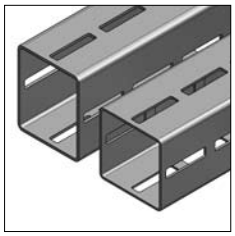
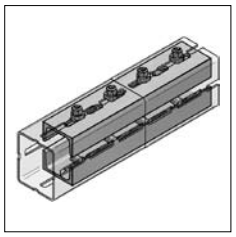
CENTUM® - components list

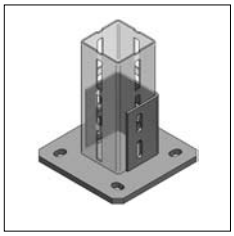


CENTUM Square profile
Page 14/4

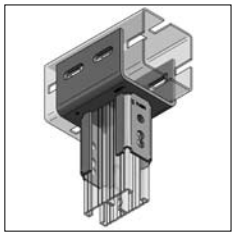
CENTUM Connection system
Page 14/5



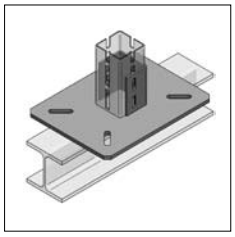
CENTUM Connector-set
Page 14/6



CENTUM Holder
Page 14/7

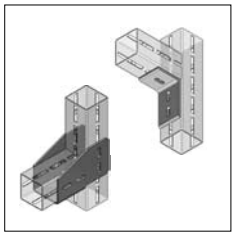


CENTUM Adaptor
Page 14/7

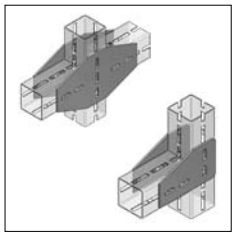


CENTUM Girder fixation
Page 14/8

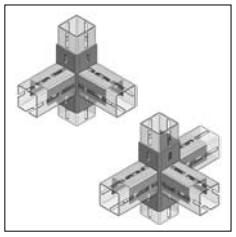
CENTUM Consoles
Page 14/9



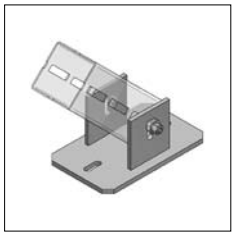
CENTUM Angles
Page 14/10



CENTUM Fittings
Page 14/10

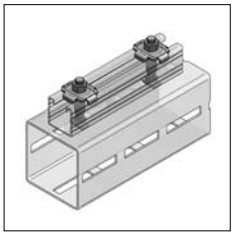


CENTUM Angle coupler
Page 14/11

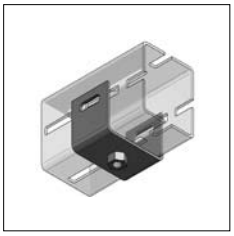


CENTUM Joint holder
Page 14/11

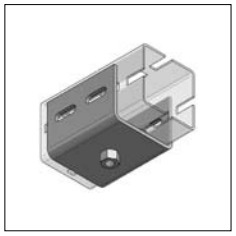
CENTUM Joint connection
Page 14/12



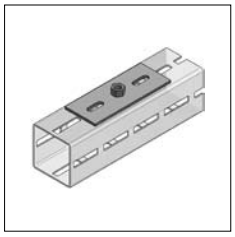
CENTUM C-profile connector
Page 14/12



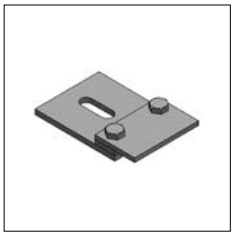
CENTUM Thread connector
Page 14/13



CENTUM Massive connector
Page 14/13

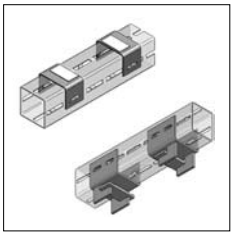


CENTUM Base plate
Page 14/14

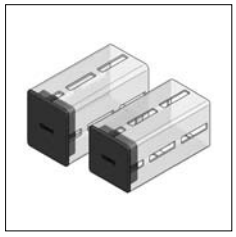


CENTUM Z-pressure pad
Page 14/14

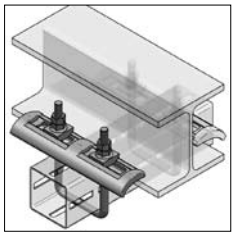
CENTUM Pipe holder
Page 14/16



CENTUM Sliding base
Page 14/16

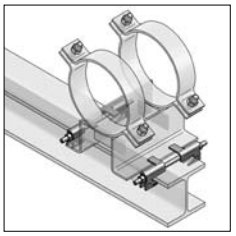


CENTUM Protection cap
Page 14/17

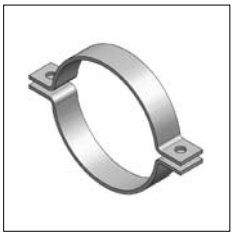


CENTUM Clamping bow
Page 14/18

CENTUM Girder clamps
Page 14/19



CENTUM Guiding clamp-set
Page 14/23



Pipe clamp Form A
Page 14/23

Pipe clamp Form C
Page 14/23

CENTUM® - components list

Pipe clamp Form A
Standard/Heavy duty
Page 14/24

Pipe clamp Form A
type TGA
Page 14/24

Stirrup clamp
Page 14/25

U-Bolt
Page 14/25

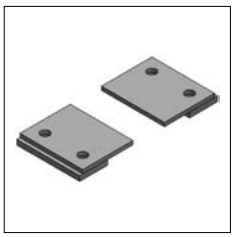
Sliding support T
Page 14/26

Sliding support T HV,
1 Pipe clamp
Page 14/27

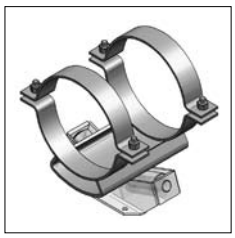
Sliding support T HV,
2 Pipe clamps
Page 14/28

Sliding sledge
Page 14/29

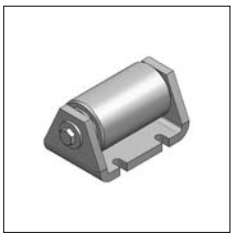
Sliding sledge HV
Page 14/30



Pressure pad
Page 14/30

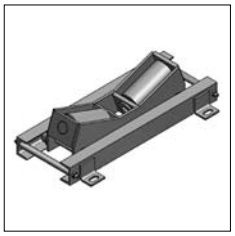


Isolation saddle for roller
bearings
Page 14/31



Single-roller-bearing
Page 14/31

Double roller bearing, axial
Page 14/31



Double roller bearing,
radial-axial
Page 14/31

coated components with zinc-nickel and hot-dip galvanized can also be used outdoor!	
Approval / calculation base:	RAL GZ 655 C+D EC3-DIN EN 1993 DIN EN 13480-3 VGB-R 510 L DIN EN ISO 9001

CENTUM® - The answer for heavy-duty application!

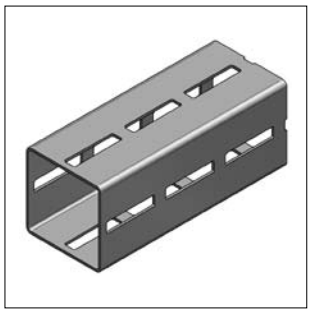
CENTUM® is the perfect solution for heavy-duty piping and industrial application.

Especially designed to admit high loads, reliable and economically. Thanks to a minimum of system components, a clear and simple screw connection system, CENTUM® offers decisive advantages compared to common welded steel constructions.

The major advantages of CENTUM®:

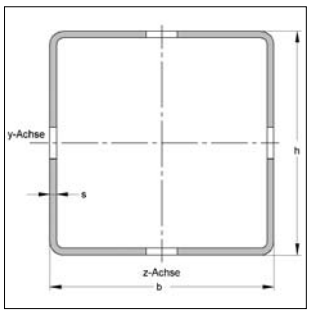
- Saving time and labour costs
- Stepless positioning of system components
- Unique, shape-fitting screw connection system with a max. load capacity of 10 kN per connection
- Dismantlement at any time
- Compatible interface for MEFA-profile channels
- All parts are hot-dip galvanized or zinc-nickel coated
- Closed profile geometric for max. torsion stiffness
- A well thought-out range of system components offering a maximum of possible variants in construction

CENTUM® Square profile



CENTUM® profile XL 100

CENTUM® profile XL 120



RAL GÜTEZEICHEN ROHRBEFESTIGUNG RAL-GZ 655-C

Description of system:
- modular system
- 4-sided w/o raster in connection with mounting parts
- torsion stiffness
- high load capacity

Technical data:

Material:	steel
Material type XL 100:	S275J2H
Material type XL 120	S235JRH
Surface:	hot-dip galvanized according to DIN EN ISO 1461

Identification	Dimensions h x b [mm]	Profile thickness s [mm]	Length L [m]	Weight [kg/m]	Packing [m]	Part-No.
CENTUM® profile XL 100	100 x 100	3	6	8,46	6	16010060
CENTUM® profile XL 120	120 x 100	4	6	12,20	6	16012060

Profile XL 100

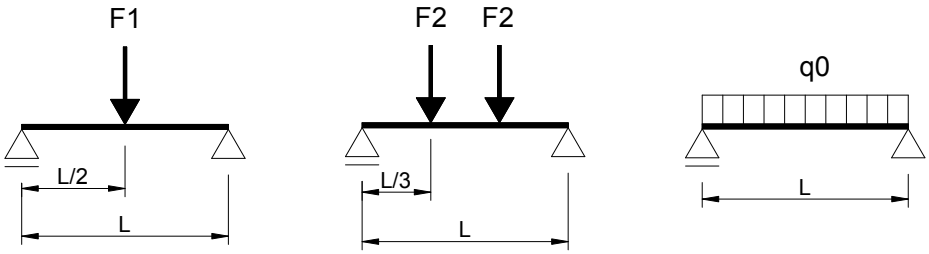
Cross-section area	Section modulus of torsion	Torsion moment of inertia	Geometrical moment of inertia		Section modulus		gyration radius	
A_k	W_t	I_t	I_{Y-Y}	I_{Z-Z}	W_{Y-Y}	W_{Z-Z}	i_Y	i_Z
973 mm²	56,40 cm³	86,50 cm⁴	157,14 cm⁴	157,14 cm⁴	31,43 cm³	31,43 cm³	40,19 mm	40,19 mm

Profile XL 120

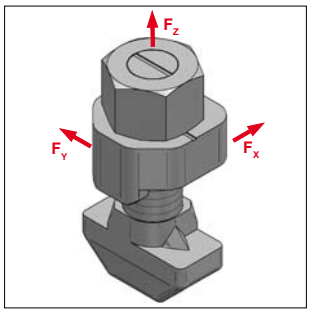
Cross-section area	Section modulus of torsion	Torsion moment of inertia	Geometrical moment of inertia		Section modulus		gyration radius	
A_k	W_t	I_t	I_{Y-Y}	I_{Z-Z}	W_{Y-Y}	W_{Z-Z}	i_Y	i_Z
1444,50 mm²	89,10 cm³	127,00 cm⁴	310,55 cm⁴	237,23 cm⁴	51,76 cm³	47,44 cm³	46,36 mm	40,52 mm

	Profile XL 100[1)]			**Profile XL 120[2)]**		
Bearing distance	max. load over Y-axis			max. load over Y-axis		
[mm]	F1 [kN]	F2 [kN]	q0 [kN/m]	F1 [kN]	F2 [kN]	q0 [kN/m]
1500	14,97	11,23	20,00	21,06	15,79	28,00
3000	7,48	5,17	4,70	10,53	7,80	7,00
6000	2,20	1,29	0,60	4,34	2,55	1,20

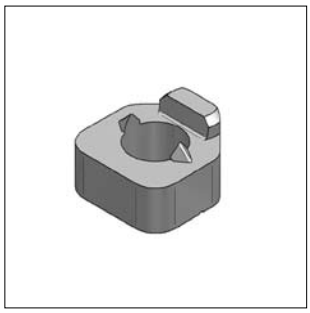
[1)] max. deflection $f_{zul.}$ = L/200, γ = 1,54 Safety, yield strength f_y = 275 N/mm², E-module 210.000 N/mm²
[2)] max. deflection $f_{zul.}$ = L/200, γ = 1,54 Safety, yield strength f_y = 235 N/mm², E-module 210.000 N/mm²

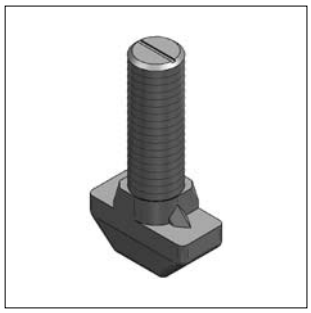


CENTUM® T-lock head, toothed



CENTUM® T-lock head


CENTUM® Lock washer


CENTUM® T-lock bolt

RAL GÜTEZEICHEN KOMBIBEFESTIGUNG RAL-GZ 655-D

Specification:

For profile type:	XL 100 and XL 120
Features:	immovable and form-locking connection
max. load:	F_x 10 kN; F_Y 10kN; F_Z 3kN
Safety γ:	2
Application:	C-profile connector

Technical data:

Material:	steel
Surface:	zinc-nickel

Identification	Property class	recommended tightening torque [Nm]	Weight [kg/pc.]	Packing [pcs.]	Part-No.
CENTUM® T-lock head M12x40, toothed consisting of:	10.9	120	0,101	50	1610011000
CENTUM® Lock washer	10	--	0,031	100	1610019000/zn
CENTUM® T-lock bolt, toothed	10.9	120	0,056	50	1610012100/zn
CENTUM® hex nut M12 FK10, DIN EN ISO 4032	10	--	0,015	100	8989995/zn

Assembly instruction for T-lock head

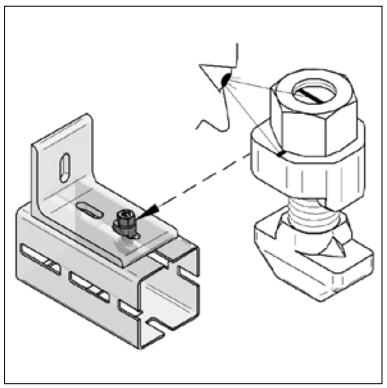


Figure 1

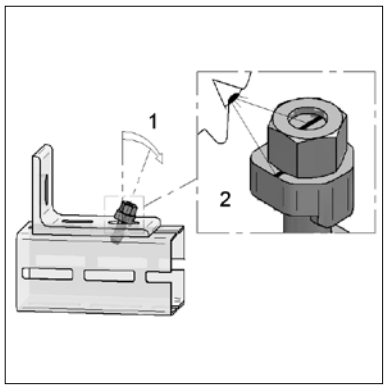


Figure 2

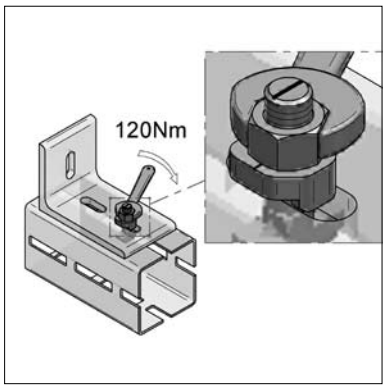


Figure 3

Positioning:

Locate T-lock head into mounting part like shown in Figure 1.

Adjustment:

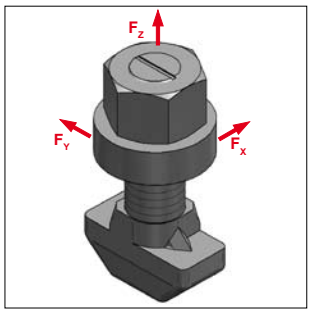
Turn T-lock head around 90 degrees, so that T-lock bolt stands diagonally to long hole (see 1).

Tilt forward T-lock head, so that guide wedge of Lock washer snaps in long hole (see 2).

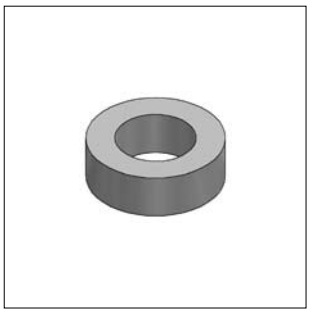
Fixation:

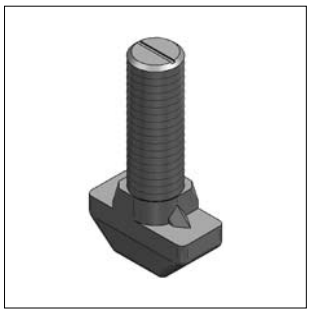
Tighten tilted T-lock with 120 Nm. T-lock head after dismounting non-reusable.

CENTUM® T-bolt, with steel disk



CENTUM® T-bolt


CENTUM® steel disk


CENTUM® T-lock bolt, toothed

Specification:

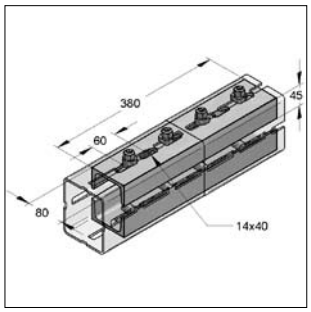
For profile type:	XL 100 and XL 120
Features:	frictional connection
max. load:	F_x 3 kN; F_y 10 kN; F_z 3 kN
Safety γ:	2
Application:	C-profile connector

Technical data:

Material:	steel
Surface:	zinc-nickel

Identification	Property class	recommended tightening torque [Nm]	Weight [kg/pc.]	Packing [pcs.]	Part-No.
CENTUM® T-bolt M12x40	10.9	120	0,088	50	1610012000
consisting of:					
CENTUM® steel disk	4.6	--	0,016	100	1610019100/zn
CENTUM® T-lock bolt, toothed	10.9	120	0,056	50	1610012100/zn
CENTUM® Hexagon nut M12 FK10, DIN EN ISO 4032	10	--	0,015	100	8989995/zn

CENTUM® Connector



CENTUM® Connector

Specification:

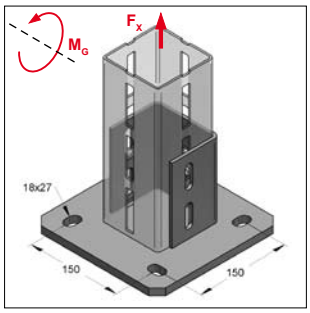
For profile type:	XL 100 and XL 120
Scope of supply:	mounting accessories, loose insert (8x T-lock head, toothed, M 12/40)
Function:	connection of XL 100 and XL 120

Technical data:

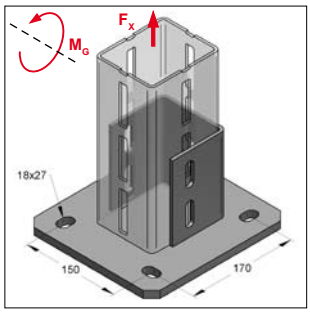
Material:	steel
Surface:	hot-dip galvanized

Identification	Limit moment M_G [kNm]	Length [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Connector-Set	2	380	8,59	1	1640005010

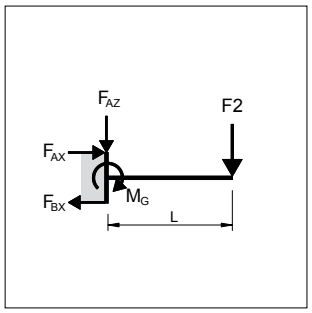
CENTUM® Holder



CENTUM® Holder XL 100



CENTUM® Holder XL 120



M_G = F2 x L

Specification:

For profile type:	XL 100 and XL 120
Scope of supply:	T-lock head, toothed, M12/40

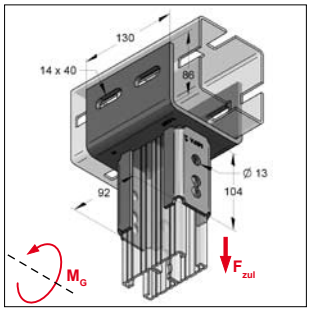
* at ulitization of all bolt holes

Technical data:

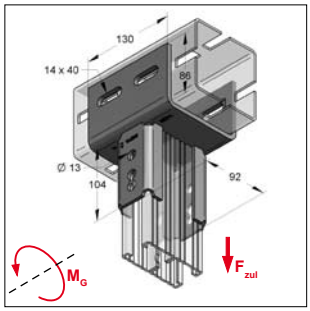
Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

Identification	max. load* F_x [kN]	maximum torque M_G* [kNm]	Plate-width [mm]	Plate-length [mm]	Plate-thickness [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Holder XL 100	40	5,2	220	220	12	6,15	1	1621001000
CENTUM® Holder XL 120	40	5,2	220	240	12	6,71	1	1621201000

CENTUM® Adaptor



CENTUM® Adaptor vertical



CENTUM® Adaptor horizontal

Specification:

For profile type:	XL 100, 45/90
Application:	to connect C-profile rails 45/90
Needed accessory:	threaded square plate
	hexagon screw
	t-lock head

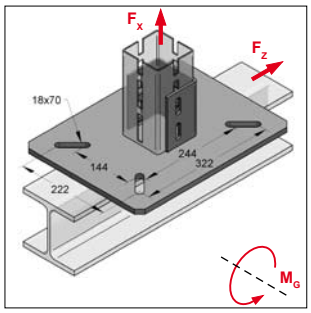
Technical data:

Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

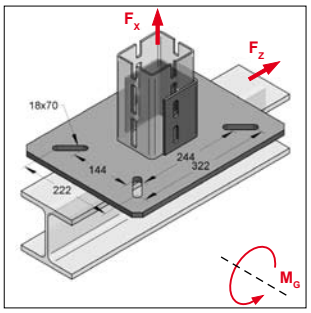
* loads refering to component, not to connection

Identification	max. load* F_{zul} [kN]	maximum torque M_G [kNm] fbv	[kNm] fsv	Length [mm]	Thickness [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Adaptor vertical	12	0,80	0,35	130	6	2,32	1	1621005011
CENTUM® Adaptor horizontal	12	0,80	0,35	130	6	2,32	1	1621005021

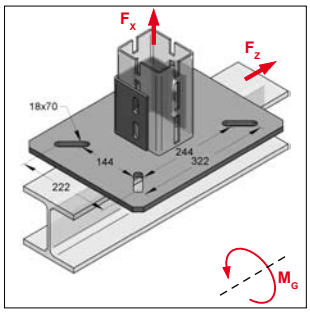
CENTUM® Girder fixation



Girder fixation XL 100, vertical



Girder fixation XL 120, vertical



Girder fixation XL 120, horizontal

Specification:

For profile type:	XL 100 and XL 120
needed accessory:	T-lock head, toothed, M12/40
	clamping claw AF/LR

Technical data:

Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

* at ulitization of all bolt holes

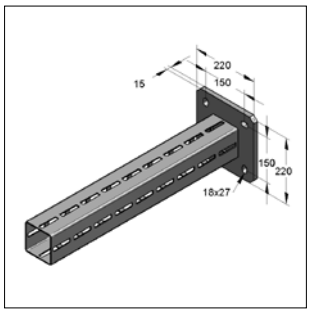
Identification	Plate-width [mm]	Plate-length [mm]	Plate-thickness [mm]	maximum torque M_G [kNm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Girder fixation XL 100, vertical	320	420	12	5,2	14,68	1	1621002001
CENTUM® Girder fixation XL 120, vertical	320	420	12	5,2	14,79	1	1621202001
CENTUM® Girder fixation XL 120, horizontal	420	320	12	5,2	14,79	1	1621203001

Table: Loads are related to clamping claws for adaption to steel girder, galvanized incl. scews class 8.8 and washer.

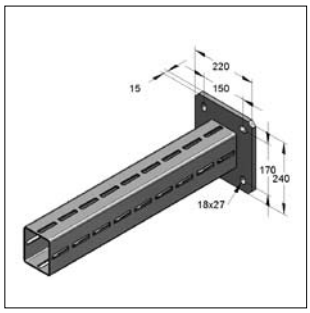
Clamping claws	max. load**	
	Pulling force$_{Fx}$ [kN]	Shear$_{Fz}$ [kN]
Typ AF M16	40,0	20,0
Typ LR M16	34,0	3,4

** in combination with 4x AF/LR connections

CENTUM® Console



CENTUM® Console XL 100



CENTUM® Console XL 120

Specification:
For profile type: XL 100 and 120

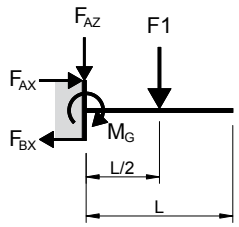
* Delivery time on request, variant demand possible

Technical data:

Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

Identification	Length [mm]	max. load 1 F1 [kN]	max. load 2 F2 [kN]	max. load 3 qo [kN/m]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Console XL 100	720	16,17	8,08	22,45	11,92	1	1631000720
CENTUM® Console XL 100	960	12,13	6,06	12,63	13,96	1	1631000960
CENTUM® Console XL 100	1440	8,08	4,58	5,61	18,02	1	1631001440
CENTUM® Console XL 120*	720	25,02	12,51	34,75	15,17	1	1631200720
CENTUM® Console XL 120*	960	18,77	9,38	19,55	18,10	1	1631200960
CENTUM® Console XL 120*	1440	12,51	6,26	8,69	23,96	1	1631201440

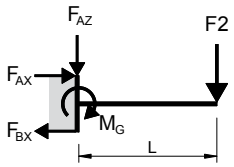
max. load 1 (LF1)



$F_{AZ} = F1$

$F_{AZ} = F1$	$M_G = \frac{F1 * L}{2}$

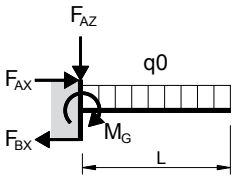
max. load 2 (LF2)



$F_{AZ} = F2$

$F_{AZ} = F2$	$M_G = F2 * L$

max. load 3 (LF3)



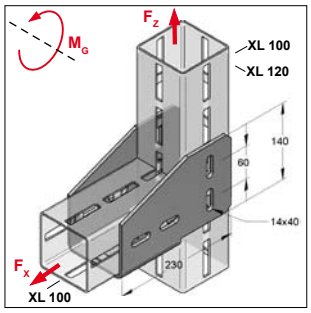
$F_{AZ} = qo * L$

$F_{AZ} = q0 * L$	$M_G = \frac{q0 * L^2}{2}$

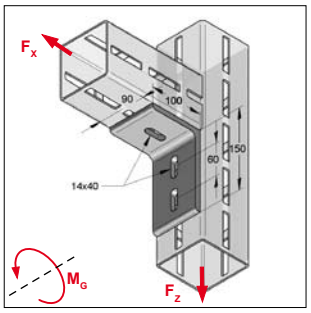
Limit moment	M_G:	9.008,0 Nm
Support reaction force	F_{AX}:	53,0 kN
Support reaction force	F_{BX}:	53,0 kN
M_G, F_{AX}, F_{BX} valid to	LF1:	2..880,0 mm
	LF2:	1.440,0 mm
	LF3:	1.920,0 mm

Notice:
All load capacities excessive refer to static loads.

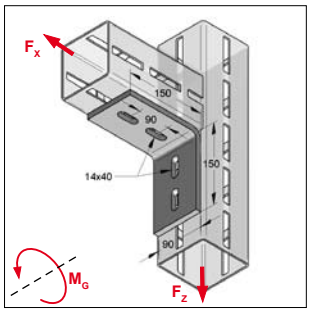
CENTUM® Angles



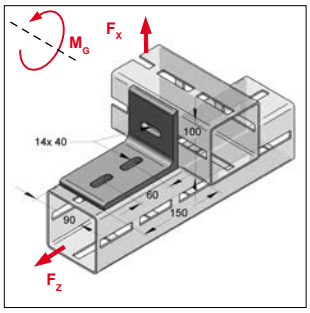
CENTUM® Angle-shoe XL



CENTUM® 3-hole angle



CENTUM® 4-hole angle



CENTUM® 3-hole angle horizontal

Specification:

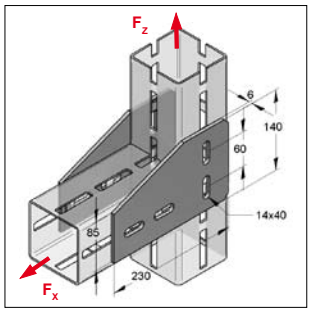
For profile type:	XL 100 and XL 120
Required accessory:	T-lock head, toothed, M12/40

Technical data:

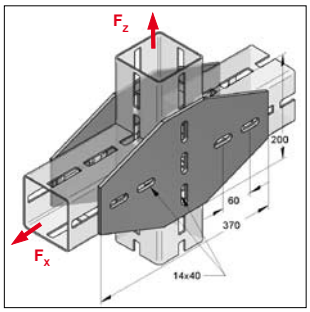
Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

Identification	max. load F_X [kN]	max. load F_Z [kN]	max. limited torque M_Y [kNm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Angle-shoe XL 100	40	40	0,8	3,42	1	1641002010
CENTUM® 3-hole angle	6	20	0,6	1,74	1	1640001010
CENTUM® 4-hole angle	6	20	0,5	2,02	1	1640001020
CENTUM® 3-hole angle, horizontal (for XL 100)	6	20	0,6	1,74	1	1640001012

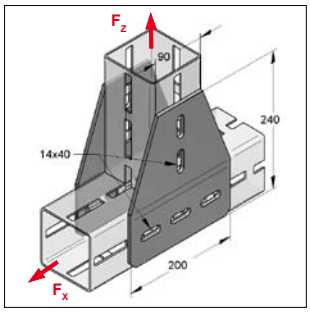
CENTUM® Fittings



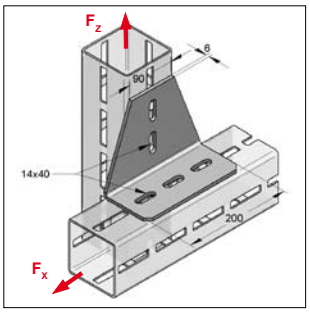
CENTUM® Corner plate L



CENTUM® Cross plate



CENTUM® T-plate



CENTUM® T-plate, angled

Specification:

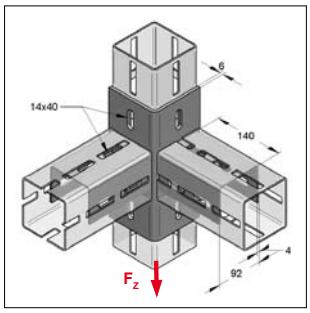
For profile type:	XL 100 and XL 120
Required accessory:	T-lock head, toothed, M12/40

Technical data:

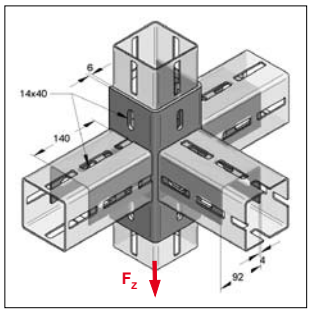
Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

Identification	max. load F_X [kN]	max. load F_Z [kN]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Corner plate L (use in pairs)	40	40	1,38	1	1640003010
CENTUM® Cross plate (use in pairs)	40	40	2,89	1	1640003020
CENTUM® T-plate (use in pairs)	40	40	1,97	1	1640001030
CENTUM® T-plate, angled	20	20	1,99	1	1640001040

CENTUM® Angle coupler



CENTUM® Angle coupler 90°



CENTUM® Angle coupler 180°

Specification:

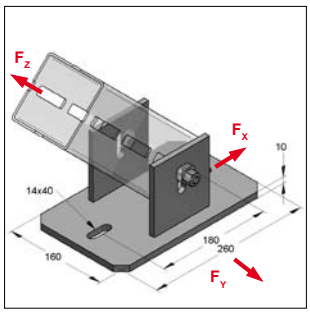
For profile type:	XL 100
Required accessory:	T-lock head, toothed, M12/40

Technical data:

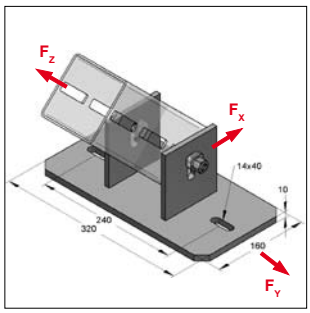
Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

Identification	max. load F_Z [kN]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Angle coupler 90°	20	4,72	1	1641006010
CENTUM® Angle coupler 180°	20	7,12	1	1641006020

CENTUM® Joint holder



CENTUM® Joint holder
XL 100 vertical



CENTUM® Joint holder
XL 100 horizontal

Specification:

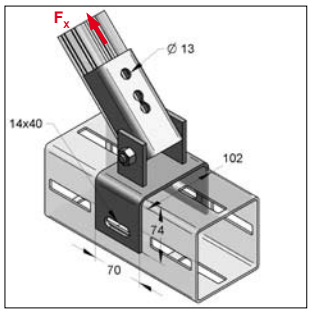
For profile type:	XL 100 or XL 120
Required accessory:	T-bolt, with steel disk, M12/40
Tightening torque:	60 Nm
Delivery time:	on request

Technical data:

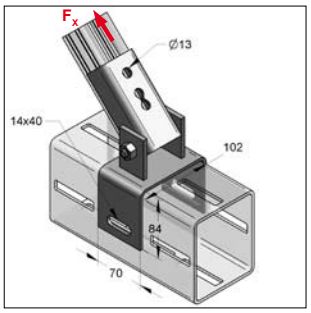
Material:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Safety factor:	2,0

Identification	max. load F_X [kN]	max. load F_Z [kN]	max. load F_Y [kN]	center hole Plate	Dimension Plate L x B x S	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Joint holder XL 100 vertical	6,3	20	11	180	260 x 160 x 10	4,89	1	1641004010
CENTUM® Joint holder XL 100 horizontal	6,3	20	11	240	320 x 160 x 10	5,72	1	1641004020

CENTUM® Joint connection



Joint connection XL 100



Joint connection XL 120

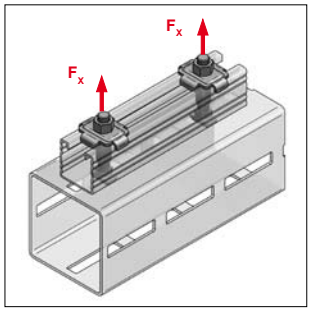
Specification:
For profile type: XL 100 and XL 120
in combination with C-profile rails 45

Technical data:
Material: steel
Material type: S235JR
Surface: zinc-nickel

[1] loads refering to component, not to connection

Identification	max. load[1] F_x [kN]	Hole-Ø [mm]	Elongated hole-Ø [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Joint connection XL 100	7	13	14 x 40	1,35	1	1641014110
CENTUM® Joint connection XL 120	7	13	14 x 40	1,40	1	1641214110

CENTUM® C-profile connector



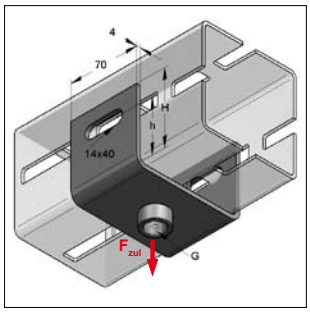
CENTUM® C-profile connector

Specification:
For profile type: XL 100 and XL 120
Application: to connect profile rails

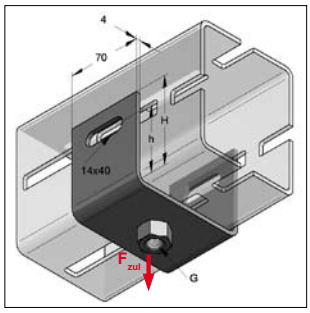
Technical data:
Material: steel
Material type: S235JR
Surface: galvanized

Identification	max. profile-height [mm]	max. load [kN]	tightening torque [Nm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® C-profile connector	45	2	10	0,18	1	1640017040
CENTUM® C-profile connector	60	2	10	0,19	1	1640017060

CENTUM® Thread connector



CENTUM® Thread connector
XL 100 1/2"



CENTUM® Thread connector
XL 120 M16

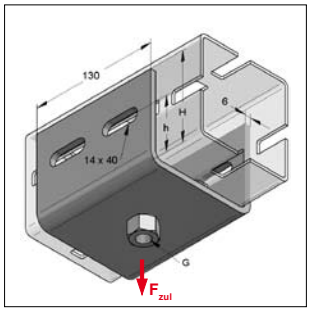
Specification:
For profile type: XL 100 or XL 120

Required: T-lock head, toothed, M12/40

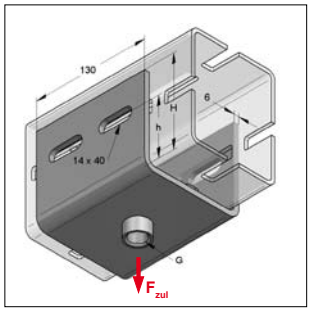
Technical data:
Material: steel
Material type: S235JR
Surface: zinc-nickel
Safety factor: 2,0

Identification	Profile type	thread G	max. load F_{zul} [kN]	H [mm]	h [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Thread connector XL 100	XL 100	M12	5,0	74	50	0,60	1	1641018006
CENTUM® Thread connector XL 100	XL 100	M16	5,0	74	50	0,63	1	1641018007
CENTUM® Thread connector XL 100	XL 100	1/2"	5,0	74	50	0,61	1	1641018008
CENTUM® Thread connector XL 100	XL 100	1"	5,0	74	50	0,67	1	1641018010
CENTUM® Thread connector XL 120	XL 120	M16	5,0	84	60	0,68	1	1641218007
CENTUM® Thread connector XL 120	XL 120	1/2"	5,0	84	60	0,67	1	1641218008
CENTUM® Thread connector XL 120	XL 120	1"	5,0	84	60	0,72	1	1641218010

CENTUM® Massive connector



CENTUM® Massive connector
XL 100 M16



CENTUM® Massive connector
XL 120 1/2"

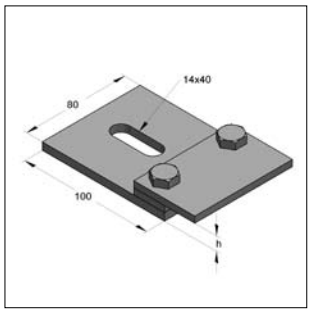
Specification:
For profile type: XL 100 or XL 120

Required: T-lock head, toothed, M12/40

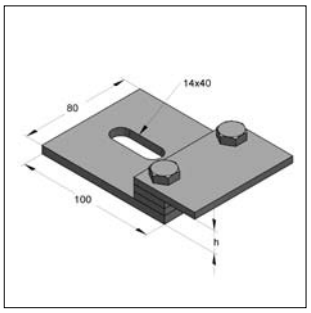
Technical data:
Material: steel
Material type: S235JR
Surface: zinc-nickel
Safety factor: 2,0

Identification	Profile type	thread G	max. load F_{zul} [kN]	H [mm]	h [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Massive connector XL 100	XL 100	M16	10,0	86	50	1,76	1	1641019007
CENTUM® Massive connector XL 100	XL 100	1/2"	10,0	86	50	1,75	1	1641019008
CENTUM® Massive connector XL 100	XL 100	1"	10,0	86	50	1,80	1	1641019010
CENTUM® Massive connector XL 120	XL 120	M16	10,0	96	60	1,89	1	1641219007
CENTUM® Massive connector XL 120	XL 120	1/2"	10,0	96	60	1,88	1	1641219008
CENTUM® Massive connector XL 120	XL 120	1"	10,0	96	60	1,93	1	1641219010

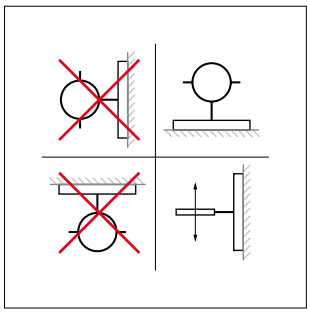
CENTUM® Z-pressure pad set



CENTUM® Z-pressure pad clamping strength 11 mm



CENTUM® Z-pressure pad clamping strength 16 mm



Mounting recommendation

Specification:

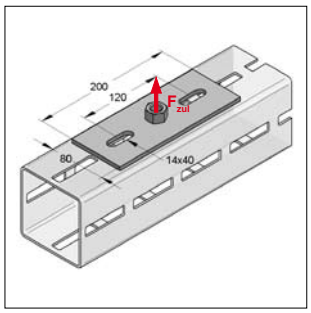
For profile type:	XL100 and XL120
	set of 2 pcs.
Mounting instruction:	suitable for standing assembly, only
Required accessory:	sliding stripe PA 6.6 (see chapter 4)
	T-bolt with steel disk, M12/40

Technical data:

Material:	steel
Material type:	S235JRG
Surface:	zinc-nickel

Identification	Length [mm]	Width [mm]	clamping strength h [mm]	Thickness [mm]	elongated hole-Ø [mm]	Weight [kg/pc.]	Packing [pcs.]	Part-No.
CENTUM® Z-pressure pad s11	100	80	11	6	14 x 40	1,38	2	1650015011
CENTUM® Z-pressure pad s16	100	80	16	6	14 x 40	1,55	2	1650015016

CENTUM® Base plate



CENTUM® Base plate M12

Specification:

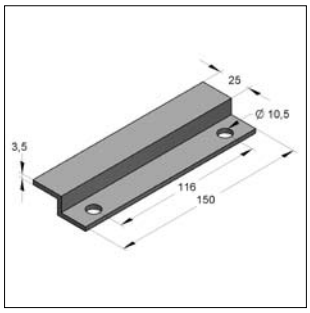
For profile type:	XL100 and XL120
Required accessory:	T-lock head, toothed, M12/40 or
	T-bolt with steel disk, M12/40

Technical data:

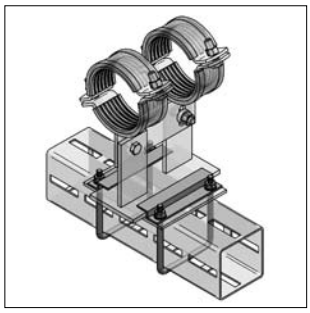
Material:	steel
Material type:	S235JRG2
Surface:	zinc-nickel
Safety factor:	2,0

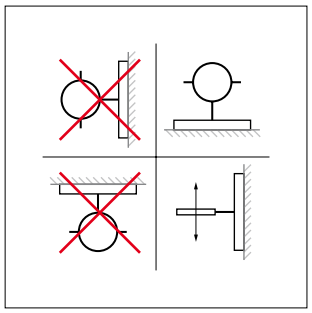
Identification	Length [mm]	Height [mm]	max. load F_{zul} [kN]	Thickness [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Base plate M12	200	80	5,5	6	0,81	1	1640018106
CENTUM® Base plate M16	200	80	5,5	6	0,84	1	1640018107
CENTUM® Base plate 1/2"	200	80	5,5	6	0,83	1	1640018108
CENTUM® Base plate 1"	200	80	5,5	6	0,89	1	1640018110

CENTUM® Z-pressure pad



CENTUM® Z-pressure pad





Mounting recommendation

Specification:

Application: mounting of sliding sledges

Required accessory: U-bolt 116/136 M10,
2x nuts M10, sliding stripes[2)]

Technical data:

Material: steel
Material type: S235JR
Surface: galvanized[1)]

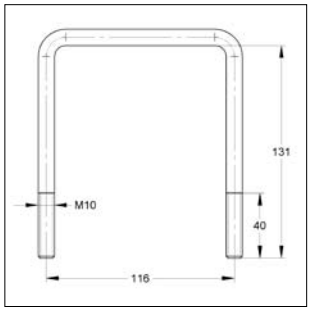
[1)] Components for outdoor application also available with Zinc-Nickel-coating (corrosion-protection class C3 acc. to ISO 9223). Delivery time on request!

[2)] suited sliding stripe on request

Identification	L [mm]	L1 [mm]	max. lifting stress/ pair [kN]	Number of mounting holes [pc.]	Hole-Ø [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Z-pressure pad	150	116	5,0	2	10,5	0,23	1	9993369

CENTUM® U-bolt

CENTUM® U-bolt



Specification:

Application: mounting of sliding sledges on
Centum XL 100 or square pipe 100

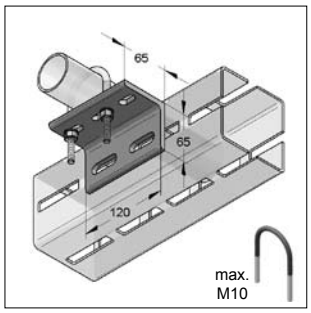
Technical data:

Material: steel
Material type: S235JR
Surface: galvanized[1)]

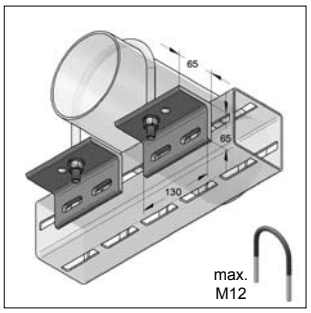
[1)] Components for outdoor application also available with Zinc-Nickel-coating (corrosion-protection class C3 acc. to ISO 9223). Delivery time on request!

Identification	Thread	for pipe / Centum [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® U-bolt 116/136	M10	100 x 100	0,18	1	9993371

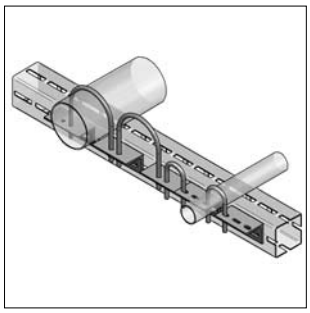
CENTUM® Pipe holder



CENTUM® Ø 21,3 - 76,1



CENTUM® Ø 88,9 - 219,1



combined exemplar

Specification:

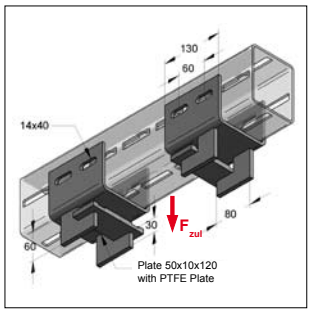
For pipe diameter:	Ø 21,3 - 219,1 mm
Mounting instruction:	pipe must overlie
Advantage:	installation of different pipe diameter
Required accessory:	T-lock head and U-bolt
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JRG2
Surface:	hot-dip galvanized

Identification	for pipe-Ø	Length [mm]	Height [mm]	Thickness [mm]	Weight [kg/pc.]	Packing [pcs.]	Part-No.
CENTUM® Pipe holder	**21,3 - 76,1**	120	65	7	0,76	1	1640008200
CENTUM® Pipe holder	**88,9 - 219,1**	130	65	7	1,73	2	1640008210

CENTUM® Sliding base, hanging



CENTUM® Sliding base, hanging

Specification:

For profile type:	XL 100 or XL 120
Required accessory:	T-lock head, toothed, M12/40
Remark:	shipment in pairs

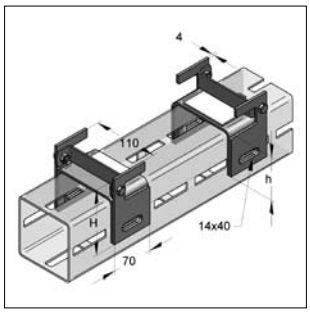
* Loads refer to pair

Technical data:

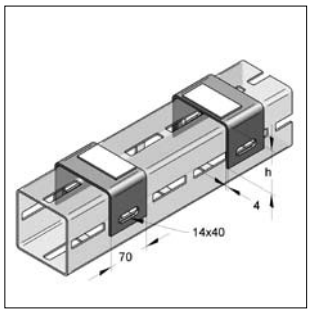
Material sliding base:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
Material sliding body:	PTFE
max. sliding plate thickness:	≤ 16 mm
Safety factor:	2,0

Identification	Profile type	Alignment	max. load* F_{zul} [kN]	Weight [kg/pc.]	Packing [pcs.]	Part-No.
CENTUM® Sliding base	XL 100	hanging	18,0	5,27	2	1651002000
CENTUM® Sliding base	XL 120	hanging, profile upright	18,0	5,54	2	1651202010

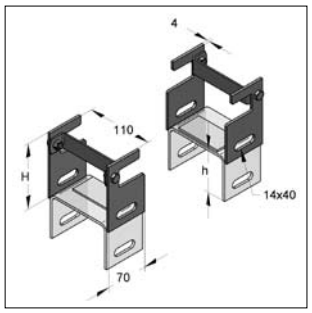
CENTUM® Sliding base, standing



CENTUM® Sliding base, standing with lift lock



CENTUM® Sliding base, standing without lift lock



lift lock (set)

Specification:

For profile type:	XL 100 or XL 120
Required accessory:	T-lock head, toothed, M12/40 or T-bolt with steel disk, M12/40
Remark:	shipment in pairs

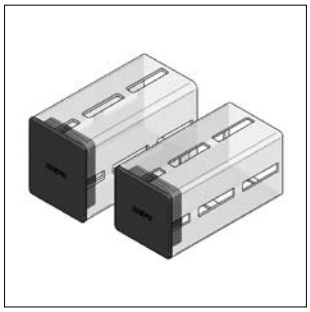
* Loads refer to pair

Technical data:

Material Sliding base:	steel
Material type:	S235JR
Surface:	hot-dip galvanized
max. sliding plate thickness:	≤ 16 mm
Material sliding body:	PE
static friction factor:	0,2
slide friction factor:	0,15
Temperature resistance:	- 200 °C up to + 80 °C
Safety factor:	2,0

Identification	Profile type	Alignment	max. load * F_{zul} [kN]	H [mm]	h [mm]	Weight [kg/set]	Packing [pcs.]	Part-No.
Sliding base with lift lock	XL 100	standing	40	110	74	2,22	2	1651001020
Sliding base without lift lock	XL 100	standing	40	-	74	1,18	2	1651001010
lift lock	XL 100	standing	40	110	74	1,05	2	1651001011
Sliding base with lift lock	XL 120	standing, profile upright	40	120	84	2,43	2	1651201050
Sliding base without lift lock	XL 120	standing, profile upright	40	-	84	1,28	2	1651201030
lift lock	XL 120	standing, profile upright	40	120	84	1,15	2	1651201031

CENTUM® Protecting cap



CENTUM® Protecting cap

Specification:

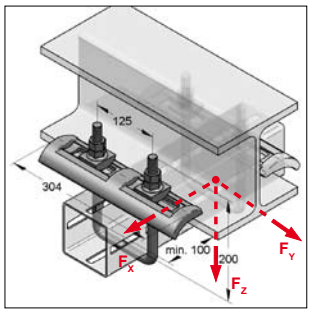
For profile type: XL 100 or XL 120

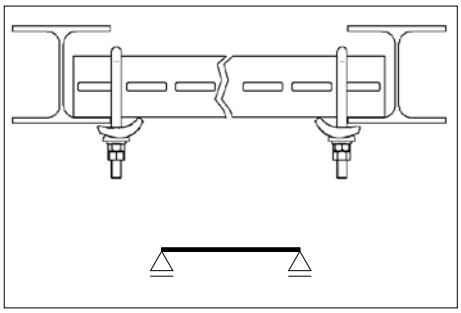
Technical data:

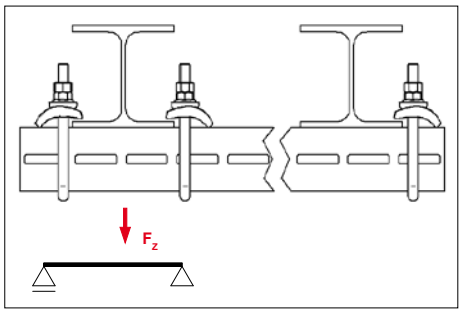
Material:	plastic
Material type:	PE
Colour:	black

Identification	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Protecting cap XL 100	0,065	1	1670100
CENTUM® Protecting cap XL 120	0,064	1	1670120

CENTUM® Clamping bow massive







CENTUM® Clamping bow massive

Specification:

For profile rail type:	XL 100 or XL 120
Application area:	for mounting of steel profile rail on girder
Delivery time:	on request

Set consisting of:

U-bolt	1 pc.
CENTUM® clamping rail FC	1 pc.
CENTUM® conical spring washer FC	2 pcs.
Flange nuts M16	2 pcs.
Nuts M16	2 pcs.

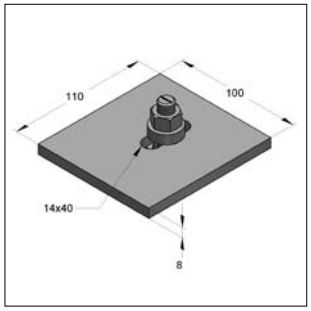
Technical data:

Material:	steel
Material type:	S235JR
Surface:	
U-bolt:	zinc-nickel
CENTUM® clamping rail FC:	galvanized (JS 500)
CENTUM® conical spring-washer FC:	galvanized (JS 500)
Flange nuts M16:	zinc-nickel
Nuts M16:	zinc-nickel
Safety factor:	2,0

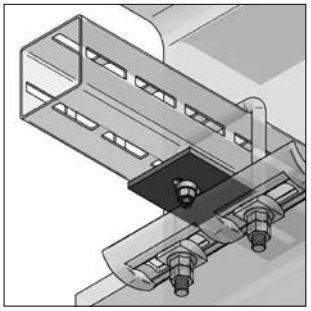
Remark: max. loads refer according to a clamping bow set please notice max. loads of CENTUM® profile rails

Identification	Thread U-bolt	max. load F_X [kN]	F_Y [kN]	F_Z [kN]	tightening torque [Nm]	max. clamping strength [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Clamping bow massive	M16	1,9	2,7	20,0	80	5 - 19	2,859	1	1660011020

CENTUM® Spacer plate for clamping bows



CENTUM® Spacer plate
for clamping bows
T-bolt, with steel disk



CENTUM® spacer plate combined
with CENTUM® clamping bow

Specification:

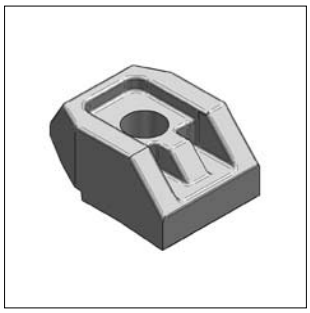
Application area:	to raise clamping thickness of CENTUM clamping bow
Mounting instruction:	with space plate clamping thickness can be increased by 8 mm
Required accessory:	T-bolt, with steel disk, M12/40
Delivery time:	on request

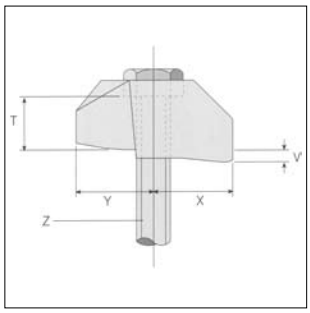
Technical data:

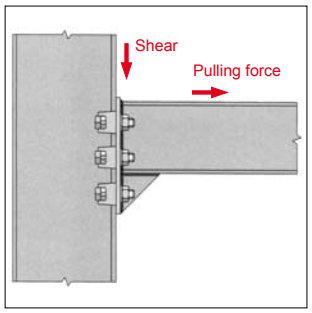
Material:	steel
Surface:	hot-dip galvanized

Identification	Dimension Width [mm]	Length [mm]	Thickness [mm]	elongated hole [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CENTUM® Spacer plate	100	110	8	14x40	0,658	1	1660011030

CENTUM® Clamping claw - type AF







Clamping Claw AF

Specification:

Application:
- flange up to inclination of 10°
- absorption of high shearing forces by clamping girder fixation at vertical girder

Mounting instruction: cam height V = min./max. clamping thickness
washers for height-adjustment of flange available on request

Delivery time: on request

Technical data:

Material: cast iron
Surface: hot-dip galvanized
Safety factor: 3,0

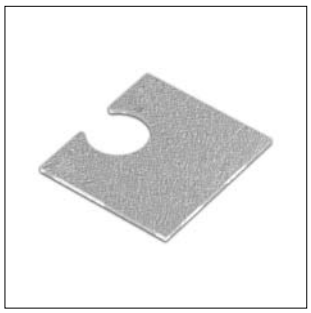
Required accessory:

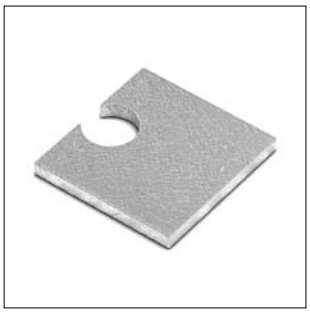
hexagon bolt h.-d. galv. FK 8.8 / threaded rod
washers DIN EN ISO 7089 h.-d. galv.
hexagon nuts h.-d. galv.

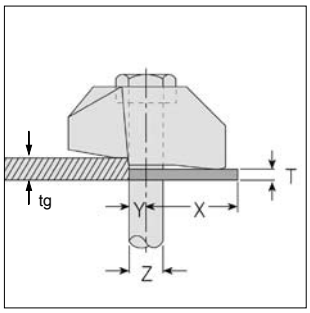
* in conjunction with property class 8.8
** for shear force value is valid for two screws couplings

Type	Dimensions Y	X	T	V	Width	Needed screw	Property class screw	Tightening torque	Pulling force	max. load* Shear** Girder coated	galvanized	Weight	Packing	Part-No.
	[mm]	[mm]	[mm]	[mm]	[mm]			[Nm]	[kN]	[kN]	[kN]	[kg/pc.]	[pc.]	
AF M12	29,0	27,0	17,0	12,5	39,0	M12 x 80	8.8	90	8,5	3,4	3,9	0,244	1	1660004012
AF M16	35,0	37,0	22,0	15,0	48,5	M16 x 80	8.8	240	16,0	8,0	10,0	0,460	1	1660004016

CENTUM® Washer component AF







Washer component AF

Specification:

Application: should only be used in combination with clamping claw - type AF

Product feature: for raising clamping thickness, allows assembly at different flange thickness

Delivery time: on request

Installation advise: T = thickness of the washer component
V = cam lift of clamping claw - type AF (see page clamping claw - type AF)
tg = flange thickness
Thickness of washer component is calculated with help of formula: T = tg - V

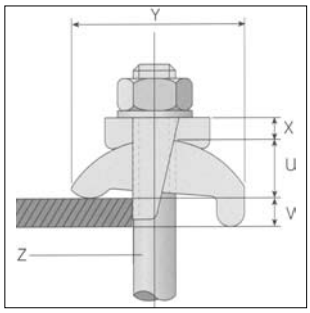
Technical Data:

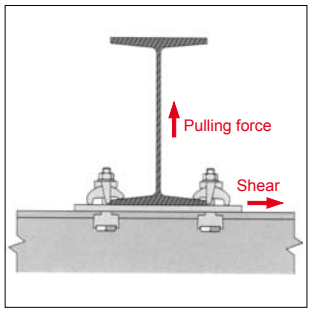
Material: steel

Surface: hot-dip galvanized

Identification	Needed screw Z	Dimension Y [mm]	Dimension X [mm]	Dimension T [mm]	Width [mm]	Weight [kg/pc.]	Packing [pc.]	Part-No.
AF 12 CW	M12	7	33	2	40	0,023	1	0576012
AF 12 P1	M12	7	33	5	40	0,062	1	0576082
AF 12 P2	M12	7	33	10	40	0,111	1	0576112
AF 16 CW	M16	8	40	2	50	0,035	1	0576016
AF 16 P1	M16	8	42	5	52	0,097	1	0576114
AF 16 P2	M16	8	42	10	52	0,172	1	0576116

CENTUM® Clamping claw - type LR





Clamping claw LR

Specification:

Application:
- girder with parallel and up to 15° inclined flanges.
- Horizontal connection of girder fixation at girder.

Delivery time: on request

Technical data:

Material: spherulitic cast iron
Surface: galvanized
Safety factor: 5:1

Required accessory:

1 x hexagon bolt h.-d. galv. FK 8.8 / threaded rod
1 x washer DIN EN ISO 7089 h.-d. galv.
1 x hexagon nut h.-d. galv.

[1] checked for dynamic loads

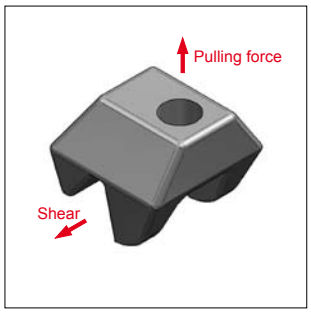
[2] larger flange thickness can be clamped with washer components (P1 and P2 on request)

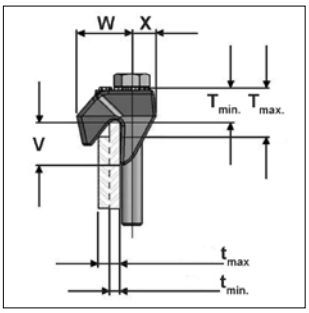
[3] in conjunction with property class 8.8

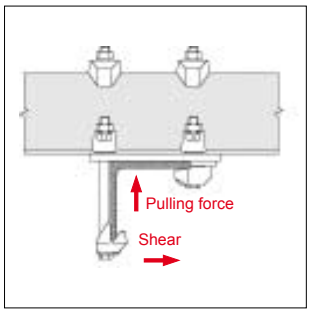
[4] for shear force value is valid for two screws couplings

Typ	Dimensions					needed	Tightening	max. load[3]		Weight	Packing	Part-No.
	Y [mm]	U [mm]	X [mm]	V[2] [mm]	Width [mm]	Screw Z	torque [Nm]	Pulling force [kN]	Shear[4] [kN]	[kg/pc.]	[pc.]	
LR M12	56,0	18,5	7,0	3-12	39,0	M12	69	4,5	0,9	0,172	1	1660003012
LR M16[1]	67,0	22,5	8,0	3-16	46,0	M16	147	8,5	1,7	0,310	1	1660003016

CENTUM® Clamping claw - type CF







Clamping claw CF

Specification:

Application:
- flange-edges of girder, U-profiles, angle-profiles
- absorption of high shearing forces by clamping at the vertical girder

Delivery time: on request

Technical data:

Material: cast iron
Surface: hot-dip galvanized
Safety factor: 2,0

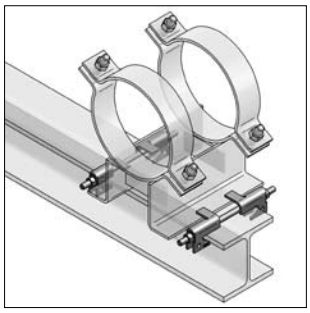
Required accessory:

1 x hexagon bolt h.-d. galv. FK 8.8 / threaded rod
1 x washer DIN EN ISO 7089 h.-d. galv.
1 x hexagon nut h.-d. galv.

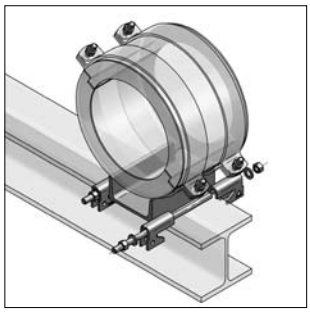
* in conjunction with property class 8.8
** for shear force value is valid for two screws couplings

Type	Dimensions X [mm]	V [mm]	W [mm]	Width [mm]	min.-max. clamping size t [mm]	min.-max. projection T [mm]	Tightening torque [Nm]	max. load Pulling force* [kN]	Shear** [kN]	Weight [kg/pc.]	Packing [pc.]	Part-No.
CF M12	14	25	32	46	6-13	21-29	90	8,5	3,9	0,222	1	1660002012
CF M16	18	32	44	56	8-16	25-33	240	16,0	10,0	0,428	1	1660002016

Guiding Clamp-Set



Guiding Clamp-Set Typ A
(assembled)



Guiding Clamp-Set Typ B
(assembled)

Specification:

Application: for lateral guidance of sliding sledges and sliding supports on girder

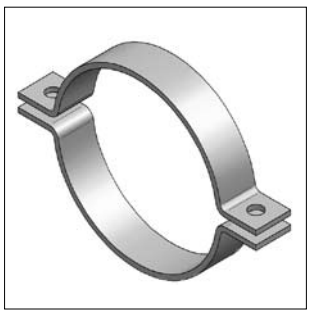
Type A with lift lock for guide bearing
Type B without lift lock for floating bearing

Technical data:

Material:	steel
Material type:	S235JR
Surface:	
- guiding clamps:	hot-dip galvanized
- screwing:	zinc-nickel

Assembly instructions see chapter 15

Pipe clamp Form A, DIN 3567



Pipe clamp Form A, DIN 3567

Specification:

Closure:	Hexagon nut/ closure-screw
Model:	2-parts
OD:	25 up to 521 mm
Connection:	without connection
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JR
Surface:	raw, galvanized, hot-dip galvanized

Pipe clamp Form C, DIN 3567

Rohrschelle Form C, DIN 3567

Specification:

Closure:	Hexagon nut/ closure screw
Model:	2-parts
OD:	115 up to 356 mm
Connection:	without connection
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JR
Surface:	raw, galvanized, hot-dip galvanized

Pipe clamp Form A, type Standard PSM / Heavy-Duty clamp

Pipe clamp Form A
type Standard PSM / Heavy-Duty clamp

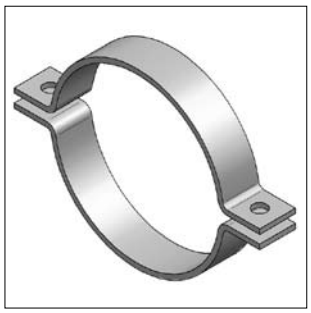
Specification:		**Technical data:**	
Closure:	Hexagon nut/ closure screw	Material:	steel
Model:	2-parts	Material type:	S235JR
OD:	20 up to 368 mm	Surface:	galvanized
Connection:	without connection		
Delivery time:	on request		

Pipe clamp Form A, type Standard PSM / Heavy-Duty clamp

Pipe clamp Form A
type Standard PSM / Heavy-Duty clamp

Specification:		**Technical data:**	
Closure:	Hexagon nut/ closure screw	Material:	steel
Model:	2-parts	Material type:	S235JR
OD:	22 up to 368 mm	Surface:	galvanized
Connection:	without connection		
Sound insulation:	according to DIN 4109	Sound insulation lining:	EPDM (ceramic lining on request)
Delivery time:	on request	Temperature resistance:	- 35 °C up to + 100 °C
		Insulation thickness:	6 mm

Pipe clamp Form A, type TGA



Pipe clamp Form A, type TGA

Specification:		**Technical data:**	
Closure:	Hexagon nut/ closure screw	Material:	steel
Model:	2-parts	Material type:	S235JR
OD:	219 up to 1220 mm	Surface:	raw,
Connection:	without connection		galvanized
Delivery time:	on request		hot-dip galvanized

Pipe clamp Form A, type TGA

Pipe clamp Form A, type TGA

SCHALL-SCHUTZ DIN 4109

Baustoffklasse ●B2● "Normal entflammbar" nach DIN 4102

Specification:		**Technical data:**	
Closure:	Hexagon nut/ closure screw	Material:	steel
Model:	2-parts	Material type:	S235JR
OD:	219 up to 1220 mm	Surface:	galvanized
Connection:	without connection		
Sound insulation:	according to DIN 4109	Sound insulation lining:	EPDM (ceramic lining on request)
Delivery time:	on request	Temperature resistance:	- 35 °C up to + 100 °C
		Insulation thickness:	6 mm

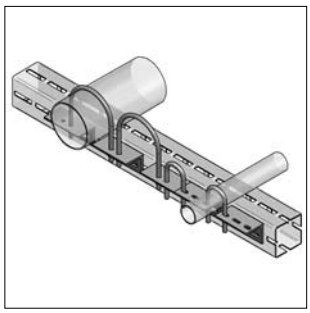
Stirrup clamp according to DIN 1593

Stirrup clamp according to DIN 1593

Specification:		**Technical data:**	
Closure:	Hexagon nut / closure screw	Material:	steel
Model:	one-piece	Material type:	S235JR
OD:	20 up to 219 mm	Surface:	galvanized
Connection:	without connection		hot-dip galvanized
Delivery time:	on request		

U-bolt pipe hanger

U-bolt pipe hanger

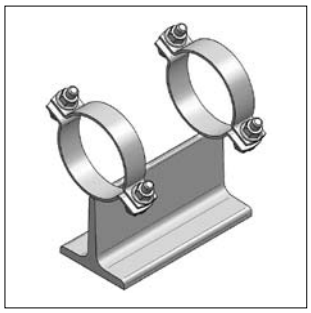


Pipe holder see page 14/16

Remark:
U-bolts galvanized
see catalogue
chapter 1

Specification:		**Technical data:**	
OD:	60,3 up to 324 mm	Material:	steel
Connection:	M10, M12, M20	Material type:	S235JR
Delivery time:	on request	Surface:	zinc-nickel

Sliding support T



Sliding support T

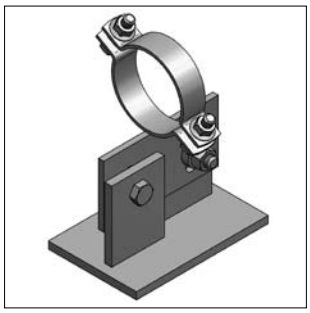
Specification:		Technical data:	
Closure:	Hexagon nut / closure screw	Material:	steel
Model:	T-support	Material type:	S235JR
OD:	20 up to 219 mm	Surface:	galvanized
Delivery time:	on request		hot-dip galvanized

Sliding support T, sound insulated

Sliding support T, sound insulated

Specification:		Technical data:	
Closure:	Hexagon nut / closure screw	Material:	steel
Model:	T-support	Material type:	S235JR
OD:	20 up to 219 mm	Surface:	galvanized
Sound insulation:	according to DIN 4109		hot-dip galvanized
Delivery time:	on request	Sound insulation lining:	EPDM (ceramic lining on request)
		Temperature resistance:	- 35 °C up to + 100 °C
		Insulation thickness:	6 mm

Sliding support T 100/150, HV 100-150, with 1 pipe clamp

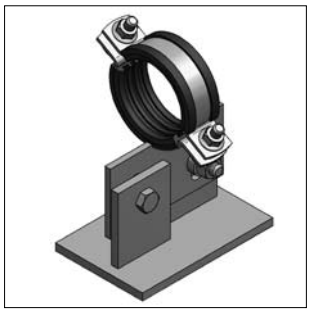


Sliding support T 100/150

Specification:	
Closure:	Hexagon nut / closure screw
Model:	T-support
Support width:	100
Support length:	150
OD:	20 up to 219 mm
Height, adjustable:	100 up to 150 mm
Recommended torque:	80 Nm
Delivery time:	on request

Technical data:	
Material:	steel
Material type:	S235JR
Surface:	galvanized hot-dip galvanized

Sliding support T 100/150, HV 100-150, with 1 pipe clamp sound insulated

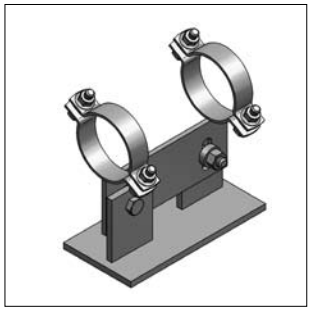


Sliding support T 100/150

Specification:	
Closure:	Hexagon nut / closure screw
Model:	T-support
Support width:	100
Support length:	150
OD:	20 up to 219 mm
Sound insulation:	according to DIN 4109
Height, adjustable:	100 up to 150 mm
Recommended torque:	80 Nm
Delivery time:	on request

Technical data:	
Material:	steel
Material type:	S235JR
Surface:	galvanized, hot-dip galvanized
Sound insulation lining:	EPDM (ceramic lining on request)
Temperature resistance:	- 35 °C up to + 100 °C
Insulation thickness:	6 mm

Sliding support T 100/200 and T 100/300, HV 100-175 with 2 pipe clamps

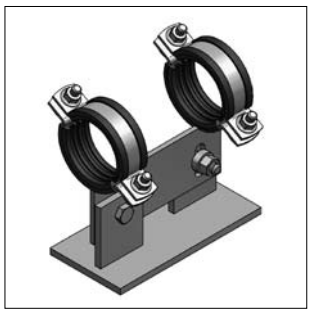


Sliding support T 100/200

Specification:	
Closure:	Hexagon nut / closure screw
Model:	T-support
Support width:	100
Support length:	200/300
OD:	20 up to 219 mm
Height, adjustable:	100 up to 175 mm
Recommended torque:	80 Nm
Delivery time:	on request

Technical data:	
Material:	steel
Material type:	S235JR
Surface:	galvanized
	hot-dip galvanized

Sliding support T 100/200 and T 100/300, HV 100-175 with 2 pipe clamps, sound insulated

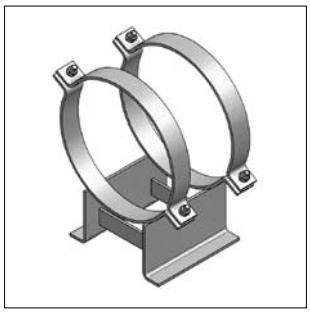


Sliding support T 100/200

Specification:	
Closure:	Hexagon nut / closure screw
Model:	T-support
Support width:	100
Support length:	200/300
OD:	20 up to 219 mm
Sound insulation:	according to DIN 4109
Height, adjustable:	100 up to 175 mm
Recommended torque:	80 Nm
Delivery time:	on request

Technical data:	
Material:	steel
Material type:	S235JR
Surface:	galvanized
	hot-dip galvanized
Sound insulation lining:	EPDM
	(ceramic lining on request)
Temperature resistance:	- 35 °C up to + 100 °C

Sliding sledge



Sliding sledge

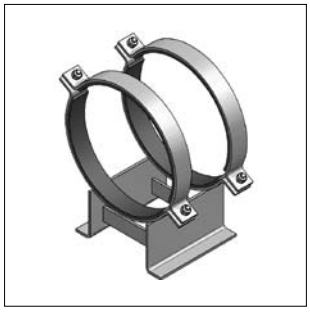
Specification:

Closure:	Hexagon nut / closure screw
Model:	Double-L-support
OD:	219 up to 813 mm
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JR
Surface:	raw, galvanized hot-dip galvanized

Sliding sledge, sound insulated



Sliding sledge, sound insulated

SCHALL-SCHUTZ DIN 4109

Baustoffklasse ●B2● "Normal entflammbar" nach DIN 4102

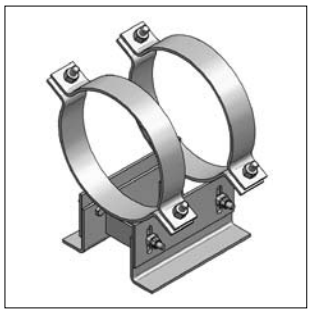
Specification:

Closure:	Hexagon nut / closure screw
Model:	Double-L-support
OD:	219 up to 813 mm
Sound insulation:	according to DIN 4109
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JR
Surface:	galvanized hot-dip galvanized
Sound insulation lining:	EPDM (ceramic lining on request)
Temperature resistance:	- 35 °C up to + 100 °C
Insulation thickness:	6 mm

Sliding sledge, height adjustable



Sliding sledge, height adjustable

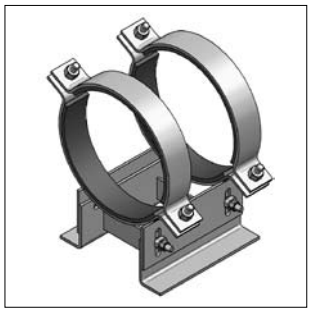
Specification:

Closure:	Hexagon nut / closure screw
Model:	Double-L-support
OD:	219 up to 813 mm
Height, adjustable:	100 up to 150 mm
	150 up to 200 mm
Recommended torque:	120 Nm
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JR
Surface:	raw, galvanized
	hot-dip galvanized

Sliding sledge, height adjustable, sound insulated



Sliding sledge, sound insulated

SCHALL-SCHUTZ DIN 4109

Baustoffklasse ●B2● "Normal entflammbar" nach DIN 4102

Specification:

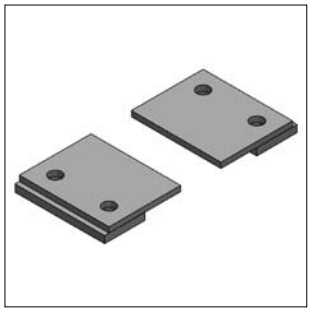
Closure:	Hexagon nut / closure screw
Model:	Double-L-support
OD:	219 up to 813 mm
Sound insulation:	according to DIN 4109
Height, adjustable:	100 up to 150 mm
	150 up to 200 mm
Recommended torque:	120 Nm
Delivery time:	on request

Technical data:

Material:	steel
Material type:	S235JR
Surface:	galvanized
	hot-dip galvanized
Sound insulation lining:	EPDM (ceramic lining on request)
Temperature resistance:	- 35 °C up to + 100 °C
Insulation thickness:	6 mm

14

Fixation plate for Sliding sledge

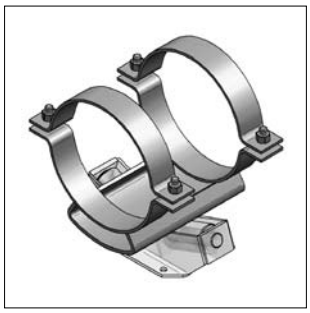


Fixation plate for Sliding sledge

Technical data:

Material:	steel
Material type:	S235JR
Surface:	raw, galvanized
	hot-dip galvanized
Delivery time:	on request

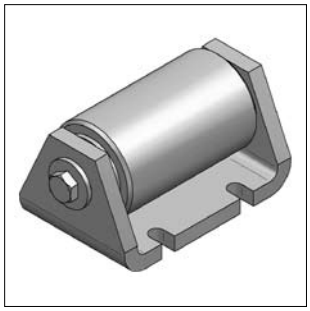
Insulation-saddle for roller-bearing



Insulation-saddle for roller-bearing

Specification:		Technical data:	
Closure:	Hexagon nut / closure screw	Material:	steel
OD:	219 up to 813 mm	Material type:	S235JR
		Surface:	raw, galvanized
Delivery time:	on request		hot-dip galvanized

Single-roller-bearing



Single-roller-bearing

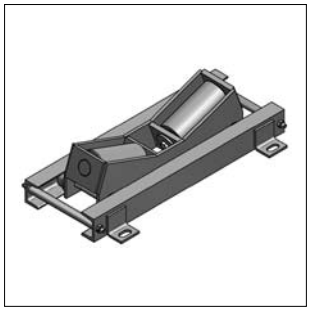
Specification:		Technical data:	
Delivery time:	on request	Material:	steel
		Material type:	S235JR
		Surface:	raw, galvanized, hot-dip galvanized
		Material axle:	stainless steel, polished
		Material bush:	bronze

Double-roller-bearing, axial

Double-roller-bearing, axial

Technical data:	
Material:	steel
Material type:	S235JR
Surface:	raw, galvanized, hot-dip galvanized
Material axle:	stainless steel, polished
Material bush:	bronze

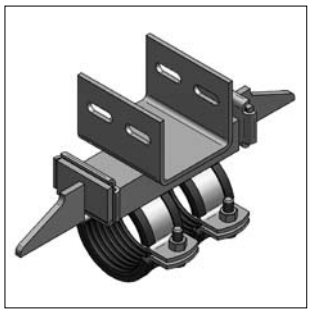
Double-roller-bearing, radial-axial



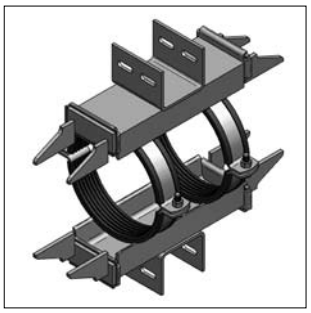
Double-roller-bearing
radial-axial

Technical data:	
Material:	Steel
Material type:	S235JR
Surface:	raw, galvanized, hot-dip galvanized
Material axle:	stainless steel, polished
Material bush:	bronze

Fixpoint with CENTUM® Massive connector



Fixpoint type A with CENTUM®
Massive connector



Fixpoint type B with CENTUM®
Massive connector

SCHALL-SCHUTZ DIN 4109

Baustoffklasse B2 "Normal entflammbar" nach DIN 4102

Specification:

Application:	established MEFA fixpoint for high power transmission while sound insulation. Due to welded Massive connector it´s possible to mount this fixpoint directly at CENTUM square profile.
Sound insulation:	according to DIN 4109
Accessory:	T-lock head, toothed, M12x40

Technical data:

Material:	Steel
Material type:	S235JR
Surface:	galvanized
Pressure piece:	raw
Sound insulation lining:	EPDM/ Silicon
Temperature resistance:	-35°C up to +100°C/ -60°C bis +250°C

Remark: for further informations regarding dimensions, loads and assembly please contact our application engineering.