...8	6...8	62 x 8	46,0	21,0	-	2
	110077	6,0	6,0	41 x 12	25,0	18,0	-	2
	017225	6,2	4,75	19 x 13	9,0	12,5	-	3
	017696	6,2	6,2	19,2 x 13	9,0	12,5	-	3
	016059	6...6,4	9,8...10,7	24,6 x 10	13,0	16,1	-	3
	013232	4,7...4,75	4,7...4,75	28 x 10	18,0	15,0	-	4

FIXED SPACER CLIPS 1 AND 2-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	ØD2	l x b	e1 / h1	h	s	Form
	013239	6...6,4	9,8...10,5	28 x 10	13,0	14,0	-	4
	054454	6,2	10,2	28 x 10	13,0	14,0	-	4
	014783	4,0	8,0	21 x 12	10,0	13,0	-	5
	016872	4,75	7,4	22 x 10	7,6	11,6	-	5
	055569	4,75...5,05	6,1	23 x 10	7,6	11,2	-	5
	015467	4,75	6,2...6,4	29,5 x 10	7,6	14,0	-	5
	014629	4,75	6,2...6,4	22 x 10	7,6	13,6	-	5
	204417	9,5	15,9	- x 12	18,3	-	-	5
	018458	16,0	19...21	54,5 x 16	24,5	28,5	-	5
	016944	16,0	19...21	54,2 x 16	24,5	29,0	-	5
	131217	6,0	6,0	24 x 15	8,6	11,9	-	5
	019950	27,0	27,0	72 x 20	29,5	-	-	5
	055472	12...65	4,8	- x 16,8	-	-	-	6
	061335	48,0	4,7...5,05	70 x 23	31,6	68,0	-	6
	061354	60,0	4,8	84 x 23	38,0	80,0	-	6
	055776	6,0	6,0	21,9 x 15	8,5	15,7	-	7
	057054	6,7...7,3	6,7...7,3	24 x 8	9,0	11,8	-	7
	015768	10...12	-	14 x 10	-	18,0	-	8
	110010	8,0	-	48 x 22	-	15,0	-	9
	018090	25,1...25,9	10,0	37 x 20	22,75	36,0	-	10
	015717	25,0	6...18	38 x 12	17,4	57,0	-	11
	055893	30...70	14,0	- x 8	24...44	89,2	-	12

FIXED SPACER CLIPS 1 AND 2-WAY



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



Form 16



Form 17



Form 18



Form 19



Form 20



Form 21



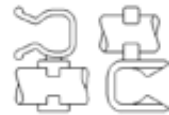
Form 22



Form 23



Form 24



Form 25



Form 26

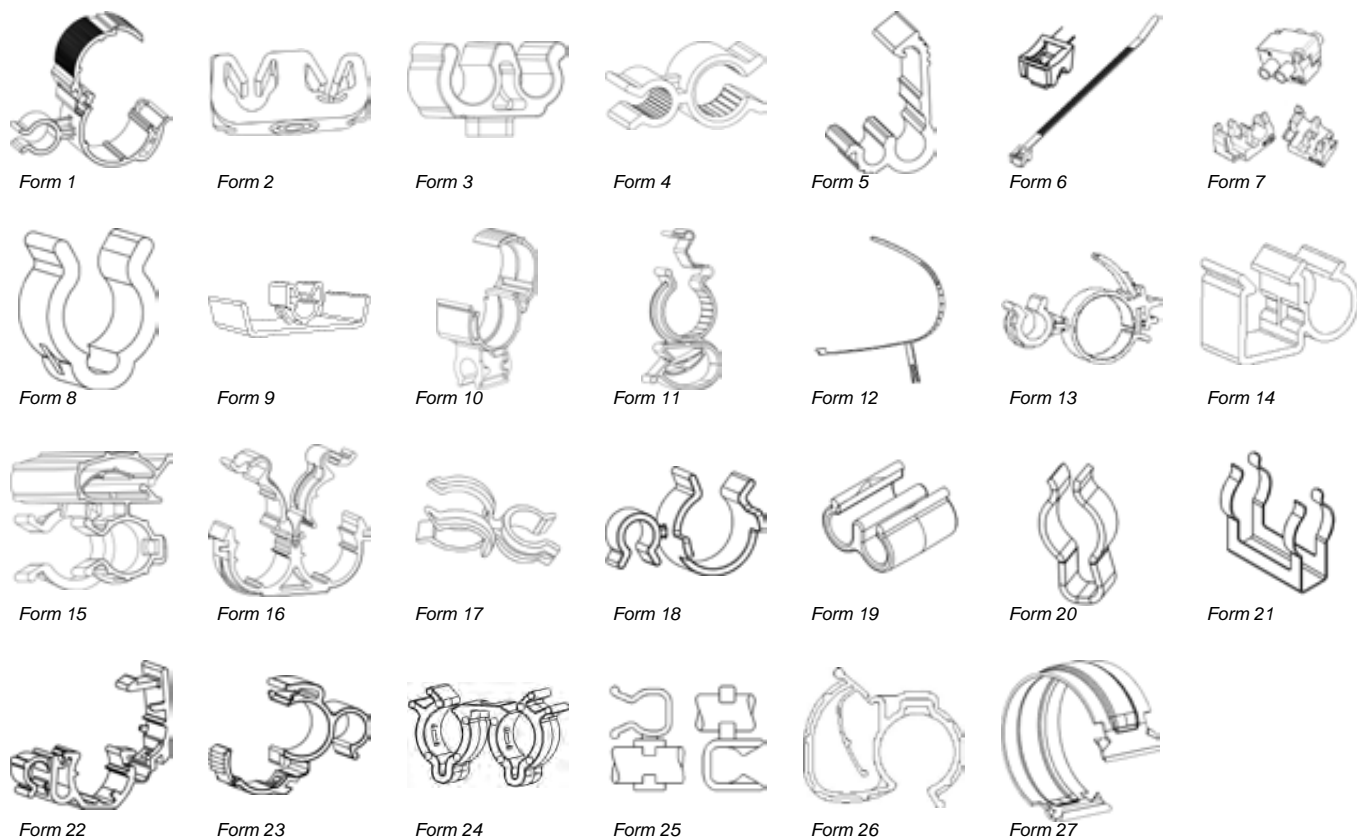


Form 27

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	ØD2	l x b	e1 / h1	h	s	Form
	030031	20...23	8,0	30 x 7,4	20,0	37,0	-	13
	030047	20...23	8,0	30 x 7,4	20,0	37,0	-	13
	016765	16 x 16	13,5	36,7 x 15	18,0	23,5	-	14
	016973	9...16	20,0	40 x 60	18,75	51,0	-	15
	016448	39,0	39,0	97 x 12	52,0	60,0	-	16
	110061	13,0	13,0	43,5 x 13	20,0	23,0	-	16
	110014	14...15,5	14...15,5	58,5 x 10	40,0	24,0	-	16
	017339	19,0	19,0	60 x 14	26,0	29,0	-	16
	018681	25,0	25,0	74,2 x 14	30,0	31,5	-	16
	018257	38,0	44,0	96 x 15	50,0	54,5	-	16
	200440	10,0	24...26	48,7 x 12	23,8	27,0	-	17
	200441	10,0	34,0	54,5 x 12	29,3	75,0	-	17
	056982	24,3	18,5	58 x 12	30,0	32,0	-	17
	017772	16,0	21,0	72,5 x 15	48,0	18,5	-	18
	019933	8,0	19,0	37,5 x 18,5	20,0	25,5	-	18
	053597	4,8...6	4,8...6	30 x 11	17,0	13,0	-	19
	014206	3,3	6,0	13,7 x 8	6,35	10,1	-	19
	018491	4,3	10,0	24,15 x 10	12,0	16,5	-	19
	018524	4,3...5,2	4,3...5,2	20,7 x 10	14,0	10,35	-	19
	012583	4,75	4,75	13 x 12	6,3	7,6	-	19
	013715	4,75	6,0	15 x 8	7,0	11,35	-	19
	013059	4,75	8,0	17,2 x 8	8,1	13,35	-	19
	054983	13...16	5.8	27 x 10	11,0	35,0	-	19
	054752	5...8	8...11	18,4 x 8	8,3	18,4	-	19
	020330	5...8	10...12	22,25 x 8	9,05	24,8	-	19
	110007	5...8,5	8...10,5	17,5 x 8	8,4	18,5	-	19

FIXED SPACER CLIPS 1 AND 2-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	ØD2	l x b	e1 / h1	h	s	Form
	016983	6,0	6,0	21 x 8	12,0	13,0	-	19
	055493	6,0	6,0	35 x 6	22,0	11,0	-	19
	016849	6,0	6,0	47,2 x 10	38,2	11,0	-	19
	053760	6...7	6...7	16,8 x 8	7,7	9,45	-	19
	012414	6...7	8...9	18,4 x 8	8,7	12,35	-	19
	016751	6,5	12,0	23,15 x 10	11,03	18,0	-	19
	017420	7,0	7,0	19,5 x 8	8,5	12,5	-	19
	054358	8,0	8,0	24 x 8	12,0	14,3	-	19
	012440	8,0	8,0	20,4 x 8	9,7	12,35	-	19
	054477	8,0	8,0	21 x 8	10,0	12,0	-	19
	020849	8,0	12,0	28 x 10	14,0	16,0	-	19
	017740	8...9	22...24	45 x 12	25,5	30,0	-	19
	012738	10,0	10,0	25,7 x 10	12,1	14,8	-	19
	018900	12,0	12,0	34 x 10	18,0	16,5	-	19
	016893	15,0	23,0	45,5 x 18	21,5	-	-	19
	110016	19,5...21,5	19,5...21,5	54 x 12	26,0	30,0	-	19
	018773	9...10	20...24,5	44,5 x 10	24,0	28,5	-	19
	202339	4,75...5,2	4,75...5,2	13 x 12	6,3	7,6	-	19
	055239	6,0	-	7,8 x 3	-	12,56	0,6	20
	055209	18,0	-	18,6 x 33,2	-	35,0	0,6	21
	018725	15...17	6,0	38 x 12	18,4	20,6	-	22
	018098	10...11	17...17,5	32,2 x 20	15,3	30,0	-	23
	206476	9...11	9...11	29,7 x 12	16...18	20,0	-	24
	016821	13...14	13...14	36 x 12	18,5	36,0	-	25

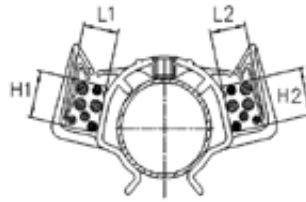
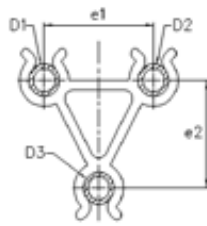
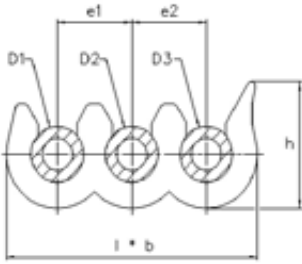
FIXED SPACER CLIPS 3-WAY

MATERIAL:

Polyoxymethylene, polymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15

Sketches for illustration purposes only, please request latest detailed drawing.

These clips, for pipe-to-pipe installation, allow cables/ tubular items to be fastened together. They do not provide a swivelling action.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/ L1xH1	ØD2	ØD3/ L2xH2	l x b	e1	e2	h	Form
	018791	4,0	4,0	4,0	36 x 12	11,0	11,0	12,5	1
	018539	4,75...6	4,75...6	4,75...6	36,6 x 12	10,5	10,5	14,3	1
	053368	4,7...5,25	4,7...5,25	4,7...5,25	35 x 10	12,0	12,0	10,0	1
	110012	5,0	5,0	5,0	34 x 10	12,0	12,0	10,0	1
	019304	6...8	6...8	6...8	60 x 13	22,5	22,5	17,0	1
	055283	8,0	10,0	8,0	56 x 12	20,0	20,0	17,0	1
	054789	8...10	9,0	8...10	51 x 25	15,7	15,7	20,0	1
	200287	10,0	8...10	8...10	45 x 12	15,5	15,5	16,5	1
	110036	5,0	5,0	3,0	32 x 10	12,0	11,0	10,0	1
	055270	8,0	10,0	8,0	46 x 12	15,0	15,0	16,0	1
	132127	4,75...6,3	4,75...6,3	4,75...6,3	38,4 x 12	12,0	12,0	17,0	1
	055071	5...7	5...7	5...7	34,8 x 10	12,0	12,0	12,0	1
	057255	8...10	8...10	8...10	58,5 x 11	19,0	19,0	21,5	1
	020080	2,9...3,1	2,8...3	2,8...3	13,6 x 4	4,0	4,0	6,4	2
	053373	3,4...3,6	3,4...3,6	3,4...3,6	30 x 10	8,5	8,5	10,0	2
	012582	4,75	4,75	4,75	18,7 x 12	6,0	6,0	7,6	2
	110043	4...6	4...6	4...6	31 x 8	12,0	12,0	14,5	2
	055451	4,5...5,05	4,5...5,05	4,5...5,05	18,7 x 12	6,0	6,0	8,0	2
	018208	7,0	7,0	10,0	38,5 x 8	12,0	15,0	14,5	2
	175000	8,0	8,0	8,0	35 x 8	12,0	12,0	14,0	2
	017351	8,0	4,75	8,0	33,9 x 8	11,5	11,5	11,05	2
	110059	8,0	8,0	8,0	46,5 x 12	13,0	13,0	15,6	2

FIXED SPACER CLIPS 3-WAY



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/ L1xH1	ØD2	ØD3/ L2xH2	l x b	e1	e2	h	Form
	020040	8...10	8...10	8...10	45 x 12	15,5	15,5	16,5	2
	018652	9,0	9,0	11,5	35,5 x 15	10,5	11,75	15,0,0	2
	018556	10,0	10,0	10,0	36 x 15	11,5	11,5	14,7	2
	017234	12...12,5	10,0	12...12,5	44,7 x 12	13,0	13,0	20,0	2
	016953	18,0	14,5	14,5	67,25 x 12	26,0	21,0	26,5	2
	055491	4,7...5,05	4,7...5,05	13,0	42,2 x 10	14,0	13,0	15,5	3
	055774	6,25...6,45	6,25...6,45	4,4...4,6	24,75 x 16	8,4	8,5	30,0	4
	054851	6,35	6,35	4,5	18,7 x 15	8,4	8,5	20,0	4
	014055	4,75	4,75	4,75	22,35 x 15	15,0	12,0	21,0	4
	055351	4,75...5,05	4,75...5,05	4,75...5,05	24,8 x 15	15,0	12,0	21,0	4
	015709	4,75	4,75	6,0	22,2 x 15	15,0	12,0	21,5	4
	054696	4,7...4,9	4,7...4,9	5,9...6,1	25 x 10	11,0	12,0	27,0	4
	055178	4,7...5,05	4,7...5,05	7,9...8,1	29 x 15	15,0	12,0	28,5	4
	054878	8,0	13,0	8,0	42 x 15	13,0	13,0	22,0	4
	016019	7,2	7,2	25,0	36,2 x 28	25,0	42,0	67,0	4
	056166	12,0	12,0	12,0	55 x 10	39,6	19,4	33,1	5
	016368	13,0	16,0	19,0	65,7 x 20	25,0	20,0	27,5	6
	017472	17,0	19,0	19,0	103 x 10	45,0	36,0	27,5	6
	056187	12,0	10,0	12,0	54,5 x 12	17,5	17,5	37,0	7
	110040	5,2	6,2	60...70	-	12,5	-	-	8
	018607	13...16	35,0	13...16	80 x 22	28,14	28,14	43,0	9
	015763	15 x 20	40,0	9 x 13	102 x 62	-	-	58,5	9
	016278	15 x 20	40,0	15 x 20	96 x 16	-	-	60,0	9
	015751	27 x 22	56,5	9 x 25	102 x 30	-	-	72,0	9
	056470	6,0	6,0	6,0	30,4 x 15	8,5	8,5	16,0	10
	017669	14,0	21,0	21,0	78,5 x 12	21,0	27,0	24,5	11
	017408	8,0	8,0	8,0	37 x 10	15,2	11,5	18,2	11
	200717	10,0	10,0	14,3	60,2 x 20	23,6	12,25	43,8	12
	201482	5,0	5,0	6,0	20 x 10	8,5	12,1	24,2	13

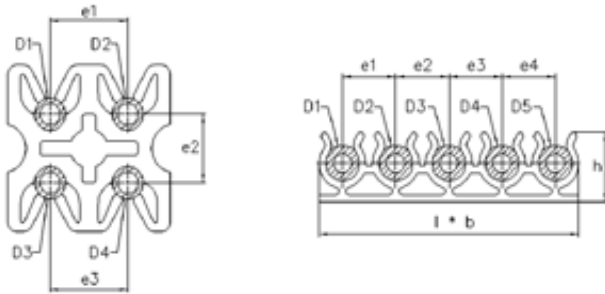
FIXED SPACER CLIPS MULTI-WAY

MATERIAL:

Polyoxymethylene, polyamide

COLOUR:

Black, natural (other colours are available on request)



Form 1



Form 2



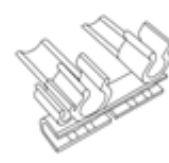
Form 3



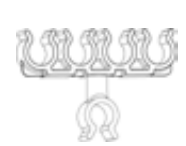
Form 4



Form 5



Form 6



Form 7



Form 8



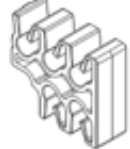
Form 9



Form 10



Form 11



Form 12

Sketches for illustration purposes only, please request latest detailed drawing.

These clips, for pipe-to-pipe installation, allow cables/ tubular items to be fastened together. They do not provide a swivelling action.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	ØD5	l x b	e1	e2	e3	e4	h	Form
	016616	4,7...4,9	4,7...4,9	4,7...4,9	4,7...4,9	-	23 x 10	11,0	10,0	11,0	-	21,4	1
	054393	8...10	8...10	4,8	4,8	-	38,5 x 10	18,4	12,5	22,0	-	32,0	1
	056493	4,8...5	4,8...5	4,8...5	4,8...5	-	29,3 x 10	14,0	14,0	-	-	29,3	2
	016797	4,75...6	4,75...6	4,75...6	4,75...6	-	- x 12	20,0	20,0	20,0	-	-	2
	014007	4,75	4,75	4,75	4,75	-	- x 20	14,0	14,0	14,0	-	-	2
	056678	4,75	4,75	4,75	4,75	-	48,5 x 10	11,0	11,0	11,0	-	15,5	3
	110015	4...5	4...5	4...5	4...5	-	46 x 10	12,0	12,0	12,0	-	10,0	3
	054565	6,0	4,8	4,8	8...10	4,8...8	70,5 x 10	10,8	10,0	14,0	17,4	20,0	3
	020793	6,0	6,0	6,0	6,0	-	34 x 10	8,0	8,0	8,0	-	12,5	3
	110045	8,0	8,0	8,0	8,0	-	50 x 8	12,0	12,0	12,0	-	15,0	4
	110050	10,0	8,0	10,0	8,0	-	47 x 8	11,5	12,0	11,5	-	15,0	4
	055777	6,0	6,0	6,0	6,0	-	39,9 x 15	8,5	8,5	8,5	-	15,7	5
	054792	8,0	10,0	3,5	5,0	-	44 x 12	26,0	10,0	-	-	23,0	6
	055362	12,5	9,5	9,5	9,2	-	55,3 x 16	25,0	15,0	-	-	35,5	6
	017461	6,7...7,5	6,7...7,5	6,7...7,5	6,7...7,5	13,0	30,6 x 17	9,0	9,0	9,0	15,0	31,5	7
	017480	4,75	4,75	8,0	8...10	-	38,3 x 10	9,0	5,0	12,0	11,0	26,0	8
C	200457	4,75	8,0	8,0	4,75	-	45 x 15	9,7	13,2	10,5	-	18,8	9
C	200458	4,75	10,0	12,0	4,75	-	44 x 15	9,7	13,2	10,5	-	21,8	9
	020086	9,9...10,1	11,9...12,1	5...5,3	4,9...5,1	5...5,3	49,2 x 10	15,5	11,5	3,1	3,1	22,7	10

C = AR-Bag® anti noise insulation - Bi-injection

TAPE-ON CLIPS PRESSED INTO A ROUND HOLE

MATERIAL PLASTIC COUPLINGS:

Form 1 to 4, 6 to 9: Polyoxymethylene, polyamide

COLOUR:

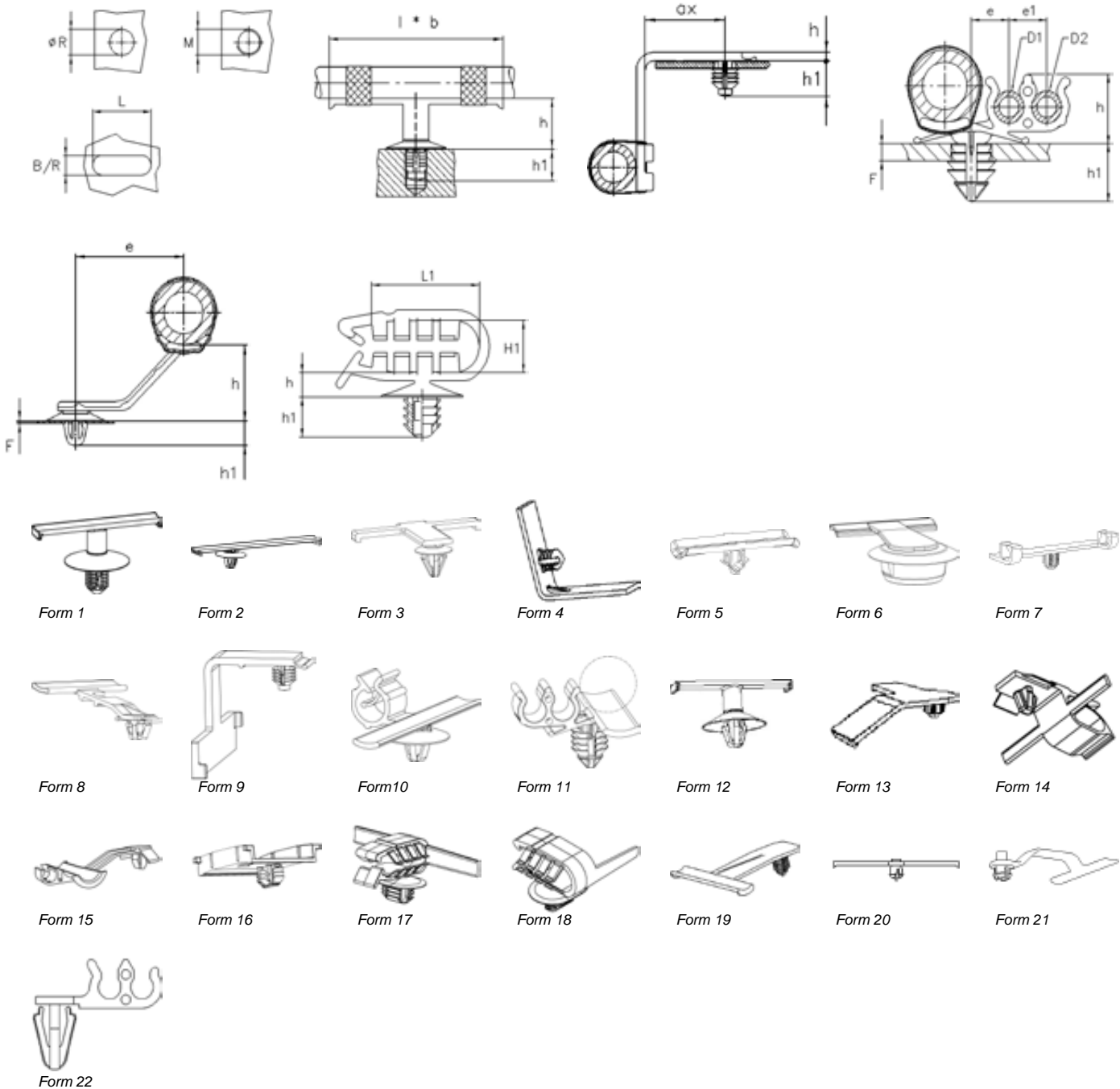
Black

MATERIAL METAL COUPLINGS:

Form 5: Spring steel C67S

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

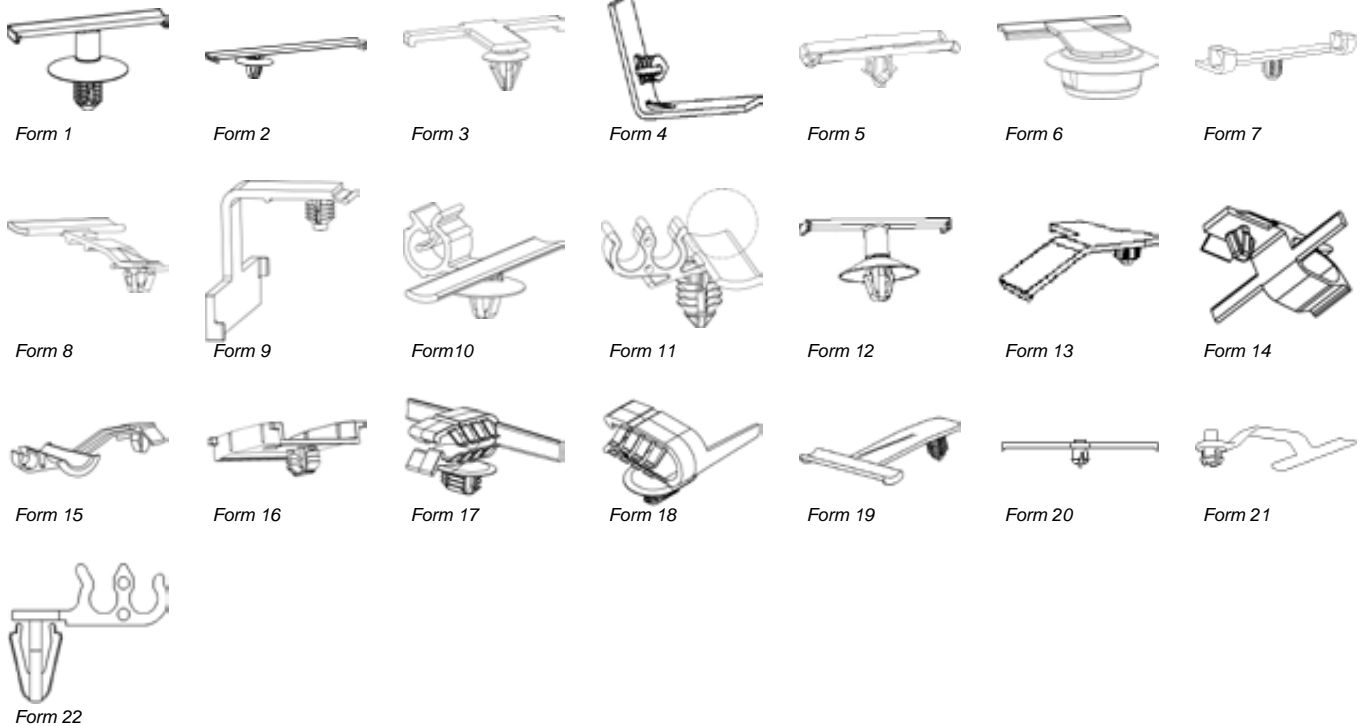
Clips for fixing into a round, square or oblong hole, designed to hold cables or pipes in place with a tape binding.
Form 1, 2, 3, 10 and 14: with or without seal

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØR/ LxB/R	F	ØD1	ØD2/ L1xH1	l x b	ax/ e /e1	h	h1	Form
	082392	6,3...6,7	0,8...6	-	-	40 x 7	-	12,4	10,5	1

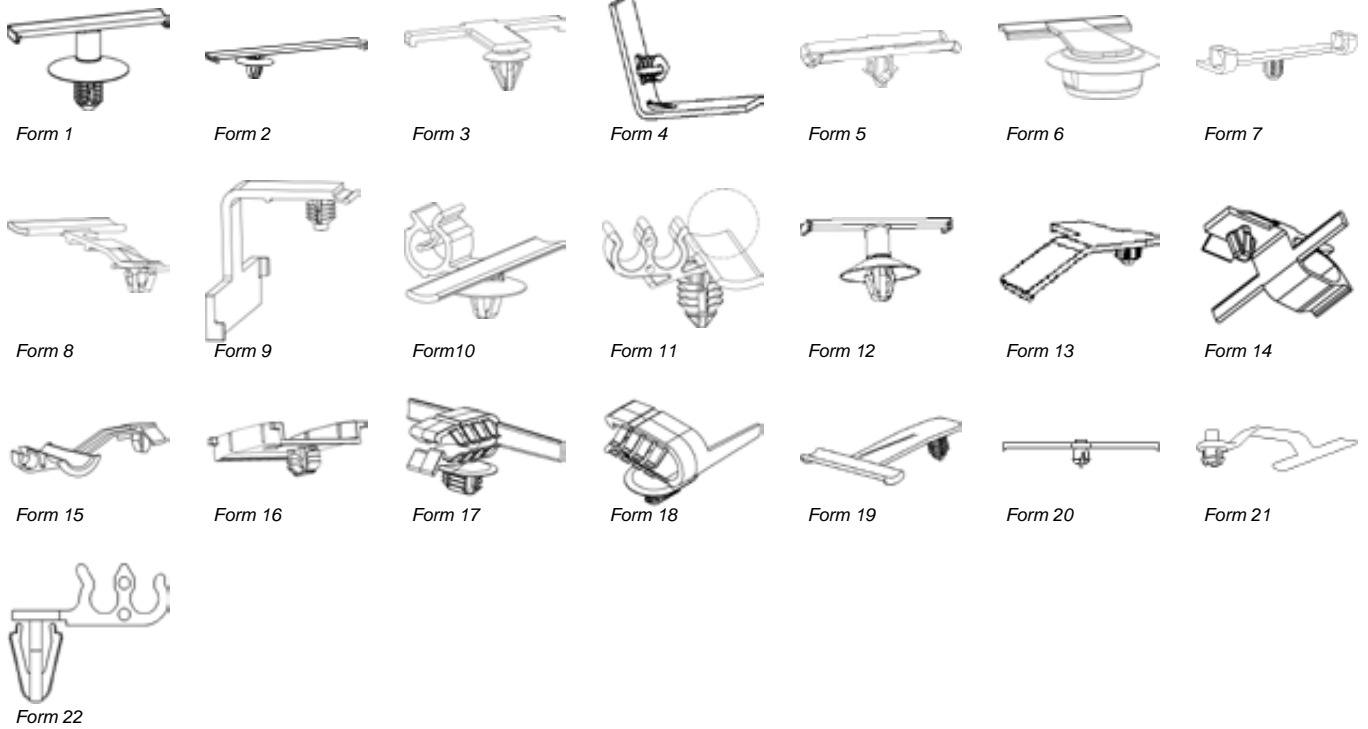
TAPE-ON CLIPS PRESSED INTO A ROUND HOLE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØR/ LxB/R	F	ØD1	ØD2/ L1xH1	l x b	ax/ e/ e1	h	h1	Form
	108169	5...6,5	0,5...1,2	-	-	70 x 23	15,0	1,8	8,0	1
	201103	4,8...5,2/ M6	0,8...6	-	-	40 x 7	-	12,4	8,6	1
	201103	4,8...5,2/ M6	0,8...6	-	-	40 x 7	-	12,4	8,6	1
	207199	5...5,2/ M6	1,5...3	-	-	40 x 7	-	12,4	8,9	1
F	218825	6,5...6,7	0,8...6	-	-	40 x 7	-	29,8	10,5	1
	175027	7,0	0,5...2	-	-	50x5	-	4,95	10,55	2
	108120	6,5...6,8	0,8...2,5	-	-	56 x 7	-	6,6	6,4	2
	108108	6,35...6,7	0,7...1,2	-	-	75 x 10	-	4,5	6,5	2
	020458	4...4,2	4,6	-	-	42 x 5	10,0	2,0	11,6	2
	175031	6,8...7,2	1,5...2,4	-	-	32,5 x 7,6	6,8	2,0	11,0	2
	018505	6,5...6,7	1,5	-	-	85 x 9	25,0	5,4	8,3	2
	081807	6,5...6,7	0,6	-	-	85 x 9	25,0	5,4	8,3	2
	082081	6,5...6,7	0,6	-	-	85 x 9	25,0	5,4	8,3	2
	175137	6,3...6,7	0,7...4	-	-	36 x 8	-	1,5	11,0	2
	108099	6,5...6,7	0,8...1	-	-	50 x 7	-	3,5	3,5	2
	108124	8...8,5	1...4	-	-	50 x 7	-	2,5	10,5	2
	108183	7 x 12	0,7...2	-	-	65 x 10	-	4,0	13,0	2
	175148	6,3...6,5	1,5	-	-	50 x 5	20,0	5,25	10,25	3
	175026	7,0	0,5...2	-	-	50 x 5	20,0	5,25	10,25	3
	175183	6,4...6,6	0,6...2,5	-	-	55 x 10	31,0	1,5	11,8	3
	175182	6,4...6,6	0,6...2,5	-	-	55 x 10	13,0	1,5	12,2	3
	108170	8,0	0,5...2	-	-	110 x 43,5	19,0	1,8	10,5	3
	108112	8,0	0,7...4	-	-	45 x 39	24,0	6,0	6,5	3
	200470	7 x 12	1,4...2	20,0	20,0	57 x 15	21,6	-	7,9	3
	175181	6,4...6,6	-	-	-	37,1 x 41,7	12,7	2,0	11,05	4
	016718	6,5...6,7	-	-	-	35,7 x 11	-	4,0	6,8	5
	020628	30...30,5	1,35...1,55	-	-	50 x 11,9	47,0	5,4	11,6	6
	055478	12,2 x 6,2	0,5...3	-	-	40 x 39	23,0	10,0	6,8	6
	108126	8,0	0,8...8	-	7,5	80 x 21,5	-	10,0	10,5	7

TAPE-ON CLIPS PRESSED INTO A ROUND HOLE



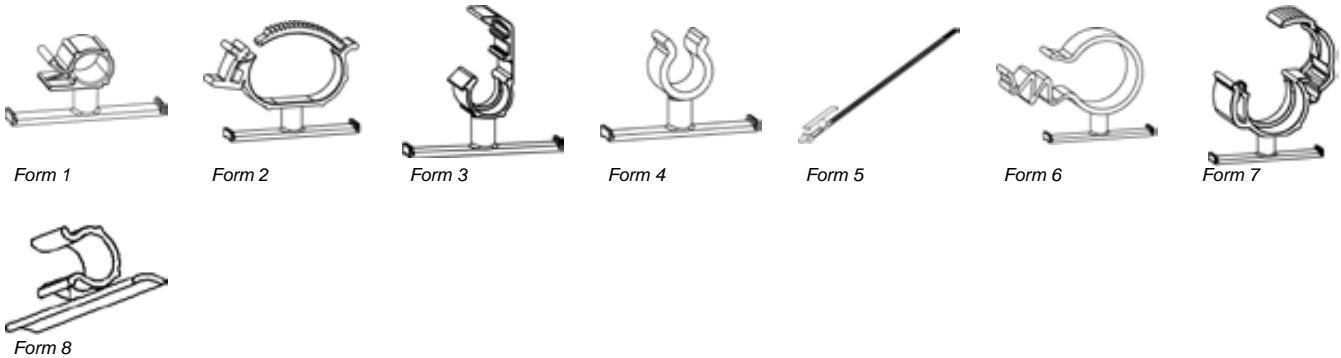
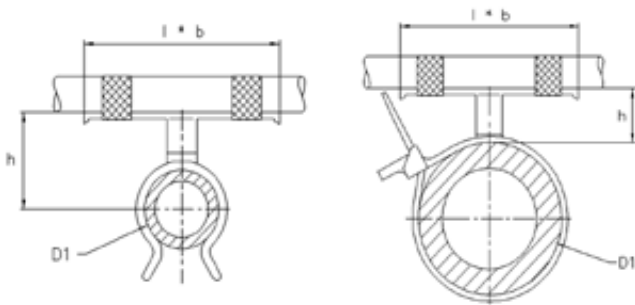
Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØR/ LxB/R	F	ØD1	ØD2/ L1xH1	l x b	ax/ e /e1	h	h1	Form
	108115	6,5	0,7...1,2	-	7,5	75 x 21	-	12,0	4,5	7
	018470	10 x 6,5	1...1,15	-	-	55 x 10	31,8	23,81	9,0	8
	200031	6,5...6,7	0,6...1,3	-	-	40 x 9	15,0	5,2	6,9	8
	200294	6,4...6,6	0,66...0,68	17,0	-	40 x 15,5	30,2	20,1	7,1	8
	201878	6,5...6,7	0,8...1,2	-	-	45 x 10,5	12,0	3,0	8,2	9
	018968	6,5...6,95	1,4	-	-	57 x 13	24,0	2,5	9,8	9
E	175042	6,5...6,7	0,8...1,5	4...8	8...12	60 x 9	13,0	18,1	8,5	10
E	175158	6,5...6,7	0,8...4	4...8	8...12	60 x 9	13,0	18,1	8,5	10
	190028	6,5...6,7	0,7...1,2	4...8	8...12	60 x 9	13,0	18,1	8,2	10
	201336	6,5...6,7	0,12...4	-	-	50 x 10	32,0	1,8	10,8	10
	201669	8...8,2	0,8...4	6,0	6,0	45 x 10	7,5	12,5	10,0	11
	201458	6...7	0,5...3	-	-	40 x 7	-	11,7...14,2	7,3...9,8	12
	201615	6...6,7	0,5...3	-	-	40 x 7	-	11,7...14,2	7,3...9,8	12
	108113	8,0	0,7...3	-	-	56 x 45	-	2,0	8,0	13
	108114	8,0	0,7...3	-	-	56 x 45	-	2,0	8,0	13
	057256	6,5	0,7...1,2	1,3...10	-	52 x 10	-	14,5	8,3	14
	057180	12,2 x 6,2	0,67...3	6,0	7...11	70 x 40	48,0	-	12,0	15
	056076	7,2 x 7,2	0,67...3	6,0	2...11	70 x 50	48,0	19,2	7,2...9,2	15
	130204	12,2 x 6,2	0,7...3,5	14,0	-	35 x 32	-	6,5	7,0	16
	205789	12,2 x 6,2	0,7...4	-	15,23 x 6,95	29,9 x 50	-	3,23	7,4	17
	201830	12,2 x 6,2	0,7...4	-	15,3 x 9,6	30 x 35,5	-	4,5	7,4	18
	020388	5...5,2	0,8	-	-	52 x 12	15,0	3,4	8,1	19
	201340	6,5...6,7	0,8...4	-	-	35 x 10	15,0	-	7,9	19
	175186	6,3...6,5	0,6...2,5	-	-	60 x 9	40,0	1,5	11,5	19

TAPE-ON CLIPS WITH SWIVEL

MATERIAL:
Polyamide

COLOUR:
Black



Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	l x b	h	Form
	221557	16...18	40 x 7	19,5	1
	208521	7,8...8,5	40 x 7	14,2	1
	207368	4,3...5,2	40 x 7	13,0	1
	202918	6...6,5	40 x 7	14,5	1
	205574	8...9	40 x 7	17,5	1
	202919	11,5...13	40 x 7	17,25	1
	208579	22...24	40 x 7	22,5	1
E	204153	6...10	40 x 7	16,5	1
	207562	16...22	40 x 7	10,4	2
F	213845	22...24	40 x 7	30,8	2
G	201635	9,6...10,2	40 x 7	15,45	3
	209206	13...14	40 x 7	18,0	4
	208254	10...12	40 x 7	16,5	4
	201175	18...20	40 x 7	20,5	4
F	228300	12...13	40 x 7	23,0	4
	209588	8...50	40 x 7	12,0	5
	212062	25,0	40 x 7	24,0	6
	212818	22,0	40 x 7	22,5	6
G	082688	20,6...21,4	40 x 7	21,5	7
	202569	12,0	50 x 10	10,3	8

G = for corrugated Tubes

TAPE-ON CLIPS ASSEMBLED ONTO AN EDGE

MATERIAL PLASTIC COUPLINGS:

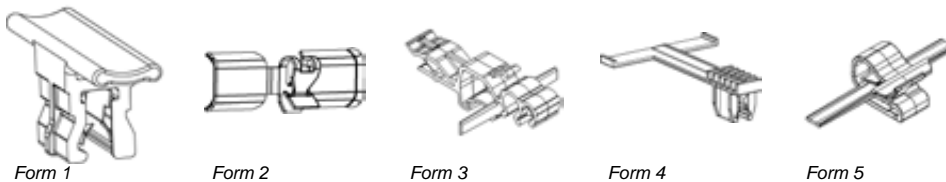
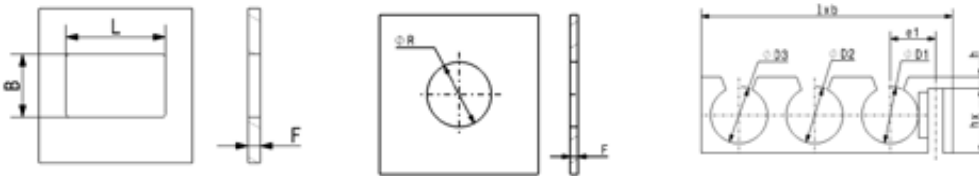
Polyoxymethylene, polyamide
COLOUR: Black

MATERIAL METAL COUPLINGS:

Spring steel C67S

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØR/ L x B	F	ØD1	ØD2	ØD3	l x b	h	hx	e1	s	Form
	108192	-	1...2	-	-	-	50 x 10	5,0	10,0	-	-	1
	018372	-	0,7...2	-	-	-	60,2 x 10,8	2,8	3,5	-	0,5	2
	130485	-	0,7	11,0	6,0	4,5	55 x 40	-	-	-	-	3
	201697	-	1,5...3,5	-	-	-	50 x 64,8	-	-	50,0	-	4
	200590	6,2	0,8...1,5	5...10	5,0	-	50 x 19,75	13,35	4,2	-	-	5
	205027	6,2	0,67... 1,2	3...6	3,0	-	50 x 19,1	10,54	4,2	-	-	5

TAPE-ON CLIPS PUSHED ONTO A STUD

MATERIAL PLASTIC COUPLINGS:

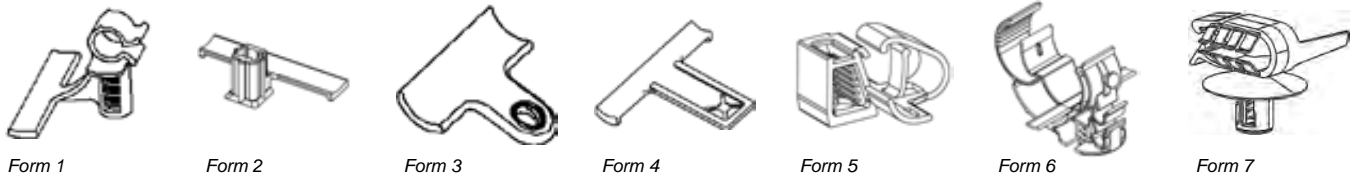
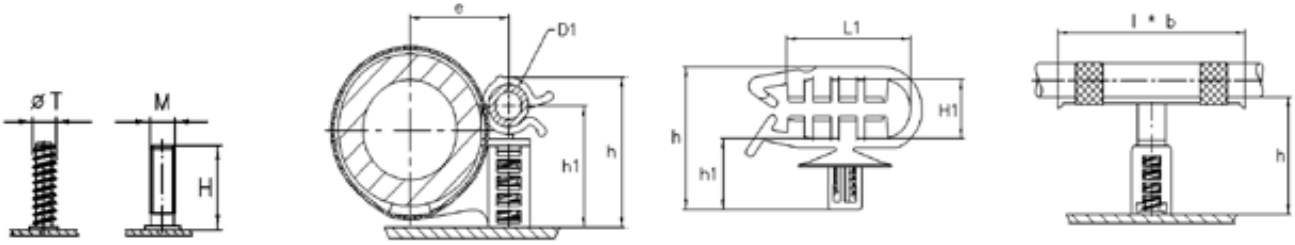
Polyoxymethylene, polyamide
COLOUR: Black

MATERIAL METAL COUPLINGS:

Spring steel C67S

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØT / M	H	ØD1/ L1xH1	ØD2	l x b	h	e	Form
	175156	5	16,0	9,0	32,0	50 x 9,14	31,8	22,0	1
	057182	5	14,0	10...20	-	50 x 10	16,0	15,0	2
	201581	-	-	-	-	45 x 16	-	20,3	3
	201338	6	12,0	-	-	60 x 11	-	36,5	4
	201337	6	12,0	-	-	35 x 10	-	15,0	4
	056457	5 / M6	16...18	8...18	-	50 x 12,6	18,0	-	5
	056974	5,0	19,0	21...24	6...6,2	60 x 24,2	45,0	22,5	6
	212027	5,0	14,2	-	-	40 x 7	28,0	-	8
	204657	5,0	14,0	38 x 9,6	-	30 x 15,3	29,6	-	7

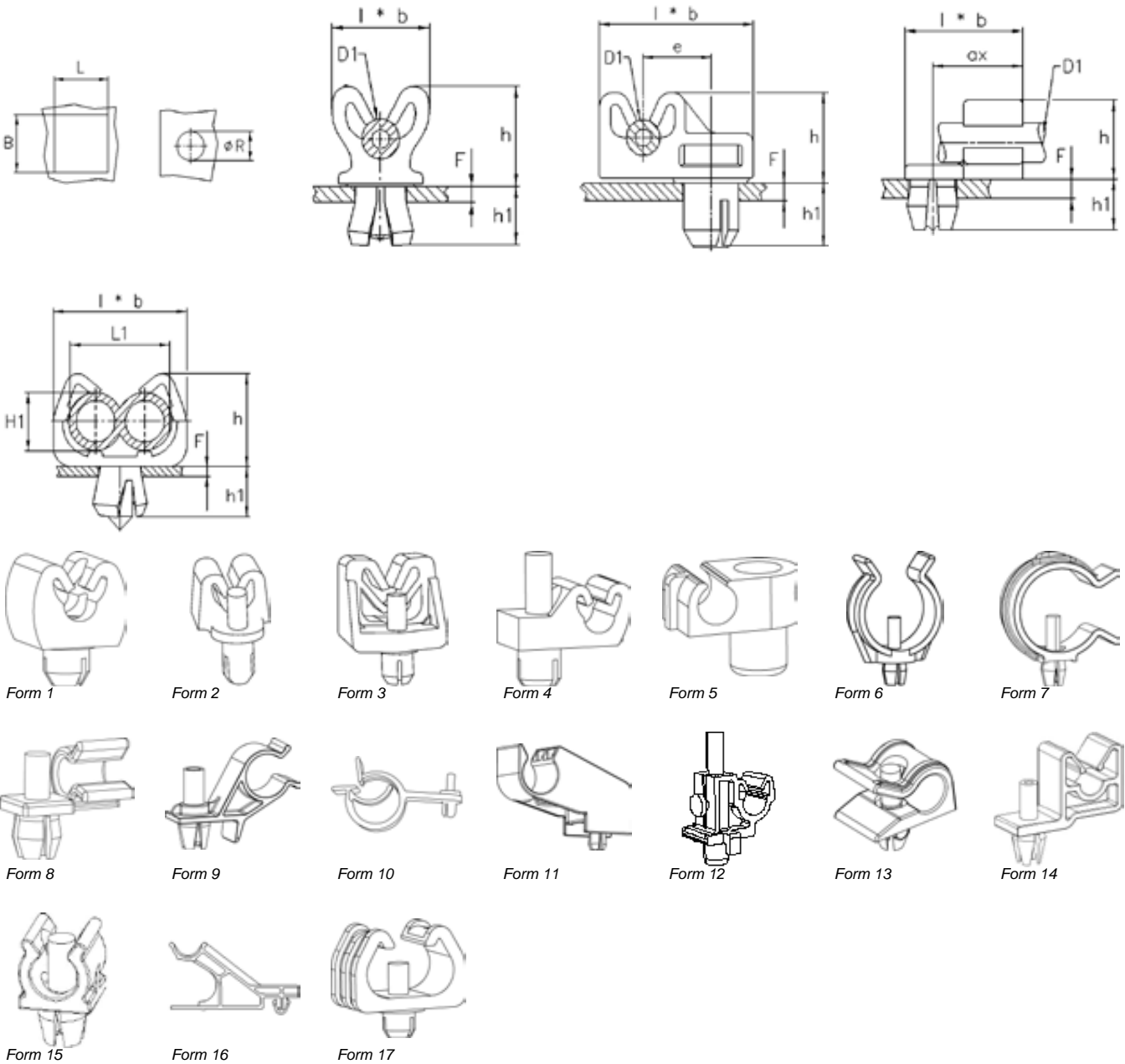
PIPE CLIPS RIVETED INTO A ROUND HOLE 1-WAY

MATERIAL:

Polyamide, polyoxymethylene, polyethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

The pin, when inserted into the tubular barrel of the rivet, provides a complete and even clamping of the clip into the panel. The ease of installation (using a manual or automatic impact tool) along with the tightness of the rivet are the key advantages of this fastener system.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	ØR/ L x B	F	l x b	h	h1	e/ ax	Form
	063665	4,8	6,5	0,5...4	13,2 x 12	16,5	10,5	-	1
	063274	4,8	6,5	0,5...3	14 x 12	12,0	6,4	-	1
	064697	4,8...6	6,5	0,5...4	12,8 x 12	12,0	10,5	-	1
	016816	4,8...6	6,5...7,2	0,5...3	12,8 x 12	12,0	6,0	-	1
	020287	4,8...6	6,5...7,2	0,5...3	12,8 x 12	16,15	6,0	-	1
	018279	4,8...6	6,5...6,7	2...5	12,8 x 12	12,0	7,5	-	1
	014454	8,0	10...10,2	5,0	20 x 16	23,0	12,0	-	1

E = with securing tang for variable bore

PIPE CLIPS RIVETED INTO A ROUND HOLE 1-WAY



Form 1



Form 2



Form 3



Form 4



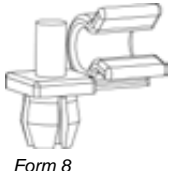
Form 5



Form 6



Form 7



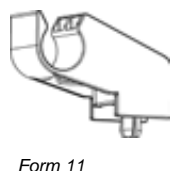
Form 8



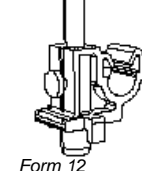
Form 9



Form 10



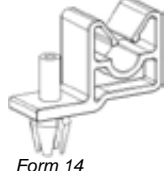
Form 11



Form 12



Form 13



Form 14



Form 15



Form 16



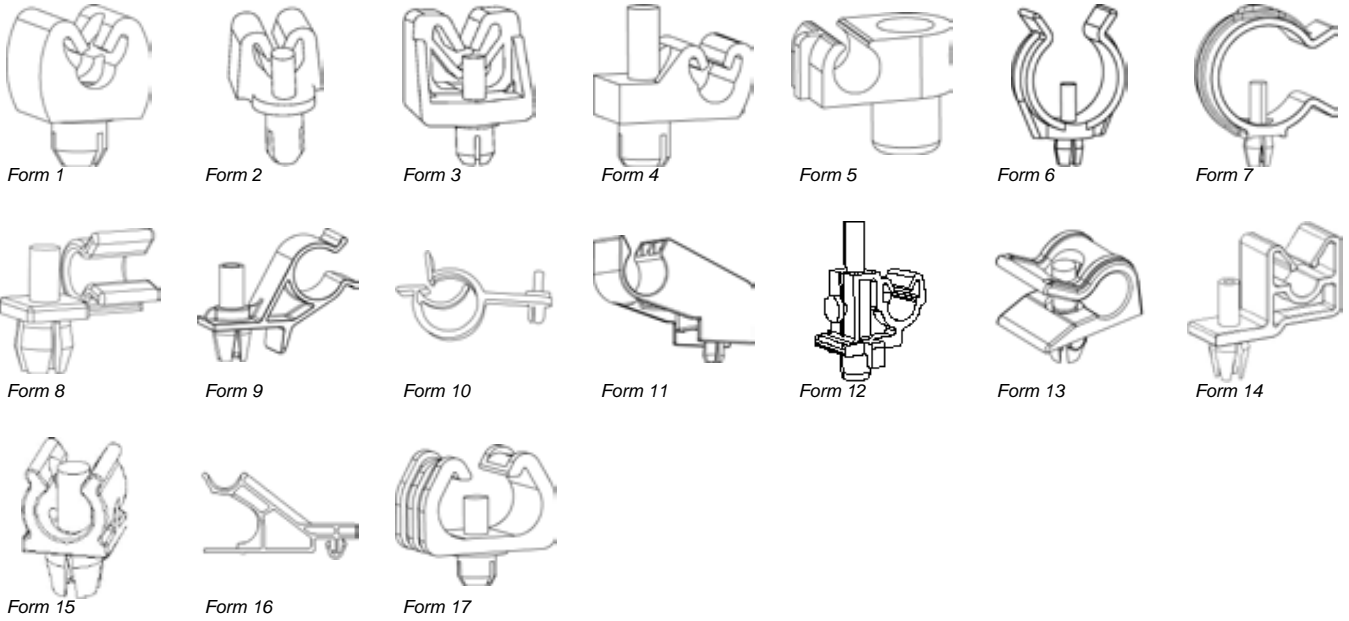
Form 17

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	ØR/ L x B	F	l x b	h	h1	e/ ax	Form
	016640	8,0	10...10,2	5,0	20 x 16	23,0	12,0	-	1
	019059	8...10	6,5...6,7	0,5...4,5	17 x 14	19,0	7,5	-	1
	063468	12,3...15	8,0	0,5...2,5	19 x 15	23,0	7,0	-	1
	063350	12,3...15	6,5	0,5...4	19 x 15	22,5	7,5	-	1
	017685	14 / 16	6,5...6,7	0,5...4	26 x 18	31,0	7,5	-	1
	063571	8...10	6,5	0,5...4	17 x 14	19,0	7,5	-	1
	064570	18,0	13,0	4...8	35 x 20	32,0	14,0	-	1
	063574	4,8	6,5	4...9	16 x 19,6	11,7	12,0	-	2
	017462	4,8...6	6,4...6,6	3,0	12,8 x 12	18,5	7,5	-	2
E	056180	11...17,5	6,5	0,5...4	32 x 12	36,25	7,5	-	3
	064266	4,8...8	6,5	0,5...3	20 x 20	18,5	7,5	-	3
	064793	3,5...3,9	6,35...6,7	2...5	19,6x 10	14,0	9,0	8,0	4
	063457	3,5	6,5	1...4	18,1 x 10	9,5	7,5	8,0	4
	020213	4,0	6,5...6,7	1...4	18,2 x 10	9,5	7,5	8,0	4
	063467	4,0	6,5	5...7	18,2 x 10	12,0	10,5	8,0	4
	175136	4,75	6,5...6,7	0,5...2,5	18,1 x 10	9,6	6,0	8,0	4
	015518	4,75	7,5...7,7	0,8...3	19,1 x 10	12,0	6,5	8,5	4
	055461	4,7...5,05	6,5	0,5...4	19 x 10	14,0	7,5	8,0	4
	063291	4,8	6,5	0,5...2,5	18,1 x 10	9,5	6,0	8,0	4
	063588	4,8	6,5	5...7	19 x 10	14,5	10,5	8,0	4
	063474	4,8	6,5	0,5...2,5	20,5 x 10	12,5	6,0	8,0	4
	064299	4,8...6	6,5	0,5...3	19,3 x 14	15,8	7,5	6,2	4
	106045	5...5,4	8,0	0,5...2,5	22,5 x 12	21,0	6,0	10,5	4
	015752	5,3	6,5...6,7	2,3	20 x 10	12,5	6,0	8,0	4
	063268	6,0	6,5	0,5...2,5	20 x 10	11,0	6,0	9,0	4
	063563	6,0	6,5	0,5...2,5	22 x 10	13,0	6,0	9,0	4
	063679	6,0	6,5	0,5...4	22 x 10	13,0	7,5	9,0	4
	063351	8,5	6,5	0,5...2,5	24 x 10	16,0	6,0	11,0	4
	063657	10...10,7	6,5	7...12	27 x 10	22,5	15,0	12,0	4
	063572	10...10,7	6,5	0,5...4	26,1 x 10	21,5	7,5	12,0	4
	106018	10,0	6,5...6,8	0,7...2,5	35,5 x 10	18,5	6,0	20,0	4
	019156	4,75	6,5...6,7	0,5...2,5	15,5 x 9	6,2	6,0	6,5	5
	064894	6,5...6,8	6,5	0,7...4	10 x 10	11,0	7,5	-	6
	055154	17...19	6,5	0,5...4	22 x 22	24,5	7,5	-	6
	013847	24,0	6,9...7,1	0,75...2,2	31 x 12	34,0	5,3...6,75	-	6

E = with securing tang for variable bore

PIPE CLIPS RIVETED INTO A ROUND HOLE 1-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

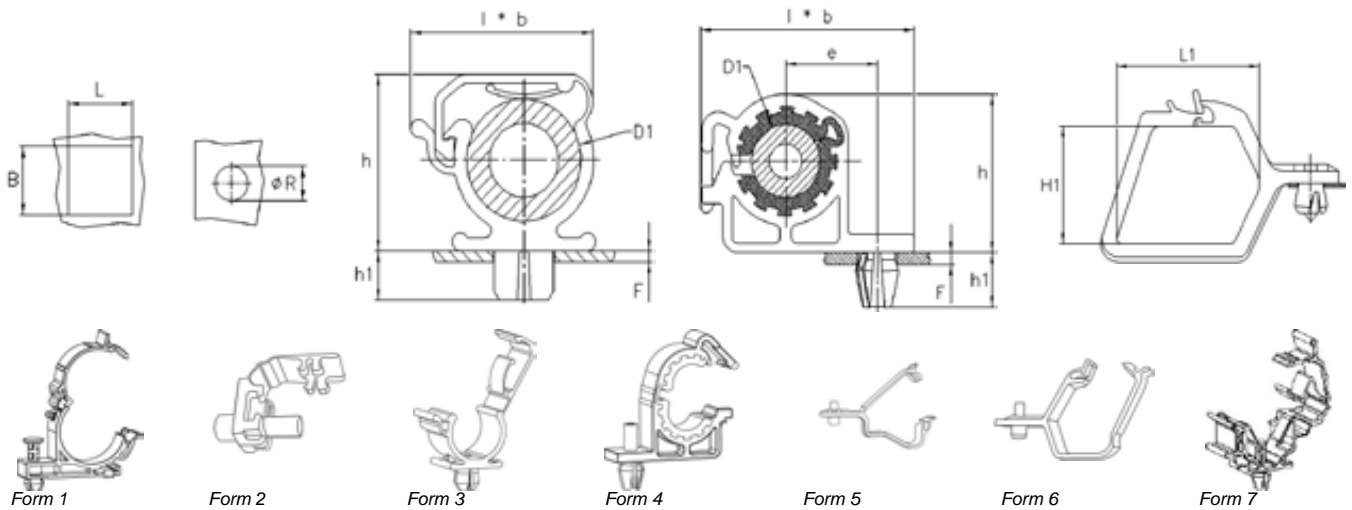
?	REF.	ØD1/L1xH1	ØR/ L x B	F	l x b	h	h1	e/ ax	Form
	056654	24...26	7,1	0,75...2,5	31 x 13,5	34,0	7,5	-	6
	015040	39,0	7...7,2	3...4,5	46 x 12	47,5	6,5...8	-	6
	204849	22,5...24	6,9...7,1	0,75...2,2	31 x 12	31,0	7,5	-	6
	015314	22...24	6,3...6,5	0,7...0,8	33,5 x 12	30,5	7,5...7,6	-	7
	015437	5,0	6,1...6,3	2,5	16 x 10	8,6	6,5	12,0	8
	015110	15,0	10...10,3	0,8	45 x 15	27,0	10,0	24,0	9
E	055268	13...24	6,35...6,7	0,5...3	66 x 12	35,0	7,5	37,0	10
	055962	12,0	14,0	4...7	34,4 x 18	19,0	12,0	15,0	11
	019061	17,0	6,5...6,7	3,8...4,2	53,95 x 22	31,1	11,5	32,7	11
	106054	9,0	8,0	3,0	28 x 20,5	29,0	8,0	11,0	12
	207044	6...7	5,2 x 5,2	0,7...1,5	16,5 x 10	10,55	5,2	3,5	13
	200160	6,0	6,5...6,7	0,9...1,1	27,8...10	18,0	6,5	13,6	14
	019034	7,0	6,5...6,7	1,0	10,6 x 10	11,0	6,5	-	15
	018437	17,0	8 x 8	2,0	76,2 x 15	30,0	9,0	55,6	16
G	225505	25,1...25,9	15...15,2	8,6...9,4	25 x 25	40,6	18,0	-	16
	017335	17,9 x 9,15	6,3...6,5	0,7...2	23,6 x 12	16,0	6,0	-	17
	016127	18,6 x 9,8	6,3...6,5	0,7...2	23,6 x 12	16,0	6,0	-	17

E = with securing tang for variable bore

PIPE CLIPS RIVETED INTO A ROUND HOLE 1-WAY - WITH LOCKING ELEMENT

MATERIAL:
Polyamide

COLOUR:
Black



Sketches for illustration purposes only, please request latest detailed drawing.

Clips with positive locking feature, which are push- riveted into a round hole, for fastening cables or pipes.

Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	L x B	F	ØR	l x b	h	h1	e	Form
	057053	13,5...16,5	-	0,5...4	6,5	30,2 x 15	25,2	7,5	12,5	1
	064156	14,0	-	0,7...4	6,5	23 x 19	18,5	7,5	9,0	1
	019044	40,0	-	1,2...2	10...10,2	74,5 x 30	50,0	8,0	34,0	1
	055158	4,2	-	2,8...3,2	6,7	19,1 x 12	9,0	5,5	11,0	2
	018467	13,5	-	2,5	6,5...6,7	21,5 x 15	20,75	5,0	-	3
	106024	42 x 18	-	0,5...2	8,0	28 x 32	59,0	6,0	16,0	3
	061281	4,8	-	0,5...4	6,5	23 x 24	18,0	7,5	-	3
	055053	10,0	-	0,5...4	6,5	23 x 24	18,0	7,5	-	3
	018593	14...16	-	2,5	6,5	22,3 x 15	24,0	7,5	-	3
E	056098	30...44	-	0,5...4	6,5	58,2 x 15	55,0	7,5	-	3
	056261	60,0	-	7...8	11,0	74 x 20	88,0	11,0	-	3
	210309	11,9...12,1	6,9...8,2	1,8...2,2	-	25,42 x 10	17,93	9,0	-	3
C	216263	12,0	-	2,0	6,5...6,7	37,6 x 12	26,0	9,0	16,0	4
	106046	70 x 20	-	0,5...2	8,0	110 x 14	6,0	21,0	-	5
	106044	42 x 27	-	0,5...2	8,0	87,5 x 16	5,0	26,0	-	5
	106026	25 x 50	-	0,5...2	8,0	58 x 14	50,0	6,0	-	6
	106065	27 x 57	-	0,5...3	8,0	57 x 14	-	60,0	-	6
	106025	25 x 50	-	0,5...2	8,0	74 x 14	-	6,0	-	6
	106043	31 x 35	-	0,5...2	8,0	63 x 6	5,0	17,0	-	6
	200573	12...18	-	2,4...2,6	6,5...6,7	32 x 15	28,25	10,0	9,0	7

E = with securing tang for variable bore; C = AR-Bag® anti noise insulation - Bi-injection

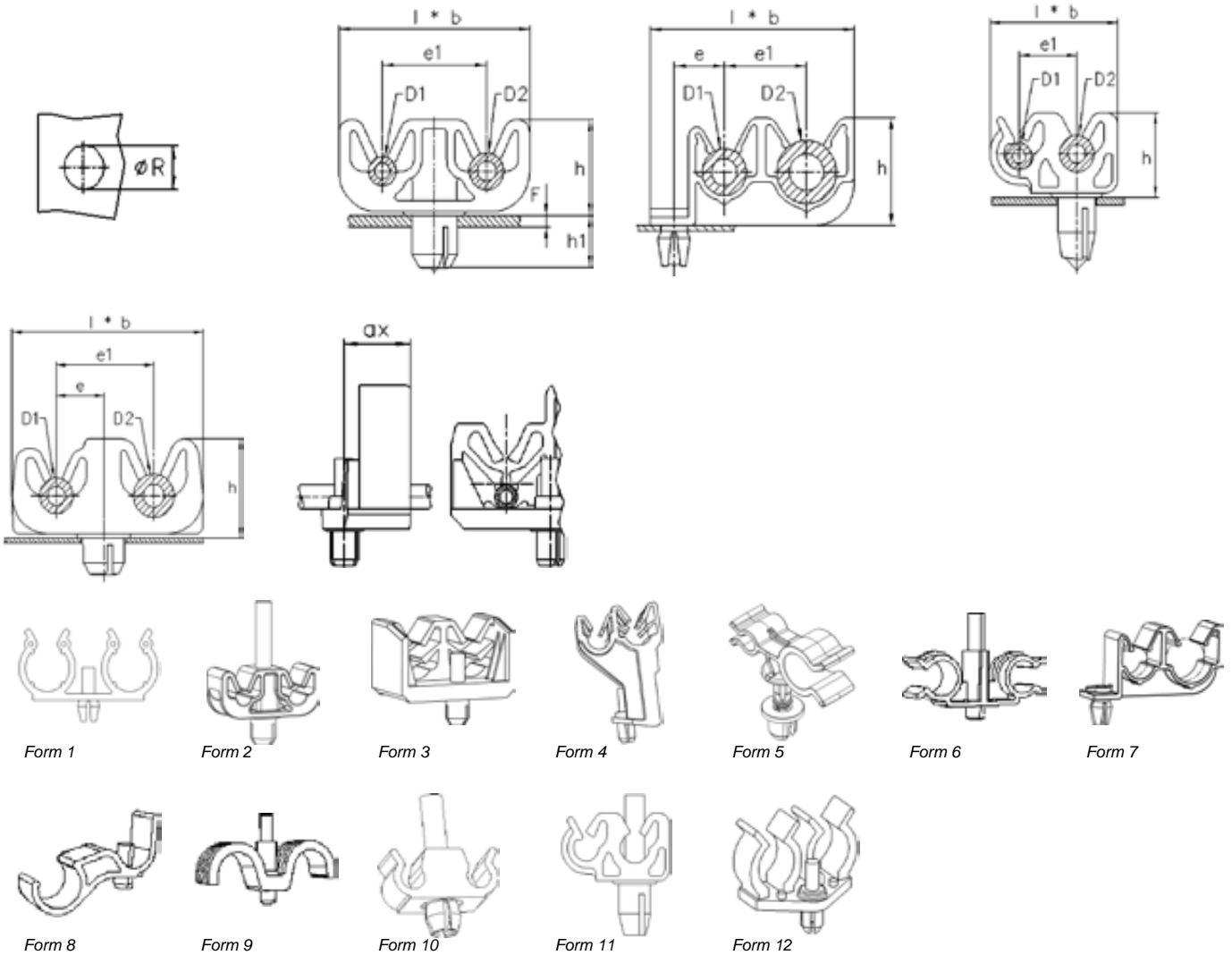
PIPE CLIPS RIVETED INTO A ROUND HOLE 2-WAY

MATERIAL:

Polyoxymethylene modified, polyamide

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

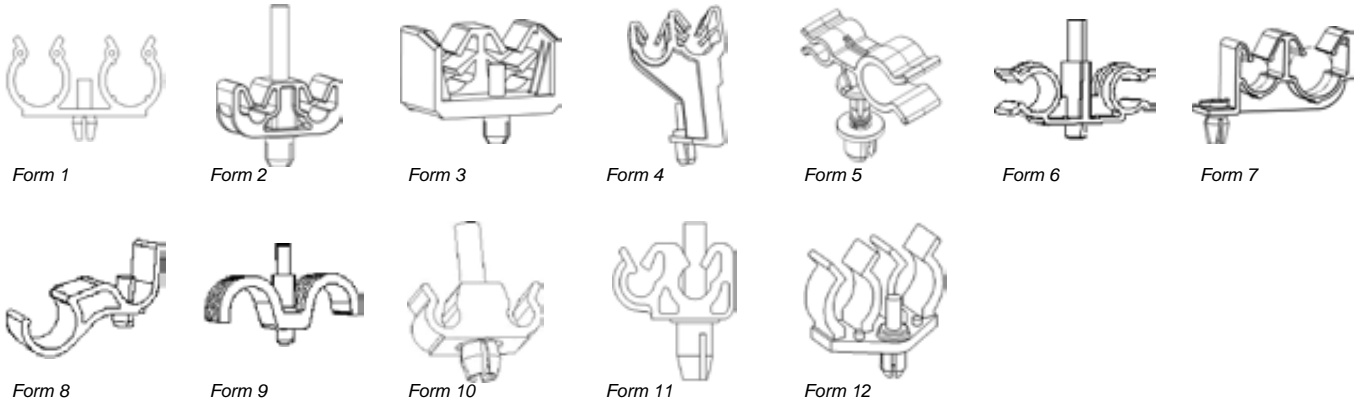
The pin, when inserted into the tubular barrel of the rivet, provides a complete and even clamping of the clip into the panel. The ease of installation (using a manual or automatic impact tool) along with the tightness of the rivet are the key advantages of this fastener system.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	F	ØR	l x b	h	h1	e/ e1 [ax]	Form
	015533	12,5...13,5	12,5...13,5	0,8...1	6,3...6,5	45,5 x 32	21,9	6,5	27,0	1
	064362	3,5...3,8	6,0	5...7	6,45...6,7	31 x 10	14,0	10,5	7,75/ 15,5	2
	020214	4,0	5,0	1...4	6,5...6,7	27,5 x 10	12,5	7,5	15,0	2
	055276	4,7...5,05	4,7...5,05	0,5...2,5	6,4...6,5	26 x 10	17,0	7,5	14,0	2
	064867	4,7...4,9	12,0	5...7	6,5...6,7	35 x 9	20,0	10,5	8/ 19	2
	063392	4,7...4,9	4,7...4,9	0,5...2,5	6,5...6,7	25 x 9,4	15,5	6,0	14,0	2
	063557	4,7...4,9	4,7...4,9	0,5...2,5	6,35...6,7	30 x 10	12,5	6,0	15,0	2
	063664	4,8	4,8	0,5...2,5	6,35...6,7	25 x 9,4	17,0	6,0	14,0	2
	063252	4,7...4,9	6,0	0,5...2,5	6,5...6,7	25 x 9,4	10,0	6,0	14,0	2
	063497	4,7...4,9	5,9...6,1	0,5...2	6,5...6,7	30,5 x 10	14,0	6,0	7,5/ 15,5	2
	063269	4,7...4,9	4,7...4,9	0,5...3	6,5...6,7	25 x 9,4	10,0	6,0	14,0	2
	063184	6,0	6,0	0,5...3	6,5...6,7	25 x 9	10,0	6,0	14,0	2
	063758	6,0	8,0	0,5...2,5	6,5...6,7	34,5 x 10	16,0	6,0	9/ 20	2

PIPE CLIPS RIVETED INTO A ROUND HOLE 2-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	F	ØR	l x b	h	h1	e/ e1 [ax	Form
	063872	5,9...6,1	5,9...6,1	0,5...2,5	6,5...6,7	32 x 10	14,0	7,5	16,0	2
	106016	6,3	6,3	0,5...2,5	8,0	30 x 11,5	12,6	6,0	17,0	2
	063580	7,9...8,1	7,9...8,1	0,5...2,5	6,35...6,7	39,6 x 10	18,9	7,5	22,0	2
	106058	8,0	10,0	0,7...2	8...8,2	36 x 12	21,0	6,0	9,5/ 20	2
	063352	5,9...6,1	8,4...8,6	0,5...2,5	6,35...6,55	35 x 10	16,0	6,0	9/ 20	2
	063353	8,4...8,6	8,4...8,6	0,5...2,5	6,35...6,75	38 x 10	16,0	6,0	22,0	2
	063786	10,0	8,0	0,5...2,5	6,5	41 x 10	21,5	7,5	22,0	2
	061361	4,7...5,05	4,7...5,05	0,7...2,5	6,35...6,5	26,4 x 10,0	17,0	7,5	14,0	2
	063973	4,8...8	4,8...8	0,5...2,5	6,5...6,7	39 x 20	19,0	7,5	17,6 [15,4	3
	064284	4,8...8	4,8...8	0,5...4	6,5...6,7	34,5 x 20	18,5	7,5	15,5 [15	3
	064298	4,8...6	4,8...6	0,5...3	6,5...6,7	28,6 x 20	15,8	7,5	12,5 [15	3
	064262	4,8...10	4,8...10	0,5...2,5	6,5...6,7	45 x 20	22,5	7,5	20 [15	3
	064569	6...10	6...10	0,5...4	6,5...6,7	35 x 20	21,0	7,5	10,5/ 17 [15	3
	063765	10,0	8,0	0,5...4	6,35...6,7	36 x 20	21,5	7,5	18,4 [14	3
	063753	8,0	8,0	0,5...2,5	6,5...6,7	37 x 20	18,9	7,5	18,4 [15	3
	133059	4,8...10,0	10,0...15,0	0,5...4	6,70	45 x 20	30,5	7,75	20 [15	3
	056983	8,0	8...10	1,0	6,35...6,55	31,35 x 24	44,0	7,5	15,0	4
	053899	4,75...5,25	10...11	1...2	6,35...6,55	31 x 10	15,92	8,0	6,5/ 16,5	5
	106017	14...16	14...16	0,5...2,5	8,0	66 x 14	23,0	6,0	40,0	6
	018473	9,4...9,6	9,4...9,6	2,0	6...6,2	38 x 12	18,0	7,5	10,25/ 14,2	7
	020014	10,0	14,0	2,0	6...6,2	46,3 x 12	23,3	9,0	11,3/ 18,5	7
	056183	13...15	13...15	0,5...4	6,5	64,2 x 12	27,5	7,5	20/ 19	7
	106049	17...18	14,5	0,5...2,5	8...8,3	55 x 16	26,0	6,0	-	8
	106056	16,0	16,0	0,5...2	6,5	60 x 15	20,5	6,0	34,5	9
	016037	5,0	5,0	1...2	6,5...6,7	27 x 10	10,5	6,0	14,0	10
	062708	4,0	4,0	0,8...2,5	7,2	20,0 x 10,0	6,2	6,0	7,2	10
	055574	6,5...7	6,5...7	0,7...4	6,35...6,7	20 x 12	11,0	7,5	10,0	10
	055058	4,7...5,05	6...6,2	0,5...4	6,35...6,7	22,2 x 12	13,2	10,5	9,5/ 9,5	11
	056657	12,0	12,0	0,5...3	6,35...6,55	37 x 12	20,5	7,5	18,0	11
	055297	13...15	13...15	0,5...4	6,35...6,7	37 x 20	24,0	7,5	19,14 [15	12

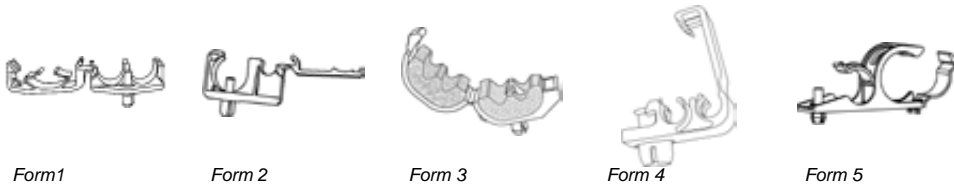
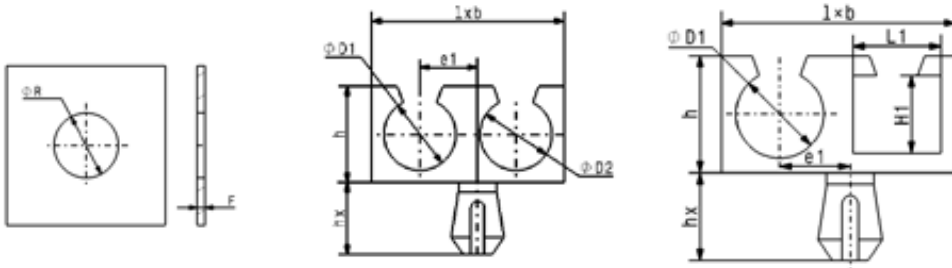
PIPE CLIPS RIVETED INTO A ROUND HOLE 2-WAY - WITH LOCKING ELEMENT

MATERIAL:

Polyamide

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

Double clips with positive locking feature, which are push- riveted into a round hole, for fastening cables or pipes.

REF. 061556: Clip without assembled pin (REF. No. for pin: 055750).

REF. 061860: Clip without assembled pin (REF. No. for pin: 056358).

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2/L1XH1	F	ØR	l x b	h	hx	e1	Form
	061359	4,7...5,05	4,7...5,05	0,7...2,5	6,5	31,5 x 12	17,0	7,5	7,0	1
	055380	13,3...15,3	13,3...15,3	0,5...4	6,5	48 x 26	27,0	7,5	9,0	1
	064155	14,0	14,0	0,5...4	6,5	39 x 19	18,5	7,5	9,6	1
	020603	12,0	12,0	3,5...3,7	8...8,2	46,3 x 12	25,0	12,0	13,4	1
	061551	11,0...12,5	11,0...12,5	0,5 x 4,0	6,5	48,0 x 26,5	15,9	7,5	18,0	1
	106035	5,0	24,3 x 16,3	0,7...3	6,5	48,5 x 12	21,0	6,5	19,5	2
	055094	18,0	8,0	0,5...4	6,5	41 x 20	25,0	7,5	17,0	2
	061211	4,8...8	4,8...8	0,5...4	6,5	34 x 20	24,0	7,5	4,8	3
	081008	9,0	9,0	0,7...0,8	6,3	34 x 20	24,0	7,0	4,75	3
	061556	6...8	6...8	0,7...1,3	9,5	32,2 x 18	14,2	6,5	8,0	4
	061860	8,0	8...10	0,7...1,3	9,5	36 x 36	14,5	6,5	10,0	4
	081744	23...24	34,0	2...2,2	8,4	87 x 20	42,0	8,0	27,5	5

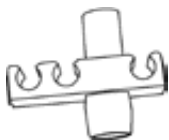
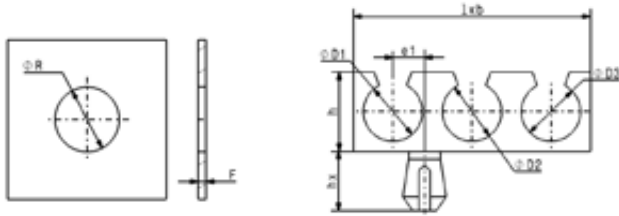
PIPE CLIPS RIVETED INTO A ROUND HOLE 3-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



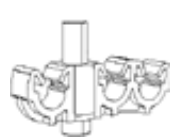
Form 7



Form 8



Form 9



Form 10

Sketches for illustration purposes only, please request latest detailed drawing.

The pin, when inserted into the tubular barrel of the rivet, provides a complete and even clamping of the clip into the panel.

REF. 055398 (Form 3): Owing to its hollow anchor design this clip may alternatively be fastened with a 4.2 mm diameter self-tapping screw.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	F	ØR	l x b	h	hx	e1	Form
	063150	3,5	3,5	3,5	0,5...2,5	6,5	23,5 x 9	5,0	6,0	11,0	1
	106029	8,0	8,0	5,0	0,5...2,5	8,0	45 x 12	13,5	6,0	10,0	2
	106030	8,0	8,0	8,0	0,7...1,5	8,0	47 x 12	15,0	4,5	20,0	2
	056663	4,8...7	4,8...7	13,4	0,7...2,5	6,5	46,9 x 12	19,0	7,5	8,1	2
	064052	8,0	8,0	3,5	0,5...4	6,5	38,5 x 12	16,0	7,5	19,5	2
	018790	4,0	4,0	4,0	1,35...1,65	7,1	36 x 12	12,5	6,0	11,0	3
	055085	4,7...5	4,7...5	6,0	0,7...3	6,5	43,5 x 10	14,0	7,5	8,0	3
	016050	4,7...4,9	4,7...4,9	4,7...4,9	0,5...1	6,5	36 x 12	13,7	4,8	11,0	3
	063988	4,8	4,8	7...8	0,5...2,6	6,5	38,5 x 12	14,0	6,0	11,0	3
	063473	4,8	4,8	4,8	0,5...2,5	6,5	36 x 12	15,5	6,0	11,0	3
	063475	4,8	6,0	6,0	0,5...2,5	6,5	40,5 x 12	14,0	6,0	12,5	3
	063798	4,8	8,0	18...20	0,5...2,5	6,5	53,1 x 12	28,0	6,0	13,6	3
	063477	4,8	4,8	6,0	0,5...2,5	6,5	36,5 x 12	14,0	6,0	11,0	3
	063478	4,8	8,0	8,0	0,5...2,5	6,5	43,6 x 12	18,0	6,0	13,6	3
	063787	4,8	8,0	10,0	0,5...2,5	6,5	44,5 x 12	21,5	7,5	13,5	3
	064692	4,8	4,8	12...14	0,5...4	6,5	38,5 x 12	19,0	7,5	11,0	3
	063556	4,8	4,8	4,8	0,5...2,5	6,5	36 x 12	12,5	6,0	11,0	3
	056573	8,0	8...10	8,0	0,7...3	6,5	45 x 12	21,0	7,5	15,0	3
	061358	8,0	10,0	8,0	0,7...2,5	6,5	45 x 12	18,0	7,5	15,0	3
	063487	8,5	10,0	8,5	0,5...2,5	6,5	51,2 x 12	20,0	6,0	16,0	3
	064967	4,8...8	4,8...8	4,8...8	0,5...4	6,5	50,6 x 20	18,5	7,5	15,5	3
	055450	4,8...6	4,8...6	4,8...6	0,5...4	6,5	41 x 20	16,3	7,5	12,7	3
	055398	5,0	3,5...4	3,5...4	0,5...2	6,5	35 x 12	11,0	5,0	18,0	3

E = legs within the bore for varying diameter hoses

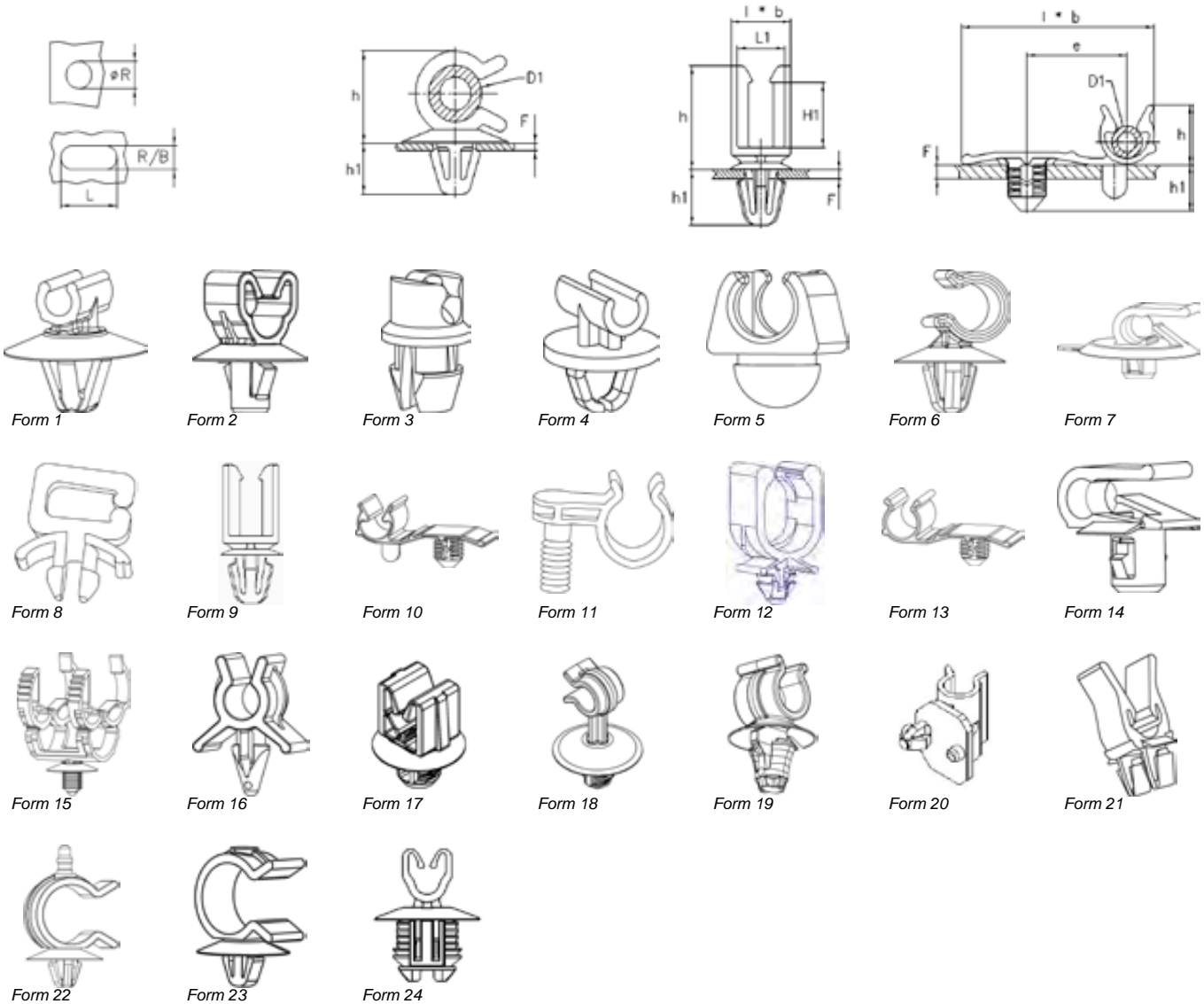
PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Form 5:

For these clips the hemispherical ball is first inserted into the panel hole. On passing through the hole, it shrinks, and then reverts to its original shape by elastic recovery. The part is then locked into the panel using a groove located at the top edge of the ball. For installation of these clips use tool P4-95.

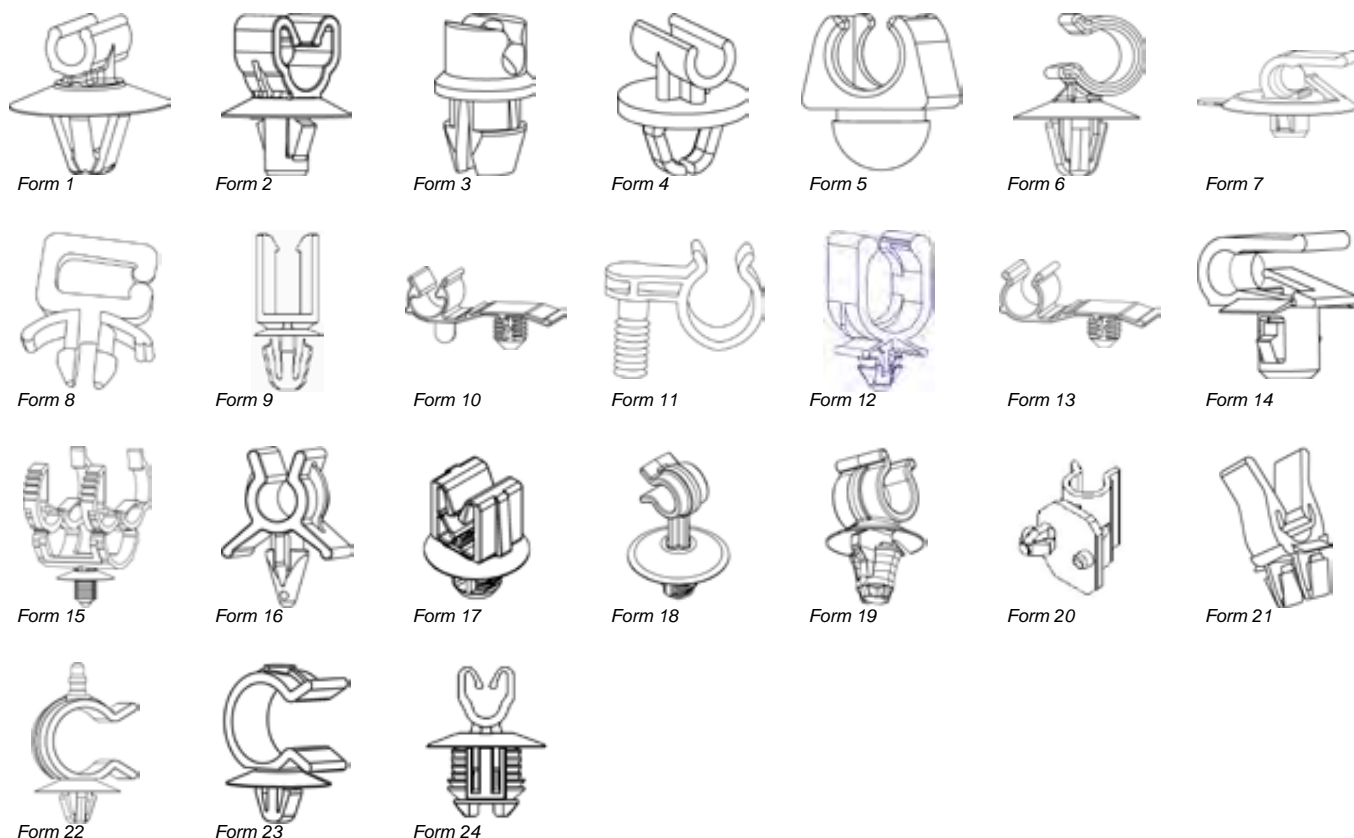
The other clip configurations shown below are installed into a round shaped hole by applying manual pressure.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	F	ØR /LxR/B	l x b	h	h1	e	Form
	016185	3,9...4	0,8...1,5	8...8,3	6,6 x 12	9,5...10,2	8,8...9,5	-	1
	016513	3,2...3,5	0,8	8...8,3	5,8 x 12	9,8	8,8	-	1
	175005	3,9...4,1	0,8...1,5	8...8,3	7,5 x 12	10,3...11	8,8...9,5	-	1
	018441	5,0	0,7...1,3	9,0	9,4 x 13	10...10,6	7,5...8,1	-	1
	175001	5,0	0,8...1,5	8...8,3	7,6 x 12	10,35...11,05	8,8...9,5	-	1
	017175	6,0	1,0	5...5,2	-	18,5	4,7	-	1
	015328	6,9...7,3	2,0	5,2...5,3	12 x 12	15,5	5,5	-	1
	016048	7,5...7,8	0,7...2	6...6,2	10,5 x 10	15,8	8,8	-	1
	015769	7,5	3...3,3	6,5...6,7	10,5 x 10	13,5...13,8	10...10,3	-	1

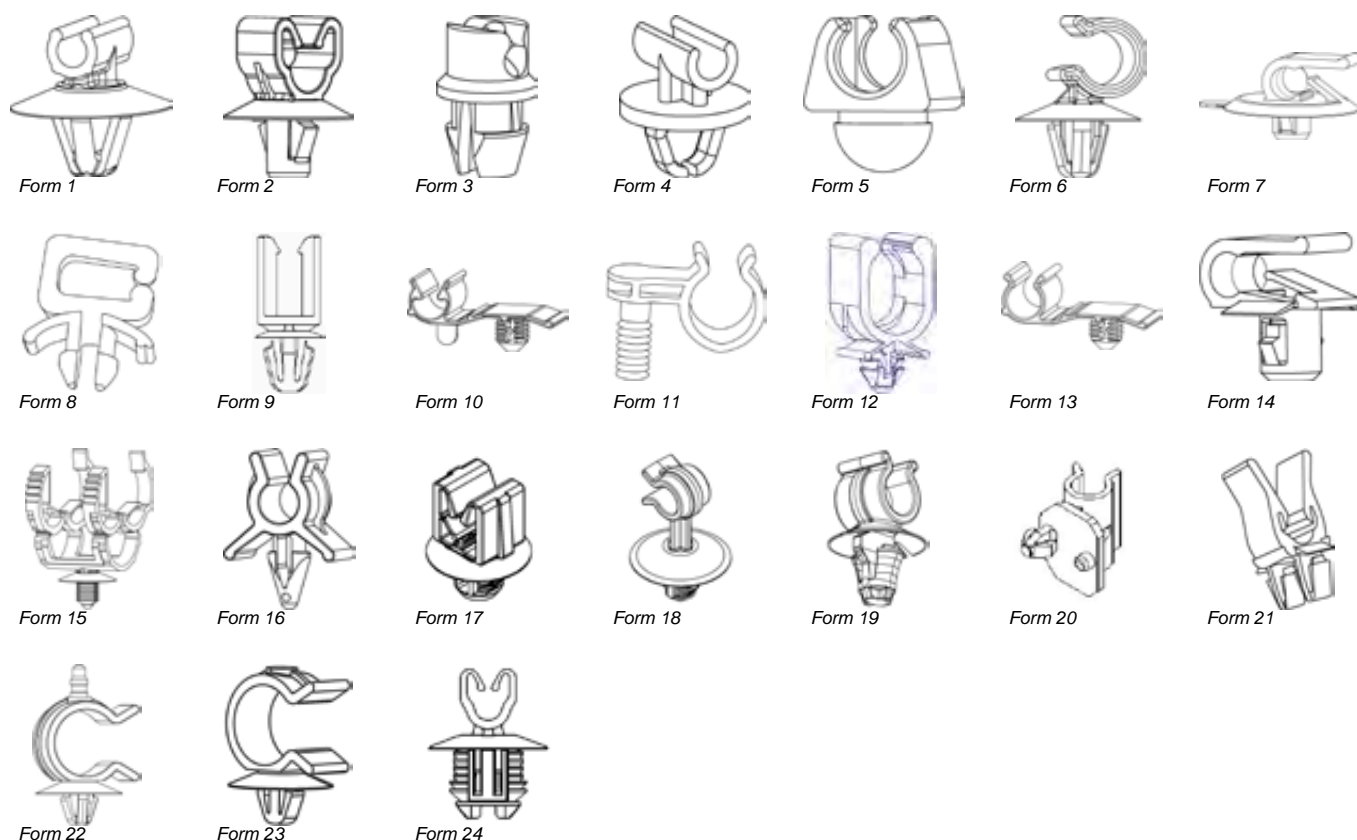
PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	F	ØR /LxR/B	l x b	h	h1	e	Form
	020403	9,5	2,2...2,6	7,1...7,6	18,8 x 8,6	18,7	9,5	-	1
	019050	10...12	0,8...4	6,5...6,7	-	26,0	8,5	-	1
	016982	14,5	0,9...1,1	16,5...17	-	27,0	11,5	-	1
	060980	16,0	1,5	6,5	20 x 12	24,4	8,1	-	1
	018776	16,0	1,5...6	6,5...6,7	-	23,0	10,0	-	1
	014640	16,0	2,8...3,3	6,3...6,45	20 x 12	23,6...24,2	8,4...8,9	-	1
	017739	16,0	0,9...1,1	16,5...17	-	28,0	10,1	-	1
	054478	17...21	0,7...2	6,5	24 x 12	32,0	6,5	-	1
	019015	20,0	2,5	6,5...6,7	-	38,9	7,75	-	1
	055172	20...23	1,5...4	6,5	26,6 x 12	36,4	6,5	-	1
	108130	21...23	0,7...2	6,5	28,5 x 12	30,2	6,0	-	1
	016850	23...24	0,7...3,2	5...5,2	-	35,0	8,2...10,7	-	1
	017924	27,0	0,7...2	6,5...6,7	-	38,0	7,5...8,8	-	1
	132033	9...12	0,7...2	8,2	15,7 x 10	18,5	9,0	-	1
	175171	3,0	0,7...1,2	6,5...6,7	12 x 7,2	8,0	5,9	-	2
	019520	6,3...6,5	0,7...1,7	6,5...6,7	12,7 x 8	14,0	8,2	-	2
	015718	13...13,5	4,75...5	6,5...6,7	21,4 x 10	23,8...24	11,5...11,7	-	2
	013959	2,7...3	0,8...0,9	7...7,2	5,5 x 5,5	4,5	2,5	-	3
	012800	3,5	3,0	7,2...7,4	8 x 8	7,0	8,0	-	3
	012493	3,9...4	0,8	8,0	6,7 x 12	9,5	7,5	-	4
	012135	6,0	1,0	7...7,2	10,2 x 10	7,2	4,8	-	5
	012115	7,0	0,88	10,9...11,1	14 x 12	9,0	6,0	-	5
	013179	7,0	1,7	10,9...11,1	14 x 12	9,0	6,8	-	5
	013121	7,0	1,5	6...6,2	14 x 12	10,8	4,5	-	5
	011787	7,5	0,75	6,9...7,1	12 x 10	8,5	5,0	-	5
	013370	8,0	1,7	10,9...11,1	15 x 12	10,0	6,8	-	5
	016737	9,0	1,6	7...7,2	13,5 x 10	9,5	5,85	-	5
	014547	9,0	0,75	7...7,2	13,5 x 10	13,5	5,0	-	5

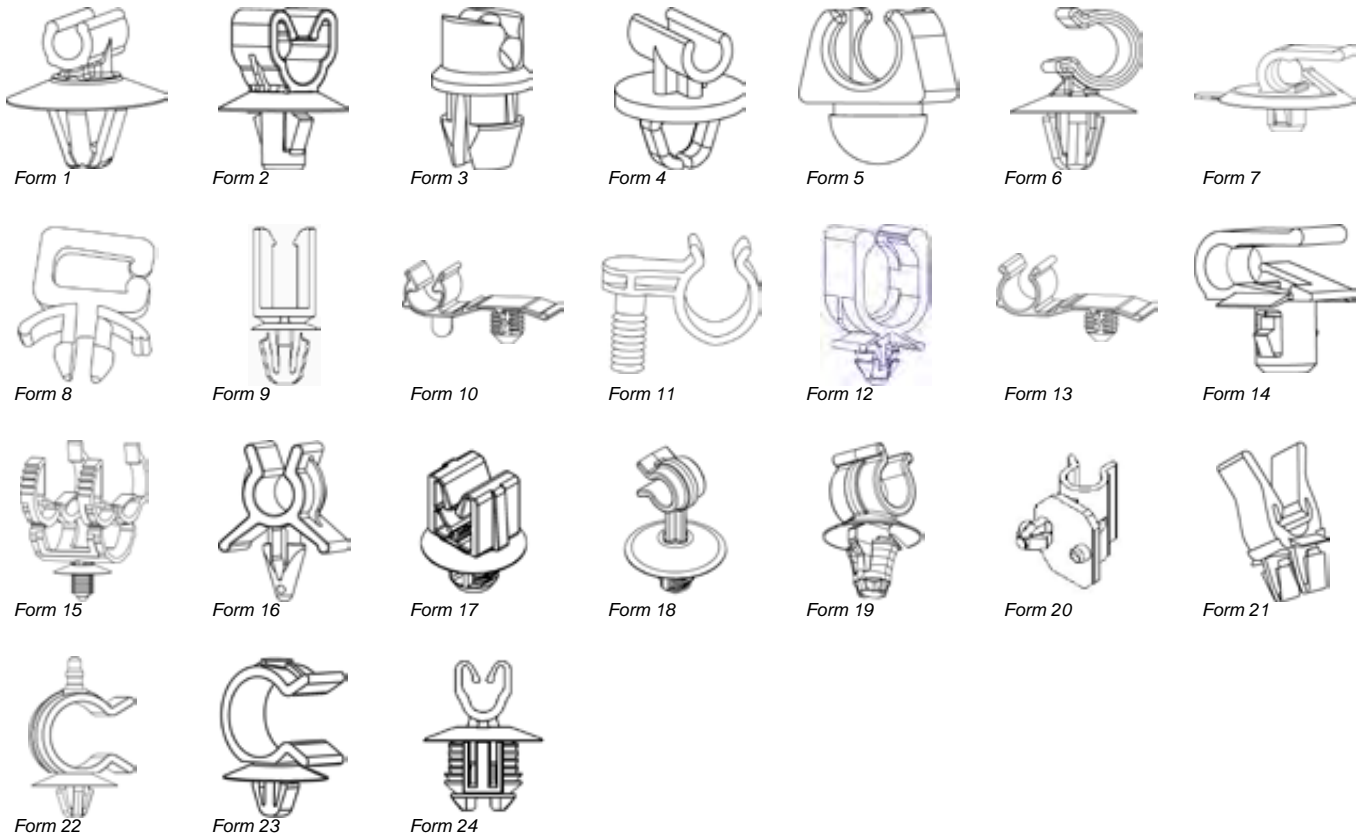
PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	F	ØR /LxR/B	l x b	h	h1	e	Form
	012810	11,0	1,5	7...7,2	16 x 10	16,0	5,5	-	5
	012992	13,0	2,5...2,7	7...7,2	18 x 10	8,0	6,2	-	5
	015732	6,2...6,4	1,2...1,7	6,3...6,8	11,1 x 8	11,1...11,6	7,7...8,2	-	6
	014351	6,2...6,4	0,7...0,9	6...6,2	11,1 x 8	10,9...11,1	7,5...7,7	-	6
	020637	7,5	0,8...1,5	5,5...6,5	12,4 x 10	13...13,7	7,9...8,6	-	6
	175064	7,5...8	0,8...2	6,3...6,5	12,75 x 8	12...13,2	6,8...8	-	6
	201490	7,8...8,5	1,8...2,2	6,5...6,7	16,3 x 12	20,4	8,6	-	6
	019495	7,1...7,6	0,7...0,9	6...6,2	10,6 x 10	12,65...12,85	7,5...7,7	3,0	6
	200953	9,0	0,5...3	6,5...6,7	13,2 x 8	13,8...16,3	7...9,5	-	6
	054198	10...11	0,7...3	6,7	18 x 10	20,7	6,5	-	6
	175043	11...13	1...1,5	6,5...6,7	18 x 10	16,7...17,2	6,6...7,1	-	6
	056184	12,5...13,5	1,5...2,5	6,5	17,3 x 10	30,0	7,5	-	6
	018099	14,0	1,1...1,3	13,8...14,2	22 x 10	26,1	10,7...10,9	-	6
	018141	15...16	0,8...1,5	6,5...6,7	23,75 x 10	26,8...27,5	7,6...8,3	-	6
	200889	16,3...17,3	1,7...2,3	8...8,2	22,9 x 10	31,45...32,05	10,2...10,8	-	6
	055657	17,3...19,3	0,5...2,5	6,5	27,45 x 12	34,5	6,5	-	6
	200608	18...20	1...2	6,5...6,7	25 x 15	27,8...28,8	7,8...8,8	-	6
	200796	25...27	0,8...6	6,5...6,7	-	44,8	11,0	-	6
	202745	9,0	1,5...2,5	6,35...6,7	15 x 10	27,0	6,5	-	6
	019081	3,8...4	0,8...1,8	6...6,2	-	10,9	6,5	-	6
	013255	3,0	0,7	8...8,2	-	8,2	6,5...7	-	7
	020349	6,0	0,8...0,9	6,9	30 x 8	9,8	5,5	-	7
	018741	16 x 12	0,8...6	6,5...6,7	29 x 9	20,5	11,0	-	7
	108070	15,5 x 10	0,5...1,5	6,5	19,5 x 9	13,0	8,5	-	7
	054252	7 x 4,4	0,4...1,5	5,0	11,2 x 2,4	11,3	3,2	-	8
	015529	12 x 15	2,5	9,5...10,5	15 x 12	24,2	13,5	-	9

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY



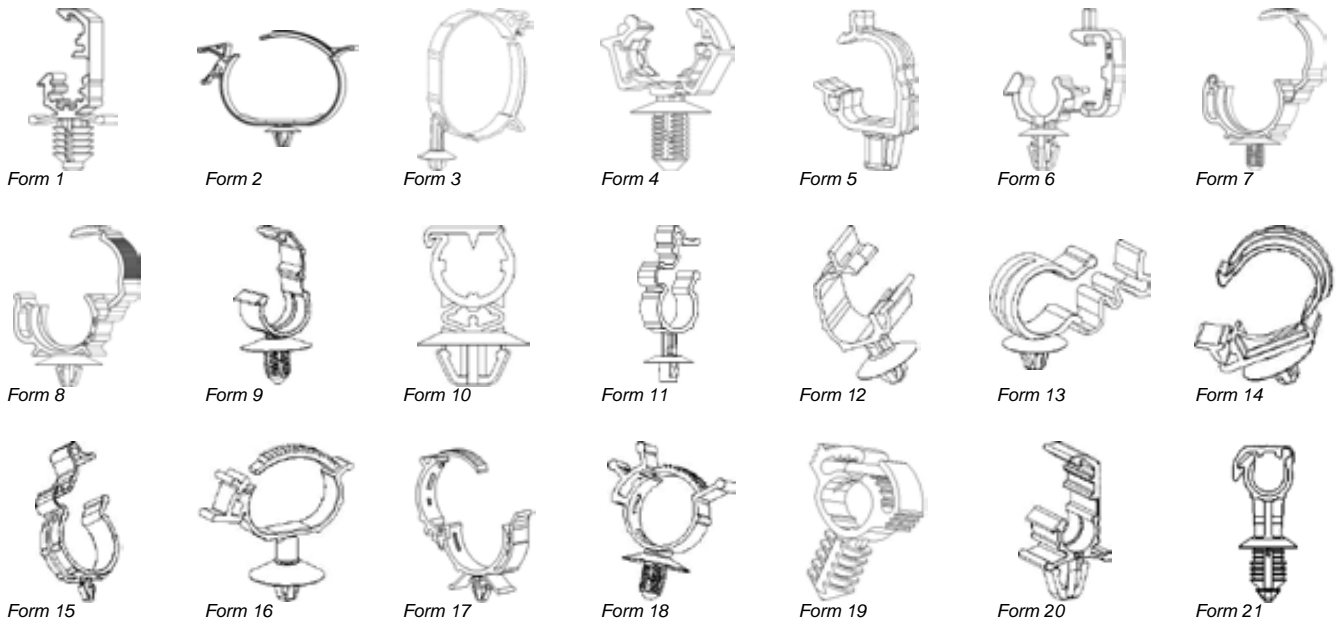
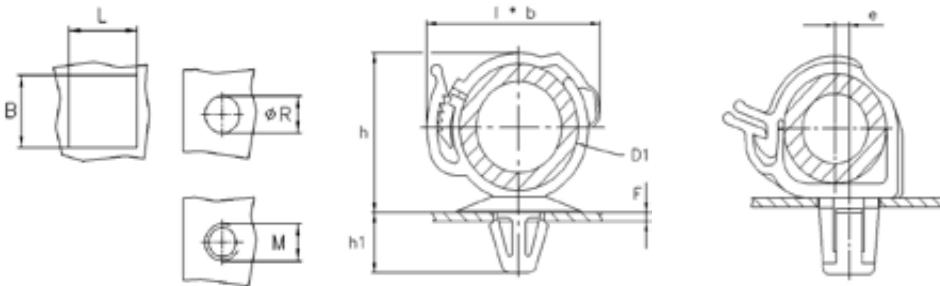
Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	F	ØR /LxR/B	l x b	h	h1	e	Form
	016829	4,3...4,8	0,7...1,5	6,5...6,7	30 x 15	10,0	6,0	15,5	10
	055998	13,5...16	-	6,9	33 x 12	21,5	18,4	18,0	11
	056698	9 x 12	0,7...2,5	6,05...6,4	12 x 14	16,0	8,5	-	12
	019623	14,0	2,5	6,5...6,7	33,3 x 10	20,5	10,5	15,0	13
	019036	7,0	0,7...1,5	6,5...6,7	30 x 15	10,0	6,0	15,5	13
	019644	5,2	3...3,3	7...7,2	17,2 x 8	7,9	8,2	6,0	14
	019550	5,0	0,8...3	10,0	22,0	5,7	8,0	17,0	14
	017646	11...18	1,5...5	6,2...6,3	8,0	-	-	-	15
	200529	10,0	2,0	8...8,2	28,3 x 14	24,0	14,0	-	16
	202005	4,8...6	4,0	9,8...10,4	26,2 x 12	16,9	9,3	-	17
	057399	8...10	0,8...6	6,5	35,5 x 10	25,0	10,5	-	17
	201409	6...6,5	0,5...6	6,5	31 x 8	21,0	10,0	-	18
	204805	7...8	2...3	6,5	24 x 10	14,5	9,7	-	19
	056980	7,8...8,2	2...2,45	6,2	20 x 26	19,0	-	2,0	20
	057378	7,8...8,1	2,5	8,0	37 x 24,5	27,6	11,4	-	21
	015123	15...16	0,8...1,2	6,5...6,7	-	30,2	7,4	-	22
	055956	15,0...16,0	0,67...2,0	6,7	23,75 x 10,0	23,2	7,3	-	23

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY - WITH LOCKING ELEMENT

MATERIAL:
Polyamide

COLOUR:
Black



Sketches for illustration purposes only, please request latest detailed drawing.

Clips pushed into a round hole by simple manual pressure.

Form 2: These clips use multiple notches to provide a gradual clamping action onto the cable/ bundle. The design may include a releasable latch which can be unlocked after clamping.

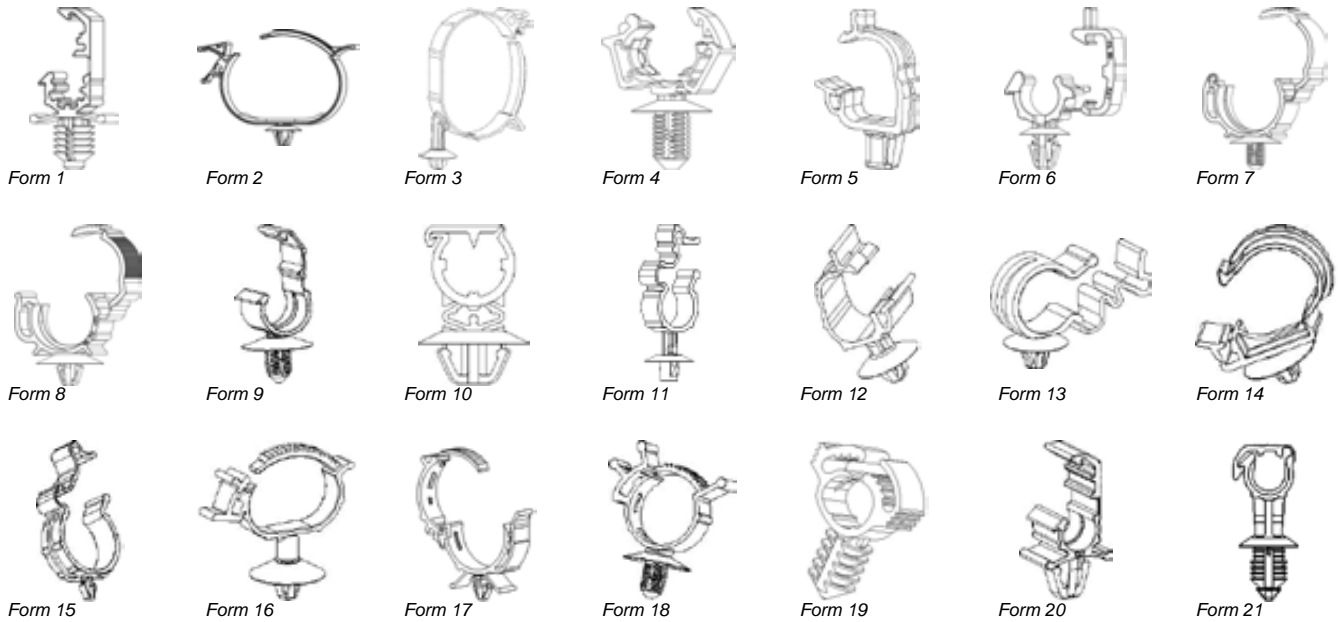
? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	F	ØR/M/LxB	l x b	h	h1	e	Form
	018845	4,9...5,1	0,8...4	6,5...6,7	11,5 x 10	11,95	8,5	-	1
G	017482	6,8...7,4	1...6	6,5...6,7	11,6 x 10	10,5	5,4...10,4	-	1
	082307	55,0	0,5...1,9	11...11,2	85 x 11	75,0	10,5...11,9	-	2
	017009	55,0	0,5...1,9	11...11,2	85 x 10	62,0	10,5...11,9	-	2
	017818	74,0	1...2,5	11...11,2	140 x 12	95,0	11...12,5	-	2
	201145	28...32	4...4,2	8...8,2	67,1 x 20	44,2	11,9	-	2
	108082	47...54	0,7...1,5	8,0	60 x 18	70,0	6,5	20,0	3
G	017095	6,8...10,2	1...6	6,5...6,7	16 x 10	19,1	10,9	-	4
	018030	7...9,5	1...6	6,5...6,7	15,8 x 10	19,0	10,9	-	4
G	017096	11,1...13,3	1...6	6,5...6,7	19,5 x 10	24,0	10,3	-	4
	017578	11,5...13	1...6	6,5...6,7	19 x 10	24,0	10,3	-	4
G	017097	15,8...18,3	1...6	6,5...6,7	39,5 x 10	29,6	10,5	-	4
	017737	16...18,5	1...6	6,5...6,7	26,5 x 10	29,3	13,5	-	4
	108179	18,0	1,2...1,5	11 x 11	33 x 16	24,0	13,0	2,5	5

G = for corrugated tube
*NW13

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY - WITH LOCKING ELEMENT



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	ØR/M/LxB	l x b	h	h1	e	Form
	018459	4,5	2,3...2,5	5...5,2	9,5 x 8	13,7	6,2	-	6
	200358	9,55	2,6...2,8	5,7...5,8	25,8 x 10	16,65	8,6...8,8	-	6
	225553	9,5	1,8	9...9,2	21,4 x 12	18,74	9,7	-	6
G	019778	25,1...25,9	1...6	6,5...6,7	37,5 x 20	31,0	10,5	-	7
	204496	22,6...23,4	0,8...6	6,5...6,7	34,4 x 20	29,4	12,75	-	7
G	202686	33,5	-	M10	39 x 20	39,5	13,5	-	7
G	019412	12,6...13,2	2,5	6,5...6,7	22,4 x 18	17,8	9,0	-	8
G	082578	15,5...16,1	0,7...0,9	6,5...6,7	28 x 20	22,6	9,0	-	8
G	018480	20,6...21,4	2...3,7	6,5...6,7	31 x 20	27,0	8,8...10,5	-	8
	018699	21,0	0,8...2,5	6,5...6,7	31 x 20	27,0	7,6...9,3	-	8
G	019670	22,6...23,4	0,8...2,5	6,5...6,7	33 x 20	30,0	7,6...9,3	-	8
	018309	22,6...23,4	0,8...2,5	6,5...6,7	32 x 20	30,0	6,5...6,7	-	8
	018700	29,0	0,8...2,5	6,5...6,7	40 x 20	35,5	7,6...9,3	-	8
G	017878	31...31,8	0,8...2,5	6,5...6,7	42 x 20	38,0	7,6...9,3	-	8
G	175072	31...31,8	2,8...4	7...7,3	42 x 20	39,0	9,6...10,8	-	8
	017955	38,0	2,5	8...8,2	47 x 20	48,5	11,0	-	8
	206585	32...38	1,8...2,2	6,5...6,7	70,1 x 20	45,5	8,3	-	8
G	018890	15,5...16,1	2,5	6,5...6,7	25,5 x 20	20,9	9,0	-	8
G	017521	20,6...21,4	0,8...2,5	6,5...6,7	31 x 20	28,0	7,6...9,3	-	8
G	017529	25,1...25,9	0,8...2,5	6,5...6,7	37 x 20	32,5	7,6...9,3	-	8
	020726	34...35	0,8...2,5	6,5...6,7	45,3 x 20	42,4...44,1	7,6...9,3	-	8
G	200326	15,5...16,1	2,0	6,5...6,7	25,5 x 20	22,76	9,3	-	8
G	200325	20,6...21,4	0,8...1,5	6,5...6,7	31 x 20	26,5...27,2	7,6...8,3	-	8
G	200324	25,1...25,9	0,8...1,5	6,5...6,7	37 x 20	31...31,7	7,6...8,3	-	8
	201850	27,0	2...3	8...8,2	40 x 20	33,0	10,3	-	8
G	017713	9,6...10,2	1...6	6,5...6,7	13,5 x 15	17,0	10,5	-	9
G	019936	12,6...13,2	0,8...6	8...8,2	18,3 x 15	19,7	11,0	-	9
G	017714	12,6...13,2	1...6	6,5...6,7	18,3 x 15	19,7	10,5	-	9
G	017600	15,5...16,1	1...6	6,5...6,7	22 x 20	23,0	10,5	-	9
G	018833	29,0	1...2	7,0	36 x 14,5	36,5	11,0	-	9
	017151	12,7	1,3...1,9	13,6	19,5 x 12	26,8	9,0	-	10
	019835	15,0	2...2,5	6,5...6,7	24 x 10	35,5	7,3	-	11
	017950	23,0	0,7...2,5	8...8,2	29 x 12	34,95...36,75	9,2...11	-	11
	055367	26,0	0,65...2,5	6,35...6,7	33 x 12	62,5	6,7	-	11

G = for corrugated tube
*NW13

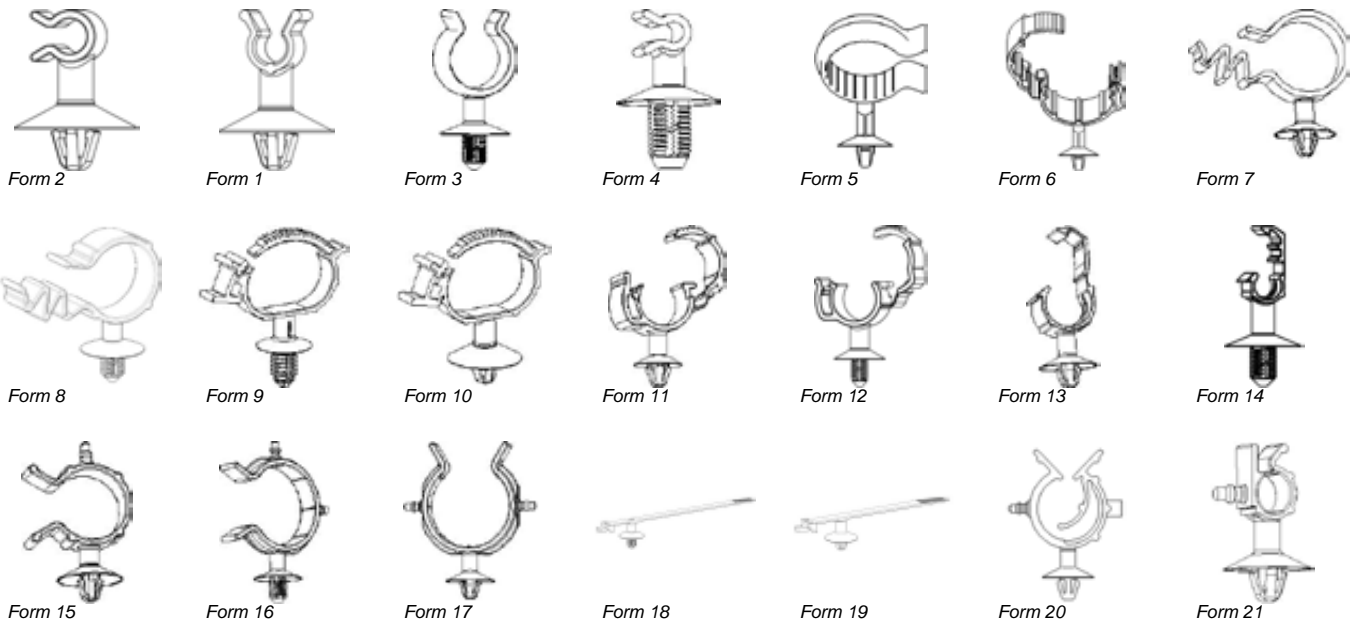
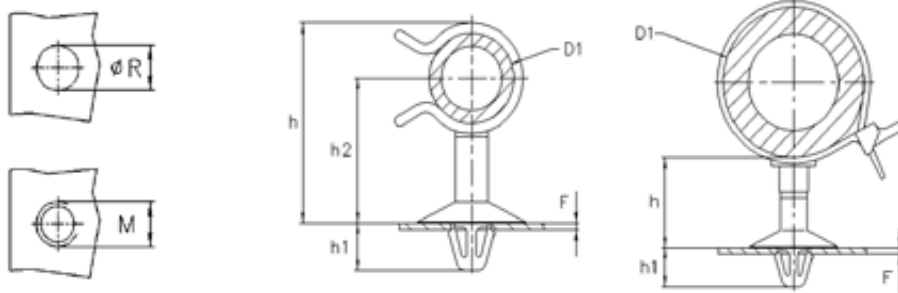
PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY SWIVEL

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

This type of assembly consists of a tube/ cable clip plus a mounting adaptor, they are joined by means of their male and female connecting features. The clips swivel, when assembled together, allowing cables or tubes to be fastened and oriented in any desired direction.

The parts referred to below may contain additional elements not shown on the sketches opposite.

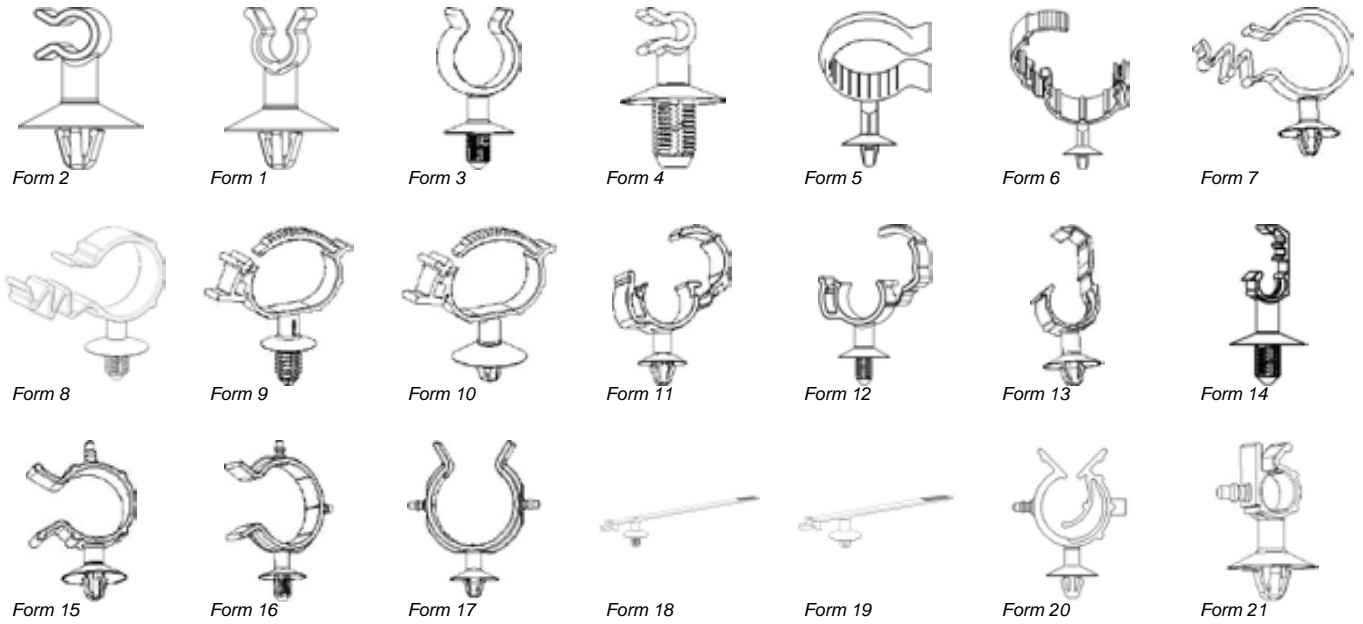
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	F	ØR / M	h	h1	h2	Form
	081791	6...6,5	0,5...3	6,3...6,7	20,2...20,7	7,3...9,8	13,2...15,7	1
	081580	7,2...7,5	0,5...3	6,3...6,7	20,8...23,3	7,3...9,8	13,8...16,3	1
	081525	10...12	0,8...2	6,5...6,7	26...27,2	7,3...8,5	17...18,2	1
	081727	12...13	0,5...3	6,3...6,7	27,7...30,2	7,3...9,8	16,7...19,2	1
	082549	13...14	0,5...3	6,5...6,7	29,2...31,7	7...9,5	17,2...19,7	1
	081418	13...14	0,5...3	6,3...6,7	29,2...31,7	7,3...9,8	17,2...19,7	1
	082528	13...14	0,7...2	6,35...6,7	28,7...30	7,3...8,5	16,7...18	1
	081471	16...18	0,5...3	6,3...6,7	31,7...34,2	7,3...9,8	18,7...21,2	1
F	082509	16...18	0,7...2	6,35...6,7	41,2...42,5	7,3...8,5	28,2...30,5	1
F	082518	16...18	0,8...2	6,5...6,7	51,8...53	7,3...8,5	38,8...40	1
F	082089	16...18	0,8...2	6,5...6,7	42,8...44	7,3...8,5	29,8...31	1
	081301	18...20	0,8...2	6,5...6,7	35...36,2	7,3...8,5	21...22,2	1
F	082576	16...18	0,5...3	6,5...6,7	45,2...47,7	7,3...9,8	32,2...34,7	1
	082568	25...27	1,0	11...11,2	44,7	12,7	25,2	1
	081624	28...30	0,8...2	6,5...6,7	49...50,2	7,3...8,5	26,5...27,7	1
	081186	29...30	0,7...2	6,6...6,8	50,2	6,5	27,2	1
	061240	29...33	0,8...2	6,6...6,8	49,4...50,6	7,3...8,5	27,2	1

E = with securing tang for variable bore; F = with connector; G = for corrugated tube

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY SWIVEL

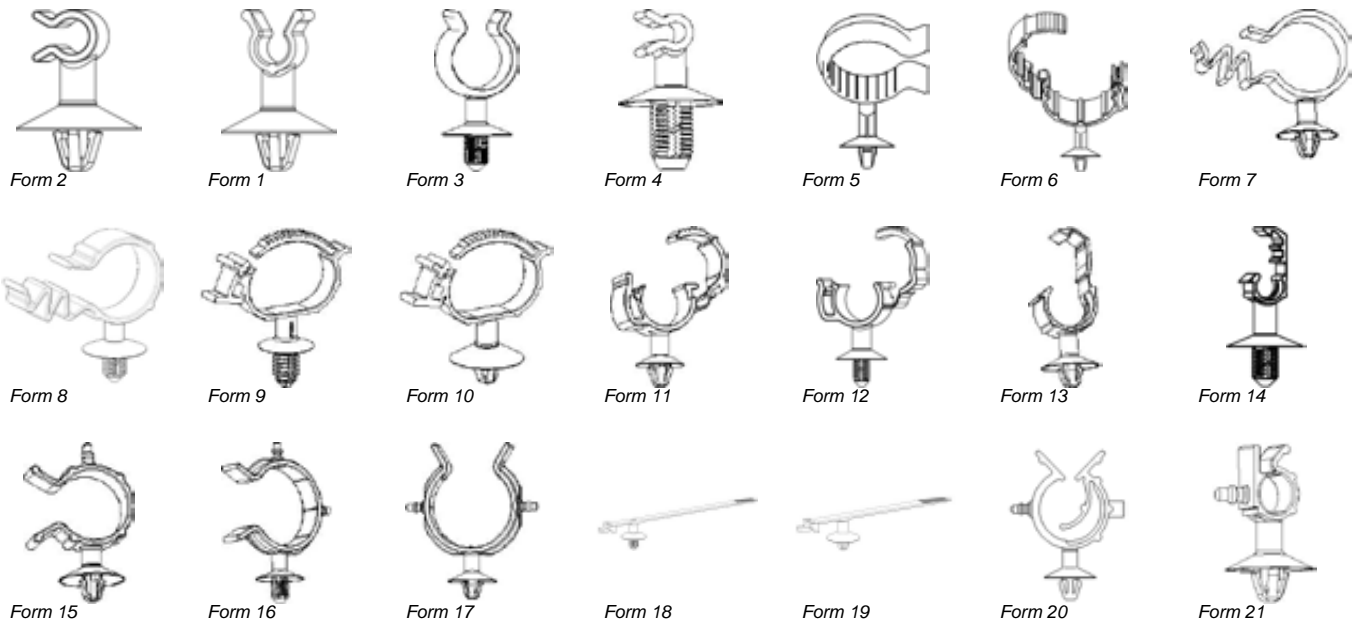


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	ØR /M	h	h1	h2	Form
	081794	35...38	0,8...2	6,5...6,7	55,5...56,7	7,3...8,5	29,5...30,7	1
	061310	20...22	0,7...2	6,2...6,4	37,5...40,9	8,0	21,5...24,9	1
	061395	16...18	0,5...3	6,35...6,7	31,7...34,7	7...9,5	19,7...22,7	1
	081301	18...20	0,8...2	6,5...6,7	35...36,2	7,3...8,5	21...22,2	1
	081525	10...12	0,8...2	6,6...6,7	26...27,2	7,3...8,5	17...18,2	1
	206612	12...13	0,7...2	6,35...6,7	27,2...28,5	7,2...8,5	16,2...17,5	1
	204055	20...22	0,8...2	6,5...6,7	39,55...40,75	7,3...8,5	24,55...25,75	1
E	081405	6...10	0,8...2	6,5...6,7	27,3...28,5	7,3...8,5	19,8...21	2
F	082473	6...6,5	0,7...2	6,35...6,7	30,2...31,5	7,2...8,5	25,4...26,7	2
	082224	6...6,5	0,5...3	6,3...6,7	17,7...20,2	7,3...9,8	13,2...15,7	2
	082514	6...6,5	0,8...1,8	6,5...6,7	19,7...20,7	7,3...8,3	15,2...16,2	2
	081801	6...6,5	0,7...2	6,35...6,7	17,2...18,5	7,2...8,5	12,7...14	2
	081218	7,8...8,5	0,8...2	6,5...6,7	19,9...21,5	7,3...8,5	14,7...15,9	2
	081722	4...4,5	0,5...3	6,3...6,7	15,7...18,2	7,3...9,8	12,2...14,7	2
	081542	4,3...5,2	0,7...2	6,6...6,8	17,55	6,5	14,2	2
	081723	4,3...5,2	0,7...2	6,35...6,7	15,55...16,85	7,2...8,5	12,2...13,5	2
	081655	4,3...5,2	0,5...3	6,3...6,7	16,05...18,55	7,3...9,8	12,7...15,2	2
	081266	4,3...5,2	0,8...2	6,5...6,7	16,85...18,05	7,3...8,5	13,5...14,7	2
	061485	6...10	0,7...2	6,5...6,7	25,2	6,5	17,7	2
	081339	6...6,5	0,5...3	6,3...6,7	17,7...20,2	7,3...9,8	13,2...15,7	2
	131178	6...6,5	0,7...2	6,35...6,7	17,2...18,5	7,2...8,5	12,7...14	2
	081364	6...6,5	0,8...2	6,5...6,7	19,5...20,7	7,3...8,5	15...16,2	2
	082532	7,8...8,5	0,7...2	6,6...6,8	20,45	6,5	15,25	2
	081710	8...9	0,5...3	6,3...6,7	19,7...22,2	7,3...9,8	14,2...16,7	2
	081437	9,5...10,5	0,8...2	6,5...6,7	23,5...24,7	7,3...8,5	16,75...17,95	2
	081476	11...13	0,8...2	6,5...6,7	25...26,2	7,3...8,5	17,5...18,7	2
	081631	11...13	0,7...2	6,35...6,7	22,7...24	7,2...8,5	15,2...16,5	2
	061208	11...13	0,7...3	6,35...6,7	26,9...29,2	7,2...9,5	19,8	2
	061346	13...14	0,5...3	6,35...6,76,5	34,0	7...9,5	24,5...27	2
	061490	13...14	0,5...3	6,35...6,7	25,2...27,7	7...9,5	16,7...19,2	2
	082533	14...15	0,7...2	6,6...6,8	28,55	6,5	19,55	2
	082219	14...15	0,8...2	6,5...6,7	28...29,2	7,3...8,5	19...20,2	2
	082536	15...16	0,7...2	6,35...6,7	29,4...30,7	7,2...8,5	19,4...20,7	2
	082090	15...16	0,5...1,3	6,3...6,7	27,7...30,2	7,3...9,8	17,2...19,7	2
	081860	18...20	0,5...3	6,3...6,7	30,7...33,2	7,3...9,8	18,7...21,2	2
	081909	16...18	0,8...2	6,5...6,7	30...31,2	7,3...8,5	20...21,2	2
	081422	19...24,5	0,5...3	6,3...6,7	30,9...33,4	7,3...9,8	19,3...21,8	2
	061292	20...22	0,7...2	6,35...6,7	31,2...32,5	7,2...8,5	19,2...20,5	2
	155056	22,0	0,8...2	6,5	-	7,3...8,5	-	2

E = with securing tang for variable bore; F = with connector; G = for corrugated tube

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY SWIVEL

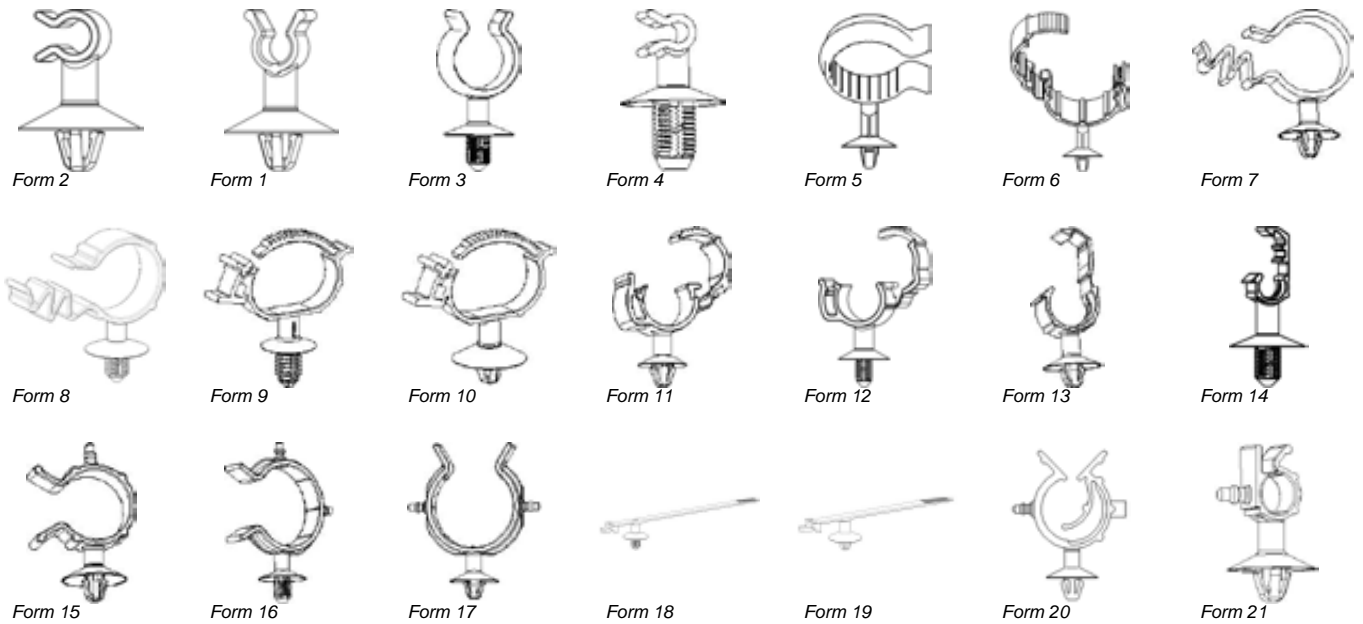


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	ØR /M	h	h1	h2	Form
	082230	22...24	0,8...2	6,5...6,7	38,8...40	7,3...8,5	25,8...27	2
	082378	38...45	0,5...3	6,3...6,7	55,7...58,2	7,3...9,8	32,2...34,7	2
	082231	48...53	0,8...2	6,5...6,7	68,7...69,9	7,3...8,5	39,95...41,15	2
	061665	8,0...9,0	0,5...3,0	6,35...6,7	22,5	6,8	17,0	2
	081790	6...6,5	0,8...6	6,5...6,7	21,4	10,5	14,4	3
	081612	7,2...7,5	0,8...6	6,5...6,7	22,0	10,5	15,0	3
	082067	7,2...7,5	0,8...6	6,5...6,7	38,5	10,5	31,5	3
F	201069	10...12	0,8...6	6,5...6,7	37,3	10,5	28,3	3
	081577	13...14	0,8...6	6,5...6,7	30,4	10,5	18,4	3
F	081694	13...14	0,8...6	6,5...6,7	47,6	10,5	35,6	3
	081876	13...14	0,8...6	12...12,2	30,4	12,1	18,4	3
	082522	16...18	0,8...6	6,5...6,7	32,9	10,5	19,9	3
	081442	18...20	0,8...6	6,5...6,7	36,1	10,5	22,1	3
	081474	25...27	0,8...6	6,5...6,7	44,9	10,5	25,4	3
	081517	29...30	0,8...6	6,5...6,7	50,6	10,5	27,6	3
	201447	29,0...33,0	0,8...6,0	6,5...6,7	50,36	10,5	27,36	3
	200895	7,8...8,5	0,8...6,0	4,8...5,2/6	21,0	8,6	15,8	4
	082467	0,8...6	0,8...6,0	12...12,2	20,9	12,1	15,4	4
	201372	4...4,5	0,8...6	7,8...8,2	16,9	12,5	13,4	4
	082560	4,3...5,2	0,8...6,0	4,8...5,2/6	17,25	8,6	13,9	4
F	081498	6...6,5	0,8...6	6,5...6,7	27,1	10,5	22,6	4
F	081809	9,5...10,5	0,8...6	6,5...6,7	41,1	10,5	34,35	4
	081963	7,8...8,5	0,8...6	6,5...6,7	21,0	10,5	15,8	4
F	201357	8...9	0,8...6	6,5...6,7	39,8	10,5	23,8	4
F	081802	4,3...5,2	0,8...6	6,5...6,7	25,45	10,5	22,3	4
F	082356	4...4,5	0,8...6	4,8...5,2/6	26,9	8,6	23,4	4
	081532	4...4,5	0,8...6	6,5...6,7	17,0	10,5	13,4	4
	081984	4,3...5,2	0,8...6	6,5...6,7	17,95	10,5	14,6	4
	082051	48...53	0,8...6	6,5...6,7	67,0	10,5	38,25	4
F	081736	6...6,5	0,8...6	6,5...6,7	36,1	10,5	31,6	4
	081484	6...6,5	0,8...6	6,5...6,7	20,8	10,5	16,3	4
	081466	6...6,5	0,8...6	6,5...6,7	18,9	10,5	14,4	4
	081657	8...9	0,8...6	6,5...6,7	24,8	10,5	24,8	4
	081395	11...12	0,8...6	6,5...6,7	26,0	10,5	18,6	4
	081740	11...13	0,8...6	6,5...6,7	24,4	10,5	16,9	4
	081696	13...14	0,8...6	6,5...6,7	25,8...26,8	10,5	17,9...18,4	4
	081516	13...14	0,8...6	6,5...6,7	26,4...26,9	10,5	17,9	4
	081570	15...16	0,8...6	6,5...6,7	24,4...28,4	10,5	18,4	4

E = with securing tang for variable bore; F = with connector; G = for corrugated tube

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY SWIVEL

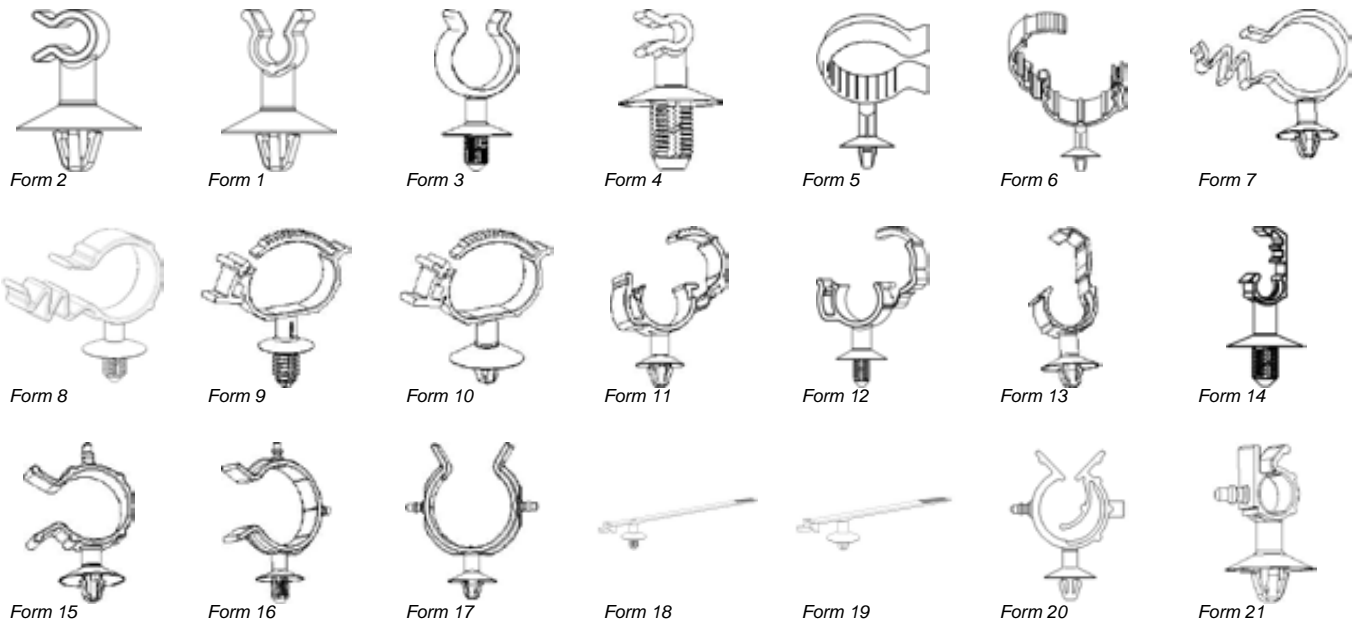


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	ØR /M	h	h1	h2	Form
F	082252	15...16	0,8...6	4,8...5,2/ 6	45,4	8,6	34,9	4
	081776	16...18	0,8...6	6,5...6,7	31,1	10,5	21,3	4
	082023	18...20	0,8...6	6,5...6,7	30,9...31,9	10,5	19,9	4
F	082689	19...24,5	0,8...6	6,5...6,7	39,4	10,5	30,9	4
F	082370	19...24,5	0,8...6	6,5...6,7	53,9	10,5	44,4	4
	081510	19...24,5	0,8...6	6,5...6,7	33...34,75	10,5	20,5	4
F	082105	20...24,5	0,8...6	6,5...6,7	41,3	10,5	29,3	4
	223715	15...16	0,8...6	6,5...6,7	28,0	12,75	17,5	4
G	212699	28...30	1,3...2,5	6,5...6,7	-	7,8...9	-	5
G	209999	33...35	1,3...2,5	6,5...6,7	-	7,8...9	-	6
G	212179	33...38	1,3...2,5	6,5...6,7	-	7,8...9	-	6
	081447	22,0	0,8...2	6,5...6,7	36...37,2	7,3...8,5	23...24,2	7
	200845	25,0	0,8...2,0	6,5...6,7	41,0	7,3...8,5	26,5	7
	082476	14,0	0,5...3	6,3...6,7	30,2...32,7	7,3...9,8	21,2...23,7	7
	213653	25,0	0,5...3	6,3...6,7	36,7...39,2	7,3...9,8	22,7...25,2	7
	081664	14,0	0,8...6	6,5...6,7	27,9	10,5	18,9	8
	082546	22,0	0,8...6	6,5...6,7	37,3	10,5	24,3	8
	082464	25,0	0,8...6	6,5...6,7	38,4	10,5	23,9	8
	082109	14,0	0,8...6	4,8...5,2/6	27,9	8,6	18,9	8
	082043	16...22	0,8...6	6,5...6,7	12,13	10,5	-	9
F	082408	16...22	0,8...6	6,5...6,7	35,5	10,5	-	9
	082406	10...14	0,8...6	6,5...6,7	12,2	10,5	-	9
F	216345	16...22	0,8...6	6,5...6,7	35,8	10,5	-	9
	081935	10...14	0,5...3	6,3...6,7	13,2...15,7	7,3...9,8	-	10
	081997	10...14	0,8...2	6,5...6,7	12,3...13,5	7,3...8,5	-	10
	201328	17,0	0,7...2	6,35...6,7	32,5...33,8	22,2...23,5	22,2...23,5	11
	082048	17,0	1,0	11...11,2	30,3	12,7	20,0	11
G	082210	25,1...25,9	0,5...3	6,3...6,7	41,65	7,3...9,8	26,45...28,95	11
	082126	33...38	0,8...2	6,5...6,7	53,0	7,3...8,5	32,8...34	11
	200398	33...35	0,8...2	6,5...6,7	52,8...54,5	7,3...8,5	32,8...34	11
	202279	14...15	0,8...6	4,8...5,2/ 6	27,8	8,6	19,05	12

E = with securing tang for variable bore; F = with connector; G = for corrugated tube

PIPE CLIPS PRESSED INTO A ROUND HOLE 1-WAY SWIVEL



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	ØR /M	h	h1	h2	Form
	081905	17,0	0,8...6	6,5...6,7	31,5	10,5	21,2	12
G	205766	20,6...21,4	0,8...6	6,5...6,7	34,2	10,5	21,9	12
G	082153	9,6...10,2	1,65...1,85	20...20,2	23,25...23,45	10,85...11,05	16,3...16,5	13
G	082377	15,5...16,1	0,8...2	6,5...6,7	31,3...32,5	7,3...8,5	21,1...23,3	13
G	082593	9,6...10,2	1,5...1,8	16...16,2	21,5	10,6	16,15	13
G	082194	6,8...7,4	0,8...6	4,8...5,2/ 6	21,4	8,6	15,95	14
G	082483	6,8...7,4	0,8...6	6,5...6,7	21,4	10,5	15,95	14
GF	081856	6,8...7,4	0,8...6	6,5...6,7	30,94	10,5	25,65	14
G	082695	6,8...7,4	0,8...6	6,5...6,7	21,3	10,5	15,85	14
G	082451	6,8...7,4	0,8...6	7,8...8,2 /10	21,4	12,5	15,95	14
G	081998	15,5...16,1	0,8...6	6,5...6,7	29,6	10,5	20,4	14
	081555	23...25	0,5...3	6,3...6,7	38,7...41,2	7,3...9,8	24,7...27,2	15
	081608	34...36	0,8...6	6,5...6,7	50,6	10,5	30,6	16
E	221701	16...24	0,8...6	6,5...6,7	40,1	10,5	24,7	16
	082131	34...36	0,8...2	6,5...6,7	57,7...58,6	7,3...8,5	31,7...32,6	17
	082567	8...33	0,8...6	6,5...6,7	13,4	10,5	-	18
	201351	8...33	0,8...6	6,5...6,7	12,15	10,5	-	18
	082584	8...50	0,8...6	6,5...6,7	13,8	10,5	-	18
	082597	8...20	0,8...6	6,5...6,7	13,4	10,5	-	18
F	082625	8...20	0,8...6	6,5...6,7	21,8	10,5	-	18
	206388	8...33	0,8...6	4,8...5,2/ 6	12,15	8,6	-	18
	082239	8...20	0,8...2	6,5...6,7	25,2...16,5	7,3...8,5	-	19
F	081910	8...20	0,8...2	6,5...6,7	23,3...24,5	7,3...8,5	-	19
	200992	8...50	0,8...2	6,5...6,7	13,7...16,5	7,3...8,5	-	19
	081993	46...75	0,8...2	6,5...6,7	15,2...16,5	7,3...8,5	-	19
	219033	13...14	0,8...2	6,5...6,7	35,3...36,5	7,2...8,7	31,3...22,5	20
E	213211	6...10	0,7...2	6,55...6,75	28,05	6,5	18,05	20
E	081387	16...24	0,8...2	6,5...6,7	48,7	7,2...8,7	24,9...26,2	20
	082541	38...45	0,8...2	6,5...6,7	66,8...68	7,3...8,5	35,8...37	20
	081233	7,8...8,5	0,8...2	6,5...6,7	26,6...27,8	7,3...8,5	15,6...16,8	21

E = with securing tang for variable bore; F = with connector; G = for corrugated tube

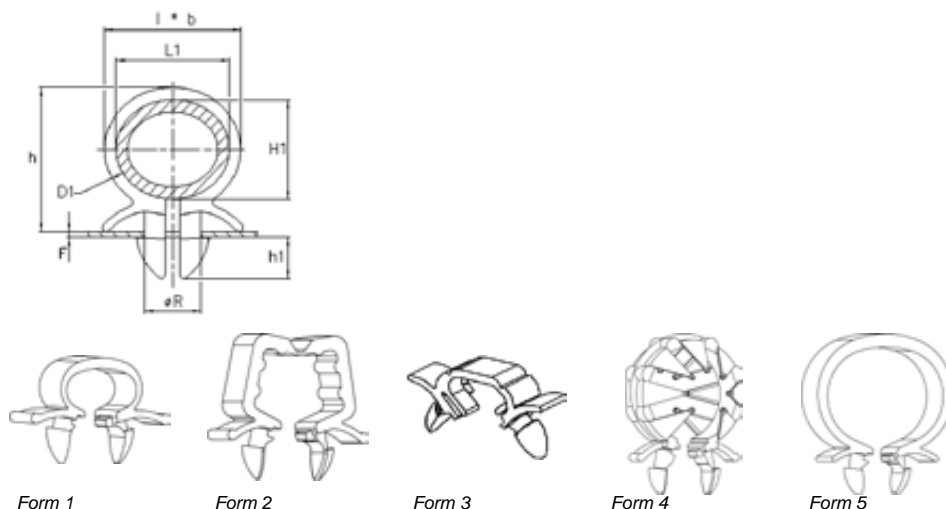
PIPE CLIPS PRESSED INTO A ROUND HOLE VARIABLE DIAMETER - OMEGA TYPE

MATERIAL:

Polyamide, polyoxymethylene, polypropylene

COLOUR:

Natural, Black (other colours are available on request)



Form 1

Form 2

Form 3

Form 4

Form 5

Sketches for illustration purposes only, please request latest detailed drawing.

Removable type clips for hoses or cable bundles of varying forms.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	F	ØR	l x b	h	h1	Form
	014606	7,8 x 5,6	0,7...2	6,5...6,7	12,5 x 8	11,15	4,7	1
	053082	7,8 x 6	0,5...1,2	6,5...6,7	10,3 x 8	8,5	4,7	1
	015181	8 x 6	1...3	6,5...6,7	12,5 x 8	11,25	4,7	1
	017964	13,6 x 8,1	0,75	6,5...6,7	16,4 x 8	22,5	5,0	1
	016541	10 x 6,2	3...4,5	6,5...6,7	12,5 x 8	10,25	4,0	1
	053164	10,8 x 8,2	0,7...2	6,5...6,7	13,8 x 8	15,9	4,7	1
	015270	12,05 x 7,8	2,7...4	6,5...6,7	15,25 x 8	12,55	4,7	1
	019402	10,8 x 7,8	3,8...4,2	8...8,2	15,25 x 8	15,9	5,0	1
	014319	11,5	0,7...2	6,5...6,7	16,8 x 8	16,25	5,0	1
	054270	10,8 x 7,8	0,7...2	6,5...6,7	14,6 x 8	12,0	4,7	1
	014786	12,4...12,9	4,0	8...8,2	17,2 x 8	17,2	6,0	1
	053163	12,8 x 8,8	0,7...2	6,5...6,7	17,5 x 8	15,3	5,0	1
	054272	14,3 x 10,7	0,7...2	6,5...6,7	19 x 8	17,4	4,7	1
	053173	14,5 x 11	0,7...2	6,5...6,7	17,5 x 8	19,7	5,0	1
	014482	15,7	3,84...4,16	7...7,1	21 x 10	22,0	4,7	1
	015008	15,8 x 8,6	1,5...3	6,5...6,7	20,5 x 8	15,05	4,7	1
	014919	16,7 x 13,5	0,7...2	6,5...6,7	22 x 8	19,85	4,7	1
	054170	16,8 x 13,5	0,5...3	6,5...6,7	21 x 8	21,4	4,9	1
	053174	16,5 x 13,5	0,7...2	6,5...6,7	23,3 x 8	21,0	5,0	1
	014075	15,0	1...3	6,5...6,7	22 x 8	20,2	4,7	1
	013250	18,0	1,75...3	6,5...6,7	23,6 x 8	22,5	5,0	1
	014732	18 x 18	1,7...2,5	6,5...6,7	23,6 x 8	21,8	4,7	1
	014920	18,4 x 15,5	0,7...2	6,5...6,7	23,5 x 8	21,85	4,7	1
	053175	18,5 x 15,5	0,7...2,5	6,3...6,7	23 x 8	22,0	5,0	1
	016304	(2x) 10	0,7...2	8...8,2	23,5 x 8	21,85	9,0	1
	053479	22 x 18,5	0,7...2,5	6,5...6,7	28,6 x 8	24,5	5,0	1
	015272	22,5 x 20	0,7...2	6,5...6,7	31 x 20	28,35	12,0	1
	013951	23,5	0,7...2	6,5...6,7	30 x 8	28,65	4,7	1
	014526	27,0	0,7...1,5	6,5...6,7	35 x 8	32,6	6,0	1
	053490	25 x 22	0,7...2	6,5...6,7	30,5 x 8	29,2	5,0	1
	054085	31 x 25	0,7...3	6,5...6,7	36,7 x 8	35,0	5,0	1
	054257	7,8 x 5,6	0,5...1,2	6,5...6,7	12,5 x 8	11,2	5,0	1
	015866	9,8 x 8,7	0,7...2	6,5...6,7	14,6 x 8	15,35	4,7	2

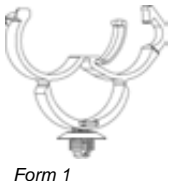
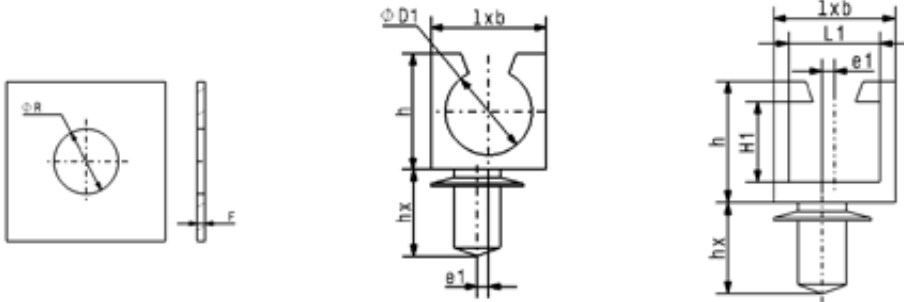
PIPE CLIPS PRESSED INTO A ROUND HOLE VARIABLE DIAMETER - WITH LOCKING ELEMENT

MATERIAL:

Polyamide, polyoxymethylene, polypropylene

COLOUR:

Black



Form 1



Form 2



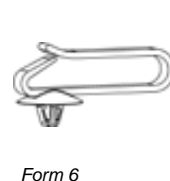
Form 3



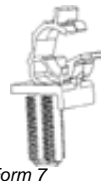
Form 4



Form 5



Form 6



Form 7



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

Clips to be pushed into a round hole, for fastening cable strands, wires, hoses, pipes, etc.

Form 1, 2 and 8: These clips are automatically locked by applying a downward pressure onto the tubular item to be fastened. They may subsequently be re-opened as required.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	F	ØR	l x b	h	hx	e1	Form
	019605	3...12	1,5	10,0	- x 10	26,0	6,5	-	1
	055286	6...12	0,5...2	6,3...6,7	24 x 18	29,0	6,1	-	1
	054253	6...12	0,7...3	6,3...6,7	23 x 10	30,0	6,5	-	1
	014595	8...12	0,65...1,8	6,5	23 x 10	28,0	7,15	-	1
	055582	8...18	3...15	9...9,2	31 x 21	38,5	21,5	-	1
	054353	11...18	0,7...3	6,3...6,7	27 x 10	36,0	6,5	-	1
	054283	17...24	0,7...3	6,3...6,7	34 x 10	46,0	15,0	-	1
	019767	25,0	0,7...4	8,0	- x 10	43,0	7,7	-	1
	014458	7...9	1,3...1,7	6,5	- x 11	27,0	6,5	4,8	2
	019383	7 / 13	2,5	6,5	26,9 x 10	18,2	9,1	-	3
	056157	15...22	0,7...3	6,3...6,7	44,8 x 22	32,0	6,5	-	3
	015896	5 x 44	1,5	6,6...7,3	21,5 x 12	53,5	9,5	-	4
	081319	39,0	0,8...3,5	6,5	38,5 x 16	59,8	7,6	-	5
	016130	65 x 7...17	0,7...8,5	6,5	82 x 16	27,0	14,0	-	6
	016131	65 x 18	0,7...8,5	6,5	78,5 x 12	29,0	15,5	-	6
	019399	46,7 x 9	0,8...1,5	6,5	50,7 x 6	15,8	8,0	-	6
	019556	38 x 17	1...5	6,5	48,9 x 15	24,0	10,5	-	6
	108093	8...11	5...20	11,0	26,5 x 19	19,0	26,0	6,0	7

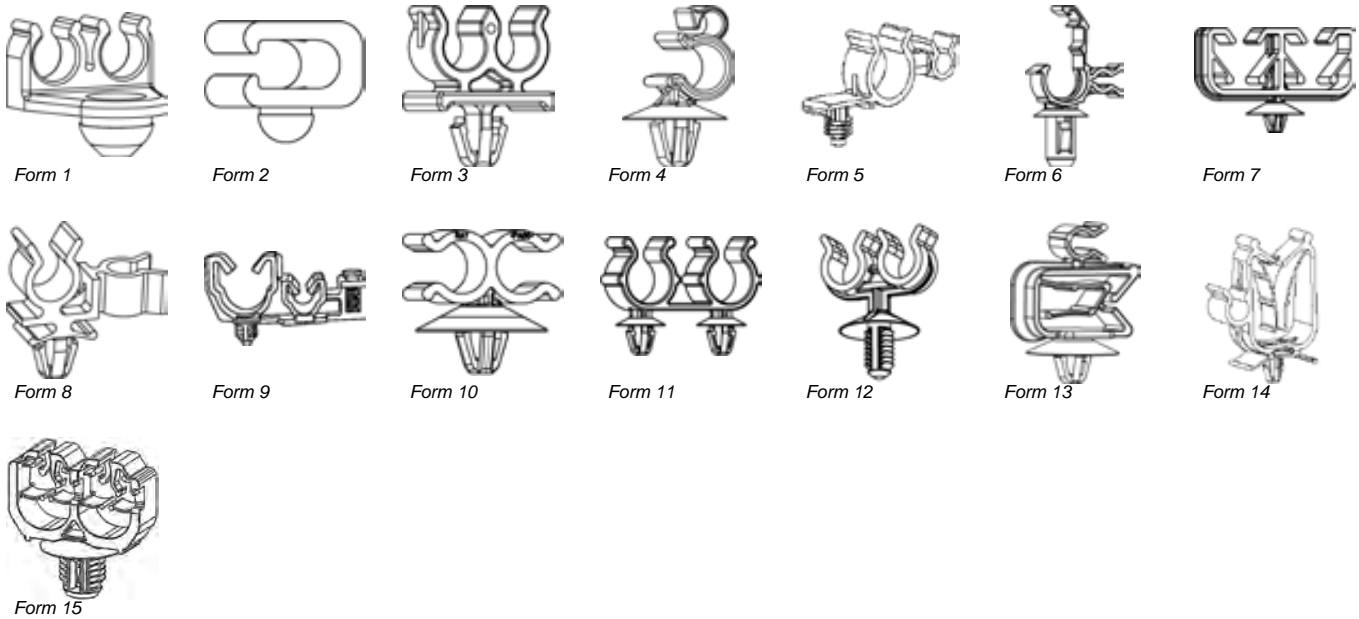
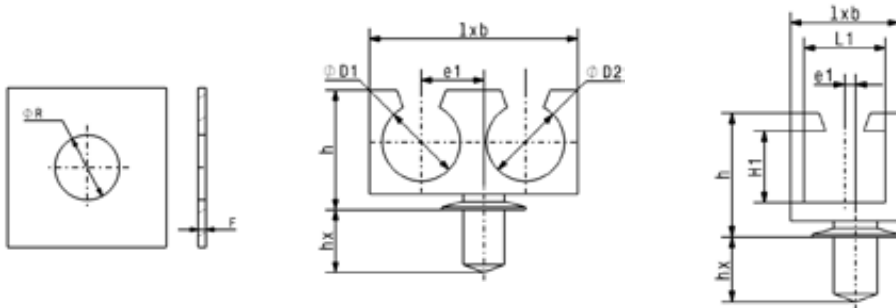
PIPE CLIPS PRESSED INTO A ROUND HOLE 2-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Assembly for forms 1 and 2:

For these clips the hemispherical ball is first inserted into the panel hole. On passing through the hole, it shrinks, and then reverts to its original shape by elastic recovery. The part is then locked into the panel using a groove located at the top edge of the ball. For installation of these clips use tool P4-95.

? Feature(s) of the part see Reference Page 4
↓
Dimensions in mm

Samples available on request

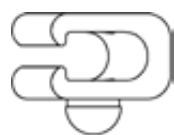
?	REF.	ØD1	ØD2	L1 x H1	F	ØR/ L x B	l x b	h	hx	e1	Form
	011845	6,7	6,7	-	0,75...8	13,0	22 x 16	8,5	8,0	5,0	1
	012777	6,7	6,7	-	1,75	11,0	22 x 16	8,5	6,8	5,0	1
	012212	7,0	7,0	-	1,45	13,0	22 x 16	8,5	8,0	5,0	1
	015219	7,6	7,6	-	1,75	11,0	23 x 6	13,5	6,8	6,0	1
	012049	-	-	8 x 4	0,88	6,0	11,5 x 11	8,7	4,25	-	2
	012235	-	-	8 x 4	2,5	6,0	11,5 x 11	8,7	6,0	-	2
	012050	6,0	6,0	-	0,88	6,0	15,5 x 12	10,2	4,1	-	2
	056473	24,0	26,0	-	0,7...1,5	7,0...7,4	66 x 14	32,0	8,0	35,0	3
	016608	4...6	4...6	-	0,8...4	6,5	18,5 x 10	12,4	9,3	4,25	3
	019268	7,0	7,0	-	1,9...2,1	7,0	20 x 10	16,8	9,0	4,5	3
	016049	7,5...7,8	7,5...7,8	-	0,7...2	6,0	21,9 x 10	16,0	7,3	6,0	3
	019608	8,0	14,5	-	0,7...2	6,5	28 x 10	21,0	8,2	12,8	3
	016330	8,0	8,0	-	0,9...1,6	7,0	18,7 x 15	13,5	5,1	4,25	3
	201353	10...14	16,0	-	0,7...2	6,2 x 8,2	43 x 12	33,0	6,1	10,0	3
	019148	(4x) 5	13,0	-	0,7...1,5	6,5	30,5 x 10	21,0	6,5	13,5	3
	018904	12,0	14,0	-	0,8...4	7,4	35 x 10	20,0	10,0	18,0	3

G = for corrugated tube

PIPE CLIPS PRESSED INTO A ROUND HOLE 2-WAY



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



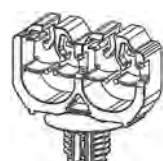
Form 12



Form 13



Form 14



Form 15

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	L1 x H1	F	ØR/ L x B	l x b	h	hx	e1	Form
	201143	13,5	13,5	-	0,7...2	6,4...6,7	40 x 11	23,2	7,0	10,5	3
	017843	13,5	13,5	-	6,0	6,5	38 x 15	25,5	8,5	9,75	3
	018558	8,2	10,0	-	0,8	6,5	24 x 14	19,5	6,8	-	3
	056594	9,2	13...14	-	0,7...3	6,5	21 x 10	40,2	7,2	-	4
	015748	7,2...8	3,4...3,8	-	0,75...1	6,3	14 x 10	22,0	7,4	4,8	4
	015971	6,6...7,6	3,4...3,8	-	0,7...0,9	6,0	11,2 x 10	23,0	7,3	3,0	4
	055483	10...11	8...9	-	0,7...1,5	8,2	19 x 10	29,7	7,0	-	4
	082256	14,0	6...6,5	-	2,5	6,5	49,3 x 10	20,5	10,5	15,0	5
	016429	6,0	8,0	-	2,1	6,5	26,6 x 12,5	17,3	6,8	11,0	5
	015959	6,0	-	10,8 x 7,8	0,7...2	6,5	15,25 x 8	29,0	4,7	-	6
	202595	8 / 10	8 / 10	-	0,8...6	6,5	41,4 x 12	21,0	11,9	9,2	7
	017363	16...18	16...18	-	0,5...3	6,5	62 x 12	31,2	6,5	14,0	7
	015909	8,0	6,0	-	1,5...1,7	6,5	28 x 8	20,5	8,5	13,0	8
	056186	8,0	17,0	-	0,8	6,5	59,1 x 20	25,0	10,0	22,0	9
	200952	9,0	9,0	-	0,5...3	6,5	24 x 8	16,75	6,5	5,1	10
	015229	6,2	6,2	-	0,7...0,9	6,0	23 x 8	13,0	6,8	5,75	10
	018400	13,5...15	13,5...15	-	2...2,8	(2x) 6,5	44,5 x 13	25,0	9,2	12,5	11
	208840	4,8	12,0	-	0,57...8	10,2	35 x 21	23,0	12,0	11,0	12
	129597	9...10,5	9...10,5	-	0,5...6	6,2...6,55	31 x 10	26,25	12,9	8,0	12
	016106	5...6	6...8	-	0,8...6	6,5	29 x 9	19,7	7,5	-	13
	016878	5...6	6...8	-	0,8...1,5	6,5	29 x 9	20,1	7,5	-	13
	020271	9,0	10...24	-	0,8...3,5	6,5	45,6 x 15	50,0	9,0	20,5	14
	209150	8,0...12,0	8,0...12,0	-	0,57...8,0	10,2	35,0 x 10,0	24,9	12,5	16,7	15

G = for corrugated tube

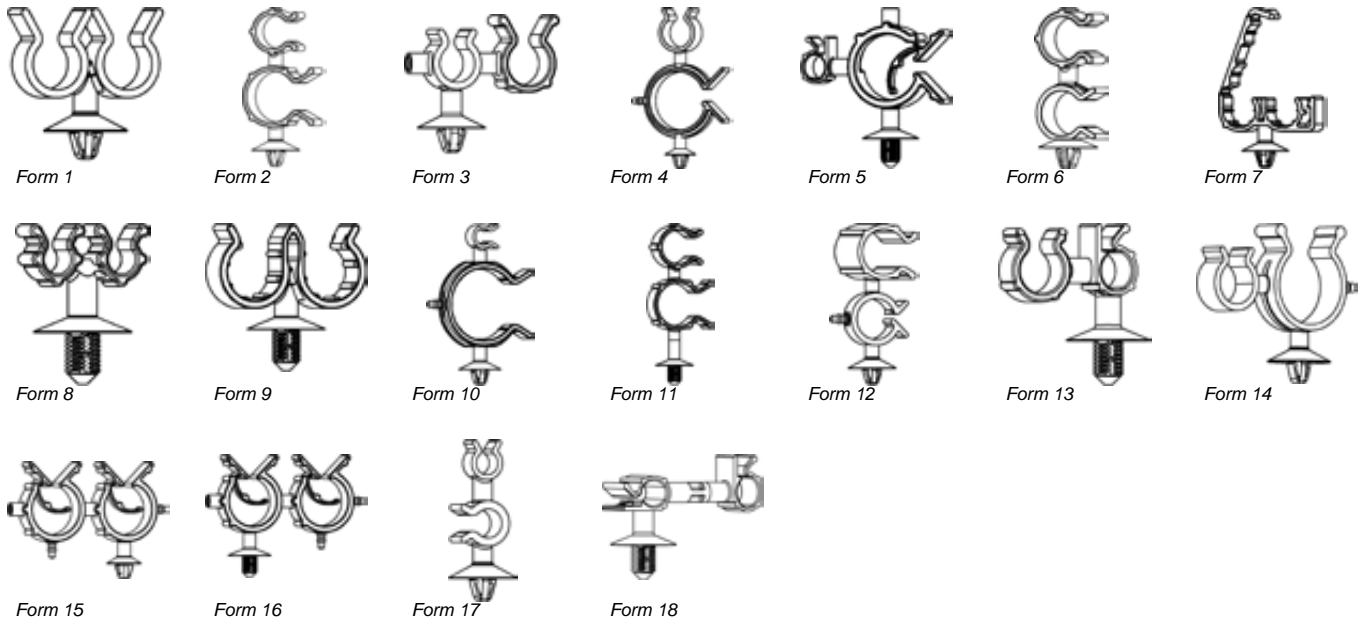
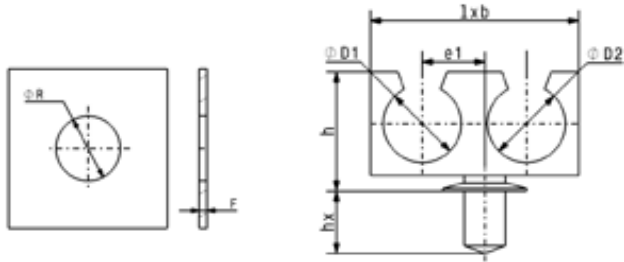
PIPE CLIPS PRESSED INTO A ROUND HOLE 2-WAY SWIVEL

MATERIAL:

Polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These assembly type clips consists of two tube/ cable clips plus a mounting adaptor. They are joined by means of their male and female connecting features. The clips swivel, when assembled together, allowing cables or tubes to be fastened and oriented in any desired direction.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØR	F	l x b	h	hx	e1	Form
	082420	6,0	6,0	6,3...6,7	0,5...3	-	23,7	6,8	7,0	1
	081898	8...9	8...9	6,3...6,7	0,5...3	-	24,7	6,8	6,0	1
	081689	13...14	16...18	6,3...6,7	0,5...3	-	31,2	6,8	10,0	1
	081873	13...14	13...14	6,3...6,7	0,5...3	-	31,2	6,8	9,5	1
	061163	13...15	13...15	6,3...6,7	0,5...3	41 x 22	31,0	6,5	9,5	1
	082258	16...17	16...17	6,3...6,7	0,5...3	41,5 x 10	31,2	6,8	11,0	1
	082351	25...27	25...27	6,3...6,7	0,5...3	-	41,7	6,8	16,0	1
	061573	8...9	8...9	6,35...6,7	0,5...3	23 x 22	27,0	12,7	6,25	1
	061540	23,0...25,0	23,0...25,0	6,7	0,7...2,0	53,8 x 10,0	39,1	8,0	25,0	1
	081583	6...6,5	7,5...8	6,5...6,7	0,5...2	-	35,0	6,5	-	2
	081593	6...9,5	9...9,5	6,5...6,7	0,8...2	-	36,0	6,5	-	2
	081389	6...6,5	11...13	6,3...6,7	0,5...3	-	44,0	6,5	-	2
	082024	15...16	23...25	6,3...6,7	0,5...3	-	65,5	6,8	-	2
	061197	18...20	23...25	6,7	0,7...2	34,5 x 22	65,8	6,5	-	2
	081546	13...14	11...13	6,5...6,7	0,8...2	-	29,5	6,5	22,5	3

E = with securing tang for variable bore
F = with connector

PIPE CLIPS PRESSED INTO A ROUND HOLE 2-WAY SWIVEL



Form 1



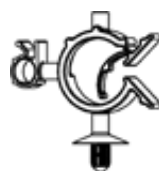
Form 2



Form 3



Form 4



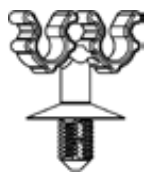
Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



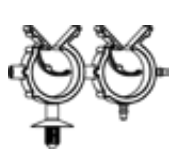
Form 13



Form 14



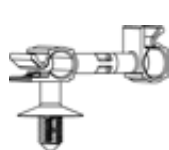
Form 15



Form 16



Form 17



Form 18

Sketches for illustration purposes only, please request latest detailed drawing.

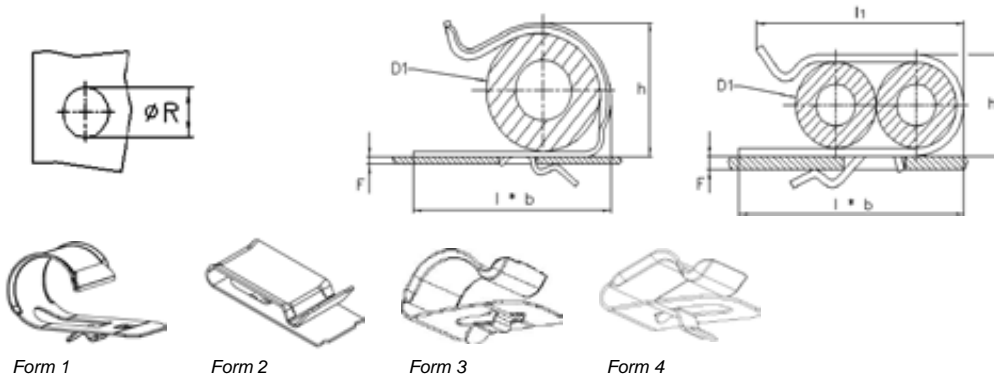
?	REF.	ØD1	ØD2	ØR	F	l x b	h	hx	e1	Form
	082176	16...18	30...32	6,3...6,7	0,7...2	-	78,0	6,5	-	4
	082220	16...18	34...36	6,5...6,7	0,8...2	-	81,0	6,5	-	4
	082499	7,8...8,5	16...24	6,5...6,7	0,8...6	-	47,5	10,5	27,8	5
	081877	15...16	16...24	6,5...6,7	0,8...6	-	47,3	10,5	30,4	5
	081917	15...16	15...16	6,5...6,7	0,8...1,2	-	35,25	6,6	-	6
	082686	14...14,5	14...14,5	6,5...6,7	0,8...2	-	23,9	6,5	9,5	7
	082062	14...14,5	14...14,5	6,5...6,7	0,8...6	-	24,3	10,5	9,5	7
F	082357	4,0	4,0	M6	-	-	30,9	8,6	6,0	8
	082700	6,0	6,0	6,5...6,7	0,8...6	-	23,7	10,5	7,0	8
	081881	6...6,5	8...9	6,5...6,7	0,8...6	-	22,9	10,5	5...6	8
	081721	8...9	8...9	6,5...6,7	0,8...6	-	22,9	10,5	6,0	8
	082455	16...17	16...17	6,5...6,7	0,8...6	41,5 x 10	29,4	10,5	11,0	8
	082358	25...27	25...27	6,5...6,7	0,8...6	-	49,9	10,5	16,0	8
	200138	13,5	13,5	6,5...6,7	0,8...6	39 x 11	26,9	10,5	10,5	9
	082642	13,5	13,5	6,3...6,7	0,7...2	39 x 11	27,2	6,5	10,5	9
	082155	8...9	34...36	6,5...6,7	0,8...2	-	68,4	6,5	-	10
	082091	13...14	23...25	6,5...6,7	0,8...6	-	67,1	10,3	-	11
F	082452	18...20	23...25	6,5...6,7	0,8...6	-	74,9	10,5	-	11
	082654	19...24,5	16...18	6,3...6,7	0,5...3	-	65,25	6,8	-	12
	081716	7,8...8,5	11...13	6,5...6,7	0,8...6	-	27,7	10,5	18,7	13
	082015	13...14	20...24,5	6,5...6,7	0,8...6	-	33,8	10,5	26,8	13
	082435	26...28	14...15	6,3...6,7	0,5...3	-	45,7	6,8	30,0	14
E	081378	16...24	16...24	6,6...6,8	0,7...2	-	47,6	6,5	36,7	15
	082379	16...24	16...24	6,5...6,7	0,8...6	-	48,0	10,5	36,7	16
	081548	7,2...7,5	9...9,5	6,3...6,7	0,5...3	-	42,8	6,8	-	17

E = with securing tang for variable bore
F = with connector

PIPE CLIPS PRESSED INTO A ROUND HOLE METAL - LUG DESIGN

MATERIAL:
Spring steel CK67S austempered

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips firmly secure cables or pipe runs in the middle of a panel or any other flat/ rigid surface, by the insertion of the lug into a round hole.

? Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	ØD1	l1	ØR	F	l x b	h	Form
	020806	13,0	14,0	6,5	0,7...1,5	25,2 x 15	14,4	1
	020519	13,0	15,0	6,5	1...1,7	21,6 x 15	14,4	1
	203810	13,0	13,7	6,5	1,9...2,1	25 x 15	14,4	1
	129408	3,0	27,34	6,05...6,25	0,5...1	29,8 x 12	4,9	2
Z	013640	9...11	17,0	6,2	1,9...2,1	23 x 15	10,8	3
D	011385	9...12	19,3	6,2	0,75...1	22 x 15	13,9	3
Z	012495	9...12	16,0	6,2	0,75...1	23 x 15	10,8	3
Z	013142	9...12	18,0	6,2	1,2...1,7	22 x 15	10,8	3
Z	011283	9...12	18,0	7,5	0,75...1	23 x 15	10,0	3
D	012918	12...15	21,0	6,2	0,7...1,2	22 x 15	17,6	3
D/Z	012405	15...16	20,0	6,2	0,75...1	23 x 15	15,5	3
	011275	4...5	20,0	6,0	0,75...1,1	23 x 15,5	6,0	4
	011475	5...6	17,0	6,2	1,0	20 x 12,5	6,0	4
	011288	5...7	20,0	6,0	0,75...1	22 x 12,5	7,1	4
Z	012646	6...8	20,0	7,8	1,5...1,75	21 x 14	-	4
D	013200	6...8	17,0	6,2	0,75...1	20 x 12,5	7,5	4
	011319	7...9	17,0	6,2	0,75...1	20 x 12,5	7,5	4
D	011384	7...9	17,0	6,2	0,75...1	20 x 12,5	7,5	4
D	011945	7...9	17,0	6,2	1,5...2	20 x 12,5	7,5	4
D	012346	7...9	17,0	6,2	2,8...3,1	20 x 12,5	7,5	4
D	013046	7...9	17,0	6,2	2,8...3,1	20 x 12,5	7,5	4
	011326	15...16	22,0	6,2	0,75...1	23 x 15	13,0	4

D = with raised edges; Z = on request

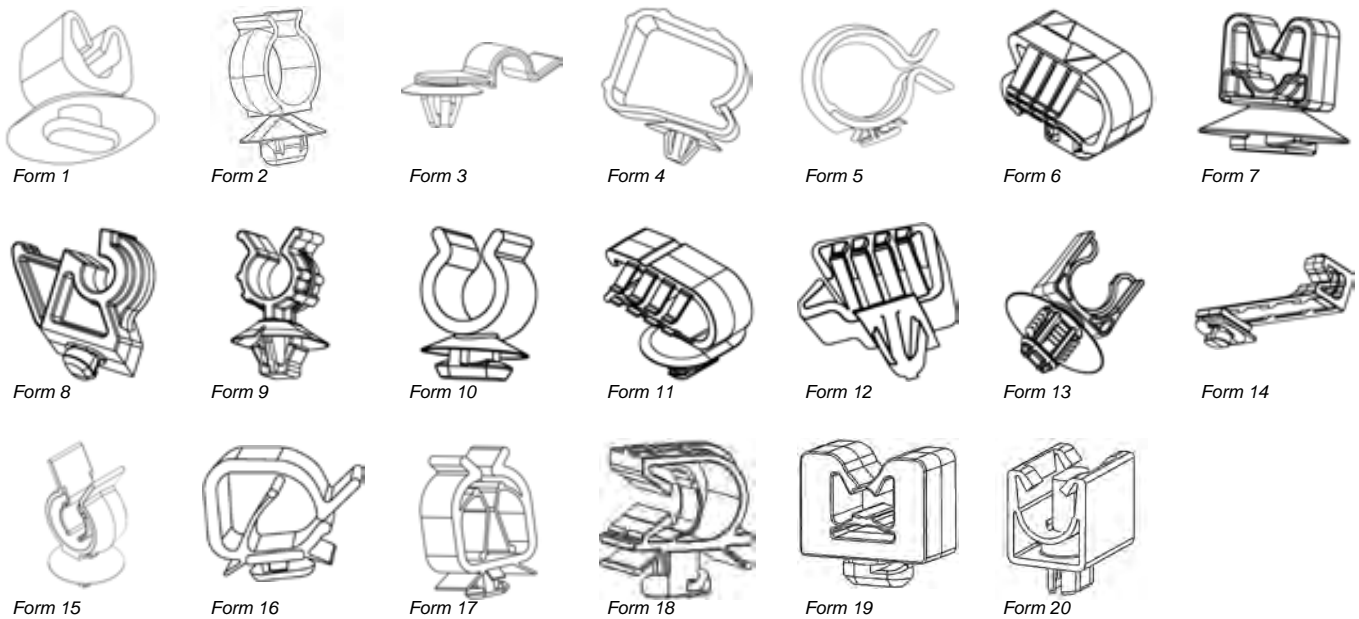
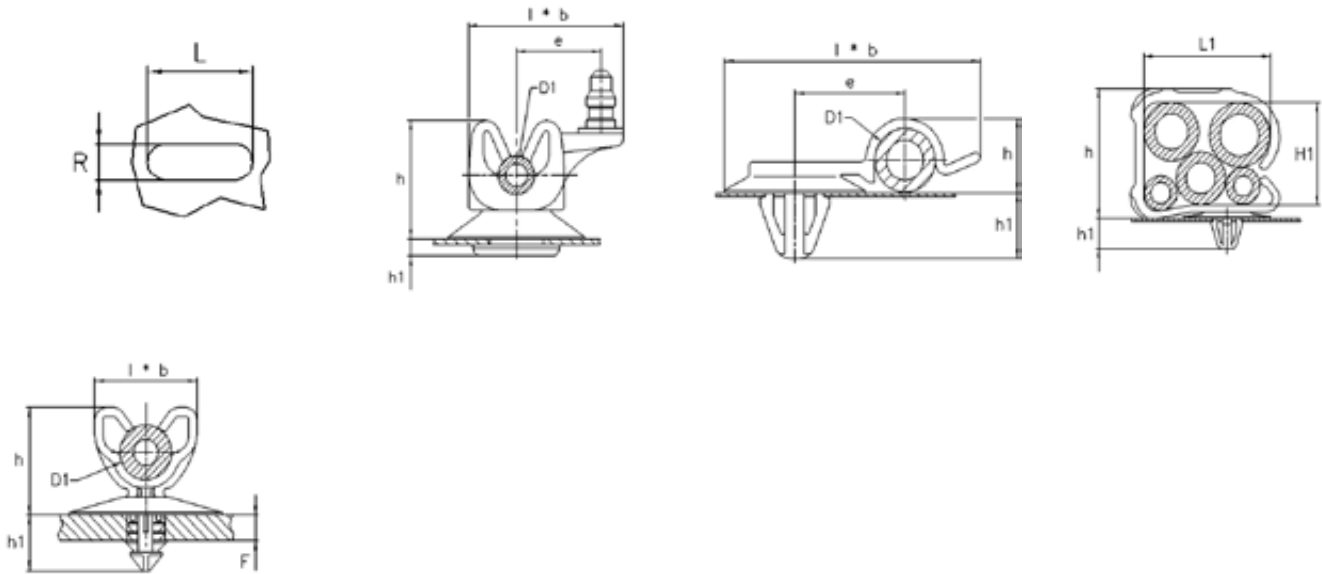
PIPE CLIPS PRESSED OR 1/4 TURN INTO AN OBLONG HOLE 1-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Clips are fixed either through manual pressure or through rotation by a 1/4 turn into an elongated hole.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	L1 x H1	F	L x R	l x b	h	h1	e	Form
H	055599	4,7...5,05	-	0,7...2	12,1...12,3x6,15	20 x 10	22,5	1,5	11,5	1
H	054579	4,7...5,05	-	0,7...2	12...12,4 x 6,15	13 x 10	15,5	1,5	-	1
H	056172	8...10	-	2...3	12,2 x 6,2	13 x 10	17,8	3,7	-	2
	055566	18...21	-	0,7...1	12,2 x 6,2	27 x 23	32,0	6,8	-	2
	016612	7,8	-	0,8	7 x 4	36 x 12,8	9,5	8,0	14,2	3

H = assembly by 1/4 turn; C = AR-Bag® anti noise insulation - Bi-injection; E = legs within the bore for varying diameter hoses

PIPE CLIPS PRESSED OR 1/4 TURN INTO AN OBLONG HOLE 1-WAY



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



Form 16



Form 17



Form 18



Form 19



Form 20

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	L1 x H1	F	L x R	l x b	h	h1	e	Form
	056198	-	29 x 22	0,7...1,5	12,2 x 6,2	34 x 14	31,0	6,0	-	4
	055986	13,0	-	0,8...1	7,2 x 14,2	16 x 25	25,0	3,5	-	4
	055078	-	50 x 6	0,7...3	12,2 x 6,2	60,5 x 15	21,2	7,0	-	4
H	054470	29...32	-	1,1...1,3	20,2 x 8,2	53,8 x 19	42,5	2,3	-	5
H	054064	42,0	-	1,2...1,5	20,2 x 8,2	57,5 x 10	53,0	5,0	-	5
H	055785	48...53	-	0,7...3	12,2 x 6,2	65 x 18	61,0	7,0	-	5
	056095	11...20	-	0,67...3	12,2 x 6,2	35 x 23,5	40,2	6,7	-	6
	129452	-	-	0,8...2	12,2 x 6,2	27,7 x 16,8	17,7	4,3	-	6
	056093	-	19,0 x 12,0	0,8...1,0	12,2 x 6,2	27,5 x 16,8	18,9	3,3	-	6
H	129668	4,75...5,25	-	0,7...2,5	12,2 x 6,2	13 x 10	16,0	4,0	-	7
H	201159	4,9...5,25	-	4,3...5	12,2 x 6,2	13 x 10	18,8	5,9	-	7
H	201851	9...10	-	0,7...2,5	12,2 x 6,2	24 x 15	26,5	4,5	-	7
H	132027	9,4...9,6	-	1,2	12,2 x 8,2	40,5 x 15	36,5	5,0	-	8
	202461	8...9,2	-	0,8...2	12,2 x 6,2	-	25,9	5,1	-	9
	057089	24,5	-	0,97...2	12,2 x 6,2	31 x 20	37,1	6,2	-	9
	057258	22...24	-	0,67...1,5	12,2 x 6,2	23 x 23	46,0	9,0	-	9
H	202700	10...11	-	1,5...2,5	12,2 x 6,2	13,8 x 12,5	13,8	3,7	-	10
	206902	-	-	0,7...4	12,2 x 6,2	29,9 x 22	16,6	7,4	-	11
	057097	-	-	0,7...0,9	12,2 x 6,2	25 x 20	17,5	7,3	-	12
	132961	-	32,6 x 14,98	0,7...2	12,2 x 6,2	46,96 x 18,5	17,0	9,5	-	12
	055196	-	16,2 x 7,9	0,7...1,5	12,2 x 6,2	21,3 x 19,0	11,4	7,5	-	12
	132096	11,5...12,5	-	0,7...5	12,2 x 6,2	20 x 12,5	16,3	10,2	-	13
H/C	202385	6...8	-	2,4...2,6	16,2 x 10,2	60,7 x 56	57,6	7,0	32,1	14
	206635	4,75...6,2	-	1,2...2	12,2 x 6,2	24 x 12	21,0	6,7	-	15
	055259	10...14	-	0,7...2	8,2 x 6,2	22 x 12	33,0	6,5	-	15
H	054469	10...15	-	0,7...0,9	12,2 x 6,2	27,5 x 12	22,2...25,2	2,5	-	16
	055293	10...26	-	0,6...2,5	12,2 x 6,2	47 x 15	39,0	6,0	-	16

H = assembly by 1/4 turn; C = AR-Bag® anti noise insulation - Bi-injection; E = legs within the bore for varying diameter hoses

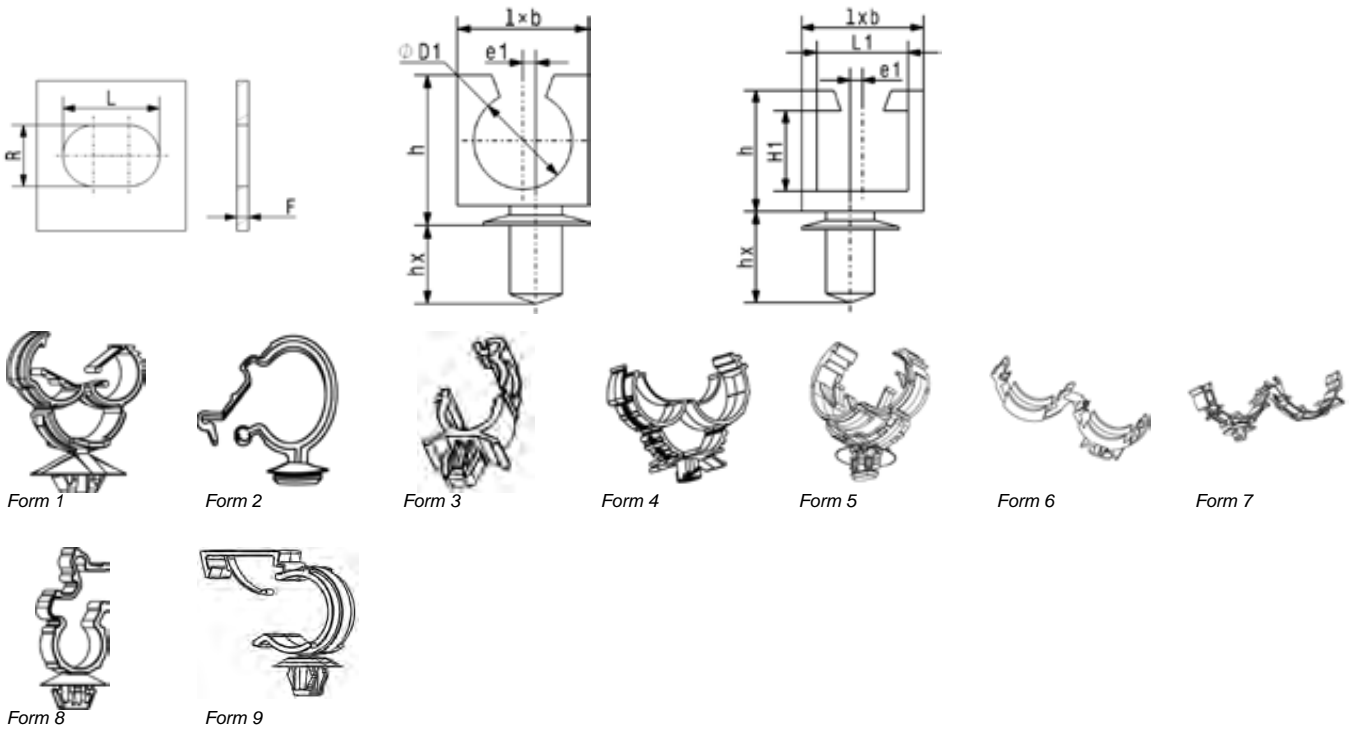
PIPE CLIPS PRESSED OR 1/4 TURN INTO AN OBLONG HOLE 1-WAY - WITH LOCKING ELEMENT

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

Clips are fixed either through manual pressure or through rotation by a 1/4 turn into an elongated hole.

Forms 1, 4 and 5: Clips automatically close by pressing the tubular component to be secured and can be manually de-latched as required.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	L1 x H1	F	L x R	l x b	h	hx	e1	Form
	054273	2...7	-	0,5...3	12,2 x 6,2	17,5 x 24	25,5	4,1	-	1
H	055375	11...18	-	0,5...2,5	12,2 x 6,2	30 x 22	39,0	1,5	-	1
	055964	3...12	-	1,5...4	12,2 x 6,2	24 x 20	43,0	7,0	-	1
	055273	3...12	-	0,5...3	12,2 x 6,2	37,7 x 20	29,55	4,75	-	1
	055272	17...24	-	0,5...3	12,2 x 6,2	35,7 x 24	47,0	6,6	-	1
	056373	20...30	-	0,7...3	12,2 x 6,2	44 x 25	51,0	6,8	-	1
	132006	3...12	-	0,7...3	12,2 x 6,2	22 x 24	36,0	6,5	-	1
	202597	28	-	0,5...3	12,2 x 6,2	37,5 x 18	51,0	6,6	-	1
H	055890	-	28 x 40	0,7...2	20,2 x 8,2	27 x 12	56,5	4,0	4,0	2
	056099	-	28 x 42	1,3...1,7	12,2 x 6,2	65 x 20	31,5	8,1	-	2
	108080	-	13 x 12	0,7...2	12,2 x 6,2	-	20,0	6,2	-	2
	019757	12,0	-	0,8...2	6,4 x 8	23,6 x 10	20,0	10,3	-	3
	130821	8...22	-	0,8...3,5	12,2 x 6,2	33,5 x 12,5	37,5	4,0	-	4
	130178	8...22	-	0,8...3,5	12,2 x 6,2	33 x 12,5	37,5	4,0	-	4
	201516	8...21	-	0,5...3,5	12,2 x 6,2	34,3 x 13	39,8	10,5	-	5
	108064	10,0	-	1...2	12 x 8	26 x 15	20,0	8,0	-	6
	018439	15,0	-	1,5...3	12,3 x 6,3	21 x 10	30,0	9,5	-	6
	108032	16,0	-	07...2	20 x 10	39,5 x 16	20,5	8,0	-	6
	108052	22...26	-	0,7...2	13,2 x 8,2	37,5 x 15	38,0	4,8	-	6
	055950	21...29	-	0,7...2	12,2 x 6,2	38,8 x 14	38,0	6,6	-	6

H = assembly by 1/4 turn

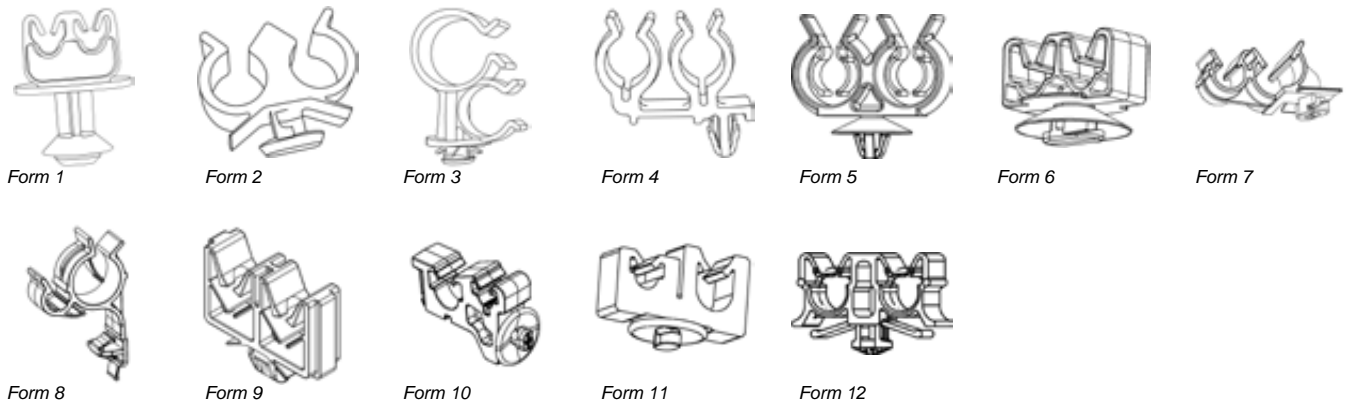
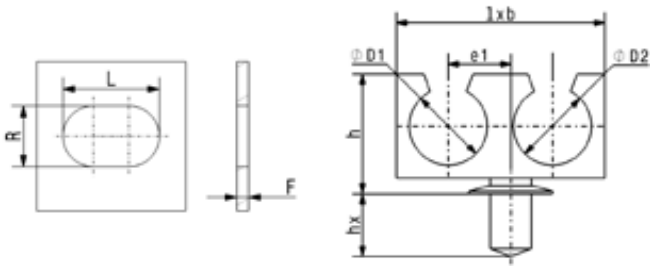
PIPE CLIPS PRESSED OR 1/4 TURN INTO AN OBLONG HOLE 2-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

Clips are fixed either through manual pressure or through rotation by a 1/4 turn into a buttonhole.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	F	L x R	l x b	h	hx	e1	Form
H	054586	4,8	4,8	0,7...2	12,2 x 6,2	30 x 30	33,8	1,5	5,5	1
	054175	4,8	4,8	0,7...2	12,2 x 6,2	24 x 22	15,8	1,8	5,5	1
	054671	4,8	8,0	0,7...2	12,2 x 6,2	28 x 10	19,2	1,5	6,5	1
	108024	6,2	6,2	4,0	28 x 18	24 x 9	16,0	12,5	5,5	1
	055075	10...12	10...12	1,5...3	12,2 x 6,2	29 x 12	18,0	2,5	8,5	2
	020761	10,75...14,75	10,75...14,75	1...3	12,2 x 6,2	43,1 x 15	-	-	8,25	2
H	055550	21,5...22,5	16...17	1,4...1,6	16,2 x 8,2	35 x 12	43,5	5,6	10,8	3
	057056	13...15	13...15	2,6...3	12,2 x 6,2	41,4 x 12	27,5	9,5	5,0	4
E	055766	10...14	10...14	0,7...2	6,2 x 8,2	42 x 12	30,4	6,1	10,5	5
H	129567	4,75...5,25	4,75...5,25	0,7...2,5	12,2 x 6,2	24 x 19	16,3	1,8	5,5	6
H	131015	8,0	10,0	1,5	12,2 x 6,2	39 x 30,6	17,25	5,6	10,65	7
	203467	7,5	5...15	0,95	12,2 x 6,2	47x 12,15	27,35	6,0	19,4	8
	057174	8...13	8...13	0,7...3	12,2 x 8,2	42...44 x 12	26,0	10,2	10,1	9
C-H	131071	15,8...16	9,55...10	2,0	12,2 x 8,2	47,8 x 29	65,0	8,0	19,8	10
C-H	213967	16,0...19,0	9,55...10,0	2,0	12,2 x 8,2	47,8 x 29,0	65,0	6,0	27,0	10
C	057293	16,0	10,0	0,8...1,5	12,2 x 8,2	57 x 30	30,6	5,0	15,0	11
	018548	10,0	10,0	1,3...3,5	11 x 7,0	40 x 13	19,0	7,4	10,0	12

H = assembly by 1/4 turn; C = AR-Bag® anti noise insulation - Bi-injection; E = legs within the bore for varying diameter hoses

PIPE CLIPS PRESSED INTO TAPPING HOLE 1-WAY

MATERIAL:

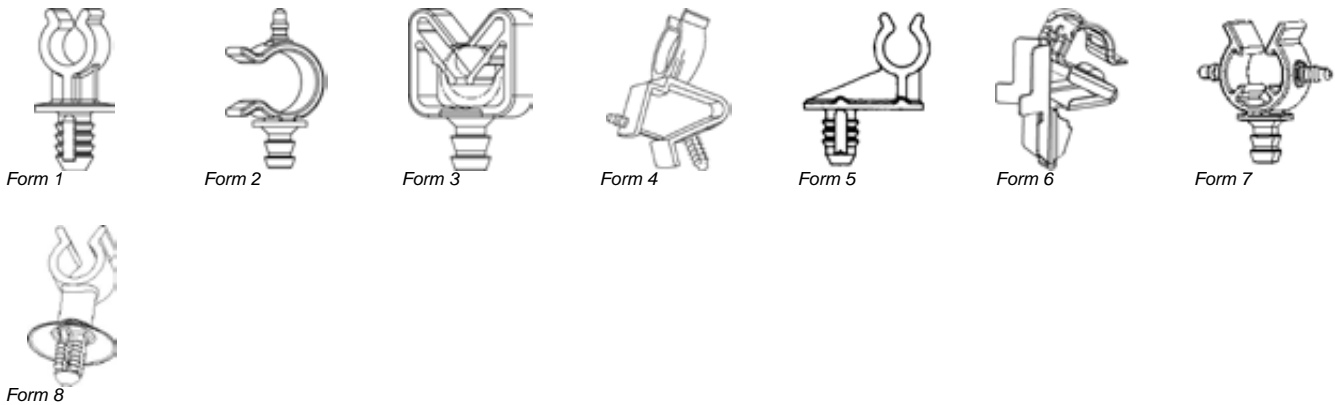
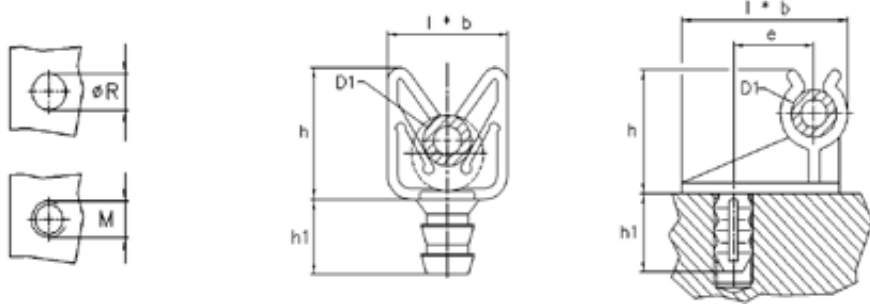
Polyoxymethylene, polyphenylene oxide; Spring steel C45

COLOUR:

Black

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

Clips are pushed into a round hole, specifically designed for moulded EPDM rubber.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØR / M	l x b	h	h1	e	Form
	016899	6...7	M6	12 x 12	15,5	9,0	-	1
	055250	16...18	M6	20 x 10	48,0	14,0	-	1
	015738	14...15	6,8	21,5 13	28,3	10,0	-	2
	016089	6/ 10/ 12	7,0	21 x 13	20,0	10,0	-	3
	055584	20,0	M7	57,5 x 20	33,0	7,5	31,0	4
	017584	6,0	M6	19,5 x 12	15,5	9,0	10,0	5
	019080	7...7,5	M10	13,6 x 12	13,1	9,9	-	6
	015553	14...15	6,8	35 x 13	23,0	10,0	-	7
	016989	9...10	7,2	35 x 13	23,0	10,0	-	7
	082441	7,2...7,5	M6	16,0	22,0	9,0	-	8
	019477	25...27	M6	16,0	44,9	8,6	-	8

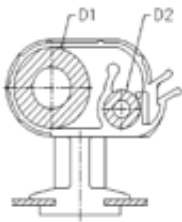
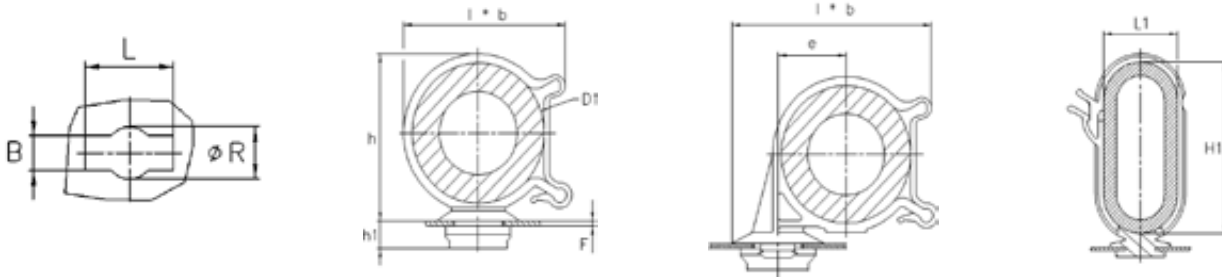
PIPE CLIPS PRESSED OR 1/4 TURN INTO SPECIAL SHAPED HOLE 1- AND 2-WAY - WITH LOCKING ELEMENT

MATERIAL:

Polyamide

COLOUR:

Black



Form 1



Form 2



Form 3



Form 4

Sketches for illustration purposes only, please request latest detailed drawing.

Clips with positive locking pushed into a notched hole followed by a quarter turn, for fixing cables or pipes.



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	L1 x H1	F	L x B	ØR	l x b	h	h1	e	Form
	108027	15,0	-	-	0,7...1,2	15,5 x 6,5	9,0	28,5 x 12	21,5	2,8	-	1
	108010	14,5	-	-	0,7...1,2	15,5 x 6,5	9,0	28 x 12	21,5	2,8	-	1
	108012	15,0	-	-	0,7...1,2	15,5 x 6,5	9,0	28 x 12	26,0	2,8	-	1
	108111	15,0	-	-	0,7...1,2	15,5 x 6,5	9,0	28 x 12	20,0	2,8	-	1
H	019340	38,0	-	-	1,8...2,2	23 x 6,5	14,3	61 x 15	46,1	7,4	20,0	1
H	017720	38,0	-	-	1,8...2,2	23 x 6,5	14,3	40x 15	46,1	7,4	-	1
	108088	15,0	8,3	-	0,7...1,2	15,5 x 6,5	9,0	27 x 15,5	31,5	3,0	7,7	2
H	020083	38,0	-	-	1,8...2,2	23 x 6,5	14,3	50x 20	47,2	7,4	-	3
	108015	-	-	22 x 37	0,7...1,2	15,5 x 6,5	9,0	33 x 12	44,0	2,8	-	4

H = for quarter turn insertion

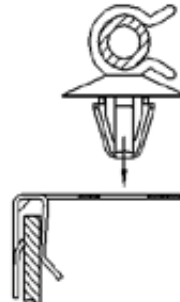
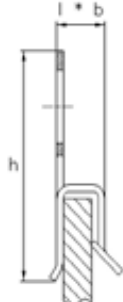
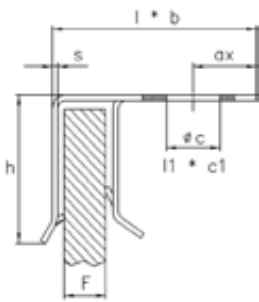
METAL BRACKETS ASSEMBLED ONTO A PANEL EDGE METAL

MATERIAL:

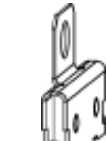
Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3



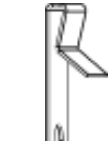
Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11

Sketches for illustration purposes only, please request latest detailed drawing.

Such barb-fitted brackets, installed onto a panel edge, are ideal for assembly to many plastic material fasteners. This type of installation allows cables/ tubes to be fastened and oriented in any desired direction just by adjusting the position of the clip.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	Øc/ l1xc1	F	l x b	h	s	ax	Form
	016837	6,7	4,5...5,5	22,6 x 20	15,8	0,6	7,0	1
	019527	6,5	2...3	26,5 x 30	12,5	0,6	16,5	1
	053943	6,6	3,9...4,1	16,3 x 33	12,4	0,6	5,7	1
	053708	6,6	0,5...2	12,8 x 33	7,8	0,4	5,0	1
	054343	6,6	0,5...2	12,8 x 33	7,2	0,4	5,0	1
	053409	6,6	3...4	16,3 x 33	12,4	0,6	5,7	1
	054219	6,7	1,5...3	18,1 x 28	9,0	0,6	7,7	1
	019432	6,7	3,5...4,5	22,6 x 20	15,8	0,6	7,0	1
	054220	6,7	0,7...2	18,1 x 28	9,0	0,6	7,7	1
	020305	6,2	3,3...3,7	18,8 x 30	12,5	0,6	7,8	1
	019905	6,2	2...3	26,5 x 30	12,5	0,6	7,9	1
	201128	6,3	1,5...2,5	19,1 x 22	9,45	0,6	7,0	1
	054501	5,0	1,5...2,4	12,9 x 33	12,6	0,6	5,6	1
	054117	6,7	4,0...5,0	17,05 x 33	11,2	0,6	5,4	1
	054027	6,7	0,5...3,0	118,1 x 28	9,0	0,6	7,7	1
	019737	12,2 x 6,2	4,5...5,5	22,6 x 20	15,2	0,6	7,0	1
	016103	4,3	1...1,5	13,6 x 22	6,0	0,4	5,3	1
	053932	6,3	3...4	16,6 x 33	12,4	0,6	5,4	1
	053544	6,7	1,5...3	15,3 x 33	12,4	0,6	5,4	1
	054119	6,2	0,8...2	33 x 35	12,7	0,6	6,4	1
	203302	6,3	2...3	26,5 x 30	12,5	0,6	7,9	1
	054747	6,6	0,5...3	4,4 x 33	24,9	0,6	5,4	2
	053219	6,8	0,5...2	4,8 x 33	16,6	0,4	5,5	2
	053532	6,7	3...4	5,7 x 33	124,4	0,6	5,4	2
	054218	6,7	1,5...3	5,2 x 28	21,8	0,6	5,05	2
	054020	6,7	0,5...3	5,2 x 28	21,0	0,6	7,7	2
	054207	6,7	0,7...2	5,2 x 28	21,0	0,6	6,5	2

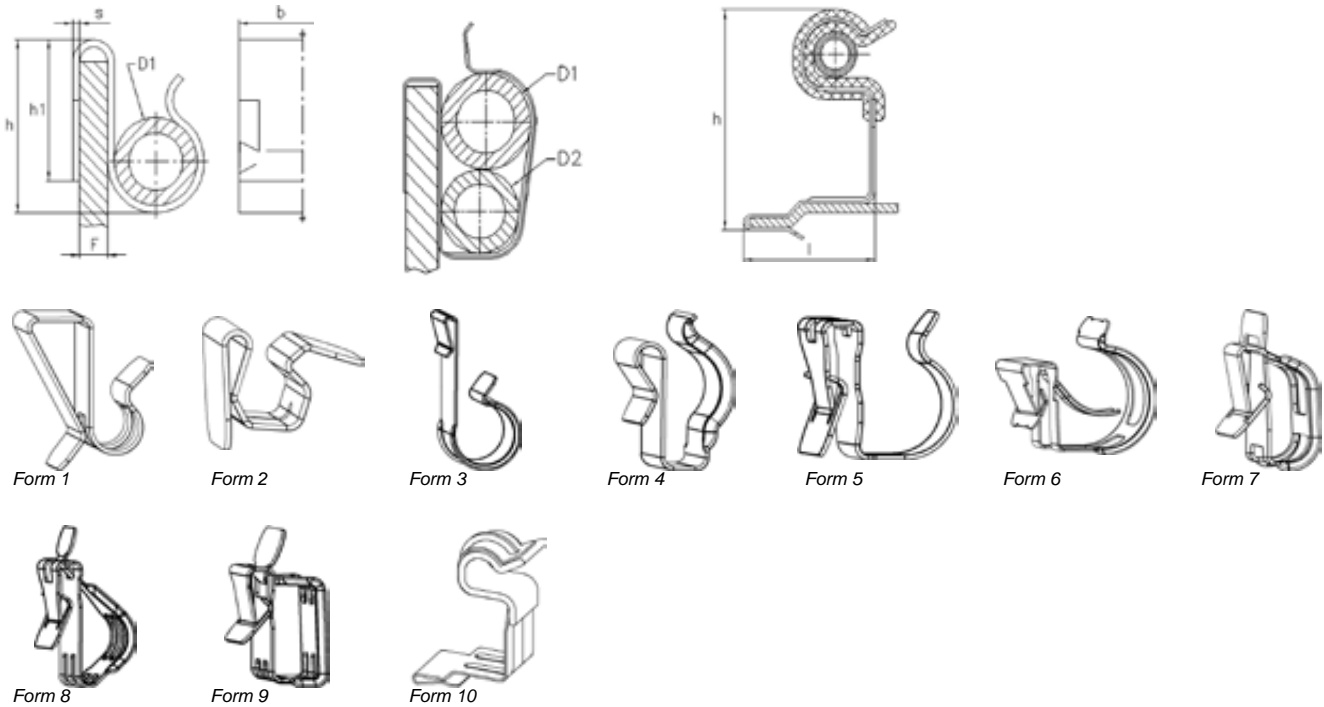
PIPE CLIPS ASSEMBLED ONTO PANEL EDGE 1- AND 2-WAY METAL

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed with barbs that grip into steel, aluminium or any rigid mounting material and resist movement from vibration or impact.

Due to the configuration of their clamping legs overall complexity is reduced, as all parts are suitable for a range of panel thicknesses. Installation is quick and positive.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	F	b	l	s	h	h1	Form
	012764	6...7	-	3...6	12,75	-	0,5	12,0	14,0	1
D	018054	13...15	-	1,2...1,5	15,0	-	0,5	32,5	15,4	1
	212277	6,0	-	2...6,5	75,0	-	0,5	17,0	19,0	1
	018200	6,2...6,5	-	1,2...1,6	15,0	-	0,5	9,0	11,2	2
	013538	7,7...8,5	-	0,7...1	10,0	-	0,4	10,0	6,7	3
D	019983	8...9	-	1,5...1,5	12,75	-	0,4	14,5	9,0	3
D	018374	8,8...9,2	-	0,7...1,2	12,0	-	0,4	25,0	10,0	3
	205255	8,0	-	3,0	14,0	-	0,6	13,9	17,8	3
D	014552	7...9	-	1,2...2,5	18,0	-	0,4	14,0	9,0	4
	020539	9,9...10,1	-	2,25...2,75	18,0	-	0,4	12,8	12,5	5
D	017957	18,0	-	6...8	20,0	-	0,5	19,0	16,7	5
	020266	5...11	-	4,0	18,0	-	0,4	13,5	12,9	6
E	200297	15...20	-	4,0	18,3	-	0,4	18,0	13,2	6
D	016455	4,0	4,0	2,0	15,0	-	0,4	13,0	10,0	7
D	014977	6,0	6,0	0,75...1,25	15,0	-	0,4	15,0	15,0	7
D	014978	6,0	6,0	3,25...4,25	15,0	-	0,4	15,4	15,0	7
D	019677	8...9	-	2,25...2,75	18,0	-	0,4	18,5	12,9	8

D = with raised edges; G = for corrugated tubes; E = legs within the bore for varying diameter hoses

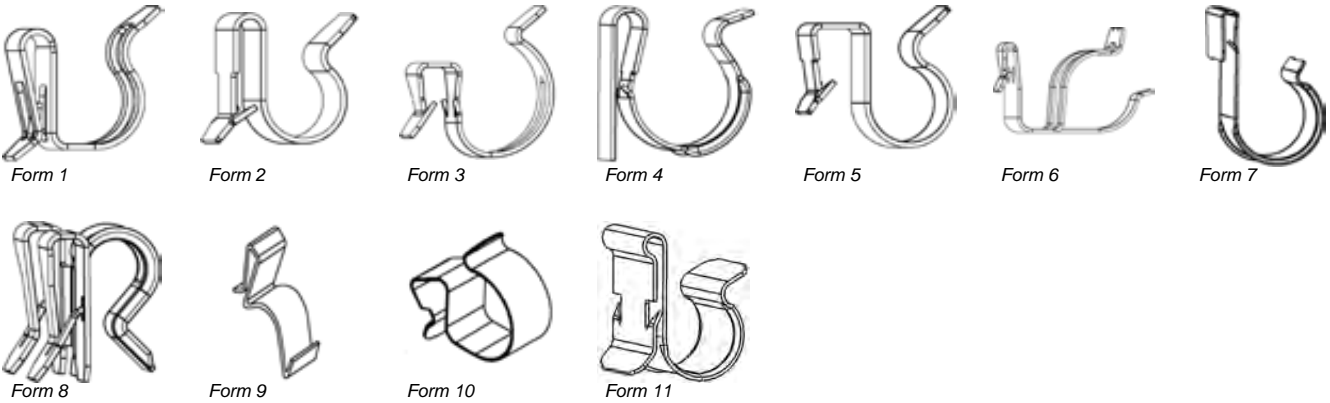
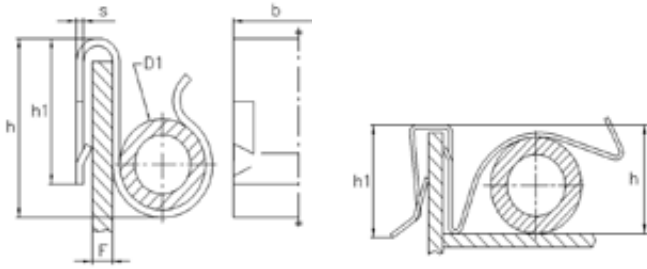
PIPE CLIPS ASSEMBLED ONTO PANEL EDGE 1-WAY METAL - WITH RETAINING CLAWS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are available in a wide range of sizes to accommodate many cable diameters and panel thicknesses. Quick, secure installation.

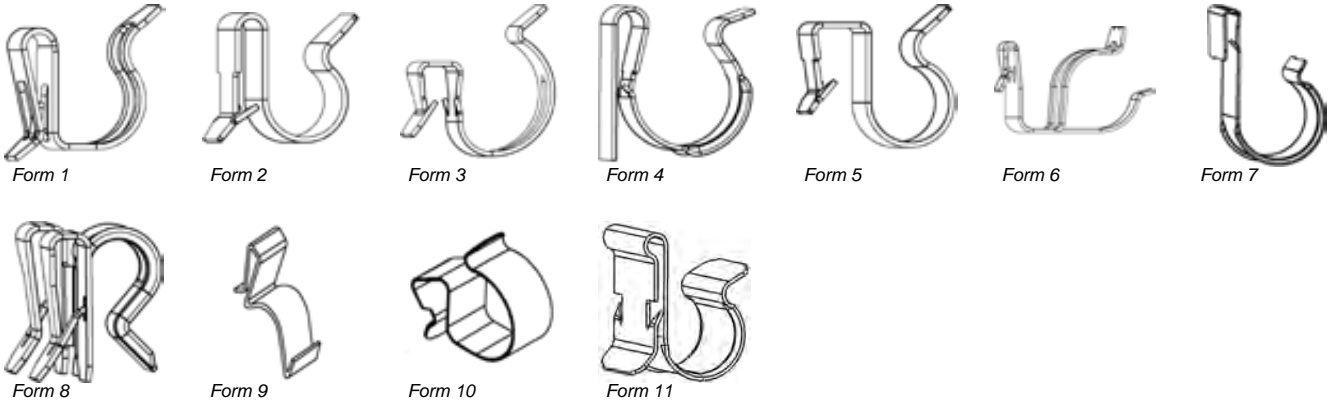
? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	F	b	h	h1	s	Form
	151054	4,5	1,2...1,7	7,9	11,2	-	0,6	1
I	203420	7,9...8,1	1,9...2,1	14,0	11,0	12,0	0,5	1
	052262	15...18	2...2,2	14,0	12,8	11,6	0,5	1
	018416	9,9...10,1	2,0	18,0	12,8	12,5	0,4	1
	051663	10...11	0,8...1,2	14,0	20,0	-	0,5	2
D	151053	12...15	0,7...1,5	14,0	17,0	-	-	2
	052421	9,5...10	0,5...0,6	12,0	10,3	7,0	0,4	2
G	020121	9,2	2...3	15,0	7,1	7,0	0,4	2
D	014293	8,5...9,5	1,2	10,0	13,8	7,0	0,4	2
D	013166	3,5...4,5	2...3	12,75	18,5	9,0	0,4	2
	051607	6,5...7	0,6...1	12,0	12,3	10,0	0,5	2
	012105	13...15	2,5	15,0	10,0	10,0	0,4	2
	052674	10,0	0,7...2,1	14,0	13,5	10,0	0,4	2
	014239	10,0	2,25	15,0	10,0	10,0	0,4	2
	016741	10,0	1,0	15,0	10,8	10,0	0,4	2
	012392	10,0	2,5	15,0	10,9	10,0	0,4	2
D	209702	13,5	3,5...4	15,0	17,0	10,0	0,4	2
	012249	15...17	4,0	15,0	17,0	10,0	0,4	2
	013646	16...17	0,5...1,5	15,0	32,0	10,0	0,4	2
	013790	17...18	1,0	15,0	18,0	10,0	0,4	2
D	018622	22,0	0,8...1,5	15,0	27,0	10,0	0,4	2
D	015006	3,5...4,5	0,7...1	13,0	18,0	11,0	0,4	2
	011902	14...15	0,7...1	15,0	20,0	11,0	0,4	2
D	013664	3,2...3,5	1,6...5	12,75	12,0	12,0	0,4	2
	020252	7,9...8,1	1,9...2,1	14,0	11,0	12,0	0,5	2
D	011882	9...10	2...2,5	15,0	17,0	14,0	0,4	2
	053814	18...22	0,8...1,5	18,0	14,0	16,0	0,5	2

D = with raised edges; G = for corrugated tubes; I = stainless steel Z = only on Request

PIPE CLIPS ASSEMBLED ONTO PANEL EDGE 1-WAY METAL - WITH RETAINING CLAWS

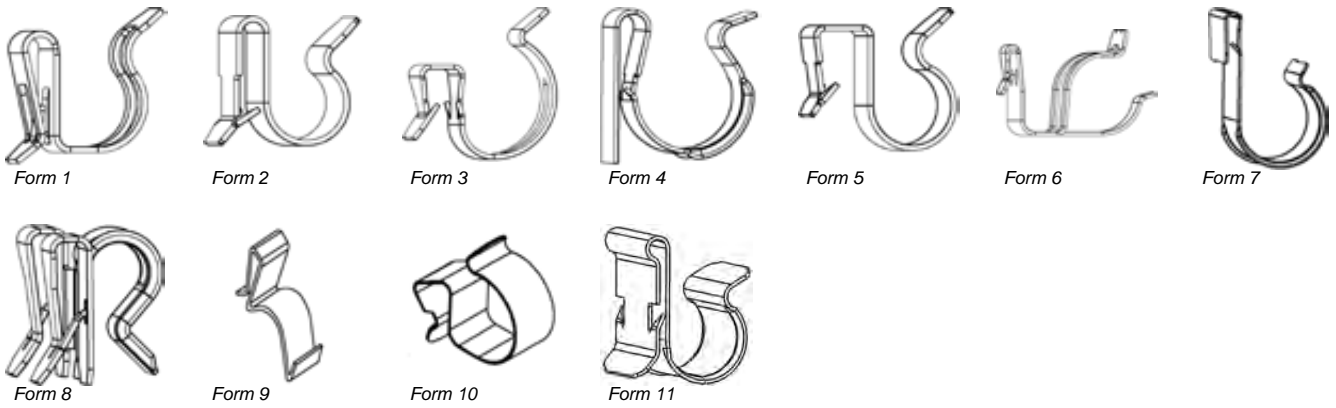


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	b	h	h1	s	Form
	052266	4,5	0,6...1	12,0	8,0	6,4	0,3	2
	019729	8...10	1,8...2,2	10,0	10,8	6,5	0,4	2
	012658	7...8	2,3...2,7	10,0	10,0	6,7	0,4	2
	011851	7...8	0,75...1,25	10,0	11,0	6,7	0,4	2
	013087	7...8	1,8...2,3	10,0	10,5	6,7	0,35	2
	019035	4,7...4,9	0,8	10,0	10,9	6,8	0,35	2
	015405	7,0	2,5	10,0	11,0	6,9	0,4	2
	014635	4,2...4,4	1,9...2,1	12,5	13,1	7,3	0,3	2
D	017904	8,4	1,65...1,7	10,0	6,7	7,4	0,4	2
D	012742	6,0	1,0	13,0	15,5	8,5	0,4	2
D	011994	6,0	2,0	13,0	14,5	8,5	0,4	2
	019302	7,9...8,3	3,6...4,4	12,75	11,9	8,7	0,5	2
	012623	7,9...8,3	3,6...4,4	12,75	11,9	8,7	0,5	2
	053806	11...15	0,7...1,5	12,7	8,7	9,2	0,45	2
	013500	6,0	3,0	13,0	8,0	9,2	0,3	2
	011430	6,0	0,75...1,5	12,75	9,5	9,5	0,4	2
	012553	14,0	1...1,5	15,0	9,8	9,8	0,4	2
	020115	15,5...16	3...4	15,0	42,7	9,9	0,4	2
	019930	6,0	2,0	12,0	12,5	10,4	0,4	2
	019390	15,0	0,8...1,8	15,0	28,3	10,5	0,5	2
D	016996	17,0	0,7...1,8	15,0	10,0	10,8	0,4	2
	052760	10,0	1,8...2,2	14,0	19,5	11,4	0,4	2
	020470	7,9...8,1	4,8...5,2	12,75	12,2	11,9	0,5	2
	053539	12...14	0,8...1,2	14,0	18,2	12,3	0,4	2
Z	013600	18,0	1...1,5	18,0	13,3	12,3	0,5	2
	051659	12...14	0,7...1,2	14,0	18,25	12,5	0,5	2
	016900	14,0	2,5...3,5	14,0	14,2	17,5	0,4	2
	019929	9,0	3,0	14,0	16,2	18,4	0,6	2
D	014398	6,5...7	2...3	10,0	8,75	6,75	0,5	2
	012490	4,0	6,3...6,5	12,5	10,0	9,45	0,55	2
D	016466	6,0	3,5...4,5	12,75	18,2	8,0	0,4	3
	052664	7...8	1,5	10,0	10,5	9,0	0,4	3
	052210	5,7...7	0,7...1	12,0	12,5	10,0	0,4	3
D	053842	17...22	1...3	19,0	17,2	12,0	0,5	3
	019103	13,0	1,5...2,5	15,3	9,3	7,1	0,4	3
	018456	7,1...7,3	15...16,5	15,0	7,4	9,5	0,4	3
	018455	7,1...7,3	10...11,5	15,0	7,4	9,5	0,4	3
	020654	3,0	0,5...2,5	12,0	10,5	9,7	0,3	3
	020284	2,9...3,1	0,5...2,5	12,0	10,5	9,7	0,3	3
D	018192	7,9...8,1	2,5...3	15,0	16,0	11,9	0,45	3
	052348	9,0	1...4	12,0	20,0	12,5	0,4	3
	017115	12,0	2,5	16,0	17,2	12,5	0,5	3
	200722	12 x 9	3...6	15,0	14,5	12,8	0,4	3
	019155	8,5...9,9	2...3	10,0	8,8	6,75	0,4	3
	018710	8...8,7	2...3	10,0	8,75	6,75	0,4	3

D = with raised edges; G = for corrugated tubes; I = stainless steel Z = only on Request

PIPE CLIPS ASSEMBLED ONTO PANEL EDGE 1-WAY METAL - WITH RETAINING CLAWS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	F	b	h	h1	s	Form
	014155	18,0	1,8...2,2	20,0	23,55	11,0	0,55	4
D	015366	18,0	1,8...2,2	20,0	23,55	11,0	0,55	4
	019855	7,4	1,6...3,5	20,0	10,7	12,0	0,45	4
	012399	12...13	1,25...3	15,0	20,0	17,0	0,5	4
	054329	15...16	2,5...3,5	15,3	20,0	17,0	0,5	4
D	019766	12...13	1,25...3	15,0	20,0	17,0	0,5	4
	202930	12...14	1,25...3	15,0	15,0	18,0	0,5	4
	130470	6,8...7	2,5	12,0	9,9	9,8	0,5	4
	200355	12,5	0,8	15,0	19,5	16,4	0,5	4
	204097	5,2	3,5...4,1	13,0	6,2	8,0	0,3	5
D	018142	6,8...7	9,9...10,1	10,0	8,5	9,0	0,5	5
D	014277	8...9	0,7...1,4	12,75	14,9	9,0	0,4	5
D	018595	12,0	2,5...3	18,0	12,8	9,0	0,4	5
D	206146	22...24	2,5...3	15,0	35,19	9,0	0,4	5
D	011936	12,0	1...1,5	18,0	11,9	10,0	0,4	5
	020525	14...19	0,8...1,5	15,0	32,0	10,0	0,4	5
	015137	14...19	0,8...1,5	15,0	32,0	10,0	0,4	5
D	017934	14,3	3,5...4	13,0	17,0	10,0	0,4	5
D	018529	15,0	3,5...4	15,0	17,0	10,0	0,4	5
G	201964	22,0	3...4	15,0	19,5	10,0	0,4	5
	216070	14,7...15,3	2,5...3	15,0	17,0	10,0	0,4	5
	015385	7...8	1...2,5	15,0	11,5	11,0	0,5	5
D	018415	12,9...13,1	0,7...1,2	15,0	17,0	11,0	0,4	5
D	019109	14,3	2...3,5	13,0	17,0	10,2	0,4	5
	020483	17,0	0,7...2,1	15,0	10,0	10,8	0,4	5
D	015311	10,0	2,4...2,6	15,0	16,6	14,3	0,4	5
D	018348	14,0	2...2,5	15,0	15,25	14,5	0,5	5
	054549	26...30	0,8	14,0	13,5	17,3	0,6	5
	053121	12...14	2...4	14,0	13,85	17,3	0,4	5
	019662	14,0	0,7...1	23,0	15,9	8,8	0,6	6
	209014	18,0	1,8...2,2	20,0	32,0	11,0	0,55	7
	020822	5,8...6	1,5...2,7	29,6	-	14,0	0,5	8
	052483	10...15	0,5...3	13,0	11,5	12,2	0,4	9
	055129	10...14	2...7	12,0	14,9	17,2	0,6	10
	055131	15...21	2...7	12,0	15,5	17,2	0,6	10
	055133	22...32	2...7	12,0	15,5	17,2	0,6	10
	052679	6...7	4...7	14,0	15,3	17,3	0,6	10
	052680	6...7	2...4	14,0	13,5	17,3	0,6	10
	052682	8...9	2...4	14,0	14,1	17,3	0,6	10
	052683	10...11	4...7	14,0	13,5	17,3	0,6	10
	052684	10...11	2...4	14,0	14,1	17,3	0,6	10

D = with raised edges; G = for corrugated tubes; I = stainless steel Z = only on Request

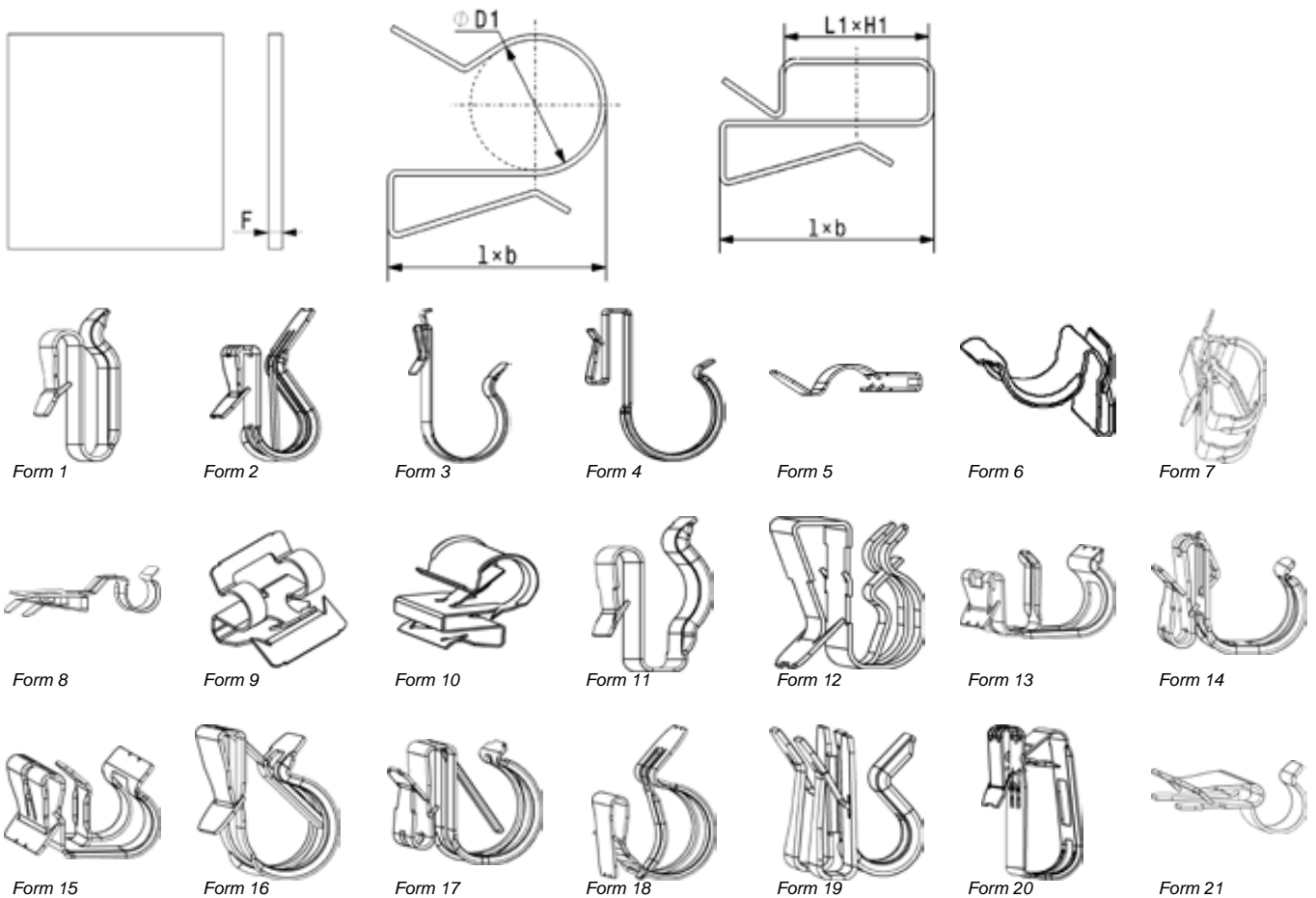
PIPE CLIPS ASSEMBLED ONTO PANEL EDGE VARIABLE DIAMETER METAL - WITH RETAINING CLAWS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

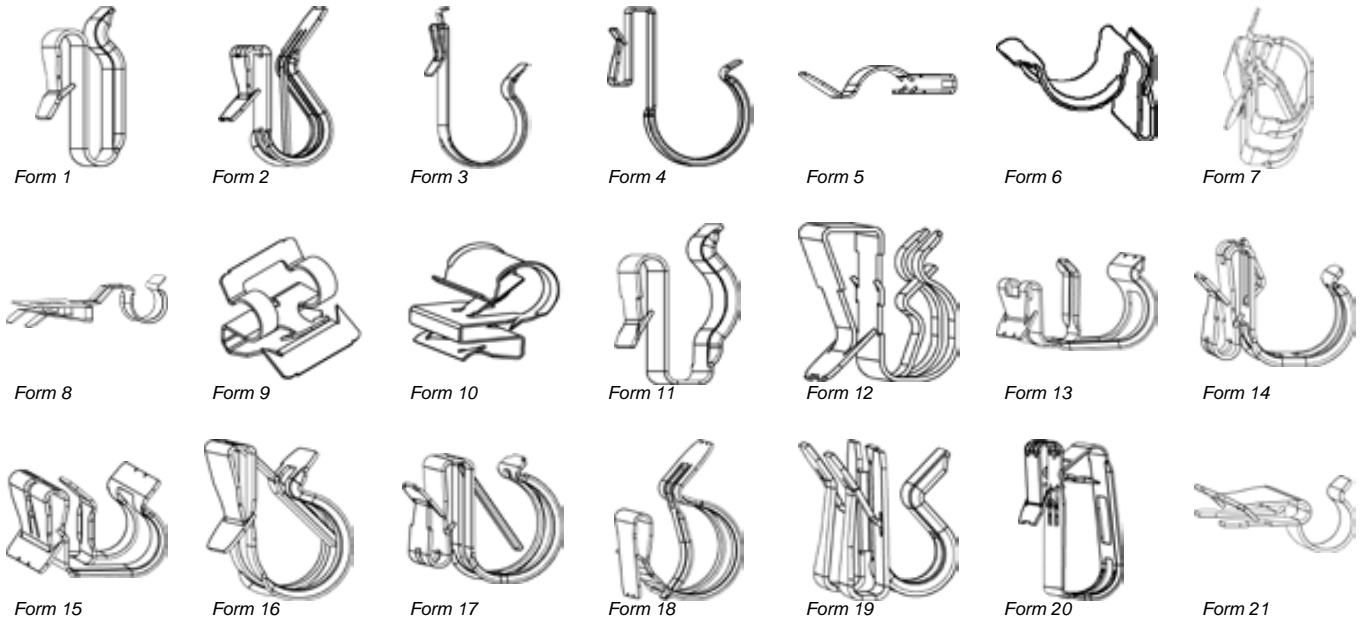
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	F	F1	l x b	s	Form
	013341	1...6	0,5...1,2	-	12,5 x 13	0,4	1
	013872	3,2	2...2,5	-	11 x 12,7	0,4	1
D	013475	5,0	0,75...1	-	13 x 13	0,4	1
	013107	6,0	4...4,5	-	12 x 13	0,4	1
D	012347	5,0	0,8...1,5	-	12,5 x 13	0,4	1
	013146	6,0	0,7	-	12,5 x 13	0,4	1
	201229	4,0	1...1,6	-	9 x 12,75	0,35	1
	013300	5,0	1...2,2	-	13 x 13	0,55	1
D	015992	5,5...9	0,7...1,5	-	15 x 18	0,4	1
D	015968	5,5...9	0,8...2	-	15 x 18	0,4	1
D	015160	3...7	1,7...1,9	-	13,4 x 15	0,4	2
	054048	7...11	0,7...2,5	-	14,3 x 12,7	0,45	2
	020597	15...16	1,0	-	32,4 x 15	0,4	3
	214104	15...16	1,0	-	32,4 x 15	0,4	3
	202682	12,5	2...3	-	22 x 17,5	0,5	3
D	018063	13,3...13,5	-	1...1,5	18,8 x 15	0,4	4
D	015057	16,0	-	1,5...2	27,2 x 8,5	0,5	4
	020609	17 x 12	-	2...2,2	21,2 x 30	0,5	4

□ = with raised edges

PIPE CLIPS ASSEMBLED ONTO PANEL EDGE VARIABLE DIAMETER METAL - WITH RETAINING CLAWS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/L1xH1	F	F1	l x b	s	Form
	012258	4...5	2...2,5	-	33,6 x 15	0,6	5
	019833	10...12	0,5...1	-	19,3 x 12,75	0,5	6
	013058	13,9...14,1	4,0	-	- x 16	0,5	6
D	016476	3,0	9...10,6	-	12,9 x 15	0,4	7
D	018690	4,5...10	0,8...3	-	19 x 24	0,4	7
D	016898	8...9	0,7...1,5	-	18,5 x 18	0,4	7
	019776	11,0	4...4,5	-	50,9 x 25	0,5	8
	128486	5,8...6,2	2,2...3,2	-	12,63 x 14	0,4	9
	129416	5...10	2,5...3,5	-	17,3 x 15	-	10
	015704	7...9	2,0	-	14 x 18	0,4	11
D	011534	7...9	4,0	-	13 x 18	0,4	11
D	012061	8...9	2,5	-	14 x 18	0,4	11
	014263	8...9	0,7...1,5	-	14 x 18	0,4	11
	011931	8...9	0,7...1,5	-	14 x 18	0,4	11
D	012426	10,0	0,7...1,4	-	14 x 18	0,4	11
	014420	9...10	2,5...3	-	12,8 x 18	0,4	11
	012037	9...10	1,5...2	-	14 x 18	0,4	11
	013217	9...10	0,75...1,5	-	14 x 18	0,4	11
D	016443	8...9	2,25...2,75	-	18 x 18	0,4	11
	019756	8...9	3...6	-	18,5 x 18	0,4	11
	052494	4...7	0,5...4,5	-	15 x 15,4	0,4	12
	052495	8...12	0,5...4,5	-	17,5 x 15	0,4	12
	020400	9...9,5	-	0,8...1,3	12,8 x 20	0,4	13
	019082	12,0	1,4...1,6	0,8...2,2	14,3 x 20	0,5	14
	020254	8,0	-	1,6	12 x 26	0,5	15
	132673	8...12	0,67	-	19,4 x 14	0,4	16
D	053810	3,5 / 6,5	0,8...2	-	17 x 15	-	16
D	053937	3,5...6,5	0,8...2	-	17,3 x 15	0,4	16
E	200263	2,5...10	1...2	-	17 x 16	0,4	16

D = with raised edges
E = legs within the bore for varying diameter hoses

PIPE CLIPS ASSEMBLED ONTO PANEL EDGE VARIABLE DIAMETER METAL/PLASTIC

MATERIAL:

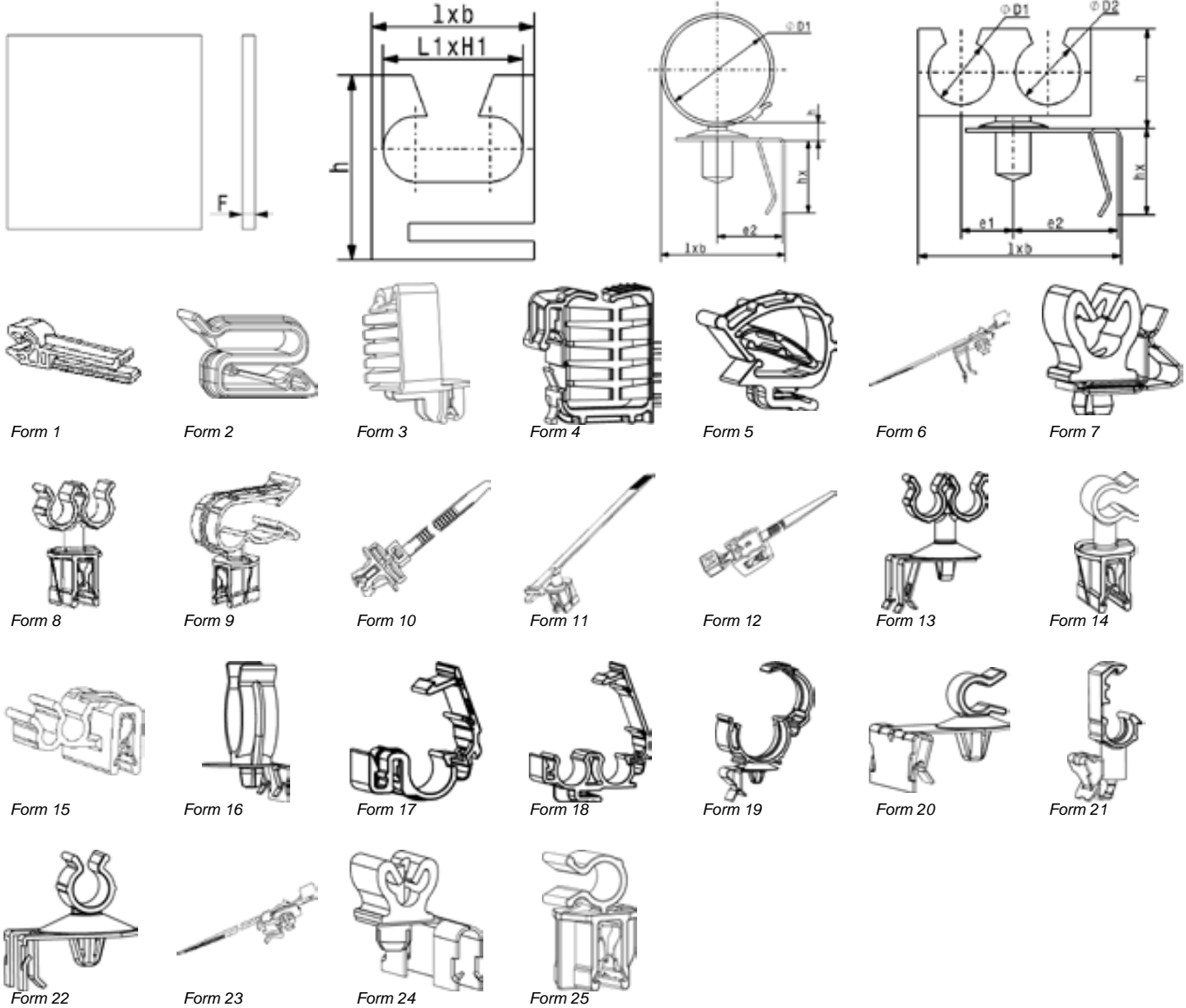
Spring steel C67S austempered; polyoxymethylene

COLOUR:

Black, natural (other colours are available on request)

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

Form 3 and 4:

Clips with flexible tab system to hold cables of variable diameters and avoid contact with panel edges.

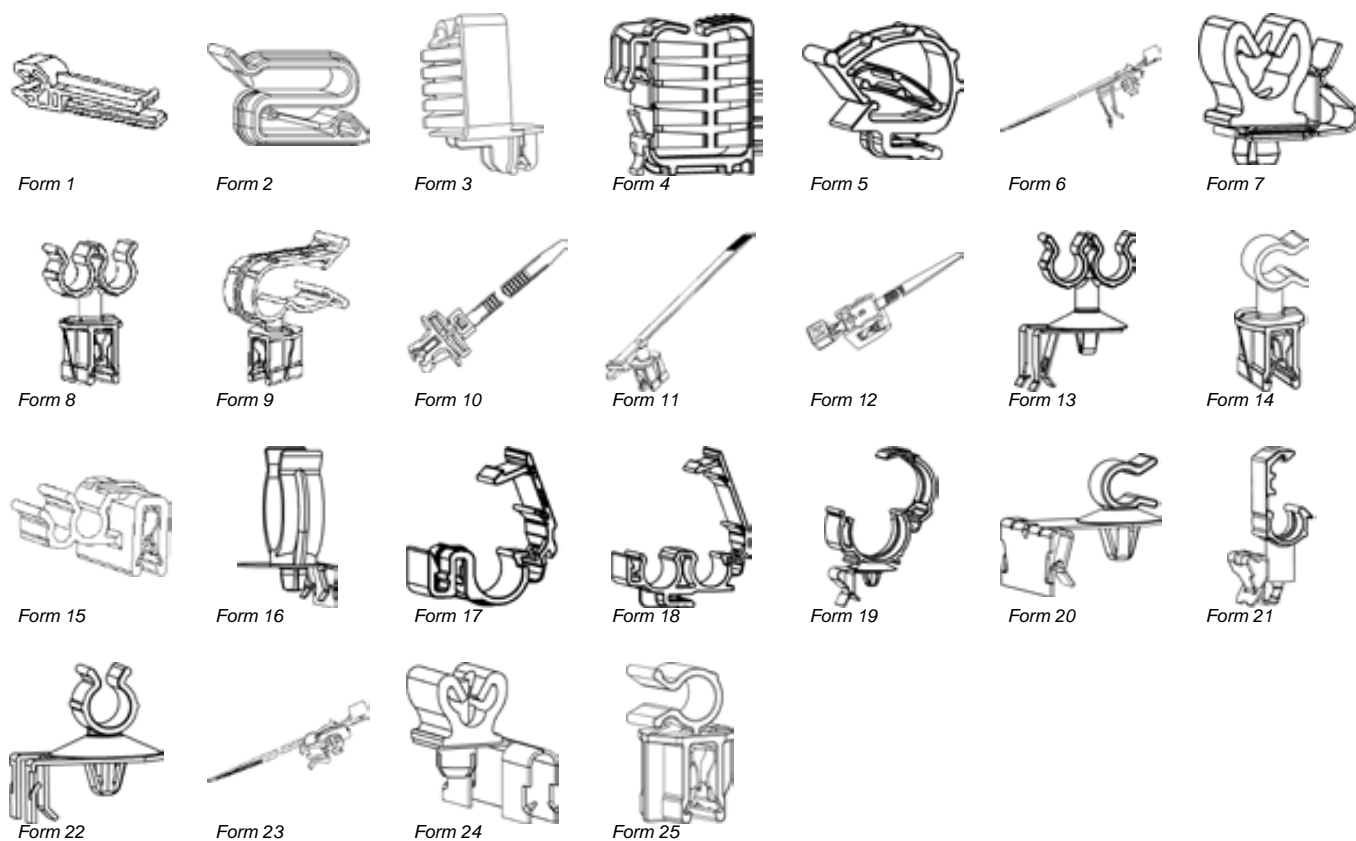
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/ L1xH1	ØD2	F	l x b	h	hx	e1	e2	Form
	108051	5,8	-	1,5...3	49 x 10	13,7	30,0	-	-	1
	108186	5,8	-	1,5...3	49 x 10	8,0	30,0	-	-	1
	016315	18,5 x 5	-	1,0	28 x 12	10,3	5,2	-	-	2
	061576	3...25	-	1...2,5	37 x 29	48,0	9,4	-	-	3
	061585	3...25	-	1...2,5	38 x 23	36,0	9,4	14,8	-	4
	061926	3...25	-	1...2,5	43 x 38	38,0	9,4	15,8	-	4
	081463	5 / 31 x 23	-	1...2,5	34,8 x 22	36,4	31,0	-	-	4

G = for corrugated tubes; *NW22

PIPE CLIPS ASSEMBLED ONTO PANEL EDGE VARIABLE DIAMETER METAL/PLASTIC

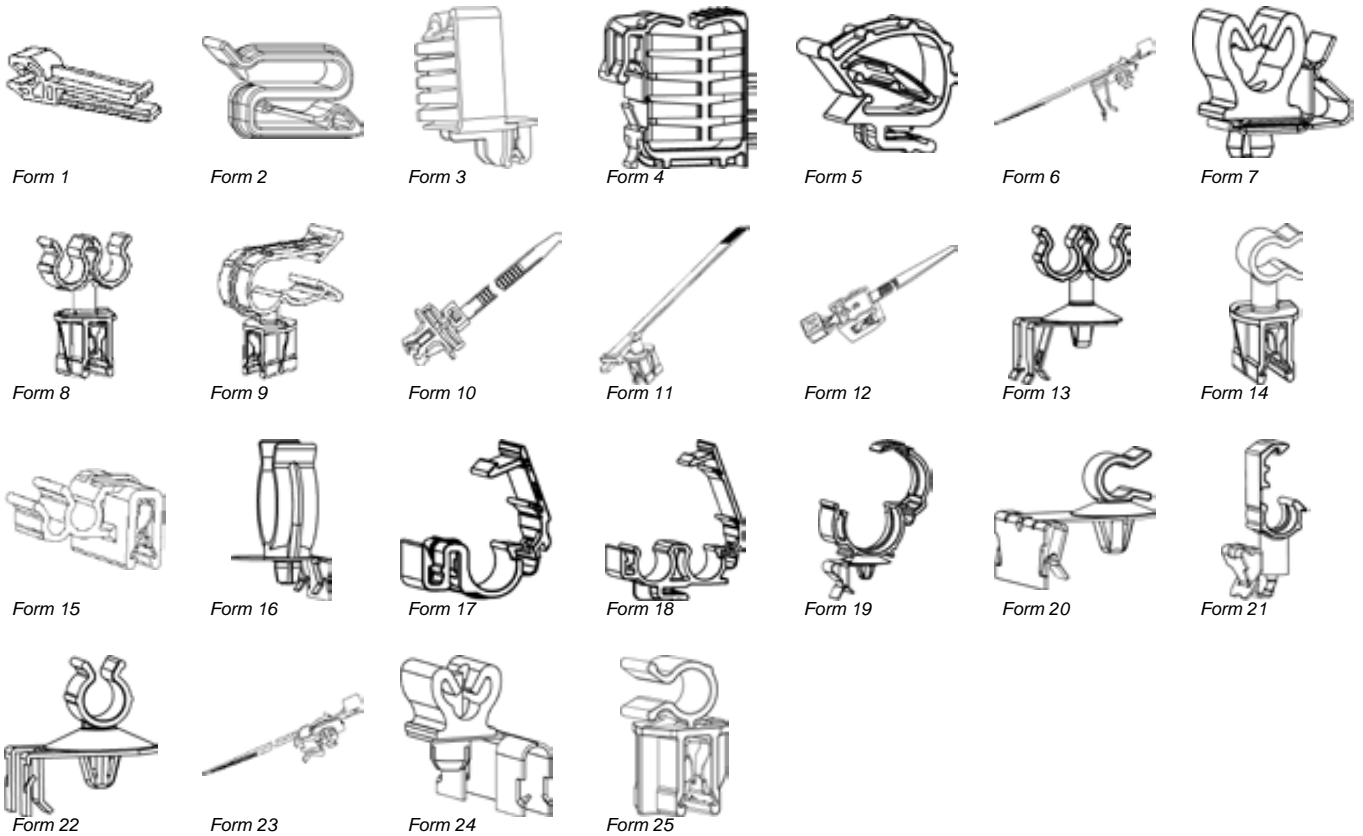


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/ L1xH1	ØD2	F	l x b	h	hx	e1	e2	Form
	061866	5...32	-	1,5	41,3 x 25,5	49,0	9,4	16,5	-	4
	082047	(4x) 5, (1x) 3	-	1...2	16,15 x 40	18,8	-	-	-	4
	081401	6...14	-	2...2,5	31,5 x 15	22,5	5,9	-	-	5
	132068	3...13	-	1,5...2,5	25,1 x 13	23,9	8,0	12,0	-	5
	082104	1,5...43	-	2,5...6	180 x 16	3,75	16,0	-	-	6
	082472	1,5...43	-	4,5...5,5	180 x 20	4,35	15,2	-	x 15	6
	201450	1,5...43	-	4,5...5,5	180 x 20	4,35	15,2	-	x 15	6
	081915	max. 24	-	1,5...4,5	127,1 x 12	10,5	15,9	-	-	6
	081286	8...10	-	1,5...4	26,3 x 14	19,0	17,3	-	17,8	7
	082168	8...10	-	1,5...4,5	23,1x 24,2	26,5	16,0	-	10,1	7
	201243	8...9	8...9	2...4	23 x 15	22,8	14,2	6,0	-	8
	082608	13,5	13,5	2...4	40 x 15	26,8	14,2	10,5	-	8
	200596	16,0	16,0	2...4	46,5 x 15	27,9	14,2	-	-	9
	190042	1,5...40	-	0,7...2,5	182,5 x 19	-	8,0	-	-	10
	082652	1,5...43	-	1,5...3,5	180 x 12	-	9,5	-	-	10
	082651	1,5...43	-	1,5...3,5	191 x 12	-	9,5	-	-	10
	201174	8...33	-	2...4	146 x 16	13,4	14,2	-	-	11
	082653	1,5...43	-	1,5...3,5	186 x 12	-	8,8	-	-	12
	082478	5,0	5,0	3...4	24,4 x 33	10,0	12,4	-	-	13
	082620	16...17	16...17	2...3	26,6 x 30	41,6	12,5	11,0	18,6	13
	200036	8...9	-	2...4	15 x 16	35,25	12,0	-	-	14

G = for corrugated tubes; *NW22

PIPE CLIPS ASSEMBLED ONTO PANEL EDGE VARIABLE DIAMETER METAL/PLASTIC



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1/ L1xH1	ØD2	F	l x b	h	hx	e1	e2	Form
	082571	6,4...6,7	4,0	1,6	27,9 x 26	17,8	12,0	10,7	-	15
	202926	22,5...24	-	2...3	26,5 x 30	46,5	12,0	-	10,0	16
	200337	14,5	-	1,9..2,1	35,3 x 20	20,6	-	11,4	-	17
	200335	14,5	14,5	1,9...2,1	50,1 x 20	26,1	11,5	-	-	18
G	082580	25...25,8	-	1,5...4,5	36 x 20	47,6	16,0	-	10,3	19
G	201187	9,6...10,2	-	4,5...5,5	24 x 20	33,4	15,2	-	15,0	19
	082077	16...18,5	-	1,5...4,5	28 x 12	47,4	17,4	-	10,1	19
	082309	6,2...6,4	-	2...3	30 x 26,5	24,2	12,5	-	18,0	20
	082461	13...14	-	2...3	34,1 x 30	38,6	12,5	-	17,6	20
G	082506	6,8...7,4	-	1,5...3	16 x 13	22,5	11,0	-	5,3	21
G	082505	9,6...10,2	-	1,5...3	16 x 13	22,8	11,0	-	5,3	21
G	082504	12,6...13,2	-	1,5...3	19 x 13	24,1	11,0	-	5,3	21
	082517	7,5...7,8	-	2,5	26 x 18	27,4	11,4	-	10,0	22
	082311	1,5...43	-	1,4...1,6	180 x 28	-	7,7	-	-	23
	082447	4,8...6	-	3...4	17,35 x 33	12,0	12,4	-	10,35	24
	060675	4,8...5,25	-	3,0...4,0	17,0 x 33,0	12,9	12,4	8,2	-	24
	205203	8,0	-	2...4	16 x 15	13,0	14,5	-	-	25

G = for corrugated tubes; *NW22

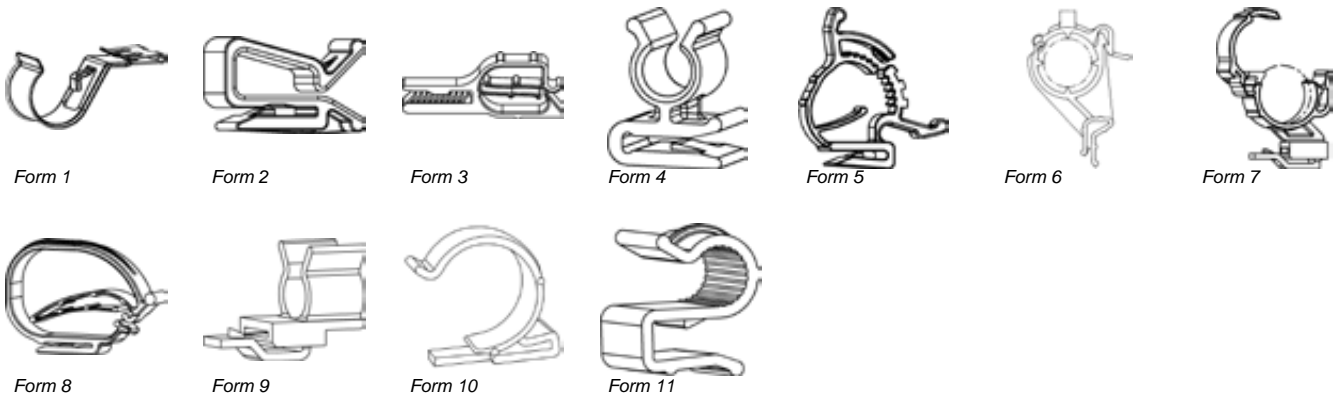
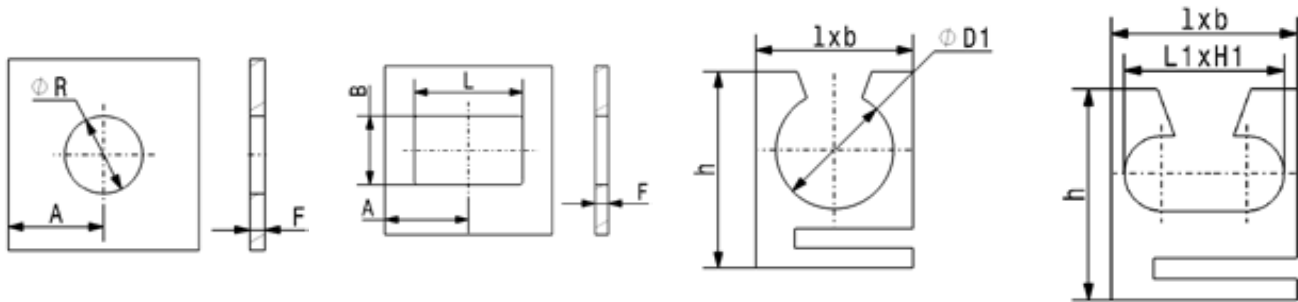
PIPE CLIPS ASSEMBLED ONTO PANEL EDGE VARIABLE DIAMETER - WITH RETAINING CLIP

MATERIAL:

Spring steel C67S, polyoxymethylene

COLOUR:

Black, Natural (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Plastic clips for fixing cables onto a panel edge. Additional security is assured by a lug clipped into the panel hole.
Form 1: Spring steel

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	F	ØR/ L x B	A	l x b	h	Form
	020126	19,5	1,7...1,9	5,8...6,2 x 5,8...6,	6,5	47,9 x 20	22,6	1
	013977	5,5 x 10	0,88	6,0	6,5	11,75 x 12	16,0	2
	015671	7 x 11	0,88	6,0	6,5	13,25 x 12	19,0	2
E	018962	5...9	1,2...1,5	6,5 x 10	9,8	46 x 10	18,0	3
	016613	7,0	2,0	4,8 x 6,5	6,5	16 x 12	20,0	4
	015674	8,5...13	1,6...1,8	7,0	7,0	- x 12	-	5
	017258	19,5	1,5	4,5 x 3	-	31 x 20	61,5	6
	017577	20,9...22,1	2...3	5,0	6,0	26 x 20	-	7
E	015673	28 x 6...10	1,2	6,0	6,2	65 x 12	19,2	8
E	015672	28,5 x 6...10	1,9	6,0	6,5	40 x 12	21,7	8
E	014569	4...6	0,5...1	10 x 6,3	-	28 x 10	15,0	8
E	017996	1...5	1...1,5	6,0	6,0	23,6 x 10	15,5	8
E	017997	8...14	1...1,5	6,0	6,0	35,1 x 10	-	8
	016394	27,0	1,0	11 x 9	9,5	55,5 x 10	38,0	8
	016917	10,5	1,6	4,5	6,5	35,5 x 15	25,5	9
	055560	25...30	1...1,5	6...6,4	10,0	32,4 x 12	41,5	10

E = with securing tang for variable bore

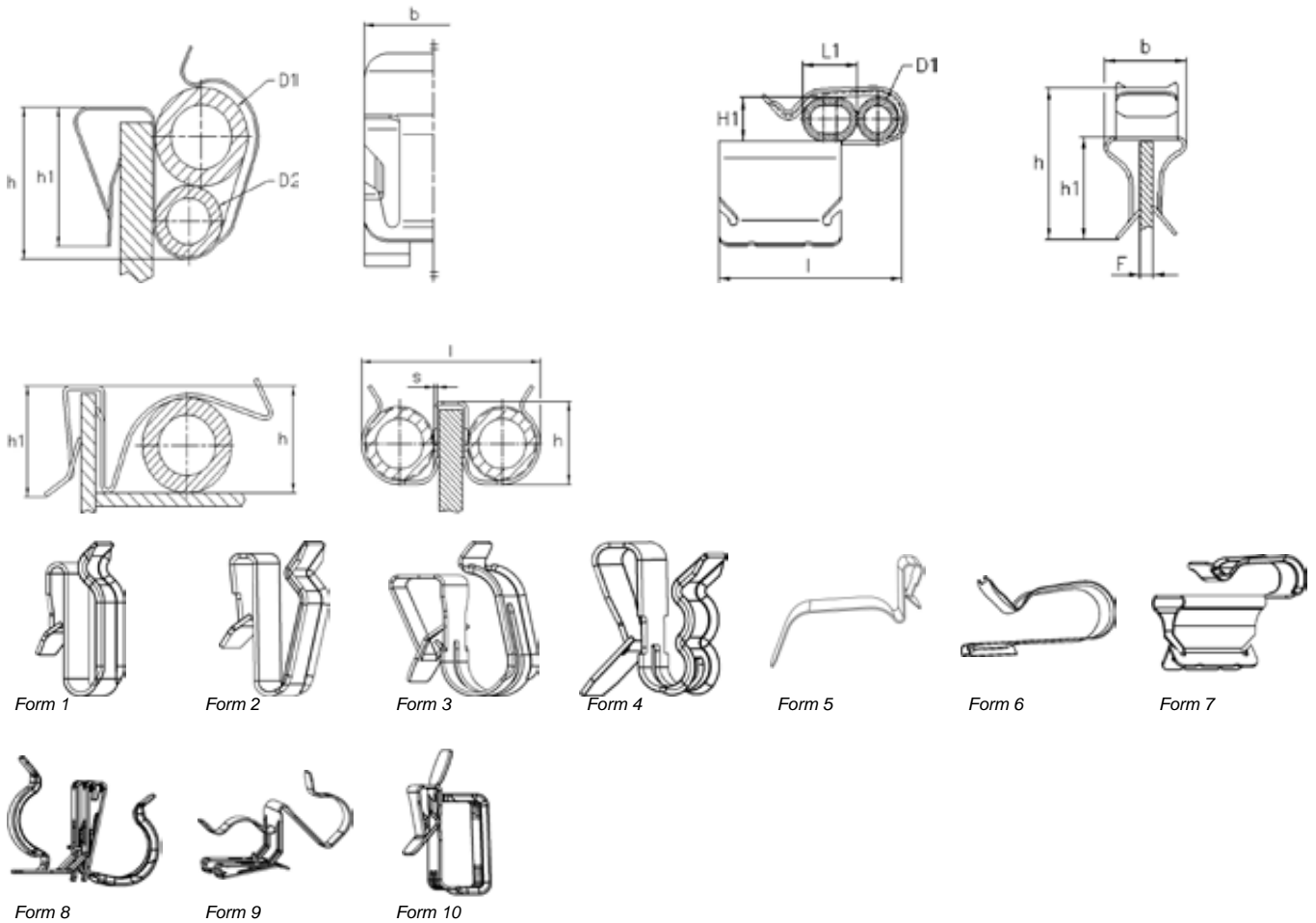
PIPE CLIPS ASSEMBLED ONTO PANEL EDGE 2-WAY METAL VARIABLE DIAMETER - WITH RETAINING CLAWS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed with barbs that grip into steel, aluminium or any rigid mounting material and resist movement from vibration or impact.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	L1 x H1	F	l	b	h	h1	s	Form
	052945	3,5	3,5	-	2...2,5	-	12,0	12,0	11,05	0,5	1
D	013512	2,5	2,5	-	0,75...1	-	13,0	13,0	9,0	0,4	1
D	011536	3,8...4,2	3,8...4,2	-	3...3,5	-	13,0	12,2	8,0	0,4	1
D	011289	4,0	4,0	-	1,5...2	-	13,0	13,0	8,5	0,4	1
D	012202	2,4...2,6	2,4...2,6	-	1,5...2	-	13,0	13,0	8,5	0,4	1
D	012247	4,8...5,2	4,8...5,2	-	2...2,5	-	15,0	15,0	11,0	0,4	1
D	012639	4,9...5,2	4,8...5,1	-	2...2,5	-	15,0	13,75	9,0	0,4	1
D	012744	5,8...6,2	5,8...6,2	-	0,75...1,25	-	15,0	13,7	11,0	0,4	1
D	014685	5,9...6,1	5,9...6,1	-	0,75...1,25	-	15,0	14,0	11,0	0,4	1
D	013474	4,9...5,1	4,9...5,1	-	3,5...6	-	15,0	12,5	10,0	0,4	1
D	017973	6,9...7,1	6,9...7,1	-	3...6	-	18,0	14,5	12,7	0,4	1
D	013493	11,8...12,2	11,8...12,2	-	1,8...2,2	-	18,0	24,0	12,0	0,5	1
D	054900	5...5,5	5...5,5	-	0,5...2	-	13,5	17,5	16,2	0,5	1
D	012857	3,9...4,1	2,4...2,6	-	0,8...1,5	-	13,0	13,0	8,5	0,4	2
D	012920	3,8...4,2	2,3...2,7	-	1,5...2	-	13,0	13,0	8,5	0,4	2
	053231	9,52	6,35	-	0,5...1,8	-	12,7	20,2	8,86	0,5	2

D = with raised edges; E = with securing tang for variable bore; G = for corrugated tubes

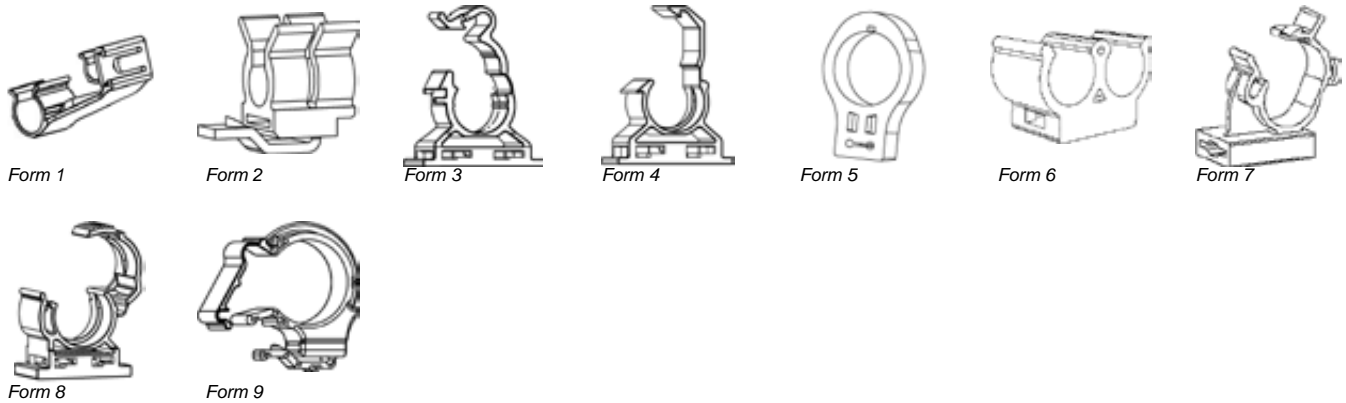
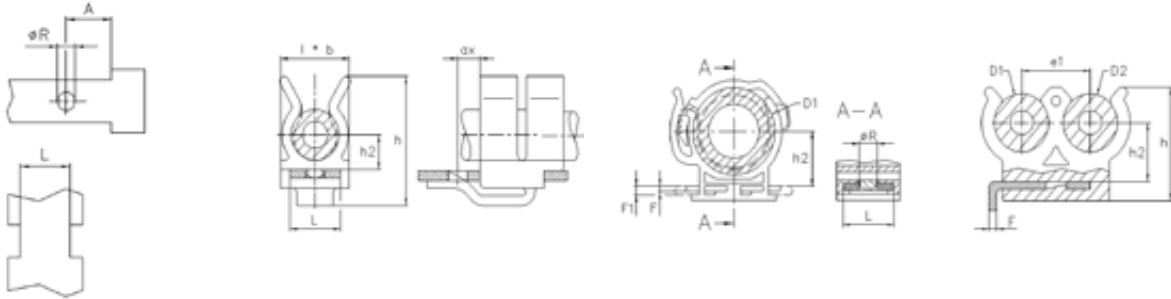
PIPE CLIPS ASSEMBLED ONTO METAL TABS 1 AND 2-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1 / ØD2	l x b	F / F1	h	h2	A	ax	ØR	L	e1	Form
	019548	8 / 15	36,3 x 44,5	1,75...2,2	29,0	-	-	9,5	7,5	13,2	16,3	1
	016861	9...10,5	15 x 29,5	1,6	26,5	7,4	-	5,0	4,5	11...11,3	-	2
	019317	14...14,6	32 x 20	1,5 / 2	28,5	11,8	13,2	-	5...5,2	16,0	-	3
G	017554	15,8...16,1	32 x 20	2 / 3	26,5	12,0	13,2	-	5...5,2	16,0	-	4
G	020022	22,6...23,4	35 x 23	2 / 3	35,8	15,4	13,2	-	5...5,2	16,0	-	4
	018313	22,6...23,4	35 x 22	2 / 3	28,7	15,4	13,2	-	5...5,2	16,0	-	4
G	017692	25,1...25,9	37 x 23	2 / 3	38,3	16,65	13,2	-	5...5,2	16,0	-	4
	018413	25,5	37 x 23	2 / 3	38,3	16,65	13,2	-	5...5,2	16,0	-	4
G	017798	31...31,8	42 x 23	2 / 3	44,4	19,6	13,2	-	5...5,2	16,0	-	4
	056258	26,0	33 x 12	1,5	53,0	27,0	-	-	-	12,0	-	5
C	056292	30,0	37 x 12	1,5...2,5	56,0	29,25	-	-	-	12,0	-	5
	108058	14 / 14	33,5 x 18	2,9...3,1	18,0	10,0	8,8...9,2	-	5,0	11,8...12	17,5	6
	108171	14,5	30 x 26	1,5	26,0	8,5...9,5	-	-	5,4	-	-	7
G	017613	20,6...21,4	35 x 20	2 / 3	34,0	14,4	13,2	-	5...5,2	-	-	8
	019002	25,0	39 x 15	1,6...1,75	39,5	22,0	-	5,0	3,8...4	11...11,3	-	9

G = for corrugated tubes; *NW26; C = AR-Bag® anti noise insulation - Bi-injection

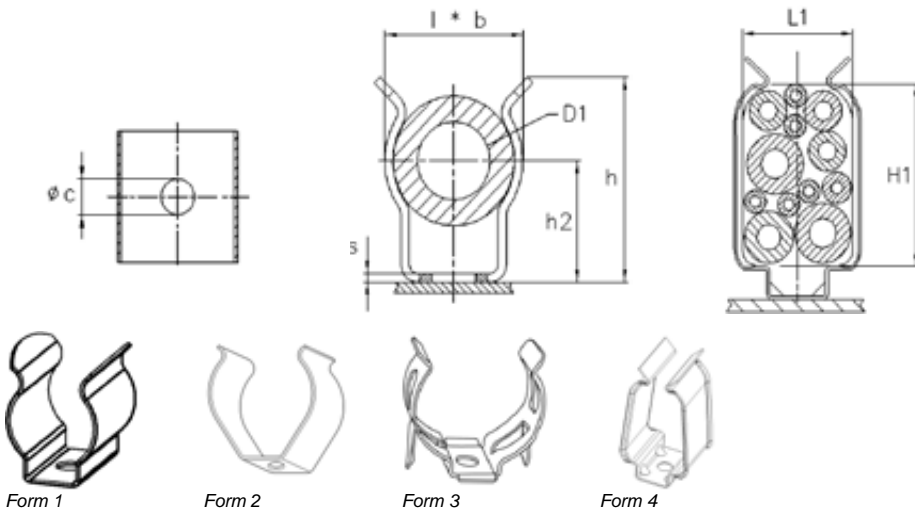
METAL FASTENERS - TO SCREW OR RIVET 1-WAY - SWIVEL

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

Clips may be supplied with plastic coated surface finish to provide anti-vibration properties. These lyre-shaped clips are installed using a threaded screw or expansion rivet. Clips allow the fastening of cables or pipes of varying forms.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1/ L1xH1	Øc	h	h2	l x b	s	Form
	053133	8,0	3,5	11,5	5,5	9,3 x 16	0,4	1
	053746	8...10	3,5	36,0	30,0	16 x 20	1,0	1
	052522	9...10	3,7	12,5	7,0	9,8 x 15	0,4	1
	052466	9...10	3,5	12,5	6,5	10,2 x 15	0,6	1
D	054436	10...12	3,5	16,0	8,0	10,3 x 20	0,4	1
D	054404	12...16	4,3	19,8	9,0	10,2 x 20	0,6	1
	052652	13...16	5,3	20,0	9,0	13,5 x 20	0,4	1
	051964	13...16	5,0	19,7	9,0	13,7 x 20	0,6	1
D	054802	16...20	5,0	42,0	30,0	18 x 20	1,0	1
	051963	17...20	5,3	23,0	11,0	16,7 x 20	0,6	1
	054530	21...25	4,1	29,0	13,0	18,8 x 20	0,8	1
	055216	21...25	4,6	27,0	13,0	22,2 x 20	0,6	1
D	051955	21...25	5,3	27,6	13,0	22,2 x 20	0,6	1
	054432	21...25	4,0	27,0	13,0	21,7 x 20	0,6	1
	052418	26,0	5,3	32,6	16,5	27 x 20	1,0	1
	052244	26...30	5,3	32,6	17,0	26,2 x 20	0,6	1
	052245	31...36	5,1	38,5	18,2	31,2x 20	0,6	1
	054514	60...65	6,1	73,0	43,5	56,2 x 20	0,8	1
	054348	61...68	6,1	73,0	41,0	61 x 17,5	1,0	1
	200467	16,0	4,4	21,5	11,5	16,7 x 20	0,6	1
	054631	21...25	5,0	27,0	13,0	21,5 x 20	0,6	1
	132707	25,0	5,0	33,17	19,5	24,2 x 15	0,6	1
	018331	12...13	4,2	18,5	11,0	13,6 x 16	0,8	1
	054308	72...74	6,3	72,0	42,0	69,5 x 20	1,0	1
D	054504	10...12	4,3	16,0	8,0	10,3 x 20	0,4	1
D	054647	23,8...24,8	5,0	28,0	15,0	25,5 x 20	0,6	1
	053833	31...36	6,0	40,2	20,4	31 x 17,5	1,0	2
D	054500	31...36	6,0	37,0	20,5	32,8 x 11	0,8	2
	054136	35...40	5,2	45,0	22,0	35 x 17,5	1,0	2
	055322	55...58	6,2	71,0	41,0	52 x 12	1,0	2
	051324	16...18	3,4	18,8	10,0	17,5 x 15	0,5	3

D = with raised edges

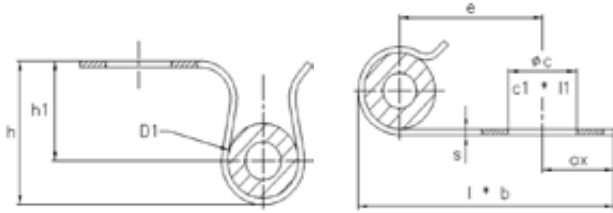
METAL FASTENERS - TO SCREW OR RIVET 1-WAY - OPEN OR CLOSED

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



Form 16



Form 17



Form 18

Sketches for illustration purposes only, please request latest detailed drawing.

Clips are installed using a threaded screw or an expansion rivet.

Form 7

Ref. 055032 clip right

Ref. 055030

Ref. 055031 clip left

Ref. 055033

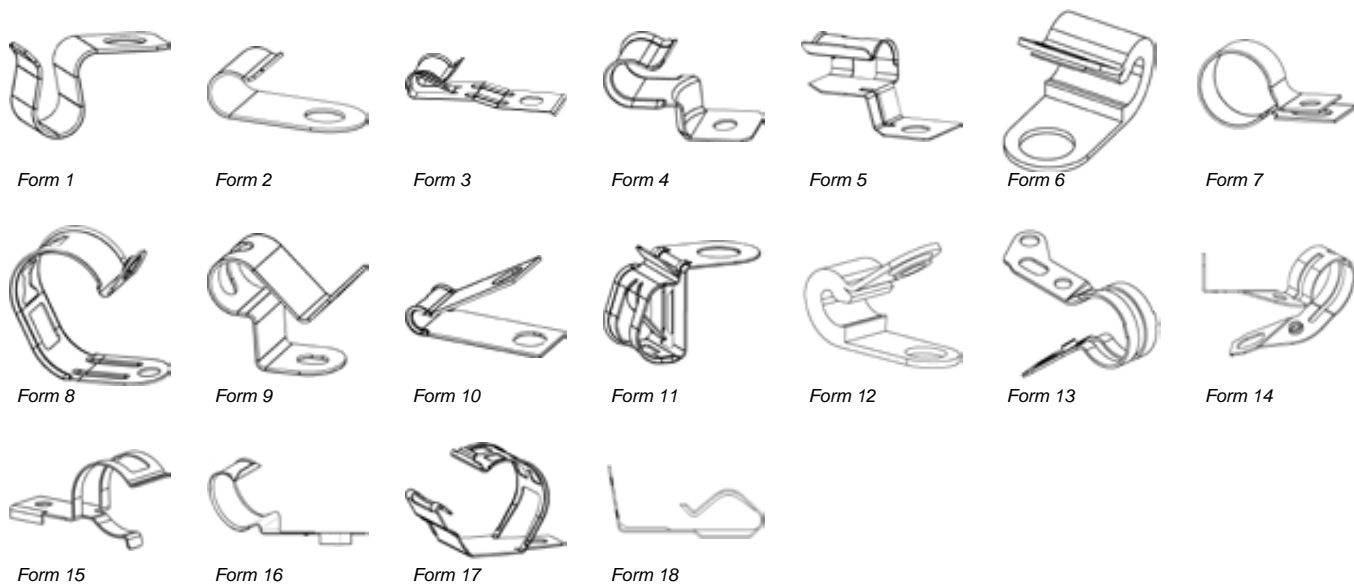
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	Øc/c1x11	ax	e	h	h1	l x b	s	Form
D	014097	13,0	6,6...6,8	8,0	20,0	7,8	1,0	35,45 x 16	0,95	1
	020779	5,9...6,1	5,3...5,7	5,0	10,5	11,5	8,0	19,7 x 10	0,5	1
	052544	9...10	5,4...5,6	12,0	14...16	7,5	-	33,4 x 20	0,6	2
	052540	12...13	5,5...5,6	12,0	15,2...15,7	9,6	-	36 x 20	0,6	2
	054749	14...16	6,4...6,6	12,0	15...17	12,7	-	37,5 x 20	0,6	2
	054116	17...19	8,4...8,6	9,2	18,5...20,5	14,3	-	37,2 x 20	0,6	2
	052542	17...19	5,4...5,6	12,0	16,2...17,2	14,3	-	37,3 x 20	0,6	2
D	053701	8...9	5,1...5,5	8,0	30,3	8,5	-	46,5 x 12,75	0,5	2
D	053702	8...9	7,2...7,4	8,0	30,3	8,5	-	46,5 x 12,75	0,5	2
D	054113	14...16	7,2...7,4	8,0	23...25	14,5	-	40,5 x 12,75	0,5	2
D	054721	22...24	8,5...8,7	9,9	33,5	22,5	-	54 x 15	0,5	2
D	018042	8,0	4,3...4,4	8,0	29,5	8,5	-	46,5 x 12,75	0,5	2
D	019772	8...9	8,3...8,5	8,0	30,0	8,5	-	47,1 x 12,75	0,5	2
	015841	10,0	9...10	10,0	20,6	11,6	-	36,4 x 20	0,8	2
D	053918	8...9	8,2...8,6	8,0	30,1	9,66	-	47,1 x 12,75	0,5	2
D	054506	15...17	8,5	10,0	34,0	17,0	-	52,5 x 15	0,5	3

D = with raised edges; I = stainless steel; Z = on request

METAL FASTENERS - TO SCREW OR RIVET 1-WAY - OPEN OR CLOSED



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	Øc/c1x11	ax	e	h	h1	l x b	s	Form
D E	018895	7...10	6,5 x 9,5	12,1	-	12,0	-	62 x 15	0,5	3
D	208075	5...5,5	6,55...6,75	6,7	13,42	10,3	7,7	22,9 x 12	0,4	4
D	017186	7,1	8,5	7,5	17,5	13,8	9,8	29 x 16	0,5	4
D	016905	15,5...17,5	10,4...10,6	11,8	32,8	29,56	20,46	58,7 x 33,2	0,6	5
C	061548	6...6,5	10,5	-	20,0	16,0	-	38 x 24	1,5	6
	055032	22,0	6,2	10,3	23,5	23,6	-	45,6 x 17	0,8	7
	055033	22,0	6,2	10,0	23,5	12,6	-	45,3 x 17	0,8	7
	055030	22,0	6,2	10,0	23,5	12,6	-	57,5 x 36	0,8	7
	055031	22,0	6,2	10,0	23,5	12,6	-	57,5 x 36	0,8	7
D	055003	16...18	7,0	8,3	21,0	17,8	-	40,9 x 15	0,9	7
D	018181	24,0	5,5	4,8,0	15,7	25,57	-	37,3 x 16	0,6	8
	200152	10...11	6,5	10,0	19,48	37,15	23,45	39,2 x 20	1,0	9
	017071	5,0	6,0	8,0	37,0	5,1	-	48,5 x 16	1,0	10
D	017226	4,65...4,85	8,5	9,0	31,0	8,0	-	44,4 x 16	1,0	10
	017200	7,8...8,2	6,6 x 13	10,0	27,0	12,5	-	44,5 x 20	1,0	10
	017419	7,8...8,2	9 x 13	11,5	16,0	11,7	-	34,6 x 20	0,6	10
D	017167	4,65...4,85	8,2x 9,7	14,0	15,0	8,76	5,5	28,6 x 16	0,6	10
D	020460	11,4	6,5	10,0	19,2	29,0	-	35,4 x 20	0,5	11
D	020462	11,4	8,5	10,0	19,2	29,0	-	23 x 20	0,5	11
D	020463	11,4	10,5	10,0	19,2	29,0	-	23 x 20	0,5	11
D	020461	11,4	12,5	10,0	19,2	29,0	-	23 x 20	0,5	11
C	061748	4,5...4,8	9,75	8,0	20,0	14,0	-	39,2 x 15	1,5	12
C	070366	3,5...3,8	9,75	8,4	21,0	14,0	-	36,5 x 15	1,5	12
I	133028	21,3	6,x 12	20,8	41,5	27,8	-	71 x 14	1,0	13
I	133029	21,3	6 x 12	-	-	23,3	-	58 x 14	1,0	14
	132790	37,9...39,9	8,2	11,0	51,0	38,5	11,0	82 x 26	1,0	15
	055421	36,0	10,2	20,1	31,8	36,3	45,3	92,2 x 52,2	0,8	16

D = with raised edges; I = stainless steel; Z = on request

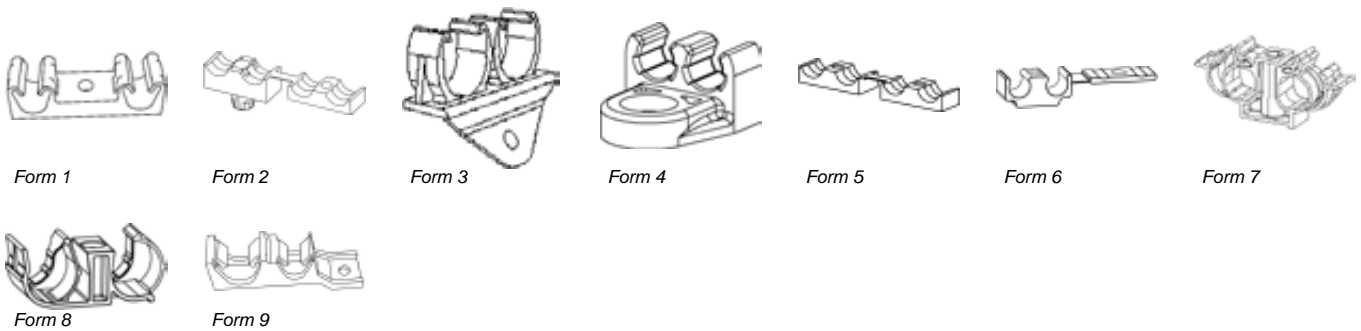
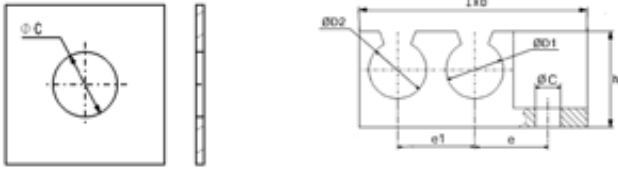
PLASTIC FASTENERS - TO SCREW OR RIVET 2-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Clips fasten onto a panel using a threaded screw or expansion rivet.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	Øc / M	l x b	e	e1	h	Form
	015373	6...10	6...10	5,0	82 x 13	34,0	68,0	18,0	1
	108036	7,5...7,8	19...20	M4	57 x 12	14,0	35,0	27,0	1
	108035	7...8	7...8	M4	44 x 10	14,0	28,0	13,0	1
	055470	9,85...10,15	9,85...10,15	6,1...6,9	66 x 20	23,0	46,0	20,0	1
	055674	11,85...12,15	11,85...12,15	6,1...6,9	70 x 20	24,0	48,0	20,0	1
	014357	9,5	9,5	8,4	28 x 12	8,0	16,0	24,0	2
	108033	24,0	24,0	7,0	68 x 25	12,0	32,0	28,5	3
	014756	6,8	6,8	5,0	22 x 25	5,0	10,0	13,4	4
	014962	7,6	7,6	4,5	23 x 22	6,0	12,0	18,9	4
	014555	8,5	9,5	4,5	28 x 12	8,0	16,0	13,6	5
	016880	15,0	15,0	6,5	53 x 20	15,0	30,0	24,5	6
	082264	15,0	15,0	8,0	48 x 20	13,5	27,0	25,3	6
	019427	15,0	15,0	9,95	48 x 20	13,5	27,0	25,5	6
C	017642	16,0	16,0	6,5	47,7 x 20	13,0	26,0	26,0	6
	020456	12,0	12,0	9,5	44 x 21	12,5	25,0	16,0	6
	108161	10...15	10...15	6,95...7,05	50 x 16	11,5	27,5	35,0	7
	017347	16...24	16...24	8,5	70,3 x 25	23,8	41,3	30,0	8
	056671	12,0	18,0	6,5	92 x 24	32,5	32,5	35,5	9

C = anti-noise pipe clip AR-BAG

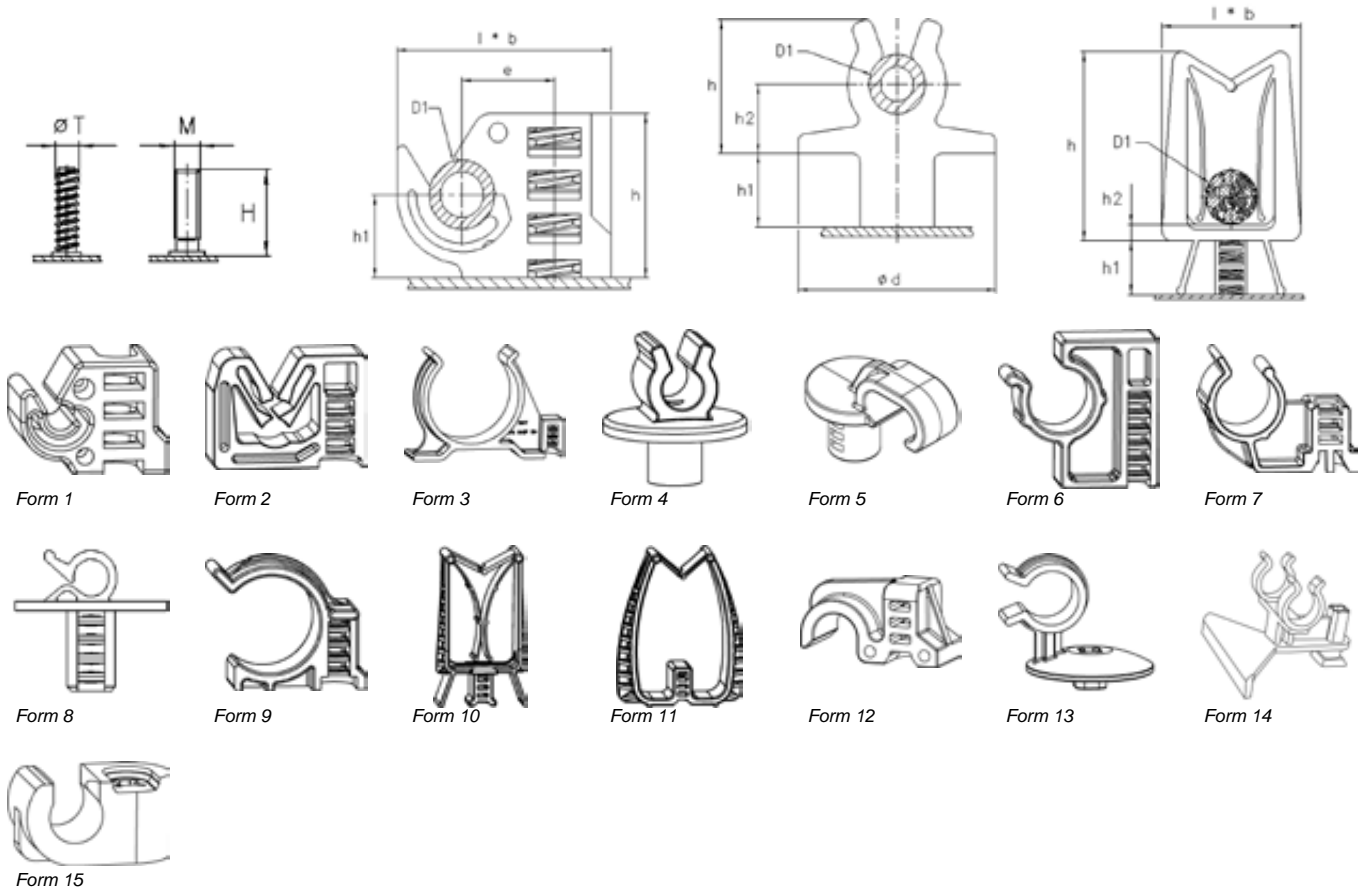
PIPE CLIPS PUSHED ONTO THREADED STUD 1-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance. To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights - 14.2 mm ... (Thread height: 11mm)

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	Ød / l x b	e	h	h1	h2	ØT / M	H	Form
	015882	3,2	17,7 x 12	7,5	13,5	-	-	5,0	14,3	1
	015747	4,75	18,2 x 13	7,5	13,5	-	-	5,0	14,3	1
	015722	4,8 / 6 / 8	28,5 x 10	12,0	21,0	19,5	-	5,0	14,2	2
	055387	4,8...8	28,5 x 10	12,0	21,0	6,3...9	-	5,0	14...18	2
	054177	4,8...8	28,5 x 10	12,0	24,5	3,5	-	5,0	14...19	2
	018579	47,0	73 x 15	40,0	61,0	31,0	-	5,0	14,2	3
	200653	44,0	73 x 15	39,9	51,0	29,5	-	5,0	14,2	3
	057389	20,0	30,0	-	31,5	12,0	16,5	5 / M6	14,0	4
	020015	5,0	28,0	-	15,5	10,0	9,5	5,0	14,2	4
	019850	8,0	28,0	-	18,3	10,0	9,5	5,0	14,2	4
C	200650	12 / 12	52,5 x 30,3	17,5	18,0	18,3	-	5,0	14,0	5
	017621	15,0	34,5 x 12	17,5	33,5	20,0	-	5,0	20,0	6

C = AR-Bag® anti noise insulation - Bi-injection

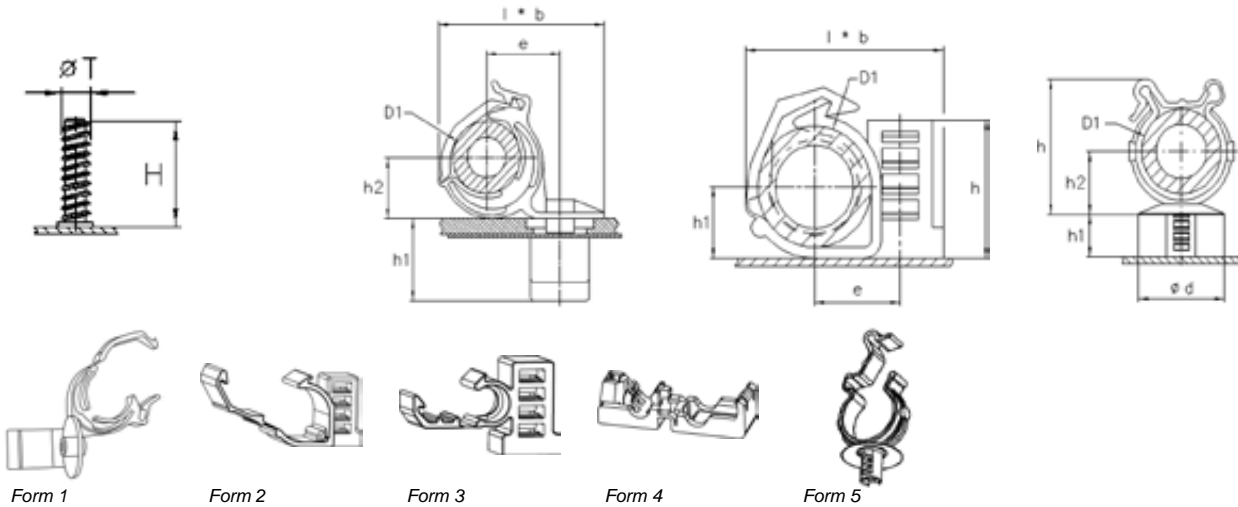
PIPE CLIPS PUSHED ONTO THREADED STUD 1-WAY - WITH LOCKING ELEMENT

MATERIAL:

Polyamide

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.

To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights: 14.2 mm

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	Ød1/ l x b	e	h	h1	h2	ØT	H	Form
	056181	24...28	58 x 44	22...25	46,5	26,0	19,0	5,0	14,0	1
	056969	16,0	39,25 x 15	15,5	32,0	17,0	-	5,0	14,0	2
	057252	5...26	42 x 53,5...56,5	-	42,0	-	-	5,0	14,0	2
	018152	38,0	64,8 x 20	31,0	43,0	21,0	-	8,0	15,0	2
	020715	22,6...23,4	40,55 x 20	18,0	-	18,0	-	5,0	14,2	2
	018368	14,0	26 x 15	10,9	19,8	18,0	-	5,0	9 / 14,2 / 16	2
G	017639	12,6...13,2	24,6 x 15	10,4	18,9	18,0	-	5,0	9 / 14,2 / 16	2
	018919	15,88...16,12	28 x 20	11,95	-	18,0	-	5,0	9 / 14,2 / 16	2
G	017528	15,5...16,1	28 x 20	11,85	22,0	18,0	-	5,0	9 / 14,2 / 16	2
G	017694	20,6...21,4	39,3 x 20	15,5	28,8	18,0	-	5,0	9 / 14,2 / 16	2
G	017716	25,1...25,9	43,5 x 20	17,5	32,3	18,0	-	5,0	9 / 14,2 / 16	2
G	017790	31...31,8	50 x 20	20,5	38,0	18,0	-	5,0	9 / 14,2 / 16	2
	019195	31...31,8	50,5 x 20	20,5	38,0	18,0	-	5,0	9 / 14,2 / 16	2
	018371	15,0	28 x 20	11,85	22,0	18,0	-	5,0	9 / 14,2 / 16	2
	152488	10,0	27,5 x 10	12,0	18,0	9,5	-	5,0	-	3
	152322	13...20	35 x 10	17,0	33,5	19,4	-	5,0	-	3
	070042	16,0	39,25 x 15	15,5	32,0	17,0	-	5,0	14,0	3
G	017620	6,8...7,4	19,2 x 10	8,0	18,0	18,0	-	5,0	9 / 14,2 / 16	3
G	017693	9,6...10,2	21,4 x 15	8,5	18,4	18,0	-	5,0	9 / 14,2 / 16	3
C	020772	8,0	27,5 x 15	11,0	15,0	15,0	-	5,0	14,2	4
	055390	26	34 x 12	-	54,3	13,0	19,3	5,0	14,2	5

G = for corrugated tubes
C = AR-Bag® anti noise insulation - Bi-injection

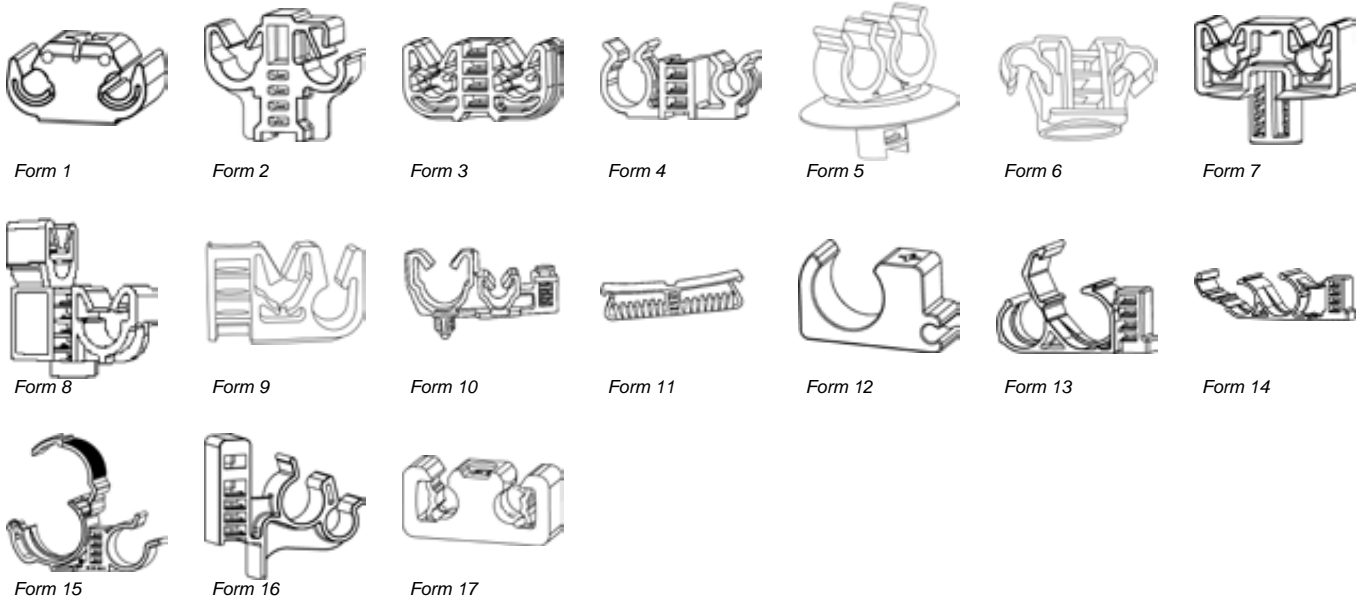
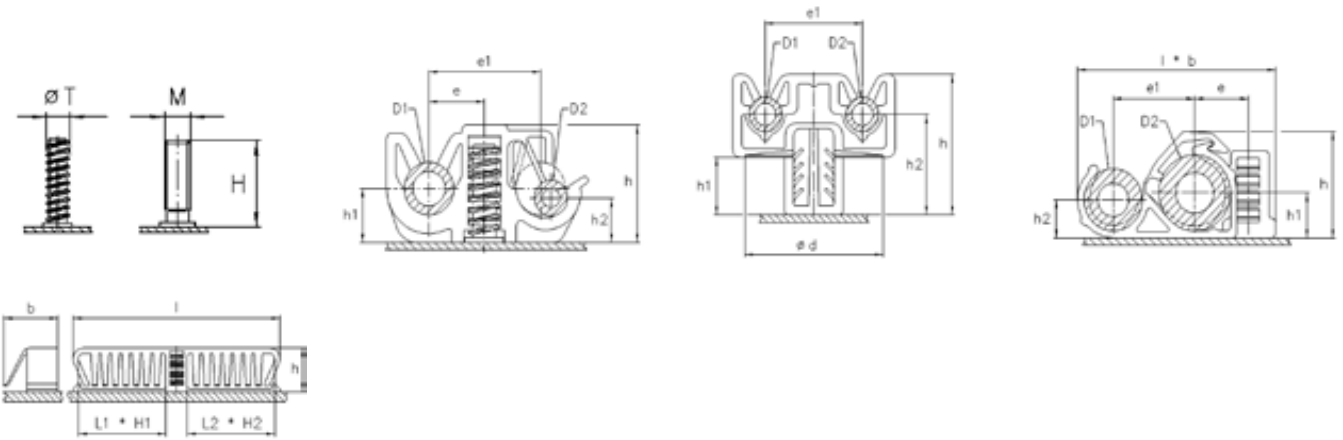
PIPE CLIPS PUSHED ONTO THREADED STUD 2-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance. To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights 14.2 mm

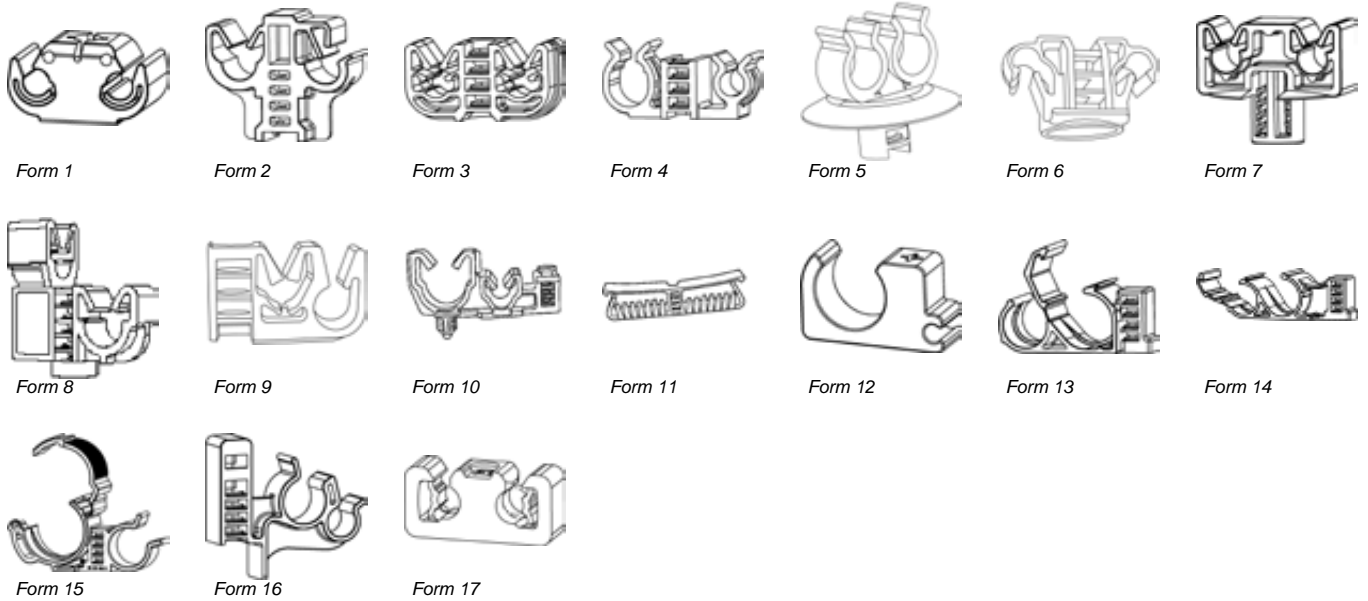
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/L1xH1	ØD2/L2xH2	l x b	e1	h	hx	H	ØT / M	Form
	015245	4,75	4,75	25,4 x 13	7,5	14,0	-	12,0	5,0	1
	019579	4,75	4,75	25,4 x 13	7,5	16,55	-	15,0	M6	1
	015249	4,75	6,35	27,4 x 13	7,5	14,0	-	12,0	5,0	1
	055961	4,8	4,8	29...33 x 18	9,0	14,0	-	14,2	5,0	1
	015360	6,35	6,35	29,4 x 13	8,5	14,0	-	12,0	5,0	1
G	056472	9,5	16,4	50...54 x 19	9,0	26,0	-	14...18	5,0	1
	235326	12,0	9,3...10,2	51,2 x 13	18,0	23,5	-	14,2	5,0	1
	019932	10,0	4,75	61 x 13	16,0	19,0	-	14,2	5,0	1
	017177	10,0	10,0	30,8 x 12	8,9	16,0	-	14,2	5,0	1
	055359	8,0	10,0	35 x 12	10,0	19,0	-	14,2	5,0	1
	014772	15,7	9,8	51 x 13	18,0	23,0	-	14,3	5,0	1
	014018	21,0	10,0	52 x 12	18,5	26,0	-	14,0	5,0	1

C = anti-noise pipe clip AR-BAG
G = for corrugated tubes

PIPE CLIPS PUSHED ONTO THREADED STUD 2-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

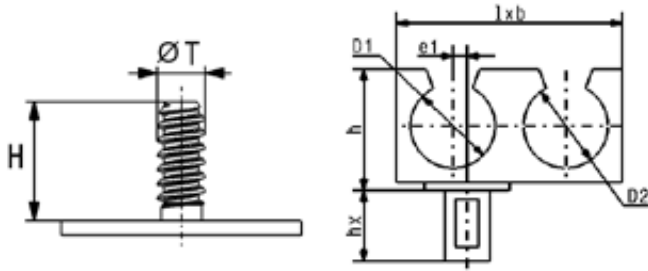
?	REF.	ØD1/L1xH1	ØD2/L2xH2	l x b	e1	h	hx	H	ØT / M	Form
C	201794	10,0	4,75	34,3 x 15	10,0	15,0	-	14,2	5,0	1
	014700	4,75	4,75	26 x 13	7,5	13,5	-	14,2	5,0	1
	015784	8,0	6 / 8	34,3 x 13	9,5	29,0	-	14,2	5,0	2
	014657	8,0	6 / 8	34,9 x 13	9,8	19,0	-	14,2	5,0	2
	055966	9...9,4	4,7...5,05	31,3..33,3 x 18	10,0	17,0	-	14,2	5,0	2
	014944	4,75...6	4,75...6	25,5 x 13	7,5	13,5	-	14,3	5,0	3
	054178	4,8...10	4,8...10	53 x 10	13,0	26,1	-	14,2	5,0	3
	129228	4,75...6	4,75...6	34 x 12	9,0	16,0	-	14,2	5,0	3
	055056	4,7...8	4,7...8	44 x 12	12,2	19,5	-	14,2	5,0	3
	108101	8,0	8,0	46 x 18	13,0	21,0	-	16,0	5,0	3
	054488	8...14	4,8	44,6 x 15	9,5	26,0	-	14,2	5,0	3
	056080	8...10	8...10	43 x 10	10,0	22,0	-	14,2	5,0	3
	175085	19,0	9,5	62 x 15	19,5	30,0	-	14,2	5,0	3
	054451	4,8...6	4,8...6	34 x 12	9,0	16,0	-	14,2	5,0	3
	056964	8...13	8...13	49 x 12	13,1	29,0	-	18,0	5,0	3
	055173	10...12	10...12	41 x 12	13,0	18,0	-	14,2	5,0	4
	055174	10...12	4,7...5,05	36 x 13	10,0	19,0	-	14,2	5,0	4
	056876	11,0	6,0	38 x 12	13,0	18,0	-	14,2	5,0	4
	055274	12,0	12,0	46 x 12	13,0	20,0	-	14,2	5,0	4
	015231	13,0	13,0	45 x 32	13,5	22,5	-	14,2	5,0	4
	017962	13,0	13,0	41 x 12	11,5	20,5	-	16,0	5,0	4
	055581	8...9	8...9	-	6,0	17,8	8,5	14,2	5,0	5
	108103	5,0	5,0	31 x 18	11,0	18,0	-	16,0	5,0	6
	054869	4,8...4,9	4,8...4,9	31 x 18	11,0	18,0	-	14,0	5,0	6
	054961	8...10	8...10	48 x 18	14,0	19,0	-	14,2	5,0	6
	019616	6,0	6,0	30 x 12	9,0	14,5	10,0	14,2	5,0	7
	055868	8...10	8...10	56,5 x 25	18,0	21,5	20,0	14,2	5,0	7
	108158	8,0	10,0	36 x 16	11,2	40,0	-	18,0	5,0	8
	108159	8,0	10,0	36 x 18	11,7	36,0	-	14,2	5,0	8
	056173	6,5	4,7...5,05	26,6 x 12	8,0	16,0	-	14,2	5,0	9
C	019600	10,0	8,0	53 x 20	36,0	17,0	-	14,2	5,0	9

C = anti-noise pipe clip AR-BAG
G = for corrugated tubes

PIPE CLIPS PUSHED ONTO THREADED STUD 2-WAY - WITH LOCKING ELEMENT

MATERIAL:
Polyamide

COLOURS:
Black



Form 1



Form 2



Form 3



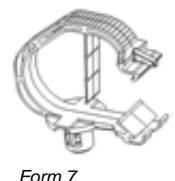
Form 4



Form 5



Form 6



Form 7



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.

To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights: 14.2 mm

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/ L1xH1	ØD2	l x b	e1	h	hx	H	ØT	Form
	017877	22,5	22,5	54 x 15	8,0	28,25	22,75	14,2	5,0	1
	055368	25,5...26,5	25,5...26,5	61,5 x 29	14,0	56,8	14,5	14,0	5,0	1
	061350	16,0	10...12	79 x 18	15,0	46,5	11,0	14,2	5,0	2
	020850	10,0	8,0	47,75 x 27,5	12,5	21,0	-	14,2	5,0	3
	055988	13,3...15,3	13,3...15,3	48 x 26	9,0	27,0	-	14,0	5,0	3
	056680	13,85...14,15	13,85...14,15	50,6 x 29	10,5	24,0	-	14,2	5,0	3
	108119	15,0	15,0	58 x 16	14,85	28,0	-	14,2	5,0	3
	061611	16,0	10,0	69,1 x 33,7	15,0	32,5	-	14,2	5,0	3
	020631	16,3	16,3	51 x 16	11,0	30,15	-	14,2	5,0	3
Z	017148	44,5 x 22	-	86,2 x 15	42,25	35,7	9,3	14,2	5,0	4
Z	016958	22,0	22,0	98 x 15	69,0	68,7	9,3	14,2	5,0	5
	017930	21,0	21,0	- x 20	15,0	-	-	6...16	5,0	6
	201519	15...22	15...22	62,8 x 24,3	3,95	33,0	10,0	14...18	5,0	7
	200417	17...20	6...15	48,8 x 10	-	26,6	14,0	14,0	5,0	7
	057582	10...30	10...30	84,4 x 14	43,0	36,8	18,25	18,0	5,0	8

Z = on request

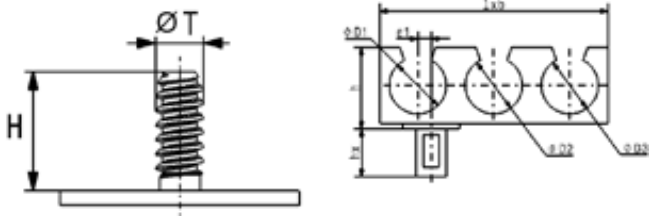
PIPE CLIPS PUSHED ONTO THREADED STUD 3-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Form 1



Form 2



Form 3



Form 4



Form 5



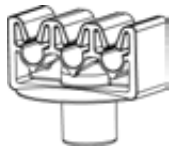
Form 6



Form 7



Form 8



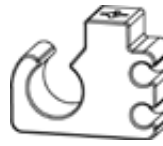
Form 9



Form 10



Form 11



Form 12



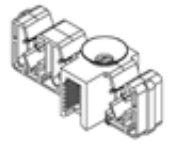
Form 13



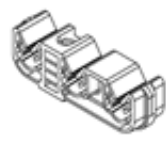
Form 14



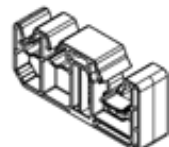
Form 15



Form 16



Form 17



Form 18



Form 19



Form 20

Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.

To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights: 14.2 mm

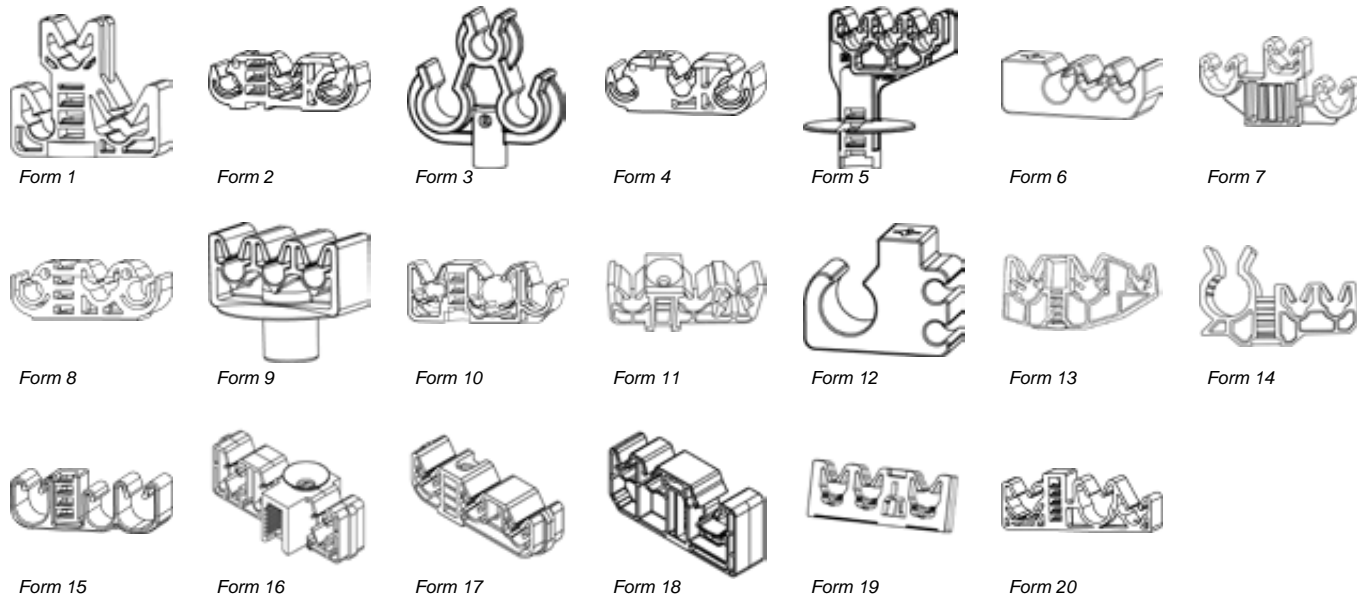
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	l x b	e1	h	hx	H	ØT	Form
	054771	4,8... 6	4,8	4,8	30 x 14	9,5	27,0	-	14,2	5,0	1
Z	015710	4,75	6,0	4,75	26,8 x 13	7,5	21,4	-	14,3	5,0	1
	018477	4,75	4,75...6	6,0	40 x 13	7,5	14,0	-	12 / 14,3	5,0	2
	019223	4,75	3,2	6,0	40 x 13	7,5	14,0	-	12 / 14,3	5,0	2
C	020385	12,0	8,0	10,0	50,5 x 14	13,5	36,8	12,0	14,2	5,0	3
	015244	4,75	4,75	6,35	40 x 13	7,5	14,0	-	12 / 14,3	5,0	4
	015728	4,75	8,0	4,75	41,2 x 13	9,0	16,5	-	14,2	5,0	4
	020016	4,75	4,75	4,75	33 x 12	-	29,5	10,0	14,2	5,0	5
C	018832	8,0	4,75	4,75	44 x 15	10,0	15,5	-	14,2	5,0	6
	016939	8,0	6 / 8	8,0	54,5 x 13	13,5	23,5	-	14,2	5,0	7

C = anti-noise pipe clip AR-BAG

PIPE CLIPS PUSHED ONTO THREADED STUD 3-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

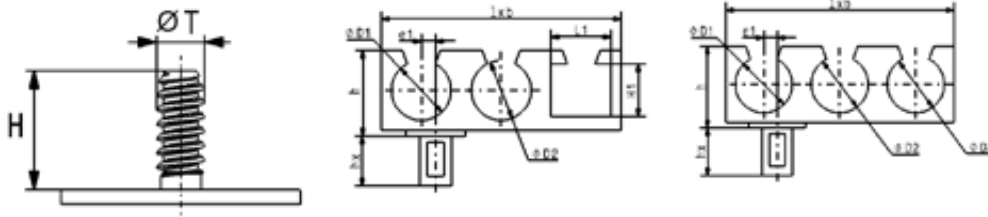
?	REF.	ØD1	ØD2	ØD3	l x b	e1	h	hx	H	ØT	Form
	017977	8,0	6 / 8	8,0	57 x 13	19,0	33,0	-	14,2	5,0	7
	015933	3,2	4,75	4,75	35,4 x 13	7,5	13,5	-	14,3	5,0	8
	014701	4,75	4,75	4,75	36,5 x 13	7,5	13,5	-	14,2	5,0	8
	019845	4,75	4,75	4,75	29 x 12	9,0	14,5	10,0	14,2	5,0	9
	019927	6...8	10...12	8,0	48,3 x 13	8,6	18,0	-	14,2	5,0	10
	016480	8,0	6 / 8	8,0	43 x 13	14,0	28,0	-	14,2	5,0	11
	017402	8,0	6 / 8	8,0	58 x 13	21,5	28,0	-	14,2	5,0	11
	055889	8...10	8,0	8,0	59 x 18	12,0	24,0	-	14,2	5,0	11
	056155	8...10	8,0	8,0	59 x 20	11,5...12,5	24,0	-	14...18	5,0	11
	055083	4,7...5,05	4,7...5,05	6...10	6...10	66,5 x 12	22,7	-	9,0	14,2	11
C	017444	15,0	6,0	6,0	39 x 15	14,0	31,0	-	14,2	5,0	12
	054958	8...10	8...10	4,7...5,05	67 x 10	13,0	31,0	-	14,2	5,0	13
	054589	13,5	4,75...5,05	4,75...5,05	47,7 x 12	11,0	29,0	-	14,2	5,0	14
	054392	4,8...6	4,8	4,8	46 x 12	9,0	19,0	-	14,2	5,0	15
	054489	4,8...8	4,8...8	4,8...8	59,5 x 10	12,2	18,5	-	14,2	5,0	15
	054179	4,8...8	4,8...8	4,8...8	64 x 10	11,5	21,0	-	18,0	5,0	15
	054766	6...10	4,8...8	4,8	50,5 x 16	11,5	27,0	-	14,2	5,0	15
	054577	4,8	8...14	10,0	62,5 x 12	9,5	26,0	-	14,2	5,0	15
	108155	5,0	5,0	6,0	53 x 18	9,0	17,5	-	14,2	5,0	15
	108100	8...8,2	8...8,2	8...8,2	62 x 18	13,0	21,0	-	14,2	5,0	15
	019341	8,0	8,0	12,0	59,3 x 15	10,0	20,0	-	14,2	5,0	15
	018559	10,0	8,0	10,0	45,5 x 14	9,5	16,0	-	14,2	5,0	15
	130586	8...10	8...10	8...10	63 x 25	12,5	26,0	-	14...18	5,0	16
	129546	4,75...6	4,75...6	4,75...6	51 x 12	9,0	16,0	-	14,0	5,0	17
	207656	4,75...5,25	5...6	9...13	53 x 12	12,0	26,0	-	14...18	5,0	18
	016610	4,7...4,9	4,7...4,9	4,7...4,9	49 x 13	9,0	13,5	-	14,3	5,0	19
C	201941	8,0	8,0	10,0	73 x 12	16,0	28,5	-	14,0	5,0	19
	019586	9,3 / 10,2	12,0	7,5	66,1 x 13	14,5	23,5	-	18,0	5,0	20

C = anti-noise pipe clip AR-BAG

PIPE CLIPS PUSHED ONTO THREADED STUD 3-WAY - WITH LOCKING ELEMENT

MATERIAL:
Polyamide

COLOURS:
Black



Form 1 Form 2 Form 3 Form 4 Form 5

Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.
To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights: 14.2 mm

? Feature(s) of the part see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	L1 x H1	l x b	e1	h	hx	H	ØT	Form
	017722	8,0	8,0	10,0	-	51 x 15	9,75	23,0	-	14,2	5,0	1
	017723	8,0	10...12	10,0	-	55 x 15	9,75	23,0	-	14,2	5,0	1
	108218	8,0	21...21,5	8,0	-	85 x 15	17,5	39,0	6,0	18,0	5,0	2
	055976	4,7...5,1	4,7...5,1	-	11,85 x 17,3	59 x 18	10,0	30,0	-	14...18	5,0	3
	055876	6...10	14...19	12...17	-	72 x 18	13,0	28,0	-	14...18	5,0	4
	208180	5...6	5...6	5...6	-	-	-	-	-	-	5,0	5

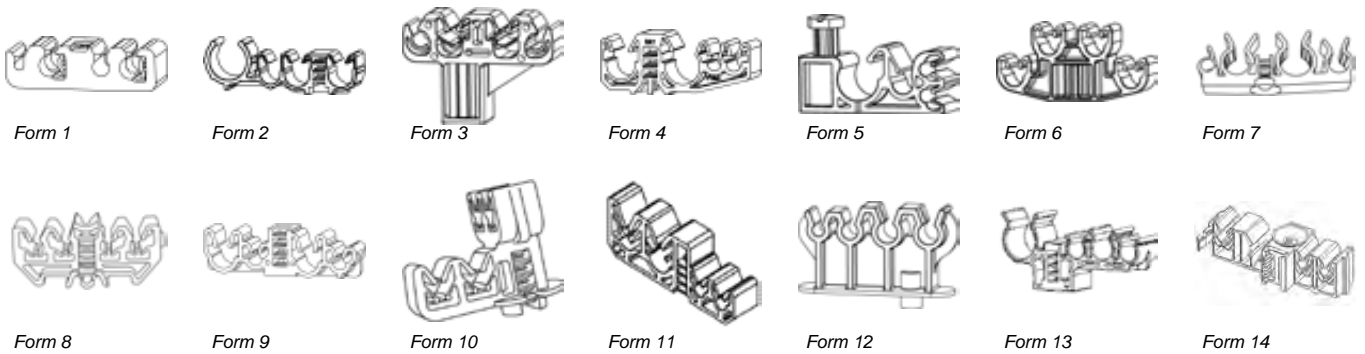
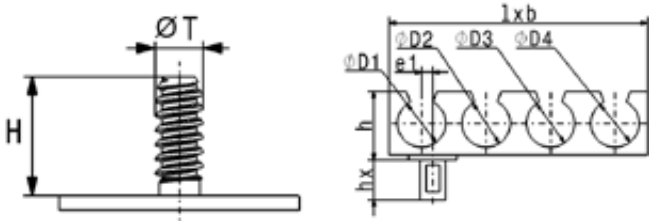
PIPE CLIPS PUSHED ONTO THREADED STUD 4-WAY

MATERIAL:

Polyoxymethylene, Polyamide

COLOURS:

Natural, Black (other colours are available on request).



Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.

To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights 14.2 mm

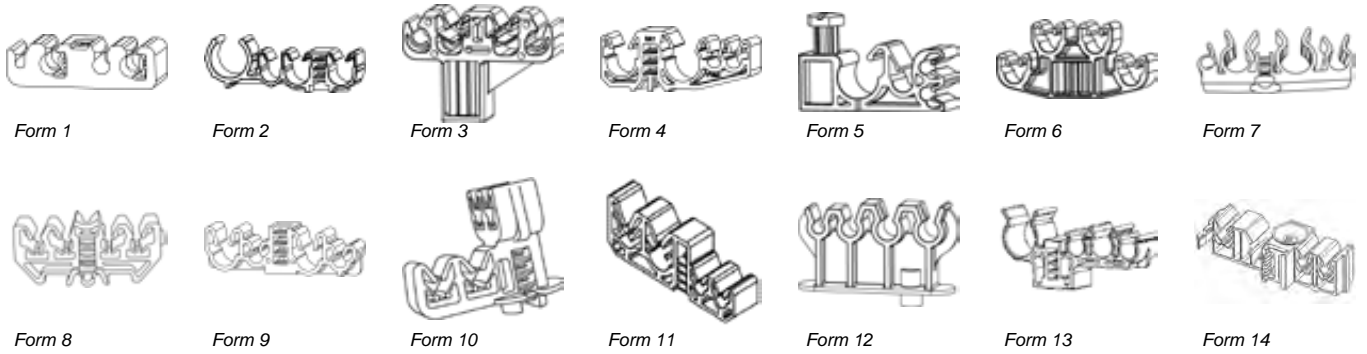
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	h	hx	e1	H	ØT	Form
Z	015401	6,35	4,75	4,75	4,75	51,4 x 13	14,0	-	20,0	12,0	5,0	1
Z	015400	4,75	4,75	4,75	4,75	50,4 x 13	14,0	-	20,0	12,0	5,0	1
C	019719	4,7	8...10	8,0	8...10	71,5 x 20	20,0	-	28,6	14,2	5,0	1
C	019810	4,75	4,75	4,75	4,75	50 x 13	13,0	-	18,0	14,2	5,0	1
	019225	15,0	8,0	10,0	10,0	63 x 12	20,85	-	37,0	14,3	5,0	2
	015612	6 / 8	6,0	6,0	8,0	53,5 x 13	25,5	-	18,5	14,2	5,0	2
	016496	8,0	6 / 8	6 / 8	8,0	56 x 13	26,5	-	20,5	14,2	5,0	2
	016808	4,75	4,75 / 6	4,75 / 6	4,75	45,8 x 13,1	14,5	18,5	10,0	18,0	5,0	3
	015958	4,75	4,75	4,75	4,75	43,4 x 13,1	13,5	5,0	16,5	18,0	5,0	3
	019865	4,75	10,0	10,0	4,75	52,4 x 13	20,5	5,5	23,9	14,2	5,0	3
	016430	4,75	4,75	4,75	4,75	43,4 x 13,1	13,5	18,5	9,0	18,0	5,0	3
	108131	10,0	8,0	10,0	8,0	63,5 x 12	16,0	8,0	10,6	14,2	5,0	4
	108213	10,0	10,0	10,0	8,0	65,6 x 12	17,5	8,0	10,6	14,2	5,0	4
	020082	10,0	12,0	5,0	5,15	52 x 13	20,0	-	10,2	14,2	5,0	4
	017467	15,0	8,0	4,75	4,75	55,5 x 18	24,0	-	15,0	18 / 20	5,0	5
	018996	8,0	8,0	8,0	8,0	65,5 x 13	31,0	-	20,0	14,2	5,0	6
	054763	10,1	15,1	12,3	6,0	75,4 x 15	27,0	-	15,0	14,2	5,0	7
	019864	4,75	10,0	12,0	4,75	51,8 x 13	19,0	-	23,9	14,2	5,0	7
C	200609	4,75...5,15	4,75...5,15	10,0	10,0	62,15 x 15	27,0	-	31,4	14,2	5,0	8

C = AR-Bag® anti noise insulation - Bi-injection

PIPE CLIPS PUSHED ONTO THREADED STUD 4-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	h	hx	e1	H	ØT	Form
	056397	4,7...5,05	4,7...5,05	4,7...5,05	4,7...5,05	46...50 x 19	21,4	-	7,0	14,2	5,0	8
	019257	8,0	8,0	8,0	10,0	60 x 15	19,6	-	22,25	14,2	5,0	8
	019187	8,0	16,0	10,0	10,0	63,5 x 15	19,6	-	26,5	14,2	5,0	8
	019141	8,0	4,8	8,0	4,8	55,2 x 10	16,0	-	20,6	14,2	5,0	9
	056558	8,0	8,0	10,0	10,0	59,2...62,2 x 15	20,0	-	9,6	14,2	5,0	9
	108153	8,0	8,0	8,0	8,0	78,6 x 18	21,0	-	13,0	14,2	5,0	9
	055382	9,0	4,8...6	4,8	4,8	54 x 12	14,7	4,3	9,0	14,2	5,0	9
	055360	4,7...5,05	4,7...5,05	4,8...6	4,8...6	42,5 x 26,5	30,5	4,0	12,5	14,2	5,0	10
	054286	4,8...8	8...10	4,7...4,9	4,7...4,9	65 x 14	23,0	-	11,5	14,2	5,0	11
C	202608	6,0	8,0	10,4	10,4	81 x 20	43,6	7,0	45,5	14,2	5,0	12
	203208	8,0	10,0	8,0	15,0	68,5 x 15	22,0	10,0	38,0	18,0	5,0	13
	204798	6,0	9...11	4,8	4,8	64 x 24	18,0	-	12,0	14,0	5,0	14
	056975	6,0	9...11	4,75	4,75	64 x 25	18,0	-	12,0	14...18	5,0	14

C = AR-Bag® anti noise insulation - Bi-injection

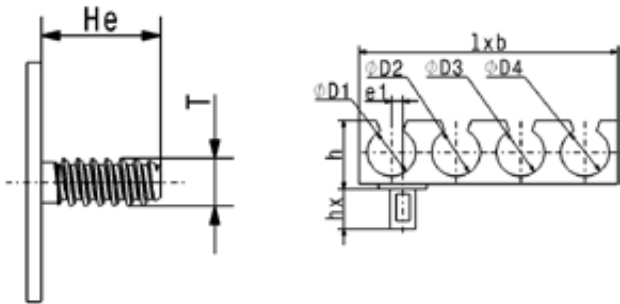
PIPE CLIPS PUSHED ONTO THREADED STUD 4-WAY - WITH LOCKING ELEMENT

MATERIAL:

Polyoxymethylene, Polyamide

COLOURS:

Black (other colours are available on request).



Form 1



Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	l x b	e1	h	hx	H	T	Form
	108077	28,0	6,6...6,7	6,6...6,7	4,8	64 x 12	16,5	52,0	-	14,2	5,0	1
	018041	8,0	8,0	10,0	10,0	66 x 15	22,25	22,5	-	14,2	5,0	2
	018040	8,0	12,0	10,0	10,0	70,2 x 15	26,5	22,9	-	14,2	5,0	2
C	020221	4,7	8...10	8,0	8...10	75,35 x 24	28,6	19,6	-	14,2	5,0	2

C = AR-Bag® anti noise insulation - Bi-injection

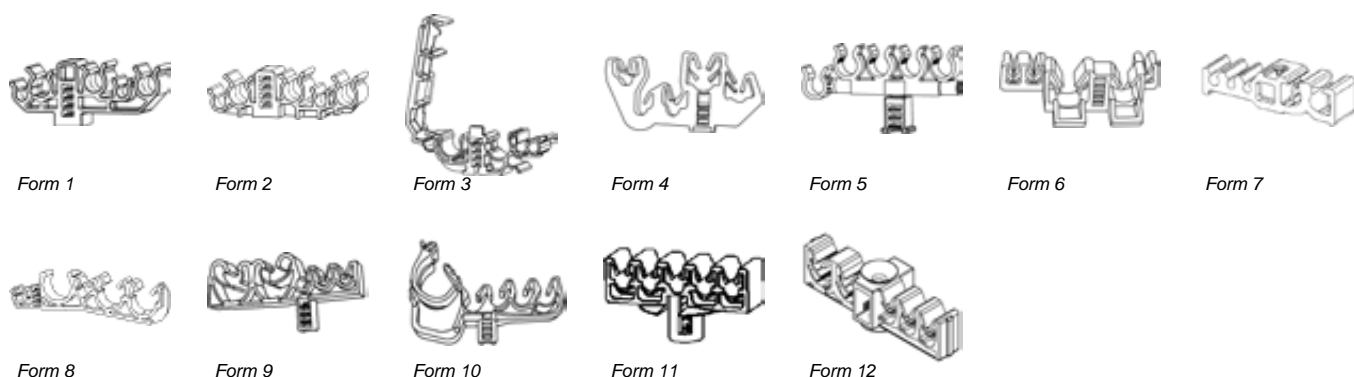
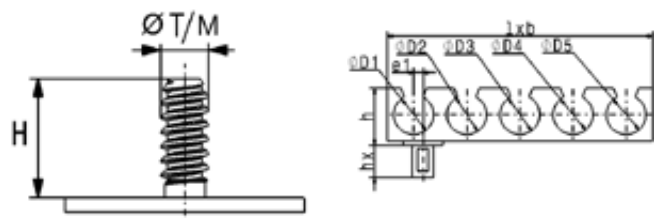
PIPE CLIPS PUSHED ONTO THREADED STUD 5-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

The threaded weld stud allows the clip (and all fastening components designed to accept weld studs) to be adjusted vertically and provides a high degree of tear resistance.

To assemble, the clip is hand pressed onto the weld stud and may be removed by unscrewing and subsequently re-used as required.

Standard stud heights 14.2 mm

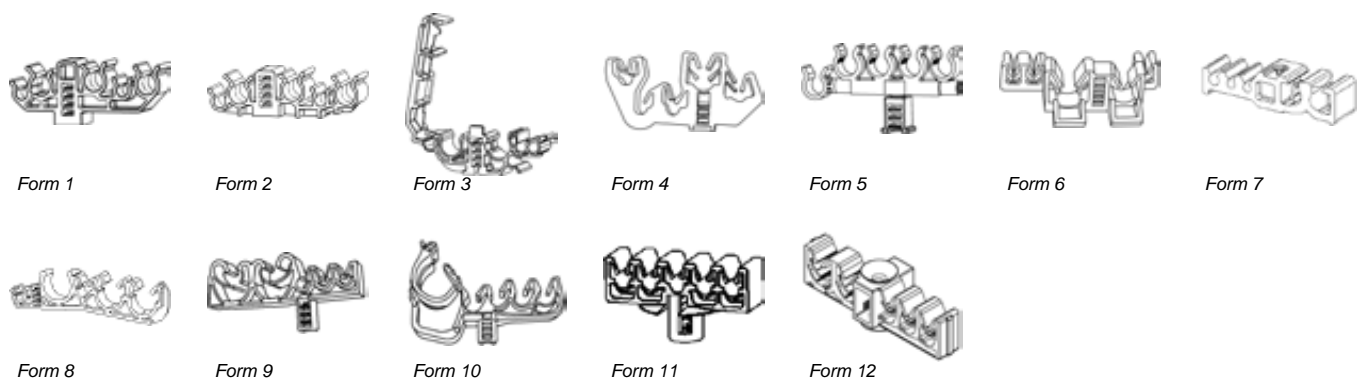
? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	ØD5	l x b	h	hx	e1	H	ØT / M	Form
	019649	4,75	8,0	8,0	4,75	8,0	64,6 x 13	20,5	5,5	23,9	14,2	5,0	1
	019647	4,75	8,0	8,0	4,75	8,0	64,2 x 13	19,0	-	23,9	14,2	5,0	2
	020088	8,0	8,0	10,0	5,0	5,15	60,5 x 13	19,0	-	19,2	14,2	5,0	2
	020084	5,05...5,25	5,05...5,25	4,9...5,1	11,9...12,1	9,9...10,1	61,5 x 15	26,0	-	29,7	14,2	5,0	3
	054385	4,8...8	6...10	4,8...6	4,8	4,8...6	71,5 x 14	35,5	-	15,6	14,2	5,0	4
	054568	4,8...8	8...10	4,8	4,8	4,8...6	78,1 x 12	20,5	-	11,5	14,2	5,0	5
	056652	4,7...5,05	11,0	11...13,9	4,7...5,05	4,7...5,05	77...79 x 39,41	25,2	-	12,25	18,0	5,0	6
C	019626	6,0	4,75	4,75	8 / 10	8 / 10	82 x 20	20,0	-	34,8	14,2	5,0	7
	108145	14,5	14,5	8,0	18,5	6,0	103 x 12	30,0	-	14,5	14,2	5,0	8
	108104	8,0	8,0	8,0	18,5	6,0	91 x 12	30,0	-	14,5	14,2	5,0	8
	056758	9...16	9...16	4,75	4,75	4,75	74,92 x 16	23,0	14,0	15,0	14,2	5,0	9
	056864	8...10	8,0	8,0	9,5	21,2...25	82,9 x 24	30,0	12,0	25,0	16,0	5,0	10

C = AR-Bag® anti noise insulation - Bi-injection

PIPE CLIPS PUSHED ONTO THREADED STUD 5-WAY



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	ØD2	ØD3	ØD4	ØD5	l x b	h	hx	e1	H	ØT / M	Form
	175081	4,75	4,75	4,75	4,75	4,75	47 x 12	14,5	10,0	18,0	14,2	5,0	11
	175082	6,0	6,0	4,75	4,75	4,75	49,5 x 12	14,5	10,0	20,0	14,2	5,0	11
	129755	8...10	8...10	4,8...8	4,8...8	4,8...8	85 x 25,1	23,0	3,0	13,0	14...16	5 / M6	12
	209517	8...10,4	8...10,4	8...10,4	8...10,4	4,8...6	91,9 x 25	26,0	-	-	14,0	5,0	12

C = AR-Bag® anti noise insulation - Bi-injection

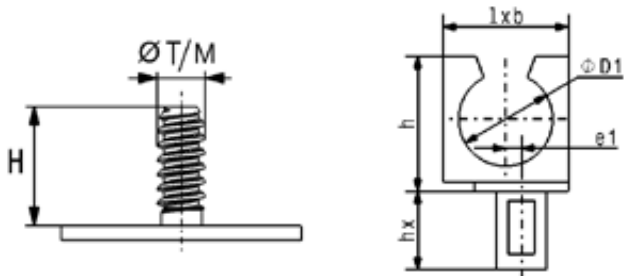
PIPE CLIPS PUSHED ONTO METRIC THREADED STUD 1-WAY

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Form 1



Form 2



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Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15

Sketches for illustration purposes only, please request latest detailed drawing.

These fasteners can be assembled on metrical studs or an available screw socket.
Assembly by pushing on, disconnecting by unscrewing.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	l x b	e1	h	hx	H	M / ØT	Form
	054964	4,4...4,6	9,4 x 17,5	9,0	10,0	9,5	-	6,0	1
	054799	4,8...6	28,5 x 10	12,0	21,0	-	14...19,5	6,0	2
	206941	9,9...10,1	29,5 x 10	12,5	21,5	-	18,0	6,0	2
	055999	6...8	31,25 x 16	14,5...15,5	19,0	-	-	8,0	3
	018065	8 / 10	34 x 12,5	18,0	26,5	-	18,0	8,0	4
	016547	10...12	32,5 x 12,5	18,0	19,0	-	18,0	8,0	4
	108022	14,5...16,5	34,5 x 10	15,5	19,8	-	-	6,0	5
	055689	15...19	53 x 12	30,5...32,5	16,5	15,0	-	6,0	5
	054995	24,0	57 x 31	19,0	37,5	7,0	-	6,0	6
	055760	33,5	48 x 32	14...16	49,7	16,5	-	10,0	7
	055069	11,6	26 x 17	9,5	21,3	23,7	-	6,0	8
	056081	12...16	51 x 39	32,4...34,4	17,0	20,0	-	6,0	8

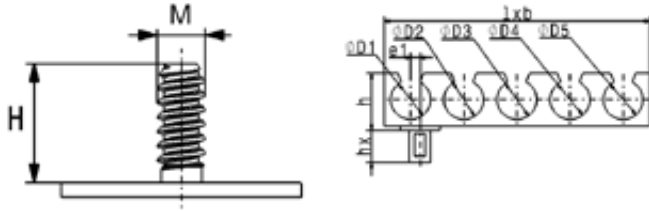
PIPE CLIPS PUSHED ONTO METRIC THREADED STUD MULTI-WAY

MATERIAL:

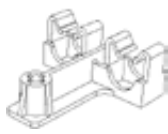
Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



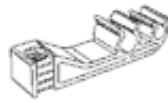
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Form 3



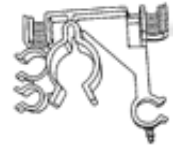
Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



Form 16

Sketches for illustration purposes only, please request latest detailed drawing.

These fasteners can be assembled on metrical studs or an available screw socket.
Assembly by pushing on, disconnecting by unscrewing.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	ØD1	ØD2	ØD3	ØD4	ØD5	l x b	h	hx	e1	H	M	Form
	055553	5,1...5,5	5,1...5,5	-	-	-	32x18	22,0	-	11,0	-	6,0	1
	054951	10...14	10...14	-	-	-	35x36	59,0	-	10,5	-	6,0	1
	055465	16...18	16...18	-	-	-	42x21,5	31,5	-	22,0	-	6,0	1
	056053	10,0	16...18	-	-	-	43x21,5	19,3	11,2	23,0	7...10	6,0	1
	108118	12,0	12,0	-	-	-	71x60	21,5	-	15,5	-	6,0	2
	108073	8,0	8,0	-	-	-	55x15	54,0	-	22,5	-	6,0	3
	108208	10,0	6,5	-	-	-	70,5x16	15,0	-	41,7	-	8,0	4
	019269	7,0	7,0	9,3	-	-	49,5x10	17,5	-	39,0	-	6,0	5
	061308	4,7...5	9...14	22,0	-	-	58x14	46,0	-	26,0	15...18	6,0	6
	055477	13,0	25,0	10,0	14,0	-	86,5x22	73,5	-	64,0	-	(2 x) 10	7
	055963	4,8...5	18,0	14,0	22,0	-	87,8x18	30,0	-	18,5	-	6,0	8
G	056860	8,0	4,8...5	18,0	14,0	20,9...29	93,8x14	35,0	-	19,0	-	6,0	9

G = for corrugated tubes

ANTI NOISE INSULATION AR-BAG® PIECES

MATERIAL:

Polypropylene + EPDM

COLOUR:

Black

The patented design of the AR-BAG® fasteners (single material, honeycomb structure with solid skin surface appearance) provides resistance against noise caused by vibration.

The "AR-BAG®" is made of a single polyamide or polypropylene material, fully skinned on the surface and "gas filled" inside. The internal structure is made from a high density of gas-filled bubbles, which absorb and stop vibration.

The "AR-BAG®" also exhibits outstanding impact strength (e.g. against gravel) and good temperature resistance.

Some of these references are already included in our catalogue according to:

- Part function
- Assembly conditions

They are marked with the symbol C.

Refer to the pages indicated for the relevant information.

Sketches for illustration purposes only, please request latest detailed drawing.



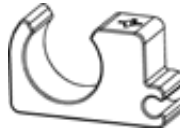
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020015



020714



017488



019627



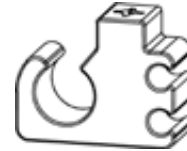
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202608



020221

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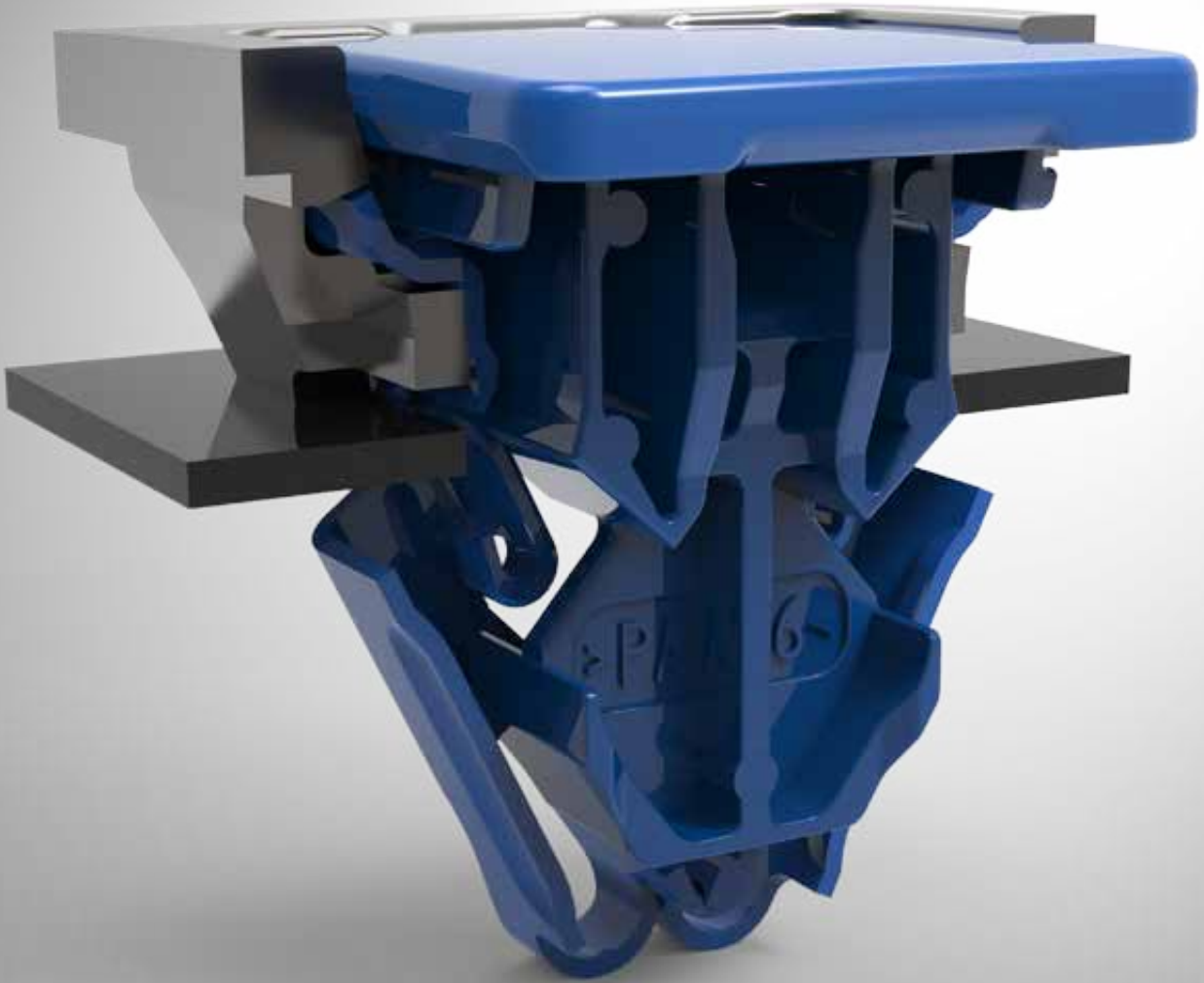
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PANEL

PANEL
FASTENERS



C PANEL FASTENERS

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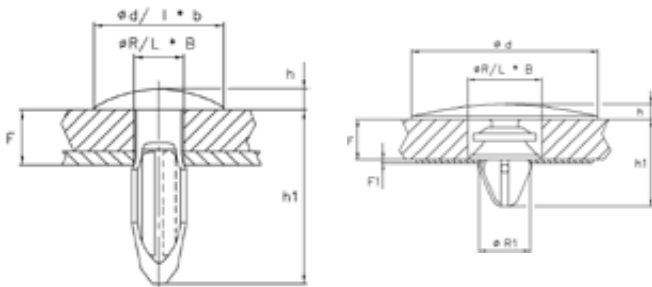
PLASTIC REMOVABLE TYPE BUTTON HEAD FASTENING PLUGS STANDARD

MATERIAL:

Polyamide, polyoxymethylene, polyethylene

COLOUR:

Natural, Black (other colours are available on request)



Form 1



Form 2



Form 3

Sketches for illustration purposes only, please request latest detailed drawing.

These button head plastic fasteners are purposely designed to allow for a wide variation in clipping thicknesses, according to the requirements of the materials being fixed. They may also be used as a simple hole-plugging component.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØR/ L x B	Ød/ l x b	h	h1	F1	ØR1	Form
	152137	1,5	4,5	9,5	1,5	12,0	-	-	1
	012543	1,5...2	3,2	7,1	1,8	8,4	-	-	1
	052880	1,5...4	6...6,2	12,3	1,5	13,5	-	-	1
	017208	1,6...3,2	3,8	6,9	1,3	10,0	-	-	1
	012568	1,6...3,2	5,4	9,4	1,5	12,2	-	-	1
	201367	1,6...3,2	5,4	9,4	1,5	12,2	-	-	1
	012439	2,5...3	3,0	7,1	1,8	9,5	-	-	1
	053791	2,5...3	3...3,2	7,5	1,8	9,5	-	-	1
	013663	2,6	4,45	10 x 12	3,8	7,2	-	-	1
	052501	3...3,4	4,1...4,3	8,5	2,0	10,0	-	-	1
	053785	3...4,8	4,6...4,9	9,9	1,5	12,9	-	-	1
	012567	3,2...4,7	3,8	6,9	1,3	11,8	-	-	1
	015070	3,2...4,7	6,2	12,4	1,5	10,0	-	-	1
	053752	3,2...4,7	6,2	12,4	1,5	14,8	-	-	1
	012332	3,2...4,7	6,2	12,4	1,5	14,8	-	-	1
	017794	3,2...4,7	6,2	12,4	1,5	14,8	-	-	1
	013113	3,2...4,7	7,0	14,2	2,2	15,2	-	-	1
	053976	3,2...4,7	7,0	14,2	2,2	15,3	-	-	1
	052998	3,2...4,8	5,5	9,4	1,5	13,7	-	-	1
	054196	3,2...4,8	5,5...5,68	12,2	2,2	13,7	-	-	1
	012802	3,3...3,5	4,4	8,0	2,0	10,0	-	-	1
	012350	3,8...4,2	3,2	10,0	2,0	12,2	-	-	1
	056581	4,0	6,2...6,42	18,5	1,5	13,5	-	-	1
	016217	4...5	7,0	30,0	1,5	16,0	-	-	1
	014017	4,8...5,2	6,0	10,0	2,0	16,0	-	-	1
	012672	6...7,5	6,0	12,0	2,5	18,0	-	-	1
	052482	6...7,5	6...6,2	12,3	2,5	18,0	-	-	1
	019723	15,2...16,9	6,2	12,4	1,5	26,8	-	-	1
	053958	1,5...4	6...6,2	9,0	1,5	13,5	-	-	1
	205827	0,77...1,47	14,2 x 7,2	25,0	2,8	19,45	3...5	11,8	2
	130270	0,7...2	6,2	30,0	2,5	14,0	5,0	12,0	3

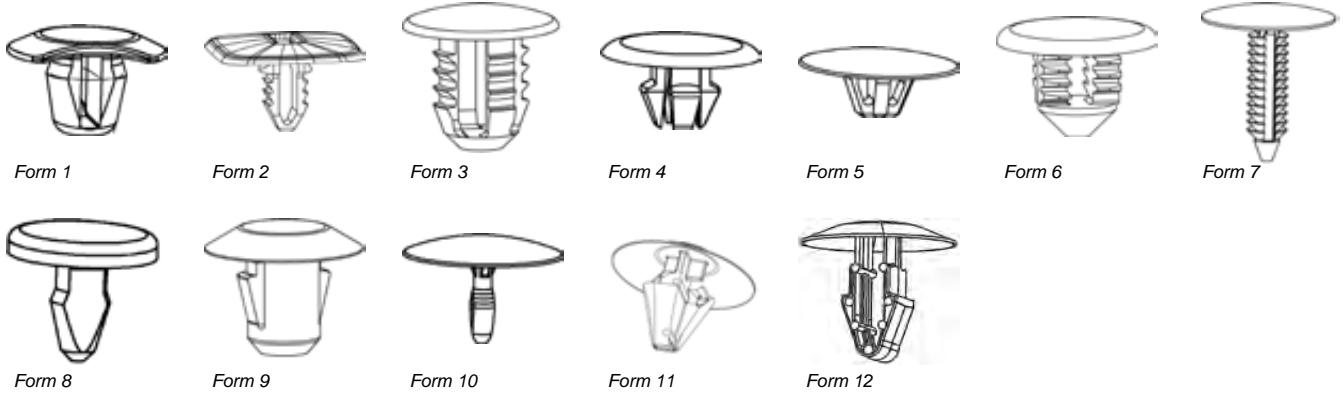
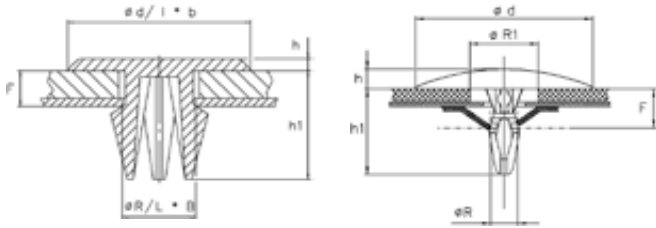
PLASTIC BUTTON HEAD FASTENING PLUGS

MATERIAL:

Polyamide, polyoxymethylene, polyethylene, polypropylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

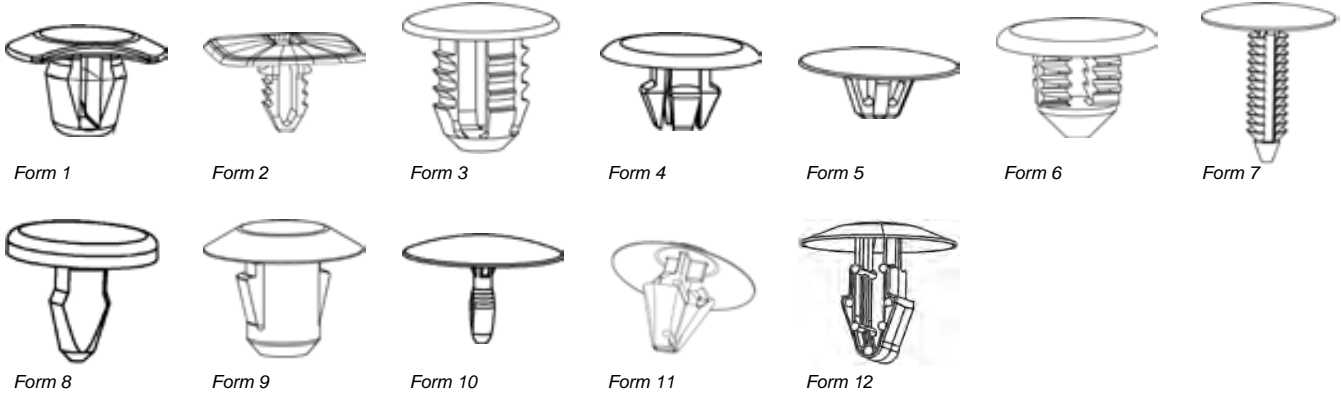
These fasteners are a preferred choice for completing blind joining operations involving sheet metal, plywood constructions and all kinds of rigid type panels. They provide instant manual installation.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØR/ L x B	ØR1	Ød/ l x b	h	h1	Form
	018586	0,8...0,9	8,0	-	13,0	1,7	11,0	1
	014330	0,8...4	9,8	-	19,0	2,5	24,0	1
	015495	2,0	11,0	-	24,0	3,0	12,0	1
	201057	2,5...3,05	5,0	-	14,5	2,6	8,6	1
	081322	2,8...3	8,1	9,5...12	17,0	2,5	12,5	1
	012551	2,5	8,2	10,0	18,0	2,2	12,8	1
	013910	4,8	8,1	10,0	18,0	2,2	13,9	1
	152277	0,77	5,2	-	17,5	1,6	15,0	2
	015284	1,0	23 x 7	-	32 x 30	2,5	18,0	2
	017410	2,0	4,0	-	15 x 7	1,5	10,5	2
	055372	2,8	3,5	-	5,2 x 6,2	8,9	1,0	2
	016689	4,0	5,0	-	14 x 11	3,1	10,0	2
	016156	4,9	6,5...6,7	-	11,0	2,0	10,7	2
	012794	8...8,3	5,5	7,0	12,0	2,2	14,8	2
	015535	9,5...9,7	5,5	-	10,0	2,0	17,3	2
	014545	2,7...6	8,4	9,5...12	18,0	2,5	15,5	3
	013926	2,8...3,55	8,1	9,5...12	17,0	2,5	12,5	3
	013336	3,3...5,5	8,2	-	18,0	2,2	12,8	3
	152263	0,7...1	7,6	-	18,0	2,0	22,1	3
	016670	2,9...6	8,4	9,3...11	15,0	2,0	11,7	3
	018442	2,9...6	8,4	-	25,0	2,0	11,7	3
	175010	2...22	6,5	-	22,0	3,0	26,0	3
	055481	2,5...18	7,8...8,2	-	20,5	2,0	21,5	3
	015749	2,9...6	8,4	9,3...16	25,0	2,0	11,7	3
	016846	11...20	9,5...10	-	33,0	4,0	25,0	3
	013207	1,5...4	3,0	-	9,0	1,5	7,0	4

PLASTIC BUTTON HEAD FASTENING PLUGS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	ØR/ L x B	ØR1	Ød/ l x b	h	h1	Form
	014563	4,4	9,8	12,0	22,0	1,5	10,0	4
	016370	0,8...1	6,5	-	18,0	1,5	5,7	5
	056991	2,67	5...5,4	-	16 x 7	2,2	9,0	5
	020373	2,8...3,3	7 x 7	-	15,0	3,5	8,8	5
	112054	3,2...3,7	6,07...6,25	-	14,0	2,2...2,5	8,0	5
	055474	9...9,5	9 x 5	-	16 x 4,5	1,0	19,5	5
	013949	3...7	7,0	-	14,0	1,6	12,0	6
	016397	2,5...10	8,0	-	20,0	2,0	14,0	6
	017905	0,5...4	6,5	-	12,0	1,0	7,0	6
	018751	1,9...8	7,0	-	18,0	2,5	15,0	6
	206987	1,25...8,4	8,0	-	11,5	1,7	13,0	6
	104012	1,5...7	8...8,3	-	20,0	2,5	14,5	7
	201012	1,6...10,3	5...5,4	7,0	16,0	2,2	14,9	7
	175047	2...9	7,0	-	18,0	2,5	19,0	7
	020133	2,4...2,6	11,0	-	19,0	3,0	10,0	7
	019246	3,4...19,4	6,5	-	26,0	2,5	28,0	7
	152500	2...8	9,2 x 7,2	-	24,0	2,0	15,3	7
	208148	2...13	7,9 x 7,9	-	35,0	4,0	22,0	7
	018901	4,0	5,0	-	14,0	2,2	10,0	8
	057193	3,1	6,0	-	15,7	2,0	11,5	8
	057177	3,5...4,9	8,2	-	18,0	2,2	12,8	8
	019142	2,55...3,05	8,0	-	17,0	2,5	11,2	9
	210213	4,1...5,9	8,0	-	-	3,5	12,3	9
	207460	3,6...5,75	8,0	-	18,0	3,2	12,6	9
	017016	8,2	4,0	6,5...14	27,0	3,0	15,0	10
	152028	6,2	4,0	6,5...14	27,0	3,0	13,0	10
	131124	3...5	10,2...12,2/14,2 x 11,2	-	35,0	5,5	20,0	11
	207713	8,1...9,1	6.33 x 10	7,0	23,0	3,0	17,6	12

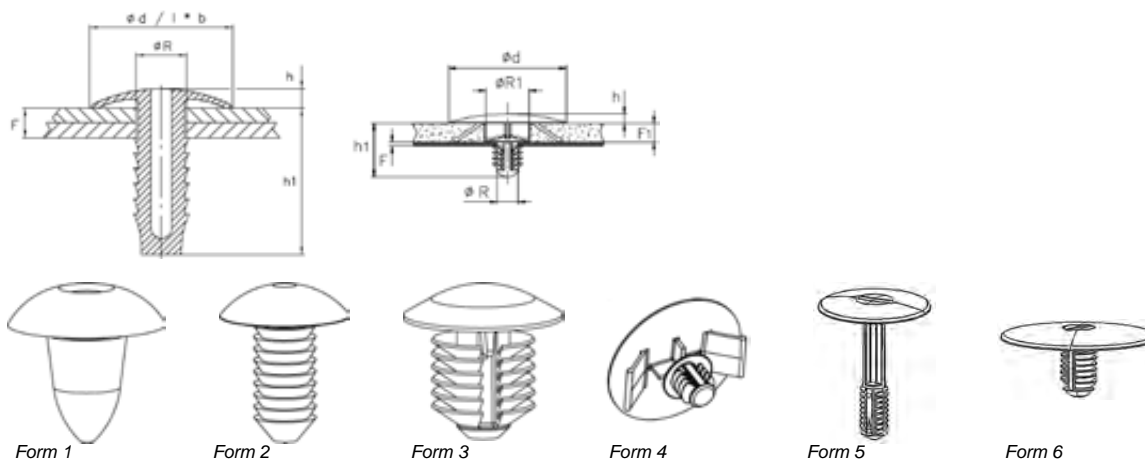
PERMANENTLY ATTACHED PLASTIC PLUGS

MATERIAL:

Polyamide, polyoxymethylene, polyethylene, polyester-elastomer

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These plastic fasteners provide a rapid and economical way of fixing flexible type pads (padding, insulation linings etc.) onto a rigid backing surface.

They are assembled by using a manually actuated or pneumatic setting tool on request.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	F	ØR	ØR1	Ød/ l x b	h	h1	F1	Form
	011868	1,5...2,5	7,8	-	17,0	4,0	13,0	-	1
	020436	1,5...4,5	8,5...11,5	-	20,0	5,2	9,3	-	1
	011654	3,5...4	6,5	-	14,0	2,0	11,5	-	1
	013894	3,8	6,0	-	13,0	3,2	11,0	-	1
	014934	4,8	5,2	-	17 x 13	3,0	10,5	-	1
	011771	5,5...6	6,5	-	14,0	2,0	13,6	-	1
	200258	13,9...14,1	11,15...11,25	-	22,0	3,8	18,3	-	1
	200260	13,9...14,1	8,4...9,3	-	22,0	3,75	19,25	-	1
	015009	1,5...17	9,5	-	22,0	5,5	21,5	-	2
	054364	2...13	10,2	-	35,0	4,0	22,0	-	2
	018000	2...13	10,2	-	35,0	4,0	22,0	-	2
	054795	2...15,5	8...8,5	-	20,5	2,75	20,0	-	2
	015577	3...10	8,5	-	20,0	2,75	14,5	-	2
	016293	2,7...6,7	10,5	-	23,0	2,8	16,2	-	2
	014706	0,7...12	8,1	-	20,0	3,75	20,0	-	2
	012911	3...6,5	8,0	-	27,0	3,5	14,0	-	2
	015081	3...6,5	8,0	-	20,0	2,75	9,5	-	2
	016512	3...6,5	M10	-	31,0	3,5	14,0	-	2
	053081	3...7	6,0	-	17,0	4,0	10,2	-	2
	011888	3...7	8,0	-	20,0	2,75	12,5	-	2
	013981	3...9	9,0	-	30,0	3,5	20,5	-	2
	014641	3...13	9,5	-	22,0	4,0	17,0	-	2
	015396	3...13,5	9,5...9,7	-	22,0	4,0	23,5	-	2
	012301	3...14	8...8,5	-	20,0	2,75	20,0	-	2
	012271	3,5...11	6...6,2	-	17,0	3,0	15,0	-	2
	016657	3,5...11	6...6,2	-	30,0	3,5	15,0	-	2
	175184	3,5...15	7,0	-	30,0	4,0	22,0	-	2
	053653	3,5...15,5	7,0	-	31,0	4,1	25,4	-	2
	016555	3,5...21,5	8,0	-	27,0	3,5	26,5	-	2
	018032	6,0	20,0	-	36,0	3,0	24,0	-	2
	053060	5...9	6...6,22	-	17,05	4,25	15,5	-	2
	052709	4,9...6	6,5...6,72	-	14,2	3,5	14,5	-	2
	012113	5,5...14	9,4...9,8	-	22,0	4,0	17,0	-	2
	017874	5,8...6,3	7,5	-	20,0	2,75	13,5	-	2

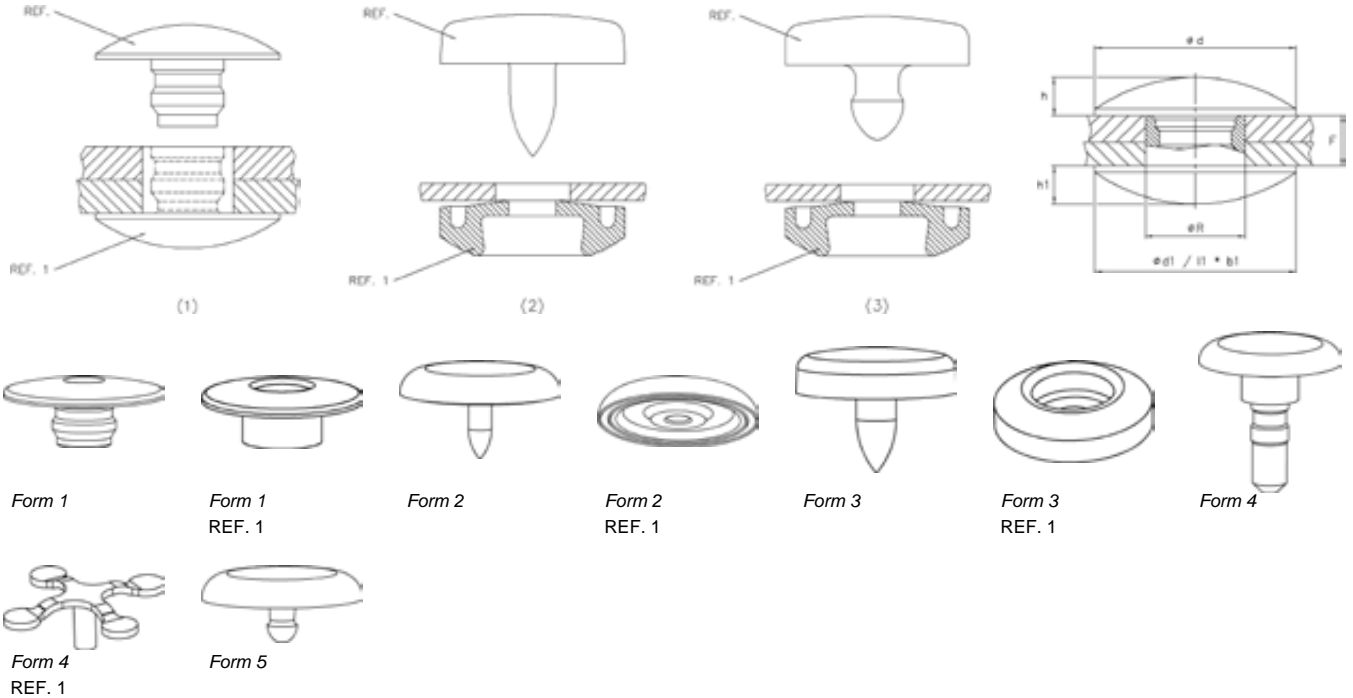
PRESS-IN RIVET WITH HOUSING

MATERIAL:

Polyamide, polyoxymethylene, polyethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

FORM 1, 4 and 5 are clipped-on
see the assembly sketch 1 + 3

FORM 2 and 3 are riveted,
see the assembly sketch 2

For the assembly of the forms 2 and 3, we recommend a special assembly tool, please contact us.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	Ref. 1	F	ØR	Ød	Ød1/ l1xb1	h	h1	Form
	014981	-	5,0	9,9	20,0	-	2,0	-	1
	-----	014980	5,0	9,9	-	20,0	-	2,0	1
	017474	-	5,0	9,7...10,2	20,0	-	4,0	-	1
	-----	017475	5,0	9,7...10,2	-	20,0	-	4,0	1
	013757	-	0,3...1,2	2,5	16,0	-	2,5	-	2
	-----	013756	0,3...1,2	2,5	-	16,0	-	2,5	2
	014775	-	0,3...1,2	2,5	16,0	-	2,5	-	2
	-----	014774	0,3...1,2	2,5	-	16,0	-	2,5	2
	013375	-	-	3,3	13,0	-	1,6	-	3
	-----	126902	-	2,5	-	9,7	-	2,9	3
	079097	-	1,1...1,3	2,5	14,9	-	2,7	-	3
	-----	079099	1,1...1,3	2,5	-	14,9	-	3,3	3
	014539	-	-	2,5	9,7	-	2,6	-	3
	-----	203133	-	2,5	-	9,7	-	2,9	3
	056762	-	8,7...9	5,9	16,0	-	-	-	4
	-----	056763	8,7...9	5,9	-	16,0	-	-	4
	015019	-	10,2...10,5	5,9	10,5	-	2,0	-	4
	-----	015020	10,2...10,5	5,9	-	10,5	-	2,0	4
	013942	-	12...12,4 / 18 / 33	6,2	15,0	-	2,0	-	4
	-----	013940	33,0	6,2	-	50 x 50	-	2,0	4
	-----	013941	18,0	6,2	-	50 x 50	-	2,0	4
	-----	020408	12...12,4	6,2	-	12,0	-	1,5	4

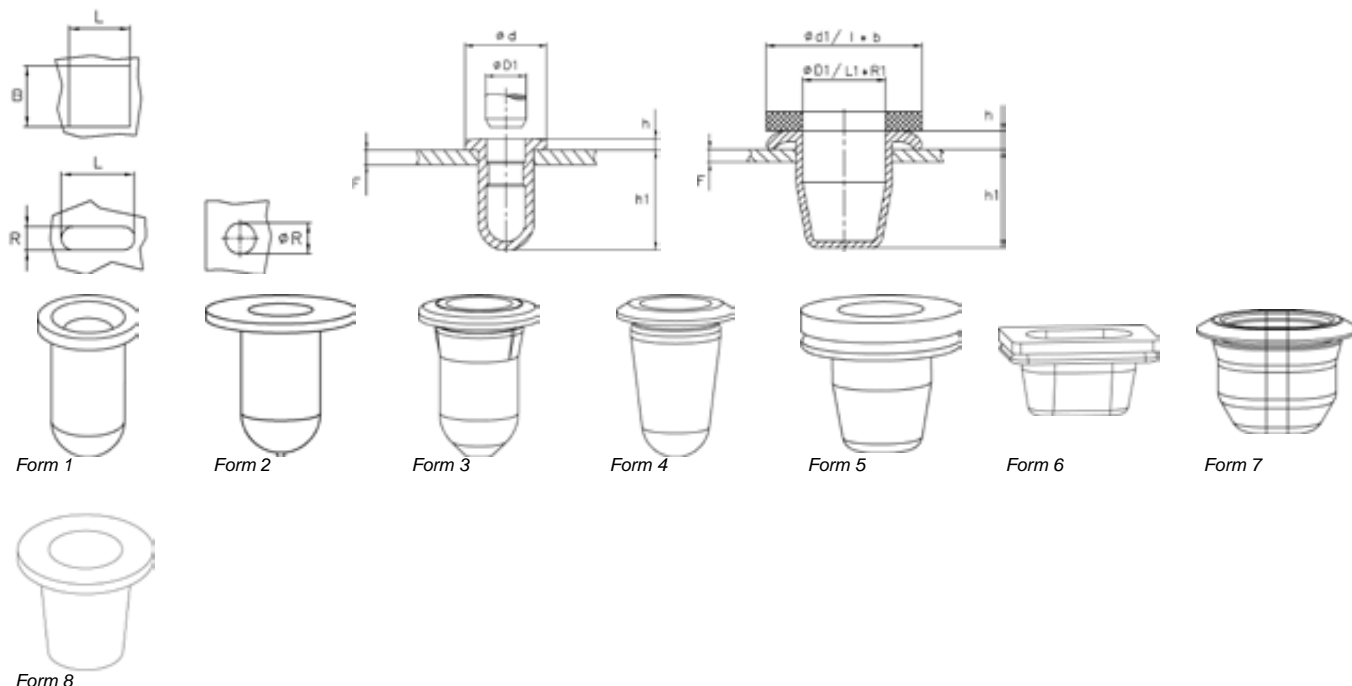
SEALING SNAP-SACS

MATERIAL:

Polyamide, polyethylene

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

These sealing snap-sacs are used to seal joints against water, more especially on panel fastening (see the previous chapter). They may also be used for a hole plugging applications.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØR/ LxB/R	Ød	ØD1/L1xR1	Ød1/ l x b	F	h	h1	Form
	012461	5,8	8,0	3,8	-	-	1,0	11,0	1
	011866	7,5	14,0	5,7	-	-	0,8	12,2	1
	012812	7,5	14,0	6,0	-	7,5	0,8	14,2	1
	056174	8...8,2	12,0	6,0	-	-	17,0	16,0	1
	020227	8,0	16,7	6,6	-	0,7...2,5	1,0	16,7	1
	052018	8,0	16,7	6,0	-	-	17,7	17,7	1
	012728	8,5	12,0	7,5	-	-	0,5	19,5	1
	012055	10,0	15,0	8,5	-	-	0,8	23,2	1
	014076	4,6	6,2	3,2	-	0,8...0,9	0,9	11,6	2
	012445	8,5	16,5	7,1	-	1,5...2	1,0	15,0	2
	015025	7,8	12,0	6,6	-	0,7...1	1,5	11,5	3
	053171	10,5	15,0	6,8	-	-	14,5	12,5	3
	012765	9,0	12,5	6,9	-	0,75...0,9	1,3	15,2	4
	204315	9,5	14,0	8,3	-	2,7...3,2	13,5	12,5	4
	081981	7,4	-	6,4	12,0	0,7...1	1,4	7,6	5
	081619	7,4	-	6,4	12,0	0,7...1	0,8	8,2	5
	081982	15 x 7,4	-	14 x 6,4	19,6 x 12	0,7...1	1,4	7,6	6
	018364	22 x 18	30 x 26	19 x 15	-	1,2...1,3	2,2	18,7	7
	152377	8,0	12,0	6,5	-	-	10,5	9,5	8
	152378	33,5	38,0	32,0	-	-	26,0	25,0	8

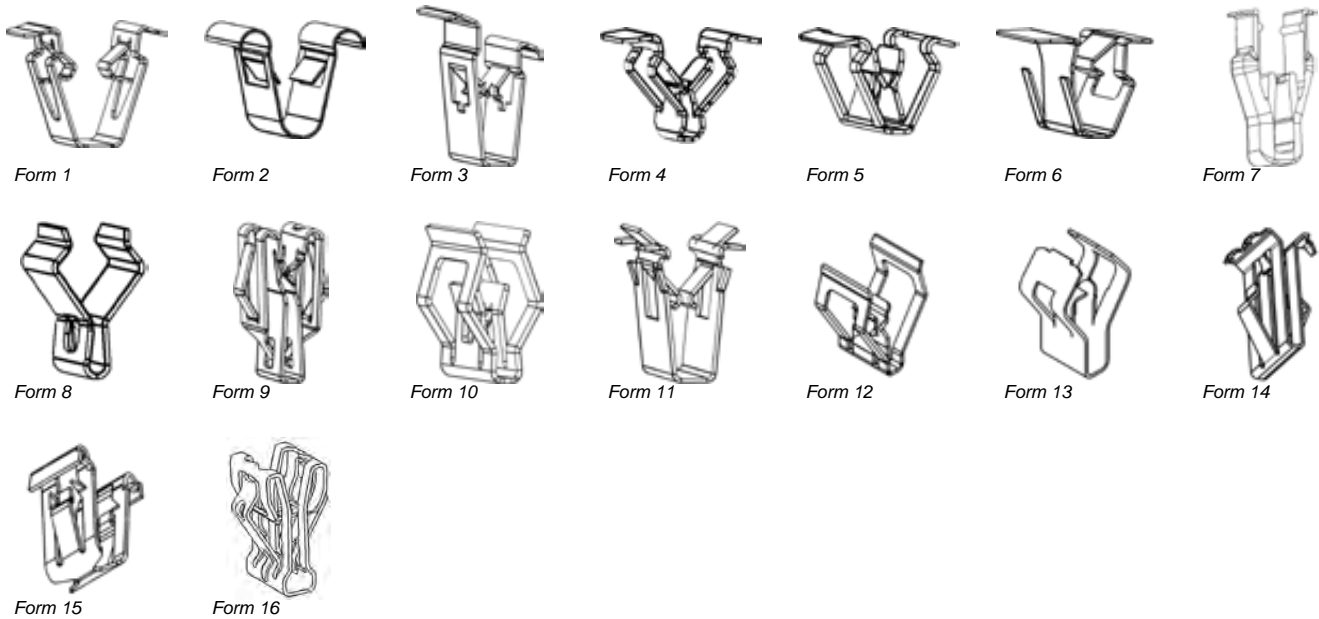
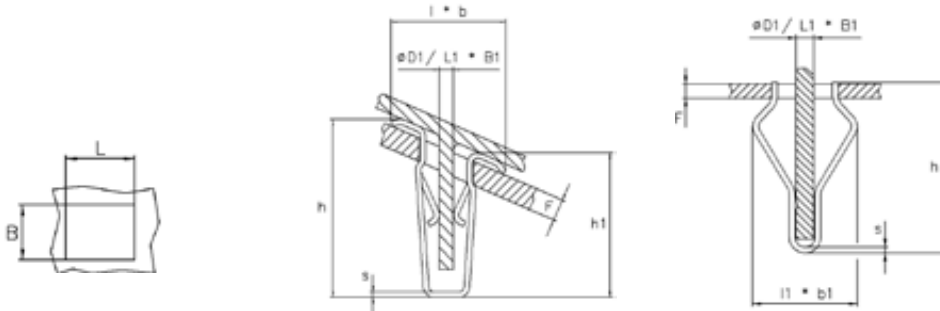
SNAP TYPE CLIP ROUND OR RECTANGULAR SHAPED STEM

MATERIAL:

Spring steel C67S austempered, polyoxymethylene

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

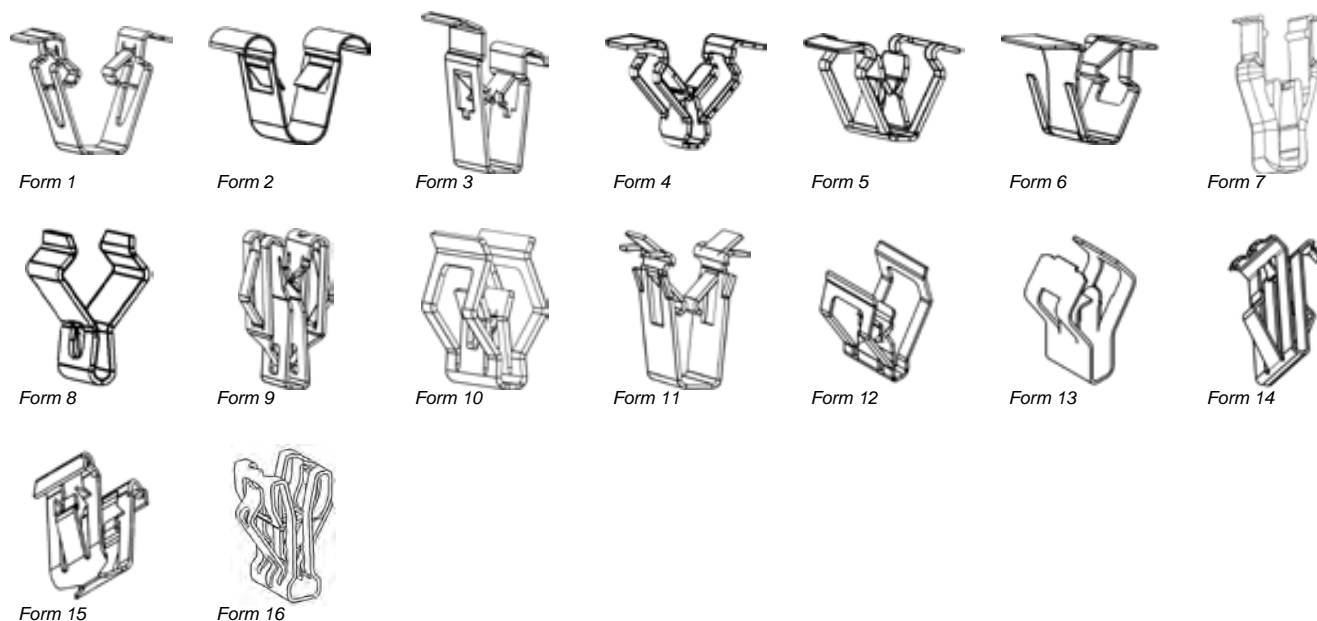
Snap type clip for rectangular or round shaped stem. It allows to compensate for variations from the stem center distance. Spring steel gives the advantage of repeatable and reliable fixing of trim and similar applications.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØD1/L1xB1	L x B	l x b	l1 x b1	h	h1	s	Form
	052073	0,7	4,1 x 6,2	8,1 x 6,1	9,2 x 7,2	-	13,5	13,5	0,4	1
	200825	2,8...3,2	3,2 x 12	10 x 14,5	17,8 x 13,8	-	15,6	15,6	0,4	1
	016290	0,7...1,5	1,5...3,2 x 13	4,8 x 13,5	9 x 12,75	-	13,6	13,6	0,4	1
	018188	2...2,1	2,4...2,6 x 13	4,8 x 15	11,7 x 13	-	9,8	9,8	0,4	1
	018637	0,95...1,05	6 x 15	10,3 x 18	21 x 23	-	18,1	18,1	0,5	1
	020130	5,3	3,6	9,5 x 20	16,9 x 18	-	12,9	12,9	0,4	1
	018597	0,85...1,15	5 x 20	10,5 x 22	22,5 x 21	-	18,5	18,5	0,5	1
	020689	5,2	M4	9,5 x 20	16,9 x 18	-	12,9	12,9	0,4	1
	211188	6,8...7,2	3,2 x 11	10 x 14,5	17,8 x 12,8	-	19,6	19,6	0,4	1
	020416	3,8...4,2	3 x 10	9 x 14,5	15 x 13,8	-	17,5	17,5	0,4	1
	016848	2,8...3,2	3,0	9 x 14,5	18 x 13,8	-	16,2	16,2	0,4	1
	014525	1,5	1,5...3,2 x 10	4,8 x 15,5	11,5 x 10	-	13,5	13,5	0,4	1
	018967	7,0	6,5	11 x 22	21,2 x 10	-	19,0	19,0	0,5	2
	014488	1,0	7,0	10,4 x 26	22 x 25	-	20,0	20,0	0,4	2
	013866	1...1,2 / 0,7...1	6,5 / 7	8,5...9 x 19	18 x 18	-	19,5	19,5	0,4	2
	014566	1,95...2,05	1,5...3,2 x 10	4,8 x 15,5	11,1 x 10	-	17,6	14,1	0,4	3

SNAP TYPE CLIP ROUND OR RECTANGULAR SHAPED STEM



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	ØD1/L1xB1	L x B	l x b	l1 x b1	h	h1	s	Form
	206045	2,8...3,2	1,8...2,2 x 8	8 x 18	18,3 x 16,5	-	15,2	15,2	0,6	4
	020808	2,5	2,4...2,6 x 7	9 x 8,5	13,2 x 8,1	-	16,3	16,3	0,5	4
	200544	3,0	1,9...2,1 x 8	8 x 18	13,1 x 14,5	-	16,3	16,3	0,55	4
	020554	0,8...1,2	1...1,2 x 8,5	6 x 9,5	9,9 x 8,5	-	9,5	9,5	0,4	4
	019743	0,7	1 x 9	5,5 x 10	12 x 9,45	-	15,6	15,6	0,5	4
	017807	5,0	1,5...1,7 x 14	8 x 16	12,5 x 9,4	-	18,5	18,5	0,5	4
	016437	2,5	1,7...2,1 x 14	8 x 16	12,5 x 9,45	-	16,5	16,5	0,5	4
	018322	2,5	1,7...2,1 x 14	8 x 16	12,5 x 10	-	16,5	16,5	0,5	4
	016674	2,5	1,7...2,1 x 14	8 x 16	12,5 x 10	-	17,9	17,9	0,5	4
	020437	2,8...3,2	1,8...2,2 x 18	8 x 18	14,2 x 17,7	-	15,7	15,7	0,6	4
	019657	2,7...3	2...2,2 x 14	8 x 16	16,4 x 15,4	-	15,1	15,1	0,4	4
	016715	0,75	1...1,2 x 16	5,3 x 18	11,8 x 16	-	8,3	8,3	0,4	4
	017433	1,2...1,5	2...2,5 x 16	7,4 x 18	15,45 x 17	-	13,5	13,5	0,5	4
	209436	2,3	1,4...1,6 x 12	6 x 20	8 x 11	-	14,7	14,7	0,5	4
	205077	0,75	1...1,2 x 8	5,3 x 18	10,8 x 16,6	-	8,4	8,4	0,4	5
	205991	0,75	1...1,2 x 8	6,8 x 18	12,7 x 16,6	-	8,0	8,0	0,4	5
	019344	3,0	2 x 9	7 x 16,5	14,2 x 16	-	12,8	12,8	0,4	5
	019180	3,0	2 x 10	8 x 16,5	14,8 x 16	-	13,4	13,4	0,5	5
	019518	1,2...1,5	2...2,5 x 13	7,4 x 18	16 x 17	-	13,4	13,4	0,5	5
	018702	3,0	2 x 15	8 x 16,5	15 x 16	-	13,2	13,2	0,4	5
	018212	0,65...0,85	2,4...2,6 x 15	7,4 x 18,5	20 x 18,3	-	21,4	21,4	0,5	5
	020703	1,5	1,8...2 x 10	5,3 x 16,5	10,7 x 16	-	9,1	9,1	0,4	5
	202790	5,5...6	3 x 16	7 x 32	22,4 x 30	-	16,2	16,2	0,5	6
	019720	4,0	3...9 x 12...14,5	9 x 14,5	18 x 13,8	-	16,2	16,2	0,4	6
	018509	3,5	4,5 x 20	7 x 32	22,1 x 30	-	14,4	14,4	0,5	6
	201011	4,0	2,1 x 8	10 x 8	11 x 7,5	-	21,1	21,1	-	7
	202231	1,2	0,7...0,9 x 6	3,6 x 10	-	5,6 x 7,5	8,9	8,9	0,3	8
	018876	2,5	1,2 x 9,5	8 x 16	-	10,4 x 9,5	18,1	18,1	0,4	9
	151771	2,5	1,0...1,2 x 9,5	8 x 16	-	10,4 x 9,5	18,1	18,1	-	9
	018207	2,5...2,7	1,4...1,6 x 15	5,5 x 17,5	7,3 x 16	-	14,2	14,2	0,5	10
	016625	2,6	1,4...1,6 x 16	5,5 x 17	7,3 x 16	-	14,2	14,2	0,5	10
	018950	0,7...1,5	1,5...3,2 x 12	4,8 x 13,5	9 x 12,75	-	14,6	14,6	0,4	11

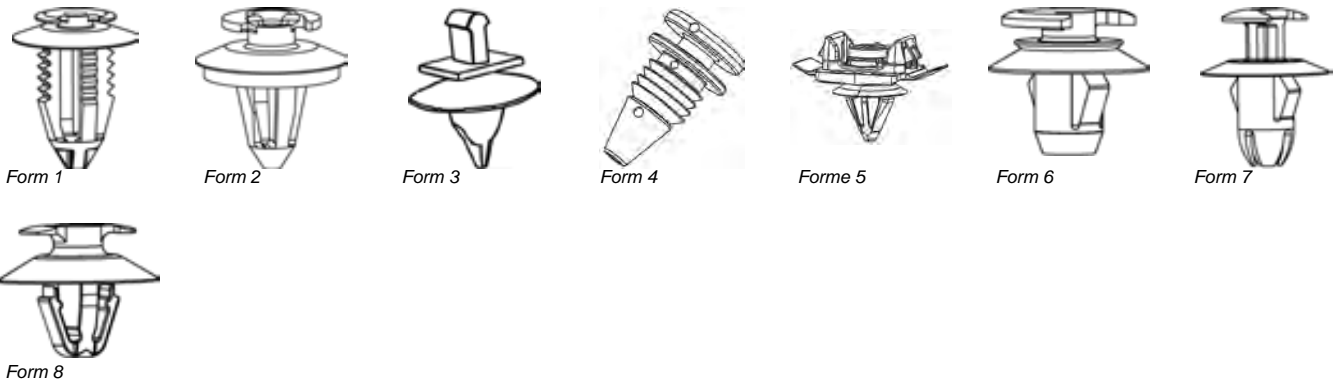
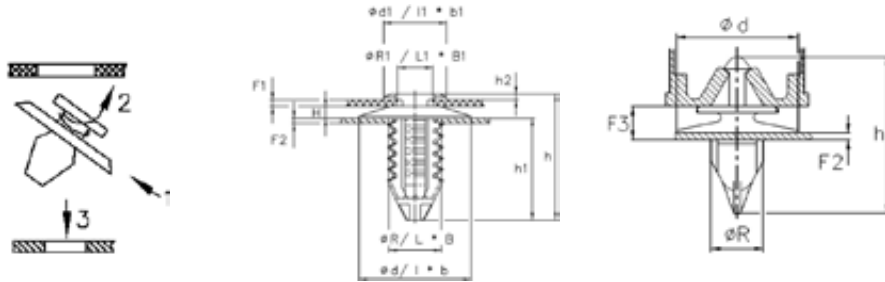
REMOVABLE PLASTIC TRIM CLIPS FOR PANEL FASTENING - TURN IN

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

These plastic clips are used to attach trim items onto body panels. They are installed on the trim by 1/4 turn action and provide significant adjustment tolerances. The clips are water and dust resistant, whilst also reducing noise transmission.
Form 2: with seal

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	F1	F2	H	ØR1/L1xB1	ØR/ L x B	Ød/l x b	Ød1/l1xb1	h	h1	h2	Form
	016663	2,5	1...1,5	1,8	9,5	7,5...7,7	18,0	11,6	18,5	12,9	1,3	1
	016236	2,5	1...1,5	1,8	9,5	7,5...7,7	18,0	11,6	18,7	12,9	1,5	1
	014241	2,5	4,8...5,1	1,0	9,5	7,5	13,0	13,0	19,0	14,7	0,8	1
	013470	2...2,7	0,6...1	3,2	9,5...10,5	7,9	18,0	13,5	20,7	13,4	1,3	1
	013588	1,5...2,7	0,75...1	5,2	9,5...10,5	7,9	18,0	13,5	23,3	13,8	1,3	1
	013644	2,5...2,7	0,8...1	2,9	9,5...10,5	9,3	18,0	13,5	20,5	13,5	1,3	1
	152252	2...2,7	0,6...0,8	3,3	9,5...10,5	8,1...8,3	18,0	-	-	-	-	1
	014350	2,3...2,8	0,8...1	20,0	9,5	7,5	18,0	13,5	35,0	10,9	1,0	1
	013152	2,3...2,8	1,0	9,0	9,5	7,5	18,0	13,5	24,0	10,9	1,0	1
	012985	2,3...2,8	1,0	12,0	9,5	7,5	18,0	13,5	27,0	10,9	1,0	1
	013385	2,2...3	0,7...0,9	2,0	10,5...11	8,0	18,0	15,0	17,9	11,6	1,3	1
	012954	2,5...3	0,9	2,6	9,5...10,5	7,9	18,0	13,5	20,7	13,8	1,3	1
	014873	2,5...3	0,88	2,6	9,5...10,5	7,9	18,0	13,5	20,7	13,8	1,3	1
	016498	1,7...1,9	3,0	1,9	8,0	8,0	18,0	10,5	15,3	10,4	1,0	1
	014274	0,8	1...1,2	2,2	14 x 8	12,0	22,0	14,0	27,4	22,9	0,8	1
	013069	0,75	2,0	1,7	12 x 8	8,0	18,0	12,5	16,4	10,9	1,7	1
	013975	0,8	2,5	1,5	8,0	8,0	18,0	10,5	12,2	9,1	0,8	1
	016919	1,4...1,6	0,7...1	2,0	9,5	7,9	18,0	13,5	33,3	28,5	1,3	1
	013386	1,5	0,7...0,9	3,3	11,0	8,0	18,0	15,0	22,6	16,0	1,5	1
	015287	1,4...1,6	0,7...1	2,0	9,5	7,9	18,0	13,5	19,2	14,4	1,3	1
	013631	2,0	0,8	2,8	12,5...13,5	7,3	17,0	17,0	18,3	-	0,9	1
	017961	2,4...2,6	0,7...0,85	1,0	4,5	5,0	13,5	10,7	12,4	8,0	0,8	1
	014950	1,9	0,7	2,5	12,5...13,5	7,3	17,0	-	17,6	12,2	0,9	1
	014405	2,2...2,5	0,7...1	2,2	10,5...11,5	8,0	18,0	15,0	13,3	7,0	1,3	1
	017446	2,5	0,88	1,8	9,5	7,5	18,0	13,0	17,9	12,8	0,8	1
	015054	2,2...2,5	0,88...1	2,2	9,5	8,0	18,0	13,0	16,5	11,0	0,8	1
	012873	2,5	0,88	1,8	9,5	7,5	18,0	13,5	16,2	10,9	1,0	1

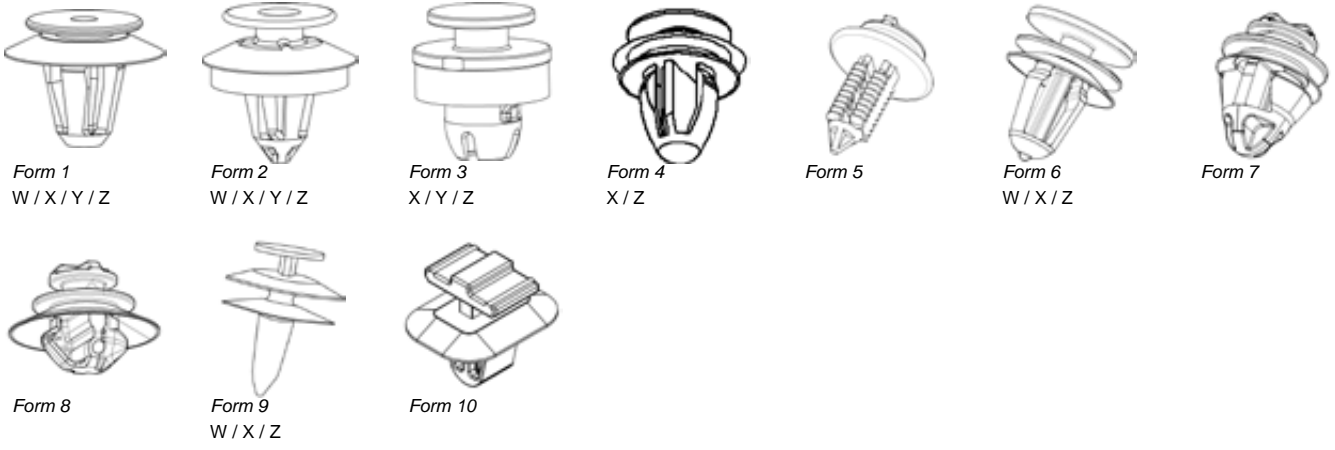
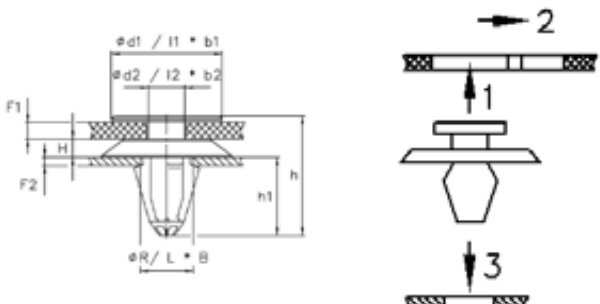
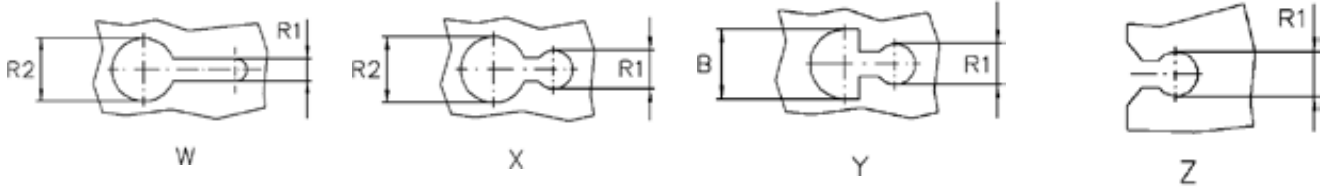
REMOVABLE PLASTIC TRIM CLIPS FOR PANEL FASTENING - TO INSET IN

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

These plastic clips are used to attach trim items onto body panels. They are installed on the trim into keyhole slots and provide significant adjustment tolerances. The clips are water and dust resistant, whilst also reducing noise transmission. Form 2 + 3: with seal

? Feature(s) of the part see Reference Page 4
↓ Dimensions in mm

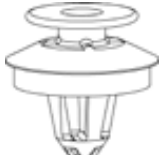
Samples available on request

?	REF.	F1	F2	H	ØR1	ØR/L x B	R2 / B	Ød2/l2xb2	Ød1/l1xb1	h	h1	Form
	014520	0,8	0,8	2,1	8,5	8,4	-	5,5	13,2	14,4	10,5	1
	014183	0,7..1	0,7..1	4,7	8,5	8,1	-	5,5	13,2	18,8	12,0	1
	015650	0,7..1	0,7..1	4,7	8,5	8,1	-	5,5	13,2	22,8	16,0	1
	014182	1,1..1,3	0,7..1	6,3	8,5	8,1	-	5,5	13,2	20,4	12,0	1
	019977	1..1,4	0,7..0,8	2,4	6,5	8,0	-	4,3	15x15	20,6	16,0	1
	019976	1,1..1,3	0,8..1	2,2	7,5	8,0	-	4,3	15x15	12,3	7,9	1
	020204	1..1,1	0,8..1	5,8	5,2	11,0	13,0	5,4	12,0	21,3	12,2	1
	016178	1,5..1,9	0,9..1	2,6	6,4..9,5	8,0	13,5..14	6,2	13,2	16,3	11,0	1
	206199	1,8	0,6..0,8	2,5	8,5	7,9	-	5,8	13,2	19,1	14,8	1
	017174	1,8..2,1	0,7..1	2,1	-	8,1	-	8x2,2	19,8	17,4	8,9	1
	014975	2,0	0,7..1	2,8	8,4	8,1	-	5,5	13,2	21,0	12,1	1
	020695	1,8..2	0,7..1,2	3,3	8,8	8,3	14,2	6,3	13,2	19,8	13,65	1
	019792	2,3	0,8..1,6	2,5	8,5	8,0	-	5,4	13,2	18,0	12,3	1

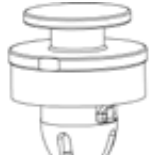
REMOVABLE PLASTIC TRIM CLIPS FOR PANEL FASTENING - TO INSET IN



Form 1
W / X / Y / Z



Form 2
W / X / Y / Z



Form 3
X / Y / Z



Form 4
X / Z



Form 5



Form 6
W / X / Z



Form 7



Form 8



Form 9
W / X / Z



Form 10

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F1	F2	H	ØR1	ØR/L x B	R2 / B	Ød2/l2xb2	Ød1/l1xb1	h	h1	Form
	019261	1,8	0,9..1	2,6	9,0	8,0	-	6,2	18,0	17,0	11,0	1
	018396	2,0	1,1..1,3	2,6	7,0	7,0	13,0	4,0	12,0	16,8	11,3	1
	205076	1,75	2,6..3	2,5	8,5	8,0	14,2	6,3	13,2	18,6	12,7	1
	018769	1,8	2,9..3	2,6	6,6	8,0	8,5	6,2	13,2	18,0	12,7	1
	018545	2,3	1,5..2	2,6	8,5	8,2	14,5	5,5	13,2	18,8	13,0	1
	018649	2,0	0,8..0,9	1,0	8,5	9,0	15,0	6,0	11,0	20,1	14,6	1
	017585	2,2	0,8..1	2,2	8,5	8,0	14,5	5,5	13,2	13,2	8,7	1
	019331	2,3	0,8..1,6	2,7	8,5	8,0	14,5	5,4	13,2	18,0	12,1	1
	013221	2,3..2,5	0,7..0,9	2,5	8,3	8,3	14,0	6,65	13,2	19,0	13,2	1
	013286	2..2,5	0,7..0,9	2,4	8,5	8,3	14,5	5,5	13,2	18,3	13,1	1
	019506	2,5	0,9..1,5	2,5	8,5	8,0	16,0	6,0	15,0	14,3	8,1	1
	013000	2..2,63	0,7..1	2,6	8,5	8,1	14,5	5,5	13,2	17,8	12,0	1
	014424	2..2,63	0,7..1	2,8	8,5	8,2	14,5	5,5	13,2	17,8	12,0	1
	015346	2..2,63	0,7..1	4,9	8,5	8,3	8,5	5,5	13,2	20,1	12,0	1
	018526	2,3	2,2..2,7	3,1	8,5	8,2	14,5	5,5	13,2	19,8	13,5	1
	205690	1,8	2..2,5	3,0	8,5	8,5	14,5	5,5	13,2	15,0	9,3	1
	205328	2,8	0,9..1,5	2,5	6,5	8,35	14,5	6,0	13,5	15,6	9,1	1
	016792	3,0	0,8..0,9	2,5	8,5	8,1	14,5	5,5	13,2	18,8	8,9	1
	016133	2,5..3	0,88	2,6	6,4..9,5	7,9	13,5..14	6,0	13,5	20,7	13,8	1
	017338	4..4,2	0,7..1	2,8	8,5	8,4	14,5	5,5	13,2	21,5	13,4	1
	014298	0,8	2,5..2,7	1,8	8,5	8,0	13..14	6,0	12,5	14,2	10,9	1
	212996	2,0	0,7..0,8	1,2	5,2	6,5..6,7	-	4,2	9,5	12,8	8,7	1
	200975	2,5	0,8..1,6	2,5	8,5	8,0	14,5	5,4	13,2	18,0	12,1	2
	201642	2..2,6	0,8	2,6	8,5	8,2	14,5	5,5	13,2	17,8	12,0	2
	081864	2..2,6	0,8	2,6	8,5	8,2	14,5	5,5	13,2	17,8	12,0	2
	200985	2,0	0,8..1,6	2,5	8,5	8,0	-	5,4	13,2	18,0	13,0	2
	082270	2..2,6	0,7..1	2,6	8,5	8,2	14,2	5,5	13,2	17,8	12,0	2
	082449	2..2,7	2,2..2,7	2,3	8,5	8,2	14,5	5,5	13,2	19,8	13,5	2
	201703	3,0	0,85	1,5	8,5	8,8..9,2	13,5	6,0	12,0	16,7	11,0	3
	201702	3,0	0,85	1,5	8,5	8,8..9,2	13,5	6,0	12,0	16,7	11,0	3
	207124	2,0	0,7	2,2	6,5	8..8,2	-	6,2	13,2	16,5	11,2	3
	175049	2,4..2,6	0,7..0,9	3,0	6..6,2	8,4	13,5..14	5,7	13,0	18,2	12,0	4
	152444	2,65	0,7..1	-	8,0	-	4,8	-	-	-	-	4
	055162	-	0,7	3,7	-	-	-	-	10,0	21,9	-	5
	207585	2,8	1,9 ... 6,5	1,4	4,8	6 ... 6,5	12,5	4,1	12,0	18,5	13,0	5
	056895	2,9	0,6..0,8	3,6	9,0	-	-	-	16,0	20,0	-	6
	201141	2,0	0,7	4,9	-	-	-	-	8,0	15,9	-	7
	204744	2,15	0,77	2,35	-	-	-	-	8,0	12,5	-	8

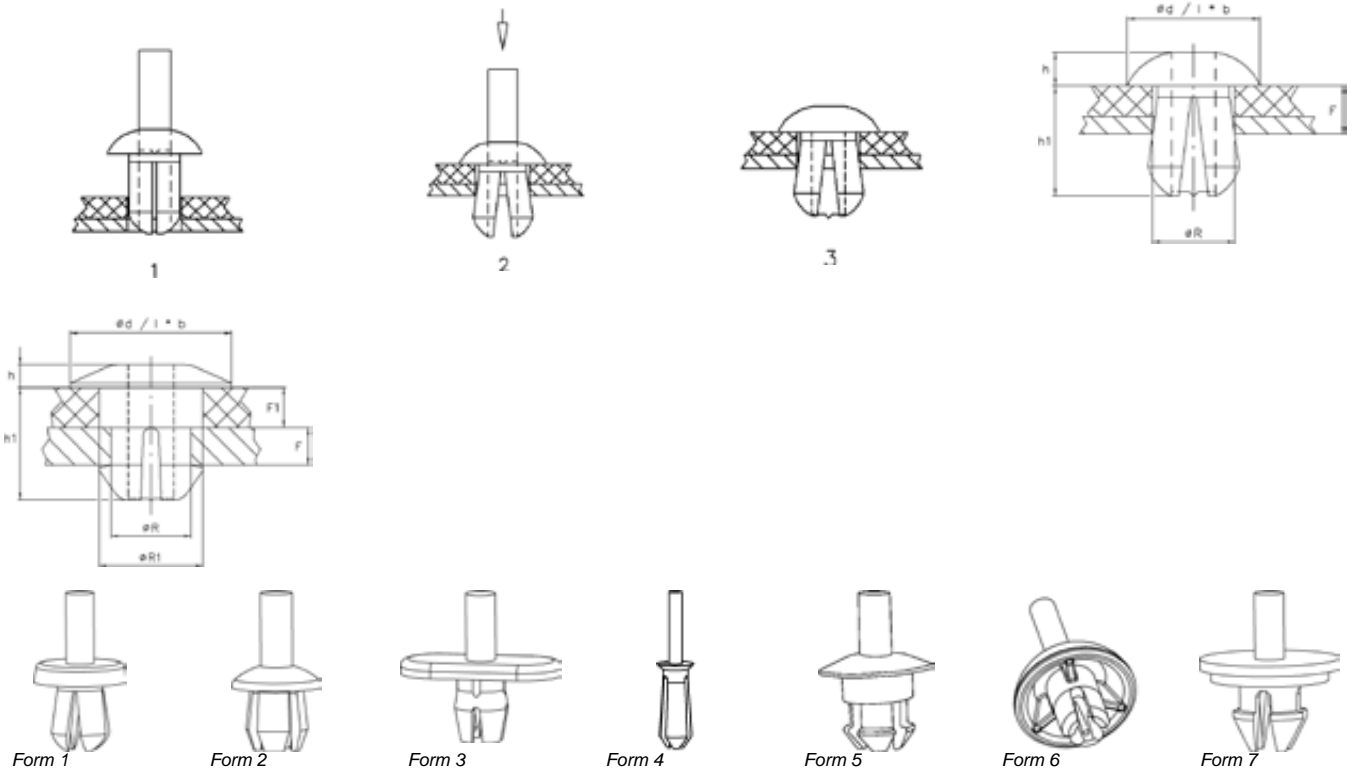
PERMANENTLY FIXED PLASTI-RIVET FASTENERS

MATERIAL:

Polyamide, polyoxymethylene, polyethylene, polypropylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

The PLASTI-RIVET fastener is a fastening system ideal for performing a variety of joining applications, with specific reference to blind installations. Due to its purposely-designed shape, the PLASTIC-RIVET may accommodate materials of varying thicknesses.

SETTING SEQUENCE:

Figure 1: Shows the rivet, with compressed legs, over the mounting hole.

Figure 2: Shows the shank pushing into the centre of the rivets legs.

Figure 3: Shows the shank at the end of its stroke, with the rivet legs fully expanded.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F / F1	ØR / ØR1	Ød / l x b	h	h1	Form
	012854	1,5...5	4,95...5,75	10,0	2,0	7,5	1
	015147	3,7	5,0	12,0	1,5	5,3	1
	013011	4...7	10,0	16,0	2,0	12,0	1
	064060	5,5...10	8...8,8	19,0	2,5	16,0	1
	020728	9,5...10,5	5,5	10,0	2,0	15,0	1
	201691	10,0	5,0	9,5	2,0	16,5	1
	017719	16,3...16,7	11,5	24,0	4,0	25,0	1
	201751	27,4...28	5,5	12,0	2,8	32,0	1
	063979	4,5...6	8,05...8,25	16,0	2,0	12,0	1
	152259	2...6	4,0	7,7	1,0	8,0	1
	063277	2...6	4,0	8,0	1,0	8,5	1
	014802	4,5...6	8,0	18,0	2,5	10,0	1
	016070	4...7	7,9...8,7	16,0	1,0	12,0	1
	016860	4...7	7,9...8,7	22,0	2,0	12,0	1
	063669	5,75...7,25	8,3...8,5	16,2	2,5	12,0	1
	015975	7,5...8,6	6...6,2	16,0	2,5	14,5	1
	012478	2,5...5	3,8	8,0	2,0	7,0	2
	012821	0,75...3	5...5,2	8,5	2,0	6,0	2
	012694	0,8...4,5	2,95...3,65	4,8	1,3	6,2	2
	175069	1,5...5	5,1	8,5	2,5	7,5	2

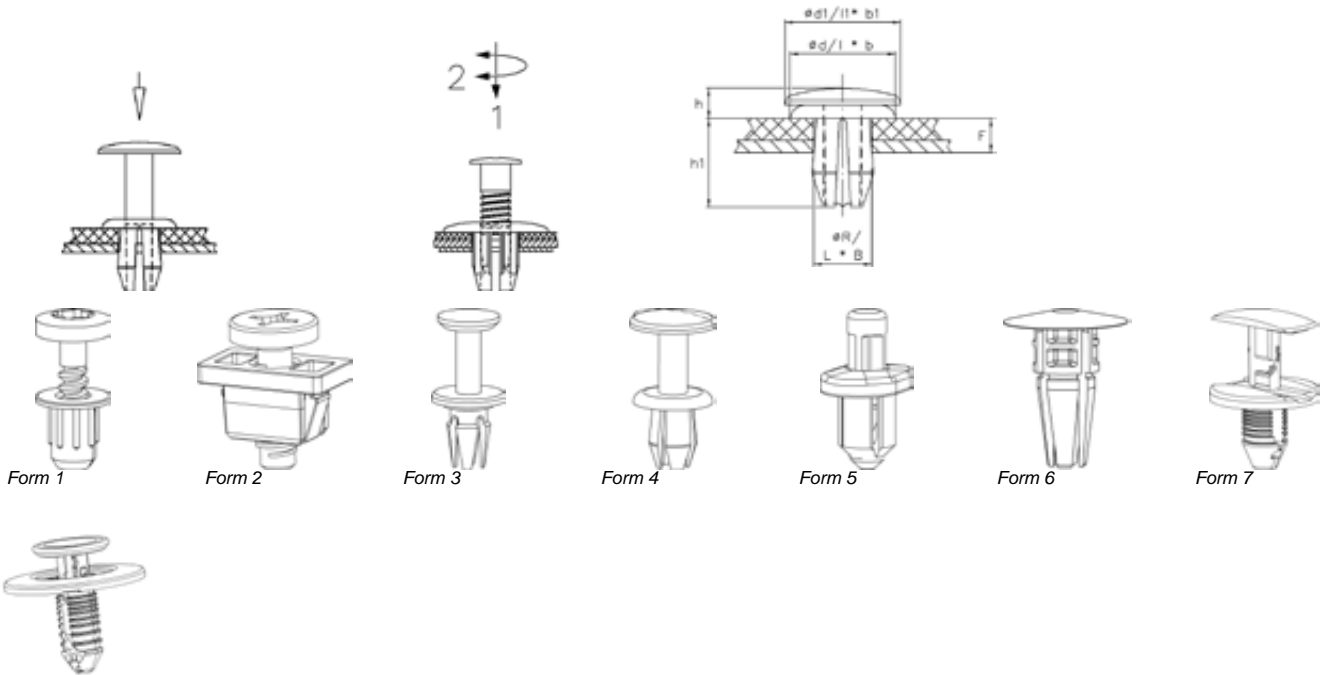
REMOVABLE TYPE PLASTI-RIVET FASTENERS

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Black (other colours are available on request)



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

This joining system provides a two-fold advantage:

- Easy installation (pressure-sensitive hand setting)
- Easy removal (unscrewing using a screwdriver)

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØR/ L x B	Ød/ l x b	Ød1/l1xb1	h	h1	Form
	061712	2...4	6,2	9,8	9,8	3,3	9,4	1
	020644	2...4	6,2	11,0	11,0	2,6	9,7	1
	061495	3...5,8	6,5	15,6	14,6	3,4	10,8	1
	082682	3...5,8	6,2	12,0	18,0	4,3	9,3	1
	017362	3,8	5,2	12,0	9,5	4,1	9,3	1
	015266	4,55...5,75	11,0	25,0	12,0	4,0	14,5	1
	082251	5...8,5	8,5	25,0	10,5	3,5	13,5	1
	082068	5...8,5	8,5 / 10 x 15	25,0	10,5	3,5	13,5	1
	061110	5,8...10	6,2	12,1	9,8	3,4	15,0	1
	060953	3...5,8	6,2	12,0	9,8	3,3	11,8	1
	210975	2...5,8	6,2	12,0	9,8	4,1	9,3	1
	080991	0,8...1	14 x 9,5	22 x 12	14,0	3,0	9,0	2
	013304	1,5	8,0	20,0	15,0	6,0	16,5	3
	016255	3,25	6,0	12,0	10,0	3,1	11,2	3
	015448	3,5...4	8,0	18,0	7,0	2,5	7,5	3
	017489	4,6	12,0	18,0	15,0	6,0	10,0	3
	019428	3,9...4,1	7,0	11,0	10,0	3,3	12,5	3
	020074	4,5...5	10,0	17,8	13,5	5,0	11,5	3
	017156	5,0	8,0	20,0	15,0	6,0	18,5	3
	016142	5,8...7,8	5,0	12,0	9,0	3,5	15,0	3
	015269	2,5...8,5	7,0	15,0	14,0	6,0	17,0	3
	207141	5,2...6,3	5,2...5,4	14,0	12,0	-	-	3
	018610	0,8...7	7,8...8,8	15,5	17,0	4,5	13,0	4

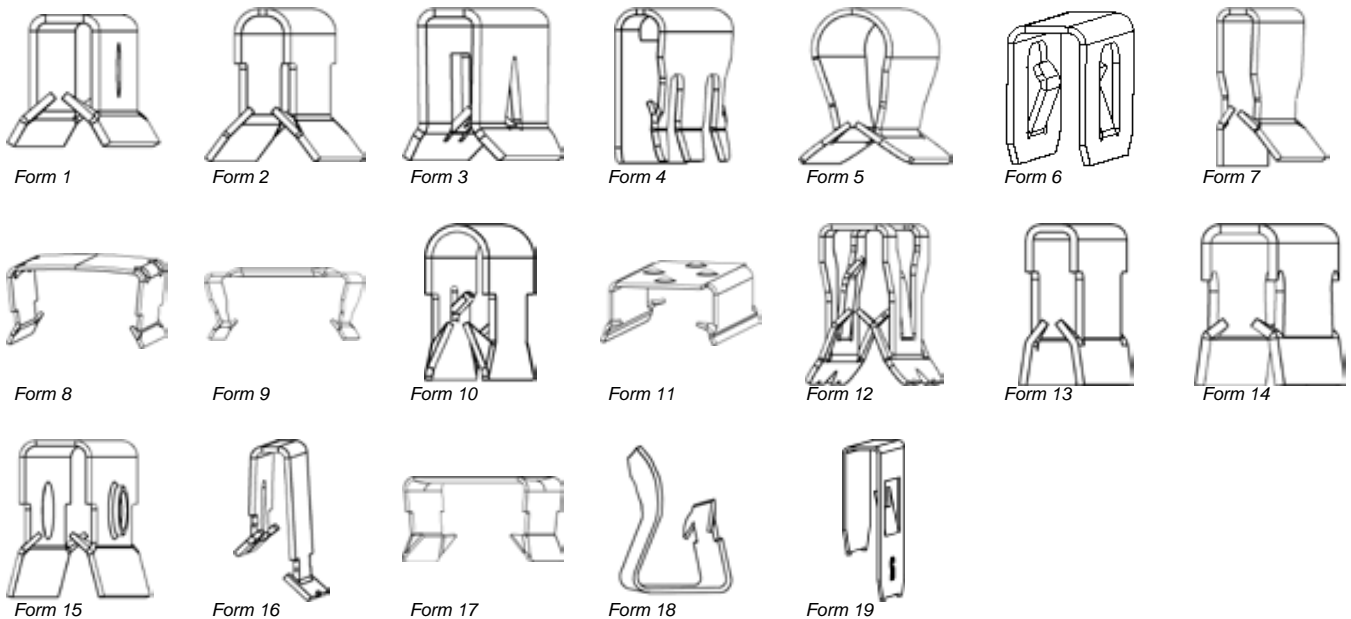
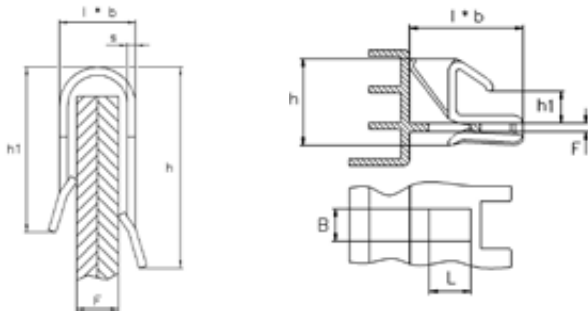
U - CLIPS FOR PANEL EDGE JOINING APPLICATIONS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are used in a variety of applications (fastening sheet metal onto sheet metal, plastic material onto sheet metal, fabric onto sheet metal etc.). They are available in various sizes, to accommodate a wide range of panel thicknesses and material configurations.

Instant application, no need for screws, nuts/ weld tacks and secure joints, achieved with the barb design, are the beneficial features of this cost effective and quick-action fastening system. Installation is by hand or using a magnet assembly tool.

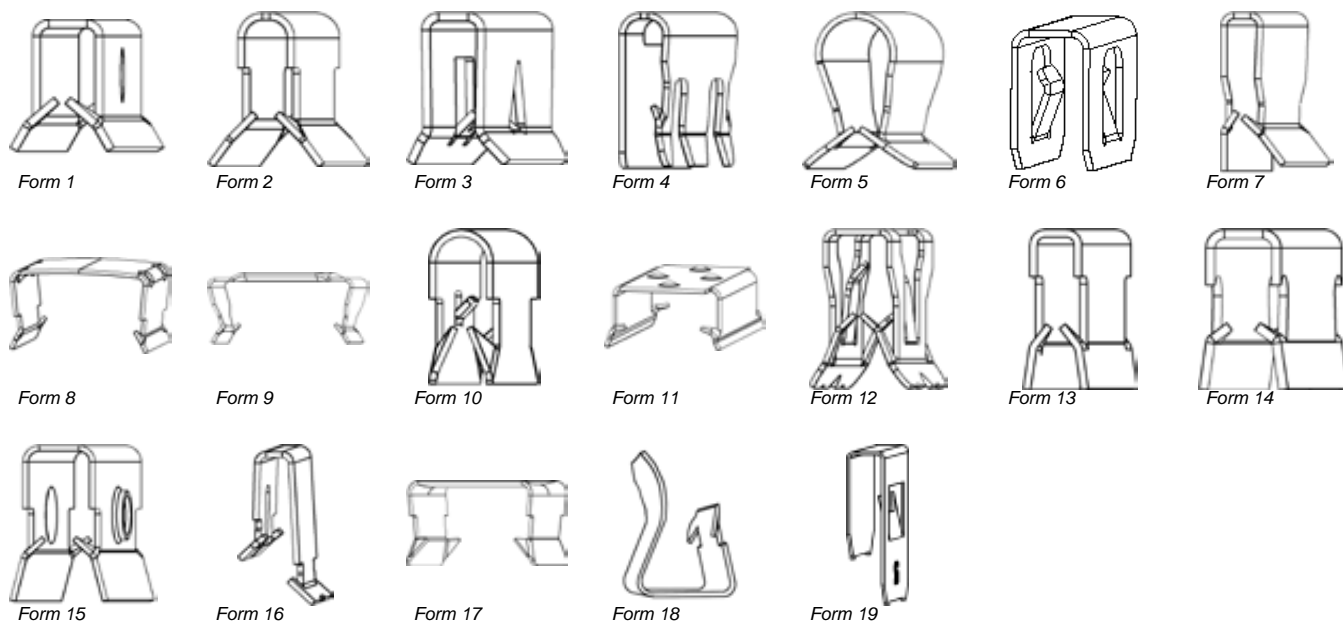
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	l x b	h	h1	s	Form
	013768	0,75...2	2,6 x 13	4,7	-	0,3	1
	011847	0,75...2	2,6 x 13	4,8	-	0,3	1
	013360	1...1,25	1,5 x 16,5	6,0	-	0,3	1
	013031	1...2,2	3,75 x 20	8,75	-	0,5	1
	012630	1,5...1,75	2,6 x 13	6,5	-	0,3	1
	013030	1,5...3,25	4,1 x 13	6,0	-	0,3	1
	013521	1,5...3,25	3,9 x 13	6,0	-	0,4	1
	013414	1,5...3,5	5,1 x 20	13,0	-	0,6	1
	013088	1,6...2,2	3,3 x 13	8,5	-	0,4	1
	011532	2...2,5	3,75 x 20	10,5	-	0,5	1
	011848	2,5...3	3,6 x 13	4,3	-	0,3	1
	011309	2,8...3	3,8 x 13	8,3	-	0,4	1
	012718	2,75...3,25	4,1 x 13	6,0	-	0,3	1
	013126	3,5...4	5 x 20	13,0	-	0,4	1
	011552	3,9...4,1	4,8 x 13	8,0	-	0,4	1
	013401	4,5...5	6,2 x 13	8,8	-	0,3	1
	018149	4,5...5	6,3 x 13	8,5	-	0,3	1

l = stainless steel

U - CLIPS FOR PANEL EDGE JOINING APPLICATIONS

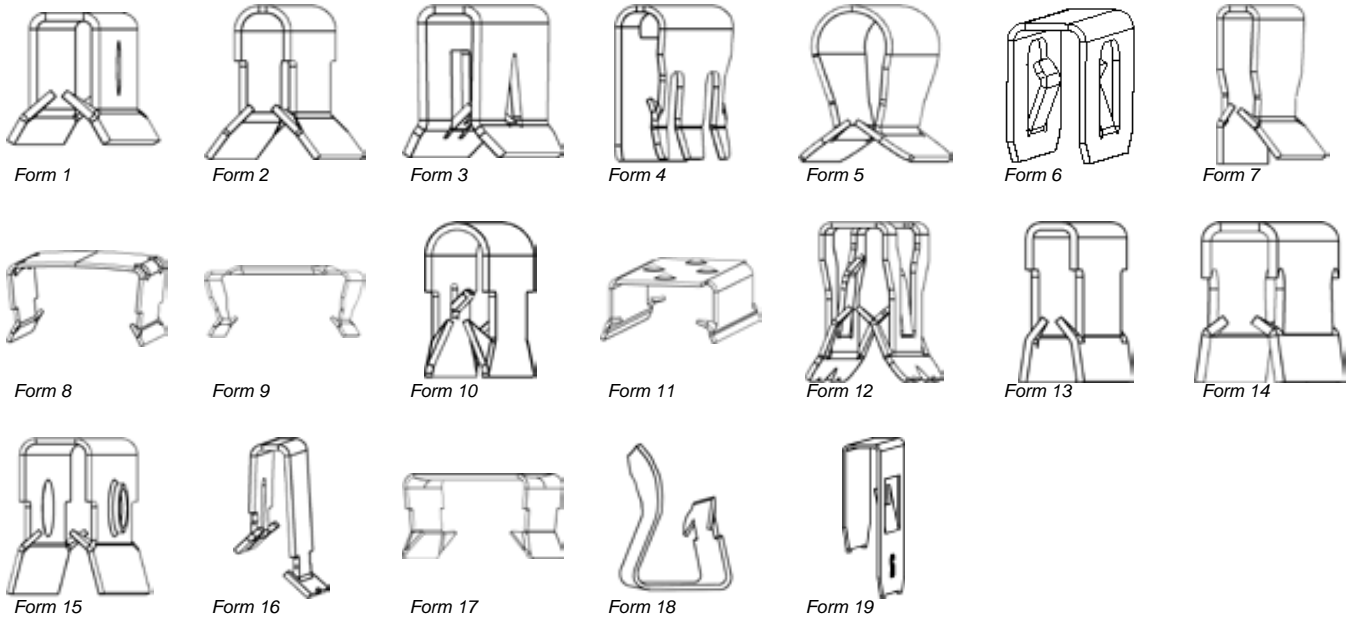


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	l x b	h	h1	s	Form
	201871	4,5...6,5	8,7 x 15	12,4	-	0,7	1
	017053	4,6...4,8	5,8 x 13	12,0	-	0,5	1
	012927	4,7...5,1	5,6 x 13	5,3	-	0,3	1
	200149	5,0	9,1 x 14,5	9,0	-	0,8	1
	012003	5,5...6	7,1 x 20	7,0	-	0,3	1
	011918	9...9,5	10,75 x 15	10,0	-	0,6	1
	017139	15,0	16,7 x 12	17,5	-	0,7	1
	055125	21,0	21,7...23,7 x 15	12,3...14,3	-	0,6	1
	012163	32,0	34 x 12	12,0	-	0,5	1
	210279	23...23,5	25 x 8	9,5	-	0,6	1
	055707	11,3...11,7	8,3 x 16	7,3	-	0,4	1
	012048	4,0	5 x 20	7,9	-	0,4	1
	012587	0,7...0,9	1,8 x 20	7,5	-	0,4	1
	054712	1...2,5	6,2 x 10	9,7	-	0,4	1
	012834	1,75...2,25	3,1 x 13	9,0	-	0,3	2
	012204	6,9...7,1	8 x 15	11,0	-	0,5	2
	011611	1,5...2	3,2 x 12,5	8,5	-	0,4	2
	011920	1,5...1,75	2,75 x 13	6,0	-	0,3	2
	013418	4,9...5,1	6,3 x 25	12,0	-	0,5	2
	053328	4...5	5,2 x 13,5	8,7	-	0,5	2
l	214099	4,9...5,1	6,3 x 25	12,0	-	0,5	2
	012264	2,25...4	5 x 20	8,5	-	0,5	3
	012982	1,7...2,3	2,5 x 8	6,5	-	0,25	3
	013670	1,75...2	2,6 x 8	6,1	-	0,25	3
	018380	1,9...2,5	3,3 x 22	10,0	-	0,4	4
	011695	3...5	10 x 20	19,0	-	0,5	5
	012899	3...6	9 x 20	20,5	-	0,5	5
	012275	3,5...4,5	10 x 25	12,0	-	0,5	5
	129569	5,0	11 x 6	14,3	-	0,6	5
	211246	4,5...5,5	7,2 x 18	12,6	-	0,6	6
	012349	2,75...3,2	4,2 x 20	13,3	-	0,5	7
	012158	2...2,5	3,9 x 20	15,0	-	0,6	7
	011782	1,5...2	3,6 x 20	14,5	12,0	0,5	7
	011545	1,5...2	3,3 x 13	8,5	-	0,4	7

l = stainless steel

U - CLIPS FOR PANEL EDGE JOINING APPLICATIONS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	l x b	h	h1	s	Form
	011454	1...2	4 x 20	14,0	-	0,6	7
	208304	33,2	34 x 20	16,7	-	0,6	8
	202426	1,85...2,15	25,8 x 15,5	18	7	-	8
	016928	13,3	16,4 x 8	7,3	-	0,35	9
	018383	1,8...3	3,8 x 13	9,0	-	0,4	10
	019624	9,5...10	12,2 x 20	6,5	-	0,4	11
	131421	0,8...3	4 x 13	8,3	-	0,4	12
	202121	1...3	4,2 x 15	11,9	-	0,4	12
	020746	1,5...3,5	4,6 x 12	9,9	-	0,4	12
	020560	1,6	3,5 x 26	12,0	-	0,5	12
	020511	2,5...4	5,2 x 15	12,0	-	0,4	12
	051652	2,5...2,8	4,9 x 13	9,6	-	0,4	13
	051627	2,8...3,5	7,2 x 13	9,0	-	0,4	13
	051510	1...1,5	3,5 x 13	8,5	-	0,5	13
	051455	1,7...2,2	4,3 x 13,5	8,5	-	0,4	13
	054804	9,5...10,5	13 x 20	6,5	-	0,4	14
	053510	4,5...5,5	6,8 x 20	15,2	-	0,5	14
	053329	6,7...8,1	9,5 x 12,7	10,5	-	0,45	14
	052667	1,5...2,2	3,9 x 13,5	7,0	-	0,4	14
	052101	2,5...3	5,2 x 50	17,0	-	1,0	14
	051780	4...4,4	13 x 5,3	9,5	-	0,4	14
	051751	4,4...5,5	13 x 8	10,1	-	0,45	14
	011971	2,75...3,25	3,4 x 12,5	8,5	-	0,3	15
	014093	3...3,5	4,9 x 11	19,0	13,5	0,7	16
	012529	4,3...4,6	6 x 12,5	10,0	8,5	0,5	16
	012072	1,75...2	3 x 15	20,5	8,5	0,4	16
	013061	13,5...14	14,7 x 20	9,0	-	0,4	17
	055308	7,0	13 x 20	19,0	15,0	0,5	18

l = stainless steel

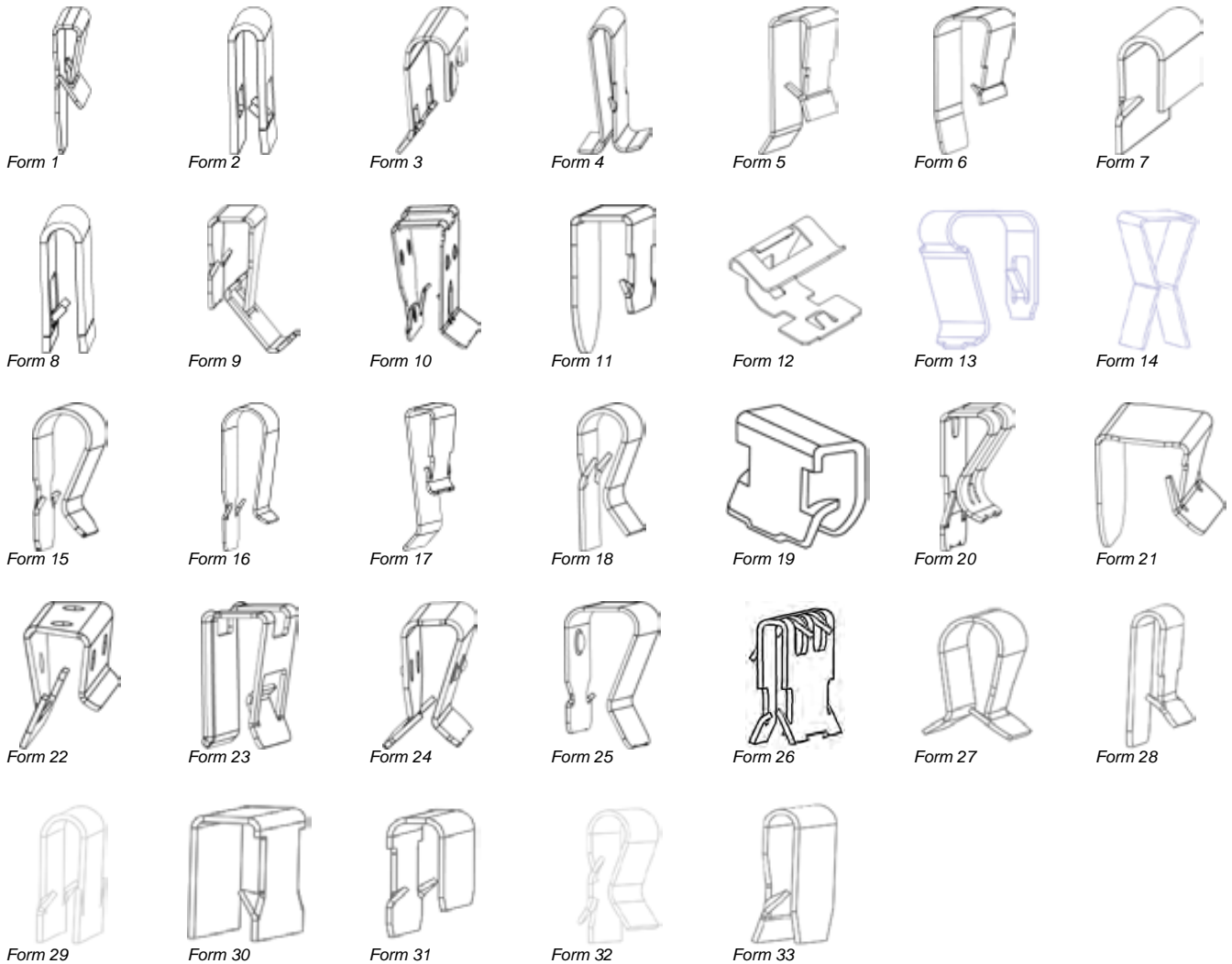
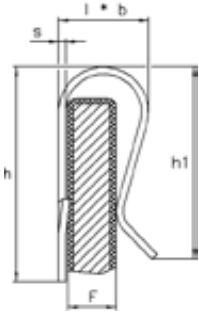
CLIPS FOR FASTENING FABRIC OR SYNTHETIC MATERIAL ONTO A PANEL EDGE

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are assembled by placing the fabric strip onto the panel edge and applying the clip, whose plain side should be placed onto the exposed face. Fabric cannot be damaged by the clipping operation.

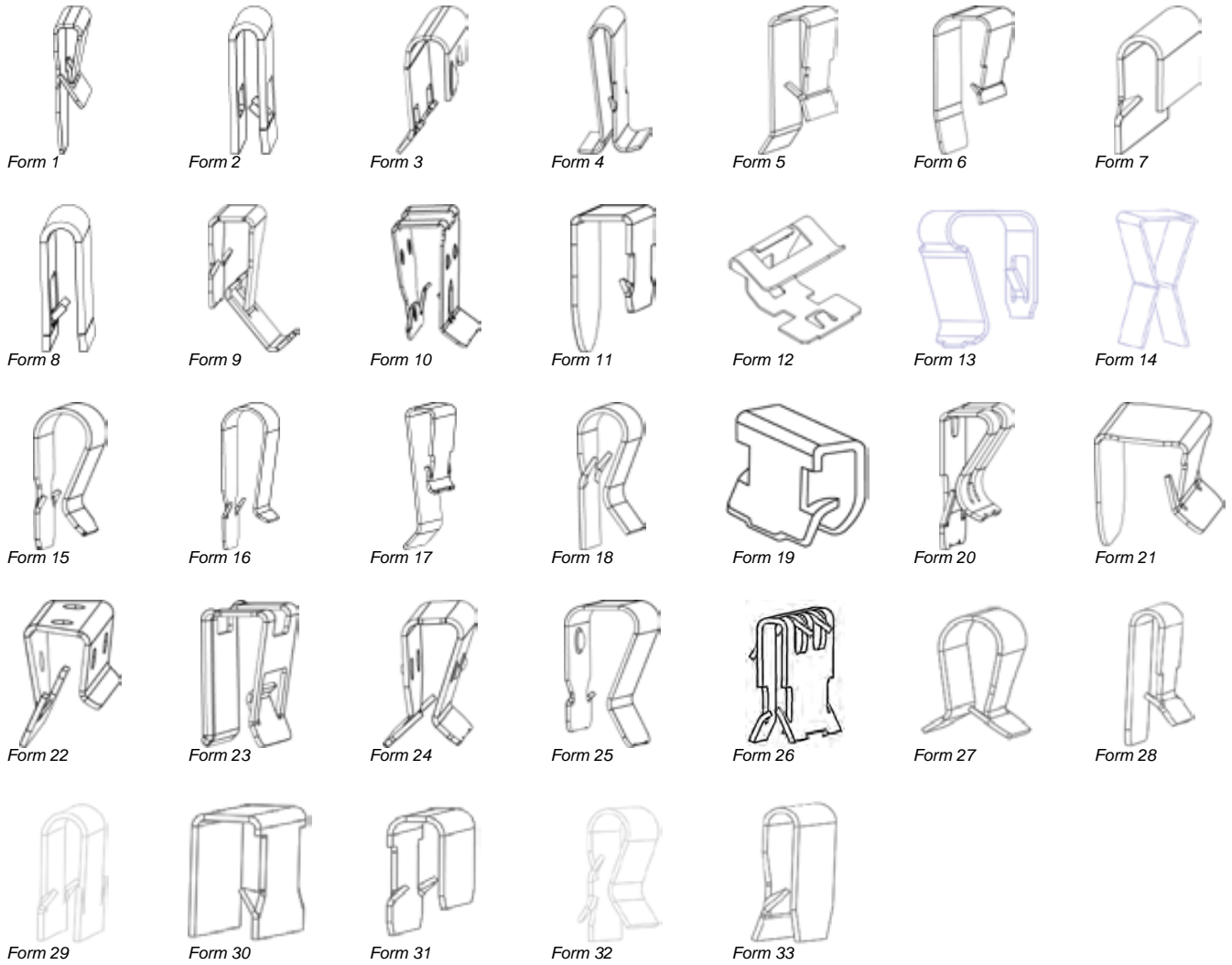
? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	h	h1	l x b	s	Form
	018951	0,8...1	18,0	14,0	2 x 7,5	0,3	1
	015435	1,75...2	14,8	9,1	3 x 14	0,4	1
	013779	0,7...1	7,4	7,4	2 x 6,5	0,4	2

I = stainless steel
D = with raised edges

CLIPS FOR FASTENING FABRIC OR SYNTHETIC MATERIAL ONTO A PANEL EDGE

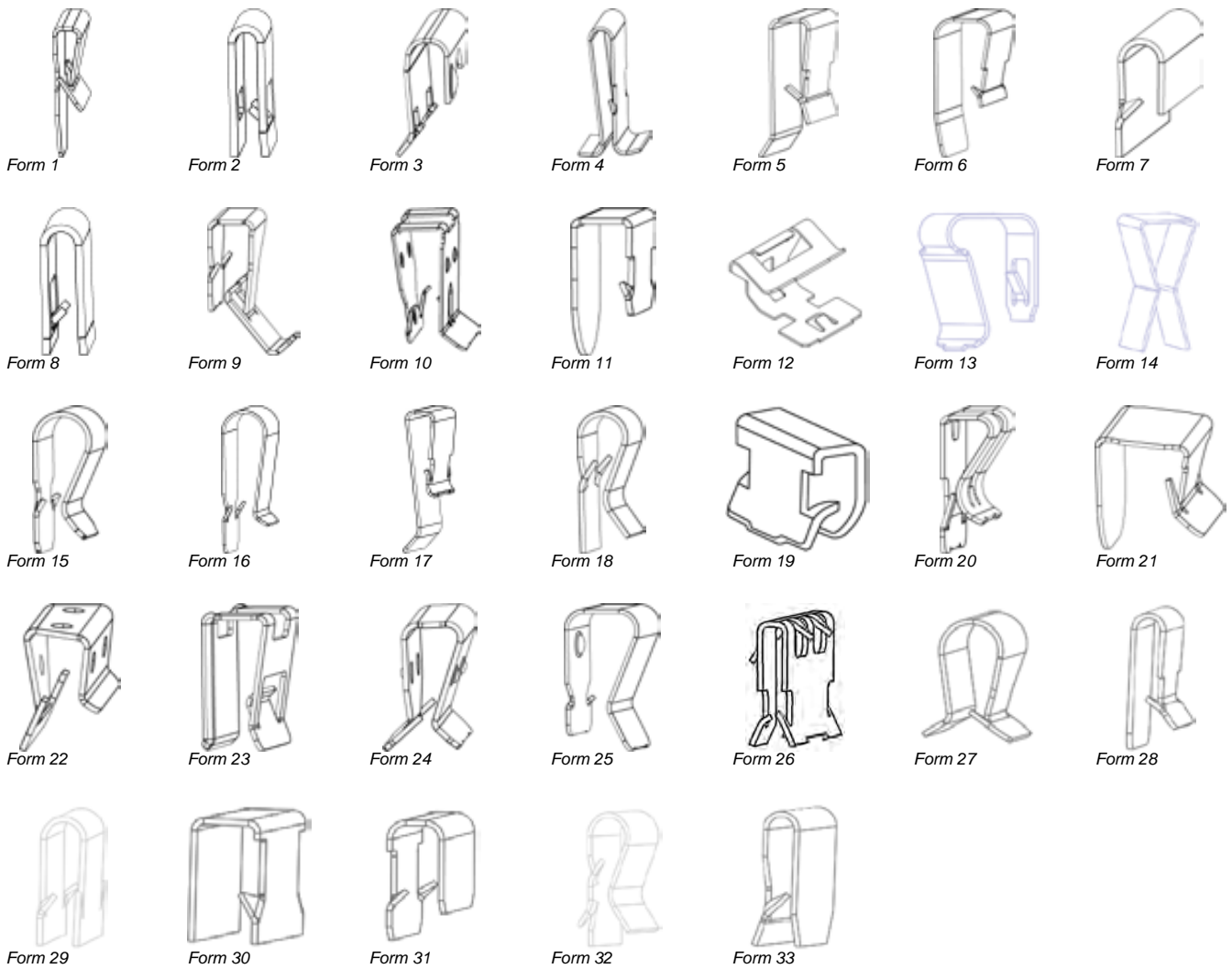


Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	h	h1	l x b	s	Form
	013889	1,8...2	6,9	6,9	3 x 6,8	0,4	2
	016885	2,5...3	11,0	6,1	4,2 x 26	0,4	3
	013242	1...1,6	12,5	12,5	2,2 x 12	0,3	4
	013053	4,5...5	21,0	16,0	6,1 x 20	0,6	5
	012070	1,75...2	8,5	8,0	3,2 x 12,5	0,4	5
	011619	2...2,5	8,2	7,8	3,6 x 12,5	0,3	5
	013648	8,0	22,0	14,0	9,5 x 20	0,5	6
	011794	0,8...1,5	4,0	6,0	2,4 x 13	0,3	7
	012614	0,75...0,9	3,7	6,0	1,8 x 13	0,3	7
	012494	2,5...2,8	3,7	5,7	3,4 x 13	0,3	7
	014244	1,25...1,5	7,3	7,3	2,3 x 6,5	0,4	8
	204813	1,8...2,8	16,1	11,0	5,5 x 20,6	0,5	9
	212447	8...10	27,8	26,0	11,7 x 20	0,6	10
	054142	4,0	18,0	-	9,8 x 9	0,4	10
	012412	4,0	12,5	8,8	5,4 x 12,5	0,5	11

I = stainless steel
D = with raised edges

CLIPS FOR FASTENING FABRIC OR SYNTHETIC MATERIAL ONTO A PANEL EDGE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	h	h1	l x b	s	Form
	055424	10,4...10,9	20,0	12,84	14 x 20	0,5	12
	128978	7,1...7,7	13,8	10,8	10,2 x 10,5	0,4	13
	054916	3,6...5,3	16,5	16,5	7,8 x 6	0,4	14
	015200	4,5...6,5	21,3	19,3	8,4 x 12	0,7	15
	016646	6...6,5	25,5	21,0	8 x 12	0,5	16
	019051	2,2...3,5	27,0	16,0	5,7 x 20	0,6	17
	019908	3,9...4,1	14,5	12,5	5,2 x 6,2	0,5	18
	053327	2,8...3,3	8,7	-	4,6 x 12,7	0,5	19
	053438	2,5...3,5	8,6	8,3	4,8 x 12,7	0,4	19
	200986	2...3	15,8	12,5	6 x 20	0,5	20
	019360	9,4...9,6	14,0	10,6	10,7 x 18	0,5	21
I	200452	3,5	5,8	9,0	5 x 12,8	0,4	22
D	201089	5,65	17,0	-	8,2x 16	0,6	23

I = stainless steel
D = with raised edges

CLIPS FOR FASTENING FABRIC OR SYNTHETIC MATERIAL ONTO A PANEL EDGE



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	h	h1	l x b	s	Form
	203202	6,0	23,0	-	11 x 28	0,95	24
	054231	4,5...6	21,3	19,3	5,1 x 12	0,7	25
	205033	10...12	25,5	22,7	13,9 x 13	0,7	25
	210560	1,20	9,2	-	5,65 x 13	0,4	26
	013750	3...4,5	12,0	12,0	5,9 x 25	0,45	27
	011802	1,5...2	13,0	11,0	3 x 15	0,5	28
	013099	2,0	8,5	8,0	3,2 x 12,5	0,4	28
	014209	1,5...1,8	6,0	-	2,5 x 13	0,3	29
	011710	3,5	8,0	-	4,6 x 13	0,4	30
	013191	3,0	6,5	8,5	4,3 x 12,8	0,4	31
	013706	4,0	14,5	13,0	5,2 x 6,2	0,5	32
	012194	1,2...1,8	10,4	-	2,8 x 18	0,4	33

l = stainless steel
D = with raised edges

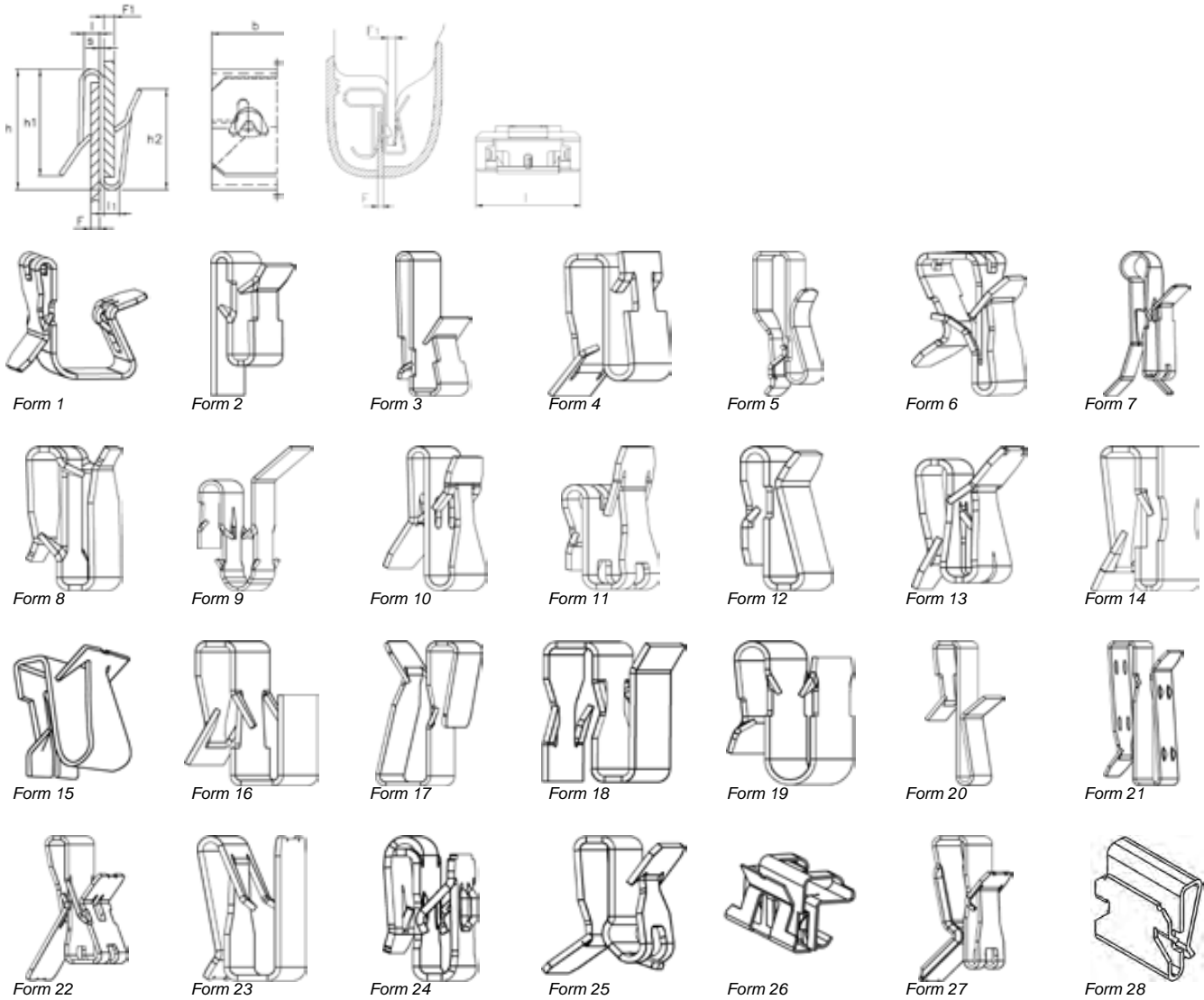
TWIN - U - CLIPS FOR FASTENING ITEMS ONTO RIGID PANEL EDGES

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These fasteners are designed for securing rubber or plastic seals and trim panels onto steel edges.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

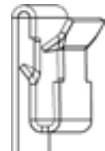
Samples available on request

?	REF.	F	F1	l	b	l1	h	h1	h2	s	Form
	017988	2,0	1,4...1,6	5,0	20,0	1,6	7,9	15,8	6,4	0,4	1
	052047	0,8...1,4	2...3	3,2	13,0	1,6	9,0	9,0	9,0	0,4	1
	055536	2...2,3	2...2,3	2,4	12,75	2,4	10,5	10,0	9,0	0,4	1
	017194	0,5	4...5	9,0	10,0	1,2	14,2	13,5	10,0	0,5	1
	203184	0,7	1,7...1,9	1,6	25,0	2,2	17,2	16,6	-	0,55	1
	017375	1...1,2	9,0	9,2	15,0	1,3	7,4	8,1	12,4	0,6	1
	014559	1,5...2	1,5...2	2,0	38,0	2,0	10,5	9,5	9,0	0,4	2
	011891	0,75...1	2...2,3	2,4	12,5	2,3	10,0	9,0	8,5	0,5	2
	054303	2,5...3	1,8...2	3,2	13,0	2,2	9,4	9,4	9,4	0,4	2
	011871	2,5	1,25	2,75	12,75	1,75	10,2	8,7	12,2	0,5	2
	011865	0,75...1	1...1,5	1,0	13,0	2,0	10,0	9,25	12,5	0,5	2
	151456	1...2	1,0	-	20,0	-	-	-	-	0,5	3

TWIN - U - CLIPS FOR FASTENING ITEMS ONTO RIGID PANEL EDGES



Form 1



Form 2



Form 3



Form 4



Form 5



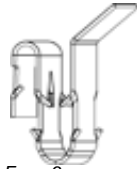
Form 6



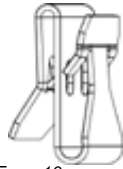
Form 7



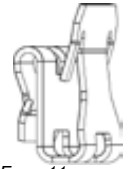
Form 8



Form 9



Form 10



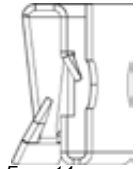
Form 11



Form 12



Form 13



Form 14



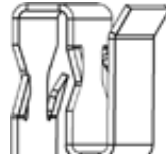
Form 15



Form 16



Form 17



Form 18



Form 19



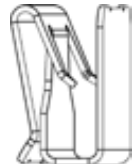
Form 20



Form 21



Form 22



Form 23



Form 24



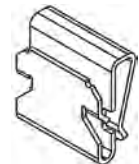
Form 25



Form 26



Form 27



Form 28

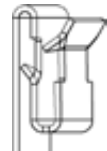
Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	F1	l	b	l1	h	h1	h2	s	Form
	013502	1,8...2	1,0	2,3	20,0	1,6	14,0	14,0	12,0	0,5	3
	013630	0,9...1,1	2,25...2,75	1,5	20,0	3,8	21,0	18,5	11,5	0,5	3
	019057	0,7...1,2	0,7 .. 2	2,5	15,0	1,7	13,3	11,4	12,0	0,5	3
	012895	2,5	5,8...6,1	3,8	20,0	6,3	21,0	11,5	14,0	0,5	4
	011516	0,75...1,25	2...2,3	2,4	12,5	1,4	10,0	9,0	10,0	0,4	4
	020790	1...1,8	2...3,2	3,5	20,0	2,0	15,6	14,0	15,6	0,6	4
	013698	0,8...1,5	0,5...1,5	2,0	12,75	1,6	14,0	8,0	14,0	0,4	4
	016662	0,9...1,1	3,9...4,1	6,4	18,0	3,0	20,8	28,0	31,5	0,8	5
	017066	0,8...1	4,5...5	5,1	15,0	1,2	15,0	12,5	12,1	0,6	6
	013988	3,0	1,8...2,3	5,0	20,0	2,4	27,0	20,0	30,0	0,55	7
	015138	1,5...1,8	1...1,5	1,8	11,5	1,5	10,0	10,0	8,0	0,4	8
	013177	2...2,3	1,8...2,2	4,0	16,0	2,5	15,5	19,0	9,5	0,5	9
	019125	2...2,3	2...2,3	2,7	20,0	2,5	11,2	12,8	11,0	0,5	10
	018532	1,9...2,1	4,9...5,1	2,7	20,0	6,0	14,6	13,5	15,6	0,6	10
	204047	0,5...1	1...1,5	2,0	15,0	1,2	14,0	11,8	-	0,5	10
	019536	0,5...0,8	0,8...1,5	2,0	15,0	1,2	14,0	9,4	13,0	0,5	10
	019602	1,4...1,8	1,4...1,8	2,0	12,75	2,0	14,2	10,0	10,0	0,5	11
	020872	2,9	6,0	3,0	15,0	6,3	16,0	11,5	10,5	0,6	11
	019543	0,7...1	2...2,5	3,0	15,0	14,0	9,4	7,7	12,8	0,5	11
	019970	2,5	1,5	2,75	12,75	1,75	10,2	8,7	12,2	0,5	12
	015205	1,9...2,2	1,9...2	2,3	15,0	2,2	12,0	12,0	8,5	0,5	12
	020153	3...3,2	2...2,2	3,4	15,0	2,4	11,2	10,4	10,9	0,5	12
	205633	2,2...2,6	1,7...2,2	2,9	25,0	2,4	11,2	11,3	10,9	0,5	12

TWIN - U - CLIPS FOR FASTENING ITEMS ONTO RIGID PANEL EDGES



Form 1



Form 2



Form 3



Form 4



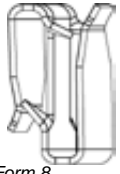
Form 5



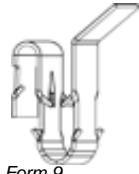
Form 6



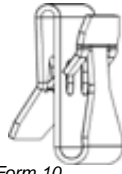
Form 7



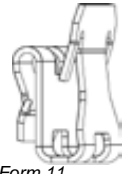
Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



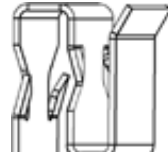
Form 15



Form 16



Form 17



Form 18



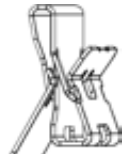
Form 19



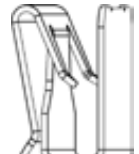
Form 20



Form 21



Form 22



Form 23



Form 24



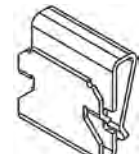
Form 25



Form 26



Form 27



Form 28

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	F1	l	b	l1	h	h1	h2	s	Form
	211375	2,4...2,6	1,9...2,1	2,9	25,0	2,4	11,2	11,3	10,9	0,5	12
	019277	1,8...2	1,9	2,3	15,0	2,2	12,0	12,0	8,5	0,5	12
	019546	0,7...1,2	2...2,3	2,5	13,0	1,4	13,5	11,1	13,1	0,6	12
	210532	0,5...1,5	-	2,0	12,75	1,6	14,0	14,0	10,0	0,4	12
	012627	3,2	0,9...1,1	3,5	30,0	2,5	13,0	8,5	9,1	0,55	12
	012699	3,5	1,5...2	3,5	20,0	2,5	15,0	8,5	9,5	0,6	12
	019997	0,8...1,6	0,8...1,6	2,0	20,0	2,0	9,8	10,3	11,1	0,5	13
	012580	1,5	0,8...1,25	2,0	30,0	1,8	10,0	11,5	11,0	0,6	13
	012740	3,4...3,6	0,75...1	3,7	20,0	1,8	15,0	10,5	12,5	0,55	13
	011680	2,3...2,5	1,75...2	2,5	30,0	2,25	14,5	9,5	9,0	0,6	13
	011521	2,5	0,88	2,0	30,0	1,5	14,5	11,0	12,5	0,6	13
	011691	2,5	0,88	2,6	30,0	1,5	10,5	9,0	9,5	0,55	13
	052534	1,8...2	2,5...3	2,2	13,0	3,2	8,8	9,5	9,5	0,4	14
	051848	1,5	2,0	1,6	13,0	2,2	9,4	9,4	9,4	0,4	14
	014016	1,5...2	2,0	2,4	12,5	2,3	10,0	9,0	8,5	0,4	14
	052336	0,5...0,8	2...4	3,2	13,0	1,0	12,0	11,0	12,0	0,4	14
	051631	0,6...0,8	1...1,4	0,9	13,0	1,4	10,0	10,0	10,0	0,4	14
	052225	0,8...1	0,7...2	2,0	13,0	1,2	10,0	10,0	10,0	0,4	14
	210991	1,8...2	2,5...3	3,3	13,0	2,3	11,0	9,4	6,9	0,4	14
	151433	1,0	1,0	3,0	26,0	1,0	24,0	22,0	22,0	0,5	14
	013168	3,0	0,75...1	3,5	20,0	1,8	15,0	10,5	12,5	0,5	15
	011517	1,8	2,3	2,2	12,5	2,4	10,0	8,5	10,0	0,4	15
	054548	0,8...1,7	0,8...1,7	2,0	13,0	2,0	9,2	9,2	9,2	0,4	15
	053142	0,8...1,7	0,8...1,7	2,0	13,0	2,0	9,2	9,2	9,2	0,4	15
	211618	1,5	3,45	4,8	12,0	2,4	14,6	1,2	14,6	0,4	17
	018402	1,8...2	2,5...2,7	2,3	20,0	2,8	9,8	9,8	10,0	0,4	18

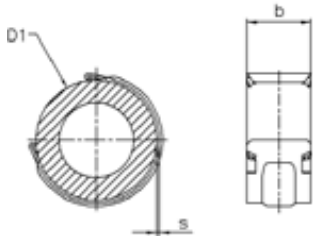
CLIPS FOR FASTENING CANVAS, RUBBER...STRAPS ONTO TUBULAR COMPONENTS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

These prong type clips are intended for fastening canvas strips, rubber or plastic straps onto tubular components (seats and tubular type furniture).

GLAZING SUPPORTS FOR 2 PARALLEL NON-ALIGNED EDGES

MATERIAL:

Polyamide, polyoxymethylene, polypropylene

COLOUR:

Black

These "glazing supports" are designed to position the windscreen or backlight in automotive and other applications and guarantees support with compensation of the metal panel and glazing tolerances while the mastic bead cures.

FORM 1: Pin design, assembled with double sided adhesive tape.

FORM 2: Pin design assembled using plastic rivets.

FORM 3: "Piano Key" design assembled using either adhesive tape or plastic rivets.

FORM 4 and 12: Eccentric cam design with integrated fixing rivet.

FORM 5: This design locates onto "T" shaped weld studs. For this type the screen is installed by hand

FORM 6, 7, 9, 10 and 11 "Piano Key"

FORM 8: "Piano Key", assembled with double sided adhesive tape.

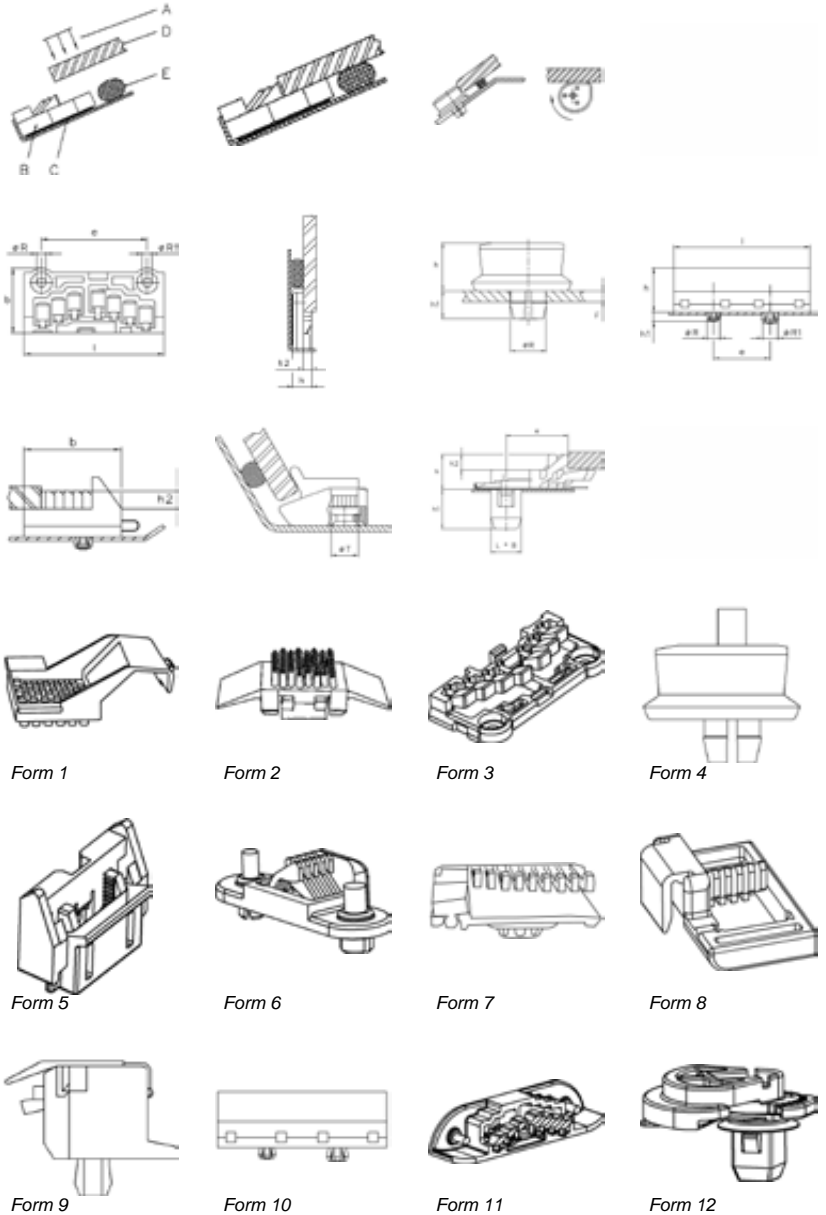
Note: Some designs have integrated plastic rivets

ASSEMBLY: (see sketch)

When the robot fits the glass, the pins are compressed under the contact surface.

- A - Robot
- B - Pin
- C - Adhesive
- D - Glass
- E - Mastic

Sketches for illustration purposes only, please request latest detailed drawing.



? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	h2	F	ØR1	ØR2	L x B	ØT	ØR	l x b	e1	h	h1	Form
	056271	3,0	-	-	-	-	-	-	40,65 x 30	-	10,0	-	1
	061298	3,5	-	-	-	-	-	-	25,5 x 15	-	7,8	-	1
	061631	3,5	-	-	-	-	-	-	40 x 13	-	7,5	-	1
	056492	5,0	0,67	-	-	16,2x16,2	-	-	34,5 x 22	-	10,0	-	1
	061289	5,5	-	-	-	-	-	-	51,5 x 25	-	12,5	-	1
	056197	5,0	0,8	-	-	21,2x26,2	-	-	51,6 x 21,2	-	11,4	2,8...3,2	2
	055091	5,5	0,5..1,2	-	-	16,2x16,2	-	-	36 x 18	-	10,0	2,0	2
	061394	5,0	0,5..1,2	6,2	6,2	-	-	-	51 x 15	38,0	12,1	6...7,2	3
	016609	3,2	-	3,5	3,5	-	-	-	53 x 24,5	40,0	8,2	-	3
	081285	3,2	-	-	-	-	-	-	53 x 24,5	-	8,2	-	3
	081789	6,0	-	3,5	3,5	-	-	-	53 x 24,5	40,0	8,2	-	3
	201346	6,0	-	3,5	3,5	-	-	-	53 x 24,5	40,0	8,2	-	3
	015192	-	4,0	12..12,2	-	-	-	-	35,3 x 30,7	-	17,0	-	4

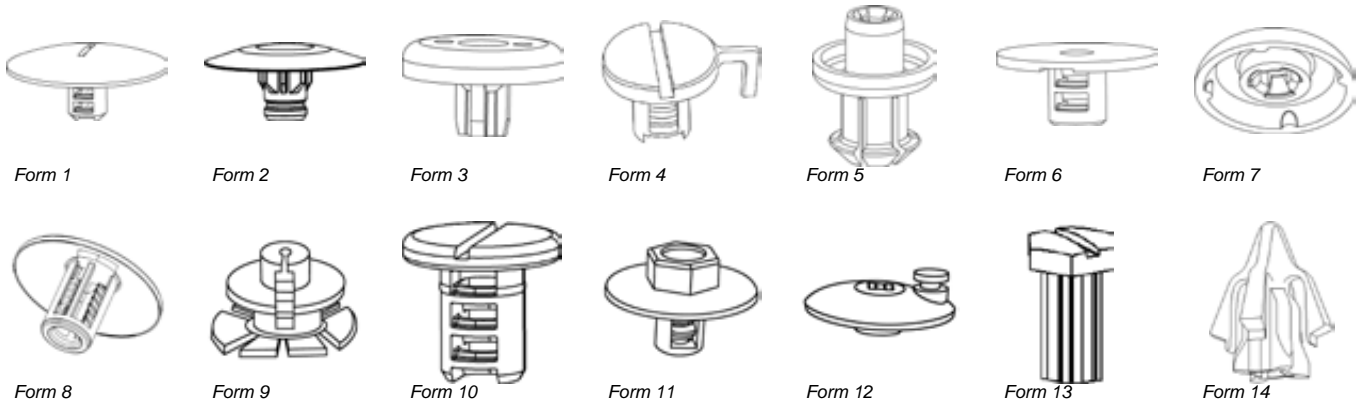
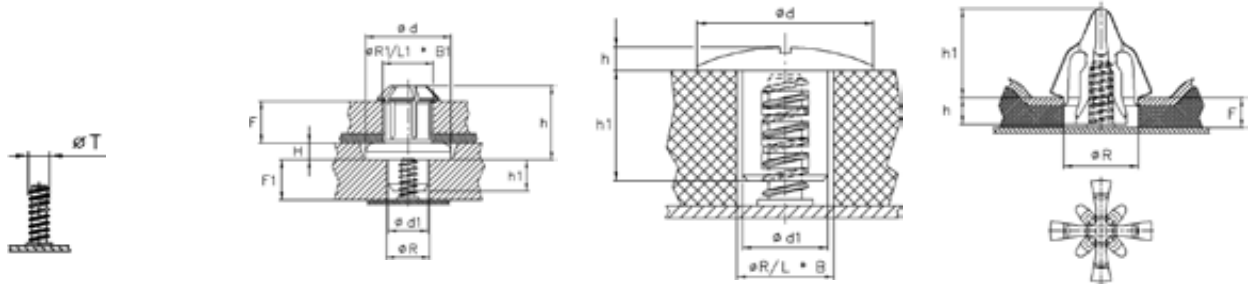
PLASTIC BUTTONS ONTO A WELD STUD FOR INSULATION FASTENING

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

Parts typically designed to fasten insulating materials onto a coarse threaded weld stud. Push on assembly and can be unscrewed for removal as necessary.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØT	F	F1	ØR/ L x B	ØR1/L1xB1	Ød	Ød1	h	h1	H	Form
	056752	5 x 14	-	-	7,4	-	30,0	-	5,0	4,0	-	1
	018810	5 x 14,2	14,5...20	-	10...15	-	40,0	9,5	5,0	13,0	-	1
	018329	5 x 14,2	14,5...20	-	9,5...14	-	22,0	9,0	2,5	13,0	-	1
	018178	5 x 14,2	-	-	9,5	-	25,0	9,0	2,5	13,0	-	1
	054962	5 x 14,2	-	-	10,0	-	-	-	40,0	5,0	13,0	1
	056154	5 x 18	-	-	9,0	-	22,0	-	2,5	26,0	-	1
	016889	5 x 14,2	5,0	12...16	10,5	10,5	30,0	10,0	3,0	10,5	-	2
	014884	5 x 14,2	12...16	-	10,5	-	30,0	10,0	6,0	11,0	-	3
	054798	5 x 18	3,0	-	18,6	-	-	21,0	22,0	9,0	10,5	4
	055879	5 x 14	12,0	-	11,0	-	-	20,0	20,0	3,5	13,0	4
	015516	5 x 12	14,5	14,0	14,0	17...19	30,0	14,0	25,88	11,12	6,0	5
	019678	5 x 10	-	-	9,0	-	24,0	8,5	1,5	10,5	-	6
	019199	5 x 14,5	-	-	6,0	-	25,0	-	7,0	-	-	7
	200139	5 x 15	-	-	10,2...10,5	-	30,5	-	5,0	12,35	-	8
	055266	5 x 18	2,5	-	-	27,6 x 18,6	-	-	25,0	9,0	10,5	9
	016835	5 x 14,2	14,5...17	-	9,4...12	-	17,0	9,0	2,5	13,0	-	10

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011454	C-38	012412	C-41	013126	C-36	013988	C-45	015269	C-30	016674	C-13
011516	C-45	012428	C-29	013135	C-52	014016	C-46	015284	C-04	016689	C-04
011517	C-46	012439	C-03	013152	C-17	014017	C-03	015287	C-17	016715	C-13
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011771	C-06	012631	C-07	013385	C-17	014474	C-22	015783	C-35	017066	C-45
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018252	C-56	019485	C-55	020729	C-29	054554	C-25	057199	C-64	081619	C-11
018322	C-13	019505	C-22	020746	C-38	054652	C-33	057268	C-07	081686	C-31
018329	C-62	019506	C-20	020790	C-45	054653	C-33	057273	C-21	081789	C-58
018364	C-11	019518	C-13	020808	C-13	054658	C-25	057275	C-64	081811	C-31
018369	C-07	019536	C-45	020872	C-45	054659	C-25	057285	C-49	081864	C-20
018380	C-37	019543	C-45	020886	C-56	054690	C-26	057362	C-64	081922	C-31
018383	C-38	019546	C-46	051455	C-38	054712	C-37	057450	C-29	081948	C-59
018396	C-20	019602	C-45	051510	C-38	054724	C-56	060953	C-30	081981	C-11
018402	C-46	019624	C-38	051627	C-38	054795	C-06	061110	C-30	081982	C-11
018403	C-47	019657	C-13	051631	C-46	054798	C-62	061265	C-59	082068	C-30
018442	C-04	019678	C-62	051652	C-38	054804	C-38	061289	C-58	082251	C-30
018464	C-22	019720	C-13	051751	C-38	054807	C-47	061298	C-58	082261	C-23
018509	C-13	019721	C-26	051780	C-38	054916	C-42	061394	C-58	082270	C-20
018526	C-20	019723	C-03	051841	C-55	054928	C-14	061495	C-30	082404	C-59
018532	C-45	019743	C-13	051848	C-46	054962	C-62	061631	C-58	082449	C-20
018545	C-20	019784	C-59	051864	C-10	055091	C-58	061712	C-30	082547	C-59
018567	C-59	019792	C-19	052018	C-11	055125	C-37	061880	C-59	082601	C-16
018586	C-04	019874	C-31	052047	C-44	055162	C-20	061921	C-59	082664	C-18
018597	C-12	019888	C-27	052073	C-12	055192	C-34	061953	C-64	082682	C-30
018610	C-30	019908	C-42	052101	C-38	055203	C-39	062268	C-29	104012	C-05
018637	C-12	019937	C-54	052225	C-46	055211	C-39	062314	C-29	112023	C-07
018649	C-20	019938	C-54	052336	C-46	055212	C-39	062724	C-29	112054	C-05
018671	C-55	019970	C-45	052482	C-03	055266	C-62	062862	C-29	128954	C-31
018702	C-13	019976	C-19	052501	C-03	055308	C-38	063251	C-32	128978	C-42
018703	C-56	019977	C-19	052534	C-46	055365	C-60	063277	C-28	129314	C-65
018711	C-26	019997	C-46	052607	C-29	055372	C-04	063652	C-29	129569	C-37
018733	C-07	020074	C-30	052645	C-29	055386	C-26	063669	C-28	130270	C-03
018745	C-55	020078	C-31	052667	C-38	055424	C-42	063863	C-29	130744	C-65
018751	C-05	020122	C-47	052709	C-06	055474	C-05	063898	C-29	130928	C-27
018756	C-59	020130	C-12	052783	C-56	055481	C-04	063979	C-28	131124	C-05
018768	C-22	020133	C-05	052864	C-29	055487	C-60	064060	C-28	131153	C-65
018769	C-20	020153	C-45	052880	C-03	055488	C-60	070195	C-31	131421	C-38
018778	C-31	020188	C-01	052998	C-03	055496	C-61	079097	C-08	131519	C-18
018795	C-31	020204	C-19	053017	C-52	055514	C-14	079293	C-07	131706	C-27
018810	C-62	020227	C-11	053060	C-06	055529	C-01	080510	C-02	131840	C-49
018876	C-13	020278	C-01	053081	C-06	055536	C-44	080511	C-02	131965	C-07
018901	C-05	020339	C-29	053142	C-46	055707	C-37	080523	C-02	132005	C-47
018930	C-15	020354	C-29	053171	C-35	055768	C-26	080539	C-16	132681	C-14
018937	C-32	020373	C-05	053172	C-34	055771	C-32	080551	C-16	132968	C-01
018950	C-13	020381	C-57	053327	C-42	055791	C-32	080552	C-16	151418	C-16
018951	C-40	020416	C-12	053328	C-37	055879	C-62	080569	C-02	151433	C-46
018967	C-12	020436	C-06	053329	C-38	056154	C-62	080570	C-02	151456	C-44
018970	C-59	020437	C-13	053438	C-42	056159	C-63	080585	C-02	151771	C-13
019051	C-42	020467	C-18	053510	C-38	056174	C-11	080590	C-16	152004	C-07
019057	C-45	020487	C-55	053653	C-06	056175	C-29	080623	C-02	152028	C-05
019125	C-45	020489	C-15	053660	C-34	056197	C-58	080640	C-51	152137	C-03
019142	C-05	020511	C-38	053752	C-03	056271	C-58	080717	C-51	152252	C-17
019180	C-13	020536	C-01	053785	C-03	056396	C-63	080781	C-16	152259	C-28

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175010	C-04	201134	C-66	202493	C-31	205328	C-20	209179	C-61	214099	C-37
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200260	C-06	201751	C-28	204315	C-11	207141	C-30	210991	C-46		
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OTHER FASTENERS

Trim. Push fix. Plug buttons. Grommets.
Linkage assemblies. Special design fasteners

D_{toZ}

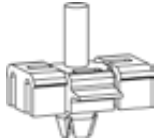
D MOULDING AND TRIM FASTENERS

TO CLAMP ON BEAD AND PANEL EDGES



METAL U - CLIPS WITH OUTSIDE CLAWS	D-01
METAL U - CLIPS WITH SIDE FEATURE	D-02

TO CLINCH



PLASTIC FASTENERS FOR MOULDINGS	D-04
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PLASTIC FASTENERS FOR MOULDINGS AND RUBBER PROFILE	D-06
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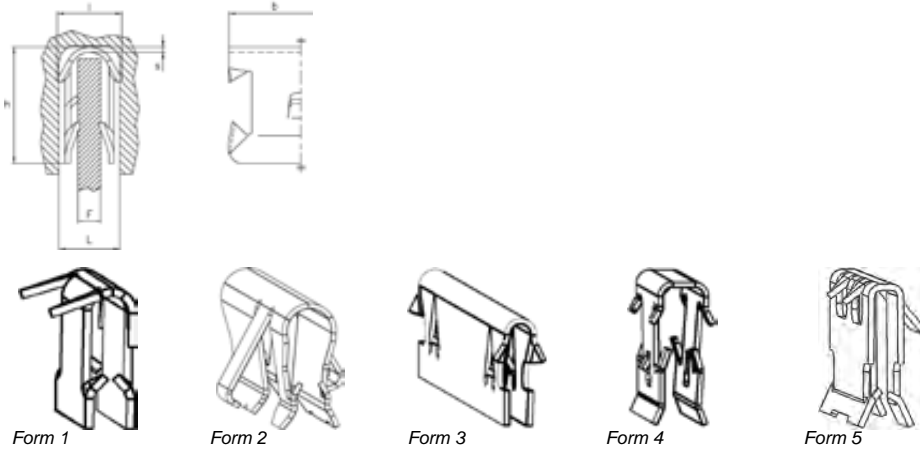
METAL U - CLIPS WITH OUTSIDE CLAWS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

As a variant form of the panel edge type-fastening clips, they are fitted with inner barbs and with outer barbs or tabs. They are intended for clipping a bead, rib, cover strip or moulding etc. onto a panel edge.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	l x b	h	L	s	Form
	015315	1...1,5	5,4 x 13	8,5	5,0	0,5	1
	011987	5...5,5	7,2 x 13	9,2	6,2	0,3	1
	013627	2,5...4	6 x 13	9,5	5,5	0,3	1
	014812	1...1,5	4,75 x 13	8,5	-	0,5	1
	051814	1...1,5	9 x 20	11,7	11,7	0,5	2
	052016	1,2...1,5	9,6 x 20,3	10,25	10,2	0,4	2
	055228	2,0	13 x 31,5	16,4	16,4	0,6	2
	020537	2,9...3,1	10 x 25	9,0	8,0	0,35	2
	011511	0,5...1	4 x 13	6,0	3,0	0,3	3
	018598	0,7...0,9	3,8 x 17,5	8,0	2,8	0,4	3
	011899	0,75...1	3,7 x 40	7,75	3,0	0,4	3
	011885	0,75...1,2	4 x 13	6,0	3,0	0,3	3
	012675	1...1,5	6,5 x 13	8,5	5,5	0,5	3
	053017	1,2...1,6	2,9 x 5	4,5	1,65	0,25	3
	202535	1,3...1,7	5,2 x 13	19,3	4,0	0,5	3
	011512	1,5...1,75	4 x 13	6,0	3,5	0,3	3
	020102	1,5...2	5,3 x 10	9,0	4,5	0,4	3
	013056	1,5...3,5	6,4 x 20	10,1	6,0	0,5	3
	011478	1,75...2,5	5 x 13	9,0	4,0	0,4	3
	012880	1,75...2,5	5 x 13	12,0	4,0	0,4	3
	015362	2,5	5 x 12,5	7,5	4,5	0,25	3
	054532	2,2...2,6	5,8 x 13	7,8	3,0	0,4	3
	052202	2,2...2,6	6,1 x 13	8,2	3,3	0,4	3
	151041	2,2...2,6	6 x 13	8,0	3,3	0,4	3
	012751	2,75...3	5,5 x 10	9,0	4,5	0,4	3
	051811	3,5...4,3	9 x 20	11,0	11,8	0,5	3
	018974	4,5...5,8	8,3 x 13	9,5	-	0,3	3
	013838	2,75...3	7 x 12,75	8,0	6,0	0,4	3
	019260	1,2...1,5	4 x 12	6,0	3,0	0,35	3
	209381	3,2	5,4 x 11,5	11,6	4,6	0,4	4
	202333	1,2	5,6 x 13	9,2	-	0,4	5

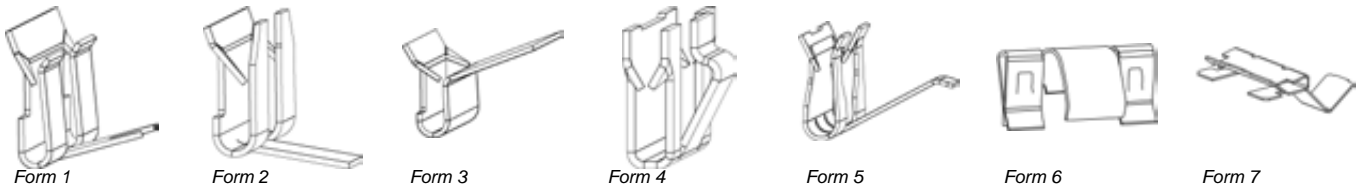
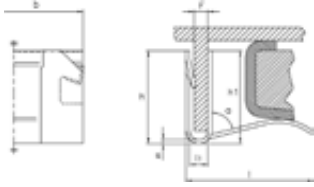
METAL U - CLIPS WITH SIDE FEATURE

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

As a variant form of the panel edge type-fastening clips, they are fitted with inner barbs and have an external side feature. They are intended for clipping a cover strip or moulding etc. onto a panel edge using this additional feature.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	l x b	l1	a°	h	h1	s	Form
	019625	0,5...0,9	5,05 x 18	1,0	45,0	10,0	10,0	0,45	1
	013482	0,5...0,9	5,8 x 18	1,0	75,0	7,5	6,0	0,3	1
	012005	1...1,25	6,5 x 18	1,5	70,0	8,2	8,2	0,3	1
	013075	1...1,5	9 x 14	2,0	50,0	7,5	9,5	0,4	1
	019705	1...1,5	16,7 x 18	1,5	97,0	10,0	10,0	0,4	1
	012203	1,5	20 x 20	1,8	50,0	13,0	13,0	0,4	1
	012462	1,5	15,9 x 20	1,6	70,0	13,0	13,0	0,4	1
	014185	1,5	15,9 x 20	1,6	90,0	13,0	13,0	0,4	1
	011970	1,2...1,8	8 x 18	2,0	75,0	8,4	8,4	0,4	1
	012040	1,2...1,8	8 x 18	2,0	75,0	10,4	9,0	0,4	1
	013014	1,25...1,75	8 x 18	2,0	75,0	10,0	10,0	0,35	1
	011483	1,25...1,75	8 x 18	2,0	75,0	10,4	10,4	0,35	1
	011790	1,2...1,8	10 x 18	2,0	75,0	10,4	10,4	0,4	1
	011907	1,2...1,8	11 x 18	2,0	60,0	10,4	10,4	0,4	1
	011855	1,25...1,75	12 x 18	2,0	75,0	10,4	10,4	0,35	1
	013771	1,5	15,4 x 20	1,6	60,0	13,0	13,0	0,4	1
	013979	1,2...1,8	9,8 x 18	2,0	35,0	10,5	10,5	0,5	1
	018921	1,5	18,4 x 20	1,5	75,0	11,0	8,6	0,5	1
	019673	1,5	22 x 20	1,5	73,0	8,6	11,0	0,5	1
	018148	1,5...1,8	8,6 x 18	2,1	68,0	7,5	7,5	0,5	1
	015292	1,5...1,8	11,5 x 19,5	1,6	32,0	8,3	11,8	0,8	1
	015155	2,0	11 x 13	2,2	75,0	9,2	9,2	0,5	1
	012975	1,8...2	11,5 x 18	2,1	45,0	10,0	10,3	0,4	1
	204730	1,8...2	11 x 18	2,1	45,0	10,7	10,0	0,4	1
	018989	1,8...2,3	14,6 x 24	3,0	75,0	6,4	7,4	0,4	1
	014734	1,9...2,3	4,3 x 18	2,5	85,0	8,0	8,0	0,3	1
	012964	1,9...2,3	6,8 x 18	2,5	85,0	8,0	8,0	0,3	1
	055225	1,9...2,3	7,1 x 18	-	85,0	8,0	8,0	0,3	1
	011952	2,25...2,75	15 x 24	3,0	75,0	6,4	7,9	0,4	1
	018271	3...3,2	17 x 22	3,2	90,0	7,9	8,1	0,4	1
	014770	4...5	19 x 24	5,0	90,0	10,5	10,5	0,5	1
	206366	1,5...2	23,3 x 11	2,3	90,0	9,2	-	0,5	1
	012842	1,25...2,25	7,5 x 13	2,5	30,0	9,2	9,2	0,35	1
	013513	1,5	8 x 18	2,0	10,0	8,4	8,4	0,4	2
	020658	2,2...2,8	13,5 x 24	3,2	5,0	7,4	7,4	0,4	2
	018696	0,5...1	15,5 x 13	1,5	120,0	9,6	9,8	0,3	3

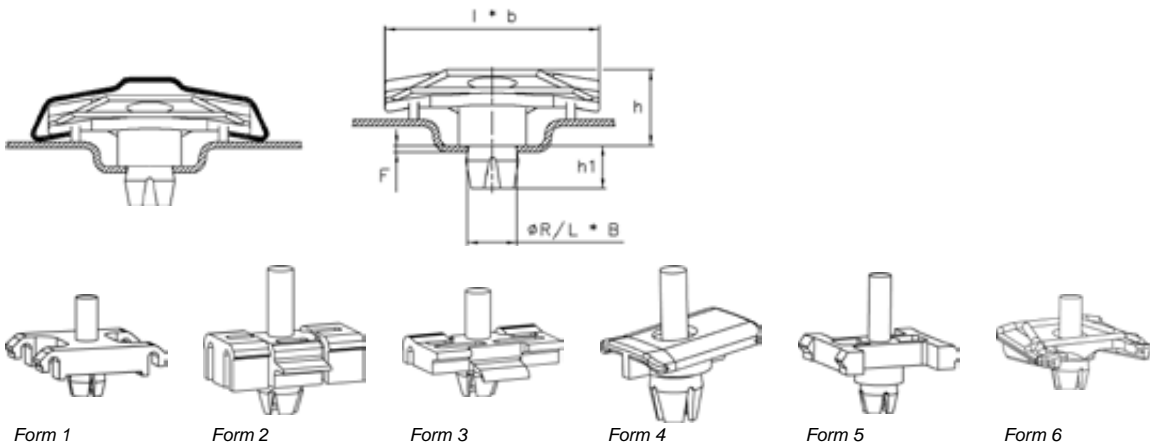
PLASTIC FASTENERS FOR MOULDINGS

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

The pin, when inserted into the barrel of the rivet, provides a secure clipping of the fastener onto the mounting surface. The moulding can then be assembled onto the fastener by means of a manual pressure and a tilting action. These fasteners are water resistant and for applications on thin gauge material, usually supplied with a pre-inserted pin.

For each moulding type, the fastener has a specific form.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØR/ L x B	l x b	h	h1	Form
	015523	2,5...3,5	3,8	18 x 5,6	3,1	4,0	1
	013937	0,9	4,0	17 x 6,5	4,7	4,5	1
	012330	0,8	4,4	18 x 6,3	3,1	5,0	1
	013193	2,6...2,9	4,2	18 x 6,3	3,1	5,5	1
	014537	0,6...1,25	4,2	18 x 5,4	3,1	4,5	1
	012869	0,8	4,2	18 x 6,3	3,1	4,5	1
	012434	0,75...1	5,0	18 x 9	2,7	3,0	1
	015235	0,8...1	5,0	22 x 13,2	2,7	2,8	1
	015733	0,7...0,9	5,5	17 x 6,8	3,3	5,3	1
	012784	0,88	5,8	16 x 7,4	2,5	6,5	1
	012475	0,7...3	5,9	18 x 9	3,5	6,0	1
	014313	0,8...1,2	6,0	18 x 15,5	4,8	5,5	1
	014401	0,75...1,5	6 x 6	18 x 8,5	3,5	6,0	1
	012746	0,75...1	6,4	19 x 8	3,2	6,5	1
	012724	0,8	6,45	18 x 9,2	2,8	6,5	1
	013256	0,88	6,4	18 x 12,5	5,5	5,5	1
	013898	0,7...0,9	8,0	18 x 9,2	2,8	6,5	1
	015088	0,7...1	8,0	22 x 15,5	6,0	7,0	1
	015176	0,7...1	8,0	26 x 31,3	7,0	6,0	1
	014719	0,7...1	8,0	28 x 21	6,4	7,0	1
	012662	0,75...1,25	8,0	23 x 12,6	5,8	5,0	1
	012687	0,75...1,25	8,0	23 x 12,6	8,1	5,0	1
	013094	0,8...1	8,0	22 x 18	4,5	6,0	1
	013080	0,7...1	8,0	28 x 21	6,4	7,0	1
	014005	0,8...1	8,0	22 x 12,2	5,0	6,0	1
	014840	0,8...1	6,0	22 x 16	7,3	5,5	2
	014906	0,8...1	6,0	22 x 16	4,0	5,3	2
	014294	0,8...1	6,0	22 x 15,5	4,3	5,5	3
	014227	0,75...1,5	6,5	18 x 14,5	5,7	7,0	4
	013368	0,88	8,0	29,3 x 25	5,3	11,2	5

PLASTIC FASTENERS FOR MOULDINGS AND RUBBER PROFILE

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Natural (other colours are available on request)

Form 1: These fasteners are pressed into holes made in the mounting panel.

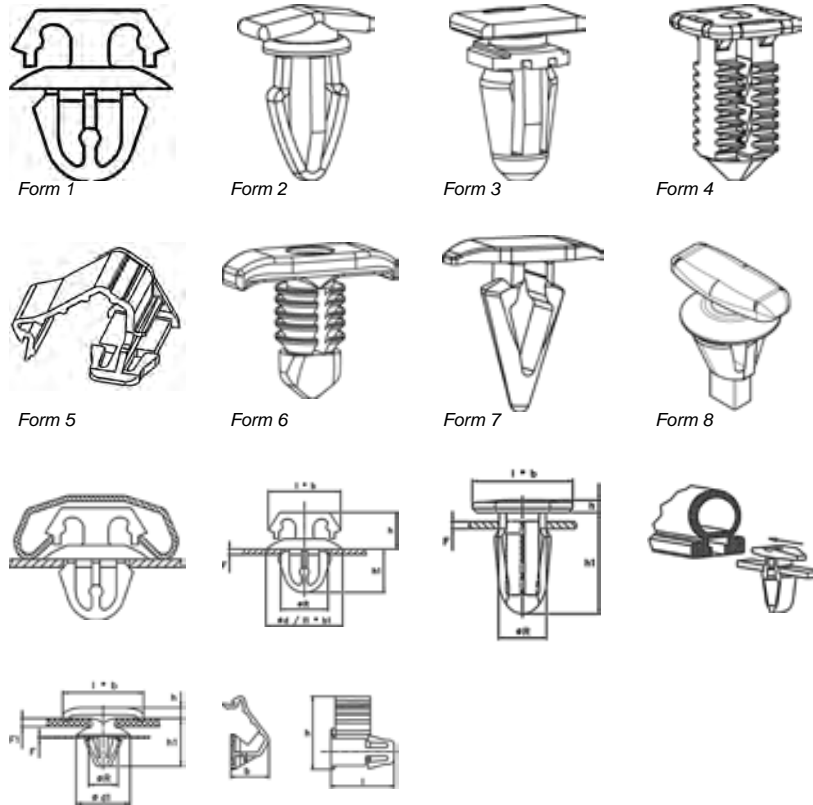
Form 2: These fasteners are first slid inside the moulding, then the entire assembly presses into the holes made in the mounting panel.

Form 3 + 4: Same type of moulding assembly situation as in form 2, but with a self-positioning design feature.

Form 5: Mounting on slide.

Form 6 to 8: for rubber profile

Sketches for illustration purposes only, please request latest detailed drawing.



? Feature(s) of the part see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	F1	ØR	Ød/ l1xb1	l x b	h	h1	Form
	015268	0,8...1	-	8,0	13,0	12,3 x 15	6,6	7,5	1
	012617	1,8	-	9,0	12,0	15 x 18	7,0	13,0	2
	012957	4,4	-	8,5	11,0	8 x 16	5,3	16,7	2
	015097	0,8...1	-	5,7	-	12 x 9	1,4	12,0	3
	013144	1,0	-	5,7	-	12 x 9	1,5	12,0	3
	013990	0,7...1	-	9,0	11,0	15 x 11,5	2,0	20,0	3
	013143	1,25	-	9,2	14 x 11	15 x 11,7	2,0	20,0	3
	016803	1,25	-	9,2	14,4 x 10,3	15 x 11,7	2,0	22,0	3
	019866	3,5...4,5	-	6,0	-	12 x 10	7,4	9,4	3
	018303	1,3/1,6...2,2	-	5,7	-	12 x 9	1,45	12,9	3
	013227	1,7	-	8,7	-	21 x 20	2,2	14,1	3
	013529	0,8...1	-	9,2	-	9,2 x 15,5	1,4	16,8	3
	013667	0,85...0,95	-	5,0	-	12 x 8,2	1,45	11,75	3
	018971	3,6...3,9	-	5,7	-	12 x 9	1,45	13,65	3
	201429	3,9...4,3	-	5,7	-	12 x 9	1,45	13,65	3
	014964	2,5...10	-	6,0	-	9 x 9	1,5	13,0	4
	201009	-	-	-	-	29,1 x 18	-	-	5
	175169	0,8	-	4,6	-	12,7 x 5	2,3	6,5	6
	012335	0,8	-	4,5	-	12,7 x 5	2,3	7,6	6
	014720	0,8	-	4,6	-	12,7 x 5	2,3	8,4	6
	205304	0,8	-	6,0	-	12,7 x 5	1,9	7,25	6
	018417	0,95 / 1,8...2	-	6,0	-	15 x 5	1,5	10,3	7
	205357	1,7	-	5,3	-	13 x 5,7	1,45	11,9	7
	129120	0,82...0,88	1,5...1,7	5,05...5,25	-	12,2 x 5	5,0	-	8

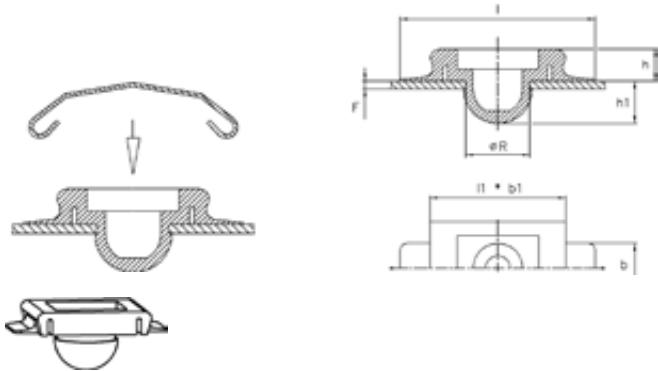
PLASTIC FASTENERS FOR MOULDINGS

MATERIAL:

Polyamide

COLOUR:

Colours are available on request



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

These clips, intended for fastening mouldings, locate according to a spherical fastening principle. The clip is first inserted into the panel using the compressive action exerted by the hole and thereafter recovers back to its normal size. The clip is locked in position because the mounting panel locates in a radial groove feature at the base of the hemisphere. The moulding is then assembled onto the clip by means of manual pressure.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	F	ØR	l x b	l1 x b1	h	h1	Form
	012058	0,88	9,0	23,5 x 8	17,5 x 15	3,5	6,0	1
	012054	1,25	9,0	23,5 x 8	17,5 x 15	6,5	6,0	1
	012057	1,5	9,0	23,5 x 8	17,5 x 15	3,5	6,0	1

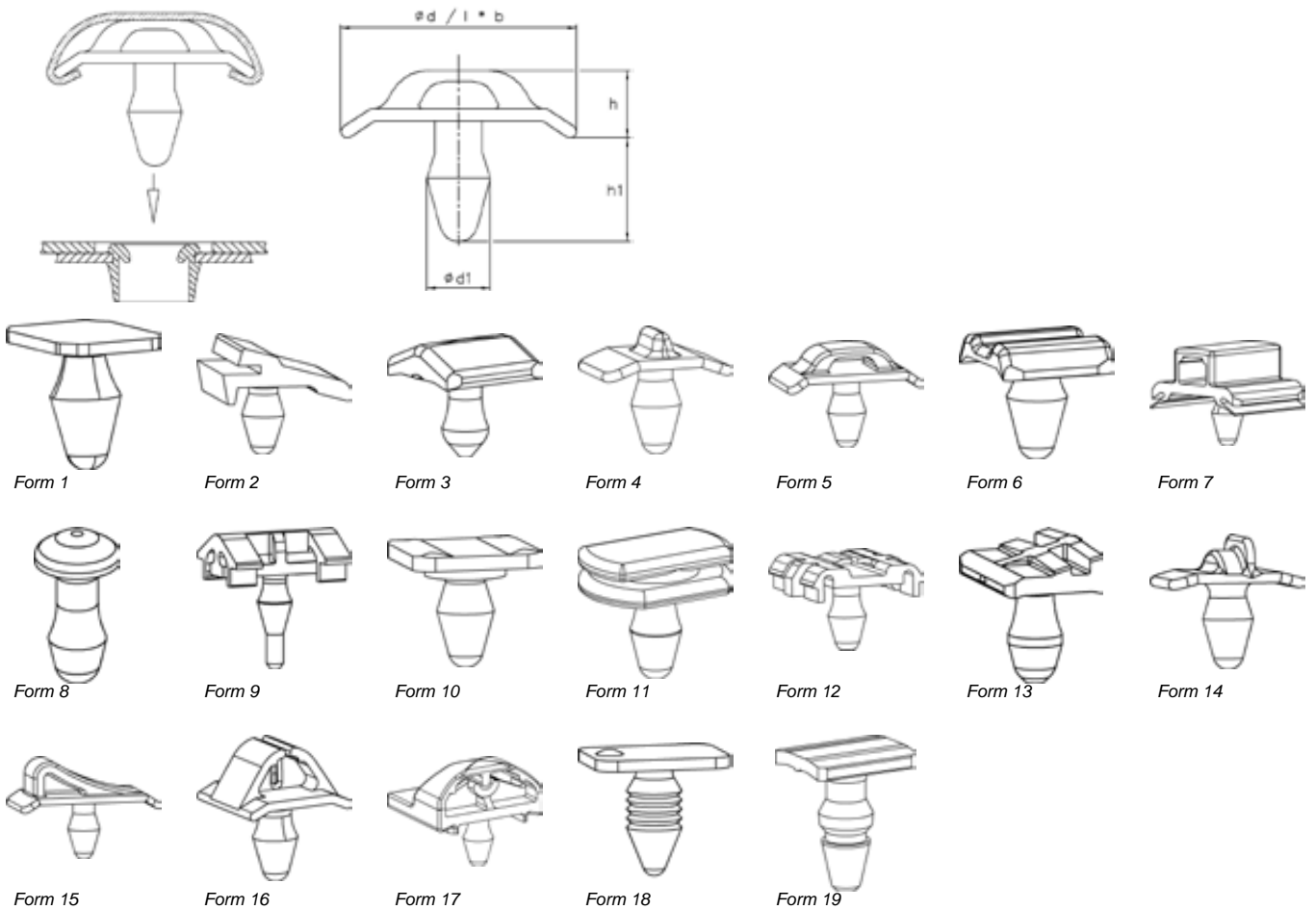
PLASTIC FASTENERS FOR REMOVABLE TRIM MOULDINGS

MATERIAL:

Polyamide

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

To fasten mouldings these parts need to be assembled using plastic eyelets (see next page).

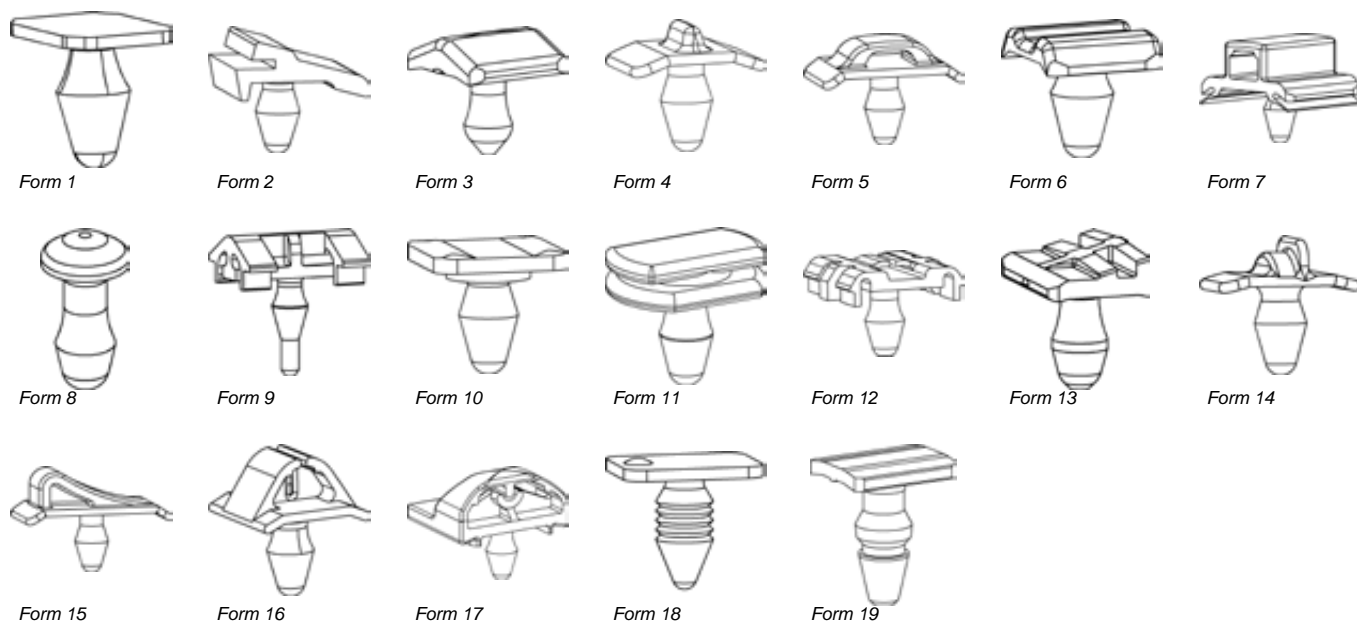
This two-piece fastener design ensures the ability to remove the trim and in addition provides a water resistant assembly situation. For installation insert the clip into the moulding and then fasten the complete assembly into the pre-installed plastic eyelet.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	Ød/ l x b	Ød1	h	h1	Form
	014741	10 x 10	6,0	1,4	11,0	1
	014715	15 x 9,7	6,0	1,0	10,7	1
	011892	14 x 11,5	6,0	2,5	11,2	1
	011646	14,2 x 11,3	5,8	1,5	12,2	1
	011796	22,4 x 15	6,0	9,4	7,7	2
	011795	18,9 x 15	6,0	7,9	8,3	2
	014679	15,4 x 15	6,0	5,1	10,3	3
	013755	15,3 x 15	6,0	4,7	10,3	3
	012302	14,5 x 14	6,0	4,05	9,95	3
	012145	16 x 15	6,0	3,7	9,5	3
	012326	16,2 x 14	6,0	5,3	9,7	4
	012196	18 x 15	6,0	7,2	10,1	4
	012263	17 x 14	6,0	4,3	9,8	4
	012156	17,4 x 15	6,0	2,2	9,9	4
	012374	22 x 15	6,0	6,4	9,8	5

PLASTIC FASTENERS FOR REMOVABLE TRIM MOULDINGS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	Ød/ l x b	Ød1	h	h1	Form
	012735	26 x 15	6,0	6,4	9,8	5
	013811	11,6 x 12	6,0	3,4	9,1	6
	013835	21,6 x 20	6,0	10,4	19,1	7
	013931	8,8	6,0	3,1	13,6	8
	015240	35 x 16	6,0	9,9	12,9	9
	014567	17 x 11	6,0	7,9	12,1	9
	014935	14 x 14	6,0	1,8	11,2	10
	013097	18 x 14	6,0	5,0	11,0	11
	016449	19,4 x 20	6,0	5,7	9,2	12
	014792	19,4 x 20	6,0	5,1	8,5	12
	014892	9,4 x 16	6,0	3,2	10,0	12
	014878	12 x 18	6,0	4,6	11,4	13
	016193	9,2 x 10	6,0	7,1	16,7	13
	016593	9,5 x 15,8	5,7	1,1	13,2	14
	012760	16,6 x 15	6,0	6,0	11,0	14
	012480	16,6 x 15	6,0	6,0	9,8	14
	012820	27,2 x 15	6,0	9,2	9,8	15
	013159	15,4 x 15	6,0	8,5	10,5	16
	015258	24 x 20	6,0	12,5	9,2	17
	015285	15 x 11,5	6,0	1,7	12,3	18
	016517	9,5 x 12	5,7	1,7	13,4	19

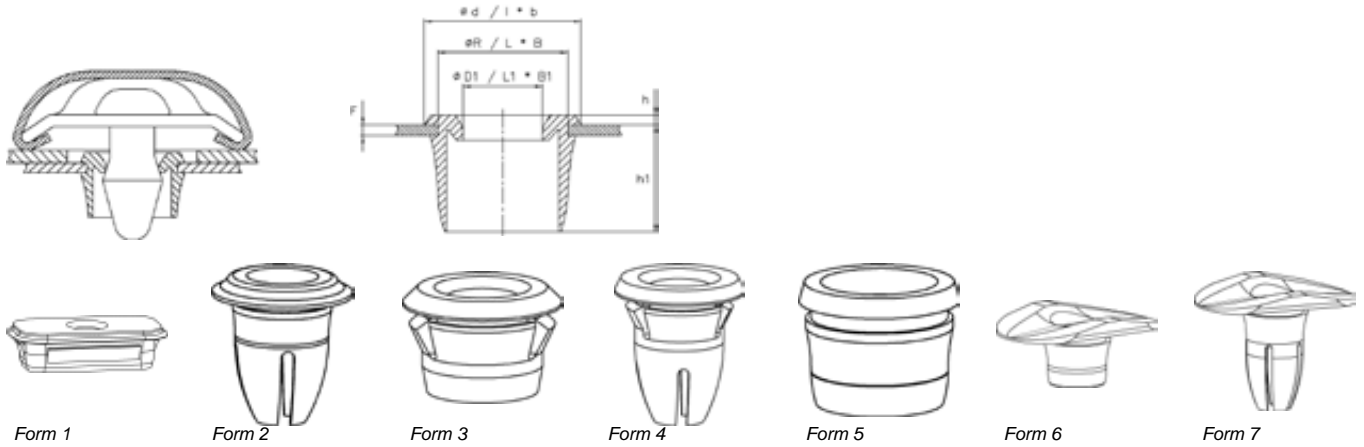
PLASTIC EYELETS

MATERIAL:

Polyamide

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

For assembly with two-piece plastic removable moulding fasteners, (see page before).

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	F	ØR/ L x B	ØD1/L1xB1	Ød/ l x b	h	h1	Form
	015099	0,8	5 x 14	1,2 x 2,2	6,5 x 9	1,0	5,3	1
	014787	1,2	22 x 7	4,5	26 x 11	1,3	5,2	1
	015233	1,2	21 x 9	4,5	25 x 13	1,3	5,2	1
	016886	0,8...1	6,8	3,0	10,5	1,4	9,6	2
	016844	1,4...1,55	9,0	4,5	11,5	1,0	13,0	2
	015251	0,8...1	9,0	4,5	18,0	1,0	13,0	2
	015021	0,8...1,2	9,0	4,5	11,5	1,0	13,0	2
	019117	1,1...1,3	7,0	3,8	10,0	1,2	5,3	3
	016035	1,1...1,3	7,0	3,8	10,0	1,2	6,8	3
	018896	0,7...0,9	9,0	4,5	12,0	0,7	6,8	3
	015047	0,8...1	9,0	4,5	12,0	1,3	6,7	3
	015361	0,8...1	8,0	4,5	10,5	1,2	5,3	3
	015651	1,8...2	8,0	4,5	10,5	1,2	6,8	3
	016417	0,8...1	9,0	4,5	12,0	1,3	6,7	3
	016748	0,8...1	7,9	4,5	11,5	1,3	11,7	4
	015419	1...1,2	9,0	4,5	11,5	1,0	13,0	4
	015281	0,9...1,2	8,8	4,5	17,0	2,5	13,0	4
	019212	0,8...1,1	9,0	4,5	11,5	1,3	12,7	4
	016504	0,8...1,1	9,0	4,5	11,5	1,3	12,7	4
	017499	1,6...1,9	9,0	4,5	11,5	1,3	13,5	4
	018430	2,55...2,75	9,0	4,5	11,5	1,3	14,3	4
	018093	1,25	9,0	4,5	11,5	1,3	13,0	4
	019701	2...2,4	7,9	4,4	12,0	1,3	11,7	4
	012878	0,75...0,8	7,0	3,2	8,2	1,0	5,3	5
	014462	0,6...0,7	7,3 / 7,5 x 7	4,0	9,0	1,0	5,5	5
	017763	0,7...0,9	8,0	4,5	16,0	1,0	5,5	5
	014714	0,9	8,0	4,5	12,0	1,0	5,5	5
	013812	0,9	8,0	4,5	12,0	1,0	5,5	5
	011652	0,9	8,0	4,5	9,5	1,0	5,5	5
	017190	1,1	8,0	4,5	12,0	1,0	5,5	5
	012598	1,3	8,0	4,5	9,5	1,0	5,5	5
	012953	1,7	8,5	4,5	10,5	1,0	6,5	5
	016346	0,75...0,9	9,0	4,5	13,0	0,7	6,8	5
	019967	1,9	9,0	4,5	15,0	1,0	7,0	5

PLASTIC EYELETS



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	ØR/ L x B	ØD1/L1xB1	Ød/ l x b	h	h1	Form
	011751	0,8...0,9	9,0	4,5	10,35	1,0	6,75	5
	012327	0,88	9,0	4,5	17,0	1,0	6,3	5
	012469	1,9	9,0	4,5	11,3	1,0	7,0	5
	012376	1,25	9,0	4,5	10,5	1,0	6,5	5
	012736	2,75	9,0	4,5	10,5	1,0	8,5	5
	012637	2,5...3	9,0	4,5	10,5	1,0	8,5	5
	012636	3,5...4	9,0	4,5	10,5	1,0	8,5	5
	015519	0,8...0,9	9,1	5,5	13,0	1,0	5,5	5
	014670	0,8	12,0	7,5	13,5	1,0	6,5	5
	014347	0,9	13,0	8,5	14,5	1,0	7,0	5
	015213	0,9	13,0	8,5	14,5	1,0	7,0	5
	203004	0,7...1	8,5	5,9	11,5	1,3	7,7	5
	013728	0,88	9,0	4,5	25 x 18	2,6	7,9	6
	015022	1,4	8,6	4,5	25 x 18	2,6	16,4	7

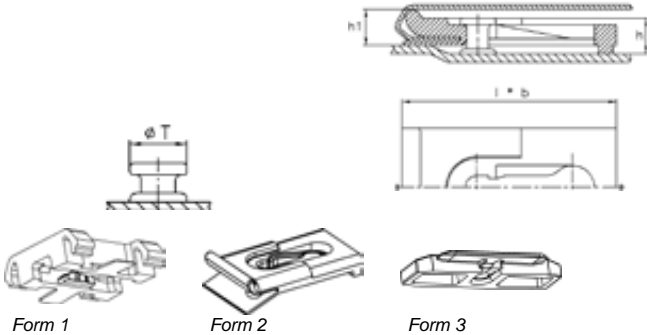
PLASTIC CLIPS FOR MOULDINGS FOR INSTALLATION ON WELDED T STUD

MATERIAL:

Polyamide, polyoxymethylene

COLOUR:

Colours are available on request



Sketches for illustration purposes only, please request latest detailed drawing.

Where there is a specific requirement for an absolute water seal, with no holes in the body panel, welded 'T' studs may be used for the purpose of fastening mouldings. The welded 'T' stud-fastening concept allows a blind joining operation with total sealing and also provides a strength reinforcement of the sheet metal from the properties of the weld.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

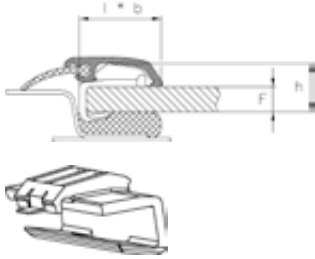
Samples available on request

?	REF.	ØT	h	l x b	Form
	014370	5,0	7,5	26 x 24	1
	013090	5,0	6,1	29,5 x 16	2
	013445	5,0	6,5	40,2 x 24	3
	014278	5,0	4,3	41 x 20	3

PLASTIC FASTENING CLIPS FOR INSTALLING BONDED WINDSHIELD TRIMS

MATERIAL:
Polyoxymethylene

COLOUR:
Black



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

These plastic clips are pushed onto the windshield edge and, depending on the design, can include a feature that "centres" the glass by the aid of a mounting groove.

REF. 080442 and 080452: These fasteners allow the trim to be adjusted with respect to the rebate.

? **Feature(s) of the part**
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	l x b	h	Form
	013524	5,8	20 x 45	9,8	1
	080442	5,8	15,9 x 45	9,8	1
	080452	5,8	15,9 x 45	9,8	1
	013703	5,8	18,6 x 45	10,4	1

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011483	D-02	012575	D-03	013513	D-02	014715	D-09	015733	D-04	020102	D-01
011511	D-01	012598	D-11	013524	D-14	014719	D-04	016035	D-11	020537	D-01
011512	D-01	012617	D-06	013529	D-06	014720	D-06	016193	D-10	020608	D-03
011646	D-09	012636	D-12	013627	D-01	014734	D-02	016346	D-11	020658	D-02
011652	D-11	012637	D-12	013667	D-06	014741	D-09	016417	D-11	020678	D-03
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011987	D-01	012842	D-02	013890	D-03	015034	D-03	018093	D-11	129120	D-06
012005	D-02	012869	D-04	013898	D-04	015047	D-11	018148	D-02	151041	D-01
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012326	D-09	013094	D-04	014313	D-04	015268	D-06	019117	D-11	204730	D-02
012327	D-12	013097	D-10	014347	D-12	015281	D-11	019212	D-11	205304	D-06
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012335	D-06	013144	D-06	014401	D-04	015292	D-02	019260	D-01	206366	D-02
012374	D-09	013159	D-10	014462	D-11	015315	D-01	019625	D-02	209381	D-01
012376	D-12	013193	D-04	014537	D-04	015361	D-11	019673	D-02		
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012462	D-02	013256	D-04	014626	D-03	015419	D-11	019705	D-02		
012469	D-12	013368	D-04	014670	D-12	015519	D-12	019790	D-03		

E FASTENERS FOR SMOOTH PINS

SINGLE-THREAD NUTS



METAL PLATES FOR FASTENING SMOOTH POLISHED STEMS	E-01
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TO PRESS IN



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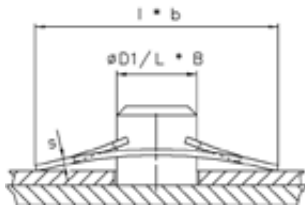
METAL PLATES FOR FASTENING SMOOTH POLISHED STEMS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11

Sketches for illustration purposes only, please request latest detailed drawing.

These hardened steel plates are used for light joining operations involving smooth stems. Fast installation is provided on any non-threaded part, solid or pressed, on plastic material or a plated polished stem. Their spring steel material provides ease of assembly and a positive lock is assured by a "wedge" action.

Installation is by manual pressure or using a magnetic headed tool.

Note: It is recommended that the smooth stem should include a chamfered end to aid assembly.



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1/ L x B	l x b	s	Form
	011186	1,5	15 x 10	0,25	1
	014157	1,8	22 x 6,5	0,3	1
	011185	2,0	15 x 10	0,25	2
	011183	3,5	15 x 10	0,35	2
	011355	5,0	20 x 13,5	0,5	3
	011513	2,0	10 x 6	0,25	3
	011367	4,5	20 x 13,5	0,5	3
	011245	4,75	20 x 13,5	0,5	3
	015813	6 / 9 x 4	12 x 14	0,3	3
	011330	6,0	20 x 13	0,5	3
	011203	6,0	24 x 16	0,5	3
	011204	8,0	24 x 16	0,5	3
	012885	4,75	14 x 11	0,4	3
	011748	2,5	11 x 7	0,3	4
	011184	2,5	15 x 10	0,35	4
	013730	3,0	11 x 7	0,3	4
	015624	3,0	56 x 15	0,5	4
	011182	4,0	15 x 10	0,35	4
	052338	5,0	17 x 10,5	0,4	4
	019301	3,0	7 x 7	0,25	5
	011141	3,0	15 x 10	0,35	5
	011908	6,0	19,5 x 12,5	0,4	5
	011586	2,0	11 x 7	0,3	5
	013148	3,0	15 x 10	0,35	6
	053502	3,0	35 x 20	0,5	7
	052848	4,0	60 x 35	0,5	7

l = stainless steel

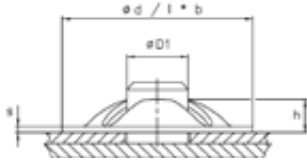
METAL SINGLE-THREADED NUTS FOR POLISHED STEM

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10

Sketches for illustration purposes only, please request latest detailed drawing.

These quickies are used as end stops on pins and for fastening nameplates, labels, linkage components etc. Fast installation can be provided either manually or by using a magnetic headed tool.



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1	Ød/ l x b	h	s	Form
	011876	2,0	9,5	1,3	0,3	1
	051856	2,5	9,5	1,6	0,25	1
	016671	3,0	9,5	1,3	0,3	1
	013993	3,0	9,5	1,3	0,3	1
	013085	3,5	9,5	1,3	0,3	1
	052233	3,0	11,5	2,0	0,3	1
	051857	3,0	9,5	1,4	0,25	1
	051858	3,5	9,5	1,25	0,25	1
	053908	3,75...3,9	11,5	1,6	0,4	1
	051859	4,0	9,7	1,2	0,25	1
	053021	4,0	11,5	1,2	0,4	1
	051832	4,1	11,5	1,75	0,3	1
	011562	4,0	11,5	1,75	0,3	1
	012734	4,0	11,5	2,0	0,35	1
	013710	4,0	11,5	2,0	0,4	1
	052515	4,0	13,0	1,6	0,35	1
	019770	4,5	14,0	1,8	0,6	1
	018103	4,5	11,5	1,5	0,3	1
	013604	4,5	11,5	1,7	0,3	1
	051833	4,5	13,0	1,4	0,35	1
	011930	5,0	11,5	1,75	0,3	1
	013112	5,0	11,5	1,75	0,3	1
	051836	5,0	13,0	1,3	0,35	1
	052675	5,0	13,0	1,3	0,5	1
	013228	5,0	22,0	2,6	0,4	1
	018636	5,0	22,0	2,6	0,4	1
	051835	6,0	13,2	1,3	0,35	1
	051834	5,5	13,0	1,2	0,35	1
	019236	6,0	22,0	2,7	0,45	1
	012205	6,0	22,0	2,7	0,45	1
	015212	6,5	20,5	2,2	0,25	1
	016806	7,75	16,9	1,8	0,3	1

l = stainless steel

METAL SINGLE-THREADED NUTS FOR POLISHED STEM



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1	Ød/ l x b	h	s	Form
	012561	7,8	22,0	2,7	0,4	1
	014343	8,5	20,0	2,7	0,7	1
	013863	12,0	25,0	2,6	0,35	1
	013214	7,0	13,5	1,2	0,3	1
	051898	2,0	9,5	1,35	0,25	1
I	054444	5,0	11,5	1,5	0,3	1
	014240	3,5	13,0	1,0	0,3	2
	052921	3,75	8,0	1,5	0,35	2
	012722	20,0	34,0	2,0	0,3	2
	151516	5,0	30,0	3,3	0,45	2
	215413	7,7	17,5	2,0	0,5	2
	053609	10,8	5,0	1,1	0,25	2
	052758	4,0	9,0	1,4	0,3	3
	011959	4,0	9,6	1,8	0,3	4
	012410	4,0	9,6	2,0	0,4	4
	012436	5,0	12,0	2,7	0,3	4
	011960	5,75	13,5	2,8	0,3	4
	012766	3,0	9,5	1,0	0,3	5
	011576	3,0	12,0	1,9	0,3	5
	013719	4,0	12,0	1,9	0,3	5
	013963	4,76	14,3	1,7	0,35	5
	014066	5,0	14,3	1,7	0,35	5
	011903	5,0	14,3	1,7	0,35	5
	012366	6,8	14,5	1,7	0,25	5
	018572	6,0	20,5	2,1	0,45	6
	019496	8,2	17,5	1,8	0,5	6
	013240	22,0	34,0	3,75	0,3	6
	019885	26,0	50,0	3,2	0,5	6
	017919	28,0	40,0	2,5	0,3	6
I	055037	11,35...11,55	16,95	2...2,2	0,2	6
	055011	19,67...19,73	34,5	3,1	0,5	6
	212825	8,0	12,6	1,1	0,3	6
	020586	5,0	12,0	0,9	0,9	7
	018713	5,0	13,5	0,9	0,3	7
	054947	6,0	14,0	1,1	0,3	7
	214498	4,0	9,0	1,4	0,5	7
	017933	5,0	15 x 15	3,5	0,4	8
	019440	6,0	16 x 13,5	3,5	0,4	8
	018961	5,0	30,0	3,0	0,4	9
I	013747	9,6	27,0	1,5	0,25	9

I = stainless steel

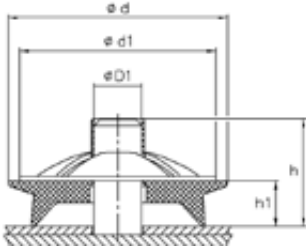
SEALS WITH INTEGRATED QUICKIE

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1

Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

To provide a sealed joint the plates are fitted with a foam rubber strip or with a plastic material washer.

? Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	ØD1	Ød	Ød1	h	h1	Form
	080438	2,5	9,8	9,5	1,3	2,8	1
	060176	2,5	13,0	11,5	-	-	1
	060351	3,0	13,6	12,0	-	-	2

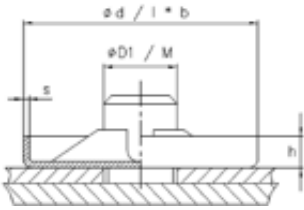
METAL QUICKIES FOR FASTENING SMOOTH POLISHED STEMS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

Applications for these parts include joining lighting, electrical equipment panels, heat shields, covers etc. They are designed to allow adjustment with no need for loosening and/ or re-torquing of any nut and screw assembly.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØD1 / M	Ød / l x b	h	s	Form
	014779	3,0	25,0	1,8	0,3	1
	014797	5,0	25,0	1,8	0,35	1
	012505	6,0	25,0	1,8	0,3	1
	012118	7,0	25,0	1,8	0,25	1
	012554	7,0	25,0	2,0	0,5	1
	014461	10,0	40,0	2,0	0,35	1
	012289	10,5	25,0	1,8	0,35	1
	013006	12,8	40,0	2,0	0,35	1
	014041	4,0	12,0	1,3	0,3	2
	013462	4,0	25,0	1,8	0,35	2
	013577	4,0	40,0	2,0	0,3	2
	016392	3,5	12,0	1,3	0,3	2
	017262	4,0	11,3	1,3	0,25	2
	151104	4,7	11,5	1,6	0,25	2
	013364	6,0	20,5	1,75	0,25	2
	014592	7,8	20,5	2,0	0,45	2
	013798	9,5	20,5	2,0	0,45	2
	014063	10,0	25,0	2,0	0,5	2
	016569	11,5	25,0	2,0	0,35	2
	013633	13,0	24,0	2,0	0,3	2
	013471	18,0	34,0	1,75	0,3	2
	207445	6,0	22,0	2,5	0,4	2
	151465	5,0	30,0	3,3	-	3
	151497	5,0	30,0	3,0	-	3
	205381	GW5	30,0	3,5	0,3	3
	020370	9,5	40,0	2,0	0,35	4
	054832	M6	23,0	2,0	0,5	5
	019480	M6	24 x 20,2	7,5	0,5	6

METAL QUICKIES FOR FASTENING SMOOTH POLISHED STEMS



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	ØD1 / M	Ød / l x b	h	s	Form
	210288	6,0	16,0	2,2	0,4	7
	208898	M10	37,5	4,5	0,3	8

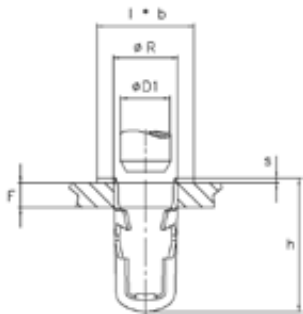
METAL CLIPS FOR BLIND INSTALLATION

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

These clips, fitted with inner and outer prongs, are inserted into a round hole on the outside of a panel and subsequently the fixing stem is driven into the clip. This fastening is a non-removable type.

? Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	F	ØR	ØD1	l x b	h	s	Form
	051884	0,8...1	4,5	3,0	10,5 x 3,8	13,8	0,4	1
	017725	1,2	5,5	4,0	10,35 x 4	11,2	0,35	1
	013280	2,65...2,85	6,5	5,0	10,5 x 4,7	14,5	0,5	1

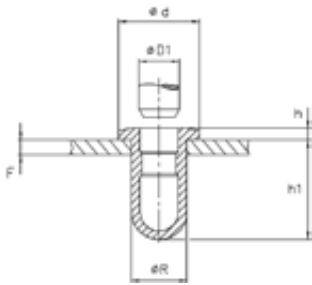
PLASTIC INSERTS FOR FASTENING SMOOTH POLISHED STEMS

MATERIAL:

Polyamid, Polyethylene

COLOUR:

Colours are available on request



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6

Sketches for illustration purposes only, please request latest detailed drawing.

These inserts are blind mounted into a panel and hold in position by friction and/ or an expansion action. They can be used to secure the smooth polished mounting stems of nameplates etc., providing a watertight joint with fast, reliable installation and without the need of an additional driving tool.

INSTALLATION:

Place insert into panel hole and push in the stem. Note: Regarding insert part No 052277 (Form 4 with groove), the insert should first be installed onto the stem and the resultant assembly then inserted into the panel.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

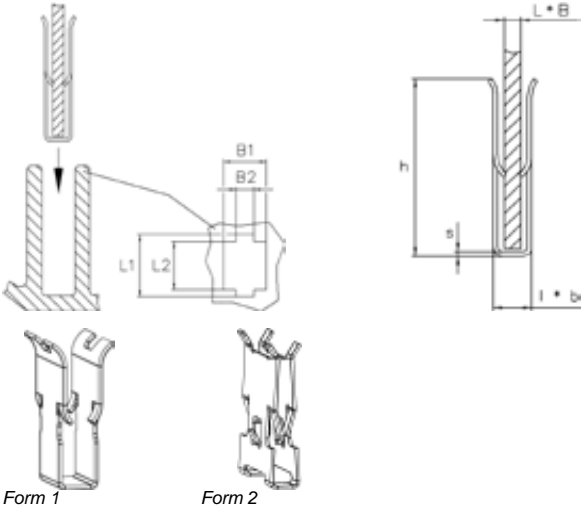
Samples available on request

?	REF.	F	ØR	ØD1	Ød	h	h1	Form
	014076	0,8...0,9	4,6	3,2	6,2	0,9	11,6	1
	056297	2,4...2,6	4,2...4,3	0,7...4	5,8	0,9	4,6	2
	015096	0,9	5,0	3,0	10,0	1,5	8,5	2
	055055	5,8...6	8,2	3,0	14,0	0,5	11,5	2
	012532	0,82...0,94	4,6	3,2	6,2	0,9	6,1	3
	014213	0,9	7,0	5,0	12,0	1,5	8,5	3
	018363	2...2,1	18,0	-	26,0	2,5	19,5	3
	052277	2,9...3	4,6...4,7	0,5...1,2	6,3	0,3	14,7	4
	015144	1...2	7,0	5,0	9,2	2,6	5,4	4
	012782	1...2	7,0	5,0	9,2	2,6	5,4	4
	012996	0,75...0,9	3,9	2,5	7,0	0,9	5,6	4
	018533	1...2	7,0	5,0	9,2	1,8	5,4	4
	052400	0,7...1,2	6,3	4,8...5,1	7,8	-	-	4
	011755	0,55...0,75	3,4	1,9	4,5	0,7	10,8	5
	011731	0,8...0,9	3,9	2,5	5,2	0,9	11,6	5
	012496	1,6...1,8	6,	2,9	8,0	1,2	10,0	5
	012233	0,8...0,9	4,6	3,2	6,2	0,9	9,1	5
	054161	0,6...0,9	4,65...4,8	2,7...3	2,7...3	-	-	5
	011975	0,6...0,7	4,6	3,2	6,2	0,9	9,1	5
	011707	0,8...0,9	4,6	3,2	6,2	0,9	11,6	5
	011988	0,8...1	4,6	3,2	6,2	0,9	11,6	5
	013050	2,0	4,6	3,2	6,2	0,9	11,6	5
	013478	1,5	4,6	3,2	6,2	0,9	13,1	5
	012406	0,8...1	6,5	3,6	12,0	3,0	12,5	5
	112033	4,5	9,0	5,0	11,0	2,0	8,0	5
	012445	1,5...2	8,5	7,2	16,5	1,0	15,0	5
	012288	1,5...2	8,5	7,2	16,5	1,0	12,7	5
	012689	0,8...1	3,4	2,0	5,5	1,0	6,0	5

FOR FASTENING GEAR SHIFT AND ROTARY KNOBS - RECTANGULAR STUDS

MATERIAL:
Spring steel C67S austempered

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are mounted on the smooth rod/ pin and the knob is then driven onto this assembly to provide a permanent fastening solution.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	L x B	l x b	L1 x B1	L2 x B2	h	s	Form
	016262	2,5 x 8	3,35 x 8	3,3 x 8,3	-	12,6	0,3	1
	013550	2 x 8	2,75 x 8	2,8 x 8,7	2 x 2,7	12,25	0,25	1
	053226	-	-	-	-	16,0	0,5	2
	020893	2,5 x 16	4,1 x 15	-	-	19,5	0,4	2

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REF	Page	REF	Page	REF	Page	REF	Page	REF	Page	REF	Page
011141	E-01	012233	E-11	013280	E-10	014633	E-02	020370	E-08	054342	E-05
011182	E-01	012288	E-11	013292	E-12	014779	E-08	020586	E-04	054444	E-04
011183	E-01	012289	E-08	013313	E-12	014797	E-08	020893	E-13	054832	E-08
011184	E-01	012366	E-04	013364	E-08	015025	E-12	051832	E-03	054947	E-04
011185	E-01	012404	E-02	013462	E-08	015096	E-11	051833	E-03	055011	E-04
011186	E-01	012406	E-11	013471	E-08	015144	E-11	051834	E-03	055037	E-04
011203	E-01	012410	E-04	013478	E-11	015212	E-03	051835	E-03	055055	E-11
011204	E-01	012431	E-14	013550	E-13	015624	E-01	051836	E-03	056297	E-11
011245	E-01	012435	E-02	013577	E-08	015813	E-01	051856	E-03	057088	E-12
011330	E-01	012436	E-04	013604	E-03	016262	E-13	051857	E-03	060176	E-06
011355	E-01	012445	E-11	013633	E-08	016392	E-08	051858	E-03	060351	E-06
011367	E-01	012496	E-11	013710	E-03	016569	E-08	051859	E-03	060507	E-07
011510	E-02	012505	E-08	013719	E-04	016671	E-03	051884	E-10	060508	E-07
011513	E-01	012532	E-11	013730	E-01	016806	E-03	051898	E-04	060538	E-07
011562	E-03	012554	E-08	013747	E-04	016863	E-02	052218	E-14	080438	E-06
011576	E-04	012561	E-04	013798	E-08	017262	E-08	052233	E-03	112033	E-11
011586	E-01	012689	E-11	013821	E-12	017725	E-10	052277	E-11	151104	E-08
011707	E-11	012722	E-04	013863	E-04	017919	E-04	052338	E-01	151465	E-08
011731	E-11	012734	E-03	013954	E-12	017933	E-04	052400	E-11	151497	E-08
011748	E-01	012766	E-04	013963	E-04	018103	E-03	052515	E-03	151516	E-04
011755	E-11	012782	E-11	013993	E-03	018363	E-11	052675	E-03	200724	E-02
011823	E-14	012885	E-01	014014	E-02	018533	E-11	052758	E-04	200980	E-02
011876	E-03	012960	E-12	014041	E-08	018572	E-04	052848	E-01	205279	E-02
011903	E-04	012994	E-12	014063	E-08	018636	E-03	052921	E-04	205381	E-08
011908	E-01	012996	E-11	014066	E-04	018713	E-04	053021	E-03	206654	E-02
011930	E-03	013006	E-08	014076	E-11	018961	E-04	053226	E-13	207445	E-08
011959	E-04	013050	E-11	014148	E-12	019236	E-03	053502	E-01	208898	E-09
011960	E-04	013085	E-03	014157	E-01	019301	E-01	053609	E-04	210288	E-09
011975	E-11	013112	E-03	014213	E-11	019440	E-04	053908	E-03	212825	E-04
011988	E-11	013148	E-01	014240	E-04	019480	E-08	054161	E-11	214498	E-04
012063	E-12	013214	E-04	014343	E-04	019496	E-04	054338	E-05	215403	E-14
012118	E-08	013228	E-03	014461	E-08	019770	E-03	054339	E-05	215413	E-04
012205	E-03	013240	E-04	014592	E-08	019885	E-04	054340	E-05		

F PLUG BUTTONS/ GROMMETS

TO PRESS IN



PUSH-FIT ACCESS / INSPECTION PLUGS INTO A ROUND HOLE	F-01
PLASTIC PLUGS INTO A ROUND HOLE	F-02
PLASTIC CAPS INTO A ROUND HOLE	F-03
PLASTIC PLUGS INTO A RECTANGULAR HOLE	F-06

GROMMETS

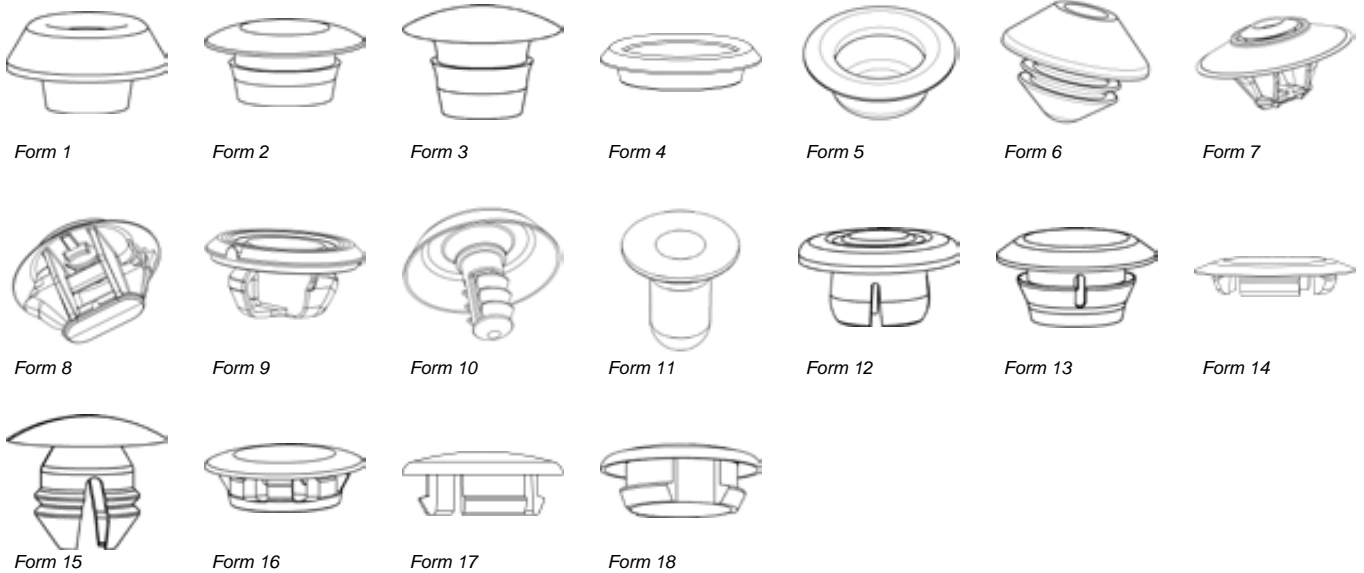
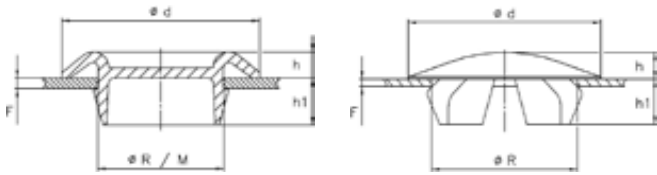


SPECIAL PLASTIC GROMMETS INTO A ROUND HOLE	F-07
SPECIAL PLASTIC GROMMETS INTO AN ELONGATED HOLE	F-08

PLASTIC CAPS INTO A ROUND HOLE

MATERIAL:
Polyethylene

COLOUR :
Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

These caps can give impermeability against surface water.
REF. 055260: Has knockout for max 5 mm diameter tubular item.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	F	ØR / M	Ød	h	h1	Form
	175155	0,6	6,5	10,5	2,2	2,8	1
	053053	0,5...1,5	10,0	17,0	3,0	4,0	1
	013544	1...3,5	10,0	18,5	5,5	4,5	1
	052621	0,5...1,5	11,0	18,3	3,0	4,0	1
	053054	0,5...1,5	12...12,5	19,0	3,0	4,0	1
	175086	0,5...1,5	12,0	19,0	3,0	4,0	1
	053074	0,5...2	14,2...14,7	23,6	4,8	4,0	1
	053062	3...4	14,2	21,2	3,0	6,5	1
	052213	0,5...2,5	18,0	30,0	4,0	5,0	1
	052742	0,5...2	19,0	29,0	4,8	4,4	1
	053296	0,5...3	20,5	29,6	3,7	2,4	1
	053192	2,5...4	23,1...24,1	31,0	5,0	6,2	1
	053061	0,5...1,5	24,6...25	32,6	3,0	4,0	1
	053188	0,6...2	28,0	39,5	4,8	5,2	1
	053068	0,5...2	30...30,3	42,0	4,8	5,2	1
	112029	1,0	32,0	45,0	4,5	5,0	1
	053153	0,5...2	32,8...33	43,5	4,8	5,2	1
	053189	2...4,5	33,0	36,0	1,5	11,5	1
	016949	0,5...2	35,0	51,0	4,8	5,2	1
	112039	1,5	35,0	50,0	3,2	4,8	1
	052875	0,5...2	36,0	47,0	4,8	5,2	1
	015552	4,0	38,0	50,0	4,0	9,0	1
	053075	0,5...2	40...40,5	51,0	4,8	5,2	1
	020810	1,6...2	13,0	24,0	4,8	7,9	2

PLASTIC CAPS INTO A ROUND HOLE



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



Form 16



Form 17



Form 18

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	ØR / M	Ød	h	h1	Form
	018025	3,3...3,8	12,8	26,0	3,0	5,5	2
	019494	8,5	19,0	40,0	4,5	12,5	2
	112065	0,7...1	20,0	27,0	5,0	3,0	2
	152522	4...6,3	20,0	34,0	3,7	11,8	2
	112019	3,0	24,5...25	34,0	3,0	7,0	2
	017273	2,5...4	25,4	30,5	4,5	13,0	2
	055391	2,5...4	25,4...25,6	31,5	3,8	13,0	2
	012774	0,75...1	25,5	37,0	4,5	5,0	2
	055371	2...2,7	27...27,2	35,0	3,0	11,5	2
	014888	2...3,5	15,2	23,0	2,7	8,0	2
	014573	2...3,5	15,2	23,0	2,7	8,0	2
	014373	3,2...3,5	15,2	23,0	2,7	8,0	2
	012276	1,7	5,5	10,0	2,6	6,4	3
	012892	0,75...4	11,0	18,0	2,5	9,6	3
	013551	4...10	15,5	19,5	1,5	15,0	3
	017155	0,5...1,5	24,6	31,6	3,0	4,0	4
	014901	0,5...2	35,0	51,0	4,8	5,2	4
	019555	0,8	24...24,6	34,3	3,5	4,5	4
	019651	2,0	25,0	30,0	2,2	6,3	4
	175157	0,6	50,8	61,0	4,3	4,8	4
	112005	1,5...1,7	15,5	22,0	2,0	6,5	4
	112062	0,7...1,5	16,0	22,0	1,0	5,0	4
	112011	0,5...3	19,9...20,2	28,5	3,5	2,5	4
	112001	0,7...1,8	20,0	29,0	1,2	6,3	4
	055260	0,5...3	20,5	29,6	4,3	2,4	4
	200812	2,0	30,0	41,0	4,29	7,71	4
	128383	0,57...5	20,5	29,5	5,6	3,3	4
	020816	0,75...1	40,0	52,8	4,1	5,0	4
	200798	1,5	20...20,2	29,7	2,0	10,0	5
	014571	1,0	14,5	16,0	3,0	4,3	5
	201153	3,8...4,2	9,5	16,5	5,4	7,3	6
	200313	0,57...3	20,5	40,0	7,9	13,15	7
	201756	0,57...3,0	20,5	30,0	6,6	12,95	7
	201755	0,57...3	20,5	30,0	5,3	12,95	8

PLASTIC CAPS INTO A ROUND HOLE



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8



Form 9



Form 10



Form 11



Form 12



Form 13



Form 14



Form 15



Form 16



Form 17



Form 18

Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	ØR / M	Ød	h	h1	Form
	201238	1,5	12,2...12,7	21,5	3,0	7,3	9
	131351	0,67...3	M6	18,5	4,5	10,5	10
	201867	-	8,4 / M10	18,0	2,8	6,7	11
	079066	-	6,2	8,5	0,8	7,2	11
	200158	-	8,2	16,7	1,0	16,05	11
	012773	0,75...1,5	6,0	10,5	1,7	4,0	12
	014069	0,88	15...15,2	19,0	2,3	5,7	12
	020759	0,7...0,8	16,2...16,8	19,5	0,8	5,2	12
	020296	0,8...1	18,0	20,0	2,2	5,8	12
	020607	1,5	18,0	21,8	2,0	3,0	12
	016912	1,5	18,0	21,8	2,0	3,0	12
	013042	0,88	19,2	24,0	2,2	5,8	12
	013819	0,8...1,2	20,5	31,5	3,5	6,0	12
	015597	1,9...2,7	9,5	15,5	2,0	6,0	13
	019863	0,6...0,8	16,0	22,0	1,5	2,8	14
	016600	7...9	85,0	96,5	4,8	14,6	14
	054275	5,0...7,0	47,5	71,0...73,0	5,0...7,0	14,0...16,0	14
	017817	8,5...9,8	16,0	27,0	4,0	18,0	15
	204649	0,7...1,2	23,0	32,0	2,5	7,5	16
	019488	5,9	15,7	26,0	3,3	8,1	17
	020881	6...6,2	30,0	42,0	6,0	10,5	17
	053873	0,5...2,5	11,7	16,5	2,0	6,0	17
	018138	0,6...0,8	13,0	18,0	2,5	4,2	17
	013264	2,8	14,0	19,4	2,5	5,5	17
	011792	2,0	14,0	19,4	2,5	5,0	17
	017882	2,5...3,5	28,0	36,0	4,0	6,5	17
	015757	3,4	30,0	42,0	6,0	8,0	17
	013974	6...6,2	30,0	42,0	6,0	10,5	18

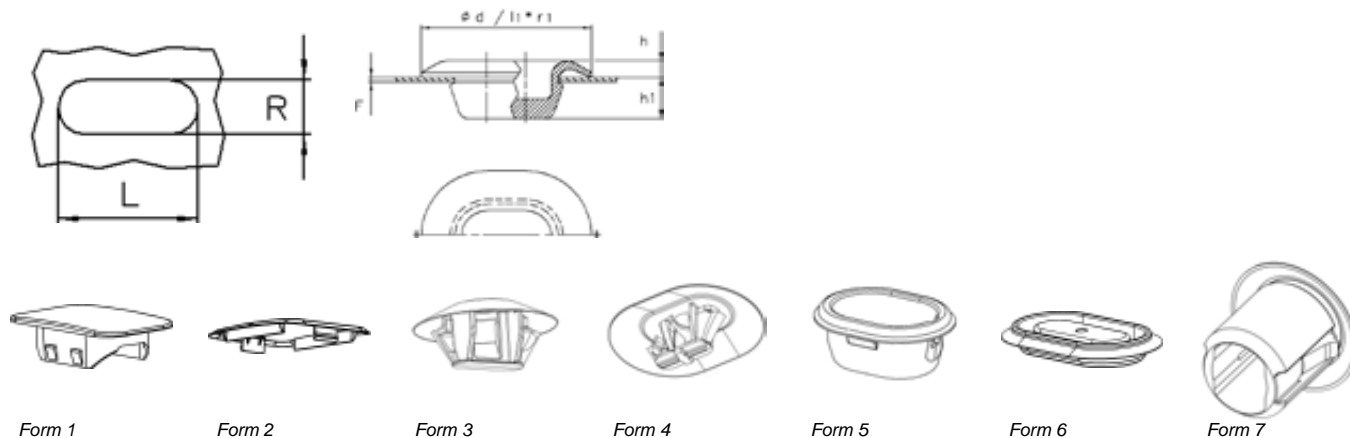
PLASTIC PLUGS INTO A RECTANGULAR HOLE

MATERIAL:

Polyamide, polyethylene

COLOUR :

Natural, Black (other colours are available on request)



Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

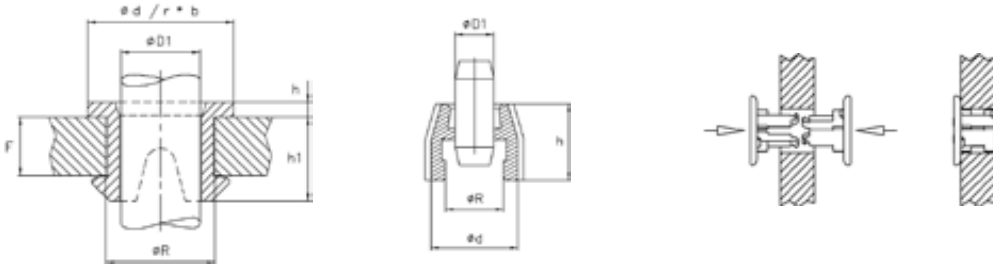
Samples available on request

?	REF.	F	Ød/ l1*r1	L x R	h	h1	Form
	020758	0,7...0,9	30 x 23,85	22 x 16	3,0	4,0	1
	112034	1,2	47 x 26	40 x 20	1,3	4,4	1
	016712	8,0	76 x 40	60 x 30	3,0	16,0	1
	014907	0,8	29 x 16	25 x 12	2,0	6,5	1
	015393	2,2...2,5	63 x 28	56,8 x 21,8	2,0	6,0	1
	016673	0,8...1,5	74 x 34	70 x 30	2,2	6,8	1
	014899	0,8	85 x 55	76 x 46,5	2,0	6,5	1
	020789	0,8	14 x 12,1	11 x 9	1,0	3,0	1
	200395	0,7...1	24 x 18	18 x 12	3,0	2,5	2
	016009	4,0	76 x 46	60 x 30	3,0	16,0	2
	018128	5...5,5	128 x 78	107 x 65	6,8	8,5	2
	200354	0,8...1,2	24 x 22	18 x 16	3,7	2,5	2
	017336	1,5	52 x 52	31 x 31	2,0	9,5	2
	017735	0,8	56 x 36	50 x 30	2,0	6,0	2
	017666	5,0	54 x 39	47 x 31	3,0	10,7	2
	019621	9,2	28 x 22	18 x 12	3,0	14,2	3
	131073	0,7...4 / 0,5...1	40,0	25 x 20	5,45	11,4	3
O	131713	0,7...4 / 0,5...1	40,0	25 x 20	5,45	11,4	3
	215006	0,5...3,0	29,6 x 25,6	16 x 20	4,9	10,75	3
O	131413	0,67...1,67 / 1,2	34 x 24	20,2x10,2/24,2x10,2	2,9	8,3	4
O	206658	-	-	30,6 x 23,6	2,5	10,5	5
O	206294	-	-	15,5 x 8	1,0	6,0	5
	201673	-	-	58 x 33	5,0	4,0	6
	018384	0,7	50 x 30	42 x 22	3,3	3,8	6
	019490	0,7...2	94 x 44	80 x 30	4,0	7,0	6
	020817	0,8...1,2	26 x 20	16 x 10	2,5	6,3	6
	055486	1,5...1,8	30,0 x 16,0	24,2 x 10,2	1,5	25,0	6
	202006	1,15...1,25	20,0	12,9 x 14,1	2,5	14,5	7

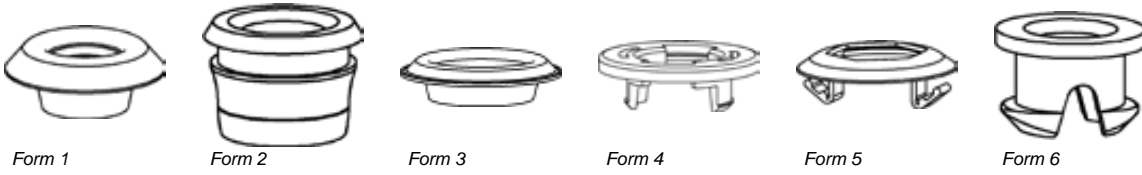
SPECIAL PLASTIC GROMMETS INTO A ROUND HOLE

MATERIAL:
Polyamide, polyethylene

COLOUR:
Natural, Black (other colours are available on request)



to Form 4



Sketches for illustration purposes only, please request latest detailed drawing.

Subject to a specific price quotation, the wire lead-through diameter "D1".

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

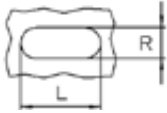
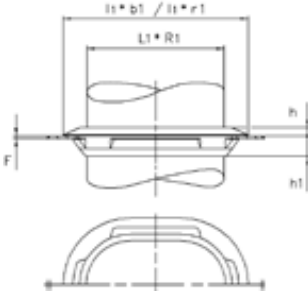
Samples available on request

?	REF.	F	Ød/ r x b	ØR	ØD1	h	h1	Form
	015509	0,5...1,5	17,0	10,0	7,2...7,8	3,0	4,0	1
	200934	3,0	16,0	11,3...11,4	8,1	1,93	7,57	1
	012953	1,7	10,5	8,5	4,5	1,0	6,5	2
	014762	4,2	17,4	13,3	9,7	2,25	9,75	2
	017960	0,5...2	40,0	28,0	25,0	4,0	6,0	3
	053691	0,5...2,0	40,9	30,0	25,0	4,8	5,2	3
	056750	0,5...2,5	18 x 26	16,0	12,0	4,3	4,9	3
	014518	2,8...3,3	14,0	13,1...13,3	10,0	1,8	4,7	4
	014444	2,8...3,3	20,0	15,6...15,8	12,7	1,8	4,7	4
	015036	17...17,5	22,0	15,5	13,0	1,8	18,9	4
	209245	9,8...10,2	20,0	9,3...9,7	6,0	2,0	12,0	4
	018059	2,9...3,1	32,0	26,0	SW17	3,5	7,2	5
	200296	2,9...3,1	8,0	6,0	4,5	0,8	4,6	6
	056784	-	24,0	12,3...13	9,45	-	-	6

SPECIAL PLASTIC GROMMETS INTO AN ELONGATED HOLE

MATERIAL:
Polyethylene, PVC.

COLOUR:
Natural, Black.



Form 1

Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	l1 x b1	l1 x r1	L x R	L1 x R1	h	h1	Form
	019456	0,7...0,9	-	32,5 x 23,5	27 x 18	24,5 x 15,5	1,4	3,6	1
	018814	0,7...0,75	40 x 20	-	32,2 x 14,2	28 x 10	3,5	3,75	1
	057363	-	-	-	-	-	3,0	10,0	1
	055161	0,67...1,2	38 x 22,6	-	32 x 16,2	28,9 x 13,7...14,6	-	-	2

INDEX

REF	Page	REF	Page	REF	Page	REF	Page	REF	Page	REF	Page
011599	F-02	014762	F-07	018059	F-07	052875	F-03	056784	F-07	175155	F-03
011792	F-05	014888	F-04	018128	F-06	052889	F-02	057363	F-08	175157	F-04
011793	F-02	014899	F-06	018138	F-05	053053	F-03	079066	F-05	200158	F-05
011826	F-02	014901	F-04	018384	F-06	053054	F-03	080423	F-02	200296	F-07
011910	F-02	014907	F-06	018814	F-08	053061	F-03	080559	F-01	200313	F-04
011919	F-02	015036	F-07	019456	F-08	053062	F-03	080593	F-01	200354	F-06
012276	F-04	015393	F-06	019488	F-05	053068	F-03	080598	F-01	200395	F-06
012611	F-02	015509	F-07	019490	F-06	053074	F-03	080600	F-01	200798	F-04
012773	F-05	015541	F-02	019494	F-04	053075	F-03	080609	F-01	200812	F-04
012774	F-04	015552	F-03	019555	F-04	053153	F-03	082333	F-01	200934	F-07
012892	F-04	015597	F-05	019621	F-06	053188	F-03	112001	F-04	201153	F-04
012953	F-07	015757	F-05	019651	F-04	053189	F-03	112005	F-04	201238	F-05
013042	F-05	016009	F-06	019863	F-05	053192	F-03	112011	F-04	201673	F-06
013264	F-05	016600	F-05	020296	F-05	053296	F-03	112019	F-04	201755	F-04
013435	F-02	016673	F-06	020607	F-05	053362	F-02	112029	F-03	201756	F-04
013544	F-03	016712	F-06	020758	F-06	053691	F-07	112034	F-06	201867	F-05
013551	F-04	016912	F-05	020759	F-05	053784	F-02	112039	F-03	202006	F-06
013567	F-02	016949	F-03	020789	F-06	053873	F-05	112062	F-04	204649	F-05
013819	F-05	017155	F-04	020810	F-03	054275	F-05	112065	F-04	206294	F-06
013974	F-05	017273	F-04	020816	F-04	054384	F-02	128383	F-04	206658	F-06
014069	F-05	017336	F-06	020817	F-06	055161	F-08	131073	F-06	209245	F-07
014221	F-02	017666	F-06	020881	F-05	055260	F-04	131351	F-05	215006	F-06
014373	F-04	017735	F-06	052198	F-02	055300	F-01	131413	F-06		
014444	F-07	017817	F-05	052213	F-03	055371	F-04	131713	F-06		
014518	F-07	017882	F-05	052498	F-02	055391	F-04	152522	F-04		
014571	F-04	017960	F-07	052621	F-03	055486	F-06	175086	F-03		
014573	F-04	018025	F-04	052742	F-03	056750	F-07	175089	F-02		

G FASTENERS FOR LINKAGE ASSEMBLY

TO SLIP ON



METAL SHAFT LOCKING CLIPS G-01

TO LATCH IN/ SNAP INTO



TOOTHED TYPE LOCKWASHERS G-02
METAL FASTENING CLIPS FOR LINKAGE ASSEMBLIES G-03
PLASTIC CLIPS FOR LINKAGE ASSEMBLIES G-04

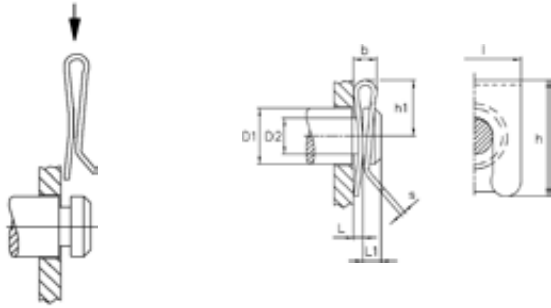
METAL SHAFT LOCKING CLIPS

MATERIAL:

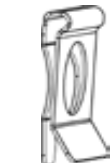
Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1



Form 2



Form 3



Form 4



Form 5



Form 6



Form 7



Form 8

Sketches for illustration purposes only, please request latest detailed drawing.

These various clip forms are used to prevent shouldered pins/ shafts from moving in an axial direction. They are assembled onto the pin/ shaft by manual pressure.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

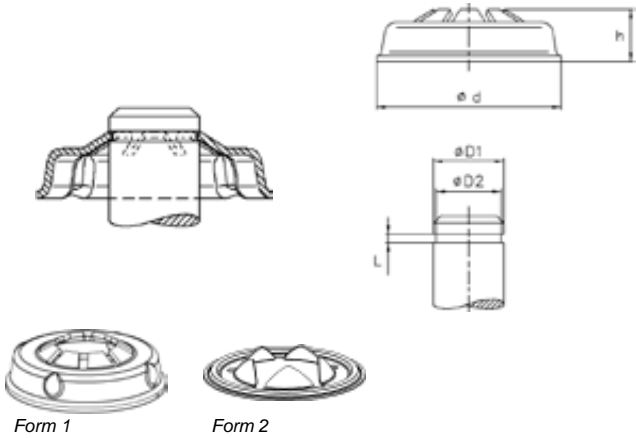
Samples available on request

?	REF.	D1	D2	L	L1	b	l x h	h1	s	Form
	018993	12...14	10,0	1...1,2	-	11,2	19,5 x 17,8	9,2	0,7	1
	055201	-	10,5...10,8	0,9...1,1	-	-	18 x 13,4	19,6	0,8	1
	054943	-	10,5...10,8	-	-	-	18 x 13,4	19,6	0,7	1
	019420	10,0	8,0	1,05...1,15	3,45	4,0	18 x 22	10,0	0,5	2
	054515	10,0	8,0	1,05	3,45	-	16,2 x 5	16,5	0,5	2
	054633	6,0	5,0	1,3	2,0	-	11,2 x 3	13,7	0,4	2
	054429	8,0	6,0	0,94	4,5	-	13,5 x 3,8	14,0	0,5	2
	054516	8,0	6,0	1,2	2,4	-	14 x 3	16,5	0,4	2
	054518	6,0	5,0	0,74	2,2	-	11 x 4	12,1	0,5	3
	018177	16,0	12,0	1,25...1,45	-	7,0	23,6 x 23,5	13,8	0,8	3
	015860	9,0	5,5	0,7	-	4,0	16 x 16	9,5	0,5	3
	013973	9,0	6,0	0,7	-	4,0	16 x 16	9,5	0,5	3
	020348	16,0	10,0	1,0	4,0	4,9	27 x 33	15,0	0,6	4
	018682	14 x 14	12,0	2,2	2,0	7,0	22 x 25,5	12,6	0,4	5
	019409	-	7,0	1,3	-	15,0	14,9 x 2	8,9	0,5	5
	055413	16	12,0	-	-	-	35,5 x 24,5	8	0,5	6
	061927	6,9	8,95...8,99	1...1,2	7,2	8,2	18,5 x 18,5	9,25	-	7
	054719	17,75...18,25	10,0	-	-	-	21,2 x 20	22,5	0,8	8
	054427	17,75...18,25	10,5...10,7	-	-	-	20 x 15,7	24,0	0,8	8

TOOTHED TYPE LOCKWASHERS

MATERIAL:
Stainless steel

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These various clip forms are used to prevent shouldered pins/ shafts from moving in an axial direction.

Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	Ød	ØD1	ØD2	h	L	s	Form
	015030	9,0	3,1	2,8	3,4	0,6...0,8	0,3	1
	015321	13,0	5,0	4,6	3,7	0,6...0,8	0,4	1
	012244	18,0	10,0	7,8	2,5	3,0	0,2	2

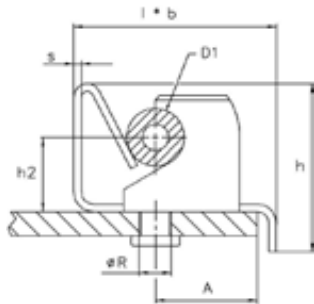
METAL FASTENING CLIPS FOR LINKAGE ASSEMBLIES

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

These clips provide fast, low-cost attachment of round-wire linkage components. Assembling the clip requires no operation on the actual linkage, only the bending operation aimed at getting the required radius. They give compliant noise-free attachment, having easy removal without the need for a special tool.

? Feature(s) of the part see Reference Page 4
 ↓ Dimensions in mm

Samples available on request

?	REF.	D1	ØR	A	l x b	h	h2	s	Form
	055220	4,8	4...4,1	5,5...7	13,5 x 14	13,5	5,5	0,5	1
	055442	3,5	4...4,1	5,5...6,5	13,5 x 14	11,8...13,8	5,3	0,5	1
	055817	4,8	4...4,2	6...6,5	13,3 x 14	11,6	5,2	0,4	1
	055818	4,8	4...4,2	6...6,5	13,3 x 14	11,6	5,2	0,5	1
	055541	4,8	4,0	4,4	10,75 x 14	12,7	5,2	0,5	1
	055343	6,0	4,1	6,5	14,6 x 14	14,8	5,1	0,5	1

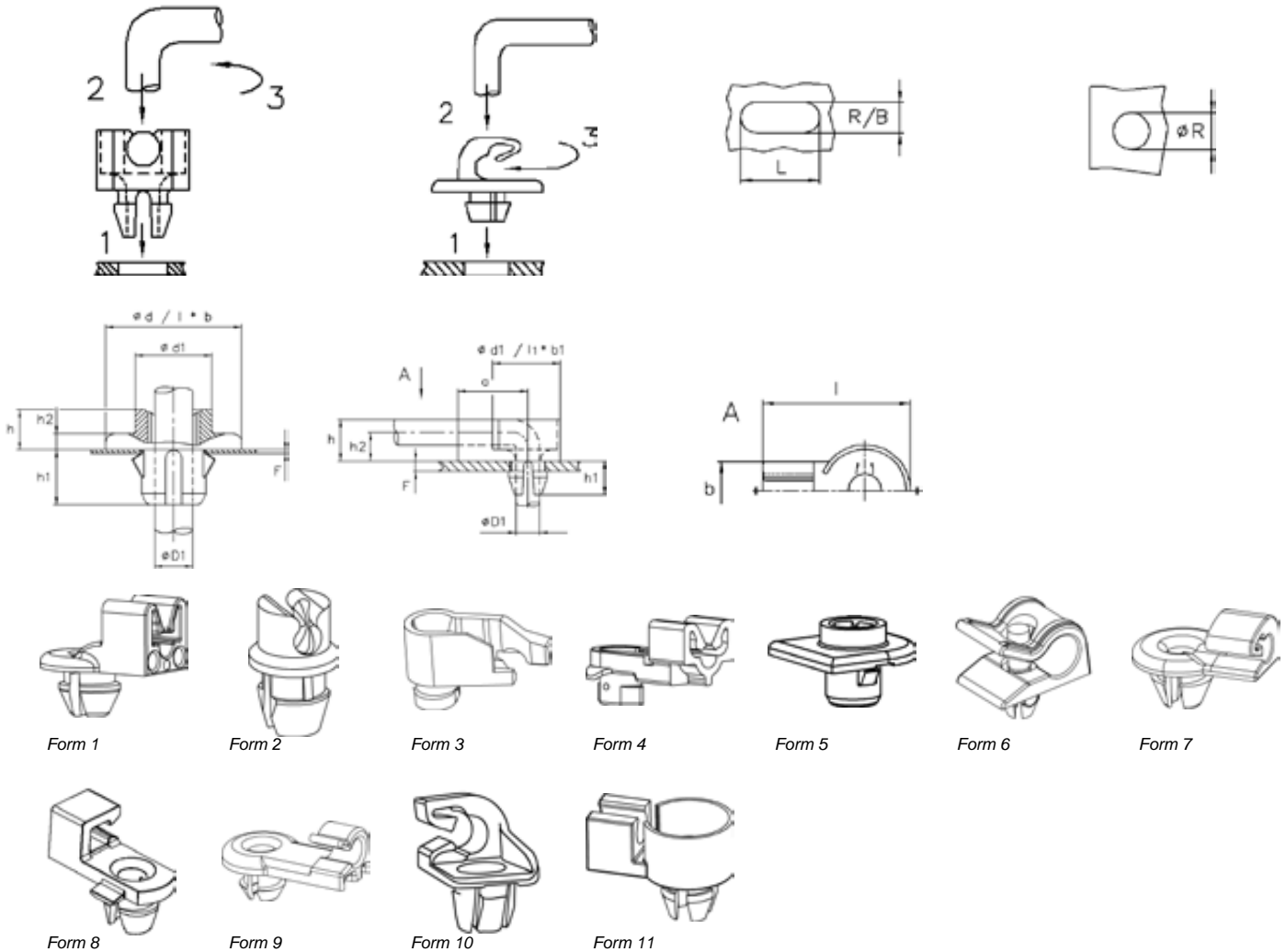
PLASTIC CLIPS FOR LINKAGE ASSEMBLIES

MATERIAL:

Polyamide, polyoxymethylene

COLOUR :

Natural, Black (other colours are available on request)



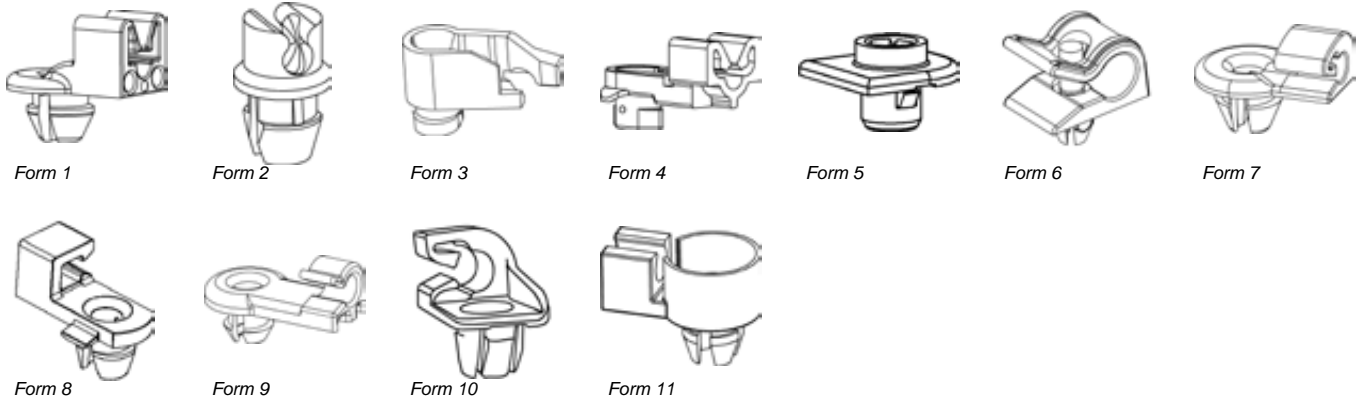
Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	Ød/ l x b	Ød1/l1xb1	ØD1	ØR	L x B/R	a	h	h1	h2	Form
	205603	1,3...1,7	16 x 8	11,0	2,5	5,9	-	10,5	8,0	5,5	3,0	1
	203632	1,3...1,7	16 x 8	11,0	2,8	5,9	-	10,5	8,0	5,5	3,0	1
	012800	3,0	10,0	8,0	3,5	7,2	-	-	7,0	8,0	2,0	2
	018547	6...6,2	16,0	8,5	5,0	7,0	-	-	11,2	8,5	13,8	2
	015760	1,8...2	26 x 10	-	3,0	-	13,3 x 7,3	21,0	10,0	5,6	3,9	3
	015564	2,3...2,5	26 x 10	-	3,5	-	13,3 x 7,3	21,0	10,0	5,6	4,0	3
	015508	1,9...2,1	26 x 14	26 x 10	3,5	-	24 x 7,3	21,0	10,0	5,6	4,0	3
	014189	1,95...2,05	21,5 x 10	-	3,5	7,3	-	16,5	10,0	7,0	4,6	3
	017432	1,9...2,1	25 x 15	8 x 12	3,5	-	10 x 7,3	20,0	10,5	4,6	4,75	4
	017360	1,9...2,1	25 x 12	8 x 12	3,5	-	10 x 7,3	20,0	10,5	4,6	4,75	4
	018268	1,9...2,1	25 x 15	8 x 15	3,5	-	13,3 x 7,3	20,0	14,0	5,6	4,5	4
	018562	0,8	25 x 27	14,1	7,0	12,0	-	-	7,4	10,0	3,0	5

PLASTIC CLIPS FOR LINKAGE ASSEMBLIES



Sketches for illustration purposes only, please request latest detailed drawing.

?	REF.	F	Ød/ l x b	Ød1/l1xb1	ØD1	ØR	L x B/R	a	h	h1	h2	Form
	207044	6...7	-	-	5,2 x 5,2	0,7...1,5	-	-	10,55	5,2	-	6
	015923	3...3,3	16,5 x 7,2	12,0	2,5	6,0	-	10,5	6,3	6,7	2,7	7
	018186	2,0	16 x 7,4	11,0	3,0	5,9	-	10,5	6,2	5,7	2,5	7
	019200	4,0	16 x 7,4	11,0	3,0	5,9	-	10,5	6,2	7,7	2,5	7
	018495	3...3,3	16,5 x 8,6	12,0	4,0	7,5	-	10,5	7,8	6,7	3,5	7
	053066	2...2,3	12,0	-	4,0	7,8	-	10,5	7,7	6,0	3,5	7
	017290	2...2,3	16,5 x 8,4	12,0	4,0	7,8	-	10,5	7,7	6,0	3,5	7
	014736	2...2,3	16 x 11	5 x 11	6,0	7,8	-	10,0	10,5	6,0	5,0	7
	053065	4,4	7,8	-	-	2...2,24	12,0	-	8,2	6,0	3,7	7
	175039	1,9...2,1	17 x 11	-	3,5	6,0	-	11,5	7,6	6,0	4,4	8
	019479	2,2...2,4	23 x 8,6	5,5 x 8,6	4,0	6,0	-	17,0	8,2	4,7	4,5	9
	015739	3...3,3	16,5 x 8,6	12,0	4,0	7,5	-	10,5	7,8	6,7	3,5	9
	056171	8,0	12,2	-	-	1,8...2,2	18,0	18,0	16,2	10,0	8,0	10
	056352	8,0	12,5	-	-	2,0	-	18,0	16,2	10,0	8,0	10
	019145	1,5...1,7	17,5 x 7	11,0	4,0	6,0	-	12,0	7,1	5,7	2,0	11

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REF	Page	REF	Page	REF	Page	REF	Page	REF	Page	REF	Page
012244	G-02	015760	G-04	018547	G-04	053065	G-05	055201	G-01	061927	G-01
012800	G-04	015860	G-01	018562	G-04	053066	G-05	055220	G-03	175039	G-05
013973	G-01	015923	G-05	018682	G-01	054427	G-01	055343	G-03	203632	G-04
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H FLUID CONNECTION

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Sketches for illustration purposes only, please request latest
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Z SPECIAL DESIGN FASTENERS

TENSIONING CLIPS



METAL FASTENING CLIPS FOR CAN LIDS Z-01

WASHERS



METAL SCREW CUPS Z-02

ELECTRICAL CONNECTOR FASTENINGS



CONECTORCLIP FOR ROUND HOLE Z-03

CONECTORCLIP FOR OVAL HOLE Z-04

CONECTORCLIP FOR EDGE Z-05

CONNECTOR SUPPORTS - OTHER FASTENINGS Z-06

EARTHING CLIP



ELECTRICAL EARTHING FASTENERS Z-07

PRE-MOUNTED RETAINERS



PRE MOUNTED RETAINERS FOR SCREWS AND RODS Z-08

INDUSTRIAL/CONSTRUCTION SPECIFIC CLIPS



TIGER CLIPS - FOR BEAMS FROM 2 TO 24 mm Z-09

PLASTER BOARD FIXINGS Z-10

FASTENINGS MISCELLANEOUS Z-11

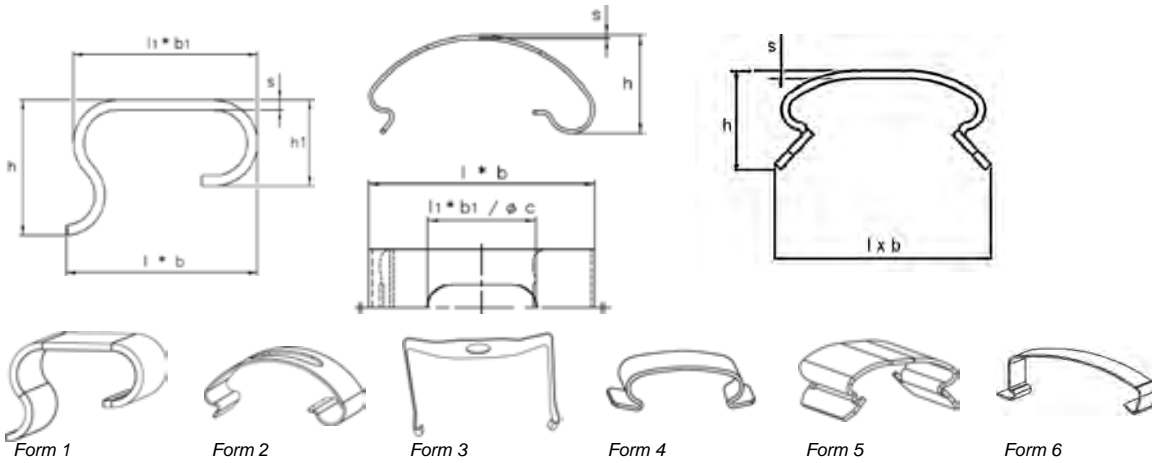
METAL FASTENING CLIPS FOR CAN LIDS

MATERIAL:

Spring steel C67S austempered

PROTECTIVE FINISH:

According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed to give additional fastening strength for the safe mailing and storage of airtight friction lid cans. They may also be used for other fastening applications. Quick manual application is normal.

Feature(s) of the part see Reference Page 4 Dimensions in mm

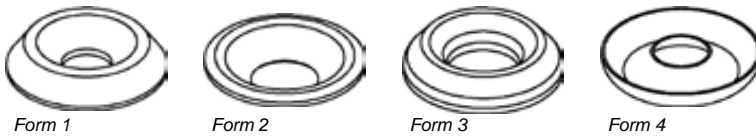
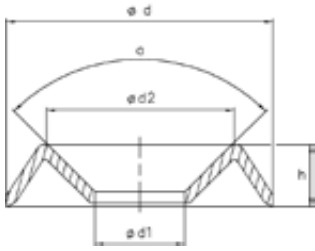
Samples available on request

?	REF.	l x b	Øc/ l1xb1	h	h1	s	Form
	205240	9,7 x 8	9,4 x 8	8,0	4,4	0,5	1
	020273	38,7 x 20	20 x 8	16,9	-	0,6	2
	055330	53 x 14	8,2	34,0	-	0,5	3
	054910	17,5 x 9,5	-	5,2	5,2	0,4	4
	209463	13,9	-	6,36	-	0,5	5
	204556	67 x 18	-	24,0	-	0,7	6

METAL SCREW CUPS

MATERIAL:
Steel, Stainless steel (J), Brass
Polyamide (Form 6)

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.
These cups increase the strength properties of a screw fastened joint and provide a more attractive appearance.



Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	Ød	Ød1	Ød2	h	a°	Form
	010255	9,8	3,0	7,0	2,1	90,0	1
	010364	11,0	3,1	7,7	2,4	90,0	1
	010141	9,0	4,1	6,5	1,8	90,0	1
	010140	11,0	5,1	8,0	2,2	90,0	1
	010222	12,5	5,0	9,0	2,3	90,0	1
	013590	15,5	5,2	11,0	3,6	90,0	1
	010066	13,0	6,0	10,0	2,3	90,0	1
	010223	15,0	7,0	12,0	2,5	90,0	1
	010169	18,0	7,0	12,5	3,2	90,0	1
	010965	18,0	8,6	13,0	3,0	90,0	1
	010820	12,75	4,9	8,9	2,5	90,0	1
	010173	11,0	5,0	8,0	2,4	90,0	1
	010174	13,0	6,0	10,5	3,0	90,0	1
	010175	15,0	7,0	12,0	3,4	90,0	1
	010104	8,0	3,2	6,2	1,7	90,0	2
	013991	12,8	4,6	8,6	2,7	90,0	3
	013880	11,0	5,0	8,0	2,4	90,0	3
	013881	13,0	6,0	10,5	3,0	90,0	3
	010431	18,0	6,2	-	2,8	-	4

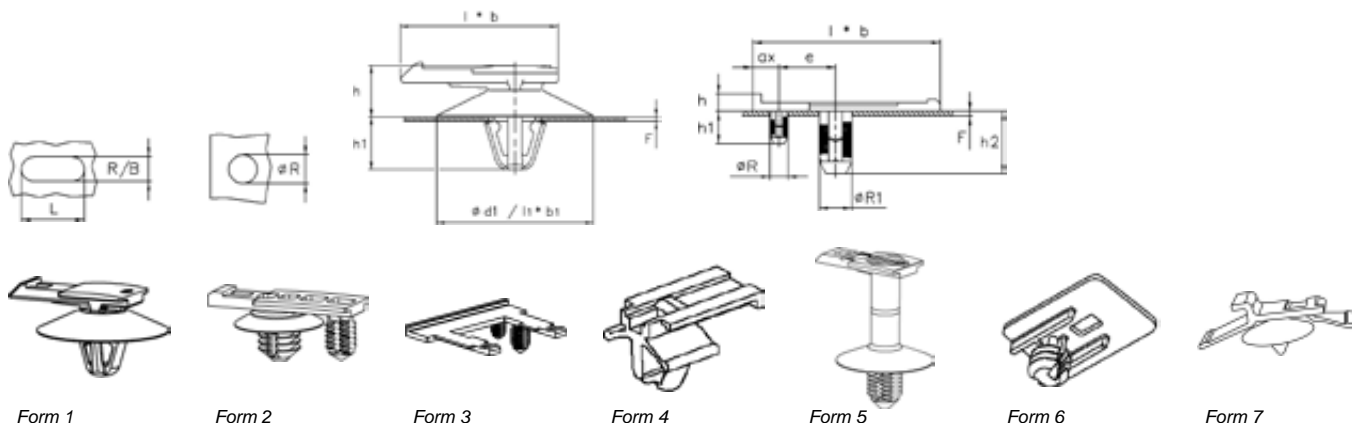
CONNECTORCLIP FOR ROUND HOLE

MATERIAL:

Polyamid, Polyoxymethylen

COLOUR:

Black



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed to mount electrical connectors (usually automotive) to suit male/female forms.
Ref 082200: With sealing element

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	Ø R	Ø R1	l x b	Ød1/l1xb1	ax	e	h	h1	h2	Form
	018162	0,8...2,5	6,5	-	22 x 10,4	22,0	-	-	7,2	7,4	-	1
	017530	0,8...6	6,5	-	22 x 10,4	18,0	-	-	6,4	10,3	-	1
	019849	0,8...6	6,5	-	22 x 10,4	18,0	-	-	6,4	10,3	-	1
	082200	0,8...2,5	6,5	-	22 x 10,4	22,0	-	-	7,0	7,6	-	1
	056151	0,5...6,5	6,5	-	26,7 x 10,3	21,5	-	-	6,4	9,2	-	1
	114006	0,8...2,5	8,0	-	12 x 7,7	21,0	-	-	-	7,0	-	1
	082564	0,6...0,8	6,5	-	22 x 10,4	22,0	-	-	7,0	7,6	-	1
	114041	0,8...2,5	8...8,2	-	-	21,0	-	-	10,0	-	-	1
	020464	0,8...3	5,0	6,5	29 x 10	6,5	13,0	12,5	16,4	-	13,0	2
	016799	1,5...6,5	5,0	6,5	6,5	6,5	6,0	13,0	-	-	6,0	3
	114022	0,7...1,2	6,6	-	-	19 x 13	-	-	5,5	7,5	-	4
	175033	0,7...1,6	7,0	-	21,4 x 12,6	17,8 x 10,2	-	-	7,0	8,1	-	4
	175028	0,7...1,6	7,0	-	19 x 18	12 x 18	-	-	7,35	7,65	-	4
F	082628	0,8...6	6,5	-	22 x 10,4	20,5	-	-	22,2	10,4	-	5
	201634	0,6...3	6,5	-	25,5 x 17	-	-	-	3,5	7,0	-	6
	056691	1...2	6,2	-	-	-	-	-	-	6,0	-	7

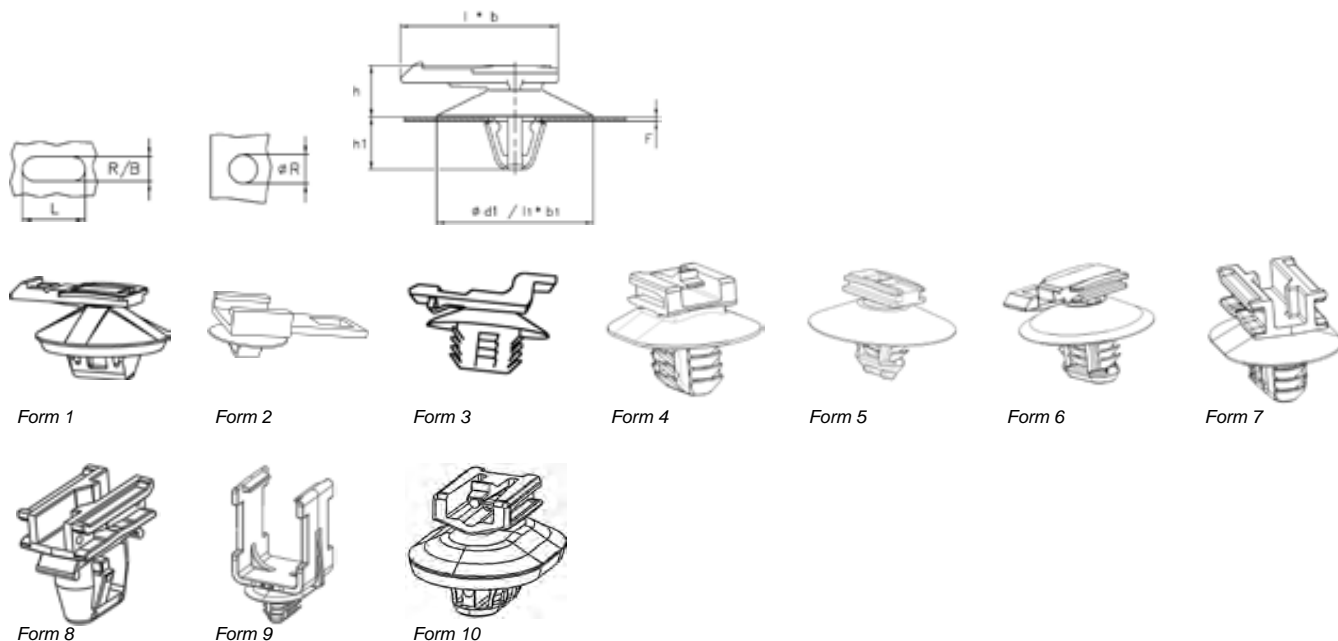
CONNECTORCLIP FOR OVAL HOLE

MATERIAL:

Polyamid, Polyoxymethylen

COLOR:

Schwarz



Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed to mount electrical connectors (usually automotive) to suit male/female forms.

? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

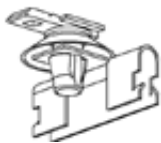
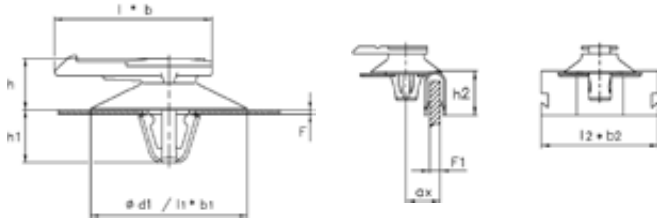
?	REF.	F	L x B/R	l x b	Ød1/l1xb1	h	h1	Form
	056150	0,5...3,0	12,2 x 6,2	-	-	7,3	7,5	1
	082359	0,5...3,0	12,2 x 6,2	-	22,5	8,4	7,2	1
	056471	0,7...1,5	12,2 x 6,2	-	-	-	-	2
	056868	0,5...6,0	12,2 x 6,2	26 x 12	22,5 x 16,5	-	8,0	3
	057597	0,5...6,0	12,2 x 6,2	11,5 x 9,5	23,5 x 17,5	6,9	7,5	4
	202498	0,67...6,5	13,4 x 7,4	16 x 9,4	30,0	-	-	5
	201925	0,7...5,0	12,2 x 6,2	21 x 10,45	23,0	-	-	6
	132768	0,7...6,0	12,2 x 6,2	-	22 x 16	9,1	10,0	7
	212922	0,6	12,2 x 6,2	16,3 x 10,5	16,3 x 10,5	8,4	7,8	8
	212188	0,67...4,0	12,2 x 6,2	23 x 16,3	22 x 16	27,8	8,2	9
	208694	0,7...1,0	12,2 x 6,2	11,5	22 x 16	7,6	6,8	10

CONNECTORCLIP FOR EDGE

MATERIAL:
Polyamid, Polyoxymethylen

EDGE CLIP:
Spring Steel

COLOUR:
Black



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed to mount electrical connectors (usually automotive) to suit male/female forms.
These metal edge clips can also be used with parts on page Z-04, Forms 1 and 5.

Feature(s) of the part
see Reference Page 4
↓
Dimensions in mm

Samples available on request

?	REF.	F	F1	$l \times b$	$\varnothing d_1 / l_1 \times b_1$	$l_2 \times b_2$	ax	h	h1	h2	Form
	082497	0,8...2,5	3...4	21 x 10	20,0	33 x 5,7	10,35	7,6	7,4	12,4	1
	082339	0,8...2,5	3...4	21 x 10	20,0	33 x 5,7	10,35	7,6	7,4	12,4	1
	061835	-	1,5...3,0	22,0 x 23,0	23,0	28,0 x 6,0	9,8	8,5	5,5	9,5	1

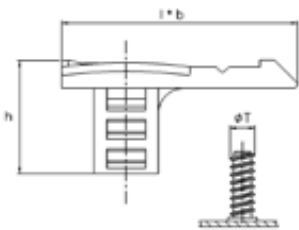
CONNECTOR SUPPORTS OTHER FASTENINGS

MATERIALS:

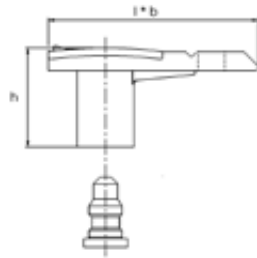
Polyamid, Polyoxymethylen, polypropylene
C45E, C67S with heat treatment

PROTECTIVE FINISH:

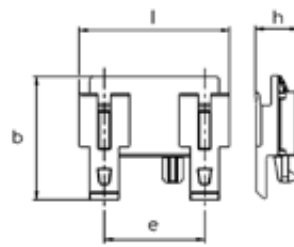
According to the drawings and taking into consideration the current environmental regulations



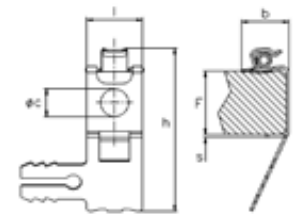
(1)



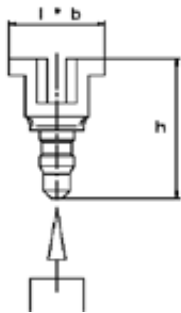
(2)



(3)



(4)



(5)



Form 1



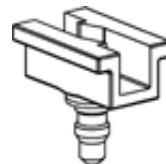
Form 2



Form 3



Form 4



Form 5

Sketches for illustration purposes only, please request latest detailed drawing.

These clips are designed to mount electrical connectors (usually automotive) to suit male/female forms.

Form 1: For fastening onto weld stud

Forms 2 & 5: For fastening onto other clip elements (see catalogue B)

Form 3: For 2 connector mounting

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

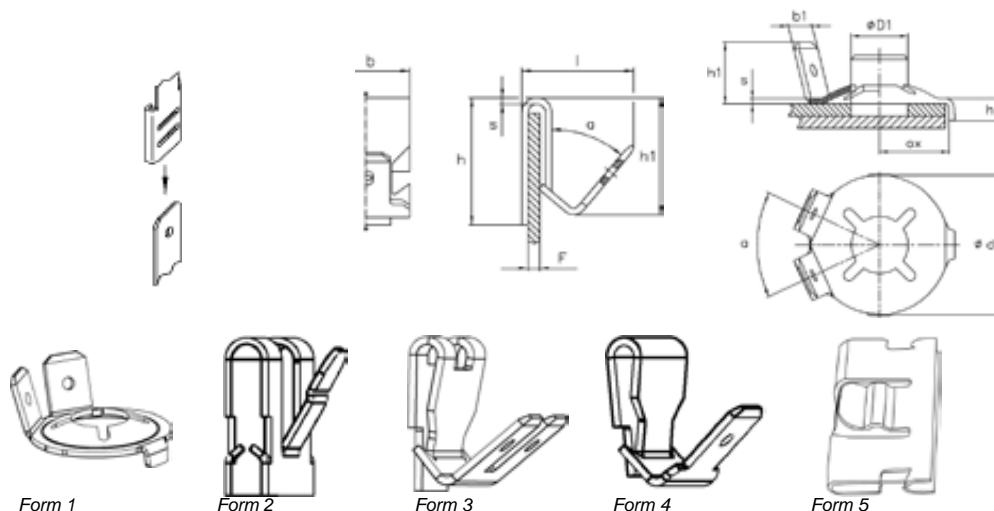
Samples available on request

?	REF.	F	ØT	l x b	h	e	Øc	ØD1	s	Form
	056369	-	5,0	22 x 10,6	13,3	-	-	-	-	1
	056167	-	-	22 x 10,5	10,4	-	-	-	-	2
	057391	-	-	30,8 x 25,2	8,9	20,5	-	-	-	3
	132625	13,6	-	11,5 x 9,35	31,3	-	5,4...5,6	3,0	0,5	4
	202570	-	-	16 x 10,5	15,5	-	-	-	-	5

ELECTRICAL EARTHING FASTENERS

MATERIAL:
Steel XC 70

PROTECTIVE FINISH:
According to the drawings or taking into account the required corrosion resistance.



Sketches for illustration purposes only, please request latest detailed drawing.

These parts are designed to fix earthing terminals or earthing wires to a smooth rod or to a metal panel edge

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	ØD1	l x b	b1	Ød	ax	a°	h	h1	s	Form
	018050	-	8,5	-	6,3	20,0	10,0	50,0	2,8	9,0	0,8	1
	012926	-	8,5	-	6,3	20,0	10,0	50,0	2,75	9,0	0,75	1
	053820	0,7...2	-	7,35 x 20	6,0	-	-	30,0	12,0	12,0	0,5	2
	019765	1...2	-	13,75 x 16	6,3	-	-	40,0	16,0	14,75	0,8	3
	014354	1...2	-	13,85 x 11	6,3	-	-	-	16,0	14,85	0,8	4
	018356	1...2	-	13,85 x 11	6,3	-	-	40,0	14,0	14,85	0,8	4
	055625	0,3...0,5	-	10 x 10	6,35	-	-	45,0	9,0	9,0	0,5	4
	214634	0,4...1,5	-	13,7 x 11	6,3	-	-	40,0	16,0	15,0	0,8	4
	051981	2...2,2	-	5 x 20	-	-	-	-	12,0	12,0	0,5	5

PRE MOUNTED RETAINERS FOR SCREWS AND RODS

MATERIALS:

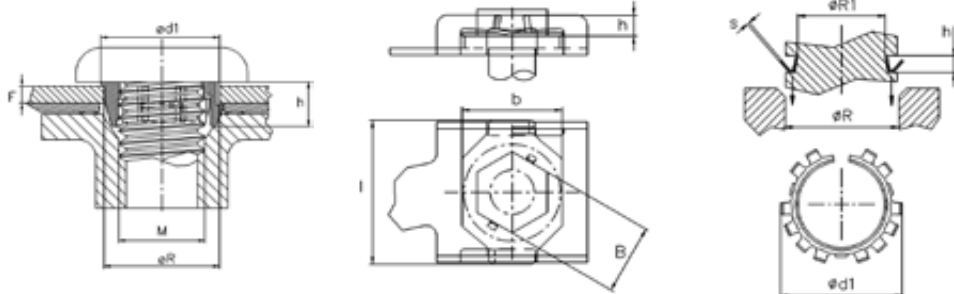
Form 1 = Polyamid, Polyoxymethylen, polypropylene

MATERIALS:

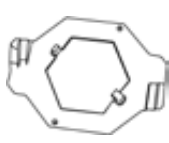
Form 2 - 3 = C67S with heat treatment

PROTECTIVE FINISH:

According to the drawings and taking into consideration the current environmental regulations



Form 1



Form 2



Form 3

Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	M	B	ØR	ØR1	F	l x b	Ød1	h	s	Form
	057375	10,0	-	13,5	-	2,0	-	14,8	5,4	0,3	1
	055510	-	18,1	-	-	-	39 x 28	-	8,0	1,0	2
	128386	-	-	14...14,2	10,75...10,85	-	-	14,4	2,15	0,3	3

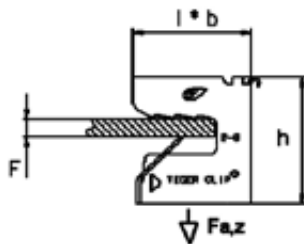
TIGER CLIPS FOR BEAMS FROM 2 TO 24 mm

MATERIALS:

Hardened steel

PROTECTIVE FINISH:

Magni, 2 coats (min. 600 h resistance in salt)



Form 1

Sketches for illustration purposes only, please request latest detailed drawing.

ADVANTAGES AND CHARACTERISTICS:

- Multifunctional fastening
- For Static loads, with single use and non-repositionable
- To set up by hand or with a hammer
- Inside / outside use
- High permitted load : 1200 N ($F_{a,z}$) - tested by CSTB, with vertical threaded rods M6 (safety factor 1:4 included)
- With a hole for fitting "S" shaped hooks with chain, steel wires, tie-wraps (9mm width Max) threaded rods (M6 or M8 in vertical only) etc
- Flexible 'tiger's' teeth: grip beams of various thicknesses.

Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	F	l x b	Øc	h	Form
	203297	2...8	28 x 19	6,7	30,0	1
	203697	8...16	30 x 19	6,7	38,0	1
	205288	16...24	40 x 19	6,7	48,0	1

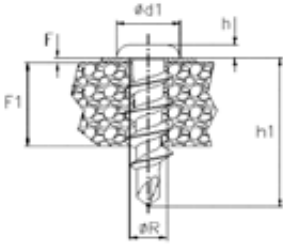
PLASTER BOARD FIXINGS

MATERIAL:

- Polyamid

COLOUR:

- Black, Grey



Form 1

Form 2

Sketches for illustration purposes only, please request latest detailed drawing.

Advantages and characteristics:

- For light loads
- Form 1 : Used for cable channel fastening, pre-drilled at Ø6mm.
- Form 2 : Used for decorations, frames fastening, pre-drilling not required (mounted into plaster boards only)
- For Class II installation
- Easy and fast to use (self-tapping)
- Also convinients for others crumbly materials such as cellular concrete, plaster boards... (pre-drilled at Ø6mm)
- Safer with cables - screw is plastic not metal

SEE ALSO CHAPTER A-23 ANCHOR NUT NAILED

(plaster board hammer-in metal plugs) :

- No drill : to hammer
- Expansion by screwing
- Flat profile : cannot turn while screwing
- Sharp teeth for easy insertion

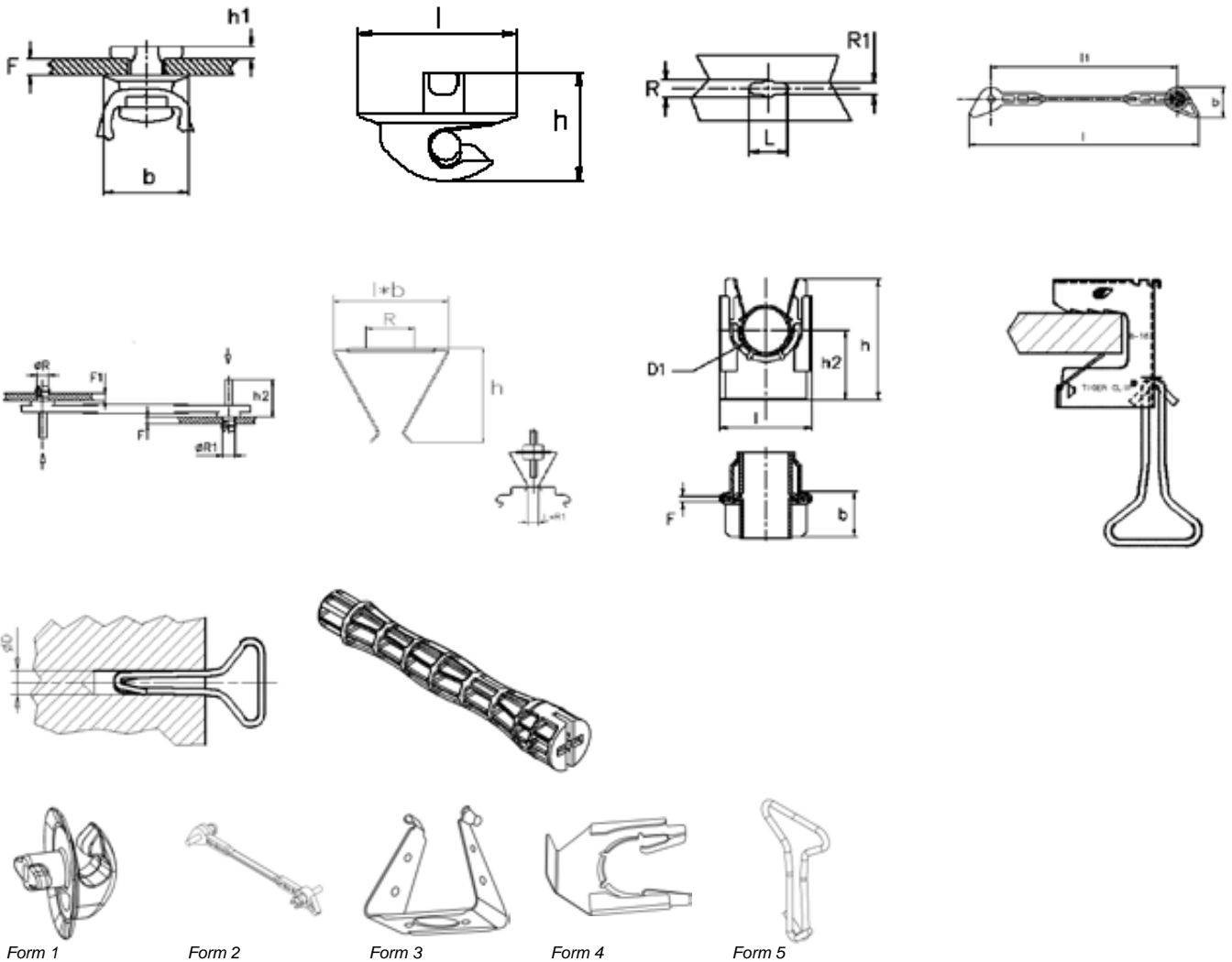
? Feature(s) of the part
see Reference Page 4
↓ Dimensions in mm

Samples available on request

?	REF.	F	F1	ØR	Ød1	ØD	h	h1	Form
	129063	1,1	9...13	6,0	10,3	-	2,3	23,6	1
	200631	1,1	9...13	6,0	7,3	-	3,35	23,6	2

FASTENINGS MISCELLANEOUS

FOR MORE INFORMATION, PLEASE CONTACT US



Sketches for illustration purposes only, please request latest detailed drawing.

? Feature(s) of the part
see Reference Page 4
Dimensions in mm

Samples available on request

?	REF.	ØR	ØR1	ØR2	F	F1	L	l x b	l1	h	h1	h2	s	Form
	054622	6,0												
	201286	6,5	4,5	-	2,5	-	14,5	21,7 x 16,7	-	15,1	2,0	-	-	1
	129193	5,0	5,0	-	2,3	2,3	-	100,7 x 13,5	81,5	-	-	17,0	-	2
	055429	13,0	6,4	-	-	-	15,0	37 x 22	-	35,9	-	-	-	3
	055240	-	-	-	2,5	-	32,2	-	-	42,4	-	25,4	-	4
	204000				8...16	-								5
	054622	1,0			1,0									5

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010066	Z-02	012926	Z-07	051981	Z-07	056868	Z-04	129063	Z-10	204556	Z-01
010104	Z-02	013590	Z-02	053820	Z-07	057375	Z-08	129193	Z-11	205240	Z-01
010140	Z-02	013880	Z-02	054622	Z-11	057391	Z-06	132625	Z-06	205288	Z-09
010141	Z-02	013881	Z-02	054910	Z-01	057597	Z-04	132768	Z-04	208694	Z-04
010169	Z-02	013991	Z-02	055240	Z-11	061835	Z-05	175028	Z-03	209463	Z-01
010173	Z-02	014354	Z-07	055330	Z-01	082200	Z-03	175033	Z-03	212188	Z-04
010174	Z-02	016799	Z-03	055429	Z-11	082339	Z-05	200631	Z-10	212922	Z-04
010175	Z-02	017530	Z-03	055510	Z-08	082359	Z-04	201286	Z-11	214634	Z-07
010222	Z-02	018050	Z-07	055625	Z-07	082497	Z-05	201634	Z-03		
010223	Z-02	018162	Z-03	056150	Z-04	082564	Z-03	201925	Z-04		
010255	Z-02	018356	Z-07	056151	Z-03	082628	Z-03	202498	Z-04		
010364	Z-02	019765	Z-07	056167	Z-06	114006	Z-03	202570	Z-06		
010431	Z-02	019849	Z-03	056369	Z-06	114022	Z-03	203297	Z-09		
010820	Z-02	020273	Z-01	056471	Z-04	114041	Z-03	203697	Z-09		

DISCLAIMER

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