



2021 EDITION

**COMPONENTS CATALOG FOR APPLICATION IN
PLASTICS PART MANUFACTURING**

Worldwide expertise in flexible lightweight tooling

BILSING AUTOMATION is a leading supplier of industrial tooling solutions, specializing in automated tooling and material handling systems. We have over 30 years' experience in the automotive stamping and bodyshop, as well as developing material handling solutions for injection molding, fabrication, packaging, hydroforming and non-automotive applications. Our tooling is based upon an innovative modular system, which provides the flexibility to rapidly configure customized solutions from our array of standard components. We offer automated pressroom solutions for robotic press-to-press transfer, linear transfer, tri-axis transfer presses, crossbar transfer presses and the new range of High speed presslines. Our long-term experience and constant innovation management help us to efficiently develop affordable customized solutions.

Globally focused, our worldwide network of subsidiaries located in Europe, North America, South America, Asia, Africa and the Pacific Rim supports our customers through planning, design, engineering, assembly and commissioning. Our global staff is purposefully situated to provide efficient service and cultural understanding.

With about 15.000 components BILSING offers a weight range of components for flexible gripping and handling systems. All parts are developed and produced for the BILSING modular system. Therefore, our components can be combined flexible, for customized systems and solutions. This advantage will be used by our engineers consequently to generate cost-saving and high quality automation solutions.

Adapter plates 17

	Quick change tooling base standard blank for the plastic industry PL-100-100-P001	17
	Quick change tooling base standard blank for the plastic industry PL-160-160-P001	17
	Quick change tooling base standard blank for the plastic industry PL-250-250-P008	18
	Quick change system SWS-100-100	18
	SWS-160-160 SWS-250-250	

Mounts 19

	Flange mount, split type GFAR-40-125-25	19
	Flange mount, split type GFAR-40-125-78	19
	Flange mount GFAR-10	20
	Flange mount GFAR-16	20
	Flange mount GFAR-Z25	21

Tubes / Profiles 22

	Aluminium tubing PAT-16x3-* PAT-20x2,5-* PAT-25x3-* PAT-25x5-* PAT-40x3-* PAT-40x6-* PAT-60x5-* PAT-60x6-* PAT-60x8-*	22
---	--	----



Content

	L profile L-18-10-L L-18-10-L	23
	L profile L-18-18-L L-18-10 L-18-18	23
	X profile X-25-18-L	24
	X profile X-25-25-L X-25-18 X-25-25	24
	X profile X-50-25-L X-50-25-L	25
	JU profile JU-40-40-L X-50-25 JU-40-40	25
	JU profile JU-80-40-L JU-80-40	26

Slot stones **27**

	Slot stone GWP-4-U GWP-5-U GWP-6-U GWP-4-K GWP-5-K GWP-6-K GWP-8-K GWP-5-U GWP-8-U GWP-8-U	27
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Slot stone

28



GWP-4-8-U
GWP-4-17-U
GWP-4-25-U
GWP-4-31-U
GWP-5-10-U
GWP-5-15-U
GWP-5-16-U
GWP-5-18-U
GWP-5-20-U
GWP-5-22-U
GWP-5-25-U
GWP-5-28-U
GWP-5-30-U
GWP-5-35-U
GWP-5-38-U
GWP-5-40-U
GWP-5-42-U
GWP-5-45-U
GWP-5-50-U
GWP-5-58-U
GWP-5-60-U
GWP-5-63-U
GWP-5-65-U
GWP-5-70-U
GWP-5-80-U
GWP-5-90-U
GWP-5-100-U
GWP-6-10-U
GWP-6-15-U
GWP-6-20-U
GWP-6-25-U
GWP-6-30-U
GWP-6-35-U
GWP-6-40-U
GWP-6-45-U
GWP-6-50-U
GWP-6-51-U
GWP-6-60-U
GWP-6-70-U
GWP-6-80-U
GWP-6-90-U
GWP-6-91-U
GWP-6-100-U
GWP-5-10-K
GWP-6-15-K
GWP-6-20-K
GWP-6-25-K
GWP-6-30-K
GWP-6-40-K



Content

GWP-6-50-K
GWP-6-90-K
GWP-8-30-K
GWP-8-40-K
GWP-8-100-K

Extensions 29



Extension with end clamp 29

ES10-10-L
ES10-14-L
ES10-16-L



Extension with end clamp 29

ES16-14-L
ES16-16-L
ES16-20-L
ES16-25-L



Extension with end clamp 30

ES25-25-L
ES25-40-L



Extension with end clamp 30

ESA-90-20-20-L
ESA-90-25-25-L
ESA-90-30-30-L



Swivel arm with through bolt 31

SA25-25-19-L
SA25-25-20-L
SA25-25-25-L



Swivel arm threaded at both ends 31

ED10-10-10-L
ED10-10-14-L
ED10-10-16-L



Swivel arm threaded at both ends 32

ED25-25-19-L
ED25-25-20-L
ED25-25-25-L
ED25-40-19-L
ED25-40-20-L
ED25-40-25-L
ED25-40-40-L

Connectors

33

Angle-type clamping piece

33



WST-L-10-U
WST-L-14-U
WST-X-10-U
WST-X-14-U
WST-X-20-U
WST-X-30-U
WST-JU-20-U
WST-JU-30-U
WST-K-20-U
WST-K-30-U

Angle-type clamping piece

33



WSL-L-10-40-U
WSL-L-14-40-U
WSL-X-14-50-U
WSL-X-20-60-U
WSL-X-30-60-U
WSL-JU-20-70-U
WSL-JU-30-70-U

Angle-type clamping piece

34



WSL-L+X-10-40-VU
WSL-X-14-50-VU
WSL-X-20-60-VU
WSL-K-14-50-VU
WSL-K-20-70-VU
WSL-X-30-60-VU
WSL-JU-20-70-VU
WSL-K-30-70-VU
WSL-JU-30-70-VU

Angle-type clamping piece

34



WSL-GA-X-10
WSL-GA-X-14
WSL-GA-X-20
WSL-GA-JU-30

Clamp adapter

35



WSW-X-10
WSW-L-10
WSW-X-14
WSW-X-20
WSW-JU-20
WSW-JU-30
WSW-K-20
WSW-K-30



Content

	Turning clamp adapter	35
	DKS-L-10-60	
	DKS-X-14-80	
	DKS-X-20-50	
	DKS-X-20-100	
	Clamp adapter, T-version, split type	36
	TKR-10-10	
	Cross clamp	36
	KK-10-10	
	Cross clamp	37
	KK-16-16	
	Cross clamp	37
	KK-25-25	
	KK-40-25	
	KK-40-40	
	Clamp collar, T-version, split type	38
	TKR-10-10	
	TKR-16-16	
	TKR-40-25	
	TKR-40-40	
	Clamp collar, T-version	38
	TKA-25-2Z25	
	Clamp collar, T-version	39
	TKA-20-2Z40	
	Clamp collar, T-version	39
	TKA-25-2Z40	
	Cross connector	40
	KVB-L+X-10	
	KVB-X-14	
	KVB-K-14	
	KVB-X-20	
	KVB-K-20	
	KVB-JU-20	
	KVB-X-30	
	KVB-K-30	
	KVB-JU-30	

Cross connector

40



KBV-L-10-18
KBV-L-18-18
KBV-X-10-25
KBV-X-18-25
KBV-X-25-25
KBV-X-50-25
KBV-X-25-50
KBV-K-40-40
KBV-K-40-80
KBV-JU-40-40
KBV-JU-40-80
KBV-K-80-40
KBV-JU-80-40

Cross connector

41



KPL-L-18-18
KPL-X-25-L18
KPL-X-25-25
KPL-X-50-25
KPL-X-50-50
KPL-JU40-X25
KPL-K-40-40
KPL-JU-40-40
KPL-JU80-X25
KPL-K-80-80
KPL-JU-80-40
KPL-K-80-80
KPL-JU-80-80
KPL-JU80-X50
KPL-JU40-X50



Cup mount adapter

41

SAS-X-18-18
SAS-X-14-18



Angle clamp

42

WSS-L-M5-M5
WSS-X-18-18
WSS-X-14-18
WSS-JU-14-18



Angle clamp

42

WSD-L-M5-M5
WSD-X-18-18
WSD-X-14-18



Content

	Angle clamp	43
	WLS-L-M5-M5-40 WLS-X-18-18-50 WLS-X-14-18-50 WLS-JU-14-18-60	
	Angle clamp WLS-GA-X-14-18-50	43
	Elbow 45° DC-4040-45	44
	Elbow 90° DC-4040-90	44
	Port only adapter	45
	Port only adapter PA-16-G1/8	45
	Port only adapter PA-G3/8-G1/4-M6 PA-G3/8-G1/4-M8	45
	Port only adapter PA-19-LR-G3/8 PA-19-LR-G1/4	46
	Spring cup mount KRCM-13-M5-10 KRCM-23-M5-10 KRCM-16-G1/8-16 KRCM-36-G1/8-16 KRCM-16-G1/8-20 KRCM-36-G1/8-20	47
	Holder for compact guide cylinder SBK-PAB-25-130	47
	Elektrical adapters	48
	Mounting plate for E-distributor PL-130-60	48
	Mounting plate for E-distributor PL-215-40	48

Vacuum cups 49



Bell suction cup, round 51

40PFG-*-80
50PFG-*-80
80PFG-*-80
100PFG-*-80



Bell suction cup, oval 52

60-20PFG-*-80
80-30PFG-*-80
100-40PFG-*-80



Belcup, round 53

30BT-*-
40BT-*-
50BT-*-
75BT-*-
100BT-*-
125BT-*-



Suction cup, round 54

BX20P
BX25P
BX35P
BX52P
BX75P

Pneumatic clamps 55



Pneumatic parallel clamp 55

MHZ2-10
MHZ2-16
MHZ2-20
MHZ2-32



Compact guide cylinder (SMC) 55

MGPM16-10
MGPM16-20



Pneumatic clamp 56

PS-10-9-14-82
PS-10-9-14-82-S



Pneumatic clamp 56

PS-16-9-20
PS-16-9-20-S



Content



Pneumatic clamp	57
PS-16-9-20-125	
PS-16-9-20-125-S	



Pneumatic clamp	57
PS-16-9-20-147	
PS-16-9-20-147-S	



Pneumatic clamp, PSB-15-I-02-...-...-RAA1(-S)	58
PSB-15-I-02-10-10-RAA1	
PSB-15-I-02-20-20-RAA1	
PSB-15-I-02-20-20-RAA1-S	



Pneumatic clamp with double stroke	58
PSB-15-DW-DH1020-25	
PSB-15-DW-DH1020-25-S	

Gripper fingers **59**



Gripper finger 35°	59
BA-OFA-20-35	
BA-OFA-30-35	



Gripper finger 95°	59
BA-OFR-20-95	
BA-OFR-30-95	

Cutting pliers **60**



Cutting pliers	60
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SZ-30-AP
SZ-30-PF
SZ-30-AJ
SZ-36-AP
SZ-36-PF
SZ-36-AJ
SZ-45-AP
SZ-45-PF
SZ-45-AJ



SZ-56-AP
SZ-56-PF
SZ-56-AJ
SZ-75-AP
SZ-75-PF
SZ-75-AJ



Adapter for cutting pliers

61

SZA-20-30-50

SZA-20-36-50

SZA-20-45-50

SZA-20-56-50

SZA-25-75-70

Adapter plates

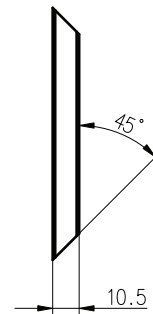
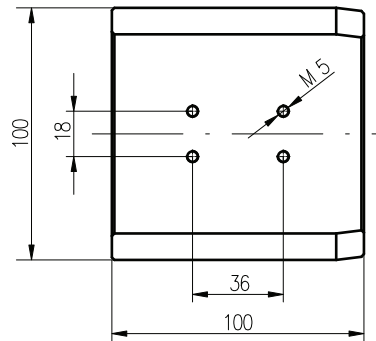
Quick change tooling base standard blank for the plastic industry



0.256 kg
Material: Aluminium

Part No.

PL-100-100-P001



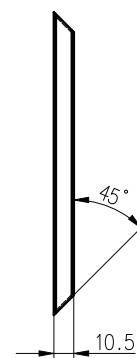
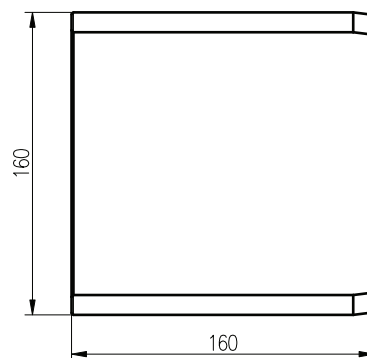
Quick change tooling base standard blank for the plastic industry



0.689 kg
Material: Aluminium

Part No.

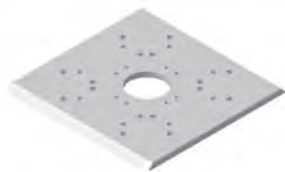
PL-160-160-P001





Adapter plates

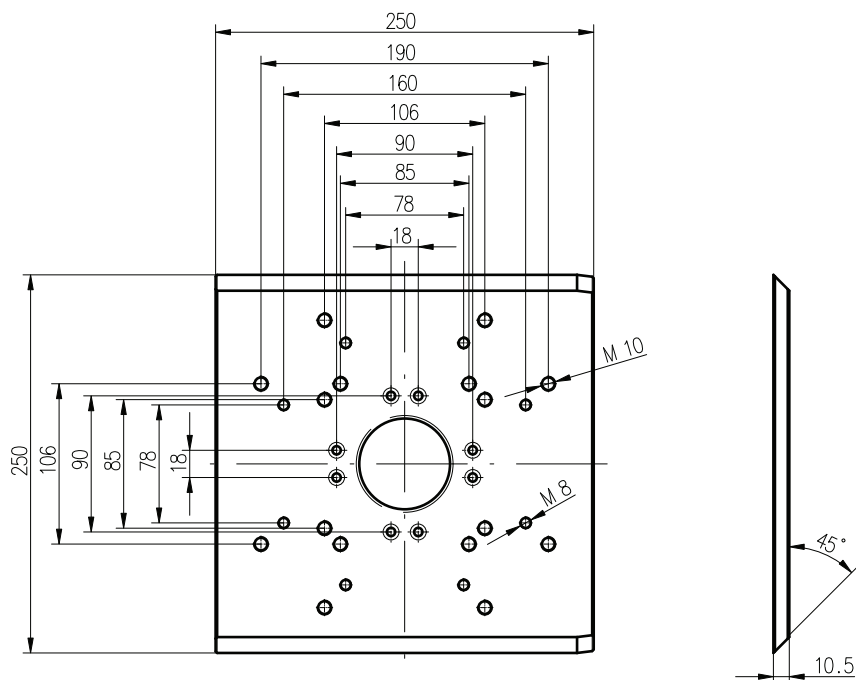
Quick change tooling base standard blank for the plastic industry



1.604 kg
Material: Aluminium

Part No.

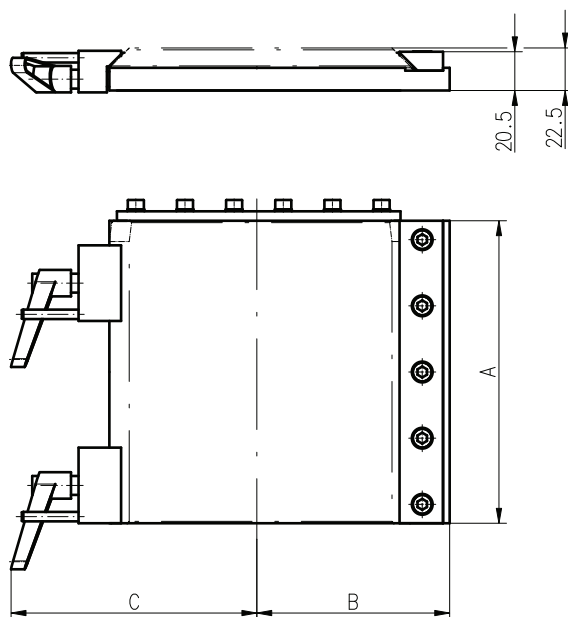
PL-250-250-P008



Quick change system



Material: Aluminium

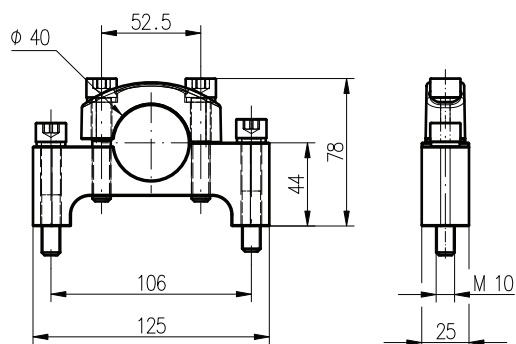


Part No.	A	B	C	■ (kg)
SWS-100-100	100	70	102	0.94
SWS-160-160	166	102	130	1.97
SWS-250-250	250	25	190	4.52

Flange mount, split type



■ 0.442 kg
Material: Aluminium



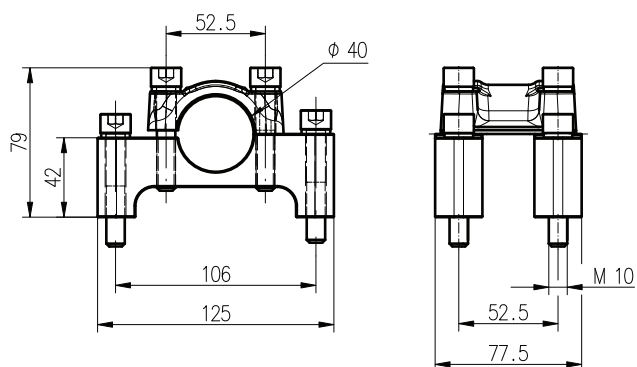
Part No.

GFAR-40-125-25

Flange mount, split type



■ 0.902 kg
Material: Aluminium



Part No.

GFAR-40-125-78

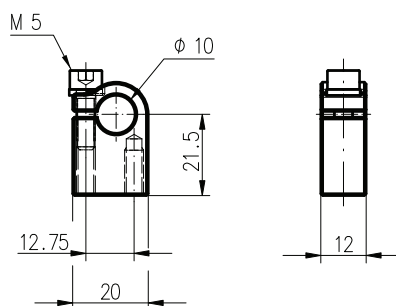


Mounts

Flange mount



0.02 kg
Material: Aluminium



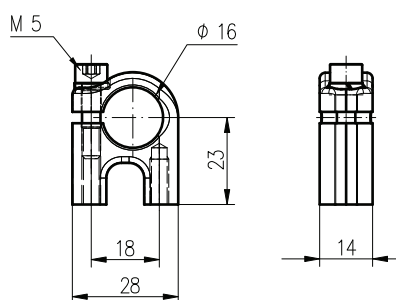
Part No.

GFAR-10

Flange mount



0.024 kg
Material: Aluminium



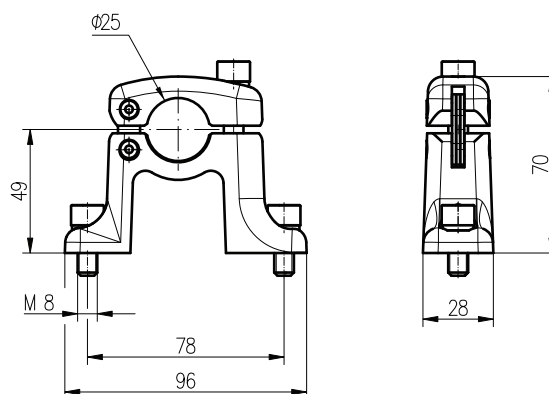
Part No.

GFAR-16

Flange mount



■ 0.22 kg
Material: Aluminium



Part No.

GFAR-Z25

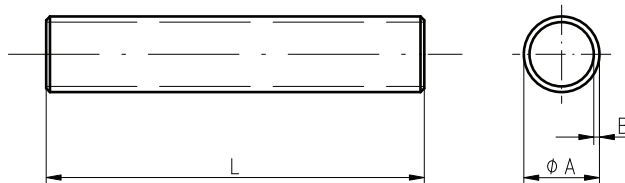


Tubes / Profiles

Aluminium tubing



Material: Aluminium



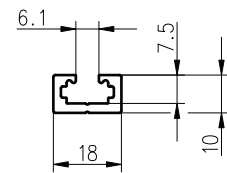
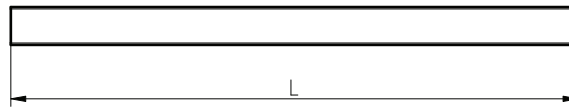
Ordering information			e.g.: PAT-16x3-1000
PAT	-A x B	-L	
	Diameter x wall thickness	Length	
	↓	↓	
	10 x 1.5	150 - 6000 (25 mm increments)	
	16 x 3		
	25 x 4		
	40 x 3		

Part No.	■ kg/m
PAT-10x1.5	0.478
PAT-16x3	0.349
PAT-25x5	0.895
PAT-40x3	1.143

L profile



■ 0.247 kg/m
Material: Aluminium

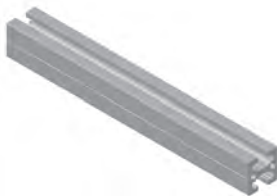


Ordering information

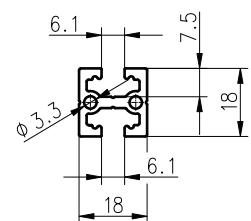
e.g.: L-18-10-500

L-18-10	-L
	Length
	↓
	1 - 2000 (1 mm increments)

L profile



■ 0,375 kg/m
Material: Aluminium



Ordering information

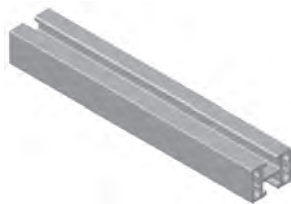
e.g.: L-18-18-500

L-18-18	-L
	Length
	↓
	1 - 2000 (1 mm increments)

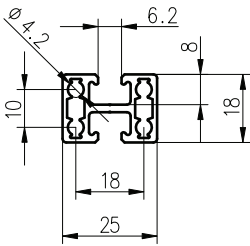


Tubes / Profiles

X profile



0.454 kg/m
 Material: Aluminium

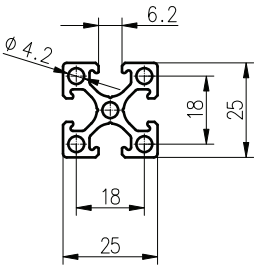
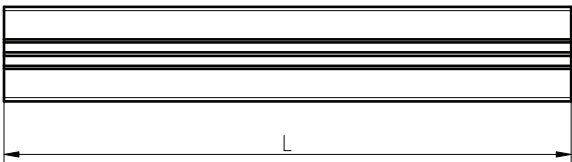


Ordering information		e.g.: X-25-18-500
X-25-18	-L	
	Length	
	↓	
	1 - 2000 (1 mm increments)	

X profile



0.620 kg/m
 Material: Aluminium

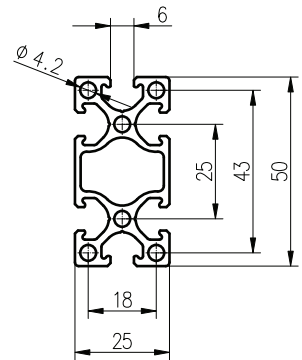


Ordering information		e.g.: X-25-25-500
X-25-25	-L	
	Length	
	↓	
	1 - 2000 (1 mm increments)	

X profile



■ 1.026 kg/m
Material: Aluminium



Ordering information

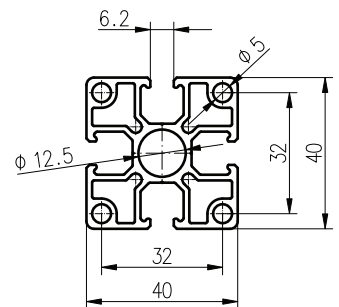
e.g.: X-50-25-500

X-50-25	-L
	Length
	↓
	1 - 2000 (1 mm increments)

JU profile



■ 1.339 kg/m
Material: Aluminium



Ordering information

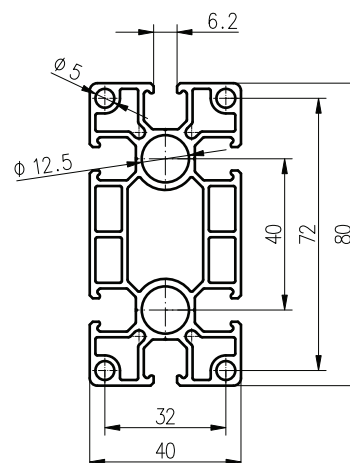
e.g.: JU-40-40-500

JU-40-40	-L
	Length
	↓
	1 - 2000 (1 mm increments)

JU profile



 2.317 kg/m
 Material: Aluminium



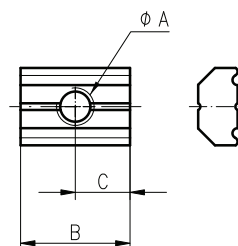
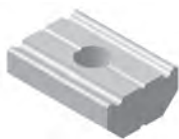
Ordering information

e.g.: JU-80-40-500

JU-80-40	-L
	Length
	↓
	1 - 2000 (1 mm increments)

Slot stones

Slot stone



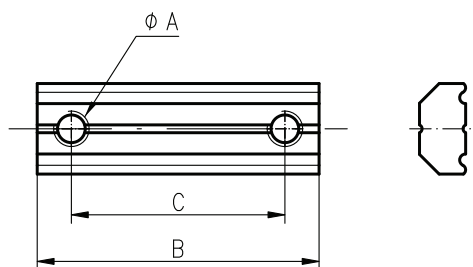
Material: Steel / zinc plated

Part No.	Ø A	B	C	compatible to profile	with spring ball	form closure	■ (kg)
GWP-4-U	M4	15	7.5	L . X. JU	-	x	0.005
GWP-5-U	M5	15	7.5	L . X. JU	-	x	0.005
GWP-6-U	M6	15	7.5	L . X. JU	-	x	0.005
GWP-4-K	M4	22	11	K	x	-	0.011
GWP-5-K	M5	22	11	K	x	-	0.011
GWP-6-K	M6	22	11	K	x	-	0.011
GWP-8-K	M8	22	11	K	x	-	0.010
GWP-5-U	M5	22	7	K	x	x	0.012
GWP-8-U	M6	22	7	K	x	x	0.012
GWP-8-U	M8	22	7	K	x	x	0.012

Slot stone



Material: Steel / zinc plated



Part No.	Ø A	B	C	compatible to profile	■ (kg)
GWP-4-8-U	M4	16	8	L, X, JU	0.005
GWP-4-17-U	M4	25	17	L, X, JU	0.005
GWP-4-25-U	M4	33	25	L, X, JU	0.005
GWP-4-31-U	M4	39	31	L, X, JU	0.011
GWP-5-10-U	M5	20	10	L, X, JU	0.011
GWP-5-15-U	M5	25	15	L, X, JU	0.011
GWP-5-16-U	M5	26	16	L, X, JU	0.010
GWP-5-18-U	M5	28	18	L, X, JU	0.012
GWP-5-20-U	M5	30	20	L, X, JU	0.012
GWP-5-22-U	M5	32	22	L, X, JU	0.012
GWP-5-25-U	M5	35	25	L, X, JU	0.012
GWP-5-28-U	M5	38	28	L, X, JU	0.014
GWP-5-30-U	M5	40	30	L, X, JU	0.014
GWP-5-35-U	M5	45	35	L, X, JU	0.016
GWP-5-38-U	M5	48	38	L, X, JU	0.018
GWP-5-40-U	M5	50	40	L, X, JU	0.014
GWP-5-42-U	M5	52	42	L, X, JU	0.019
GWP-5-45-U	M5	55	45	L, X, JU	0.020
GWP-5-50-U	M5	60	50	L, X, JU	0.022
GWP-5-58-U	M5	68	58	L, X, JU	0.026
GWP-5-60-U	M5	70	60	L, X, JU	0.026
GWP-5-63-U	M5	73	63	L, X, JU	0.027
GWP-5-65-U	M5	75	65	L, X, JU	0.028
GWP-5-70-U	M5	80	70	L, X, JU	0.029
GWP-5-80-U	M5	90	80	L, X, JU	0.033
GWP-5-90-U	M5	100	90	L, X, JU	0.037

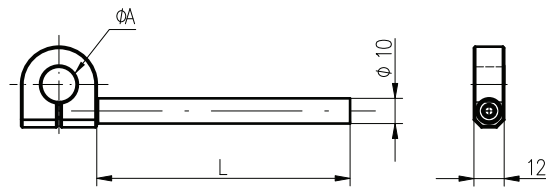
Part No.	Ø A	B	C	compatible to profile	■ (kg)
GWP-5-100-U	M5	110	100	L, X, JU	0.042
GWP-6-10-U	M6	22	10	L, X, JU	0.006
GWP-6-15-U	M6	27	15	L, X, JU	0.008
GWP-6-20-U	M6	32	20	L, X, JU	0.010
GWP-6-25-U	M6	37	25	L, X, JU	0.011
GWP-6-30-U	M6	42	30	L, X, JU	0.013
GWP-6-35-U	M6	47	35	L, X, JU	0.015
GWP-6-40-U	M6	52	40	L, X, JU	0.017
GWP-6-45-U	M6	57	45	L, X, JU	0.019
GWP-6-50-U	M6	62	50	L, X, JU	0.021
GWP-6-51-U	M6	60	51	L, X, JU	0.022
GWP-6-60-U	M6	72	60	L, X, JU	0.025
GWP-6-70-U	M6	82	70	L, X, JU	0.029
GWP-6-80-U	M6	92	82	L, X, JU	0.033
GWP-6-90-U	M6	102	90	L, X, JU	0.036
GWP-6-91-U	M6	100	91	L, X, JU	0.038
GWP-6-100-U	M6	112	100	L, X, JU	0.040
GWP-5-10-K	M5	20	10	K	0.009
GWP-6-15-K	M6	27	15	K	0.012
GWP-6-20-K	M6	32	20	K	0.015
GWP-6-25-K	M6	37	25	K	0.017
GWP-6-30-K	M6	42	30	K	0.020
GWP-6-40-K	M6	52	40	K	0.025
GWP-6-50-K	M6	62	50	K	0.030
GWP-6-90-K	M6	102	90	K	0.051
GWP-8-30-K	M8	46	30	K	0.020
GWP-8-40-K	M8	56	40	K	0.026
GWP-8-100-K	M8	116	100	K	0.057

Extensions

Extension with end clamp



Material: Aluminium



Ordering information

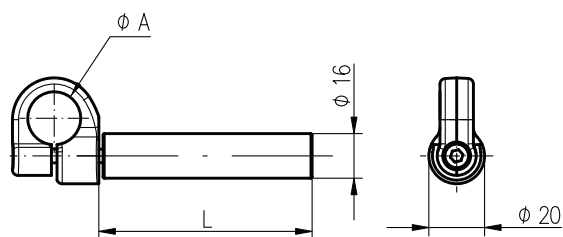
e.g.: ES10-10-100

ES10	-A	-L
	Diameter	Length
	↓	↓
	10	12
	14	25 - 175 (25mm increments)
	16	Other lengths upon request

Extension with end clamp



Material: Aluminium



Ordering Information

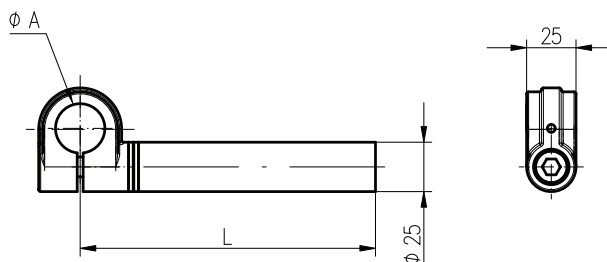
e.g.: ES16-20-100

ES16	-A	-L
	Diameter	Length
	↓	↓
	14	50 - 350 (50 mm increments)
	16	Other lengths upon request
	20	
	25	

Extension with end clamp



Material: Aluminium

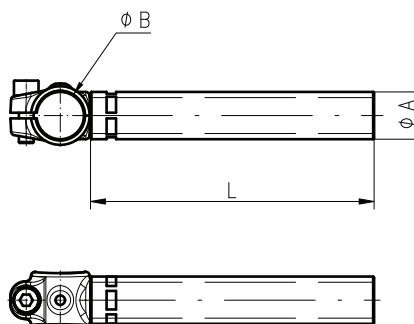


Ordering information			e.g.: ES25-25-200
ES25	-A	-L	
	Diameter	Length	
	↓	↓	
	25	200	
	40	400	
		600	
Other lengths upon request			

Extension with end clamp



Material: Aluminium

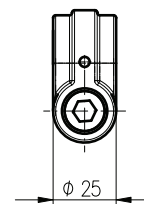
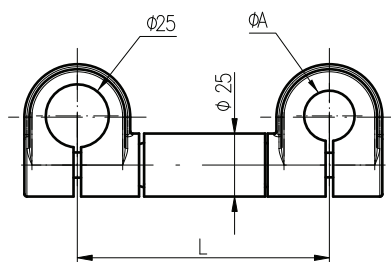


Ordering information			e.g.: ESA-90-20-20-200
ESA-90	-A-B	-L	
	Diameter	Length	
	↓	↓	
	20-20	200	
	25-25	400	
	30-30	600	
Other lengths upon request			

Swivel arm with through bolt



Material: Aluminium



Ordering information

e.g.: SA25-25-20-200

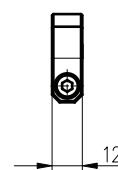
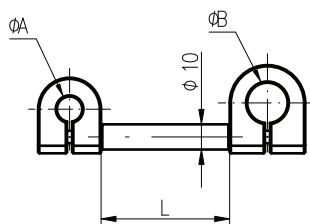
SA25-25	-A	-L
	Diameter	Length
	↓	↓
	19	200
	20	400
	25	600

Other lengths upon request

Swivel arm threaded at both ends



Material: Aluminium



Ordering information

e.g.: ED10-10-16-100

ED10-10	-A	-L
	Diameter	Length
	↓	↓
	10	12
	14	25 - 175 (25mm increments)
	16	Other lengths upon request

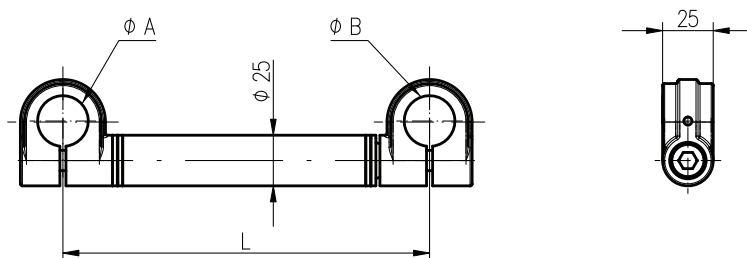


Extensions

Swivel arm threaded at both ends



Material: Aluminium



Ordering information

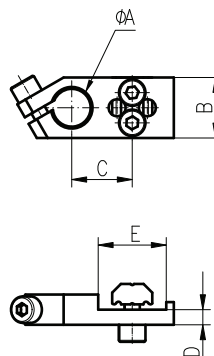
e.g.: ED25-25-25-200

ED25	-A-B	-L
	Diameter	Length
	↓	↓
	25-19	50 - 400 (25mm increments)
	25-20	Other lengths upon request
	25-25	
	40-19	
	40-20	
	40-25	
	40-40	

Angle-type clamping piece



Material: Aluminium

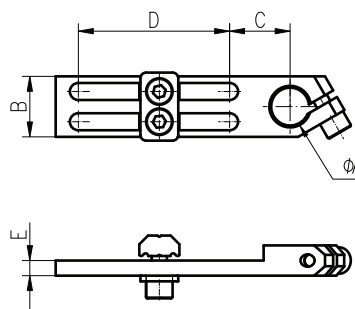


Part No.	Ø A	B	C	D	E	■ (kg)
WST-L-10-U	10	16	16	4	18	0.018
WST-L-14-U	14	20	18	6	18	0.026
WST-X-10-U	10	16	19.5	4	25	0.019
WST-X-14-U	14	20	21.5	6	25	0.033
WST-X-20-U	20	25	17.5-32.5	6	25	0.040
WST-X-30-U	30	35	22.5-37.5	10	25	0.076
WST-JU-20-U	20	25	32	7.5	40	0.061
WST-JU-30-U	30	40	27.47	10	40	0.117
WST-K-20-U	20	25	32.5	7.5	40	0.064
WST-K-30-U	30	40	27-47	10	40	0.121

Angle-type clamping piece



Material: Aluminium

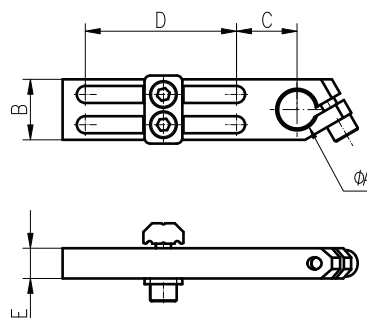


Part No.	Ø A	B	C	D	E	■ (kg)
WSL-L-10-40-U	10	16	16	40	4	0.022
WSL-L-14-40-U	14	20	18	40	5	0.031
WSL-X-14-50-U	14	20	21	50	6	0.042
WSL-X-20-60-U	20	25	24	60	6	0.053
WSL-X-30-60-U	30	35	30	60	10	0.115
WSL-JU-20-70-U	20	30	31	70	7.5	0.096
WSL-JU-30-70-U	30	35	30	70	10	0.133

Angle-type clamping piece



Material: Aluminium

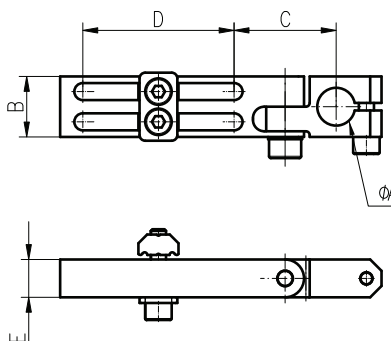


Part No.	Ø A	B	C	D	E	■ (kg)
WSL-L-X-10-40-VU	10	16	16	40	8	0.028
WSL-X-14-50-VU	14	20	21	50	12	0.057
WSL-X-20-60-VU	20	25	24	60	15	0.091
WSL-K-14-50-VU	14	20	21	50	12	0.060
WSL-K-20-70-VU	20	30	32	70	15	0.154
WSL-X-30-60-VU	30	35	30	60	20	0.177
WSL-JU-20-70-VU	20	30	31	70	15	0.144
WSL-K-30-70-VU	30	40	27	70	20	0.249
WSL-JU-30-70-VU	30	35	30	70	20	0.199

Angle-type clamping piece



Material: Aluminium

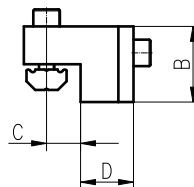
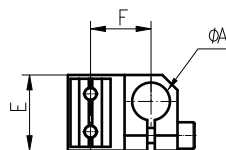


Part n o.	Ø A	B	C	D	E	swivel range [°]	■ (kg)
WSL-GA-X-10	10	16	27	40	10	+/-90	0.039
WSL-GA-X-14	14	20	32.5	50	12	+/-90	0.069
WSL-GA-X-20	20	25	38.5	60	15	+/-90	0.116
WSL-GA-JU-30	30	35	52	82	20	+/-90	0.264

Clamp adapter



Material: Aluminium

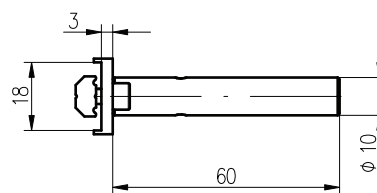
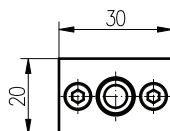


Part No.	Ø A	B	C	D	E	F	■ (kg)
WSW-X-10	10	25	12.5	14	25	19.5	0.036
WSW-L-10	10	20	9	14	20	16	0.029
WSW-X-14	14	25	12.5	18	25	12.5	0.050
WSW-X-20	20	30	12.5	25	32	24	0.072
WSW-JU-20	20	40	20	26	35	33	0.115
WSW-JU-30	30	45	20	38	45	39	0.181
WSW-K-20	20	40	20	25	35	32.5	0.124
WSW-K-30	30	45	20	38	45	39	0.190

Turning clamp adapter



Material: Aluminium



Part No.	Ø A	B	Size B form closure to profile	C	■ (kg)
DKS-L-10-60	10	18	L 18-10 oder L18-18	60	0.028
DKS-X-14-80	14	25	X 25-25 oder X 50-25	80	0.050
DKS-X-20-50	20	25	X 25-25 oder X 50-25	50	0.059
DKS-X-20-100	20	25	X 25-25 oder X 50-25	100	0.078

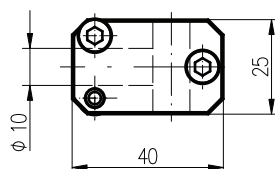
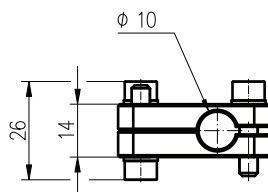
Clamp adapter, T-version, split type



0.038 kg
Material: Aluminium

Part No.

TKR-10-10



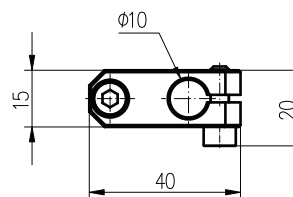
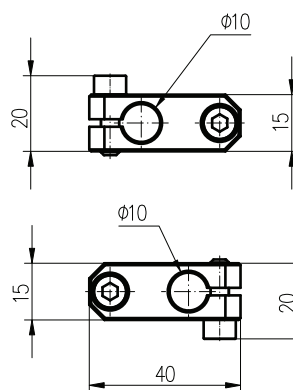
Cross clamp



0.023 kg
Material: Aluminium

Part No.

KK-10-10

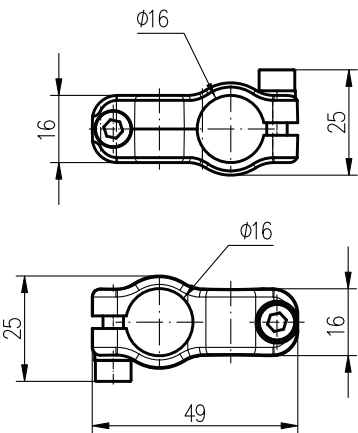


Cross clamp



■ 0.026 kg
Material: Aluminium

Part No.
KK-16-16

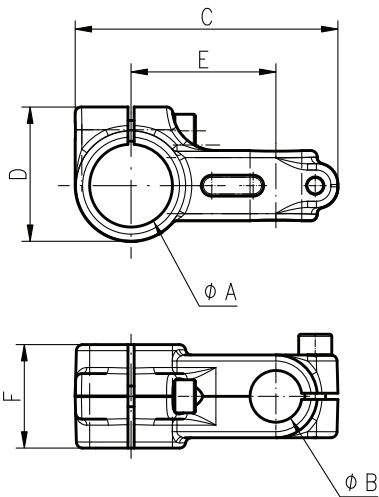


Cross clamp



Material: Aluminium

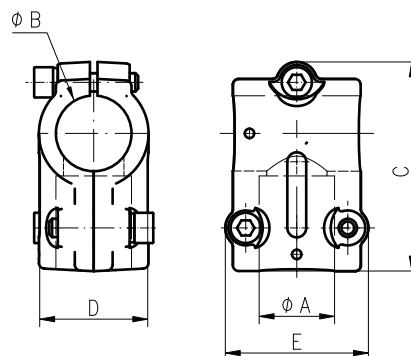
Part No.	Ø A	Ø B	C	D	E	F	■ (kg)
KK-25-25	25	25	87	52	35	40	0.227
KK-40-25	40	25	127	65	70	50	0.407
KK-40-40	40	40	133	63	70	50	0.30



Clamp collar, T-version, split type



Material: Aluminium



Part No.	Ø A	Ø B	C	D	E	■ (kg)
TKR-10-10	10	10	40	29.2	25.0	0.027
TKR-16-16	16	16	47	23.0	35.0	0.047
TKR-40-25	40	25	103	56.0	76.0	0.46
TKR-40-40	40	40	111	58.0	76.0	0.56

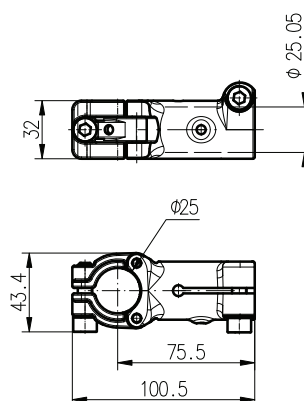
Clamp collar, T-version



■ 0.175 kg

Material: Aluminium

Part No.
TKA-25-2Z25

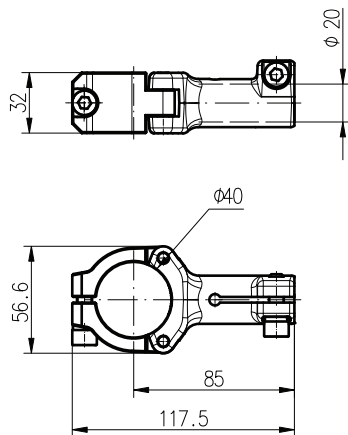


Clamp collar, T-version



■ 0.213 kg
Material: Aluminium

Part No.
TKA-20-2Z40

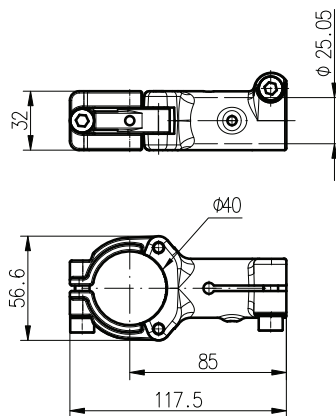


Clamp collar, T-version



■ 0.215 kg
Material: Aluminium

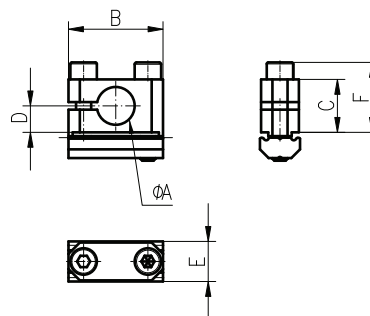
Part No.
TKA-25-2Z40



Cross connector



Material: Aluminium

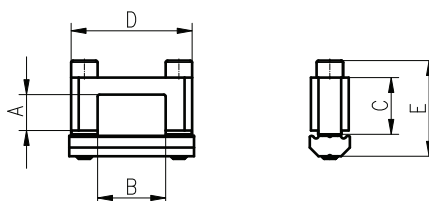


Part No.	Ø A	B	C	D	E	F	■ (kg)
KVB-L+X-10	10	25	14	7	10	18.5	0.020
KVB-X-14	14	32	18	9	12	23.6	0.032
KVB-K-14	14	40	28.5	12.5	20	35.2	0.086
KVB-X-20	20	38	27	12.5	15	32.6	0.052
KVB-K-20	20	40	28.5	12.5	20	35.2	0.061
KVB-JU-20	20	40	28.5	12.5	20	35.2	0.071
KVB-X-30	30	50	37	17	15	41.2	0.072
KVB-K-30	30	52	34.5	17	20	41.2	0.095
KVB-JU-30	30	50	34	17	20	41.2	0.087

Cross connector



Material: Aluminium

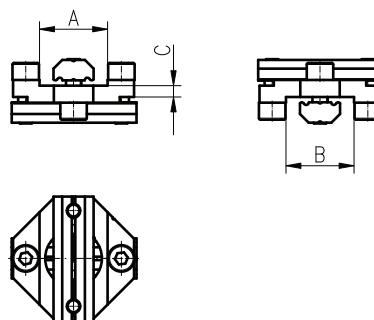


Part No.	A	B	C	D	E	■ (kg)
KBV-L-10-18	9.5	18	15	32	25	0.024
KBV-L-18-18	17.5	18	23	32	33	0.027
KBV-X-10-25	9.5	25	15	45	27	0.035
KBV-X-18-25	17.5	25	23	45	35	0.041
KBV-X-25-25	24.5	25	30	45	41	0.045
KBV-X-50-25	49.5	25	55	45	65	0.064
KBV-X-25-50	24.5	50	30	70	40	0.061
KBV-K-40-40	39.5	40	48.5	60	61	0.094
KBV-K-40-80	39.5	80	50	100	61	0.133
KBV-JU-40-40	39.5	40	50	60	60	0.090
KBV-JU-40-80	39.5	80	50	100	60	0.119
KBV-K-80-40	79.5	40	90	60	106	0.137
KBV-JU-80-40	79.5	40	90	60	104	0.126

Cross connector



Material: Aluminium

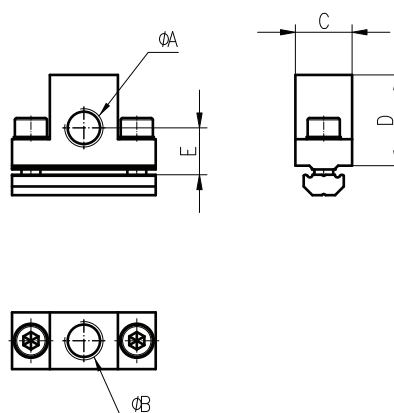


Part No.	A	B	C	■ (kg)
KPL-L-18-18	18	18	3	0.038
KPL-X-25-L18	25	18	4	0.063
KPL-X-25-25	25	25	4	0.061
KPL-X-50-25	50	25	4	0.099
KPL-X-50-50	50	50	4	0.180
KPL-JU40-X25	40	25	4	0.117
KPL-K-40-40	40	40	4	0.130
KPL-JU-40-40	40	40	4	0.110
KPL-JU80-X25	80	25	4	0.163
KPL-K-80-80	80	40	4	0.219
KPL-JU-80-40	80	40	4	0.184
KPL-K-80-80	80	80	4	0.352
KPL-JU-80-80	80	80	4	0.299
KPL-JU80-X50	80	50	4	0.229
KPL-JU40-X50	40	50	4	0.151

Cup mount adapter



Material: Aluminium

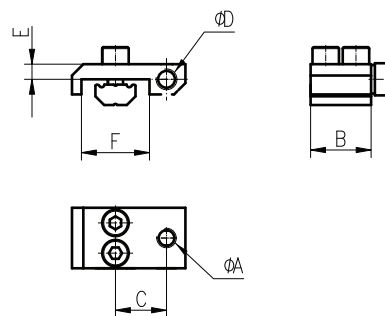


Part No.	Ø A	Ø B	C	D	E	■ (kg)
SAS-X-18-18	G1/8	G1/8	15	24	12	0.040
SAS-X-14-18	G1/4	G1/8	15	24	10	0.038

Angle clamp



Material: Aluminium

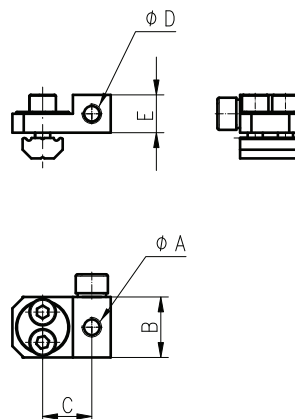


Part No.	Ø A	B	C	Ø D	E	F	■ (kg)
WSS-L-M5-M5	M5	16	13.5	M5	4	18	0.017
WSS-X-18-18	G1/8	25	21.5	G1/8	7.5	25	0.041
WSS-X-14-18	G1/4	25	21.5	G1/8	7.5	25	0.042
WSS-JU-14-18	G1/4	30	30	G1/8	10	40	0.083

Angle clamp



Material: Aluminium

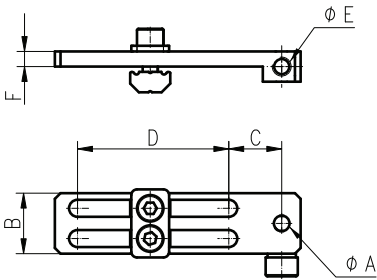


Part No.	Ø A	B	C	Ø D	E	■ (kg)
WSD-L-M5-M5	M5	16	13	M5	10	0.018
WSD-X-18-18	G1/8	25	21	G1/8	15	0.039
WSD-X-14-18	G1/8	25	21	G1/8	15	0.039

Angle clamp

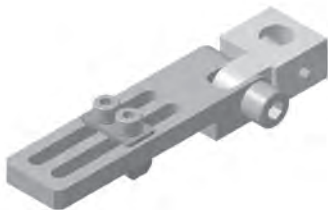


Material: Aluminium

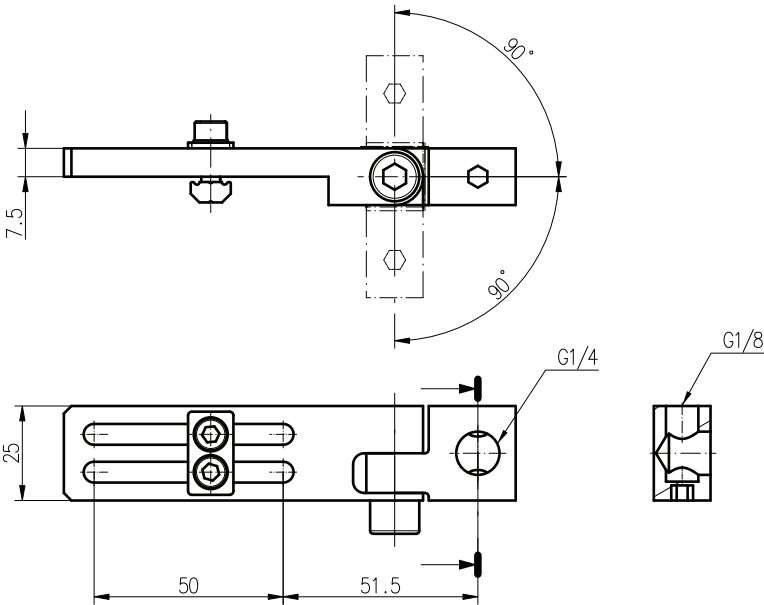


Part No.	Ø A	B	C	D	Ø E	F	■ (kg)
WLS-L-M5-M5-40	M5	16	14	40	M5	4	0.021
WLS-X-18-18-50	G1/8	25	21	50	G1/8	7.5	0.056
WLS-X-14-18-50	G1/4	25	21	50	G1/8	7.5	0.055
WLS-JU-14-18-60	G1/4	30	24	60	G1/8	10	0.103

Angle clamp



■ 0.080 kg
Material: Aluminium



Part No.
WLS-GA-X-14-18-50



Connectors

Elbow 45°

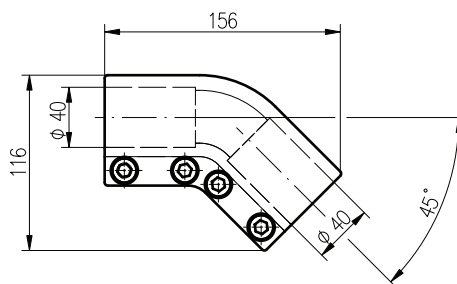


0.817 kg

Material: Aluminium

Part No.

DC-4040-45



Elbow 90°

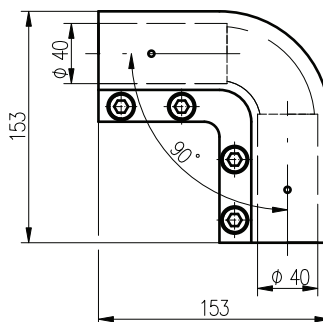


1.102 kg

Material: Aluminium

Part No.

DC-4040-90



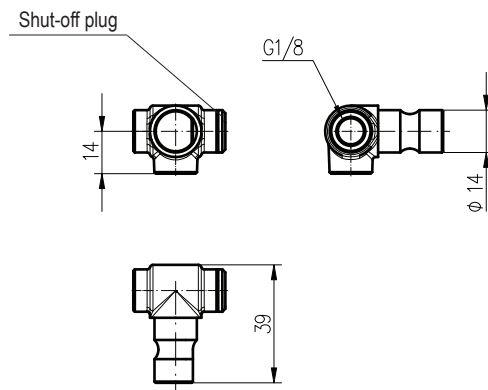
Port only adapter

Port only adapter



0.03 kg
 Material: Aluminium

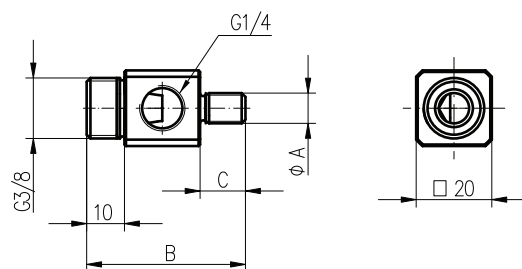
Part no.	Shut-off plug
PA-16-G1/8	VS-1/8-I6KT



Port only adapter



Material: Aluminium



Part No.	Ø A	B	C	(kg)
PA-G3/8-G1/4-M6	M6	42	20	0.07
PA-G3/8-G1/4-M8	M8	50	12	0.07

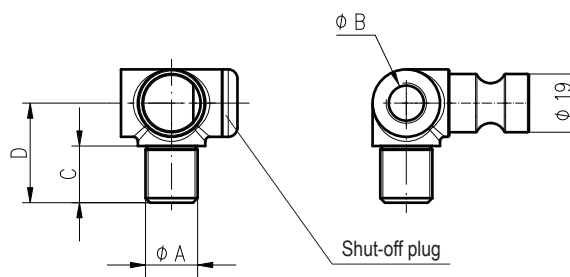


Port only adapter

Port only adapter



Material: Aluminium



Part no.	Ø A	Ø B	C	D	■ (kg)	Shut-off plug
PA-19-LR-G3/8	G 3/8	G 1/4	18.5	32.0	0.06	VS-1/4-I6KT
PA-19-LR-G1/4	G 1/4	G 1/4	15.0	28.5	0.06	VS-1/4-I6KT

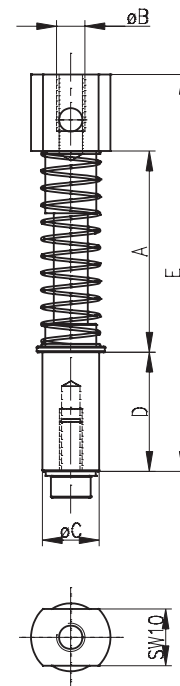
Port only adapter

Spring cup mount



Material: Aluminium

Part No.	Ø A	Ø B	Ø C	D	E
KRCM-13-M5-10	13	M5	M5	20	60
KRCM-23-M5-10	23	M5	M5	20	70
KRCM-16-G1/8-16	18	G1/8	G1/8	30	63
KRCM-36-G1/8-16	36	G1/8	G1/8	30	83
KRCM-16-G1/8-20	16	G1/8	G1/8	30	63
KRCM-36-G1/8-20	36	G1/8	G1/8	30	83



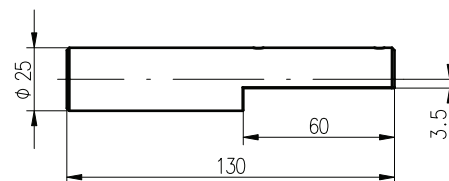
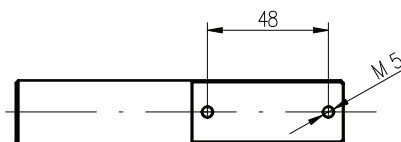
Holder for compact guide cylinder



0.15 kg

Material: Aluminium

Part No.
SBK-PAB-25-130



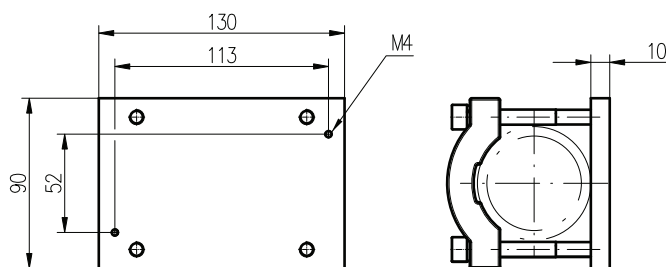
Mounting plate for E-distributor



■ 0.33 kg
Material: Aluminium

Part no.

PL-130-60



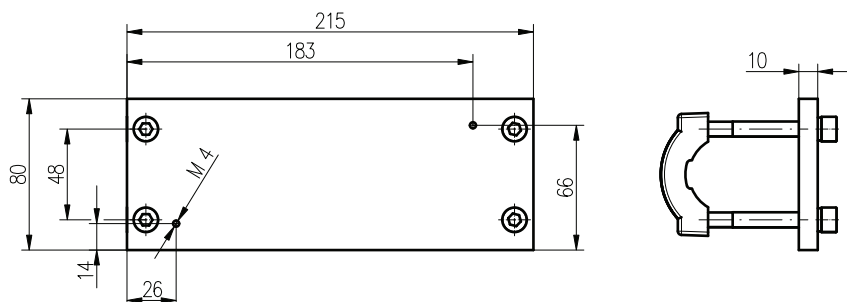
Mounting plate for E-distributor



■ 0.67 kg
Material: Aluminium

Part no.

PL-215-40

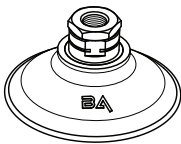
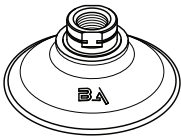
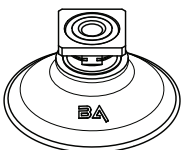
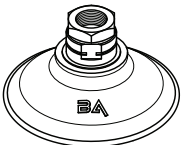
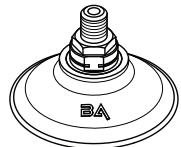
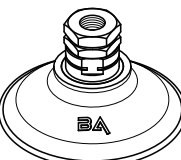
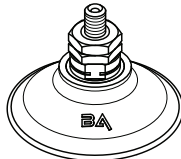
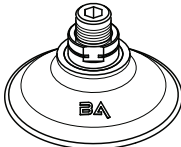
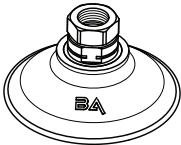


Vacuum cups

Vacuum cup type	Applications	Characteristics	Durometers
Bell suction cup, round TYP PFG  Page 51	For flat to convex surfaces, edges and limited 3D geometry. Aluminium and steel panels as well as outer parts with solid lubricant and oil. Optimal for panel loader. Plastic handling to 100 degrees. Combines holding forces of flat foot cups with the advantages of traction cups (increased stroke compared to PF cups).	Extremely wear resistant material TPU. Due to geometry of interior ribs very high adhesion power resisting transverse forces. No surface damage on thin panels.	Shore 30 (green) Shore 55 (yellow))
Bell suction cup, oval TYP PFG  Page 52	For flat to convex surfaces, edges and limited 3D geometry. Aluminium and steel panels as well as outer parts with solid lubricant and oil. Optimal for handling of smaller parts. Plastic handling to 100 degrees. Combines holding forces of flat foot cups with the advantages of traction cups (increased stroke compared to PF cups).	Extremely wear resistant material TPU. Due to geometry of interior ribs very high adhesion power resisting transverse forces. No surface damage on thin panels.	Shore 30 (green) Shore 55 (yellow))
Traction cup, oval TYP HT  Page 53	General light-duty operating conditions for parts with polished or painted surfaces. Oval shape for good suction power at small width of the parts.	Due to its flexible design the contact surface of the cup will fit to parts with uneven, considerable contour. The belcup offers flexibility even under conditions of high acceleration, deceleration and rotations at high speed. Polished and painted surfaces can be used as working surfaces without damaging. No damaging of sensitive surfaces because of a unequal high contours soft seal.	Shore 30 (green) Shore 55 (yellow))



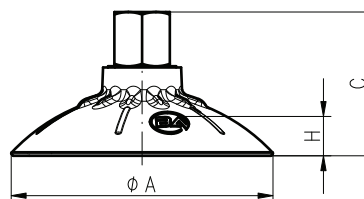
Vacuum cups

Connection Characterization		Mount
	G 1/4" internal thread	A
	G 3/8" internal thread	B
	C-Mount	C
	G 3/8" internal thread with SW22 jam nut with SW22 (height = 6mm)	F
	M10 male thread with SW22	K
	G 1/4" internal thread with SW22 jam nut with SW22 (height = 6mm)	G
	M10 male thread with SW22 jam nut with SW22 (height = 6mm)	N
	G 3/8" male thread with SW22 and plastic insert	P
	G 3/8" internal thread with SW22 jam nut with SW22 (height = 9mm)	X

Vacuum cups



Bell suction cup, round



Part No.	Ø A	Ø A max.	C	H	Vol. cm ³	convex	■ (kg)
30PFG	33.78	35.9	35.0	4.34	3.2	17	0.07
40PFG	43.11	47.4	37.6	6.65	7.0	25	0.11
50PFG	53.5	58.7	42.8	8.04	14.1	26	0.16
60PFG	62.74	68.4	45.3	9.62	23.8	31	0.24
80PFG	84.0	92.03	48.0	13.3	50.4	35	0.51
100PFG	105.0	111.4	57.2	15.6	93.9	45	0.77

Amax. = Diameter in vacuum position
 Vol. = Volume in ccm air
 convex. = Minimum bending radius
 H = travel

Size in B-Mount

Technical data

Holding forces	vertical stroke at a vacuum of			lateral forces parallel at a vacuum of		
Part No.	-50kPa	-70kPa	-90kPa	-50kPa	-70kPa	-90kPa
30PFG	45	55	60	35	45	51
40PFG	45	74	81	49	70	79
50PFG	91	119	129	89	119	127
60PFG	140	172	184	148	165	179
80PFG	219	291	307	220	291	301
100PFG	309	429	439	341	421	430

measured holding forces on oiled, zinc-plated steel plate; Measurements in N

Depending on temperature and part surface as well as other parameter the real values can diversify.

Ordering information			e.g.: 60PFG-B-80
Size	Mount*	Hardness in Shore	
↓	↓	↓	
30PFG	A	80 (yellow)	
40PFG	B		
50PFG	C		
60PFG	F		
80PFG	K		
100PFG	P		
	X		

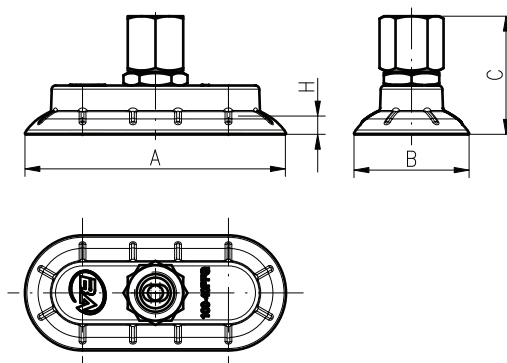
*See page 50 for vacuum cup mounts

Material	NBR (Nitrilkautschuk)
max. allowable temperature	-25 up to +100°
Shore hardness	80°
Stability	Ozone, draw and absorption oils, UVB-light, gas, ethanol
Capacities	silicone-free



Vacuum cups

Bell suction cup, oval



Part No.	AxB	AxB max.	C	H	■ (kg)
60-20PFG	64 x 22	66 x 24	38.5	4.6	0.029
80-30PFG	84 x 34	86 x 36	39.1	5.7	0.039
100-40PFG	104 x 44	107 x 46	45.7	7.3	0.062

AxBmax. = diameter in vacuum position

Technical data

Holding force	vertical stroke at a vacuum of			lateral forces parallel at a vacuum of		
Part No.	-50kPa	-70kPa	-90kPa	-50kPa	-70kPa	-90kPa
60-20PFG	70	95	115	35	50	75
80-30PFG	125	170	190	75	80	95
100-40PFG	220	285	350	120	135	160

measured holding forces on oiled, zinc-plated steel plate; Measurements in N, longitudinal to the tensile direction

Ordering information			e.g.: 60-20PFG-B-80
Size	Mount	Hardness in shore	
↓	↓	↓	
60-20PFG	A	80 (yellow)	
80-30PFG	B		
100-40PFG	C		
	F		
	K		
	P		
	X		

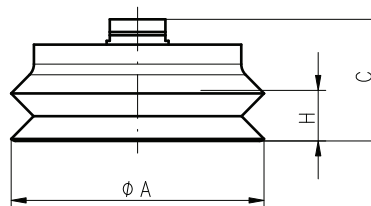
See page 50 for vacuum cup mounts

Material	TPU
max. allowable temperature	-30 up to +100°
Shore hardness	80°
Stability	Ozone, draw and absorption oil, UVB-light, gas, ethanol
Capacities	silicone-free

Vacuum cups



Belcup, round



Part No.	Ø A	Ø A max.	C	H	Vol.	convex	■ (kg)
30BT	30.5	31.0	40.0	11.0	5.114	12	0.01
40BT	41.5	41.7	36.0	9.2	13.4	20	0.038
50BT	53.0	56.2	48.5	18.3	29.66	25	0.061
75BT	75.0	77.0	48.5	18.3	72.24	50	0.093
100BT	100.0	101.0	48.0	18.5	143.5	65	0.16
125BT	124.0	126.1	48.0	16.7	230.8	150	0.254

Amax. = Diameter in vacuum position

Vol. = Volume in ccm air

CONVEX. = Minimum bending radius

H = travel

Technical data

Holding force	vertical stroke at a vacuum of			lateral forces parallel at a vacuum of		
Part No.	-50kPa	-70kPa	-90kPa	-50kPa	-70kPa	-90kPa
30BT	14	20	44	12	23	28
40BT	55	75	90	35	40	50
50BT	90	120	150	50	60	65
75BT	170	220	270	80	90	95
100BT	320	400	470	105	125	145
125BT	470	595	715	145	165	200

measured holding forces on oiled, zinc-plated steel plate; Measurements in N

Ordering information			e.g.: 75BT-B-30
Size	Mount	Hardness in shore	
↓	↓	↓	
30BT	A	30 (green)	
40BT	B	55 (yellow)	
50BT	C		
75BT	F		
100BT	K		
125BT	P		
	X		

See page 50 for vacuum cup mounts

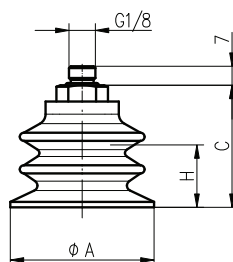
Material	NBR (Nitrilkautschuk)
max. allowable temperature	-25 up to +100°
Shore hardness	55°
Stability	Ozone, draw and absorption oil, UVB-light, gas, ethanol

Material	NBR (Nitrilkautschuk)
max. allowable temperature	-25 up to +100°
Shore hardness	30°
Stability	Ozone, draw and absorption oil, UVB-light, gas, ethanol



Vacuum cups

Suction cup, round



Part No.	Ø A	B	C	H	Vol. cm ³	convex	■ (kg)
BX20P	21	7	20.2	7.5	1.16	10	0.002
BX25P	26	7	24.0	8.5	3	6	0.003
BX35P	37	6	32.8	14.0	10	10	0.008
BX52P	53	7	45.0	19	30	32	0.024
BX75P	77.5	8.4	51.7	26	80	23	0.071

Vol. = Volume in ccm air
convex. = Minimum bending radius
H = travel

Technical data

Holding forces	vertical stroke at a vacuum of			lateral forces parallel at a vacuum of		
	-20kPa	-60kPa	-90kPa	-20kPa	-60kPa	-90kPa
Part No.						
BX20P	4.5	7	9,5	-	-	-
BX25P	8	13	17	5	10	12
BX35P	12	20	28	11	19	26
BX52P	32	56	75	25	44	54
BX75P	62	110	141	39	83	116

Material	Polyurethane (PU30)	Polyurethane (PU60)
Colour	yellow	green transparent
max. allowable temperature	10 - 50°C	
Shore hardness	30°	
Stability	Concentrated acids, Ethanol, Hydrolysis, Oil, Petrol, Wear resistance, Weather and ozone	

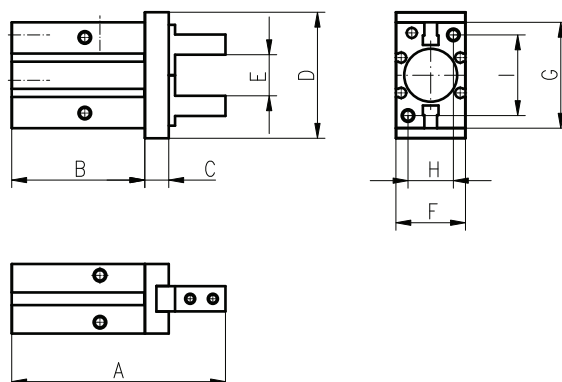
Pneumatic clamps



Pneumatic parallel clamp



Material: Aluminium

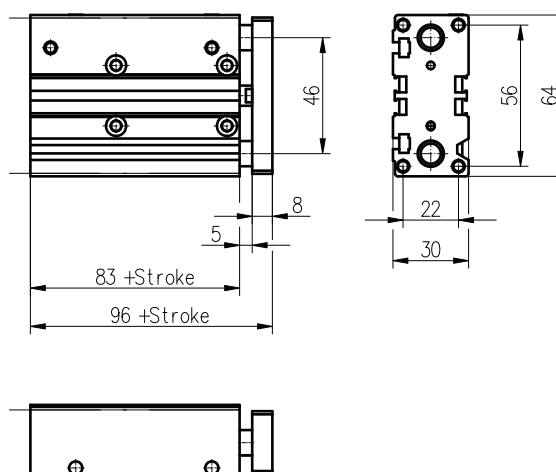


Part No.	A	B	C	D	E	F	G	H	I	■ (kg)
MHZ2-10	57.0	37.8	6.0	29	15.2	16.4	23.0	12	18	0.055
MHZ2-16	67.3	42.5	7.5	38	20.9	23.6	30.6	15	22	0.115
MHZ2-20	84.8	52.8	9.5	50	26.3	27.6	42.0	18	32	0.235
MHZ2-32	113.0	67.0	12.0	97	48.0	40.0	60.0	26	46	0.715

Compact guide cylinder (SMC)



Material: Aluminium



Part No.	Stroke	■ (kg)
MGPM16-10	10	0.33
MGPM16-20	20	0.38

Pneumatic clamp



PS-10-9-14-82-S

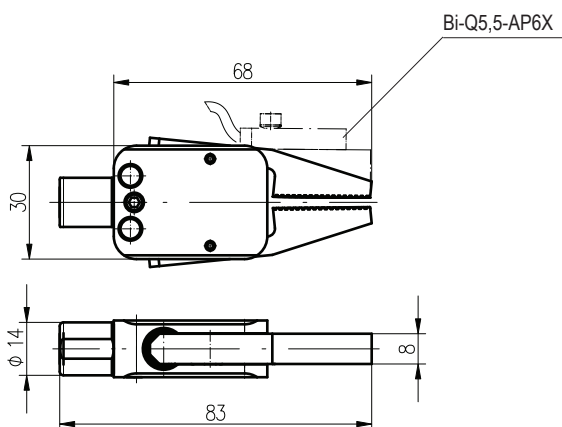


PS-10-9-14-82

Material: Aluminium

Part No.	■ (kg)
PS-10-9-14-82	0.051
PS-10-9-14-82-S	0.071

without air supply - clamp opened



Pneumatic clamp



PS-16-9-20

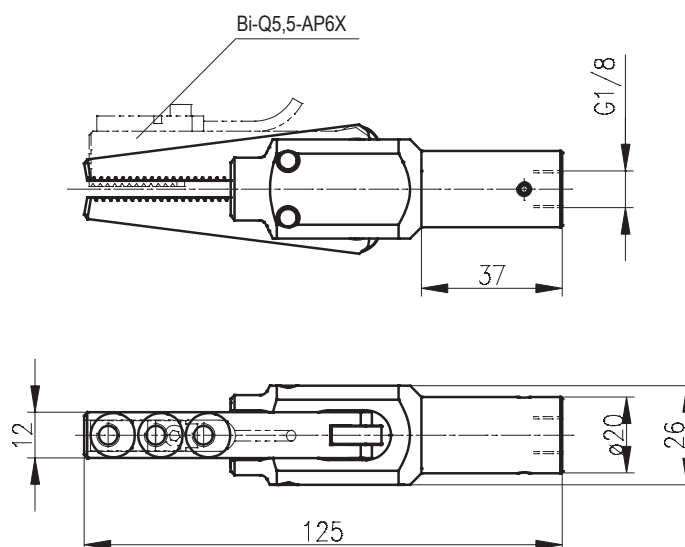


PS-16-9-20-S

Material: Aluminium

Part No.	■ (kg)
PS-16-9-20	0.180
PS-16-9-20-S	0.183

without air supply - clamp opened



Pneumatic clamps

Pneumatic clamp



PS-16-9-20-125

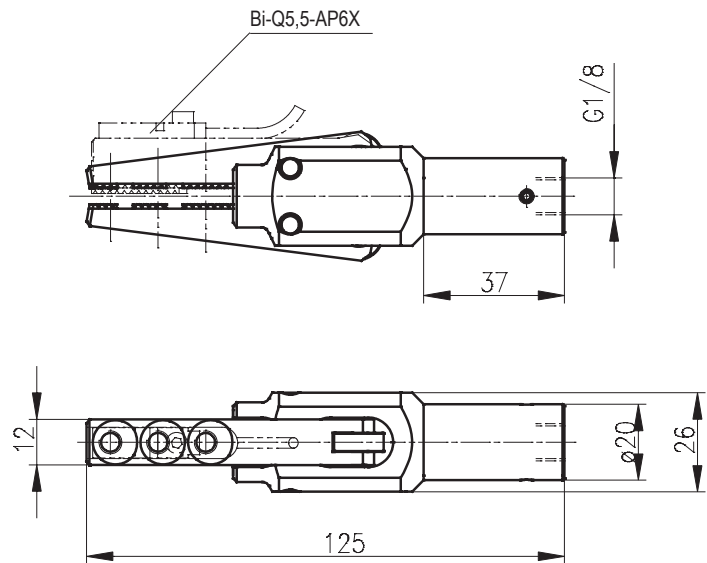


PS-16-9-20-125-S

Material: Aluminium

Part No.	■ (kg)
PS-16-9-20-125	0.180
PS-16-9-20-125-S	0.183

without air supply - clamp opened



Pneumatic clamp



PS-16-9-20-147

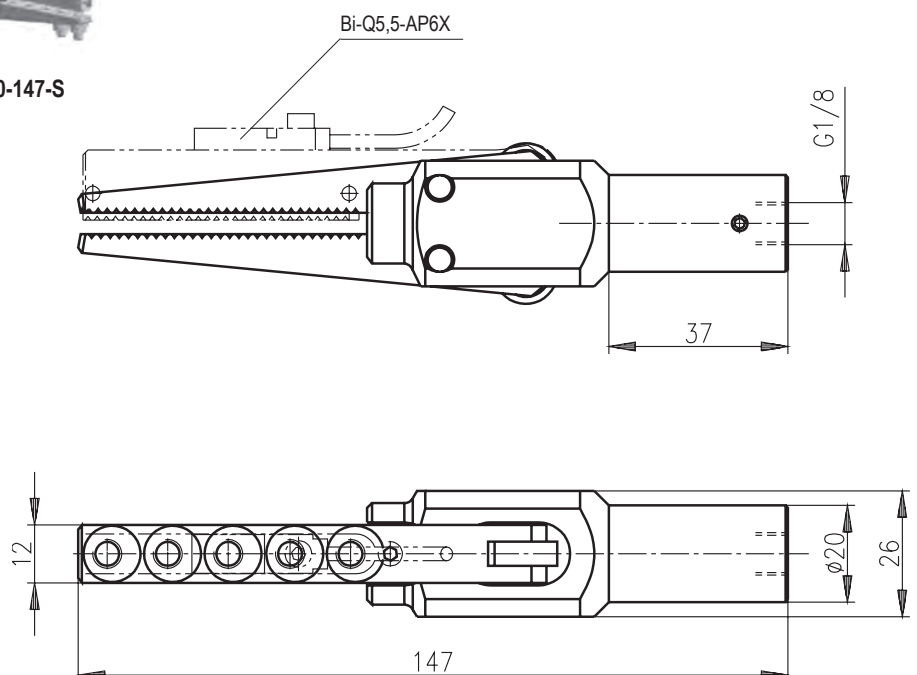


PS-16-9-20-147-S

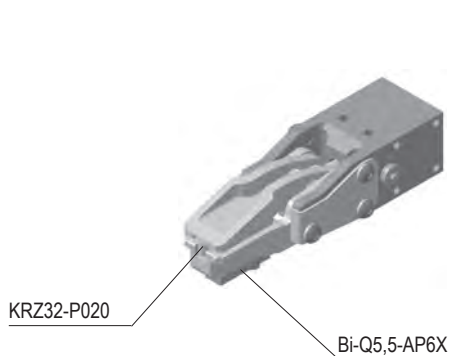
Material: Aluminium

Part No.	■ (kg)
PS-16-9-20-147	0.180
PS-16-9-20-147-S	0.183

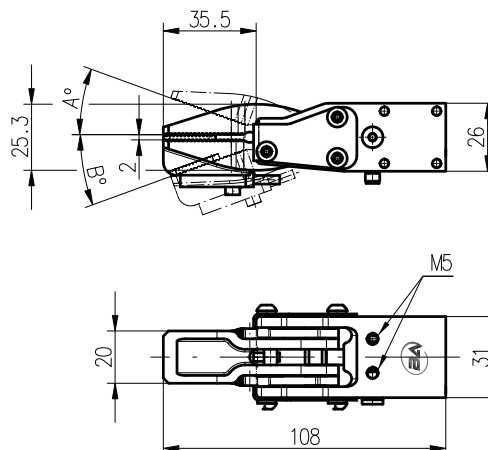
without air supply - clamp opened



Pneumatic clamp, PSB-15-I-02-...-...-RAA1(-S)



Material: Aluminium



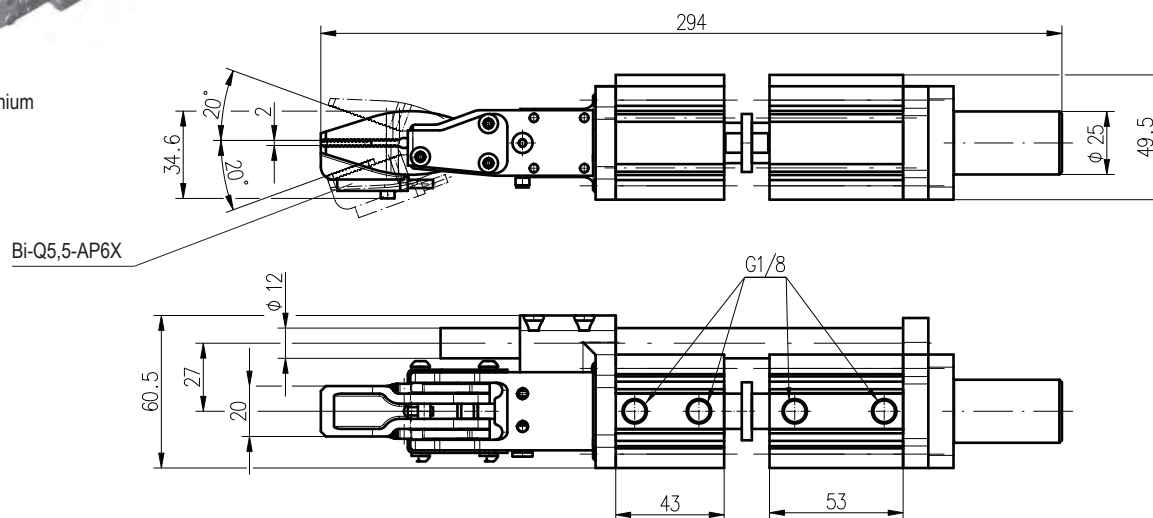
self-locking

Part No.	Aperture angle A°	Aperture angle A°	Option Sensor	■ (kg)
PSB-15-I-02-10-10-RAA1	10	10	-	0.215
PSB-15-I-02-20-20-RAA1	20	20	-	
PSB-15-I-02-20-20-RAA1-S			S	

Pneumatic clamp with double stroke



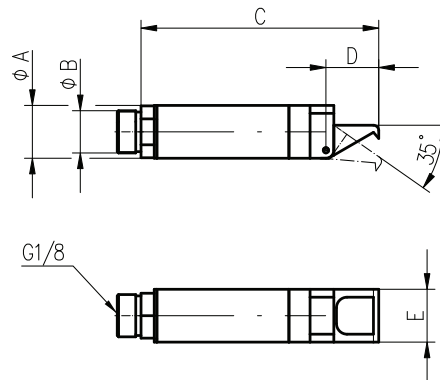
Material: Aluminium



Part No.	■ (kg)
PSB-15-DW-DH1020-25	1.080
PSB-15-DW-DH1020-25-S	1.081

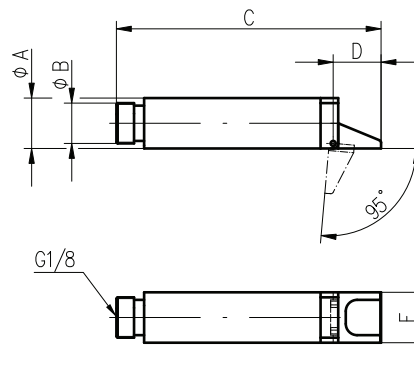
Gripper fingers

Gripper finger 35°



Part No.	Ø A	Ø B	C	D	E	■ (kg)
BA-OFA-20-35	20	M17x1	107	22	20	0.058
BA-OFA-30-35	30	M27x1	154	31	30	0.165

Gripper finger 95°



Part No.	Ø A	Ø B	C	D	E	■ (kg)
BA-OFR-20-95	20	M17x1	94	20	20	0.058
BA-OFR-30-95	30	M27x1	137	29	30	0.195

Cutting pliers

Typ AP



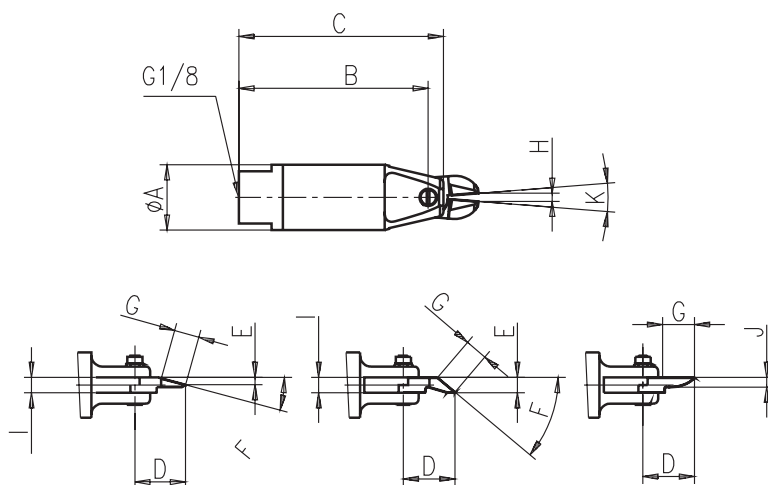
Typ PF



Typ AJ

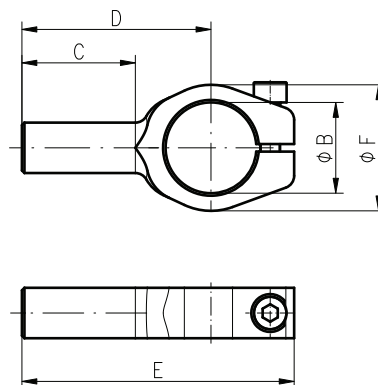


Mat.: Aluminium



Part No.	Ø A	B	C	D	E	F	G	H	I	J	K	■ (kg)
SZ-30-AP	30	87.0	94	24	3.6	15°	11.5	3.7	7	-	9°	0.135
SZ-30-PF	30	87.0	94	24	7.0	40°	9.7	3.7	7	-	9°	0.136
SZ-30-AJ	30	87.0	94	24	-	-	13.0	3.7	7	4.5	9°	0.137
SZ-36-AP	36	106.3	113	35	5.3	15°	16.0	6.3	12	-	10°	0.247
SZ-36-PF	36	106.3	113	35	12.0	40°	13.5	6.3	12	-	10°	0.272
SZ-36-AJ	36	106.3	113	35	-	-	9.0	6.3	12	8	10°	0.269
SZ-45-AP	45	119.8	129	35	3.5	15°	16.0	11.0	12	-	6°	0.384
SZ-45-PF	45	119.8	129	35	12.0	40°	13.5	10.0	12	-	5°	0.383
SZ-45-AJ	45	119.8	129	35	-	-	18.0	10.2	12	8	5°	0.381
SZ-56-AP	56	155.0	165	66	11.0	15°	38.0	14.5	17	-	12°	0.845
SZ-56-PF	56	155.0	165	58	17.0	30°	27.0	14.5	17	-	14°	0.860
SZ-56-AJ	56	155.0	165	52	-	-	30.0	11.0	17	8	12°	0.868
SZ-75-AP	75	169.0	178	66	11.0	15°	38.0	28.6	17	-	25°	1.465
SZ-75-PF	75	169.0	178	58	17.0	30°	27.0	28.6	17	-	26°	1.480
SZ-75-AJ	75	169.0	178	52	-	-	30.0	22.0	17	8	24°	1.488

Adapter for cutting pliers



Part No.	Ø A	B	C	D	E	F	■ (kg)
SZA-20-30-50	20	30	50	75	104.0	50	0.134
SZA-20-36-50	20	36	50	75	108.0	50	0.118
SZA-20-45-50	20	45	50	80	118.0	60	0.142
SZA-20-56-50	20	56	50	90	133.5	75	0.191
SZA-25-75-70	25	75	70	125	180.0	95	0.372



ABOUT BILSING AUTOMATION

Bilsing Automation is a leading supplier of industrial tooling solutions, specializing in automated tooling and material handling systems with over 30 years' experience in automotive stamping and bodyshop applications, as well as developing material handling solutions for injection molding, fabrication, packaging, hydroforming and non-automotive applications. The company is focused on providing optimum product performance that results in cost reductions, supporting the customer through planning, design, engineering, assembly and commissioning. Bilsing Automation also offers 3D digital simulation and on-site training as part of its service offerings.

For more information, contact Bilsing Automation at +492-722-956-30.

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