

MEP SUPPORT SOLUTIONS







“ Spectra walks an extra mile
to serve our customers better.”



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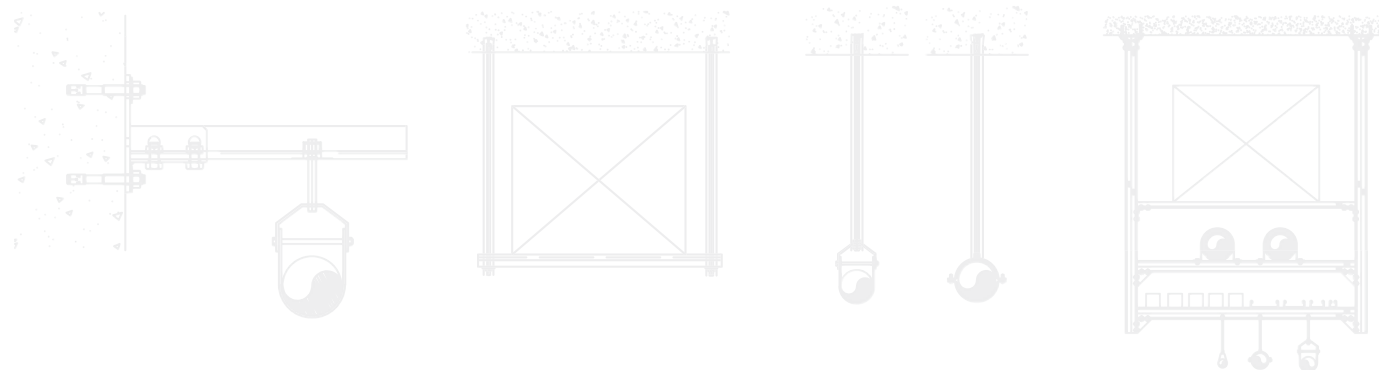
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Spectra Engineering Solutions is a passionate MEP solution provider and MEP support system manufacturer in the construction industry. We are committed to provide best & reliable engineering solution as per the industry standards & codes to our customers to achieve their goals on time with help of our world- renowned suppliers.



We work as a solution provider rather than a product seller, which qualifies us to be unique in the industry. With the highly professional & dedicated management, group of industry specific competent engineering professionals with proven track record and a strong procurement & logistics team enables us to offer you seamless service and "one stop" for all kind of MEP support solutions.

Our wide product range helps us to be the first choice among the customers for MEP supports & solutions. Our extended support in the field of MEP includes Structural analysis, Calculations, Product installation training, Pull out tests, Certifications, Consultancy service etc.



- **Technical Support & Training Services**
- Overall design configuration of MEP Support assembly to suit the site scenario
- Load Calculations, Support Selection and Detailed Design Drawings to ease the Installation
- Optimized BOQ preparation for MEP supports
- Design and selection of Seismic Restraints for MEP system in accordance with code provisions
- Selection of Anti-Vibration products for MEP equipment's and services
- Product Training, Information Webinars & Installation Guidance (In-House & Out-House)
- Technical Seminars & tutorials for Skill enhancement at Site
- Pull Out Tests for Anchor Bolts
- On time Delivery
- Delivery with supporting documents – Packing list, COO & Test Certificates
- Branded Products
- Quality products – UL Listed / FM Approved
- Material Safety Datasheets, Quality Policy & Health Safety Policy
- Reference Project Approvals

Pre Galvanized

Our most popular finish, generally used for internal applications. Pre Galvanized to ASTM A653 standard. Supplied with a zinc coating to a nominal coat of 20um.

Plain Oil

Plain oil to BS EN 10025 standards. Pickled & Oiled with a min. yield 280 n/mm². Excellent for welding and finishing on site. Ideal base for powder coating and other surface finishes.

Zinc Dichromate

Often used for clean rooms, data centres and other sterile environments.

Zinc Plated

An alternative to a Pre Galvanized product and generally used for internal applications. Again often used in sterile environments. Electroplated ASTM A633

Hot Dipped Galvanized

Processed in accordance with ASTM A123/A123M. It is an excellent solution for outdoor environments and has a unique metallurgical structure which gives outstanding resistance to mechanical damage in transport, erection and service.

Stainless Steel

Stainless steel to 1.4401 (316) standards. Excellent for marine applications, highly corrosive and extreme environmental conditions.

Powder Coated

A variety of powder coating finishes are available. Often used to provide a pleasing aesthetic finish such as shops and retail environments.

Deep Galvanised

Processed in accordance with ASTM A123/A123M. to a greater thickness than our standard Hot Dipped Galvanised, it is an excellent solution for outdoor and harsh environments.

MATERIALS

Channels are coldrolled from 1.5mm and 2 5mm steestrip and are available in :

PO	plain oiled
PG	pre - galvanized
HDG	hot dip galvanized
SS	stainless steel marine grade
ZP	electro zinc plated

Mild steel channels are rolled using material formed from BS EN 10025 with guaranteed yield 275N/mm² and minimum ultimate tensile strength of 370N/mm². Stainless steel channels are rolled usingvormed from BS EN10088-2 grade 1.4401 (Grade 316). Channel fittings are pressed from hot rolled, pickled and oiled mild steel plate, or strip steel mainly from grade S315MC OR grade S275 mild steel. Stainless steel fittings are available to EN10088-2 grade1.4401 (Grade 316).

FINISHES

Hot -Dip Galvanized

Channels are Hot-Dip Galvanized in accordance with ASTM A123 / A123M and chromate passivated. The minimum average Zinc Coating is as follows:

Cold Rolled From
1.5mm Steel - 45 microns
2.5mm Steel - 55 microns
Fittinas spun aalvanized - 45 microns

Pre-Galvanized

Pre-Galvanizing is to ASTM A653. SPECIAL COATINGS AND MATERIAL GRADES ARE AVAILABLE ON REQUEST:

Stainless Steel

- Stainless Steel 1.4301 (304)
- Stainless Steel 1.4401 (316)
- Cleaned (Pickled & Passivated) Applying a pickling process to stainless steel results in a clean product and it also removes any heat discolouration that has occurred in the welding process.

Deep Galvanized

A deep galvanized coating can be achieved when using steel containing a slightly higher proportion of silicon; for example Corten 'A' steel. Silicon bearing steels modify the chemistry of the galvanizing process, resulting in the zinc coating continuing to increase in thickness as long as the steel remains immersed in the zinc. Coatings up to two to three times as thick as the normal standard coating are practical to achieve.

PVC Coating

PVC coating is a thick coating with good anti-corrosion properties. It gives a generally good chemical resistance to most acidic and alkaline materials. It is not suitable for use with most solvent-based contaminants. PVC coating is suitable for application over hot-dip galvanized steel.

Zinc Electroplated

Channel nuts and bolts are zinc electroplated.

RANGE

Channels are available in plain or continuous slotted, in multiple channel combinations and all 2.5mm channels have serrated lips. Slots, 14mm wide x 28mm long or 11mm wide x 25mm long, are provided at 50mm nominal centres. Combination channels manufactured from Pre-Galvanized Steel are spot welded, whilst Hot-Dip Galvanised channels are continuously seam welded or spot welded as appropriate.

LENGTH

Standard channel lengths are 3m or 6m. Cut channel lengths can be supplied.

WEIGHTS & DIMENSIONS

Weights published in this catalogue for all materials are approximate shipping weights. All dimensions are subject to commercial tolerance variations.

TORQUE

The torque figures stated in this catalogue are based on using a properly calibrated torque wrench with a clean, dry (non-lubricated) channel fitting, bolt and nut. A lubricated bolt or nut can cause extremely high tension in the connection and may lead to bolt failure. It must be noted that the accuracy of commercial torque wrenches varies widely and it is the responsibility of the installer to ensure that proper bolt torque has been achieved.

PERFORMANCE

It should not be assumed that the performance of a stainless steel product is similar to that of its mild steel counterpart. Consult your local service centre for further information.

FITTING APPLICATION

All part drawings illustrate only one application of each fitting. In most cases, many other applications are possible. Load values are based on use of a Channel nut and M12 bolt unless specified otherwise.

While effort has been made to ensure the accuracy of the information contained in this catalogue at the time of publication, we cannot accept responsibility for inaccuracies resulting from undetected errors or omissions.

STANDARDS

The standard requires that products are stamped with this is, as it should be, stamped into the Channel to ensure that you can clearly identify our product over the inferior product that is creeping into the market place.

The engraving should also be clearly visible at all times, even when the product has under gone further finishing treatments i.e. Hot Dip Galvanised, Epoxy Coating.

Contractors and distributors should be aware of cheap imported and non-standard products that have removable or no product marking at all, as this is not within the Standard.



Product Range

1. Pipe clamps and supports
2. Pipe clamps for insulated pipes
3. Channel fixing system
4. Channel accessories and fittings
5. Fasteners
6. Metal framing
7. Anti vibration system
8. Seismic cable restrained system

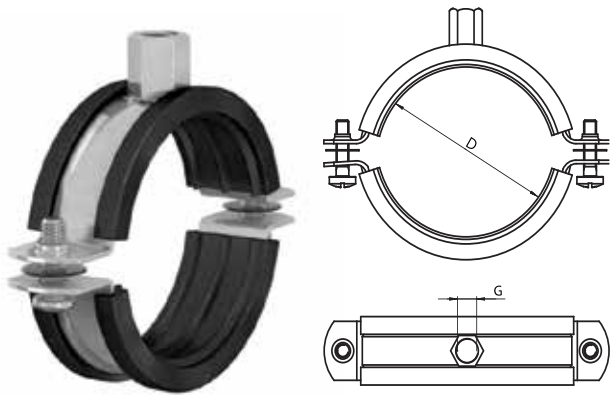




Pipe clamps and supports

1. Pipe clamps and supports

Lined Split Clamp
Plain Split Clamp
Sprinkler Clamp
Clevis Hanger
Riser Clamp
U Bolt
U-Strap
Girder Clamp
Adjustable Roller Hanger
Pipe Roller
Pipe Roller Chair
Roller Stand



Description

- Lock bolts with combi cross recessed head.
- For horizontal and vertical applications.
- Profiled for extra strength.

Material

- Mild Steel, Stainless Steel, Aluminum, other materials on request.

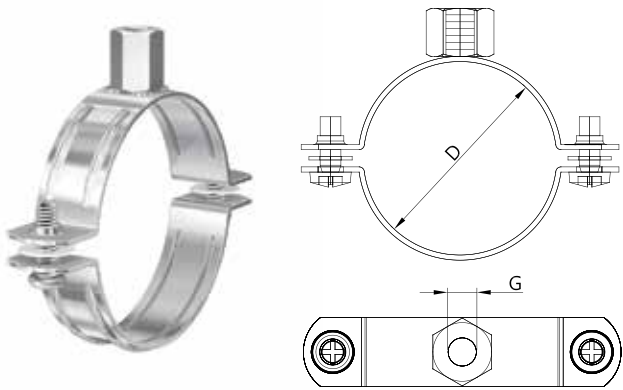
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.
- Temperature resistance from - 20 °C to +100 °C.
- Noise reduction up to 18 dB (A)

Technical Data

Item	Article Number	Pipe diameter D (Inch)	Pipe diameter D (mm)	Pipe Outside dia (mm)	Clamping Range D(mm)	Thread G	Side Screw size(mm)	Max.Load (N)
SLSC 18	3110018	3/8"	DN10	17.1	15-19	M8/M10	M6	1500
SLSC 22	3110022	1/2"	DN15	21.3	20-25	M8/M10	M6	1500
SLSC 28	3110028	3/4"	DN20	26.7	26-30	M8/M10	M6	1500
SLSC 35	3110035	1"	DN25	33.4	32-36	M8/M10	M6	1500
SLSC 40	3110040	1 1/4"	DN32	42.1	38-43	M8/M10	M6	1500
SLSC 48	3110048	1 1/2"	DN40	48.2	47-51	M8/M10	M6	1500
SLSC 54	3110054	-	-	54.0	53-58	M8/M10	M6	1500
SLSC 60	3110060	2"	DN50	60.3	60-64	M8/M10	M6	1500
SLSC 63	3110063	-	-	63.0	63-66	M8/M10	M6	2000
SLSC 70	3110070	-	-	70.0	68-72	M8/M10	M6	2000
SLSC 75	3110075	2 1/2"	DN65	73.0	74-80	M8/M10	M6	2000
SLSC 83	3110083	-	-	83.0	81-86	M8/M10	M6	2000
SLSC 90	3110090	3"	DN80	88.9	87-92	M8/M10	M6	2000
SLSC 100	3110100	3 1/2"	DN90	101.6	99-105	M8/M10	M6	2000
SLSC 110	3110110	-	-	110.0	107-112	M8/M10	M6	2000
SLSC 115	3110115	4"	DN100	114.3	113-118	M8/M10	M6	2500
SLSC 125	3110125	-	-	125.0	125-130	M8/M10	M6	2500
SLSC 133	3110133	-	-	133.0	131-137	M8/M10	M6	2500
SLSC 140	3110140	5"	DN125	141.3	138-142	M8/M10	M6	2500
SLSC 150	3110150	-	-	150.0	148-153	M8/M10	M6	2500
SLSC 160	3110160	-	-	160.0	159-166	M8/M10	M6	2500
SLSC 168	3110168	6"	DN150	168.3	168-172	M8/M10	M6	2500
SLSC 200	3110200	-	-	200.0	200-212	M8/M10	M8	3000
SLSC 220	3110220	8"	DN200	219.1	215-220	M8/M10	M8	3000
SLSC 250	3110250	-	-	250.0	249	M8/M10	M8	3000
SLSC 315	3110315	-	-	315.0	313-318	M8/M10	M8	3000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Description

- Lock bolts with combi cross recessed head.
- For horizontal and vertical applications.
- Profiled for extra strength.

Material

- Mild Steel, Stainless Steel, Aluminum, other materials on request.

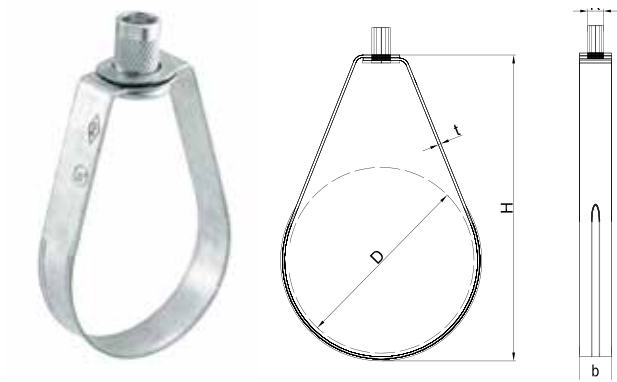
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article Number	Pipe diameter D (Inch)	Pipe diameter D (mm)	Pipe Outside dia (mm)	Clamping Range D(mm)	Thread G	Side Screw size(mm)	Max. Load (N)
SPSC 18	3130018	3/8"	DN10	17.1	15-19	M8/M10	M6	1500
SPSC 22	3130022	1/2"	DN15	21.3	20-25	M8/M10	M6	1500
SPSC 28	3130028	3/4"	DN20	26.7	26-30	M8/M10	M6	1500
SPSC 35	3130035	1"	DN25	33.4	32-36	M8/M10	M6	1500
SPSC 40	3130040	1 1/4"	DN32	42.1	38-43	M8/M10	M6	1500
SPSC 48	3130048	1 1/2"	DN40	48.2	47-51	M8/M10	M6	1500
SPSC 54	3130054	-	-	54.0	53-58	M8/M10	M6	1500
SPSC 60	3130060	2"	DN50	60.3	60-64	M8/M10	M6	1500
SPSC 63	3130063	-	-	63.0	63-66	M8/M10	M6	2000
SPSC 70	3130070	-	-	70.0	68-72	M8/M10	M6	2000
SPSC 75	3130075	2 1/2"	DN65	73.0	74-80	M8/M10	M6	2000
SPSC 83	3130083	-	-	83.0	81-86	M8/M10	M6	2000
SPSC 90	3130090	3"	DN80	88.9	87-92	M8/M10	M6	2000
SPSC 100	3130100	3 1/2"	DN90	101.6	99-105	M8/M10	M6	2000
SPSC 110	3130110	-	-	110.0	107-112	M8/M10	M6	2000
SPSC 115	3130115	4"	DN100	114.3	113-118	M8/M10	M6	2500
SPSC 125	3130125	-	-	125.0	125-130	M8/M10	M6	2500
SPSC 133	3130133	-	-	133.0	131-137	M8/M10	M6	2500
SPSC 140	3130140	5"	DN125	141.3	138-142	M8/M10	M6	2500
SPSC 150	3130150	-	-	150.0	148-153	M8/M10	M6	2500
SPSC 160	3130160	-	-	160.0	159-166	M8/M10	M6	2500
SPSC 168	3130168	6"	DN150	168.3	168-172	M8/M10	M6	2500
SPSC 200	3130200	-	-	200.0	200-212	M8/M10	M8	3000
SPSC 220	3130220	8"	DN200	219.1	215-220	M8/M10	M8	3000
SPSC 250	3130250	-	-	250.0	249	M8/M10	M8	3000
SPSC 315	3130315	-	-	315.0	313-318	M8/M10	M8	3000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Technical Data

Item	Article Number	Pipe diameter D (Inch)	Pipe diameter D (mm)	Height H (mm)	Width b (mm)	Roadsize R	Thickness t (mm)	Max. Load (N)
SSC 1/2	3140022	½	22.0	54	20	M10	1.5	3000
SSC 3/4	3140028	¾	28.0	60	20	M10	1.5	3000
SSC1	3140035	1	35.0	69	20	M10	1.5	3000
SSC 1 1/4	3140040	1¼	42.0	78	20	M10	1.5	3000
SSC 1 1/2	3140048	1½	48.0	85	20	M10	1.5	3000
SSC 2	3140060	2	60.0	102	20	M10	1.5	3000
SSC 2 1/2	3140075	2½	73	118	32	M10	2.0	4500
SSC 3	3140090	3	89.0	114	32	M10	2.0	4500
SSC 4	3140115	4	115	178	32	M10	2.5	5500
SSC 5	3140140	5	140.0	220	40	M12	2.5	6500
SSC 6	3140168	6	168	262	40	M12	3.0	7500
SSC 8	3140219	8	219.0	305	50	M12	3.0	9000
SSC 10	3140273	10	273.0	350	50	M12	3.0	9000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request

Description

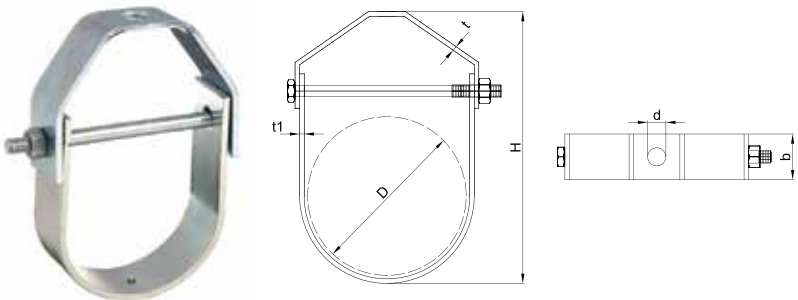
- For use in fire fighting and sprinkler installations.
- Easy to install and adjust, without tools.
- High load capacity due to one piece design.
- Knurled swivel nut to adjust vertical pipe alignment during and after installation.

Material

- Mild Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.
- Comply to meet MSS Standard SP 58 type 10 and SP 69.



Technical Data

Item	Article Number	Pipe diameter D (Inch)	Pipe diameter D (mm)	Height H (mm)	Width b (mm)	Hole size d (mm)	Thickness t (mm)	Thickness t1 (mm)	Bolt size d (mm)	Max. Load (N)
SCH ½	3170022	½	22	70	25	10	3	3	M8 x 60 mm	4000
SCH ¾	3170028	¾	28	76	25	10	3	3	M8 x 68 mm	4000
SCH 1	3170035	1	35	82	25	10	3	3	M8 x 78 mm	4000
SCH 1¼	3170040	1¼	42	92	25	10	3	3	M8 x 82 mm	4000
SCH 1½	3170048	1½	48	100	25	10	3	3	M8 x 88 mm	4000
SCH 2	3170060	2	60	117	25	10	3	3	M10 x 110 mm	4000
SCH 2½	3170075	2½	73	146	25	10	4	4	M10 x 140 mm	6500
SCH 3	3170090	3	89	155	25	10	4	4	M10 x 155 mm	6500
SCH 4	3170115	4	115	198	32	10	6	6	M12 x 195 mm	8000
SCH 5	3170140	5	140	232	32	12	6	6	M12 x 225 mm	8000
SCH 6	3170168	6	168	266	40	12	5	6	M12 x 275 mm	11000
SCH 8	3170219	8	219	338	40	12	5	6	M16 x 360 mm	11000
SCH 10	3170273	10	273	419	40	16	6	6	M20 x 420 mm	11000
SCH 12	3170323	12	323	490	50	20	6	10	M20 x 455 mm	15000
SCH 14	3170355	14	355	556	50	20	6	10	M24 x 510 mm	15000
SCH 16	3170406	16	406	610	65	24	6	12	M24 x 555 mm	17500
SCH 18	3170457	18	457	675	65	24	6	12	M24 x 610 mm	17500
SCH 20	3170508	20	508	715	75	30	10	12	M24 x 710 mm	22000
SCH 24	3170610	24	610	850	75	30	10	16	M24 x 890 mm	27000
SCH 30	3170755	30	755	995	75	30	10	20	M10 x 125 mm	30000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request

Description

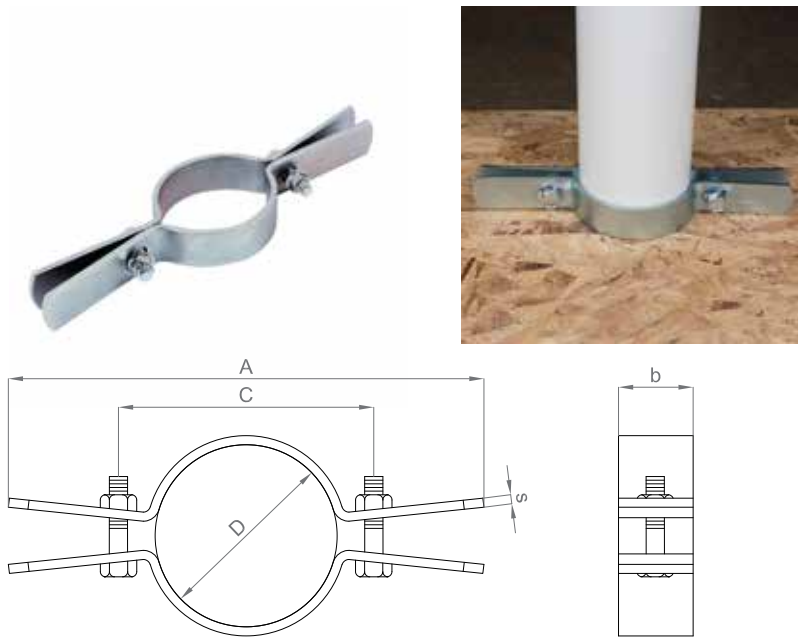
- Recommended for the suspension of insulated and non- insulated pipe lines.
- Clevis bottom pivots to allow pipe to be fed from either direction
- Conforms with Manufacturers Standardization Society(MSS) SP-58 (Type 1)

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.
- Designed to meet MSS standard SP-58, type 1 and SP-69



Description

- Designed to act as a rigid support or guide for vertical pipes.
- Recommended for suspending vertical steel pipe risers
- Conforms with Manufacturers Standardization Society (MSS) SP-58 (Type 8)

Material

- Steel, other materials on request.

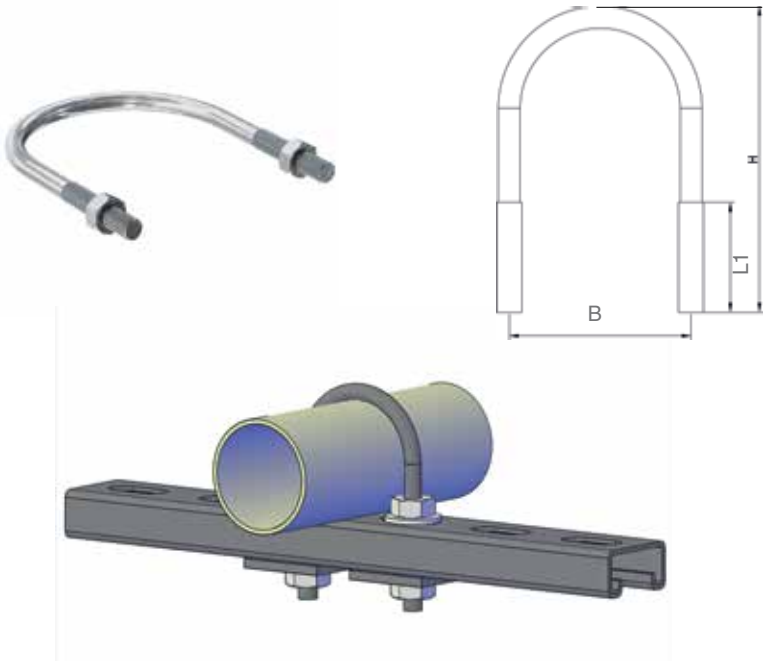
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.
- Designed to meet MSS Standard SP-58-2002, type 8 and SP-69.

Technical Data

Item	Article Number	Pipe Size (mm)	Pipe Size (Inch)	Pipe Outer dia (mm)	Length A (mm)	Length C (mm)	b x s (mm)	Hole Size (mm)	Max. Load (N)
SRC 1/2"	3200022	DN15	1/2"	21.3	216	59	25 x 5	11	4000
SRC 3/4"	3200028	DN20	3/4"	26.7	227	68	25 x 5	11	4000
SRC 1"	3200035	DN25	1"	33.4	227	71	25 x 5	11	4000
SRC 1 1/4"	3200040	DN32	1 1/4"	42.1	240	83	25 x 5	11	4000
SRC 1 1/2"	3200048	DN40	1 1/2"	48.2	251	96	25 x 5	11	4000
SRC 2"	3200060	DN50	2"	60.3	260	106	25 x 5	11	4000
SRC 2 1/2"	3200075	DN65	2 1/2"	73.0	280	124	25 x 6	11	6500
SRC 3"	3200090	DN80	3"	88.9	298	140	25 x 6	11	6500
SRC 4"	3200115	DN100	4"	114.3	321	165	25 x 6	13	8000
SRC 5"	3200140	DN125	5"	141.3	330	168	40 x 6	13	8000
SRC 6"	3200168	DN150	6"	168.3	368	210	40 x 6	13	11000
SRC 8"	3200219	DN200	8"	219.1	406	244	40 x 10	17	11000
SRC 10"	3200273	DN250	10"	273.1	464	464	50 x 10	17	15000
SRC 12"	3200323	DN300	12"	323.8	524	371	50 x 12	17	15000
SRC 14"	3200373	DN350	14"	355.6	581	435	50 x 12	17	17500
SRC 16"	3200406	DN400	16"	406.4	622	464	50 x 12	17	17500
SRC 18"	3200457	DN450	18"	457.2	686	533	50 x 12	21	17500
SRC 20"	3200508	DN500	20"	508.0	508	600	50 x 12	21	22000
SRC 24"	3200610	DN600	24"	609.6	850	700	50 x 12	21	27000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Description

- For direct installation of piping onto steel structures
- Suitable for sprinkler system
 - suitable for push-through-assembling into profile rails
 - should not be used as fixpoint without required measures

Material

- Steel, other materials on request.

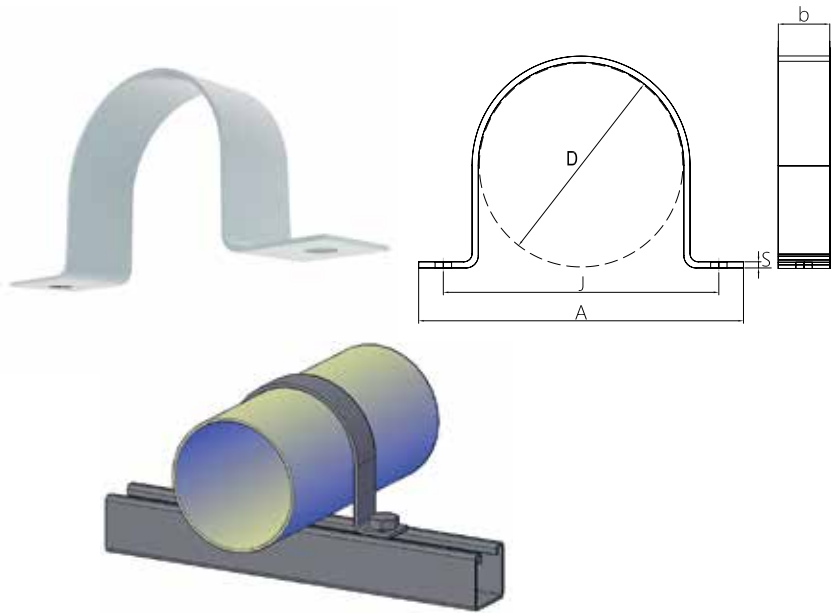
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.
- Designed to meet MSS Standard SP-58, type 24 and SP-69.

Technical Data

Item	Article Number	Pipe outer dia (mm)	Pipe Size (Inch)	Thread Size (mm)	Width B (mm)	Length H (mm)	Length L 1 (mm)
SUB 22 MM	211102210	22	1/2"	M 10	32	65	50
SUB 28 MM	211102810	28	3/4"	M 10	38	77	50
SUB 35 MM	211103510	35	1"	M 10	45	85	50
SUB 42 MM	211104210	42	1 1/4"	M 10	53	93	50
SUB 48 MM	211104810	48	1 1/2"	M 10	60	100	50
SUB 60 MM	211106010	60	2"	M 10	71	110	50
SUB 75 MM	211107512	75	2 1/2"	M 12	90	127	50
SUB 90 MM	211109012	90	3"	M 12	104	140	50
SUB 115 MM	211111512	115	4"	M 12	128	165	50
SUB 140 MM	211114012	140	5"	M 12	154	190	50
SUB 168 MM	211116812	168	6"	M 12	182	220	50
SUB 219 MM	211121916	219	8"	M 16	238	295	75
SUB 273 MM	211127320	273	10"	M 20	295	370	100
SUB 324 MM	211132420	324	12"	M 20	346	420	100
SUB 356 MM	211135620	356	14"	M 20	378	455	100
SUB 406 MM	211135620	406	16"	M 20	428	505	100
SUB 457 MM	211145724	457	18"	M 24	483	555	100
SUB 508 MM	211150824	508	20"	M 24	534	605	100
SUB 610 MM	211161024	610	24"	M 24	636	710	100

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request
Sizes of U bolts can be modified to be used with rubber insert supports.
Alternate rod sizes for different pipe sizes available upon request.
Selection is prepared for standard steel pipe sizes only, U bolts sizes can be selected for different pipe sizes upon request.



Description

- Designed to steady a horizontal run of pipe against a perpendicular section of strut channel or any other flat surface.
- Can be used with Rubber Support Inserts.
- U-Strap with Channel support acts as a guide support.

Material

- Steel, other materials on request.

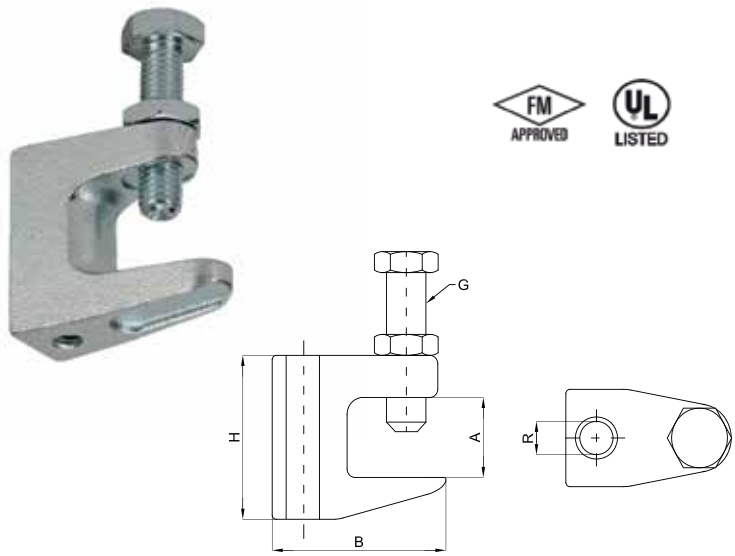
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.
- Designed to meet MSS Standard SP-58, type 26 and SP-69.

Technical Data

Item	Article Number	Pipe outer dia (mm)	Pipe Size (Inch)	Bolt Size (M)	S X b (mm)	J (mm)	A (mm)
SUS 1/2"	2125022	22	1/2"	M8	2 x 25	54	32
SUS 3/4"	2125028	28	3/4"	M8	2 x 25	60	38
SUS 1"	2125035	35	1"	M8	2 x 25	66	45
SUS 1 1/4"	2125042	42	1 1/4"	M8	2 x 25	75	53
SUS 1 1/2"	2125048	48	1 1/2"	M8	2 x 25	81	60
SUS 54mm	2125054	54	54mm	M8	2 x 25	92	119
SUS 2"	2125060	60	2"	M8	2 x 25	98	125
SUS 67mm	2125067	67	67mm	M8	2 x 25	105	132
SUS 2 1/2"	2125075	75	2 1/2"	M8	3 x 25	136	172
SUS 82mm	2125082	82	82mm	M8	3 x 25	144	180
SUS 3"	2125090	90	3"	M8	3 x 25	152	188
SUS 100mm	2125100	100	100mm	M8	3 x 25	162	198
SUS 108mm	2125108	108	108mm	M8	3 x 25	170	206
SUS 4"	22125115	115	4"	M8	3 x 25	178	214
SUS 126mm	2125126	126	126mm	M 10	3 x 25	186	222
SUS 140mm	2125140	140	140mm	M 10	3 x 25	201	237
SUS 148mm	2125148	148	148mm	M 10	3 x 25	208	244
SUS 155mm	2125155	155	155mm	M 10	3 x 25	216	252
SUS 6"	2125168	168	6"	M 10	3 x 25	228	264
SUS 179mm	2125179	179	179mm	M 10	3 x 25	239	275
SUS 190mm	2125190	190	190mm	M 10	3 x 28	251	287
SUS 205mm	2125205	205	205mm	M 10	3 x 28	265	301
SUS 8"	2125219	219	8"	M 10	3 x 28	278	314
SUS 230mm	2125230	230	230mm	M 10	3 x 28	292	328

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request
Sizes of U-Strap can be modified to be used with rubber insert supports.
Selection is prepared for standard steel pipe sizes only, U-Strap sizes can be selected for different pipe sizes upon request.



Description

- For a solid fixing to steel connections up to 22mm flange thickness without welding or drilling.
- Recommended for use under roof installations with bar joist type construction, or for attachment to top flange of structural shapes
- For sprinkler systems, heating, ventilation and air conditioning, acoustic tubes and sanitary installations.
- Threaded with Cup Point (RS) according to EN ISO 4753 and lock nut.

Material

- Malleable Iron, ASTM A47 Grade 32510

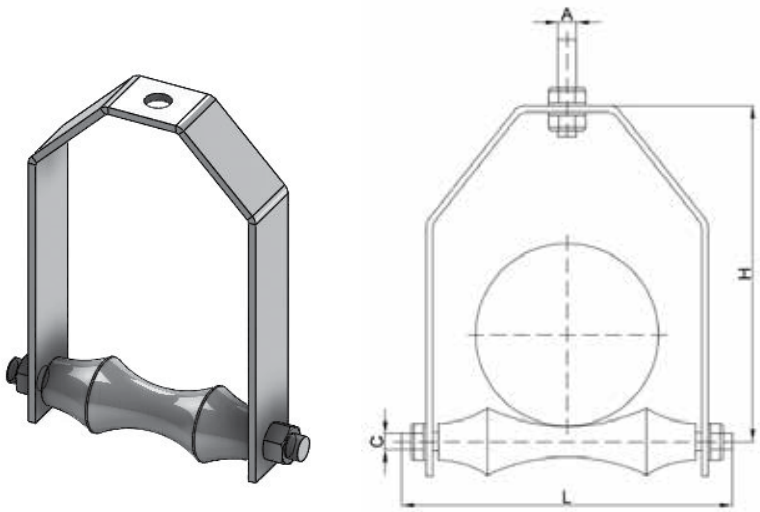
Standards & Properties

- Electro galvanized casting tolerance according to DIN 1684
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article Number	Clamping Range A (mm)	Thread size R	G	Length B (mm)	Length H (mm)	Max. Load (N)
SGC M8	48012	0 - 18	M8	M8	35	35	1200
SGC M10	48013	0 - 20	M10	M10	41	42	2500
SGC M12	48014	0 - 26	M12	M10	48	54	3500
SGC M16	48018	0 - 28	M16	M12	55	58	5500

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Description

- Pipe support designed for pipe lines where horizontal movement may take place due to expansion and contraction.
- Allows vertical adjustment up to 6".

Material

- Bracket : Steel
- Roller : Solid steel shaft

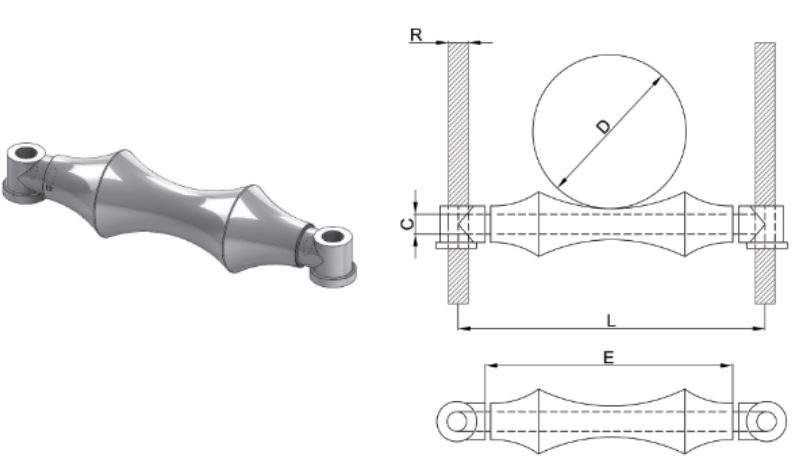
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Designed to meet MSS Standard SP-58-2002, type 43 and SP-69.

Technical Data

Item	Article Number	Pipe Size (mm)	Pipe Size (Inch)	Pipe Outer dia (mm)	Dimension A (mm)	Dimension C x L (mm)	Dimension H (mm)	Max. Load (N)
SARH 60	4100060	DN50	2"	60.3	M12	M12 X 115	105	2100
SARH 73	4100073	DN65	2 1/2"	73.0	M12	M12 X 125	125	2100
SARH 90	4100090	DN80	3"	88.9	M12	M12 X 145	140	2100
SARH 101	4100101	DN90	3 1/2"	101.6	M16	M12 X 160	155	2100
SARH 114	4100114	DN100	4"	114.3	M16	M12 X 175	170	2900
SARH 141	4100141	DN125	5"	141.3	M20	M12 X 200	200	5500
SARH 168	4100168	DN150	6"	168.3	M20	M20 X 245	230	5500
SARH 219	4100219	DN200	8"	219.1	M20	M24 X 305	290	6000
SARH 273	4100273	DN250	10"	273.1	M20	M24 X 365	350	6000
SARH 323	4100323	DN300	12"	323.8	M24	M24 X 425	400	7500
SARH 356	4100356	DN350	14"	355.6	M24	M24 X 460	445	7500
SARH 406	4100406	DN400	16"	406.4	M24	M24 X 515	500	7500
SARH 457	4100457	DN450	18"	457.2	M30	M33 X 580	555	7500
SARH 508	4100508	DN500	20"	508.2	M30	M33 X 630	610	9000
SARH 610	4100610	DN600	24"	609.6	M30	M52 X 780	725	11000
SARH 661	4100661	DN650	26"	661.0	M36	M52 X 845	785	11000
SARH 712	4100712	DN700	28"	712.0	M36	M52 X 895	840	11000
SARH 755	4100755	DN750	30"	755.0	M36	M52 X 940	885	11000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Description

- Pipe support designed for pipe lines where horizontal movement may take place due to expansion and contraction.
- The use of a double rod design offers increased support for heavier loads.
- The standard installation is designed to accommodate a single pipe,
- but the design allows for the installation of two pipes in a double banking arrangement. In such instances, it is essential to verify that the combined weight of the installation does not exceed the maximum load capacity specified in the table for the rollers.
- Insulation protection products such as Rubber Support Inserts, Insulation Protection Shields and Pipe Covering Protection Saddles can be used with Pipe Rollers.

Material

- Bracket : Steel
- Roller : Solid steel shaft

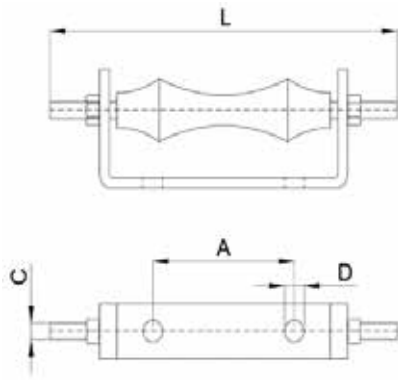
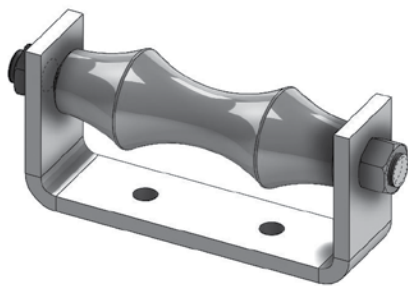
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Designed to meet MSS Standard SP-58-2002, type 44 and SP-69.

Technical Data

Item	Article Number	Pipe Size (mm)	Pipe Size (Inch)	Pipe Outer dia (mm)	Dimension E (mm)	Dimension C x L (mm)	Dimension R (mm)	Max. Load (N)
SPR 60	4500060	DN50	2"	60.3	70	M12 X 115	M12	3500
SPR 73	4500073	DN65	2 1/2"	73.0	83	M12 X 125	M12	3500
SPR 90	4500090	DN80	3"	88.9	99	M12 X 145	M12	3500
SPR 101	4500101	DN90	3 1/2"	101.6	112	M12 X 160	M12	3500
SPR 114	4500114	DN100	4"	114.3	125	M12 X 175	M12	5000
SPR 141	4500141	DN125	5"	141.3	152	M12 X 200	M12	5000
SPR 168	4500168	DN150	6"	168.3	179	M20 X 245	M16	5000
SPR 219	4500219	DN200	8"	219.1	231	M24 X 305	M16	5000
SPR 273	4500273	DN250	10"	273.1	285	M24 X 365	M20	12500
SPR 323	4500323	DN300	12"	323.8	336	M24 X 425	M20	12500
SPR 356	4500356	DN350	14"	355.6	368	M24 X 460	M24	15000
SPR 406	4500406	DN400	16"	406.4	419	M24 X 515	M24	20000
SPR 457	4500457	DN450	18"	457.2	470	M33 X 580	M32	35000
SPR 508	4500508	DN500	20"	508.2	520	M33 X 630	M32	35000
SPR 610	4500610	DN600	24"	609.6	626	M52 X 780	M36	50000
SPR 661	4500661	DN650	26"	661.0	679	M52 X 845	M36	50000
SPR 712	4500712	DN700	28"	712.0	732	M52 X 895	M36	50000
SPR 755	4500755	DN750	30"	755.0	778	M52 X 940	M36	50000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Description

- Pipe support designed for pipe lines where horizontal movement may take place due to expansion and contraction.
- Insulation protection products such as Rubber Support Inserts, Insulation Protection Shields and Pipe Covering Protection Saddles can be used with Pipe Rollers.

Material

- Bracket : Mild Steel
- Roller : MILD STEEL / CAST IRON

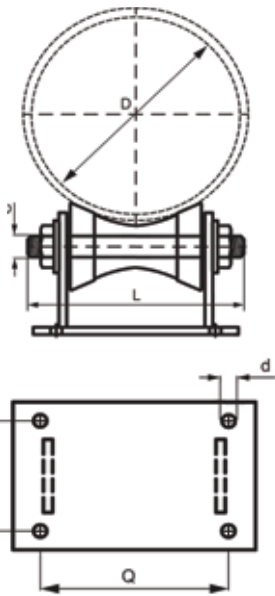
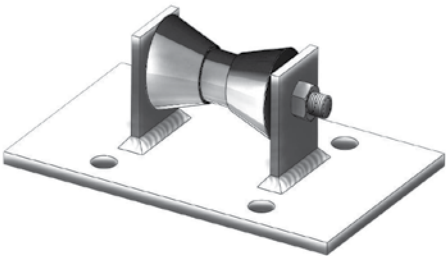
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Designed to meet MSS Standard SP-58-2002, type 44 and SP-69.

Technical Data

Item	Article Number	Pipe Size (mm)	Pipe Size (Inch)	Pipe Outer dia (mm)	Dimension E (mm)	Dimension C x L (mm)	Dimension R (mm)	Max. Load (N)
SRC 34	4200034	DN25	1"	33.4	20	M10 X 90	M12 X 50	4000
SRC 60	4200060	DN50	2"	60.3	35	M12 X 115	M12 X 50	6700
SRC 73	4200073	DN65	2 1/2"	73.0	35	M12 X 125	M12 X 50	10000
SRC 90	4200090	DN80	3"	88.9	50	M12 X 145	M12 X 50	13800
SRC 101	4200101	DN90	3 1/2"	101.6	50	M12 X 160	M12 X 50	17300
SRC 114	4200114	DN100	4"	114.3	50	M12 X 175	M16 X 75	21100
SRC 141	4200141	DN125	5"	141.3	75	M12 X 200	M16 X 75	30400
SRC 168	4200168	DN150	6"	168.3	80	M20 X 245	M16 X 75	34700
SRC 219	4200219	DN200	8"	219.1	85	M24 X 305	M20 X 100	34700
SRC 273	4200273	DN250	10"	273.1	130	M24 X 365	M20 X 100	42900
SRC 323	4200323	DN300	12"	323.8	140	M24 X 425	M20 X 100	53400
SRC 356	4200356	DN350	14"	355.6	165	M24 X 460	M24 X 100	53400
SRC 406	4200406	DN400	16"	406.4	210	M24 X 515	M24 X 100	53400
SRC 457	4200457	DN450	18"	457.2	235	M33 X 580	M24 X 100	62300
SRC 508	4200508	DN500	20"	508.2	260	M33 X 630	M24 X 100	71100
SRC 610	4200610	DN600	24"	609.6	310	M52 X 780	M24 X 100	71100
SRC 661	4200661	DN650	26"	661.0	335	M52 X 845	M24 X 100	76000
SRC 712	4200712	DN700	28"	712.0	360	M52 X 895	M24 X 100	76000
SRC 755	4200755	DN750	30"	755.0	385	M52 X 940	M24 X 100	80000

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Description

- Pipe support designed for pipe lines where horizontal movement may take place due to expansion and contraction.

Material

- Bracket : Mild Steel
- Roller : MILD STEEL / CAST IRON

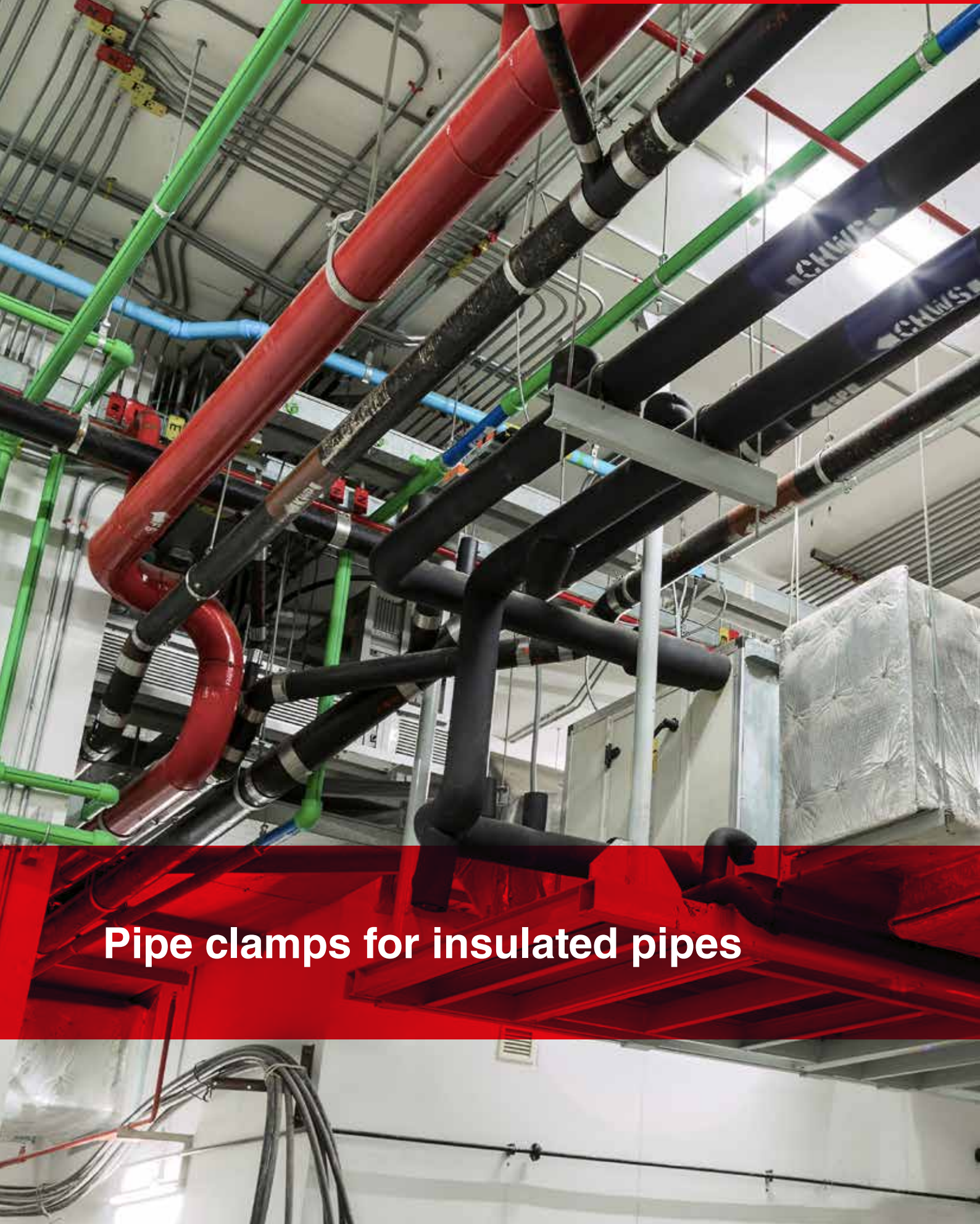
Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.

Technical Data

Item	Article Number	Pipe Size (mm)	Pipe Size (inch)	Pipe Outer Dia. (mm)	Dimension P (mm)	Dimension Q (mm)	Dimension C x L (mm)	Bolt Dia. (mm)	Max. Load (N)
SRS 60	4300060	DN50	2"	60.3	100	40.0	M12 X 80	16.0	5500
SRS 73	4300073	DN65	2 1/2"	73.0	100	48.0	M12 X 90	16.0	5500
SRS 90	4300090	DN80	3"	88.9	100	55.0	M12 X 95	16.0	5500
SRS 101	4300101	DN90	3 1/2"	101.6	100	61.0	M12 X 100	16.0	T5500
SRS 114	4300114	DN100	4"	114.3	115	72.0	M12 X 115	16.0	13000
SRS 141	4300141	DN125	5"	141.3	115	85.0	M12 X 130	16.0	13000
SRS 168	4300168	DN150	6"	168.3	125	100.0	M20 X 160	16.0	13000
SRS 219	4300219	DN200	8"	219.1	130	125.0	M24 X 190	20.0	17500
SRS 273	4300273	DN250	10"	273.1	130	155.0	M24 X 225	20.0	17500
SRS 323	4300323	DN300	12"	323.8	130	180.0	M24 X 260	20.0	35000
SRS 356	4300356	DN350	14"	355.6	130	197.0	M24 X 275	20.0	35000
SRS 406	4300406	DN400	16"	406.4	165	220.0	M24 X 300	24.0	52500
SRS 457	4300457	DN450	18"	457.2	165	250.0	M33 X 345	24.0	52500
SRS 508	4300508	DN500	20"	508.2	165	275.0	M33 X 370	24.0	52500
SRS 610	4300610	DN600	24"	609.6	190	330.0	M52 X 480	24.0	65000
SRS 661	4300661	DN650	26"	661.0	200	355.0	M52 X 500	30.0	84500
SRS 712	4300712	DN700	28"	712.0	200	385.0	M52 X 530	30.0	84500
SRS 755	4300755	DN750	30"	755.0	200	405.0	M52 X 550	30.0	84500

Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Pipe clamps for insulated pipes

2. Pipe clamps for insulated pipes

Rubber support insert

Calcium silicate pipe insulation

Pipe protection shield

Pipe insulation saddle

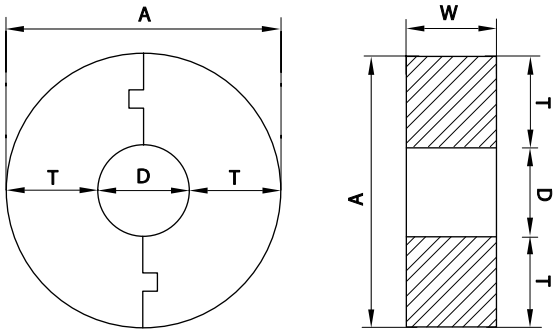


Description

- Rubber support Inserts are designed for use at the support points of insulated pipes for preventing the crushing of insulation
- They exhibit a high load-bearing capacity, eliminating the risk of compression or disintegration due to the weight of the pipe.
- Resistant to deterioration and distortion over time, even when exposed to moisture

Standards & Properties

- Density:- 1100 - 1600 kg/m³
- Thermal Conductivity :- 0.16 w/m Temperature
- Resistance from -20 °C to + 110 °C
- Designed to meet BS3974-1 : 1974



Technical Data

Nominal Pipe Size (Inch)	Pipe OD (mm)	Width W (mm)	T= 1/2" (13mm)		T= 3/4" (19mm)		T= 1" (25mm)		T= 1 1/4" (32mm)		
			Article Number	A (mm)	Article Number	A (mm)	Article Number	A (mm)	Article Number	A (mm)	
1/2"	DN15	21.3	25	66121325	47	66121925	59	66122525	71	66123225	85
3/4"	DN20	26.7	25	66341325	53	66341925	65	66342525	77	66343225	91
1"	DN25	33.4	25	66111325	59	66111925	71	6612525	83	6613225	97
1 1/4"	DN32	42.1	25	661141325	68	661141925	80	661142525	92	661143225	106
1 1/2"	DN40	48.2	25	661121325	74	661121925	86	661122525	98	661123225	112
2"	DN50	60.3	25	6621325	86	6621925	98	6622525	110	6623225	124
2 1/2"	DN65	73.0	38	662121338	99	662121938	111	662122538	123	662123238	137
3"	DN80	88.9	38	6631338	115	6631938	127	6632538	139	6633238	153
4"	DN100	114.3	38	6641338	140	6641938	152	6642538	164	6643238	178
5"	DN125	141.3	38	6651338	167	6651938	179	6652538	191	6653238	205
6"	DN150	168.3	50	6661350	194	6661950	206	6662550	218	6663250	232
8"	DN200	219.1	50	6681350	245	6681950	257	6682550	269	6683250	283
10"	DN250	273.1	50	66101350	299	66101950	311	66102550	323	66103250	337
12"	DN300	323.8	50	66121350	350	66121950	362	66122550	374	66123250	388
14"	DN350	355.6	50	66141350	382	66141950	394	66142550	406	66143250	420
16"	DN400	406.4	50	66161350	432	66161950	444	66162550	456	66163250	470
18"	DN450	457.2	50	66181350	483	66181950	495	66182550	507	66183250	521
20"	DN500	508.0	50	66201350	534	66201950	546	66202550	558	66203250	572
24"	DN600	609.6	50	66241350	636	66241950	648	66242550	660	66243250	674

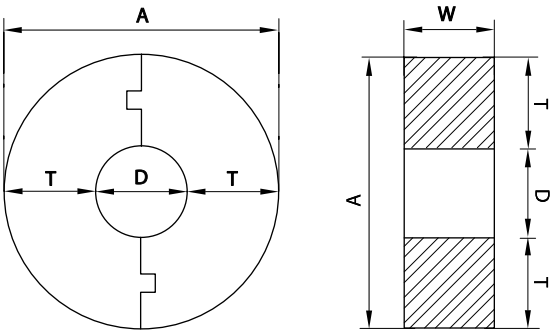


Description

- Rubber support Inserts are designed for use at the support points of insulated pipes for preventing the crushing of insulation
- They exhibit a high load-bearing capacity, eliminating the risk of compression or disintegration due to the weight of the pipe.
- Resistant to deterioration and distortion over time, even when exposed to moisture

Standards & Properties

- Density:- 1100 - 1600 kg/m³
- Thermal Conductivity :- 0.16 w/m Temperature
- Resistance from -20 °C to + 110 °C
- Designed to meet BS3974-1 : 1974



Technical Data

Nominal Pipe Size (Inch)	Pipe OD (mm)	Pipe OD D (mm)	Width W (mm)	T= 1/2" (38mm)		T= 2" (50mm)		T= 3" (75mm)	
				Article Number	A (mm)	Article Number	A (mm)	Article number	A (mm)
1/2"	DN15	21.3	25	66123825	97	66125025	121	-	-
3/4	DN20	26.7	25	66343825	103	66345025	127	66347525	177
1"	DN25	33.4	25	66343825	109	6615025	133	6617525	183
1 1/4"	DN32	42.1	25	661143825	118	661145025	142	661147525	192
1 1/2"	DN40	48.2	25	661123825	124	661125025	148	661127525	198
2"	DN50	60.3	25	6623825	136	6625025	160	6627525	210
2 1/2"	DN65	73.0	38	662123838	149	662125038	173	662127538	223
3"	DN80	88.9	38	6633838	165	6635038	189	6637538	239
4"	DN100	114.3	38	6643838	190	6645038	214	6647538	264
5"	DN125	141.3	38	6653838	217	6655038	241	6657538	291
6"	DN150	168.3	50	6663850	244	6665050	268	6667550	318
8"	DN200	219.1	50	6683850	295	6685050	319	6687550	369
10"	DN250	273.1	50	66103850	349	66105050	373	66107550	423
12"	DN300	323.8	50	66123850	400	66125050	424	66127550	474
14"	DN350	355.6	50	66143850	432	66145050	456	66147550	506
16"	DN400	406.4	50	66163850	482	66165050	506	66167550	556
18"	DN450	457.2	50	66183850	533	66185050	557	66187550	607
20"	DN500	508.0	50	66203850	584	66205050	608	66207550	658
24"	DN600	609.6	50	66243850	686	66245050	710	66247550	760



Description

- Excellent thermal insulating properties, which helps maintain the desired temperature of chilled water within the pipes.
- Resistant to moisture and does not absorb water easily.
- Robust material that can withstand mechanical stress, compression, and vibration.
- Easy to install, and it can be cut and shaped to fit the specific requirements of the piping system.

Standards & Properties

- Product quality meets the ASTM and EN standards (CE mark)
- Excellent resistance to corrosion under insulation (according to ASTM C795 and ASTM C1617)

Technical Data

Nominal Pipe Size		D (mm)	B (mm)	T (Insert thickness in mm)			
(Inch)	(mm)			25	50	75	100
1/2"	DN15	21.3	600	SCSi1225	SCSi1250	SCSi1275	SCSi12100
3/4"	DN20	26.7	600	SCSi3425	SCSi3450	SCSi3475	SCSi34100
1"	DN25	33.4	600	SCSi125	SCSi150	SCSi175	SCSi1100
1 1/4"	DN32	42.1	600	SCSi11425	SCSi11450	SCSi11475	SCSi114100
1 1/2"	DN40	48.2	600	SCSi11225	SCSi11250	SCSi11275	SCSi112100
2"	DN50	60.3	600	SCSi225	SCSi250	SCSi275	SCSi2100
2 1/2"	DN65	73.0	600	SCSi21225	SCSi21250	SCSi21275	SCSi212100
3"	DN80	88.9	600	SCSi325	SCSi350	SCSi375	SCSi3100
3 1/2"	DN90	101.6	600	SCSi31225	SCSi31250	SCSi31275	SCSi312100
4"	DN100	114.3	600	SCSi425	SCSi450	SCSi475	SCSi4100
5"	DN125	141.3	600	SCSi525	SCSi550	SCSi575	SCSi5100
6"	DN150	168.3	600	SCSi625	SCSi650	SCSi675	SCSi6100
8"	DN200	219.1	600	SCSi825	SCSi850	SCSi875	SCSi8100
10"	DN250	273.1	600	SCSi1025	SCSi1050	SCSi1075	SCSi10100
12"	DN300	323.8	600	SCSi1225	SCSi1250	SCSi1275	SCSi12100
14"	DN350	355.6	600	SCSi1425	SCSi1450	SCSi1475	SCSi14100
16"	DN400	406.4	600	SCSi1625	SCSi1650	SCSi1675	SCSi16100
18"	DN450	457.2	600	SCSi1825	SCSi1850	SCSi1875	SCSi18100
20"	DN500	508.0	600	SCSi2025	SCSi2050	SCSi2075	SCSi20100

Note :
Different lengths and different thicknesses are also available upon request.

Technical Data

	Unit	ASTM Method	SCSi1275	SCSi12100
Density	lb/ft³	ASTM C302	15	13
compressive Strength	lb/in²	ASTM C165	100	220
Service Temperature	°F	ASTM C447	1200°	1200°
Thermal Conductivity - K @ 100 °F	(Btu.in.)/(hr.ft². °F)	ASTM C335	0.344	0.31
Closed Cell	Minimum %	—	Passes	Passes
Water Absorption	% by Volume	ASTM C1617	Passes	Passes
Water Vapor	perm inch	—	Passes	Passes
Dimensional Stability	% lin chg	—	—	—
Flame Spread	Flame Spread	ASTM E84	0/0	0/0

Note :
Different lengths and different thicknesses are also available upon request.

Technical Data

Item	Article Number	PipeSize (mm)	Pipe Size (Inch)	Pipe Outer Dia. (mm)	Length of Insulation Shield	Thickness of Insulation Shield S	Gauge	Insulation (mm)
SPS 34-25	440003425	DN25	1"	33.4	305	1.22	18	25
SPS 34-32	440003432	DN25	1"	33.4	305	1.22	18	32
SPS 34-50	440003450	DN25	1"	33.4	305	1.22	18	50
SPS 42-25	440004225	DN32	1 1/4"	42.1	305	1.22	18	25
SPS 42-32	440004232	DN32	1 1/4"	42.1	305	1.22	18	32
SPS 42-50	440004250	DN32	1 1/4"	42.1	305	1.22	18	50
SPS 48-25	440004825	DN40	1 1/2"	48.2	305	1.22	18	25
SPS 48-32	440004832	DN40	1 1/2"	48.2	305	1.22	18	32
SPS 48-50	440004850	DN40	1 1/2"	48.2	305	1.22	18	50
SPS 60-25	440006025	DN50	2"	60.3	305	1.22	18	25
SPS 60-32	440006032	DN50	2"	60.3	305	1.22	18	32
SPS 60-50	440006050	DN50	2"	60.3	305	1.22	18	50
SPS 73-25	440007325	DN65	2 1/2"	73.0	305	1.22	18	25
SPS 73-32	440007332	DN65	2 1/2"	73.0	305	1.22	18	32
SPS 73-50	440007350	DN65	2 1/2"	73.0	305	1.22	18	50
SPS 89-25	440008925	DN80	3"	88.9	305	1.22	18	25
SPS 89-32	440008932	DN80	3"	88.9	305	1.22	18	32
SPS 89-50	440008950	DN80	3"	88.9	305	1.22	18	50
SPS 114-25	440011425	D100	4"	114.3	305	1.22	18	25
SPS 114-32	440011432	D100	4"	114.3	305	1.22	18	32
SPS 114-50	440011450	D100	4"	114.3	305	1.22	18	50
SPS 141-25	440014125	DN125	5"	141.3	305	1.22	18	25
SPS 141-32	440014132	DN125	5"	141.3	305	1.22	18	32
SPS 141-50	440014150	DN125	5"	141.3	305	1.22	18	50
SPS 168-25	440016825	DN150	6"	168.3	305	1.22	18	25
SPS 168-32	440016832	DN150	6"	168.3	305	1.22	18	32
SPS 168-50	440016850	DN150	6"	168.3	305	1.22	18	50
SPS 219-25	440021925	DN200	8"	219.1	457	1.52	16	25
SPS 219-32	440021932	DN200	8"	219.1	457	1.52	16	32
SPS 219-50	440021950	DN200	8"	219.1	457	1.52	16	50
SPS 273-25	440027325	DN250	10"	273.1	457	1.52	16	25
SPS 273-32	440027332	DN250	10"	273.1	457	1.52	16	32
SPS 273-50	440027350	DN250	10"	273.1	457	1.52	16	50

Description

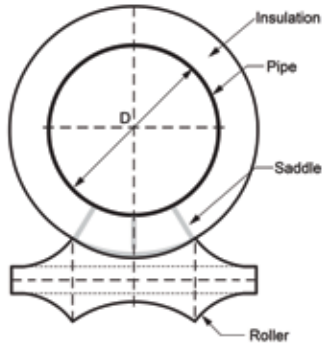
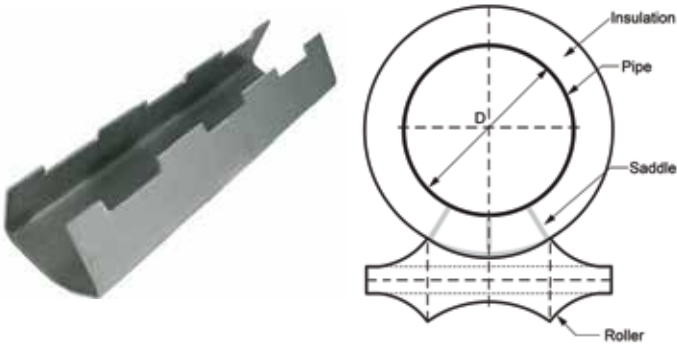
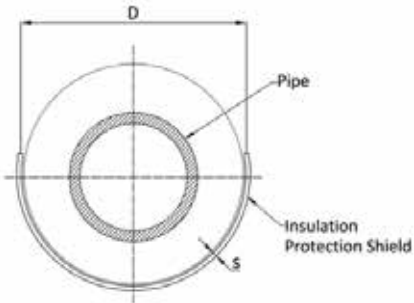
- Designed for outside of foam or fiberglass insulation on stationary pipe lines to prevent crushing of insulation without breaking the vapor barrier

Material

- Bracket : Mild Steel
- Roller : MILD STEEL / CAST IRON

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Designed to meet MSS Standard SP-58, and SP-69 (Type 40).



Description

- Recommended to be used with insulated pipes
- Designed to protect pipe insulation from crushing, typically used on high temperature pipe lines.
- Saddles are 300 mm long.

Material

- Steel

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Designed to meet MSS Standard SP-58-2002, type 39 and 39B

Technical Data

Item	Article number	PipeSize (mm)	PipeSize (Inch)	Pipe Outer Dia. (mm)	Insulation (mm)	Max. Load (N)
SIS 34-25	441003425	DN25	1"	33.4	25	3500.00
SIS 34-50	441003450	DN25	1"	33.4	50	3500.00
SIS 42-25	441004225	DN32	1 1/4"	42.1	25	3500.00
SIS 42-50	441004250	DN32	1 1/4"	42.1	50	3500.00
SIS 48-25	441004825	DN40	1 1/2"	48.2	25	3500.00
SIS 48-50	441004850	DN40	1 1/2"	48.2	50	3500.00
SIS 60-25	441006025	DN50	2"	60.3	25	3500.00
SIS 60-50	441006050	DN50	2"	60.3	50	3500.00
SIS 60-75	441006075	DN50	2"	60.3	75	3500.00
SIS 73-25	441007325	DN65	2 1/2"	73.0	25	6000.00
SIS 73-50	441007350	DN65	2 1/2"	73.0	50	6000.00
SIS 73-75	441007375	DN65	2 1/2"	73.0	75	6000.00
SIS 89-25	441008925	DN80	3"	88.9	25	6000.00
SIS 89-50	441008950	DN80	3"	88.9	50	6000.00
SIS 89-75	441008975	DN80	3"	88.9	75	6000.00
SIS 114-25	441011425	DN100	4"	114.3	25	6000.00
SIS 114-50	441011450	DN100	4"	114.3	50	6000.00
SIS 114-75	441011475	DN100	4"	114.3	75	6000.00
SIS 141-25	441014125	DN125	5"	141.3	25	9500.00
SIS 141-50	441014150	DN125	5"	141.3	50	9500.00
SIS 141-75	441014175	DN125	5"	141.3	75	9500.00
SIS 168-25	441016825	DN150	6"	168.3	25	9500.00
SIS 168-50	441016850	DN150	6"	168.3	50	9500.00
SIS 168-75	441016875	DN150	6"	168.3	75	9500.00
SIS 219-25	441021025	DN200	8"	219.1	25	9500.00
SIS 219-50	441021950	DN200	8"	219.1	50	9500.00
SIS 219-75	441021975	DN200	8"	219.1	75	9500.00
SIS 273-25	441027325	DN250	10"	219.1	25	12500.00
SIS 273-50	441027350	DN250	10"	273.1	50	12500.00
SIS 273-75	441027375	DN250	10"	273.1	75	12500.00



Channel fixing system

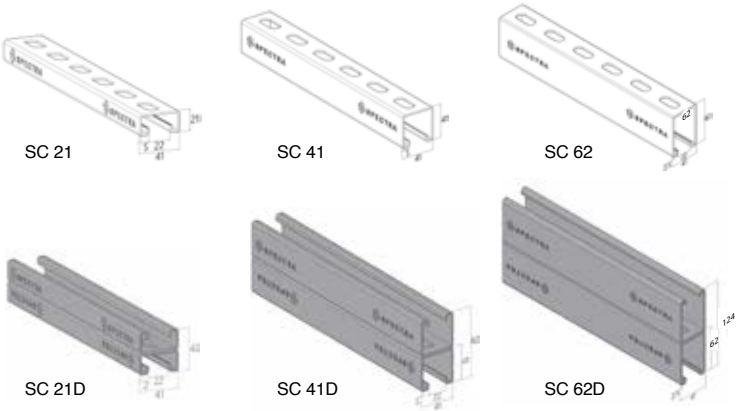
3. Channel fixing system

Slotted Channels

Cantilever Arm

3

Channel fixing system



Description

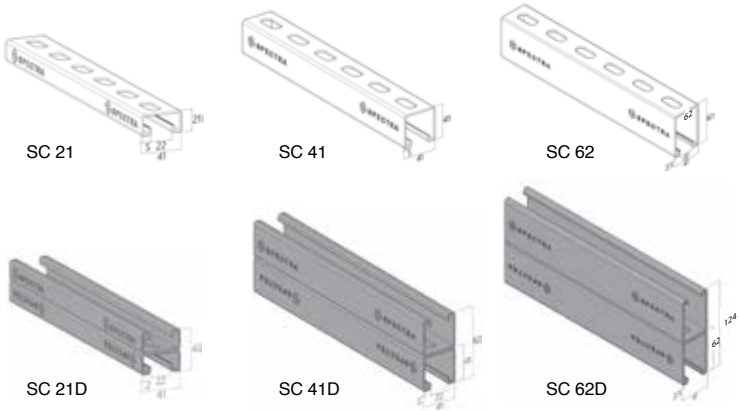
- Designed to carry the heaviest loads and provide the widest variety of applications
- Designed for trapeze supports, seismic bracing, ceiling grids, pipe,conduit, duct and cable tray supports, racks, and other general framing.
- With continuous perforation (on request without perforation). Yield strength 240 N/mm2.

Material

- Steel, other materials on request.

Standards & Properties

- Pre-Galvanized as per ASTM B 653.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Description

- Designed to carry the heaviest loads and provide the widest variety of applications
- Designed for trapeze supports, seismic bracing, ceiling grids, pipe,conduit, duct and cable tray sup ports, racks, and other general framing.
- With continuous perforation (on request without perforation). * Yield strength 240 N/mm2.

Material

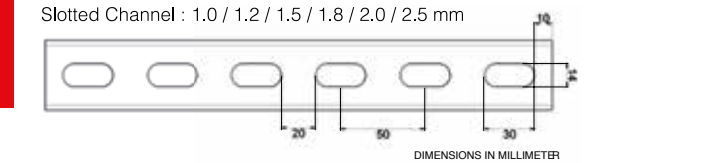
- Steel, other materials on request.

Standards & Properties

- Pre-Galvanized as per ASTM B 653.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

3

Channel fixing system



Technical Data

Pre Galvanized

Item	Article number	Thickness S (mm)	Length (m)	Finish
SC 41x21	34121103	1.0	3.0	Pre Galvanized (PG)
SC 41x21	34121123	1.2	3.0	
SC 41x21	34121153	1.5	3.0	
SC 41x21	34121183	1.8	3.0	
SC 41x21	34121203	2.0	3.0	
SC 41x21	34121253	2.5	3.0	
SC 41x41	34141133	1.3	3.0	
SC 41x41	34141153	1.5	3.0	
SC 41x41	34141183	1.8	3.0	
SC 41x41	34141203	2.0	3.0	
SC 41x41	34141253	2.5	3.0	
SC 41x41	34141256	2.5	6.0	
SC 41x62	34162253	2.5	3.0	
SC 41x62	34162256	2.5	6.0	

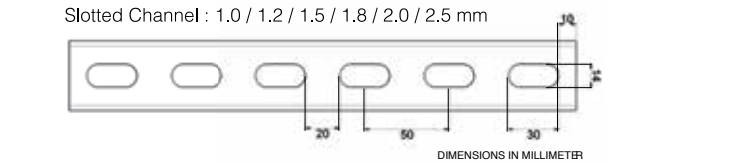
Pre-Galvanized Double Channels

Item	Art number	Thickness S (mm)	Length (m)	Finish
SC 41x41D	34141253	2.5	3.0	Pre Galvanized (PG)
SC 41x41D	34141256	2.5	6.0	
SC 41x62D	341124253	2.5	3.0	
SC 41x62D	341124256	2.5	6.0	

Note :
Materials are available in Stainless Steel finishes upon request

3

Channel fixing system



Technical Data

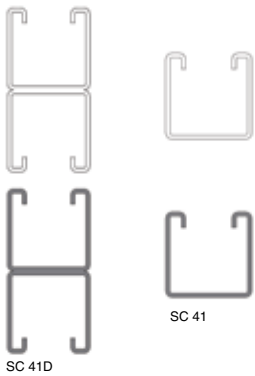
Hot Dip Galvanized

Item	Artcle number	Thickness S (mm)	Length (m)	Finish
SC 41x21	334121123	1.2	3.0	HotDip Galvanized (HDG)
SC 41x21	334121153	1.5	3.0	
SC 41x21	334121183	1.8	3.0	
SC 41x21	334121203	2.0	3.0	
SC 41x21	334121253	2.5	3.0	
SC 41x21	334141133	1.3	3.0	
SC 41x41	334141153	1.5	3.0	
SC 41x41	334141183	1.8	3.0	
SC 41x41	334141203	2.0	3.0	
SC 41x41	334141253	2.5	3.0	
SC 41x41	334141256	2.5	6.0	
SC 41x41	334162253	2.5	3.0	
SC 41x62	334162256	2.5	6.0	

Hot Dip Galvanized Double Channels

Item	Article number	Thickness S (mm)	Length (m)	Finish
SC 41x41D	334141253	2.5	3.0	HotDip Galvanized (HDG)
SC 41x41D	334141256	2.5	6.0	
SC 41x62D	3341124253	2.5	3.0	
SC 41x62D	3341124256	2.5	6.0	

Note :
Materials are available in Stainless Steel finishes upon request



Description

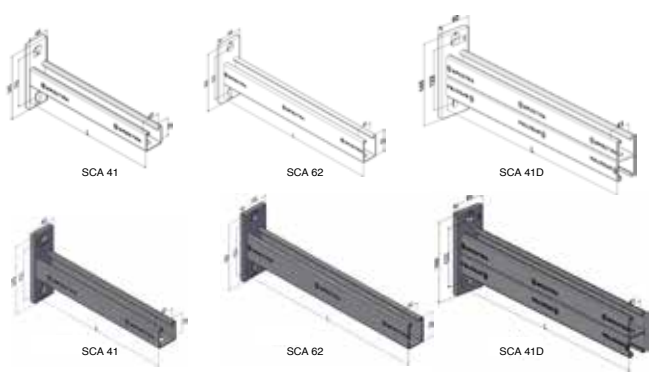
- Designed to carry the heaviest loads and provide the widest variety of applications
- Designed for trapeze supports, seismic bracing, ceiling grids, pipe,conduit, duct and cable tray supports, racks, and other general framing.
- With continuous perforation (on request without perforation). * Yield strength 240 N/mm2.

Material

- Steel, other materials on request.

Standards & Properties

- Pre-Galvanized as per ASTM B 653.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Description

- Designed for wall mounted MEP application.
- S High load can be achieved when considering double cantilever.
- Suitable for indoor and outdoor applications.
- Yield strength 240 N/mm2.
- Alternative solution for channels and base plate supports.

Material

- Steel, other materials on request.

Standards & Properties

- Pre-Galvanized as per ASTM B 653.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Thickness (mm)	Weight (kg/m)	Moment of Inertia cm ⁴		Section Modulus cm ³	
			I _y	I _z	W _y	W _z
SC 41x21	1.5	1.16	0.78	3.66	0.71	1.77
SC 41x21	1.8	1.24	0.80	4.30	0.76	2.10
SC 41x21	2.0	1.33	0.90	4.59	0.84	2.21
SC 41x21	2.5	1.76	1.04	5.32	0.92	2.57
SC 41x41	1.5	1.72	4.24	6.10	2.07	2.98
SC 41x41	1.8	2.00	4.94	7.48	2.41	3.65
SC 41x41	2.0	2.50	5.32	7.80	2.60	3.80
SC 41x41	2.5	2.73	6.10	9.17	2.87	4.44
SC 41x62	2.0	2.91	17.03	11.82	16.22	5.77
SC 41x62	2.5	3.60	17.57	13.07	5.59	6.33
SC 41x41D	2.5	5.47	36.21	18.34	8.77	8.88
SC 41x62D	2.5	7.21	109.74	26.14	17.70	12.66

Technical Data

Item	Article number	For Channel Sizes (mm)	Sales Unit (Pcs)
SCA 41x300	554130	41x2.0, 41x2.5	1
SCA 41x450	554145	41x2.0, 41x2.5	1
SCA 41x600	554160	41x2.0, 41x2.5	1
SCA 62x600	556260	62x2.5	1
SCA 62x750	556275	62x2.5	1
SCA 62x1000	5562100	62x2.5	1
SCA 41Dx750	55414175	41Dx2.5	1
SCA 41Dx1000	554141100	41Dx2.5	1

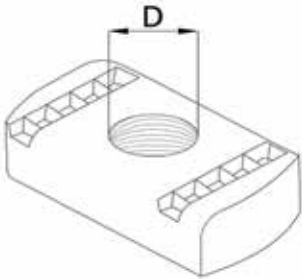
Note :
Hot Dip Galvanized & Stainless Steel Finishes are available upon request



Channel accessories and fittings

4. Channel accessories and fittings

Channel nut
Spring channel nut
Channel square washer
Channel connector
Strut base plate
Strut base plate adjustable
Angle fittings
Flat fittings
Z fittings
U fittings
Angle brackets
Wing fittings



Description

- Helps to connect bracket, and clamps to slotted serrated channels
- Provides a secure hold in various channel profiles.
- Channel nut teeth help to increase the tension and slip resistance.

Material

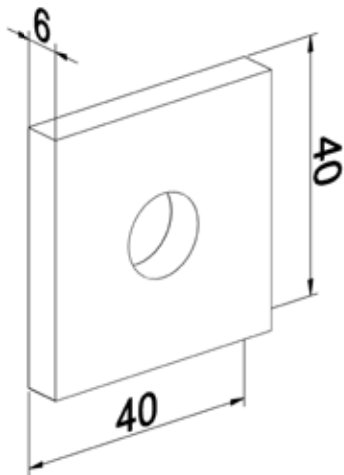
- Steel, other materials on request.

Standards & Properties

- Pre-Galvanized as per ASTM B 653.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article number	Rod Size (mm)
CN M06	3106	M06
CN M08	3108	M08
CN M10	3110	M10
CN M12	3112	M12



Description

- Square washers are designed to connect metal framing channel.
- Available in a variety of hole sizes and finishes to meet project requirements.

Material

- Steel, other materials on request.

Standards & Properties

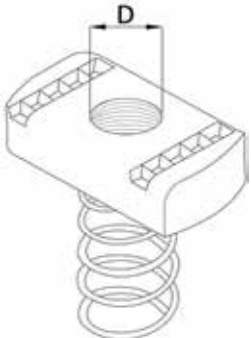
- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article number	Hole Size (mm)
CSW M08	4108	8
CSW M10	4110	10
CSW M12	4112	12

Note :
Other Finishes are available upon request

Spring Channel Nut SCN



Description

- Designed to conform to the flanges on the inside of the channel creating a secure fit.
- Spring nuts are used in conjunction with hex head cap screws to create a unique, weldless fastening solution.
- Channel nut grooves are textured for improved traction and slip resistance.

Material

- Steel, other materials on request.

Standards & Properties

- * Electro Zinc Plated as per ASTM B 633.
- * Hot Dip Galvanized as per ASTM A 123 / A 123M.
- * Stainless Steel A4, 1.4401.

Technical Data

Item	Art number	Rod Size (mm)
SCN M06	3706	M06
SCN M08	3708	M08
SCN M10	3710	M10
SCN M12	3712	M12

Note :
Other Finishes are available upon request

Description

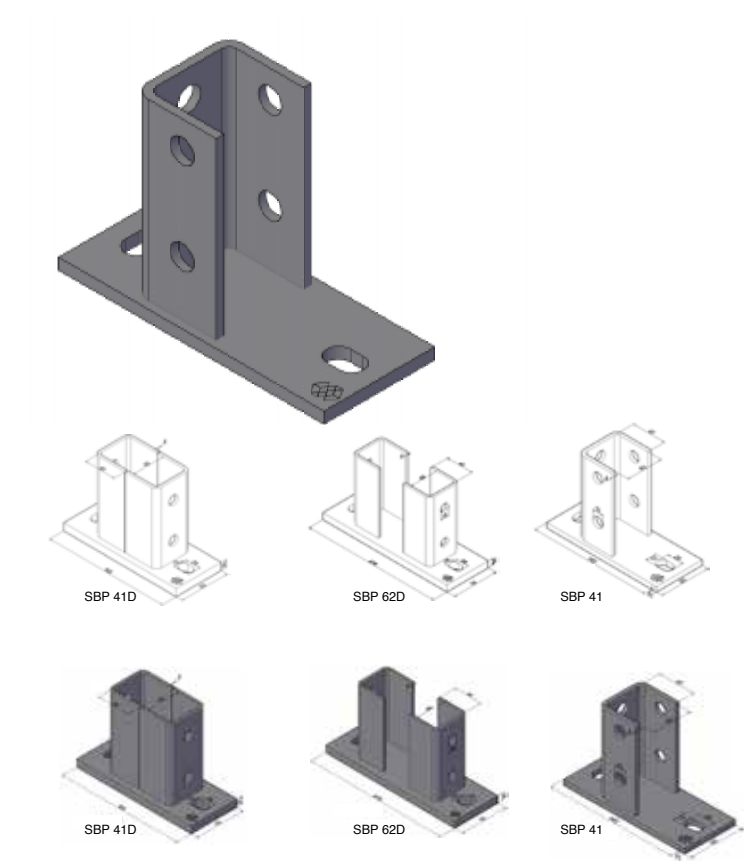
- Designed to connetc multiple pieces of Channel sections together.
- U Shaped Fitting creates multiple connection points along the section of Channel profile.
- Help to connect two channels together where sup port span exceeding 6 m

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Technical Data

Item	Article number	For Channel Sizes (mm)	Sales Unit (Pcs)
SBP 41 - HDG	48004	21, 41, 21D, 62	10
SBP 41D - HDG	48005	41D	5
SBP 62D - HDG	48006	62D	5

Note :
Other Finishes are avaible upon request

Description

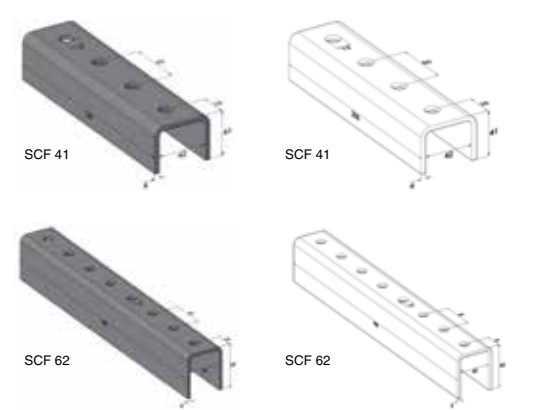
- Designed to connetc multiple pieces of Channel sections together.
- U Shaped Fitting creates multiple connection points along the section of Channel profile.
- Help to connect two channels together where sup port span exceeding 6 m

Material

- Steel, other materials on request.

Standards & Properties

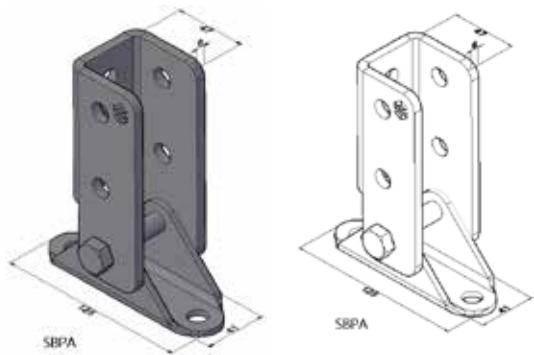
- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Technical Data

Item	Length, L (mm)	Article number	For Channel Sizes (mm)
SCF 41	200	4631	41
SCF 62	400	4632	62

Note :
Other Finishes are avaible upon request



Description

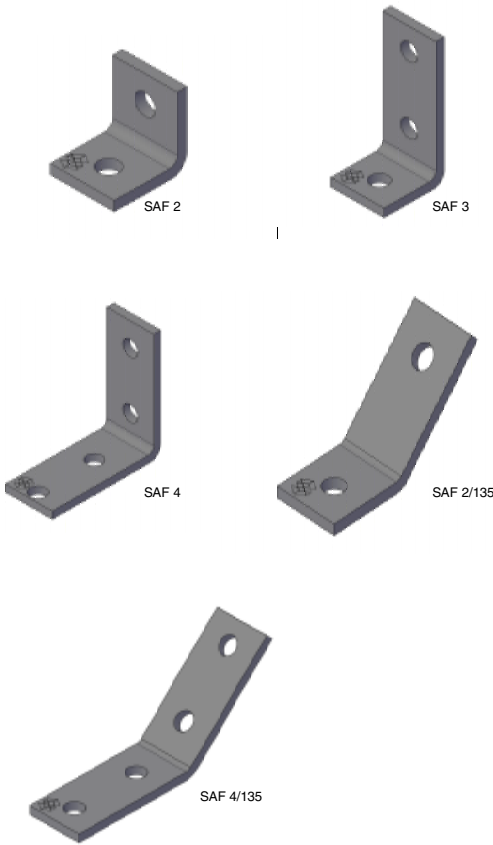
- Provides good connection between bracing and the wall.
- The ability to install the bracing at the preferred angle provides greater flexibility in the installation process.
- Gives good compression resistance to horizontal channel when the deflection is exceeding the limit.

Material

- Steel, other materials on request

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Description

- Angle fittings simplify the process of connecting multiple channel profiles together and provide a secure means of attaching to channel to a wall or another surface.
- 90° Brackets are available in a multitude finishes and materials
- A variety of hole patterns to help accommodate all of your metal framing applications.
- Angle brackets allow you to create a weld-less connection on either inside or outside of channel depending on type of fitting and which way the mouth of your channel is facing

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article number	For Channel Sizes (mm)	Sales Unit (Pcs)
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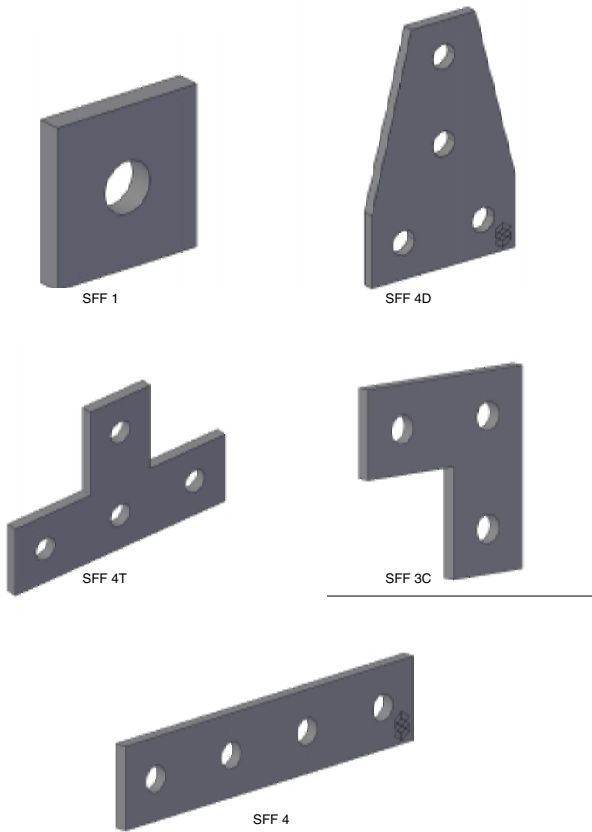
SBPA 41x41 - HDG	48007	41	5
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Note :
Other Finishes are avaible upon request

Technical Data

Item	Item Description	Art number GI	Art number HDG	Sales Unit (Pcs)
SAF 2	Angle Fitting 2 holes 90 deg	46290	47290	25
SAF 3	Angle Fitting 3 holes 90 deg	46390	47390	25
SAF 4	Angle Fitting 4 holes 90 deg	46490	47490	25
SAF 2/135	Angle Fitting 2 holes 135 deg	46428	47428	25
SAF 4/135	Angle Fitting 4 holes 135 deg	46429	47429	25

Note :
Other Finishes are avaible upon request



Description

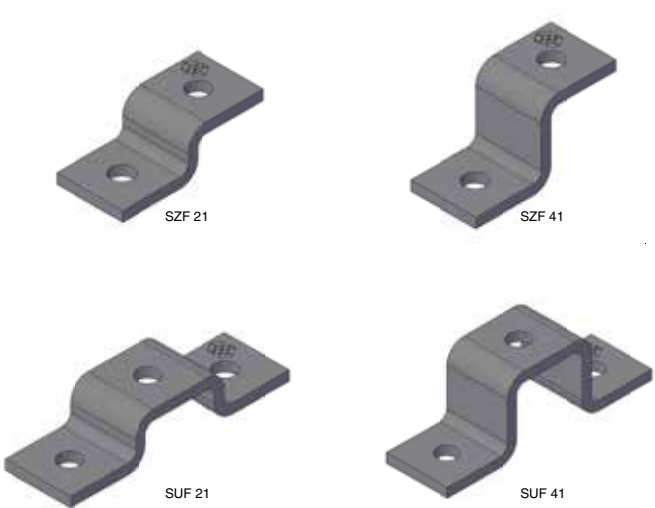
- Flat Fittings are used to connect Channels together, creating a unique weld-less connection.
- A variety of hole patterns to help accommodate all of your metal framing applications.

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Description

- U & Z Shaped Fitting is used for Slotted Channels cross-sections.
- A variety of hole patterns to help accommodate all of your metal framing applications.

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

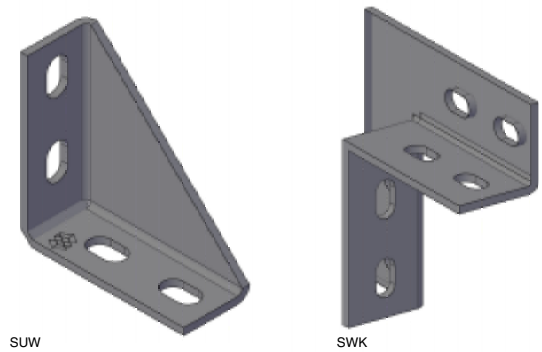
Item Code	Item Description	Article number	Sales Unit (Pcs)
SZF 21	Z Fitting 2 holes for 21	46411	25
SZF 41	Z Fitting 3 holes for 41	46412	25
SZF 41D	Z Deep Fitting 3 holes for 41D	46413	25
SUF 21	U Fitting 3 holes for 21	46414	25
SUF 41	U Fitting 3 holes for 41	46415	25
SUF 62	U Deep Fitting 3 holes for 62	46416	25
SUF 41D	U Deep Fitting 3 holes for 41D	46417	25

Note :
Other Finishes are available upon request

Technical Data

Item	Item Description	Article number	Sales Unit (Pcs)
SFF 1	Flat Fitting	4112	25
SFF 4	Flat Fitting Straight 4 holes	46400	25
SFF 3C	Flat Fitting Corner 3 holes	46430	25
SFF 4T	Flat Fitting T 4 holes	46410	25
SFF 4D	Flat Fitting Delta 4 holes	46420	25

Note :
Other Finishes are available upon request



Description

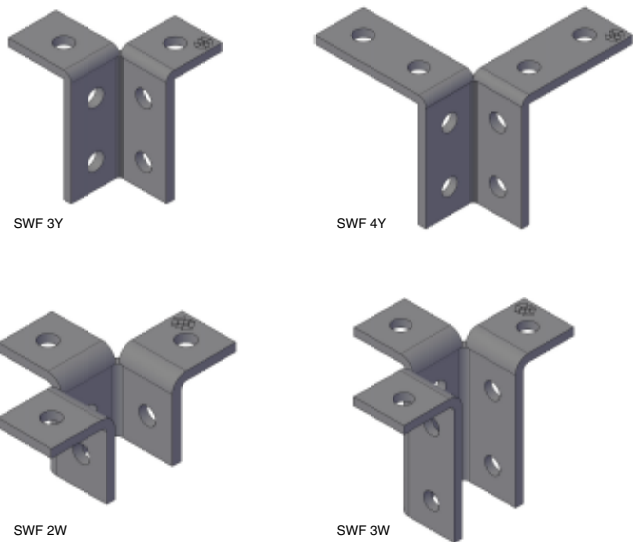
- Angle fittings simplify the process of connecting multiple channel profiles together and provide a secure means of attaching to channel to a wall or another surface.
- 90° Brackets are available in a multitude finishes and materials
- A variety of hole patterns to help accommodate all of your metal framing applications.
- Angle brackets allow you to create a weld-less connection on either of channel depending on type of fitting and which way the mouth of your channel is facing.

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.



Description

- Wing fittings simplify the process of connecting multiple channel profiles together and provide a secure means of attaching to channel to a wall or another surface.
- A variety of hole patterns to help accommodate all of your metal framing applications.

Material

- Steel, other materials on request.

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

4
Technical Data
Angle Brackets GI

Item Code	Item Description	Article number	Sales Unit (Pcs)
SUW	Universal Bracket	46418	25
SWK	Rigid Bracket	46419	25

Note :
Other Finishes are avaible upon request

4
Technical Data
Wing Fittings GI

Item Code	Item Description	Article number	Sales Unit (Pcs)
SWF 2Y	Wing Fitting 2 Holes Y Type	46421	20
SWF 3Y	Wing Fitting 3 Holes Y Type	46422	10
SWF 4Y	Wing Fitting 4 Holes Y Type	46423	10
SWF 2W	Wing Fitting 2 Holes W Type	46424	20
SWF 3W	Wing Fitting 3 Holes W Type	46425	10
SWF4W	Wing Fitting 4 Holes W Type	46426	10
SWF 2T	Wing Fitting 2 Holes T Type	46427	20

Note :
Other Finishes are avaible upon request



Fasteners

5. Fasteners

Threaded rod
Hexagonal nut
Hexagonal bolt
Roofing Bolt
Flat washer
Drop in anchor
Through bolt



Description

- Threaded Rod is designed for supporting equipment, plumbing and conduit from walls, floors and ceilings.

Material

- Mild Steel, Carbon Steel, Alloy steel & Stainless Steel.

Standards

- A STM/ ASME/ DIN /BS EN ISO/ JIS

Threads

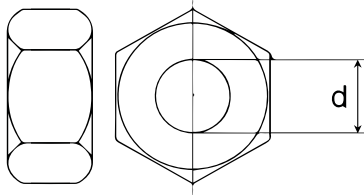
- UNC,8UN,UNF,Metric Coarse and Metric Fine

Size Range

- M6 to M100 in Metric series.
- 1/4" to 4" in Imperial
- Bigger sizes can be manufactured as per order.

Typical Grades & Standards

- ASTM A193 Grade B7, B7M, B8, B8M & B16
- ASTM A320 Grade L7 & L7M
- BS 3692 / BS 4190 Grade 4.6, 4.8, 5.6, 5.8, 8.8
- Stainless Steel 304, 304L, 316, 316L, A2-70/ 80, A4-70/80



Material

- Mild Steel, Carbon Steel, Alloy Steel & Stainless Steel.t

Standards

- ASTM/ ASME/ DIN /BS EN ISO/ JIS

Threads

- UNC,8UN,UNF,Metric Coarse and Metric Fine

Size Range

- M6 to M100 in Metric series.
- 1/4" to 4" in Imperial
- Bigger sizes can be manufactured as per order.

Typical Grades & Standards

- DIN 934 Class 4, 8, 10, 12, A270, A280, A470 and A480.
- ASTM A194/ A194M Grades 2H, 2HM, 4L, 7L and 7LM.
- ASTM A563/ 563M Grades 8, 10S, A, B, C, D, DH, Dh3.
- Stainless Steel 304, 304L, 316, 316L, A2-70/ 80, A4-70/ 80.

Technical Data

Article Number	Thread (mm)
1306	M6
1308	M8
1310	M10
1312	M12
1313	M14
1316	M16
1318	M18
1320	M20
1322	M22
1324	M24
1327	M27
1330	M30
1333	M33
1406	M6
1408	M8
1410	M10
1412	M12
1414	M14
1414	M16
1414	M18
1414	M20
1414	M22
1414	M24
1414	M27
1414	M30
1414	M33

Note :
Stainless steel available on request.

Technical Data

Article Number	Length (m)	Thread (mm)
11062	2.0	M6
11063	3.0	M6
11082	2.0	M8
11083	3.0	M8
11102	2.0	M10
11103	3.0	M10
11122	2.0	M12
11123	3.0	M12
11162	2.0	M16
11163	3.0	M16
11182	2.0	M18
11202	2.0	M20
11203	3.0	M20
11222	2.0	M22
11242	2.0	M24
11272	2.0	M27
11302	2.0	M30
11332	2.0	M33

Note :
Materials are available in HDG Stainless Steel finishes upon request



Description

- Hex bolts can be used for many different applications that include fastening wood, steel, and other construction materials for projects such as docks, bridges, highway structures, and buildings.
- Hex bolts with forged heads are also commonly used as headed anchor bolts.

Material

- Mild Steel, Carbon Steel, Alloy Steel & Stainless Steel.

Standards

- ASTM/ ASME/ DIN /BS EN ISO/ JIS

Threads

- UNC,8UN,UNF,Metric Coarse and Metric Fine

Size Range

- M6 to M100 in Metric series.
- 1/4" to 4" in Imperial
- Bigger sizes can be manufactured as per order.

Typical Grades & Standards

- BS3692 / BS4190 grade 4.6, 4.8, 5.6, 5.8, 8.8, 10.9 and 12.9 -ASTM A307 Grade A and B
- ASTM A325
- ASTM A193 Grade B7, B7M, B8, B8M & B16
- ASTM A320 Grade L7 & L7M
- Stainless Steel 304, 304L, 316, 316L, A2-70/ 80, A4-70/ 80
- Stainless Steel 304, 304L, 316, 316L, A2-70/ 80, A4-70/ 80

Material

- DIN 7985

Standards

- Electro Galvanized as per ASTM B633/
Hot dip galva nized as per ASTM A153/
Stainless Steel A4



Technical Data

Item Code	Article Number	Size (mm)	Length (m)
SRB M6X12	70612	M6	12.0
SRB M6X16	70616	M6	16.0
SRB M6X20	70620	M6	20.0
SRB M6X25	70625	M6	25.0
SRB M6X30	70630	M6	30.0
SRB M6X40	70640	M6	40.0
SRB M6X50	70650	M6	50.0
SRB M6X60	70660	M6	60.0
SRB M8X16	70816	M8	16.0
SRB M8X20	70820	M8	20.0
SRB M8X25	70825	M8	25.0
SRB M8X30	70830	M8	30.0
SRB M8X40	70840	M8	40.0
SRB M8X50	70850	M8	50.0
SRB M8X60	70860	M8	60.0
SRB M10X20	71020	M10	20.0
SRB M10X25	71025	M10	25.0
SRB M10X30	71030	M10	30.0
SRB M10X40	71040	M10	40.0
SRB M10X50	71050	M10	50.0
SRB M10X60	71060	M10	60.0

5

Technical Data

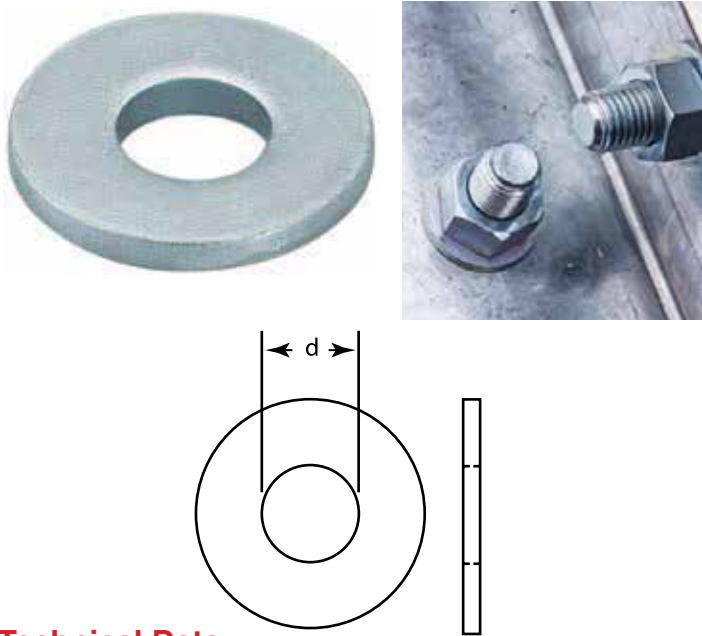
Article Number	Length (m)	Thread (mm)
430612	12	M6
430616	16	M6
430620	20	M6
430625	25	M6
430630	30	M6
430820	20	M8
430825	25	M8
430830	30	M8
430840	40	M8
430850	50	M8
430860	60	M8
431025	25	M10
431030	30	M10
431040	40	M10
431050	50	M10
431060	60	M10
431080	80	M10
431225	25	M12
431230	30	M12
431240	40	M12
431250	50	M12
431260	60	M12

Note :
Also available in HDG & stainless steel finishes.

Article number	Length (m)	Thread (mm)
431270	70	M12
431280	80	M12
431660	60	M16
431680	80	M16
431690	90	M16
4316100	100	M16
4316110	110	M16
4316120	120	M16
432070	70	M20
432080	80	M20
432090	90	M20
4320100	100	M20
4320110	110	M20
4320120	120	M20
4320140	140	M20
432480	80	M24
4324100	100	M24
4324120	120	M24
4324140	140	M24
4324160	160	M24
4324180	180	M24
4324200	200	M24

5

Fasteners



Material

- Mild Steel, Carbon Steel, Alloy Steel & Stainless Steel.

Standards

- ASTM/ ASME/ DIN /BS EN ISO/ JIS

Threads

- UNC,8UN,UNF,Metric Coarse and Metric Fine

Size Range

- M6 to M 64 in Metric series.
- 1/4" to 2 1/2" in Imperial
- Bigger sizes can be manufactured as per order.

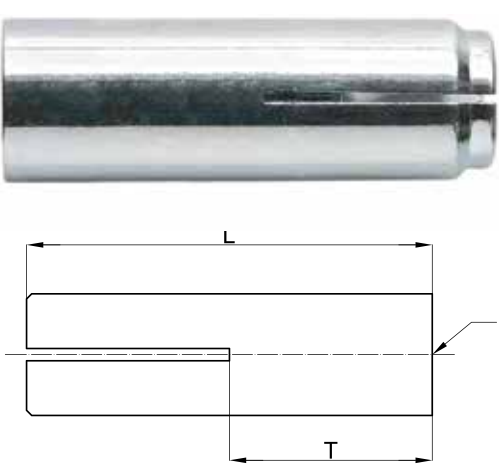
Typical Grades & Standards

- DIN 125/A
- DIN 127/B
- DIN 9021
- ASTM F436 and F436M
- Stainless Steel 304, 304L, 316, 316L, A2-70/ 80, A4-70/ 80

Technical Data

Article number	Size (mm)
1506	M6
1508	M8
1510	M10
1512	M12
1514	M14
1516	M16
1518	M18
1520	M20
1522	M22
1524	M24
1527	M27
1530	M30
1533	M33
1606	M6
1608	M8
1610	M10
1612	M12
1614	M14
1616	M16
1618	M18
1620	M20
1622	M22
1624	M24
1627	M27
1630	M30
1633	M33

Note :
Stainless steel available on request.



Description

- Designed for suspended type of fixtures such as pipings, air ducts, cable tray and trunkings.
- Suitable for cracked and non-cracked concrete of non-structural applications and redundant installtion
- A setting tool is required to set the anchor in the concrete.

Material

- Steel, other materials on request.

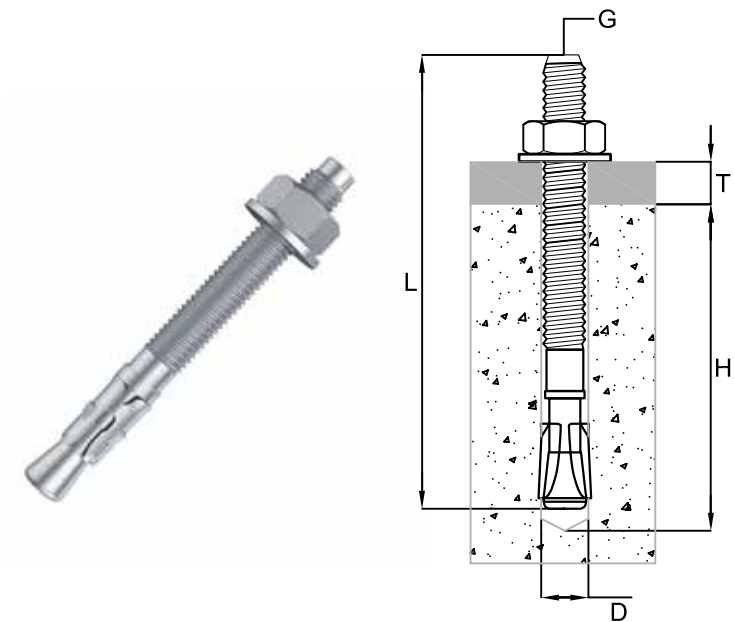
Standards

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article number	Size G	Length L (mm)	Thread Length T (mm)	Hole diameter H (mm)	Hole depth (mm)	Min. Concrete thickness (mm)	Max. Load (N)
SPDA M6	5000006	M6	25	10	35	35	60	728
SPDA M8	5000008	M8	30	13	41	42	70	1428
SPDA M10	5000010	M10	40	16	48	54	80	2170
SPDA M12	5000012	M12	20	21	55	58	100	3066
SPDA M16	5000014	M16	60	30	48	54	130	6342

Note :
Other finishes are available upon request.



Description

- The one-piece clip is formed around Anchor, assuring full expansion for dependable superior holding power.
- Anchor can be hammered below the surface of the concrete when no longer needed.
- The test values listed beneath were obtaining using 4000 PSI concrete (no aggregate).
- Does not require precise hole depth or hole cleaning out.
- Expanding clip will not fall off or twist in the hole.
- A safe working load should not exceed 25 % rated values.

Technical Data

Item	Article number	Size G	Anchor Length L (mm)	Hole Diameter D (mm)	Hole Depth H (mm)	Fixture Thickness T (mm)
SPTB M8x80	5008080	M8	80	8	42	35
SPTB M8x100	5008100	M8	100	8	45	35
SPTB M8x120	5008120	M8	120	8	63	35
SPTB M10x80	5010080	M10	80	10	50	42
SPTB M10x100	5010100	M10	100	10	50	54
SPTB M10x120	5010120	M10	120	10	50	58
SPTB M10x150	5010150	M10	150	10	55	54
SPTB M10x200	5010200	M10	200	10	60	58
SPTB M12x100	5012100	M12	100	12	60	35
SPTB M12x120	5012120	M12	120	12	60	35
SPTB M12x150	5012150	M12	150	12	60	35
SPTB M16x100	5016100	M16	100	16	65	42
SPTB M16x120	5016120	M16	120	16	65	54
SPTB M16x150	5016150	M16	150	16	65	58

Note :
Other finishes are available upon request.

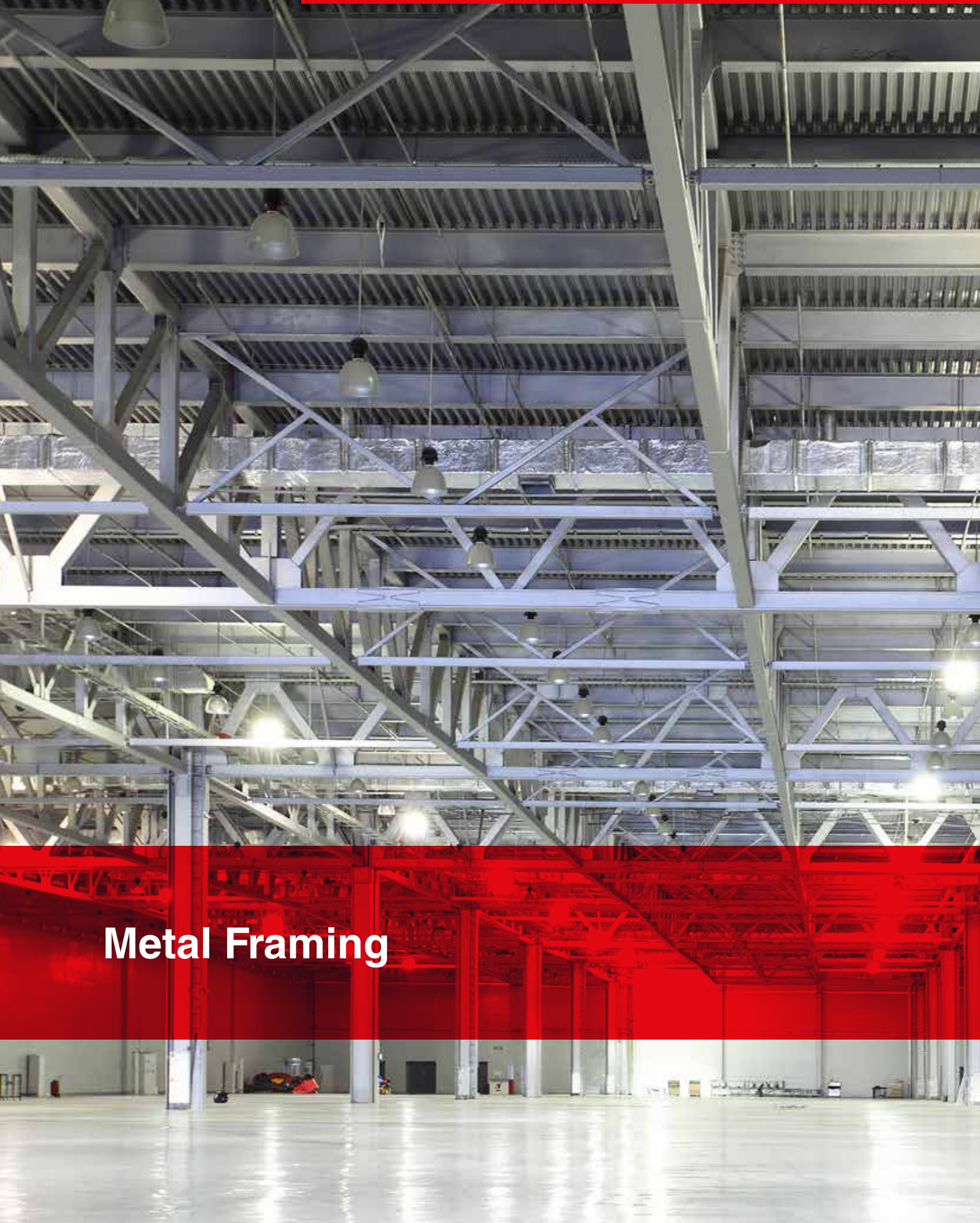
Technical Data

Anchor Size		M8	M10	M12	M16
Maximum tension loads in concrete	kN	2.1	3.1	1/4	7
Minimum spacing	mm	85	110	150	170
Minimum Edge distance	mm	70	90	110	140
Minimum base material thickness	mm	180	200	220	260
Recommended tightening torque	mm	20	30	50	120
Wrench size	mm	13	17	19	24

Performance Data (20/25 Concrete)

Thread Diameter D (mm)	Characteristic Resistance (kN)		Design Resistance (kN)		Recommended Resistance (kN)		Spacing (mm)		Edge Distance (mm)	
	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile	Shear	Tensile	Shear
8	7.4	9.2	3.9	4.6	2.1	3	85	85	45	70
10	11.2	14.5	5.8	7	3.1	4.4	110	110	55	90
12	17.9	21.2	9.2	11.3	4	6.2	150	150	75	110

Note :
Other finishes are available upon request.



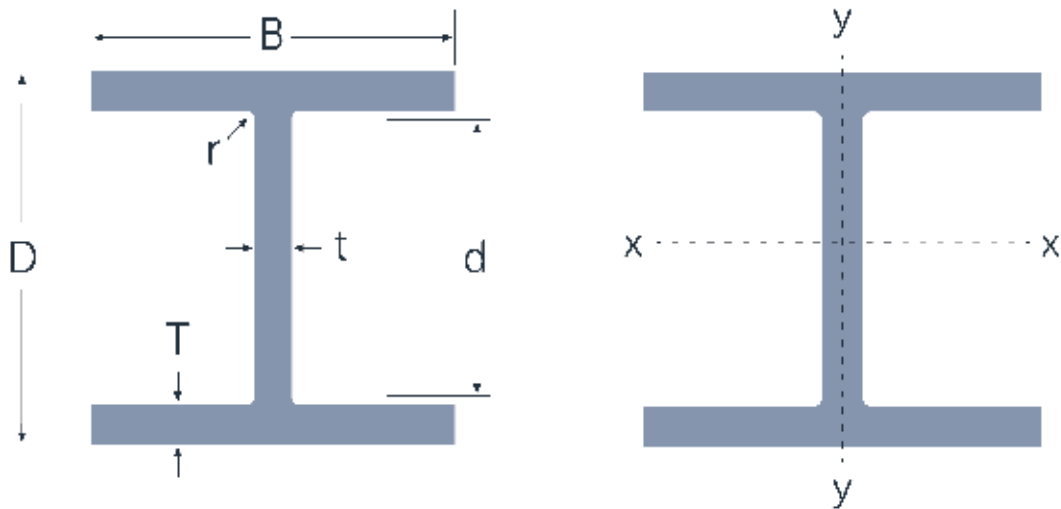
Metal Framing

6. Metal Framing

Universal Columns

C Channels

L Angles



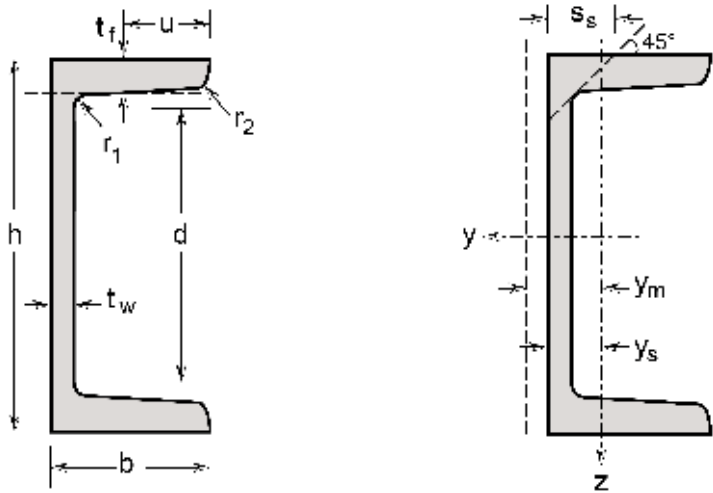
- Properties**
- Nominal Dimensions**
 - EN 10056-1:2017
 - Material**
 - EN 10025-2
 - Tolerance**
 - EN 10056-2:1993
 - Finish**
 - Hot Dip Galvanized

Technical Data

Designation					Dimensions							
Article Number	Serial Size	Length	Finish	Mass per metre G(kg/m)	Depth of section D (mm)	Width of section B (mm)	Web thickness t (mm)	Flange thickness T (mm)	Root radius r (mm)	Depth between fillets d (mm)	Area of section cm ²	
2615215223	152x 152x 23	6	HDG	23.0	152.4	152.2	5.8	6.8	7.6	123.6	29.2	
2615215230	152x 152x 30	6	HDG	30.0	157.6	152.9	6.5	9.4	7.6	123.6	38.3	
2615215237	152x 152x 37	6	HDG	37.0	161.8	154.4	8.0	11.5	7.6	123.6	47.1	
2620320346	203x 203x 46	6	HDG	46.1	203.2	203.6	7.2	11.0	12.7	155.8	59.2	
2620320352	203x 203x 52	6	HDG	52.0	206.2	204.3	7.9	12.5	12.7	155.8	66.8	
2620320360	203x 203x 60	6	HDG	60.0	209.6	205.8	9.4	14.2	12.7	155.8	76.9	
2620320371	203x 203x 71	6	HDG	71.0	215.8	206.4	10.0	17.3	12.7	155.8	90.9	
2625425473	254x 254x 73	6	HDG	73.1	254.1	254.6	8.6	14.2	20	185.7	95.2	
2625425489	254x 254x 89	6	HDG	88.9	260.3	256.3	10.3	17.3	20	185.7	115	
2630530597	305x 305x 46	6	HDG	96.9	307.9	305.3	9.9	15.4	20	237.1	125	
26305305118	305 x 305 x 118	6	HDG	117.9	314.5	307.4	12.0	18.7	20	237.1	152	
26356368129	356 x 368 x 129	6	HDG	129.0	355.6	368.6	10.4	17.5	20	280.6	166	

Note :
Other custom sizes are available upon request.
Also available in MS and Stainless Steel finishes.

Structural Properties											
Serial Size	Second moment of Area		Radius of Gyration		Elastic modulus		Plastic modulus		Torsional index x	Torsional constant J cm ⁴	
	I _{x-x} cm ⁴	I _{y-y} cm ⁴	i _{x-x} cm	i _{y-y} cm	S _{x-x} cm ³	S _{y-y} cm ³	Z _{x-x} cm ³	Z _{y-y} cm ³			
152x 152x 23	1250	400	6.54	3.70	164	53	182	80	20.70	4.63	
152x 152x 30	1748	560	6.76	3.83	222	73	248	112	16.00	10.50	
152x 152x 37	2210	706	6.85	3.87	273	91	309	140	13.30	19.20	
203x 203x 46	4605	1549	8.82	5.11	453	152	502	231	17.30	23.30	
203x 203x 52	5296	1778	8.91	5.16	514	174	572	265	15.50	33.20	
203x 203x 60	6162	2065	8.95	5.18	588	201	660	306	13.80	49.10	
203x 203x 71	7655	2538	9.18	5.28	709	246	803	374	11.80	82.70	
254x 254x 73	11643	3910	11.10	6.41	916	307	1014	467	16.30	66.10	
254x 254x 89	14504	4860	11.20	6.49	1114	379	1246	577	13.90	114.00	
305x 305x 46	22504	7310	13.40	7.65	1462	479	1612	727	18.70	98.40	
305 x 305 x 118	27927	9061	13.60	7.73	1776	590	1977	897	15.80	171.00	
356 x 368 x 129	40591	14613	15.60	9.39	2283	793	2502	1200	19.40	161.00	



Properties

Nominal Dimensions
• EN 10056-1:2017

Material

• EN 10025-2

Tolerance

• EN 10056-2:1993

Finish

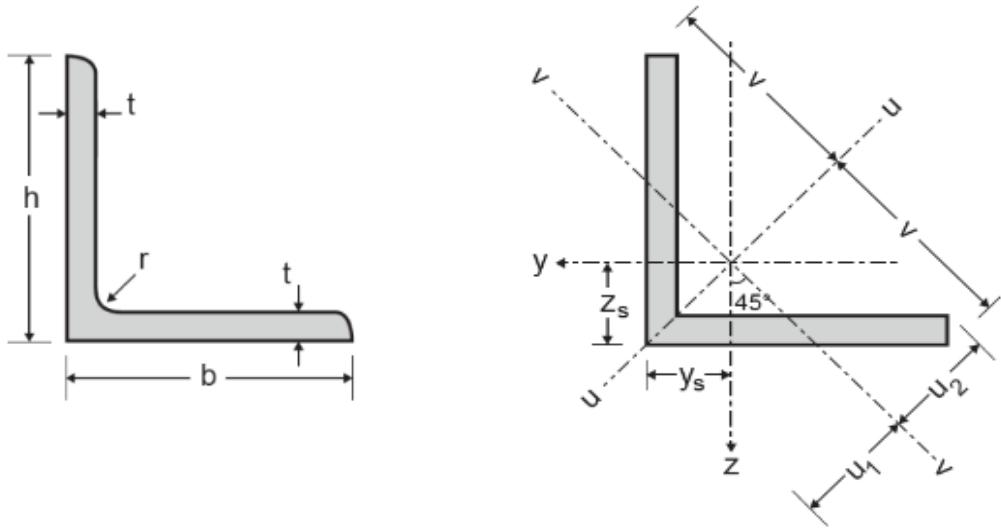
• Hot Dip Galvanized

Technical Data

Designation					Dimensions						Dimensions for detailing		
Article Number	Serial Size	Length	Finish	G kg/m	h mm	b mm	tw mm	tf mm	r1 mm	r2 mm	A mm ² x10 ²	d mm	U \pm 8%
25754056	C 75x40x5	6	HDG	6.95	75	40	5	7	8	4	8.68	42.7	20
251005056	C 100x50x5	6	HDG	9.37	100	50	5	7.5	8	4	11.71	65.3	25
251256566	C 125x65x6	6	HDG	13.4	125	65	6	8	8	4	16.75	87.5	32.5
2515075656	C 150x75x6.5	6	HDG	18.62	150	75	6.5	10	10	5	23.27	103.7	37.5
251507596	C 150x75x9	6	HDG	24.01	150	75	9	12.5	2	1	30.02	121	125
2520080756	C 200x80x7.5	6	HDG	24.77	200	80	7.5	11	2	1	30.97	174	178
252009086	C 200x90x8	6	HDG	30.53	200	90	8	13.5	2	1	38.16	169	173
252009096	C 250x90x9	6	HDG	34.86	250	90	9	13	2	1	43.58	220	224
2520090116	C 250x90x11	6	HDG	40.34	250	90	11	14.5	2	1	50.43	217	221
253009096	C 300x90x 9	6	HDG	37.17	300	90	9	12	2	1	46.46	272	276
25380100136	C 380x100x13	6	HDG	62.5	380	100	13	16.5	2	1	78.13	343	347

Note :
Other custom sizes are available upon request.
Also available in MS and Stainless Steel finishes.

	Strong axis y-y			Weak axis z-z					
Serial Size	I _y mm ⁴ x10 ⁴	W _{el,y} mm ³ x10 ³	i _y mmx10	I _z mm ⁴ x10 ⁴	W _{el,z} mm ³ x10 ³	i _z mmx10	S _s mm	y _s mmx10	y _m mmx10
C 75x40x5	73.88	19.70	2.92	10.93	3.89	1.12	17.75	1.19	2.39
C 100x50x5	182.65	36.53	3.95	23.02	6.43	1.40	18.95	1.42	3.04
C 125x65x6	403.93	64.63	4.91	52.69	11.04	1.77	21.37	1.73	3.89
C 150x75x6.5	829.79	110.64	5.97	101.78	18.79	2.09	25.41	2.08	4.62
C 150x75x9	1035.82	138.11	5.87	165.24	33.13	2.35	22.68	2.51	4.88
C 200x80x7.5	1927.33	192.73	7.89	194.27	34.91	2.50	19.68	2.44	5.02
C 200x90x8	2868.05	249.40	8.96	218.23	38.53	2.47	21.18	2.34	4.80
C 250x90x9	4134.28	330.74	9.74	336.97	52.86	2.78	23.18	2.62	5.40
C 250x90x11	4614.87	369.19	9.57	375.03	58.55	2.73	26.68	2.59	5.15
C 300x90x 9	6061.66	404.11	11.42	337.00	50.55	2.69	22.18	2.33	4.88
C 380x100x13	15439.91	812.63	14.06	641.99	85.46	2.87	30.68	2.49	4.92



Technical Data

General Properties												
Serial Size	Article Number	Length m	Finish	G kg/m	h=b kg/m	t kg/m	r kg/m	A kg/m	z _s =y _s kg/m	V kg/m	U ₁ kg/m	U ₂ kg/m
L 25 x 25 x 3	23252536	6	HDG	1.12	25	3	3.5	1.42	7.23	17.68	10.22	8.85
L 30 x 30 x 3	23303036	6	HDG	1.36	30	3	5	1.74	8.35	21.21	11.81	10.49
L 40 x 40 x 5	23404056	6	HDG	2.97	40	5	6	3.79	11.62	28.28	16.43	14.14
L 40 x 40 x 6	23404066	6	HDG	3.52	40	6	6	4.48	12.02	28.28	17	14.29
L 45 x 45 x 5	23454556	6	HDG	3.38	45	5	7	4.3	12.79	31.82	18.09	15.81
L 50 x 50 x 4	23505046	6	HDG	3.06	50	4	7	3.89	13.59	35.36	19.21	17.52
L 50 x 50 x 5	23505056	6	HDG	3.77	50	5	712	48	14.04	35.36	19.85	17.59
L 50 x 50 x 6	23505066	6	HDG	4.47	50	6	712	5.69	14.45	35.36	20.44	17.71
L 60 x 60 x 5	23606056	6	HDG	4.57	60	5	8/2	5.82	16.44	42.43	23.24	21.06
L 60 x 60 x 6	23606066	6	HDG	5.42	60	6	8/2	6.91	16.88	42.43	23.87	21.15
L 75 x 75 x 5	23757556	6	HDG	5.87	75	5	9/2	7.34	20.06	53.03	28.37	26.33
L 75 x 75 x 6	23757566	6	HDG	6.87	75	6	9/2	8.73	20.53	53.03	29.03	26.38
L 80 x 80 x 6	23808066	6	HDG	7.34	80	6	10 / 2	9.35	21.67	56.57	30.65	28.09

Note :
Other custom sizes are available upon request.
Also available in MS and Stainless Steel finishes



Properties

Nominal Dimensions
• EN 10056-1:2017

Material

• EN 10025-2

Tolerance

• EN 10056-2:1993

Finish

• Hot Dip Galvanized

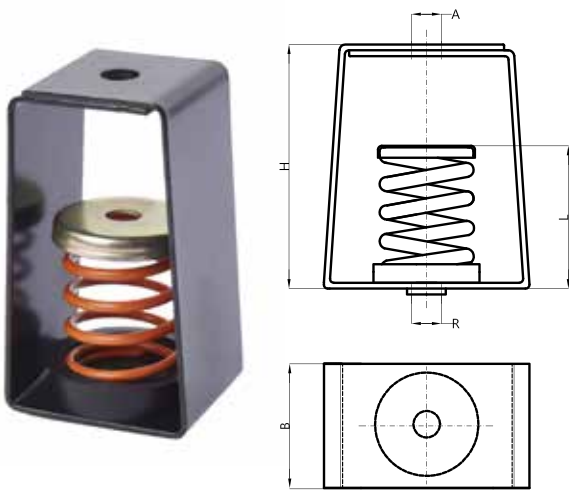
Structural Properties								
Serial Size	Axis y-y / Axis z-z			Axis u-u		Axis v-v		I _{yz} mm ⁴ x10 ⁴
	I _y =I _z mm ⁴ x10 ⁴	W _{ey} =W _{ez} mm ³ x10 ³	I _y =I _z mm x10	I _u mm ⁴ x10 ⁴	I _u mm x10	I _v mm ⁴ x10 ⁴	I _v mm x10	
L 25 x 25 x 3	0.80	0.45	0.75	1.27	0.95	0.33	0.48	-0.47
L 30 x 30 x 3	1.40	0.60	0.90	2.22	1.13	0.59	0.58	-0.82
L 40 x 40 x 5	5.43	1.91	1.20	8.59	1.51	2.26	0.77	-3.17
L 40 x 40 x 6	6.31	2.26	1.19	9.97	1.49	2.65	0.77	-3.66
L 45 x 45 x 5	7.84	2.43	1.35	12.42	1.70	3.26	0.87	-4.58
L 50 x 50 x 4	8.97	2.46	1.52	14.22	1.91	3.73	0.98	-5.24
L 50 x 50 x 5	10.96	3.05	1.51	17.38	1.90	4.55	0.97	-6.42
L 50 x 50 x 6	12.84	3.61	1.50	20.34	1.89	5.34	0.97	-7.50
L 60 x 60 x 5	19.37	4.45	1.82	30.71	2.30	8.03	1.17	-11.34
L 60 x 60 x 6	22.79	5.29	1.82	36.14	2.29	9.44	1.17	-13.35
L 75 x 75 x 5	38.77	7.06	2.30	61.46	2.89	16.08	1.48	-22.69
L 75 x 75 x 6	45.83	8.41	2.29	72.71	2.89	18.94	1.47	-26.89
L 80 x 80 x 6	55.82	9.57	2.44	88.51	3.08	23.13	1.57	-32.69



Anti vibration system

7. Anti vibration system

- Spring hanger
- Open spring mount
- Closed spring mount
- Inertia base
- Rubber hanger
- Duct mount
- Ribbed mounting pad
- Waffle pad
- Square cell pad
- Cork sandwich pad
- Metal sandwich pad
- Ribbed multilayer pad
- Square cell multilayer pad



Description

- FGS Spring Hangers consist of freestanding, laterally stable assembled into a stamped and welded hanger bracket. The hanger brackets and the springs are powder coated. Spring vibration isolation hangers are designed to provide high efficiency viisolation from structure-borne vibration and noise.
- Springs are color-coded and in compliance with ASHRAE guide lines, springs are designed with a horizontal stiffness of at least 100% of the vertical stiffness, to ensure stability. This is achieved through high spring diameter to operating height ratios - 0.85 to 1.0 (as against the minimum of 0.80 required by ASHRAE).

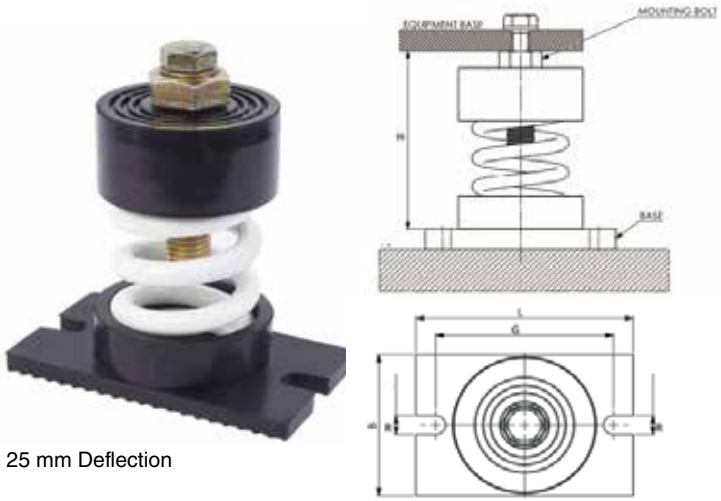
Applications

- FGS Hangers are used to isolate suspended sources of both noise and vibration. Suspended mechanical equipment such as air handling units, FCU's cabinet fans, piping and ductwork in close proximity to rotating mechanical equipment are typical applications of model FGS hangers.

Technical Data

Item code	Article number	Color code	A mm	B mm	H mm	L mm	R mm	Deflection mm	Max. Load N
SP SH25/10	4412510	Red	10.5	52	104	80	M10	25	100
SP SH25/15	4412515	Purple	10.5	52	104	80	M10	25	150
SP SH25/20	4412520	Grey	10.5	52	104	80	M10	25	200
SP SH25/30	4412530	Green	10.5	52	104	80	M10	25	300
SP SH25/40	4412540	Blue	10.5	52	104	80	M10	25	400
SP SH25/60	4412560	Yellow	12.5	65	138	96	M12	25	600
SP SH25/100	44125100	Black	12.5	65	138	96	M12	25	1000
SP SH25/160	44125160	White	12.5	65	138	96	M12	25	1600
SP SH25/200	44125200	Green	12.5	65	138	96	M12	25	2000
SP SH25/250	44125250	Blue	12.5	65	138	96	M12	25	2500
SP SH25/300	44125300	Red	16.5	85	157	115	M16	25	3000
SP SH25/400	44125400	Purple	16.5	85	157	115	M16	25	4000
SP SH25/500	44125500	Grey	16.5	85	157	115	M16	25	5000
SP SH25/600	44125600	Green	16.5	85	157	115	M16	25	6000
SP SH25/800	44125800	Blue	16.5	85	157	115	M16	25	8000
SP SH25/1050	441251050	Yellow	16.5	85	157	115	M16	25	10500
SP SH25/1250	441251250	Black	16.5	85	157	115	M16	25	12500

Note :
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25 mm Deflection

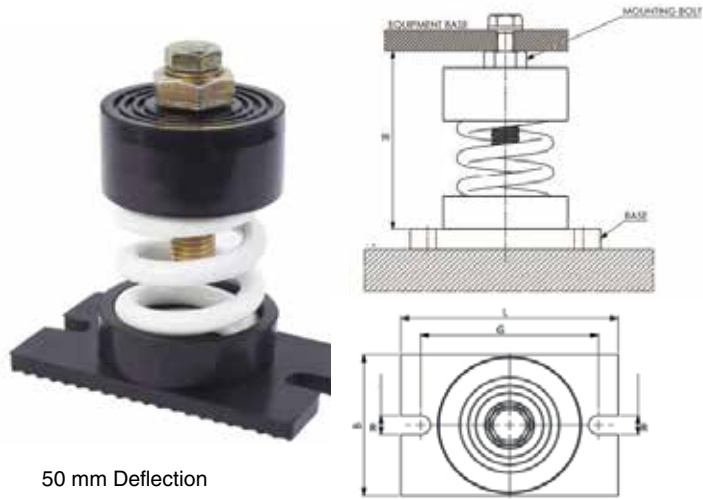
Description

- Unique expanding rubber and fixing of spring which also provides high frequency attenuation.
 - Nominal 20, 25 & 50 mm deflection colour coded springs with 50% overload capacity.
 - Can be bolted to supporting structure or free standing on 6mm thick ribbed rubber pad.
 - Fully height adjustable.
 - Zinc plated metals.
 - No snubbing gives maximum efficiency.
- This unique range of open spring mounting uses an integral rubber end fixing of the spring which sets them apart from all other designs. Loose springs and plates are now history and high frequency and noise attenuation is provided regardless of whether rubber seating pad is used or not.
- Originally designed for use with type IPF Inertia Pouring Frames, the FGOS Mountings are now widely used to isolate vibration from every conceivable type of rotating and reciprocating machine. Some examples being air handling units, axial and centrifugal fans, low level pipe work, ductwork, condensing units, pumps, generating sets, chillers, etc. Where control of transient motion is required open spring mountings can be used in conjunction with our Viscous Dampers Type FGVD.

Technical Data

Item code	Article number	Color code	L mm	G mm	B mm	K mm	R mm	Deflection mm	Max. Load N
SP OSM25/10	44010	Red	110	90	65	115	M10	25	100
SP OSM25/15	44015	Purple	110	90	65	115	M10	25	150
SP OSM25/20	44020	Grey	110	90	65	115	M10	25	200
SP OSM25/30	44030	Green	110	90	65	115	M10	25	300
SP OSM25/40	44040	Blue	110	90	65	115	M10	25	400
SP OSM25/60	44060	Yellow	110	90	75	125	M10	25	600
SP OSM25/100	440100	Black	110	90	75	125	M10	25	1000
SP OSM25/160	440160	White	110	90	75	125	M10	25	1600
SP OSM25/200	440200	Green	110	90	75	125	M10	25	2000
SP OSM25/250	440250	Blue	110	90	75	125	M10	25	2500
SP OSM25/300	440300	Red	140	120	100	168	M12	25	3000
SP OSM25/400	440400	Purple	140	120	100	168	M12	25	4000
SP OSM25/500	440500	Grey	140	120	100	168	M12	25	5000
SP OSM25/600	440600	Green	140	120	100	168	M12	25	6000
SP OSM25/800	440800	Blue	140	120	100	168	M12	25	8000
SP OSM25/1050	4401050	Yellow	140	120	100	168	M12	25	10500
SP OSM25/1250	4401250	Black	140	120	100	168	M12	25	12500

Note :
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Description

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Technical Data

Item code	Article number	Color code	L mm	G mm	B mm	K mm	R mm	Deflection mm	Max. Load N
SP OSM50/10	44010	White	110	90	65	135	M10	50	100
SP OSM50/15	44015	Yellow	110	90	65	135	M10	50	150
SP OSM50/20	44020	Purple	110	90	65	135	M10	50	200
SP OSM50/30	44030	Purple	110	90	65	135	M10	50	300
SP OSM50/40	44040	Yellow	110	90	65	135	M10	50	400
SP OSM50/60	44060	Grey	110	90	75	150	M10	50	600
SP OSM50/100	440100	Green	110	90	75	150	M10	50	1000
SP OSM50/160	440160	Light Blue	110	90	75	155	M10	50	1600
SP OSM50/200	440200	Green	110	90	75	150	M10	50	2000
SP OSM50/250	440250	Green	110	90	75	155	M10	50	2500
SP OSM50/300	440300	Orange	140	120	100	208	M12	50	3000
SP OSM50/400	440400	Red	140	120	100	208	M12	50	4000
SP OSM50/500	440500	Purple	140	120	100	208	M12	50	5000
SP OSM50/600	440600	Grey	140	120	100	213	M12	50	6000
SP OSM50/800	440800	Orange	140	120	100	213	M12	50	8000
SP OSM50/1050	4401050	Brown	140	120	100	213	M12	50	10500
SP OSM50/1250	4401250	Black	140	120	100	213	M12	50	12500

Note :
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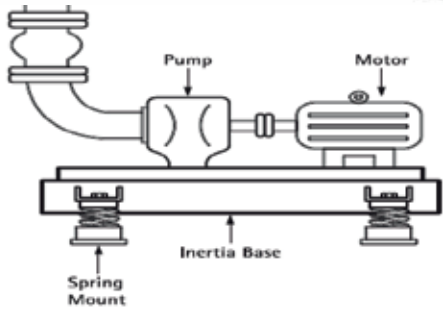
Description

- Color coded springs to facilitate identification.
- Powder coated springs.
- Load upto 5000 kgs.*
- Deflection upto 25mm*
- 4 Models
- 26 Load Ranges
- Deflection is at rated load with 15% Tolerances.
- Unique mount design provides horizontal stability, high loading capacity and protective spring enclosure.
- All mounts have external leveling arrangement, capable of compensating for full static deflection.
- Inner walls of lower casing have resilient rubber snubbers which; -Eliminates possibility of binding by providing a smooth guide path for the top casing.
- Limits lateral movement, particularly due to start-up, shut-down and horizontal wind load.
- Prevents isolator short-circuiting by avoiding metal to metal contact.
- Neoprene inserts below springs and 6 mm thick ribbed base pad act as noise breaks for high frequencies in the audible range, which can otherwise get transmitted to building structure.
- Mountings must be adjusted so that upper housing clears lower housing by at least 6 mm and not more than 12mm.

Technical Data

Item code	Article number	Color code	Bolt	L mm	B mm	S mm	R mm	K mm	FH mm	Deflection mm	Max. Load N
SP CSM 60	4422560	Yellow	M12	160	92	5	M10	147	116	25	600
SP CSM 100	44225100	Black	M12	160	92	5	M10	147	116	25	1000
SP CSM 160	44225160	White	M12	160	92	5	M10	147	116	25	1600
SP CSM 200	44225200	Green	M12	160	92	5	M10	147	116	25	2000
SP CSM 250	44225250	Blue	M16	160	92	5	M10	147	116	25	2500
SP CSM 300	44225300	Red	M16	200	115	10	M10	180	158	25	3000
SP CSM 400	44225400	Purple	M16	200	115	10	M10	180	158	25	4000
SP CSM 500	44225500	Grey	M16	200	115	10	M10	180	158	25	5000
SP CSM 600	44225600	Green	M16	200	115	10	M10	180	158	25	6000
SP CSM 800	44225800	Blue	M16	200	115	10	M12	180	158	25	8000
SP CSM 1050	442251050	Yellow	M16	200	115	10	M12	180	158	25	10500
SP CSM 1250	442251250	Black	M16	200	115	10	M12	180	158	25	12500
SP CSM 11/600	44325600	Red	M20	285	210	10	M16	265	163	25	6000
SP CSM 11/800	44325800	Purple	M20	285	210	10	M16	265	163	25	8000
SP CSM 11/1050	443251000	Grey	M20	285	210	10	M16	265	163	25	10500
SP CSM 11/1200	443251200	Green	M20	285	210	10	M16	265	163	25	12000
SP CSM 11/1600	443251600	Blue	M20	285	210	10	M16	265	163	25	16000
SP CSM 11/2100	443252100	Yellow	M20	285	210	10	M16	265	163	25	21000
SP CSM 11/2500	443252500	Black	M20	285	210	10	M16	265	163	25	25000
SP CSM 11/1200	444251200	Red	M20	285	210	10	M16	265	163	25	12000
SP CSM 11/1600	444251600	Purple	M20	285	210	10	M16	265	163	25	16000
SP CSM 11/2000	444252000	Grey	M20	285	210	10	M16	265	163	25	20000
SP CSM 11/2400	444252400	Green	M20	285	210	10	M16	265	163	25	24000
SP CSM 11/3200	444253200	Blue	M20	285	210	10	M16	265	163	25	32000
SP CSM 11/4200	444254200	Yellow	M20	285	210	10	M16	265	163	25	42000
SP CSM 11/5000	444255000	Black	M20	285	210	10	M16	265	163	25	50000

Note :
Due to policy of continual improvement, the specifications are subject to change without prior notice. Measurement are subject to 5% tolerance.
To achieve good sound suppressions do not overload fitting.



Description

- Inertia Base is specially designed and engineered to pour concrete, which after curing is used as mechanical vibration isolated reinforced inertia base for the equipments.
- These Inertia Base are recommended to use under heavy start up and shut down vibration amplitude equipments such as generators, IC engines, large fans, centrifugal chillers etc .
- Inertia Base made from standard structural channel or formed steel channel depend upon the design.
- It is used 12 mm reinforcement rod welded in 150 mm spacing for better concrete strength.
- Inertia Base is supplied with red oxide primer coating, Also as per request galvanized will be supplied.
- Klemco Vibration Isolator Spring Mount will be supplied together as per drawing.

Technical Data

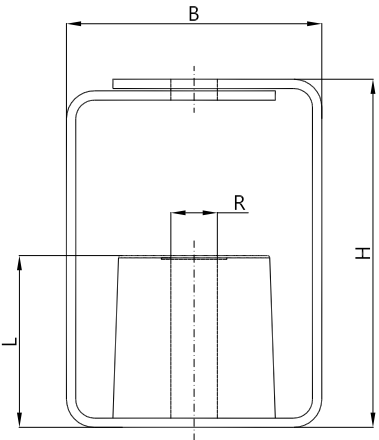
Data	Item code	Base width in mm					
		500	750	1000	1250	1500	1750
Base length in mm	SP IB500	150	-	-	-	-	-
	SP IB750	150	150	-	-	-	-
	SP IB1000	150	150	150, 200, 250	-	-	-
	SP IB1250	150	150x200	150, 200, 250	-	-	-
	SP IB1500	150	150x200	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300	-
	SP IB1750	-	150x200	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300
	SP IB2000	-	150x200	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300
	SP IB2250	-	-	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300
	SP IB2500	-	-	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300
	SP IB2750	-	-	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300
	SP IB3000	-	-	-	150, 200, 250, 300	150, 200, 250, 300	150, 200, 250, 300

Note :
Measurement are subject to 5% tolerance.
Selection of vibration isolators is based on motor & pump weight.
Any non-standard size inertia base can be manufacture suitable to pump & motor assembly.



Description

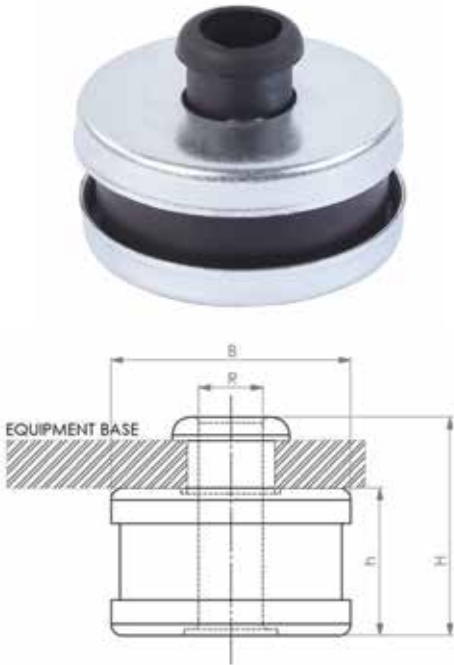
- Comprised of a neoprene element within a square, powder-coated bracket.
- Designed to absorb the equipment vibration and noise
- Easy to install.



Technical Data

Item code	Article number	Color Code	B mm	H mm	L mm	R mm	Deflection mm	Max. Load N
SP RH10	44510	Blue	55	75	40	M10	8	100
SP RH20	44520	Green	55	75	40	M10	8	200
SP RH30	44530	Red	55	75	40	M10	8	300
SP RH50	44550	Yellow	55	75	40	M10	8	500
SP RH50	44570	Brown	55	75	40	M10	10	700
SP RH120	445120	Orange	55	75	40	M10	10	1200

Note :
Measurement are subject to 5% tolerance.
Selection of vibration isolators is based on motor & pump weight.
Any non-standard size inertia base can be manufacture suitable to pump & motor assembly.



Description & Applications

- Duct Hanger consist of a resilient rubber mount held between two plated steel caps.
- For uniform distribution of load. It has an integral extended rubber sleeve which prevents direct.
- Metal-to-metal contact, thereby minimizing transmission of noise and vibration.

SUSPENSION OF

- Fan Coil Units
- Pipes
- Ducts
- Brackets
- Light Weight Equipments

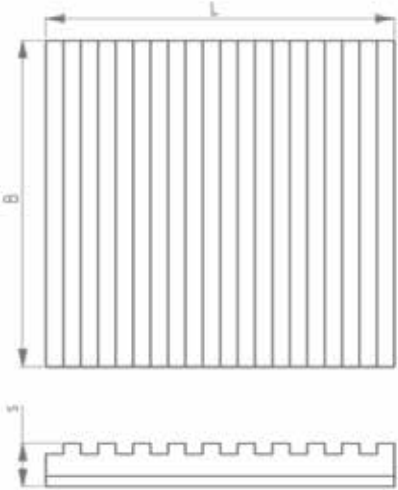
FLOOR MOUNTING OF

- Refrigerators
- Domestic Appliances
- Industrial Equipments

Technical Data

Item code	Article Number	B mm	H mm	h mm	R mm	Deflection mm	Max. Load N
SP DM 60	44660	32	27	19	M10	4	600
SP DM 90	44690	41	37	25	M10	4	600

Note :
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To achieve good sound suppressions do not over load fitting.



Description & Applications

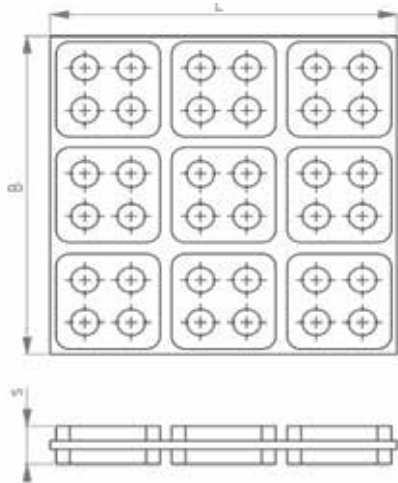
- Utilizes an alternate high-low ribbed construction.
- These pads can be easily trimmed to a size slightly larger than the leg or machine using shears or a knife.
- Possible to increase deflection by using multiple layers of Ribbed Mounting Pad.
- Easy to install in the field.
- Designed to absorb the equipment vibration and noise



Technical Data

Item code	Article Number	Length (L) mm	Width (B) mm	Thickness (s) mm	Max. Load N
SP RMP075	447075	75	75	10	750
SP RMP100	447100	100	100	10	1050
SP RMP150	447150	150	150	10	1500
SP RMP200	447200	200	200	10	2050
SP RMP300	447300	300	300	10	3100
SP RMP450	447450	450	450	10	4800

Note :
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Description

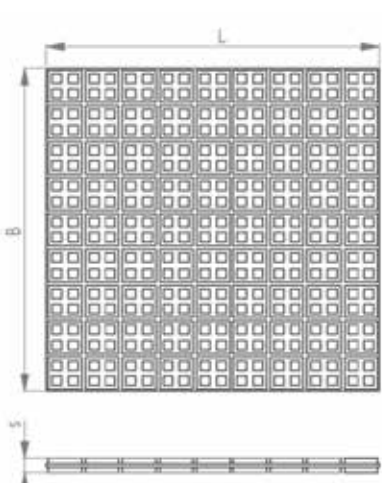
- Can be fixed without anchor bolts.
- Easy to install in the field.
- These pads can be easily trimmed to a size slightly larger than the leg or machine using shears or a knife.
- Designed to absorb the equipment vibration and noise



Technical Data

Item code	Article Number	Length (L)	Width (B)	Thickness (s)	Max. Load N
		mm	mm	mm	
SP WP075	47000757520	75	75	20	750
SP WP100	47010010020	100	100	20	1050
SP WP150	47015015020	150	150	20	1500
SP WP200	47020020020	200	200	20	2050
SP WP300	47030030020	300	300	20	3100
SP WP450	47045045020	450	450	20	4800

Note :
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Description

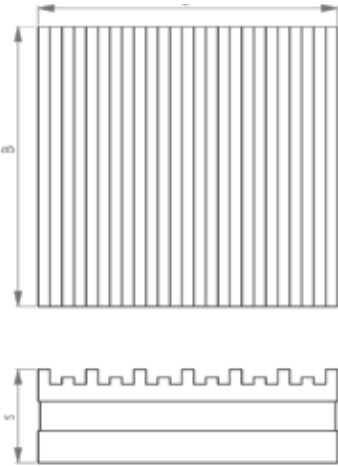
- The Square Cell Pad is composed of 81 sections measuring 50 mm x 50 mm, separated by a thin web that can be readily cut to meet specific needs.
- Offers superior high-frequency sound attenuation when compared to waffle pads..
- Standard size for ease of handling.
- Designed to absorb the equipment vibration and noise



Technical Data

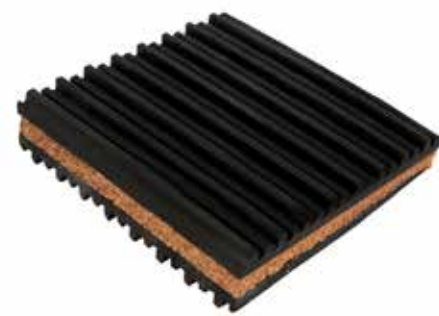
Item code	Article Number	Length (L)	Width (B)	Thickness (s)	Max. Load N
		mm	mm	mm	
SP SCP075	48000757520	75	75	20	1000
SP SCP100	48010010020	100	100	20	1500
SP SCP150	48015015020	150	150	20	2000
SP SCP200	48020020020	200	200	20	3000
SP SCP300	48030030020	300	300	20	4500
SP SCP450	48045045020	450	450	20	6000

Note :
Due to policy of continual improvement, the specifications are subject to change without prior notice.
Measurement are subject to 5% tolerance.
To achieve good sound suppressions do not over load fitting.



Description

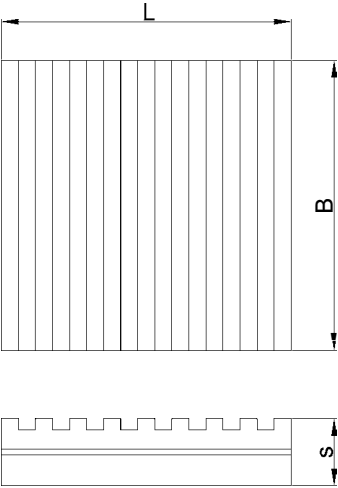
- Cork Sandwich Pads are laminated pads with a 3/8" thick, tightly bonded, close-grained cork layer sandwiched between two layers of 1/4" alternating low-high ribbed neoprene rubber pads.
- Offers superior high-frequency sound attenuation
- Easy to install.
- Can be installed without anchor bolts
- Designed to absorb the equipment vibration and noise



Technical Data

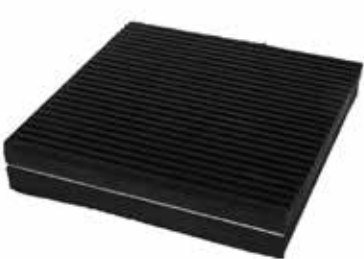
Item code	Article Number	Length (L)	Width (B)	Thickness (s)	Max. Load N
		mm	mm	mm	
SP SCP075	49000757522	75	75	22	1500
SP CSP100	49010010022	100	100	22	2000
SP CSP150	49015015022	150	150	22	3000
SP CSP200	49020020022	200	200	22	4000
SP CSP300	49030030022	300	300	22	6000
SP CSP450	49045045022	450	450	22	9000

Note :
Due to policy of continual improvement, the specifications are subject to change without prior notice.
Measurement are subject to 5% tolerance.
To achieve good sound suppressions do not over load fitting.



Description

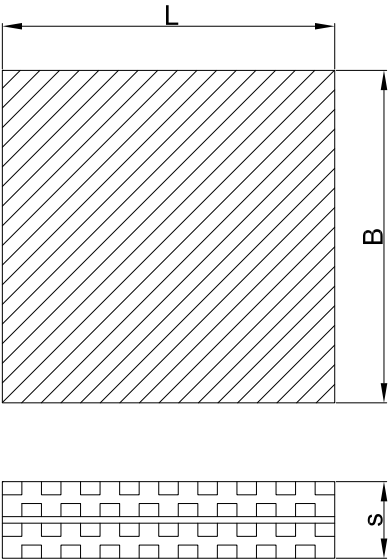
- Metal Sandwich Pads are fabricated with a steel plate securely bonded between ribbed and vibration pads.
- Designed for heavy duty equipment.
- Designed to absorb the equipment vibration and noise
- Easy to install.



Technical Data

Item code	Article Number	Length (L)	Width (B)	Thickness (s)	Max. Load N
		mm	mm	mm	
SP MSP075/20	50000757520	75	75	20	6000
SP MSP100/20	50010010020	100	100	20	7500
SP MSP150/20	50015015020	150	150	20	12500
SP MSP200/20	50020020020	200	200	20	15000
SP MSP300/20	50030030020	300	300	20	18000
SP MSP450/20	50045045020	450	450	20	22000
SP MSP450/20	50000757525	75	75	25	9000
SP MSP450/20	50010010025	100	100	25	11250
SP MSP450/20	50015015025	150	150	25	18750
SP MSP450/20	50020020025	200	200	25	22500
SP MSP450/20	50030030025	300	300	25	27000
SP MSP450/25	50045045025	450	450	25	33000

Note :
Due to policy of continual improvement, the specifications are subject to change without prior notice.
Measurement are subject to 5% tolerance.
To achieve good sound suppressions do not over load fitting.



Description

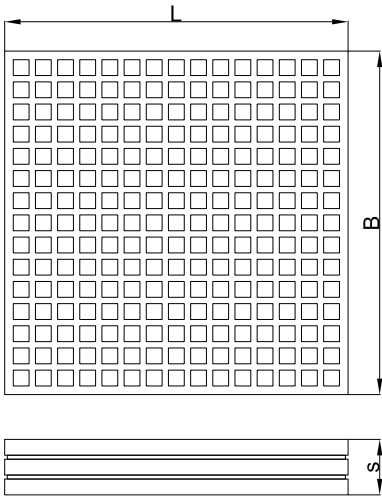
- Ribbed Multi-Layer Pads consist of two layers of thick ribbed pads that encapsulate a 1.5 mm thick steel plate in the center.
- An alternating rib design with the ribs positioned both below and above, interconnected at right angles to prevent skidding.
- Diagonal ribs help to distribute load uniformly.
- Designed to absorb the equipment vibration and noise



Technical Data

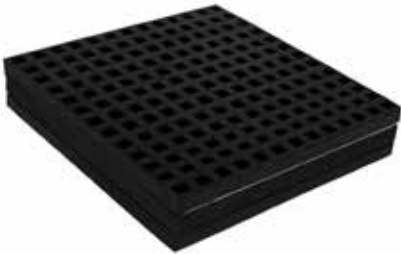
Item code	Article Number	Length (L) mm	Width (B) mm	Thickness (s) mm	Deflection mm	Max. Load N
SP RMLP102	448100	152	152	35	4.5	9000
SP RMLP102	448150	102	102	35	4.5	4000

Note :
Due to policy of continual improvement, the specifications are subject to change without prior notice.
Measurement are subject to 5% tolerance.
To achieve good sound suppressions do not load fitting.



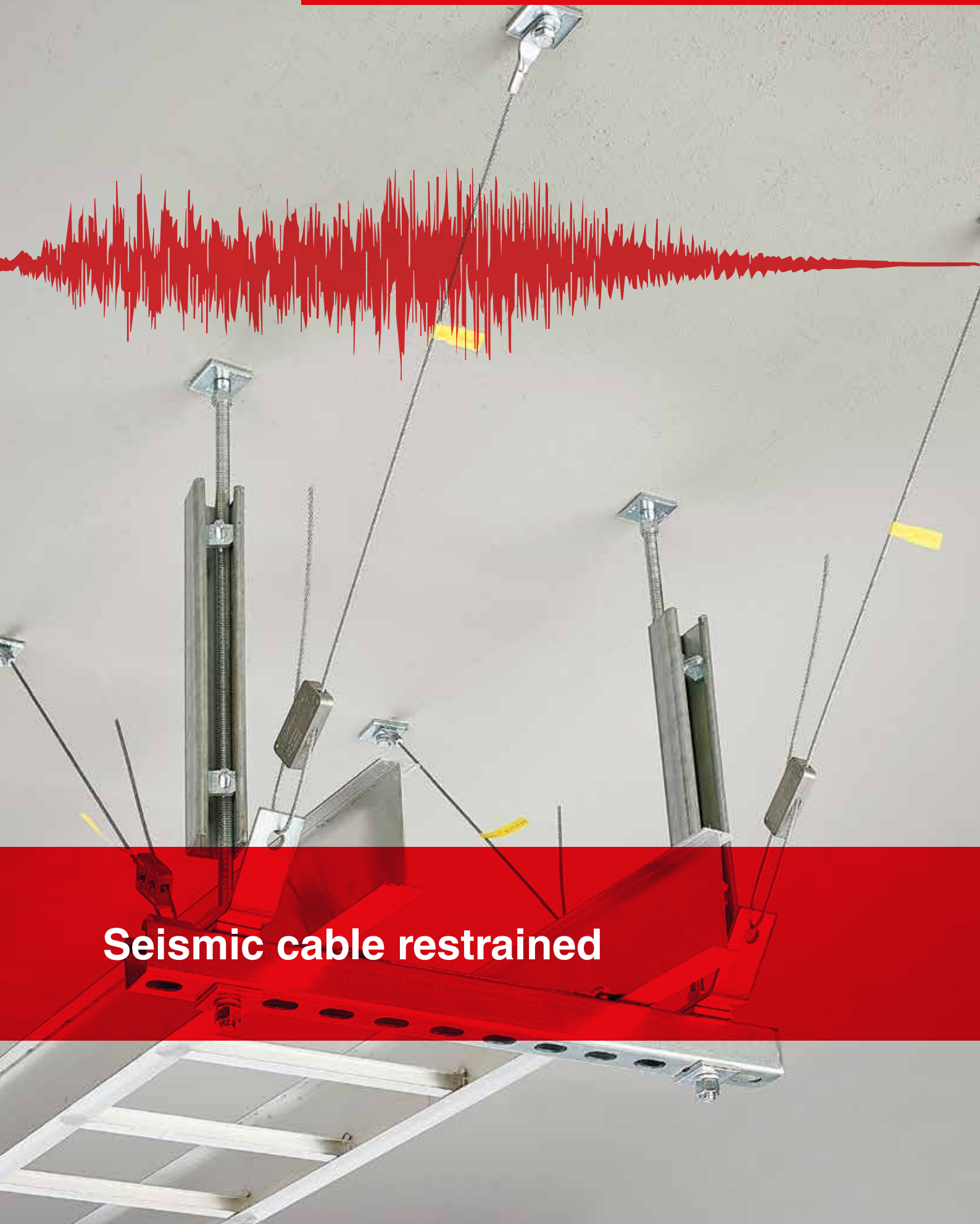
Description

- Square Cell Multi-Layer Pads are crafted using three layers of square cell rubber sheets, each featuring two steel plates with a thickness of 1.5 mm.
- The square cell design creates suction pockets that enhance the pad's grip on the floor surface.
- Higher load capacity than Ribbed Multi Layer Pad.
- Designed to absorb the equipment vibration and noise



Technical Data

Item code	Article Number	Length (L) mm	Width (B) mm	Thickness (s) mm	Deflection mm	Max. Load N
SP SMLP152	52015215235	152	152	35	4.5	10000
SP SMLP102	52010210235	102	102	35	4.5	4500



Seismic cable restrained

8. Seismic cable restrained

Seismic wire rope cable

Seismic wire clip



Description

- Convenient for relocating and maneuvering around different spool sizes.
- Cable length can be customized to meet specific requirements..
- The brace connection is securely fastened with a wire clip.
- Designed for seismic bracing, circular duct, Lifting..

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article Number	Cable Dia (mm)	Tightening Torque (Nm)	Minimum Breaking Strength of wire rope (kN)
SPSCB-01	520111	1.0 - 1.5	4.0	2.40
SPSCB-02	520112	2.0	6.1	3.00
SPSCB-03	520113	3.0	6.1	5.72
SPSCB-04	520114	4.0	6.1	10.20
SPSCB-05	520115	5.0	10.2	13.80
SPSCB-06	520116	6.0	20.3	17.90
SPSCB-08	520118	8.0	40.7	26.90



Description

- Designed to support high loads of MEP seismic application.
- BThe body is constructed from a special-grade zinc material known for its excellent anti-corrosion properties.
- Removes the need for swaging and screwing the cable into the clip.
- Load capacity is achievable only in combination with wire cable
- High Load capacity is achievable when increasing the numbers of clips

Standards & Properties

- Electro Zinc Plated as per ASTM B 633.
- Hot Dip Galvanized as per ASTM A 123 / A 123M.
- Stainless Steel A4, 1.4401.

Technical Data

Item	Article Number	Wire Size (mm)	Load Ratings (Kg)	Minimum Breaking Strength of wire clip (Kg)
SPSCC-01	521111	1.0 - 1.50	50	75
SPSCC-02	521112	2.0	60	90
SPSCC-03	521113	3.0	120	180
SPSCC-04	521114	4.0	210	315
SPSCC-05	521115	5.0	280	420
SPSCC-06	521116	6.0	360	540
SPSCC-08	521118	8.0	540	810



Technical information

9. Technical information

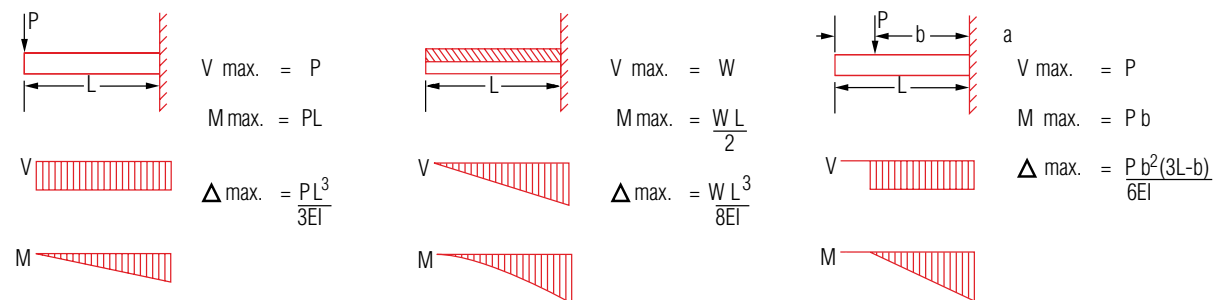
Engineering data

Support Selection Chart - Steel Pipe

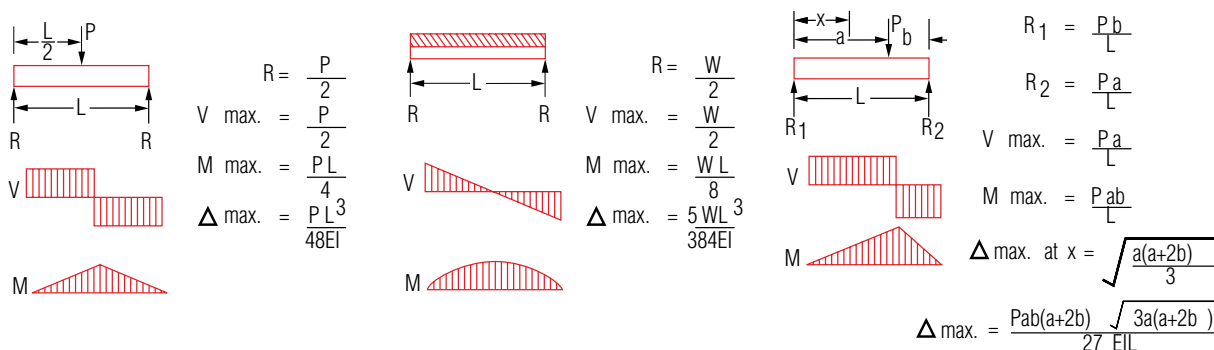
Pipe hanger & support recommended specifications

Beam formulae

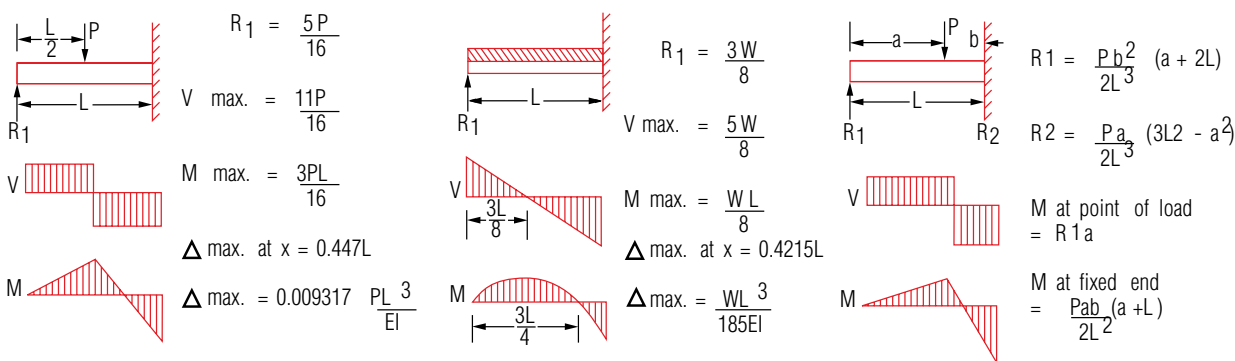
CANTILEVER BEAMS



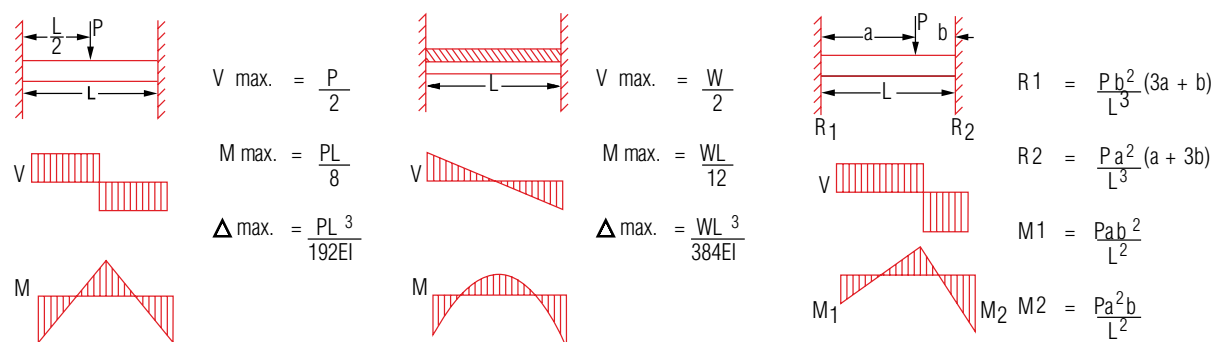
SIMPLE BEAMS



BEAMS FIXED ONE END, SUPPORTED AT OTHER



BEAMS FIXED AT BOTH ENDS



R - Reaction
M - Moment (Nmm)
P - Concentrated load (N)

W - Total uniform load (N)
V - Shear
L - Length (mm)

Δ - Deflection (mm)
E - Modulus of Elasticity (MPa)
I - Moment of Inertia (mm⁴)

Conversion factors

DESIGN LOAD DATA - TYPICAL STRUT CONNECTION

Load tables in this catalogue for 41mm Strut width series are for single span beams supported at the ends. These can be used in the majority of cases. There are times when it is necessary to know what happens with other loading and support conditions. Some common arrangements are shown in Table 1. Simply multiply the loads from the Beam Load Tables by the load factors given in Table 1. Similarly, multiply the deflections from the Beam Load Tables by the deflection factor given in Table 1.

TABLE 1

Load and Support Condition	Load Factor	Deflection Factor
1 Simple Beam - Uniform Load	1.00	1.00
2 Simple Beam Concentrated Load at Centre	0.50	0.80
3 Simple Beam - Two Equal Concentrated Loads at 1/4 Points	1.00	1.10
4 Beam Fixed at Both Ends - Uniform Load	1.50	0.30
5 Beam Fixed at Both Ends - Concentrated Load at Centre	1.00	0.40
6 Cantilever Beam - Uniform Load	0.25	2.40
7 Cantilever Beam - Concentrated Load at End	0.12	3.20
8 Continuous Beam - Two Equal Spans - Uniform Load on One Span	1.30	0.92
9 Continuous Beam - Two Equal Spans - Uniform Load on Both Ends	1.00	0.42
10 Continuous Beam - Two Equal Spans - Concentrated Load at Centre of One Span	0.62	0.71
11 Continuous Beam - Two Equal Spans - Concentrated Load at Centre of Both Spans	0.67	0.48

COLUMN LOADING

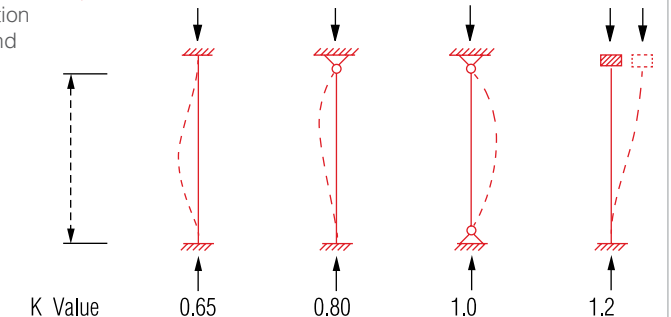
The strength of axially loaded columns or compression members is, in part, dependent on the end conditions, that is, the degree of end fixity or restraint. A column with both ends fixed will support more load than one with both ends free or pin-ended.

Column loads published for Spectra sections in this catalogue are offered as a guide and assume a partially fixed end condition as usually found in flat ended columns that are laterally tied and braced, i.e. $K = 1.0$.

Assumed K values (effective length factors) for columns with varying end restraints are as follows:

END CONDITION CODE

- Rotation fixed and translation fixed
- Rotation free and translation fixed
- Rotation fixed and translation free



HOW TO USE LOAD TABLES

Channel selections as beams

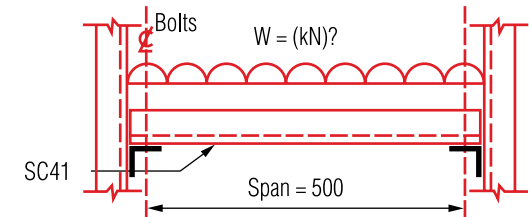
The load capacity of channel members acting as a horizontal beam, between two vertical channel members acting as columns, is governed by:

- the nature of the load.
- the particular section to be used.
- the span of the beam.
- the beam-load capacity of the section for a given span.
- the load capacity of the connectors used to support the beams on the columns.
- the load limitations, if any, resulting from special deflection considerations.

If items a), b) and c) are known, the load capacity is the smallest value of d), e), and f) as read or derived from the listed values in the appropriate tables.

EXAMPLE 1

What is the uniformly distributed load capacity of a SC41X41X2.5 section used as a beam to span 500mm if SAF2 connectors are used to support the beam?



STEP 1

Find beam load at maximum permissible stress.
From SC41 Beam and Column 500mm section,
 $W = 7.42\text{kN}$.

STEP 2

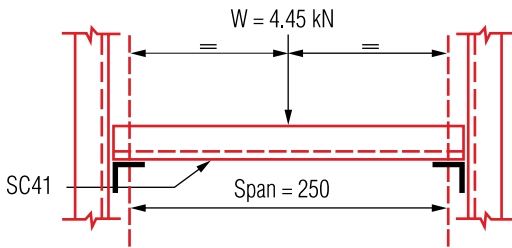
Find load capacity of connectors.
Safe Bearing Loads for SC41 section supported on SAF2 connectors; Support load = 6.67kN
Beam load = 2 x support load = 2 x 6.67 = 13.34kN.

STEP 3

- Check deflection limitations.
- No special deflection considerations apply.

STEP 4

- Select smallest load value from Step 1 to 3.
- Smallest value is 7.42kN.
- To convert to mass units divide by 0.0098, hence load capacity $W = 7.42 / 0.0098 = 757\text{ kg}$ uniformly distributed.



STEP 1

- Convert point load to equivalent uniformly distributed load by multiplying by 2.
- Equivalent U.D.L. = $4.45 \times 2 = 8.9\text{kN}$.

STEP 2

- Compare with beam load capacity for SC41 section spanning 250mm. For SC41 Beam and Columns in this Tab Section. Tabulated value = 14.83kN.

- Since this is greater than load to be applied, the SC41 section is satisfactory.

STEP 3

- Determine support loads, which are each half the applied load. Support load = 2.23kN.

STEP 4

- Select appropriate connector from Safe Bearing Loads in this Tab Section.
- Recommended load for SAF2 supporting SC41 = 6.67kN.
- As the SAF2 connectors exceed the required support load of 2.23kN, use SAF2 connectors at each end.

STEP 5

- Calculate central Deflection of beam from

$$\delta = (W_2 / W_1) \times (L_2 / L_1)^3 \times 8,$$

- From Beam load table for SC41 section with $L_1 = 250\text{mm}$. $W_1 = 14.83\text{kN}$ and $\delta = 0.22\text{mm}$

- From example data and step 1 above $W_2 = 8.9\text{kN}$, $L_2 = 250\text{mm}$

- Substituting values in formula
 $\delta = (8.9/14.83) \times (250/250)^3 \times 0.22 = 0.14\text{mm}$

As this is the value for the equivalent uniformly applied load a correction is necessary to account for a central point load. This is done by multiplying the uniform load deflection by 0.8. Hence deflection under applied point load:

HOW TO USE LOAD TABLES

Channel selections as columns

The load capacity of channel sections acting as columns depends on:

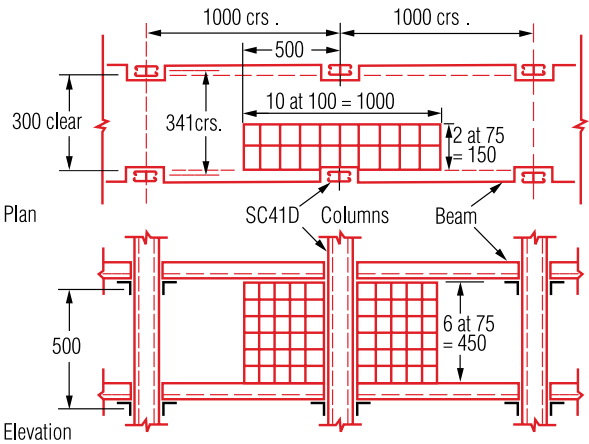
- the particular section used.
- the actual height of the column, measured between centres of connections to horizontal members.
- the location of the resultant axial load with respect to the centre of gravity (C.G.) of the section (i.e. the location of the resultant axial load with respect to the C.G. of the section, as shown on the section diagrams).
- the restraint to various kinds of movements of the column offered by the connections to horizontal members at various levels.

It is emphasised that, for tabulated values to be used directly, the resultant load must be concentric (i.e. act through the C.G.) and connections at each end of a free column height must restrain those ends from both horizontal and torsional movement. If these conditions do not apply, reference should be made to the appropriate sections of AS/NZS 4600 since it is most likely that a smaller value than the listed one should be used.

EXAMPLE 3

Island-type storage shelving is to be constructed using SC41D main posts (columns) at 1000 x 341mm centres. Shelves are to be at 500mm vertical spacing starting from the floor and connected to the posts so that concentric loading and translational and torsional restraint are provided at each level under full load conditions.

If the shelves are to carry packages of bolts stacked six high per shelf and the packages measure 75 x 75 x 100mm with a mass of 6.5kg each, what is the maximum height (number) of shelving that can be used?



STEP 1

- Determine Concentric load for shelf.
- Plan area supported by each main column = $1000 \times 150 = 150,000\text{mm}^2$
- This area can be packed with 20 packages
- 75 x 100mm in plan i.e. 120 packages per shelf

Hence mass per shelf and load per shelf

STEP 2

- Determine load capacity of SC41D section.
- For SC41D section with height 500mm.
- Maximum column load = 94.09kN.

STEP 3

- Determine number of shelves.
- Divide column load capacity by the load per shelf. i.e. Number of shelves = $94.09 / 7.64 = 12.31$
- Hence maximum number of shelves = 12 i.e. max. height of shelving = $12 \times 0.5 = 6.0\text{ metres}$

SUPPORT SELECTION CHART FOR SP RSI - 13mm Thickness

Nominal Pipe Size		Pipe Outer Diameter	RSI Size	Total Outer Diameter	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp
(inch)	(mm)	(mm)		(mm)					
1/2"	15	21.3	1/2" x 13mm x 25mm	47.3	3170048	3140048	211104810	2125048	3200048
3/4"	20	26.7	3/4" x 13mm x 25mm	52.7	3170054	3140054	211106010	2125054	3200054
1"	25	33.4	1" x 13mm x 25mm	59.4	3170060	3140060	211106010	2125060	3200060
1-1/4"	32	203.2	1"-1/4 x 13mm x 25mm	68.1	3170072	3140070	211107212	2125072	3200072
1-1/2"	40	48.2	1-1/2" x 13mm x 25mm	74.2	3170075	3140075	211107512	2125075	3200075
2"	50	209.6	2-1/2" x 13mm x38mm	86.3	3170086	3140086	211108612	2125086	3200086
2-1/2"	65	73.0	3" x 13mm x 38mm	99.0	3170100	3140100	211109812	2125100	3200100
3"	80	88.9	2-1/2" x 13mm x 38mm	114.9	3170115	3140115	211111512	2125115	3200115
3-1/2"	90	101.6	3-1/2" x 13mm x 38mm	127.6	3170140	3140125	211112512	2125125	3200125
4"	100	114.3	4" x 13mm x 38mm	140.3	3170140	3140140	211114012	2125140	3200140
5"	125	141.3	5" x 13mm x 38mm	167.3	3170168	3140168	211116812	2125168	3200168
6"	150	168.3	6" x 13mm x 38mm	194.3	3170195	-	211119512	2125195	3200192
6"	150	219.1	8" x 13mm x 50mm	245.1	3170245	-	211124216	2125245	3200245

SUPPORT SELECTION CHART FOR SP RSI - 19mm Thickness

Nominal Pipe Size		Pipe Outer Diameter	RSI Size	Total Outer Diameter	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp
(inch)	(mm)	(mm)		(mm)					
1/2"	15	21.3	1/2" x 13mm x 25mm	59.3	3170060	DMC 133060	211106010	2125060	3200060
3/4"	20	26.7	3/4" x 13mm x 25mm	64.7	3170065	314063	211106512	2125066	3200065
1"	25	33.4	1" x 13mm x 25mm	71.4	3170072	3140070	211107212	2125072	3200072
1-1/4"	32	203.2	1"-1/4 x 13mm x 25mm	80.1	3170080	3140080	211108012	2125080	3200080
1-1/2"	40	48.2	1-1/2" x 13mm x 25mm	86.2	3170086	3140086	211108612	2125086	3200086
2"	50	209.6	2-1/2" x 13mm x38mm	98.3	3170099	3140100	211109812	2125098	3200098
2-1/2"	65	73.0	3" x 13mm x 38mm	111.0	3170111	3140110	211111012	2125110	3200110
3"	80	88.9	2-1/2" x 13mm x 38mm	126.9	3170127	3140125	211112712	2125127	3200125
3-1/2"	90	101.6	3-1/2" x 13mm x 38mm	139.6	3170140	3140140	211114012	2125140	3200140
4"	100	114.3	4" x 13mm x 38mm	152.3	3170153	3140150	211115312	2125153	3200150
5"	125	141.3	5" x 13mm x 38mm	179.3	3170179	-	211117912	2125179	3200180
6"	150	168.3	6" x 13mm x 38mm	206.3	3170206	-	211120612	2125205	3200206
8"	150	219.1	8" x 13mm x 50mm	257.1	3170258	-	211125816	2125258	3200258

SUPPORT SELECTION CHART FOR SP RSI - 25mm Thickness

Nominal Pipe Size		Pipe Outer Diameter	RSI Size	Total Outer Diameter	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp
(inch)	(mm)	(mm)		(mm)					
1/2"	15	21.3	1/2" x 25mm x 25mm	71.3	3170072	3140070	211107212	2125072	3200072
3/4"	20	26.7	3/4" x 25mm x 25mm	76.7	3170077	3140075	211107712	2125077	3200075
1"	25	33.4	1" x 25mm x 25mm	83.4	3170084	3140083	211108412	2125084	3200080
1-1/4"	32	42.1	1-1/4" x 25mm x 25mm	92.1	3170092	3140090	211109212	2125092	3200092
1-1/2"	40	48.2	1-1/2" x 25mm x 25mm	98.2	3170098	3140100	211109812	2125098	3200098
2"	50	60.3	2" x 25mm x25mm	110.3	3170111	3140110	211111012	2125111	3200110
2-1/2"	65	73.0	2-1/2" x 25mm x 38mm	123.0	3170123	3140125	211112312	2125123	3200123
3"	80	88.9	3" x 25mm x 38mm	138.9	3170140	3140140	211113912	2125140	3200139
3-1/2"	90	101.6	3-1/2" x 25mm x 38mm	151.6	3170153	3140150	211115212	2125153	3200150
4"	100	114.3	4" x 25mm x 38mm	164.3	3170168	3140168	211116512	2125165	3200165
5"	125	141.3	5" x 25mm x 38mm	191.3	3170192	-	211119212	2125190	3200192
6"	150	168.3	6" x 25mm x 50mm	218.3	3170219	-	211121916	2125219	3200219
8"	200	219.1	8" x 25mm x 50mm	269.1	3170269	-	211126920	2125269	3200269
10"	250	273.0	10" x 25mm x 50mm	323.0	3170323	-	211132320	2125323	3200323
12"	300	323.8	12" x 25mm x 50mm	372.8	3170374	-	211137420	2125374	3200374
14"	350	355.6	14" x 25mm x 50mm	405.6	3170406	-	211140620	2125406	3200406
16"	400	406.4	16" x 25mm x 50mm	456.4	3170457	-	211145720	2125454	3200457

SUPPORT SELECTION CHART FOR SP RSI - 32mm Thickness

Nominal Pipe Size		Pipe Outer Diameter	RSI Size	Total Outer Diameter	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp
(inch)	(mm)	(mm)		(mm)					
1/2"	15	21.3	1/2" x 25mm x 25mm	71.3	3170072	3140070	211107212	2125072	3200072
3/4"	20	26.7	3/4" x 25mm x 25mm	76.7	3170077	3140075	211107712	2125077	3200075
1"	25	33.4	1" x 25mm x 25mm	83.4	3170084	3140083	211108412	2125084	3200080
1-1/4"	32	42.1	1-1/4" x 25mm x 25mm	92.1	3170092	3140090	211109212	2125092	3200092
1-1/2"	40	48.2	1-1/2" x 25mm x 25mm	98.2	3170098	3140100	211109812	2125098	3200098
2"	50	60.3	2" x 25mm x25mm	110.3	3170111	3140110	211111012	2125111	3200110
2-1/2"	65	73.0	2-1/2" x 25mm x 38mm	123.0	3170123	3140125	211112312	2125123	3200123
3"	80	88.9	3" x 25mm x 38mm	138.9	3170140	3140140	211113912	2125140	3200139
3-1/2"	90	101.6	3-1/2" x 25mm x 38mm	151.6	3170153	3140150	211115212	2125153	3200150
4"	100	114.3	4" x 25mm x 38mm	164.3	3170168	3140168	211116512	2125165	3200165
5"	125	141.3	5" x 25mm x 38mm	191.3	3170192	-	211119212	2125190	3200192
6"	150	168.3	6" x 25mm x 50mm	218.3	3170219	-	211121916	2125219	3200219
8"	200	219.1	8" x 25mm x 50mm	269.1	3170269	-	211126920	2125269	3200269
10"	250	273.0	10" x 25mm x 50mm	323.0	3170323	-	211132320	2125323	3200323
12"	300	323.8	12" x 25mm x 50mm	372.8	3170374	-	211137420	2125374	3200374
14"	350	355.6	14" x 25mm x 50mm	405.6	3170406	-	211140620	2125406	3200406
16"	400	406.4	16" x 25mm x 50mm	456.4	3170457	-	211145720	2125454	3200457

SUPPORT SELECTION CHART FOR SP RSI - 38mm Thickness

Nominal Pipe Size		Pipe Outer Diameter	RSI Size	Total Outer Diameter	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp
(inch)	(mm)	(mm)		(mm)					
1/2"	15	21.3	1/2" x 25mm x 25mm	71.3	3170072	3140070	211107212	2125072	3200072
3/4"	20	26.7	3/4" x 25mm x 25mm	76.7	3170077	3140075	211107712	2125077	3200075
1"	25	33.4	1" x 25mm x 25mm	83.4	3170084	3140083	211108412	2125084	3200080
1-1/4"	32	42.1	1-1/4" x 25mm x 25mm	92.1	3170092	3140090	211109212	2125092	3200092
1-1/2"	40	48.2	1-1/2" x 25mm x 25mm	98.2	3170098	3140100	211109812	2125098	3200098
2"	50	60.3	2" x 25mm x25mm	110.3	3170111	3140110	211111012	2125111	3200110
2-1/2"	65	73.0	2-1/2" x 25mm x 38mm	123.0	3170123	3140125	211112312	2125123	3200123
3"	80	88.9	3" x 25mm x 38mm	138.9	3170140	3140140	211113912	2125140	3200139
3-1/2"	90	101.6	3-1/2" x 25mm x 38mm	151.6	3170153	3140150	211115212	2125153	3200150
4"	100	114.3	4" x 25mm x 38mm	164.3	3170168	3140168	211116512	2125165	3200165
5"	125	141.3	5" x 25mm x 38mm	191.3	3170192	-	211119212	2125190	3200192
6"	150	168.3	6" x 25mm x 50mm	218.3	3170219	-	211121916	2125219	3200219
8"	200	219.1	8" x 25mm x 50mm	269.1	3170269	-	211126920	2125269	3200269
10"	250	273.0	10" x 25mm x 50mm	323.0	3170323	-	211132320	2125323	3200323
12"	300	323.8	12" x 25mm x 50mm	372.8	3170374	-	211137420	2125374	3200374
14"	350	355.6	14" x 25mm x 50mm	405.6	3170406	-	211140620	2125406	3200406
16	400	406.4	16" x 25mm x 50mm	456.4	3170457	-	211145720	2125454	3200457

SUPPORT SELECTION CHART FOR SP RSI - 50mm Thickness

Nominal Pipe Size		Pipe Outer Diameter	RSI Size	Total Outer Diameter	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp
(inch)	(mm)	(mm)		(mm)					
1/2"	15	21.3	1/2" x 50mm x 25mm	121.3	3170122	3140120	211112212	2125119	3200123
3/4"	20	26.7	3/4" x 50mm x 25mm	126.7	3170127	3140125	211112712	2125127	3200125
1"	25	33.4	1" x 50mm x 25mm	133.4	3170137	3140133	211113412	2125133	3200134
1-1/4"	32	42.1	1-1/4" x 50mm x 25mm	142.1	3170140	3140140	211113412	2125142	3200140
1-1/2"	40	48.2	1-1/2" x 50mm x 25mm	148.2	3170148	3140150	211114812	2125148	3200148
2"	50	60.3	2" x 50mm x 25mm	160.3	3170160	3140160	211116012	2125160	3200160
2-1/2"	65	73.0	2-1/2" x 50mm x 38mm	173.0	3170173	-	211117312	2125173	3200173
3"	80	88.9	3" x 50mm x 38mm	188.9	3170191	-	211119012	2125190	3200190
3-1/2"	90	101.6	3-1/2" x 50mm x 38mm	201.6	3170202	-	211120312	2125203	3200200
4"	100	114.3	4" x 50mm x 38mm	214.3	3170215	-	211121512	2125191	3200215
5"	125	141.3	5" x 50mm x 38mm	241.3	3170242	-	211124216	2125242	3200240
6"	150	168.3	6" x 50mm x 50mm	268.3	3170269	-	211126916	2125269	3200269
8"	200	219.1	8" x 50mm x 50mm	319.1	3170320	-	211132020	2125269	3200320
10"	250	273.0	10" x 50mm x 50mm	373.0	3170374	-	211137420	2125374	3200373
12"	300	323.8	12" x 50mm x 50mm	423.8	3170424	-	211145420	2125423	3200423
14"	350	355.6	14" x 50mm x 50mm	455.6	3170456	-	211145724	2125456	3200456
16"	400	406.4	16" x 50mm x 50mm	506.4	3170506	-	211150824	2125508	3200508
18"	450	457.2	18" x 50mm x 50mm	557.2	3170558	-	211155624	2125557	3200558
20"	500	508.0	20" x 50mm x 50mm	608.0	3170608	-	211160724	2125608	3200608
24"	600	609.6	24" x 50mm x 50mm	709.6	3170710	-	211171024	2125710	3200710

SUPPORT SELECTION CHART FOR SP RSI - 65mm Thickness

Nominal Pipe Size (inch)	Pipe Outer Diameter (mm)	RSI Size	Total Outer Diameter (mm)	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp	
1/2"	15	21.3	1/2" x 65mm x 25mm	151.3	3170152	3140150	211115212	2125153	3200150
3/4"	20	26.7	3/4" x 65mm x 25mm	156.7	3170157	3140160	211115712	2125157	3200153
1"	25	33.4	1" x 65mm x 25mm	163.4	3170165	3140168	211116512	2125165	3200160
1-1/4"	32	42.1	1-1/4" x 65mm x 25mm	172.1	3170172	-	211117312	2125173	3200172
1-1/2"	40	48.2	1/2" x 65mm x 25mm	178.2	3170178	-	211117912	2125179	3200178
2"	50	60.3	2" x 65mm x 25mm	190.3	3170178	-	211119012	2125190	3200191
2-1/2"	65	73.0	1/2" x 65mm x 38mm	203.0	3170203	-	211120312	2125205	3200206
3"	80	88.9	3" x 65mm x 38mm	218.9	3170219	-	211121916	2125219	3200219
3-1/2"	90	101.6	3-1/2" x 65mm x 38mm	231.6	3170232	-	211123316	2125233	3200232
4"	100	114.3	4" x 65mm x 38mm	244.3	3170245	-	211124516	2125245	3200245
5"	125	141.3	5" x 65mm x 38mm	271.3	3170272	-	211127320	2125273	3200273
6"	150	168.3	6" x 65mm x 50mm	298.3	3170299	-	211129920	2125299	3200299
8"	200	219.1	8" x 65mm x 50mm	349.1	3170350	-	211135020	2125349	3200350
10"	250	273.0	10" x 65mm x 50mm	403.0	3170404	-	211140320	2125404	3200403
12"	300	323.8	12" x 65mm x 50mm	453.8	3170454	-	211145420	2125456	3200456
14"	350	355.6	14" x 65mm x 50mm	485.6	3170486	-	211148624	2125486	3200483
16"	400	406.4	16" x 65mm x 50mm	536.4	3170537	-	211153624	2125537	3200534
18"	450	457.2	18" x 65mm x 50mm	587.2	3170588	-	211158824	2125588	3200584
20"	500	508.0	20" x 65mm x 50mm	638.0	3170639	-	211163924	2125639	3200636
24"	600	609.6	24" x 65mm x 50mm	739.6	3170740	-	211174024	2125740	3200740

SUPPORT SELECTION CHART FOR SP RSI - 75mm Thickness

Nominal Pipe Size (inch)	Pipe Outer Diameter (mm)	RSI Size	Total Outer Diameter (mm)	Clevis Hanger	Split Clamp	U Bolt Clamp	U-Strap Clamp	Riser Clamp	
1/2"	15	21.3	1/2" x 75mm x 25mm	171.3	3170172	-	211117312	2125153	3200150
3/4"	20	26.7	3/4" x 75mm x 25mm	176.7	3170177	-	211117612	2125157	3200153
1"	25	33.4	1" x 75mm x 25mm	183.4	3170184	-	211118412	2125165	3200160
1-1/4"	32	42.1	1-1/4" x 75mm x 25mm	192.1	3170193	-	211119212	2125173	3200172
1-1/2"	40	48.2	1-1/2" x 75mm x 25mm	198.2	3170199	-	211119512	2125179	3200178
2"	50	60.3	2" x 75mm x 25mm	210.3	3170211	-	211121012	2125190	3200191
2-1/2"	65	73.0	2-1/2" x 75mm x 38mm	223.0	3170223	-	211122316	2125205	3200206
3"	80	88.9	3 x 75mm x 38mm	238.9	3170239	-	211123916	2125219	3200219
3-1/2"	90	101.6	3-1/2" X 75mm X 38mm	251.6	3170252	-	211125016	2125233	3200232
4"	100	114.3	4" x 75mm x 38mm	264.3	3170265	-	211125016	2125245	3200245
5"	125	141.3	5 x 75mm x 38mm	291.3	3170295	-	211129220	2125273	3200273
6"	150	168.3	6 x 75mm x 50mm	318.3	3170320	-	211131920	2125299	3200299
8"	200	219.1	8" x 75mm x 50mm	369.1	3170309	-	211137020	2125349	3200350
10"	250	273.0	10" x 75mm x 50mm	423.0	3170424	-	211142420	2125404	3200403
12"	300	323.8	12" x 75mm x 50mm	473.8	3170473	-	211147424	2125456	3200456
14"	350	355.6	14" x 75mm x 50mm	505.6	3170508	-	211150824	2125486	3200483
16"	400	406.4	16" x 75mm x 50mm	556.4	3170558	-	211155624	2125537	3200534
18"	450	457.2	18" x 75mm x 50mm	607.2	3170608	-	211161024	2125588	3200584
20"	500	508.0	20" x 75mm x 50mm	658.0	3170660	-	211166024	2125639	3200636
24"	600	609.6	24" x 75mm x 50mm	739.6	3170760	-	211176024	2125740	3200740

SEAMLESS PIPE FOR THREADING

EN 10225M (REPLACES DIN 2440)

ø Pipe D (DN, NB)	ø Pipe D (")	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
8	1/4"	13.5	2.35	0.65	0.06	0.71	1.5
10	3/8"	17.2	2.35	0.86	0.12	0.98	2.25
15	1/2"	21.3	2.65	1.22	0.20	1.42	2.75
20	3/4"	26.9	2.65	1.58	0.37	1.95	3
25	1"	33.7	3.25	2.44	0.58	3.02	3.5
32	1-1/4"	42.4	3.25	3.14	1.01	4.15	3.75
40	1-1/2"	48.3	3.25	3.61	1.37	4.98	4.25
50	2"	60.3	3.65	5.10	2.21	7.31	4.75
65	2-1/2"	76.1	3.65	6.52	3.72	10.24	5.5
80	3"	88.9	4.05	8.47	5.13	13.60	6
100	4"	114.3	4.5	12.19	8.70	20.89	6
125	5"	139.7	4.85	16.13	13.27	29.40	6
150	6"	165.1	4.85	19.17	18.96	38.13	6

Note :
The Maximum hanger span depends on the specific pipe-type and manufactures

SEAMLESS STEEL PIPES

EN 10220 (REPLACES DIN 2448)

ø Pipe D (DN, NB)	ø Pipe D (")	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
6		10.2	1.6	0.34	0.04	0.38	1.25
8	1/4"	13.5	1.8	0.52	0.08	0.60	1.5
-		16	1.8	0.63	0.12	0.75	2
10	3/8"	17.2	1.8	0.68	0.15	0.83	2.25
-		20	2	0.89	0.20	1.09	2.5
15	1/2"	21.3	2	0.95	0.24	1.19	2.75
-	65	25	2	1.13	0.35	1.48	3
20	3/4"	26.9	2.3	1.40	0.39	1.79	3
-		30	2.6	1.76	0.48	2.24	3.25
-		31.8	2.6	1.87	0.56	2.43	3.25
25	1"	33.7	2.6	1.99	0.64	2.63	3.5
-		38	2.6	2.27	0.85	3.12	3.75
32	1-1/4"	42.4	2.6	2.55	1.09	3.64	3.75
-		44.5	2.6	2.69	1.21	3.90	4
40	1-1/2"	48.3	2.6	2.95	1.46	4.41	4.25
-		51	2.6	3.10	1.65	4.75	4.5
-		57	2.9	3.87	2.06	5.93	4.6
50	2	60.3	2.9	4.11	2.33	6.44	4.75
-		63.5	2.9	4.33	2.61	6.94	5.25
-		70	2.9	4.80	3.24	8.04	5.75
65	2-1/2"	76.1	2.9	5.24	3.88	9.12	6
-		82.5	3.2	6.26	4.55	10.81	6
80	3"	88.9	3.2	6.76	5.34	12.10	6
-		101.6	3.6	8.70	7.00	15.70	6
-		108	3.6	9.27	7.98	17.25	6
100	4"	114.3	3.6	9.83	9.00	18.83	6
-		127	4	12.13	11.12	23.25	6
-		133	4	12.73	12.27	25.00	6
125	5"	139.7	4	13.39	13.62	27.01	6
-		152.4	4.5	16.41	16.14	32.55	6
-		159	4.5	17.15	17.66	34.81	6
150	6"	168.3	4.5	18.18	19.92	38.10	6
-		177.8	5	21.31	22.10	43.41	6
-		193.7	5.4	25.08	25.08	51.34	6
200	8"	219.1	5.9	31.02	33.73	64.75	6
-		244.5	6.3	37.01	42.44	79.23	6
250	10"	273	6.3	41.44	53.26	94.70	6
300	12"	323.9	7.1	55.47	75.33	130.80	6
350	14"	355.6	8	68.58	90.58	159.16	6
400	16"	406	8.8	86.29	118.73	205.02	6
450	18"	457	10	110.24	149.99	260.23	6
500	20"	508	11	134.82	185.51	320.33	6

WELDED STEEL PIPE

EN 10220 (REPLACES DIN 2458)

ø Pipe D (DN, NB)	ø Pipe D (")	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
6		10.2	1.6	0.34	0.04	0.38	1.25
8	1/4"	13.5	1.8	0.52	0.08	0.60	1.5
-		16	1.8	0.63	0.12	0.75	2
10	3/8"	17.2	1.8	0.68	0.15	0.83	2.25
-		20	2	0.89	0.2	1.09	2.5
15	1/2"	21.3	2	0.95	0.24	1.19	2.75
-		25	2	1.13	0.35	1.48	3
20	3/4"	26.9	2	1.23	0.41	1.64	3
-		30	2	1.38	0.53	1.91	3.25
-		31.8	2	1.47	0.61	2.08	3.25
25	1"	33.7	2	1.56	0.69	2.25	3.5
-		38	2.3	2.02	0.88	2.9	3.75
32	1-1/4"	42.4	2.3	2.27	1.12	3.39	3.75
-		44.5	2.3	2.39	1.25	3.64	4
40	1-1/2"	48.3	2.3	2.61	1.5	4.11	4.25
-		51	2.3	2.76	1.69	4.45	4.5
-		57	2.3	3.1	2.16	5.26	4.6
50	2	60.3	2.3	3.29	2.44	5.73	4.75
-		63.5	2.6	3.9	2.67	6.57	4.75
-		70	2.6	4.32	3.3	7.62	5.25
65	2-1/2"	76.1	2.6	4.71	3.95	8.66	5.5
-		82.5	2.6	5.12	4.69	9.81	5.75
80	3"	88.9	2.9	6.15	5.42	11.57	6
-		101.6	2.9	7.06	7.21	14.27	6
-		108	2.9	7.52	8.2	15.72	6
100	4"	114.3	3.2	8.77	9.14	17.91	6
-		127	3.2	9.77	11.42	21.19	6
-		133	3.6	11.49	12.43	23.92	6
125	5"	139.7	3.6	12.08	13.79	25.87	6
-		152.4	4	14.64	16.38	31.02	6
-		159	4	15.29	17.91	33.2	6
150	6"	168.3	4	16.21	20.18	36.39	6
-		177.8	4.5	19.23	22.38	41.61	6
-		193.7	4.5	21	26.79	47.79	6
200	8"	219.1	4.5	23.82	34.67	58.49	6
-		244.5	5	29.53	43.19	72.72	6
250	10"	273	5	33.05	54.33	87.38	6
300	12"	323.9	5.6	43.96	76.8	120.76	6
350	14"	355.6	5.6	48.34	93.16	141.5	6
400	16"	406	6.3	62.16	121.8	183.96	6
450	18"	457	6.3	70.02	155.11	225.13	6
500	20"	508	6.3	77.95	192.75	270.7	6

DRAINAGE PIPES, GA, CAST IRON

DIN 19500

ø Pipe D (DN, NB)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
50	60	3.5	5.20	2.21	7.41	1.5
70	80	3.5	7.00	4.18	11.18	1.5
100	112	4	11.30	8.49	19.79	1.5
125	137	4	14.00	13.06	27.06	1.5
150	162	5	20.60	18.14	38.74	1.5
200	212	6	32.40	31.40	63.80	1.5

Note :

The Maximum hanger span depends on the specific pipe-type and manufacturer. Every pipe should be supported twice at least.

SML DRAINAGE PIPES

DIN 19522

ø Pipe D (DN, NB)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
40	48	3	3.07	1.39	4.46	1.5
50	58	3.5	4.34	2.04	6.38	1.5
70	78	3.5	5.94	3.96	9.9	1.5
80	83	3.5	6.34	4.54	10.88	1.5
100	110	3.5	8.49	8.33	16.82	1.5
125	135	4	11.93	12.67	24.6	1.5
150	160	4	14.21	18.15	32.36	1.5
200	210	5	23.35	31.42	54.77	1.5
250	274	5.5	33.64	54.33	87.97	1.5
300	326	6	43.73	77.44	121.17	1.5
400	429	8.1	77.65	133.83	211.48	1.5
500	532	9	107.21	207.5	314.71	1.5
600	635	9.9	140.95	297.25	438.2	1.5

Note :

The Maximum hanger span depends on the specific pipe-type and manufacturer. Every pipe should be supported twice at least.

ø Pipe D (DN, NB)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (40 °C) (m)
32	40	1.8	0.33	1.00	1.33	0.9
40	50	1.8	0.40	1.69	2.09	1.1
50	63	1.9	0.53	2.75	3.29	1.2
70	75	2.2	0.73	3.91	4.65	1.35
80	90	2.7	1.08	5.62	6.70	1.5
100	110	3.2	1.57	8.43	10.00	1.7
125	125	3.7	2.06	10.86	12.92	1.95
150	160	4.7	3.35	17.81	21.16	2.1
-	180	5.3	4.25	22.54	26.78	2.2
-	200	5.9	5.25	27.82	33.07	2.2
-	225	6.6	6.61	35.23	41.84	2.3
-	250	7.3	8.13	43.52	51.65	2.5
-	280	8.2	10.22	54.57	64.80	2.8
-	315	9.2	12.91	69.09	82.00	3

Note :
The Maximum hanger span depends on the specific pipe-type and manufacturer.

PVC DRAINAGE PIPES
DIN 8062-Series 5

ø Pipe D (DN, NB)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (40 °C) (m)
10	16	1.2	0.08	0.15	0.23	0.5
15	20	1.5	0.13	0.23	0.35	0.6
20	25	1.9	0.20	0.35	0.55	0.65
25	32	2.4	0.33	0.58	0.91	0.7
32	40	3	0.51	0.91	1.42	0.9
40	50	3.7	0.79	1.43	2.21	1.1
50	63	4.7	1.26	2.26	3.51	1.2
70	75	5.6	1.78	3.20	4.98	1.35
80	90	6.7	2.56	4.61	7.17	1.5
100	110	8.2	3.83	6.88	10.71	1.7
125	125	10.4	6.18	11.16	17.34	1.95
150	160	11.9	8.08	14.57	22.65	2.1
-	180	13.4	10.24	18.43	28.67	2.2
-	200	14.9	12.65	22.75	35.40	2.2
-	225	16.7	15.96	28.83	44.79	2.3

Technical information

PE DRAINAGE PIPES
DIN 19535

ø Pipe D (DN, NB)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
26	32	3	0.27	0.53	0.80	0.32
34	40	3	0.35	0.91	1.26	0.40
40	50	3	0.44	1.52	1.96	0.50
50	56	3	0.50	1.96	2.46	0.56
60	63	3	0.57	2.55	3.12	0.63
70	75	3	0.68	3.74	4.42	0.75
80	90	3.5	0.95	5.41	6.36	1.10
100	110	4.3	1.43	8.07	9.50	1.10
115	125	4.8	1.82	10.45	12.27	1.25
125	140	5.4	2.30	13.10	15.39	1.40
150	160	6.2	3.00	17.10	20.11	1.60
200	200	6.2	3.83	27.63	31.46	2.00
250	250	7.8	6.02	43.13	49.15	2.50
300	315	9.8	9.40	68.51	77.91	3.15

Note :
The Maximum hanger span depends on the specific pipe-type and manufacturer.

COPPER TUBE
EN 1057 (REPLACES DIN 1786)

ø Pipe D (DN, NB)	ø Pipe D (Inch)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Weight of Water (full Pipe) (kg/m)	Weight of Pipe & Water (kg/m)	Span Max. (m)
		10	1	0.25	0.05	0.30	1.25
10		12	1	0.31	0.13	0.39	1.25
12		15	1	0.39	0.13	0.52	1.25
15		18	1	0.48	0.20	0.68	1.5
20		22	1	0.59	0.31	0.90	2
25		28	1.5	1.11	0.49	1.60	2.25
32		35	1.5	1.41	0.80	2.21	2.75
40		42	1.5	1.70	1.19	2.89	3
50		54	2	2.91	1.96	4.87	3.5
100		64	2	3.47	2.83	6.30	4
65		76.1	2	4.17	4.08	8.25	4.75
80		88.9	2	4.89	5.66	10.55	4.75
-		108	2.5	7.42	8.33	15.75	5
-		133	3	10.98	12.67	23.65	5
-		159	3	13.17	18.39	31.56	5
-		219	3	18.24	35.63	53.87	5
-		267	3	22.29	53.50	75.79	5

Technical information

STEEL DUCT - SPIRAL

EN 12237 (REPLACES DIN24147)

ø Pipe D (DN, NB)	ø Pipe D OD (mm)	Wall Thickness (mm)	Weight of Pipe (kg/m)	Span Max. (40 °C) (m)
80	80	0.4	0.8	3
100	100	0.6	1.5	3
125	125	0.6	1.8	3
150	150	0.6	2.2	3
160	160	0.6	2.4	3
200	200	0.6	3.0	3
224	224	0.6	3.3	3
250	250	0.6	3.7	3
300	300	0.6	5.9	3
315	315	0.8	6.2	3
355	355	0.8	7.0	3
400	400	0.8	7.9	3
450	450	0.8	8.9	3
500	500	0.8	9.9	3
560	560	1.0	11.0	3
630	630	1.0	15.5	3
710	710	1.0	17.5	3
800	800	1.0	19.7	3
900	900	1.2	22.2	3
1000	1000	1.2	29.6	3
1120	1120	1.2	33.1	3
1250	1250	1.2	37.0	3

Note :
The Maximum hanger span depends on the specific pipe-type and manufacturer.

PIPE CLAMP FITMENT - STEEL

ø Pipe D		Supply Pipes / Pressure Pipes			Drain Pipes	
[DN, NB]	["]	EN 10225M	EN 10220	EN 10220	DIN 19500	DIN 19522
		Seamless Pipe for threading	Seamless steel pipes	Welded Steel Pipe	Drainage Pipes, GA,Cast Iron	SML DrainagePipes
		ø Outside D mm	ø Outside D mm	ø Outside D mm	ø Outside D mm	ø Outside D mm
6	-	-	10.2	10.2	-	-
8	1/4"	13.5	13.5	13.5	-	-
-	-	-	16.0	16.0	-	-
10	3/8"	17.2	17.2	17.2	-	-
-	-	-	20.0	20.0	-	-
15	1/2"	21.3	21.3	21.3	-	-
-	-	-	25.0	25.0	-	-
20	3/4"	26.9	26.9	26.9	-	-
-	-	-	30.0	30.0	-	-
-	-	-	31.8	31.8	-	-
25	1"	33.7	33.7	33.7	-	-
-	-	-	38.0	38.0	-	-
32	1-1/4"	42.4	42.4	42.4	-	-
-	-	-	44.5	44.5	-	-
40	1-1/2"	48.3	48.3	48.3	-	48.0
-	-	-	51.0	51.0	-	-
-	-	57	2.9	57.0	-	-
50	2"	60.3	2.9	60.3	-	-
-	-	-	63.5	63.5	-	-
-	-	-	70.0	70.0	-	-
65	1120	76.1	76.1	76.1	-	78.0
70	1250	82.5	-	-	80.0	-
-	3"	88.9	82.5	82.5	-	83.0
80	-	101.6	88.9	88.9	-	-
-	-	108	101.6	101.6	-	-
-	4"	114.3	108.0	108.0	-	-
100		127	114.3	114.3	112.0	110.0
-		133	127	127	-	-
-	5"	139.7	133	133	-	-
125		152.4	139.7	139.7	137.0	135.0
-		159	152.4	152.4	-	-
-	6"	168.3	159	159	162.0	160.0
150		177.8	168.3	168.3	-	-
-		193.7	177.8	177.8	-	-
-	8"	219.1	193.7	193.7	-	-
-		244.5	-	-	212.0	210.0
200	10"	273	219.1	219.1	-	-
-	12"	323.9	244.5	244.5	-	-
250	14"	355.6	273	273	-	274.0

PIPE CLAMP FITMENT

PLASTIC

ø Pipe D		Drain Pipes		
		DIN 8062 - Series 3	DIN 8062 - Series 5	DIN 19535
[DN, NB]	[“]	PVC Drainage Pipes	PVC Drainage Pipes	PE Drainage Pipes
		ø Outside D mm	ø Outside D mm	ø Outside D mm
10	3/8”	-	16	-
15	1/2”	-	20	-
20	3/4”	-	25	-
25	1”	-	32	32
32	1 1/4”	40	40	40
40	1 1/2”	50	50	50
50	2”	63	63	63
70	-	75	75	75
80	3”	90	90	90
100	4”	110	110	110
115	-	-	-	125
125	5”	125	125	140
150	6”	160	160	160
-	-	180	180	-
-	-	200	200	-
200	8”	-	-	200
-	-	225	225	-
-	-	250	250	250

PIPE CLAMP FITMENT

COPPER

ø Pipe D		Plumbing Pipe
		EN 1057
[DN, NB]	[“]	Copper Tube
		ø Outside D mm
-	-	10
10	3/8”	12
12	-	15
15	1/2”	18
20	3/4”	22
25	1”	28
32	1 1/4”	35
40	1 1/2”	42
50	2”	54
-	-	64
65	-	76.1
80	2 1/2”	88.9
-	3”	108
-	180	133
-	200	159
-	-	219
-	225	267

Notes





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