



VESTADEZH

Engineering & Manufacturing

Technical Catalog



Cable support

Use to wire rope is a new method for supporting of HVAC equipment, Electrical services, pipework, etc. There are three reasons for using of this support system:

1) Time saving

Save times for installation of your suspended services when use our cable hanger kits, as traditional suspension methods. Not only is the installation faster, no pre-work, such a cutting or filing, is required.

2) Health & Safety

Our cable hanger kits are ready-to-use straight from the box, removing the need for potentially hazardous cutting on site. One box of standard cable hanger kits weighs just 8 kg, doing the same job as 150 kg of threaded rod and strut. Not only is the weight and bulk of materials to carry reduced, but also the time spent working at heights.

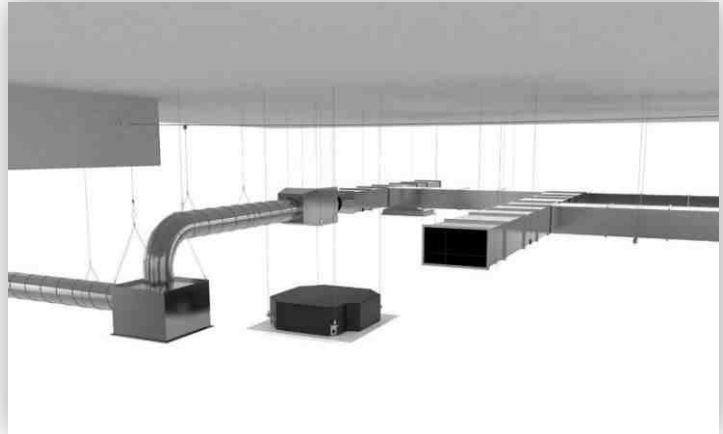
3) Aesthetics

Our cable hanger kits are lightweight and virtually invisible from ground. Comparing cable to threaded rod, the difference is easy to see.

Cable supports have a wide range of applications. In the following we introduce them

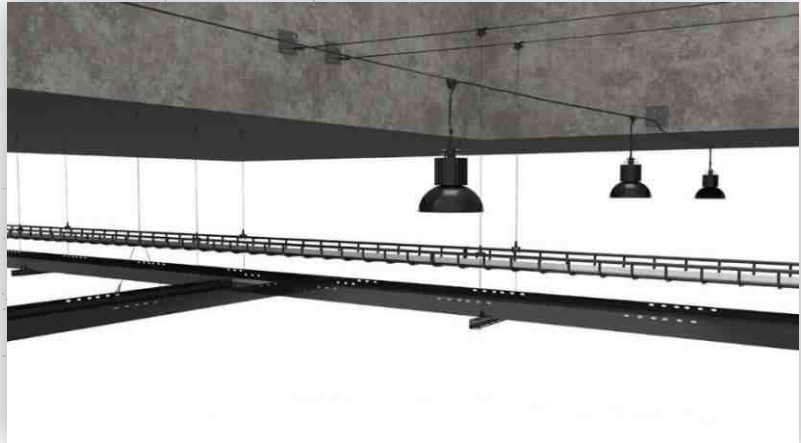


Mechanical & HVAC Suspension



Cable support system are designed to save you time, and labor costs, thus improving the efficiency of your installation. Flexibility of our system allows suspension of services from any angle, whilst maintaining unyielding support once in place. Ready-to-use kits with your choice of wire length and end fixing, there's no need for tools and time spent working at height is significantly reduced. Our cable support use to pipework, air duct, etc.

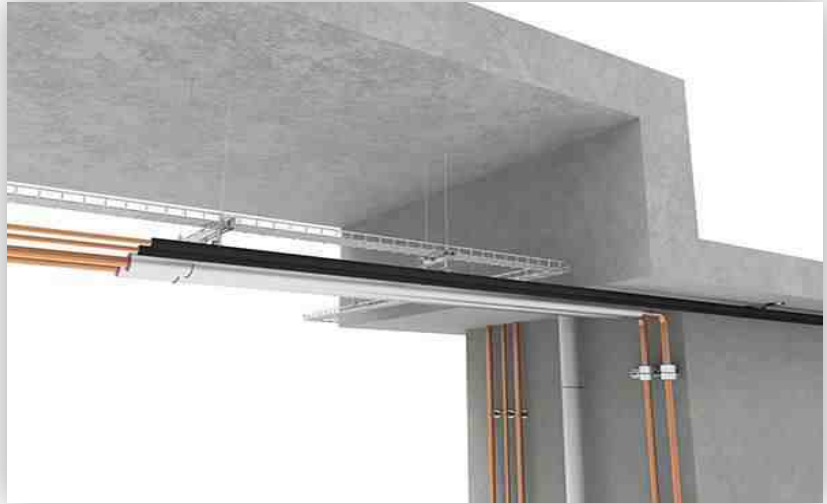
Electrical Services & Cable Suspension



Our cable support range and hangers for electrical applications has been developed to provide a fast and versatile solution for suspending all types of electrical containment. Wires can be pre-installed prior to module installation and provide the added option of installing from the ground. As a result, installation time is dramatically reduced compared to traditional methods, with no need for cutting or bending rod into place.



Pipework



Our system range of pipework supports and hangers has been specifically developed to provide a fast and versatile solution for suspending all types of pipework. Supplied in ready-to-use kits, the products in this range require no on-site cutting and eliminate the need for fabricating pipe bracket assemblies, offering enormous health and safety benefits for your project.

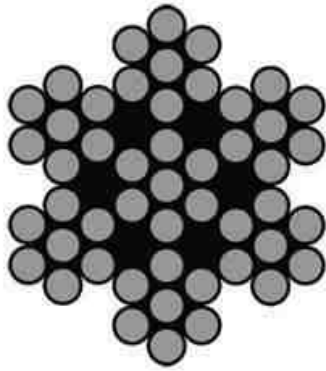
Seismic Bracing



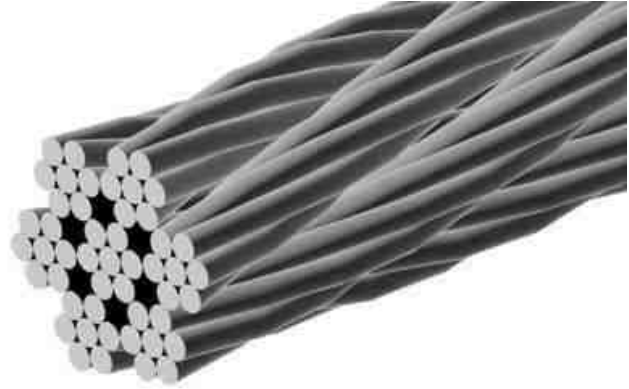
Properly-engineered bracing and isolation of these services is particularly critical for essential facilities that must remain operational in the aftermath of an earthquake or seismic event (such as hospitals, fire/rescue, water/power, etc.), or facilities representing a substantial hazard to human life (such as schools, jails, etc.). Our bracing Systems are specifically designed and engineered to brace and secure suspended non-structural equipment (VAV boxes, fans, unit heaters, small in-line pumps, etc.) and components (HVAC duct, conduit/cable tray, and piping) within a building or structure to minimize damage from an earthquake or seismic event.



Wire Rope properties and Construction



7×7



Nominal Diameter	Approximate Mass	Minimum Breaking Load	
(mm)	(kg/m)	(KN)	(Kg)
2	0.015	2.54	259
3	0.035	5.72	283
4	0.061	10.2	1040
5	0.096	15.9	1621
6	0.138	22.9	2335

Features and Benefit

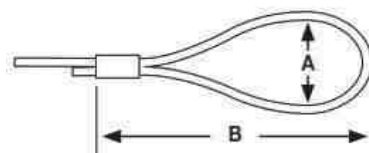
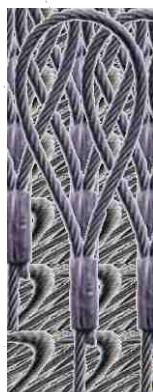
The wire ropes used within our product ranges are manufactured with a galvanized coating in accordance with the norm EN 12385.

7 × 7 wire rope is constructed of seven strands of seven wires, it has excellent flexibility and good abrasion resistance.

Application:

- General engineering application
- Small diameter wire rope slings
- Stay wires
- Fencing rope

Loop properties



Features and Benefits

No need for nuts, bolts, clamps or other accessories.

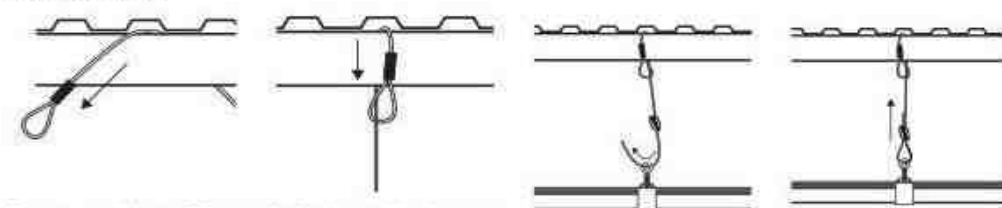
Available up to 90 kg, with up to a 5:1 safety factor.

Useable in lengths of 1m, 3m, 5m (cable to supply up to 10m).

Available in stainless steel.

Size	Length (m)	Diameter (mm)	Construction	A (mm) Indicative	B (mm) Indicative
10 – 45 kg	1	2	7×7	30	60
10 – 45 kg	3	2	7×7	30	60
10 – 45 kg	5	2	7×7	30	60
45 – 90 kg	1	3	7×7	25	60
45 – 90 kg	3	3	7×7	25	60
45 – 90 kg	5	3	7×7	25	60

Installation

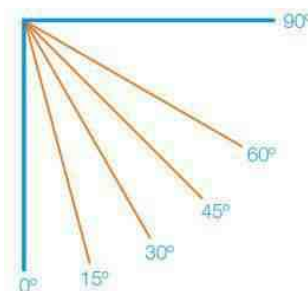


Ensure a minimum 75 mm of tail wire exit the hanger.

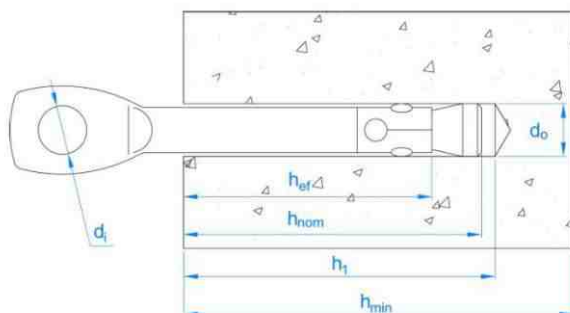
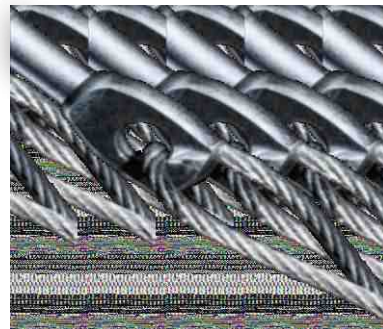
Hanging at Angles

The load rating for a Hanger is based on the suspension being hung vertically. If the wire rope is at an angle, an additional sideways force is applied which increases the load on the suspension. The net effect is shown in the table below

Size	Maximum load (kg) at an angle from vertical				
	0°	15°	30°	45°	60°
45 – 90 kg	90	87	78	64	45
Load %	100	96	86	70	50



Concrete Ceiling Anchor



Anchor properties

Code	d_o (mm)	h_{ef} (mm)	h_{nom} (mm)	h_1 (mm)	h_{min} (mm)	d_i (mm)
TWA	6	40	49.5	55	100	6

TWA anchor made by Index-co, we are exclusive representative of Index in Iran.

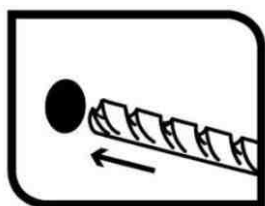
Metal anchor: functioning by expansion

Easy installation

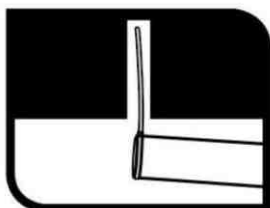
Use in non-cracked concrete

Use for medium loads

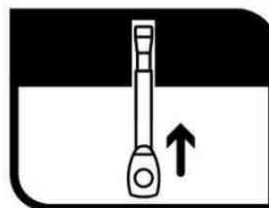
Installation procedure



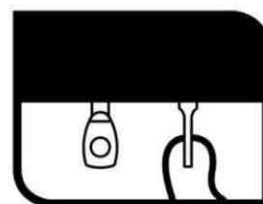
Drill



Blow and clean



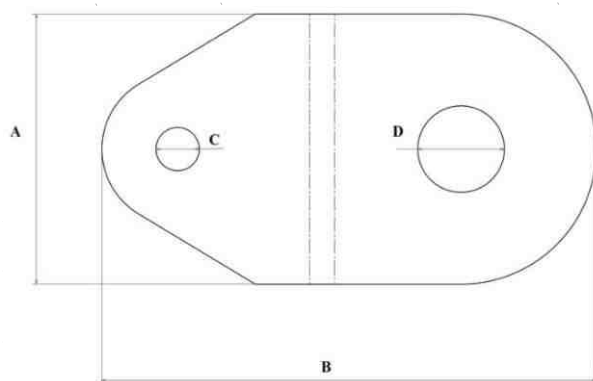
Install



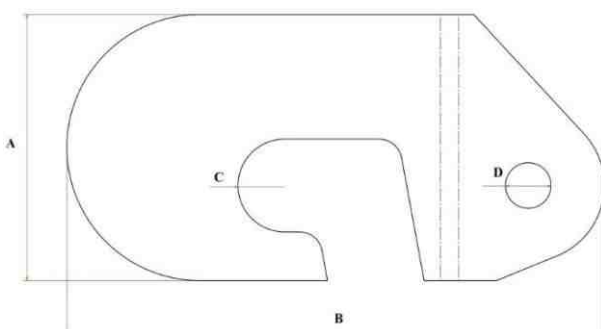
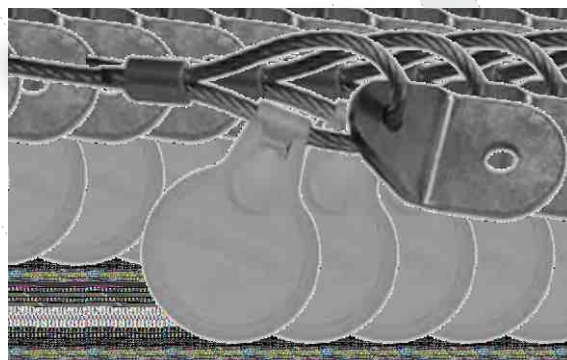
Apply Torque

Standard or Retrofit Bracket in

Single or Double Bracket configuration.



Product code	A (mm)	B (mm)	C (mm)	D (mm)
VD-CB-M8	25	45.7	7	10



Product code	A (mm)	B (mm)	C (mm)	D (mm)
VD-CB-Rod	35	70.69	6.1	7



Standard Hanger

For the fast suspension of a variety of HVAC, piping, lighting and electrical services, designed with an easy push-button release mechanism.



Features and Benefits

Useable for wire rope with 3 mm diameter, with safe working load 450 N per hanger

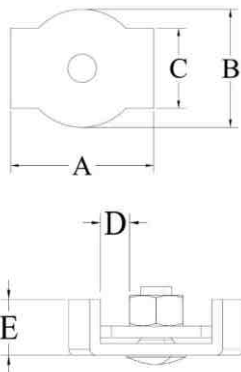
Material: ASTM A283 Grade C

Ideal for fast suspension of any suspended service

Versatile and simple to use

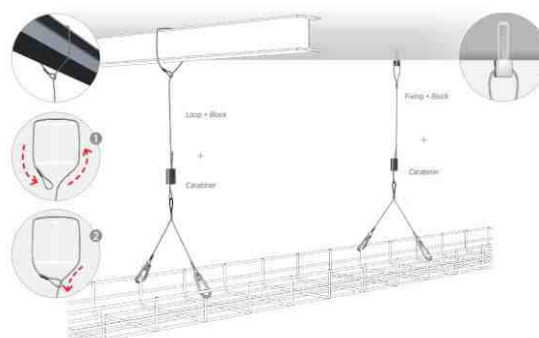
Strong, safe, and industry approved

Cold galvanized (the capability of coating with hot dip galvanizing)



Cable size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Thread Length(mm)	Weight (kg)
3-4	20	19	12	1.5	6	M5×17	0.01
5	25	20	14	1.5	8	M5×17	0.013
6	30	25	17	2	9.5	M6×22	0.027
8	38	31	23	2	10	M8×29	0.046

Installation



Karabiner



Features and Benefits

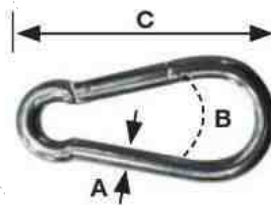
Supplied as a ready-to-use kit with our fastener and length of cable.

Ideal for use with loop and fixing.

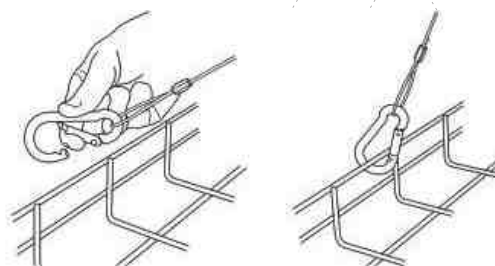
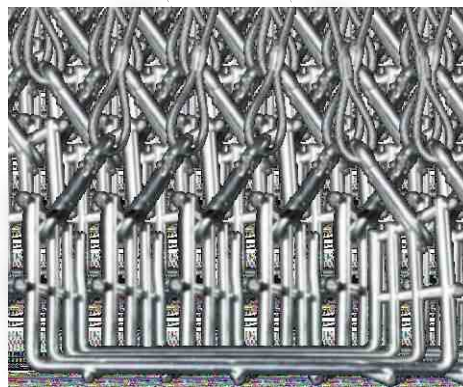
Available in lengths of 300 mm- 400 mm standard

General Dimension

Product code	A (mm)	B (mm)	C (mm)
VDC-L	6	17	6



Installation





Cable screw



Features and Benefits

End fixing that installs into an anchor (HE-HO, HE-NO) or Internally threaded concrete insert.

Available in length of 1m,3m,5m as standard

Also available in Stainless Steel

HE-HO and HE-NO anchor

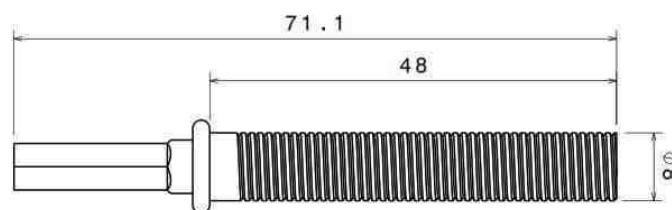


HE-HO

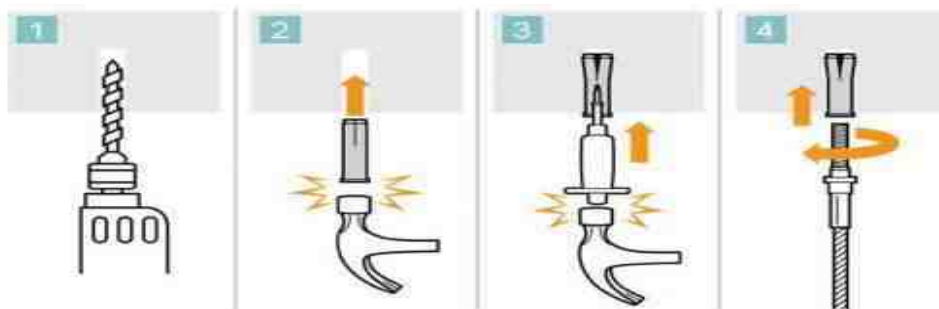


HE-NO

General Dimension



installation



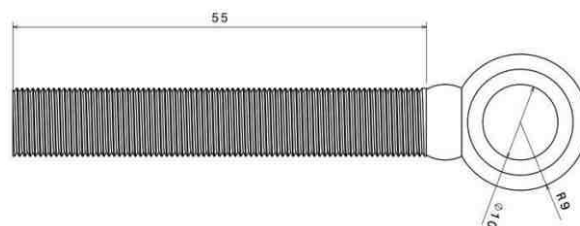
Eye nut



Features and Benefits

Ideal for fixing to many services such as light fixing
End fixing that installs into an anchor (HE-HO, HE-NO) or Internally threaded concrete and strut channel insert.

Dimension (m10 screw bolt)



Cable cutters



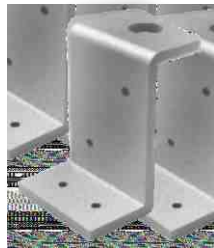
Features and Benefit

Useful instrument for cutting cable up to 95 mm. Cable
Cutter opens up to 250 mm.
Weight: 1kg

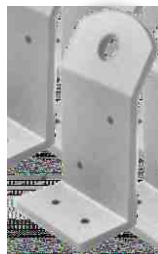
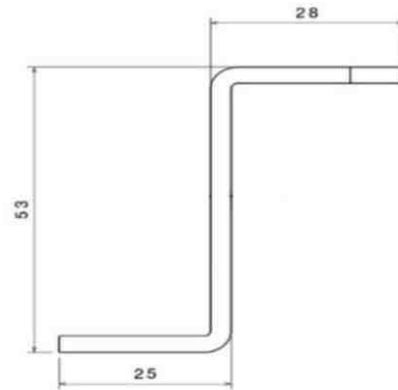


Air Duct Bracket

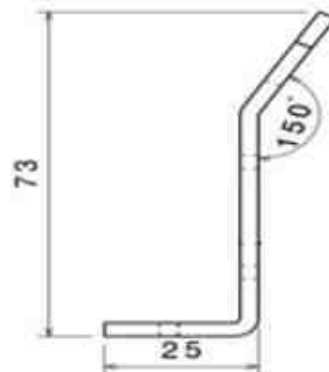
Use For the installation of rectangular air ducts to ceilings



VD-CCB



VD-CCB-1



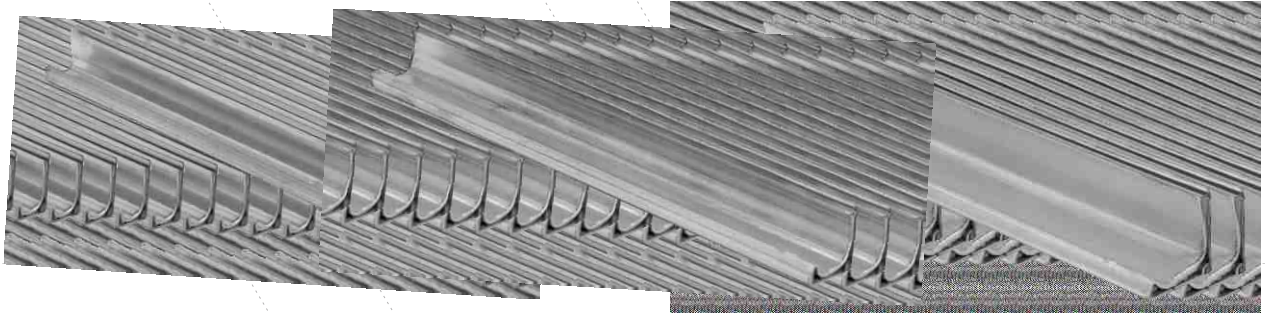
Features and Benefits

Replaces the need for threaded rod or duct strap

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

Flange Channel



Feature and Benefit

Highly accurate flange profiles and components ensure ease of fitting and high-quality assembly

Light weight square flange manufactured from galvanized sheet steel with corner fixing points

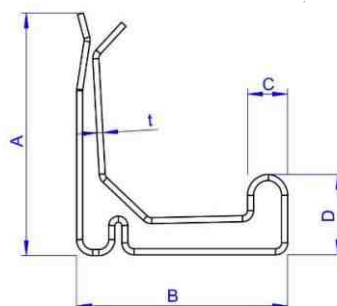
Snap fit corner pieces to allow easy fitting at sites

Material: ASTM A283 Grade C

These flanges cover air pressure classes and forces are based on the "SMACNA-HVAC" standard and the DW 144 steel standard air duct standard, which are two global standards.

General Dimension

	A(mm)	B(mm)	t(mm)	C(mm)	D(mm)
Flange 20	24	21	0.6	4	8
Flange 30	27	31	0.8	4	10
Flange 40	27	43	1	5	10





Flange Corner



Feature and Benefit

Used for rectangular duct connection

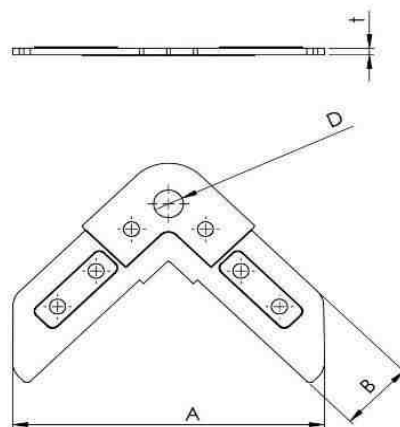
Hold ductwork together and provide a sealing

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

	A(mm)	B(mm)	t(mm)	D(mm)
SC020	94	14	2	8
SC030	119.5	24	2.5	10.5
SC040	137	33.5	3	13



Clamp clips



Feature and Benefit

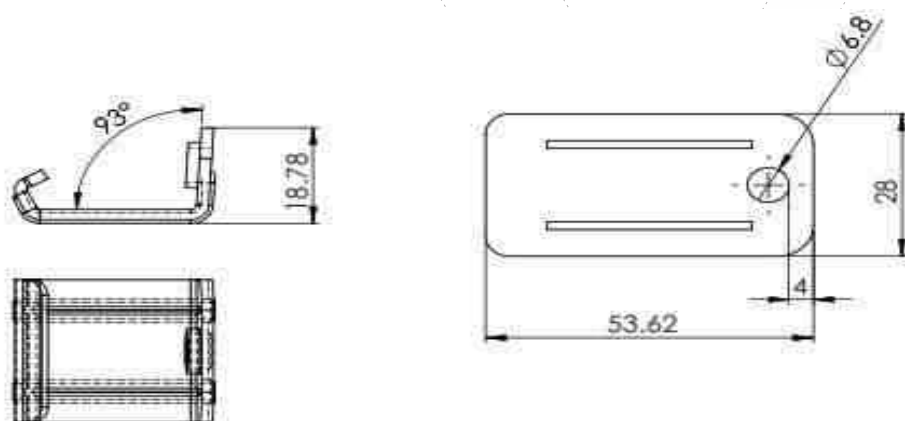
Designed for the joining of square and rectangular ducting.

Fitted on the flange edges of the duct, these clamps are supplied complete with bolts to securely fix ductwork together.

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Perforated Band



Feature and Benefit

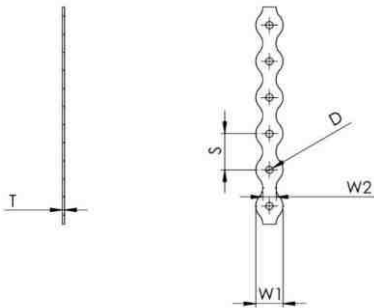
Made of galvanized perforated steel with assorted holes, which allow fixing of threaded rods, threaded clamps, bolts etc.

The small holes can be used with rivets, screws or nails.

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Code	D(mm)	S(mm)	T(mm)	W1(mm)	W2(mm)
BHVAC M	4	16	1.25	15.3	7.7
BHVAC L	6	19	1.5	21	13

Application



Light slider



General properties

Designed to support pipe between two fixed points by allowing longitudinal movement due to thermal expansion

Designed for pipe size with $\frac{3}{4}$ " to $1\frac{1}{4}$ "

suitable for ceiling mounting (suspended) and floor mounting (standing mounted)
fix directly on the building structure or in combination with support channel material:

metal parts made of steel (ASTM A283 Grade C)

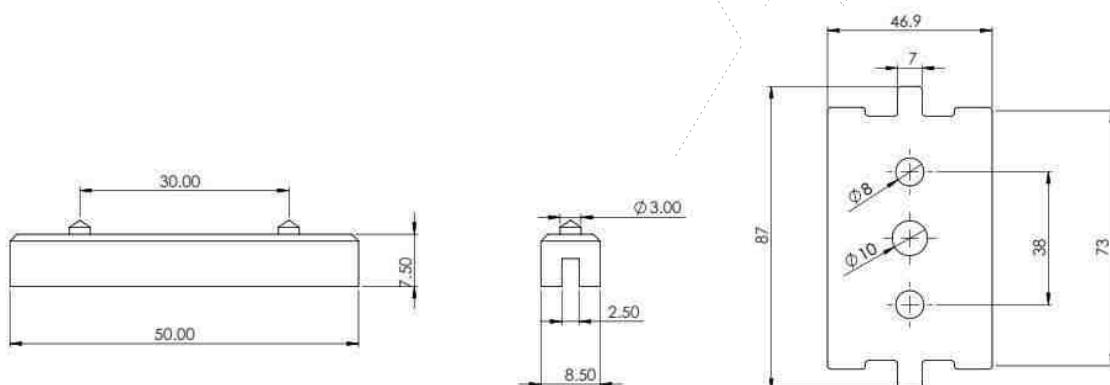
plastic parts made of Polyamide 6

Coefficient of Static friction: 0.2

Coefficient of kinetic friction: 0.15

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Medium Slider



General properties

Designed to support pipe between two fixed points by allowing longitudinal movement due to thermal expansion

Designed for pipe size with $1\frac{1}{2}$ " to 4"

suitable for ceiling mounting (suspended) and floor mounting (standing mounted)

fix directly on the building structure or in combination with support channel material:

metal parts made of steel (ASTM A283 Grade C)

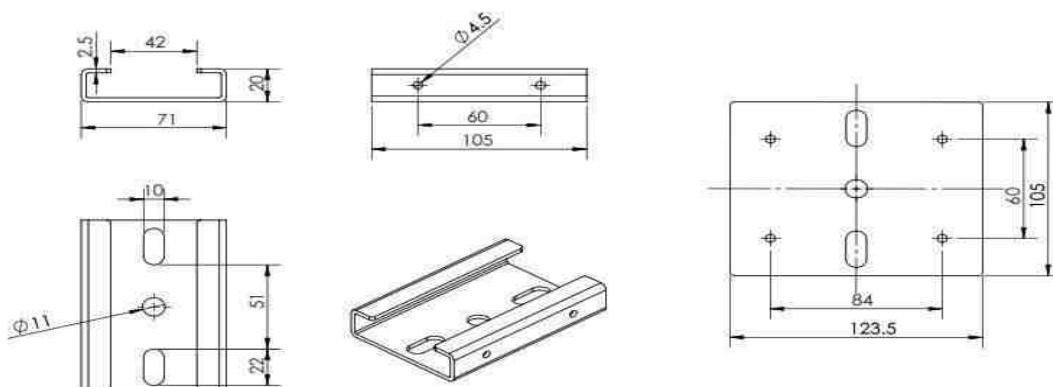
plastic parts made of Polyamide 6

Coefficient of Static friction: 0.2

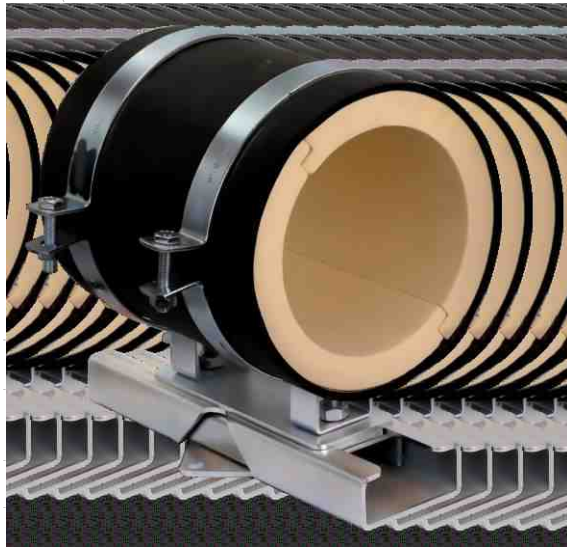
Coefficient of kinetic friction: 0.15

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Heavy Slider



General properties

Designed to support pipe between two fixed points by allowing longitudinal movement due to thermal expansion

Designed for pipe size with 5" to 10"

suitable for ceiling mounting (suspended) and floor mounting (standing mounted)
fix directly on the building structure or in combination with support channel

material:

metal parts made of steel (ASTM A283 Grade C)

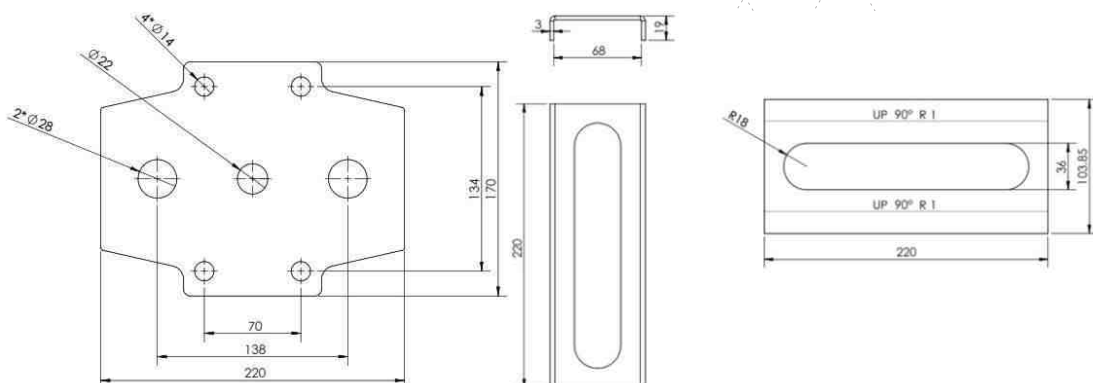
plastic parts made of Polyamide 6

Coefficient of Static friction: 0.2

Coefficient of kinetic friction: 0.15

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Heavy Slider



General properties

Designed to support pipe between two fixed points by allowing longitudinal movement due to thermal expansion

Designed for pipe size with 5" to 10"

suitable for ceiling mounting (suspended) and floor mounting (standing mounted)

fix directly on the building structure or in combination with support channel

material:

metal parts made of steel (ASTM A283 Grade C)

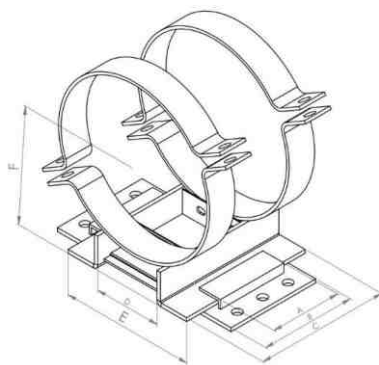
plastic parts made of Polyamide 6

Coefficient of Static friction: 0.2

Coefficient of kinetic friction: 0.15

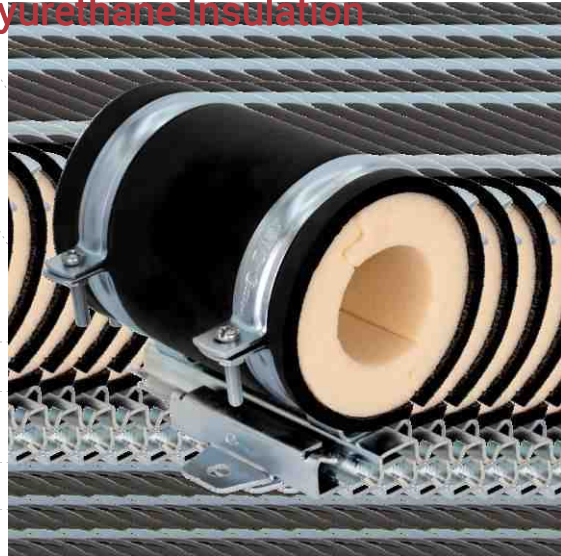
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Code	Nominal Pipe Size	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
SG.HH.W.12	12	150	200	280	140	280	226
SG.HH.W.14	14	147	180	245	150	460	226
SG.HH.W.16	16	220	260	400	245	550	276

Medium Slider Type N with Polyurethane Insulation



General properties

Designed to support pipe between two fixed points by allowing longitudinal movement due to thermal expansion

Designed for pipe size with $\frac{1}{2}$ " to $2\frac{1}{2}$ "

suitable for ceiling mounting (suspended) and floor mounting (standing mounted)
fix directly on the building structure or in combination with support channel material:

metal parts made of steel (ASTM A283 Grade C)

plastic parts made of Polyamide 6

Coefficient of Static friction: 0.2

Coefficient of kinetic friction: 0.15

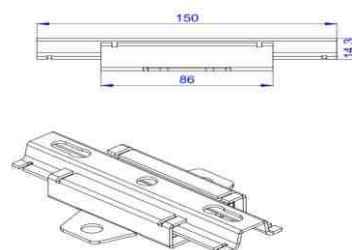
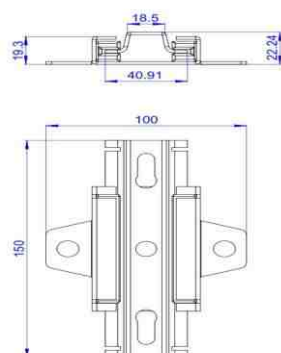
Maximum design load in hanging form: 685 N

Cold galvanized (the capability of coating with hot dip galvanizing)

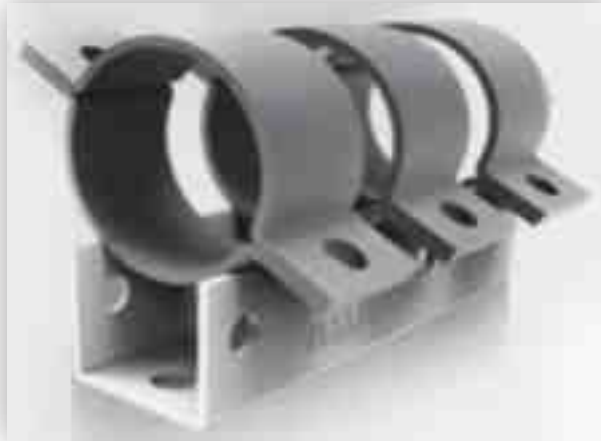
Polyurethane Insulation property

Density	Temperature Range	Compressive strength	thickness
$160 \frac{kg}{m^3}$ to $190 \frac{kg}{m^3}$	$-40^{\circ}C$ to $+120^{\circ}C$	3200 kpa to 3600 kpa	20 cm to 30 cm

General Dimension



Fix Point Clamp-U



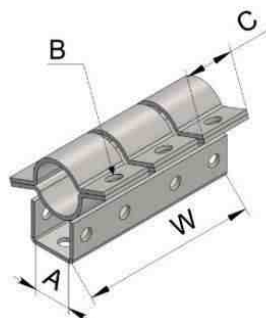
General properties

Designed for protect piping at “changes-in-direction” from excessive bending stress and undesirable movement caused by water hammer.

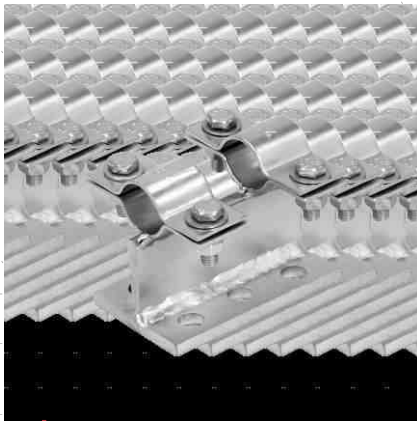
material: steel (ASTM A283 Grade C)

General Dimension

Code	Nominal Pipe Size	A	W	C	B	Axial Design Load (kN)
CFXLRU 1	1	32	140	40	M12	2.5
CFXLRU 1 1/4	1 1/4	32	140	40	M12	2.5
CFXLRU 1 1/2	1 1/2	41	180	40	M12	2.8
CFXLRU 2	2	43	180	40	M12	3.65
CFXLRU 2 1/2	2 1/2	42	190	40	M12	3.65
CFXLRU 3	3	40	190	40	M12	3.65



Fix Point Clamp



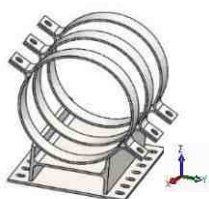
General properties

Designed for protect piping at "changes-in-direction" from excessive bending stress and undesirable movement caused by water hammer.

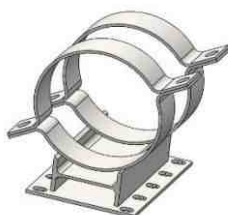
material: steel (ASTM A283 Grade C)

General Dimension

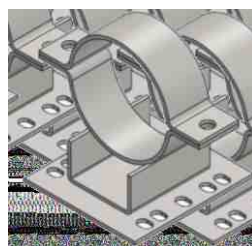
Code	Nominal Pipe Size	Wide (mm)	$F_x(kN)$	$F_y(kN)$	$F_z(kN)$
CFXL 3/4	3/4	30	0.45	0.45	0.9
CFXL1	1	30	0.5	0.5	1
CFXL1 1/4	1 1/4	30	0.6	0.6	1.2
CFXL1 1/2	1 1/2	30	0.6	0.6	1.2
CFXL2	2	30	1.1	1.1	2.2
CFXL2 1/2	2 1/2	40	1.3	1.3	2.6
CFXL3	3	40	1.3	1.3	2.6
CFXL4	4	50	2.8	2.8	5.6
CFXL5	5	50	3	3	6
CFXL6	6	50	10	10	18
CFXL8	8	50	14	14	28
CFXL10	10	100	17	17	34
CFXL12	12	70	19	19	38
CFXL14	14	70	20.5	20.5	41
CFXL16	16	80	21.5	21.5	43



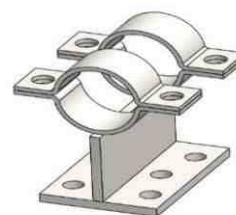
$\frac{3}{4}$ " to 2"



2 $\frac{1}{2}$ " to 5"



6" to 8"



10" to 16"



Medium Slider Type N with Polyurethane Insulation



General properties

Designed to support pipe between two fixed points by allowing longitudinal movement due to thermal expansion

Designed for pipe size with $\frac{1}{2}$ " to $2\frac{1}{2}$ "

suitable for ceiling mounting (suspended) and floor mounting (standing mounted)
fix directly on the building structure or in combination with support channel material:

metal parts made of steel (ASTM A283 Grade C)

plastic parts made of Polyamide 6

Coefficient of Static friction: 0.2

Coefficient of kinetic friction: 0.15

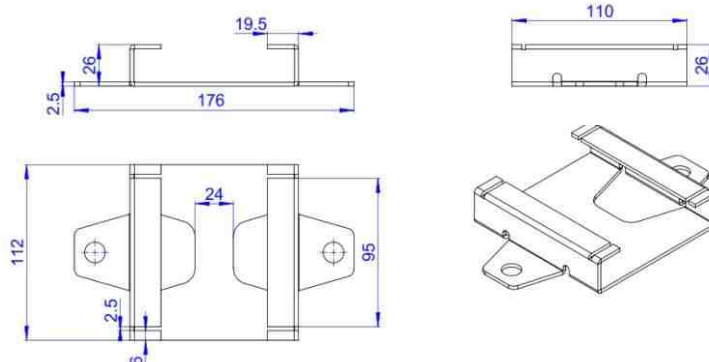
Maximum design load in hanging form: 685 N

Cold galvanized (the capability of coating with hot dip galvanizing)

Polyurethane Insulation property

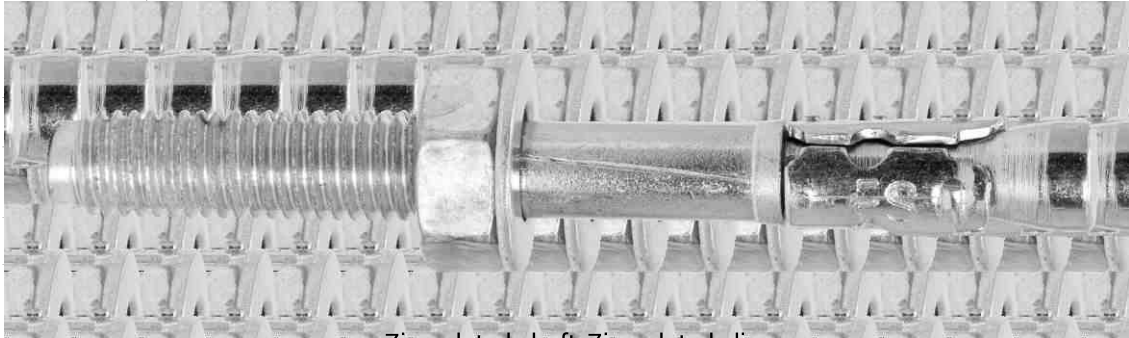
Density	Temperature Range	Compressive strength	thickness
$160 \frac{kg}{m^3}$ to $190 \frac{kg}{m^3}$	$-40\text{ }^{\circ}\text{C}$ to $+120\text{ }^{\circ}\text{C}$	3200 kpa to 3600 kpa	20 cm to 30 cm

General Dimension



VSA Anchor

Through-bolt expansion anchor with controlled torque, for use in non-cracked concrete



Zinc-plated shaft, Zinc-plated clip

Product Information

Describe: Metallic anchor, with male thread, expansion by controlled torque.

SIZES: M10 * 95

DESIGN LOAD: 9 KN

BASE MATERIAL: Concrete class from C20/25 to C50/60 non-cracked.

ASSESSMENTS: Razi Metallurgical Research Center

Characteristics and Benefits

Easy installation.

Use in non-cracked concrete.

Use for medium-heavy duty loads.

Pre-installation or through the drill-hole of the fixture.

Variety of lengths and diameters: flexibility in assembly.

For static and quasi-static loads.

MATERIALS

Shaft: Cold-formed steel, zinc-plated $\geq 5 \mu\text{m}$.

Washer: DIN 125 or DIN 9021, zinc-plated $\geq 5 \mu\text{m}$.

Nut: DIN 934, zinc-plated $\geq 5 \mu\text{m}$.

Clip: Cold-formed steel, zinc-plated $\geq 10 \mu\text{m}$.

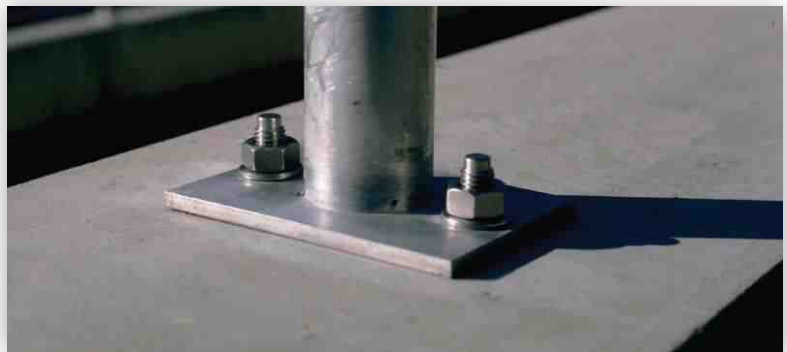


VESTADEZH
Anchor Bolt



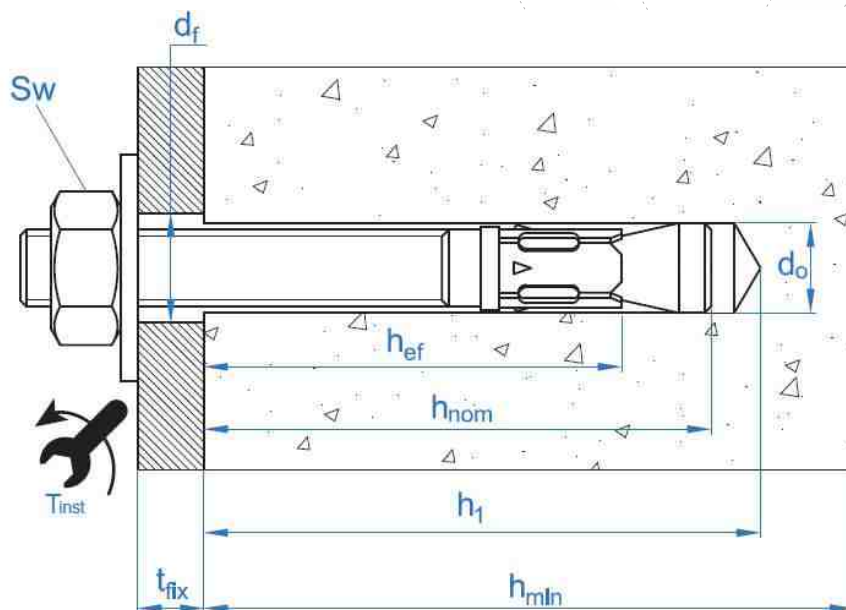
Application

Shelving
Pipe supports
Urban fitments
Fences
Common Fixings
Railings
Balconies

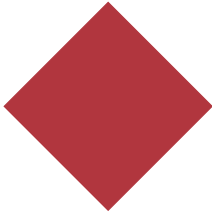


Mechanical Properties		
Cone area section		
A_s (mm ²)	Cone area section	45.4
$F_{u,s}$ (N/mm ²)	Characteristic tension resistance	440
$F_{y,s}$ (N/mm ²)	Yield strength	390
Threaded area section		
A_s (mm ²)	Cone area section	58
$F_{u,s}$ (N/mm ²)	Characteristic tension resistance	440
$F_{y,s}$ (N/mm ²)	Yield strength	390

Installation Data			
	M8	M10	M12
d_o		10	
T_{ins}		35	
h_1		80	
h_{nom}		71.5	
h_{ef}		60	
t_{fix}		L-85	
$S_{cr, N}$		165	
$C_{cr, N}$		83	
$S_{cr, sp}$		220	
$C_{cr, sp}$		110	
S_{min}		50	
C_{min}		50	
L= Total Length			



Resistances in C20/25 concrete for an isolated anchor, without effects of edge distance or spacing



Characteristic Resistance N_{Rk} and V_{Rk}							
Tension				Shear			
Size	M8	M10	M12	Size	M8	M10	M12
N_{Rk} (kN)		18.5		V_{Rk} (kN)		13.5	
Design Resistance N_{Rd} and V_{Rd}							
Tension				Shear			
Size	M8	M10	M12	Size	M8	M10	M12
N_{Rd} (kN)		12.3		V_{Rd} (kN)		10.8	
Maximum Loads Recommended N_{rec} and V_{rec}							
Tension				Shear			
Size	M8	M10	M12	Size	M8	M10	M12
N_{rec} (kN)		8.75		V_{rec} (kN)		7.7	

INSTALLATION PRODUCTS

Hammer drill

Concrete Drill bits

Blow pump

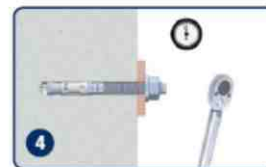
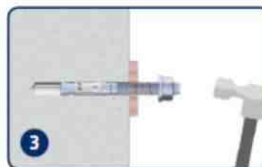
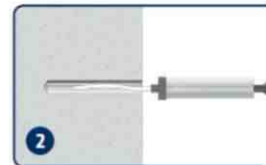
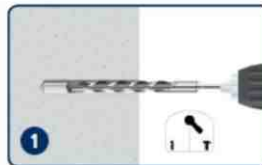
Cleaning Brush

Installation hammering tool

Torque wrench

Hexagonal socket

INSTALLATION



Pipe Clamp with Rubber



General properties

Two-part clamp with two locking bolts.

Bolts secured with anti-loss washer.

Used for mounting of pipes to the walls (vertical/horizontal), ceilings and floor.

Design for, Pvc, Pe, Pp, Steel, Cast Iron and Copper pipe.

NBR lining for:

a) Noise reduction level up to 15 dB according to DIN4109

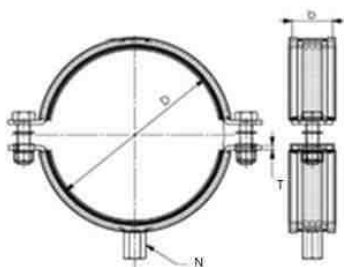
b) Vibration reduction

c) Temperature Resistance: -20°C to +110°C

Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

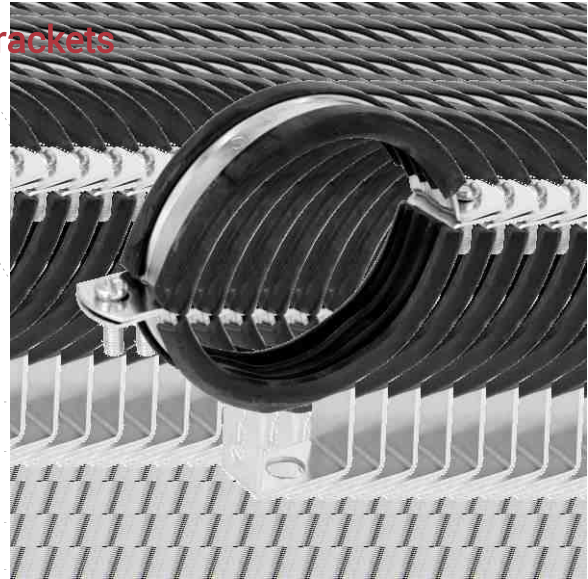


Nominal pipe size	T(mm)	Diameter Range (mm)	Nut Size N (mm)	b (mm)	F1 (KN)	F2 (KN)
3/8	1.25	15-20	8	20	0.9	1.08
1/2	1.25	20-25	8	20	0.9	1.08
3/4	1.25	25-31	8	20	0.9	1.08
1	1.25	31-38	8-10	20	0.9	1.08
1-1/4	1.25	36-48	8-10	20	0.9	1.08
1-1/2	1.25	48-60	8-10	20	0.9	1.08
2	1.25	60-70	8-10	20	1.25	1.5
2-1/2	1.25	75-88	8-10	20	1.25	1.5
3	1.5	89-102	8-10	25	1.25	1.5
4	1.5	110-122	8-10	25	1.9	2.28
5	2	122-132	8-10	25	3	3.6
6	2	155-168	8-10	25	3	3.6

Note: F_1 , for hanging clamp and F_2 , for clamp that install on profile.



Pipe Clamp with Rubber and U-Brackets



General properties

Two-part clamp with two locking bolts.

heavy design

Bolts secured with anti-loss washer.

Used for mountains of pipes to the walls (vertical/horizontal), ceilings and flood.

Design for, Pvc, Pe, Pp, Steel, Cast Iron and Copper pipe.

NBR lining for:

a) Noise reduction level up to 15 dB according to DIN4109

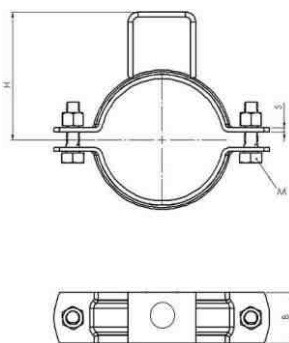
b) Vibration reduction

c) Temperature Resistance: -20°C to +110°C

Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

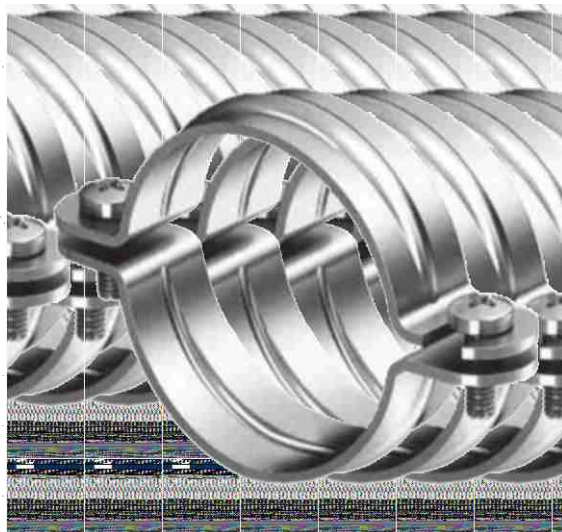
General Dimension



Nominal pipe size	Diameter Range (mm)	H (mm)	S (mm)	B (mm)	Bolt Size	F1(KN)	F2(KN)
2	60-70	33	1.25	20	M6	3.21	3.852
2-1/2	75-88	39	1.25	20	M6	3.21	3.852
3	89-102	46	1.5	25	M6	3.21	3.852
4	110-122	54	1.5	25	M6	3.21	3.825
5	122-132	70	2	25	M6	4.52	5.424
6	155-168	77	2	25	M6	4.52	5.424
8	200-218	100	3	25	M8	6.63	7.956

Note: F_1 , for hanging clamp and F_2 , for clamp that install on profile.

Heavy Duty Pipe Clamp



General properties

Heavy duty pipe clamps used for mounting of pipes

to the walls (vertical I horizontal), ceiling and floors

Easy and safe assembly through hex head bolt and nut.

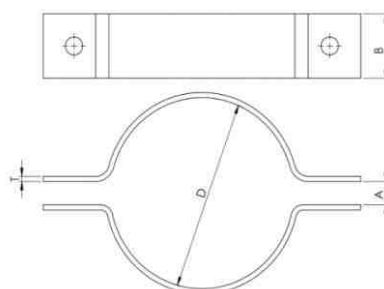
Design for Steel pipe

Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

Nominal pipe size	Thickness (T)	Diameter Range (mm)		B(mm)	F1 (KN)	F2 (KN)
3/4"	2	24	28	30	3.21	3.852
1	3	32	38	30	3.21	3.852
1 1/4"	3	34	46	40	3.21	3.852
1 1/2"	3	46	54	40	3.21	3.852
2"	3	50	64	40	3.21	3.852
2 1/2"	4	71	77	40	3.21	3.852
3"	4	74	95	40	3.21	3.852
4"	4	110	120	50	3.21	3.852
5"	4	130	148	50	4.52	5.424
6"	4	142	180	50	4.52	5.424
8"	5	187	230	50	6.63	7.956
10"	5	235	285	50	6.63	7.956
12"	6	300	345	60	12.15	14.58
14"	8	330	365	60	14.37	17.244
16"	8	376	420	80	14.37	17.244





Pipe clamp



General properties

Light duty pipe clamps used for mounting of pipes

Bolts secured with anti-loss washer.

Design for, Pvc, Pe, Pp, Steel, Cast Iron and Copper pipe.

NBR lining for:

a) Noise reduction level up to 15 dB according to DIN4109

b) Vibration reduction

c) Temperature Resistance: -20°C to +110°C

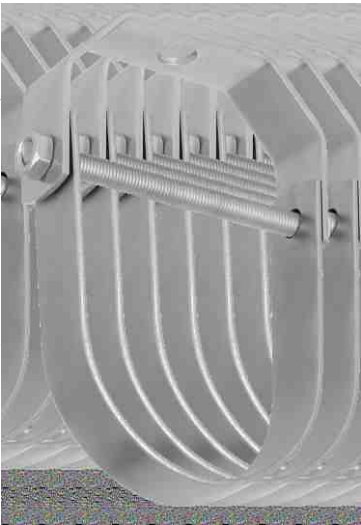
Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

Nominal pipe size	Thickness (T)	Diameter Range (mm)		Width (mm)	Nut	F1 (KN)
3.8	1.25	18	26	20	8-10	0.5
1.2	1.25	24	30	20	8-10	0.5
3.4	1.25	30	36	20	8-10	0.5
1	1.25	36	43	20	8-10	0.5
1-1/4	1.25	44	51	20	8-10	0.66
1-1/2	1.25	54	58	20	8-10	0.66
2	1.25	66	70	20	8-10	0.66

Clevis Hanger



General properties

designed for chilled water pipe work and fire fighting systems.

Heavy duty pipe clamps

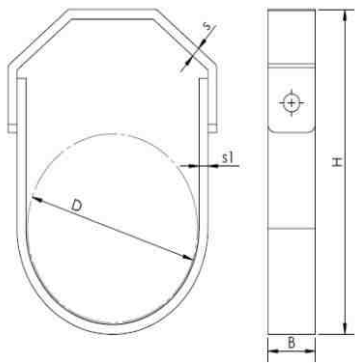
design permits vertical adjustment of pipe after installation.

Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

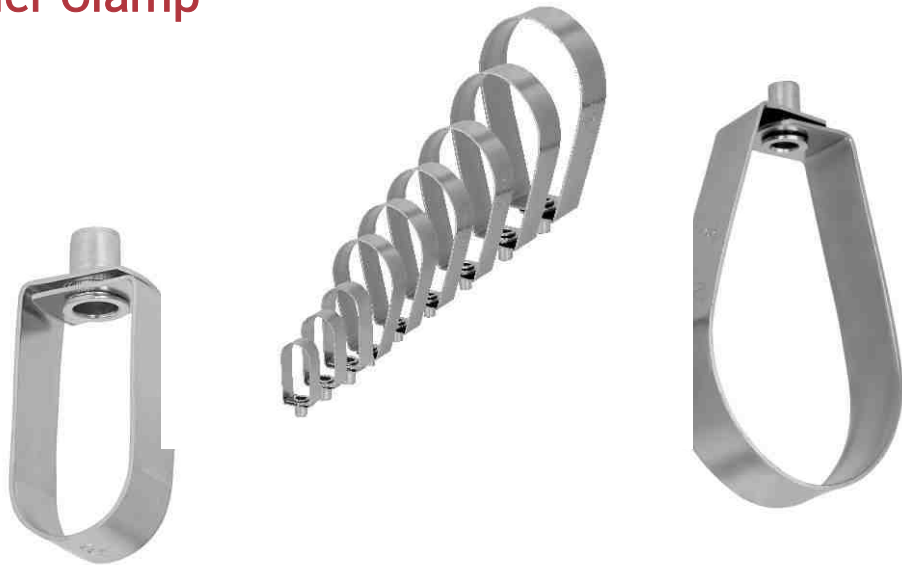
General Dimension

Nominal pipe size	D(mm)	S1(mm)	S (mm)	B(mm)	H(mm)	F (KN)
4	115	6	6	32	198	6.3
5	140	6	6	32	232	6.3
6	168	6	5	40	266	8.6
8	219	6	5	40	339	8.81
10	273	6	6	40	419	16





Sprinkler Clamp



General properties

for use in fire fighting and sprinkler installations.

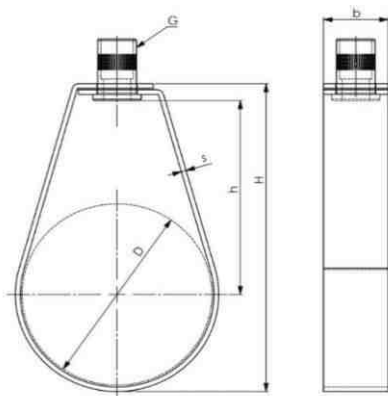
easy to install, without tools

high load capacity due to one-piece design

Material: steel

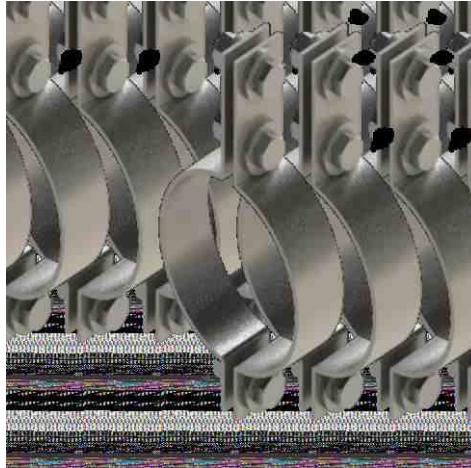
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Nominal pipe size	S (mm)	b (mm)	D (mm)	H(mm)	Test Loading UL	Final Time	New Load
3.4	1.5	22	34	78	3336	5437	
1	1.5	22	38	80	3336	5437	15866
1-1/4	1.5	22	44	99	3336	5437	
1-1/2	1.5	22	51	108	3336	5455	
2	1.5	22	62	133	3336	5399	
2-1/2	2	32	74	160	3781	7382	
3	2	32	90	183	4670	7382	16510
4	2.5	32	110	226	6672	18100	26331
5	2.5	40	130	270	8892	18100	
6	3	40	160	320	11787	23601	
8	3	50	220	400	18014	19966	

Two Bolt Clamp



General properties

Designed for high static loading requirements in plant construction.

Material: steel

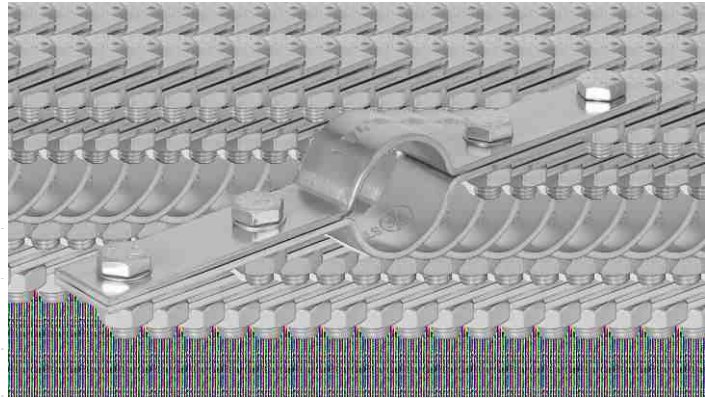
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

Nominal pipe size	Thickness (mm)	DA (mm)	DB (mm)	With (mm)	Design load F(KN)
1-1.4	3	46	40	40	1.97
1-1.2	3	54	46	40	3.2
2	3	64	58	40	3.2
2-1.2	4	77	70	40	3.5
3	4	95	86	40	3.5
4	4	120	112	50	4.3
5	4	148	138	50	4.3
6	4	180	172	50	5
8	5	230	220	50	6.2
10	5	285	265	50	7
12	6	345	325	60	8.4
14	8	365	345	60	11.95
16	8	420	390	80	11.95



Heavy Duty Riser Clamp



General properties

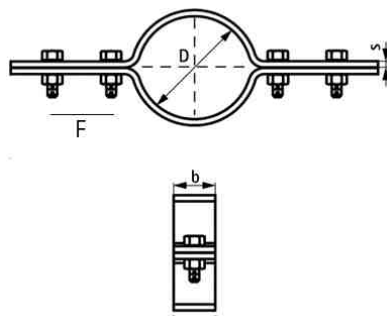
designed to act as a rigid support or guide for vertical pipes.

suitable for use with all types of pipes

Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Nominal pipe size	S(mm)	F(mm)	b (mm)	Design load F(KN)
3.4	2	60	30	1.7
1	3	60	30	1.7
1-1.4	3	60	30	1.7
1-1.2	3	60	30	1.7
2	3	60	30	1.7
2-1.2	4	60	35	4
3	4	60	35	4
4	4	60	50	4
5	4	60	50	6
6	4	60	60	6
8	4	60	70	11
10	4	60	70	12
12	6	60	70	15
14	6	60	70	15
16	6	60	70	22

U-Strap Clamp



General properties

Designed for supporting pipe runs from walls or ceiling with frame channels.

Can be used with Rubber Support Inserts

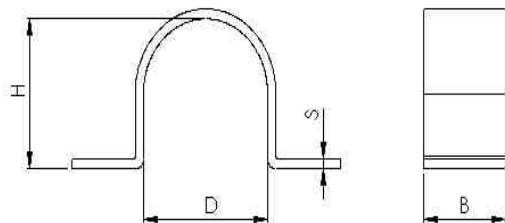
Slotted holes on both sides allow convenient installation

For mounting plain or insulated pipes

Material: steel

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Nominal pipe size	D(mm)	H(mm)	S(mm)	F_z (KN)	F_y (KN)	F_x (KN)
1/2	22	21	2	2.67	0.67	0.47
3/4	28	27	2	2.67	0.67	0.47
1	35	34	3	2.67	0.67	0.53
1-1/4	42	41	3	2.67	0.67	0.53
1-1/2	48	47	4	2.67	0.67	0.53
2	60	59	4	5.34	2.14	0.8
2-1/2	75	74	4	5.34	2.14	0.8
3	90	89	5	5.34	2.14	1.33
4	115	114	5	6.67	3.56	2
5	140	139	5	6.67	3.56	2
6	168	166	6	6.67	3.56	2
8	219	217	6	6.67	3.56	2.67



U Bolt



General properties

high load capacity due to one-piece design

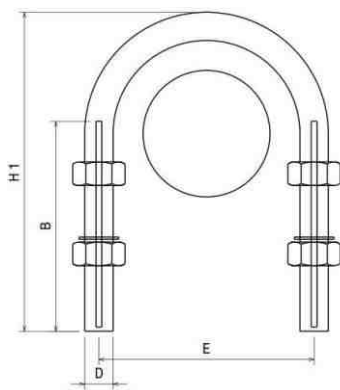
supplied with four nuts and two washes

Design as support, guide or anchor of pipe

Material: steel

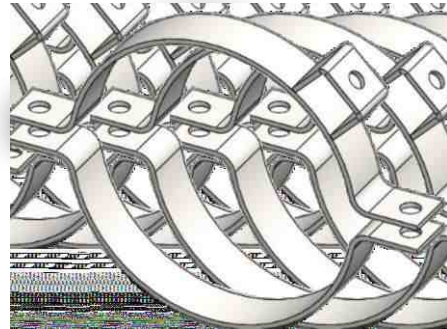
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Nominal pipe size	E(mm)	D(mm)	H(mm)	B(mm)
1/2	30	8	56	25
3/4	36	8	60	30
1	45	10	62	35
1-1/4	56	10	80	38
1-1/2	66	10	88	47
2	76	10	108	48
2-1/2	90	12	126	57
3	105	12	128	54
4	130	12	172	60
5	170	12	210	60
6	188	12	230	60
8	246	16	280	95
10	300	20	350	110

Heavy Duty Pipe Clamp -45



General properties

Heavy duty pipe clamps used for mounting of pipes to the angled walls

Design for Steel pipe

Material: steel

Easy and safe assembly through hex head bolt and nut

Cold galvanized (the capability of coating with hot dip galvanizing)

Material: steel

Wall Pipe Clamp with Rubber



General properties

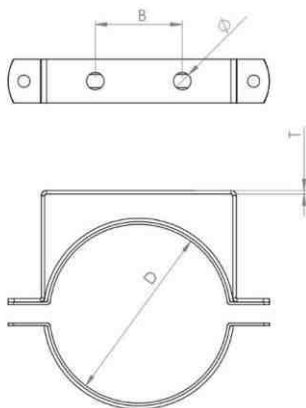
designed to act as a rigid support or guide for vertical pipes

Noise reduction and Vibration reduction

Material: steel

Cold dip galvanized (the capability of coating with hot galvanizing)

General Dimension



Nominal pipe size	T(mm)	Diameter Range (mm)	B (mm)	Ø(mm)	F _z (KN)
2	2	60-70	50	10	500
2-1/2	2	75-88	50	10	500
3	2	89-102	50	10	600
4	2.5	110-122	50	10	600
5	2.5	122-132	50	10	700
6	3	155-168	50	10	700
8	3	200-218	50	10	800

Strut Channel 30×20



General Properties

The design of this profile is such that it has the ability to withstand significant static loads.

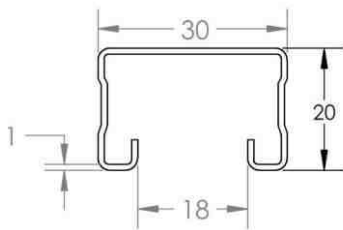
Designed for light loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

material: construction steel St37-2

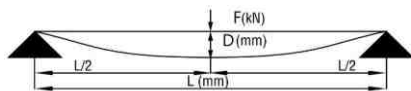
The sheet used in making this profile is galvanized.

General Dimension



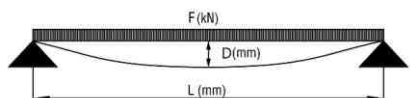
Code	A×B (mm)	t (mm)	L (mm)	Weight (gr/m)
SL.PS.30*20	30 × 30	1	6000	3636

Concentrated Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	3	0.1
200	1.5	0.5
250	1.15	0.9
300	1	1
500	0.53	1.9
750	0.35	3.0
1000	0.22	4.5
1250	0.15	6.2
1500	0.11	7.3
2000	0.06	9.5

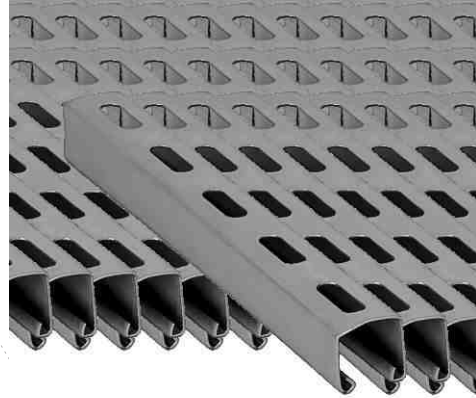
Extensive Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	7.3	0.08
200	3.6	0.4
250	2.85	0.75
300	2.36	1.1
500	1.42	2
750	0.75	3.4
1000	0.42	4.8
1250	0.25	6.3
1500	0.17	7.5
2000	0.08	10



Strut Channel 30x30



General Properties

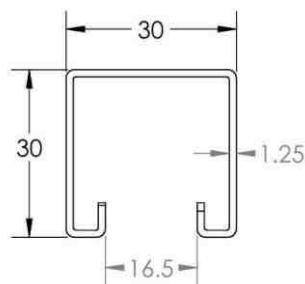
The design of this profile is such that it has the ability to withstand significant static loads.
Designed for light loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

material: construction steel St37-2

The sheet used in making this profile is galvanized.

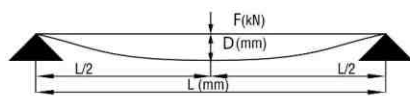
General Dimension



Code	AxB (mm)	t (mm)	L (mm)	Weight (gr/m)
SL.PM.30	30 × 30	1.25	60000	5400

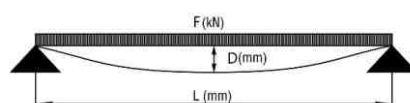
Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	5.2	0.1
200	2.55	0.5
250	1.98	0.9
300	1.80	1
500	0.98	1.9
750	0.64	3.0
1000	0.43	4.5
1250	0.29	6.2
1500	0.21	7.5
2000	0.11	9.5

Concentrated Loading

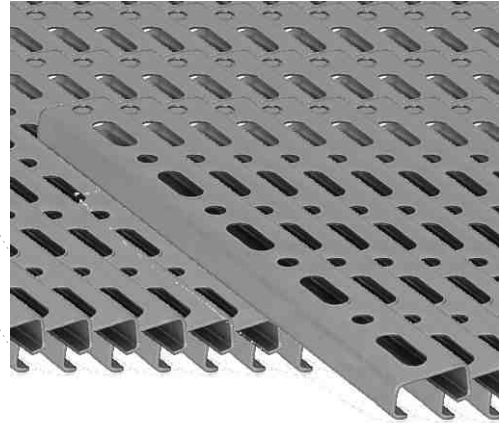


Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	14.5	0.08
200	7.35	0.4
250	5.85	0.75
300	4.9	1.1
500	2.97	2
750	1.6	3.4
1000	0.9	4.8
1250	0.53	6.3
1500	0.34	7.5
2000	0.15	10

Extensive Loading



C CHANNEL



General Properties

The design of this profile is such that it has the ability to withstand significant static loads.

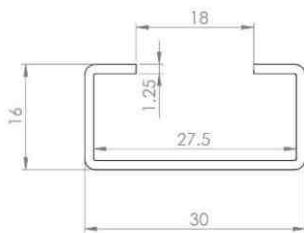
Designed for light loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

material: construction steel St37-2

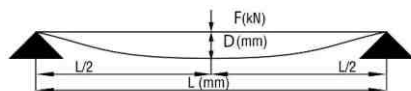
The sheet used in making this profile is galvanized.

General Dimension



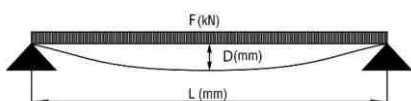
Code	AxB (mm)	t (mm)	L (mm)	Weight (gr/m)
CH.M	30 × 16	1.25	6000	3300

Concentrated Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	1.95	0.07
200	1	0.3
250	0.8	0.45
300	0.65	0.7
500	0.38	1.85
750	0.2	3.1
1000	0.1	4

Extensive Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	3.85	0.09
200	1.95	0.4
250	1.55	0.6
300	1.3	0.9
500	0.7	2.1
750	0.3	3.1
1000	0.17	4.2



Strut Channel Base 30



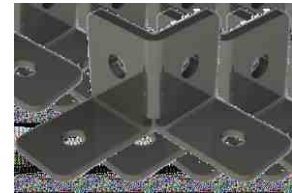
SL.BM.30



SL.SBM.30



SL3W.B.2H



SL2W.B.H

General Properties

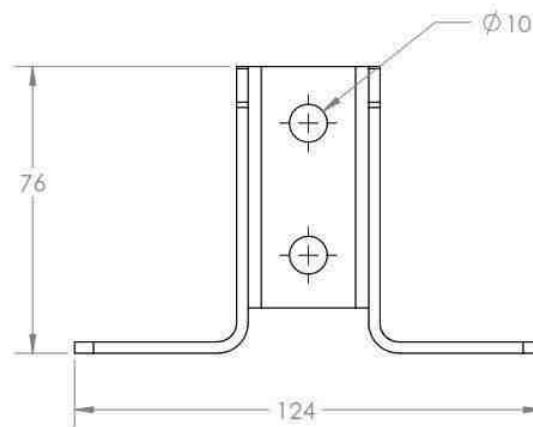
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Strut Channel Welded Base 30



SLL.DM.30

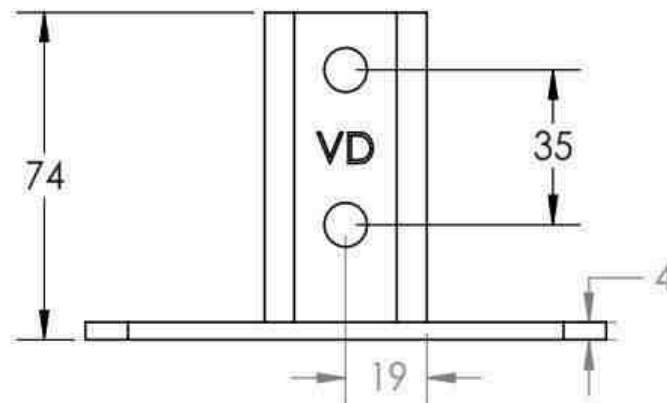


SL.B4H.30

General Properties

- Use for connect of strut channel
- Easy fitting due to rounded edge
- Pre-assemble for rapid installation
- material: construction steel St37-2
- Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





L 30



SLL.LD2.30



SLL.LD3.30



SLL.LD4.30

General Properties

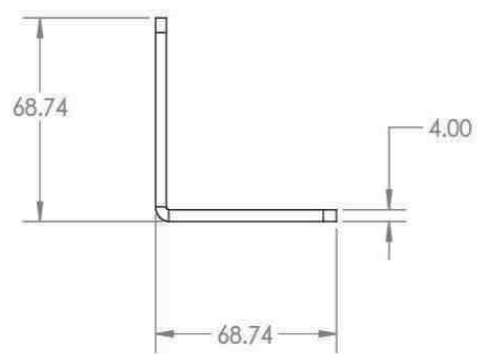
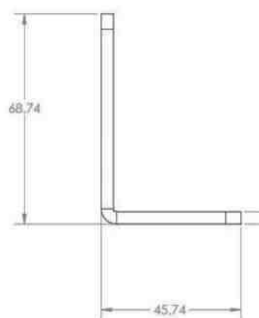
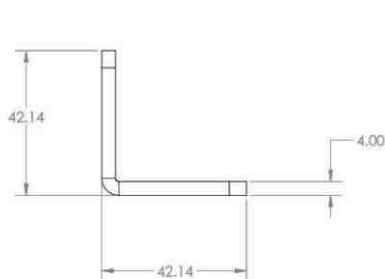
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Conner Connector 30

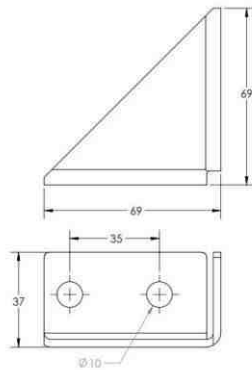
SLL.PM.30



General Properties

Use for connect of strut channel
Easy fitting due to rounded edge
material: construction steel St37-2
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Bracing 30

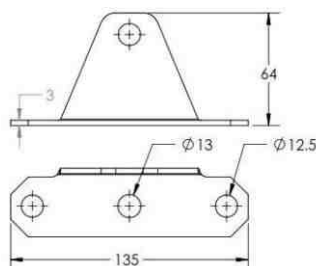
SSR.30



General Properties

Suitable for bearing lateral loads
Assembly with system profile 30 and connecting to the ceiling
material: construction steel St37-2
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

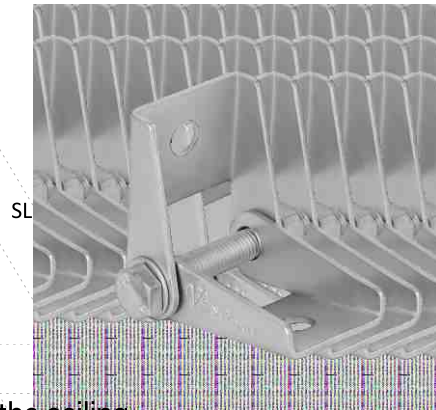




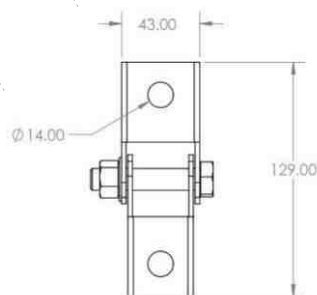
Hinge 30

General Properties

Suitable for bearing lateral loads
Assembly with system profile 30 and connecting to the ceiling
material: construction steel St37-2
Cold galvanized (the capability of coating with hot dip galvanizing)



General Dimension



Strut Channel Connector 30

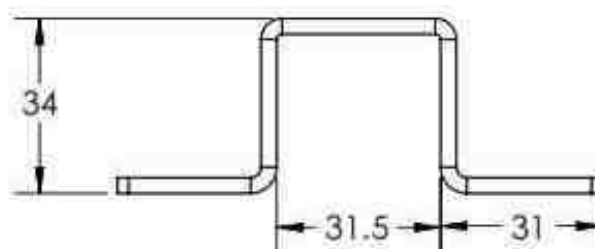
SML.JLD.4



General Properties

Use for connect of strut channel
Easy fitting due to rounded edge
material: construction steel St37-2
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Covered Strut Channel Connector 30



SSL.BW.L



SL.BW.R

General Properties

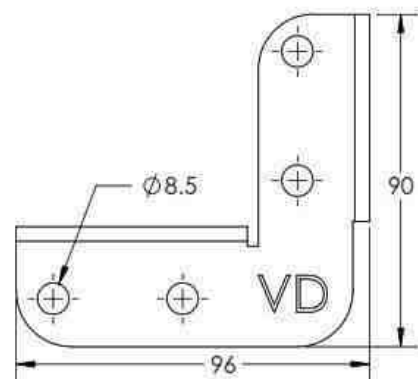
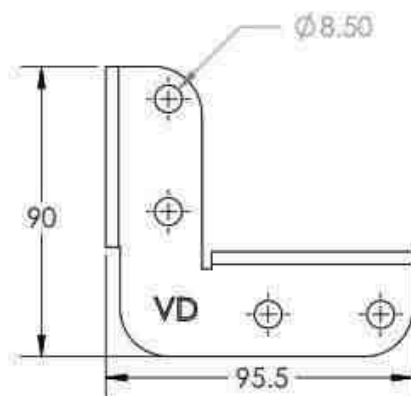
Use for connect of strut channel

Quick and easy installation

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Strut Channel Connector 30



SLL.JJ.30



SLL.JL.30

General Properties

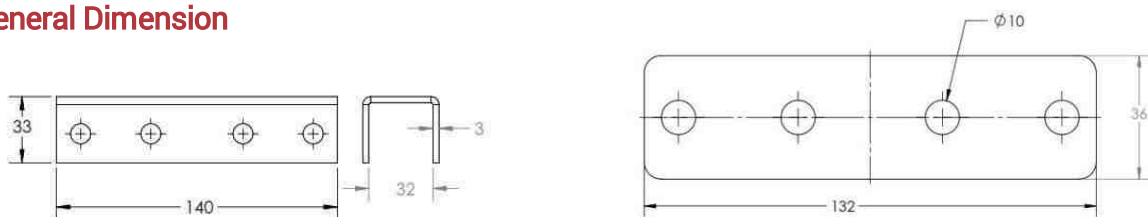
Use for connect of strut channel

The U-shaped interface structure creates high-stability connections

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Cover Washer 30



SLL.CC



SLL.C.30

General Properties

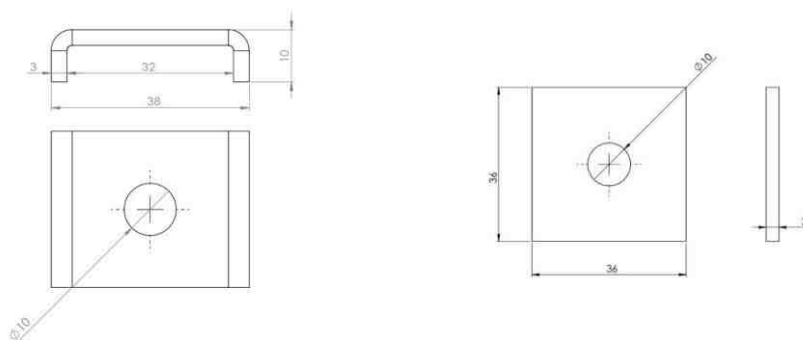
The structure of the U washer on the profile prevents the edges of the profile from bending when installing the meter screw

Quick and easy installation

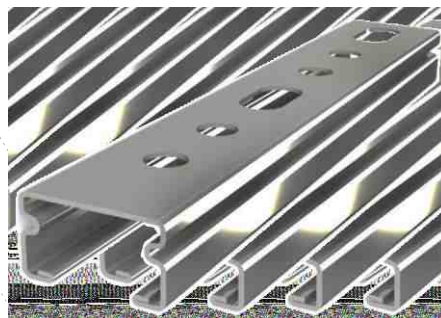
material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Strut Channel 35×21



General Properties

The design of this profile is such that it has the ability to withstand significant static loads.

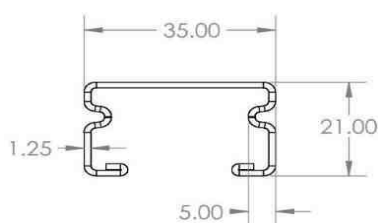
Designed for light loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

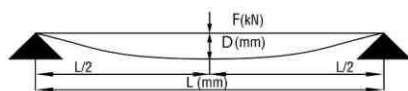
material: construction steel St37-2

The sheet used in making this profile is galvanized.

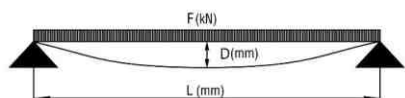
General Dimension



Concentrated Loading



Extensive Loading



Code	AxB (mm)	t(mm)	L (mm)	Weight (gr/m)
SL.PS.35*21	35×21	1.25	6000	

Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	3.57	0.06
200	1.78	0.22
250	1.42	0.35
300	1.18	0.50
500	0.71	1.40
750	0.46	3.08
1000	0.26	4.16
1250	0.16	5.08
1500	0.11	6.18

Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
200	3.56	0.28
250	2.85	0.44
300	2.37	0.63
500	1.42	1.75
750	0.74	3.09
1000	0.41	4.10
1250	0.26	5.16
1500	0.17	5.99



Strut Channel 35x35



General Properties

The design of this profile is such that it has the ability to withstand significant static loads.

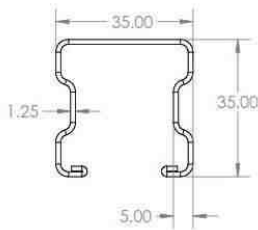
Designed for light loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

material: construction steel St37-2

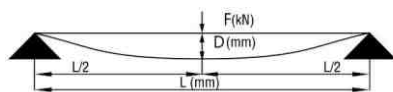
The sheet used in making this profile is galvanized.

General Dimension



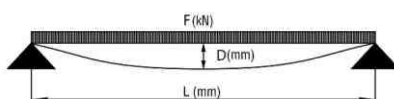
Code	A×B (mm)	t (mm)	L (mm)	Weight (gr/m)
SL.PM.35	35 × 35	1.25	6000	7044

Concentrated Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
100	8.24	0.03
200	4.12	0.13
250	3.29	0.21
300	2.74	0.3
500	1.64	0.83
750	1.09	1.86
1000	0.81	3.28
1250	0.65	5.17
1500	0.45	6.25
2000	0.24	8.20

Extensive Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)
200	8.24	0.17
250	6.59	0.26
300	5.48	0.37
500	3.29	1.03
750	2.18	2.32
1000	1.63	4.12
1250	1.04	5.17
1500	0.72	6.25
2000	0.39	8.32

Strut Channel Base 35



SL.BM.35

General Properties

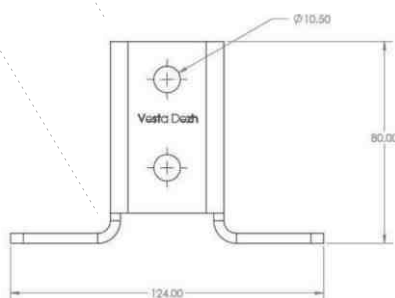
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



L 35



SLL.LD4.35

General Properties

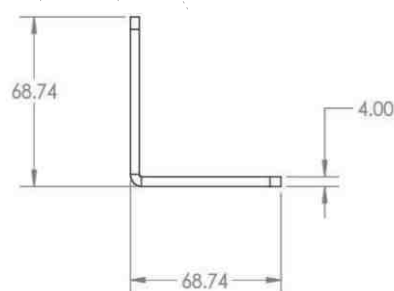
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Conner Connector 35



General Properties

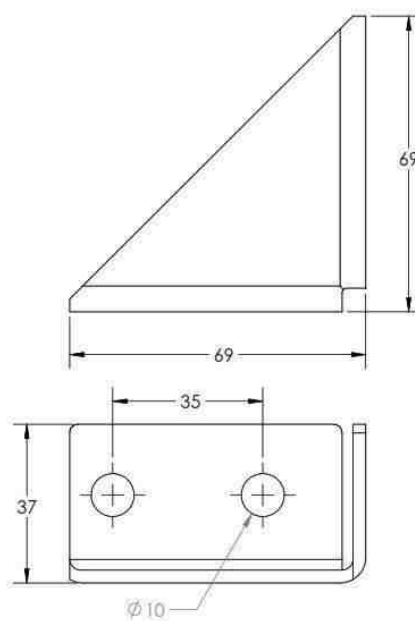
Use for connect of strut channel

Easy fitting due to rounded edge

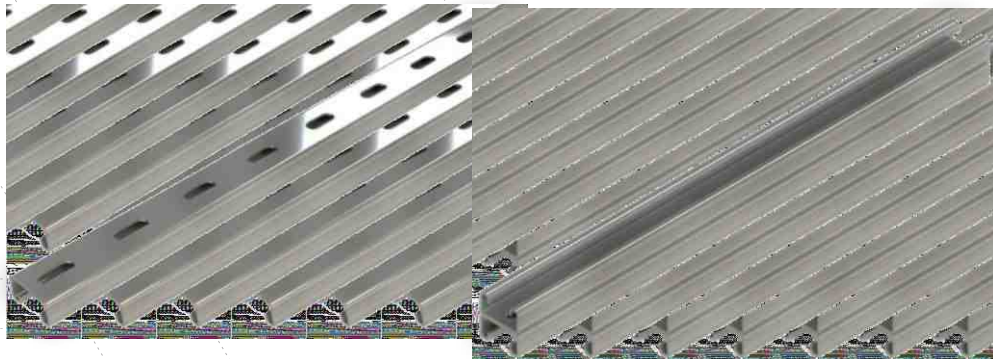
material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Strut Channel 41×21



General Properties

The design of this profile is such that it has the ability to withstand significant static loads.

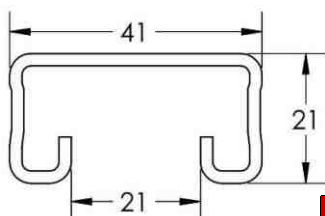
Designed for medium loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

material: construction steel St37-2

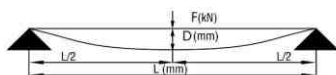
The sheet used in making this profile is galvanized.

General Dimension



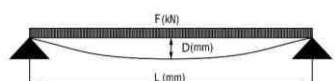
Code	A×B (mm)	t (mm)	L (mm)	Weight (gr/m)
SM.PS.21	41x21	2	6000	1410
SM.DPS.21	41x42	2	6000	2920

Concentrated Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)	Max Design Load (KN)	Deflection (mm)
100	6.24	0.038	15.6	0.022
200	3.12	0.17	7.75	0.09
250	2.5	0.26	6.2	0.141
300	2.1	0.38	5.2	0.21
500	1.28	1	3.1	0.58
750	0.87	2.3	2	1.3
1000	0.5	3.1	1.5	2.3
1250	0.32	4	1.19	3.6
1500	0.21	4.6	0.89	4.7
2000	0.14	5.3	0.49	6.25

Extensive Loading



Profile Length (mm)	Max Design Load (KN)	Deflection (mm)	Max Design Load (KN)	Deflection (mm)
100	15.1	0.05	30	0.04
200	7.7	0.24	14.7	0.15
250	6.2	0.4	11.65	0.22
300	5.2	0.55	9.6	0.3
500	3.15	1.6	5.7	0.92
750	1.17	3.05	3.75	2.1
1000	0.95	4.1	2.8	3.8
1250	0.59	5.07	2	5.15
1500	0.4	6.1	1.42	6.15
2000	0.2	8	0.81	8.3



Strut Channel 41x41



General Properties

The design of this profile is such that it has the ability to withstand significant static loads.

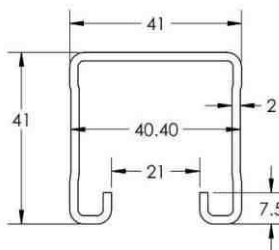
Designed for medium loads.

The punches designed on the body of this profile provide the ability to use it in a variety of positions.

material: construction steel St37-2

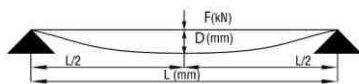
The sheet used in making this profile is galvanized.

General Dimension



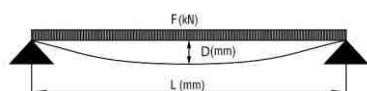
Code	AxB (mm)	t (mm)	L (mm)	Weight (gr/m)
SM.PM.41	41x41	2	6000	2000
SM.DPM.41	41x82	2	6000	4000

Concentrated Loading



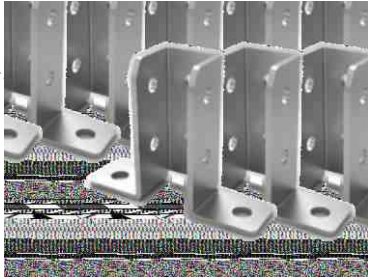
Profile Length (mm)	Max Design Load (kN)	Deflection (mm)	Max Design Load (kN)	Deflection (mm)
100	14	0.03	35.8	0.02
200	7.16	0.11	17.8	0.05
250	5.74	0.16	14.3	0.1
300	4.82	0.25	12.8	0.13
500	2.94	0.7	7.2	0.35
750	2	1.62	4.66	0.86
1000	1.2	2.9	3.5	1.54
1250	0.77	4.55	2.7	2.4
1500	0.5	6.2	2.0	3.5
2000	0.31	8.2	1.11	6.28

Extensive Loading



Profile Length (mm)	Max Design Load (kN)	Deflection (mm)	Max Design Load (kN)	Deflection (mm)
100	26.4	0.04	82.6	0.02
200	13.2	0.15	41.25	0.07
250	10.5	0.22	32.92	0.1
300	8.7	0.32	27.4	0.15
500	5.2	0.9	16.4	0.44
750	3.4	2.04	10.9	1.06
1000	2.5	3.64	8	1.93
1250	1.84	5.18	6.45	3.02
1500	1.3	6.2	5.5	4.4
2000	0.73	8.3	4.2	7.82

Strut Channel Base 41



SMM.B.41



SM2W.B.2H.41



SM3W.B.1H.41



SM3W.B.2H.41



SM2W.B.2H.41

General Properties

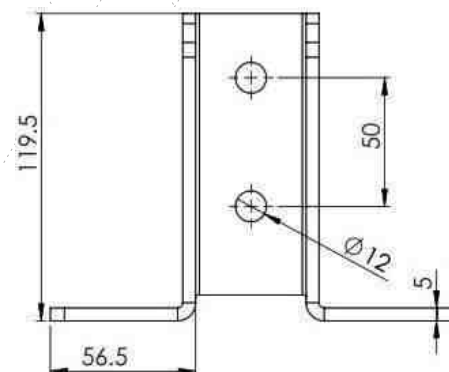
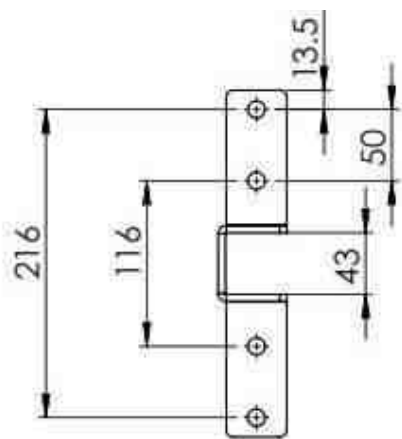
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Strut Channel Welded Base 41



SMH.BBM.41



SMH.BBM4.41

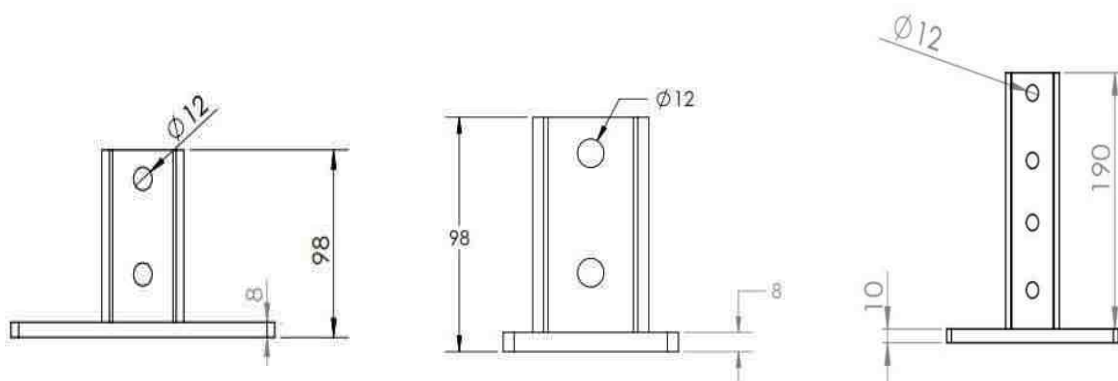


SM.B4H.41

General Properties

Use for connect of strut channel
Easy fitting due to rounded edge
Pre-assemble for rapid installation
material: construction steel St37-2
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



L 41



SML.D4.41



SML.D3.41



SML.D2.41

General Properties

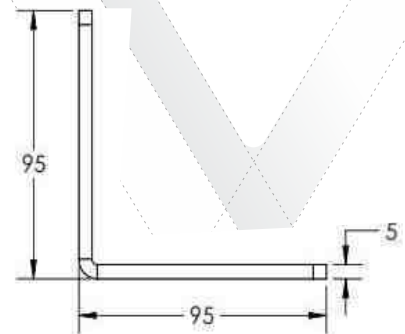
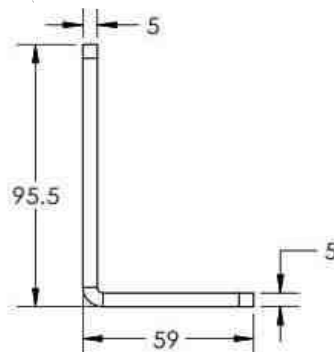
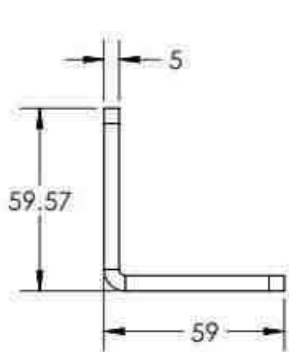
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Conner Connector 41



SMM.L.50.41

General Properties

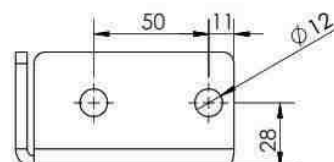
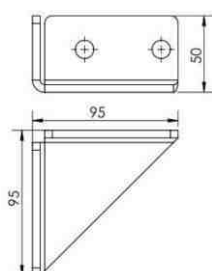
Use for connect of strut channel

Easy fitting due to rounded edge

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Bracket 41



General Properties

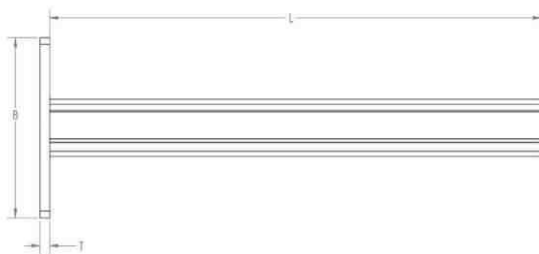
Wall Plate welded on strut channel

The 90-degree angle of this connection makes it easy to install

Due to the longitudinal, it is possible to select it based on the appropriate load material: construction steel St37-2

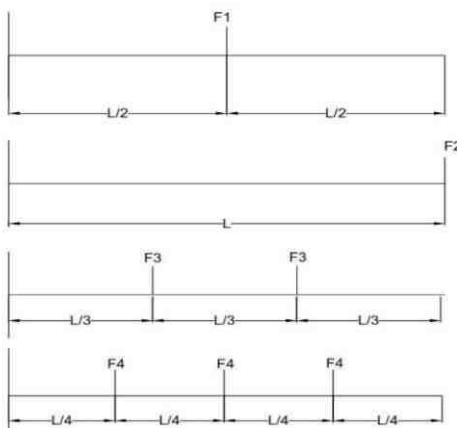
Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



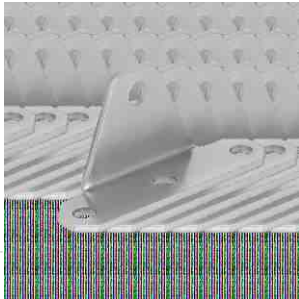
code	L(mm)	B(mm)	t(mm)
SM.D20.41	200	130	8
SM.D30.41	300	130	8
SM.D40.41	400	130	8
SM.D50.41	500	130	8

Loading

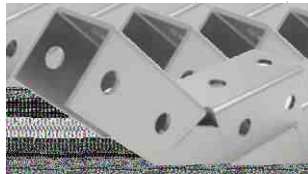


code	L(mm)	F1(KN)	F2(KN)	F3(KN)	F4(KN)
SM.D20.41	200	5.50	2.70	2.70	1.8
SM.D30.41	300	2.75	1.35	1.35	0.9
SM.D40.41	400	2.00	1.00	1.00	0.67
SM.D50.41	500	1.65	0.8	0.8	0.55

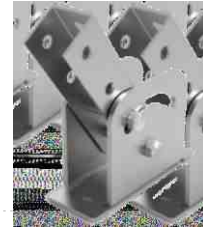
Bracing 41



SS.R.41



SMM.AJ.20.41



SMH.RS350.41

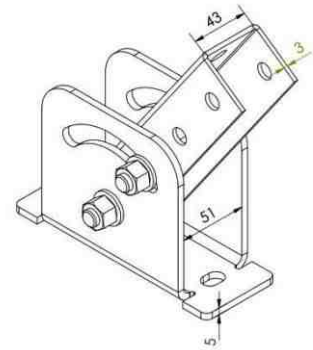
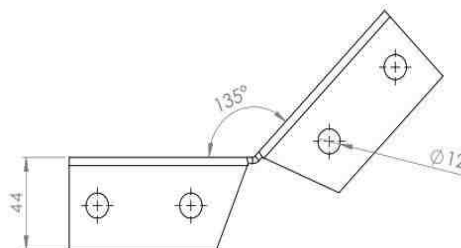
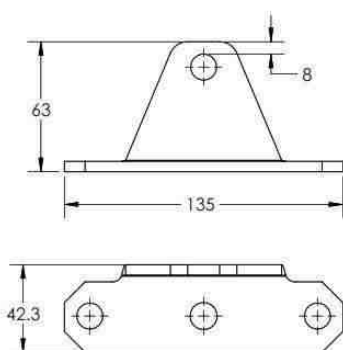
General Properties

Suitable for bearing lateral loads

Assembly with system profile 41 and connecting to the ceiling
material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





Hinge 41

SMH.RS.20.41



SM.RSH.41



General Properties

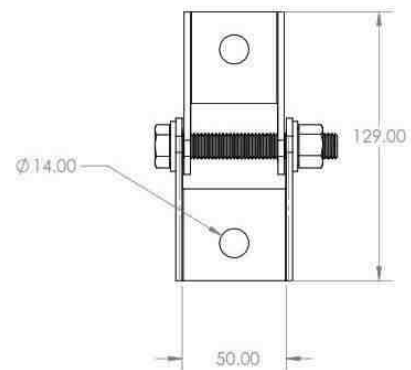
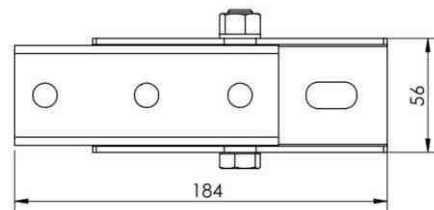
Suitable for bearing lateral loads

Assembly with system profile 41 and connecting to the ceiling

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Direct Connector Hing



SM.H41

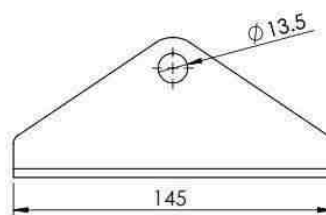
General Properties

Has a wide range of applications due to its angular variation

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

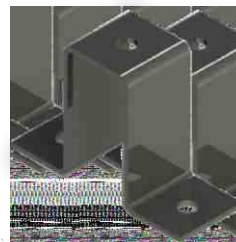
General Dimension



Strut Channel Connector 41



JLD.41

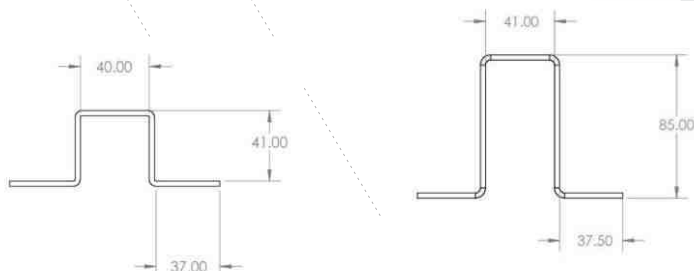


SMLJLD2.41

General Properties

- Use for connect of strut channel
- Easy fitting due to rounded edge
- material: construction steel St37-2
- Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



Strut Channel Connector 41



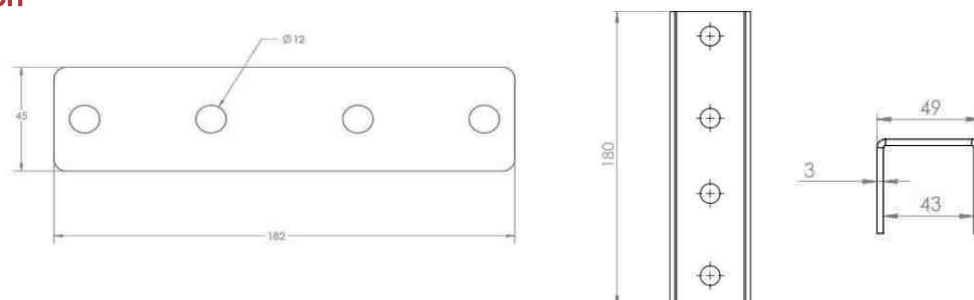
SMLJLD.41



General Properties

- Use for connect of strut channel
- The U-shaped interface structure creates high-stability connections
- material: construction steel St37-2
- Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension

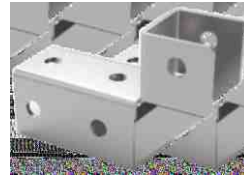




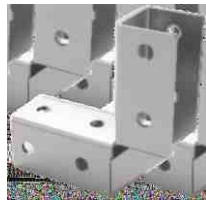
Covered Strut Channel Connector 41



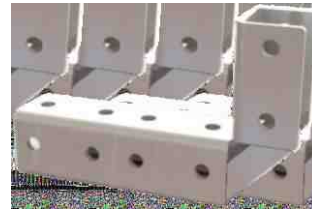
SMH.A10.10.41



SMH.A10.20.41



SMH.A20.20.41



SMH.AH20.40.41

General Properties

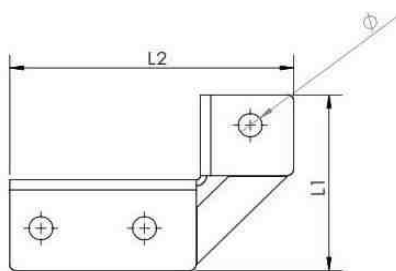
Use for connect of strut channel

Quick and easy installation

material: construction steel St37-2

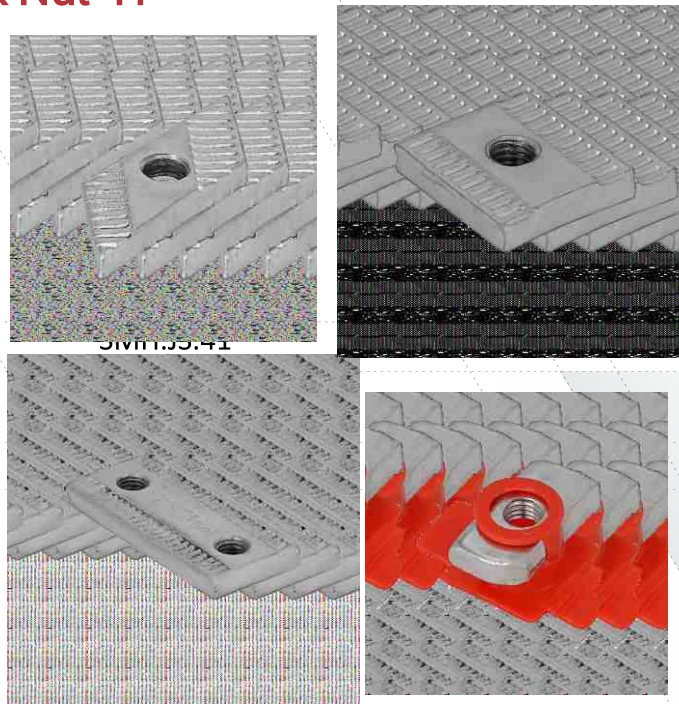
Cold galvanize (the capability of coating with hot dip galvanizing)

General Dimension



Code	L_1 (mm)	L_2 (mm)	\varnothing (mm)
SMH.A10.10.41	92	92	11.5
SMH.A10.20.41	87	137	11.5
SMH.A20.20.41	137	137	11.5
SMH.AH20.40.41	132	168	11.5

Easy Lock Nut 41



General Properties

Use for connect of strut channel

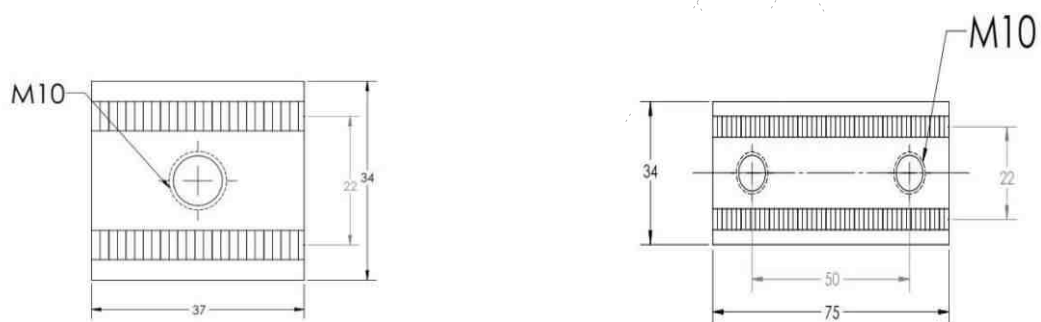
The teeth on the piece are designed to match the inner teeth of the perforated profiles, which increases the stability of the joints.

Available for m10 and m12

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension





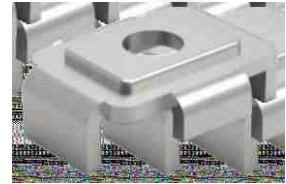
Cover Washer



SMM.C41



SM.CMF



SMM.P41

General Properties

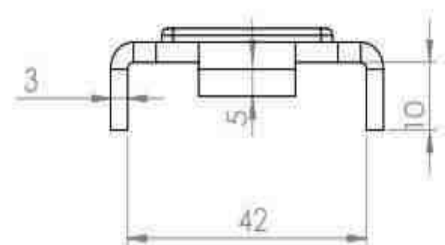
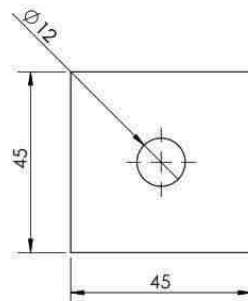
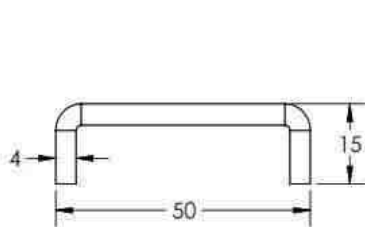
The structure of the U washer on the profile prevents the edges of the profile from bending when installing the meter screw

Quick and easy installation

material: construction steel St37-2

Cold galvanized (the capability of coating with hot dip galvanizing)

General Dimension



introduction

Galvanized metal cable tray is used in electrical installations. This tool is used to enhance the beauty and order of many cabling in buildings. The cables must pass through the cable tray all the way, including vertical movements.

The benefits of a galvanized metal cable tray are:

- Non-flammable components
- Manufacture in accordance with international and European standards
- Resistant to acid vapors and other chemicals
- Has smooth edges and no damage to the cable
- Impact resistant
- Ideal for wet climates
- Highly durable
- Various sizes
- High weight bearing



Steps to produce cable trays

Cutting

The sheets used for cable tray construction are black and galvanized steel sheet.

Punching

Cutting of cable tray parts is done with NC Circuit Cutter in lengths of 2 and 3 meters.

Bending

The bending of the cable tray is performed by means of NC circuits, in different degrees and angles depending on the thickness of the sheet used, in the form of four bends or six bends.

Welding

Cable tray parts are shipped to the welding unit if required and welded to the welding machine depending on the type and thickness of sheet used.

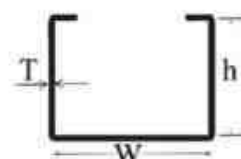
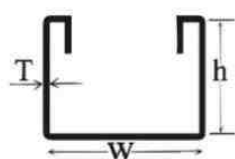
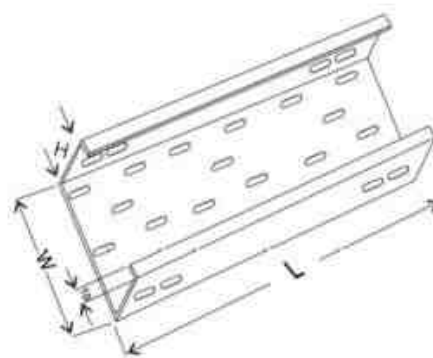
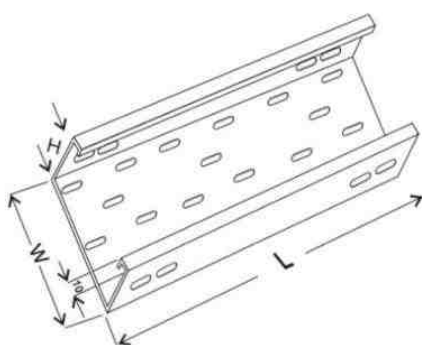
Inspection

Initial inspection of cable tray - Inspection during production of cable tray - Inspection of cable tray after galvanization operation - Final inspection of cable tray.

Cable Tray



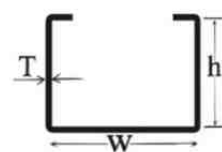
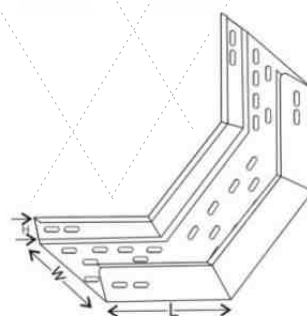
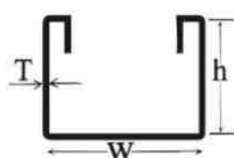
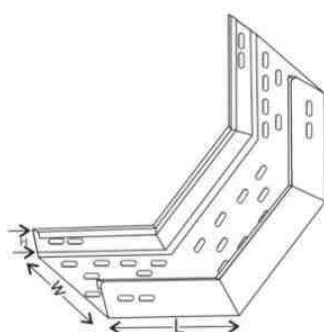
W(mm)	h(mm)	L(mm)	Hot Dip Galvanized	Galvanized
			T(mm)	T(mm)
100	40≈200	2000≈ 3000	1.5≈2	1≈2
200	40≈200	2000≈ 3000	1.5≈2	1≈2
300	40≈200	2000≈ 3000	2≈4	1.25≈2
400	40≈200	2000≈ 3000	2≈4	1.5≈2
500	40≈200	2000≈ 3000	2≈4	1.5≈2
600	40≈200	2000≈ 3000	2≈4	2≈2.5
700	40≈200	2000≈ 3000	2≈4	2≈2.5
800	40≈200	2000≈ 3000	2≈4	2≈2.5



Internal Vertical Riser for Cable Tray



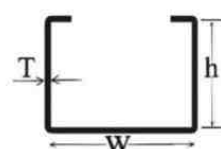
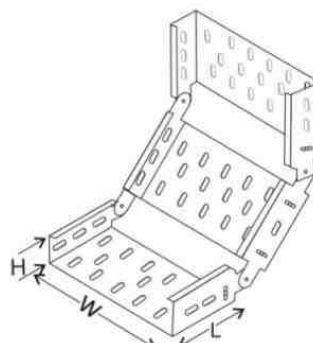
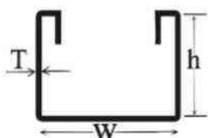
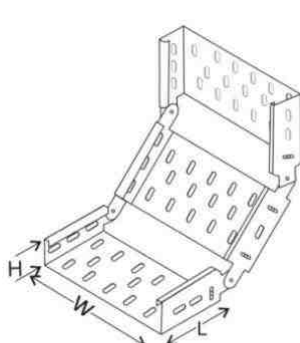
		Hot Dip Galvanized	Galvanized
W(mm)	h(mm)	T(mm)	T(mm)
100	40≈200	1.5≈2	1≈2
200	40≈200	1.5≈2	1≈2
300	40≈200	2≈4	1.25≈2
400	40≈200	2≈4	1.5≈2
500	40≈200	2≈4	1.5≈2
600	40≈200	2≈4	2≈2.5
700	40≈200	2≈4	2≈2.5
800	40≈200	2≈4	2≈2.5



Internal Adjustable Vertical Riser for Cable Tray



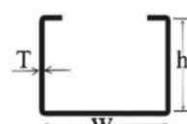
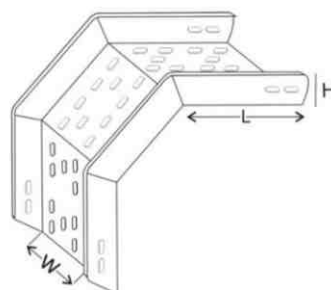
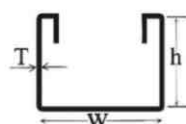
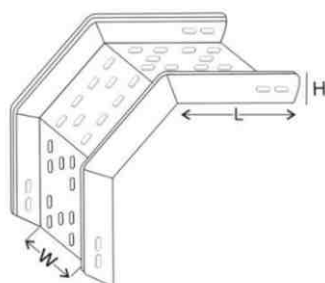
		Hot Dip Galvanized	Galvanized
W(mm)	h(mm)	T(mm)	T(mm)
100	40≈200	1.5≈2	1≈2
200	40≈200	1.5≈2	1≈2
300	40≈200	2≈4	1.25≈2
400	40≈200	2≈4	1.5≈2
500	40≈200	2≈4	1.5≈2
600	40≈200	2≈4	2≈2.5
700	40≈200	2≈4	2≈2.5
800	40≈200	2≈4	2≈2.5



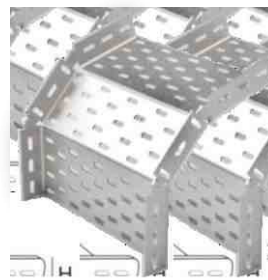
External Vertical Riser for Cable Tray



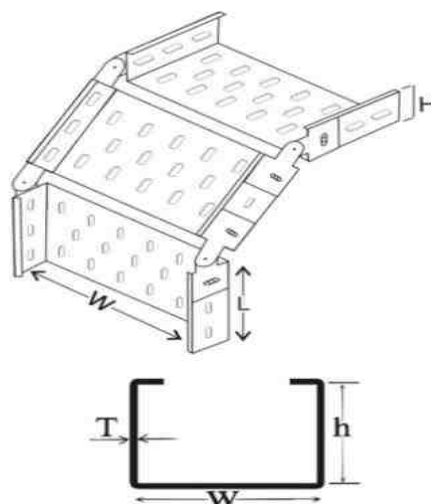
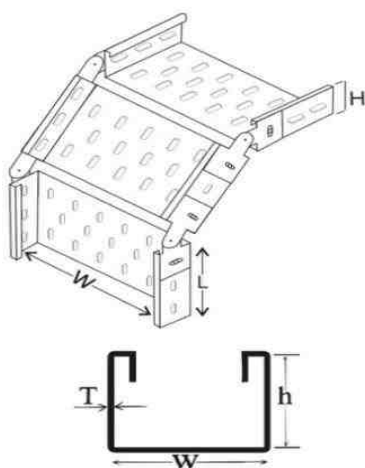
W(mm)	h(mm)	Hot Dip Galvanized	Galvanized
		T(mm)	T(mm)
100	40~200	1.5~2	1~2
200	40~200	1.5~2	1~2
300	40~200	2~4	1.25~2
400	40~200	2~4	1.5~2
500	40~200	2~4	1.5~2
600	40~200	2~4	2~2.5
700	40~200	2~4	2~2.5
800	40~200	2~4	2~2.5



External Adjustable Vertical Riser for Cable Tray



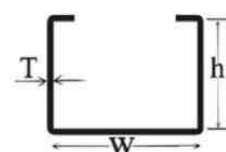
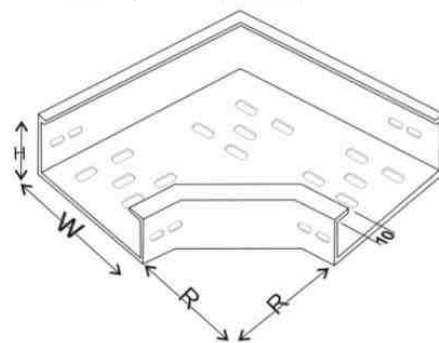
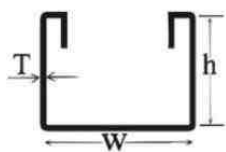
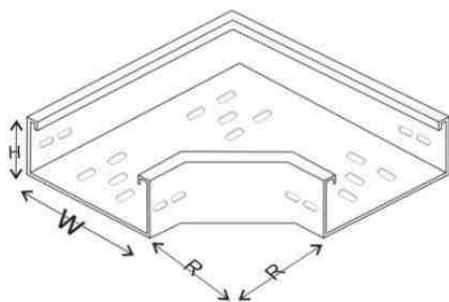
		Hot Dip Galvanized	Galvanized
W(mm)	h(mm)	T(mm)	T(mm)
100	40~200	1.5~2	1~2
200	40~200	1.5~2	1~2
300	40~200	2~4	1.25~2
400	40~200	2~4	1.5~2
500	40~200	2~4	1.5~2
600	40~200	2~4	2~2.5
700	40~200	2~4	2~2.5
800	40~200	2~4	2~2.5



Horizontal 90 Elbow for Cable Tray



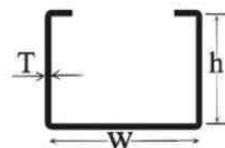
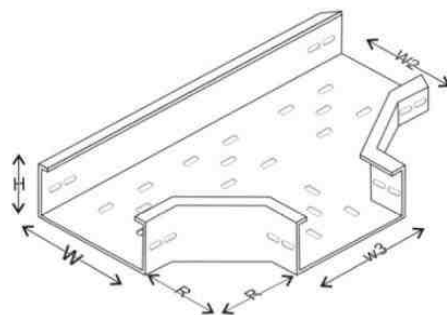
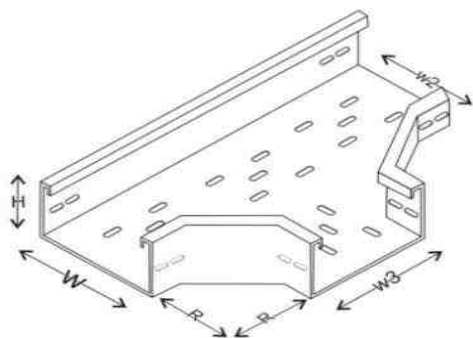
		Hot Dip Galvanized	Galvanized
W(mm)	h(mm)	T(mm)	T(mm)
100	40~200	1.5~2	1~2
200	40~200	1.5~2	1~2
300	40~200	2~4	1.25~2
400	40~200	2~4	1.5~2
500	40~200	2~4	1.5~2
600	40~200	2~4	2~2.5
700	40~200	2~4	2~2.5
800	40~200	2~4	2~2.5



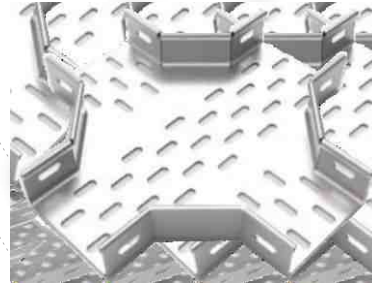
T-Junction for Cable Trays



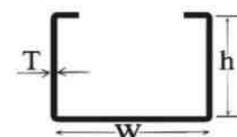
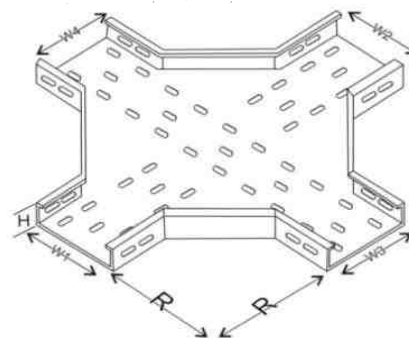
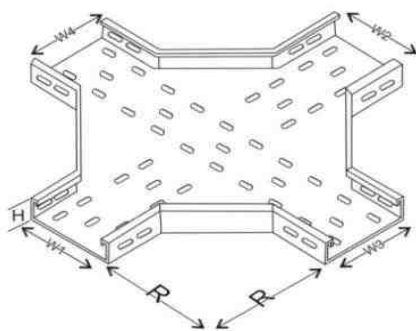
W(mm)	h(mm)	Hot Dip Galvanized	Galvanized
		T(mm)	T(mm)
100	40≈200	1.5≈2	1≈2
200	40≈200	1.5≈2	1≈2
300	40≈200	2≈4	1.25≈2
400	40≈200	2≈4	1.5≈2
500	40≈200	2≈4	1.5≈2
600	40≈200	2≈4	2≈2.5
700	40≈200	2≈4	2≈2.5
800	40≈200	2≈4	2≈2.5



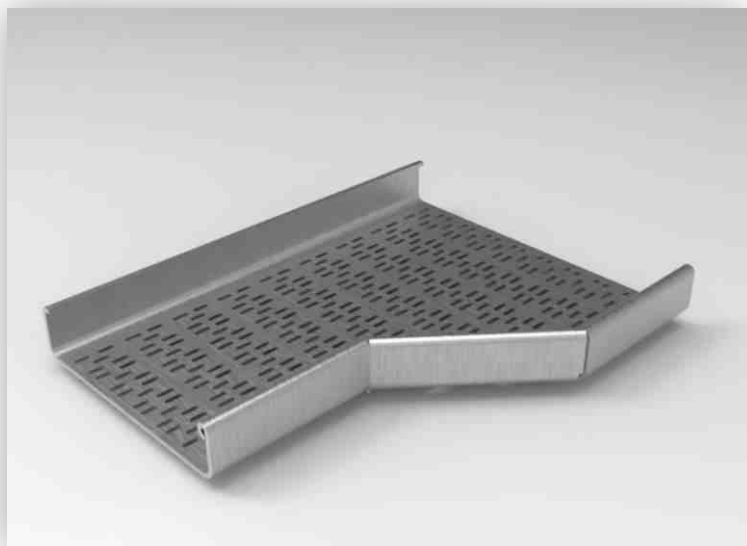
Cross for Cable Tray



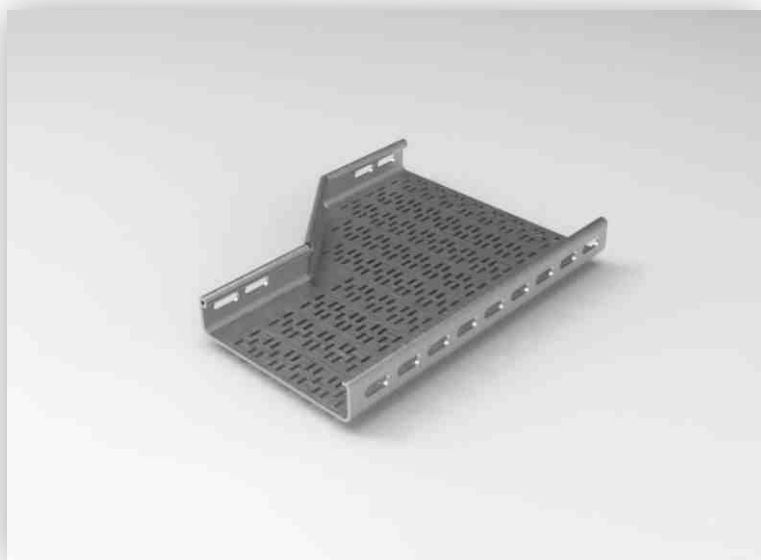
W(mm)	h(mm)	Hot Dip Galvanized	Galvanized
		T(mm)	T(mm)
100	40≈200	1.5≈2	1≈2
200	40≈200	1.5≈2	1≈2
300	40≈200	2≈4	1.25≈2
400	40≈200	2≈4	1.5≈2
500	40≈200	2≈4	1.5≈2
600	40≈200	2≈4	2≈2.5
700	40≈200	2≈4	2≈2.5
800	40≈200	2≈4	2≈2.5



Right Reducer for Cable Tray



Left Reducer for Cable Tray



Introduction

The innovatively designed wire mesh cable tray customizable and customizable in the most complex situations. This lightweight basket is designed to be lightweight and easily transported in the project, and can even be mounted on off-road routes with the least fitting.

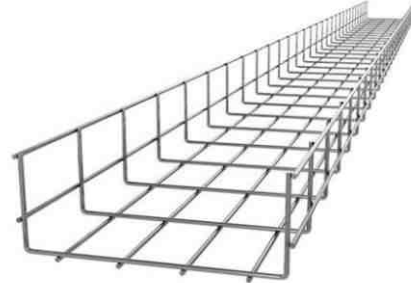
Surface protection steel wire mesh cable tray, or AISI 304 or L 316 stainless steel with safety edge are used to support and manage the cables. Manufactured to International Standard IEC 61537. It covers a wide range of sizes.

Support, manage, and distribute cable in electrical or telecommunication installations in civil, tunnels, parks, public buildings, shopping malls, data processing centers, infrastructure, airports, underground tunnels and roads. Iron. Industrial applications such as navy, petrochemical, textile, chemical and food. Indoor applications in dry or humid conditions.





Wire Mesh Cable Tray



Features and Benefits

High flexibility and simplicity in connections resulting in reduced runtime.

No need for angles and accessories of this kind as a result of reduced running cost.

Material of wire mesh cable tray

EG: Electrostatically galvanized iron wire.

IBLE: Iron wire with electrostatic powder coating.

304S: Stainless steel wire rod 304 with nickel plating.

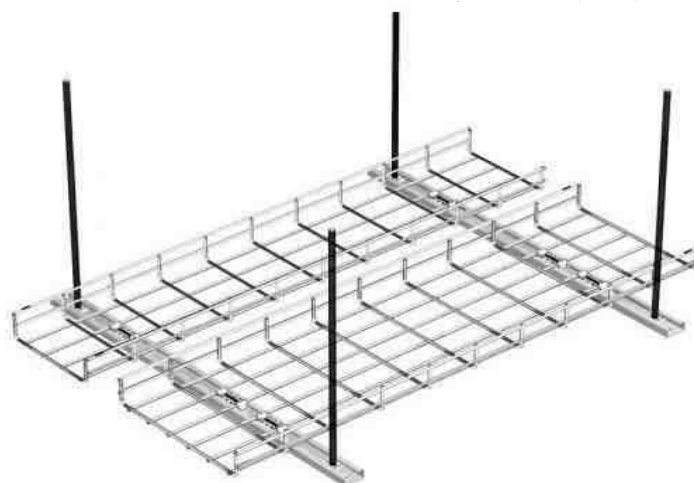
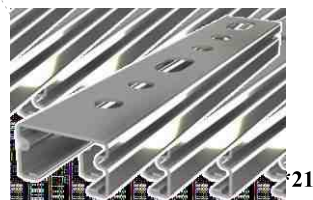
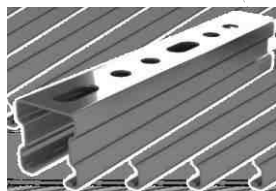
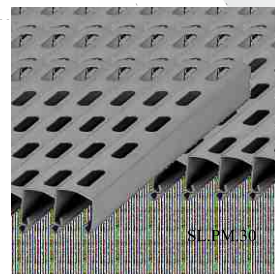
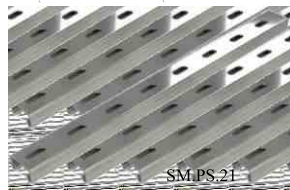
Wire mesh cable tray properties

Hight (mm)	Material	Width(mm)									Length of each branch (m)	fire resistance	Impact resistance (J)	Temperatur e range (°C)	Corrosion Class
35	electro galvanized	60	100	150	200	300	400	--	--	--	3	Resistan t	20	-50 to +150	Class 3
60	electro galvanized	60	100	150	200	300	400	450	500	600	3	Resistan t	20	-50 to +150	Class 3
100	electro galvanized	--	100	150	200	300	400	450	500	600	3	Resistan t	20	-50 to +150	Class 3
150	electro galvanized	--	--	--	200	300	400	450	500	600	3	Resistan t	20	-50 to +150	Class 3

Ceiling Retaining System

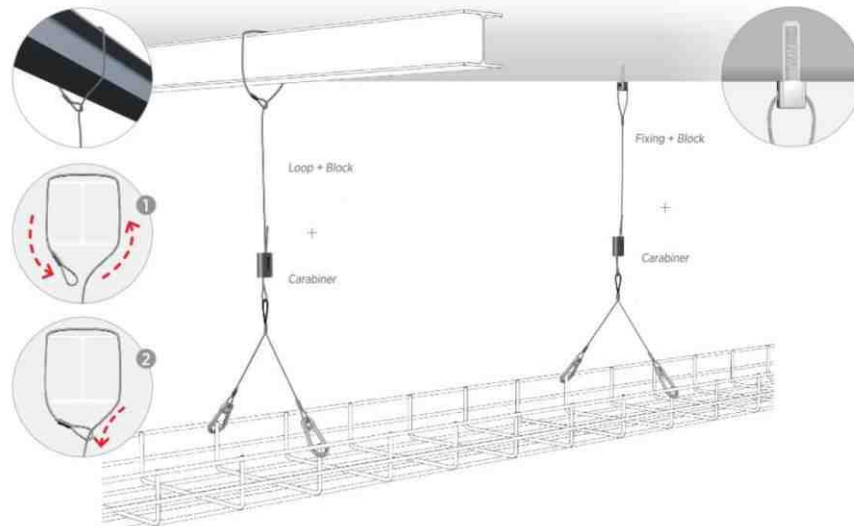
Strut channel

This system includes Strut channel and Rod.

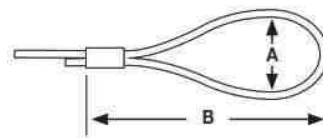




Cable Support



Loop



Features and Benefits

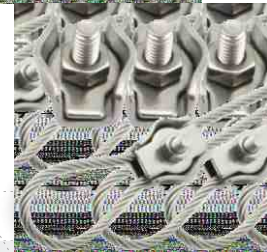
No need for screws, nuts, clamps and accessories
Available up to 90 kg, with up to a 5:1 safety factor
Useable in lengths of 1m, 3m, 5m (cable to supply up to 10m).
Available in stainless steel.

Size	Length (m)	Diameter (mm)	Construction	A (mm) Indicative	B (mm) Indicative
10 – 45 kg	1	2	7×7	30	60
10 – 45 kg	3	2	7×7	30	60
10 – 45 kg	5	2	7×7	30	60
45 – 90 kg	1	3	7×7	25	60
45 – 90 kg	3	3	7×7	25	60
45 – 90 kg	5	3	7×7	25	60

Standard Hanger



M4 M5 M6 M8



Features and Benefits

Useable for wire rope with 3 mm diameter, with safe working load 450 N per hanger

Material: ASTM A283 Grade C

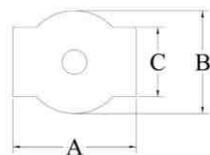
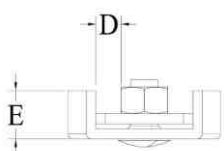
Ideal for fast suspension of any suspended service

Versatile and simple to use

Strong, safe, and industry approved

Cold galvanized (the capability of coating with hot dip galvanizing)

Dimensions



Cable size (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Thread Length(mm)	Weight (kg)
3-4	20	19	12	1.5	6	M5×17	0.01
5	25	20	14	1.5	8	M5×17	0.013
6	30	25	17	2	9.5	M6×22	0.027
8	38	31	23	2	10	M8×29	0.046

Karabiner

Features and Benefits

Supplied as a ready-to-use kit with our fastener and length of cable.

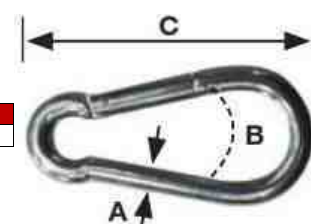
Ideal for use with loop and fixing.

Available in lengths of 300 mm- 400 mm standard



Dimensions

Product code	A (mm)	B (mm)	C (mm)
VDC-L	6	17	6





Wall Retaining System



SM.D50.41



SM.D40.41



SM.D30.41



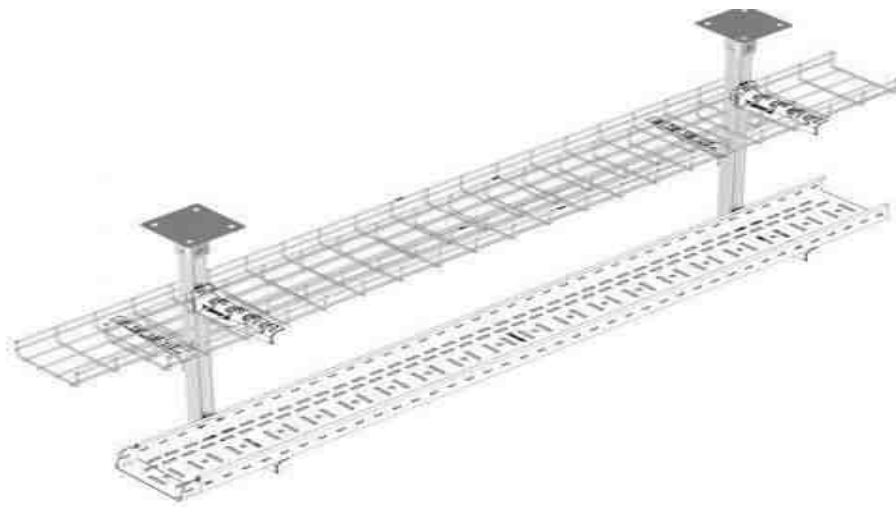
SM.D20.41



SL.BM.35

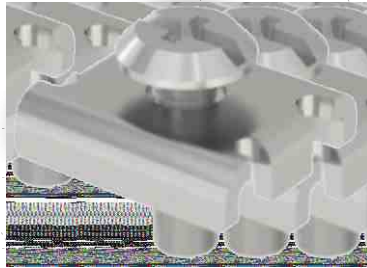


SLL.DM.30

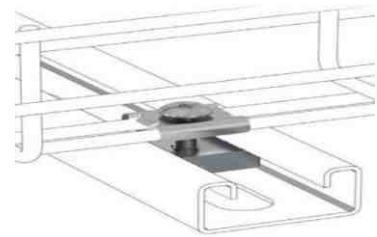


Part Clamp

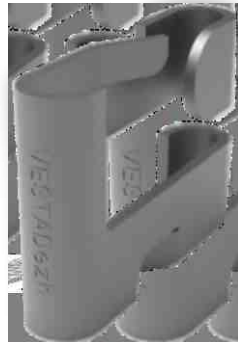
Part Clamp



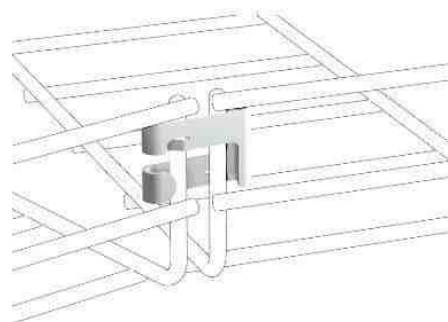
Can be used for bonding between multiple wire mesh cable tray in different sizes, which provides greater mechanical strength between the joints and trays. It is quick and easy to install and it saves time and manpower, it is highly reliable and robust.



Fast Clip



Made of electro-galvanized steel, fast and easy connection of mesh trays without the use of screws or fasteners in a variety of sizes, which saves time and manpower (80%), this piece of safety and it has high strength.





Ceiling Retaining System

The Materials which are used to produce the foams of these elastomeric insulation have good resistance against fog penetration and these are able to control condensation in addition to insulating in installation systems.



NBR/PVC Sheet/Rolled Elastomeric Insulators



Features and Benefits

Wide range of production

Production in 7 different thicknesses and 2 different widths

Manufactured in optimum sizes (1000-1200 mm) for duct insulation

Lowers the scrap ratio in rectangular ducts

Lowers the total cost by decreasing the adhesive tape usage in round ducts

Helps to reduce the vibration in duct joints thanks to its flexibility

	Roll Width [1000 mm]	Roll Width [1200 mm]
Thickness (mm)	m ² /Roll	m ² /Roll
6	30	-
9	20	24
13	14	16,80
19	10	12
25	8	9,60
32	6	7,20
50	4	4,80

NBR/PVC Self-adhesive elastomeric insulators/rolls

Features and Benefits

Saves time and labor

Self-adhesive with netting

Ensures full sealing and eliminates the application faults

Decreases the scarp ratio by 2-3%

Manufactured in optimum sizes (1000-1200 mm) for duct insulation

Helps to reduce the vibration in duct joints thanks to its flexibility

Provides high adhesion strength



	Roll Width [1000 mm]	Roll Width [1200 mm]
Thickness (mm)	m ² /Roll	m ² /Roll
6	30	-
9	20	24
13	14	16,80
19	10	12
25	8	9,60
32	6	7,20
50	4	4,80

NBR/PVC Coated Elastometric Insulators with Laminated Aluminum Strip/Roll



Features and Benefits

Aluminum lamination with polyester reinforcement with 130 and 230 μm thickness

Best performance with high quality raw materials

Manufactured in optimum sizes (1000-1200 mm) for duct insulation

Helps to reduce the vibration in duct joints thanks to its flexibility

Packing resistant to external environment

Saves installation time compared to traditional cladding

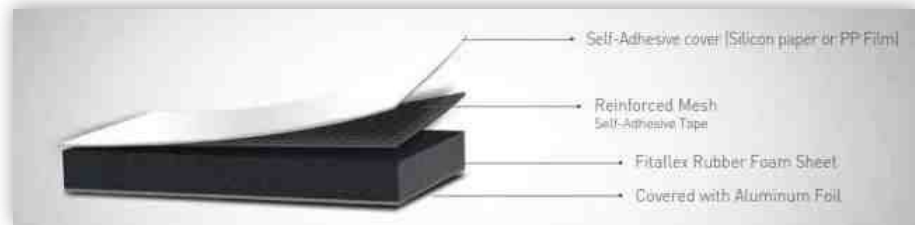
UV resistant

High resistance to mechanical impact

	Roll Width (1000 mm)	Roll Width (1200 mm)
Thickness [mm]	m ² /Roll	m ² /Roll
6	30	-
9	20	24
13	14	16,80
19	10	12
25	8	9,60
32	6	7,20
50	4	4,80



NBR/PVC Self Adhesive Coating Insulations / Aluminum Strip Coated Rolls



Features and Benefits

Aluminum lamination with polyester reinforcement with 130 and 230 μm thickness

Packing resistant to external environment

Ensures full sealing and eliminates the application faults

Helps to reduce the vibration in duct joints thanks to its flexibility

Saves installation time compared to traditional cladding

Provides full and perfect adhesion over the duct surface by its reinforced adhesive

Decreases the scarp ratio by 2-3%

UV resistant

Resistant to external conditions

High resistance to mechanical impact

	Roll Width (1000 mm)	Roll Width (1200 mm)
Thickness (mm)	m ² /Roll	m ² /Roll
6	30	-
9	20	24
13	14	16,80
19	10	12
25	8	9,60
32	6	7,20
50	4	4,80

NBR/PVC Laminated Elastomeric Insulation / Coated Roll with Reinforced Aluminum Strip - PVC

Features and Benefits

130 and 230 μm lamination thickness with three layers (PVC, Aluminum and Polyester) and rigid external protective surface

Aluminum lamination with polyester reinforcement

Best performance with high quality raw materials

Manufactured in optimum sizes (1000 mm) for duct insulation

Helps to reduce the vibration in duct joints thanks to its flexibility

Packing resistant to external environment

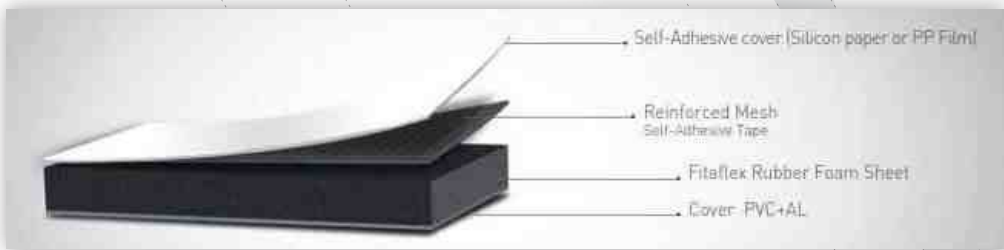
Saves installation time compared to traditional cladding

UV-resistant, High resistance to mechanical impact



	Roll Width (1000 mm)
Thickness (mm)	m ² /Roll
6	30
9	20
13	14
19	10
25	8
32	6
50	4

Self-adhesive electronic insulators sheet/roll coated with pvc aluminum reinforced tape - NBR/PVC



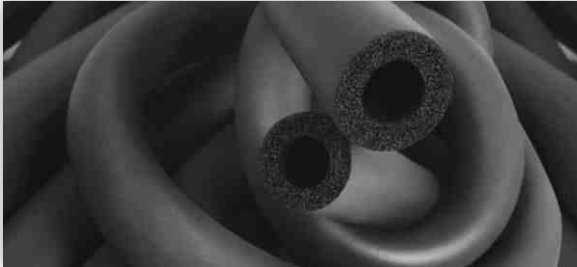
Features and Benefits

- 130 and 230 μm lamination thickness with three layers (PVC, Aluminum and Polyester) and rigid external protective surface
- Aluminum lamination with polyester reinforcement
- Best performance with high quality raw materials
- Manufactured in optimum sizes (1000 mm) for duct insulation

	Roll Width (1000 mm)
Thickness (mm)	m ² /Roll
8	30
9	20
13	14
19	10
25	8
32	6
50	4



NBR/PVC Pipe Elastometric Insulation with/without coated aluminum reinforced or unarmed



Features and Benefits

Helps to reduce the vibration in duct joints thanks to its flexibility
130 and 230 μm lamination thickness with three layers (PVC, Aluminum and Polyester) and rigid external protective surface
Saves installation time compared to traditional cladding
UV-resistant, High resistance to mechanical impact
Self-adhesive with netting

Metric	Copper	Steel	6 mm (1/4")	9 mm (3/8")	13 mm (1/2")
mm	Inch	Inch	m/box	m/box	m/box
6	1/4"		496	352	210
8	5/16"		432	300	190
10	3/8"	1/8"	364	266	172
12	1/2"		316	234	180
15	5/8"		266	216	140
18	3/4"	3/8"	238	170	122
22	7/8"	1/2"	200	156	108
*25	1"		162	144	90
28	1 1/8"	3/4"	148	118	90
35	1 3/8"	1"	130	94	84
42	1 5/8"	1 1/4"	108	96	72
48		1 1/2"	-	96	60
*54	2 1/8"		-	80	60
60	2 3/8"	2"	-	70	50
*67	2 5/8"		-	60	40
76	3"	2 1/2"	-	60	40
*80	3 1/8"		-	48	40
89	3 1/2"	3"	-	56	40
*102		3 1/2"	-	42	26
*108	4 1/4"		-	42	32
114	4 1/2"	4"	-	42	30

NBR/PVC Pipe Elastometric Insulation
with/without coated aluminum reinforced or unarmed



Metric	Copper	Steel	19 mm [3/4"]	25 mm [1"]	32 mm [1 1/4"]
mm	Inch	Inch	m/box	m/box	m/box
6	1/4"		-	-	-
8	5/16"		-	-	-
10	3/8"	1/8"	-	-	-
12	1/2"		-	-	-
15	5/8"		-	-	-
18	3/4"	3/8"	90	50	-
22	7/8"	1/2"	72	48	-
*25	1"		54	48	24
28	1 1/8"	3/4"	60	48	24
35	1 3/8"	1"	48	36	24
42	1 5/8"	1 1/4"	48	36	24
48		1 1/2"	48	32	24
*54	2 1/8"		40	24	24
60	2 3/8"	2"	40	32	24
*67	2 5/8"		32	24	24
76	3"	2 1/2"	32	24	18
*80	3 1/8"		24	12	12
89	3 1/2"	3"	24	18	12
*102		3 1/2"	24	18	12
*108	4 1/4"		24	18	12
114	4 1/2"	4"	24	18	12

Cable tray corner



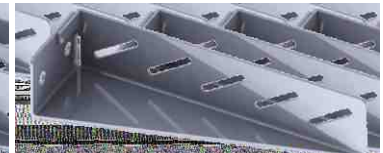
SML.2H15.41



SML.2H20.41



SML.2H25.41



SML.2H30.41

Feature and Benefit

Design for support of cable tray

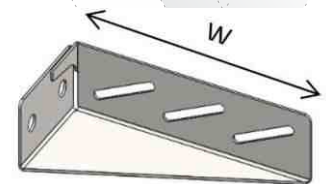
Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

Use in industrial lighting

General dimension

Code	w(mm)	Thickness (mm)	Max Load (kg)
SML.2H15.41	150	1.5	135
SML.2H20.41	200	2	140
SML.2H25.41	250	2.5	145
SML.2H30.41	300	3	150



Triangular connection

Feature and Benefit

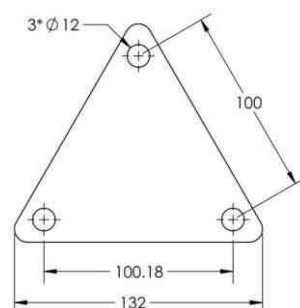
Prevents the rotation of the profile from the main axis

Easy Connecting due to proper design

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

General dimension





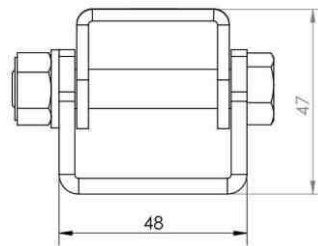
Universal joint



Feature and Benefit

- Easy Connection due to proper design
- Especially suitable for bracing
- Easy handling and height adjustment of the threaded rod
- Material: ASTM A283 Grade C
- Cold galvanized (the capability of coating with hot dip galvanizing)

General dimension



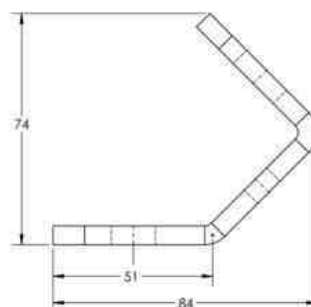
Bracing Rod Connect



Feature and Benefit

- For strengthening channels support with threaded rod M10, M12
- High application flexibility
- For installation of angles or connectors on site
- Reliable, quick and easy to use
- 45° angle and bracing with predetermined bending point
- Material: ASTM A283 Grade C
- Cold galvanized (the capability of coating with hot dip galvanizing)

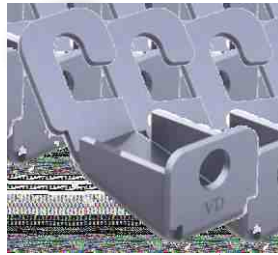
General dimension



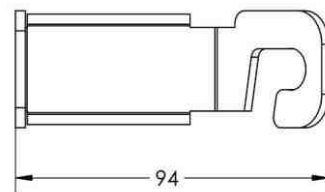
Tension Bracing

Feature and Benefit

- Ability to use after installation
- High application flexibility
- For installation of angles or connectors on the site
- Quick and easy to use
- 45° angle and bracing with predetermined bending point
- Material: ASTM A283 Grade C
- Cold galvanized (the capability of coating with hot dip galvanizing)



General dimension



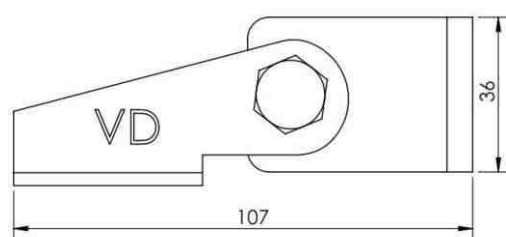
Universal joint 2

Feature and Benefit

- Containment of lateral forces
- Universal fastening on Inclined components
- Suitable for bracings
- Angle step fixable up to 90°
- Easy handling and height adjustment of the threaded rod
- Material: ASTM A283 Grade C
- Cold galvanized (the capability of coating with hot dip galvanizing)

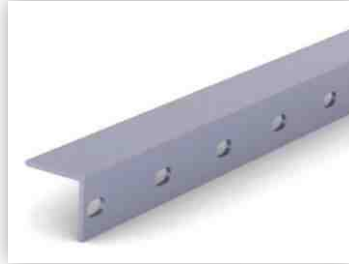


General dimension





Strut angel



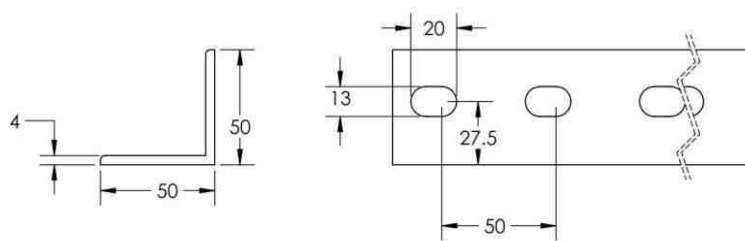
Feature and Benefit

Use in industrial lighting

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

General dimension



Arc Installation Plate



Feature and Benefit

Designed to act as a support or guide for horizontal and vertical pipes

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

SC. PU



Feature and Benefit

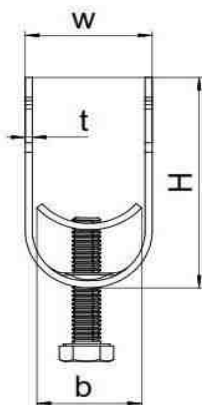
Designed for hanger and support on conduit pipe and cable of profile framing channels

Easy and safe assembly through hex head bolt and nut.

Material: ASTM A283 Grade C

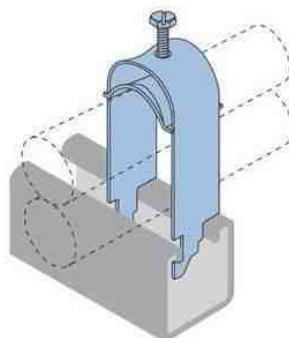
Cold galvanized (the capability of coating with hot dip galvanizing)

General dimension



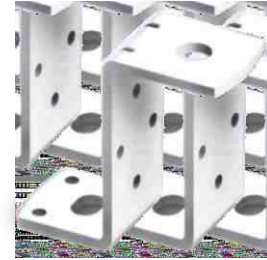
code	H(mm)	w(mm)	b(mm)	t(mm)
SC.PU.16-22	50	27	22	1.25
SC.PU.22-28	58	33	28	1.5
SC.PU.28-34	58	38	34	1.5

Application





ADCB01



Feature and Benefit

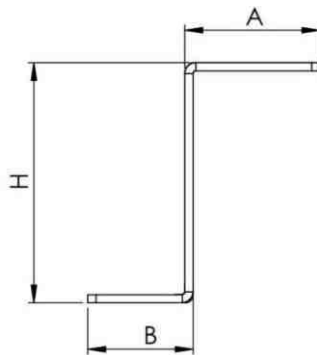
For the installation of rectangular air ducts to ceilings

Quick through-fastening for M8/M10 threaded rods

Material: ASTM A283 Grade C

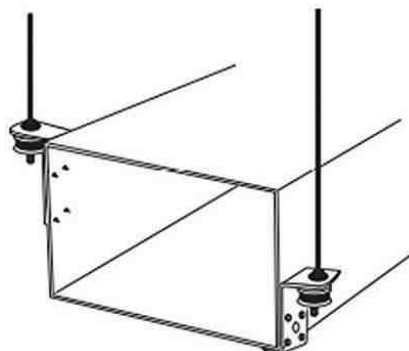
Cold galvanized (the capability of coating with hot dip galvanizing)

General dimension



code	A(mm)	B(mm)	H(mm)
ADCB01	50	39	89
ADCB02	38	28	63

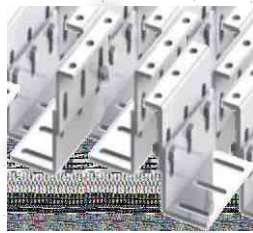
Application



Regulated Base for Clamps



Type1



Type2



Type3

Feature and Benefit

Flexible use console module for high forces (depending on the situation, detailed design by technical service)

Adjustable height and inclination

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

Application



Installation Plate



Feature and Benefit

Useful for locating and installing of hot and cold-water pipes in radiator of HVAC system

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)

Strut Channel Lock clamp



Feature and Benefit

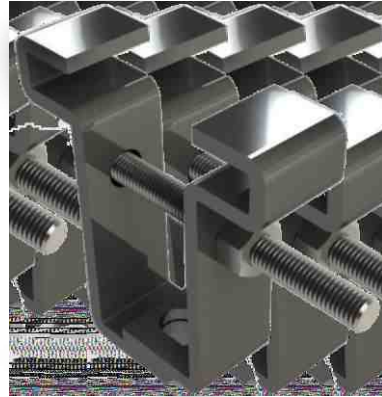
Use for back to back connecting of two profile channels

Material: ASTM A283 Grade C

Cold galvanized (the capability of coating with hot dip galvanizing)



Steel Beam Clamp



Feature and Benefit

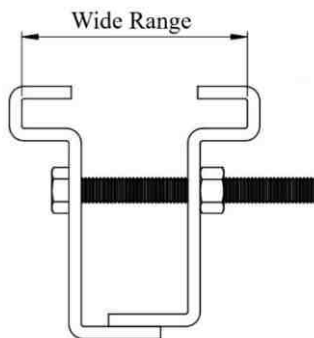
Designed for attaching a hanger thread rod under beam flanges

Vertical adjustment is provided in the clamp

Material: ASTM A283 Grade C

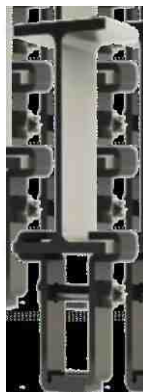
Cold galvanized (the capability of coating with hot dip galvanizing)

General dimension



code	Wide range	Bolt	Design Load (kN)
S. Beam.H 120-140	64-73	M10	0.85
S. Beam.H 160-180	82-91	M10	1.25
S. Beam.H 200-220	100-110	M10	1.35

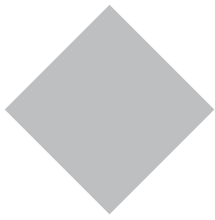
Application





Ceiling Retaining System

Most modern buildings today are equipped with mechanical devices such as air conditioning systems that generate vibration, shock and noise. The purpose of mechanical Anti-Vibration Mount is to reduce the vibration and noise transmission caused by mechanical equipment to industrial plant structures, residential apartments, and hospitals.



Determining the Transmission Percentage is done according to the Anti-Vibration application environment. In air conditioning we have a transfer rate of 1 to 10 percent. For sensitive areas with electronic equipment, transfer rates are between 2% and 3%, for hospitals 5% and for warehouses 10%.

The allowable displacement rate is determined by the speed of the vibrating member's rotation and by the percentage of transfer required according to the following table.

Equipment Speed (RPM)	Vibration Transmission—Percentage								
	0.50%	1%	2%	3%	5%	10%	15%	25%	40%
Static Deflection Required for Isolator*									
3,600	0.55	0.27	0.14	0.09	0.06	0.03	0.02	0.01	0.01
2,400	1.2	0.62	0.31	0.21	0.13	0.07	0.05	0.03	0.02
1,800	2.2	1.1	0.56	0.37	0.23	0.12	0.08	0.05	0.04
1,600	2.8	1.4	0.7	0.47	0.29	0.15	0.11	0.07	0.05
1,400	3.6	1.8	0.92	0.62	0.38	0.2	0.14	0.09	0.06
1,200	4.9	2.5	1.3	0.84	0.52	0.27	0.19	0.12	0.09
1,100	5.9	2.9	1.5	1.0	0.61	0.32	0.22	0.15	0.1
1,000	7.1	3.6	1.8	1.2	0.74	0.39	0.27	0.18	0.12
900	8.8	4.4	2.2	1.5	0.92	0.48	0.34	0.22	0.15
800	11.1	5.6	2.8	1.9	1.2	0.61	0.42	0.28	0.19
700	-	7.3	3.7	2.5	1.5	0.79	0.55	0.36	0.25
600	-	9.9	5.0	3.4	2.1	1.1	0.75	0.49	0.34
550	-	11.8	6.0	4.0	2.5	1.3	0.9	0.59	0.41
400	-	-	11.3	7.6	4.6	2.4	1.7	1.1	0.77
350	-	-	-	9.9	6.1	3.2	2.2	1.4	1.0
300	-	-	-	-	8.3	4.3	3.0	2.0	1.4
250	-	-	-	-	-	6.2	4.3	2.8	2.0

Anti-Vibration mounts are usually categorized by the amount of static displacement. By specifying the amount of static displacement and the specificity of the load determined by the user according to their needs, one can obtain the coefficient of hardness as well as the natural frequency of the spring according to the formulas in the mechanical vibration references.

Static Deflection (inches)	0.5"	1.0"	2.0"	3.0"
Natural Frequency - Hz	4.43 Hz	3.13 Hz	2.21 Hz	1.8 Hz

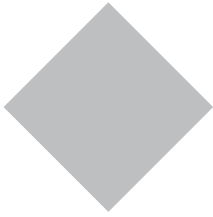
The amount of static permissible displacement is determined according to the location of the Anti-Vibration mounts application as well as its environment according to the ASHRAE standard as shown in the following table. According to this table, the user can easily determine the type of seismic used.

Advantages of Anti-Vibration mounts:

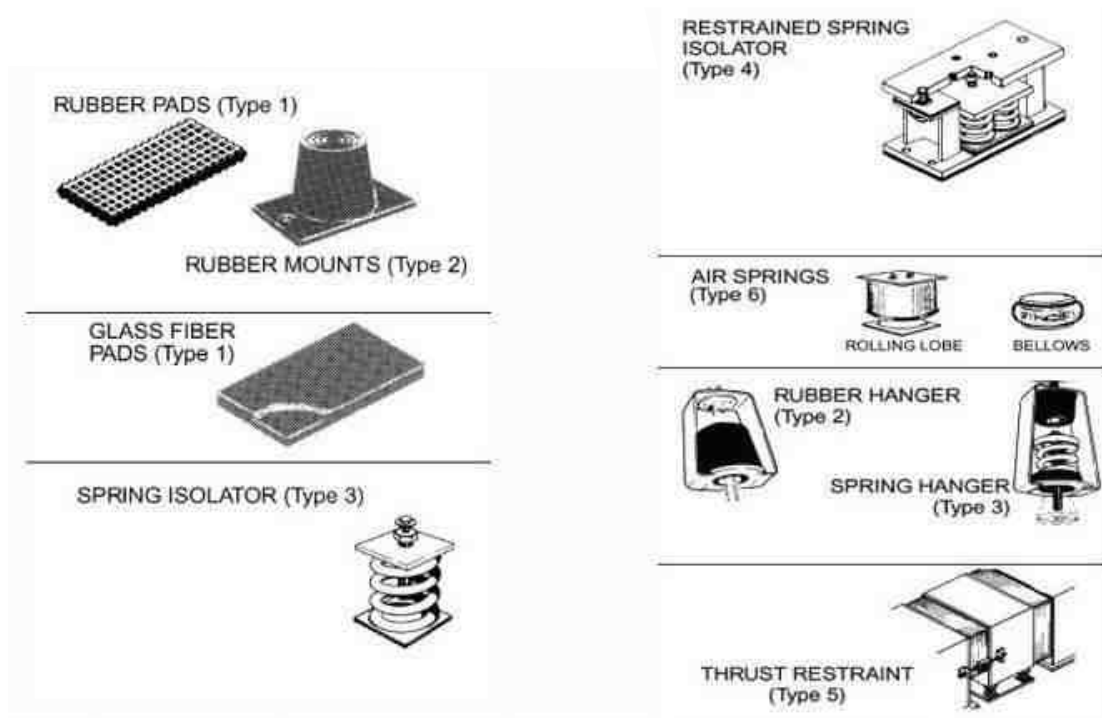
- Prevent vibration and vibration transmission to the building
- Reduce noise pollution
- Detailed engineering design and analysis
- Time saving installation and ease of execution
- Order-based production
- Reduce costs in system maintenance operations
- Significant durability and useful life
- Increase system performance and productivity

Equipment Location (Note 1)															
Equipment Type	Shaft Power kW and Other	RPM	Slab on Grade		Floor Span								Reference Notes		
					Up to 6 m				6 to 9 m					9 to 12 m	
			Base Isolator Type	Type	Min. Defl., mm	Base Isolator Type	Type	Min. Defl., mm	Base Isolator Type	Type	Min. Defl., mm	Base Isolator Type		Type	Min. Defl., mm
Refrigeration Machines and Chillers															
Reciprocating	All	All	A	2	6.4	A	4	19	A	4	38	A	4	64	2,3,12
Centrifugal, scroll	All	All	A	1	6.4	A	4	19	A	4	38	A	4	38	2,3,4,8,12
Screw	All	All	A	1	25	A	4	38	A	4	64	A	4	64	2,3,4,12
Absorption	All	All	A	1	6.4	A	4	19	A	4	38	A	4	38	
Air-cooled recip., scroll	All	All	A	1	6.4	A	4	38	A	4	38	A	4	64	2,4,5,12
Air-cooled screw	All	All	A	4	25	A	4	38	B	4	64	B	4	64	2,4,5,8,12
Air Compressors and Vacuum Pumps															
Tank-mounted horiz.	≤7.5	All	A	3	19	A	3	19	A	3	38	A	3	38	3,15
	≥11	All	C	3	19	C	3	19	C	3	38	C	3	38	3,15
Tank-mounted vert.	All	All	C	3	19	C	3	19	C	3	38	C	3	38	3,15
Base-mounted	All	All	C	3	19	C	3	19	C	3	38	C	3	38	3,14,15
Large reciprocating	All	All	C	3	19	C	3	19	C	3	38	C	3	38	3,14,15
Pumps															
Close-coupled	≤5.6	All	B	2	6.4	C	3	19	C	3	19	C	3	19	16
	≥7.5	All	C	3	19	C	3	19	C	3	38	C	3	38	16
Large inline	3.7 to 19	All	A	3	19	A	3	38	A	3	38	A	3	38	
	≥22	All	A	3	38	A	3	38	A	3	38	A	3	64	
End suction and split case	≤30	All	C	3	19	C	3	19	C	3	38	C	3	38	16
	37 to 93	All	C	3	19	C	3	19	C	3	38	C	3	64	10,16
	≥110	All	C	3	19	C	3	38	C	3	64	C	3	89	10,16
Packaged pump systems	All	All	A	3	19	A	3	19	A	3	38	C	3	64	
Cooling Towers															
	All	Up to 300	A	1	6.4	A	4	89	A	4	89	A	4	89	5,8,18
		301 to 500	A	1	6.4	A	4	64	A	4	64	A	4	64	5,18
		501 and up	A	1	6.4	A	4	19	A	4	19	A	4	38	5,18
Boilers															
Fire-tube	All	All	A	1	6.4	B	4	19	B	4	38	B	4	64	4
Water-tube, copper fin	All	All	A	1	3	A	1	3	A	1	3	B	4	6.4	
Axial Fans, Plenum Fans, Cabinet Fans, Fan Sections, Centrifugal Inline Fans															
Up to 560 mm diameter	All	All	A	2	6.4	A	3	19	A	3	19	C	3	19	4,9
610 mm diameter and up	≤500 Pa SP	Up to 300	B	3	64	C	3	89	C	3	89	C	3	89	9,8
		300 to 500	B	3	19	B	3	38	C	3	64	C	3	64	9,8
		501 and up	B	3	19	B	3	38	B	3	38	B	3	38	9,8
	≥501 Pa SP	Up to 300	C	3	64	C	3	89	C	3	89	C	3	89	3,8,9
		300 to 500	C	3	38	C	3	38	C	3	64	C	3	64	3,8,9
		501 and up	C	3	19	C	3	38	C	3	38	C	3	64	3,8,9
Centrifugal Fans															
Up to 560 mm diameter	All	All	B	2	6.4	B	3	19	B	3	19	B	3	38	9,19
610 mm diameter and up	≤30	Up to 300	B	3	64	B	3	89	B	3	89	B	3	89	8,19
		300 to 500	B	3	38	B	3	38	B	3	64	B	3	64	8,19
		501 and up	B	3	19	B	3	19	B	3	19	B	3	38	8,19
	≥37	Up to 300	C	3	64	C	3	89	C	3	89	C	3	89	2,3,8,9,19
		300 to 500	C	3	38	C	3	38	C	3	64	C	3	64	2,3,8,9,19
		501 and up	C	3	25.4	C	3	38	C	3	38	C	3	64	2,3,8,9,19
Propeller Fans															
Wall-mounted	All	All	A	1	6.4	A	1	6.4	A	1	6.4	A	1	6.4	
Roof-mounted	All	All	A	1	6.4	A	1	6.4	B	4	38	D	4	38	
Heat Pumps, Fan-Coils, Computer Room Units															
	All	All	A	3	19	A	3	19	A	3	19	A/D	3	38	
Condensing Units															
	All	All	A	1	6.4	A	4	19	A	4	38	A/D	4	38	
Packaged AH, AC, H and V Units															
	≤7.5	All	A	3	19	A	3	19	A	3	19	A	3	19	19
	≤11	Up to 300	A	3	19	A	3	89	A	3	89	C	3	89	2,4,8,19
	≤1 kPa SP	301 to 500	A	3	19	A	3	64	A	3	64	A	3	64	4,19
		501 and up	A	3	19	A	3	38	A	3	38	A	3	38	4,19
	>1 kPa SP11	Up to 300	B	3	19	C	3	89	C	3	89	C	3	89	2,3,4,8,9
	>1 kPa SP	301 to 500	B	3	19	C	3	38	C	3	64	C	3	64	2,3,4,9
		501 and up	B	3	19	C	3	38	C	3	38	C	3	64	2,3,4,9

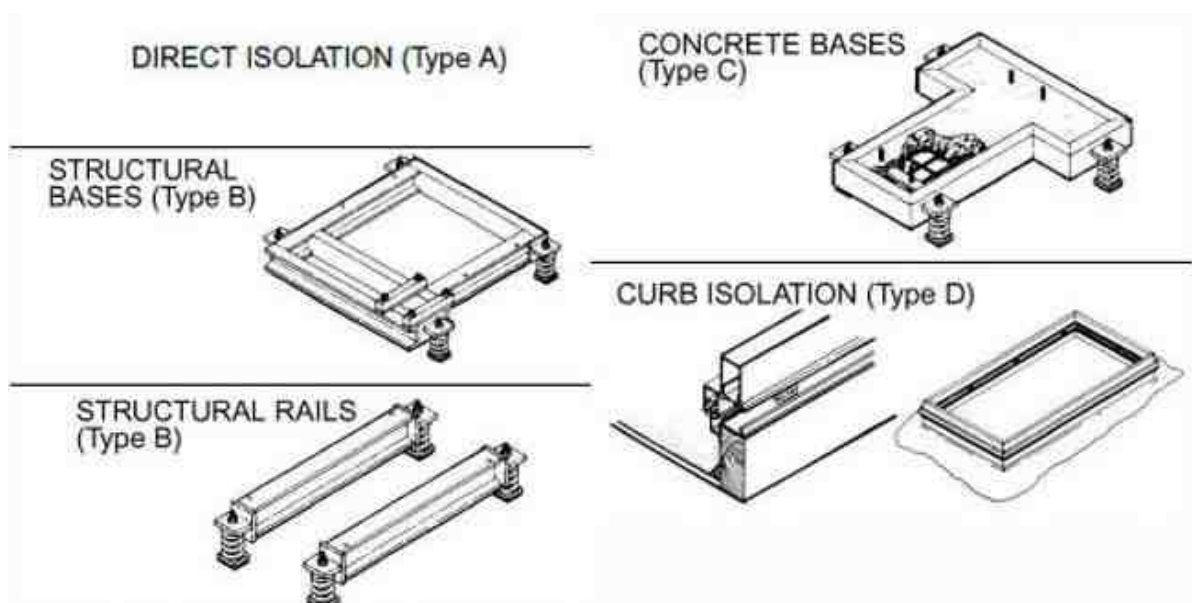
In the table above, the types of standard Anti-Vibration mounts bases are determined by the letters A, B and C according to the type of user. Also, the type of anti-shock is specified by standard numbering.



The following figure illustrates the seismic types according to their standard and type.



The following figure shows the types of Anti-Vibration mounts connection bases based on the letters in the table.



Spring Anti-Vibration

VESTA Dezh's Spring Anti-Vibration shock absorbers are manufactured in two types of free and stopper (single and double stroke) which reduce noise, shock and vibration produced by mechanical and industrial equipment such as pumps, cool towers. Chillers, boilers and compressors are used. It is also recommended to absorb vibration loads with different frequencies and lateral loads to the structure.

Free Spring Anti-Vibration

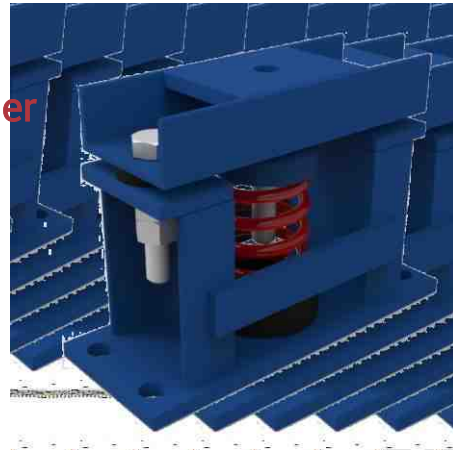


Free Spring Anti-Vibration is designed to dampen low-frequency vibrations in air ducts, fans, chillers and HVAC equipment. The steel springs of this Anti-Vibrations are designed with an appropriate ratio between outer diameter and height. Welding operations have not been used to connect the coil springs and the lower plate of the Anti-Vibration mounts, as tensions in the welding zones may cause tension and damage to the springs. This type of Anti-Vibration mounts assembly uses steel plates and polymer pads to increase durability, strength and flexibility. The maximum amount of deflection of these shocks is determined by the equipment's distance. This product is not recommended for side loads and is manufactured in accordance with the following table to withstand different loads in two types.

Product Name	Product's code	Load's Range
Spring Anti-Vibration	VSV-L	10-100
Free Spring Anti-Vibration	VSV-H	100-500



Anti-Vibration Mount with hanger

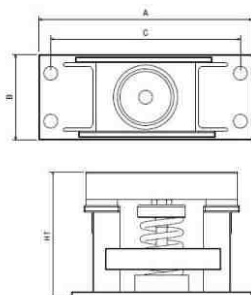


Single-strand and double-stroke spring Anti-Vibration Mount with hanger shock absorbers with rubber elements to absorb vibrations from the operation of mechanical equipment such as chillers, cooling towers and industrial fans and reduce the transmission of noise, shock and low-frequency vibration produced by the equipment. Building structures are produced. It is essential to use these Anti-Vibration Mounts for equipment that generates significant dynamic loads on and off. They have high lateral stability and the initial compression of the spring is adjustable by the screws on the top of the frame.

Product Name	Product's code	Load's Range
Anti-Vibration Mount with hanger	VSV-F	100-1200



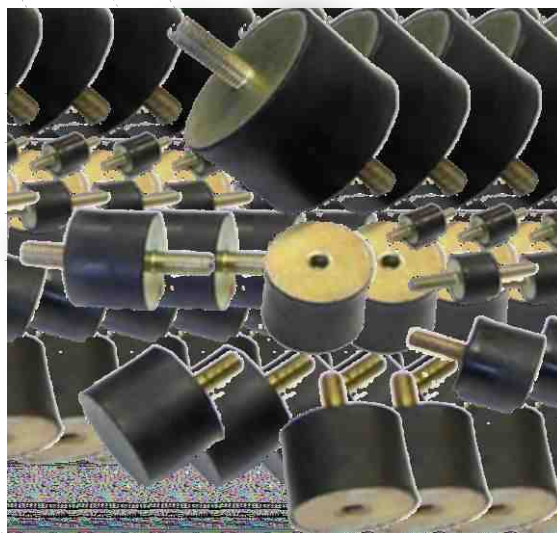
General dimension



Model	Rated Load (kg)	A (mm)	B (mm)	C (mm)	HCW	HT	diameter	Number of springs
VSV-150	100 - 180	250	100	220	55	170	M12	1
VSV-200	200 - 290	250	100	220	55	170	M14	1
VSV-300	300 - 390	250	100	220	55	170	M14	1
VSV-400	400 - 480	250	100	220	55	170	M14	1
VSV-500	450 - 550	250	100	220	55	170	M14	1
VSV-800	800 - 990	290	100	260	55	170	M16	2
VSV-1000	1000 - 1190	290	100	260	55	170	M16	2
VSV-1500	1500 - 1700	customizable	customizable	260	customizable	170	customizable Two or e four	4

Plastic Anti-Vibration

Plastic Anti-Vibration is produced in a double-bolt pulley, a bolt head, and a two-nut end.



General dimension

Model	Rated Load (kg)	Screw connection	Height (mm)	Diameter (mm)	X (mm)
VPV-38	17 - 60	M8	24 - 30	30	3
VPV-60	29 - 90	M8 / M10	35 - 40	40	4
VPV-90	47 - 130	M10 / M12	40 - 50	50	5
VPV-113	75 - 150	M12	40 - 50	70	8
VPV-205	110 - 300	M12	40 - 50	75	10
VPV-500	250 - 750	M14 / M16	50 - 60	100	10
VPV-850	400 - 1300	M16	50 - 60	120	10
VPV-1500	700 - 2300	M16	50 - 60	157	13
VPV-2400	2000 - 2800	M20	60 - 86	200	20

