

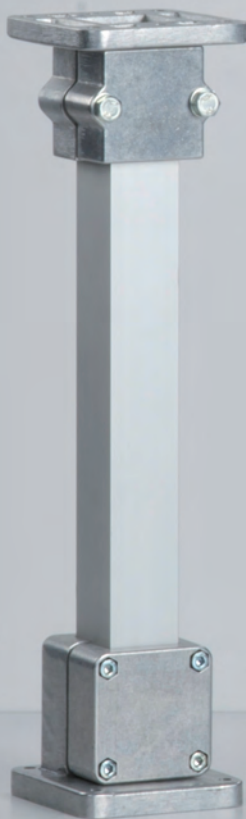
**R** RENOWNED  
KNOW-HOW

Automation Technology



**RK ROSE+KRIEGER**

A Phoenix Mecano Company



***Connecting  
Technology***

# How to use this catalogue

Depending on your level of experience, we suggest you proceed as follows

## **If you are new to connecting technology**

Please use our selection guide from page 9 onwards.  
We will guide you to the right product for your particular application.

## **If you know all about connecting technology**

You know exactly what you require and can go straight to the right product category, where you will find a product overview on the first pages.

## **Specific search**

...if you are looking for a specific product, we suggest you start in our index on the last pages of this catalogue.

**If you have any questions, do not hesitate to contact one of our product consultants.**



## Introduction

- About Us
- Service
- Our products
- Level of service

From page 4

## Connecting Technology Selection guide

- Flexible Clamping  
(What is Connecting Technology?)
- Four steps to your recommended product  
(How do I find the right product?)

From page 9

## Light Clamps

Plastic tube connectors

- Light load range

From page 24

## Solid Clamps

Aluminium tube connectors

- Medium to heavy load range

From page 50

## Robust Clamps

Stainless steel tube connectors

- Shock-proof load range

From page 198

## Accessories

From page 208

## ITAS

- Industrial stairs and working platforms

From page 222

## Support arm/equipment carrier system

From page 254

## Appendix

- Sketches / Notes
- Index

From page 282

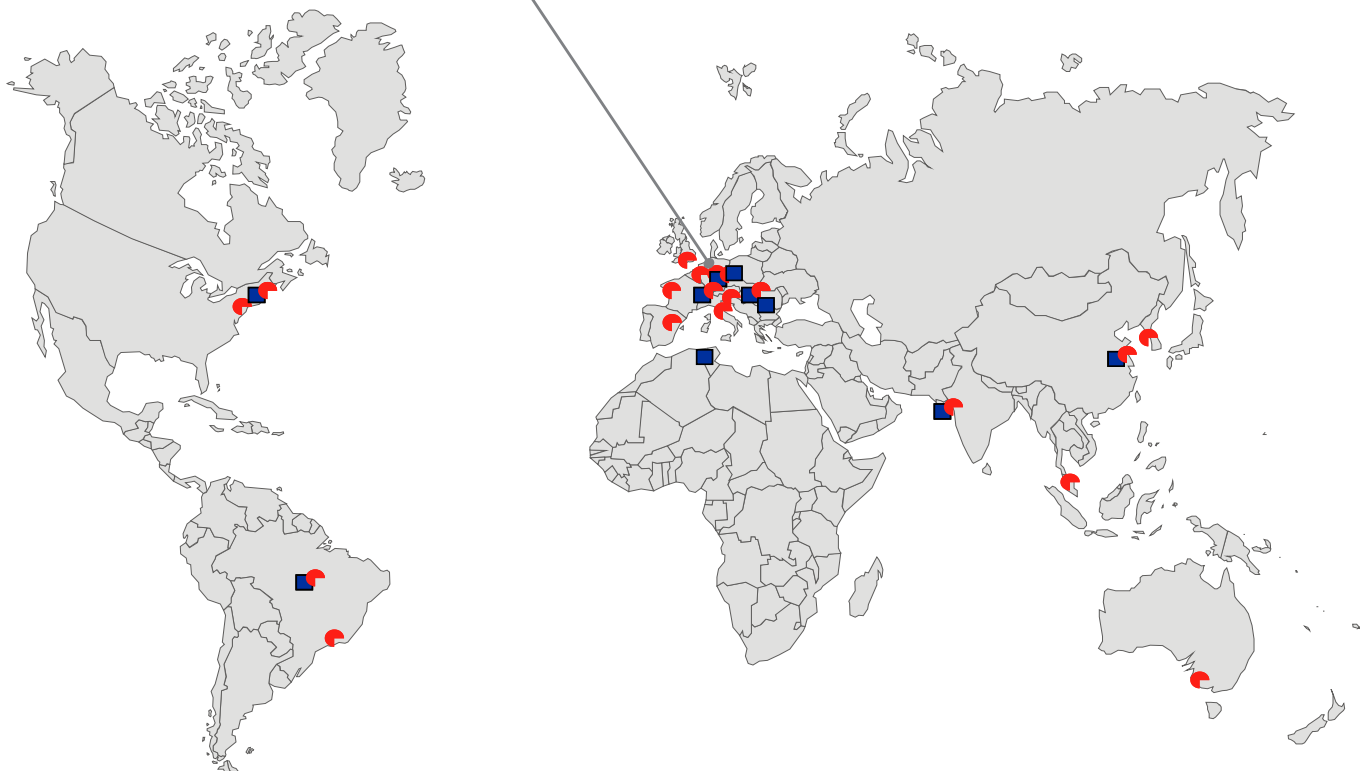
# About Us

As a subsidiary of the global Phoenix Mecano AG, we offer an unrivalled range of products in the fields of linear, profile, connecting and module technology. With decades of experience and expertise in a huge range of industrial applications, you need look no further for a highly competent partner. From the first point of contact through to delivery, we focus entirely on your requirements. Individual advice and short delivery periods are two central priorities in our customer-focused corporate philosophy. Our aim is your success, and we look forward to being your strategic partner.



**Head Office:** Germany, Minden/Westph.

- ✓ Company sales representatives
- ✓ Distributors and system partners



## Available around the globe.

- ✓ Profit Centre within Phoenix Mecano
- ✓ Sales and system partners

■ = Production facilities

● = Distribution companies

  
**RK ROSE+KRIEGER**

A Phoenix Mecano Company



# Our product range

## LINEAR TECHNOLOGY

- ✓ Linear actuators
- ✓ Manual guide units
- ✓ Electric cylinders
- ✓ Lifting columns
- ✓ We can move loads for you of up to 3 t and up to 12 m dynamically, reliably and with great precision



## CONNECTING TECHNOLOGY

- ✓ Fittings for the secure clamp connection of round and square profiles
- ✓ Elements made of aluminium, stainless steel and plastic
- ✓ Sizes from 8 mm to 80 mm



## PROFILE TECHNOLOGY

- ✓ The proven and tested BLOCAN® aluminium assembly system, with profiles offering cross-sections from 20 mm to 320 mm, for a broad spectrum of applications
- ✓ Connection techniques with an unsurpassed combination of flexibility and reliability



## MODULE TECHNOLOGY

- ✓ We develop, manufacture and assemble
- ✓ Machine frames
- ✓ Workstations
- ✓ Machine guards
- ✓ Multi-dimensional linear actuator modules
- ✓ Complete drive solutions

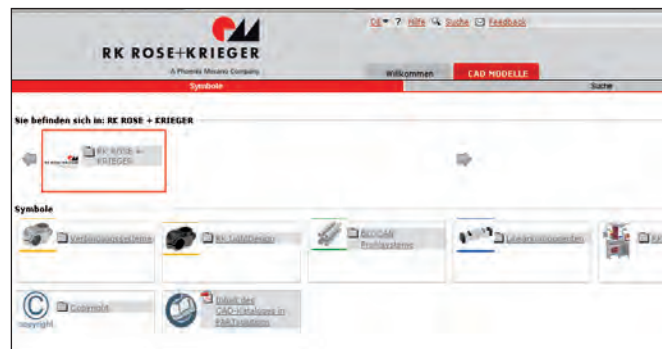


# What we can do for you

## We help you make the right choice:

### CAD component library

To help you design your products, we give you free access to the component data stored in our Rose+Krieger component library (drawings, technical descriptions). This library lets you choose between around 60 different file formats (2D/3D). The link to our component server can be found on our web site at: [www.rk-rose-krieger.com/deutsch/service/cad-daten.html](http://www.rk-rose-krieger.com/deutsch/service/cad-daten.html)



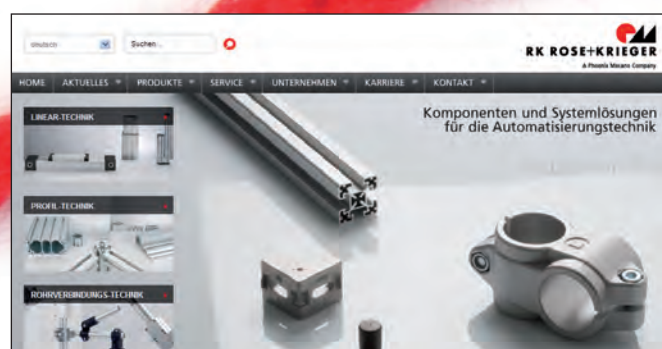
### In-house RK product consultancy

The RK infovan - our showroom on your doorstep. With more than 20 presentation boards containing exhibits and functional samples and a range of applications from the world of drive and linear technology, our infovan provides a complete cross-section of the RK products currently available. Our Key Account managers and sales consultants are happy to visit you on site and help you draw up concrete proposals for practical solutions.



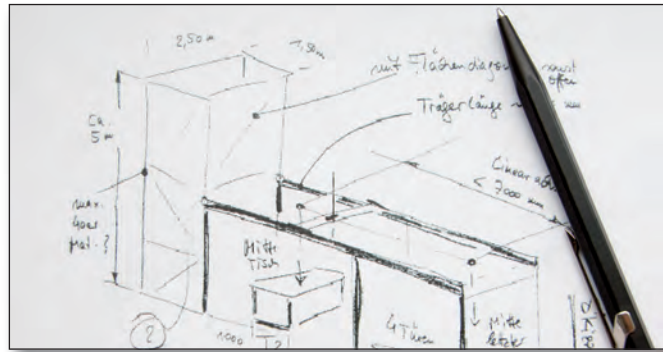
### RK website: [www.rk-rose-krieger.com](http://www.rk-rose-krieger.com)

At our website you will find a wealth of information on our company and our products. You will also find the details of company contacts in your area and the latest catalogues (PDF format) available to download.



Do you need to focus your resources on other tasks and are you looking for an expert partner you can rely on? Working in close collaboration with you, our specialists will develop solutions tailor-made to meet your needs. If you wish, we can also assemble and commission the units on site.

**Just make a sketch of your requirements**



**Our product specialists will develop a solution for you**



**We can deliver your turnkey solution or assemble and commission it for you on site**

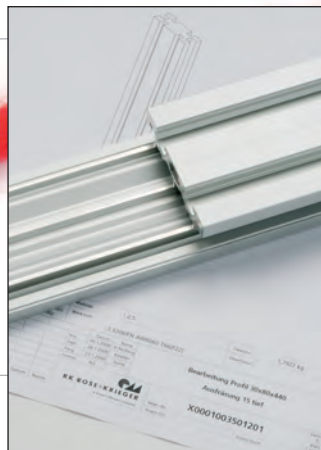




# Level of service

## You decide...

100%



### Different models, modified standards

Our expertise at your fingertips. Our expert consultants can recommend the optimum products modified to your requirements.



### Customised developments

Are you looking for something completely new? Then we'll team up with you to develop it.



### Modules and systems

You require your skills and time for other tasks and are looking for a partner you can rely on.

### Catalogue items

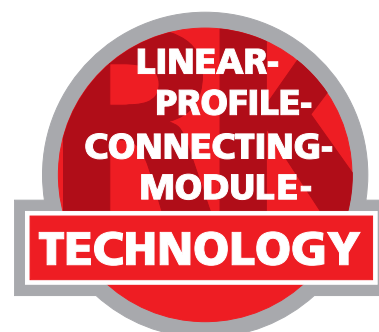
If you know what you want and take the time to browse our catalogue, you are sure to find what you're looking for in our standard range.

...what level of service you require

0%

## We offer

- ✓ A broad range of compatible products
- ✓ 40 years of experience in numerous industries
- ✓ Expert advice for all your requirements
- ✓ Quality – because we deliver what we promise





## Contents

---

What is connecting technology... Page 10
How to find the right product ... Page 11
The RK connecting circle..... Page 12
Light Clamps ..... Page 14
Solid Clamps ..... Page 16
Robust Clamps..... Page 18
Accessories ..... Page 19
ITAS ..... Page 20
Support arm-/ Equipment carrier system..... Page 22

# ***Selection guide***

# Flexible Clamping

## What is Connecting Technology

Connecting precision round and square tube with reliability and stability whilst also making removing easy, appears to be a difficult task. The RK connecting technology, which has been proven over years of use, meets this requirement in a simple and perfect fashion.

Our versatile connection elements offer you the chance to implement creative and flexible solutions, because you can rely on our product. We are sure to have the right part for you, and if not we will develop one especially.

## Why drilling, riveting, welding...



**...when it's quicker with our reliable clamping system.**



## Four steps to your recommended product

### Step 1:



#### The application always takes centre stage

- Light load range
- Medium to heavy load range
- Shock-proof load range

### Step 2:



#### What features should the product have?

- Right angle connection
- Axially parallel connection
- Hinge connection

### Step 3:



#### Which product design do you want?

- Single-piece elements:  
for faster and more economic assembly
- Multi-piece elements:  
for add-on assembly and upgrading

### Step 4:

#### Which performance category do you require?

- Round tube
- Square tube
- Ø Diameter
- □ Square

...follow our system and the terms are self explanatory.



**Features:**

- ✓ Easy
- ✓ Good value
- ✓ Variable



## Light Clamps

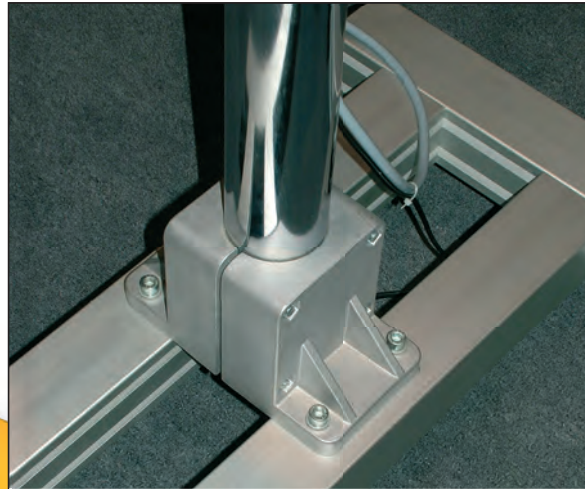
continue on page 24

Your appli  
takes centr



## Solid Clamps

continue on page 50



Medium to heavy load range

**Features:**

- ✓ Reliable
- ✓ Solid
- ✓ Price/Performance optimised
- ✓ Great variety



ation  
e stage

## Robust Clamps

continue on page 198



Shock-proof load range

**Features:**

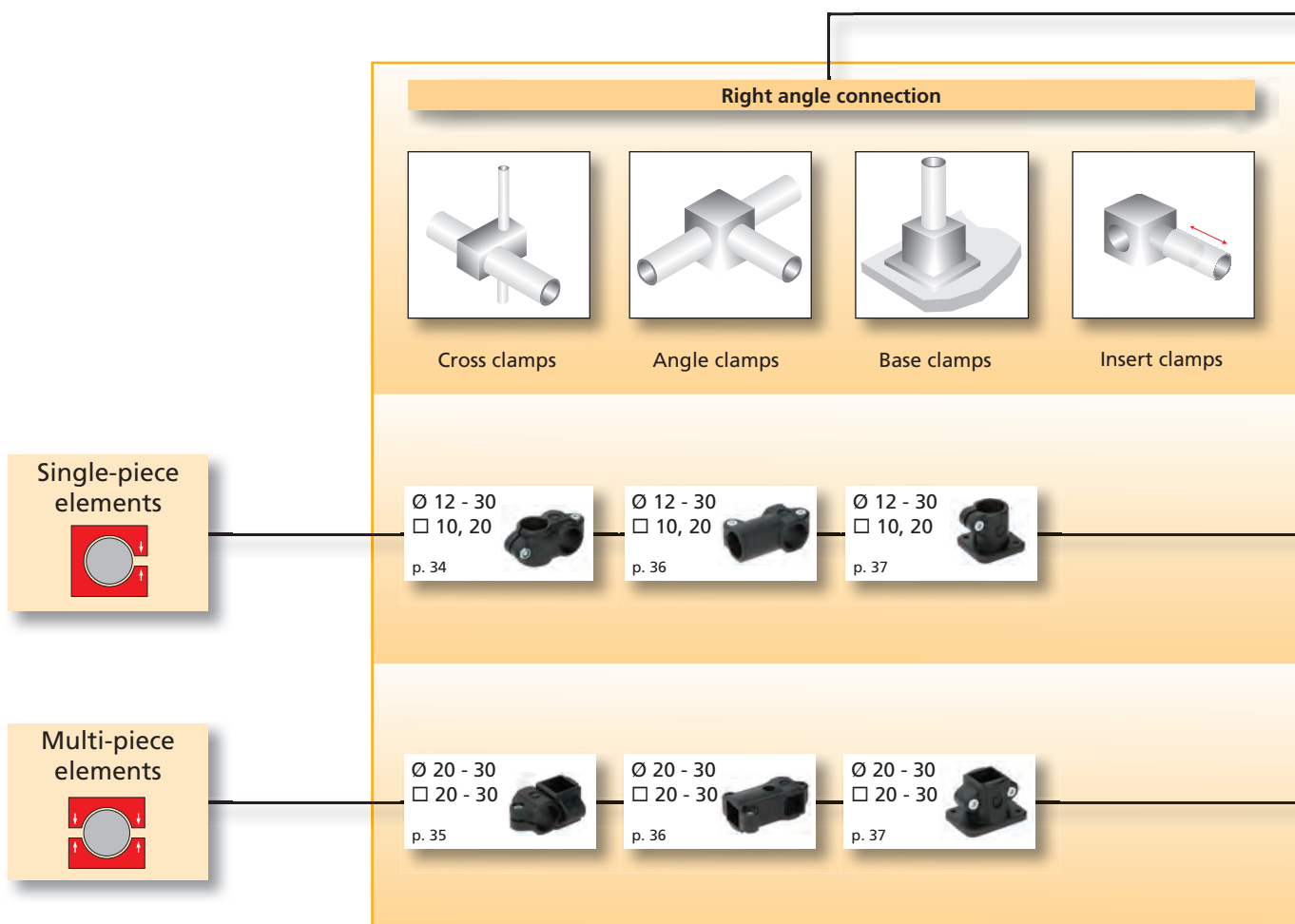
- ✓ Extremely strong
- ✓ Vibration proof
- ✓ Impact and shock load



# Light Clamps Light load range


## Plastic:

- ✓ Corrosion resistant
- ✓ Low weight
- ✓ Usable in food packaging
- ✓ Variable using reducing bushes



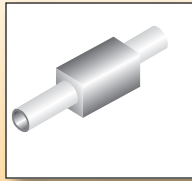
Ø = Diameter round tube  
 □ = Dimension square tube

**Light Clamps**  
Plastic

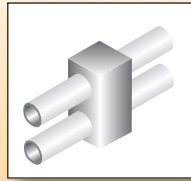


**Connecting types**

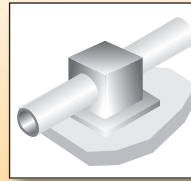
**Axially parallel connection**



Sleeve clamps




Parallel clamps




Flange clamps

Ø 12 - 30  
□ 10, 20




p. 38

Ø 12 - 30  
□ 10, 20



p. 39

Ø 20 - 30  
□ 20 - 30

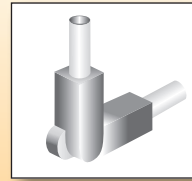


p. 39

**Hinge connection**



Strap clamps



Hinge clamps

Ø 12 - 30  
□ 10, 20



p. 41

Ø 12 - 30  
□ 10, 20



p. 41

# Solid Clamps Medium to heavy load range

## Industrial design

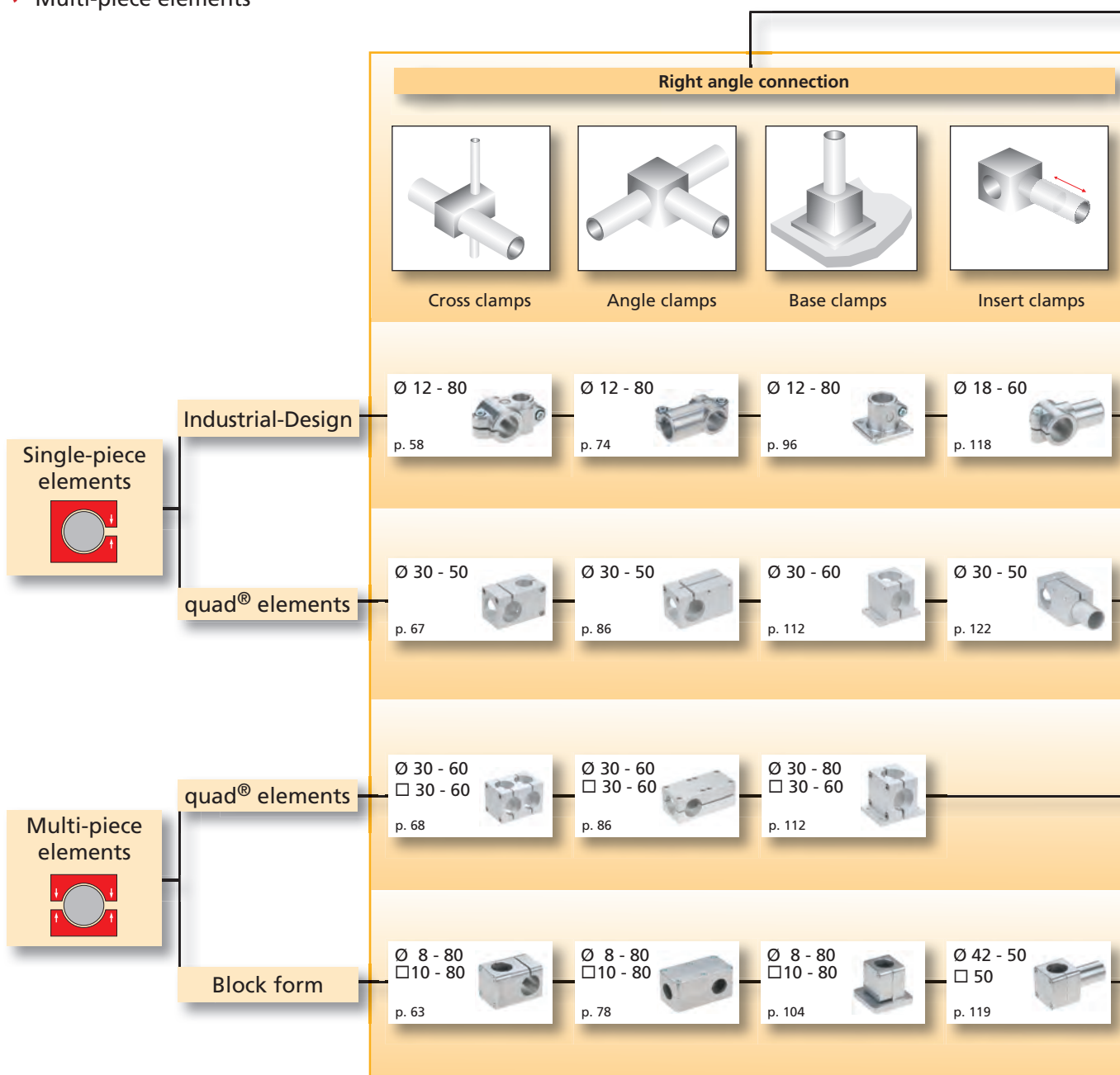
- ✓ Cast aluminium
- ✓ Great variety
- ✓ Single-piece elements

## quad® elements

- ✓ Extruded aluminium
- ✓ Maximum torque loads
- ✓ High-quality anodized surface
- ✓ Single- and Multi-piece elements

## Blockform

- ✓ Cast aluminium
- ✓ Higher torque loads
- ✓ Plane surface
- ✓ Multi-piece elements



Ø = Diameter round tube  
□ = Dimension square tube

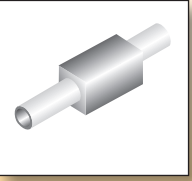
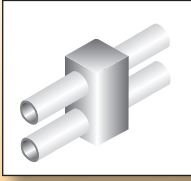
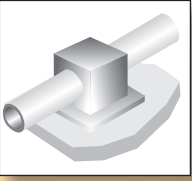






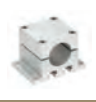



**Solid Clamps**  
Aluminium

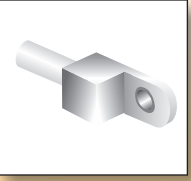
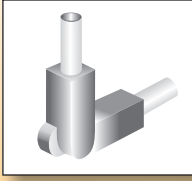








**Connecting types**

**Axially parallel connection**


		
Sleeve clamps	Parallel clamps	Flange clamps
<p>Ø 20 - 60 p. 128</p> 	<p>Ø 12 - 80 p. 138</p> 	<p>Ø 12 - 80 p. 146</p> 
<p>Ø 30 - 50 p. 131</p> 	<p>Ø 30 - 50 p. 140</p> 	<p>Ø 30 - 60 p. 154</p> 
		<p>Ø 30 - 80 □ 30 - 80 p. 157</p> 
		<p>Ø 30 - 80 □ 10 - 80 p. 151</p> 

**Hinge connection**

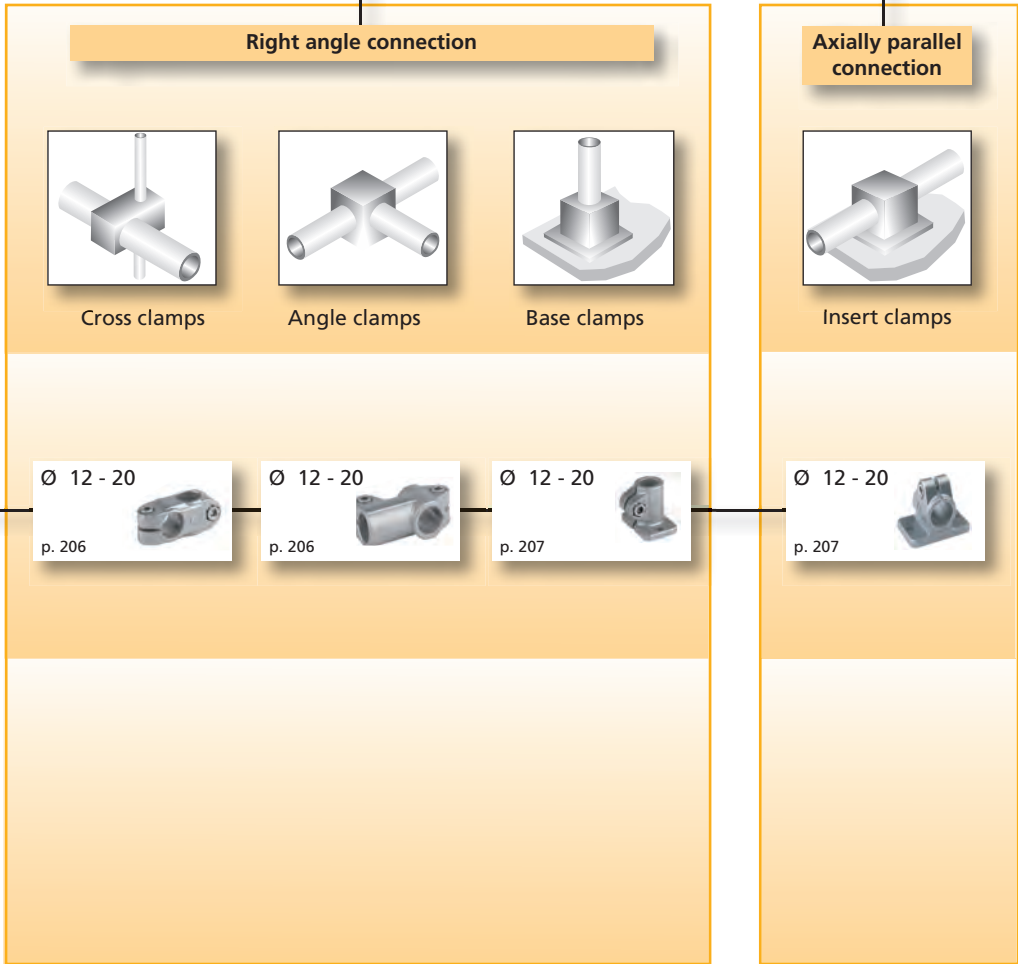
	
Strap clamps	Hinge clamps
<p>Ø 12 - 60 p. 164</p> 	<p>Ø 12 - 60 p. 176</p> 
	<p>Ø 30 - 50 p. 194</p> 
	<p>Ø 30 - 50 □ 30 - 50 p. 196</p> 
<p>Ø 40 □ 40 p. 170</p> 	<p>Ø 40 - 50 □ 40 - 50 p. 184</p> 


## Stainless steel

- ✓ Extremely strong for dynamic loads
- ✓ High temperature resistance
- ✓ Corrosion resistant

**Robust Clamps**  
Stainless steel 

### Connecting types



**Single-piece elements**  


Ø = Diameter round tube  
□ = Dimension square tube

# Accessories



## Steel tubes

Ø = 12 - 80  
□ = 20 - 80



p. 212

## Stainless steel tubes

Ø = 12 - 60  
□ = 20 - 80



p. 212

## Aluminium tubes

Ø = 20 - 60  
□ = 20 - 60



p. 213

## Aluminium bars

Ø = 8 - 10  
□ = 10



p. 213

## Round tube stopper



p. 215

## Adjustable foot



p. 217

## Swivel castor with tube fitting



p. 218

## Square tube stopper



p. 215

## Adjustable foot with tube fitting



p. 218

## Fixed castor with tube fitting



p. 218

## Round tube threaded stopper



p. 214

## Square tube threaded stopper



p. 214

## Adjustable levers



p. 219

# ITAS - Industrial stairs and working platforms

- ✓ No drilling or welding
- ✓ No bevel cut
- ✓ Easy installation
- ✓ Pleasing design










## Internal tension system

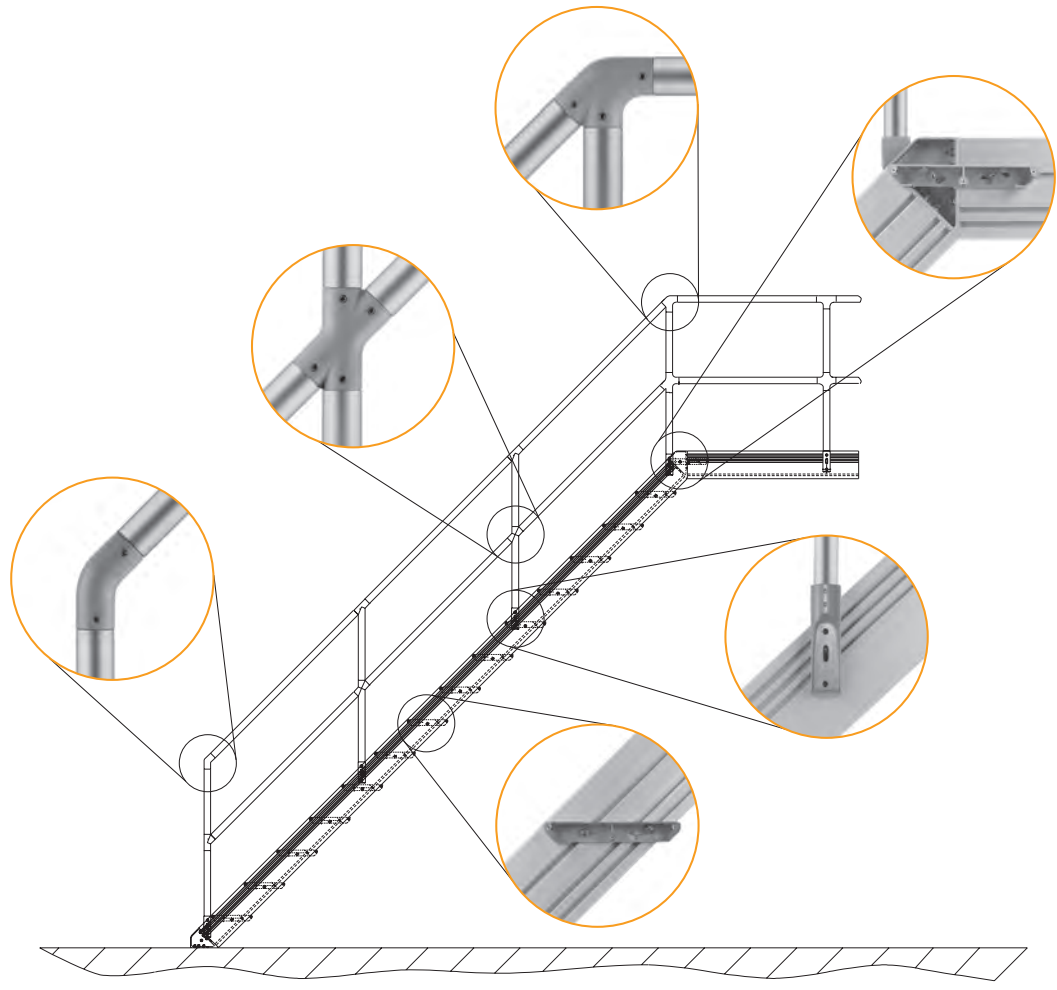
<p>MI 40</p>  <p>p. 230</p>	<p>KI 40</p>  <p>p. 231</p>	<p>KI 40H-45°</p>  <p>p.</p>	<p>WIY 40-45°</p>  <p>p. 235</p>
<p>WI 40</p>  <p>p. 230</p>	<p>WI 40-45° 30°, 38°, 52°, 60°</p>  <p>p. 232</p>	<p>WIT 40H-45°R</p>  <p>p. 233</p>	<p>FIW 40</p>  <p>p. 235</p>
<p>WIT 40</p>  <p>p. 230</p>	<p>WIT 40-45°</p>  <p>p. 232</p>	<p>WIT 40H-45°L</p>  <p>p. 234</p>	<p>FI 40</p>  <p>p. 235</p>
<p>WIE 40</p>  <p>p. 231</p>	<p>WIT 40H-45°</p>  <p>p. 232</p>	<p>WIV 40H-45°</p>  <p>p. 234</p>	<p>TSI</p>  <p>p. 236</p>
<p>WITE 40</p>  <p>p. 231</p>	<p>KI 40-45°</p>  <p>p. 233</p>	<p>WIV 40-45°</p>  <p>p. 234</p>	<p>TSI 40-WI</p>  <p>p. 236</p>

## Quick change system

<p>MI-H 40-SW</p>  <p>p. 240</p>	<p>WIT 40-SW2</p>  <p>p. 241</p>	<p>WITE 40-SW2</p>  <p>p. 242</p>
<p>WI 40-SW1</p>  <p>p. 240</p>	<p>KI 40-SW2</p>  <p>p. 241</p>	<p>WIT 40H-45°SW1</p>  <p>p. 242</p>
<p>WIT 40-SW1</p>  <p>p. 240</p>	<p>WIE 40-SW2</p>  <p>p. 241</p>	<p>KI 40H-45°SW1</p>  <p>p. 242</p>

**ITAS Accessories**

<p>Aluminium tube Ø 40x3</p>  <p>p. 226</p>	<p>Surface element support FEH-I 40</p>  <p>p. 245</p>	<p>Stair corner joint</p>  <p>p. 248</p>
<p>Stair cross beam profile</p>  <p>p. 226</p>	<p>Step profil</p>  <p>p. 245</p>	<p>Stair railing support TGHF</p>  <p>p. 246</p>
<p>Stair joint</p>  <p>p. 227</p>	<p>Side plate</p>  <p>p. 247</p>	<p>Angle plate for TGHF</p>  <p>p. 249</p>



# Support arm- / Equipment carrier system

- ✓ Variable
- ✓ Individual connection
- ✓ Degree of protection IP 65
- ✓ Infinitely adjustable pivot bearing



## Support arm-/Equipment carrier system GT 48

**GT Ø 48**  
for round steel tubes  
(standardised)

GT AG



p. 260

GT F / GT FD



p. 260

GT WGW / GT WGS



p. 261

GT AF



p. 261

GT W



p. 262

GT KU / GT KUF



p. 262

GT WKU / GT WKUF



p. 263

GT PF



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GT NA



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## Support arm-/Equipment carrier system GT 50, 60, 80

**GT □ 50, 60, 80**  
for square tubes

GT AG



p. 270

GT F



p. 270

GT WG



p. 271

GT AF



p. 271

GT ZG



p. 272

GT W



p. 272

GT WKU



p. 273

GT WKUF



p. 273

GT KU



p. 274

GT KUF



p. 274

GT PKU



p. 275

GT PA



p. 276

GT A



p. 276



# Our selection guide is also available online !



Our online selection guide  
Connecting technology - including:

- ✓ Light Clamps
- ✓ Solid Clamps
- ✓ Robust Clamps

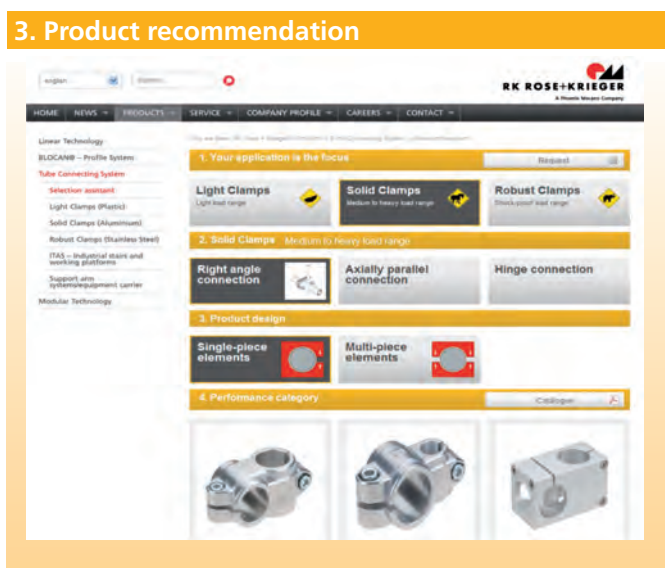
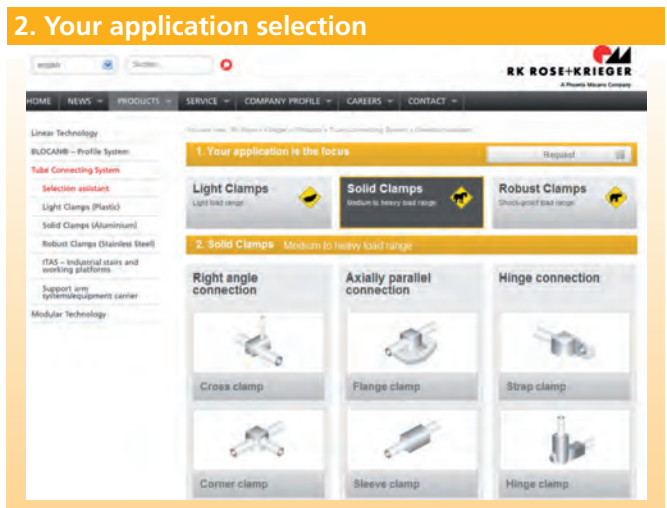
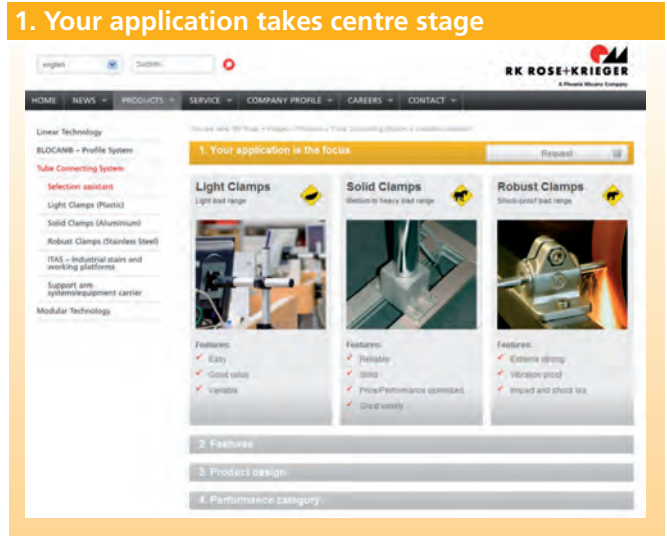
can be found on our website:  
[www.rk-rose-krieger.com](http://www.rk-rose-krieger.com)

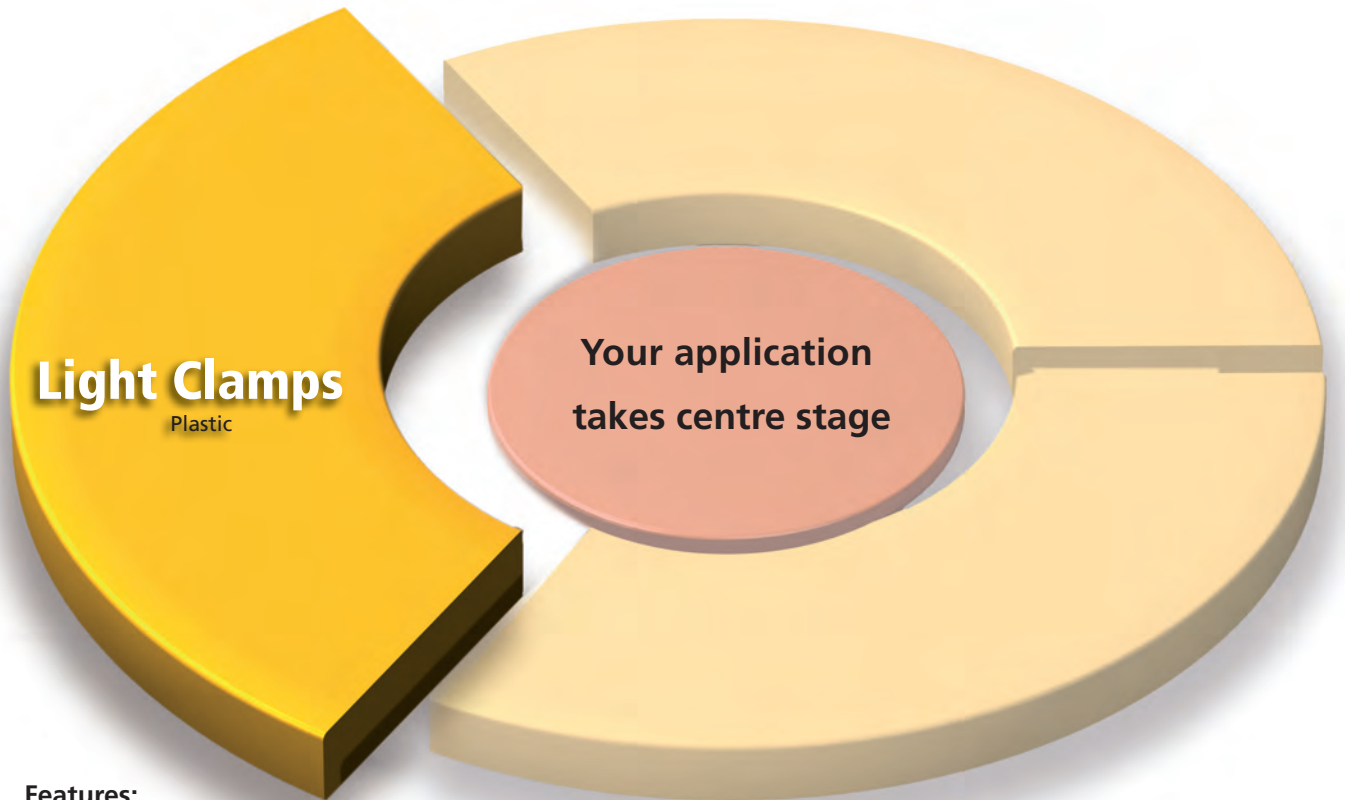
## Only four steps to our product recommendation

Features:

- Easy to select
- Online link to current PDF-catalogues
- CAD-data
- Shopping cart function for inquiries

It can be easier than that...  
...just try it.



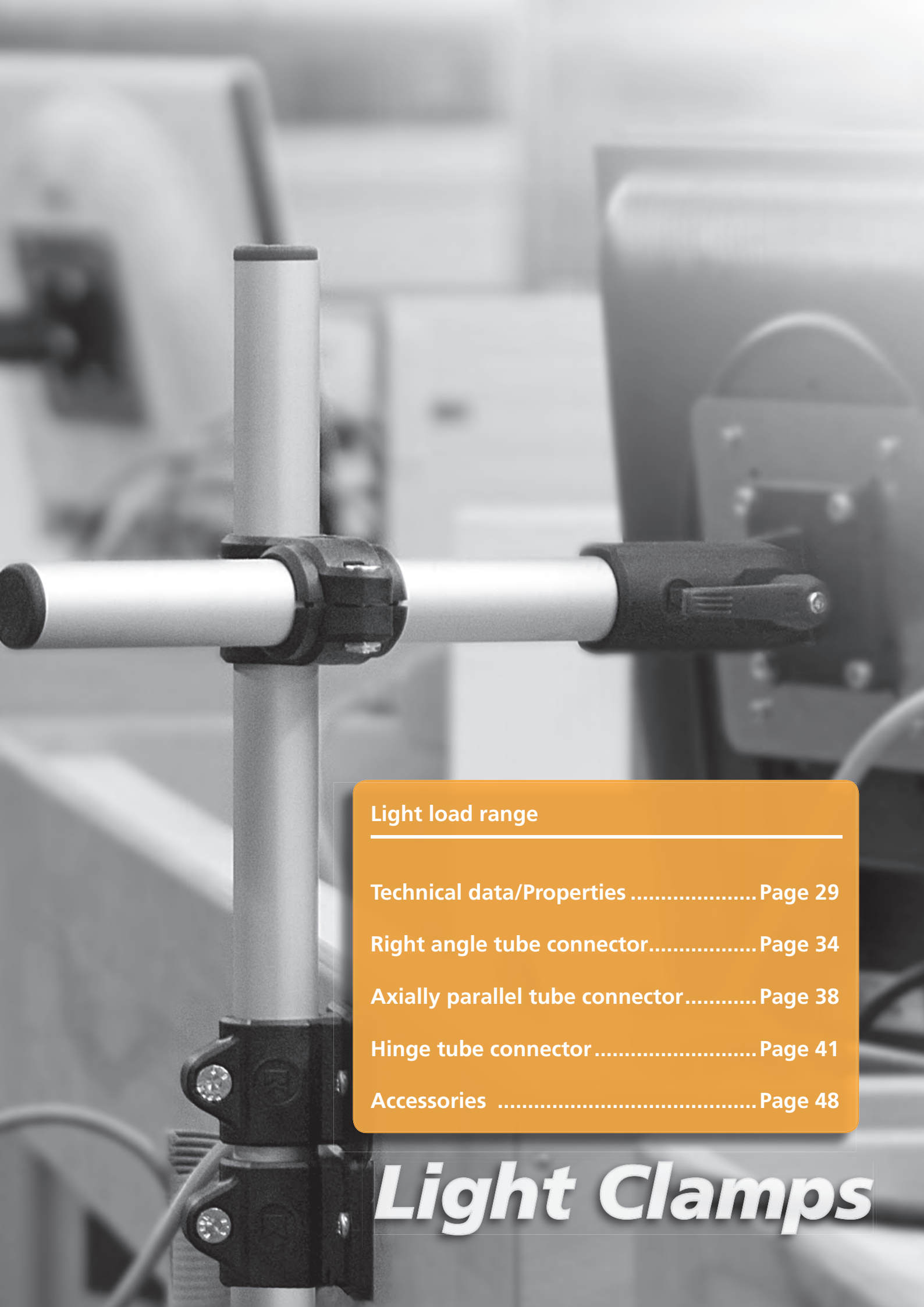


**Features:**

- ✓ Easy
- ✓ Good value
- ✓ Variable



...the constructive plastic element connecting technology



**Light load range**

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Technical data/Properties ..... Page 29

Right angle tube connector..... Page 34

Axially parallel tube connector..... Page 38

Hinge tube connector ..... Page 41

Accessories ..... Page 48

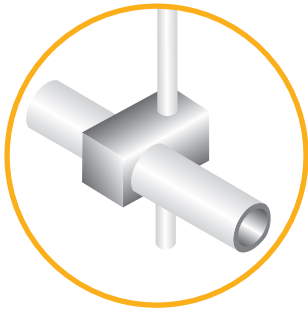
# ***Light Clamps***



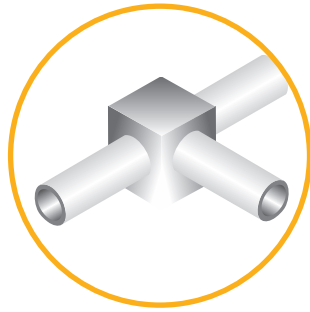


## ...the constructive plastic element connecting technology

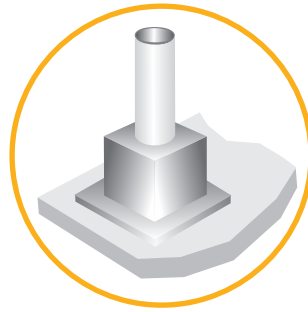
### Right angle tube connector



Cross clamps

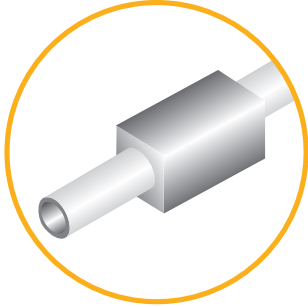


Angle clamps

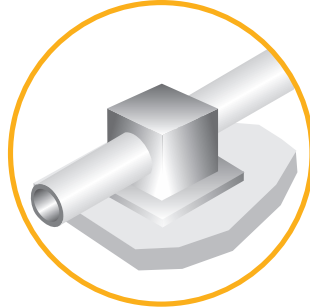


Base clamps

### Axially parallel tube connector

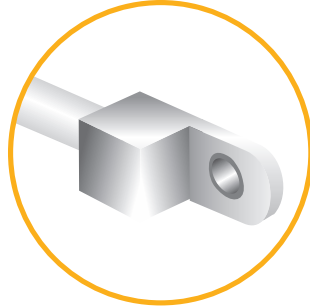


Sleeve clamps

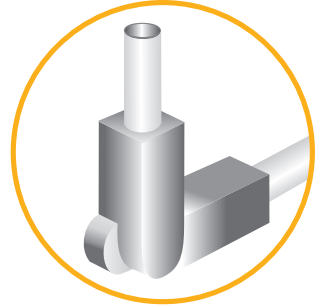


Flange clamps

### Hinge tube connector



Strap clamps



Hinge clamps

#### Features:

- Only one element per type (Ø18 / Ø30 / □ 30)
- Elements made of reinforced polyamide
- Closed elements or half cups
- Tube clamping of different diameters or sections due to a special bush system
- Every bush form is worked with the needed tube diameter

- Anti turning device for the bush former due to a lokation pin in the bush
- Attractive design
- Zinc plated screws
- Compatibility to the BLOCAN® profile system

#### Options:

- Equipped with stainless steel screws for usage in the food industry and the wet areas in the beverage industry

**Table of contents - RK LightClamps**

<p><b>Right angle tube connector</b> (Single-piece and multi-piece elements)</p> 	<ul style="list-style-type: none"> <li>■ Cross clamps ..... p. 34</li> <li>■ Angle clamps ..... p. 36</li> <li>■ Base clamps ..... p. 37</li> </ul>
<p><b>Axially parallel tube connector</b> (Single-piece and multi-piece elements)</p> 	<ul style="list-style-type: none"> <li>■ Sleeve clamps ..... p. 38</li> <li>■ Flange clamps ..... p. 39</li> </ul>
<p><b>Hinge tube connector</b> (Single-piece and multi-piece elements)</p> 	<ul style="list-style-type: none"> <li>■ Strap clamps ..... p. 41</li> <li>■ Hinge clamps ..... p. 43</li> </ul>
<p><b>Properties</b></p>	<ul style="list-style-type: none"> <li>■ Resistance to chemicals ..... p. 46</li> </ul>
<p><b>Accessories</b></p>	<ul style="list-style-type: none"> <li>■ Reducing bushes Ø ..... p. 48</li> <li>■ Reducing insert □ ..... p. 48</li> <li>■ Clamping lever ..... p. 49</li> <li>■ Screws – Zinc-plated steel ..... p. 49</li> <li>■ Screws – Stainless steel ..... p. 49</li> </ul>



Version:

■ Light Clamps



Single-piece elements

✓ For faster and more economic assembly



Multi-piece elements

✓ For add-on assembly and upgrading



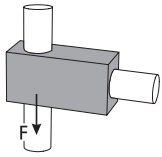
## Features:

- Resistance against corrosion and aggressive substances
- Low dead load
- Applicable e.g. in the food packaging industry
- Two basic diameters can be flexibly adapted with reducing bushes

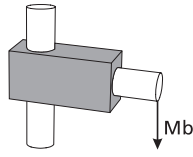
delivery  
from stock



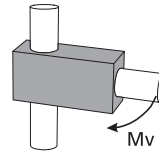
## Loads *RK LightClamps*



Adhesion force F [KN]



Bending moment Mb [Nm]



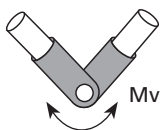
Twisting moment Mv [Nm]

Tightening torque max:

Sizes: 10 – 18: 2,5 Nm

Sizes: 20 – 30: 8,0 Nm

Sizes Type	□10			Ø12 - 18			□20			Ø20 - 30			□30			Ø30		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Cross clamps</b>																		
K-KU	0,30	130	15	0,50	111	5	0,50	164	31	1,00	184	11,50						
KV-KU													1,30	122	23	1,60	120,50	19
KVR-KU Insert													1,40	136	23	1,60	142,50	19
KVR-KU Bushes													0,60	134,50	30,50	1,80	107,50	19
<b>Angle clamps</b>																		
W-KU	0,20	91	8	0,60	83	4,50	0,60	153,50	30	1,00	177	10,50						
WV-KU													1,00	136,50	23	1,40	109,50	15,50
<b>Base clamps</b>																		
FS-KU	0,20	36	11	0,40	40	2,50	0,60	158	31	1,10	181,50	13						
FV-KU													1,00	77	23	1,60	72	19,50
<b>Sleeve clamps</b>																		
M-KU	0,10	91	8	0,50	75,50	4	0,70	225,50	31	1,00	242,50	11,50						
<b>Flange clamps</b>																		
FK-KU	0,20	35	7,50	0,40	38,50	4	0,60	134,50	31	1,20	137,50	12,50						
FKV-KU													1,30	144,50	23	1,60	142,50	20,50
V-KU													0,90	-	23	1,20	-	15,50
<b>Strap clamps</b>																		
LP-KU	0,30	16	7,50	0,40	18,50	4,50	0,70	38,50	27	0,90	41,50	11,50						
LPZ-KU	0,40	16	7,50	0,50	18,50	2,50	0,70	43	28	0,90	45,50	12						
LW-KU	0,20	27,50	7,50	0,70	27,50	4	0,80	40,50	31	1,10	41	14						
LF-KU																		



Twisting moment Mv [Nm]

Sizes Type	□10		Ø12 - 18		□20		Ø20 - 30		□30		Ø30	
		Mv		Mv		Mv		Mv		Mv		Mv
<b>Hinge clamps</b>												
GW-KU ohne Verzahnung		1,50		1,70		4,00		4,20				
GWZ-KU mit Verzahnung												
GP-KU ohne Verzahnung		1,10		1,50		2,50		2,10				
GPZ-KU mit Verzahnung												
GF-KU ohne Verzahnung												
GFZ-KU mit Verzahnung		27		23		68		68				

### Reducing bushes / -insert size

You can choose the size of the insert you want to introduce into the clamping element between 10 and 25 mm.

The basic size of the round tubular connections is either 18 or 30mm. For any other required diameter the corresponding reducing bush can be delivered.

Should you work with square tubes, which offer a choice between 10 and 20 mm, reducing bushes are a necessity.

### Reducing bushes / -insert form

Not only can you choose the diameter of the reducing bush you require, you also have the possibility to choose its form. All you need to do is to choose the tube section you would like to work with.

**The following forms are at your disposal:**

For round tubes  $\emptyset$   
For square tubes  $\square$

Detailed information for the reducing bushes and inserts can be found in the chapter accessories page 48

### Order information and accessories

The clamping elements are automatically provided with a zinc-plated fixation screw. Also, stainless steel screws and plastic levers can be optionally ordered for the fixation.

The reducing bushes and -inserts are not included in the standard delivery. They are separately listed in the accessory chapter.

#### Delivery set:

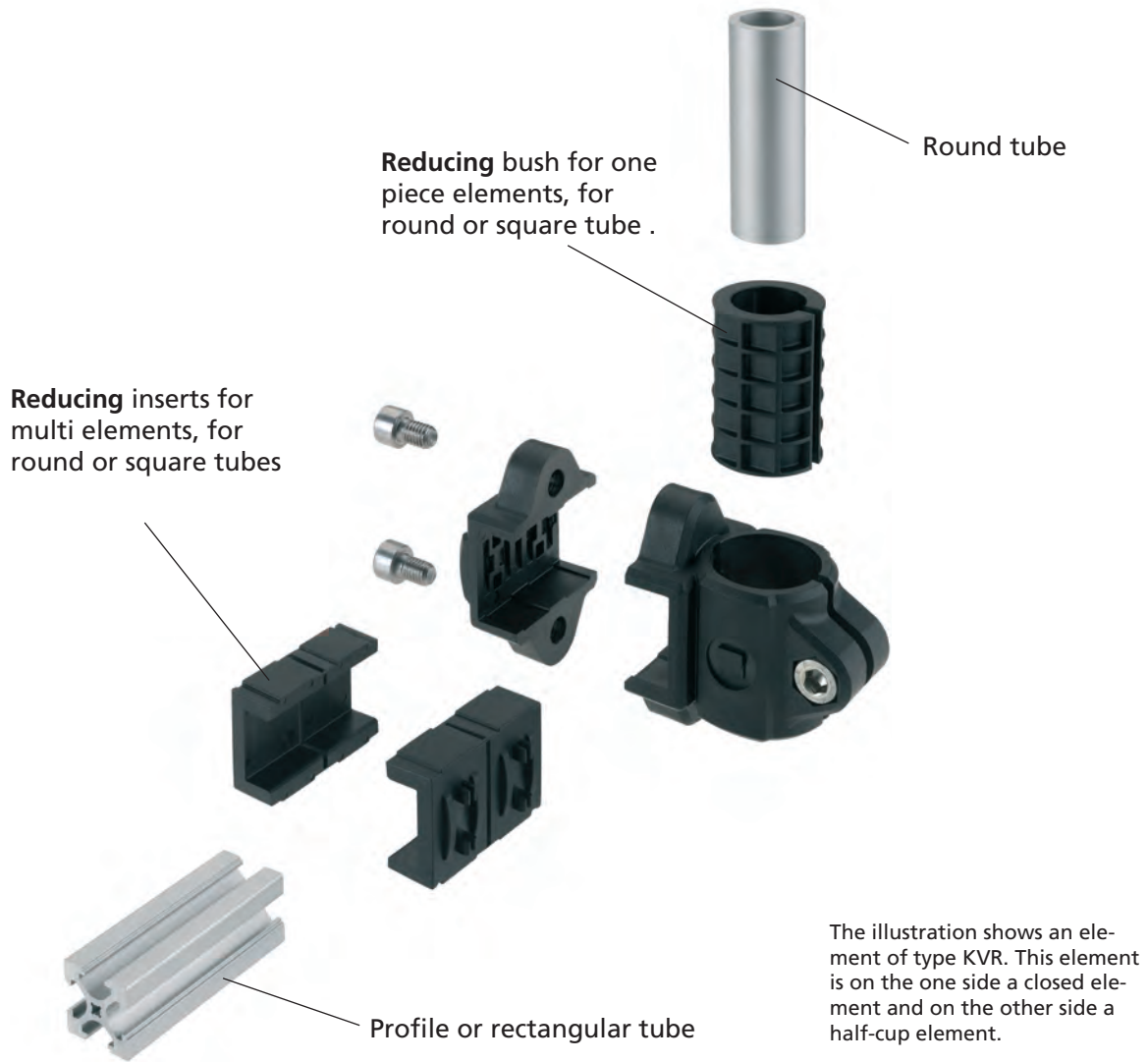
The code number contains one packaging unit.  
Type 12-18 10 pieces in PET bags  
Type 20-30 5 pieces in PET bags

### Applications:

- ✓ Areas of the laboratory technology
- ✓ Food industry
- ✓ Wet area in the beverage industry
- ✓ Photo technical applications



**The variable reduction sleeve concept :**



# RK LightClamps – Comprehensive view

## Right angle tube connector



## Axially parallel tube connector



## Hinge tube connector







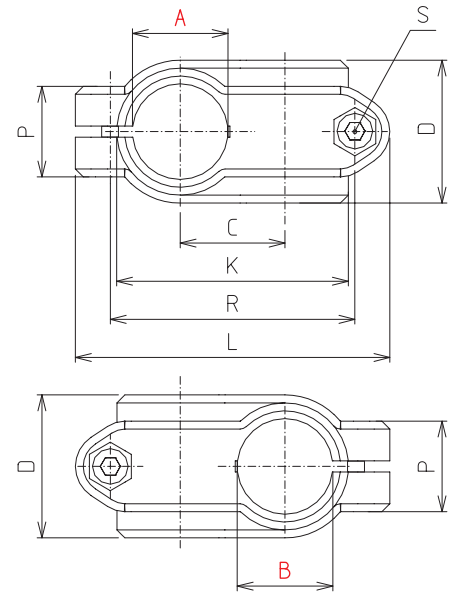
# RK LightClamps – Cross clamps

## Order information:

- Inserts and bushes for diameter/cross-section changes see accessories page 48
- For clamping levers see accessories page 49

## On request:

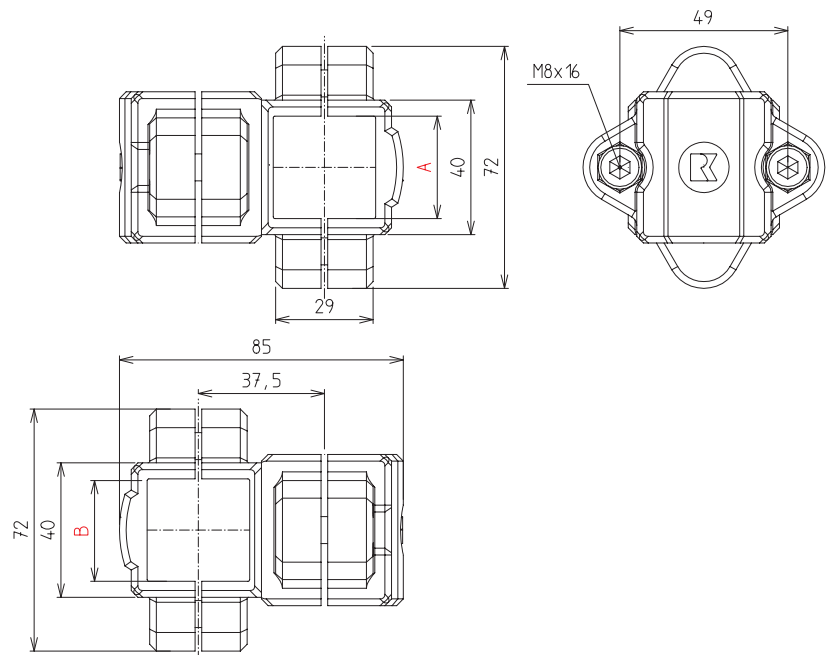
- Stainless screws



## Cross clamp K-KU

[mm]

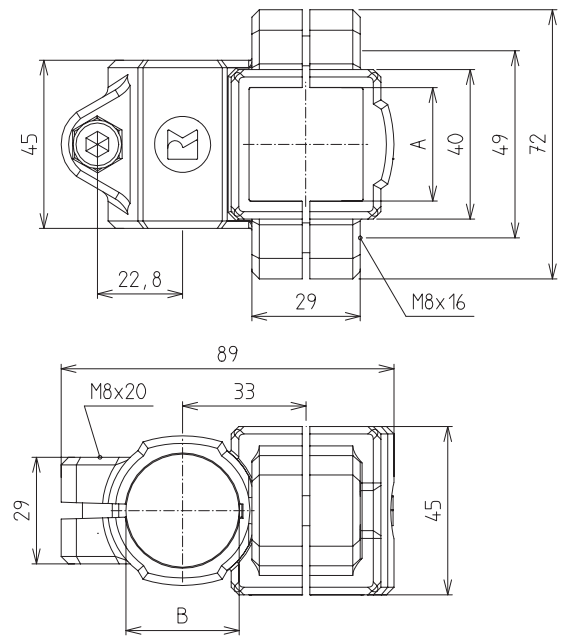
Code No.	Type	Packaging	Clamping *		C	D	K	L	P	R	S	Weight m [g]
			A	B								
K00018CCSR18R18	12-18	10 pcp.	18		20	30	48	63	21	48	M6x18	50
K00030BCSR30R30	20-30	5 pcp.	30		33	45	72	99	28,5	77	M8x25	132



## Cross clamp KV-KU

[mm]

Code No.	Type	Packaging	Clamping *		Weight m [g]
			A	B	
K00530BCSV30V30	20-30	5 Pcp.	30		171



### Cross clamp KVR-KU

[mm]

Code No.	Type	Packaging	Clamping *		Weight m [g]
			A	B	
K00430BCSR30V30	20-30	5 Pcp.		30	117

\* Reduction of the diameter or cross section of the clamping with inserts and bushes possible

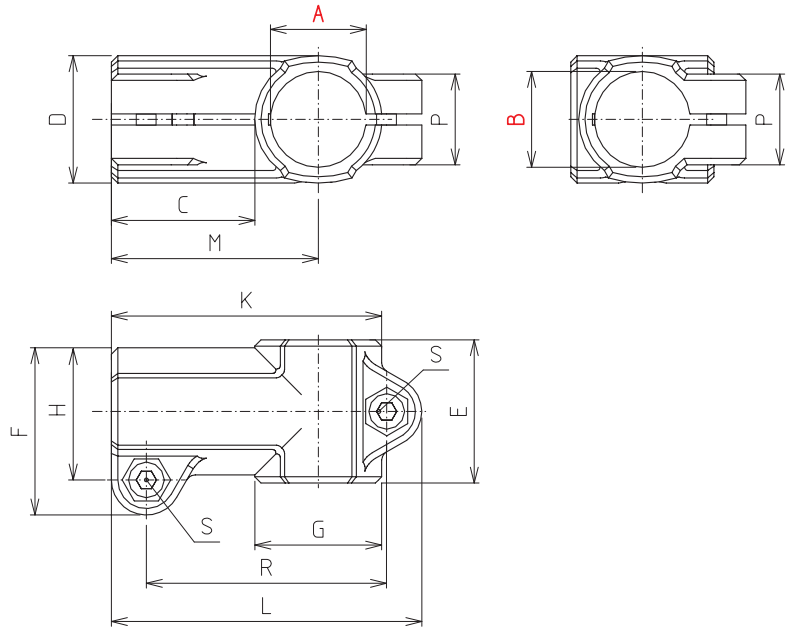
# RK LightClamps – Angle-/Base clamps

## Order information:

- Inserts and bushes for diameter/cross-section changes see accessories page 48
- For clamping levers see accessories page 49

## On request:

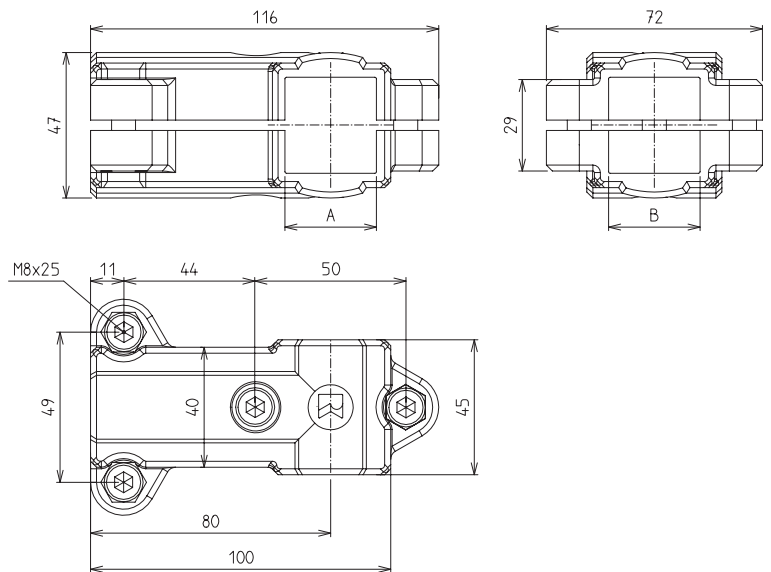
- Stainless screws



## Angle clamps W-KU

[mm]

Code No.	Type	Packaging	Clamping*		C	D	E	F	G	H	K	L	M	P	R	S	Weight m [g]
			A	B													
K10018CCSR18R18	12-18	10 Pcp.	18		30,5	25	30	34	25	26,5	55,5	64,5	43	21	49,5	M6x18	44
K10030BCSR30R30	20-30	5 Pcp.	30		45	40	45	52,5	40	41,5	85	97,5	65	28,5	75,5	M8x25	115



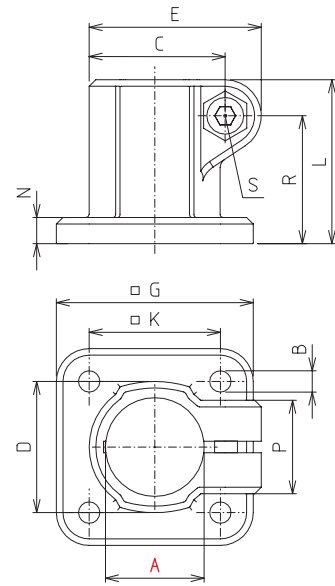
## Angle clamps WV-KU

[mm]

Code No.	Type	Packaging	Clamping* A	Weight m [g]
K10430BCSV30V30	20-30	5 Pcp.	30	194



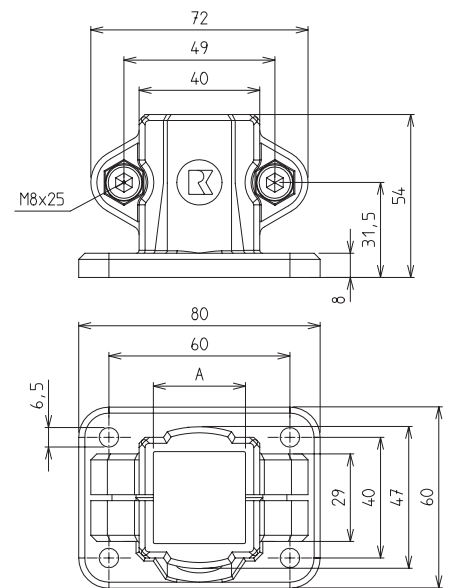
FS-KU 18/2



### Base clamps FS-KU

[mm]

Code No.	Type	Packaging	Clamping* A	B	C	D	E	G	K	L	M	N	P	R	S	Weight m [g]
K30018CCSR18	12-18	10 Pcp.	18	5,3	26,5	26	34	45	30	32	50	5	21	24,5	M6x18	30
K30118BCSR18	18/2	10 Pcp.	18	5,5	25,5	26	32,6	30	38	32	80	5	21	18,5	M6x18	30
K30030BCSR30	20-30	5 Pcp.	30	6,5	41,5	42	52,5	60	40	50	80	8	28,5	39	M8x25	75



### Base clamps FV-KU

[mm]

Code No.	Type	Packaging	Clamping* A	Weight m [g]
K30530BCSV30	20-30	5 Pcp.	30	121

\* Reduction of the diameter or cross section of the clamping with inserts and bushes possible

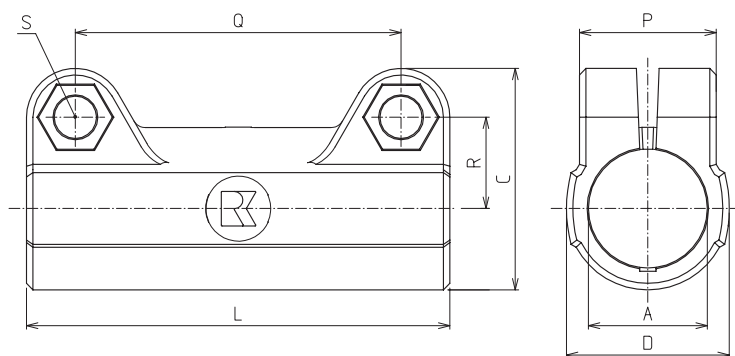
# RK LightClamps – Sleeve-/Flange clamps

## Order information:

- Inserts and bushes for diameter/cross-section changes see accessories page 48
- For clamping levers see accessories page 49

## On request:

- Stainless screws

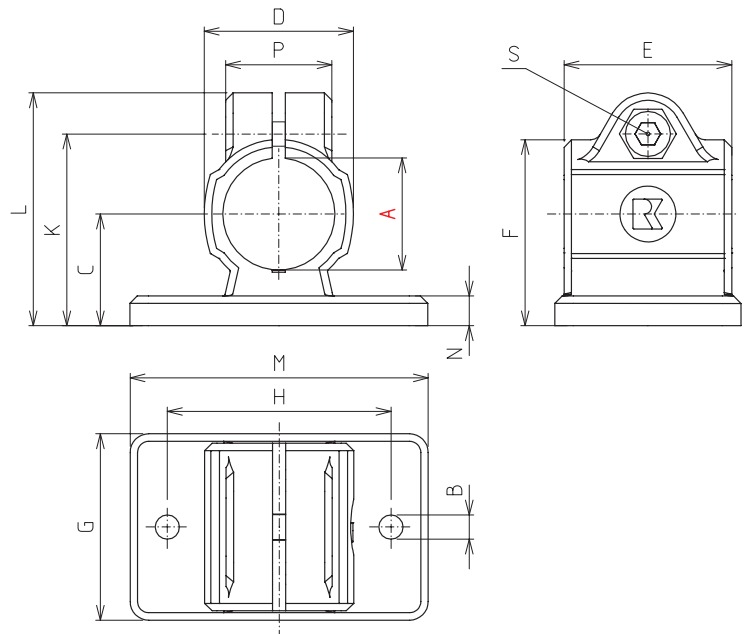


## Sleeve clamp M-KU

[mm]

Code No.	Type	Packaging	Clamping *		C	D	L	P	Q	R	S	Weight m [g]
			A	B								
K40018CCSR18R18	12-18	10 Pcp.	18		34	25	65	21	50	14	M6x18	28
K40030BCSR30R30	20-30	5 Pcp.	30		52,5	40	95	28,5	73	22,8	M8x25	87

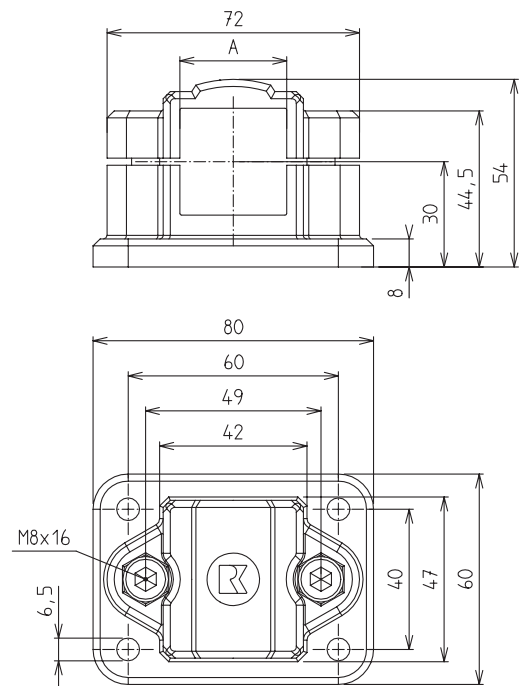




### Flange clamp FK-KU

[mm]

Code No.	Type	Packaging	Clamping * A	B	C	D	E	F	G	H	K	L	M	N	S	Weight m [g]
K20018CCSR18	12-18	10 Pcp.	18	5,3	18	25	30	30,5	35	40	32	39,5	50	5	M6x18	30
K20030BCSR30	20-30	5 Pcp.	30	6,5	30	40	45	50	50	60	52,8	62,5	80	8	M8x25	84



### Flange clamp FKV-KU

[mm]

Code No.	Type	Packaging	Clamping * A	Weight m [g]
K20530BCSV30	20-30	5 Pcp.	30	125

\* Reduction of the diameter or cross section of the clamping with inserts and bushes possible

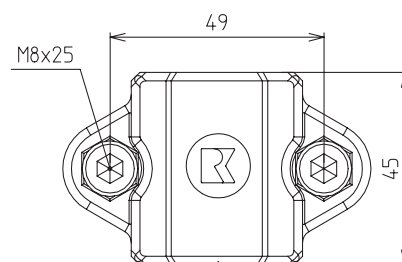
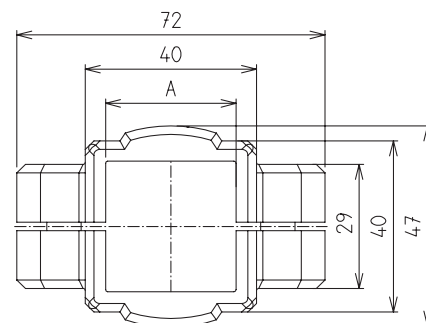
# RK LightClamps – Flange-/Strap clamps

## Order information:

- Inserts and bushes for diameter/cross-section changes see accessories page 48
- For clamping levers see accessories page 49

## On request:

- Stainless screws



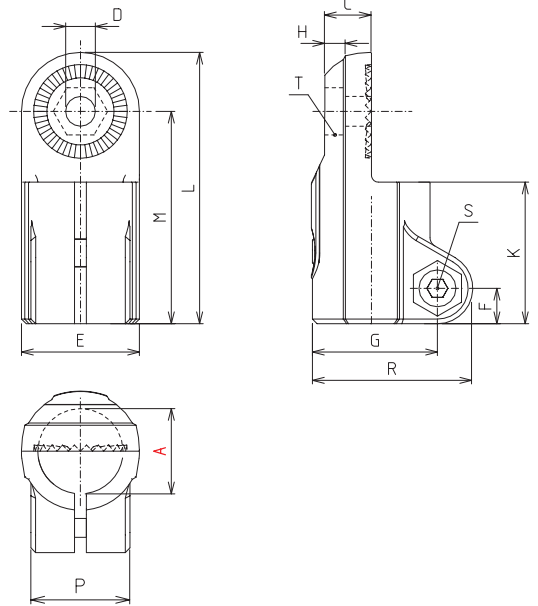
## Flange clamp V-KU

[mm]

Code No.	Type	Packaging	Clamping * A	Weight m [g]
K20830BCSV30	20-30	5 Pcp.	30	90



15° toothing, internal

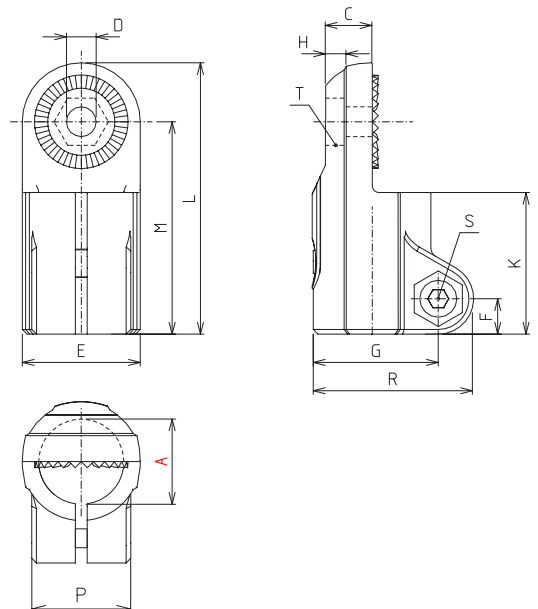

**Strap clamp LP-KU**

[mm]

Code No.	Type	Packaging	Clamping* A	C	D	E	F	G	H	K	L	M	P	R	S	T	Weight m [g]
K70118CCSR18	12-18	10 Pcp.	18	9,9	6,1	25	7,5	26,5	5,9	30	57,5	45	21	34	M6x18	M6-DIN985	28
K70130BCSR30	20-30	5 Pcp.	30	16,5	8,1	40	11	41,5	9,9	45	88	68	28,5	52,5	M8x25	M8-DIN985	86



15° toothing, external


**Strap clamp LPZ-KU**

[mm]

Code No.	Type	Packaging	Clamping* A	C	D	E	F	G	H	K	L	M	P	R	S	T	Weight m [g]
K71018CCSR18	12-18	10 Pcp.	18	9,9	6,1	25	7,5	26,5	5,9	30	57,5	45	21	34	M6x18	M6-DIN985	28
K71030BCSR30	20-30	5 Pcp.	30	16,5	8,1	40	11	41,5	9,9	45	88	68	28,5	52,5	M8x25	M8-DIN985	87

\* Reduction of the diameter or cross section of the clamping with inserts and bushes possible

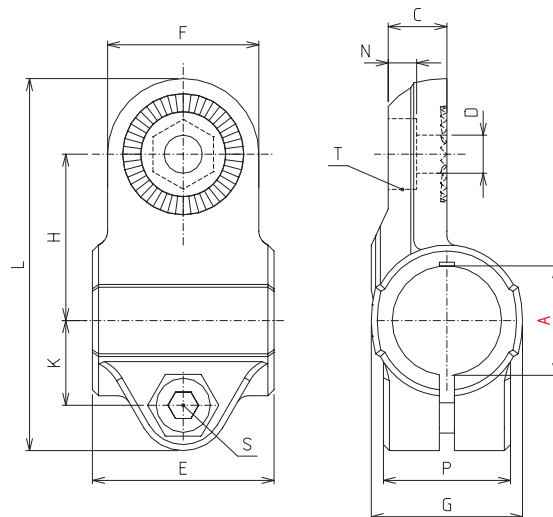
# RK LightClamps – Strap-/Hinge clamps

## Order information:

- Inserts and bushes for diameter/cross-section changes see accessories page 48
- For clamping levers see accessories page 49

## On request:

- Stainless screws



15° toothing, internal



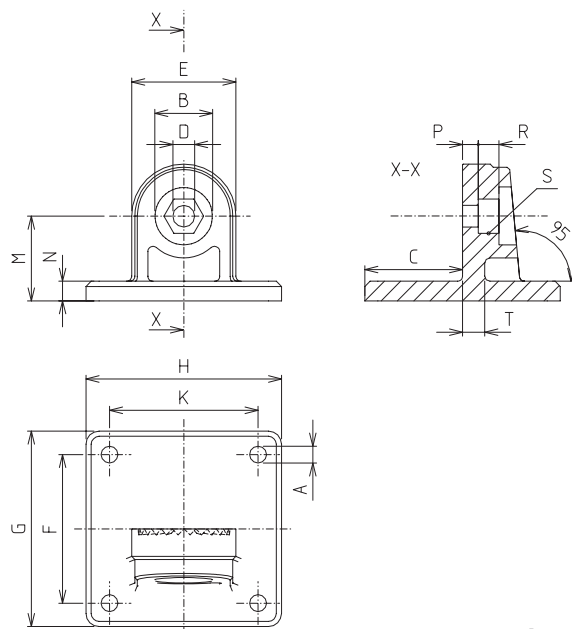
## Strap clamp LW-KU

[mm]

Code No.	Type	Packaging	Clamping* A	C	D	E	F	G	H	K	L	M	P	S	T	Weight m [g]
K70018CCSR18	12-18	10 Pcp.	18	9,7	6,1	30	25	25	27,5	14	61,5	5,7	21	M6x18	M6-DIN985	29
K70030BCSR30	20-30	5 Pcp.	30	16,5	8,1	45	40	40	43	21,5	95,5	9,9	28,5	M8x25	M8-DIN985	91



15° toothing, internal

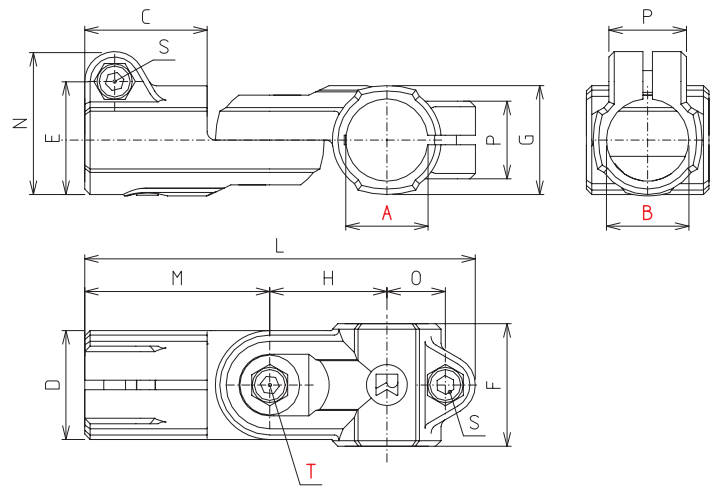


## Strap clamp LF-KU

[mm]

Code No.	Type	Packaging	A	B	C	D	E	F	G	H	K**	M	N	P	R	S	T	Weight m [g]
K70218CCS	12-18	10 Pcp.	5,3	15	25	6,1	25	40	50	35	0	20	5	4,5	5,5	M6-DIN985	5	17
K70230BCS	20-30	5 Pcp.	6,5	22	37,5	8,1	40	60	75	75	63,5	32,5	7,5	6,6	8,2	M8-DIN985	7	77

\*\* For Type 12-18, only 2 bores (centered) available.



### Hinge clamp GW-KU (without tothing) GWZ-KU (with tothing)

[mm]

Code No.	Type	Packaging	Clamping *		C	D	E	F	G	H	L	M	N	O	P	S / T	Weight m [g]
			A	B													
K80118CCSR18R18	GW 12-18	10 Pcp.	18		30	25	26,5	30	25	27,5	94	45	34	14	21	M6x18	67
K80418CCSR18R18	GWZ 12-18	10 Pcp.	18		30	25	26,5	30	25	27,5	94	45	34	14	21	M6x18	67
K80130BCSR30R30	GW 20-30	5 Pcp.	30		45	40	41,5	45	40	43	143,5	68	52,5	32,5	28,5	M8x25	177
K80430BCSR30R30	GWZ 20-30	5 Pcp.	30		45	40	41,5	45	40	43	143,5	68	52,5	32,5	28,5	M8x25	178

GW – without tothing, 180° infinitely  
GWZ – with tothing, rotation of 180°, 15° intervals



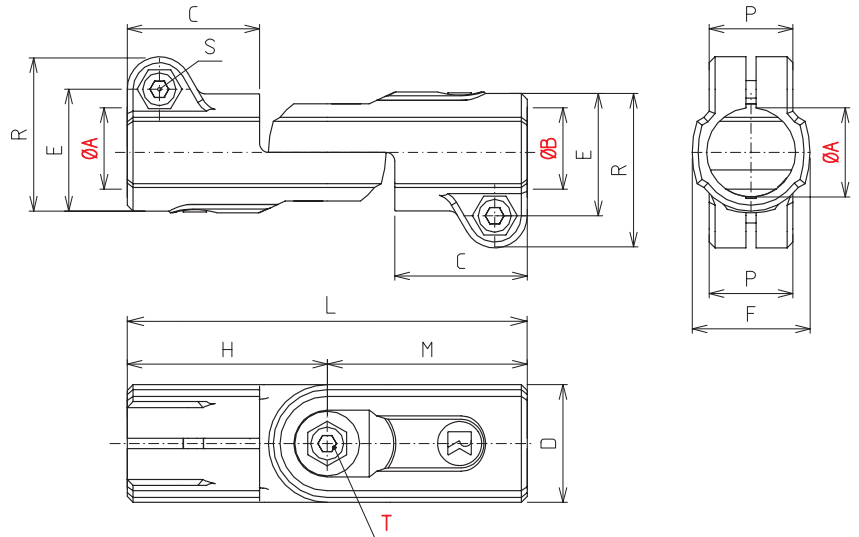
# RK LightClamps – Hinge clamp

## Order information:

- Inserts and bushes for diameter/cross-section changes see accessories page 49
- For clamping levers see accessories page w

## On request:

- Stainless screws

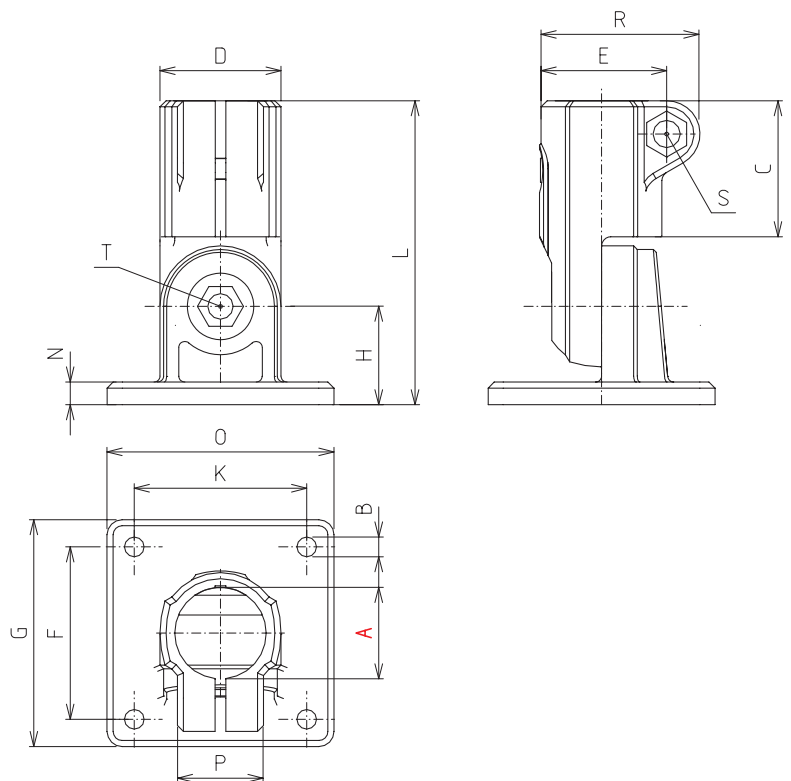


## Hinge clamp GP-KU (without tothing) GPZ-KU (with tothing)

[mm]

Code No.	Type	Packaging	Clamping *		C	D	E	F	H	L	M	P	R	S / T	Weight m [g]
			A	B											
K80018CCSR18R18	GP 12-18	10 Pcp.	18		30	25	26,5	30	45	90	45	21	34	M6x18	66
K80518CCSR18R18	GPZ 12-18	10 Pcp.	18		30	25	26,5	30	45	90	45	21	34	M6x18	66
K80030BCSR30R30	GP 20-30	5 Pcp.	30		45	40	41,5	40	68	136	68	28,5	52,5	M8x25	194
K80530BCSR30R30	GPZ 20-30	5 Pcp.	30		45	40	41,5	40	68	136	68	28,5	52,5	M8x25	194

GW – without tothing, 180° infinitely  
GWZ – with tothing, rotation of 180°, 15° intervals



### Hinge clamp GF-KU (without tothing) GFZ-KU (with tothing)

[mm]

Code No.	Type	Packaging	Clamping* A	B	C	D	E	F	G	H	K*	L	N	O	P	R	S / T	Weight m [g]
K80218CCSR18	GF 12-18	10 Pcp.	18	5,3	30	25	26,5	40	50	20	0	65	5	35	21	34	M6x18	55
K80718CCSR18	GFZ 12-18	10 Pcp.	18	5,3	30	25	26,5	40	50	20	0	65	5	35	21	34	M6x18	55
K80230BCSR30	GF 20-30	5 Pcp.	30	6,5	45	40	41,5	60	75	32,5	60	100,5	7,5	75	28,5	52,5	M8x25	184
K80730BCSR30	GFZ 20-30	5 Pcp.	30	6,5	45	40	41,5	60	75	32,5	60	100,5	7,5	75	28,5	52,5	M8x25	185

GW – without tothing, 180° infinitely  
GWZ – with tothing, rotation of 180°, 15° intervals

\* Reduction of the diameter or cross section of the clamping with inserts and bushes possible

Medium	resistant	conditionally resistant	not resistant
Acetic acid		●	
Aqua regia			○
Benzene + Fuel	●		
Benzole	●		
Brake fluid	●		
Butane	●		
Butanol	●		
Butyl acetate	●		
Carbon Tetrachloride	●		
Caustic soda	●		
Chloroflouorocarbon	●		
Chloroform		●	
Cresol		●	
Dekalin	●		
Dibutyl phthalate	●		
Diesel	●		
Dimethylformamide		●	
Diocyl phthalate	●		
Dioxan	●		
Engine oils	●		
Ethanol		●	
Fats + Waxes	●		
Fatty acids	●		
Gear oil	●		
Glycol		●	
Glystantin	●		
Glycerine	●		
Heating oil	●		
Heptane, Hexane	●		
Hydraulic oil	●		
Hydrochloric acid			○
Isopropanol	●		
Isooctane	●		
Methanol		●	
Methylene chloride			○
Mineral oils		●	
Naphthalene	●	●	
Ozone			○
Phenol		●	
Phosphoric acid		●	

Medium	resistant	conditionally resistant	not resistant
Potassium hypochloride			○
Sulphuric acid			○
Silicone oil	●		
Styrolene	●		
Tetrahydrofurane	●		
Toluol	●		
Trichlorethylene		◐	
Water	●		
Xylene		◐	

This table is valid for all the clamping elements of the RK Light-Clamps programme.  
 The indications in the table are provided without guarantee, being the materials behaviour under real application conditions affected by different factors i.e. temperature, substance concentration, short-term or permanent presence of chemicals.

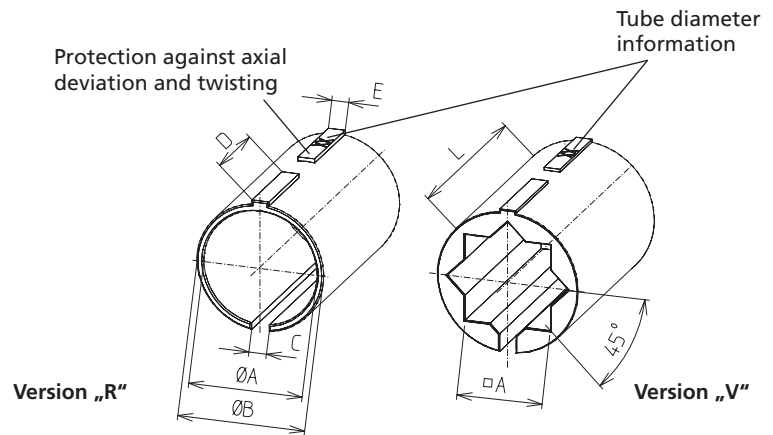
Material	Reinforced polyamide
Working temperature	always
0°C bis 80°C	
-30°C bis 120°C	temporary



# RK LightClamps – Accessories

## Order information:

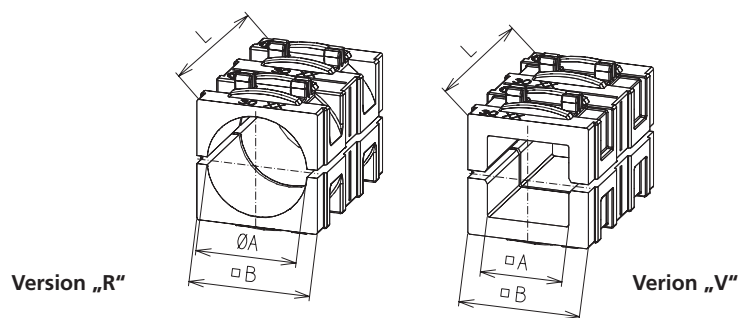
- The code number contains one packaging unit



## Reducing bushes for single-piece elements

[mm]

Code No.	Type	Version	Packaging	A + 0,1	B	C	D	E	L
96200CC	12-18	R12	10 Pcp.	12,25	18	2,5	11,9	2,4	30
96209CC	12-18	R13	10 Pcp.	13,25	18	2,5	11,9	2,4	30
96201CC	12-18	R14	10 Pcp.	14,25	18	2,5	11,9	2,4	30
96202CC	12-18	R15	10 Pcp.	15,25	18	2,5	11,9	2,4	30
96203CC	12-18	R16	10 Pcp.	16,25	18	2,5	11,9	2,4	30
96205CC	12-18	V10	10 Pcp.	10,25	18	2,5	11,9	2,4	30
96204BC	20-30	R12	5 Pcp.	20,25	30	3,5	18,9	3,4	45
96206BC	20-30	R12	5 Pcp.	25,25	30	3,5	18,9	3,4	45
96208BC	20-30	V20	5 Pcp.	20,25	30	3,5	18,9	3,4	45



## Reducing inserts for multi-piece elements

[mm]

Code No.	Type	Version	Packaging	A	B	L
963000BC	20-30	R20	5 Pcp.	20,25	30,3	45
963002BC	20-30	R25	5 Pcp.	25,25	30,3	45
963004BC	20-30	R30	5 Pcp.	30,25	30,3	45
963001BC	20-30	V20	5 Pcp.	20,50	30,3	45
963003BC	20-30	V25	5 Pcp.	25,50	30,3	45

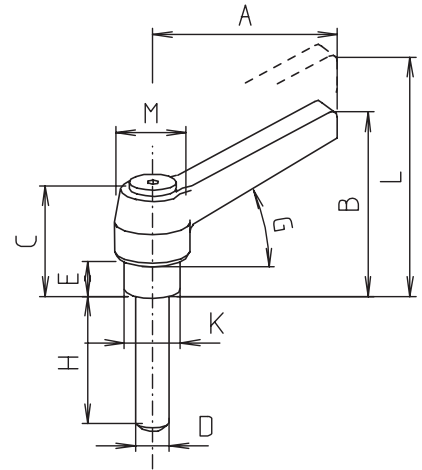


## Clamping lever



- The clamping lever enables the re-adjustment of the clamping elements. This can be done by easy exchange of the cylinder screw.
- By lifting the grip, the free movement of the serration toothing enables the clamping lever to swing into the desired position. The grip moves into its original position when released.

**Material:** Grip made of polyamide, black, screws made of zinc-plated or stainless steel



## Stainless steel (single-piece elements)

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M
93024	12-18	40	35,5	30	M6	10	20°	18	10	39,5	13
902381	20-30	65	48,5	36,5	M6	14		25	13	52,5	18



## Screws – Steel, zinc-plated

[mm]

Code No.	Type	Size	Description	Packaging
4006160	12-18	M6x18 / DIN 7984	Socket head cap screw	100 Pcp. / bag
4006116		M6 / DIN 985	Hexagonal nut	
4006180	20-30	M8x16 / DIN 7984	Socket head cap screw	50 Pcp. / bag
4006185		M8x25 / DIN 7984	Socket head cap screw	
4006118		M8 / DIN 985	Hexagonal nut	

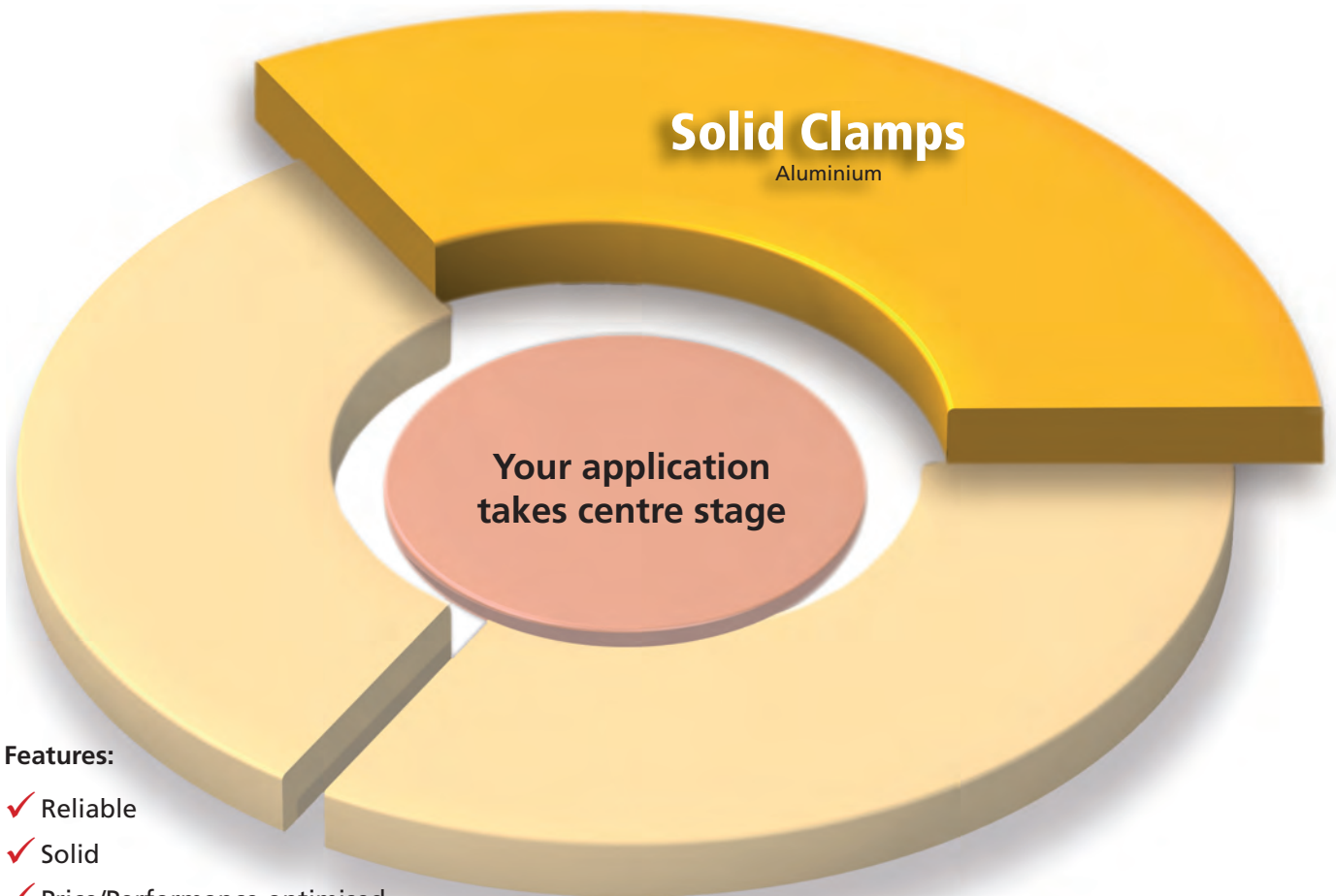
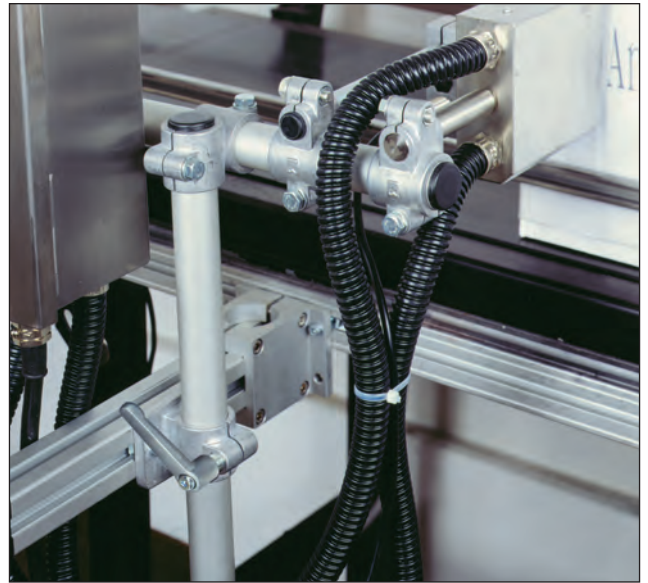
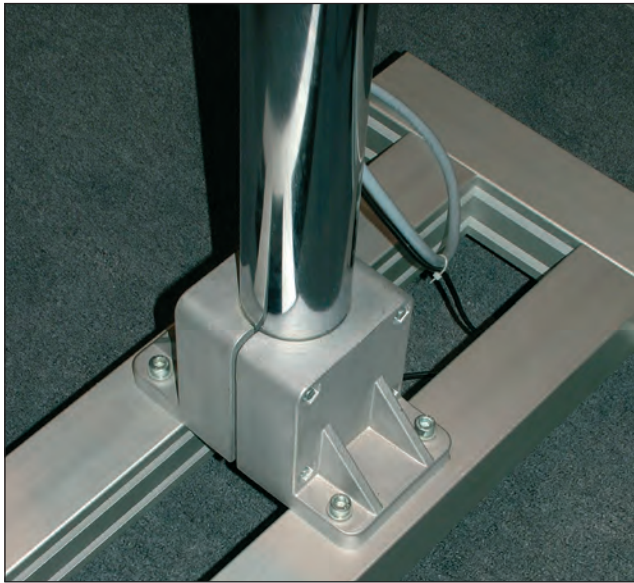


## Screws – Stainless steel

[mm]

Code No.	Type	Size	Description	Packaging
4009160	12-18	M6x18 / DIN 7984	Socket head cap screw	100 Pcp. / bag
4009116		M6 / DIN 985	Hexagonal nut	
4009180	20-30	M8x16 / DIN 7984	Socket head cap screw	50 Pcp. / bag
4009185		M8x25 / DIN 7984	Socket head cap screw	
4009118		M8 / DIN 985	Hexagonal nut	

# Solid Clamps Medium to heavy load range



## Features:

- ✓ Reliable
- ✓ Solid
- ✓ Price/Performance optimised
- ✓ Great variety



...the precise connecting technology made of aluminium



**RK ROSE+KRIEGER**

Medium to heavy load range

Right angle tube connector.....Page 54

Axially parallel tube connector.....Page 124

Hinge tube connector .....Page 160

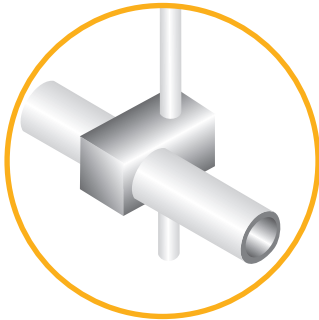
Accessories ..... Page 208

# ***Solid Clamps***

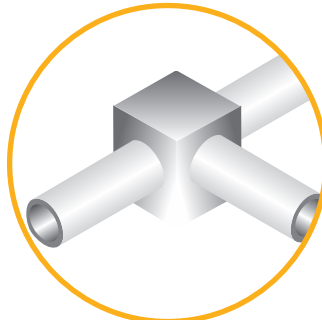


...the precise connecting technology made of aluminium

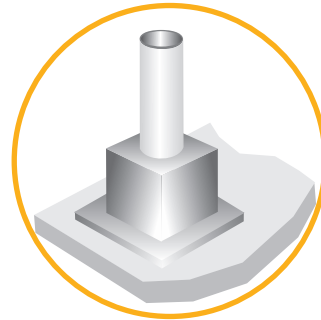
■ Right angle tube connector



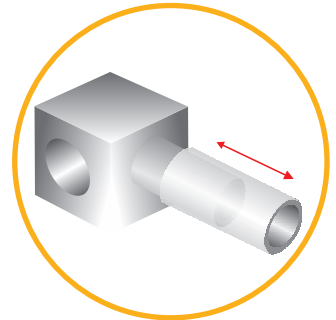
Cross clamps



Angle clamps

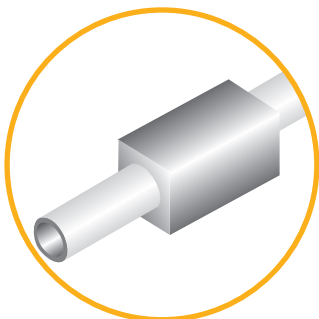


Base clamps

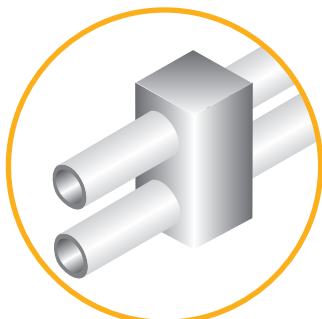


Insert clamps

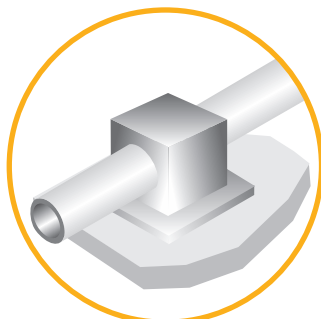
■ Axially parallel tube connector



Sleeve clamps

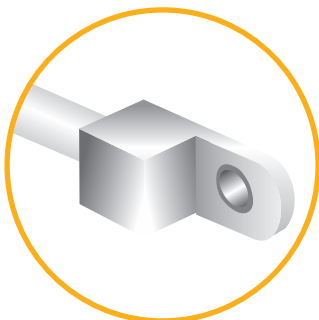


Parallel clamps

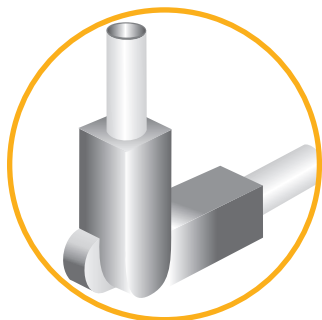


Flange clamps

■ Hinge tube connector



Strap clamps



Hinge clamps

**Solid Clamps - table of contents**

<p><b>Right angle tube connector</b> (Single-piece and multi-piece elements)</p> 	<ul style="list-style-type: none"> <li>■ Cross clamps ..... p. 54</li> <li>■ Angle Clamps ..... p. 70</li> <li>■ Base clamps ..... p. 92</li> <li>■ Insert clamps ..... p. 114</li> </ul>
<p><b>Axially parallel tube connector</b> (Single-piece and multi-piece elements)</p> 	<ul style="list-style-type: none"> <li>■ Sleeve clamps ..... p. 124</li> <li>■ Parallel clamps ..... p. 134</li> <li>■ Flange clamps ..... p. 143</li> </ul>
<p><b>Hinge tube connector</b> (Single-piece and multi-piece elements)</p> 	<ul style="list-style-type: none"> <li>■ Strap clamps ..... p. 160</li> <li>■ Hinge clamps ..... p. 172</li> </ul>
<p><b>Accessories</b></p>	<ul style="list-style-type: none"> <li>■ Accessories total ..... p. 208</li> </ul>



# Solid Clamps – Cross clamps

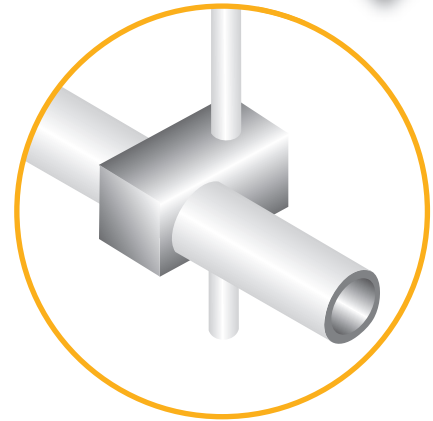


Version:

■ Cross clamps



delivery  
from stock



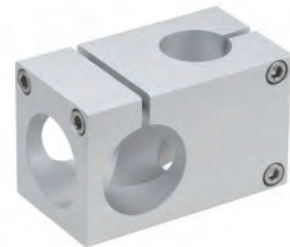
Single-piece elements

✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



Multi-piece elements

✓ Also suitable for subsequent assembly and expansion



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements

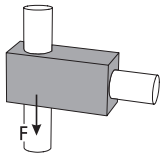


**Block form**

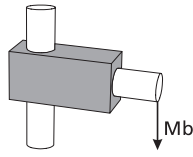
- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements



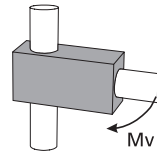
## Loads cross clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

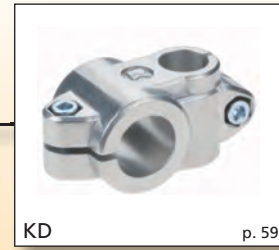
Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
K	2,2	126	24	5,8	368	84	4,8	750	43	12,7	1025	368	16	1900	497			
KD				6,9	420	92	9,0	1148	103	2	948	63	16	1900	359			
KR				7,0	396	49	5,5	866	43									
KVR						49	5,0	335	43									
KRR				6,7	713	93	5,5	1131	84									
KV				3,0	393	280	2,8	338	692									
KDVR				6,7	328	249	6,3	198	118									

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
KR										9,4	1250	253						
KVR										9,4	1250	253						
KRR				5,1	831	99	5,7	512	114	9,4	1270	254	12,5	1625	261	11	1750	594
KV				2,6	425	429	3,1	512	698	5,9	823	743	7,8	1390	1208	18	1535	2183
KVRR				2,6	831	421	5,7	512	114	13,7	1270	254	7,6	1433	1191	18	1601	2275

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>																		
K				2	738	51	4,0	960	59	6,9	1250	167						
KD				1	847	61	5,3	1075	62	3,9	1250	59						
KRR				6	1139	50	7,6	1125	121	11,5	1250	272						
KRD				6	1045	41	7,6	1125	121	7,6	1250	121						
KVR				5	854	50	8,1	1001	121	7,5	1750	272						
KV				5	754	303	8,1	804	375	7,5	960	1207						

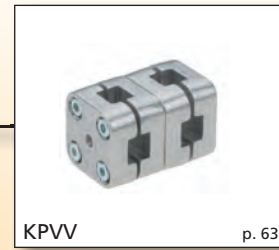
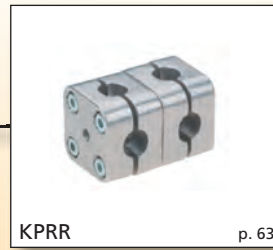
# Solid Clamps – Cross clamps

Right angle tube connector

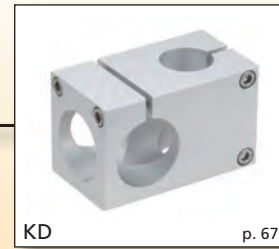
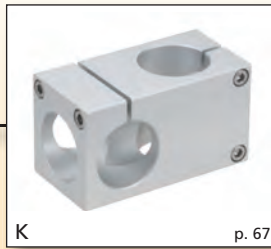


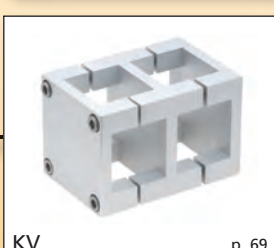
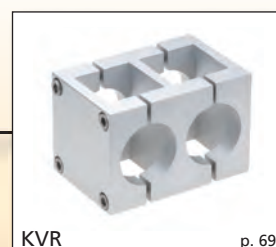
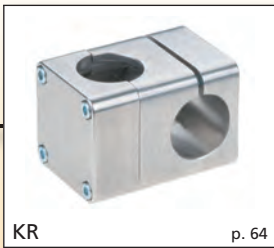
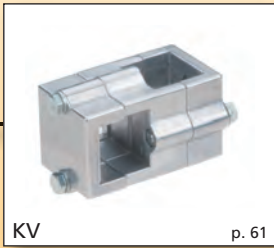
Industrial design

Block form



quad® elements





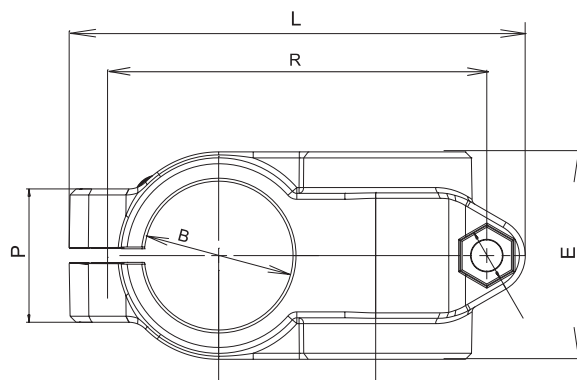
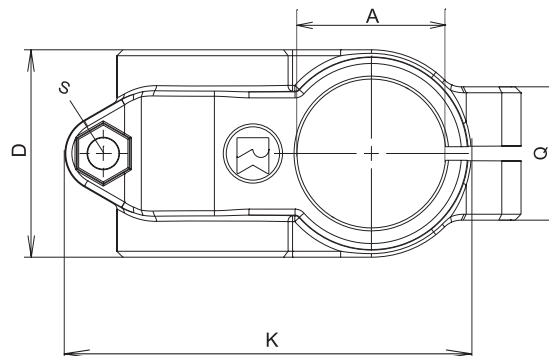
# Solid Clamps – Cross clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

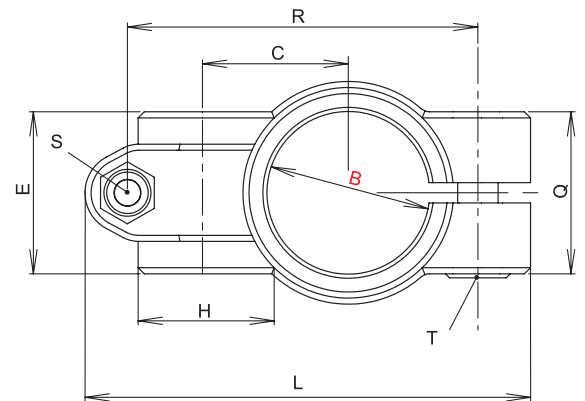
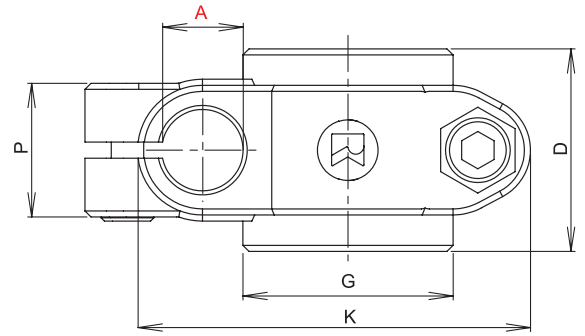
- Stainless steel screws
- Ball-polished
- Colour



## K - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	K	L	P	R	S	m [g]
101200000200	K 12	12,1	12,1	20	25,5	25,5	43,5	66	23	49	M6x20	75
101400000200	K 14	14,1	14,1									70
101500000200	K 15	15,1	15,1									67
101600000200	K 16	16,1	16,1									64
101800000200	K 18	18,1	18,1									57
102000000200	K 20	20,1	20,1									252
102500000200	K 25	25,1	25,1	33	40	40	73	99	33	78	M8x25	217
103000000200	K 30	30,1	30,1									173
103020000200	K 30(20)		20,1									195
103025000200	K 30(25)		25,1	195								
103002000200	K 30(32)	30,1	30,1	45	60	60	119	137	40	111	M10x30	665
103200000200	K 32	32,15	32,15									665
103500000200	K 35	35,17	35,17									617
104000000200	K 40	40,17	40,17									527
104200000200	K 42	42,22	42,22	53	70	70	119	154	45	128	M10x35	907
104800000200	K 48	48,22	48,22									755
105000000200	K 50	50,2	50,2									699
105040000200	K 50/40	50,22	40,17	65	80	80	142,5	190	58	158	M12x45	827
106000000200	K 60	60,27	60,25									1101
108000000200	K 80	80,35	80,35	90	120	120	200	255	82	210	M16x65	3870



**KD - Industrial design**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	P	Q	R	S	T	m [g]
102012010200	KD 20x12	12,1	20,1	27	40	33	40	23,5	60	84	21	33	65	M6x18	M8x25	175
102014010200	KD 20x14	14,1														172
102015010200	KD 20x15	15,1														170
102016010200	KD 20x16	16,1														168
102018010200	KD 20x18	18,1														163
102512010200	KD 25x12	12,1	25,1	27	40	33	40	23,5	60	84	21	33	65	M6x18	M8x25	154
102514010200	KD 25x14	14,1														154
102515010200	KD 25x15	15,1														152
102516010200	KD 25x16	16,1														150
102518010200	KD 25x18	18,1														146
103012010200	KD 30x12	12,1	30,1	27	40	33	40	23,5	60	84	21	33	65	M6x18	M8x25	135
103014010200	KD 30x14	14,1														132
103015010200	KD 30x15	15,1														130
103016010200	KD 30x16	16,1														128
103018010200	KD 30x18	18,1														124
103220010200	KD 32x20	20	32,2	36	50	40	52	32	78	110	33	40	86,5	M8x25	M10x30	283
103520010200	KD 35x20	35,2	257													
104020010200	KD 40x20	20,1	40,17						60	110	33	40	86,5			250
104030010200	KD 40(42)x30	30,1	40,17	45	65	49	65	45	60	137,5	44	44	108,5	M10x30	M10x30	659
104230010200	KD 42x30	30,1	42,2	45	65	65	66	48	102	126	43	58	102	M10x45	M10x60	640
105025010200	KD 50x25	25,1	50,22	45	65	49	65	45	60	137,5	44	44	108,5	M10x35	M10x35	576
105030010200	KD 50x30	30,1														564
106040010200	KD 60x40	60,27	40,22	60	80	70	75	65	130	180	58	53	148	M12x40	M12x45	1163
106048010200	KD 60x48	48,27	1059													
106050010200	KD 60x50	50,27	60,27								53	58				1027
106250010200	KD 62x50															1027

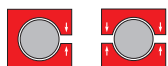
# Solid Clamps – Cross clamps

## Order instruction:

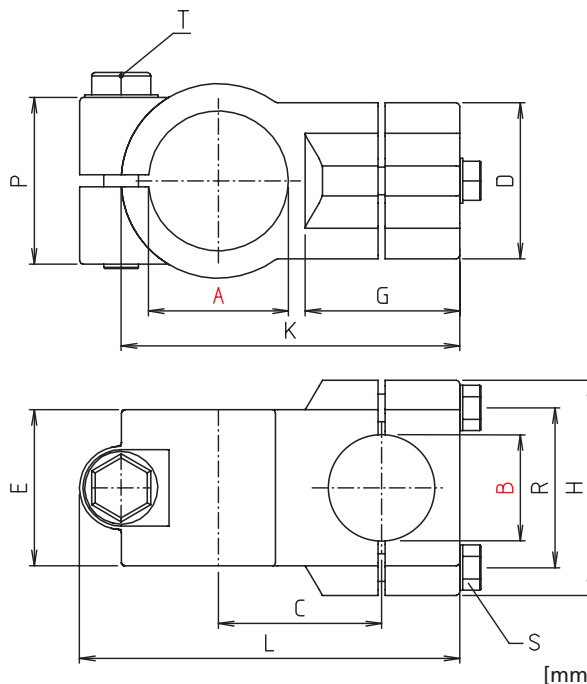
- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

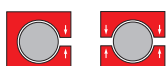
- Stainless steel screws
- Ball-polished
- Colour



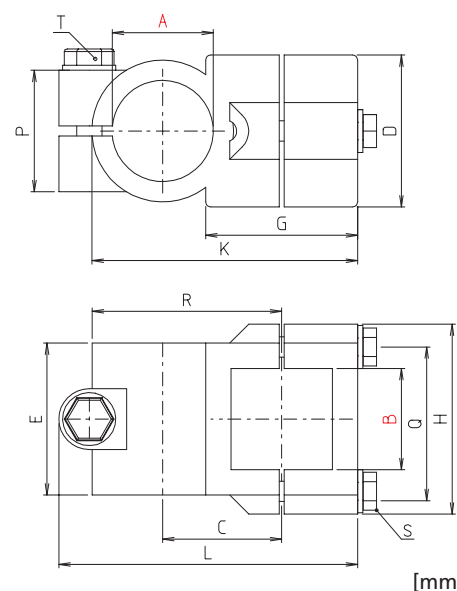
**KR - Industrial design**



Code No.	Type	A	B	C	D	E	G	H	K	L	P	Q	R	S	T	m [g]
102000020200	KR 20	20,1	20,1	33	45	45	40	62	74,5	85	33	46	55	M8x35	M8x35	338
102500020200	KR 25	25,1	25,1													287
103000020200	KR 30	30,1	30,1	47	60	60	60	75	105	117	48	57	75	M8x45	M8x45	257
103500020200	KR 35	35,2	35,2													622
104000020200	KR 40	40,2	40,2													557



**KVR - Industrial design**

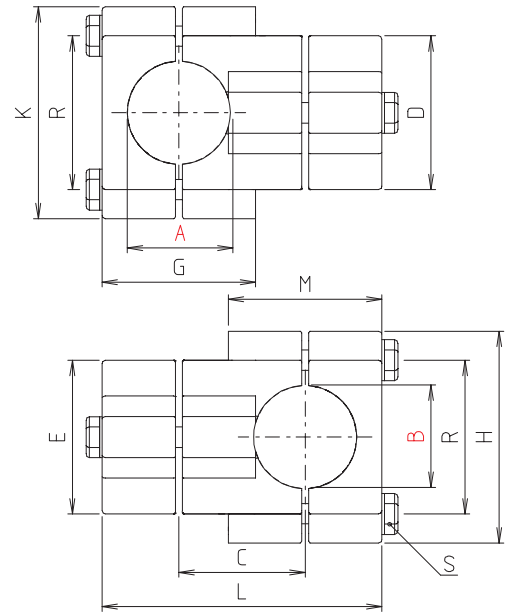


Code No.	Type	A	B	C	D	E	G	H	K	L	P	Q	R	S	T	m [g]
102000040200	KVR 20	20,1	20,2	33	45	45	40	62	74,5	85	33	46	55	M8x35	M8x35	332
102500040200	KVR 25	25,1	25,2													286
103000040200	KVR 30	30,1	30,2	47	60	60	60	75	105	117	48	57	75	M8x45	M10x50	245
103500040200	KVR 35	35,2	35,3													599
104000040200	KVR 40	40,2	40,3													525





KRR - Industrial design

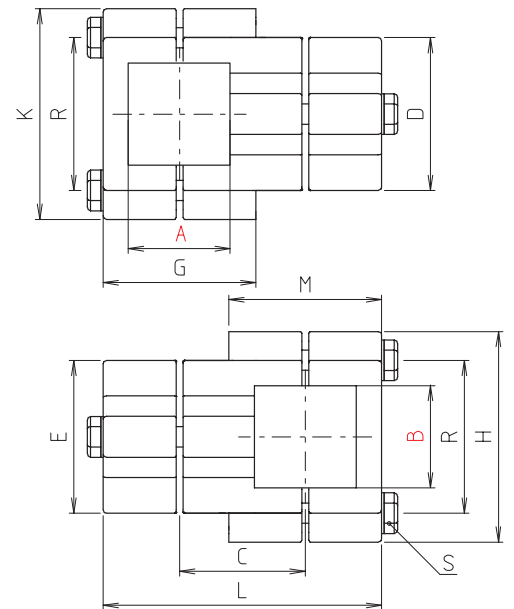


[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	R	S	m [g]
102500030200	KRR 25	25,2	25,2	38	45	45	44	62	62	83	44	46	M8x45	369
103000030200	KRR 30	30,2	30,2											352
103500030200	KRR 35	35,2	35,2	50	60	60	60	75	75	110	60	57	M8x60	668
104000030200	KRR 40	40,2	40,2											645



KV - Industrial design



[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	R	S	m [g]
102000050200	KV 20	20,3	20,3	38	45	45	44	62	62	83	44	46	M8x45	385
102500050200	KV 25	25,2	25,2											353
103000050200	KV 30	30,2	30,2	50	60	60	60	75	75	110	60	57	M8x60	321
103500050200	KV 35	35,3	35,3											637
104000050200	KV 40	40,3	40,3	584										

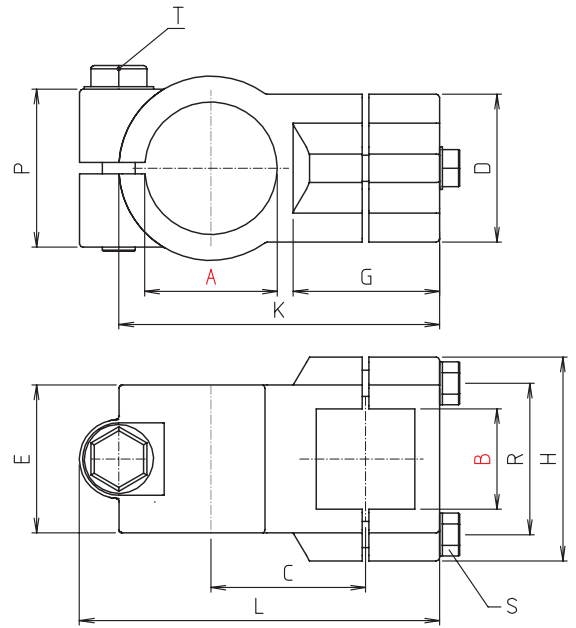
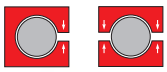
# Solid Clamps – Cross clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

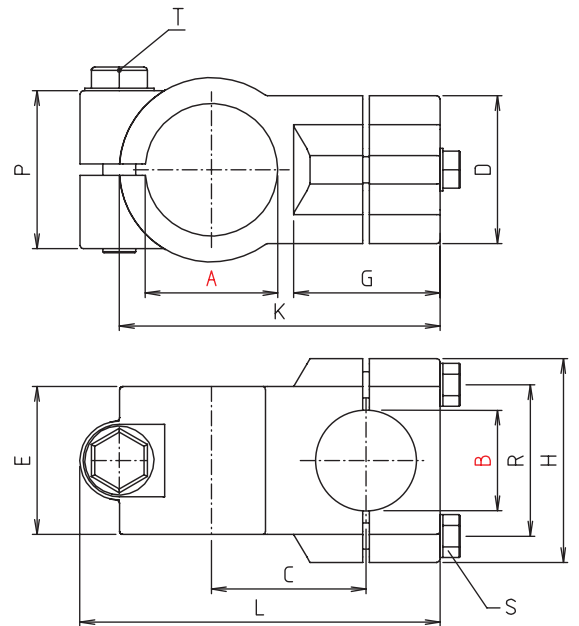
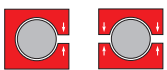
- Stainless steel screws
- Ball-polished
- Colour



## KDVR - Industrial design

[mm]

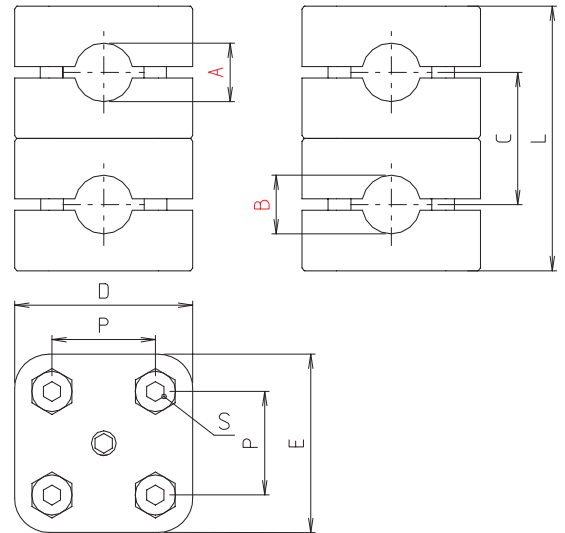
Code No.	Type	A	B	C	D	E	G	H	K	L	P	R	S	T	m [g]
104020090200	KDVR 20-40		20,2												408
104025090200	KDVR 25-40	40,3	25,2	47	45	45	45	62	98	110	48	46	M8x35	M10x50	396
104030090200	KDVR 30-40		30,2												365



## KDRR - Industrial design

[mm]

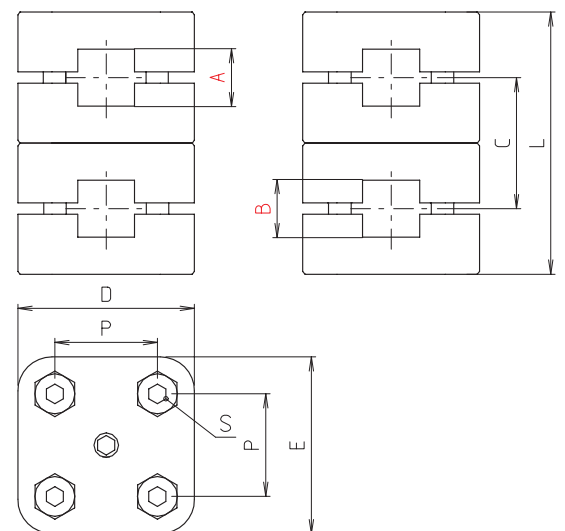
Code No.	Type	A	B	C	D	E	G	H	K	L	P	R	S	T	m [g]
102040110200	KDRR 20-40		20												452
102540110200	KDRR 25-40	40,3	25,1	47	45	45	45	62	98	110	48	46	M8x35	M10x50	442



### KPRR - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	P	S	m [g]
290800000266	KPRR 8	8	8	23	31	31	46	18	M4x18	97
291000000266	KPRR 10	10	10							93



### KPVV - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	P	S	m [g]
291000010266	KPVV 10	10	10	23	31	31	46	18	M4x18	88

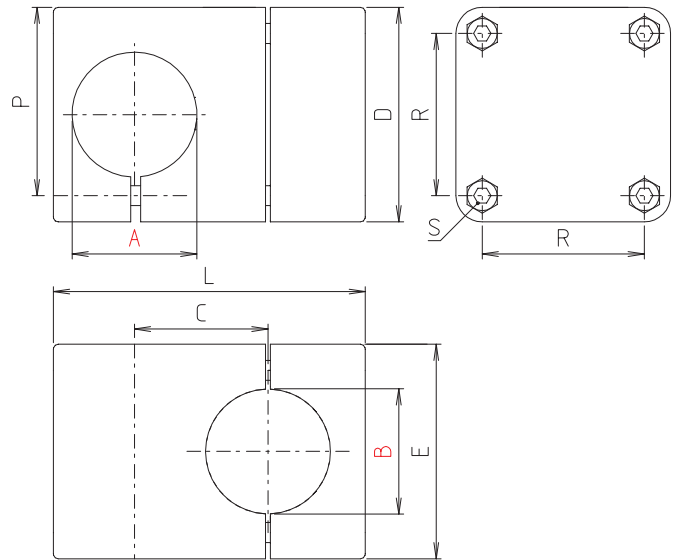
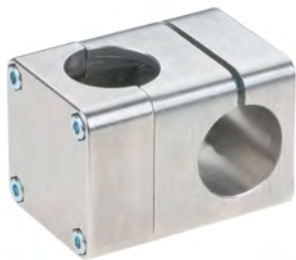
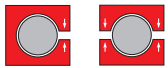
# Solid Clamps – Cross clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

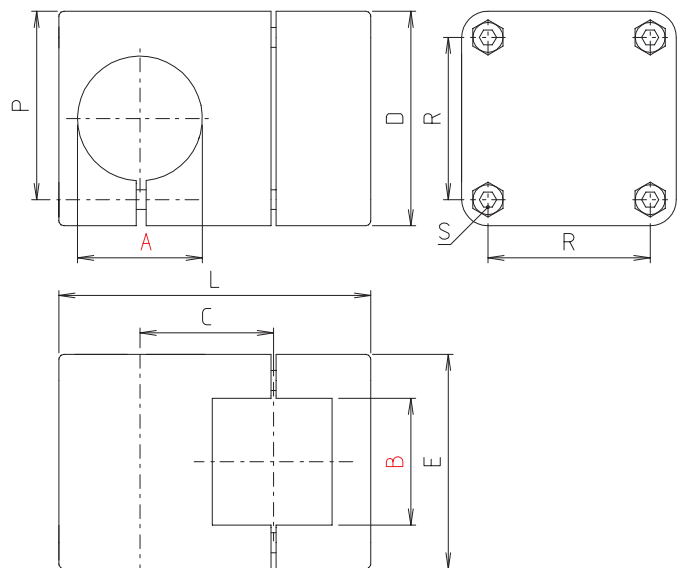
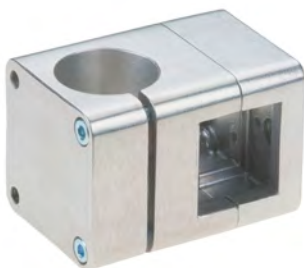
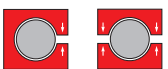
- Stainless steel screws
- Ball-polished
- Colour



## KR - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	P	R	S	m [g]
204200020266	KR 42	42,2	42,2	53	86	86	126	73	65	M8x50	1367
204500020266	KR 45	45,2	45,2								1310
204800020266	KR 48	48,2	48,2								1264
205000020266	KR 50	50,2	50,2								1213



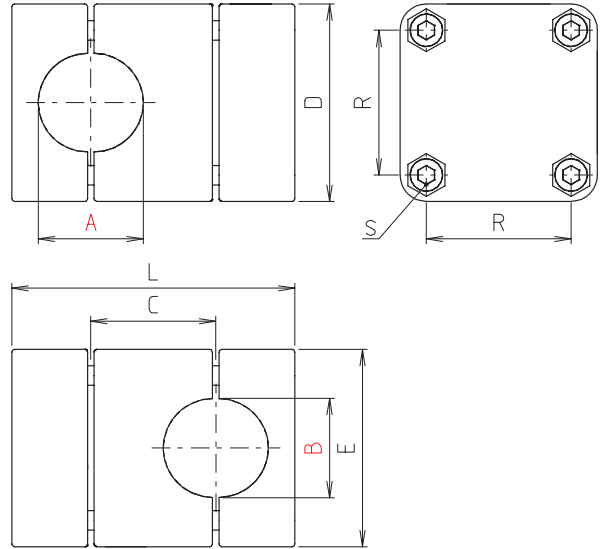
## KVR - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	P	R	S	m [g]
204850040266	KVR 48/50	48,2	50,5	53	86	86	126	73	65	M8x50	1199
205000040266	KVR 50	50,2									1182

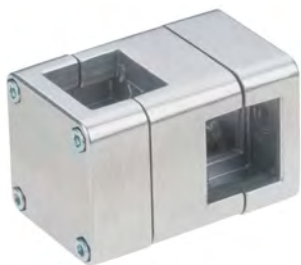


**KRR - Block form**

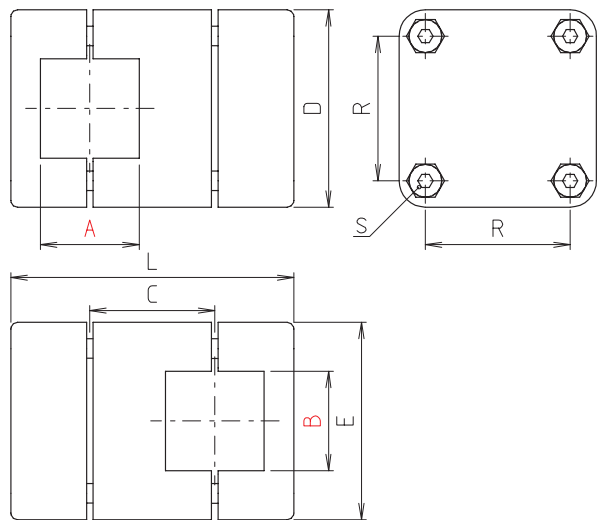


[mm]

Code No.	Type	A	B	C	D	E	L	R	S	m [g]
203000030266	KRR 30	30,2	30,2	38	60	60	86	44	M6x35	450
204000030266	KRR 40	40,3	40,3	50	70	70	112	53	M6x45	688
204200030266	KRR 42	42,3	42,3	70	86	86	149	65	M8x60	1614
204500030266	KRR 45	45,3	45,3							1579
204800030266	KRR 48	48,3	48,3							1550
205000030266	KRR 50	50,3	50,3							1520
206000030266	KRR 60	60,4	60,4	80	100	100	170			2048
208000030266	KRR 80	80,5	80,5	122	130	130	244	65	M10x110	5075



**KV - Block form**



[mm]

Code No.	Type	A	B	C	D	E	L	R	S	m [g]
203000050266	KV 30	30,2	30,2	38	60	60	86	44	M6x35	329
204000050266	KV 40	40,4	40,4	50	70	70	112	53	M6x45	661
205000050266	KV 50	50,5	50,5	70	86	86	149	65	M8x60	1427
206000050266	KV 60	60,6	60,6	80	100	100	170	78		1950
208000050266	KV 80	80,7	80,7	122	130	130	244	100	M10x110	4850

# Solid Clamps – Cross clamps

## Order instruction:

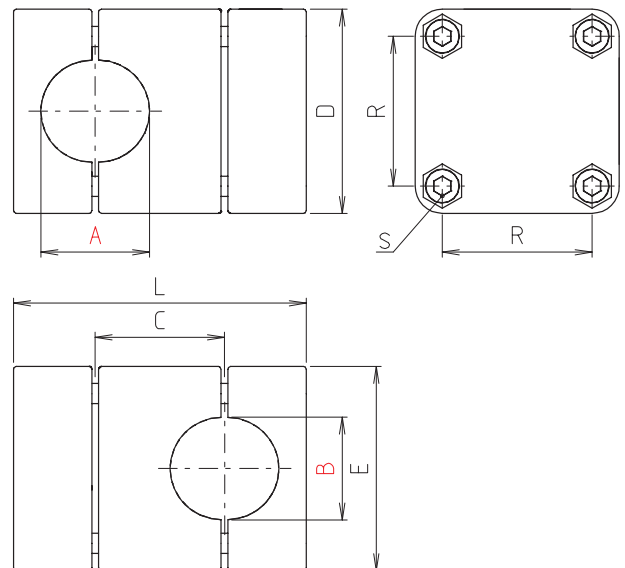
- Block form zinc plated screws
- quad® with stainless steel screws
- Clamping lever see accessories page 219

## On request block form:

- Stainless steel screws
- Ball-polished
- Colour

## On request quad®:

- Black anodized

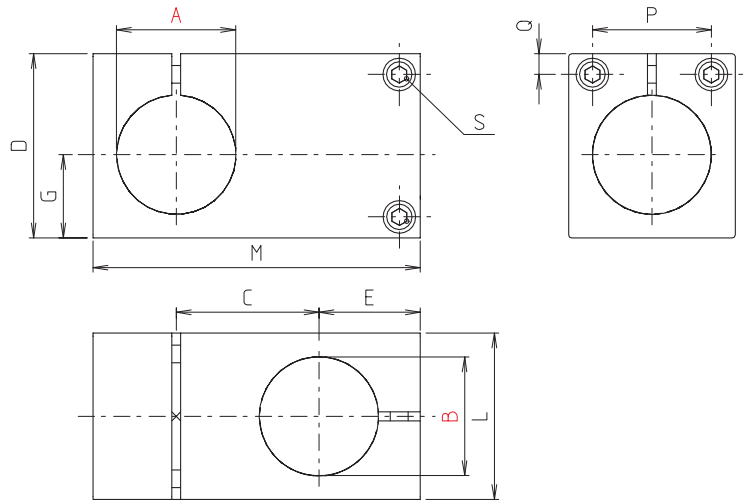


## KVRR - Block form

[mm]

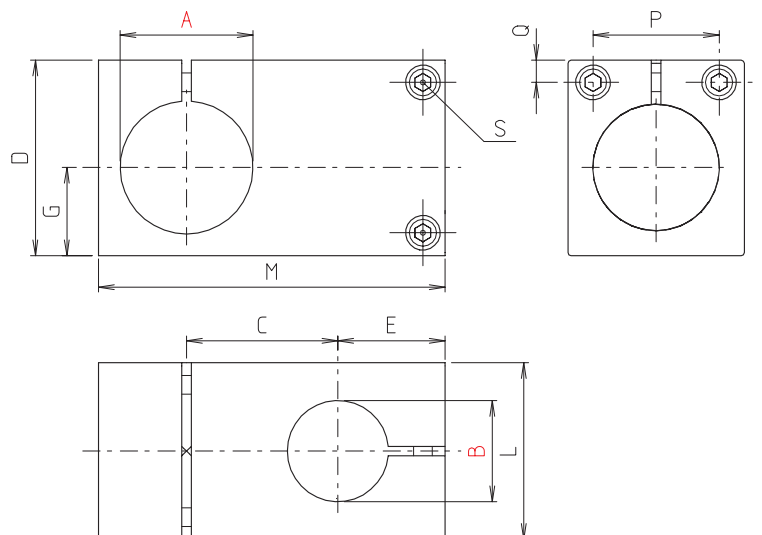
Code No.	Type	A	B	C	D	E	L	R	S	m [g]
203000080266	KVRR 30	30,2	30,2	38	60	60	86	44	M6x35	441
204000080266	KVRR 40	40,4	40,3	50	70	70	112	53	M6x45	671
205000080266	KVRR 50	50,5	50,3	70	86	86	149	65	M8x60	1477
206000080266	KVRR 60	60,6	60,4	80	100	100	170	78	M8x60	1987
208000080266	KVRR 80	80,7	80,5	122	130	130	244	100	M10x110	5075




**K - quad®**

[mm]

Code No.	Type	A	B	C	D	E	G	L	M	P	Q	S	m [g]
503000000300	K 30	30,1	30,1	36	49	28	21	42	85	28	7	M6x25	236
504000000300	K 40	40,1	40,1	48	62	34	28	56	110	42	7	M6x35	490
505000000300	K 50	50,1	50,1	60	77	42	35	70	137	50	9	M8x45	953


**KD - quad®**

[mm]

Code No.	Type	A	B	C	D	E	G	L	M	P	Q	S	m [g]
503020010300	KD 30x20	30,1	20,1	31	49	23	21	42	75	28	7	M6x25	229
504030010300	KD 40x30	40,1	30,1	43	62	29	28	56	100	42	7	M6x35	477
505040010300	KD 50x40	50,2	40,2	55	77	37	35	70	127	52	9	M8x45	926

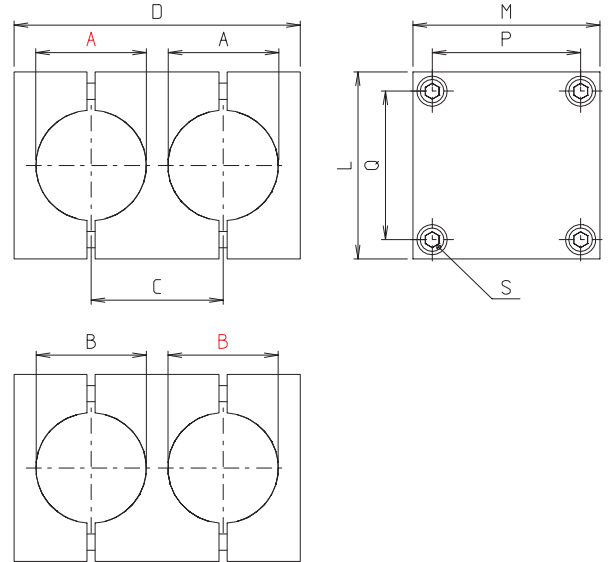
# Solid Clamps – Cross clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

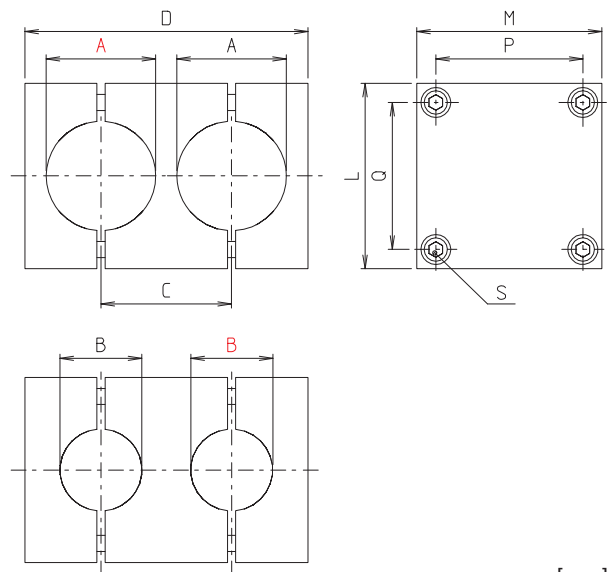
- Black anodized



## KRR - quad®

[mm]

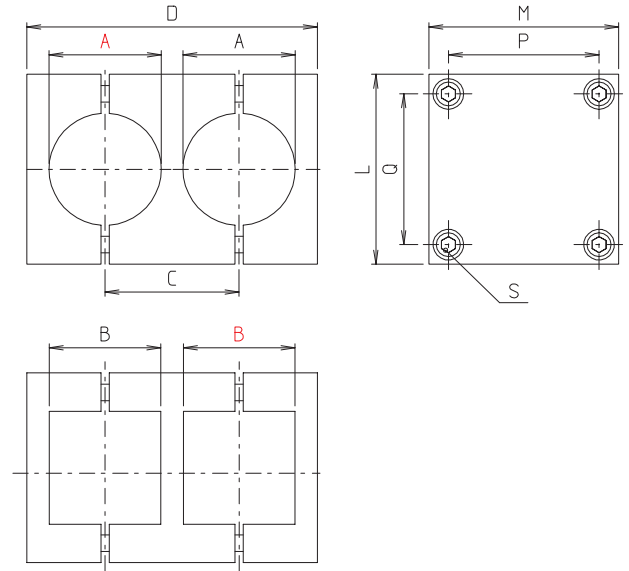
Code No.	Type	A	B	C	D	L	M	P	Q	S	m [g]
503000030300	KRR 30	30,1	30,1	36	78	56	56	42	42	M6x25	346
504000030300	KRR 40	40,2	40,2	48	104	68	68	54	54	M6x35	615
505000030300	KRR 50	50,3	50,3	60	130	85	85	67	67	M8x45	1241
506000030300	KRR 60	60,3	60,3	72	169	105	105	85	85	M8x60	–



## KRD - quad®

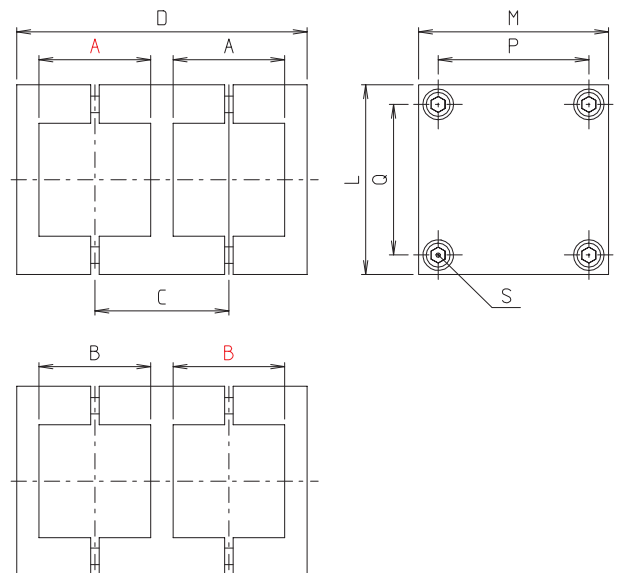
[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	S	m [g]
503020060300	KRD 30x20	30,1	20,1	36	78	56	56	42	42	M6x25	414
504030060300	KRD 40x30	40,2	30,1	48	104	68	68	54	54	M6x35	723
505040060300	KRD 50x40	50,3	40,2	60	130	85	85	67	67	M8x45	1411
506050060300	KRD 60x50	60,3	50,4	72	169	105	105	85	85	M8x60	–


**KVR - quad®**

[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	S	m [g]
503000040300	KVR 30	30,1	30,2	36	78	56	56	42	42	M6x25	301
504000040300	KVR 40	40,2	40,3	48	104	68	68	54	54	M6x35	527
505000040300	KVR 50	50,3	50,4	60	130	85	85	67	67	M8x45	1080
506000040300	KVR 60	60,3	60,4	72	169	105	105	85	85	M8x60	–


**KV - quad®**

[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	S	m [g]
503000050300	KV 30	30,2	30,2	36	78	56	56	42	42	M6x25	277
504000050300	KV 40	40,3	40,3	48	104	68	68	54	54	M6x35	477
505000050300	KV 50	50,4	50,4	60	130	85	85	67	67	M8x45	961
506000050300	KV 60	60,4	60,4	72	169	105	105	85	85	M8x60	–

# Solid Clamps – Angle clamps



Version:

- Angle clamps



delivery from stock



Single-piece elements

- ✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



Multi-piece elements

- ✓ Also suitable for subsequent assembly and expansion



**quad® elements**

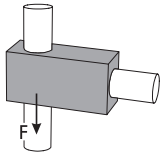
- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



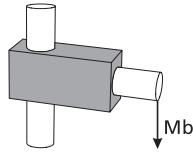
**Block form**

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements

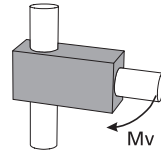
## Loads angle clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

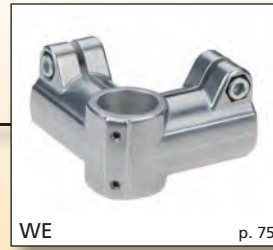
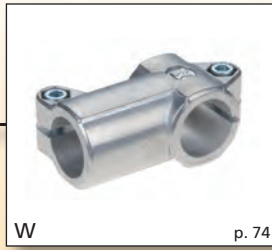
Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
W	1,1	189	20	6,6	447	104	4,3	1365	104	12,1	900	217	10,7	1388	299			
WV				3,3	413	345	4,3	464	546									
WR				5,1	870	59	5,1	1174	158									
WE	2,5	52	14	6,6	494	41	6,6	300	300	10,6	409	217						
WVT				3,3	144	345	2,6	765	546									
WRT				5,1	141	63	5,1	1174	120									

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
WV				3,6	383	283	3,3	528	847	3	600	425	7,8	1197	917	11	3038	2400
WR				5,1	809	66	6,2	1560	44	9,8	1200	262	12,3	1500	255	19	950	601
WVT				3,6	149	283	3,3	793	847									
WRT				5,1	136	66	6,2	1560	44									
WK				4,9	594	41	4,9	1388	139	10	750	179	11,4	650	315			
WEV							1,2	493	844	5,9		678						
WER							0,7	883	37	8,7	1280	131						
WKR							6,1	1361	93	8,7	1250	272						
WERT							0,7	883	37	8,7	1280	131						
WEVT							1,2	686	844	5,9		678						

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>																		
W	4	634	61	7,8	960	68	5,8	1788	159									
WR	5	1650	168	7,6	960	128	11,8	2200	272									
WRT	5,7	1475	166	7,6	960	128	11,8	2200	272									
WKR	5,7	1365	172	7,5	1050	510	11,8	2200	272									
WVR	6,1	618	70	8,4	1050	128	7,5	1800	1800									
WRV	6,2	1000	325	7,5	1200	46	7,5	2200	272									
WER	6,1	1139	49	2,7	1020	450	11,8	2200	272									
WV	5	410	534	8,1	1212	450	7,5	2022	1800	20,1								
WVT	5,1	411	524	6,3	1229	450	7,5	2022	1800	20,1								
WKV	5,7	781	350	8,1	1256	459	7,5	2022	1800									
WEV	4,5	527	350	2,8	897		7,5	2022	1800									

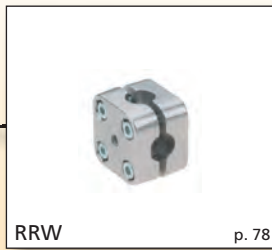
# Solid Clamps – Angle clamps

## Right angle tube connector

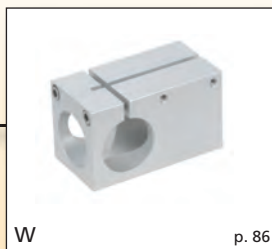


## Industrial design

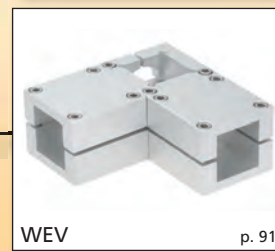
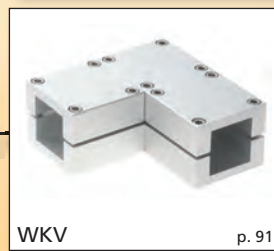
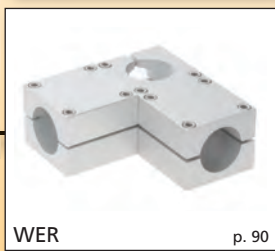
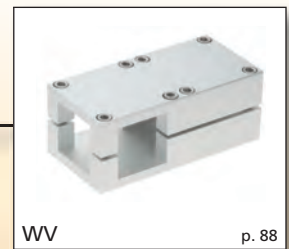
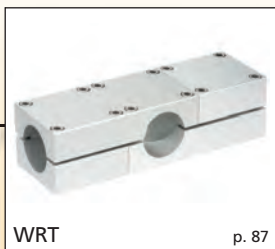
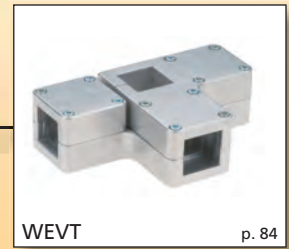
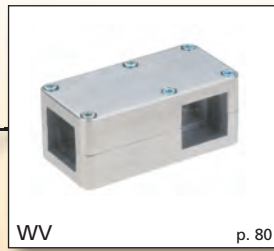
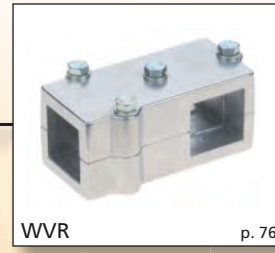
## Block form



## quad® elements







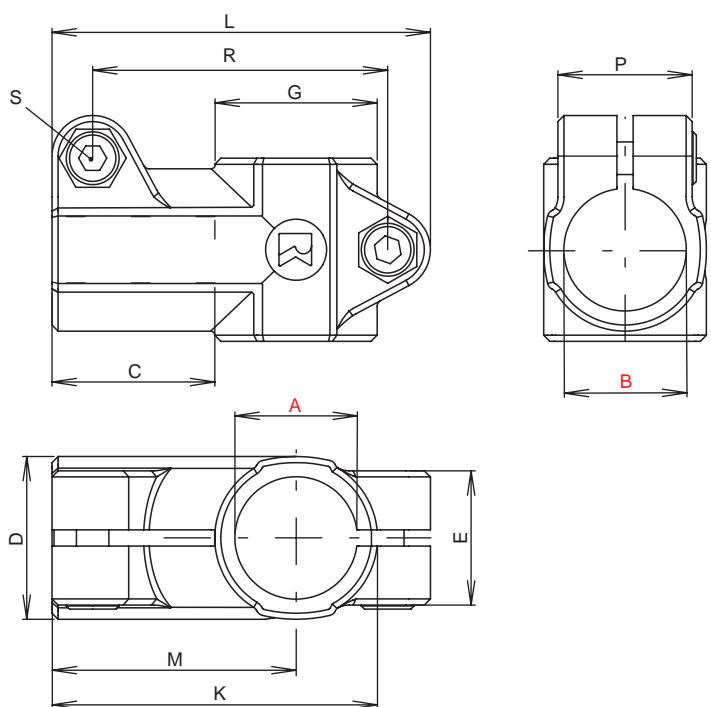
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

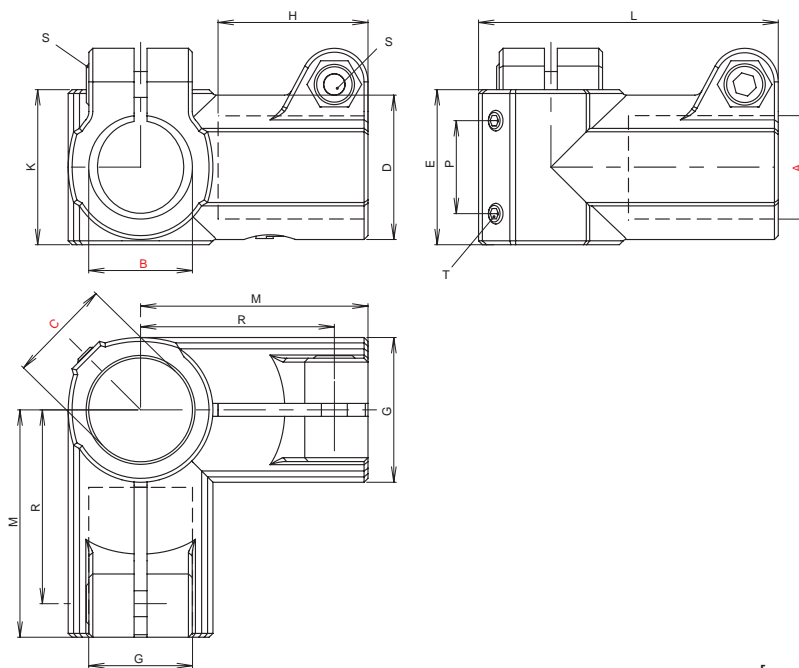
- Stainless steel screws
- Ball-polished
- Colour



## W - Industrial design

[mm]

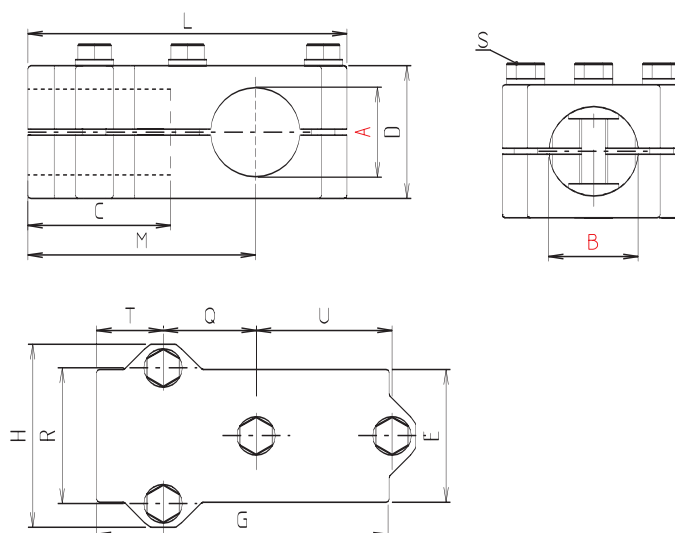
Code No.	Type	A	B	C	D	E	G	K	L	M	P	R	S	m [g]										
111200000200	W 12	12,1	12,1	28	26	32	26	56	66	43	23	49	M6x20	97										
111400000200	W 14	14,1	14,1											90										
111500000200	W 15	15,1	15,1											87										
111600000200	W 16	16,1	16,1											83										
111800000200	W 18	18,1	18,1											75										
112000000200	W 20	20,1	20,1	40	40	45	40	80	93	60	33	72,5	M8x25	278										
112500000200	W 25	25,1	25,1											240										
113000000200	W 30	30,1	30,1											192										
113200000200	W 32	32,2	32,2											680										
113500000200	W 35	35,15	35,15											60	56	60	56	117	134	88	40	108	M10x30	623
114000000200	W 40	40,15	40,15	65	66	70	66	136	149	198	45	123	M10x35	530										
114800000200	W 48	48,22	48,22											765										
115000000200	W 50	50,22	50,22											710										
116000000200	W 60	60,27	60,27											80	80	90	80	160	183	120	58	151	M12x45	1340
118000000200	W 80	80,35	80,35											121,7	110	123	110	231,7	259	176,8	82	214	M16x65	3750



**WE - Industrial design**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	R	S	T	m [g]
1130000602005	WE 30	30,1	30,1	30	40	45	40	35	51	80	60	49	M8x35	M8x15	250
1132000602005	WE 32	32,2	32,2	32	56	60	56	55	69	116	88	70	M10x50	M8x10	977
1135000602005	WE 35	35,2	35,2	35											909
1140000602005	WE 40	40,15	40,15	40,15	56	60	56	58	-	116	88	75	M10x30	M8x10	708
1142000602005	WE 42	42,2	42,2	42	66	70	66	65	78	136	103	82	M10x60	M10x12	1365
1145000602005	WE 45	45,2	45,2	45											1250
1148000602005	WE 48	48,2	48,2	48											1113
1150000602005	WE 50	50,22	50,22	50,22	66	70	66	70	-	136	108	90	M10x35	M10x12	710



**WR - Industrial design**

[mm]

Code No.	Type	A	B	C	D	E	G	H	L	M	Q	R	S	T	U	m [g]
112500030200	WR 25	25,2	25,2	46	45	45	100	62	108	77	31,5	46	M8x45	23	46	418
113000030200	WR 30	30,2	30,2													388
113500030200	WR 35	35,2	35,2	60	60	60	129	75	136	99	40	57	M8x60	30	57	770
114000030200	WR 40	40,2	40,2													738

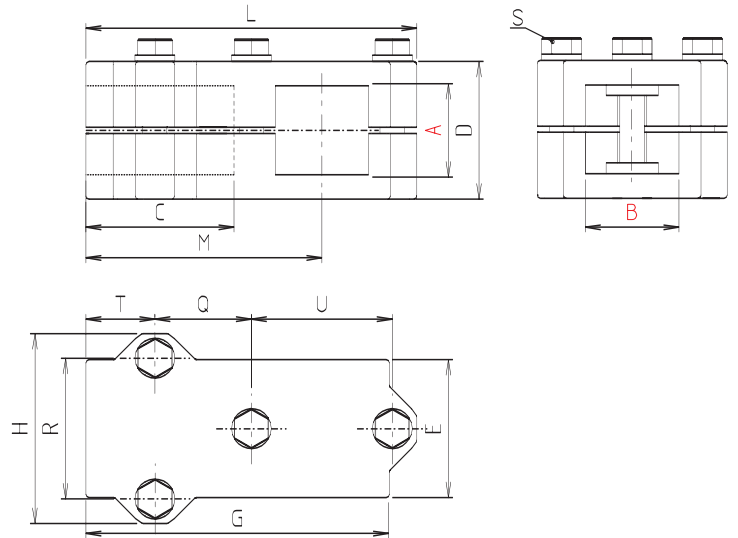
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

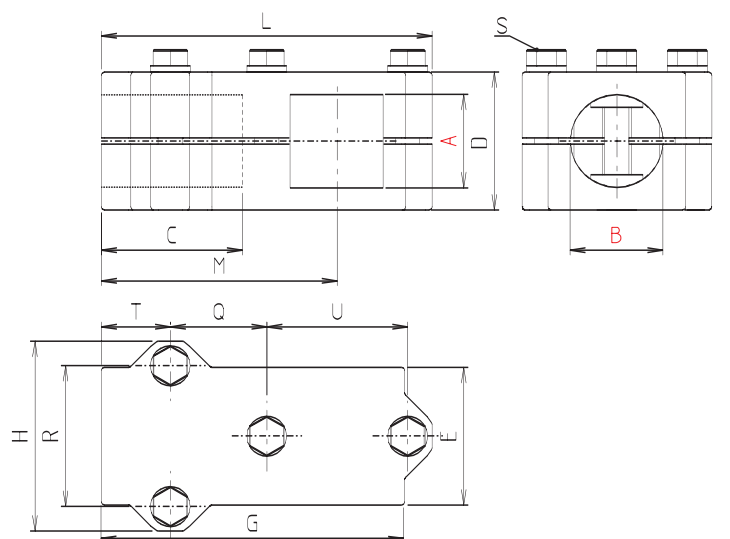
- Stainless steel screws
- Ball-polished
- Colour



## WV - Industrial design

[mm]

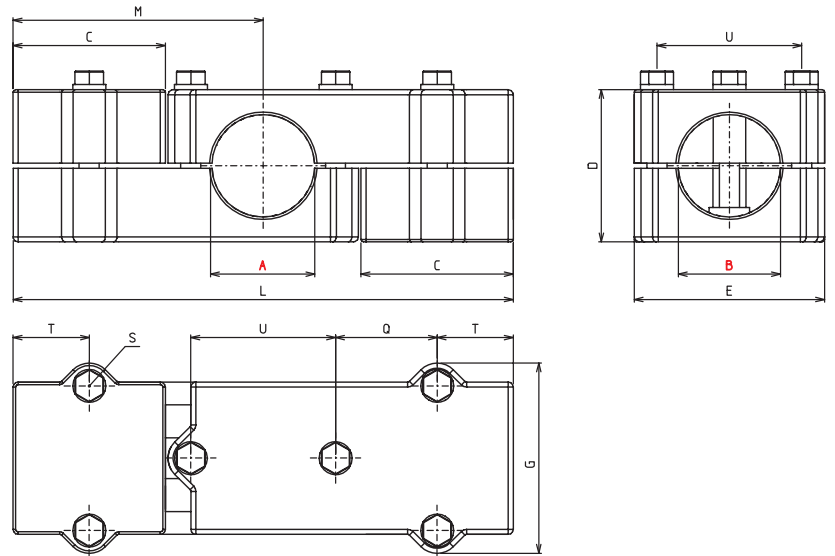
Code No.	Type	A	B	C	D	E	G	H	L	M	Q	R	S	T	U	m [g]
112500050200	WV 25	25,3	25,3	46	45	45	100	62	108	77	31,5	46	M8x45	23	46	389
113000050200	WV 30	30,3	30,3													361
113500050200	WV 35	35,4	35,4	60	60	60	129	75	136	99	40	57	M8x60	30	57	731
114000050200	WV 40	40,4	40,4													722



## WVR - Industrial design

[mm]

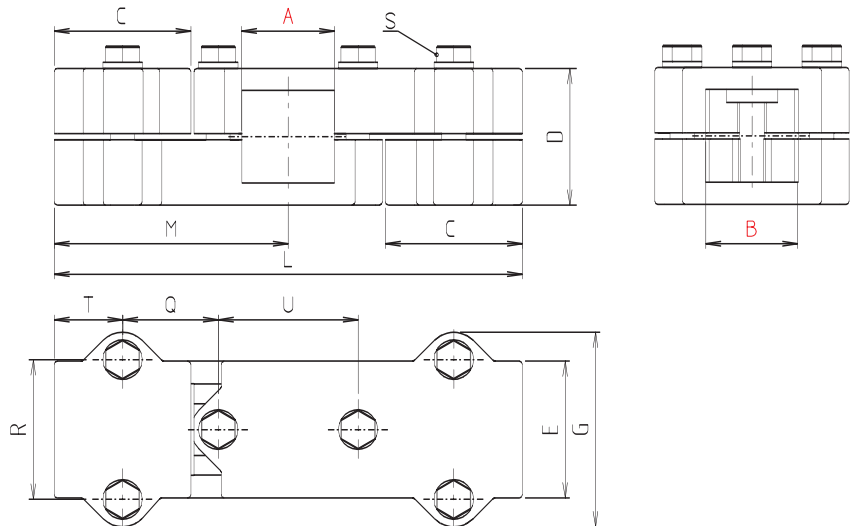
Code No.	Type	A	B	C	D	E	G	H	L	M	Q	R	S	T	U	m [g]
113000040200	WVR 30	30,3	30,2	46	45	45	100	62	108	77	31,5	46	M8x45	23	46	358
114000040200	WVR 40	40,4	40,2	60	60	60	129	75	136	99	40	57	M8x60	30	57	698



### WRT - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	L	M	Q	R	S	T	U	m [g]
112500100200	WRT 25	25,2	25,2	46	45	45	62	154	77	31,5	46	M8x45	23	46	621
113000100200	WRT 30	30,2	30,2												585
113500100200	WRT 35	35,2	35,2	60	60	60	75	196	99	40	57	M8x60	30	57	1148
114000100200	WRT 40	40,2	40,2												1104



### WVT - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	L	M	Q	R	S	T	U	m [g]
112500110200	WVT 25	25,3	25,3	46	45	45	62	154	77	31,5	46	M8x45	22,5	46	601
113000110200	WVT 30	30,3	30,3												549
113500110200	WVT 35	35,4	35,4	60	60	60	75	196	99	40	57	M8x60	30	57	1084
114000110200	WVT 40	40,4	40,4												1044

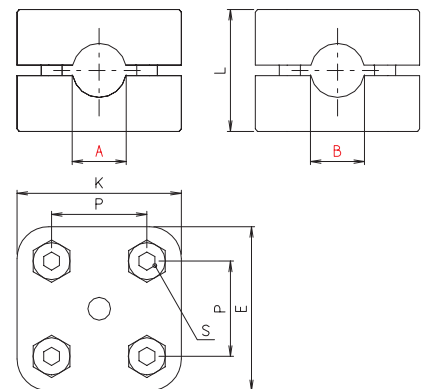
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

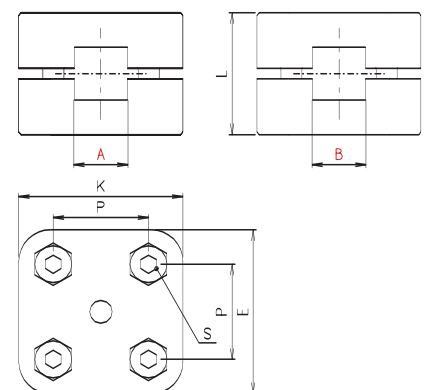
- Stainless steel screws
- Ball-polished
- Colour



## RRW - Block form

[mm]

Code No.	Type	A	B	E	K	L	P	S	m [g]
290800040266	RRW 8	8	8	31	31	23	18	M4x18	47
291000040266	RRW 10	10	10						46

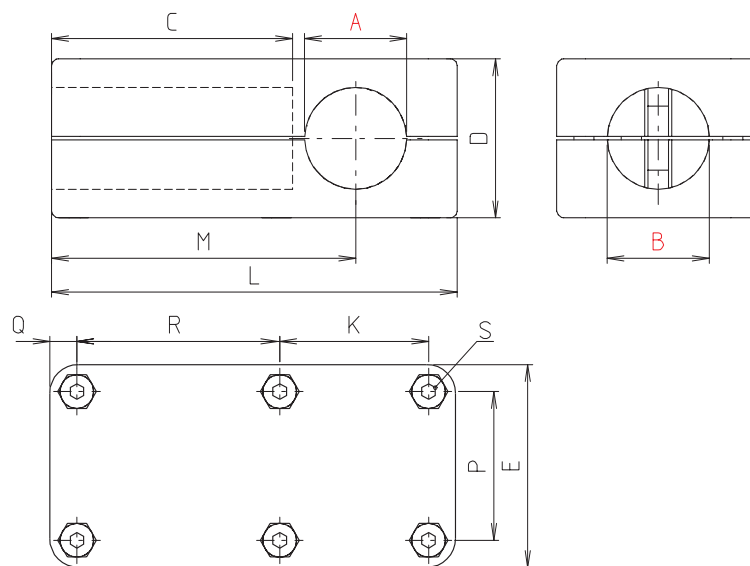


## VVW - Block form

[mm]

Code No.	Type	A	B	E	K	L	P	S	m [g]
291000050266	VVW 10	10	10	31	31	23	18	M4x18	42

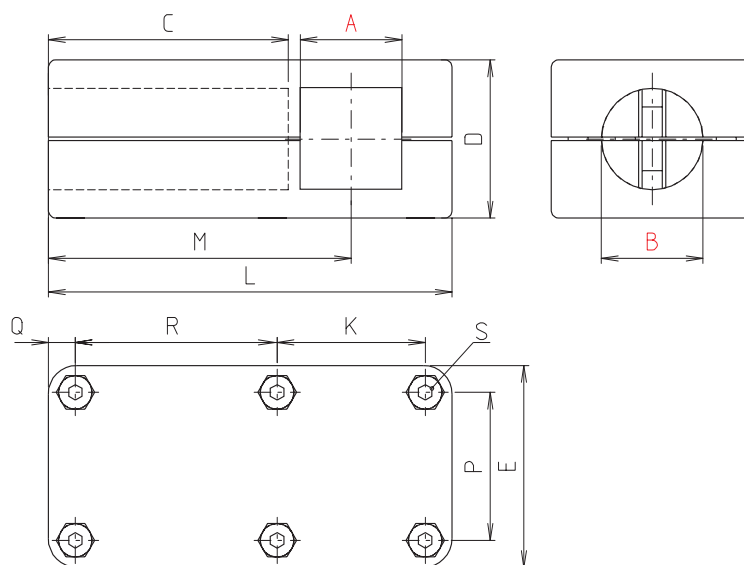




### WR - Block form

[mm]

Code No.	Type	A	B	C	D	E	F	K	L	M	P	Q	R	S	m [g]
213000030266	WR 30	30,2	30,2	60	48	60	16	44	120	90	44	8	44	M6x40	499
213500030266	WR 35	35,3	35,3	70	62	70	17	53	140	105	53	9	55	M6x55	782
214000030266	WR 40	40,2	40,2												750
214200030266	WR 42	42,3	42,3	86	79	86	0	70	161	116	65	11	70	M6x55	1579
214500030266	WR 45	45,3	45,3	86	79	86	0	70	161	116	65	11	70	M8x70	1535
214800030266	WR 48	48,3	48,3												1528
215000030266	WR 50	50,3	50,3												1490
216000030266	WR 60	60,4	60,4	100	90	100	0	84	190	140	78	11	84	M8x80	2015
218000030266	WR 80	80,5	80,5	130	122	130	30	100	260	195	100	15	100	M10x100	5030



### WVR - Block form

[mm]

Code No.	Type	A	B	C	D	E	K	L	M	P	Q	R	S	m [g]
215000150266	WVR 50	50,3	50,3	86	79	86	70	161	118	65	11	70	M8x70	1410
216000150266	WVR 60	60,4	60,4	100	90	100	84	190	140	78	11	84	M8x80	1920

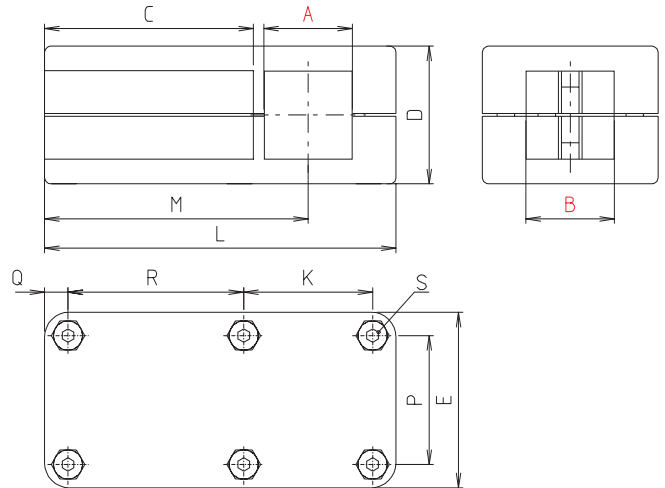
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

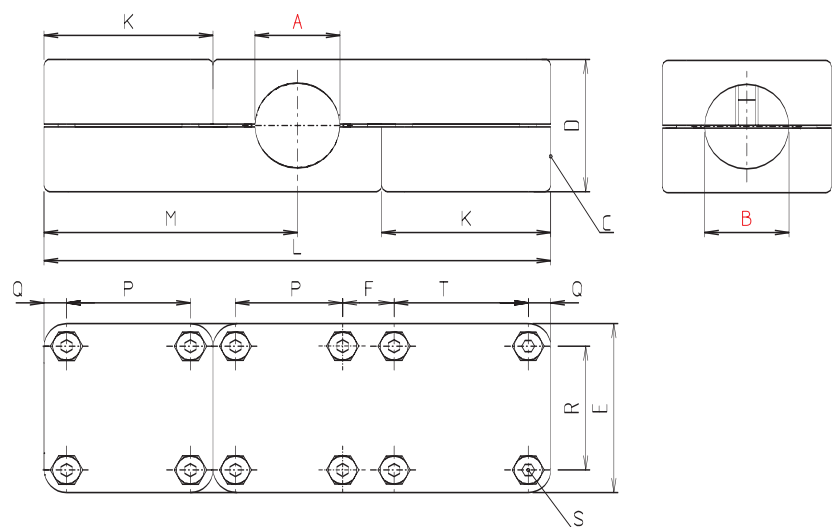
- Stainless steel screws
- Ball-polished
- Colour



## WV - Block form

[mm]

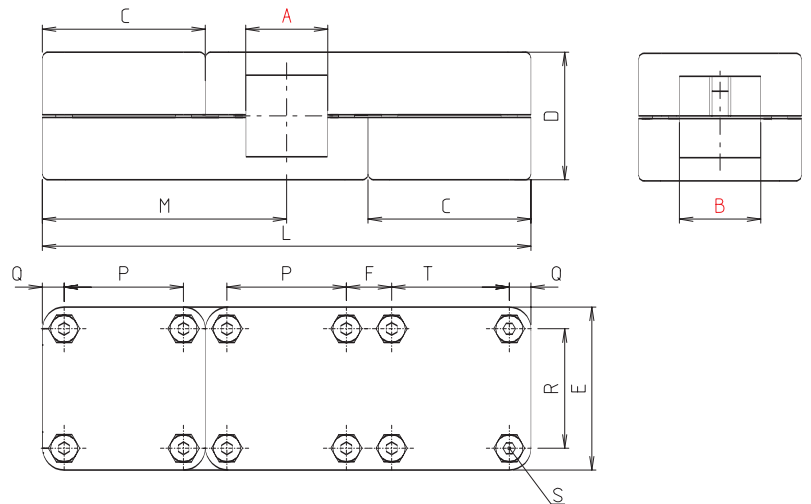
Code No.	Type	A	B	C	D	E	K	L	M	P	Q	R	S	m [g]
213000050266	WV 30	30,3	30,3	60	48	60	44	120	90	44	8	60	M6x40	482
213500050266	WV 35	35,4	35,4	70	62	70	53	140	105	53	9	70	M6x55	765
214000050266	WV 40	40,4	40,4											716
215000050266	WV 50	50,5	50,5	86	79	86	70	161	116	65	11	70	M8x70	1406
216000050266	WV 60	60,6	60,6	100	90	100	84	190	140	78				84
218000050266	WV 80	80,7	80,7	130	122	130	115	260	195	100	15	115	M10x100	4680



## WRT - Block form

[mm]

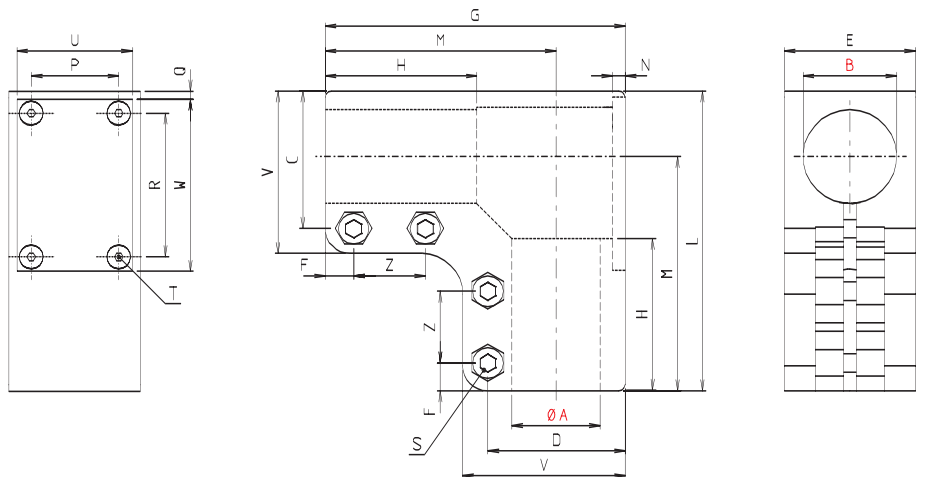
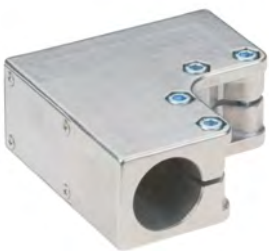
Code No.	Type	A	B	C	D	E	F	K	L	M	P	Q	R	S	T	m [g]
213000100266	WRT 30	30,2	30,2	30	48	60	15	60	180	90	44	8	44	M6x40	44	753
214000100266	WRT 40	40,2	40,2	40	62	70	0	70	210	105	53	9	53	M6x55	53	1151



**WVT - Block form**

[mm]

Code No.	Type	A	B	C	D	E	F	L	M	P	Q	R	S	T	m [g]
213000110266	WVT 30	30,3	30,3	60	48	60	15	180	90	44	8	44	M6x40	44	732
214000110266	WVT 40	40,4	40,4	70	62	70	0	210	105	53	9	53	M6x55	53	1080



**WK - Block form**

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q	R	S	T	U	V	W	Z	m [g]
213000090266	WK 30	30,1	30,1	44	44	42	9	96	48	48	96	75	1	28	2,5	46	M6x35	M4x6	37	52	55	32	449
214000090266	WK 40	40,2	40,2	70	70	54	12	128	65	65	128	100	2,5	38	2,5	61	M8x45	M4x6	49	70	74	43	1008
214800090266	WK 48	48,2	48,2	70	70	65	12	148	75	75	148	115	2,5	49	2,5	71	M8x55	M4x6	60	80	84	58	1533
215000090266	WK 50	50,2	50,2	70	70	65	12	148	75	75	148	115	2,5	49	2,5	71	M8x55	M4x6	60	80	84	58	1474
216000090266	WK 60	60,3	60,3	80	80	80	25	170	110	110	170	130	4	-	-	-	M10x70	-	-	80	-	0	2232

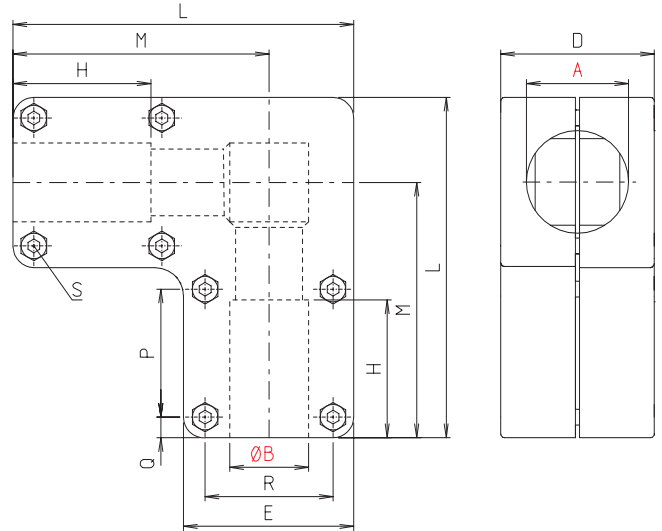
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

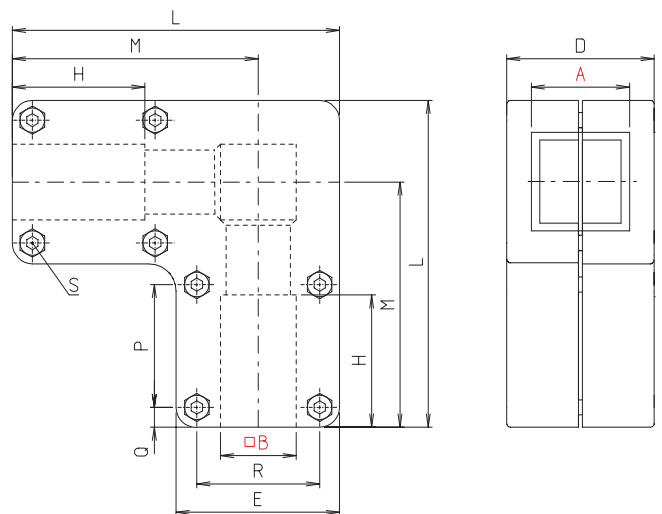
- Stainless steel screws
- Ball-polished
- Colour



## WKR - Block form

[mm]

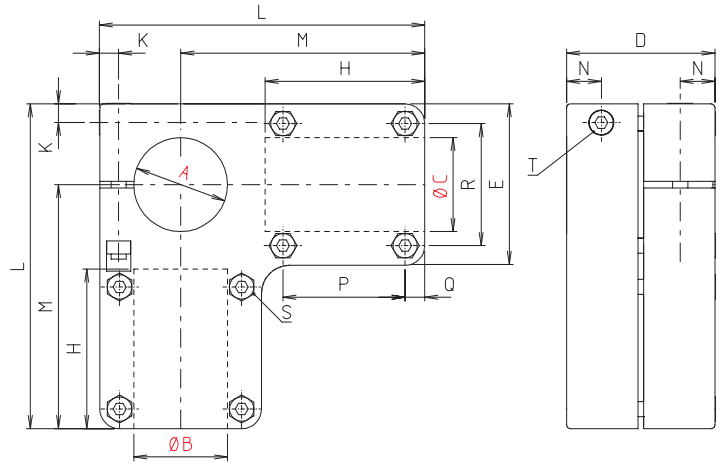
Code No.	Type	A	B	D	E	H	L	M	P	Q	R	S	m [g]
213200010266	WKR 32	32,2	32,2	62	70	70	141	106	53	8,5	53	M6x55	1667
213500010266	WKR 35	35,2	35,2										1328
214000010266	WKR 40	40,2	40,2										1230
214200010266	WKR 42	42,3	42,3	76	86	85	173	130	65	10,5	65	M8x70	2639
214500010266	WKR 45	45,3	45,3										2642
214800010266	WKR 48	48,3	48,3										2595
215000010266	WKR 50	50,3	50,3										2380



## WKV - Block form

[mm]

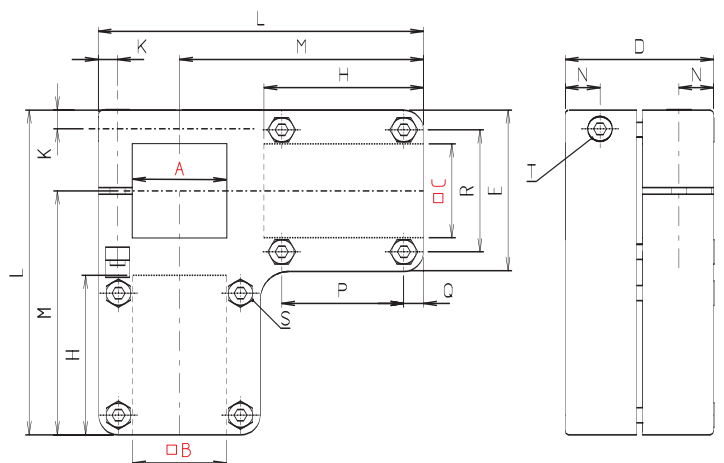
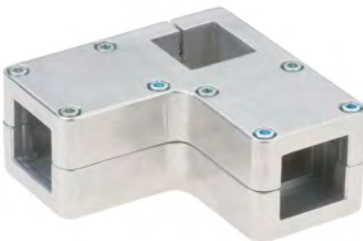
Code No.	Type	A	B	D	E	H	L	M	P	Q	R	S	m [g]
213500020266	WKV 35	35,4	35,4	62	70	70	141	106	53	8,5	53	M6x55	1258
214000020266	WKV 40	40,4	40,4										1192
215000020266	WKV 50	50,5	50,5	76	86	95	173	130	65	10,5	65	M8x70	2320



### WER - Block form

[mm]

Code No.	Type	A	B	C	D	E	H	K	L	M	N	P	Q	R	S	T	m [g]
2132000702666	WER 32	32,2	32,2	32													1448
2135000702666	WER 35	35,2	35,2	35	62	70	70	9	141	106	16	53	8,5	53	M6x55	M6x55	1340
2140000702666	WER 40	40,2	40,2	40													1275
2142000702666	WER 42	42,2	42,3	42													2760
2145000702666	WER 45	45,2	45,3	45													2698
2148000702666	WER 48	48,2	48,3	48	76	86	85	10	173	130	19	65	10,5	65	M8x70	M8x75	2644
2150000702666	WER 50	50,2	50,3	50													2520



### WEV - Block form

[mm]

Code No.	Type	A	B	C	D	E	H	L	M	P	Q	R	S	m [g]
2135000802666	WEV 35	35,4	35,4	35										1286
2140000802666	WEV 40	40,4	40,4	40	62	70	70	141	106	53	9	53	M6x55	1205
2150000802666	WEV 50	50,5	50,5	51	76	86	85	173	130	65	11	65	M8x70	2320

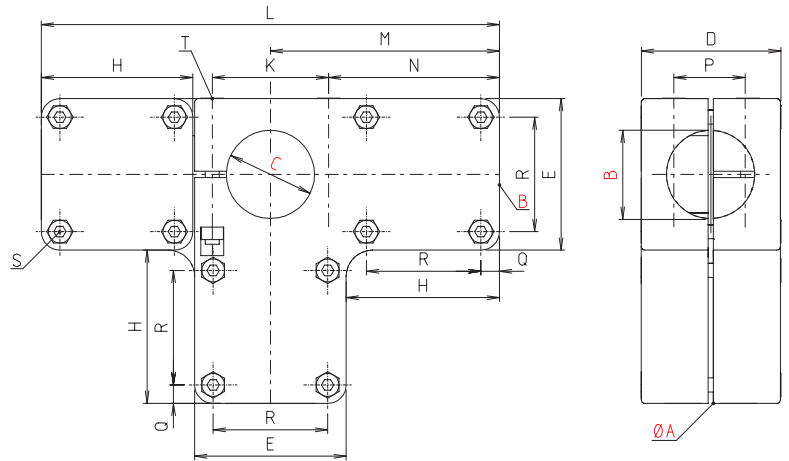
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

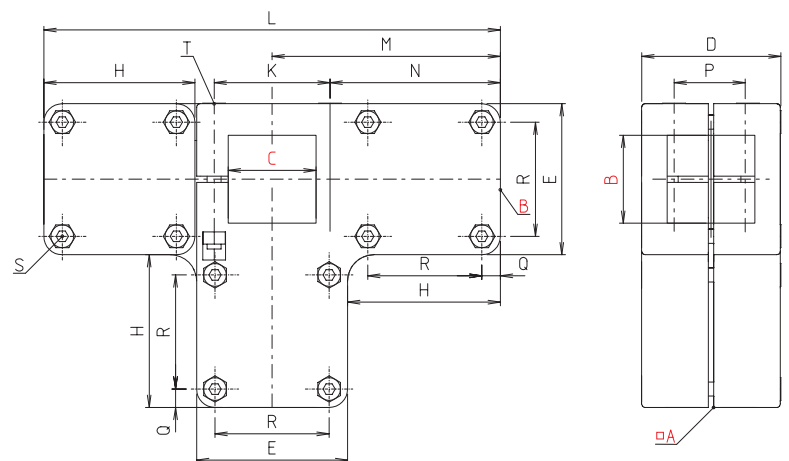
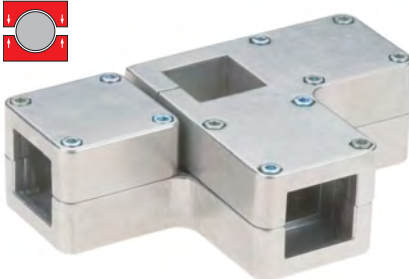
- Stainless steel screws
- Ball-polished
- Colour



## WERT - Block form

[mm]

Code No.	Type	A	B	C	D	E	H	K	L	M	N	P	Q	R	S	m [g]
2132001202666	WERT 32	32,2	32,2	32	62	70	70	53	212	106	80	33,5	8,5	53	M6x55	1864
2135001202666	WERT 35	35,2	35,2	35												1738
2140001202666	WERT 40	40,2	40,2	40												1678
2142001202666	WERT 42	42,3	42,3	42	76	86	86	66	260	130	97	41	10,5	65	M6x55	3690
2145001202666	WERT 45	45,3	45,3	45												3580
2148001202666	WERT 48	48,3	48,3	48	76	86	86	66	260	130	97	41	10,5	65	M8x70	3512
2150001202666	WERT 50	50,3	50,3	50												3360



## WEVT - Block form

[mm]

Code No.	Type	A	B	C	D	E	H	K	L	M	N	P	Q	R	S	T	m [g]
2135001302666	WEVT 35	35,4	35,4	35	62	70	70	53	212	106	80	33,5	8,5	53	M6x55	M6x55	1673
2140001302666	WEVT 40	40,4	40,4	40													1573
2150001302666	WEVT 50	50,5	50,5	51	76	86	95	66	260	130	97	41	10,5	65	M8x70	M8x75	3100





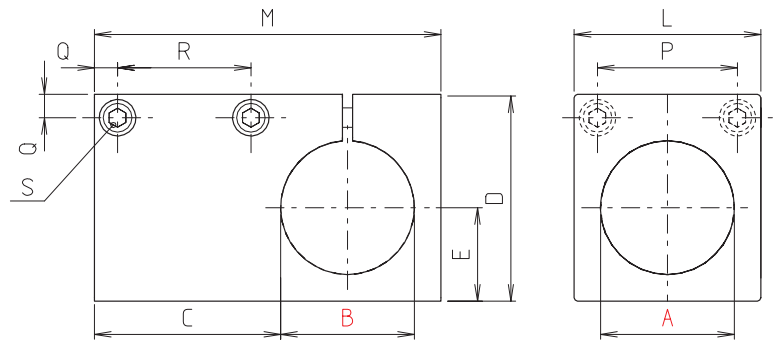
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

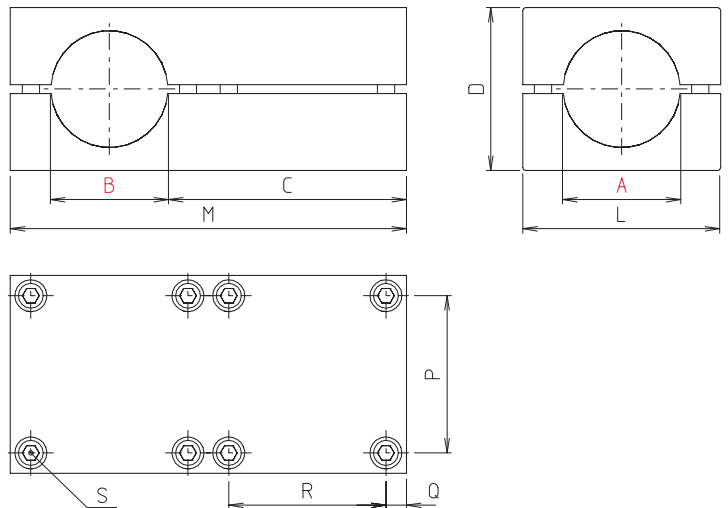
- Black anodized



## W - quad®

[mm]

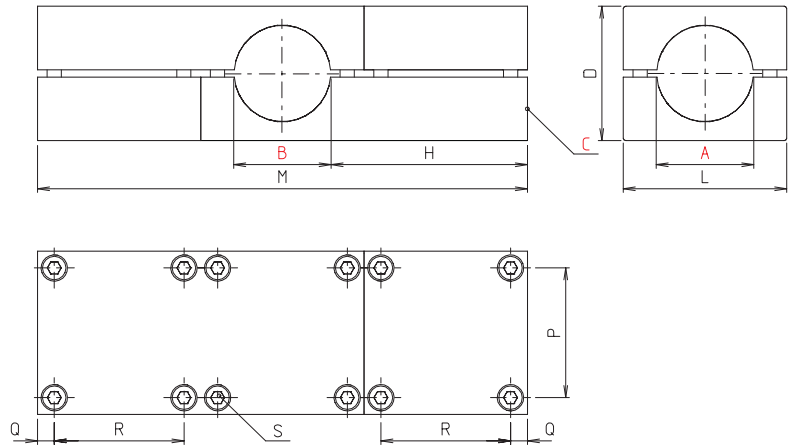
Code No.	Type	A	B	C	D	E	L	M	P	Q	R	S	m [g]
51300000300	W 30	30,1	30,1	42	49	21	42	78	28	7	26	M6x25	251
51400000300	W 40	40,1	40,1	56	62	28	56	104	42	7	40	M6x35	544
51500000300	W 50	50,2	50,2	70	77	35	70	130	50	9	50	M8x45	1049



## WR - quad®

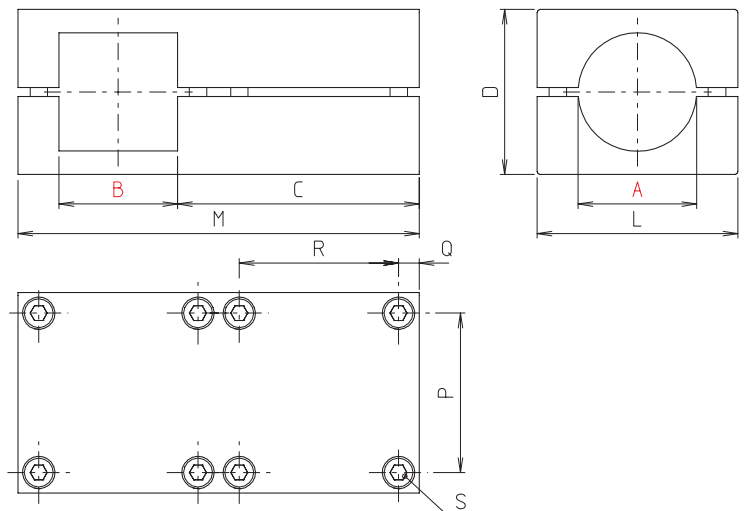
[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	R	S	m [g]
513000030300	WR 30	30,1	30,1	69	42	56	112	42	7	42	M6x25	450
514000030300	WR 40	40,2	40,2	82	56	68	136	54	7	54	M6x35	812
515000030300	WR 50	50,3	50,3	102	70	85	170	67	9	67	M8x45	1633
516000030300	WR 60	60,3	60,3	127	97	105	210	85	10	85	M8x60	-


**WRT - quad®**

[mm]

Code No.	Type	A	B	C	D	H	L	M	P	Q	R	S	m [g]
513000100300	WRT 30	30,1	30,1	30,1	42	69	56	168	42	7	42	M6x25	702
514000100300	WRT 40	40,2	40,2	40,2	56	82	68	204	54	7	54	M6x35	1257
515000100300	WRT 50	50,3	50,3	50,3	70	102	85	255	67	9	67	M8x45	2563


**WVR - quad®**

[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	R	S	m [g]
513000150300	WVR 30	30,2	30,1	69	42	56	112	42	7	42	M6x25	430
514000150300	WVR 40	40,3	40,2	82	56	68	136	54	7	54	M6x35	772
515000150300	WVR 50	50,4	50,3	102	70	85	170	67	9	67	M8x45	1580
516000150300	WVR 60	60,3	60,4	127	97	105	210	85	10	85	M8x60	-

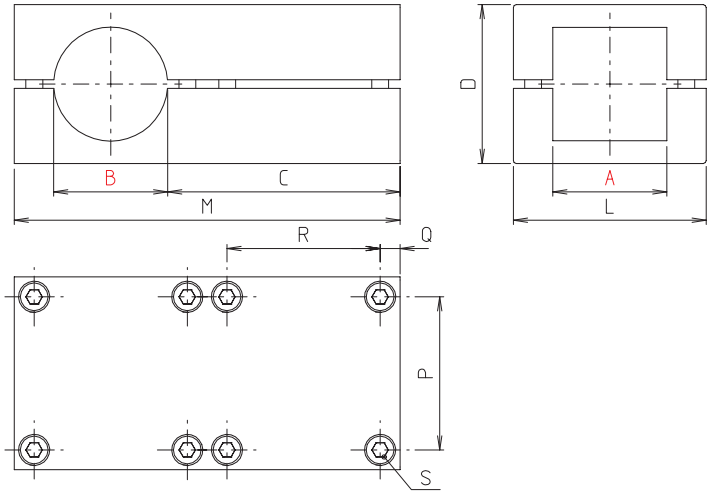
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

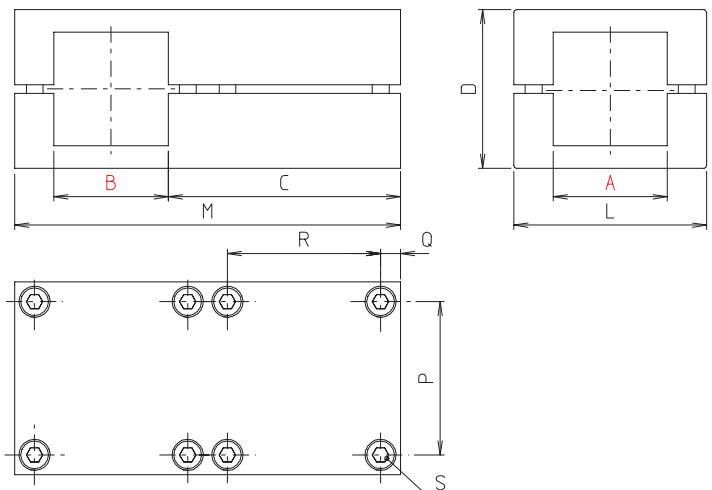
- Black anodized



## WRV - quad®

[mm]

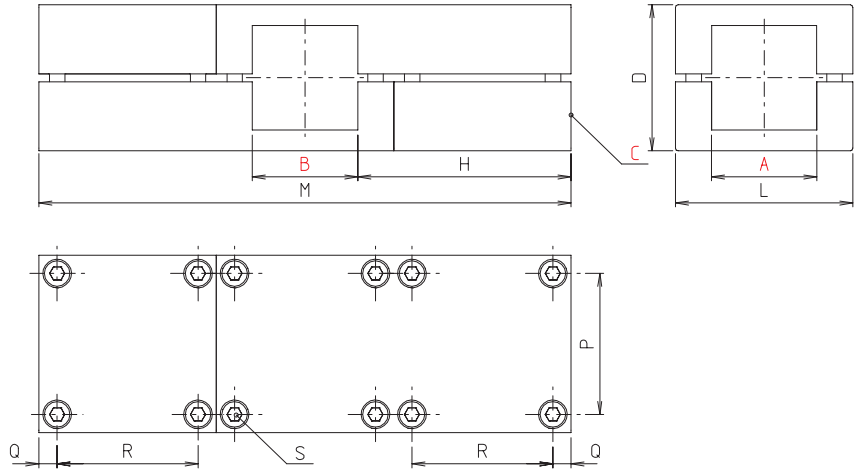
Code No.	Type	A	B	C	D	L	M	P	Q	R	S	m [g]
513000140300	WRV 30	30,1	30,2	69	42	56	112	42	7	42	M6x25	400
514000140300	WRV 40	40,2	40,3	82	56	68	136	54	7	54	M6x35	702
515000140300	WRV 50	50,3	50,4	102	70	85	170	67	9	67	M8x45	1412
516000140300	WRV 60	60,3	60,3	127	97	105	210	85	10	85	M8x60	-



## WV - quad®

[mm]

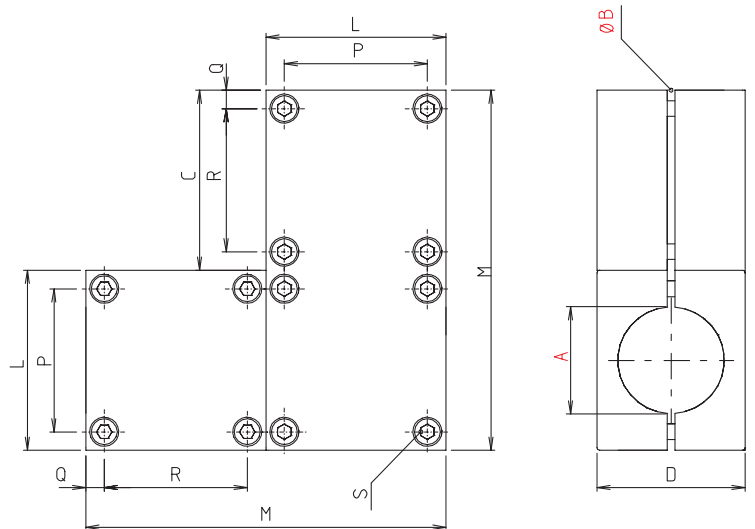
Code No.	Type	A	B	C	D	L	M	P	Q	R	S	m [g]
513000050300	WV 30	30,2	30,2	69	42	56	112	42	7	42	M6x25	387
514000050300	WV 40	40,3	40,3	82	56	68	136	54	7	54	M6x35	693
515000050300	WV 50	50,4	50,4	102	70	85	170	67	9	67	M8x45	1370
516000050300	WV 60	60,4	60,4	127	97	105	210	85	10	85	M8x60	-
518000050300	WV 80	80,4	80,4	149	112	126	252	100	13	100	M10x70	4200



WVT - quad®

[mm]

Code No.	Type	A	B	C	D	H	L	M	P	Q	R	S	m [g]
5130001103000	WVT 30	30,2	30,2	30,2	42	69	56	168	42	7	42	M6x25	667
5140001103000	WVT 40	40,3	40,3	40,3	56	82	68	204	54	7	54	M6x35	1168
5150001103000	WVT 50	50,4	50,4	50,4	70	102	85	255	67	9	67	M8x45	2155
5180001103000	WVT 80	80,4	80,4	80,4	112	159	126	378	100	13	100	M10x70	6782



WKR - quad®

[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	R	S	m [g]
513000010300	WKR 30	30,1	30,1	56	42	56	112	42	7	42	M6x25	702
514000010300	WKR 40	40,2	40,2	68	56	68	136	54	7	54	M6x35	1257
515000010300	WKR 50	50,3	50,3	85	70	85	170	67	9	67	M8x45	2563

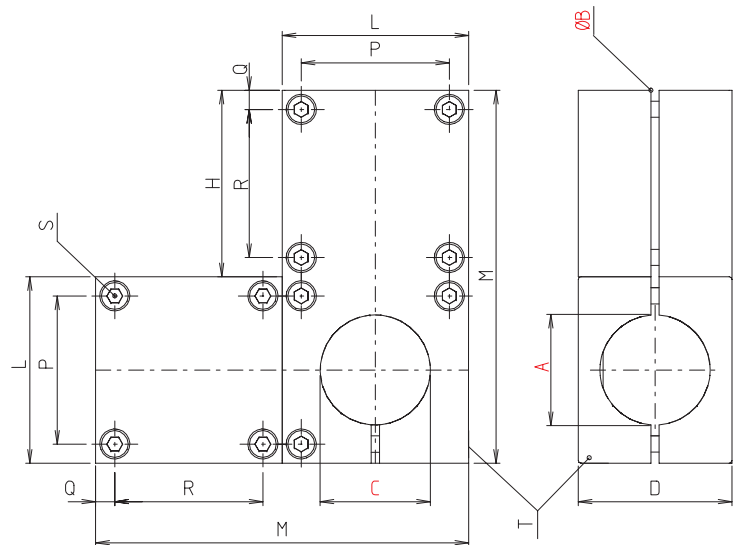
# Solid Clamps – Angle clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

- Black anodized

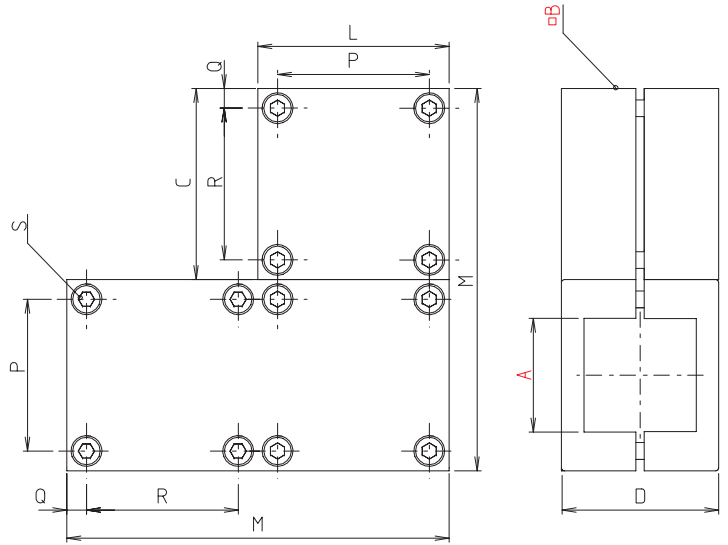


## WER - quad®

[mm]

Code No.	Type	A	B	C	D	H	L	M	P	Q	R	S	T	m [g]
5130000703000	WER 30	30,1	30,1	30,1	42	56	56	112	42	7	42	M6x25	M5x35	725
5140000703000	WER 40	40,2	40,2	40,2	56	68	68	136	54	7	54	M6x35	M6x45	1311
5150000703000	WER 50	50,3	50,3	50,3	70	85	85	170	67	9	67	M8x45	M6x55	2627

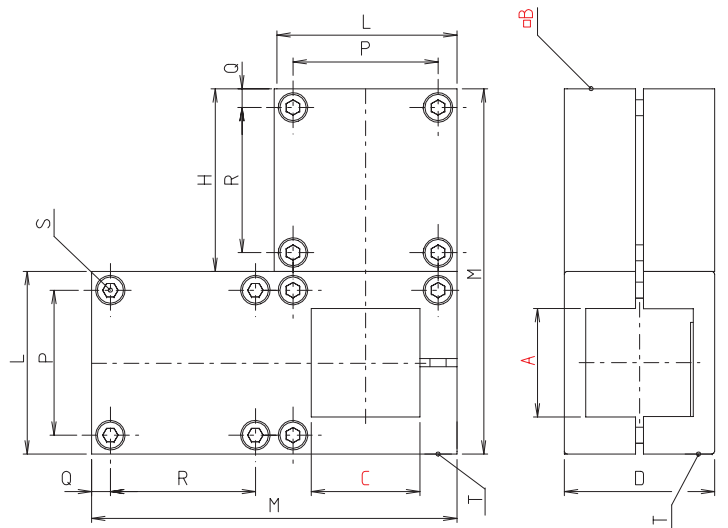




### WKV - quad®

[mm]

Code No.	Type	A	B	C	D	L	M	P	Q	R	S	m [g]
513000020300	WKV 30	30,2	30,2	56	42	56	112	42	7	42	M6x25	634
514000020300	WKV 40	40,3	40,3	68	56	68	136	54	7	54	M6x35	1133
515000020300	WKV 50	50,4	50,4	85	70	85	170	67	9	67	M8x45	2274



### WEV - quad®

[mm]

Code No.	Type	A	B	C	D	H	L	M	P	Q	R	S	T	m [g]
5130000803000	WEV 30	30,2	30,2	30,2	42	56	56	112	42	7	42	M6x25	M5x35	634
5140000803000	WEV 40	40,3	40,3	40,3	56	68	68	136	54	7	54	M6x35	M6x45	1133
5150000803000	WEV 50	50,4	50,4	50,4	70	85	85	170	67	9	67	M8x45	M6x55	2274

# Solid Clamps – Base clamps



Version:

■ Base clamps



delivery  
from stock



Single-piece elements

✓ For the quick and inexpensive installation



## Industrial design

- Cast aluminium
- Great variety
- Single-piece elements

## quad® elements

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



Multi-piece elements

✓ Also suitable for subsequent assembly and expansion



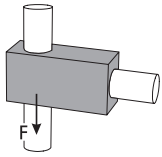
## quad® elements

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements

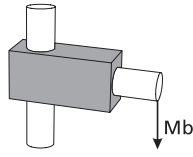
## Block form

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements

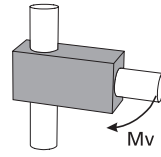
## Loads base clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

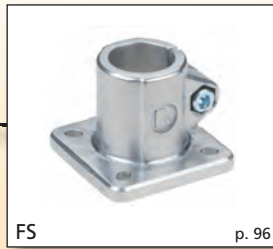
Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
FS				5,7	302	87	7,5	418	121	8,7	1375	150	16	1250	374			
FR							4,5	738	96	5,4	1395	207						
FV				5,6	125	296	2,9	290	623									
FRR				6,7	555	108	5,9	743	91									
FRA										5	600	250	12	1297	256			
FVA										5,9	1015	726	8	1750	1155			
FRAA										7,7	971	257	12	1750	263			

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
FV				3,0	441	213	3,1	811	855	5,9	600	726				18	2125	2250
FRR				4,5	433	80	5,7	838	58	7,7	600	257				10	2250	692

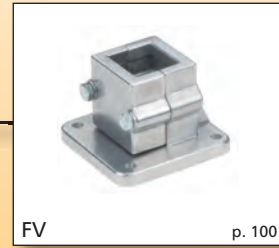
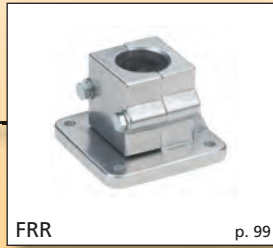
Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>																		
FS	2,1	418	39	3,9	703	81	5,8	1960	118									
FR	5,6	548	65	7,4	744	121	11,5	1960	272	21,5		950						
FV	3,2	541	338	7,1	881	540	7,5	1960	50	20,1								

# Solid Clamps – Base clamps

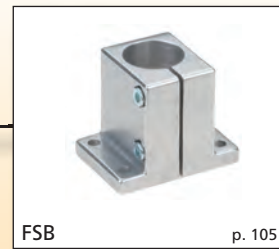
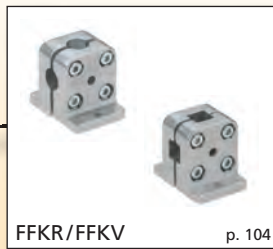
## Right angle tube connector



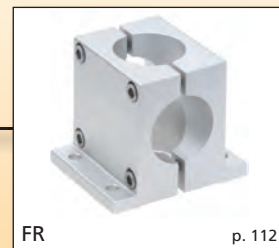
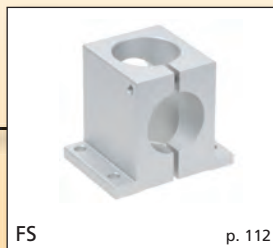
## Industrial design



## Block form



## quad® elements

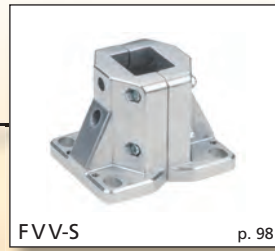




FS-B p. 97



FR p. 98



FVV-S p. 98



FVV-D p. 99



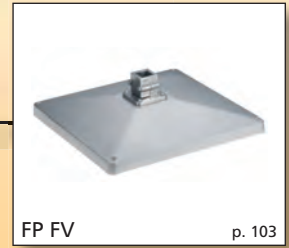
FP p. 102



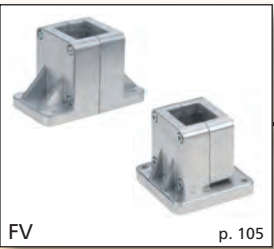
FP FS p. 102



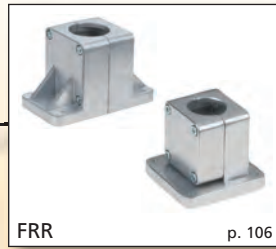
FP FRR p. 102



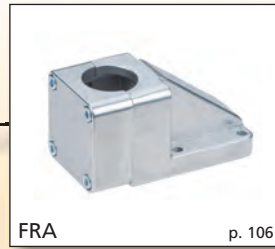
FP FV p. 103



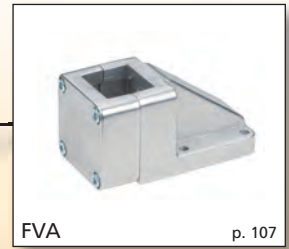
FV p. 105



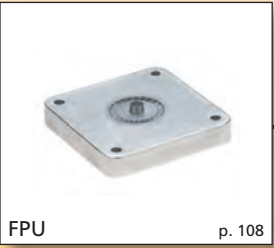
FRR p. 106



FRA p. 106



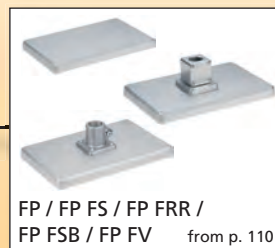
FVA p. 107



FPU p. 108



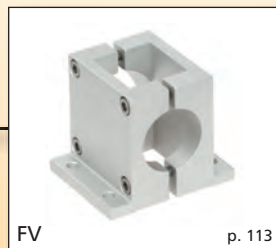
BAK-80 p. 109



FP / FP FS / FP FRR /  
FP FSB / FP FV from p. 110



FRS p. 113



FV p. 113

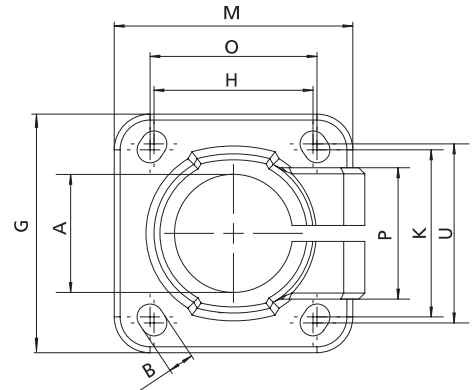
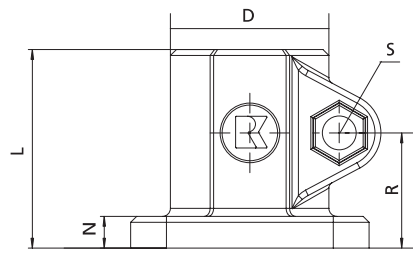
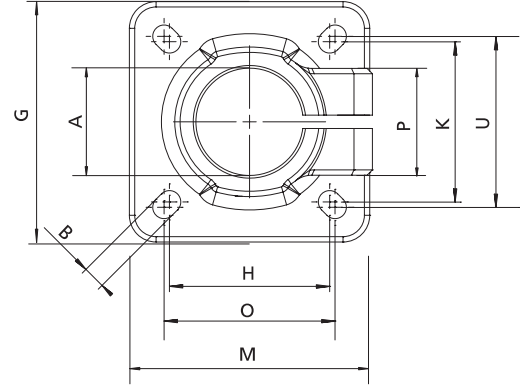
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour



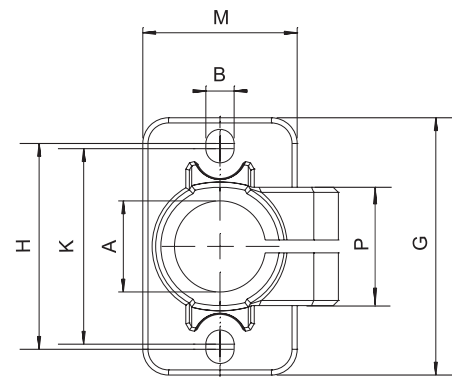
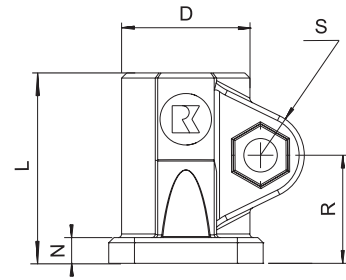
## FS - Industrial design

[mm]

Code No.	Type	A	B	D	G	H	K	L	M	N	O	P	R	S	U	m [g]
13120000020	FS 12	12,1														65
13140000020	FS 14	14,1														61
13150000020	FS 15	15,1	5,5	25	42	28	28	37	42	5	30	23	21	M6x20	30	58
13160000020	FS 16	16,1														57
13180000020	FS 18	18,1														52
13200000020	FS 20	20,1														186
13250000020	FS 25	25,1	6,5	40	60	40	42	50	60	8	42	33	29	M8x25	45	164
13300000020	FS 30	30,1														137
13320000020	FS 32	32,17														465
13300200020	FS 30(32)	30,1	8,5	56	90	60	60	70	90	10	64	40	40	M10x30	64	465
13350000020	FS 35	35,17														450
13400000020	FS 40	40,17														385
13400200020	FS 40(42)	40,17														758
13420000020	FS 42	42,22														720
13480000020	FS 48	48,22	10,5	66	105	74	74	85	105	14	80	45	49,5	M10x35	80	636
13500000020	FS 50	50,22														603
13600000020	FS 60	60,27	10,5	80	120	80	80	100	120	15	89	58	57,5	M12x45	89	935
13800000020	*FS 80	80,35	17,5	110	170	120	120	141,4	174,5	22	-	82	119	M16x65	-	2770

Type FS 20–30 turned by 90° \* Type FS 80 with round hole





[mm]

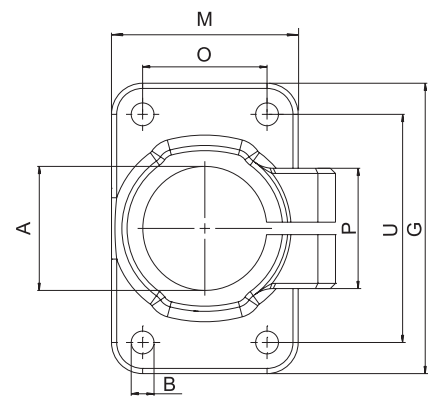
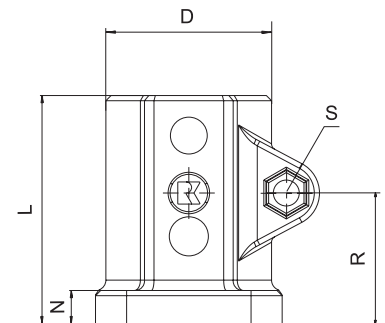


### FS 2 - Industrial design

Code No.	Type	A	B	D	G	H	K	L	M	N	P	R	S	m [g]
13120300020	FS 12-2	12,1	5,5	25	50	40	38	37	30	5	23	21	M6x20	65
13140300020	FS 14-2	14,1												61
13150300020	FS 15-2	15,1												58
13160300020	FS 16-2	16,1												57
13180300020	FS 18-2	18,1												52



### FS-B - Industrial design



[mm]

Code No.	Type	A	B	D	G	H	L	M	N	O	P	R	S	m [g]
13600200020	FS-B 60	60,27	11	80	140	110	110	90	16	60	58	63	M12x45	920

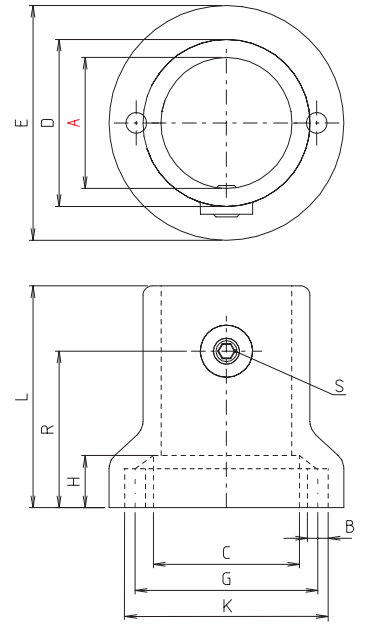
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

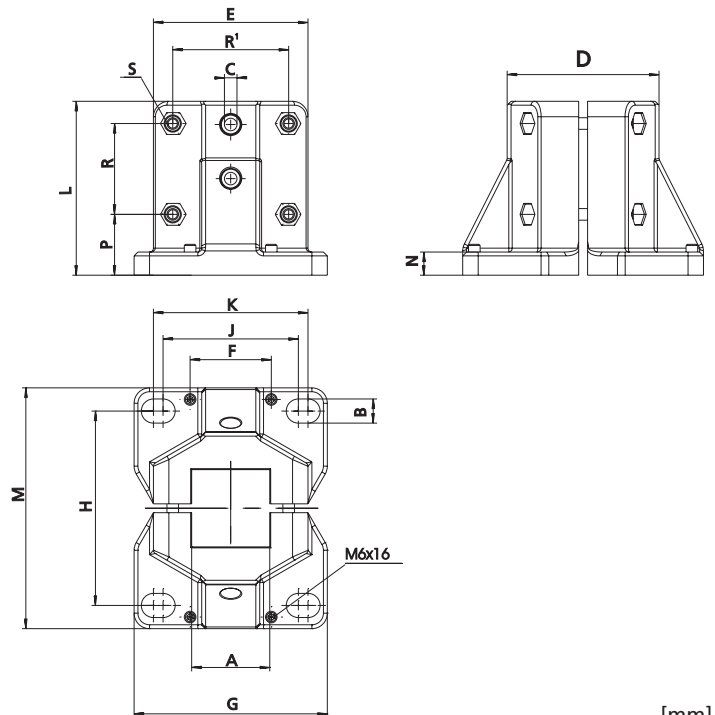
- Stainless steel screws
- Ball-polished
- Colour



## FR - Industrial design

[mm]

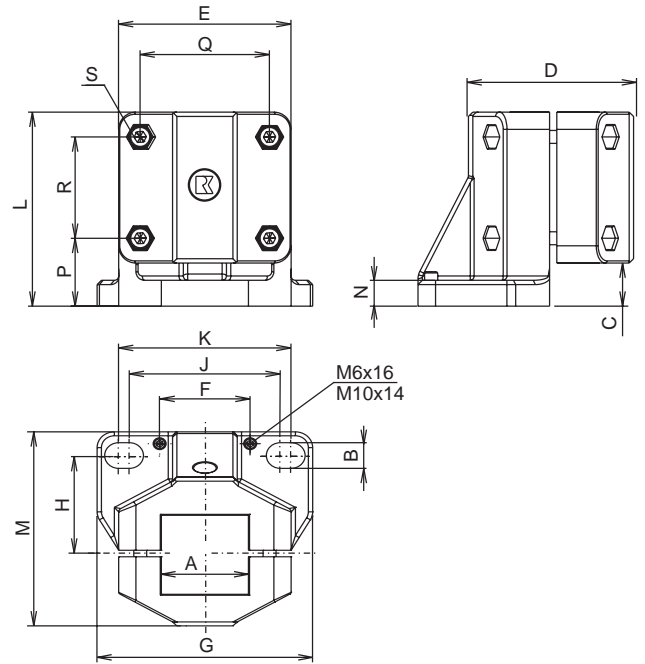
Code No.	Type	A	B	C	D	E	G	H	K	L	R	S	m [g]
13400009020	FR 40	40,2	M8	56	64	90	70	20	77	85	60	M10x12	474
13420009020	FR 42	42,2											458
13450009020	FR 45	45,2											407
13480009020	FR 48	48,2											383
13500009020	FR 50	50,2											359



## FVV-S - Industrial design

[mm]

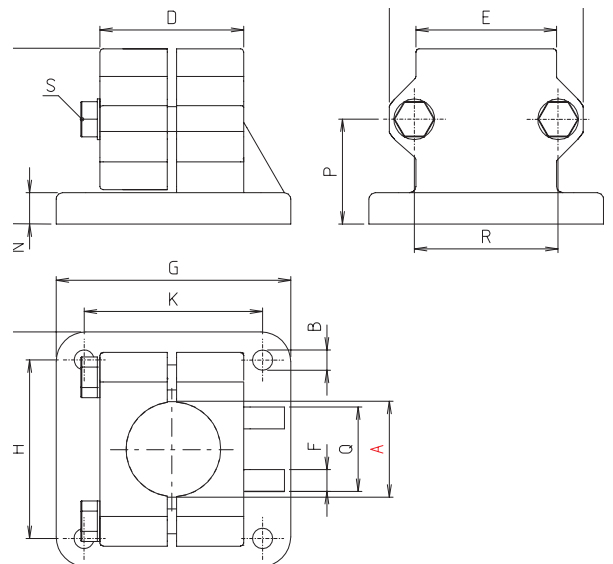
Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	m [g]
4014312	FVV-S 40	40,4	12,5	6,5	79	80	42	100	100	70	80	90	125	12	31,5	60	47	M6x45	805



### FVV-D - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	m [g]
4014313	FVV-D 40	40,4	12,5	20	75	80	42	100	50	70	80	90	98	12	31,5	60	47	M6x45	633



### FRR - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q	R	S	m [g]
13250003020	FRR 25	25,2	6,5	62	45	45	5	75	57	57	56	75	10	33,5	25	46	M8x45	303
13300003020	FRR 30	30,2																287
13350003020	FRR 35	35,2	8,5	75	60	60	5	100	76	76	71	100	10	43	25	57	M8x60	612
13400003020	FRR 40	40,2																597

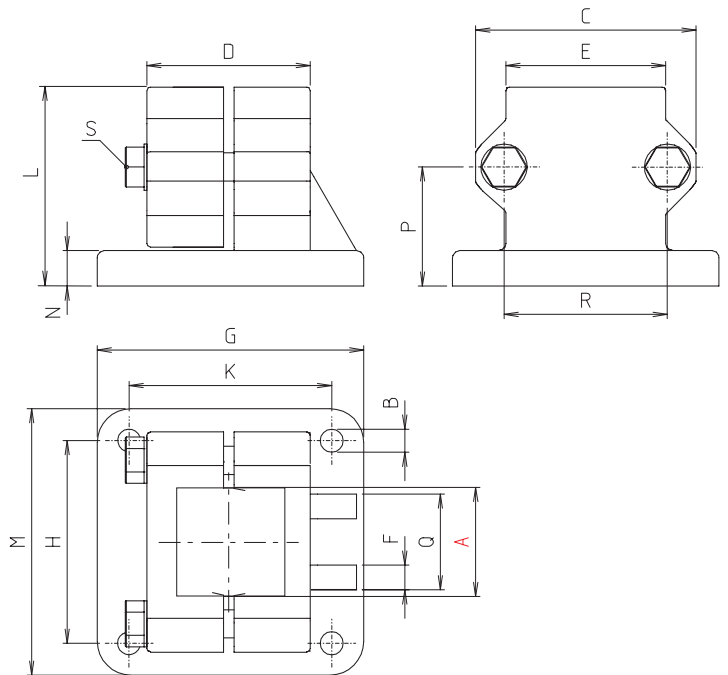
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour



## FV - Industrial design

[mm]

Code .	Type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q	R	S	m [g]
13200005020	FV 20	20,5																320
13250005020	FV 25	25,3	6,5	62	45	45	5	75	57	57	56	75	10	33,5	25	46	M8x45	292
13300005020	FV 30	30,3																278
13350005020	FV 35	35,4	8,5	75	60	60	5	100	76	76	73	100	12	43	32	57	M8x60	587
13400005020	FV 40	40,4																581

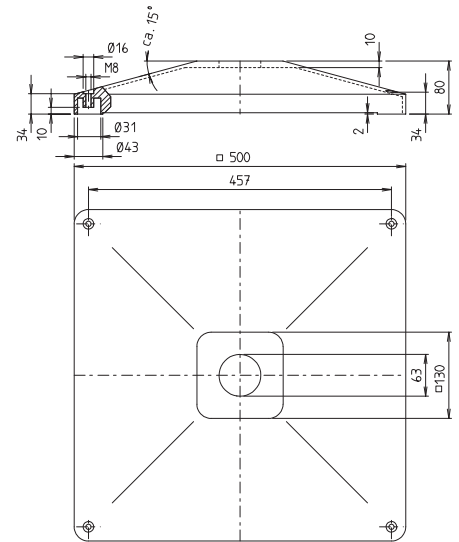


The fitting dimensions are largely adjusted to our profile technology BLOCAN®.

# Solid Clamps – Base clamps



Plate without base clamp



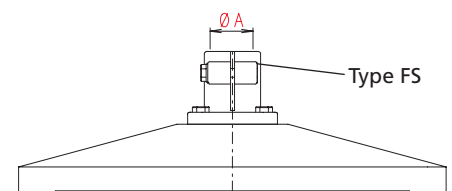
[mm]

## FP - Industrial design

Code No.	Type	m [g]
130000100_ _ _ _ _	FP	4440



Plate with base clamp Type FS



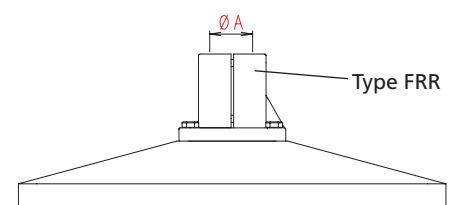
## FP FS - Industrial design

[mm]

Code No.	Type	A	m [g]
133200120_ _ _ _ _	FP FS 32	32,15	4946
134000120_ _ _ _ _	FP FS 40	40,15	4881
134800120_ _ _ _ _	FP FS 48	48,2	5141
135000120_ _ _ _ _	FP FS 50	50,2	5111



Plate with base clamp Type FRR



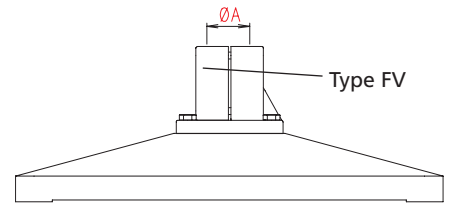
## FP FRR - Industrial design

[mm]

Code No.	Type	A	m [g]
134000130_ _ _ _ _	FP FRR 40	40,2	5037
134200130_ _ _ _ _	FP FRR 42	42,3	5854
134500130_ _ _ _ _	FP FRR 45	45,3	5799
134800130_ _ _ _ _	FP FRR 48	48,3	5783
135000130_ _ _ _ _	FP FRR 50	50,3	579



Plate with base clamp Type FV



### FP FV - Industrial design

[mm]

Code No.	Type	A	m [g]
133500150_ _ _ _	FP FV 35	35,4	5027
134000150_ _ _ _	FP FV 40	40,4	5010

### Code No. +

#### Surface:

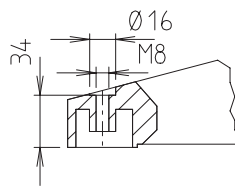
- 2 = ground finish
- A = RAL 7035, light grey
- B = RAL 7030, stone grey
- C = RAL 9005, jet black
- D = RAL 1021, yellow

#### Variants for clamping A:

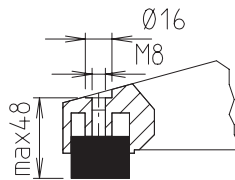
- 0 = screws
- 1 = 1 lever
- 2 = 2 levers
- 3 = 3 levers
- 4 = 4 levers

#### Version:

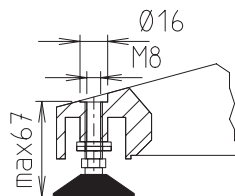
- 1 = Bore hole



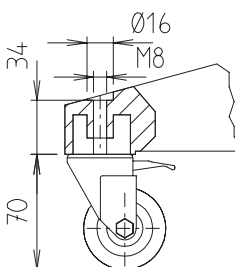
#### 2 = Rubber foot



#### 3 = Adjustable foot

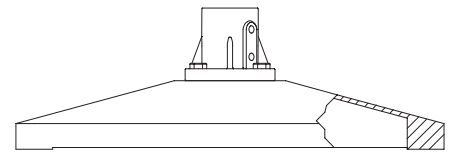


#### 4 = Castor with brake

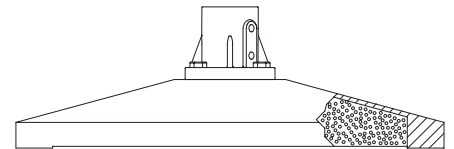


#### Filling:

- = without filling dump moment 15 Nm



CX = hollow space with concrete plate  
(m = 14 kg)  
dump moment 65 Nm



#### Order example:

Plate FP with base clamp FS 50,  
ground finish surface,  
equipped with screws,  
version with rubber foot,  
filled with concrete plate

**135000120 2 0 2 CX**



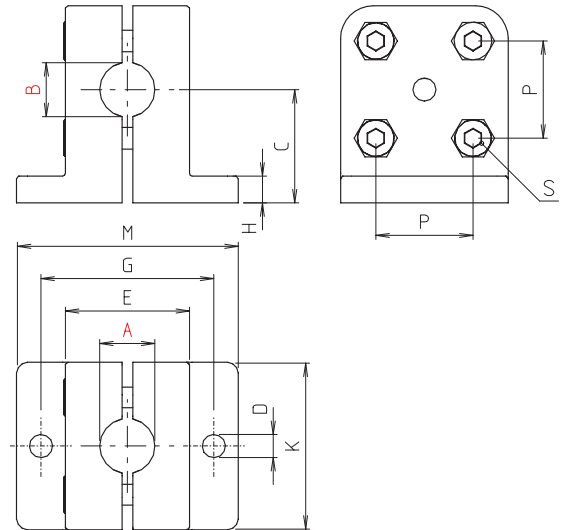
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

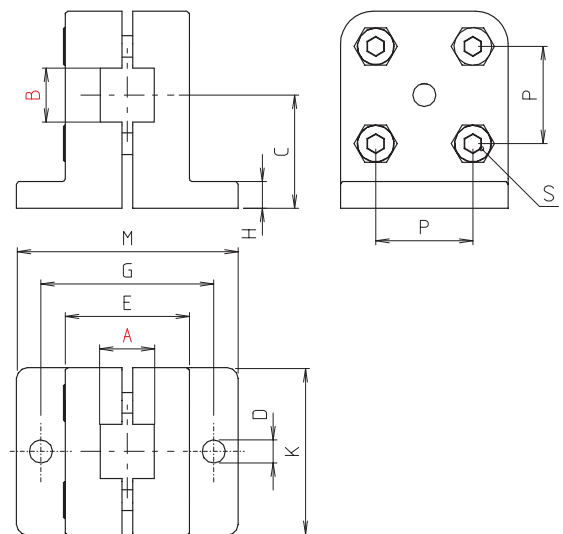


## FFKR - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	m [g]
290800020266	FFKR 8*	8	8	21	4	23	32	5	31	36	41	18	M4x18	62
291000020266	FFKR 10	10	10											58

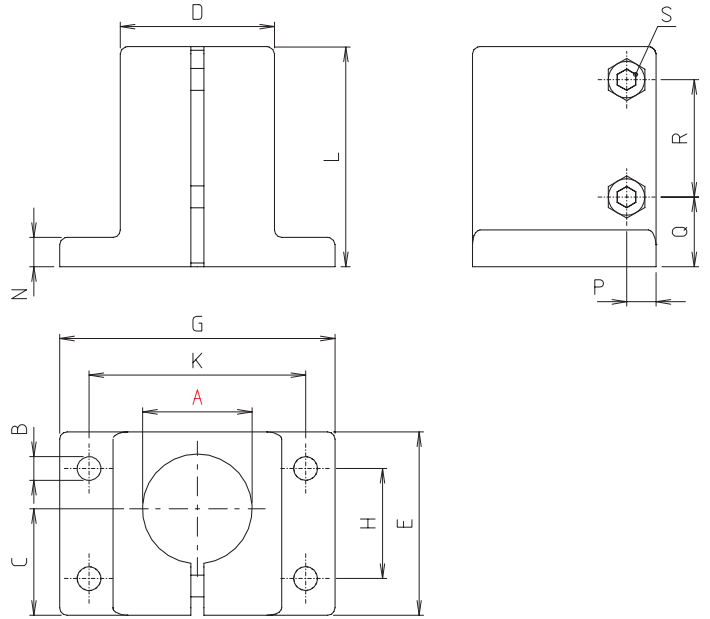
\* Ø 8 reduced with clamping sleeve



## FFKV - Block form

[mm]

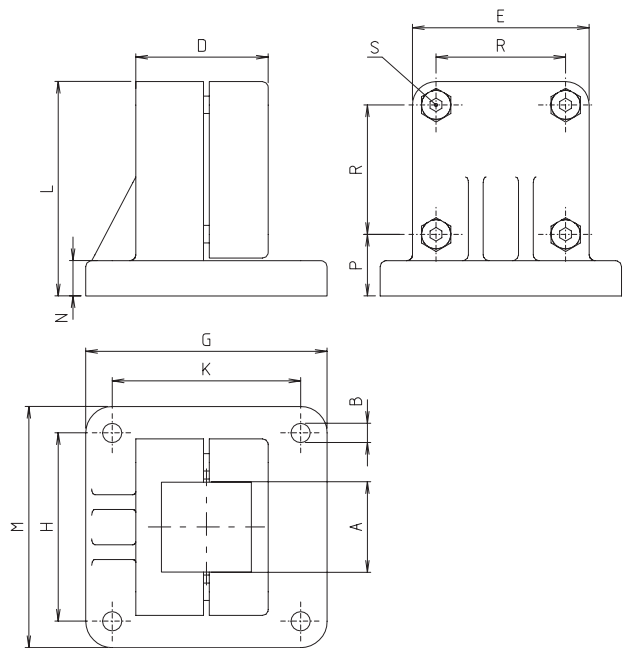
Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	m [g]
291000030266	FFKV 10	10	10	21	4	23	32	5	31	36	41	18	M4x18	5



FSB - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	N	P	Q	R	S	m [g]
23400000026	FSB 40	40,15	8,5	38	53	65	92	42	74	75	11	9,5	24	40	M8x45	500



FV - Block form

[mm]

Code No.	Type	A	B	D	E	G	H	K	L	M	N	P	R	S	m [g]
23300005026	FV 30	30,3	6,5	48	60	82	64	64	73	82	12	21	44	M6x40	403
23400005026	FV 40	40,4	6,5	62	70	95	76	76	85	95	14	23,5	53	M6x55	600
23500005026	FV 50	50,5	8,5	79	86	125	98	98	102	125	12	26,5	65	M8x70	1333
23800005026	FV 80*	80,7	11	122	130	240	100	190	150	130	20	35	100	M10x110	3741

\* With split flange plate

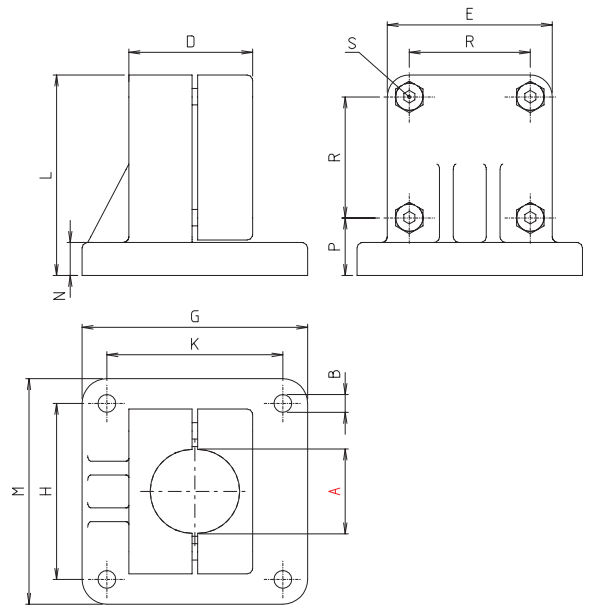
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

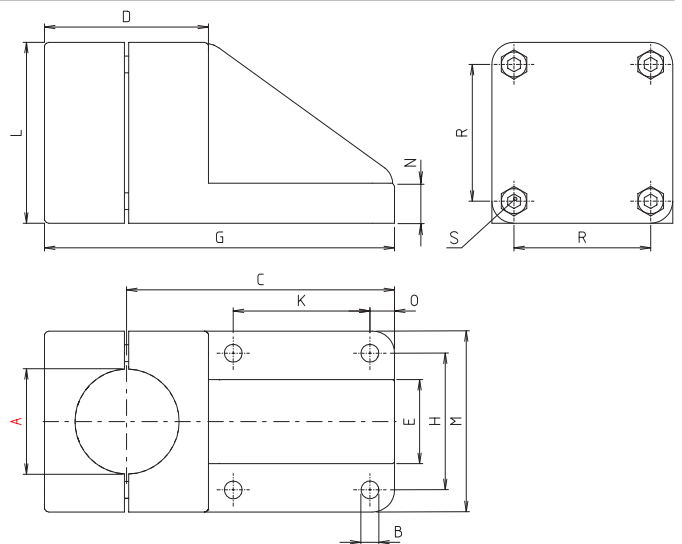


## FRR - Block form

[mm]

Code No.	Type	A	B	D	E	G	H	K	L	M	N	P	R	S	m [g]
23300003026	FRR 30	30,2	6,5	48	60	82	64	64	73	82	12	21	44	M6x40	414
23350003026	FRR 35	35,2	6,5	62	70	95	76	76	85	95	14	24	55	M6x55	670
23400003026	FRR 40	40,2											53		
23420003026	FRR 42	42,3	8,5	79	86	125	98	98	102	125	12	27	64	M8x70	1414
23450003026	FRR 45	45,3													1359
23480003026	FRR 48	48,3													1343
23500003026	FRR 50	50,3													1332
23800003026	FRR 80*	80,7													11

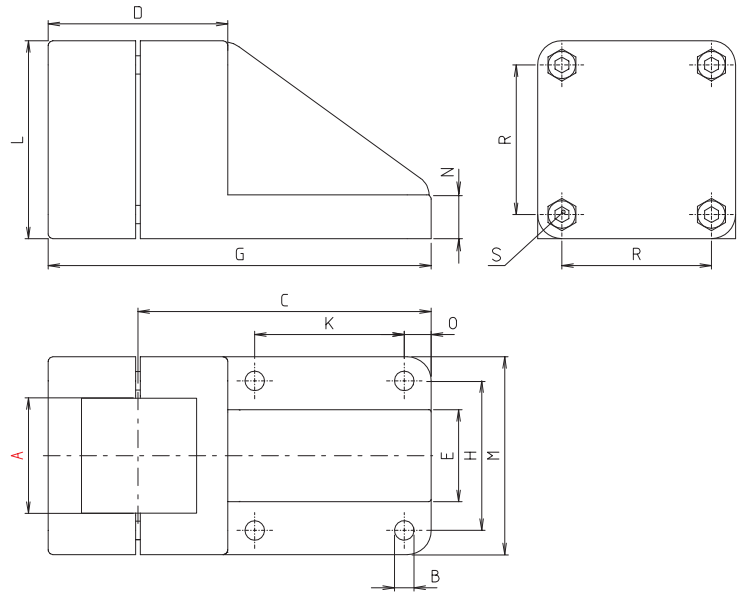
\*With split flange plate



## FRA - Block form

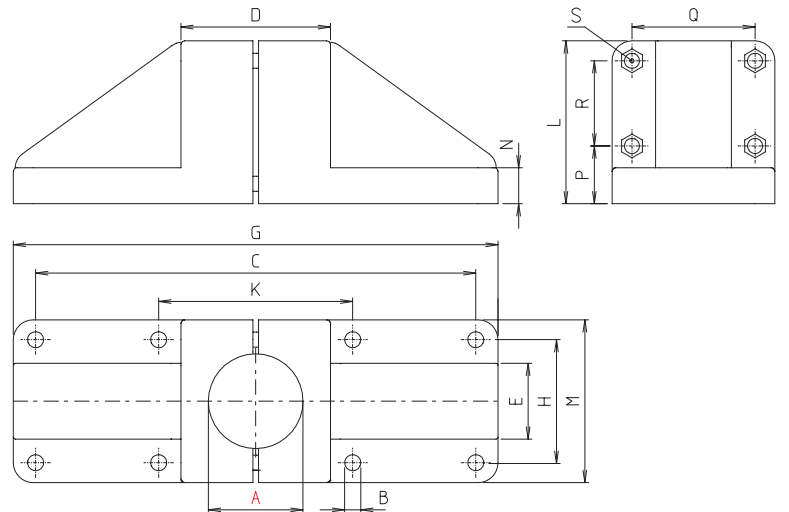
[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	O	R	S	m [g]
23420002026	FRA 42	42,3	8,5	128	79	40	167	65	65	86	86	19	10,5	65	M8x70	1198
23450002026	FRA 45	45,3														1217
23480002026	FRA 48	48,3														1231
23500002026	FRA 50	50,3														1205
23600002026	FRA 60	60,4														8,5


**FVA - Block form**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	O	R	S	m [g]
23500007026	FVA 50	50,5	8,5	127,5	79	40	167	65	65	86	86	19	10,5	65	M8x70	1146
23600007026	FVA 60	60,6	8,5	147	90	46	192	78	78	100	100	22	11	78	M8x80	1635


**FRAA - Block form**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	Q	R	S	m [g]
23420016026	FRAA 42	42,3	8,5	235	79	40	256	65	105	86	86	19	28,5	65	47	M8x70	1570
23450016026	FRAA 45	45,3															1250
23480016026	FRAA 48	48,3															1231
23500016026	FRAA 50	50,3															1518
23600016026	FRAA 60	60,4															2253

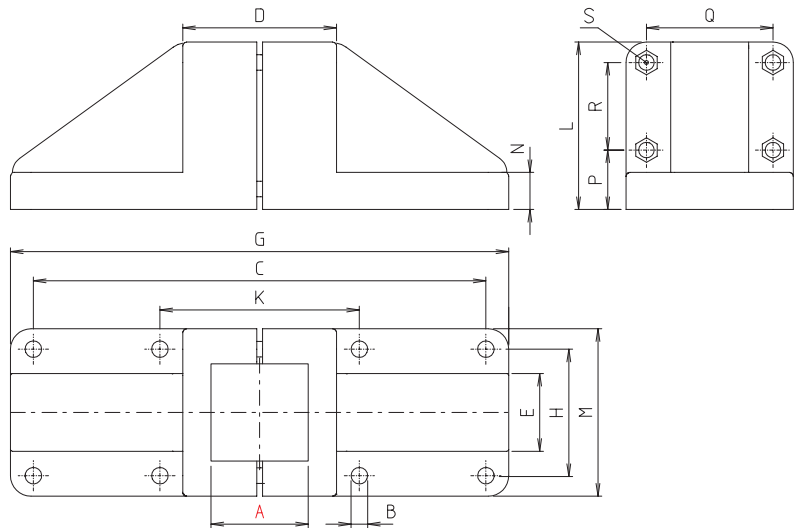
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

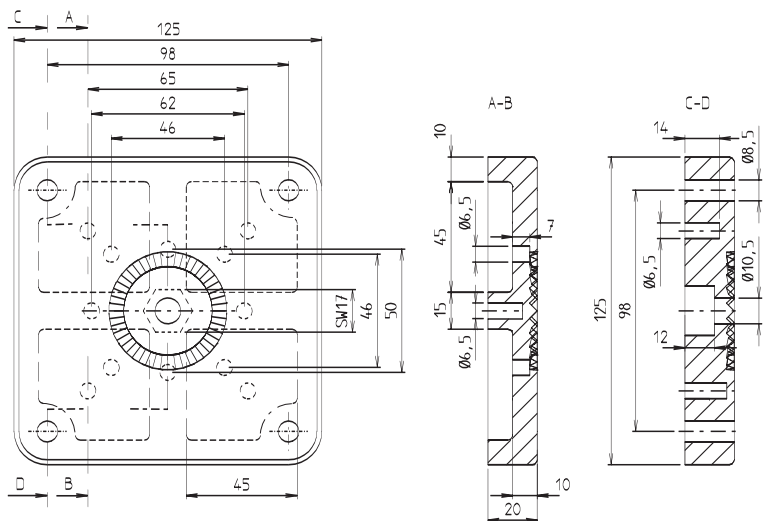
- Stainless steel screws
- Ball-polished
- Colour



## FVAA - Block form

[mm]

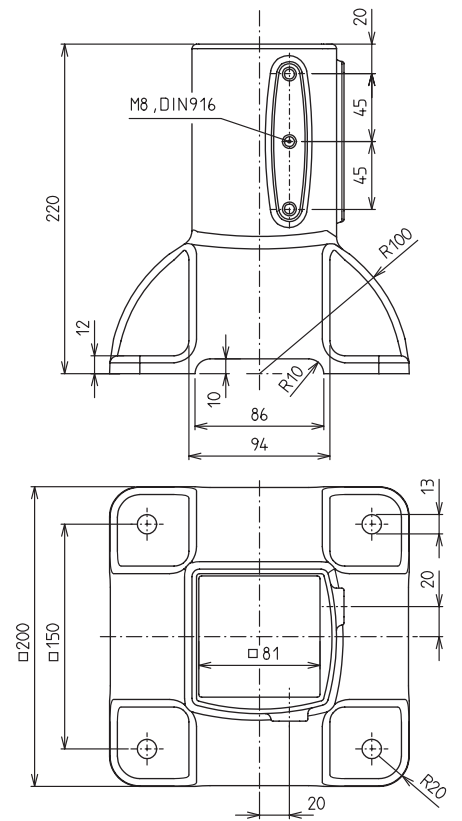
Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	Q	R	S	m [g]
23500017026	FVAA 50	50,5	8,5	235	79	40	256	65	105	86	86	19	28,5	65	47	M8x70	1479
23600017026	FVAA 60	60,6	8,5	272	90	46	294	78	116	100	100	22	30,5	78	58,5	M8x80	2220



## FPU - Block form

[mm]

Code No.	Type	m [g]
2340001902	FPU 40	60



**BAK-80 - Block form**

[mm]

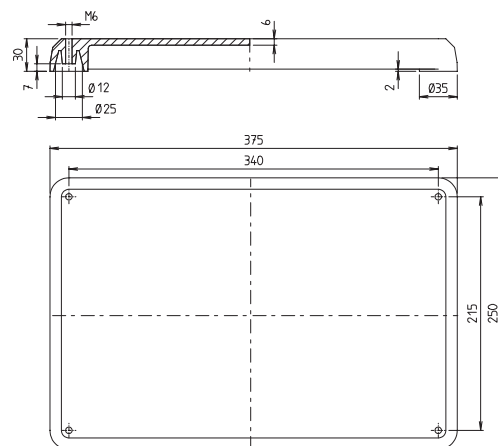
Code No.	Type	m [g]
4040501	BAK-80	1880



# Solid Clamps – Base clamps



Plate without base clamp



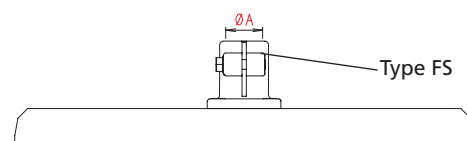
## FP - Block form

[mm]

Code No.	Type	m [g]
230000100 _ _ _ _	FP	1960



Plate with base clamp Type FS



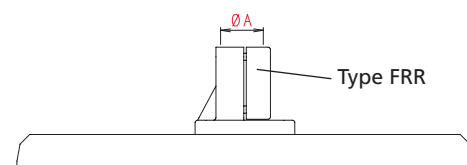
## FP FS - Block form

[mm]

Code No.	Type	A	m [g]
232000120 _ _ _ _	FP FS 20	20	2141
233000120 _ _ _ _	FP FS 30	30,1	2400
233200120 _ _ _ _	FP FS 32	32,15	2459
233500120 _ _ _ _	FP FS 35	35,15	2434
234000120 _ _ _ _	FP FS 40	40,15	2391



Plate with base clamp Type FRR



## FP FRR - Block form

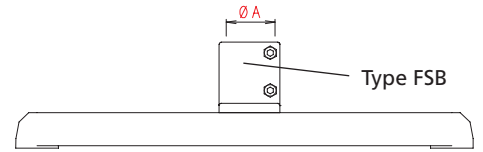
[mm]

Code No.	Type	A	m [g]
233000130 _ _ _ _	FP FRR 30	30,15	2364
234000130 _ _ _ _	FP FRR 40	40,2	256





Plate with base clamp Type FSB



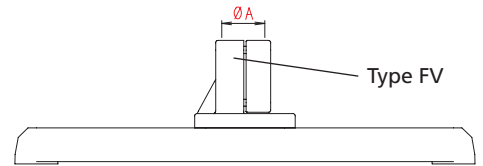
### FP FSB - Block form

[mm]

Code No.	Type	A	m [g]
233200140_ _ _ _	FP FSB 32	32,15	2534
233500140_ _ _ _	FP FSB 35	35,15	2507



Plate with base clamp Type FV



### FP FV - Block form

[mm]

Code No.	Type	A	m [g]
233000150_ _ _ _	FP FV 30	30,3	2353
234000150_ _ _ _	FP FV 40	40,4	2550

## Code No. +

#### Surface:

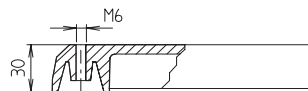
- 2 = ground finish
- A = RAL 7035, light grey
- B = RAL 7030, stone grey
- C = RAL 9005, jet black
- D = RAL 1021, yellow

#### Variants for clamping A:

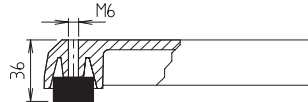
- 0 = screws
- 1 = 1 lever
- 2 = 2 levers
- 3 = 3 levers
- 4 = 4 levers

#### Version:

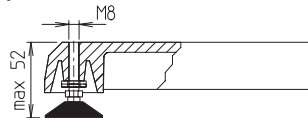
- 1 = Bore hole



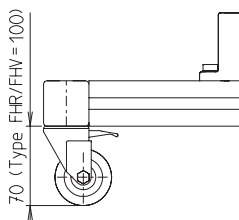
- 2 = Rubber foot



- 3 = Adjustable foot



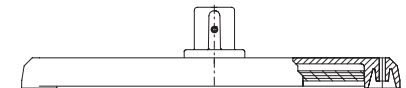
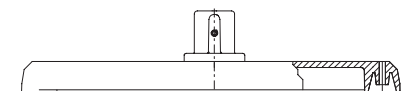
- 4 = Castor with brake



#### Filling:

0 = without filling dump moment 15 Nm

y = hollow space with steel plate  
dump moment 65 Nm



#### Order example:

Plate FP with base clamp FS 40, ground finish surface, equipped with screws, version with rubber foot, filled with steel plate

**234000120 2 0 2 Y**

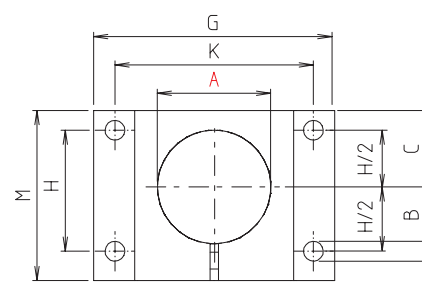
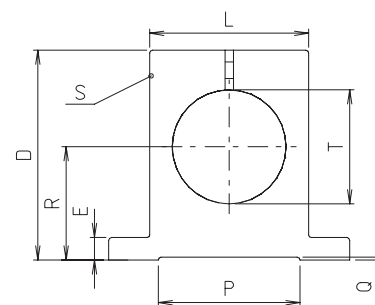
# Solid Clamps – Base clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

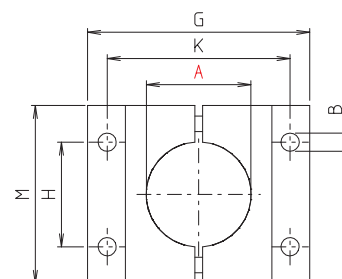
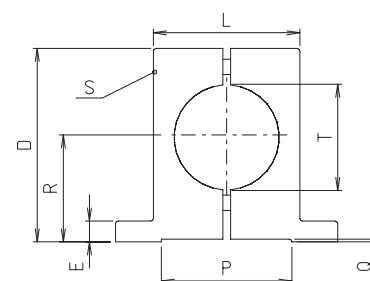
- Black anodized



FS - quad®

[mm]

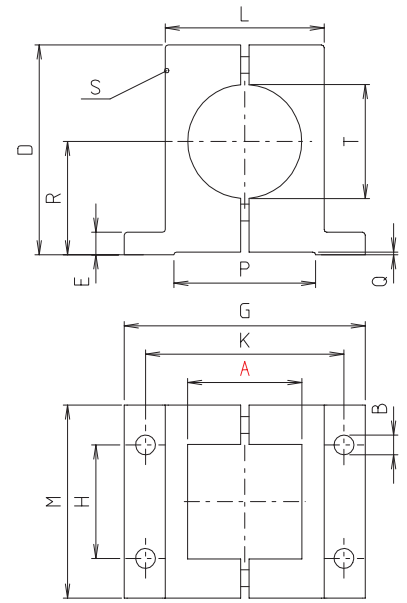
Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	Q	R	S	T	m [g]
53300000030	FS 30	30,1	7	21	58	6	70	28	56	42	49	35	1	30	M6x25	29,5	182
53400000030	FS 40	40,1	7	28	74	8	85	40	70	56	62	50	1	40	M6x35	39,5	369
53500000030	FS 50	50,2	9	35	92	10	110	50	90	70	77	60	1	50	M8x45	49,5	738
53600000030	FS 60	60,2	9	42	112,5	12	137	60	110	85	90	71	2	60	M8x60	60,2	1500



FR - quad®

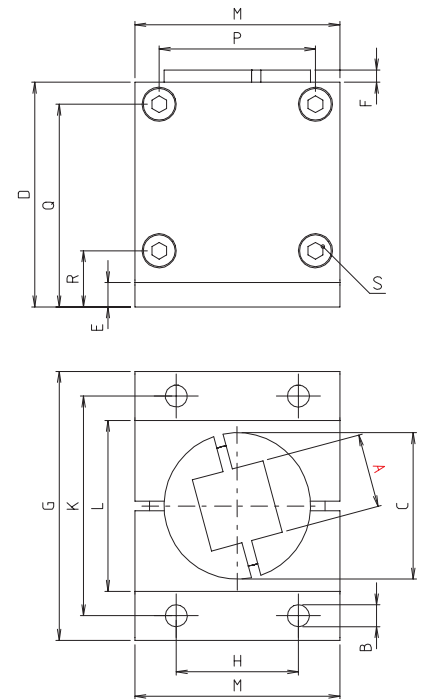
[mm]

Code No.	Type	A	B	D	E	G	H	K	L	M	P	Q	R	S	T	m [g]
53300009030	FR 30	30,1	7	58	6	70	28	56	42	56	35	1	30	M6x25	29,5	223
53400009030	FR 40	40,2	7	74	8	85	40	70	56	68	50	1	40	M6x35	39,5	431
53500009030	FR 50	50,3	9	92	10	110	50	90	70	84	60	1	50	M8x45	49,5	857
53600009030	FR 60	60,2	9	112,5	12	137	80	120	97	105	71	2	60	M8x60	60,3	–
53800009030	FR 80	80,6	11	142	16	156	80	135	112	126	80	2	80	M10x70	80,6	2858


**FV - quad®**

[mm]

Code No.	Type	A	B	D	E	G	H	K	L	M	P	Q	R	S	T	m [g]
53300005030	FV 30	30,2	7	58	6	70	28	56	42	56	35	1	30	M6x25	29,5	197
53400005030	FV 40	40,3	7	73,5	8	85	40	70	56	68	50	1	40	M6x35	39,5	375
53500005030	FV 50	50,4	9	92	10	110	50	90	70	84	60	1	50	M8x45	49,5	750
53600005030	FV 60	60,4	9	112,5	12	137	80	120	97	105	71	2	60	M8x60	60,3	–
53800005030	FV 80	80,4	11	142	16	156	80	135	112	126	80	2	80	M10x70	80,6	2508

360° 
**FRS - quad®**

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	P	Q	R	S	m [g]
533000180300	FRS 30	30,3	9	70	92	10	5	110	50	90	70	84	64	83	135	M8x45	1006
535000180300	FRS 50	50,5	11	122	142	16	5	156	80	135	112	126	100	130	30	M10x70	3100

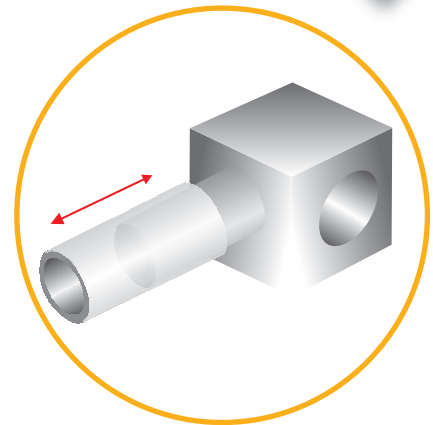
# Solid Clamps – Insert clamps



Version:

■ Insert clamps

delivery  
from stock



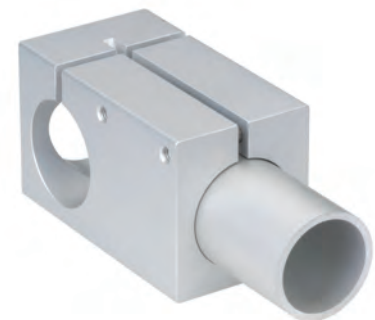
Single-piece elements

✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



Multi-piece elements

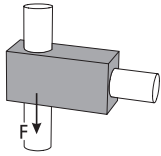
✓ Also suitable for subsequent assembly and expansion



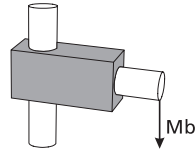
**Block form**

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements

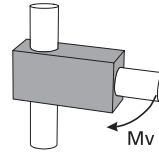
## Loads insert clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

Size	18			30			40			50			60			80			
	Type	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																			
S				1,1	38	18	4	316	87	4,7	605	79	5	850	363	13	1500		

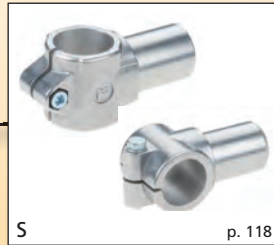
Size	18			30			40			50			60			80			
	Type	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																			
SO							4		87										
SR													8,1	441	255				
SV													5,9	471	329				

Size	18			30			40			50			60			80			
	Type	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>																			
SW	2,7	182	58	3,3	352	68	5,8	994	147										
SK	2,2	188	51	1,5	291	59	6,9	994	167										
SFK	1,6	188	33	1,1	295	89	6,3	994	159										

# Solid Clamps – Insert clamps

Right angle tube connector

Industrial design



Block form



quad® elements







# Solid Clamps – Insert clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

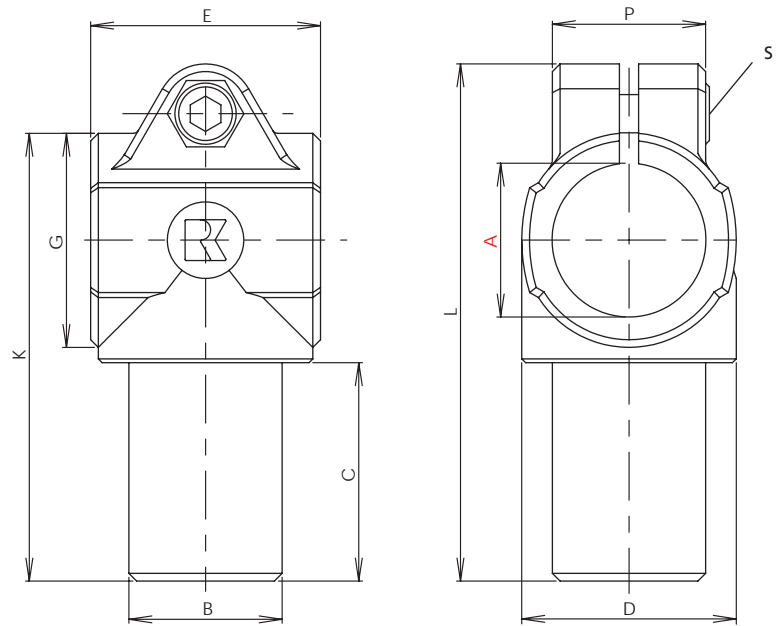
- Stainless steel screws
- Ball-polished
- Colour



Type: S 18/18, S 20/20, S 25/25, S 30/30, S 40/40, S 50/50, S 60/60



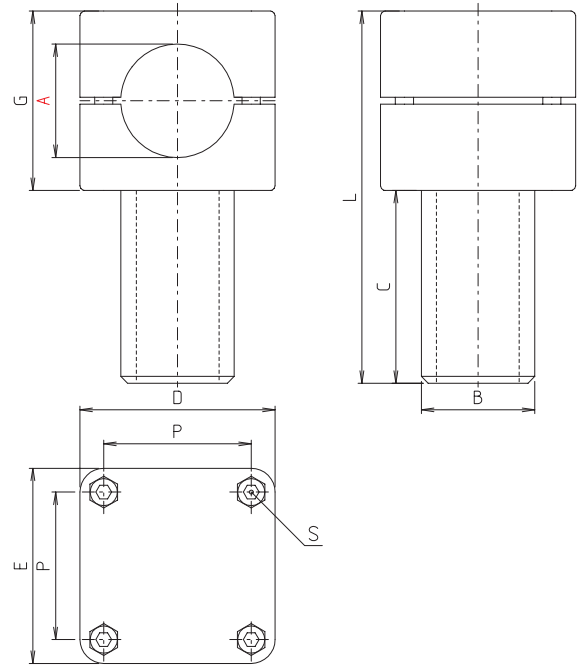
Type: S 20/30, S 25/30, S 32/32–35/40, S 42/50–50/50



## S - Industrial design

[mm]

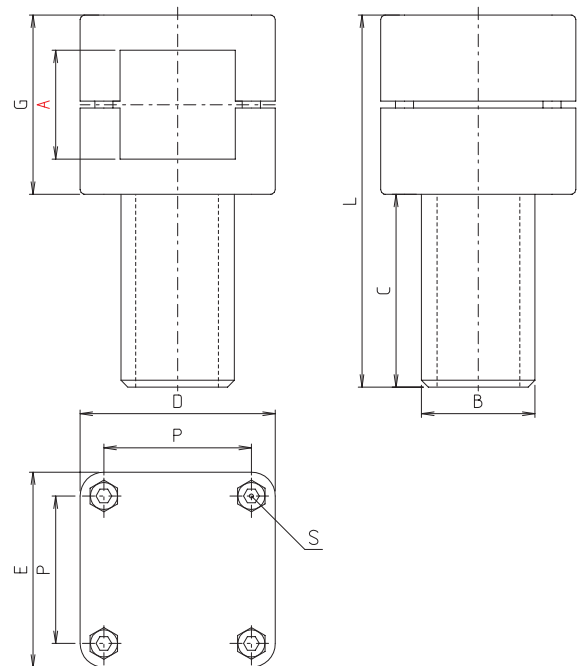
Code No.	Type	A	B	C	D	E	G	K	L	P	S	m [g]				
16181800020	S 18/18	18,1	18,1	33	26	32	26	62	72,5	21	M6x16	56				
16202000020	S 20/20	20	20	42	40	45	40	87	95	33	M8x35	180				
16203000020	S 20/30	20	30						95		M8x35	205				
16252500020	S 25/25	25,1	25,1	57	56	60	56	117	100	48	M8x25	188				
16253000020	S 25/30	25,1	30						95		M8x35	185				
16303000020	S 30/30	30,1	30,1						100		M8x25	174				
16323200020	S 32/32	32,15	32	67	66	70	66	136	148	58	M10x50	459				
16324000020	S 32/40	32,15	40									117	129	48	M10x50	484
16354000020	S 35/40	35,15	40									87	135	40	M10x30	426
16404000020	S 40/40	40,17	40,17									136	148	58	M10x60	704
16425000020	S 42/50	42,2	50	82	80	85	80	165	188	58	M10x35	669				
16455000020	S 45/50	45,2	50									137	154	45	M10x35	623
16484800020	S 48/48	48,2	48	82	80	85	80	165	188	58	M12x45	629				
16485000020	S 48/50	48,2	50									137	154	45	M12x45	620
16505000020	S 50/50	50,2	50	82	80	85	80	165	188	58	M12x45	1128				
16606000020	S 60/60	60,27	60,1	82	80	85	80	165	188	58	M12x45	1128				



SR - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	L	P	S	m [g]
26420003026	SR 42	42,3	50	85	86	86	79	164	65	M8x70	1134
26450003026	SR 45	45,3									1122
26500003026	SR 50	50,3									1116



SV - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	L	P	S	m [g]
26500005026	SV 50	50,5	50	85	86	86	79	164	65	M8x70	1058

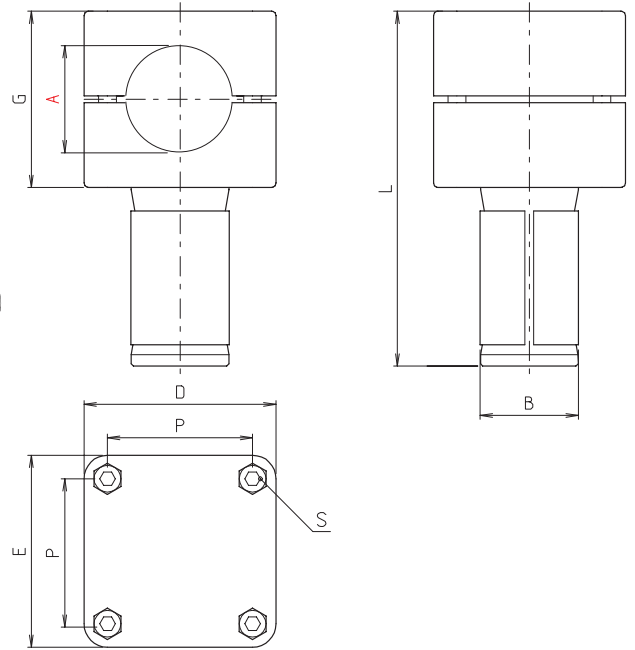
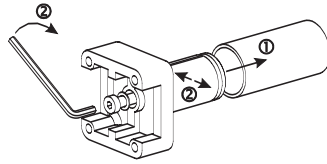
# Solid Clamps – Insert clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

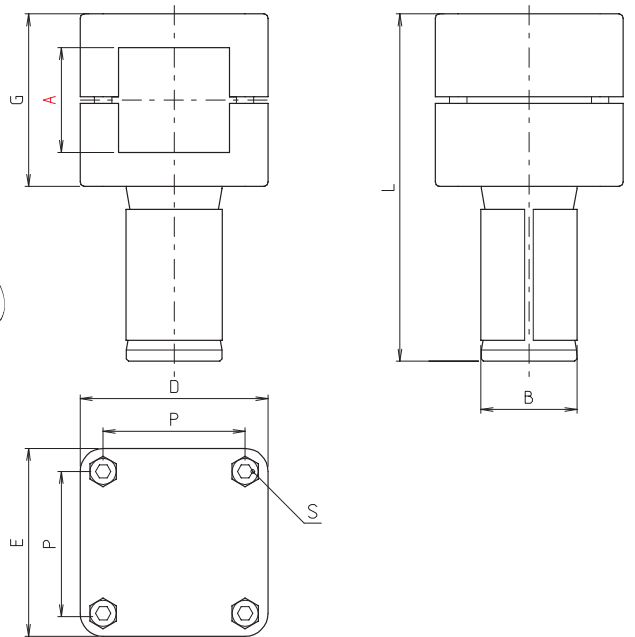
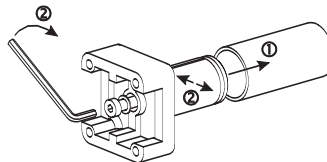
- Stainless steel screws
- Ball-polished
- Colour



## SRX - Block form

[mm]

Code No.	Type	A	B	D	E	G	L	P	S	m [g]
26500009026	SRX 50	50,3	43,8	86	86	79	164	65	M8x70	120

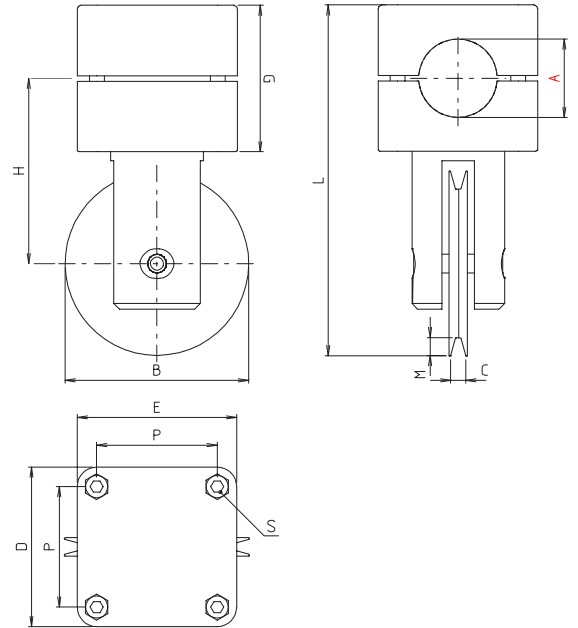


## SVX - Block form

[mm]

Code No.	Type	A	B	D	E	G	L	P	S	m [g]
26500010026	SVX 50	50,5	43,8	86	86	79	164	65	M8x70	1200

- Rope pulley: polyamide
- max. load 560 N

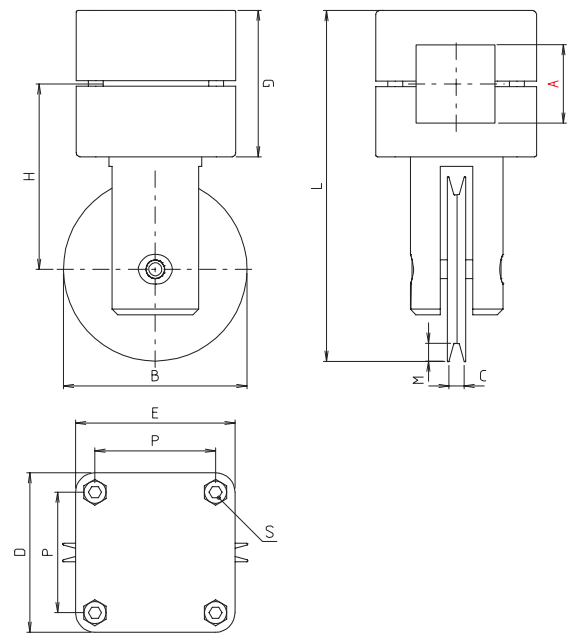
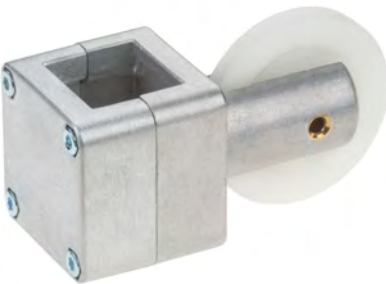


### SRO - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	L	M	P	S	m [g]
26420007026	SRO 42	42,3	100	8	86	86	79	100	189,5	10	65	M8x70	1170
26450007026	SRO 45	45,3											1180
26500007026	SRO 50	50,3											1200

- Rope pulley: polyamide
- max. load 560 N



### SVO - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	L	M	P	S	m [g]
26500008026	SVO 50	50,5	100	8	86	86	79	100	189,5	10	65	M8x70	1190

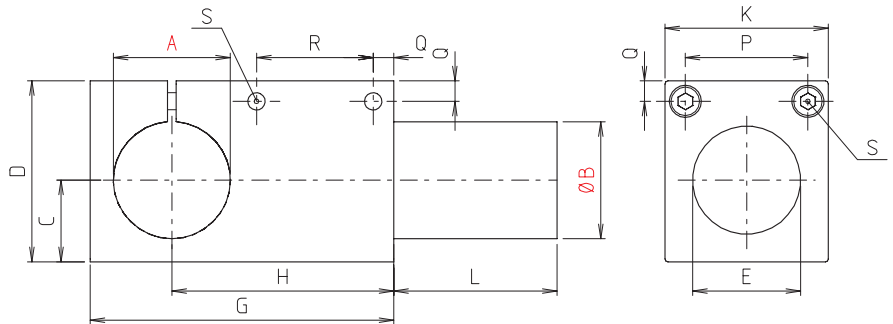
# Solid Clamps – Insert clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

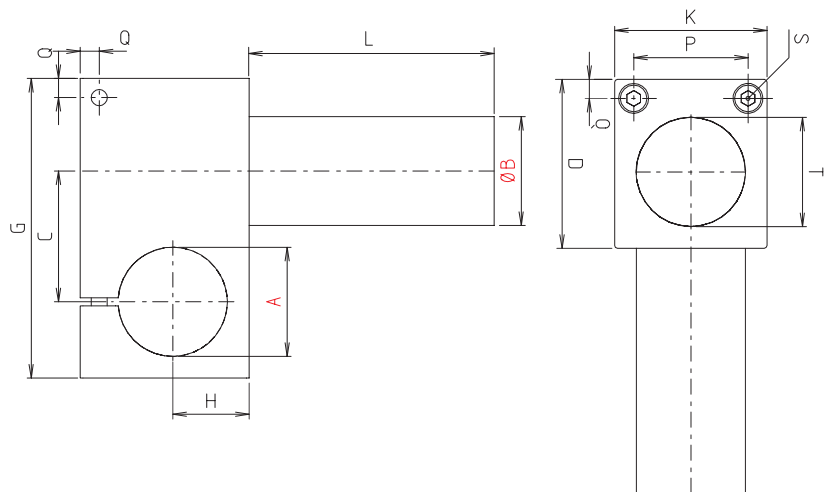
- Black anodized



## SW - quad®

[mm]

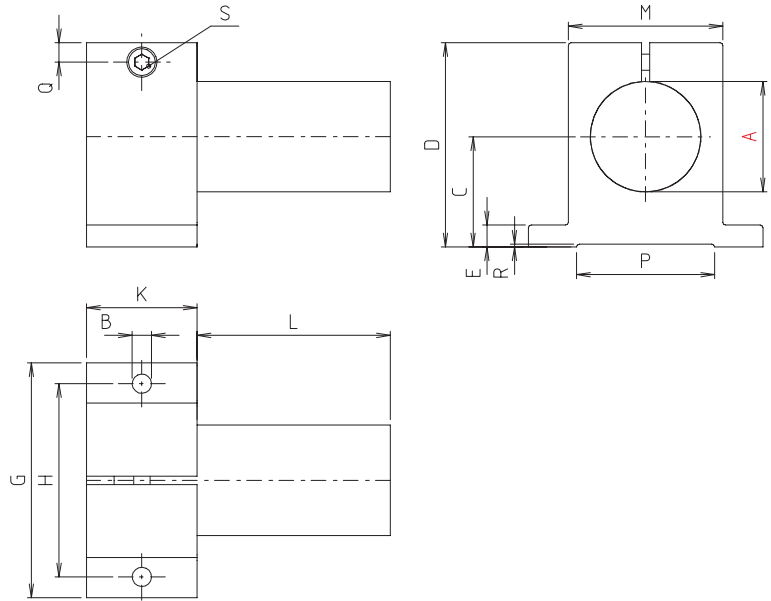
Code No.	Type	A	B	C	D	E	G	H	K	L	P	Q	R	S	m [g]
563000130300	SW 30	30,1	30	21	49	30	78	57	42	42	28	7	26	M6x25	289
564000130300	SW 40	40,1	40	28	62	40	104	76	56	56	42	7	40	M6x35	644
565000130300	SW 50	50,2	50	35	77	50	130	95	70	70	50	9	50	M8x45	1256



## SK - quad®

[mm]

Code No.	Type	A	B	C	D	G	H	K	L	P	Q	S	T	m [g]
563000140300	SK 30	30,1	30	36	49	85	21	42	42	28	7	M6x25	29,5	268
564000140300	SK 40	40,1	40	48	62	110	28	56	56	42	7	M6x35	39,5	595
565000140300	SK 50	50,2	50	60	77	137	35	70	70	52	9	M8x45	49,5	1160



**SFK - quad®**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	Q	R	S	m [g]
56300015030	SFK 30	30	7	30	58	6	70	56	30	42	42	35	7	1	M6x25	187
56400015030	SFK 40	40	7	40	74	8	85	70	40	56	56	50	7	1	M6x35	427
56500015030	SFK 50	50	9	50	92	10	110	90	50	70	70	60	9	1	M8x45	820

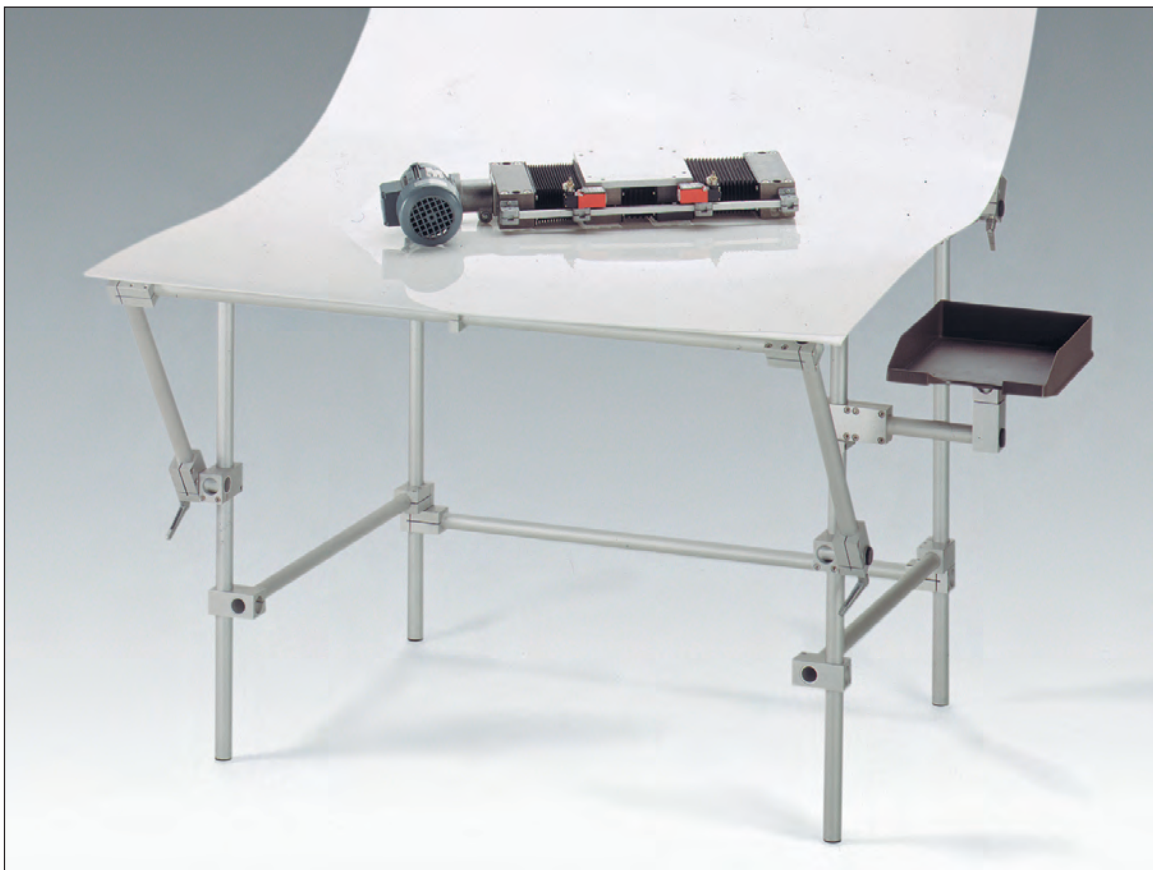


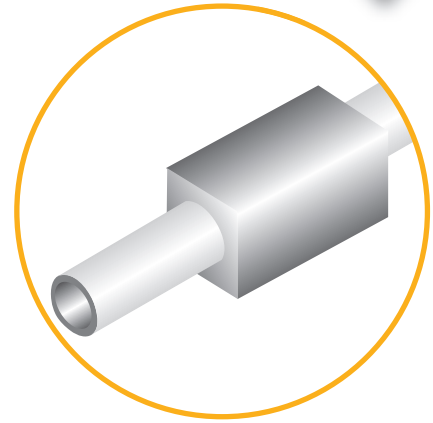
Photo table made from quad® tube connectors. The design can be tailored to the individual circumstances.

# Solid Clamps – Sleeve clamps



Version:

■ Sleeve clamps



Single-piece elements  
 ✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**Block form**

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



Multi-piece elements  
 ✓ Also suitable for subsequent assembly and expansion

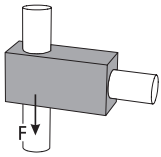


**quad® elements**

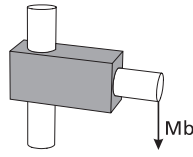
- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



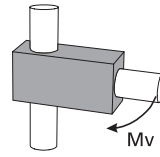
## Loads sleeve clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
M							1,9	435		4,7	698		2,8	1000		15	2400	
MD							2,7	440		5	994		2,7	1000				
MH							4,7			10			9,4					

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
M					141		5,3	351		9,2	519		6,5	875				
MD							1,8	451		8	713		4	1000		1,5	1125	

Size Type	30			40			50			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>												
M	11,2	352		8,0	619		11,8	1267				
MD	6,2	324		7,8	612		8	1267				
MH	2,6			3,4			7,8					
MR	9	810		4,5	1024		12,6	1596				
MV	7,8	433		2,5	1074		7,4	1568				
MVR	3,6	491		1,9	975		7,4	1568				

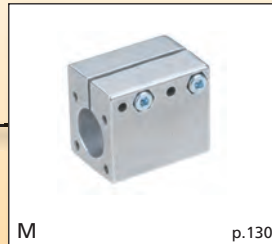
# Solid Clamps – Sleeve clamps

Axially parallel tube connector

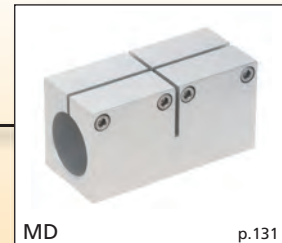
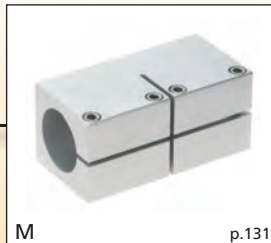
Industrial design

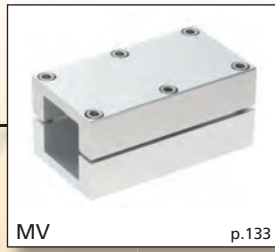
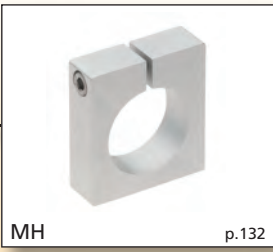


Block form



quad® elements





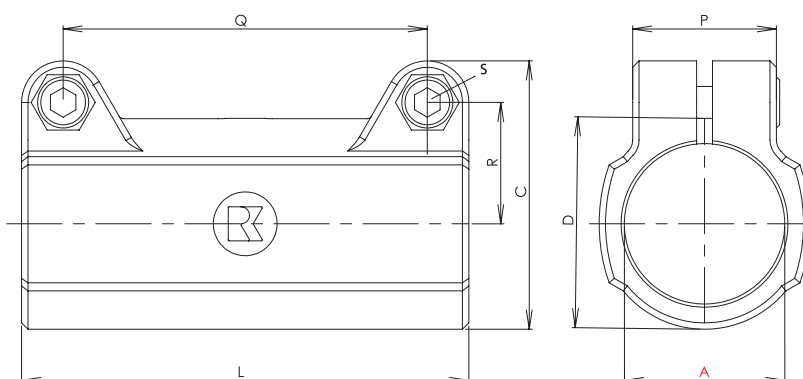
# Solid Clamps – Sleeve clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

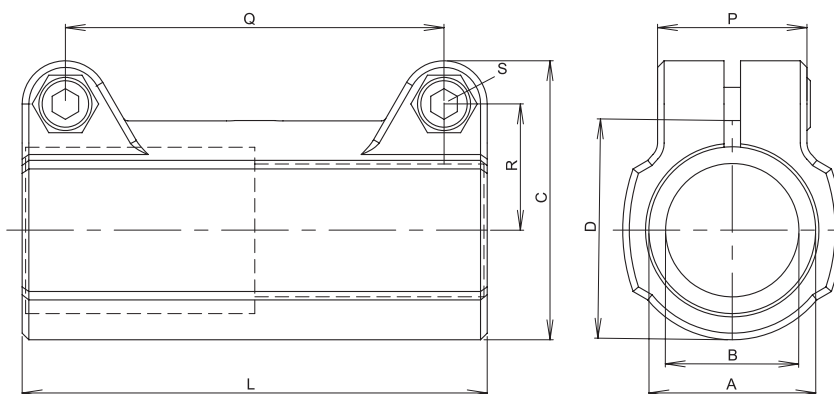
- Stainless steel screws
- Ball-polished
- Colour



## M - Industrial design

[mm]

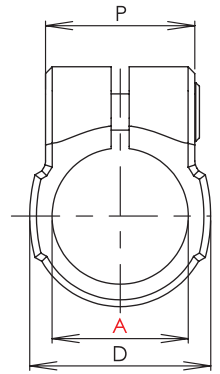
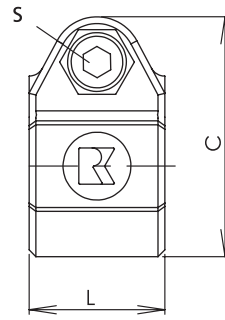
Code No.	Type	A	C	D	L	P	Q	R	S	m [g]
142000000200	M 20	20,1	53	40	80	33	60	22,5	M8x25	256
142500000200	M 25	25,1								220
143000000200	M 30	30,1								176
144000000200	M 40	40,17	73	56	120	40	94	32	M10x35	501
145000000200	M 50	50,22	84	66	140	45	114	38	M10x35	650
146000000200	M 60	60,27	103	80	150	58	118	47	M12x45	1092



## MD - Industrial design

[mm]

Code No.	Type	A	B	C	D	L	P	Q	R	S	m [g]
143025010200	MD 30x25	30,1	25,1	53	40	80	33	60	22,5	M8x25	176
144032010200	MD 40x32	40,17	32,15	73	56	120	40	94	32	M10x35	501
144840010200	MD 48x40	48,22	40,17	84	66	140	45	114	38		853
145040010200	MD 50x40	50,22									822
146048010200	MD 60x48	60,27	48,27	103	80	150	58	118	47	M12x45	1288



## MH - Industrial design

[mm]

Code No.	Type	A	C	D	L	P	R	S	m [g]
14300002020	MH 30	30,1	53	40	30	33	23	M8x25	80
14400002020	MH 40	40,15	73	56	40	40	32	M10x30	
14500002020	MH 50	50,22	84	66	42	45	38	M10x35	



Roller block made from quad® clamp connectors. Individually adjustable.

# Solid Clamps – Sleeve clamps

## Order instruction:

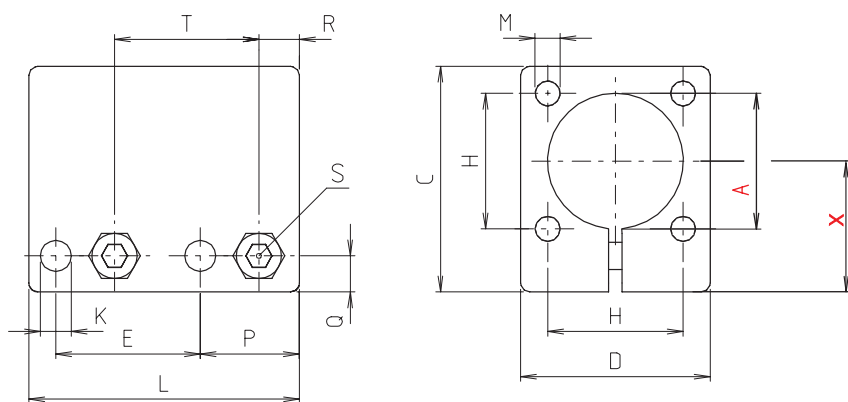
- Block form zinc plated screws
- quad® with stainless steel screws
- Clamping lever see accessories page 219

## On request block form:

- Stainless steel screws
- Ball-polished
- Colour

## On request quad®:

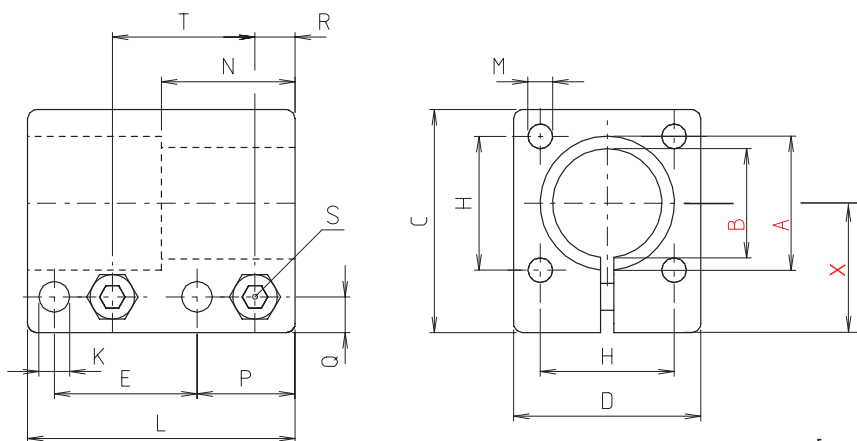
- Black anodized



## M - Block form

[mm]

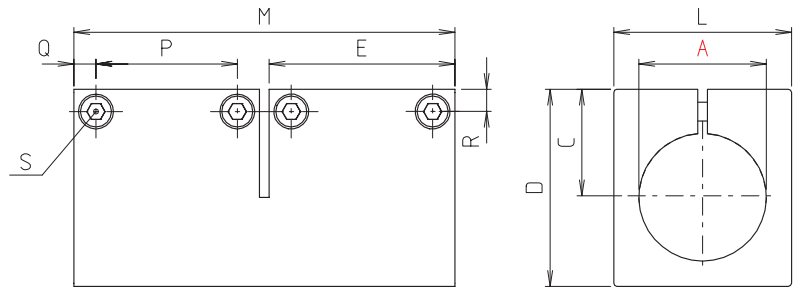
Code No.	Type	A	C	D	E	H	K	L	M	P	Q	R	S	T	X	m [g]
24180000026	M 18	18	32	26	-	-	-	40	-	-	7	7	M5x20	20	19	66
24320000026	M 32	32,15	65	53	40	36	8,5	75	5,5	8,25	9,5	14	M8x45	40	-	491
24350000026	M 35	35,15		65	46	8,5	90	6,5	-	9,5	12,5	M8x55	46	-	468	
24480000026	M 48	48,2	78	65	65	46	8,5	90	6,5	-	9,5	12,5	M8x55	46	-	721



## MD - Block form

[mm]

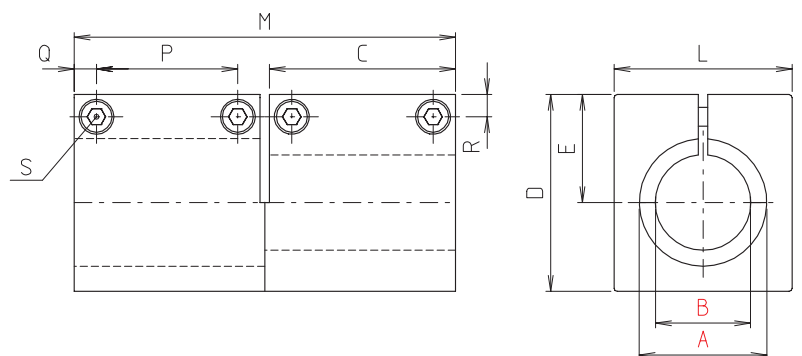
Code No.	Type	A	B	C	D	E	H	K	L	M	N	P	Q	R	S	T	X	m [g]
244032010266	MD 40x32	40,15	32,15	65	53	40	36	8,5	75	5,5	40	30,75	9,5	11	M8x45	40	38	472



### M - quad®

[mm]

Code No.	Type	A	C	D	E	L	M	P	Q	R	S	m [g]
54300000030	M 30	30,1	28	49	44	42	90	30	7	7	M6x25	326
54400000030	M 40	40,1	34	62	58,5	56	120	44,5	7	7	M6x35	703
54500000030	M 50	50,2	42	77	68	70	140	48	10	9	M8x45	1300



### MD - quad®

[mm]

Code No.	Type	A	B	C	D	E	L	M	P	Q	R	S	m [g]
543020010300	MD 30x20	30,1	20,1	44	49	28	42	90	30	7	7	M6x25	371
544030010300	MD 40x30	40,1	30,1	58,5	62	34	56	120	44,5	7	7	M6x35	789
545040010300	MD 50x40	50,2	40,2	68	77	42	70	140	48	10	9	M8x45	1426



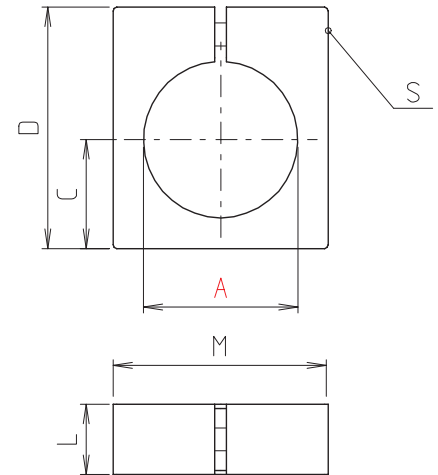
# Solid Clamps – Sleeve clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

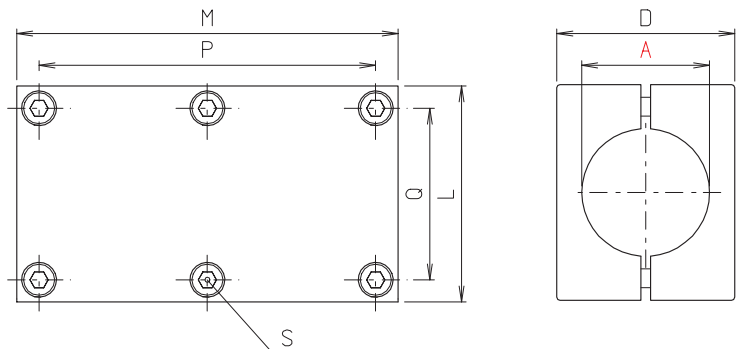
- Stainless steel screws
- Ball-polished
- Colour



## MH - quad®

[mm]

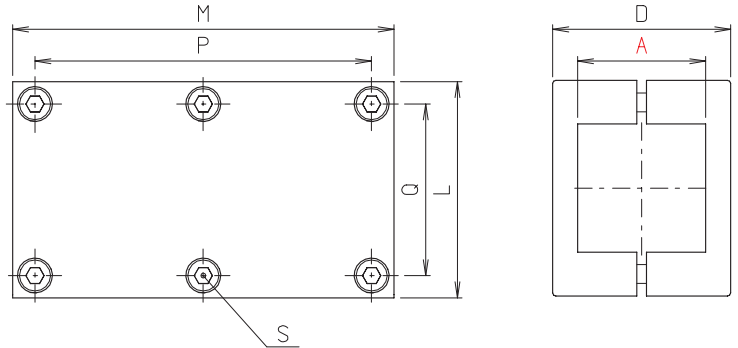
Code No.	Type	A	C	D	L	M	R	S	m [g]
54300002030	MH 30	30,1	21	49	16	42	7	M6x25	59
54400002030	MH 40	40,1	28	62	18	56	7	M6x35	108
54500002030	MH 50	50,2	35	77	20	70	9	M8x45	191



## MR - quad®

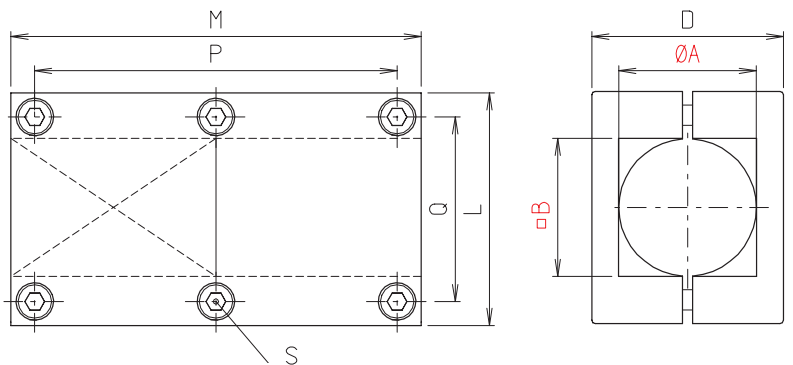
[mm]

Code No.	Type	A	D	L	M	P	Q	S	m [g]
54300003030	MR 30	30,1	42	56	90	76	42	M6x25	404
54400003030	MR 40	40,2	56	68	120	106	54	M6x35	800
54500003030	MR 50	50,3	70	85	140	120	67	M8x45	1523
54600003030	MR 60	60,3	97	105	200	180	85	M8x60	-


**MV - quad®**

[mm]

Code No.	Type	A	D	L	M	P	Q	S	m [g]
54300004030	MV 30	30,2	42	56	90	76	42	M6x25	355
54400004030	MV 40	40,3	56	68	120	106	54	M6x35	705
54500004030	MV 50	50,4	70	85	140	120	67	M8x45	1302
54600004030	MV 60	60,4	97	105	200	180	85	M8x60	–


**MVR - quad®**

[mm]

Code No.	Type	A	B	D	L	M	P	Q	S	m [g]
543000050300	MVR 30	30,1	30,2	48	56	90	76	42	M6x25	378
544000050300	MVR 40	40,2	40,3	56	68	120	106	54	M6x35	747
545000050300	MVR 50	50,3	50,4	70	85	140	120	67	M8x45	1399
546000050300	MVR 60	60,3	60,4	97	105	200	180	85	M8x60	–

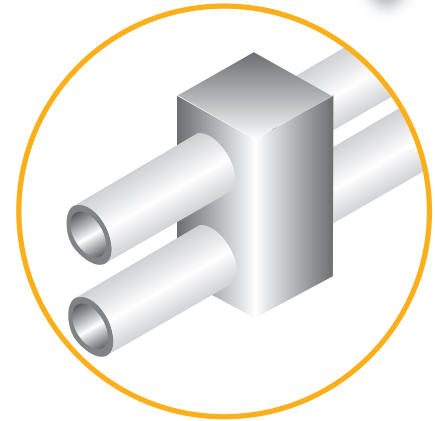
# Solid Clamps – Parallel clamps



Version:

■ Parallel clamps

delivery  
from stock



Single-piece elements

✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**Block form**

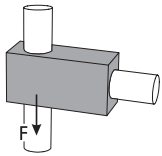
- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements



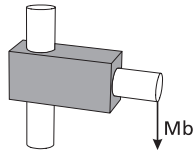
**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements

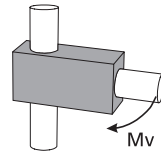
## Loads parallel clamps



Adhesion force F [kN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
Industrial design																		
P							2,7	100	40	12,2	700	317	8,9	1250	243			

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
Block form																		
P				3,6	201	19	6	1210	97	11,5	1395	316	11,5	1250	181	13,5	1500	

Size Type	30			40			50			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
quad® elements												
P	3,7	970	57	4,8	787	48	6,3	1650	159			
PFK	3,7	600	57	4,7	827	41	6,3	1500	159			
PF	2,1	1500	42	2,4	945	40	5,8	1500	118			

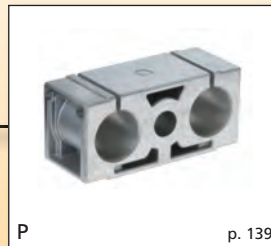
# Solid Clamps – Parallel clamps

Axially parallel tube connector

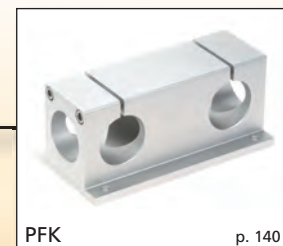
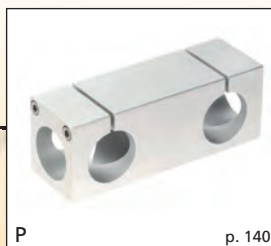
Industrial design

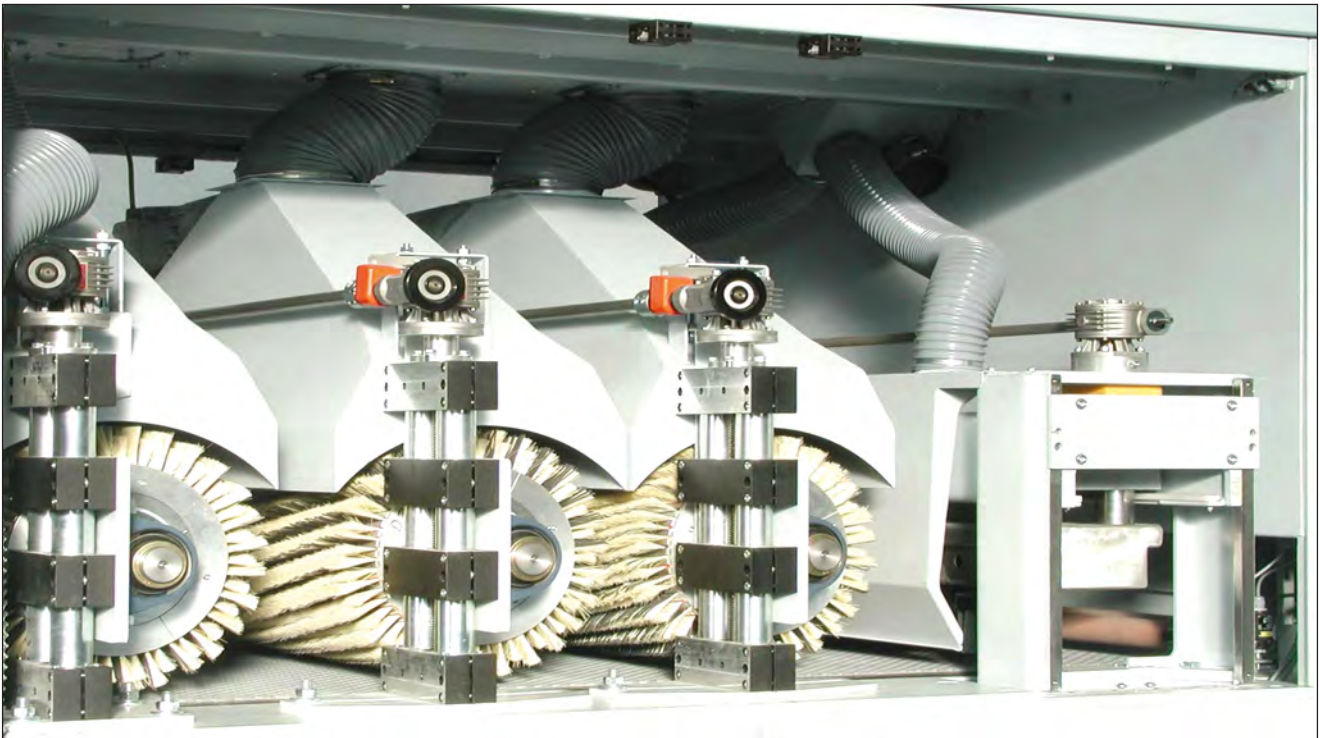


Block form



quad® elements





Height adjustment of a system for surface processing.

# Solid Clamps – Parallel clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

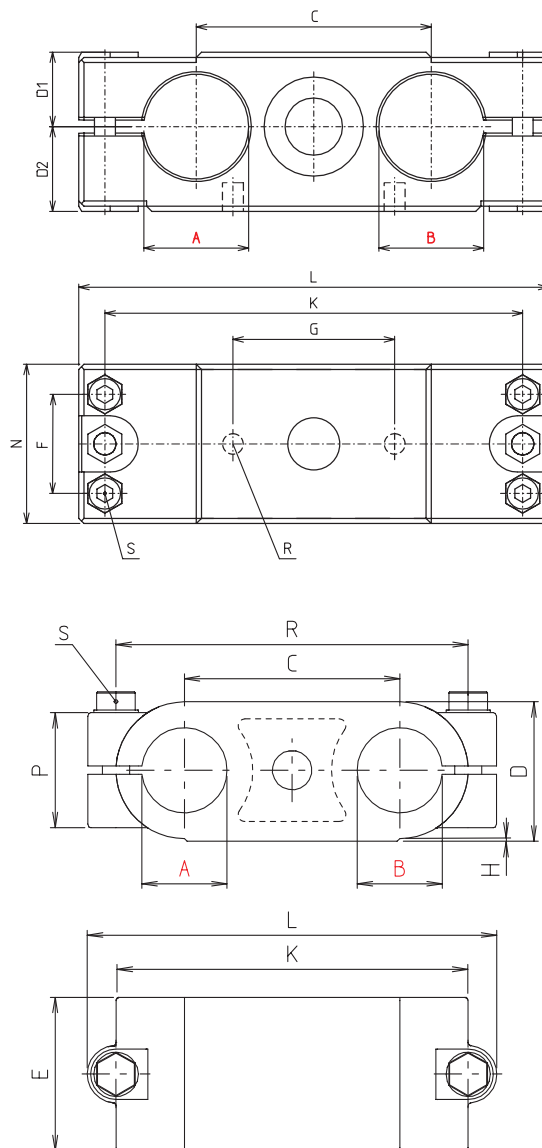
- Stainless steel screws
- Ball-polished
- Colour



Type P 12–18, P40



Type P 20–30, 48

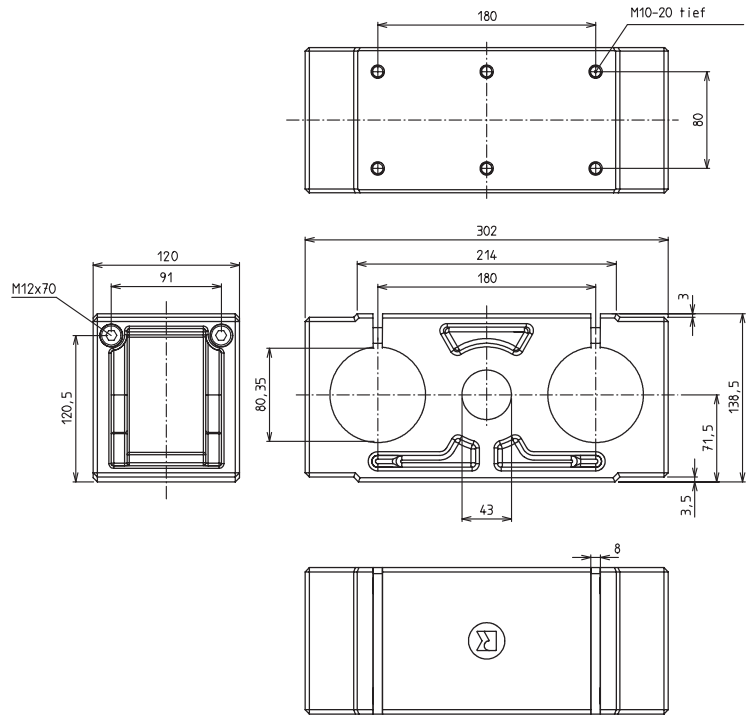
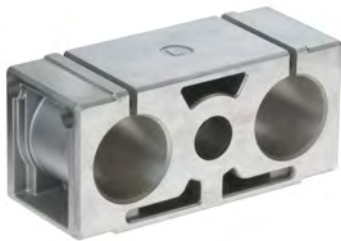


## P - Industrial design

[mm]

Code No.	Type	A	B	C	D1	D2	G	K	L	N	R	S	m [g]
151200000200	P 12	12,1	12,1	40	13,6	15	18	68	82	28,5	-	M5x20	140
151400000200	P 14	14,1	14,1										134
151600000200	P 16	16,1	16,1										128
151800000200	P 18	18,1	18,1										120
152000000200	P 20	20,1	20,1	63	20	21	41	103	119	45	M5	M8x35	367
152500000200	P 25	25,1	25,1										330
153000000200	P 30	30,1	30,1										269
154000000200	P 40	40,17	40,17	90	28,5	32,5	62	160	180	61	M8	M8x45	1307
154800000200	P 48	48,2	48,2	100	33	35	62,5	166	190	70	M7	M10x60	1846

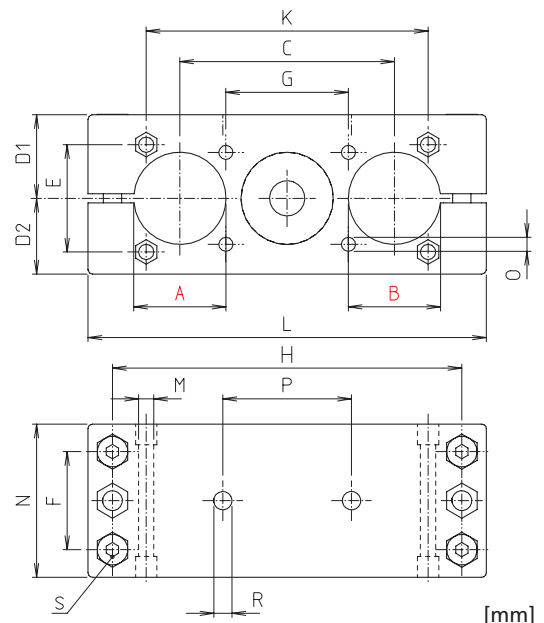




**P - Block form**

[mm]

Code No.	Type	m [g]
158000000266	P 80	7920



**PB - Block form**

[mm]

Code No.	Type	A	B	C	D1	D2	E	F	G	H	K	L	M	N	O	P	R	S	X	m [g]
252000000266	PB 20	20,1	20,1	70	27	25	35	32	40x30	114	92	130	5,3*	50	4,2-10 prof	42	M6	M6x45	28	733
253000000266	PB 30	30,1	30,1																	622
254800000266	PB 48	48,2	48,2	100	36,5	35	50	50	46	206	150	206	8,5	73	6,5	62	M8	M8x60	38	1799
255000000266	PB 50	50,2	50,2																	1794
256000000266	PB 60	60,3	60,25	130	44	42	60	56	55	216	185	240	8,5	80	6,5	74	M10	M8x75	45	2727

\* Counterbore 20 deep, without hexagonal. The type 12-18 and 40 are no longer available. They are replaced by industrial design. See page 138

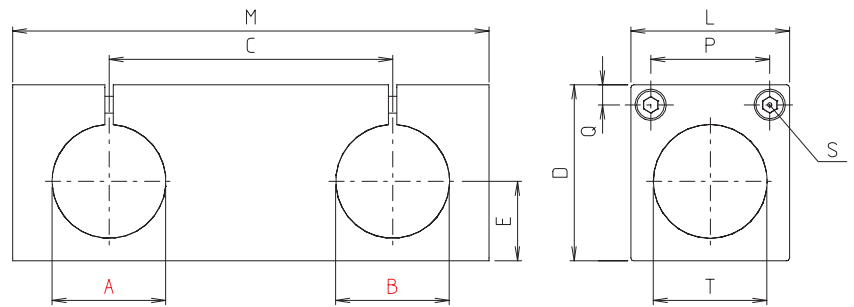
# Solid Clamps – Parallel clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

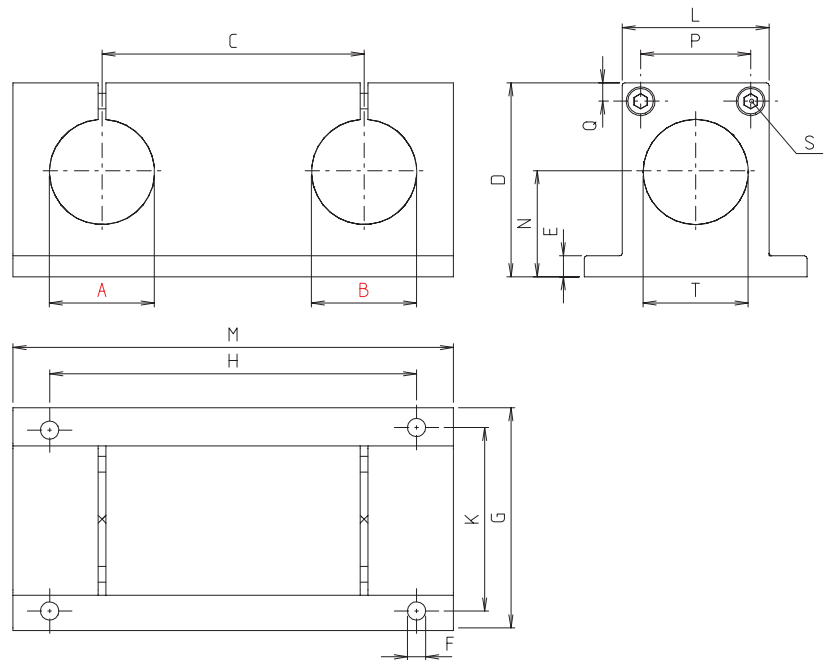
- Black anodized



## P - quad®

[mm]

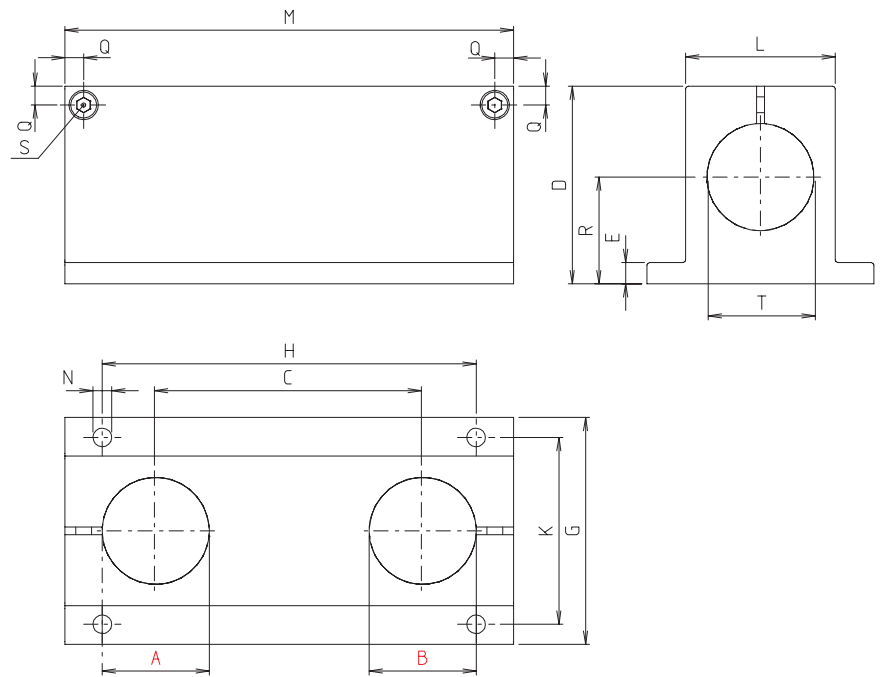
Code No.	Type	A	B	C	D	E	L	M	P	Q	S	T	m [g]
55300000300	P 30	30,1	30,1	80	49	21	42	136	28	7	M6x35	29,5	434
55400000300	P 40	40,1	40,1	100	62	28	56	168	42	7	M6x35	38,5	858
55500000300	P 50	50,2	50,2	120	77	35	70	204	52	9	M8x50	49,5	1580



## PFK - quad®

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	N	P	Q	S	T	m [g]
553000030300	PFK 30	30,1	30,1	80	58	6	7	70	110	56	42	136	30	28	7	M6x35	29,5	617
554000030300	PFK 40	40,1	40,1	100	74	8	7	85	140	70	56	168	40	42	7	M6x35	39,5	1232
555000030300	PFK 50	50,2	50,2	120	92	10	9	110	170	90	70	204	50	52	9	M8x50	49,5	2360



### PF - quad®

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	Q	R	S	T	m [g]
553000020300	PF 30	30,1	30,1	80	58	6	70	110	56	42	136	7	7	30	M6x25	29,5	600
554000020300	PF 40	40,1	40,1	100	74	8	85	140	70	56	168	7	7	40	M6x35	39,5	1115
555000020300	PF 50	50,2	50,2	120	92	10	110	170	90	70	204	9	9	50	M8x45	49,5	2120

# Solid Clamps – Flange clamps



Version:

■ Flange clamps



Single-piece elements

✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



Multi-piece elements

✓ Also suitable for subsequent assembly and expansion



**quad® elements**

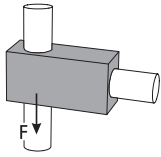
- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



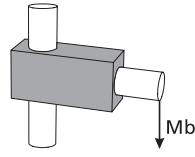
**Block form**

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements

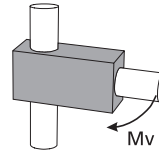
## Loads flange clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
FK	1,1	1285	218	4,9	200	95	8,9	504	254	11,6	750	1025	9,9	1393	253			
FKR				6,8	429	117	6	1190	152									
FKV				5,2	270	381	3	1247	955									
R				6,8			6											
V				5,2			3											
RH				4,0			6,1			4,9			5,1			6,3		
VH				1,7			2,5			3			4			10		

Size Type	18			30			40			50			60			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
FKR				4,3	438	96	2,5	450	700	8,2	1465	260	12,2	1456	255	10	2500	602
FKV				3,5	304	372	1,5	450	320	5,9	937	1250	7,8	1688	1203	20	2500	2250
R				4,3			5,7			9,4			12,2			10		
V				3,5			2,8			5,9			7,9			19		
RH				4,0			6,1			4,9			5,1			6,3		
VH				1,7			2,5			3			4			10		

Size Type	30			40			50			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>												
R	6,2			7,1			11,8			19,4		
RH	3,1			3,5			5,8			7,5		
V	5			7,4			7,5			20,1		
VH	1,9			4,2			2,6			7,7		
FK	2,5	484	59	4,9	750	89	6,3	1620	159			
FKH	2,7	96	48	3,2	102	62	5,6	230	86			
FKR	6,2	657	90	7,1	786	121	11,9	2146	272	19,4		950
FKRH	3,1	105	47	3,5	110	87	5,8	287	70	7,5		243
FKV	5	590	338	7,4	682	743	7,5	1904	1100	20,1		
FKVH	2,5	109	134	4,2	102	451	2,6	297	563	7,7		

# Solid Clamps – Flange clamps

Axially parallel tube connector

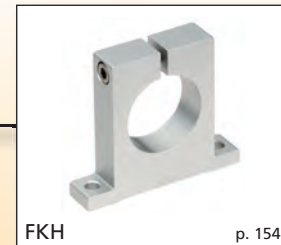
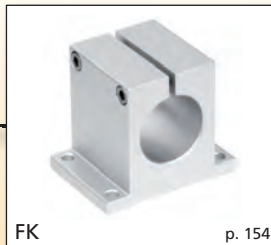
Industrial design

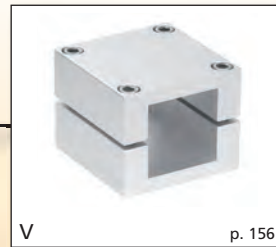
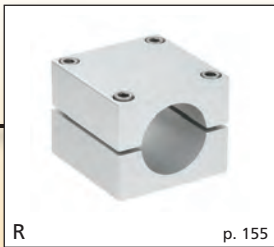
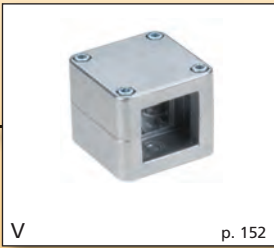
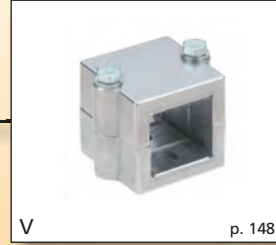


Block form



quad® elements







# Solid Clamps – Flange clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

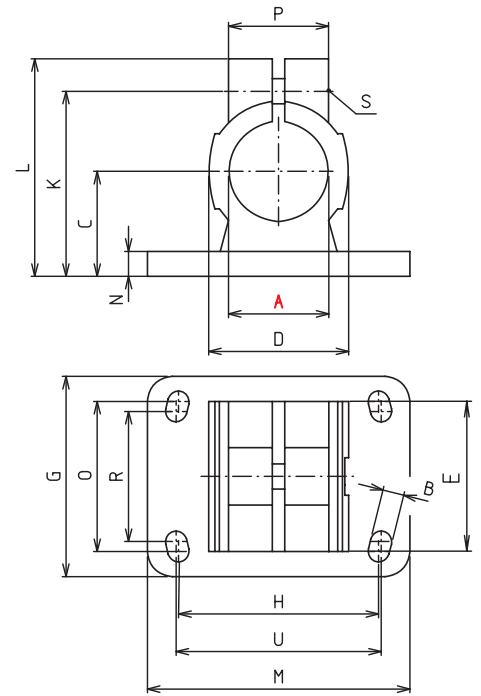
- Stainless steel screws
- Ball-polished
- Colour



FK 30-4 - 80  
(4 drills, 20-60 with slotted hole)



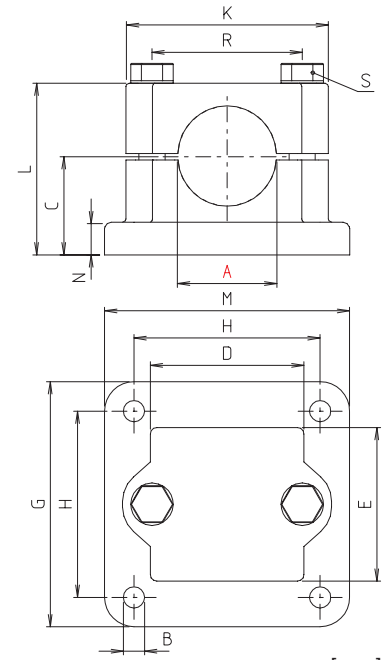
FK 12-30  
(2 central holes)



## FK - Industrial design

[mm]

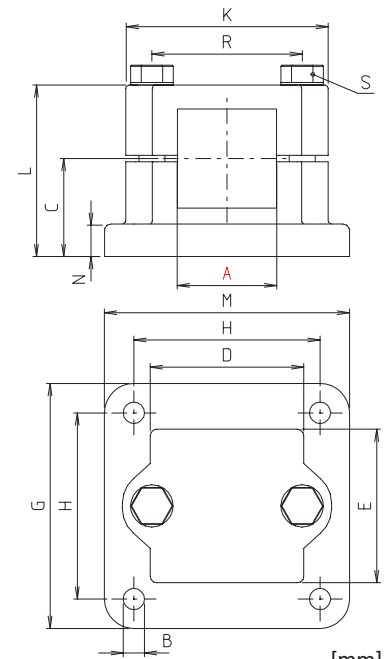
Code No.	Type	A	B	C	D	E	G	H**	K	L	M	N	O*	P	R	S	U	m [g]
12120000020	FK 12	12,1																67
12140000020	FK 14	14,1																64
12150000020	FK 15	15,1	5,5	18	26	32	35	38	32,5	41	50	5	-	23	-	M6x20	40	62
12160000020	FK 16	16,1																60
12180000020	FK 18	18,1																56
12200000020	FK 20	20,1											-		-			199
12200100020	FK 20-4	20,1											40		35			199
12250000020	FK 25	25,1	6,5	30	40	40	55	53	53	63	78	7	-	33	-	M8x25	60	181
12250100020	FK 25-4	25,1											40		35			199
12300000020	FK 30	30,1											-		-			159
12300100020	FK 30-4	30,1											40		35			199
12300200020	FK30(32)	30,1																489
12320000020	FK 32	32,17	8,5	42	56	60	80	80	74	87	105	10	60	40	52	M10x30	82	473
12350000020	FK 35	35,15																449
12400000020	FK 40	40,17																404
12400200020	FK40(42)	40,17																703
12420000020	FK 42	42,22	10,5	50	66	65	90	98	85	98	128	14	62	45	60	M10x35	100	682
12480000020	FK 48	48,22																610
12500000020	FK 50	50,22																585
12600000020	FK 60	60,27	10,5	60	80	80	110	100	107	123	150	15	80	58	74	M12x45	118	1048
12800000020	FK 80	80,35	17,5	80	110	123	164,7	140	140	162,5	180	20	120	82	-	M16x65	-	2930



[mm]

### FKR - Industrial design

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	R	S	m [g]
12200003020	FKR 20	20,2	6,5	30	45	45	75	57	62	52,5	75	10	46	M8x50	314
12250003020	FKR 25	25,2													301
12300003020	FKR 30	30,2													285
12350003020	FKR 35	35,2	8,5	40	60	60	100	76	75	70	100	10	57	M8x70	569
12400003020	FKR 40	40,2													545



[mm]

### FKV - Industrial design

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	R	S	m [g]
12200005020	FKV 20	20,2	6,5	30	45	45	75	57	62	52,5	75	10	46	M8x50	302
12250005020	FKV 25	25,3													292
12300005020	FKV 30	30,3													273
12350005020	FKV 35	35,4	8,5	40	60	60	100	76	75	70	100	10	57	M8x70	555
12400005020	FKV 40	40,4													530

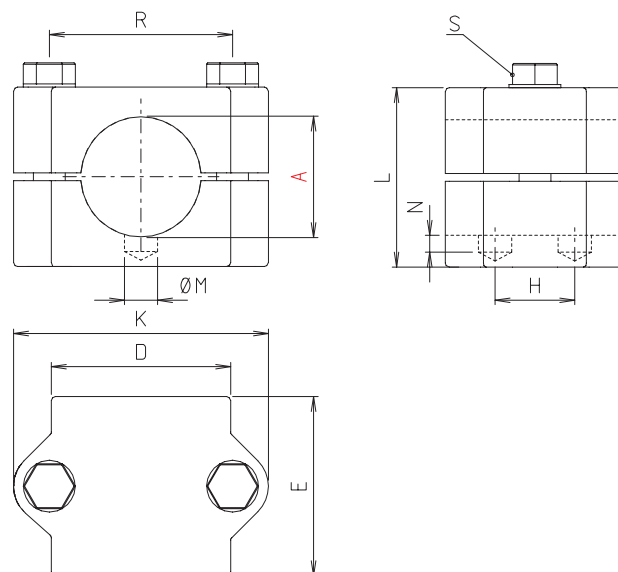
# Solid Clamps – Flange clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

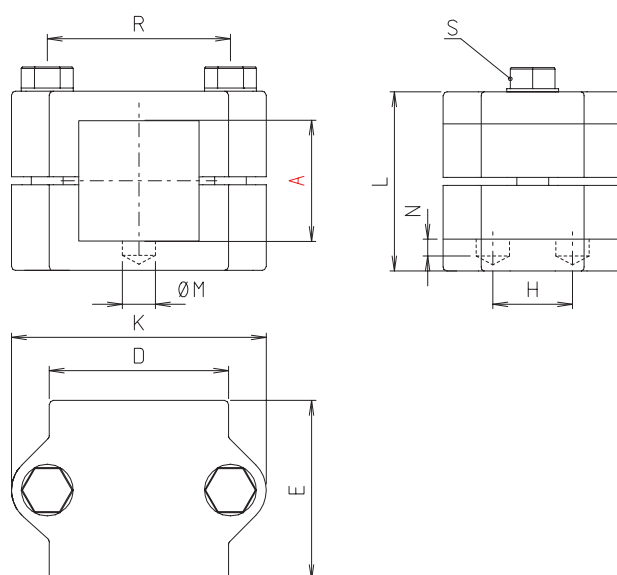
- Stainless steel screws
- Ball-polished
- Colour



## R - Industrial design

[mm]

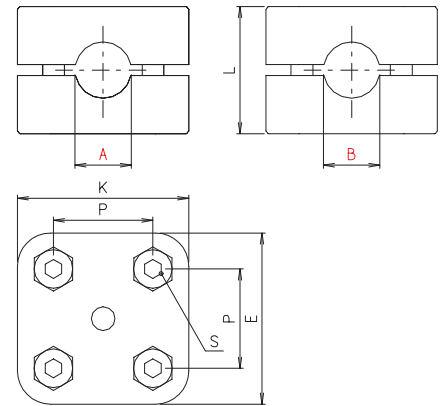
Code No.	Type	A	D	E	H	K	L	M	N	R	S	m [g]
12200007020	R 20	20,1	45	45	20	62	45	10	3	46	M8x45	211
12250007020	R 25	25,2										210
12300007020	R 30	30,2										194
12350007020	R 35	35,2	60	60	26	75	60	14	5,5	57	M8x60	376
12400007020	R 40	40,2										360



## V - Industrial design

[mm]

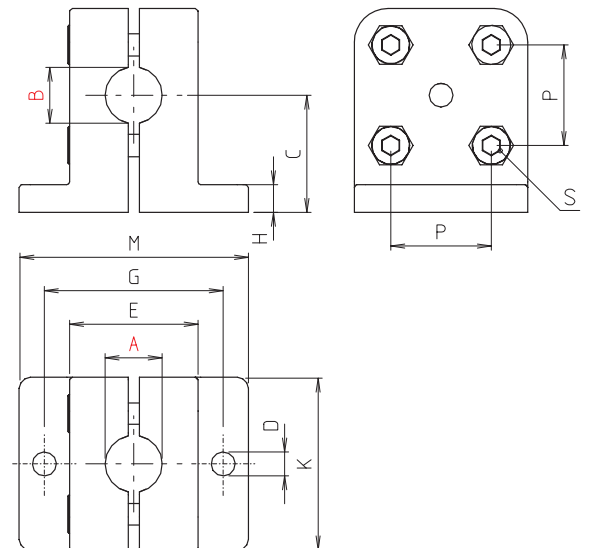
Code No.	Type	A	D	E	H	K	L	M	N	R	S	m [g]
12200008020	V 20	20,3	45	45	20	62	45	10	3	46	M8x45	202
12250008020	V 25	25,3										197
12300008020	V 30	30,3										187
12350008020	V 35	35,4	60	60	26	75	60	14	5,5	57	M8x60	361
12400008020	V 40	40,4										334



### RRW - Block form

[mm]

Code No.	Type	A	B	E	K	L	P	S	m [g]
290800040266	RRW 8*	8	8	31	31	23	18	M4x18	47
291000040266	RRW 10	10	10						46



### FFKR - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	m [g]
290800020266	FFKR 8*	8	8	21	4	23	32	5	31	36	41	18	M4x18	62
291000020266	FFKR 10	10	10											58

\* Ø 8 is achieved by means of a clamping sleeve

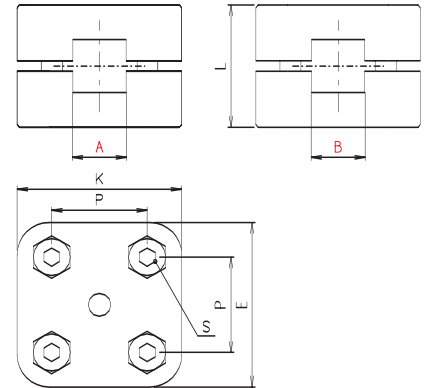
# Solid Clamps – Flange clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

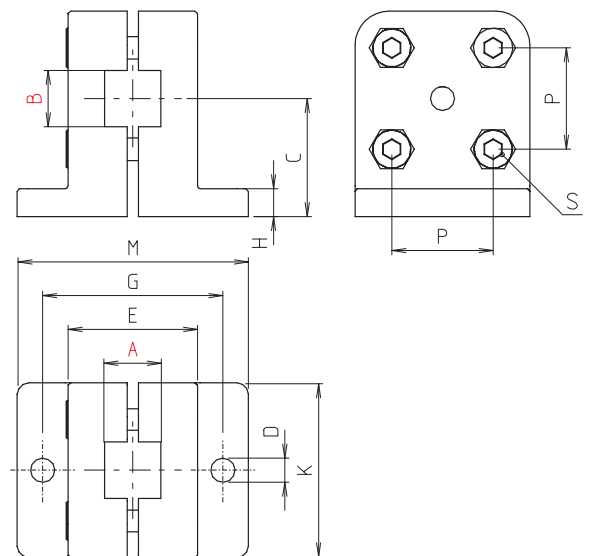
- Stainless steel screws
- Ball-polished
- Colour



## VVW - Block form

[mm]

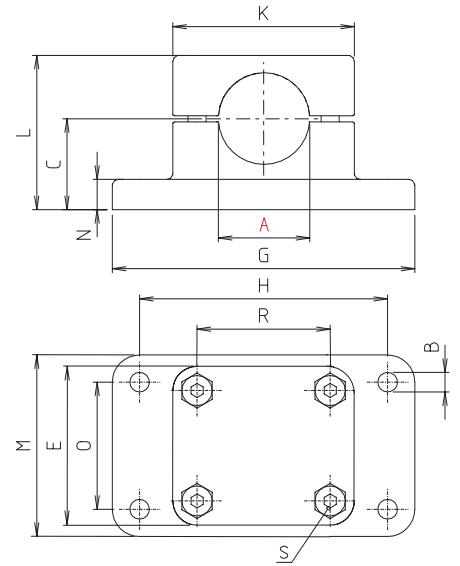
Code No.	Type	A	B	E	K	L	P	S	m [g]
291000050266	VVW 10	10	10	31	31	23	18	M4x18	42



## FFKV - Block form

[mm]

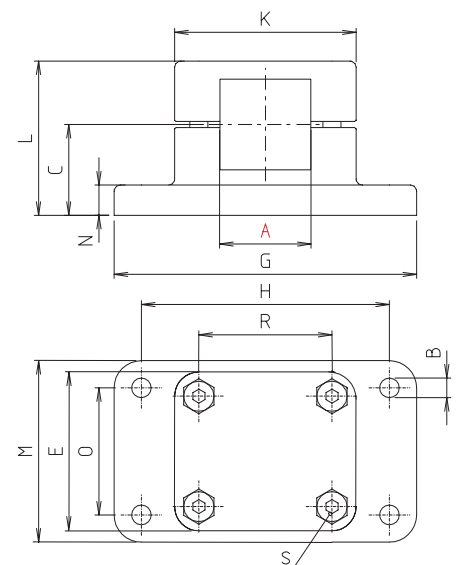
Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	m [g]
291000030266	FFKV 10	10	10	21	4	23	32	5	31	36	41	18	M4x18	5



FKR - Block form

[mm]

Code No.	Type	A	B	C	E	G	H	K	L	M	N	O	R	S	m [g]
22300003026	FKR 30	30,2	6,5	30	60	100	82	60	54	60	10	42	44	M6x45	349
22350003026	FKR 35	35,4	8,5	40	70	110	92	70	73	71	12	52	53	M6x60	552
22400003026	FKR 40	40,2		521											
22420003026	FKR 42	42,3		1226											
22450003026	FKR 45	45,3		1222											
22480003026	FKR 48	48,3		1191											
22500003026	FKR 50	50,3	1190												
22600003026	FKR 60	60,4	8,5	60	100	144	122	100	105	100	16	78	78	M8x90	1489
22800003026	FKR 80	80,5	11	80	130	200	170	130	141	130	20	100	100	M10x110	4050



FKV - Block form

[mm]

Code No.	Type	A	B	C	E	G	H	K	L	M	N	O	R	S	m [g]
22300005026	FKV 30	30,3	6,5	30	60	100	82	60	54	60	10	42	44	M6x45	341
22400005026	FKV 40	40,4	6,5	42	70	110	92	70	73	70	12	52	53	M6x60	511
22500005026	FKV 50	50,5	8,5	50	86	125	98	86	90	125	12	98	65	M8x80	1124
22600005026	FKV 60	60,6	8,5	60	100	144	122	100	105	100	16	78	78	M8x90	1428
22800005026	FKV 80	80,7	11	80	130	200	170	130	141	130	20	100	100	M10x110	3878

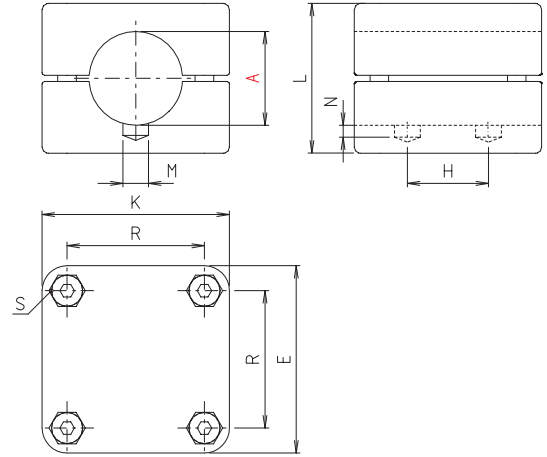
# Solid Clamps – Flange clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

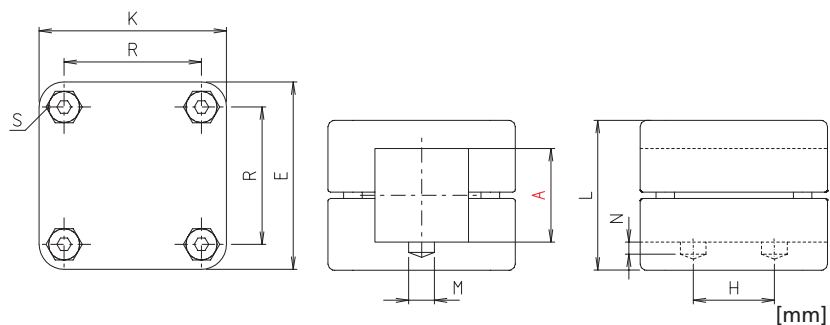
- Stainless steel screws
- Ball-polished
- Colour



## R - Block form

[mm]

Code No.	Type	A	E	H	K	L	M	N	R	S	m [g]
22300007026	R 30	30,1	60	26	60	48	11	5,5	44	M6x40	256
22320007026	R 32	32,2	70	26	70	62	14	6	53	M6x55	420
22350007026	R 35	35,2									410
22400007026	R 40	40,2	86	50	86	79	14	8,5	65	M8x70	395
22420007026	R 42	42,3									914
22450007026	R 45	45,3									870
22480007026	R 48	48,3	100	50	100	90	14	9	78	M8x80	878
22500007026	R 50	50,3									873
22600007026	R 60	60,4	130	70	130	122	8,5	5,5	100	M10x100	1136
22800007026	R 80	80,5									2560

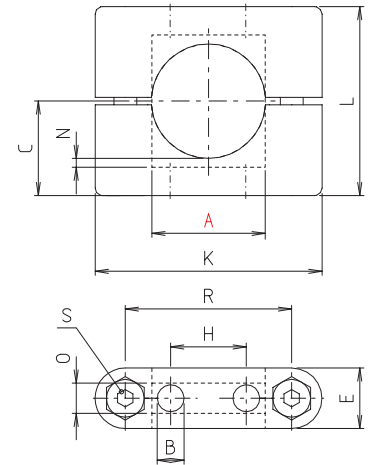


## V - Block form

[mm]

Code No.	Type	A	E	H	K	L	M	N	R	S	m [g]
22300008026	V 30	30,3	60	26	60	48	11	5,5	44	M6x40	249
22350008026	V 35	35,4	70	26	70	62	14	6	53	M6x55	390
22400008026	V 40	40,4									404
22500008026	V 50	50,5	86	50	86	79	14	8,5	65	M8x70	811
22600008026	V 60	60,6									1064
22800008026	V 80	80,7	130	70	130	122	8,5	5,5	100	M10x110	2380

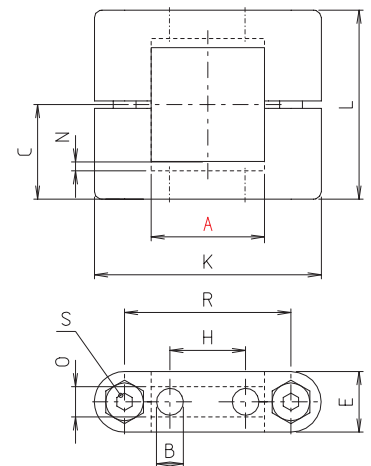




[mm]

### RH - Block form

Code No.	Type	A	B	C	E	H	K	L	N	O	R	S	m [g]
22200002026	RH 20	20,1											92
22250002026	RH 25	25,1	5,1	25	16	20	60	50	5	8,1	44	M6x40	84
22300002026	RH 30	30,1											72
22350002026	RH 35	35,2											198
22400002026	RH 40	40,2	6,5	34	20	26	75	68	7	10,1	55	M8x60	192
22420002026	RH 42	42,3											256
22450002026	RH 45	45,3	6,5	40	20	26	85	79	7,5	10,1	65	M8x70	242
22480002026	RH 48	48,3											239
22500002026	RH 50	50,3											236
22600002026	RH 60	60,4	6,5	45	22	26	100	90	6	10,1	78	M8x80	318
22800002026	RH 80	80,5	8,5	61	30	50	130	122	11	13,1	100	M10x110	775



[mm]

### VH - Block form

Code No.	Type	A	B	C	E	H	K	L	N	O	R	S	m [g]
22250004026	VH 25	25,3											85
22300004026	VH 30	30,3	5,1	25	16	20	60	50	5	8,1	44	M6x40	72
22350004026	VH 35	35,4											184
22400004026	VH 40	40,4	6,5	34	20	26	75	68	7	10,1	55	M8x60	172
22500004026	VH 50	50,5	6,5	40	20	26	85	79	7,5	10,1	65	M8x70	217
22600004026	VH 60	60,6		45	22		100	90	6		78	M8x80	286
22800004026	VH 80	80,9	8,5	61	30	50	130	122	11	13,1	100	M10x110	698

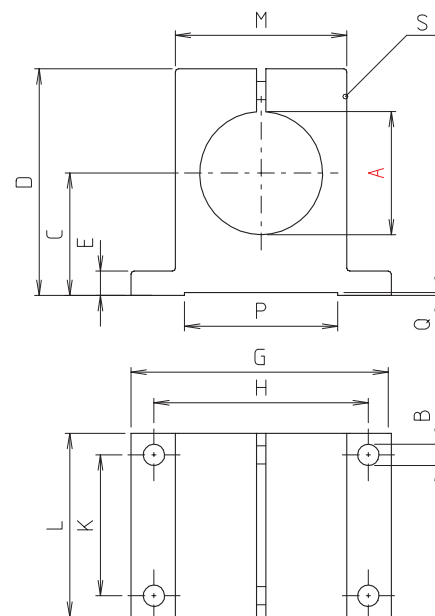
# Solid Clamps – Flange clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

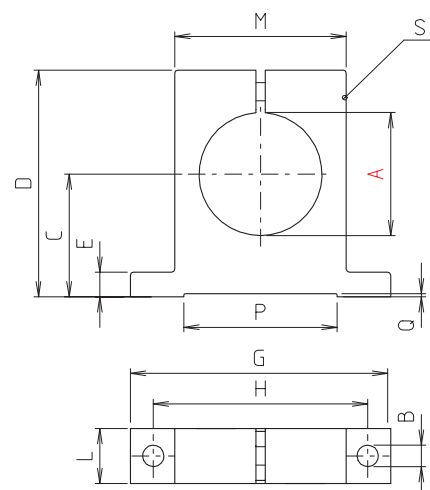
- Black anodized



## FK - quad®

[mm]

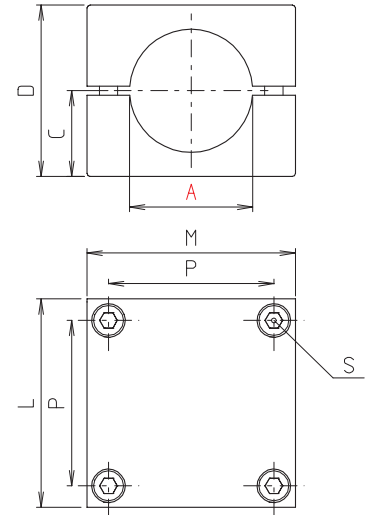
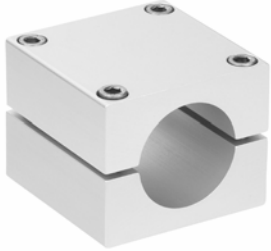
Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	Q	S	m [g]
52300000030	FK 30	30,1	7	30	58	6	70	56	36	50	42	35	1	M6x25	246
52400000030	FK 40	40,1	7	40	74	8	85	70	46	60	56	50	1	M6x35	490
52500000030	FK 50	50,2	9	50	92	10	110	90	50	77	70	60	1	M8x45	911
52600000030	FK 60	60,2	9	60	112,5	12	137	110	75	100	85	71	2	M8x60	2000



## FKH - quad®

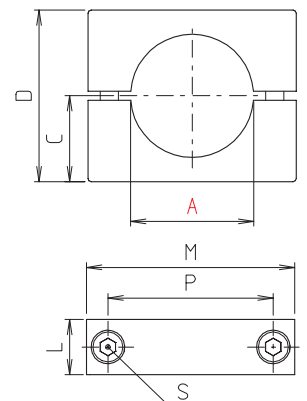
[mm]

Code No.	Type	A	B	C	D	E	G	H	L	M	P	Q	S	m [g]
52300011030	FKH 30	30,1	7	30	58	6	70	56	16	42	35	1	M6x25	80
52400011030	FKH 40	40,1	7	40	74	8	85	70	18	56	50	1	M6x35	147
52500011030	FKH 50	50,2	9	50	92	10	110	90	20	70	60	1	M8x45	262
52600011030	FKH 60	60,2	9	60	112,5	12	137	110	20	85	71	2	M8x60	460


**R - quad®**

[mm]

Code No.	Type	A	C	D	L	M	P	S	m [g]
52300007030	R 30	30,1	21	42	56	56	42	M6x25	252
52400007030	R 40	40,2	28	56	68	68	54	M6x35	459
52500007030	R 50	50,3	35	70	85	85	67	M8x45	927
52600007030	R 60	60,3	48,5	97	105	105	85	M8x60	-
52800007030	R 80	80,6	56	112	126	126	100	M10x70	3000


**RH - quad®**

[mm]

Code No.	Type	A	C	D	L	M	P	S	m [g]
52300002030	RH 30	30,1	21	42	16	56	42	M6x25	74
52400002030	RH 40	40,2	28	56	18	68	54	M6x35	122
52500002030	RH 50	50,3	35	70	20	85	67	M8x45	229
52600002030	RH 60	60,3	48,5	97	22	105	85	M8x60	-
52800002030	RH 80	80,6	56	112	24	126	100	M10x70	608

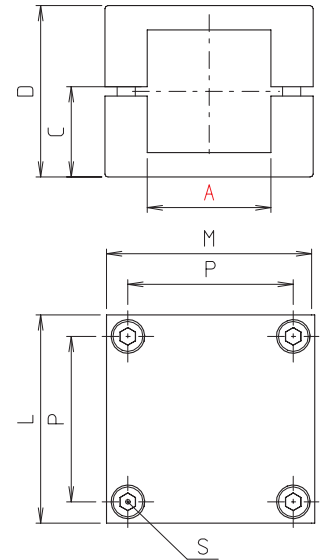
# Solid Clamps – Flange clamps

## Order instruction:

- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

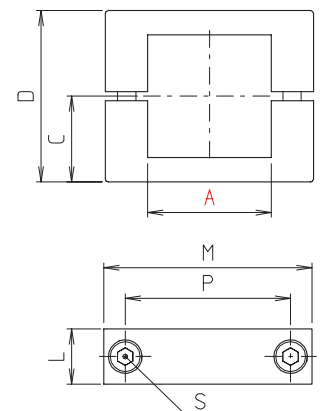
- Black anodized



## V - quad®

[mm]

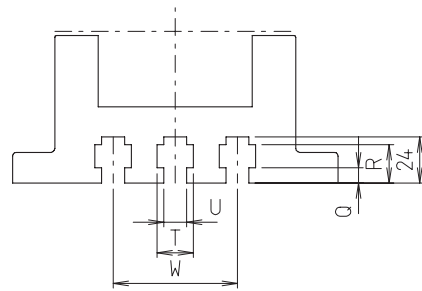
Code No.	Type	A	C	D	L	M	P	S	m [g]
52300008030	V 30	30,2	21	42	56	56	42	M6x25	220
52400008030	V 40	40,3	28	56	68	68	54	M6x35	401
52500008030	V 50	50,4	35	70	85	85	67	M8x45	785
52600008030	V 60	60,3	48,5	97	105	105	85	M8x60	–
52800008030	V 80	80,4	56	112	126	126	100	M10x70	2540



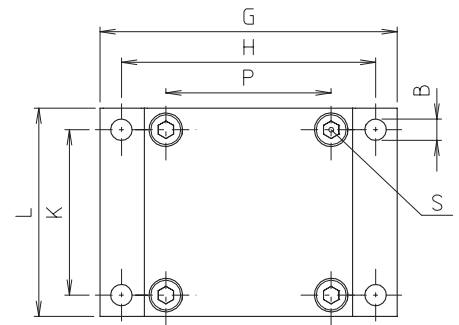
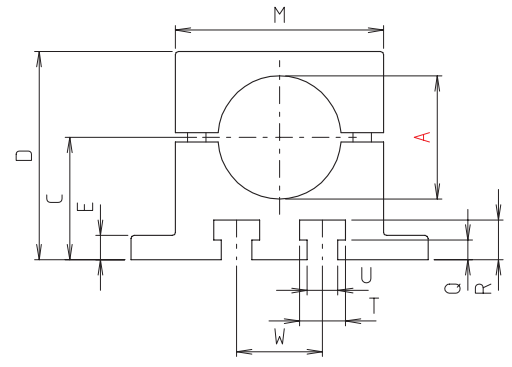
## VH - quad®

[mm]

Code No.	Type	A	C	D	L	M	P	S	m [g]
52300004030	VH 30	30,2	21	42	16	56	42	M6x25	65
52400004030	VH 40	40,3	28	56	18	68	54	M6x35	109
52500004030	VH 50	50,4	35	70	20	85	67	M8x45	197
52600004030	VH 60	60,4	48,5	97	22	105	85	M8x60	–
52800004030	VH 80	80,4	56	112	24	126	100	M10x70	522



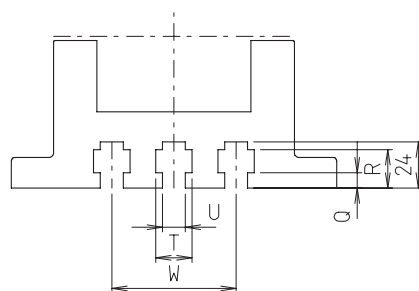
only FKR 60, 80



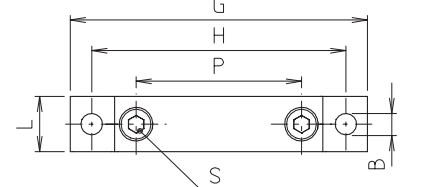
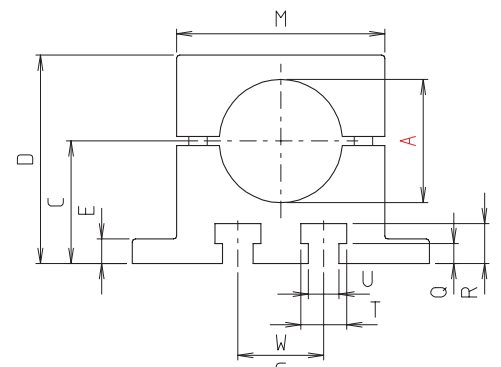
FKR - quad®

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	Q	R	S	T	U	W	m [g]
52300003030	FKR 30	30,1	7	30	51	6	84	70	40	56	56	4,5	9	M6x25	10	6	20	329
52400003030	FKR 40	40,2	7	40	68	8	97	83	54	68	68	6,5	13	M6x35	15	10	28	586
52500003030	FKR 50	50,3	9	50	85	10	125	105	65	85	85	7	14	M8x45	20	10	30	1204
52600003030	FKR 60	60,3	9	62,5	111	12	145	120	80	105	105	7	14	M8x60	20	10	65	-
52800003030	FKR 80	80,4	11	80	136	16	170	148	80	126	126	8	20	M10x70	19	12	65	3876



only FKRH 60, 80



FKRH - quad®

[mm]

Code No.	Type	A	B	C	D	E	G	H	L	M	Q	R	S	T	U	W	m [g]
52300009030	FKRH 30	30,1	7	30	51	6	84	70	16	56	4,5	9	M6x25	10	6	20	96
52400009030	FKRH 40	40,2	7	40	68	8	97	83	18	68	6,5	13	M6x35	15	10	28	158
52500009030	FKRH 50	50,3	9	50	85	10	125	105	20	85	7	14	M8x45	20	10	30	293
52600009030	FKRH 60	60,3	9	62,5	111	12	145	120	22	105	7	14	M8x60	20	10	65	-
52800009030	FKRH 80	80,4	11	80	136	16	170	148	24	126	8	20	M10x70	19	12	65	783

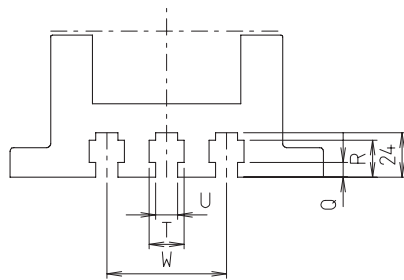
# Solid Clamps – Flange clamps

## Order instruction:

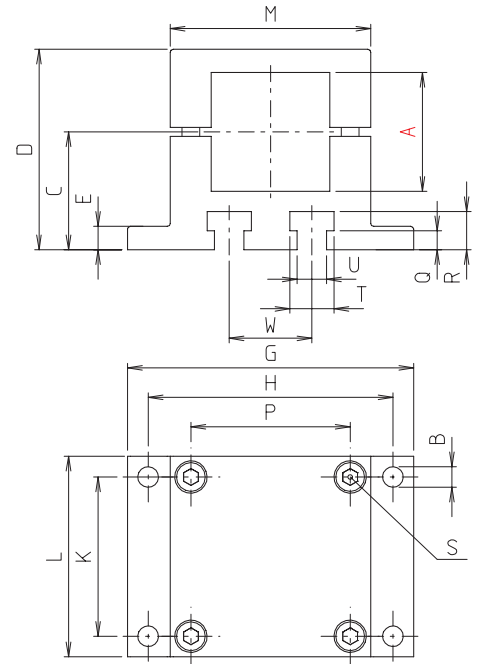
- Standard equipment with stainless steel screws
- Clamping lever see accessories page 219

## On request:

- Black anodized



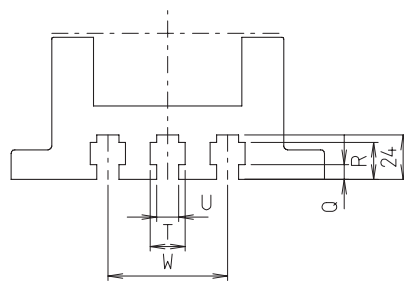
only FKV 60, 80



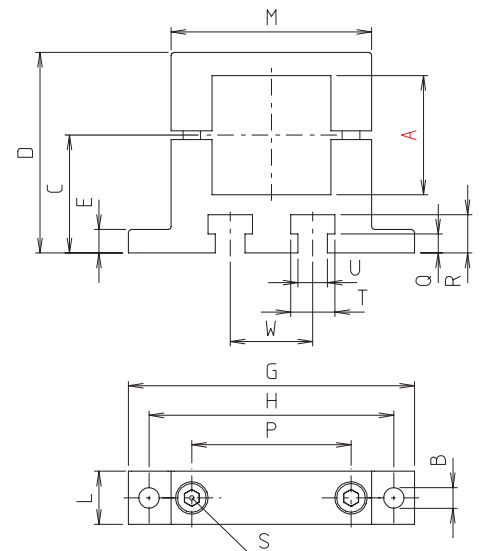
## FKV - quad®

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	Q	R	S	T	U	W	m [g]
52300005030	FKV 30	30,2	7	30	51	6	84	70	40	56	56	40	4,5	9	M6x25	10	6	20	303
52400005030	FKV 40	40,3	7	40	68	8	97	83	54	68	68	54	6,5	13	M6x35	15	10	28	525
52500005030	FKV 50	50,4	9	50	85	10	125	105	65	85	85	65	7	14	M8x45	20	10	30	1065
52600005030	FKV 60	60,3	9	62,5	111	12	145	120	80	105	105	80	7	14	M8x60	20	10	65	-
52800005030	FKV 80	80,4	11	80	136	16	170	148	100	126	126	100	8	20	M10x70	19	12	65	3440



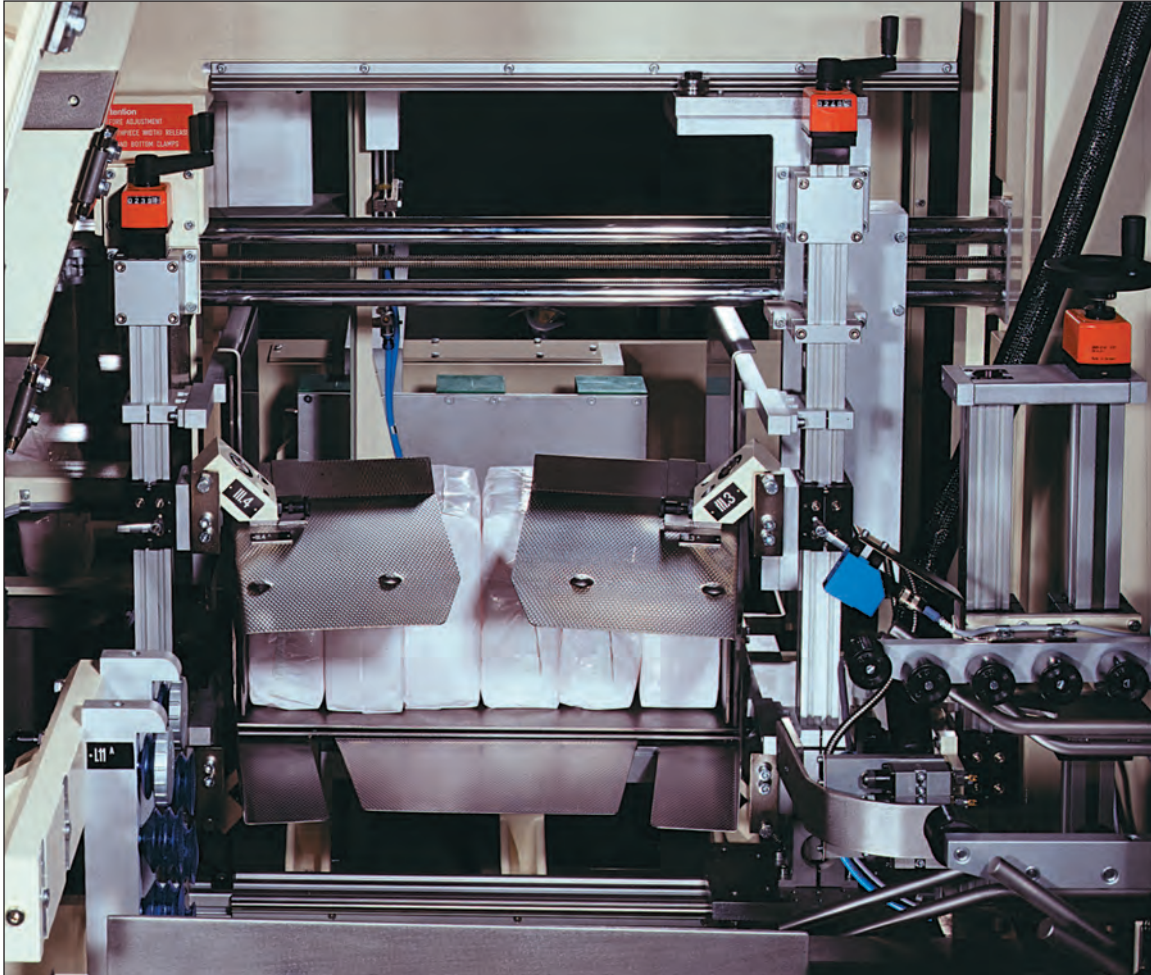
only FKVH 60, 80



## FKVH - quad®

[mm]

Code No.	Type	A	B	C	D	E	G	H	L	M	P	Q	R	S	T	U	W	m [g]
52300010030	FKVH 30	30,2	7	30	51	6	84	70	16	56	40	4,5	9	M6x25	10	6	20	86
52400010030	FKVH 40	40,3	7	40	68	8	97	83	18	68	54	6,5	13	M6x35	15	10	28	141
52500010030	FKVH 50	50,4	9	50	85	10	125	105	20	85	65	7	14	M8x45	20	10	30	259
52600010030	FKVH 60	60,4	9	62,5	111	12	145	120	22	105	80	7	14	M8x60	20	10	65	-
52800010030	FKVH 80	80,4	11	80	136	16	170	148	24	126	100	8	20	M10x70	19	12	65	690



Simple fixation of linear units (for format adjustment) on a packaging machine.



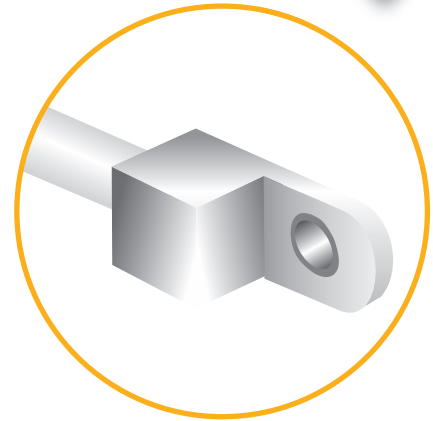
# Solid Clamps – Strap clamps



Version:

■ Strap clamps

delivery  
from stock



Single-piece elements

✓ For the quick and inexpensive installation



**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



Multi-piece elements

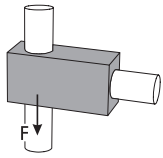
✓ Also suitable for subsequent assembly and expansion



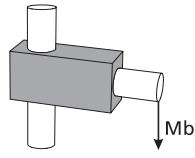
**Block form**

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements

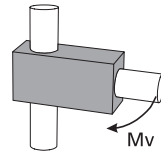
## Loads strap clamps



Adhesion force F [KN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
LW				2,7	38	15	6	133	85	5,8	264	138	12	274	358			
LP				3,6	28	9	4,9	91	94	6	267	181	12,1	332	387			
LQ				2,7	28	15	4,9	83	94	5,8	231	138	12,1	346	133			
LF					40	50		110	101		562	635		349	377			

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
LWR										7,1	397	107						
LWV										3,2	333	287						
LPR										7,1	598	107						
LPV										3,2	405	438						
LQR										7,1	593	107						
LQV										3,2	738	653						
LF																		

# Solid Clamps – Strap clamps

Hinge tube connector

Industrial design



Block form





# Solid Clamps – Strap clamps

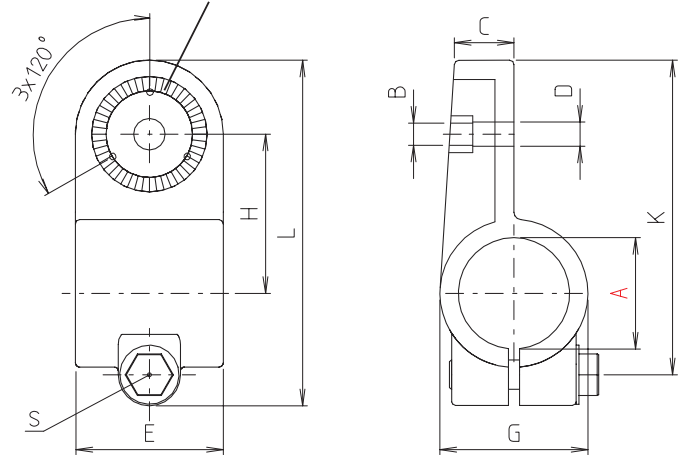
## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

serration: possibility of fixation by means of straight pins



15° tothing, external



Type LW 12–18



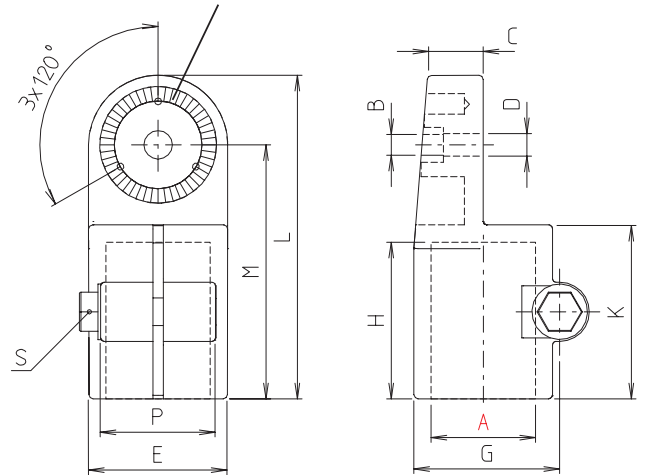
Type LW 20–60

## LW - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	P	S	m [g]
17120000020	LW 12	12,1	M6	10,5	7,5	30	26	27	51,5	64,5	21	M6x16	62
17140000020	LW 14	14,1											59
17160000020	LW 16	16,1											56
17180000020	LW 18	18,1											52
17200000020	LW 20	20	M8	16	7	40	40	43	85	93	33	M8x35	169
17250000020	LW 25	25,1			9								150
17300000020	LW 30	30,1			9								131
17320000020	LW 32	32,2			9								428
17350000020	LW 35	35,2	M10	22	11	56	56	60	116	128	48	M10x50	400
17400000020	LW 40	40,2											366
17420000020	LW 42	42,2											586
17450000020	LW 45	45,2											547
17480000020	LW 48	48,2	M10	25	11	66	66	70	136	148	58	M10x60	519
17500000020	LW 50	50,2											488
17500000020	LW 50	50,2											488
17600000020	LW 60	60,2											M12

serration: possibility of fixation by means of straight pins



15° toothing internal



Type LP 12–18



Type LP 20–60

## LP - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	m [g]
17120001020	LP 12	12,1	M6	10,5	7,5	26	29,4	25	30	57	44	21	M6x16	62
17140001020	LP 14	14,1												59
17160001020	LP 16	16,1												56
17180001020	LP 18	18,1												52
17200001020	LP 20	20	M8	16	9	40	40	45	50	93	73	33	M8x35	198
17250001020	LP 25	25,1												179
17300001020	LP 30	30,1												150
17320001020	LP 32	32,2	M10	22	11	56	56	60	68	128	100	48	M10x50	498
17350001020	LP 35	35,2												460
17400001020	LP 40	40,2												410
17420001020	LP 42	42,2	M10	25	11	66	66	70	78	148	115	58	M10x60	690
17450001020	LP 45	45,2												653
17480001020	LP 48	48,2												609
17500001020	LP 50	50,2												586
17600001020	LP 60	60,2	M10	30	13,5	80	80	78	90	174	135	68	M10x60	940

# Solid Clamps – Strap clamps

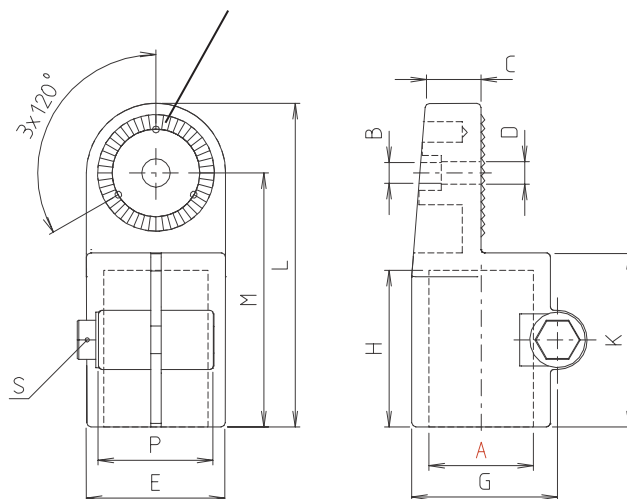
## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

serration: possibility of fixation by means of straight pins



15° toothing external



Type LPZ 12–18



Type LPZ 20–60

## LPZ - Industrial design

[mm]

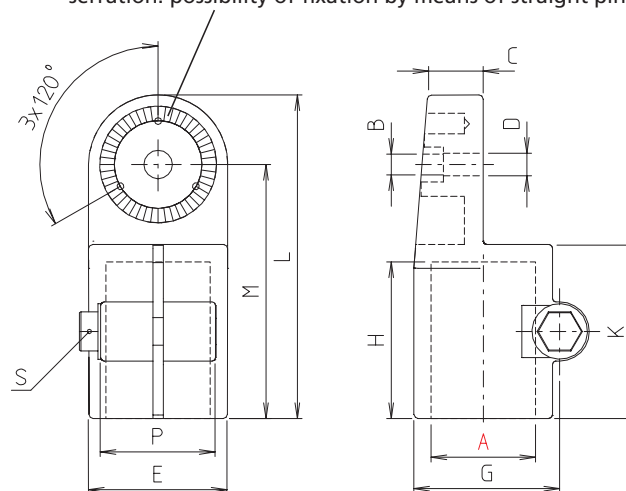
Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	m[g]
17120010020	LPZ 12	12,1	M6	10,5	7,5	26	29,4	25	30	57	44	21	M6x16	62
17140010020	LPZ 14	14,1												59
17160010020	LPZ 16	16,1												56
17180010020	LPZ 18	18,1												52
17200010020	LPZ 20	20	M8	16	9	40	40	45	50	93	73	33	M8x35	198
17250010020	LPZ 25	25,1												179
17300010020	LPZ 30	30,1												150
17320010020	LPZ 32	32,2	M10	22	11	56	56	60	68	128	100	48	M10x50	498
17350010020	LPZ 35	35,2												460
17400010020	LPZ 40	40,2												410
17420010020	LPZ 42	42,2												690
17450010020	LPZ 45	45,2	M10	25	11	66	66	70	78	148	115	58	M10x60	653
17480010020	LPZ 48	48,2												609
17500010020	LPZ 50	50,2												586
17600010020	LPZ 60	60,2												940





Type LQ 20–50

serration: possibility of fixation by means of straight pins



15° toothing internal

**LQ - Industrial design**

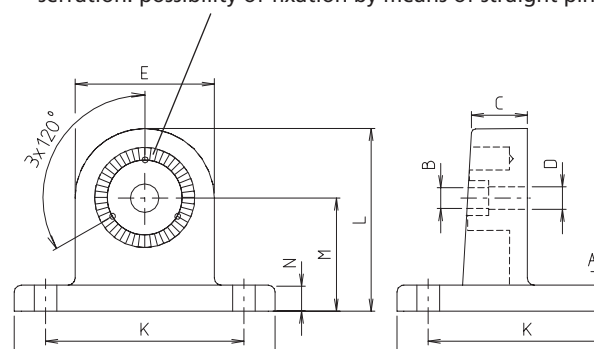
[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	P	S	m [g]
17200003020	LQ 20	20	M8	16	9	45	40	43	85	93	33	M8x35	102
17250003020	LQ 25	25											120
17300003020	LQ 30	30,1											145
17320003020	LQ 32	32,2	M10	22	11	60	56	60	116	128	48	M10x50	470
17350003020	LQ 35	35,2											421
17400003020	LQ 40	40,2											375
17420003020	LQ 42	42	M10	25	11	70	66	70	136	148	58	M10x60	517
17450003020	LQ 45	45											534
17480003020	LQ 48	48,2											553
17500003020	LQ 50	50,2											536



Type LF 30–50

serration: possibility of fixation by means of straight pins



15° toothing internal

**LF - Industrial design**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	m [g]
1718000202	LF 18	5,3	M6	13	7	25	50	35	38	32,5	20	5	38
1730000202	LF 30	6,5	M8	16	9	40	75	75	57	52,5	33	7,5	151
1740000202	LF 40	8,5	M10	22	11	56	100	100	76	72	44	10	375
1750000202	LF 50	8,5		25		66	125	125	98	85	52	12	582

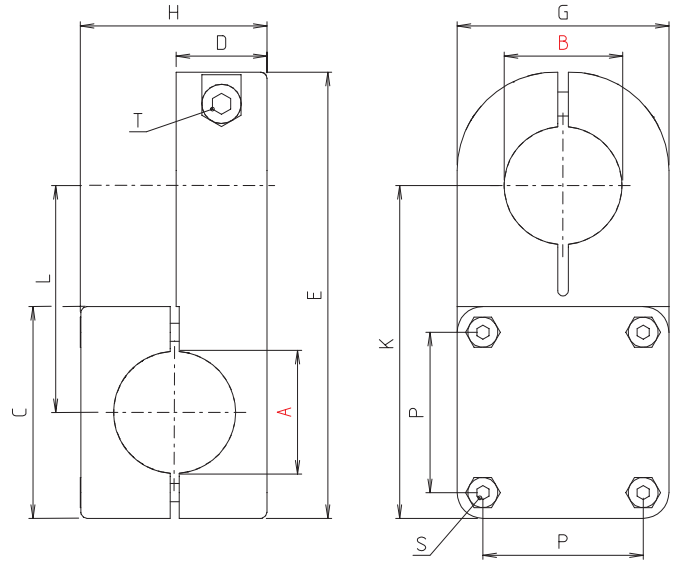
# Solid Clamps – Strap clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

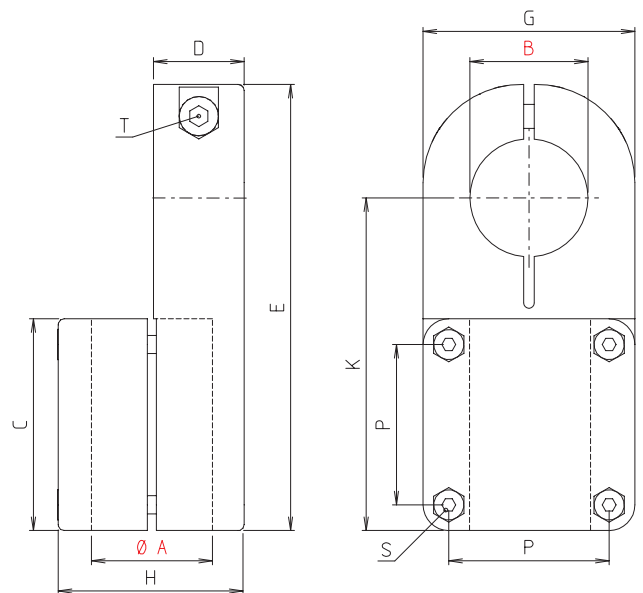
- Stainless steel screws
- Ball-polished
- Colour



## LWR - Block form

[mm]

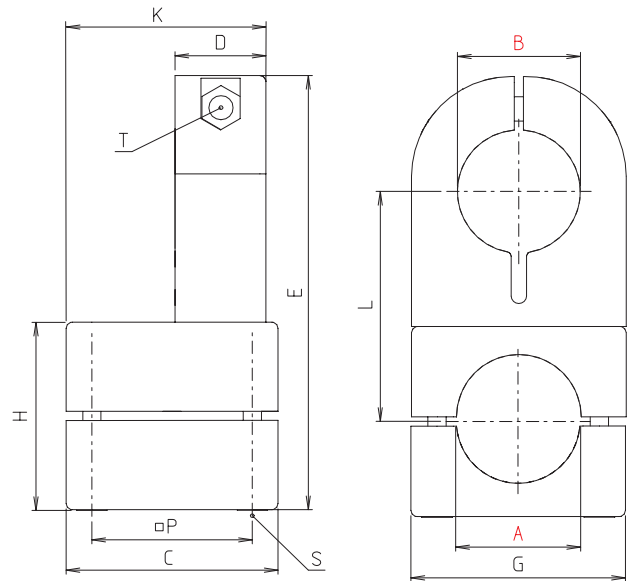
Code No.	Type	A	B	C	D	E	G	H	K	L	P	S	T	m [g]
274000040266	LWR 40	40,2	40,2	70	30	146	70	62	110	75	55	M6x55	M8x30	654



## LPR - Block form

[mm]

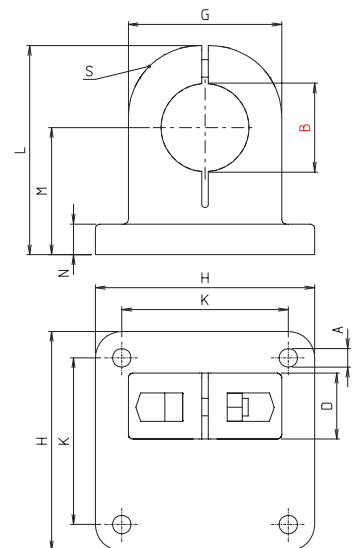
Code No.	Type	A	B	C	D	E	G	H	K	P	S	T	m [g]
274000050266	LPR 40	40,2	40,2	70	30	146	70	62	110	53	M6x55	M8x30	551



LQR - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	P	S	T	m [g]
274000060266	LQR 40	40,2	40,2	70	30	142	70	62	66	75	53	M6x55	M8x30	694



LFR - Block form

[mm]

Code No.	Type	A	B	D	G	H	K	L	M	N	S	m [g]
274000020266	LFR 40	8,5	40,2	30	70	100	76	90	58	14	M8x30	55

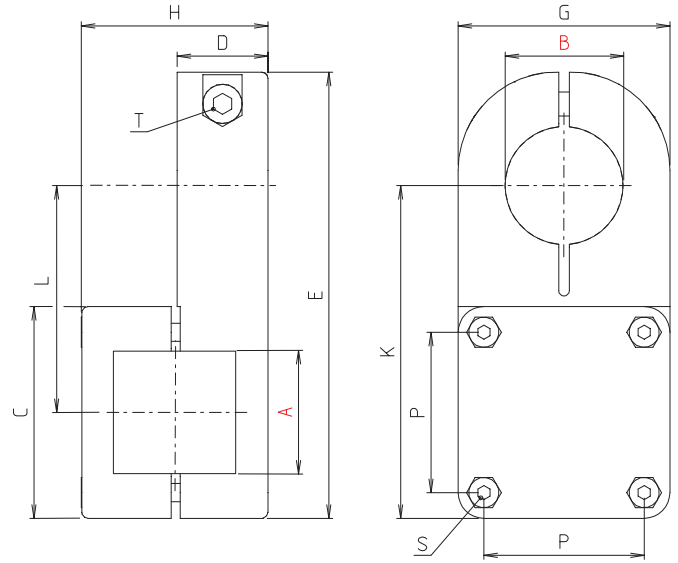
# Solid Clamps – Strap clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

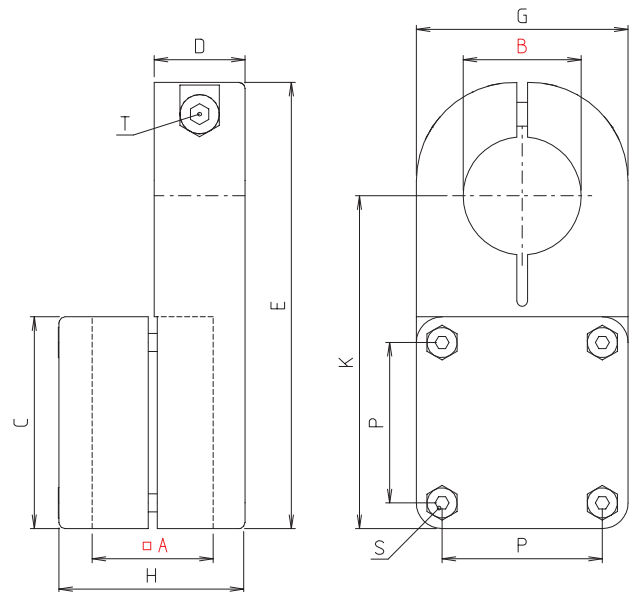
- Stainless steel screws
- Ball-polished
- Colour



## LWV - Block form

[mm]

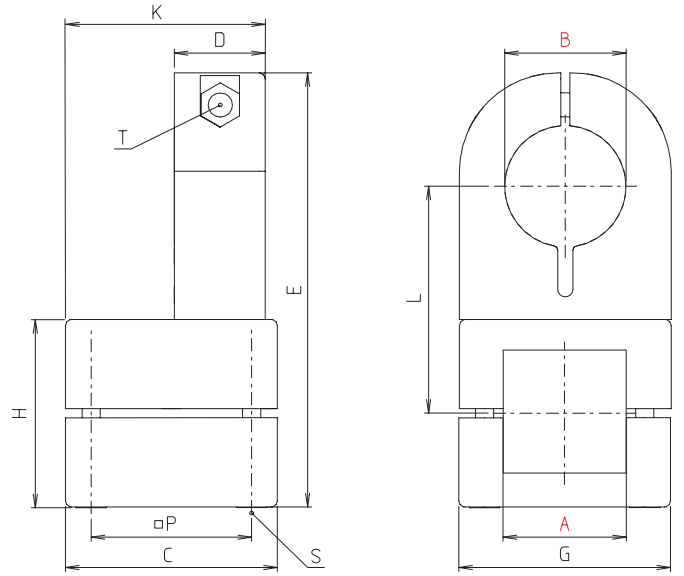
Code No.	Type	A	B	C	D	E	G	H	K	L	P	S	T	m [g]
274000070266	LWV 40	40,4	40,2	70	30	146	70	62	110	75	53	M6x55	M8x30	636



## LPV - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	P	S	T	m [g]
274000080266	LPV 40	40,4	40,2	70	30	146	70	62	110	53	M6x55	M8x30	632



### LQV - Block form

[mm]

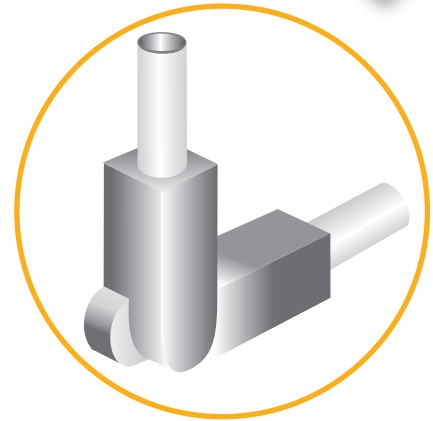
Code No.	Type	A	B	C	D	E	G	H	K	L	P	S	T	m [g]
274000090266	LQV 40	40,4	40,2	70	30	142	70	62	66	75	53	M6x55	M8x30	668


# Solid Clamps – Hinge clamps



Version :

■ Hinge clamps



 Single-piece elements

✓ For the quick and inexpensive installation




**Industrial design**

- Cast aluminium
- Great variety
- Single-piece elements



**quad® elements**

- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements

 Multi-piece elements

✓ Also suitable for subsequent assembly and expansion



**quad® elements**

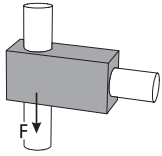
- Extruded aluminium
- Maximum torque loads
- High-quality anodized surface
- Single- and Multi-piece elements



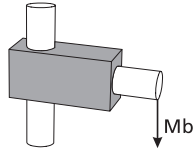
**Block form**

- Cast aluminium
- Higher torque loads
- Plain surface
- Multi-piece elements

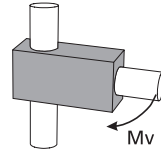
## Loads hinge clamps



Adhesion force F [kN]



Bending moment Mb [Nm]



Twisting moment Mv [Nm]

**Tightening torque of clamping screws:**

M6: 10 Nm

M8: 25 Nm

M10: 50 Nm

Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Industrial design</b>																		
GW				2,2	25	7	5,8	85	15	6	233	38	11,9	244	143			
GP				1,1	25	7	4,8	85	15	6	233	38	12	244	143			
GQ				2,2	25	7	4,8	85	15	6	233	38	12	244	143			
GF				2,2	25	7	4,8	85	15	6	233	100	12	244	143			
GWZ				2,2	27	16	5,8	85	148	6	223	376	11,9	317	695			
GPZ				1,1	27	16	4,8	85	148	6	300	300	12	260	400			
GQZ				2,2	27	16	4,8	85	148	6	223	376	12	317	695			
GFZ				2,2	27	16	5,8	69	82	7,4	240	470	7,8	363	695			

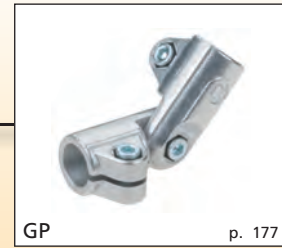
Size Type	10			18			30			40			50			60		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>Block form</b>																		
GKR										5,7	253	43	9,3	563	60			
GKV										2,9	253	43	5,9	563	60			
GFKR										5,7	253	43	9,3	563	60			
GFKV										2,9	410	43	5,9	563	60			
GKRZ										5,7	343	619	9,3	444	548			
GKVZ										2,9	343	619	5,9	444	548			
GFKRZ										5,7	343	619	9,3	444	548			
GFKVZ										1,6	343	619	5,9	444	548			
GWR										5,7	306	75						
GPR										5,7	306	75						
GQR										5,7	375	75						
GFR										5,7	308	75						
GWV										2,9	306	75						
GPV										2,9	306	75						
GQV										2,9	306	75						
GFV										2,9	306	75						

Size Type	30			40			50			80		
	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv	F	Mb	Mv
<b>quad® elements</b>												
G												
GFM	3,2	268	14	4,1	404	17	6,4	1092	19			
GFW	3,1	268	14	4,3	404	17	6,4	1092	19			
GFF	3,1	268	14	4,3	404	17	6,4	1092	19			
GPR	3,1	268	14	4,2	404	17	6,4	1092	19			
GFR	3,1	268	14	4,2	404	17	6,4	1092	19			
GPV	3,1	268	14	4,2	404	17	6,4	1092	19			
GFV	3,2	268	14	4,2	404	17	6,4	1092	19			



# Solid Clamps – Hinge clamps

Hinge tube connector



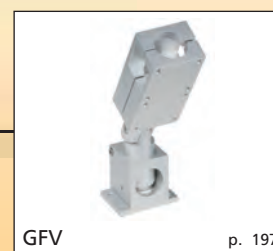
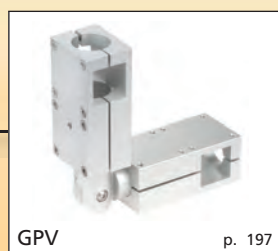
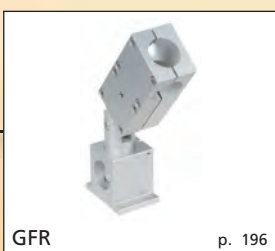
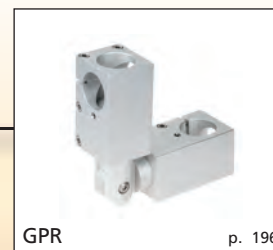
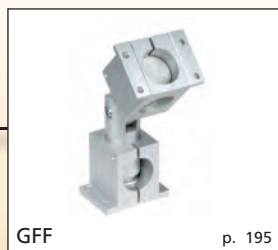
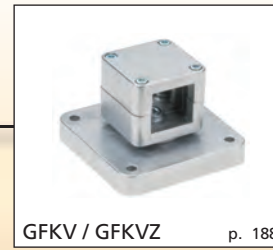
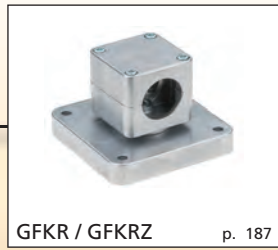
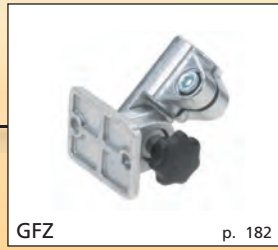
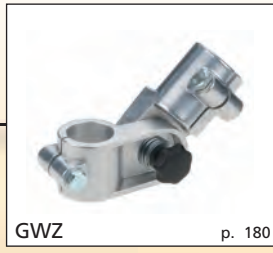
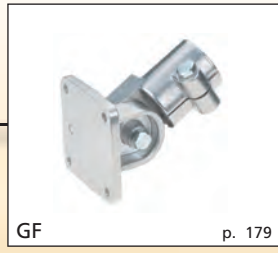
Industrial design

Block form



quad® elements





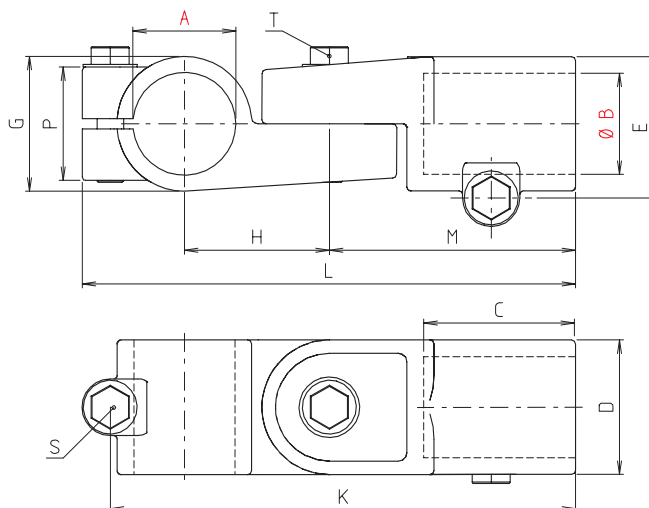
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour



Without tothing- 180° infinitely



Type GW 12-18

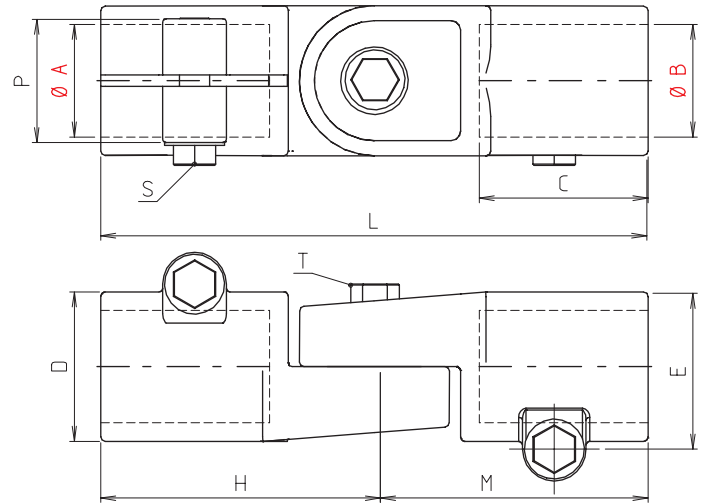


Type GW 20-60

## GW - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	S	T	m [g]
181200010200	GW 12	12,1	12,1												135
181400010200	GW 14	14,1	14,1												129
181600010200	GW 16	16,1	16,1	25	26	29,4	26	27	84	95,5	44	21	M6x16	M6x16	123
181800010200	GW 18	18,1	18,1												115
182000010200	GW 20	20	20												387
182500010200	GW 25	25,1	25,1	45	40	40	40	43	136	146	73	33	M8x35	M8x35	346
183000010200	GW 30	30,1	30,1												300
183200010200	GW 32	32,2	32,2												961
183500010200	GW 35	35,2	35,2	60	56	56	56	60	188	200	100	48	M10x50	M10x50	900
184000010200	GW 40	40,2	40,2												810
184200010200	GW 42	42,2	42,2												1335
184500010200	GW 45	45,2	45,2												1253
184800010200	GW 48	48,2	48,2	70	66	66	66	70	218	230	115	58	M10x60	M10x60	1177
185000010200	GW 50	50,2	50,2												1121
186000010200	GW 60	60,3	60,3	80	80	80	85	85	260	273	135	68	M12x50	M10x60	2050



Without tothing- 180° infinitely



Type GP 12-18



Type GP 20-60

## GP - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	H	L	M	P	S	T	m [g]
181200000200	GP 12	12,1	12,1	25	26	29,4	44	88	44	21	M6x16	M6x16	135
181400000200	GP 14	14,1	14,1										129
181600000200	GP 16	16,1	16,1										123
181800000200	GP 18	18,1	18,1										115
182000000200	GP 20	20	20	45	40	40	73	146	73	33	M8x35	M8x35	419
182500000200	GP 25	25,1	25,1										374
183000000200	GP 30	30,1	30,1										328
183200000200	GP 32	32,15	32,15										1028
183500000200	GP 35	35,15	35,15	60	56	56	100	200	100	48	M10x50	M10x50	972
184000000200	GP 40	40,15	40,15										871
184200000200	GP 42	42,2	42,2										1440
184500000200	GP 45	45,2	45,2										70
184800000200	GP 48	48,2	48,2	1279									
185000000200	GP 50	50,2	50,2	1213									
186000000200	GP 60	60,25	60,25	80	80	80	135	270	135	68	M10x60	M12x50	

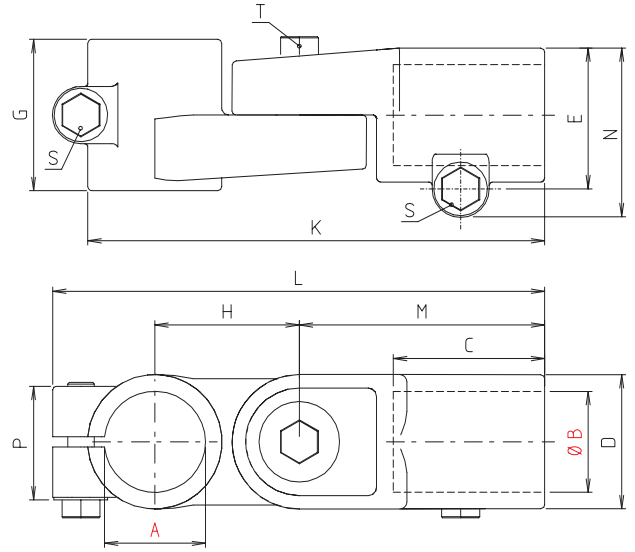
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour



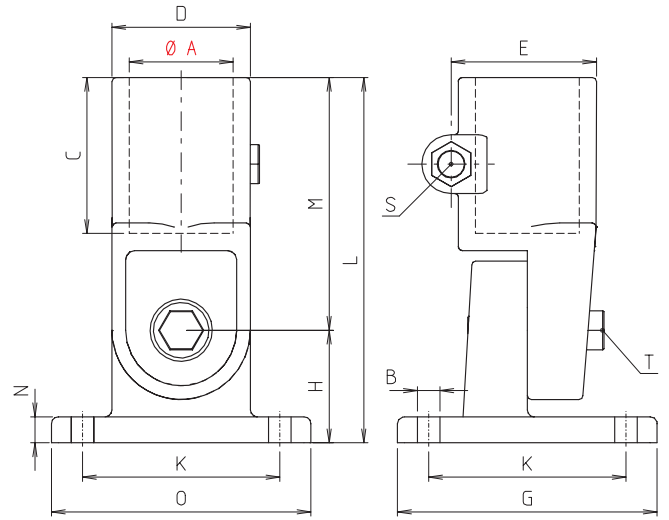
Without tothing 180° infinitely



## GQ - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	S	T	m [g]
182000030200	GQ 20	20	20													409
182500030200	GQ 25	25,1	25,1	45	40	40	45	43	136	146	73	50	33	M8x35	M8x35	369
183000030200	GQ 30	30,1	30,1													318
183200030200	GQ 32	32,2	32,2													1005
183500030200	GQ 35	35,2	35,2	60	56	56	60	60	188	200	100	68	48	M10x50	M10x50	922
184000030200	GQ 40	40,2	40,2													822
184200030200	GQ 42	42,2	42,2													1405
184500030200	GQ 45	45,2	45,2	70	66	66	70	70	218	230	115	78	58	M10x60	M10x60	1302
184800030200	GQ 48	48,2	48,2													1221
185000030200	GQ 50	50,2	50,2													1164



Without tothing 180° infinitely



Type GF 12–18



Type GF 20–50

## GF - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	O	S	T	m [g]
18120002020	GF 12	12,1	5,3	25	26	29,4	50	20	40	64	44	5	35	M6x16	M6x16	106
18140002020	GF 14	14,1														103
18160002020	GF 16	16,1														100
18180002020	GF 18	18,1														96
18200002020	GF 20	20	6,5	45	40	40	75	33	57	106	73	7	75	M8x35	M8x35	371
18250002020	GF 25	25,1														374
18300002020	GF 30	30,1														325
18320002020	GF 32	32,2														963
18350002020	GF 35	35,2	8,5	60	56	56	100	44	76	144	100	10	100	M10x50	M10x50	880
18400002020	GF 40	40,2														827
18420002020	GF 42	42,2														1378
18450002020	GF 45	45,2														1287
18480002020	GF 48	48,2	8,5	70	66	66	125	52	98	167	115	12	125	M10x60	M10x60	1233
18500002020	GF 50	50,2														1213

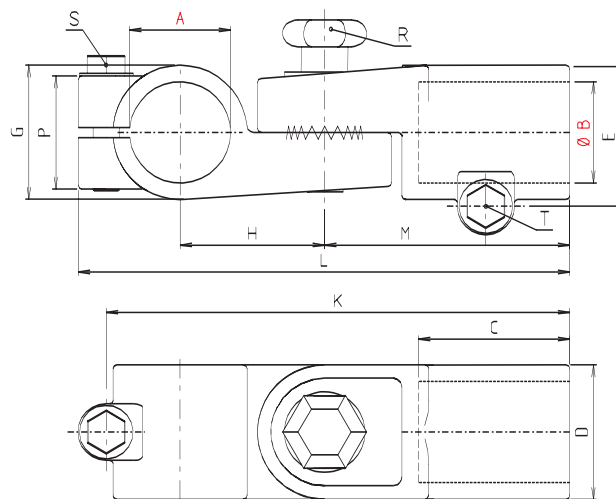
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour



With toothing - rotation of 180°, engaging at 15° intervals



Type GWZ 12–18

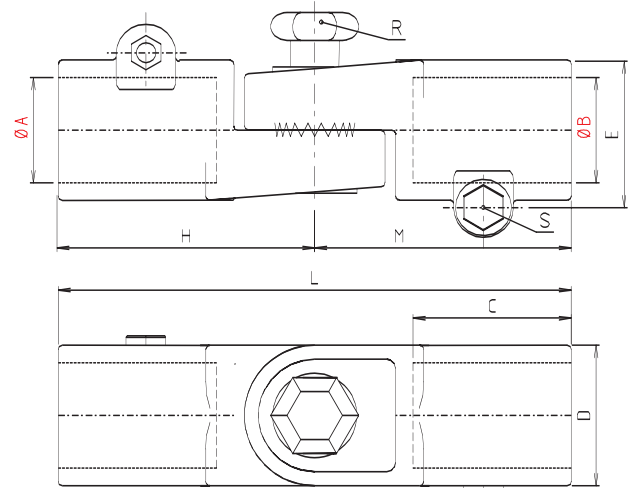


Type GWZ 20–60

## GWZ - Industrial design

Code No.	Type	A	B	C	D	E	G	H	K	L	M	P	R	S	T	m [g]
181200040200	GWZ 12	12,1	12,1													135
181400040200	GWZ 14	14,1	14,1	25	26	29,4	26	27	84	95,5	44	21	M6x26	M6x16	M6x16	129
181600040200	GWZ 16	16,1	16,1													123
181800040200	GWZ 18	18,1	18,1													115
182000040200	GWZ 20	20	20													428
182500040200	GWZ 25	25,1	25,1	45	40	40	40	43	136	146	73	33	M8x40	M8x35	M8x35	391
183000040200	GWZ 30	30,1	30,1													344
183200040200	GWZ 32	32,2	32,2													999
183500040200	GWZ 35	35,2	35,2	60	56	56	56	60	188	200	100	48	M10x50	M10x50	M10x50	943
184000040200	GWZ 40	40,2	40,2													861
184200040200	GWZ 42	42,2	42,2													1361
184500040200	GWZ 45	45,2	45,2	70	66	66	66	70	218	230	115	58	M10x50	M10x60	M10x60	1287
184800040200	GWZ 48	48,2	48,2													1211
185000040200	GWZ 50	50,2	50,2													1166
186000040200	GWZ 60	60,3	60,3	80	80	80	85	85	260	273	135	68	M12x50	M10x60	M10x60	2050





With tothing - rotation of 180°, engaging at 15° intervals



Type GPZ 12–18



Type GPZ 20–60

## GPZ - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	H	L	M	R	S	m [g]
181200050200	GPZ 12	12,1	12,1	25	26	29,4	44	95,5	44	M6x26	M6x16	135
181400050200	GPZ 14	14,1	14,1									129
181600050200	GPZ 16	16,1	16,1									123
181800050200	GPZ 18	18,1	18,1									115
182000050200	GPZ 20	20	20	45	40	40	73	146	73	M8x40	M8x35	460
182500050200	GPZ 25	25,1	25,1									414
183000050200	GPZ 30	30,1	30,1									370
183200050200	GPZ 32	32,2	32,2									1069
183500050200	GPZ 35	35,2	35,2	60	56	56	100	200	100	M10x50	M10x50	1012
184000050200	GPZ 40	40,2	40,2									916
184200050200	GPZ 42	42,2	42,2									1482
184500050200	GPZ 45	45,2	45,2									1393
184800050200	GPZ 48	48,2	48,2	70	66	66	115	230	115	M10x60	M10x60	1316
185000050200	GPZ 50	50,2	50,2									1261
185000050200	GPZ 50	50,2	50,2									1261
186000050200	GPZ 60	60,3	60,3									80

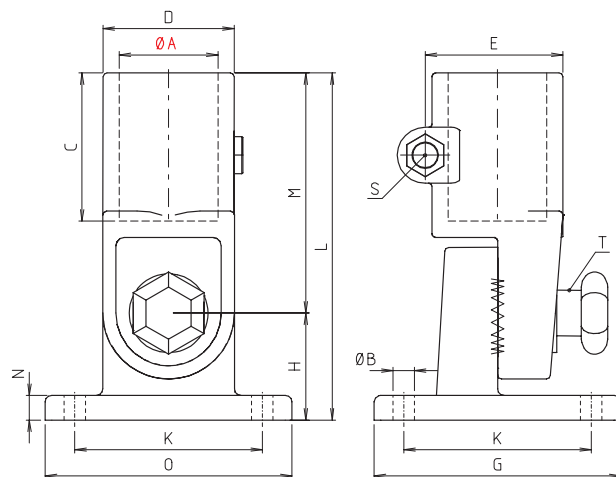
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour



With toothing - rotation of 180°, engaging at 15° intervals



TYPE GFZ 12-18

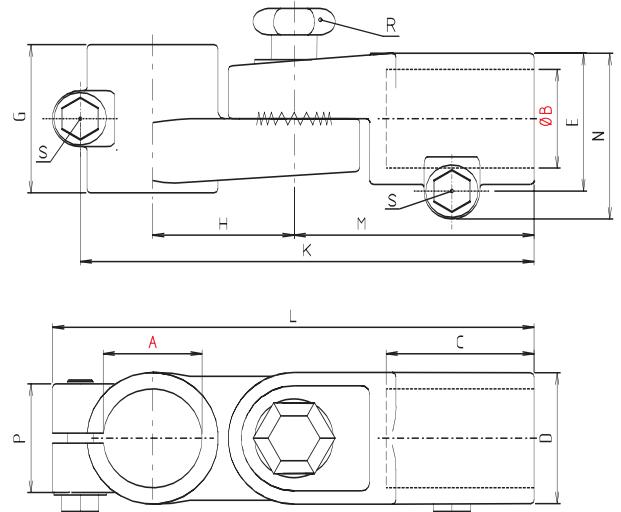


TYPE GFZ 20-50

## GFZ - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	O	S	T	m [g]
18120007020	GFZ 12	12,1														106
18140007020	GFZ 14	14,1	5,3	25	26	29,4	50	27	40	64	44	5	35	M6x16	M6x26	103
18160007020	GFZ 16	16,1														100
18180007020	GFZ 18	18,1														96
18200007020	GFZ 20	20														409
18250007020	GFZ 25	25,1	6,5	45	40	40	75	32,5	57	105,5	73	7	75	M8x35	M8x40	398
18300007020	GFZ 30	30,1														368
18320007020	GFZ 32	32,2														949
18350007020	GFZ 35	35,2	8,5	60	56	56	100	44	76	144	100	10	100	M10x50	M10x52	923
18400007020	GFZ 40	40,2														866
18420007020	GFZ 42	42,2														1365
18450007020	GFZ 45	45,2	8,5	70	66	66	125	52	98	167	115	12	125	M10x60	M10x60	1318
18480007020	GFZ 48	48,2														1279
18500007020	GFZ 50	50,2														1287



With toothing - rotation of 180°, engaging at 15° intervals



## GQZ - Industrial design

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	R	S	m [g]
182000060200	GQZ 20	20	20	45	40	40	45	43	136	146	73	50	33	M8x40	M8x35	450
182500060200	GQZ 25	25,1	25,1													412
183000060200	GQZ 30	30,1	30,1	60	56	56	60	60	188	200	100	68	48	M10x52	M10x50	358
183200060200	GQZ 32	32,2	32,2													1045
183500060200	GQZ 35	35,2	35,2													990
184000060200	GQZ 40	40,2	40,2	70	66	66	70	70	218	230	115	78	58	M10x60	M10x60	870
184200060200	GQZ 42	42,2	42,2													1443
184500060200	GQZ 45	45,2	45,2													1362
184800060200	GQZ 48	48,2	48,2													1259
185000060200	GQZ 50	50,2	50,2													1218

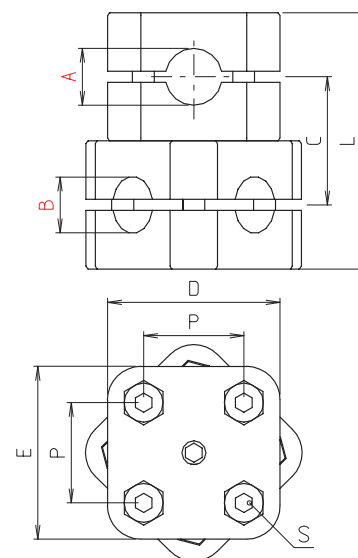
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

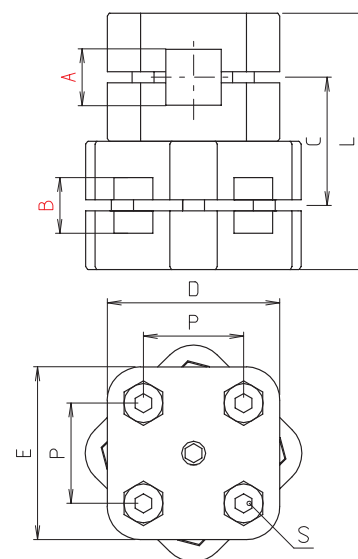


Without tothing 360° infinitely

## GKPR - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	P	S	m [g]
290800080266	GKPR 8	8	8	23	31	31	46	18	M4x18	96
291000080266	GKPR 10	10	10							92

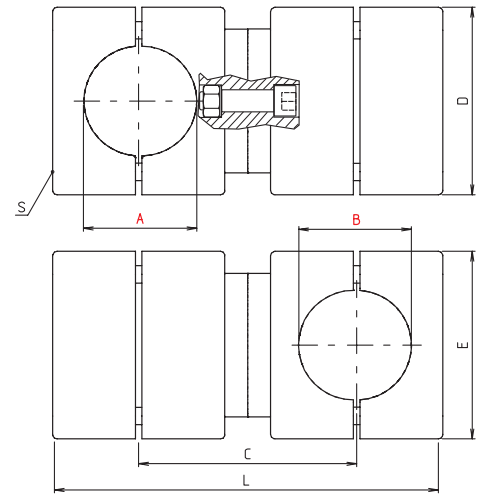


Without tothing 360° infinitely

## GKPV - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	P	S	m [g]
291000090266	GKPV 10	10	10	23	31	31	46	18	M4x18	88

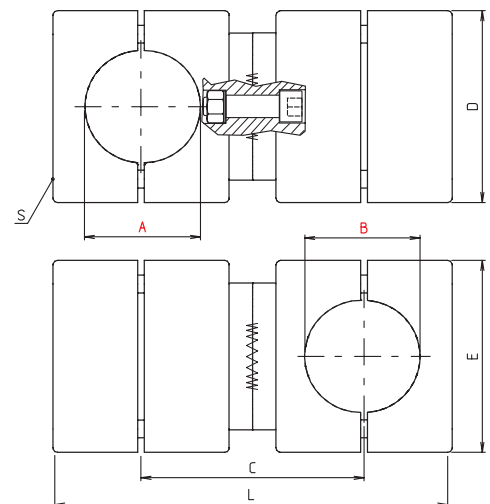


Without tothing 360° infinitely

### GKR - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	S	m [g]
284000080266	GKR 40	40,2	40,2	75	70	70	137	M6x55	899
284200080266	GKR 42	42,3	42,3	100	86	86	179	M8x70	1997
284500080266	GKR 45	45,3	45,3						1941
284800080266	GKR 48	48,3	48,3						1946
285000080266	GKR 50	50,3	50,3						1903



With tothing - rotation of 360°,  
engaging at 15° intervals

[mm]

### GKRZ - Block form

Code No.	Type	A	B	C	D	E	L	S	m [g]
284000090266	GKRZ 40	40,2	40,2	75	70	70	137	M6x55	910
284200090266	GKRZ 42	42,3	42,3	100	86	86	179	M8x70	2003
284500090266	GKRZ 45	45,3	45,3						1956
284800090266	GKRZ 48	48,3	48,3						1933
285000090266	GKRZ 50	50,3	50,3						1914

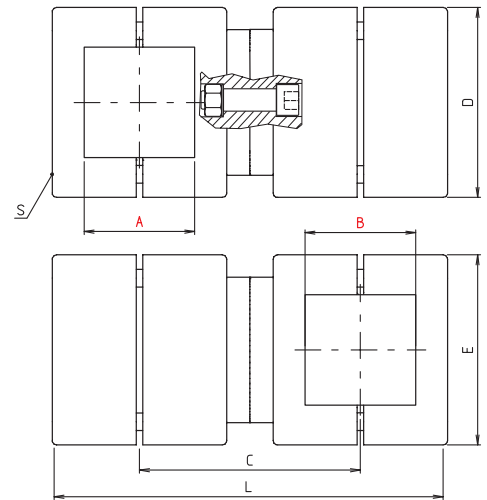
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

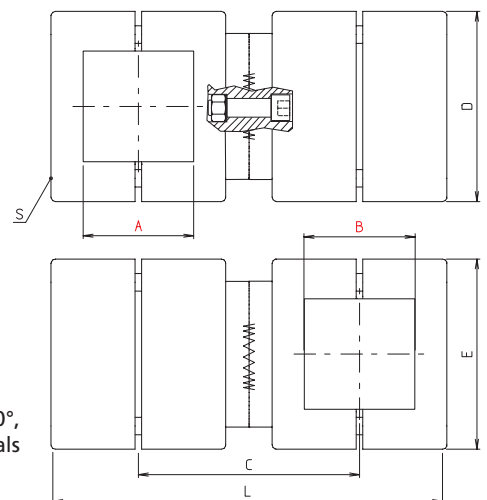


Without tothing 360° infinitely

## GKV - Block form

[mm]

Code No.	Type	A	B	C	D	E	L	S	m [g]
284000100266	GKV 40	40,4	40,4	75	70	70	137	M6x55	827
285000100266	GKV 50	50,5	50,5	100	86	86	179	M8x70	1816



With tothing - rotation of 180°,  
engaging at 15° intervals

## GKVZ - Block form

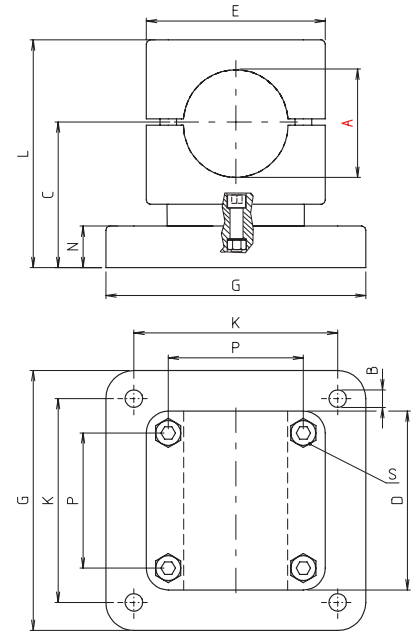
[mm]

Code No.	Type	A	B	C	D	E	L	S	m [g]
284000110266	GKVZ 40	40,4	40,4	75	70	70	137	M6x55	834
285000110266	GKVZ 50	50,5	50,5	100	86	86	179	M8x70	1826



### GFKR - Block form

Without tothing 360° infinitely



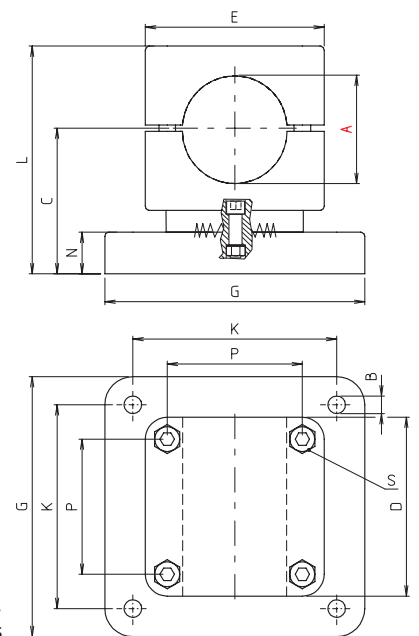
[mm]

Code No.	Type	A	B	C	D	E	G	K	L	N	P	S	m [g]
28400012026	GFKR 40	40,2	8,5	58	70	70	125	98	88,5	20	53	M6x55	1064
28420012026	GFKR 42	42,3	8,5	70	86	86	125	98	109,5	20	65	M8x70	1606
28450012026	GFKR 45	45,3											1576
28480012026	GFKR 48	48,3											1570
28500012026	GFKR 50	50,3											1566



### GFKRZ - Block form

With tothing - rotation of 180°,  
engaging at 15° intervals



[mm]

Code No.	Type	A	B	C	D	E	G	K	L	N	P	S	m [g]
28400013026	GFKRZ 40	40,2	8,5	58	70	70	125	98	88,5	20	53	M6x55	1066
28420013026	GFKRZ 42	42,3	8,5	70	86	86	125	98	109,5	20	65	M8x70	1615
28450013026	GFKRZ 45	45,3											1590
28480013026	GFKRZ 48	48,3											1576
28500013026	GFKRZ 50	50,3											1565



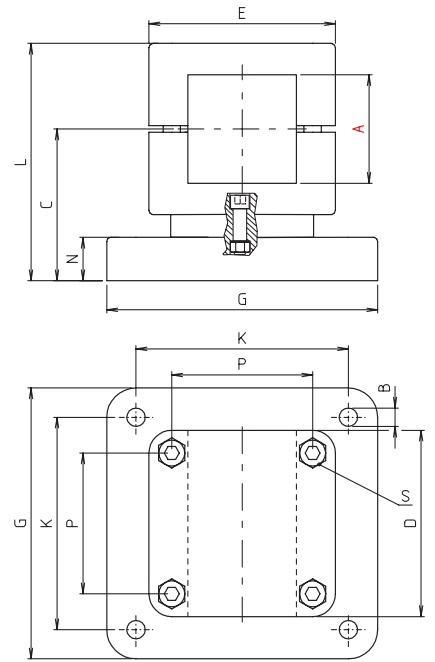
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Ball-polished
- Colour

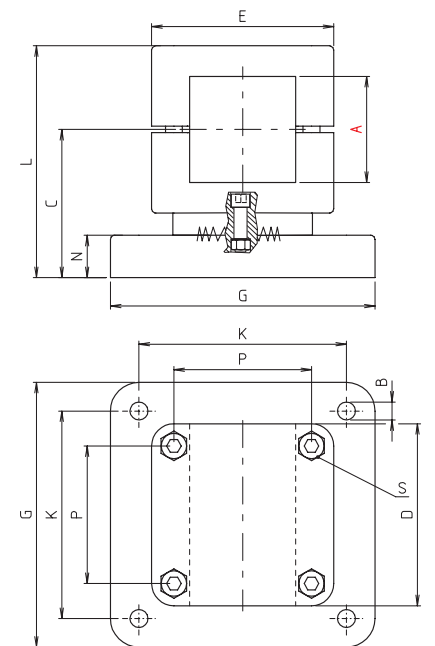


Without tothing 360° infinitely

## GFKV - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	K	L	N	P	S	m [g]
28400014026	GFKV 40	40,4	8,5	58	70	70	125	98	88,5	20	53	M6x55	1025
28500014026	GFKV 50	50,5	8,5	70	86	86	125	98	110	20	65	M8x70	1515

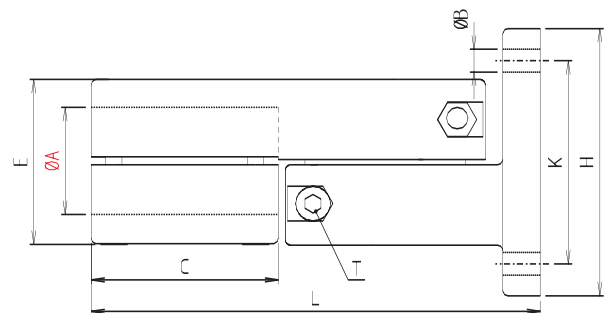
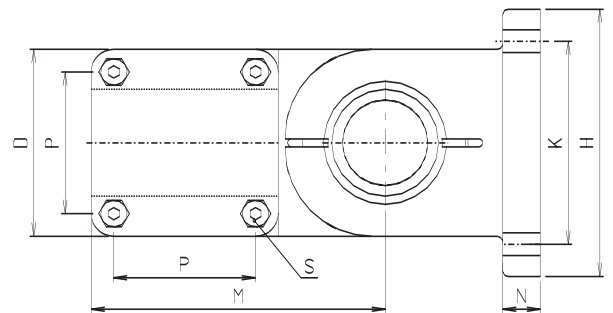


With tothing - rotation of 180°, engaging at 15° intervals

## GFKVZ - Block form

[mm]

Code No.	Type	A	B	C	D	E	G	K	L	N	P	S	m [g]
28400015026	GFKVZ 40	40,4	8,5	58	70	70	125	98	88,5	20	53	M6x55	1031
28500015026	GFKVZ 50	50,5		70	86	86			109,5				65

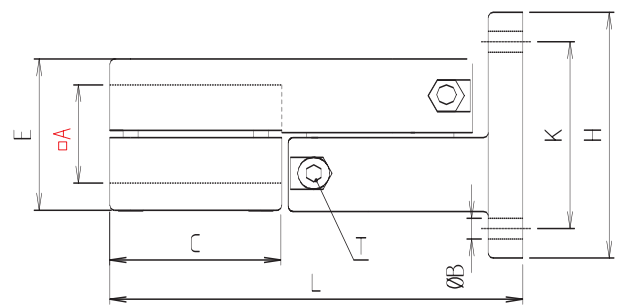
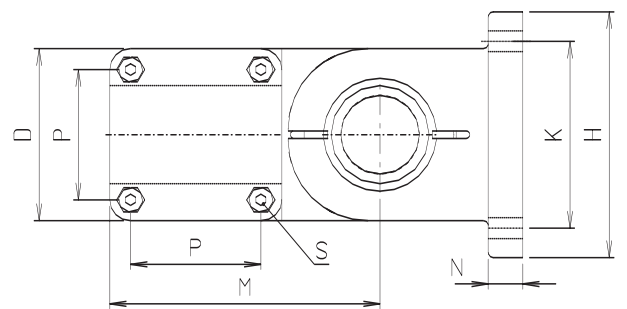


Rotation of 180°, infinitely

### GFR - Block form

[mm]

Code No.	Type	A	B	C	D	E	H	K	L	M	N	P	S	T	m [g]
28400018026	GFR 40	40,2	8,5	70	70	62	100	76	168	110	14	53	M6x55	M8x30	143



Rotation of 180°, infinitely

### GFV - Block form

[mm]

Code No.	Type	A	B	C	D	E	H	K	L	M	N	P	S	T	m [g]
28400022026	GFV 40	40,4	8,5	70	70	62	100	76	168	110	14	53	M6x55	M8x30	1413

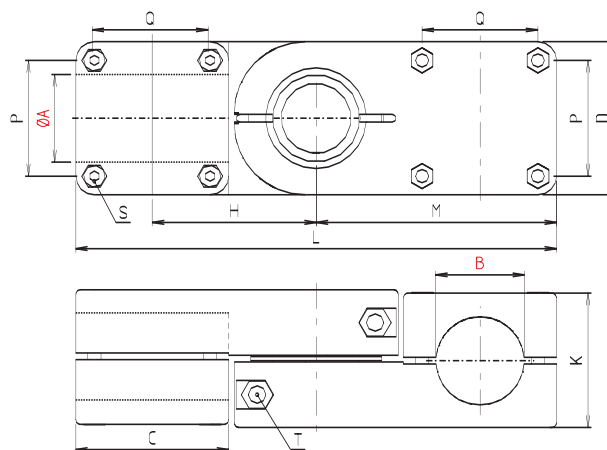
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

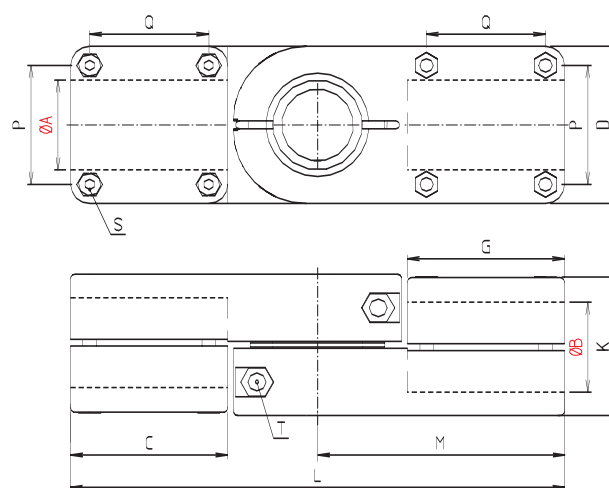


Rotation of 180°, infinitely

## GWR - Block form

[mm]

Code No.	Type	A	B	C	D	H	K	L	M	P	Q	S	T	m [g]
284000160266	GWR 40	40,2	40,2	70	70	75	62	220	110	53	53	M6x55	M8x30	154

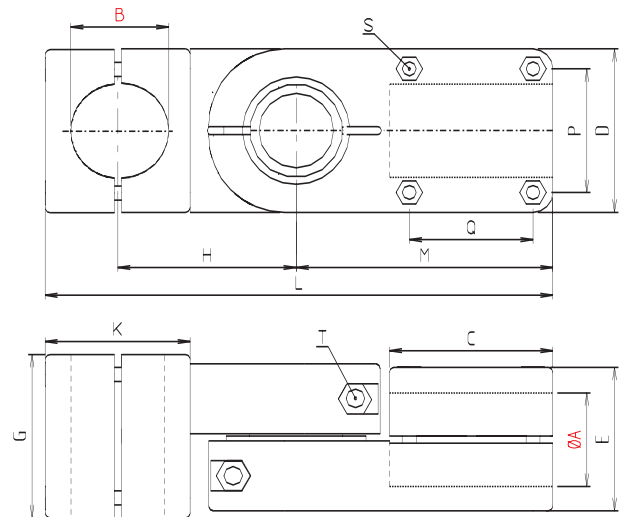


Rotation of 180°, infinitely

## GPR - Block form

[mm]

Code No.	Type	A	B	C	D	G	K	L	M	P	Q	S	T	m [g]
284000170266	GPR 40	40,2	40,2	70	70	70	62	220	110	53	53	M6x55	M8x30	1533

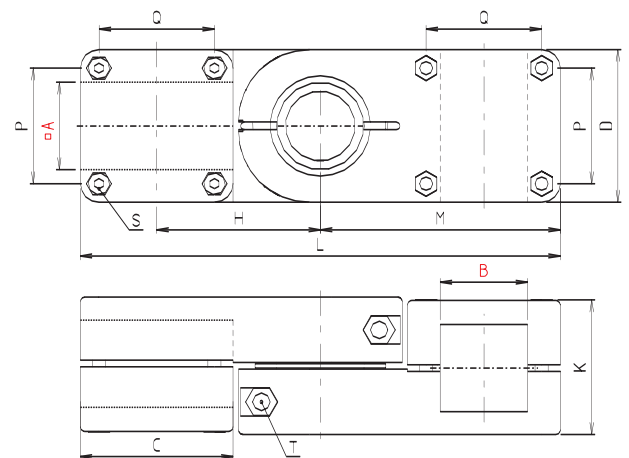


Rotation of 180°, infinitely

### GQR - Block form

[mm]

Code No.	Type	A	B	C	D	G	H	K	L	M	P	Q	S	T	m [g]
28400019026	GQR 40	40,2	40,2	70	70	70	75	76	216	110	53	53	M6x55	M8x30	1583



Rotation of 180°, infinitely

### GWV - Block form

[mm]

Code No.	Type	A	B	C	D	H	K	L	M	P	Q	S	T	m [g]
284000200266	GWV 40	40,4	40,4	70	70	75	62	220	110	53	53	M6x55	M8x30	1473

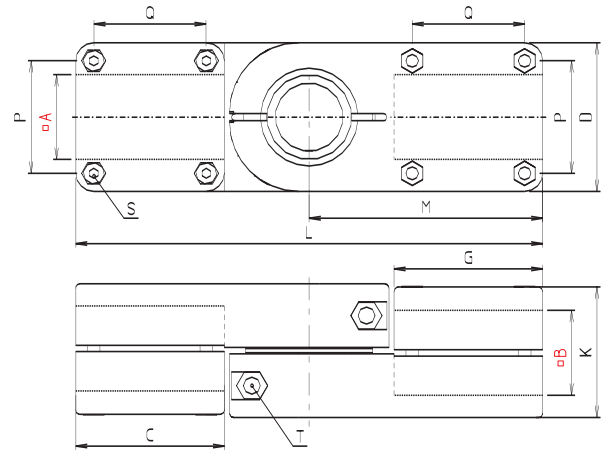
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

- Stainless steel screws
- Ball-polished
- Colour

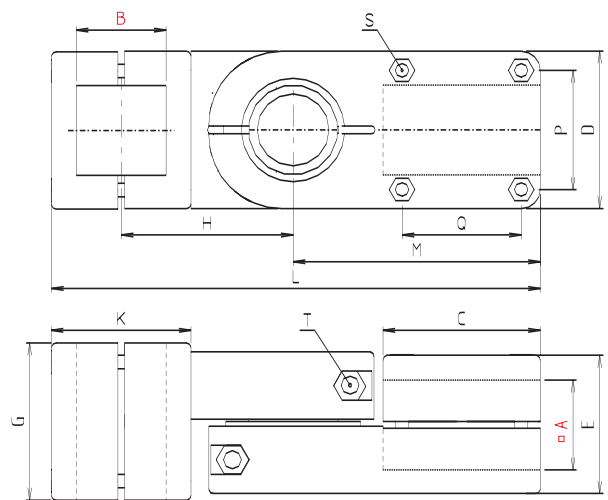


Rotation of 180°, infinitely

## GPV - Block form

[mm]

Code No.	Type	A	B	C	D	G	K	L	M	P	Q	R	S	m [g]
284000210266	GPV 40	40,4	40,4	70	70	70	62	220	110	53	53	M6x55	M8x30	1486



Rotation of 180°, infinitely

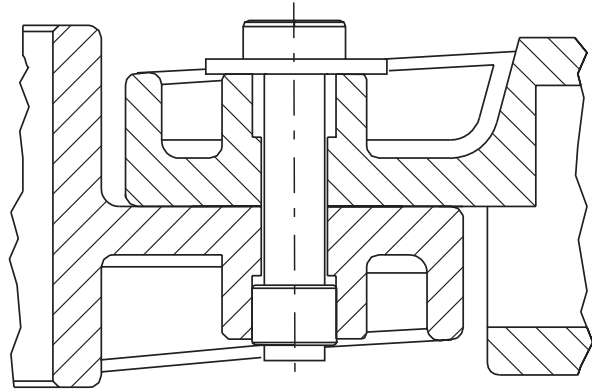
## GQV - Block form

[mm]

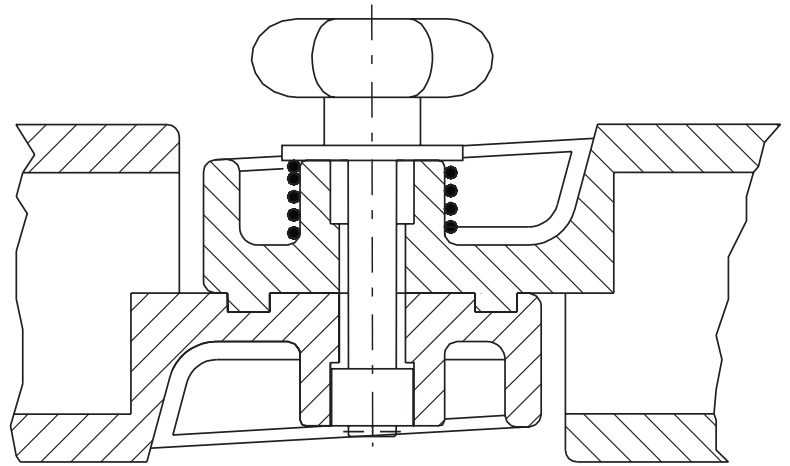
Code No.	Type	A	B	C	D	G	H	K	L	M	P	Q	S	T	m [g]
284000230266	GQV 40	40,4	40,4	70	70	70	75	62	216	110	53	53	M6x55	M8x30	1523

## Sectional views

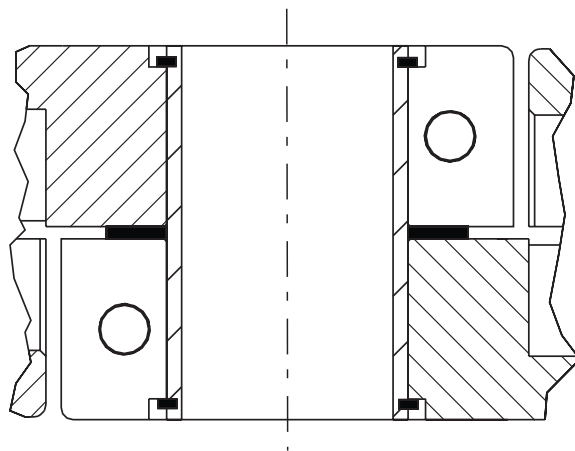
**Industrial design without tothing**  
Pivot connected with screw



**Industrial design with tothing**  
Pivot connected with star grip screw



**quad®- tube connector**  
Pivot connected with tube jointing sleeve and sliding disk



On request, all size combinations of the rated diameters A and B are available within a series.

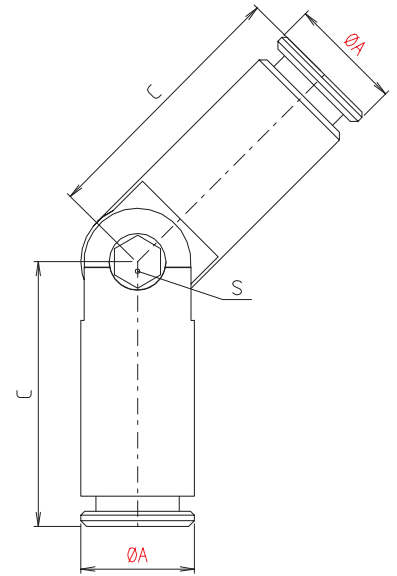
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

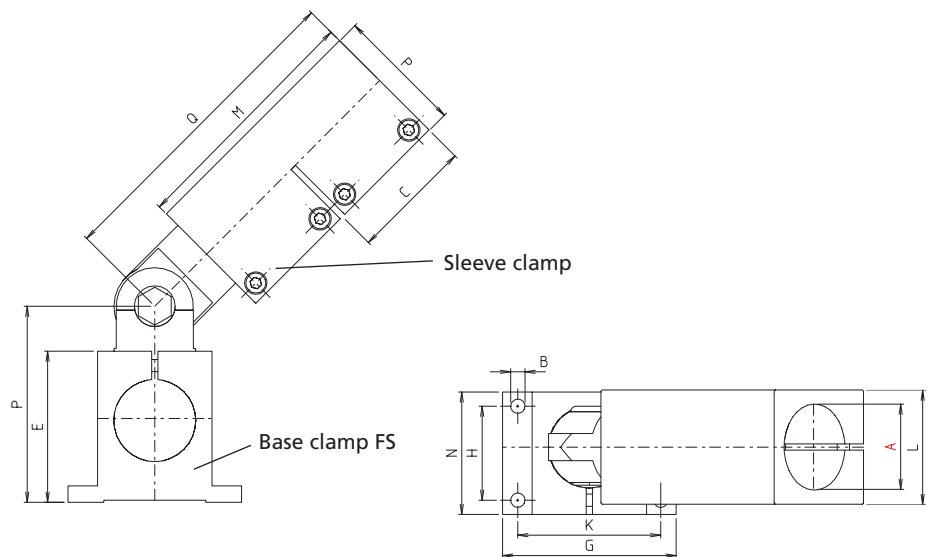
- Black anodized



## G - quad®

[mm]

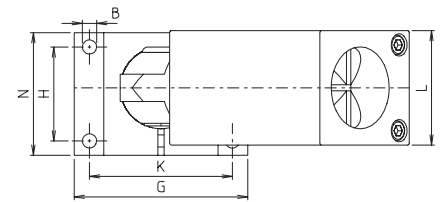
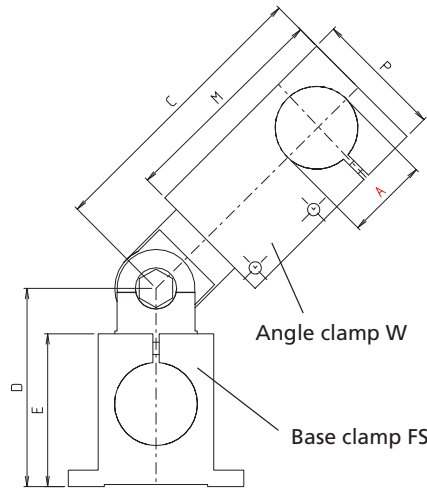
Code No.	Type	A	C	S		m [g]
5830002703	G 30	30	70	M8x25	ISO 7380	258
5840002703	G 40	40	91	M8x35	ISO 7380	600
5850002703	G 50	50	114	M10x45	ISO 7380	1168



## GFM - quad®

[mm]

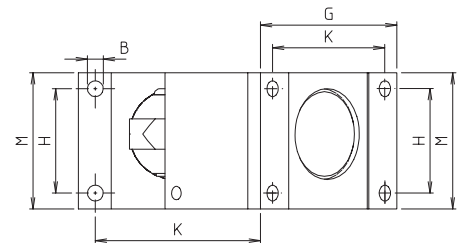
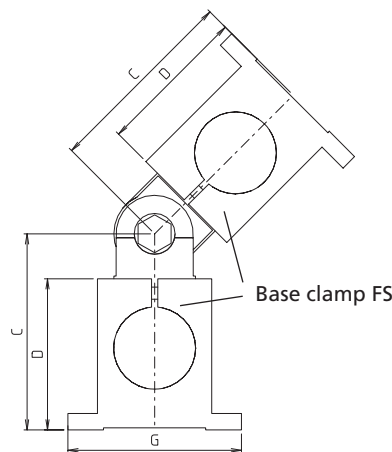
Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	Q	m [g]
58300028030	GFM 30	30,1	7	45	49	58	70	28	56	42	90	49	88	120	776
58400028030	GFM 40	40,1	7	60	62	76	85	40	70	56	120	62	112	156	1649
58500028030	GFM 50	50,2	9	70	77	92	110	50	90	70	140	77	136,5	184,5	3194



**GFW - quad®**

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	m [g]
58300029030	GFW 30	30,1	7	108	88	58	70	28	56	42	78	49	49	703
58400029030	GFW 40	40,1	7	140	110	74	85	40	70	56	104	62	62	1515
58500029030	GFW 50	50,2	9	194,5	136,5	92	110	50	90	70	130	77	77	2978



**GFF - quad®**

[mm]

Code No.	Type	B	C	D	G	H	K	M	m [g]
5830003003	GFF 30	7	86	56	70	28	56	49	634
5840003003	GFF 40	7	110	74	85	40	70	62	1340
5850003003	GFF 50	9	136,5	92	110	50	90	77	2670



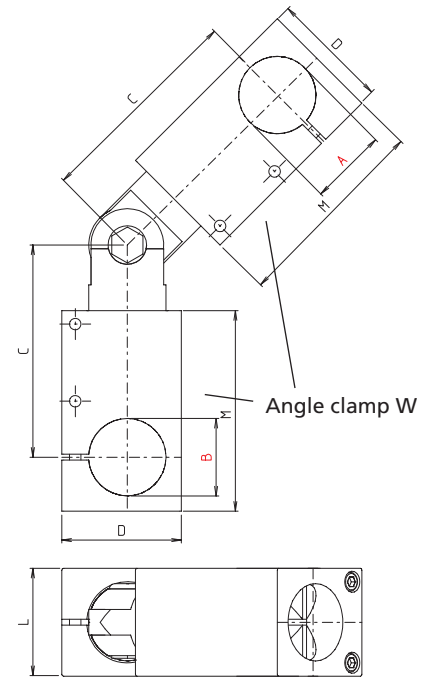
# Solid Clamps – Hinge clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219

## On request:

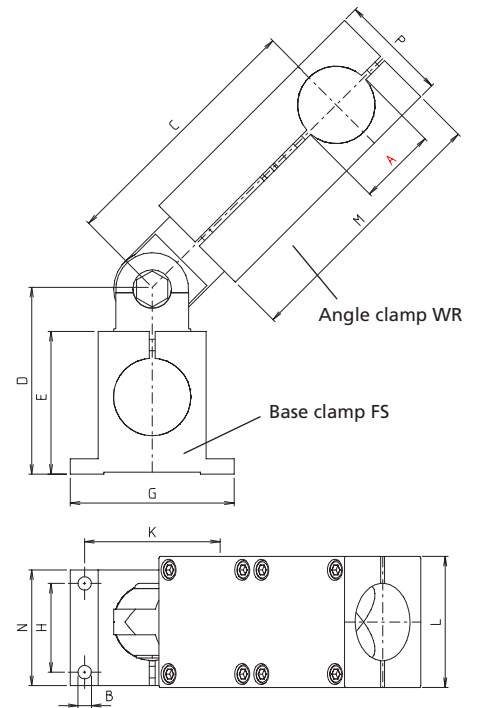
- Black anodized



## GPR - quad®

[mm]

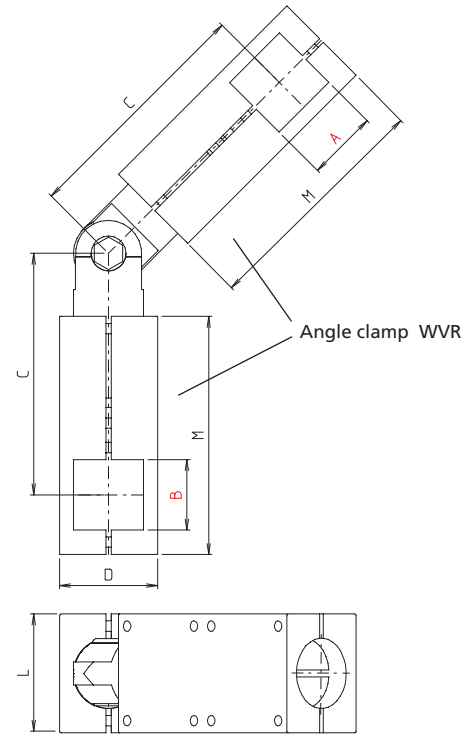
Code No.	Type	A	B	C	D	L	M	m [g]
583000310300	GPR 30	30,1	30,1	86	49	42	78	772
584000310300	GPR 40	40,1	40,2	121	62	56	104	1686
585000310300	GPR 50	50,2	50,2	139,5	77	70	130	3294



## GFR - quad®

[mm]

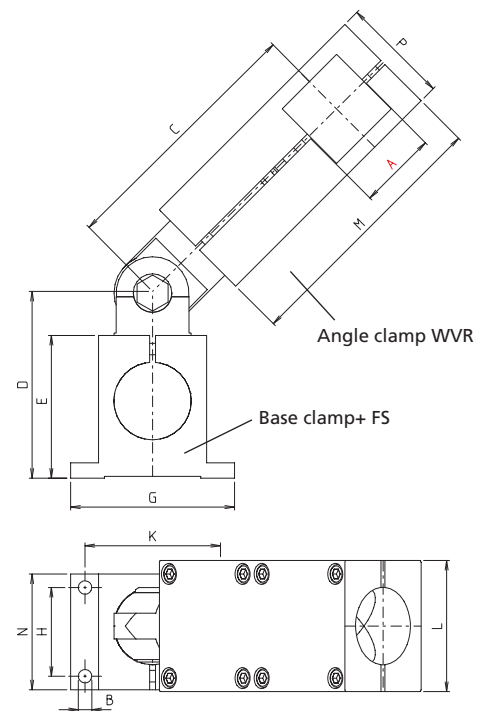
Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	m [g]
58300032030	GFR 30	30,1	7	121	88	58	70	28	56	56	112	49	42	893
58400032030	GFR 40	40,2	7	144	110	74	85	40	70	68	136	62	56	1784
58500032030	GFR 50	50,3	9	172	136,5	92	110	50	90	85	170	77	70	3566



GPV - quad®

[mm]

Code No.	Type	A	B	C	D	L	M	m [g]
583000330300	GPV 30	30,2	30,2	114	42	56	112	1115
584000330300	GPV 40	40,3	40,3	138	56	68	136	2143
585000330300	GPV 50	50,4	50,4	172	70	85	170	4354

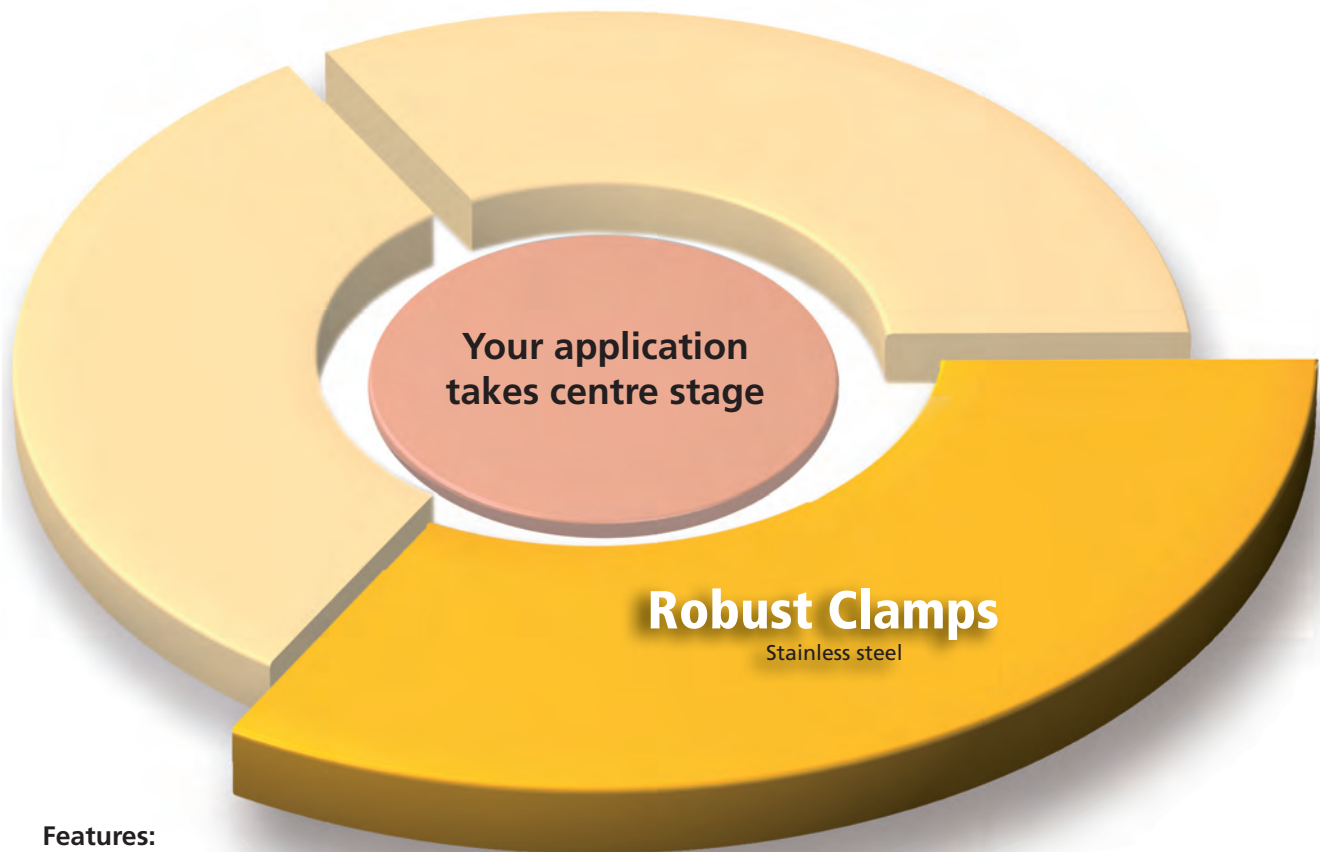
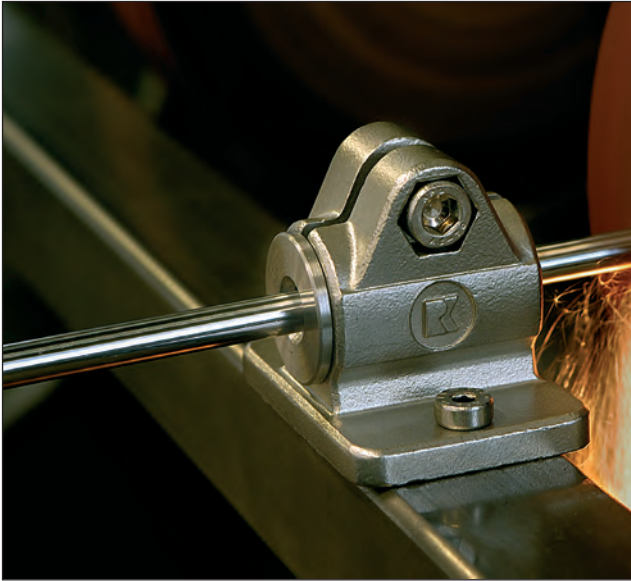


GFV - quad®

[mm]

Code No.	Type	A	B	C	D	E	G	H	K	L	M	N	P	m [g]
58300034030	GFV 30	30,2	7	142	88	58	70	28	56	56	112	49	42	893
58400034030	GFV 40	40,3	7	138	110	74	85	40	70	68	136	62	56	1743
58500034030	GFV 50	50,4	9	172	136	92	110	50	90	85	170	77	70	3512

# Robust Clamps Shock-proof load range



## Features:

- ✓ Extremely strong
- ✓ Vibration proof
- ✓ Impact and shock load



... specific demands require specific solutions.



**RK ROSE+KRIEGER**

### Shock-proof load range

Loads..... page 203

Right angle tube connector..... page 206

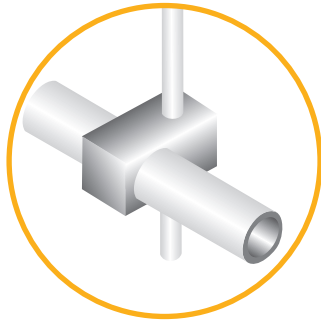
Axially parallel tube connector..... page 207

# ***Robust Clamps***

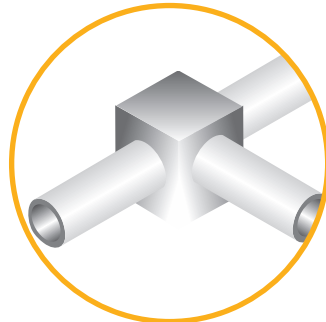


... specific demands require specific solutions.

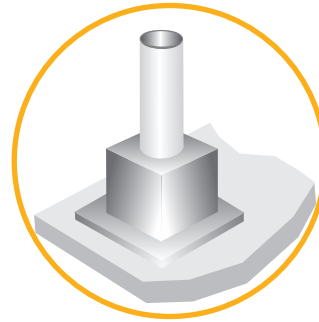
■ Right angle tube connector



Cross clamps



Angle clamps



Base clamps

■ Axially parallel tube connector

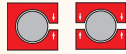


Flange clamps

**Robust Clamps - table of contents**

**Right angle tube connector**

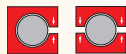
(Single-piece and multi-piece elements)



- Cross clamps ..... p. 206
- Angle clamps ..... p. 206
- Base clamps ..... p. 207

**Axially parallel tube connector**

(Single-piece and multi-piece elements)



- Flange clamps ..... p. 207

**Accessories**

- Accessories ..... from p. 208





Verion:

■ Robust Clamps



delivery  
from stock



Single-piece elements

✓ For the quick and inexpensive installation



Cross clamps



Angle clamps

## Stainless steel:

- Impact and shock load
- High temperature resistance
- Corrosion resistance

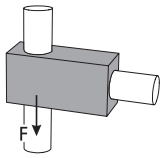
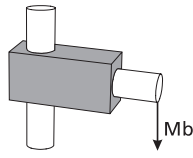
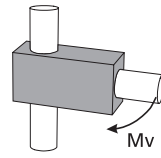


Base clamps



Flange clamps

## Loads robust clamps

Adhesion force  $F$  [kN]Bending moment  $M_b$  [Nm]Twisting moment  $M_v$  [Nm]

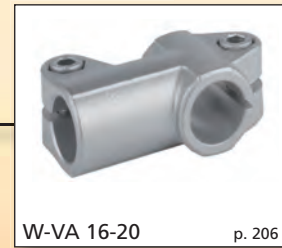
Tightening torque of clamping screws:  
M6: 10 Nm

Type	Bending moment $M_b$ (Nm)	Adhesion force $F$ (kN)	Twisting moment $M_v$ (Nm)
K	328	7,3	37
W	449	4,4	31
FK	236	6,3	44
FS	175	5,5	30



# Robust Clamps – Comprehensive view

Right angle tube connector



Axially parallel tube connector



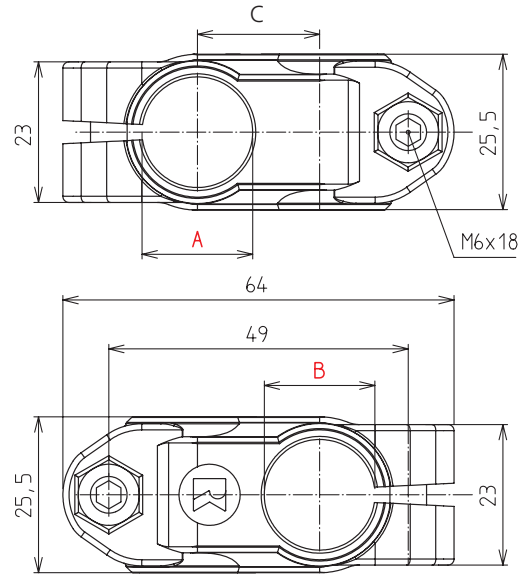


Simple probe fixation in an aggressive environment.

# Robust Clamps – Cross-/Angle-/Base-/Flange clamps

## Order instruction:

- Standard equipment zinc plated screws
- Clamping lever see accessories page 219



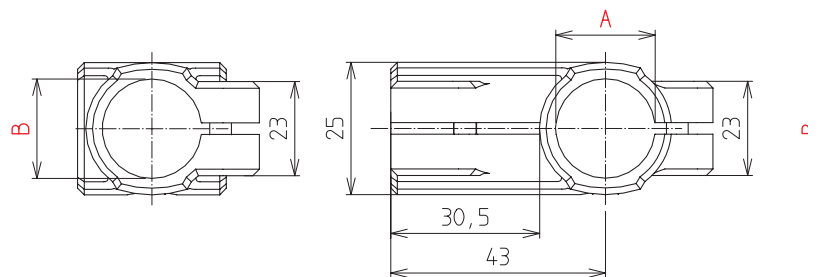
K-VA 12–14



K-VA 16–20

## Cross clamps K-VA

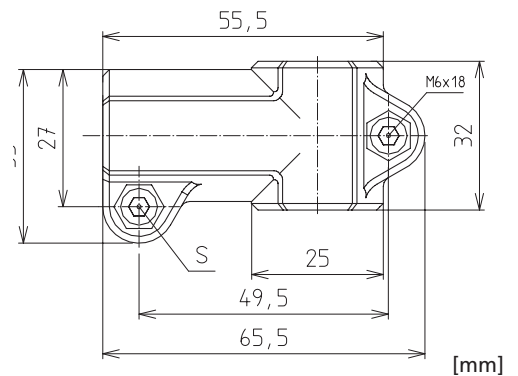
Code No.	Type	A	B	C	m [g]
101200003800	K-VA 12	12,1	12,1	20	198
101400003800	K-VA 14	14,1	14,1	20	183
101600003800	K-VA 16	16,1	16,1	20	165
101800003800	K-VA 18	18,1	18,1	20	144
102000003800	K-VA 20	20,1	20,1	21	106



W-VA 12–14

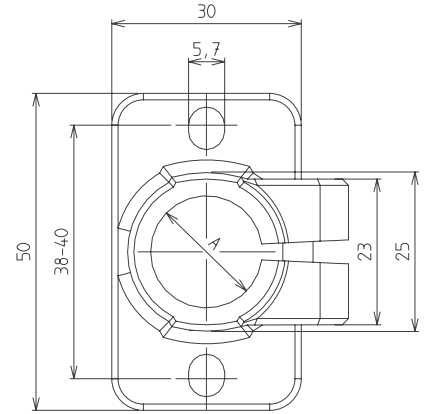
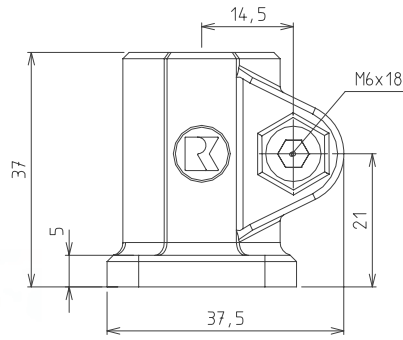


W-VA 16–20



## Angle clamps W-VA

Code No.	Type	A	B	m [g]
111200003800	W-VA 12	12,1	12,1	235
111400003800	W-VA 14	14,1	14,1	216
111600003800	W-VA 16	16,1	16,1	194
111800003800	W-VA 18	18,1	18,1	169
112000003800	W-VA 20	20,1	20,1	123



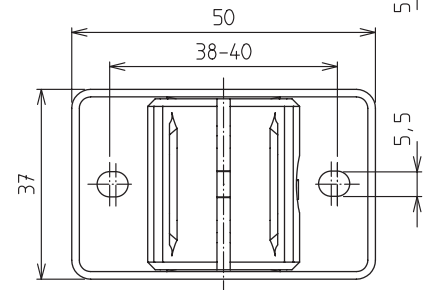
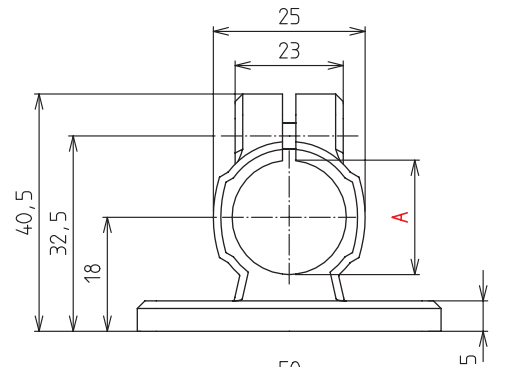
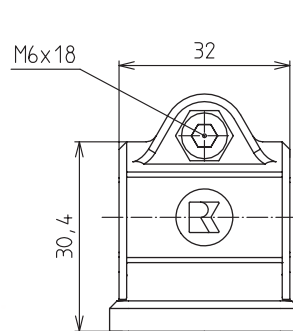
FS-VA 12-14

FS-VA 16-20

### Base clamps FS-VA

[mm]

Code No.	Type	A	m [g]
13120000380	FS-VA 12	12,1	163
13140000380	FS-VA 14	14,1	151
13160000380	FS-VA 16	16,1	138
13180000380	FS-VA 18	18,1	124
13200000380	FS-VA 20	20,1	99



FK-VA 12-14

FK-VA 16-20

### Flange clamps FK-VA

[mm]

Code No.	Type	A	m [g]
12120000380	FK-VA 12	12,1	178
12140000380	FK-VA 14	14,1	167
12160000380	FK-VA 16	16,1	156
12180000380	FK-VA 18	18,1	143
12200000380	FK-VA 20	20,1	120







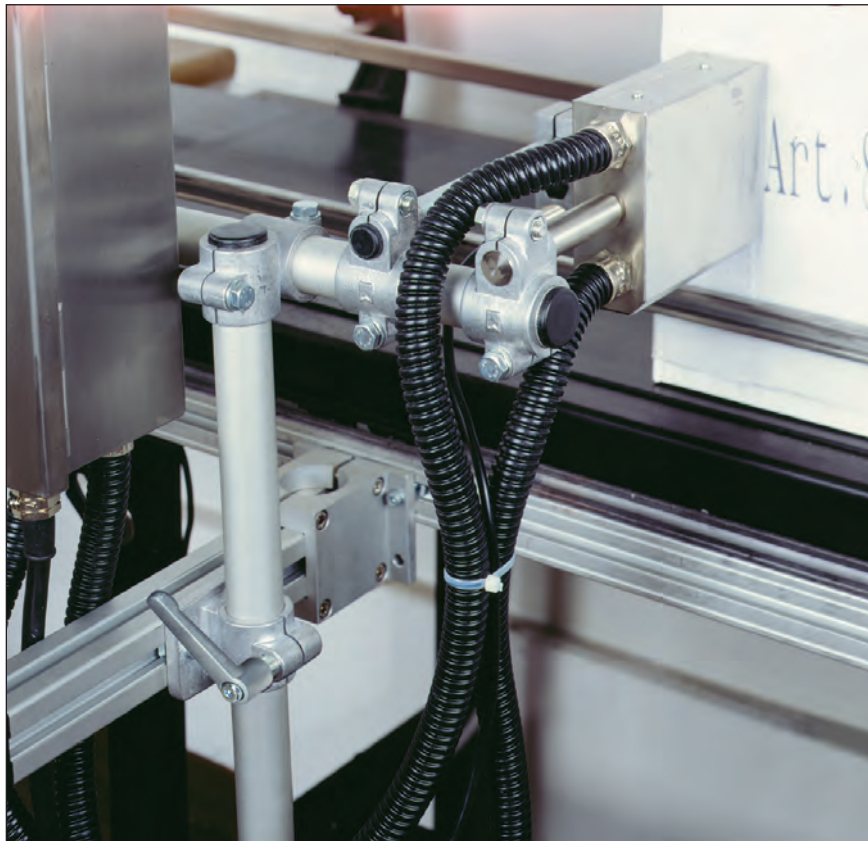
RK ROSE+KRIEGER



Light-, Solid- & Robust Clamps

Accessories ..... ab p. 210

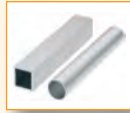
# Accessories



Print head holder on a packaging machine – can be moved as required.

**Accessories - table of contents**

**Accessories**



■ Steel-, Stainless steel-, Aluminium tubes ... p. 212



■ Aluminium bars /-profiles ..... p. 213



■ Threaded stopper ..... p. 214



■ Tube stopper ..... p. 215



■ Special tube fittings ..... p. 216



■ Adjustable feet ..... p. 217



■ Castors ..... p. 218



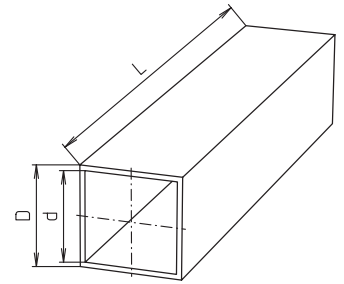
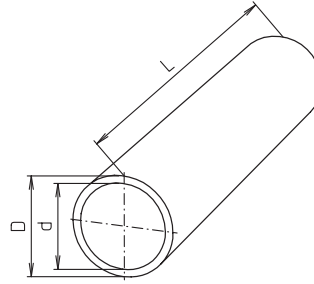
■ Clamping levers / Insert nuts ..... ab p. 219



# Accessories

## Order instruction:

- Cut-to-length or standard lengths



## Steel-/ Stainless steel tubes

[mm]

Code No.	Type	D tol. zinc-plated	L max. zinc-plated	D tol. stainless steel	L max. stainless steel	d
round						
801215_ _ _ _ _	12x1,5	12 ± 0,1	6000	12 ± 0,12	3000	9
801415_ _ _ _ _	14x1,5	14 ± 0,1		14 ± 0,14		11
801515_ _ _ _ _	15x1,5	15 ± 0,1		15 ± 0,15		12
801615_ _ _ _ _	16 x1,5	16 ± 0,1		16 ± 0,16		13
801815_ _ _ _ _	18x1,5	18 ± 0,1		18 ± 0,12		15
802020_ _ _ _ _	20x2	20 ± 0,1		20 ± 0,12	3000	16
802520_ _ _ _ _	25x2	25 ± 0,1		25 ± 0,25		21
803020_ _ _ _ _	30x2	30 ± 0,1		30 ± 0,10		26
803230_ _ _ _ _	32x3	32 ± 0,15		32 ± 0,15		26
803530* _ _ _ _ _	35x3	35 ± 0,15		–		–
804040_ _ _ _ _	40x4	40 + 0,15		40 + 0,12	3000	32
804240* _ _ _ _ _	42x4	42 ± 0,2		–	–	34
804540* _ _ _ _ _	45x4	45 ± 0,2		–	–	37
804835* _ _ _ _ _	48x3,5	48 ± 0,2		–	–	41
804840* _ _ _ _ _	48x4	48 ± 0,2		–	–	40
805040_ _ _ _ _	50x4	50 + 0,2		50 + 0,15	3000	42
805540* _ _ _ _ _	55x4	55 ± 0,25		–	–	47
806050_ _ _ _ _	60x5	60 + 0,25		60 + 0,20	3000	50
806250* _ _ _ _ _	62x5	62 ± 0,3		–	–	52
808050* _ _ _ _ _	80x5	80 ± 0,35		–	–	70

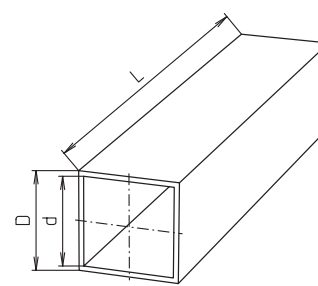
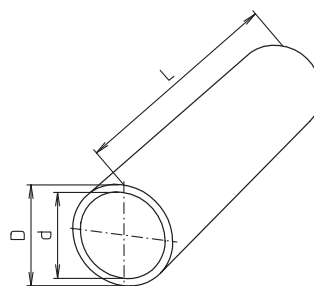
\* Not available in stainless steel

Code No.	Type	D tol.	L max. zinc-plated	L max. stainless steel
square				
812010_ _ _ _ _	20x1,5	20 ± 0,3	4000	6000
812515_ _ _ _ _	25x1,5	25 ± 0,3	6000	
813020_ _ _ _ _	30x2	30 ± 0,3	4000	
814030_ _ _ _ _	40x3	40 ± 0,4	6000	
815030_ _ _ _ _	50x3	50 ± 0,5		
816040_ _ _ _ _	60x4	60 ± 0,6		
818050_ _ _ _ _	80x5	80 ± 0,7		

**Length:**  
every length is possible  
**standard lengths\*\*:**  
0500, 1000, 2000,  
3000 und 4000 mm

**Version:**  
0 = polished St 37-2  
1 = galvanized zinc-plated St 37-2  
2 = stainless steel VA 1.4301

\*\* standard lengths only for galvanized zinc-plated



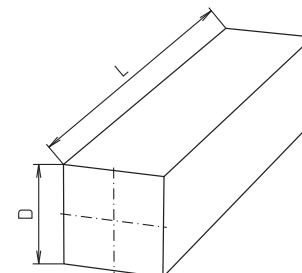
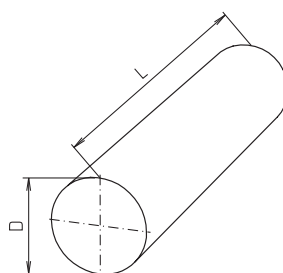
### Aluminium tubes

[mm]

Code No.	Type	D tol.	d	L max.
<b>round</b>				
822030_ _ _ _ _	20x3	20 ± 0,2	14	6000
823020_ _ _ _ _	30x2	30 ± 0,1	26	
824030_ _ _ _ _	40x3	40 ± 0,15	34	
825030_ _ _ _ _	50x3	50 ± 0,2	44	
826030_ _ _ _ _	60x3	60	54	
<b>square</b>				
832015_ _ _ _ _	20x1,5	20 ± 0,2	17	6000
833020_ _ _ _ _	30x2	30 ± 0,2	26	
834040_ _ _ _ _	40x4	40 ± 0,3	32	
835040_ _ _ _ _	50x4	50 ± 0,4	42	
836040_ _ _ _ _	60x4	60 ± 0,4	52	

**Length:**  
every length is possible

**Version:**  
1 = natural AlMgSi0,5  
2 = clear anodized AlMgSi0,5  
3 = black anodized AlMgSi0,5  
(on request)



### Aluminium bars

[mm]

Code No.	Type	D tol.	L max.
<b>round</b>			
820800_ _ _ _ _	8	8	3000
821000_ _ _ _ _	10	10	3000
<b>square</b>			
831000_ _ _ _ _	10	10	3000

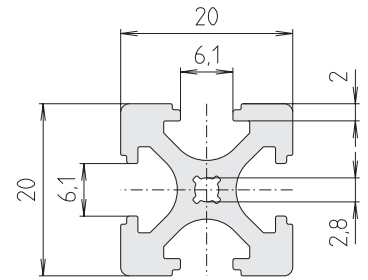
**Length:**  
every length is possible

**Version:**  
1 = natural AlMgSi0,5  
2 = clear anodized AlMgSi0,5  
3 = black anodized AlMgSi0,5  
(on request)

# Accessories

## Order instruction:

- Standard lengths: tubes in 500, 1000 and 2000 mm Length delivery from stock



## Aluminium profile F-20x20

[mm]

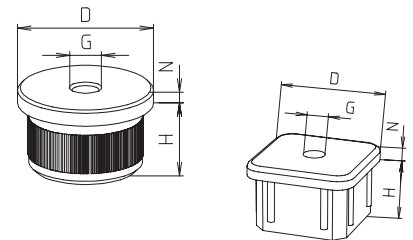
Code No.	Version	Anodized
E01000BBC	bar	natural
E01000BBA_ _ _ _	cut	natural
E01000BCC	bar	black
E01000BCA_ _ _ _	cut	black

max. 3000 mm



### Length:

Standard lengths (clear and black anodized)  
500, 1000 und 2000 mm  
On request every cut is possible



## Round tube threaded stopper

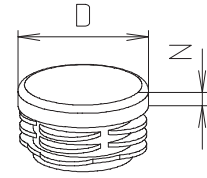
[mm]

Code No.	Type	D	G	H	N
Aluminium					
90321	50x4	50	M10	25	6
90322			M16		
90323	60x5	60	M10	30	6
90324			M16		

## Square tube threaded stopper

[mm]

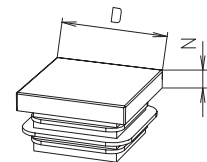
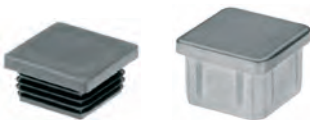
Code No.	Type	D	G	H	N
Aluminium					
90421	50x3	50x50	M10	25	6
90422			M16		
90423	60x4	60x60	M10	30	6
90424			M16		
90427	60x4	60x60	M10	25	8
90425			M16		
90426			M20		



## Round tube stopper

[mm]

Code No.	Type	packaging	Ø D	N
<b>Black polyethylene</b>				
90301	18x1,5	1	18	5
90301C	18x1,5	10		
90302	20x2	1	20	5
90302C	20x2	10		
90303	25x2	1	25	5
90303C	25x2	10		
90304	30x2	1	30	5
90304C	30x2	10		
90305	32x3	1	30	5
90312	35x3	1		
90306	40x3	1	40	5
90307	40x4	1		
90308	45x4	1	45	5
90309	48x4	1		
90310	50x3 / 50x4	1	50	5
90311	60x5	1	55	
<b>Aluminium</b>				
90331	50x4		55	6
90332	60x5			



## Square tube stopper

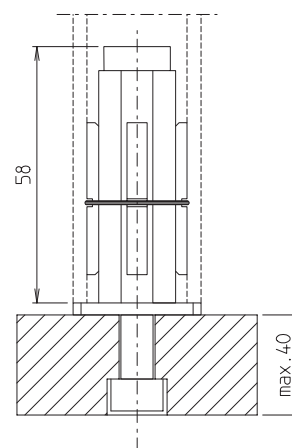
[mm]

Code No.	Type	packaging	□ D	N
<b>Black polyethylene</b>				
90400C	20x1	10	20x20	5
90401	25x1,5		25x25	
90402	30x2	1	30x30	5
90403	35x2,5		35x35	
90404	40x3		40x40	
90408	40x4		5	
90405	50x3			50x50
90406	60x4			60x60
90407	80x5			80x80
<b>Aluminium</b>				
90411	50x3		50x50	6
90412	60x4		60x60	

## Order instruction:

- Hinge parts PA, black
- Steel parts galvanized zinc-plated

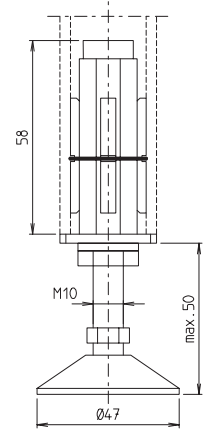
- Clamping element for  $\varnothing$  and  $\square$ tubes
- Clamping capacity for  $\varnothing$  21–40,5 mm
- Clamping capacity for  $\square$ 16,5–32 mm



## Special tube fittings

[mm]

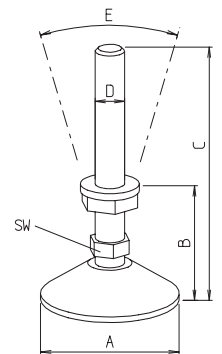
Code No. DIN 912	Code No. DIN 7991	$\varnothing$ Type	$\square$ Type
90701	90711	25x2	–
90702	90712	30x2	25x1,5
90702	90712	32x3	–
90702	90712	35x3	–
90705	90715	40x4	30x2
90705	90715	42x4	–
90707	90717	48x4	35x2,5
90708	90718	–	40x3



### Adjustable feet with special tube fittings

[mm]

Code No.	Ø Type	□ Type
90601	25x2	–
90602	30x2	25x1,5
90602	32x3	–
90602	35x3	–
90605	40x4	30x2
90605	42x4	–
90607	48x4	35x2,5
90608	–	40x3



### Adjustable feet

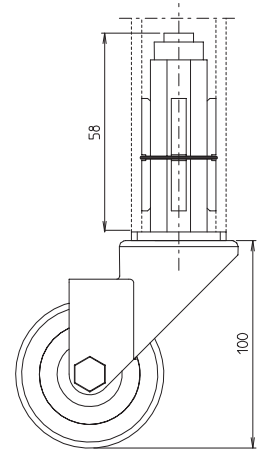
[mm]

Code No.	A	B	C	D	E	L	SW
90611	47	22	117	M10	30°	117	12
4606301	70	30	130	M16		130	22
4046301	60	39	185	M20	30°	185	16
4046311*	60	42	188			188	16
4046312*	123	70	216			216	16

\* with anti-vibration pat



- Rubber wheel, width 25 mm
- Ball bearing
- polyamide rim
- blue-grey rubber tyre
- thread guard
- load capacity 600 N



## Castors with special tube fittings and wheel brake

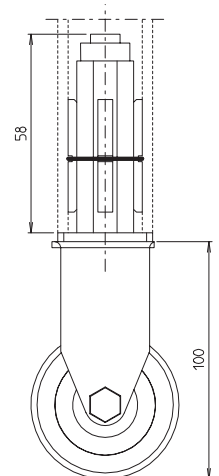
[mm]

Code No.	Ø Type	□ Type
90501	25x2	-
90502	30x2	25x1,5
90502	32x3	-
90502	35x3	-
90505	40x4	30x2
90505	42x4	-
90507	48x4	35x2,5
90508	-	40x3

Other versions up on request



- Rubber wheel, width 25 mm
- Ball bearing
- polyamide rim
- blue-grey rubber tyre
- thread guard
- load capacity 600 N



## Fixed wheels with special tube fittings

[mm]

Code No.	Ø Type	□ Type
90801	25x2	-
90802	30x2	25x1,5
90802	32x3	-
90802	35x3	-
90805	40x4	30x2
90805	42x4	-
90807	48x4	35x2,5
90808	-	40x





■ Instructions:

Regarding its dimensions and adjustability the lever is perfectly adapted to the RK clamp system. The handle must be lifted high enough to disengage allowing "confined space" tightening or loosening as desired. It relocks by means of spring pressure.

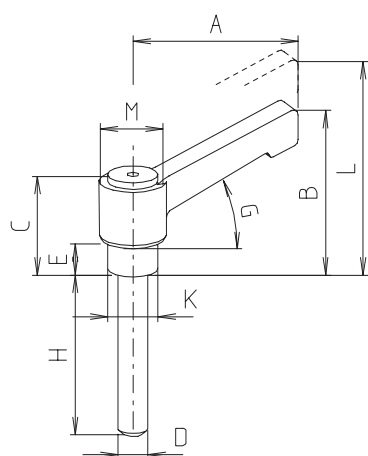
■ Materials:

Handle made of zinc pressure casting according to DIN 1743, steel parts quality class 5.8, galvanized. Hand levers with plastic handles upon request.

■ Hand levers with die-casting handles upon request.

**Clamping lever**

[mm]



Code No.	Type	A	B	C	D	E	G	H	K	L	M	m [g]
90248	HV 5x15	40	33,5	25,5	M5	5,5	20°	15	7,5	37,5	13,5	-
90201	HV 5x20							20				32
90211	HV 6x10	40	33,5	26,5	M6	6,5	20°	10	10	37,5	13,5	30
90249	HV 6x20							20				-
90210	HV 6x16	40	33,5	26,5	M6	6,5	20°	16	10	37,5	13,5	-
90209	HV 6x18							18				-
90212	HV 6x25	40	33,5	26,5	M6	6,5	20°	25	10	37,5	13,5	34
90247	HV 6x30							30				-
90213	HV 6x35	40	33,5	26,5	M6	6,5	20°	35	10	37,5	13,5	38
90214	HV 6x40							40				40
90215	HV 6x45							45				65
90216	HV 6x55	65	43,2	29,2	M6	6,5	20°	55	10	47	18	75
90217	HV 6x60							60				80
90221	HV 8x15	65	45	31	M8	8,5	20°	15	13	49	18	68
90222	HV 8x25							25				72
90223	HV 8x30	65	45	31	M8	8,5	20°	30	13	49	18	75
90224	HV 8x35							35				80
90225	HV 8x45	65	45	31	M8	8,5	20°	45	13	49	18	86
90226	HV 8x50							50				91
90227	HV 8x55	80	53,5	36	M8	8,5	20°	55	13	57,5	22	100
90228	HV 8x60	65	45	31				60		49	18	
90229	HV 8x70							70				120
90230	HV 8x80	80	53,5	36	M8	8,5	20°	80	13	57,5	22	130
90231	HV 8x90							90				140
90241	HV 10x20	80	55	37,5	M10	10	20°	20	16	59	26	125
90250	HV 10x30							30				-
90251	HV 10x35	80	55	37,5	M10	10	20°	35	16	59	26	-
90242	HV 10x45							45				140
90243	HV 10x50	80	55	37,5	M10	10	20°	50	16	59	26	145
90244	HV 10x60	95	64	42,5	M10	10	20°	60	16	68	26	200
90246	HV 10x110							110				250
90255	HV 12x40							40				-
90253	HV 12x45	95	64	42,5	M12	13,5	20°	45	18	68	26	-
90256	HV 12x80							45				-
90270	HV 16x72	100	72	65	M16	19	20°	65	23	72	33	-



■ Steel thread insert  
(exchange piece)

## Insert nut

[mm]

Code No.	Type	H	M	SW
90730	galv. zinc-plated galv.	7,5	4	7
90731	stainless steel stainless steel			
90732	galv. zinc-plated galv.	5	6	8
90733	stainless steel stainless steel			
90734	galv. zinc-plated galv.	9	6	10
90736	galv. zinc-plated galv.	12	8	11
90738	galv. zinc-plated galv.	7	8	11
90739	stainless steel stainless steel			
90740	galv. zinc-plated galv.	10	10	14
90741	stainless steel stainless steel			



Holder for a camera on a seed spreading machine made of clamping pieces and clamping levers.





Platform with staircase on a web offset machine.

The ITAS-system is suitable for many outdoor and indoor applications from the simplest railings to complicated stairs and working platforms.

The easy "socket connection principle" of the internal tension system reduces construction and assembly work to a minimum.

A positive connection is created by tightening the special clamping screws. The smooth contour transitions are pleasant to the touch and ensure enhanced safety.



## Industrial stairs and working platforms

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General information/  
Operation conditions..... from page 226

Internal tension system..... from page 228

Quick change system..... from page 238

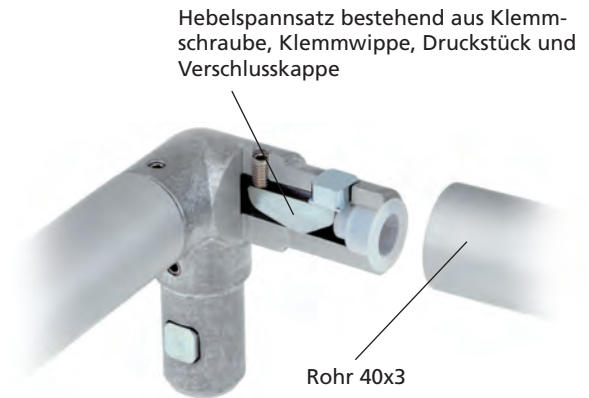
Accessories ..... from page 244

...no drilling or welding, no mitre cut – just assemble.



## Internal tension system

Principle: The clamping rocker is tilted by screwing in the set screw. The other side of the clamping rocker pushes the pressure piece against the inner side of the tube. Without the need for any mechanical machining, the tube construction is positively and quickly connected by simply tightening a screw.



## Quick change system

Working and machining areas which in the past required additional guards can now be made accessible with just a few flicks of the wrist and without the need for any tools thanks to the ITAS quick change system. This makes the complicated removal of entire rail segments a thing of the past.



### Features:

- Connect tubes without annoying transitions
- No mechanical treatment required – just cut the material to length and assemble
- Flexible – elements can be dismantled at any time
- Simple and stable system
- Plan and assemble – it's as simple as that!

### Options:

- Other surface colours are available on request





## ITAS – table of contents

### Properties/performance data

- Technical data ..... p. 226
- Loads / System description ..... p. 226
- Building regulations ..... p. 227

### Versions

(Dimensions, code numbers)

- Internal tension system ..... p. 228
- Quick change system ..... p. 238
- Fax request form ..... p. 252

### Accessories

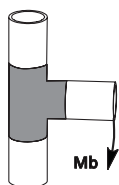
- Aluminium tube ..... p. 245
- Surface element support ..... p. 245
- Stair railing support TGHF ..... p. 246
- Angle plate for TGHF ..... p. 246
- Stair cross beam profile ..... p. 247
- Step profile ..... p. 248
- Side plate ..... p. 249
- Stair joint ..... p. 250
- Stair corner joint ..... p. 251
- Tools/spare parts..... p. 251



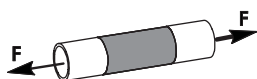
## Basic information / mechanical properties

- ITAS die-cast elements
- clamping mechanism inside from steel (zinc plated)

## Loads

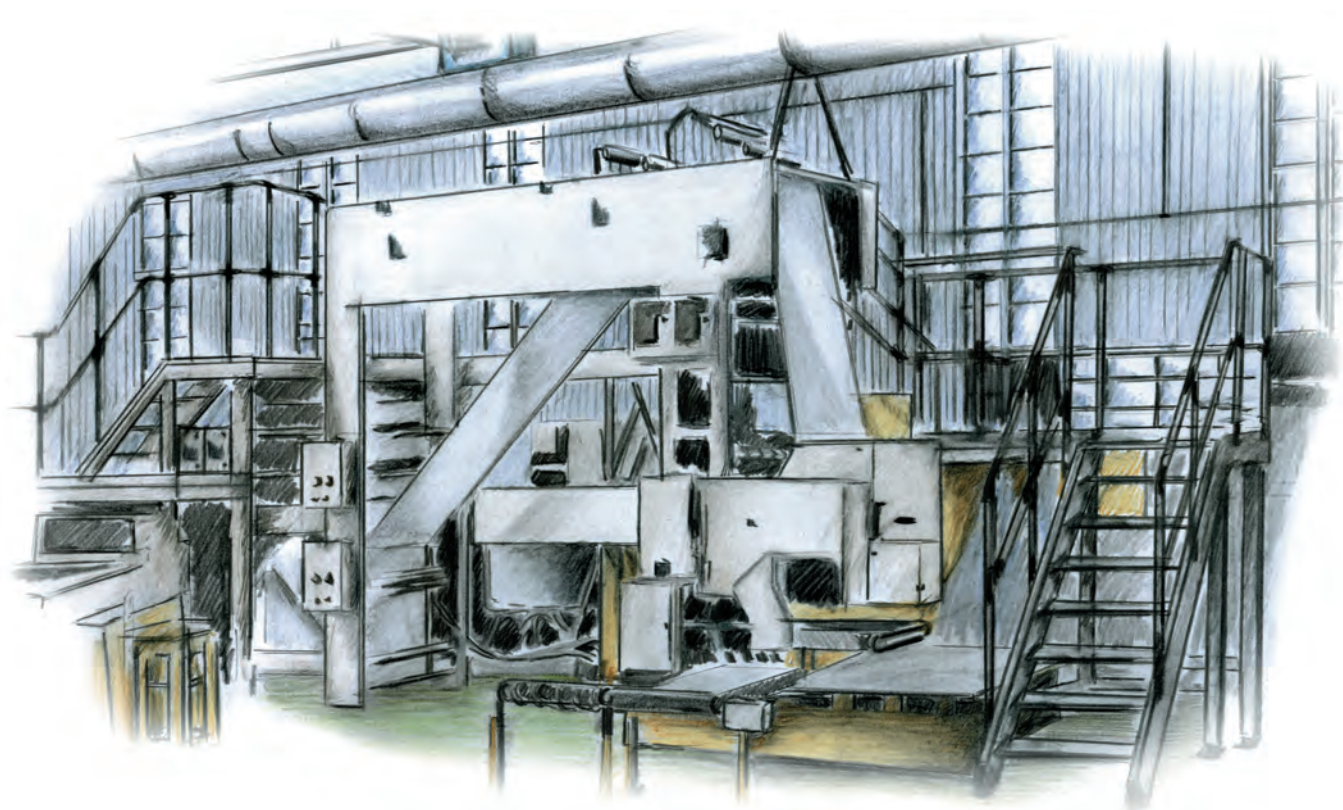


Bending moment Mb [Nm]



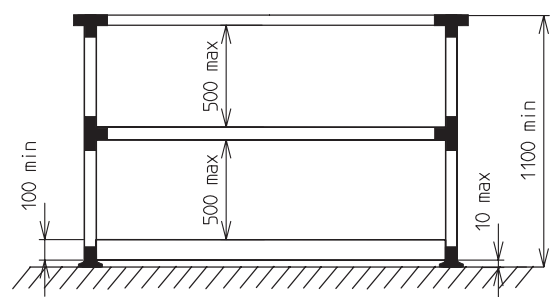
Adh. force: static pull,  
dynamic pull+pressure

Size Type	Including static safety factor $v = 2,5$		Including dynamic safety factor $v = 1,5$	
	F [N]	Mb [Nm]	F [N]	Mb [Nm]
FI 40	1250	340	1200	160
MI40	1250	340	1200	160
WI40	1250	200	1200	160
WIT40	1250	200	1200	160
WIE40	1250	200	1200	160
WITE40	1250	200	1200	160

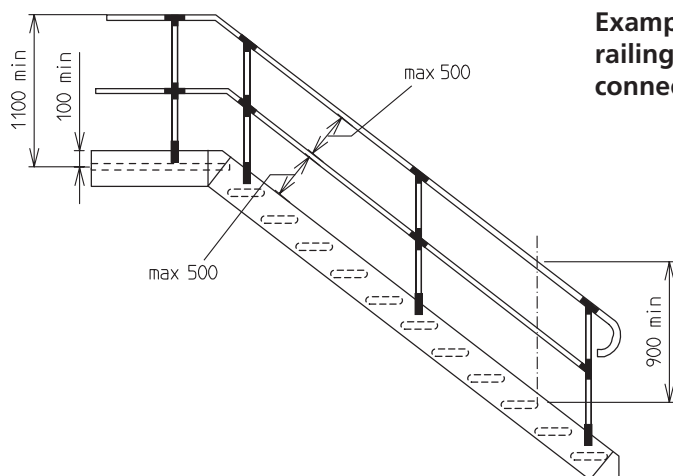


**ITAS – Load data**

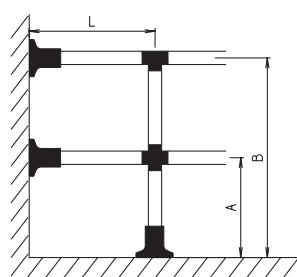
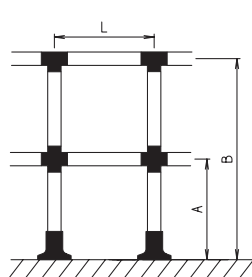
- **Load data according to DIN 1055**
- Maximum permitted load of steps (for a length of 1,2 m) 1500 N
- Maximum permitted load of stairs cross beams (for a 45° angle and a length of 4 m without support) 3500 N
- Maximum permitted load of railing (distance between pillars 0,7 m) 500 Nm
- The maximum permitted load of the platform depends on the base construction. It cannot exceed the maximum permitted load of the base clamps used.
- **Technical safety requirements in accordance with DIN EN ISO 141221-4**


**Example for a horizontal railing**

- The railing must have at least one knee rail
- Do not exceed a free space between the handrail and knee and foot rail of 500 mm
- Fit a foot rail with a minimum height of 100 mm maximum 10 mm above the step level


**Example for a stair railing - catwalk connector**

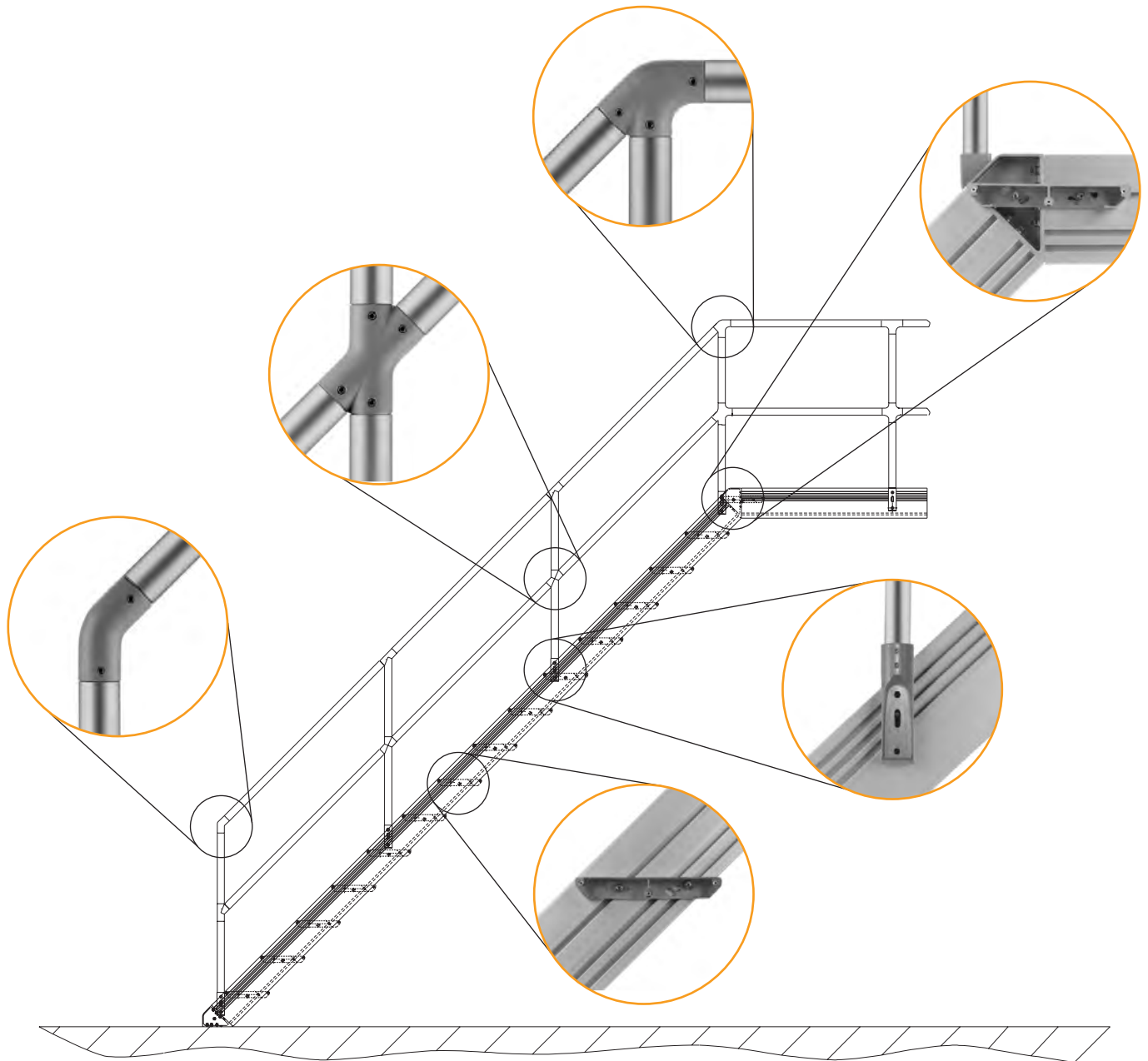
- A staircase must have at least one handrail
- With a flight width equal to or exceeding 1200 mm two handrails must be provided in the same manner as with all ladder stairs.

**Building regulations for railings according to UVV, VBG1 and conforming to DIN EN ISO 14122-3 "construction type" tested.**

**Example 1:**  
wall and floor fixing

**Example 2:** self-sup-  
porting with floor fixing

Example	Dimension max.		
	A	B	L
1	500	1000	1500*
2	500	1000	1500*

\* The support spacing "L" must ensure that 340 Nm for base type FI40 is not exceeded.

# ITAS – Internal tension system



## Features:

- Technically optimised solution for the installation of railings, frame structures, boundaries, superstructures, stairs and working platforms of all kinds.
- The smooth transitions between all of the elements used and the connecting tube are kind on the hands
- Positive, quick connection with the simple tightening of a screw – without the need for any mechanical machining



MI 40



KI 40



KI 40H-45°



WIY 40-45°



WI 40



WI 40-45°  
30°, 38°, 52°, 60°



WIT 40H-45°R



FIW 40



WIT 40



WIT 40-45°



WIT 40H-45°L



FI 40



WIE 40



WIT 40H-45°



WIV 40H-45°



TSI



WITE 40



KI 40-45°



WIV 40-45°

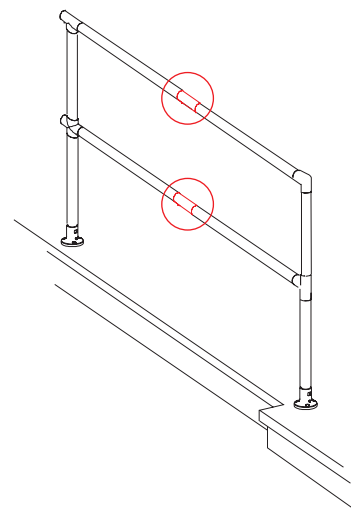
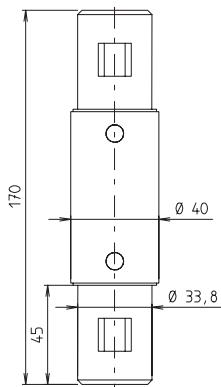


TSI 40-WI

# ITAS – Internal tension system

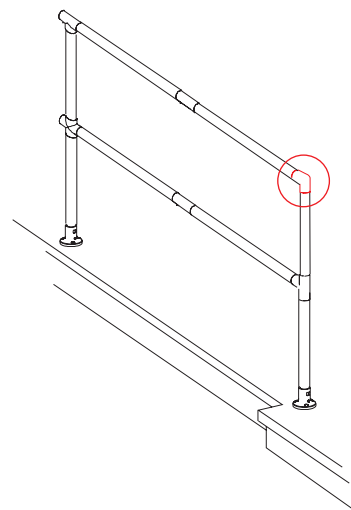
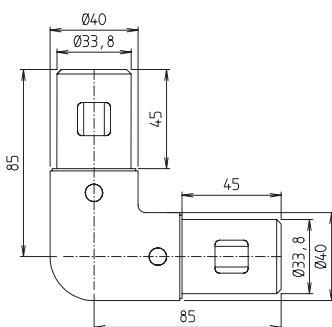
## On request:

- ITAS elements in various RAL colours



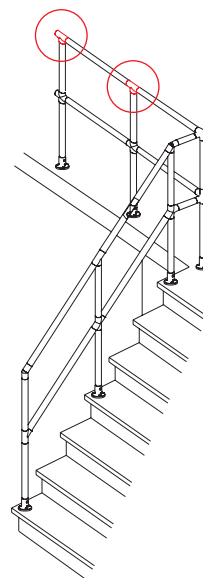
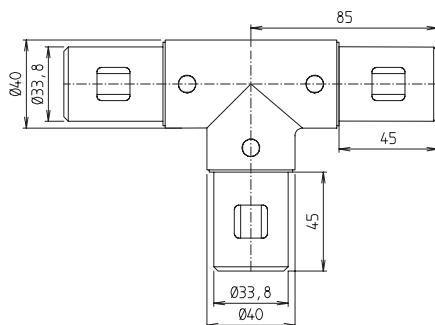
## Coupler MI 40

Code No.	Type	m [g]
14403410025	MI 40	453



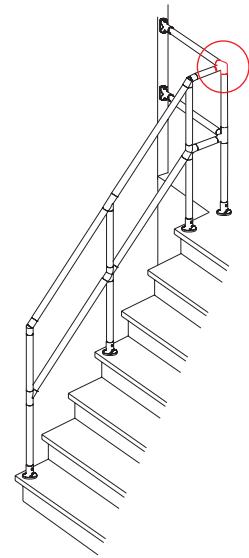
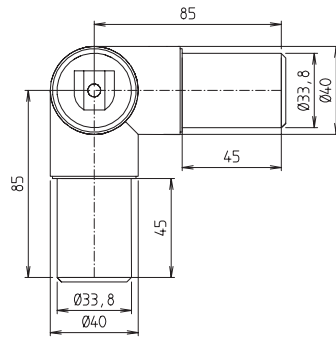
## Elbow 90° WI 40

Code No.	Type	m [g]
11403421025	WI 40	455

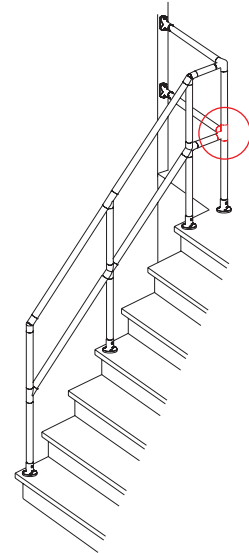
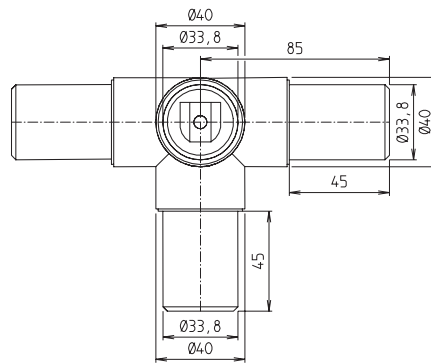


## T-joint 90° WIT 40

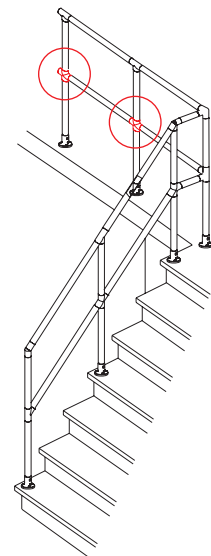
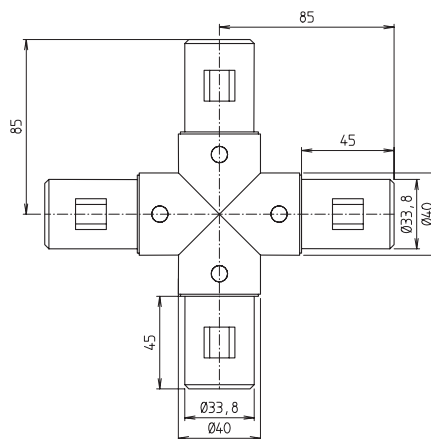
Code No.	Type	m [g]
11403423025	WIT 40	625


**Corner joint WIE 40**


Code No.	Type	m [g]
11403422025	WIE	624


**Corner T-joint WITE 40**


Code No.	Type	m [g]
11403424025	WITE 40	786


**Cross KI 40**


Code No.	Type	m [g]
10403410025	KI 40	795



# ITAS – Internal tension system

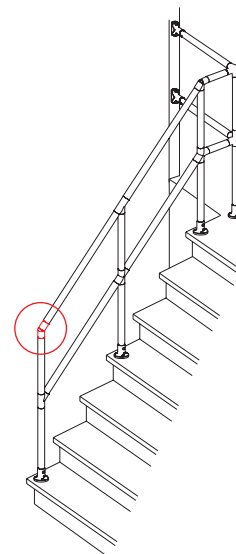
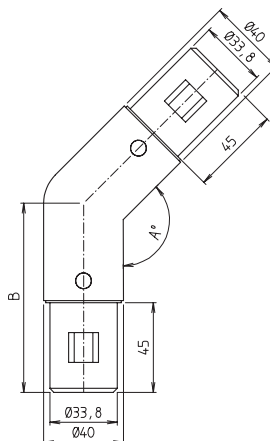
## On request:

- ITAS elements in various RAL colours



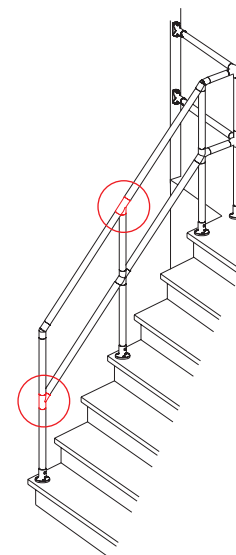
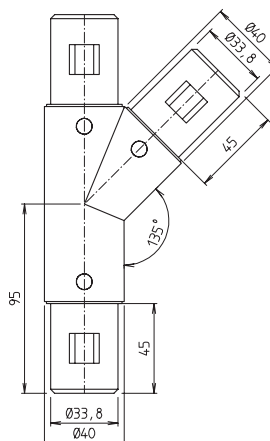
### Elbow WI 40

Code No.	Type	A	B [mm]	m [g]
11404521025	WI 40-45°	135°	95	520
11405021025	WI 40-30°	150°	85	456
11404221025	WI 40-38°	142°	85	456
11402821025	WI 40-52°	128°	85	455
11402021025	WI 40-60°	120°	85	455



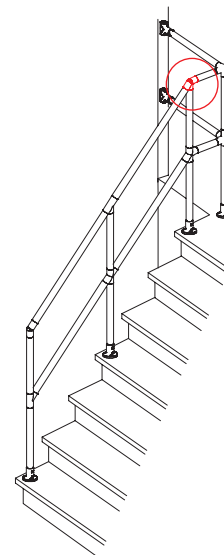
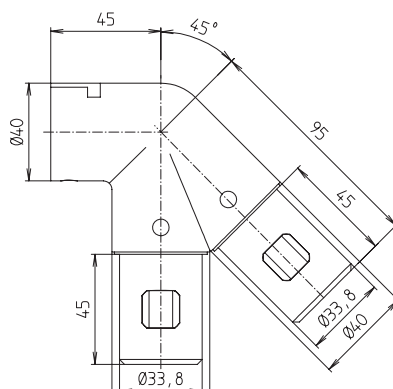
### T-joint 45° WIT 40-45°

Code No.	Type	m [g]
11404523025	WIT 40-45°	715

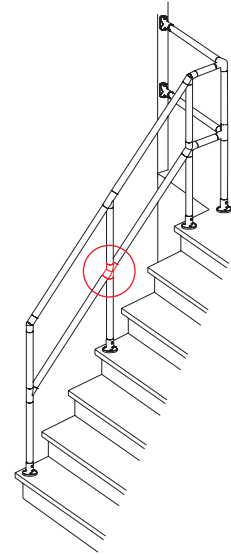
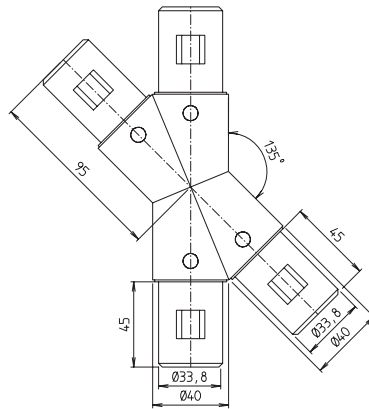


### T-joint horizontal 45° WIT 40H-45°

Code No.	Type	m [g]
11404525025	WIT 40 H-45°	715

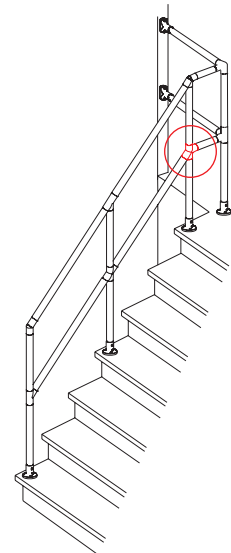
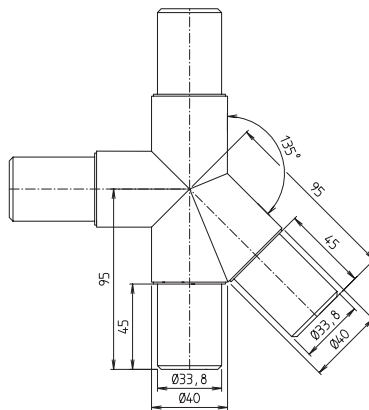






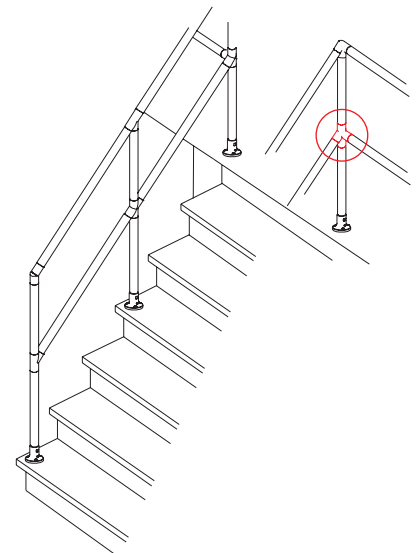
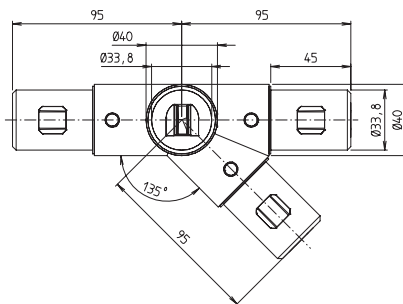
**Cross KI 40-45°**

Code No.	Type	m [g]
10404510025	KI 40-45°	901



**Cross horizontal KI 40H-45°**

Code No.	Type	m [g]
10404521025	KI 40 H-45°	940



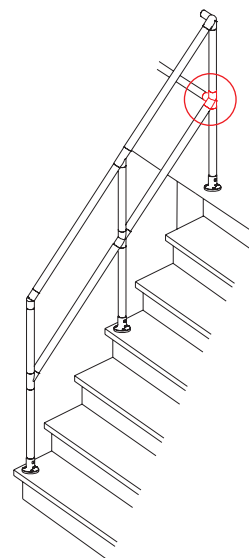
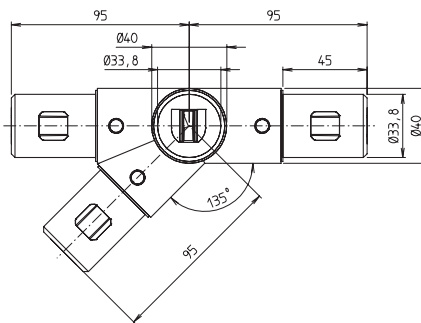
**WIT 40H-45°R**

Code No.	Type	m [g]
11404528025	WIT 40H-45°R	908

# ITAS – Internal tension system

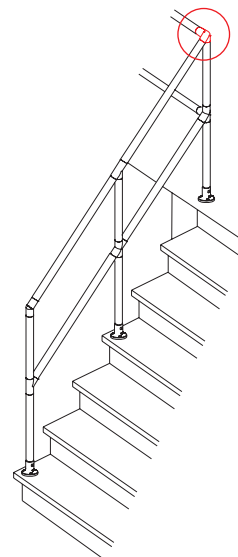
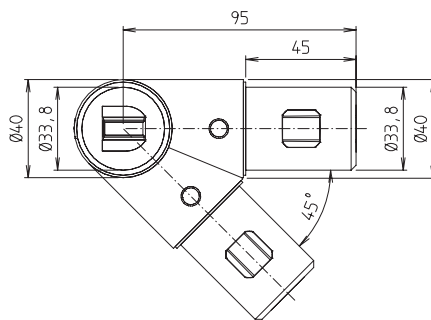
## On request:

- ITAS elements in various RAL colours



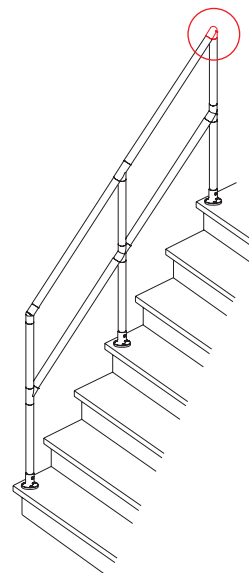
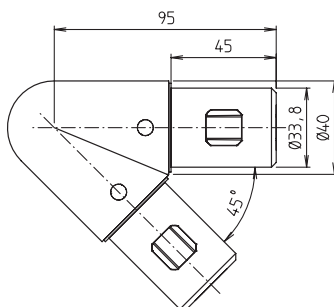
## WIT 40H-45°L

Code No.	Type	m [g]
11404529025	WIT 40H-45°L	903



## WIV 40H-45°

Code No.	Type	m [g]
11404527025	WIV 40H-45°	693

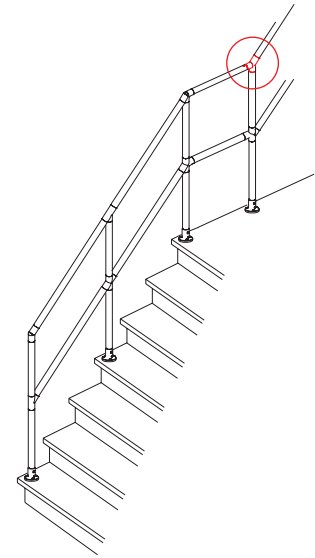
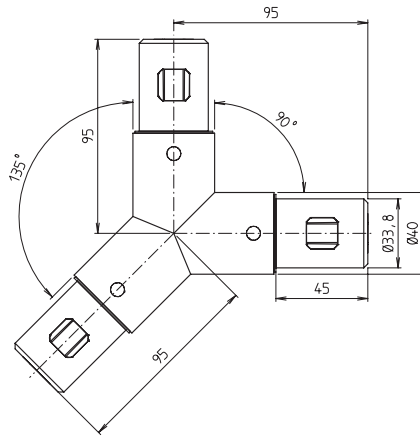


## WIV 40-45°

Code No.	Type	m [g]
11404526025	WIV 40-45°	486



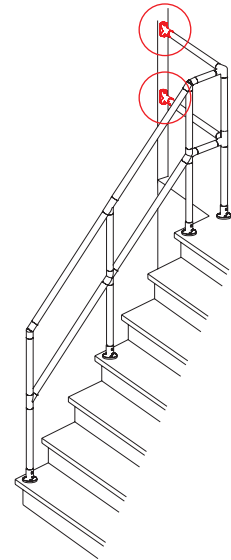
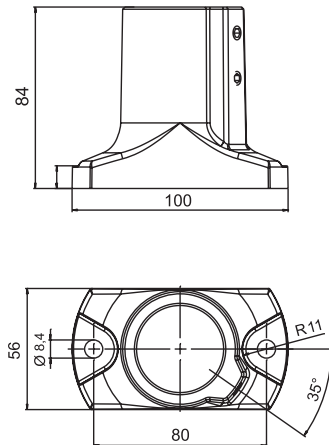
WIY 40-45°



Code No.	Type	m [g]
11404530025	WIY 40-45°	733



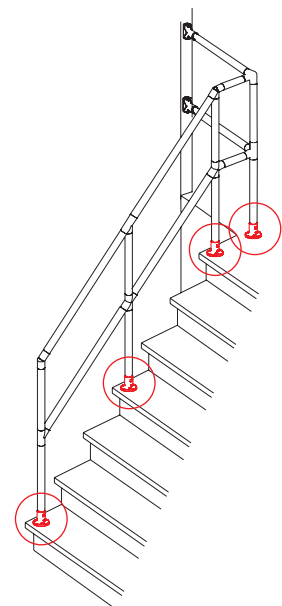
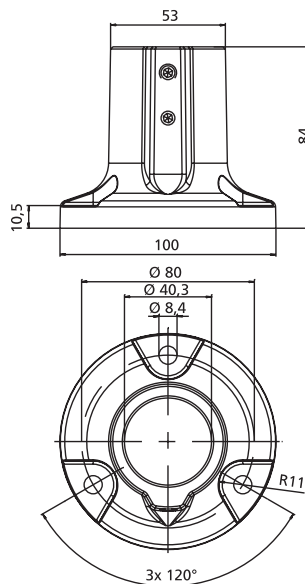
FIW 40 (Wall flange)



Code No.	Type	m [g]
13403430025	FIW 40	428



Base FI 40

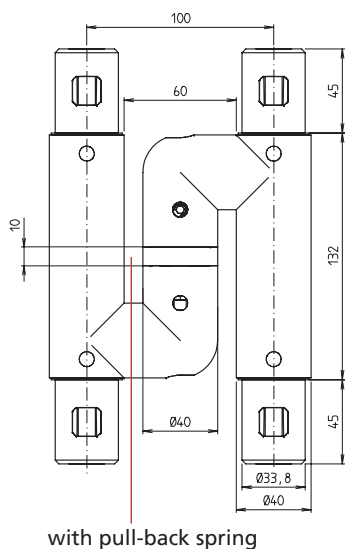


Code No.	Type	m [g]
13403431025	FI 40	487

# ITAS – Internal tension system

## On request:

- ITAS elements in various RAL colours



with pull-back spring

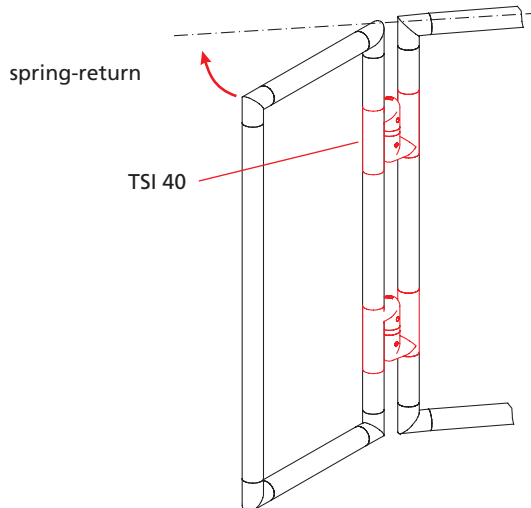
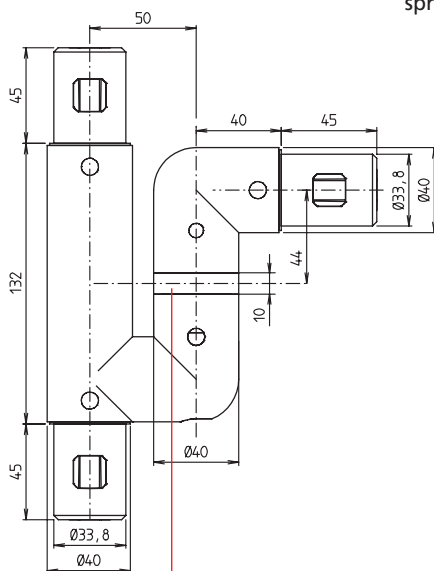


Illustration shows right hand version

## TSI 40

Code No.	Type	Version	m [g]
18403426025	TSI 40	Right-hand	1872
18403427025	TSI 40	Left-hand	1849

**Attention:**  
please read the instruction manual



with pull-back spring

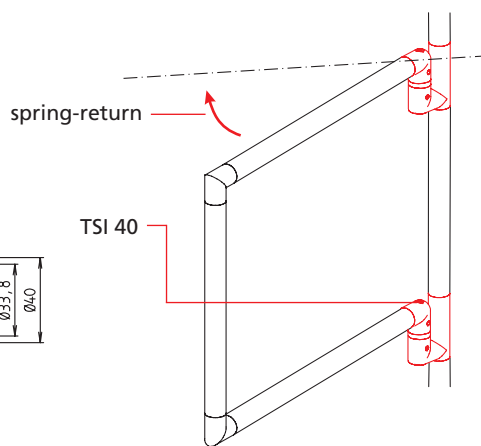


Illustration shows right hand version

## TSI 40-WI

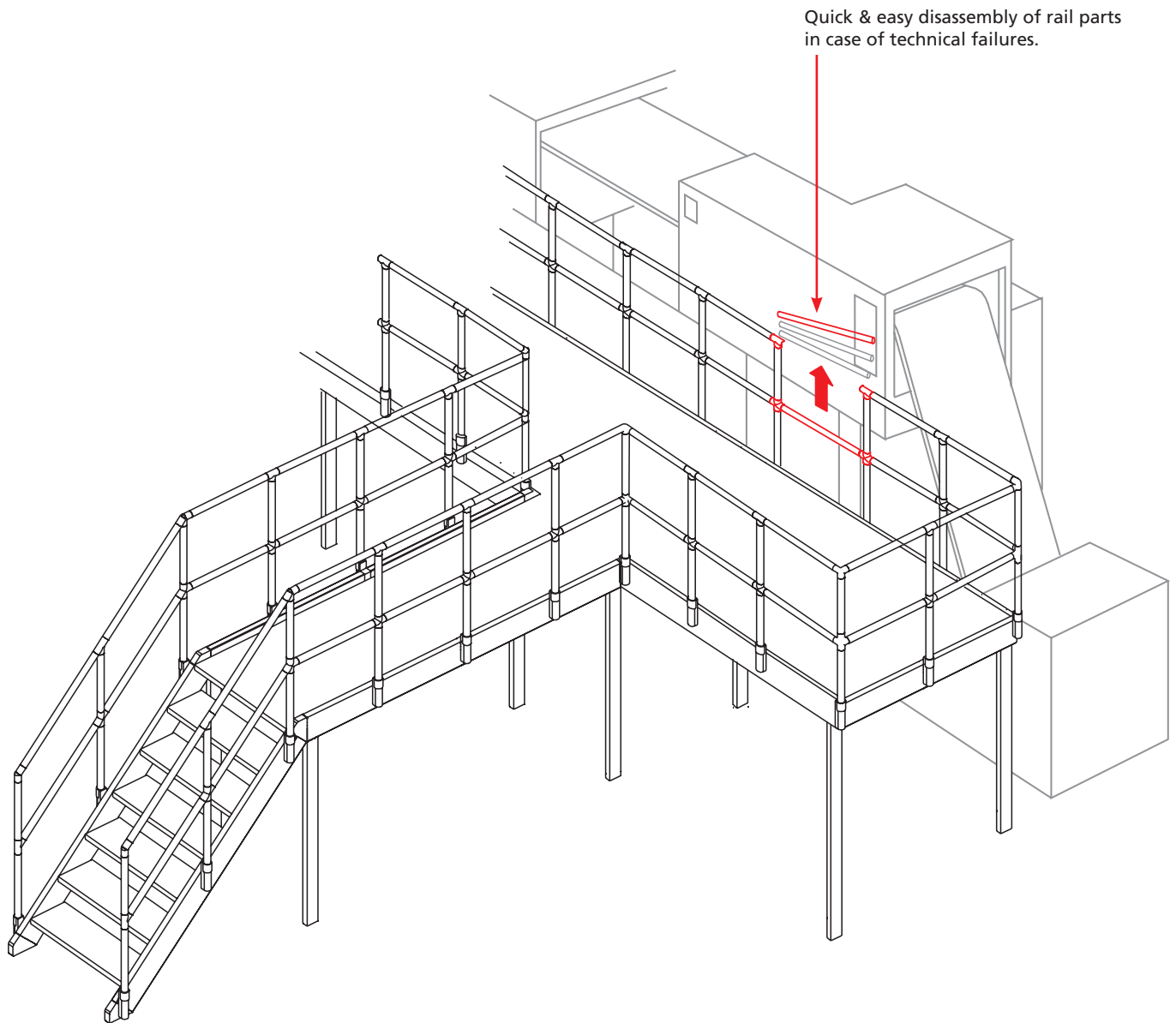
Code No.	Type	Version	m [g]
18403428025	TSI 40-WI	Right-hand	1353
18403429025	TSI 40-WI	Left-hand	1389

**Attention:**  
please read the instruction manual



Crossovers made from ITAS elements provide access to various production areas.

# ITAS – Quick change system



## Features:

- This system combines the proven flexibility of the internal tension system and an easy assembly and dismantling system which is not to be compared to that of common railing systems.
- It enables protected working and machine areas to be more accessible.
- The new ITAS Quick change system permits an easy access to specific machine parts in case of technical malfunctioning: all you need is to remove the necessary part of the balustrade.





WI 40-SW1



KI 40H-45°SW1



KI 40-SW2



WIT 40-SW1



WIT 40-SW2



WIT 40H-45°SW1



WIE 40-SW2



WITE 40-SW2

### Dismantling of quick change system



Release stopper with a screwdriver



Loosen clamping screw



Turn the cross strut to 90° and then raise and release

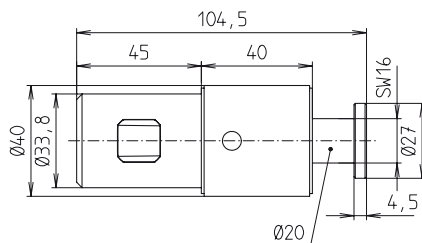




# ITAS – Quick change system

## On request:

- ITAS elements in various RAL colours

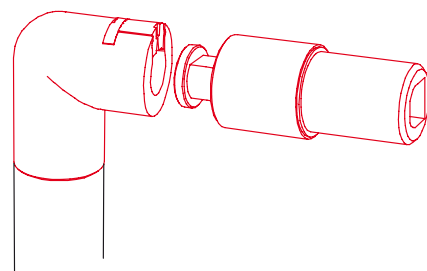
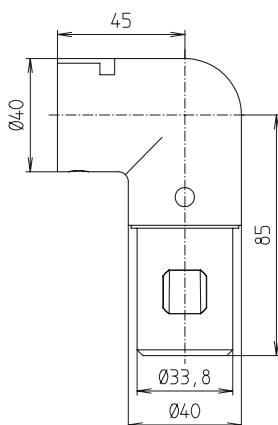


### Attention:

The clamping element MI-H 40-SW is included in the delivery set of the following quick change elements. This element does not need to be ordered separately

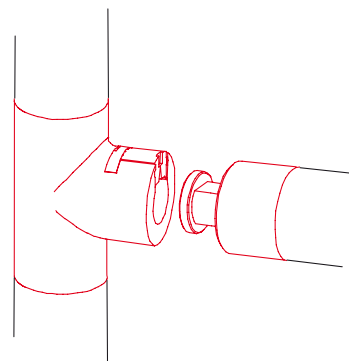
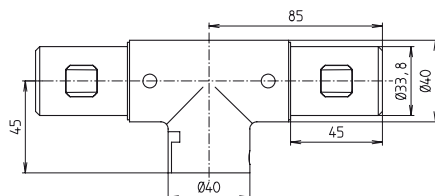
## MI-H 40-SW

Code No.	Type	m [g]
14403411025	MI-H 40-SW	307



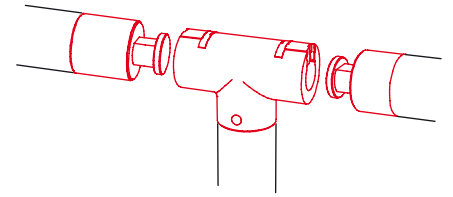
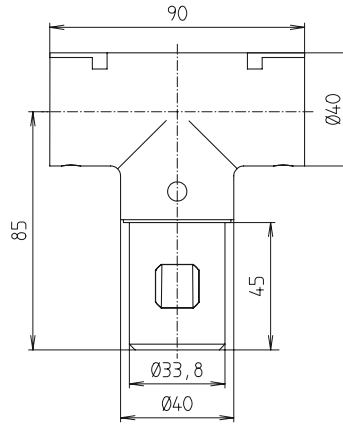
## WI 40-SW1

Code No.	Type	m [g]
11403425025	WI 40-SW1	643

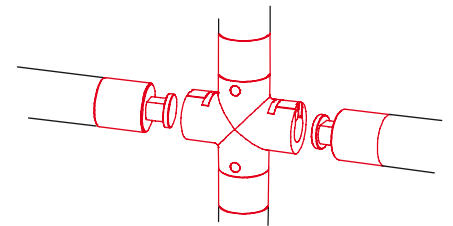
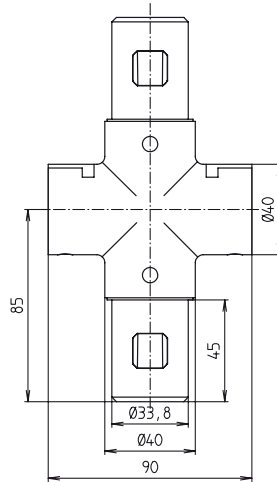
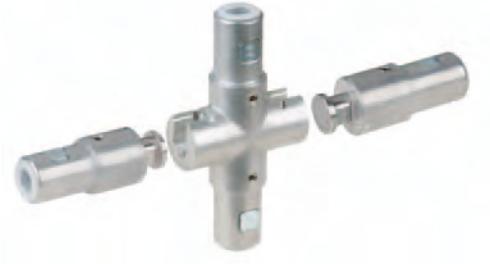


## WIT 40-SW1

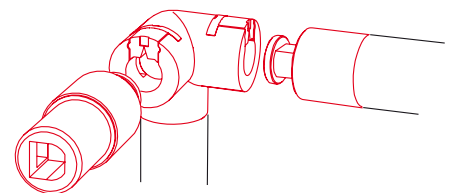
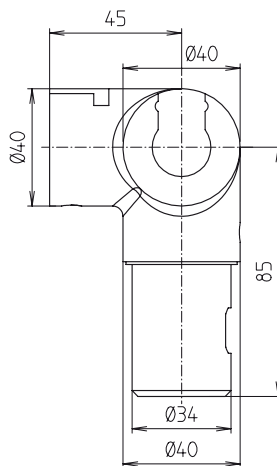
Code No.	Type	m [g]
11403428025	WIT 40-SW1	828


**WIT 40-SW2**

Code No.	Type	m [g]
11403426025	WIT 40-SW2	1020


**KI 40-SW2**

Code No.	Type	m [g]
10403411025	KI 40-SW2	1221

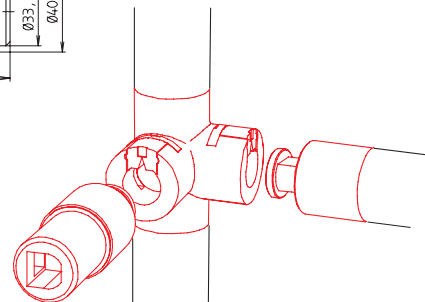
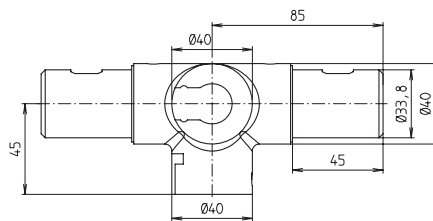

**WIE 40-SW2**

Code No.	Type	m [g]
11403427025	WIE 40-SW2	1034

# ITAS – Quick change system

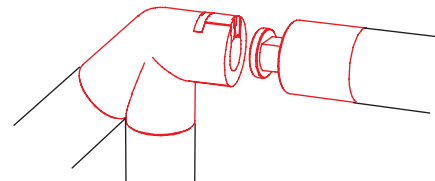
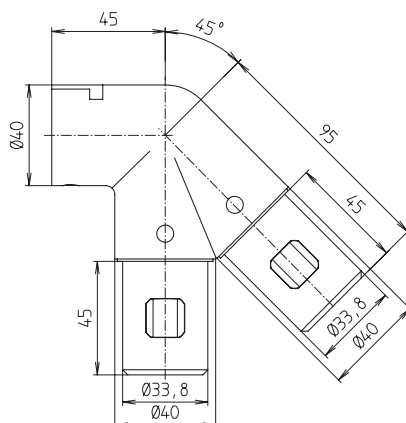
## On request:

- ITAS elements in various RAL colours



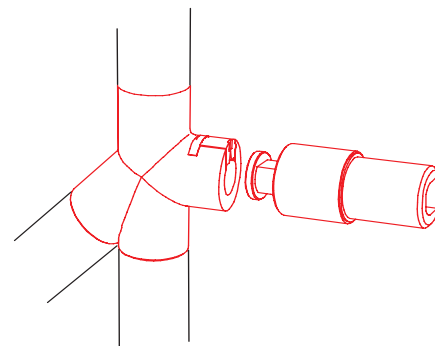
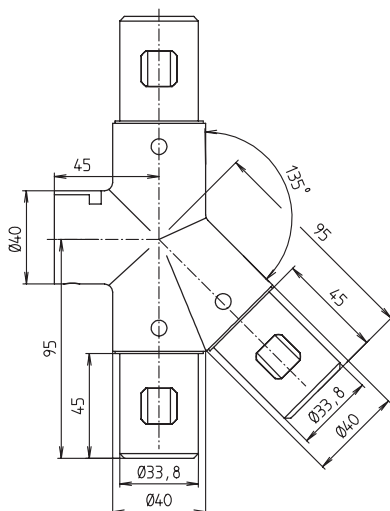
## WITE 40-SW2

Code No.	Type	m [g]
11403429025	WITE 40-SW2	1209



## WIT 40H-45°SW1

Code No.	Type	m [g]
11404524025	WIT 40H-45°SW1	902



## KI 40H-45°SW1

Code No.	Type	m [g]
10404511025	KI 40H-45°SW1	1068



The mobile ITAS ladder makes accessing various storage shelves easier.





Aluminium tube  
Ø 40x3



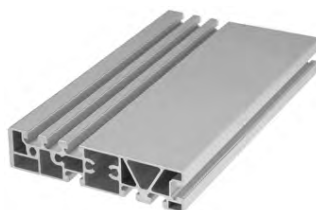
Angle plate  
TGHF



Side plate



Surface element support  
FEH-I 40



Stair cross beam  
profile



Stair joint



Stair railing support  
TGHF



Step profile



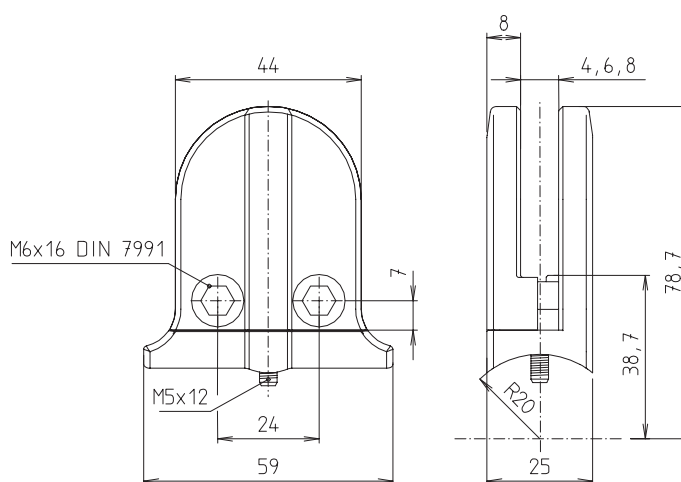
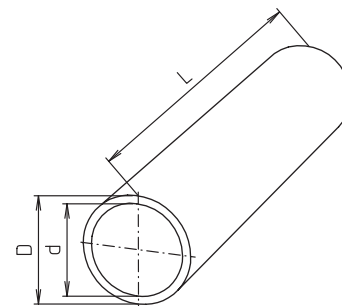
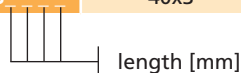
Stair corner joint



Material: AlMgSi 0,5 F22EQ  
Resistance moment  $W = 3 \text{ cm}^3$   
Moment of inertia  $I = 6 \text{ cm}^4$

### Aluminium tube

Code No.	Type	Version
8240302	40x3	clear anodized
8240303	40x3	black anodized



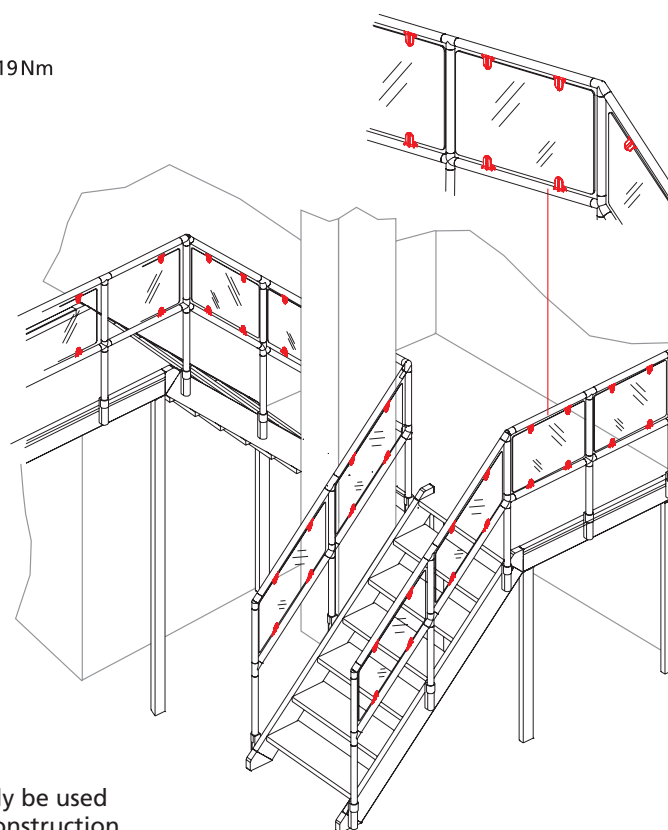
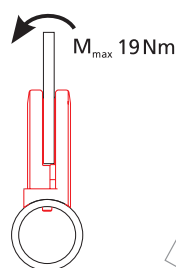
### FEH-I 40 (Surface element support)

Code No.	Type
91803	FEH-I 40

#### Features:

- The surface element support enables the clamping of panels of 4, 6 or 8 mm thickness.
- The support can be used with a Ø40 tube (min. wall thickness 3 mm)
- Only a 4.5 mm hole has to be bored into the tube where the support is then fixed with a thread former screw.

Material: PA-GF, black  
Fixation set galvanized



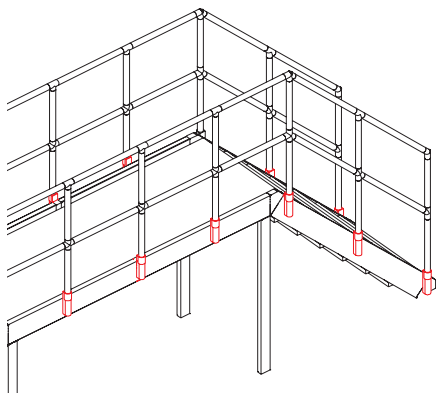
Attention:  
the support can only be used  
in a closed frame construction.



# ITAS – Accessories

## On request:

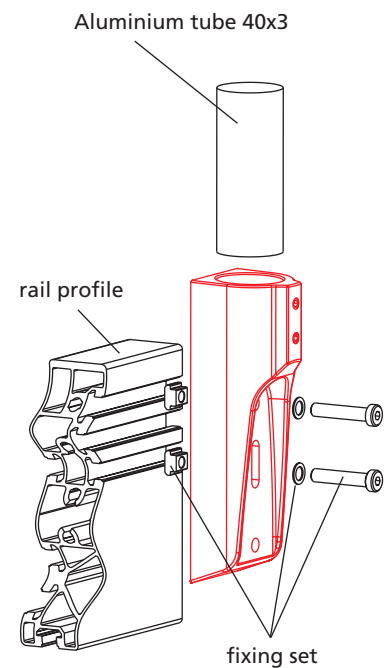
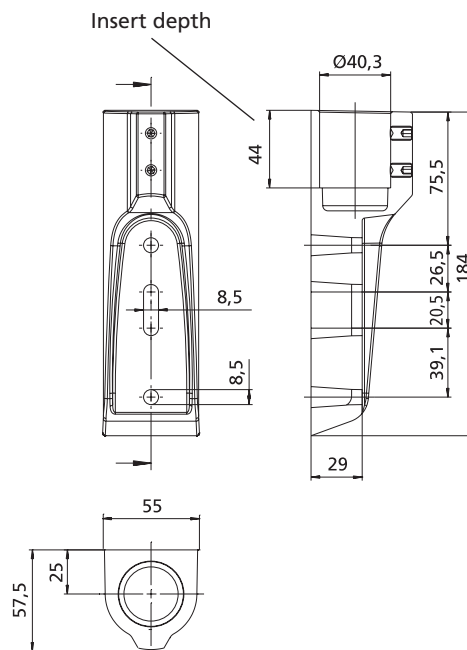
- ITAS elements in various RAL colours



### Stair railing support TGHF

Code No.	Type
13403429025	TGHF 40
93800	fitting TGHF cross beam profile

- The base houses the vertical railings
- The fixing set for connecting to the spar is not included in the equipment as delivered
- Please order this extra as required.

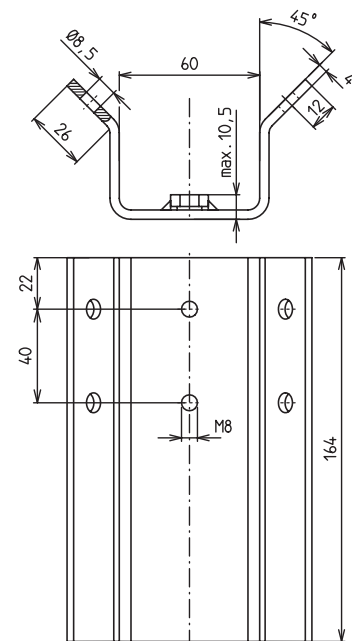
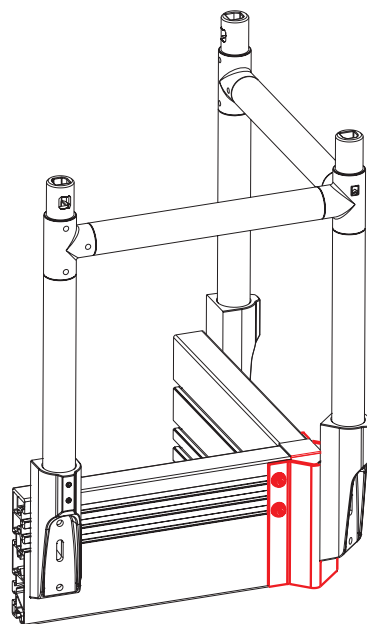


- The angle plate is fixed to the corner of the stair cross beam at 90° degrees.



### Angle plate for TGHF

Code No.	Type
96701	Angle plate







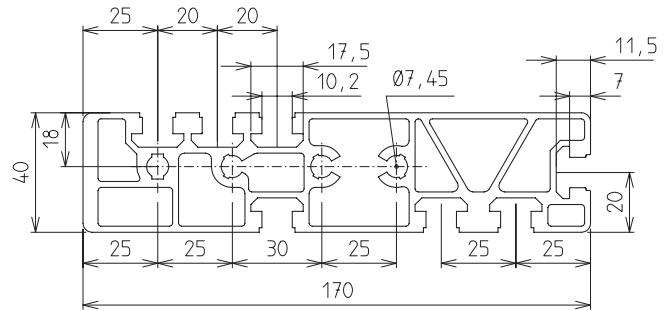
**Material:** AlMgSi 0,5 F25,  
clear anodized

$$I_x = 37 \text{ cm}^4$$

$$I_y = 606 \text{ cm}^4$$

$$W_x = 18 \text{ cm}^3$$

$$W_y = 69 \text{ cm}^3$$



## Stair cross beam profile

Code No.	Type	Version	m [g]
450500_ _ _ _	Stair cross beam profile	Cut max. 6000 mm	5957 / m
450500	Stair cross beam profile	Bar at 6000 mm	5957 / m



### Features:

- The 'T'-slot channels of the extruded aluminium profile enable fitting of the fixing components for the step profile (see p. 248).
- The geometry of the 'T'-slot channels is designed to comply with the BLOCAN® Profile Assembly System which is designed and manufactured by RK Rose+Krieger.
- Threaded to ensure that stair joints can be fixed with standard M8 screws
- Realisation of 38, 45 and 60 degree leadangles without mitre cuts of the beam profile by using special designed stair joints. Saws with a smaller disc dia can therefore be used.
- The geometry conforms with the UVV rules so that commercially available surface elements / grids can be used for the platform surfaces
- The protective railing and the continuous rim of the stair cross beam profile provide protection against slipping.

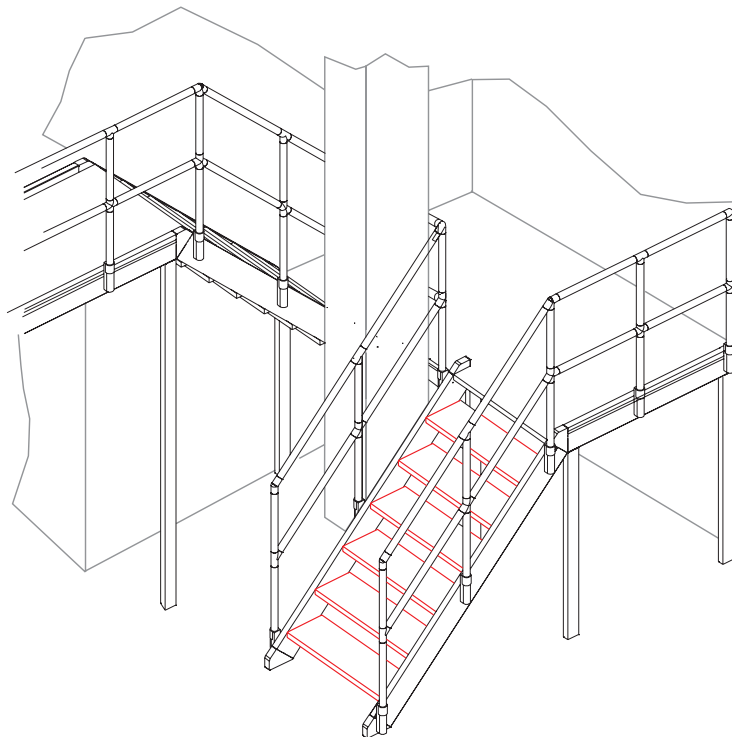
# ITAS – Accessories

## On request:

- ITAS elements in various RAL colours

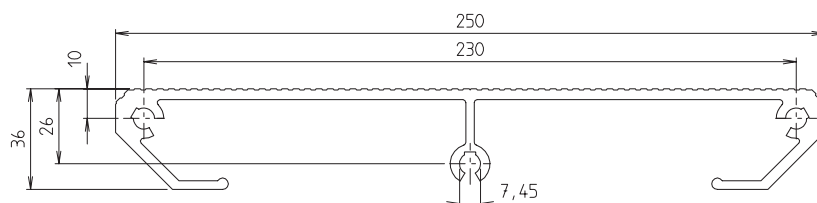
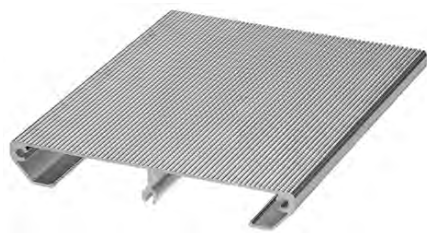
## Features:

- An endless step profile made of extruded aluminium which is cut to the step width desired.
- The surface complies with the UVV rules DIN 24530.
- Threaded channels have been prepared to ensure that side plates can be fixed with standard M8 screws (see p. 249).
- This step profile can, of course, also be used as a platform element.



**Material:** AlMgSi 0,5 F22, natural

$I_x = 16 \text{ cm}^4$   
 $I_y = 1003 \text{ cm}^4$   
 $W_x = 7 \text{ cm}^3$   
 $W_y = 80 \text{ cm}^3$



## Step profile

Code No.	Type	Version	m [g]
4525000	Step profile	Cut max. 6000 mm	3621 / m
4525001	Step profile	Bar at 6000 mm	3621 / m

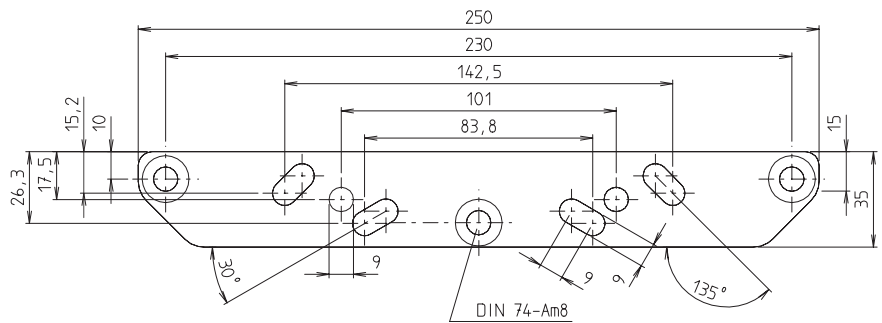
**Features:**

- The code n° contains a complete fixing set for the fitting of the side plate to the step profile (see p. 248).
- The arrangement of the holes and slots enables alignment of the step when it is fitted to the stair cross beam profile. The side plate serves as an end piece to the step width chosen by the customer.



**Material:** AlMgSi 0,5 F22, natural

Thickness  $t = 5$  mm



**Site plate**

Code No.	Type	m [g]
93700	Side plate	164

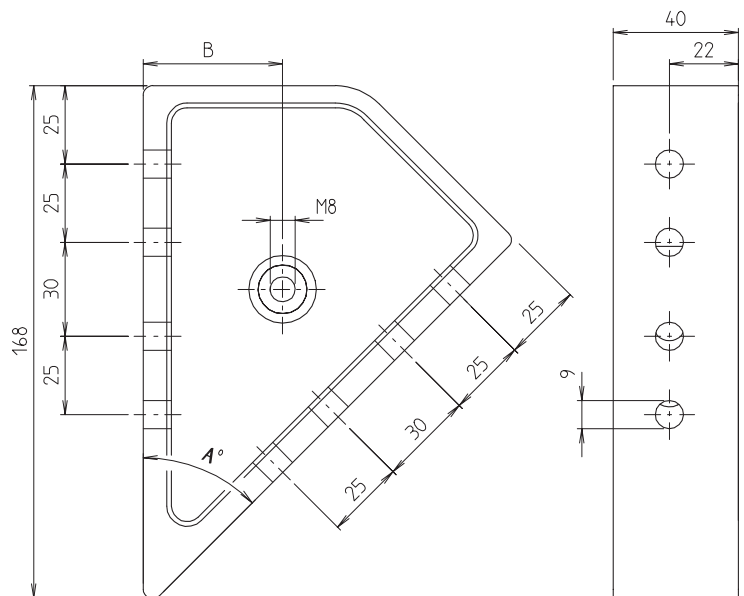
# ITAS – Accessories

## On request:

- ITAS elements in various RAL colours

### Features:

- This joint permits the construction of 38°, 45° and 60° angles.
- The arrangement of the holes guarantees fixing of this joint to the stair cross beam profile with standard M8 screws (see p. 247).
- The centre spigot is for the fixing of the last step in the transition from stair to platform.



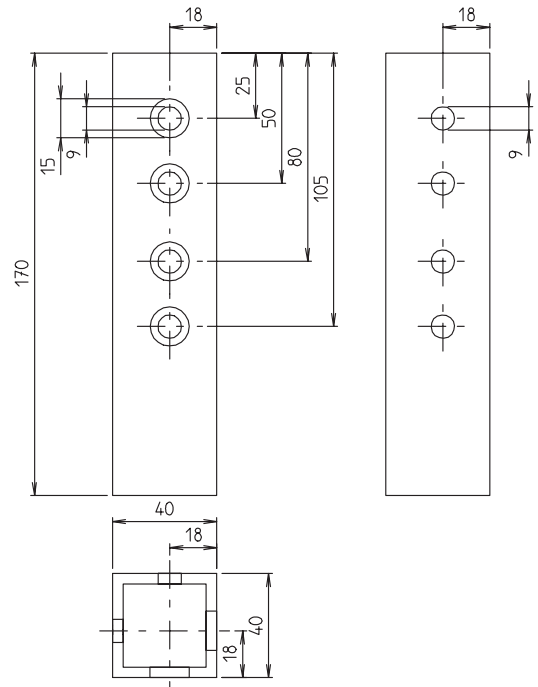
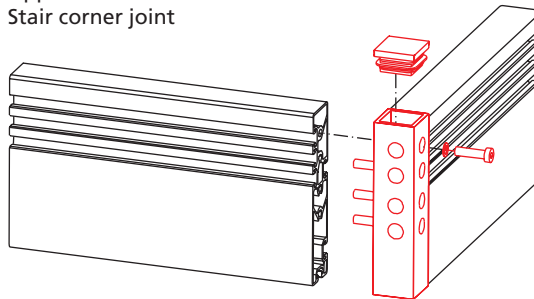
## Stair joint

Code No.	Type	A	B	Material	m [g]
93807	Stair joint 38°	38°	36,15	Gk AlSi 12	430
93810	Stair joint 45°	45°	44,5	Gk AlSi 12	621
93811	Stair joint 45°	45°	44,5	Gk AlSi 12	621
93820	Stair joint 60°	60°	60,5	St 37-2	1500

**Material:** AlMgSi 0,5 F22



Application  
Stair corner joint



The illustration shows a "left" version .  
The right version is the mirror-image.

## Stair corner joint

Code No.	Type	m [g]
93821	Stair corner joint right-hand	242
93822	Stair corner joint left-hand	242

## Tools / spare parts

Code No.	Type	Application
4016621	Cross handle key SW4	for clamping screw, int. tension and quick change system
91804	Compl.clamping lever set	Spare parts for internal tension system (clamping screw, clamping rocker, thrust pad, screw cap)
90430	Stopper	for quick change system

# Fax: 49 571 9335-119

Phone: 49 571 9335-0

e-mail: [anfrage.vertrieb@rk-online.de](mailto:anfrage.vertrieb@rk-online.de)

Company:..... Customer no:.....

Adress: .....

Phone:..... Telefax:.....

Responsible:..... E-Mail: .....

Remarks: .....

### Working platform

Constructions are made of aluminium components with non-slip step profiles and smooth connections between handrailing components allowing a complete modular design.

#### Procedure:

Please fill in points 1 to 4, so that we are able to send you the quotation as soon as possible.  
A layout of your details with possible constructional suggestions from our company will be placed at your disposal upon request.

#### 1. Application

fixed platforms

#### 2. Delivery

unassembled

pre-assembled parts

assembled

#### 3. Technical data

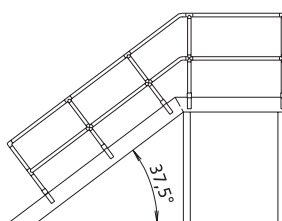
Load: max. 150 kg/m<sup>2</sup>

Step width: .....mm

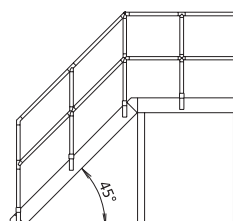
Length of platform: .....mm

Height of platform: .....mm

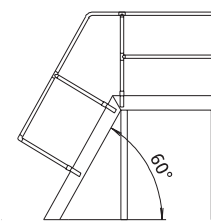
Angle of inclination (see type of railing) ⇨



Railing 38°

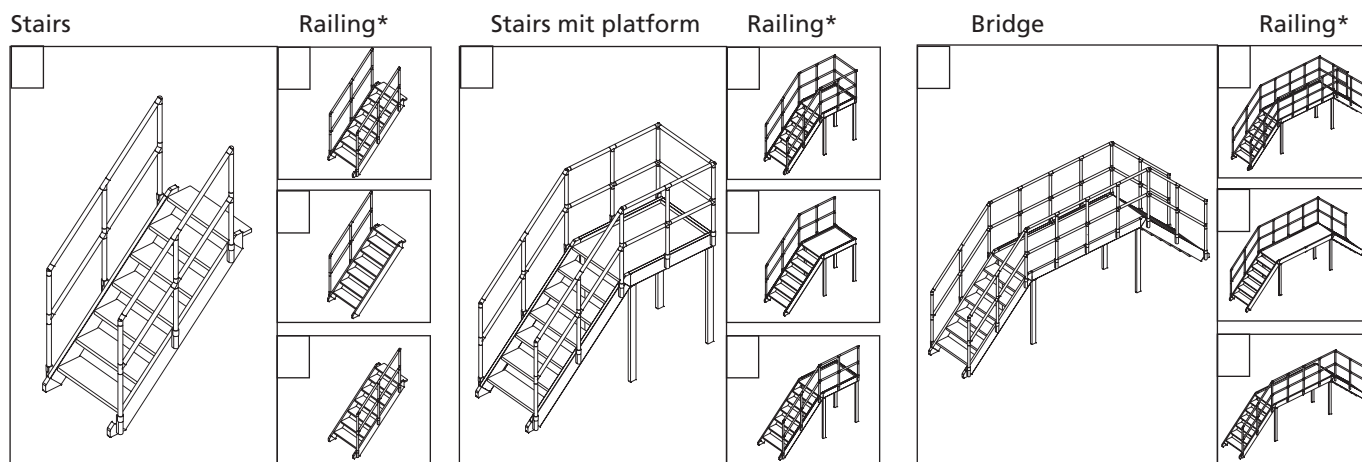
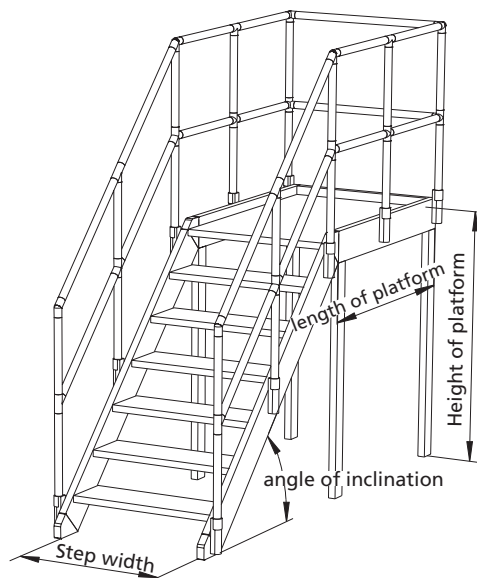


Railing 45°



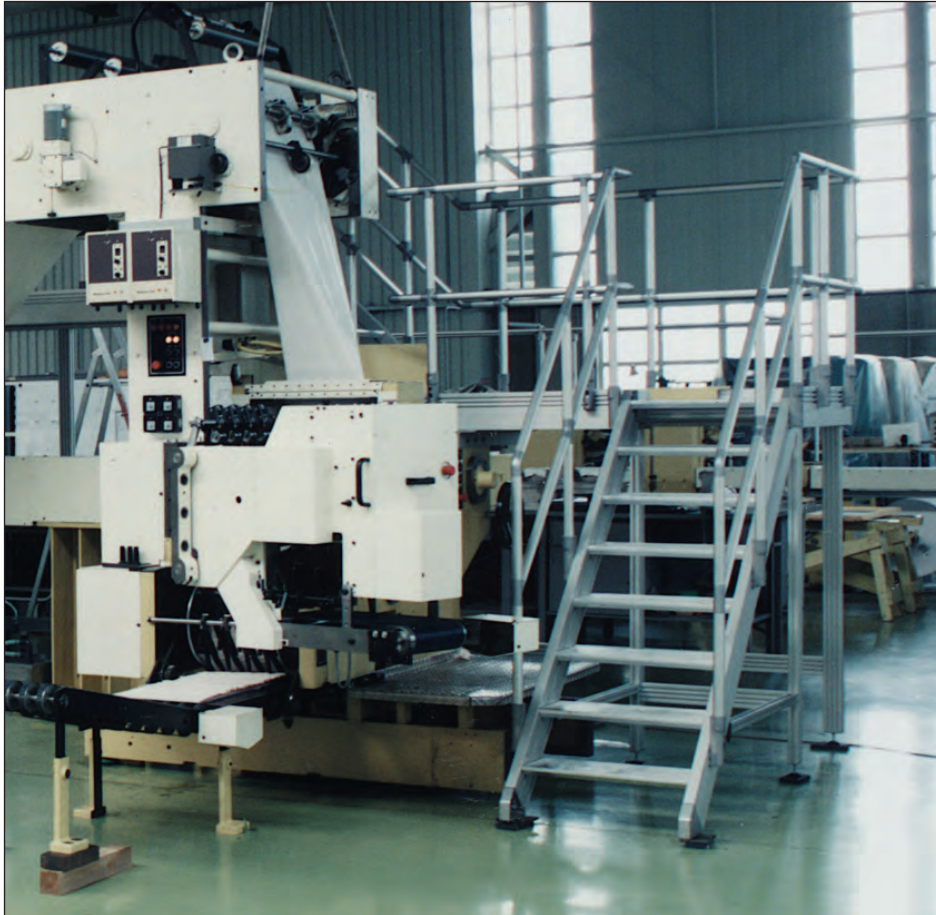
Railing 60°

#### 4. Angle of inclination (see type of railing)



\*In case of a height of more than 1 m it is necessary to assemble railings onto the stairs and platforms.





Maintenance platform at printing machine ( internal tention system )





# Support arm / equipment carrier system



Support arm / equipment carrier system

GT 48 ..... page 256

GT 50, 60, 80 ..... page 266

***Support arm /  
equipment carrier system***

# Supports arm/equipment carrier system GT 48



GT AG



GT F / GT FD



GT WGW / WGS



GT AF



GT W



GT KU / GT KUF



GT WKU / WKUF



GT PF



GT NA

## Features:

- Based on a standardized round steel tube 48 mm in diameter, the different system elements can be combined so as to allow individual system structures to be set up within a short time.
- The length of the steel tubes can be adjusted freely; attachment to the system elements is made with self-tapping Allen screws.

## Options:

- A free cable passage 40 mm in diameter is provided.

**Support arm/equipment carrier system GT Ø48 – table of contents**

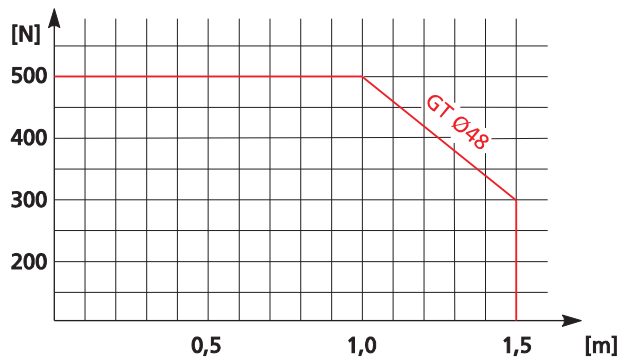
<p><b>Properties/performance data</b></p>	<ul style="list-style-type: none"> <li>■ Technical data ..... p. 258</li> <li>■ Examples for system constructions ..... p. 259</li> </ul>
<p><b>Versions</b> (Dimensions, code numbers)</p>	<ul style="list-style-type: none"> <li>■ GT AG / GT F / GT FD ..... p. 260</li> <li>■ GT WGW / GT WGS / GT AF ..... p. 261</li> <li>■ GT W / GT KU / GT KUF ..... p. 262</li> <li>■ GT WKU / GT WKUF / GT PF ..... p. 263</li> </ul>
<p><b>Accessories</b></p> <p style="text-align: right;"><b>Fastening</b></p>	<ul style="list-style-type: none"> <li>■ Inclining adaptor GT NA ..... p. 264</li> <li>■ Flexi tube GT FLS ..... p. 264</li> <li>■ Connecting tubes Ø48 ..... p. 264</li> </ul>

# Supports arm/equipment carrier system GT 48

## Basic information / operating conditions

Surface	standard version in transport grey, RAL7043 powder-coated, other colours upon request
Tube Ø 48	zinc plated steel tube, 48x4, DIN EN 10305
Free cable passage	through fittings and tube 40 mm in diameter
Torque of tube clamp	30 Nm
Protection mode	IP 54 according to DIN 40050 (Foot stand IP 42)

## Load diagram



**Examples for constructions:**



# Supports arm/equipment carrier system GT 48

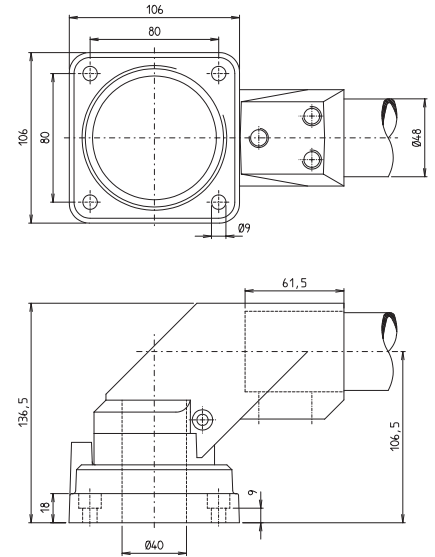
## Surface-mounted joint

- Cast aluminium with inner steel tube and flange fastening
- Swing 250°.



### GT AG

Code No.	Type	m [g]
194800260G	GT AG 48	2000



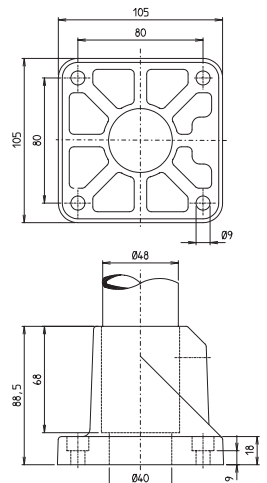
## Foot stand:

- Cast aluminium



### GT F

Code No.	Type	m [g]
194800240G	GT F 48	722



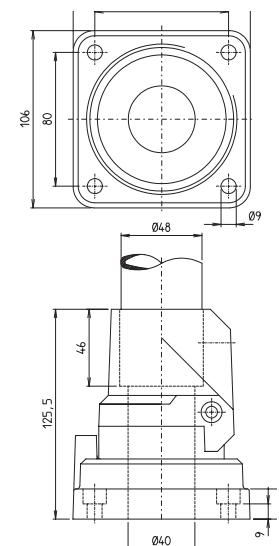
## Foot stand, pivoted

- Cast aluminium with inner steel tube and slide bearing.
- Swing 250°.



### GT FD

Code No.	Type	m [g]
194800340G	GT FD 48	1787



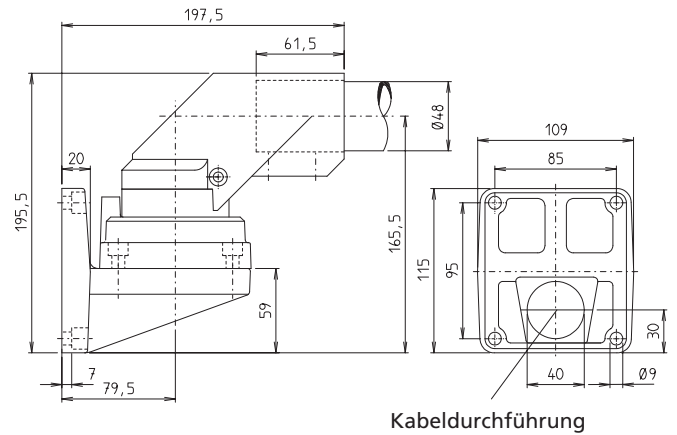


**Wall hinge (horizontal)**

- Cast aluminium with inner steel tube and slide bearing.
- Swing 250°


**GT WGW**

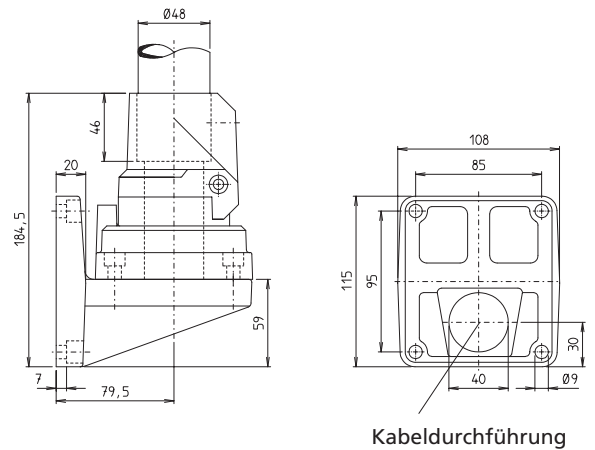
Code No.	Type	m [g]
194800270G	GT WGW 48	2851


**Wall hinge (vertical):**

- Cast aluminium with inner steel tube and slide bearing.
- Swing 250°


**GT WGS**

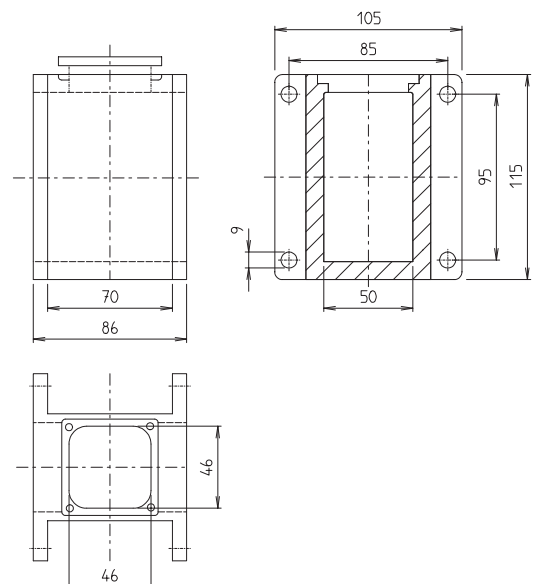
Code No.	Type	m [g]
194800310G	GT WGS 48	2627


**Adaptor flange:**

- Cast steel, in combination with wall hinges as a cable lead-in, from bottom or top


**GT AF**

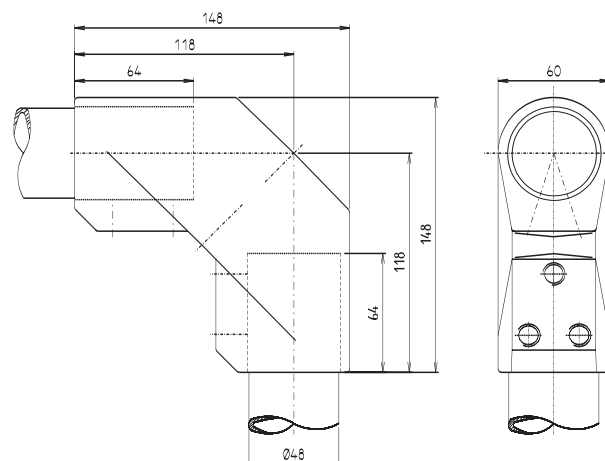
Code No.	Type	m [g]
194800111G	GT AF 48	2038



# Supports arm/equipment carrier system GT 48

## Elbow:

- Cast aluminium, angle 90°

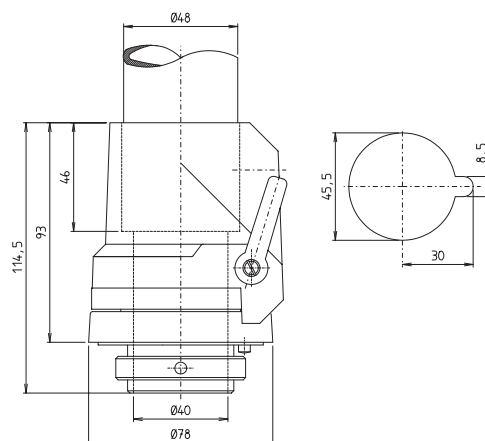


## GT W

Code No.	Type	m [g]
194800280G	GT W 48	835

## Coupling:

- Cast aluminium with inner steel tube
- Centre of motion infinitely variable using clamping lever
- Fitting through enclosure hole.
- Swing 260°

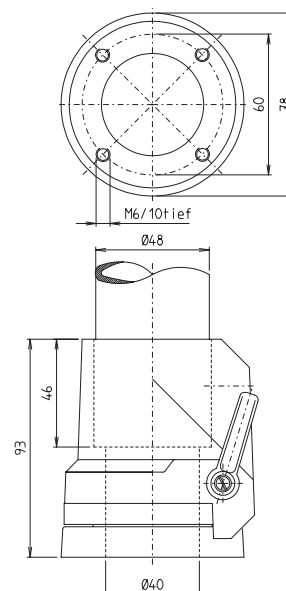


## GT KU

Code No.	Type	m [g]
194800320G	GT KU 48	926

## Flange coupling:

- Cast aluminium with inner steel tube
- Centre of motion infinitely variable using clamping lever
- Large-surface flange fastening on enclosure
- Swing 260°



## GT KUF

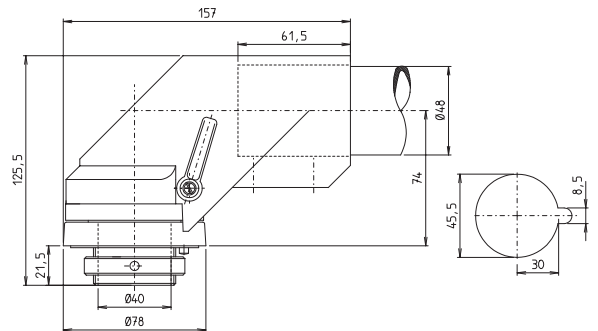
Code No.	Type	m [g]
194800330G	GT KUF 48	814

**GT 48**
**Elbow coupling:**

- Combination of coupling and elbow
- Fitting through enclosure hole
- Centre of motion infinitely variable using clamping lever
- Swing 260°


**GT WKU**

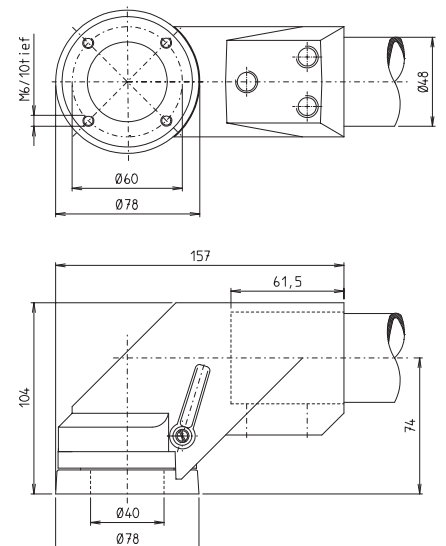
Code No.	Type	m [g]
194800290G	GT WKU 48	1140


**Elbow flange coupling:**

- Combination of coupling and angle piece
- Large-surface flange fastening on enclosure
- Centre of motion infinitely variable using clamping lever
- Swing 260°


**GT WKUF**

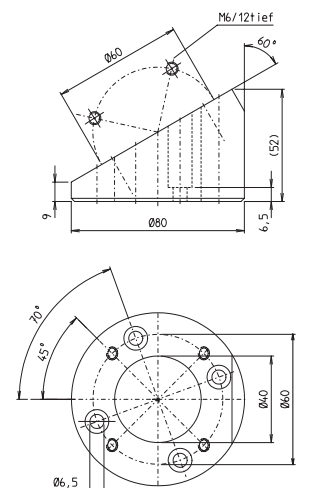
Code No.	Type	m [g]
194800300G	GT WKUF 48	1041


**Console flange:**

- Cast aluminium
- Screw fastening to coupling
- Slope angle 30°


**GT PF**

Code No.	Type	m [g]
194800170G	GT PF 48	303



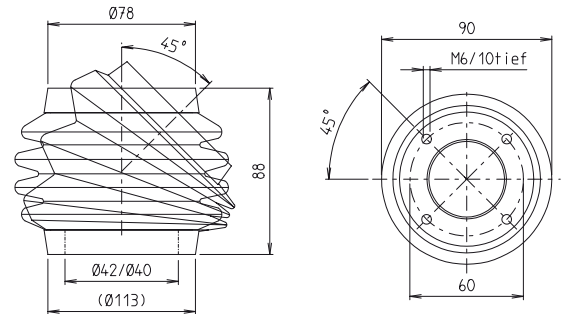
# Supports arm/equipment carrier system GT 48

## Inclining adaptor



### GT NA

Code No.	Type	m [g]
194800250G	GT NA 48	600

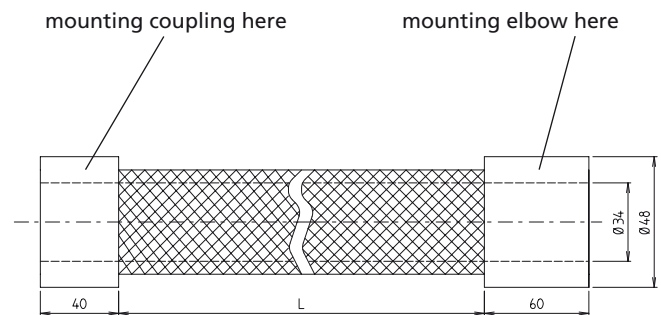


## Flexi tube:

- variable length, please state!

### GT FLS

Code No.	Type
194800120G	GT FLS 4



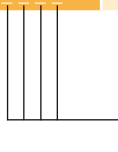
## Connecting tube



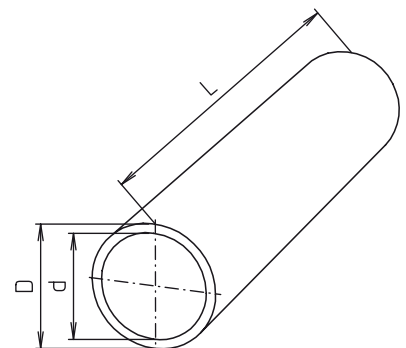
Ø48

[mm]

Code No.	Type	D tol.	d	L max.	m [g]
10094158	48x4	48 ± 0,2	40	3000	4300



Length:  
Every length is possible.





# Supports arm/equipment carrier system – GT 50, 60, 80



GT AG



GT F



GT WG



GT AF



GT ZG



GT W



GT WКУ



GT WKUF



GT КУ / GT КУF



GT PKU



GT PA



GT A

## Features:

- Variable constructions, consisting of series produced elements, for individual attachment and positioning of control panels. Designed in clear lines the carrier system harmoniously fits in with the modern working environments.
- Free system construction using high-solid functional elements and tubular steel 50x50, 60x60, and 80x80 mm.
- Consistent IP 65 ingress protection up to the control panel is achieved by means of a self-contained tube system with integrated seals in places where the system elements are joined
- Installed cables are protected from damage due to burr-free inner contours, an unrestricted cable passage of 49 cm<sup>2</sup>, and flush joints between tube and system elements
- Swing can be adjusted to on-site requirements using adjustable fittings in the rotary and swivel elements
- Easy alignment of carrier arm using pre-formed tube supports in the elements. Adjusting screws freely accessible without having to remove the bellows
- Adjustment of swing forces to different loads using infinitely variable pivot bearings

## Support arm/equipment carrier system GT □ 50, 60 und 80 – Table of contents

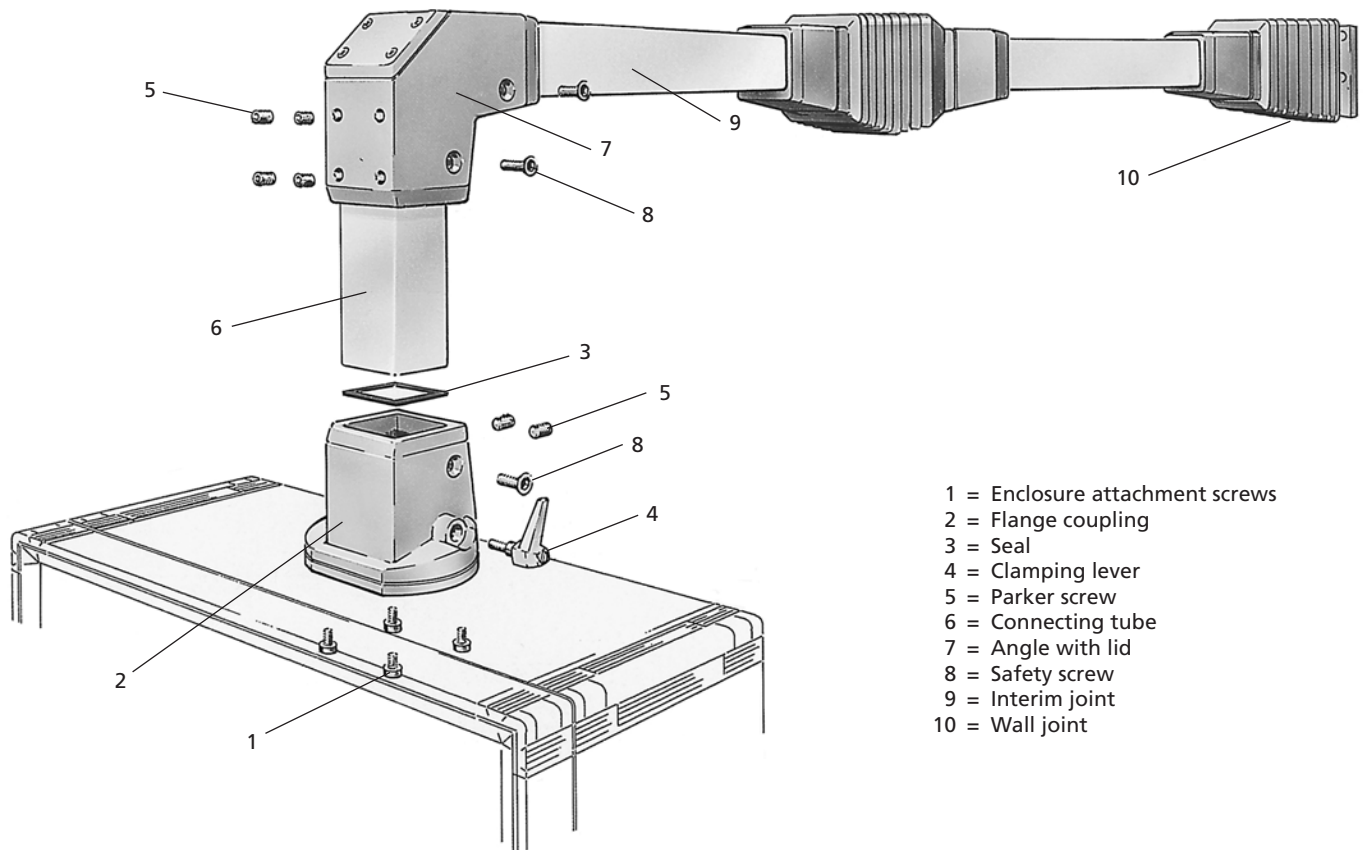
<p><b>Properties/performance data</b></p>	<ul style="list-style-type: none"> <li>■ Technical data ..... p. 268</li> <li>■ Examples for system constructions ..... p. 269</li> </ul>
<p><b>Versions</b> (Dimensions, code numbers)</p>	<ul style="list-style-type: none"> <li>■ GT AG / GT F ..... p. 270</li> <li>■ GT WG / GT AF ..... p. 271</li> <li>■ GT ZG / GT W ..... p. 272</li> <li>■ GT WKU / GT WKUF ..... p. 273</li> <li>■ GT KU / GT KUF ..... p. 274</li> <li>■ GT PKU ..... p. 275</li> <li>■ GT PA / GT A ..... p. 276</li> </ul>
<p><b>Accessories</b></p> <p style="text-align: right;"><b>Fastening</b></p>	<ul style="list-style-type: none"> <li>■ Square connecting tubes □ 50, 60 , 80 ..... p. 277</li> </ul>



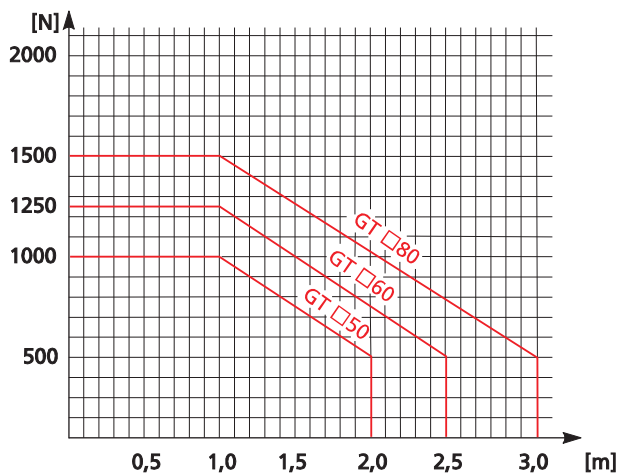
# GT 50, 60, 80 – Technical data

## Basic information / operating conditions

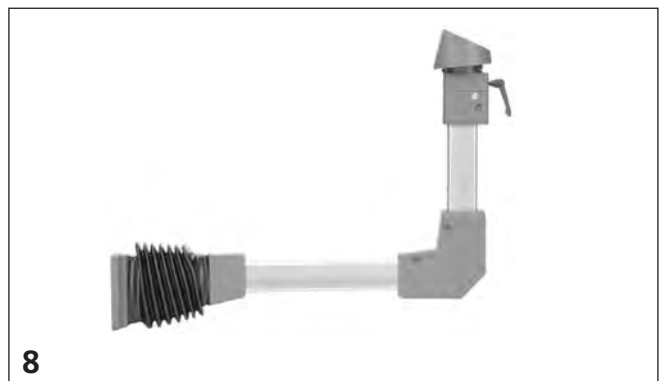
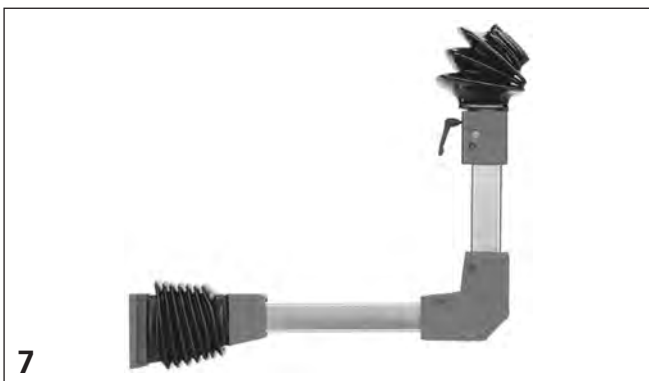
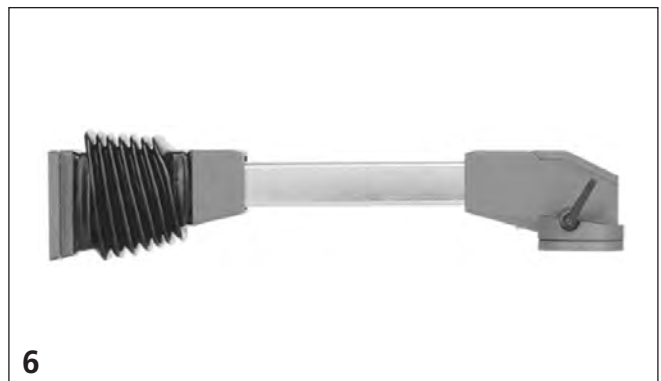
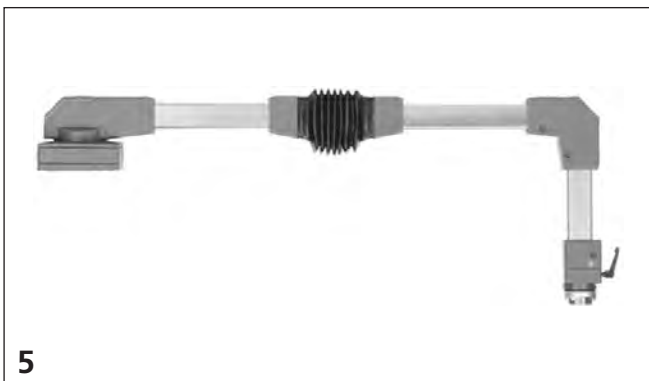
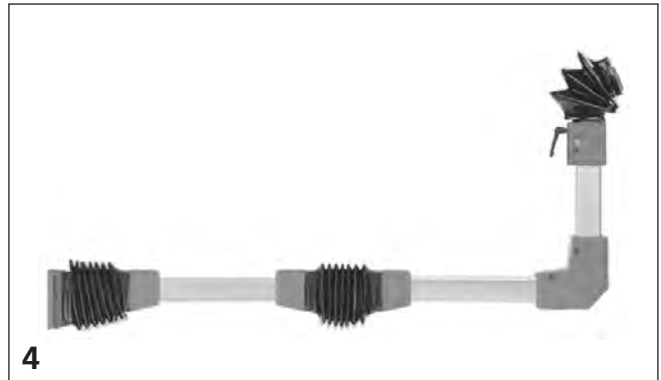
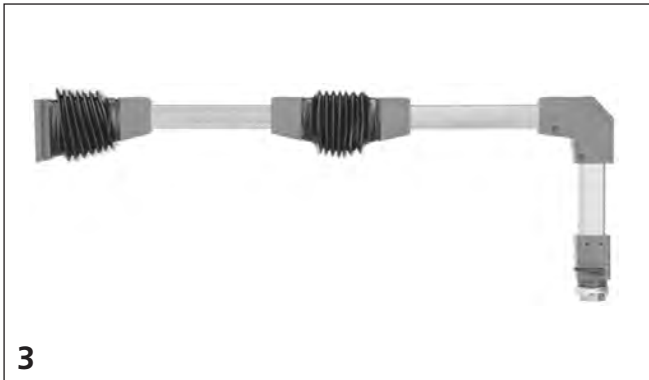
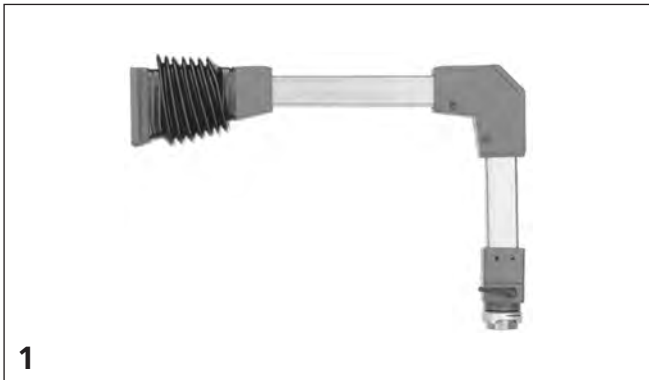
Surface	standard version in transport grey, RAL7043 powder-coated, other colours upon request
tube Ø 48	zinc plated steel tube, DIN 2395
Free cable passage	□ 50 = 40x40 mm / □ 60 = 50x50 mm / □ 80 = 70x70 mm
For tube clamping	30 Nm
Protection mode	IP 65 according to DIN 40050



## Load diagram



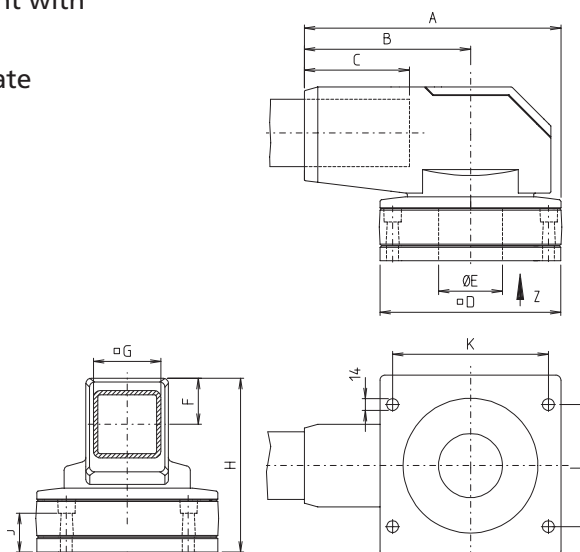
Examples for system constructions:



# Supports arm/equipment carrier system – GT 50, 60, 80

## Surface-mounted joint:

- Cast steel joint for use on mounting surfaces and for suspension mounting (ceiling mounting)
- Slide bearing with swing of 310°, infinitely variable between 0° and 270°
- Force of swing adjustable by means of a set screw. Tube clamping and alignment with self-tapping set screws
- Mounting lid to facilitate wiring



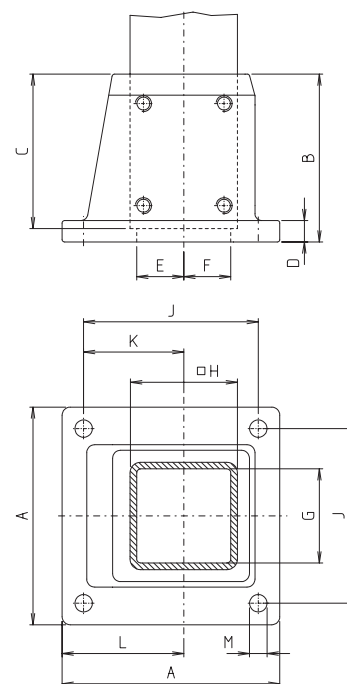
## GT AG

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	m [g]
195000261G	GT AG 50	251	160	95	180	50	39,5	50	151	35	150	116	1400
196000261G	GT AG 60	278	179,5	110	195	58	44,5	60	171	38	165	125	1820
198000261G	GT AG 80	306	197,5	125	215	76	54,5	80	206	46	185	145	2330

## Foot stand:

- Cast steel element for floor mounting
- Tube clamping and alignment with self-tapping set screws



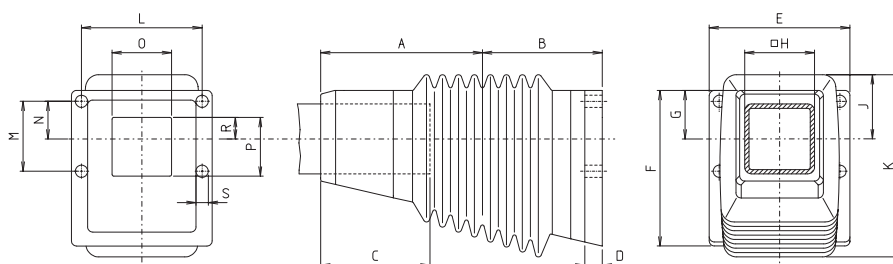
## GT F

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	m [g]
195000351G	GT F 50	128	90	80	12	20,5	19,5	40	50	100	57	71	12	3000
196000351G	GT F 60	138	100	90	14	25,5	24,5	50	60	110	63	77	12	3900

**Wall hinge:**

- Steel elements with slide bearing
- Swing 180°, stepped adjustment using variable fittings
- Force of swing adjustable using bearing screw. Tube clamping and alignment with selftapping set screws
- PVC bellows for dust and water protection

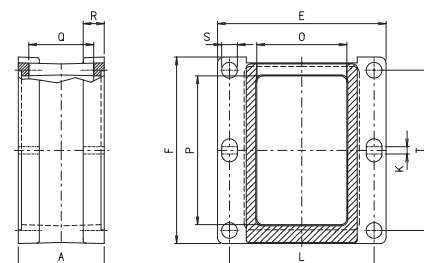

**GT WG**

[mm]

Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	m [g]
195000271G	GTWG50	140	90	95	12	132	125	40	50	58	164	107	50	27,5	48	35	11	12	6300
196000271G	GTWG60	162	102	110	15	140	145	45	60	62	176	115	60	32,5	57	44,5	15	12	9100
198000271G	GTWG80	185	137	125	20	161	178	56	80	75	210	138	80	43,5	68	67	25	14	13000

**Adaptor for wall hinge:**

- Cast steel adaptor to be mounted between wall hinge and mounting surface
- Removable lead-in plate makes wiring possible from below.


**GT AF**

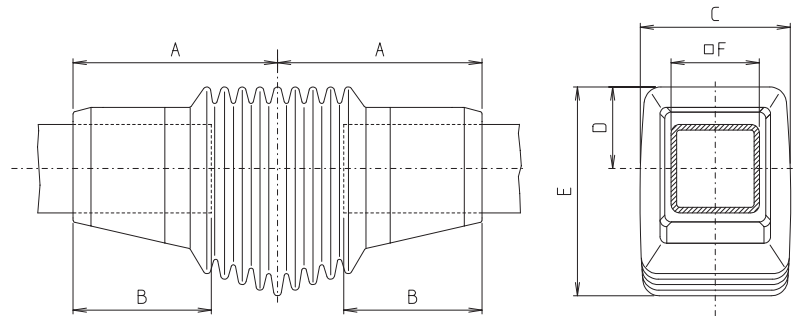
[mm]

Code No.	Type	A	E	F	K	L	O	S	T	P	Q	m [g]
195000111G	GT AF 50	66	132	125	0	107	107	12	100	89	46	5000
196000111G	GT AF 60	72	140	145	0	115	115	12	120	109	52	6500
198000111G	GT AF 80	82	161	178	7	138	86	15	153	142	62	6000

# Supports arm/equipment carrier system – GT 50, 60, 80

## Linking joint:

- Cast steel pivoted joint with slide bearing.
- Swing 180°, stepped adjustment using variable fittings.
- Force of swing adjustable using bearing screw. Tube clamping and alignment with self-tapping set screws.
- PVC bellows for dust and water protection.



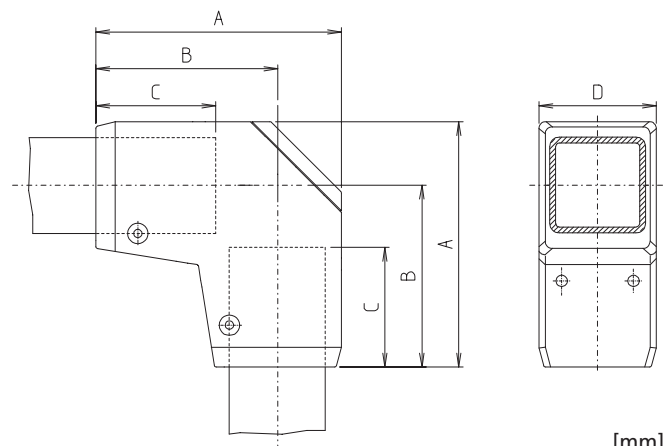
## GT ZG

[mm]

Code No.	Type	A	B	C	D	E	F	m [g]
195000241G	GT ZG 50	140	95	107	58	152	50	6200
196000241G	GT ZG 60	162	110	114	62	162	60	8900
198000241G	GT ZG 80	185	125	136	75	190	80	1270

## Elbow:

- Angle 90°, cast steel.
- Tube clamping and alignment with self-tapping set screws.
- Additional safety screw especially for vibration-caused strain.
- Mounting lid to facilitate wiring.



## GT W

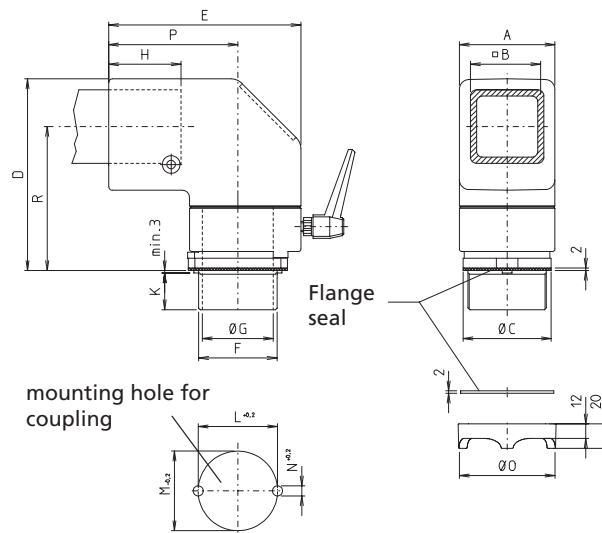
[mm]

Code No.	Type	A	B	C	D	m [g]
195000281G	GT W 50	154	115	80	74	4500
196000281G	GT W 60	172	128	90	84	5800
198000281G	GT W 80	210	157	105	98	8000

**Elbow coupling:**

- Combination of coupling and elbow.
- Cast aluminium.
- Fitting through enclosure hole
- Attachment to connecting tube with self-tapping set screws.
- Additional safety screw for high loads.

- Durable PA bearing. Friction force of swing adjustable. Centre of motion freely adjustable with clamping lever.
- Swing 300°.


**GT WKU**


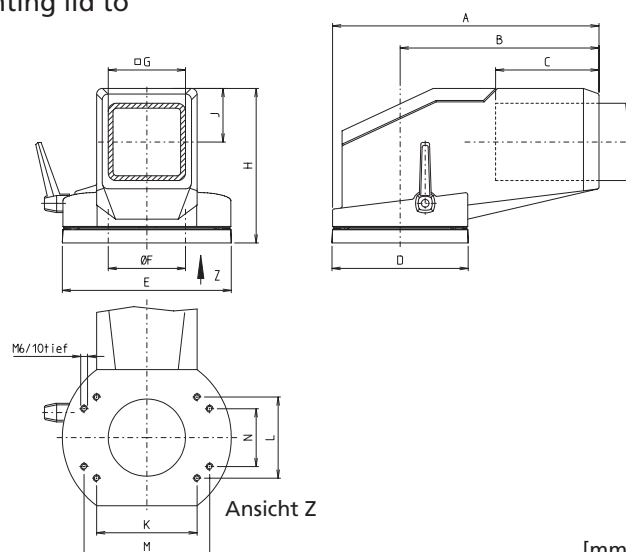
[mm]

Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	N	O	P	R	m [g]
195000291G	GT WKU50	66	50	62	140	140	M50x2	44,5	47	31	50,8	51	8,2	65	95	104	2200
196000291G	GT WKU60	78	60	72	157	157	M64x2	56	61	31	64,8	65	8,2	80	105,5	118	3200
198000291G	GT WKU80	104	80	104	199	200	M90x2	80	72	34	90,8	91	10,2	111	137	149	5700

**Elbow Flange coupling:**

- Cast aluminium rotary joint for direct attachment of control-panel to horizontal carrier arm.
- Slide bearing with 325° swing, can be arrested at intervals of 25°.

- Clamping lever to adjust force of movement and to arrest swinging movement. Tube clamping with self-tapping Allen screws. Mounting lid to facilitate wiring


**GT WKUF**


[mm]

Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	m [g]
195000301G	GT WKUF 50	187,5	134	80	107	131	48	50	118	39,5	77	57	-	-	2600
196000301G	GT WKUF 60	216,5	158	90	117	141	58	60	131	42,5	77	57	-	-	3600
198000301G	GT WKUF 80	276,5	206	107	141	175	80	80	160	55,5	104	84	130	60	5600

# Supports arm/equipment carrier system – GT 50, 60, 80

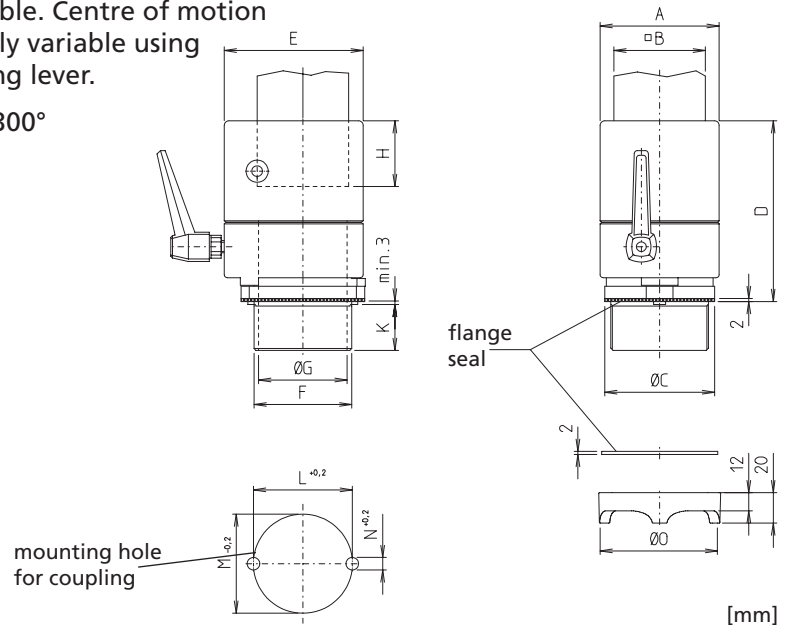
## Coupling:

- Cast aluminium with inner steel tube
- Fitting through enclosure hole. Attachment to connecting tube with self-tapping set screws.
- Additional safety screw for high loads
- Durable PA bearing.

- Friction force of swing adjustable. Centre of motion infinitely variable using clamping lever.
- Swing 300°



GT KU



Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	N	O	m [g]
195000321G	GT KU 50	66	50	62	99,5	82	M50x2	44,5	32	31	50,8	51	8,2	65	1800
196000321G	GT KU 60	78	60	72	118,5	91	M64x2	56	45	31	64,8	65	8,2	80	2400
198000321G	GT KU 80	104	80	104	145,5	115	M90x2	80	49	34	90,8	91	10,2	111	3400

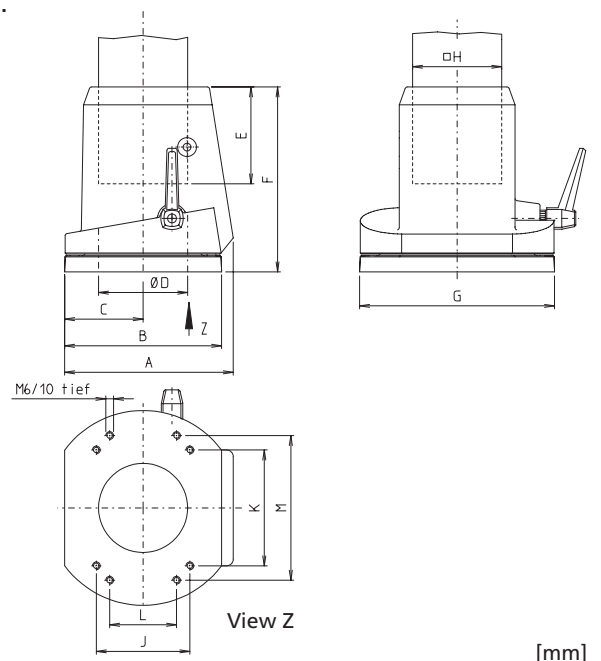
## Flange coupling:

- Cast aluminium rotary device for attachment to the control panel.
- Slide bearing with 325° swing, adjustable at intervals of 25°.
- Clamping lever to adjust force of movement and to arrest swinging movement.
- Tube clamping with self-tapping set screws.

- Additional safety screw especially for vibration-caused strain.



GT KUF



Code No.	Type	A	B	C	D	E	F	G	H	J	K	L	M	m [g]
195000331G	GT KUF 50	110	107	53,5	48	55	116	131	50	57	77	–	–	2100
196000331G	GT KUF 60	124	117	59,5	58	65	136,5	141	60	57	77	–	–	2800
198000331G	GT KUF 80	151	141	70,5	80	87	166	175	80	84	104	60	130	4900

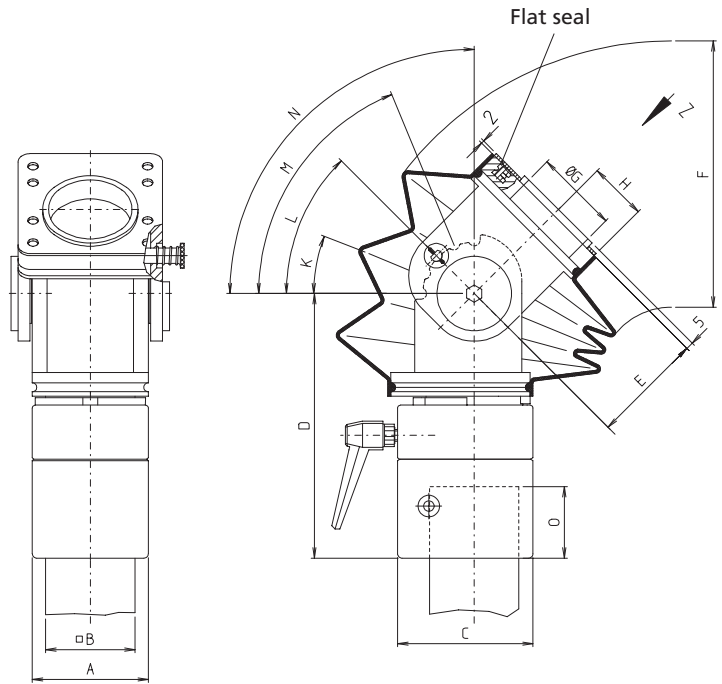




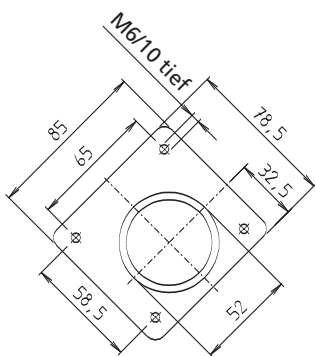
**Console coupling:**

- Cast aluminium with inner steel tube.
- Large-surface mounting on enclosure. Attachment to connecting tube with self-tapping set screws.
- Additional safety screw for high loads.
- Durable PA bearing.

- Friction force of swinging movement adjustable. Centre of motion infinitely variable using clamping lever.
- Swing 300° - angle of slope adjustable.

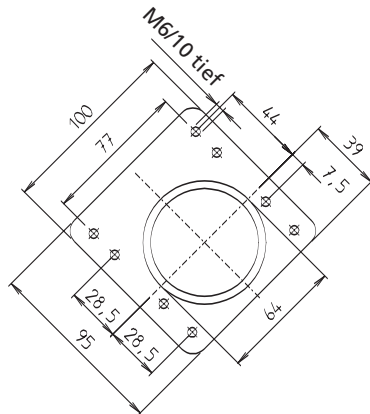


**View Z**



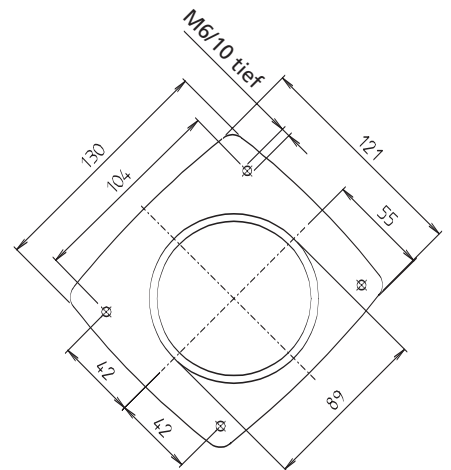
Flange dimensions GT PKU 50

**View Z**



Flange dimensions GT PKU 60

**View Z**



Flange dimensions GT PKU 80

**GT PKU**

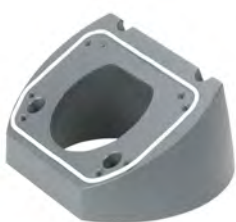
[mm]

Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	N	O	m [g]
195000250G	GT PKU 50	66	50	82	142	44	115x103	44,5	32,5	15°	32,5°	50°	-	32	1800
196000250G	GT PKU 60	78	60	91	178	75	180x160	56	39	22,5°	45°	67,5°	90°	45	2200

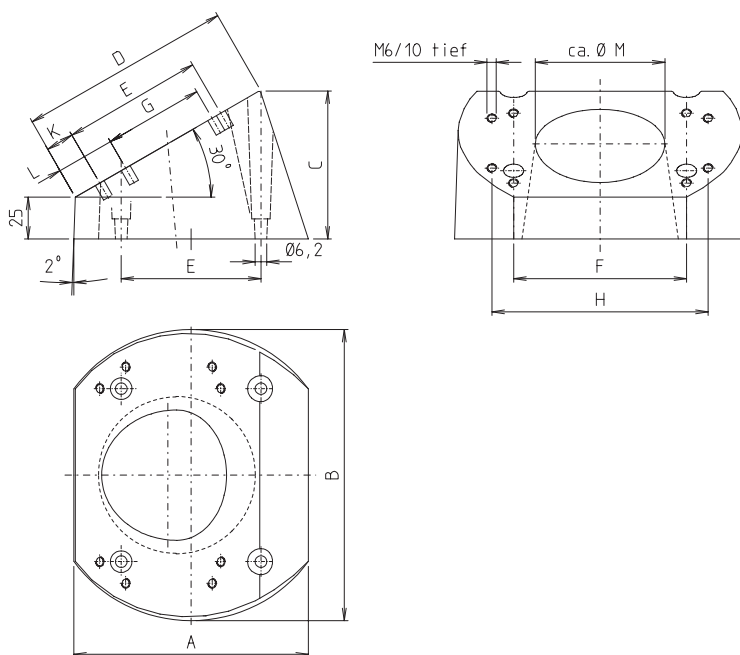
# Supports arm/equipment carrier system – GT 50, 60, 80

## Console adaptor:

- Cast aluminium
- 30°-inclination for flange coupling 50, 60, 80



**GT PA**



[mm]

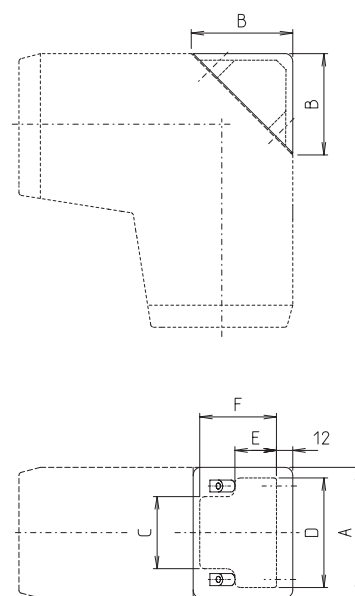
Code No.	Type	A	B	C	D	E	F	G	H	K	L	M	m [g]
195000160G	GT PA 50	107	131	71	92	57	77	–	–	14	–	50	800
196000160G	GT PA 60	117	141	76	102	57	77	–	–	18	–	60	1000
198000160G	GT PA 80	141	175	89	128	84	104	60	130	17	35	80	1700

## Signal fitting:

- Cast aluminium
- For mounting signal lamps



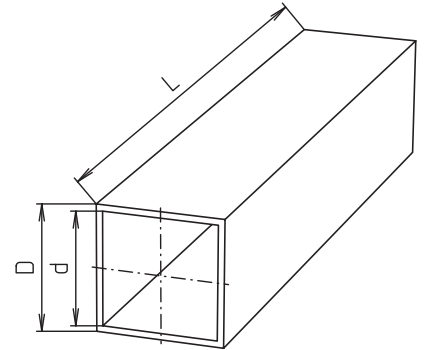
**GT A**



[mm]

Code No.	Type	A	B	C	D	E	F	m [g]
195000310G	GT A 50	74	60	36	54	29	38	300
196000310G	GT A 60	84	65	40	62	32	43	400
198000310G	GT A 80	98	76	54	82	42	54	600

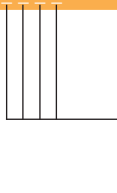
## Square Connecting tubes



□ 50, 60, 80

[mm]

Code No.	Type	D tol.	d	L max.	m [g]
10094156 _ _ _ _	50x5	50 ± 0,3	40	3000	6900/m
10094157 _ _ _ _	60x5	60 ± 0,4	50	3000	8500/m
10094159	80x5	80 ± 0,6	70	3000	11600/m



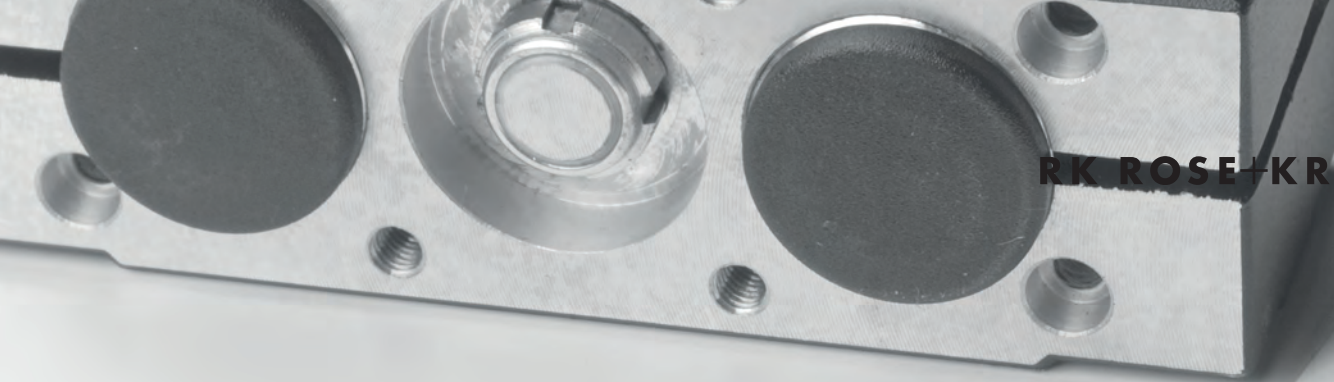
**Length:**  
Every length is possible.







RK ROSE+KRIEGER



Belastung

Gesamtlänge (mm)	Ausführung	
E 18		800 N
E 30		1000 N
E 40		1300 N
E 50		1700 N
E 60		2300 N
AE 30		500 N
AE 40		1300 N

\* bezogen auf „geschlossenen“ Führungsschlitten

Belastungsdaten\* - A / AS -

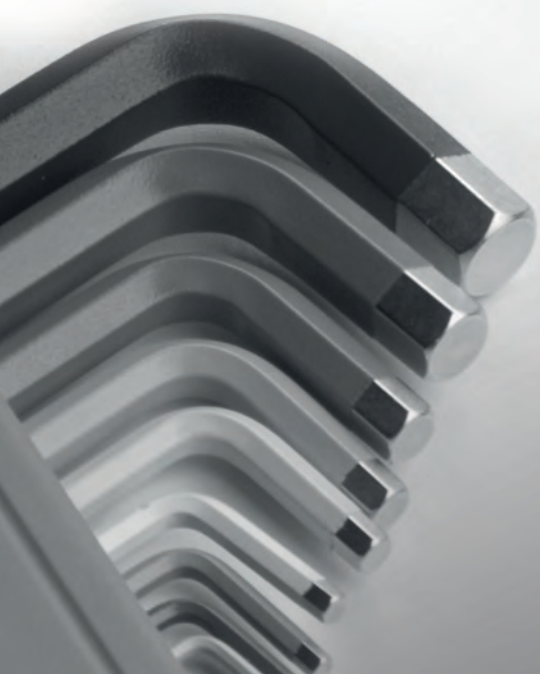
	Fx	Fy
Gesamtlänge (mm)	500	1000
Ausführung		
A/AS 30	1300 N	
A/AS 40	1800 N	
A/AS 50	3000 N	
A/AS 60	4000 N	

\* bezogen auf „geschlossenen“ Führungsschlitten (Durchbiegung d.)



Geschwin

Ausführung
E / AE
E / AE
A / AS



**Applications, Index**

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Applications..... from page 280

Index ..... from page 282

# Appendix



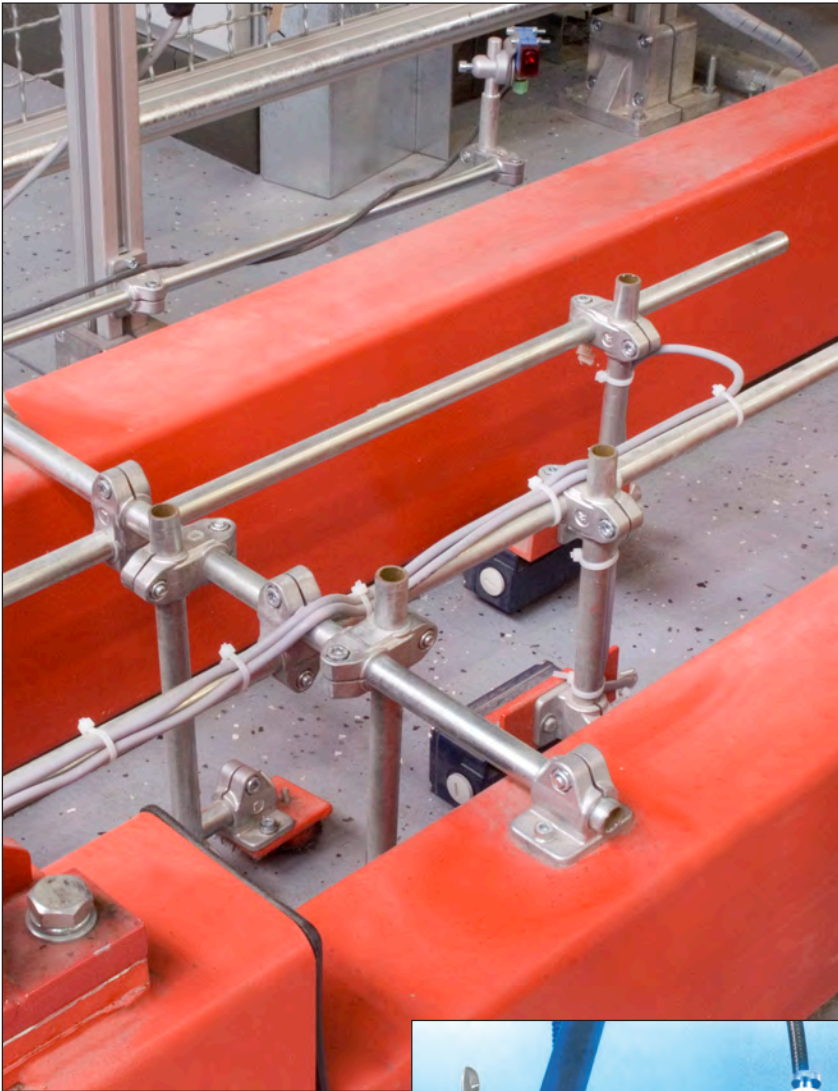
# Applications



Frame for a labelling machine.



Working platform with ITAS railing



Logistic system at RK Rose+Krieger – holder for sensors.



Airbrush holder with cross clamping pieces and clamping levers.



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We also say what we can't do - and don't do it!



Connecting and positioning systems

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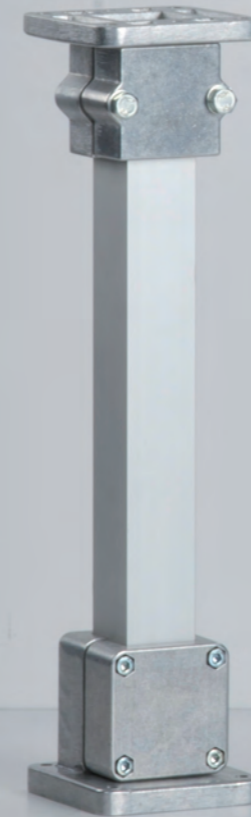
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