

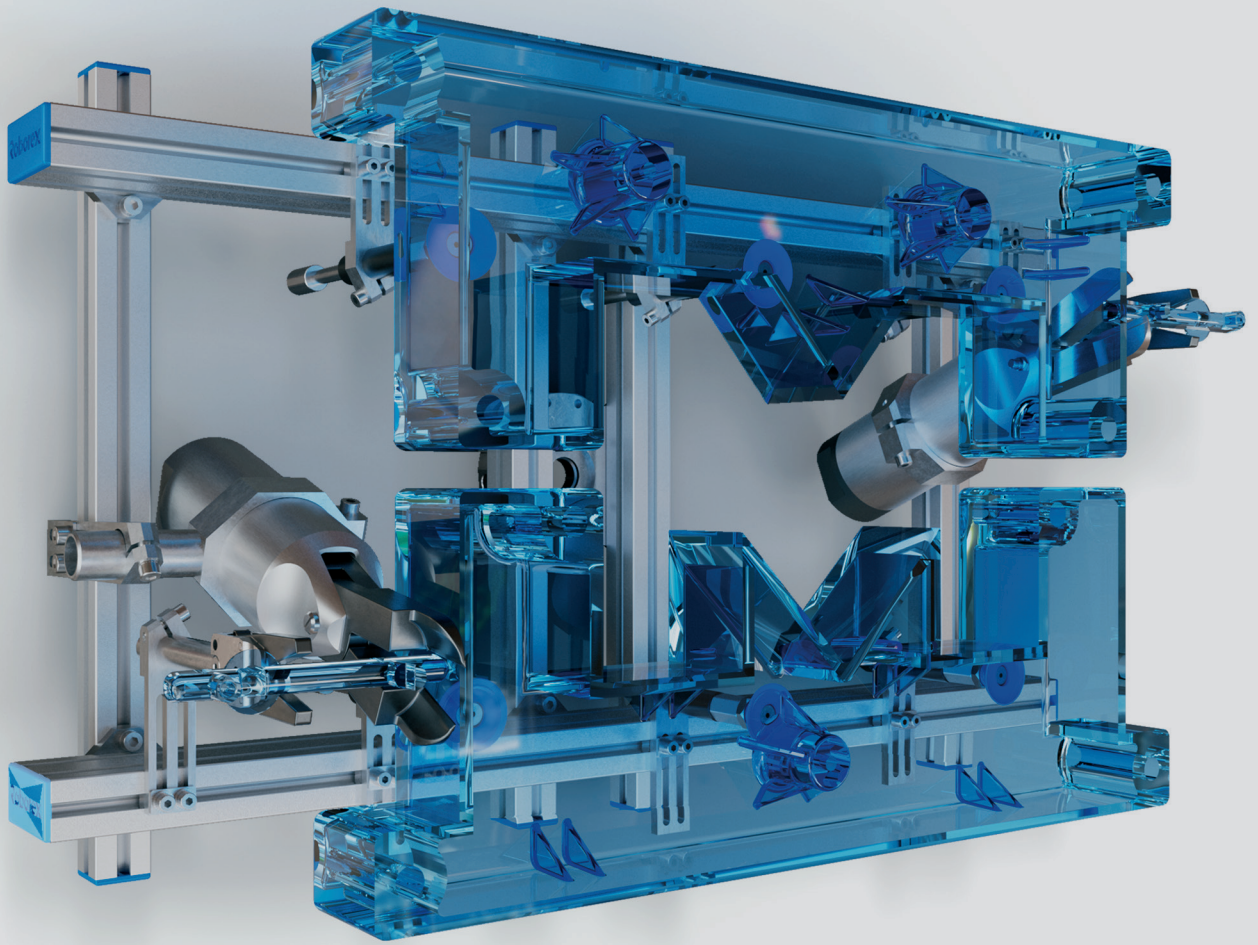
01



Roborex

CATALOGUE 2024

ISSUE 001/24





Introducing Roborex®

A cutting-edge brand dedicated to end-of-arm tooling solutions. With a commitment to industry excellence and innovation, Roborex® aims to redefine efficiency and productivity with an extensive catalogue of over 1000 products.

From robotic quick changers and grippers to suction cups, our range boasts an array of precision-engineered solutions. At Roborex®, we understand the importance of reliable end-of-arm tooling solutions in industrial automation and our mission is to empower our customers' ability to succeed with high-quality products that deliver exceptional performance, efficiency, and value.

Moreover, Roborex® prioritises affordability without compromising quality. A competitive pricing structure across the entire product range will make advanced automation technology accessible to customers of all sizes.

Roborex® is powered by Mouldpro, renowned across the moulding industry and poised to drive innovation and transformation within the manufacturing landscape.

With Mouldpro's well-established ordering process and robust supply chain, all Roborex® products are readily available for 24-hour delivery, enabling customers to minimise downtime and maximise productivity. Experience the next level of efficiency with Roborex®.

Our products are fully compatible with industry standards, ensuring seamless integration into new and existing automation systems.

END OF ARM TOOLING

01.

6 Quick Change System



16 Profile & Channel Nuts



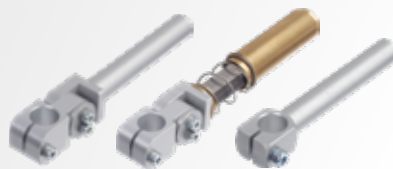
20 Profile Connectors



28 Clamps



38 Gripper Arms



44 Vacuum Cup Mounts



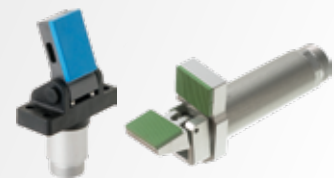
60 Vacuum Cups



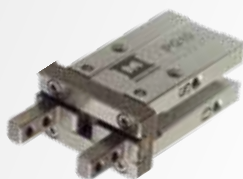
74 Sprue Grippers



86 Finger Grippers



98 General Purpose Grippers



104 Speciality Grippers



112 Nippers



124 Cylinders & Slides



132 Fittings, Tube & Manifolds



142 Electronics & Sensors





QUICK CHANGE SYSTEM

7 Dovetail Quick Changers



8 EOAT Base Plates



10 Wall Mounts – Dovetail



11 Round Quick Changers



13 Quick Changer Interfaces



14 Electrical Connectors



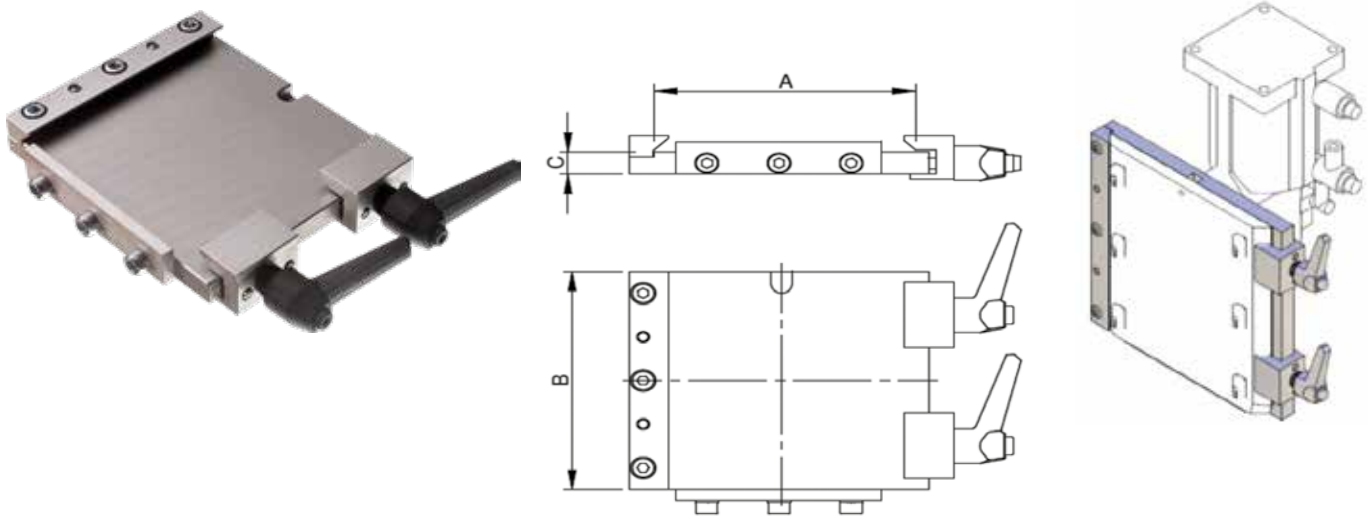
15 Wall mounts – Round



15 Locating Pin



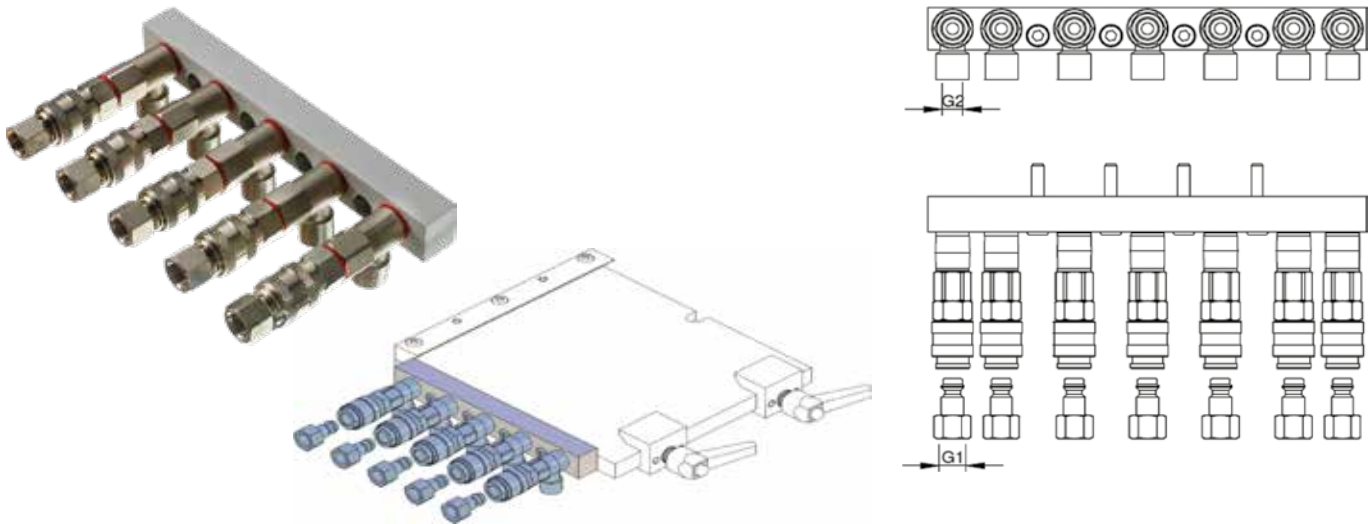
QC-RSW – Quick Changer Robot Side



Part No.	A	B	C	Max load	Reference	Weight (g)
QC-RSW-60-00	60	60	10	5 kg	QC-SSW-60	140
QC-RSW-100-00	100	100	10	10 kg	QC-SSW-100	495
QC-RSW-160-00	160	160	10	20 kg	QC-SSW-160	1136
QC-RSW-250-00	250	250	10	40 kg	QC-SSW-250	3072

Manual interface between robot and EOAT.
Works with all profile systems.

QC.LAL – Pneumatic Connection for Quick Changer QC-RSW

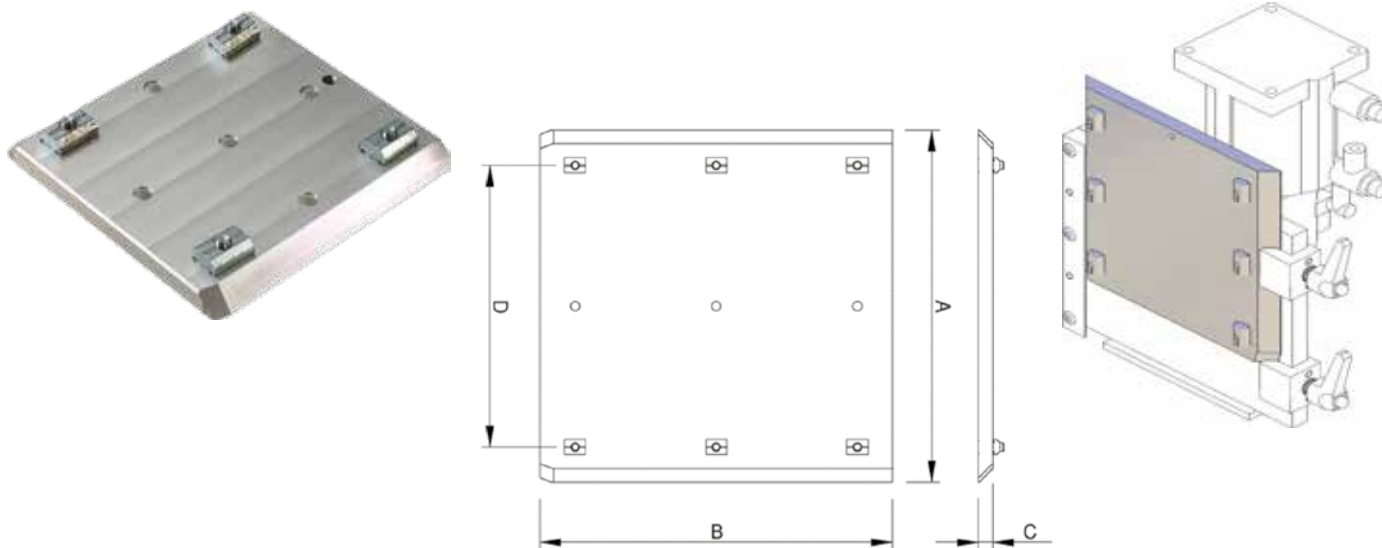


Part No.	G1	G2	No. of Connections	Reference	Weight (g)
CA.LAL.1.5	M5	M5	5	QC-RSW-100	154
CA.LAL.1.7	M5	M5	7	QC-RSW-100	225
CA.LAL.2.5	G 1/8	G1/8	5	QC-RSW-160	629
CA.LAL.2.7	G 1/8	G 1/8	7	QC-RSW-160	742
CA.LAL.3.6	G 1/4	G 1/4	6	QC-RSW-250	902
CA.LAL.3.8	G 1/4	G 1/4	8	QC-RSW-250	1503

Couplers are Standard "Rectus 21" series.

DOVETAIL PLATE QUICK CHANGE SYSTEM

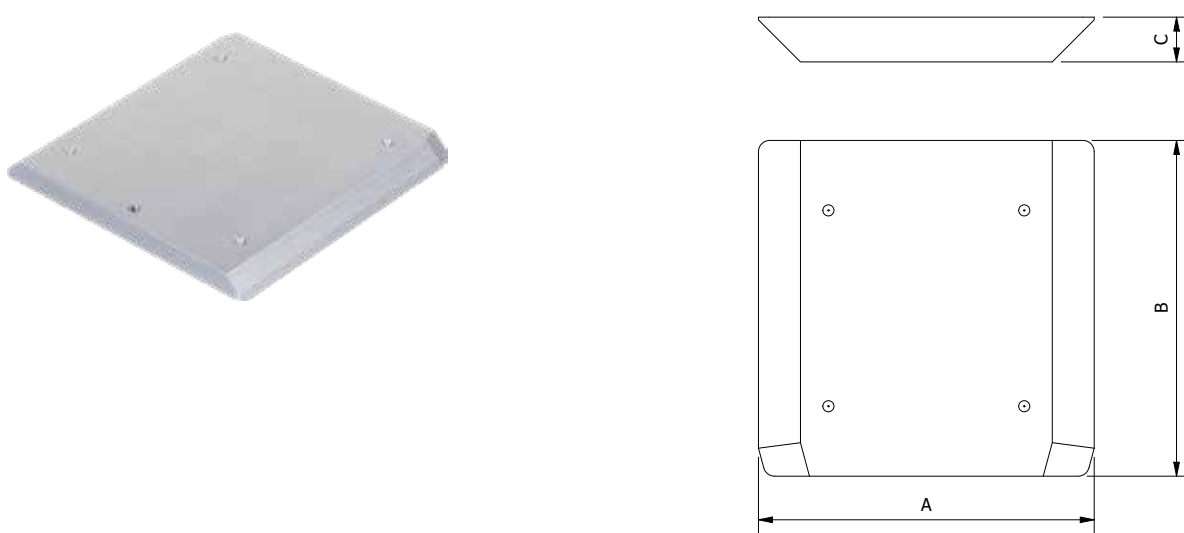
QC-SSW – EOAT Base Plate



Part No.	A	B	C	D	Reference	Weight (g)
QC-SSW-60	60	60	8	35	QC-RSW-60-00	93
QC-SSW-100	100	100	8	70	QC-RSW-100-00	242
QC-SSW-160	160	160	10	120	QC-RSW-160-00	695
QC-SSW-250	250	250	10	200	QC-RSW-250-00	1641

Material: Aluminium.
Surface: Silver anodized.

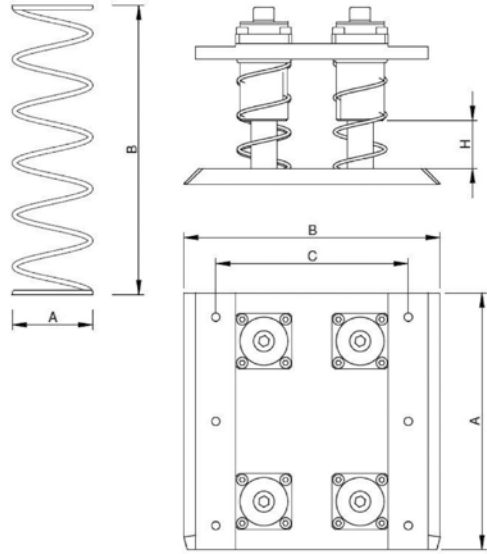
QC-SSW-CP - EOAT Base Plate - Center Punched Holes



Part No.	A	B	C	Reference	Weight (g)
QC-SSW-060-CP	60	60	8	QC-RSW-60-00	69
QC-SSW-100-CP	100	100	8	QC-RSW-100-00	201
QC-SSW-160-CP	160	160	10	QC-RSW-160-00	653
QC-SSW-250-CP	250	250	10	QC-RSW-250-00	1613

Material: Aluminium.
Surface: Silver anodized.

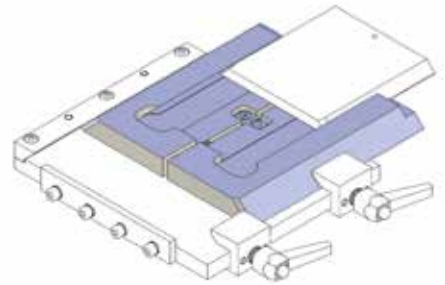
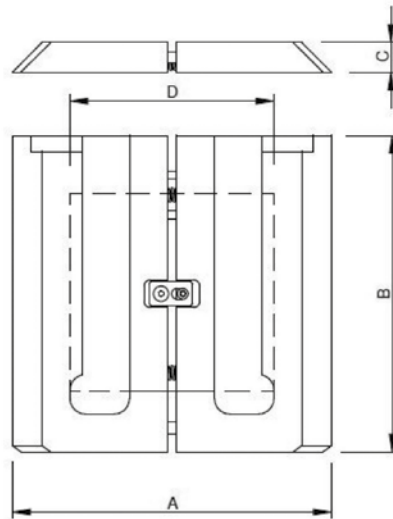
QC.SWS – EOAT Base Plate Spring Loaded



Part No.	A	B	C	H	F(N)	Guides	Weight (g)
QC-SWS-100	100	100	70	22	36	2	486
QC-SWS-160	160	160	120	30	50	4	1344

Compensates for variation in ejection stroke of IMM.

QC-SWR – EOAT Base Plate Reducer



Part No.	A	B	C	D	REF 1	REF 2	Weight (g)
QC-SWR-100	100	100	15	60	QC-SSW-60	QC-RSW-100-00	263
QC-SWR-160	160	160	15	100	QC-SSW-100	QC-RSW-160-00	703
QC-SWR-250	250	250	20	160	QC-SSW-160	QC-RSW-250-00	2441

Allows mounting of EOAT's with smaller dovetail plates to a larger robot side plate.

DOVETAIL PLATE QUICK CHANGE SYSTEM

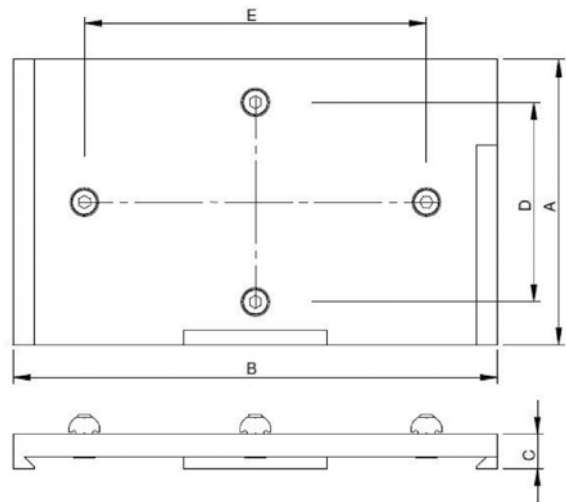
QC-SWM – EOAT Wall Mount



Part No.	REF	Weight (g)
QC-SWM-060	QC-SSW-60	136
QC-SWM-100	QC-SSW-100	238
QC-SWM-160	QC-SSW-160	547

For wall mounting of EOAT's with dovetail plates

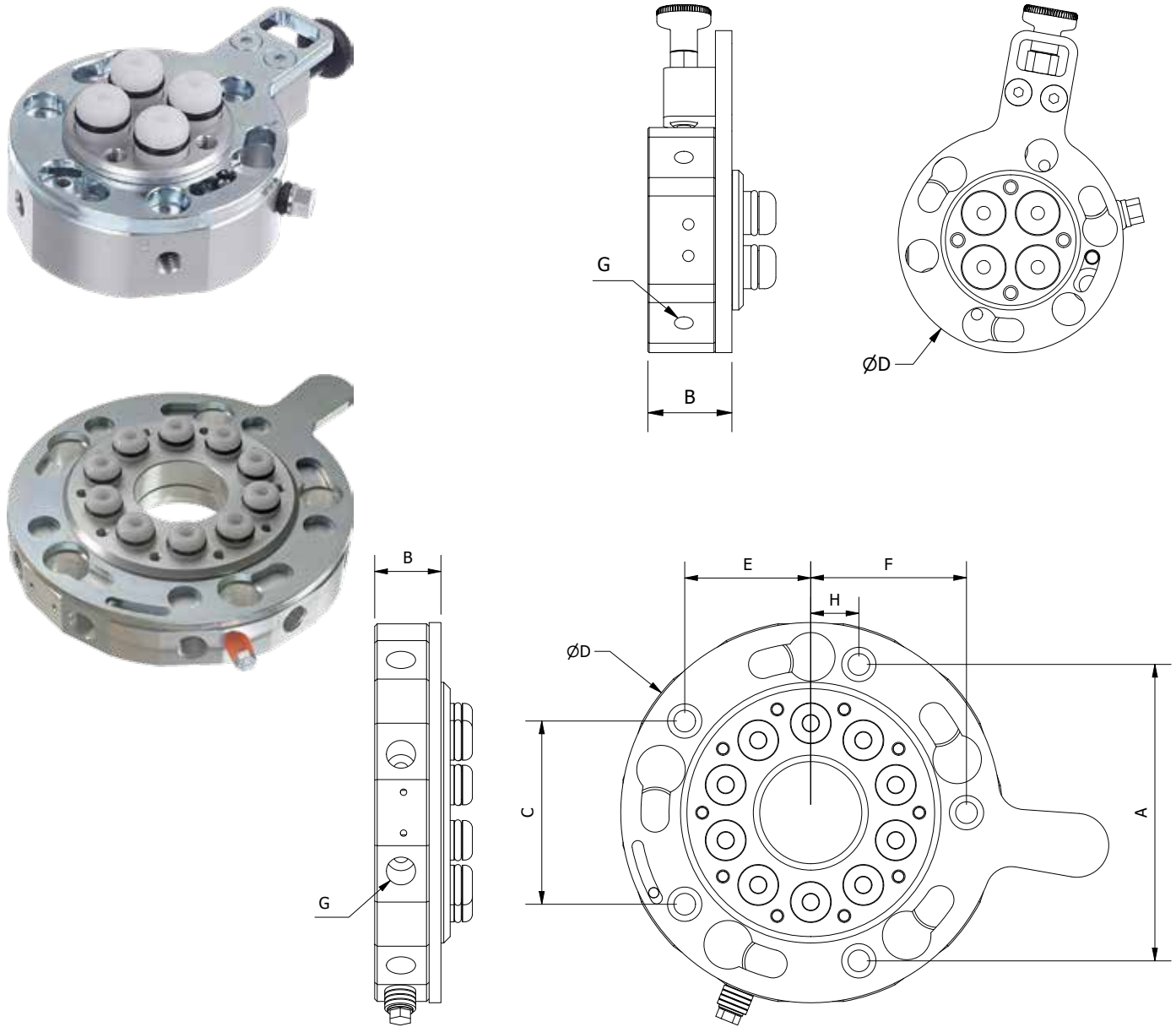
QC-SWH – EOAT Wall Mount



Part No.	A	B	C	D	E	REF	Weight (g)
QC-SWH-060	60	70	10	35	30	QC-SSW-60	128
QC-SWH-100	60	110	10	35	70	QC-SSW-100	182
QC-SWH-160	100	170	12	70	120	QC-SSW-160	412
QC-SWH-250	120	270	15	90	220	QC-SSW-250	1033

For wall mounted storage of EOAT's.

MRS – Quick Changer Robot Side

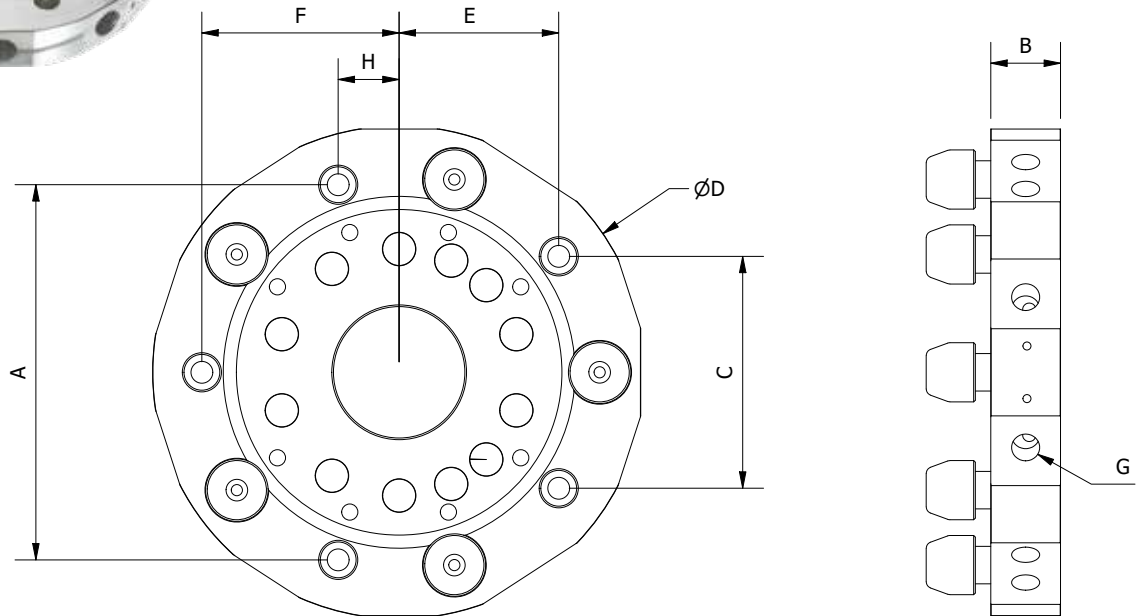


Part No.	D	A	C	E	F	H	G	B	Weight (g)
MRS-50	50	-	-	-	-	-	M5 (4x)	18,68	108
MRS-90	90	-	53,6	22,5	35	-	G 1/8 (8x)	18,3	318
MRS-150	150	116,03	71,7	49,35	61	18,85	G 1/4 (10x)	25,95	1158
MRS-160	160	116,03	71,7	49,35	61	18,85	G 1/8 (12X)	25,95	1213
MRS-200	200	175	87,5	75,8	75,8	25	G 1/4(12X)	30,6	2409

Quick changer for easy placement and correct alignment of EOAT on the robot.
 Avoids mistakes in pneumatic/electrical connections.
 Available with 4, 8, 10 or 12 pneumatic ports.

ROUND QUICK CHANGER SYSTEM

MGS – Quick Changer Gripper Side

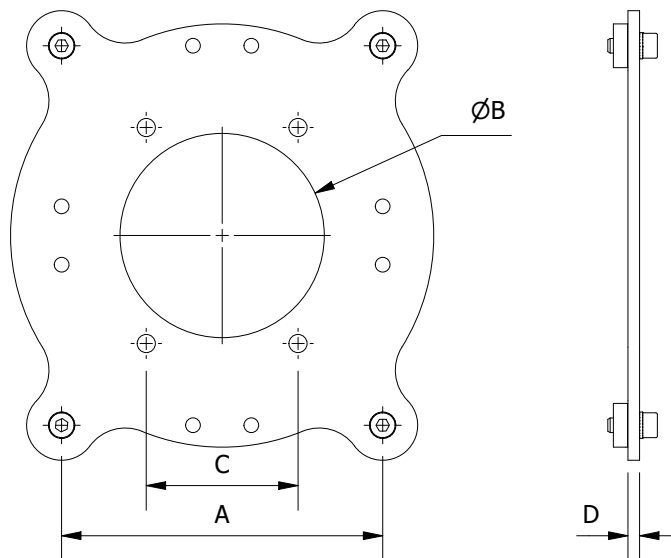


Part No.	D	A	C	E	F	H	G	B	Weight (g)
MGS-50	50	-	-	-	-	-	M5 (4x)	15,3	63
MGS-90	90	-	-	-	-	-	G 1/8 (8x)	15,9	227
MGS-150	150	114,13	70,53	48,54	60	18,54	G 1/4 (10x)	21,2	827
MGS-160	160	114,13	70,53	48,54	60	18,54	G 1/8 (12X)	21,2	900
MGS-200	200	175	87,5	75,8	75,8	25	G 1/4(12X)	25	1798

Quick changer for easy placement and correct alignment of EOAT on the robot.
 Avoids mistakes in pneumatic/electrical connections.
 Available with 4, 8, 10 or 12 pneumatic ports.



MGSI – Interface for Quick Changer



Part No.	A	B	C	D	Reference	Weight (g)
MGSI-50	25	32	15	3	MGS-50	63
MGSI-90	76	37	35	3	MGS-90	170
MGSI-150	110	70	52	4	MGS-150/MGS-160	497
MGSI-200	192	140	151,6	8	MGS-200	1439

Interface to mount EOAT quick changers to profiles.
Fastening set included.



ROUND QUICK CHANGER SYSTEM

QC.M.E – Electrical Connectors



QC.MR.E



QC.MG.E



QC.MR.ES



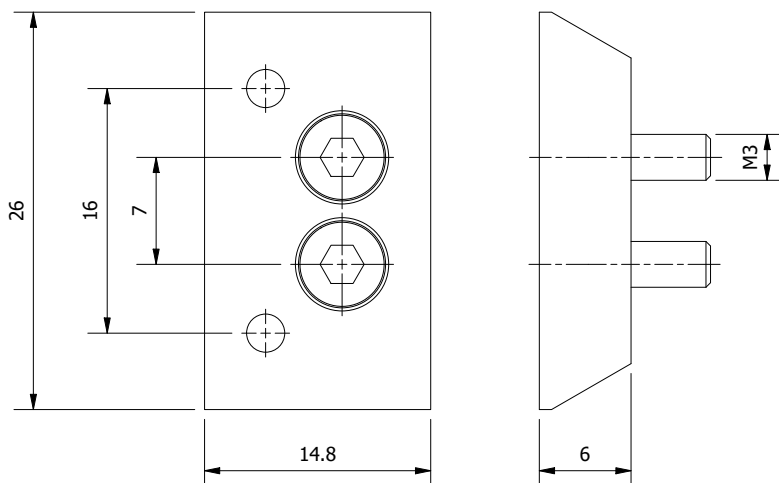
QC.MG.ES



Part No.	I/O connection type	Working Current	Break down voltage	Temperature range	Contact	Max conductor cross section	Max cable outer dia	Weight (g)
QC.MR.ES	15 pin	0,5	0 ÷ 250 Vac	-55°C, +105°C	Gold plated	AWG28	7 mm	50
QC.MG.ES	15 pin	0,5	0 ÷ 250 Vac	-55°C, +105°C	Gold plated	AWG28	7 mm	50
QC.MR.E	15 pin	3A	0 ÷ 250 Vac	-55°C, +105°C	Gold plated	AWG28	7 mm	50
QC.MG.E	15 pin	3A	0 ÷ 250 Vac	-55°C, +105°C	Gold plated	AWG28	7 mm	50

Springs assist in maintaining connections.
Spring contact design, minimises potential contact damage.
Self-aligning.

QC.MB - Electrical Connector Spacer for MRS-50/MGS-50



Part No.	Weight (g)
QC.MB.S	6

For wall mounted storage of EOAT's.

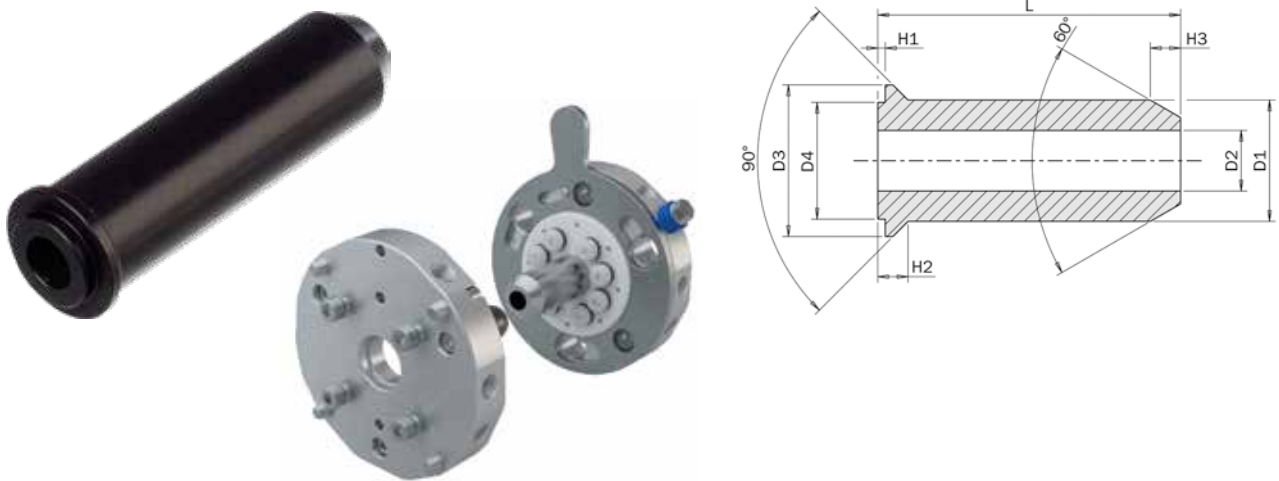
MGSH – Wall Mount for Quick Changer



Part No.	A	REF	Weight (g)
MGSH-050	50	MGS-50	125
MGSH-090	90	MGS-90	440
MGSH-150	150	MGS-150/160	926
MGSH-200	200	MGS-200	1178

Included mounting screws.

QC-P – Locating Pin



Part No.	L	H1	H2	H3	ØD1	ØD2	ØD3	ØD4	REF	Weight (g)
QC-P090065	65	2	5	5	18	8	20	14	MRS-90	190
QC-P150100	100	2,5	10	10	40	20	50	38,5	MRS-150	435
QC-P200120	120	3	11	15	50	25	60	43,5	MRS-200	950

To be positioned on the robot side.
It helps the manual centering of heavy EOATs.

PROFILE & CHANNEL NUTS

17 Aluminum Profiles



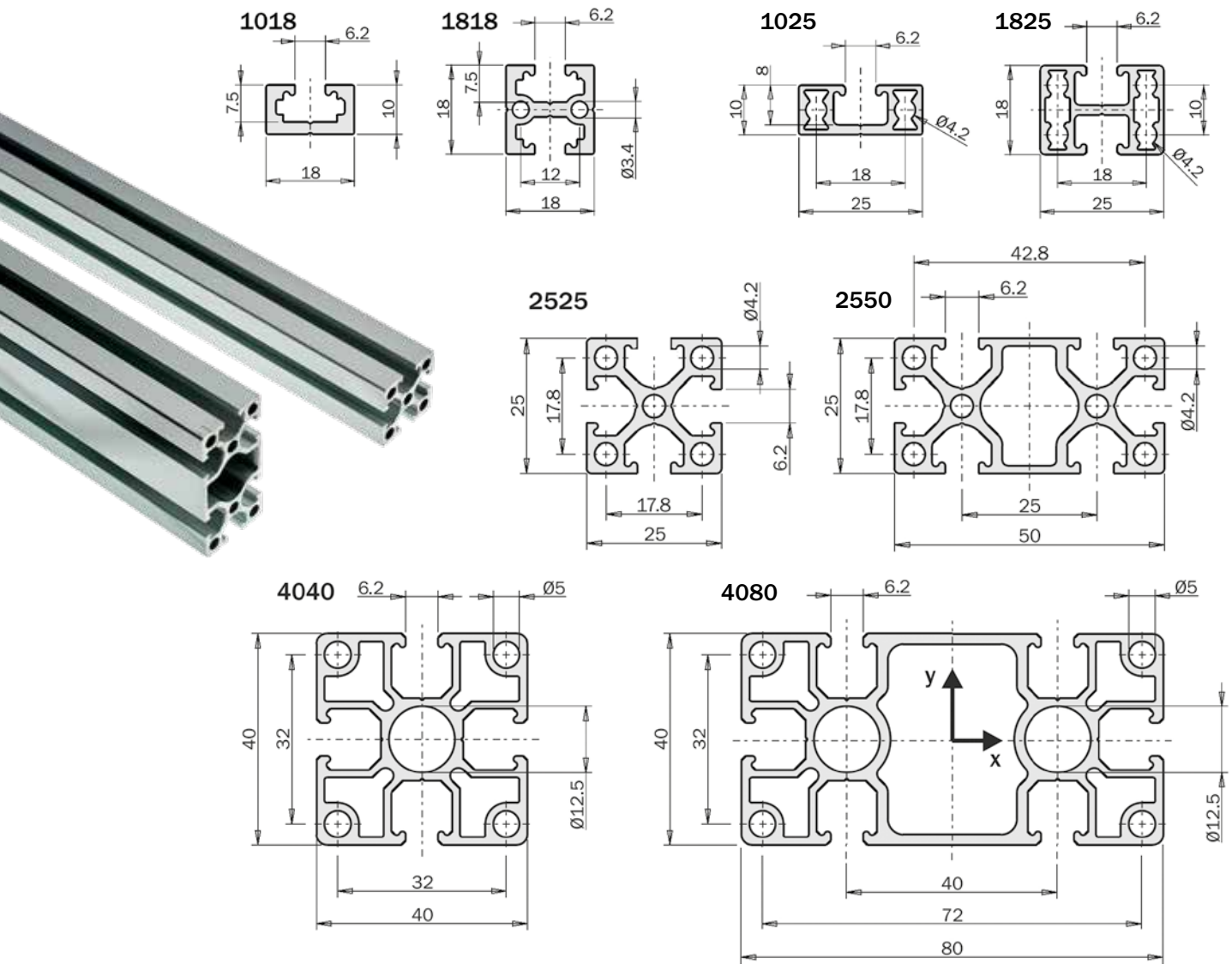
18 Channel Nuts



19 Profile Accessories



AP - Aluminum Profile

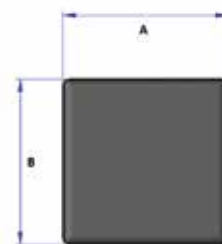
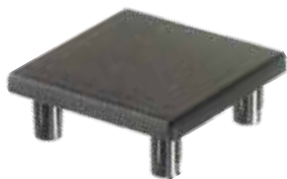


Part No.	Length	REF	Weight (g)
APL.1018.1000	1m	MPP-10-18	250
APL.1818.1000	1m	MPP-18-18	400
APX.1025.1000	1m	MPP-10-25	280
APX.1825.1000	1m	MPP-18-25	400
APX.2525.1000	1m	MPP-25-25	683
APX.2525.2000	2m	MPP-25-25	1365
APX.2550.1000	1m	MPP-25-50	1155
APX.2550.2000	2m	MPP-25-50	2311
APJ.4040.1000	1m	MPP-40-40	1407
APJ.4040.2000	2m	MPP-40-40	2814
APJ.4080.1000	1m	MPP-40-80	2302
APJ.4080.2000	2m	MPP-40-80	4603

Material: Aluminium.
Surface: Silver anodized.

PROFILE & CHANNEL NUTS

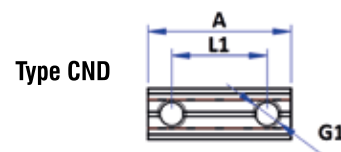
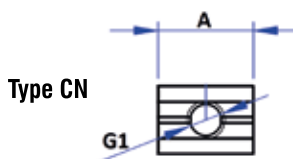
MPP – Profile End Cap



Part No.	A	B		Weight (g)
MPP-10-18	10	18	10	1
MPP-18-18	18	18	10	2
MPP-10-25	10	25	10	2
MPP-18-25	18	25	10	2
MPP-25-25	25	25	10	3
MPP-25-50	25	50	10	4
MPP-40-40	40	40	10	7
MPP-40-80	40	80	10	13

Provides a finished look to an EOAT.
Reduces the risk of injury by coverage of sharp edges.

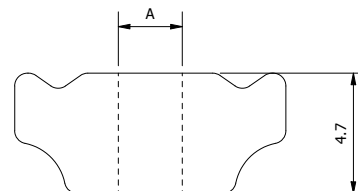
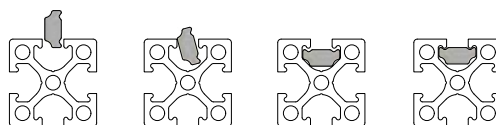
CN – Channel Nut for Profiles



Part No.	G1	A	L1	Weight (g)
CN-M3	M3	15		6
CN-M4	M4	15		6
CN-M4-16	M4	24	16	9
CN-M5	M5	15		5
CN-M5-20	M5	30	20	11
CN-M6	M6	15		5
CN-M6-20	M6	30	20	11

Suitable for L, X and J line of profiles.

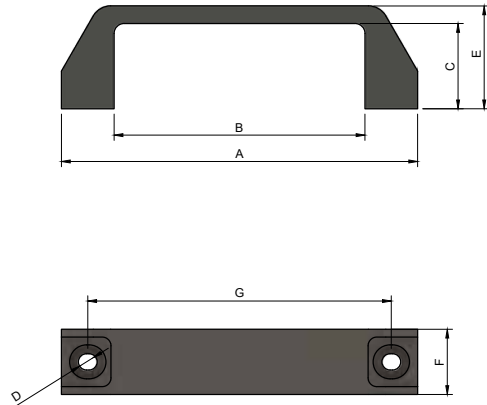
CN – Last Minute Channel Nut for Profiles



Part No.	A	Weight (g)
CN-M4-LM	M4	3
CN-M5-LM	M5	2
CN-M6-LM	M6	2

Suitable for L, X and J line of profiles.

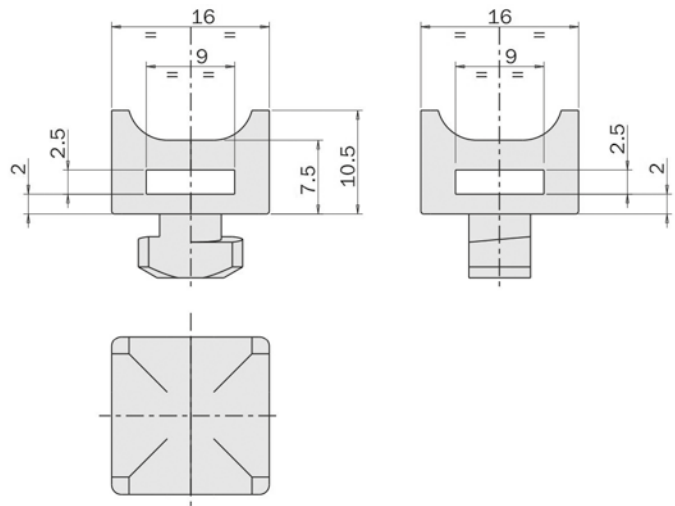
MPH – EOAT Handle



Part No.	A	B	C	D	E	F	G	Weight (g)
MPH.142	142	100	34	6,5	41	26	120	70

Includes mounting screws.

CTK - Cable Tie Block



Part No.	Weight (g)
CTK.01X	20g

Twist on cable saddle for clean pneumatic/electrical cable management.

PROFILE CONNECTORS

21 Corner Brackets



22 Cross Joint Connectors



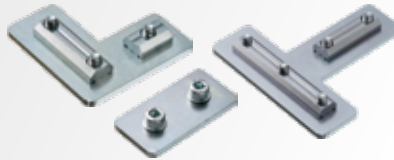
23 Square Joint Connectors



24 End Connectors



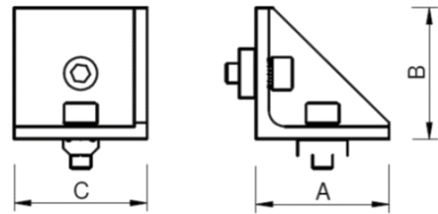
25 S, L, T Flat Connectors



26 Adjustable Connectors



MP.WIV – Profile Corner Bracket



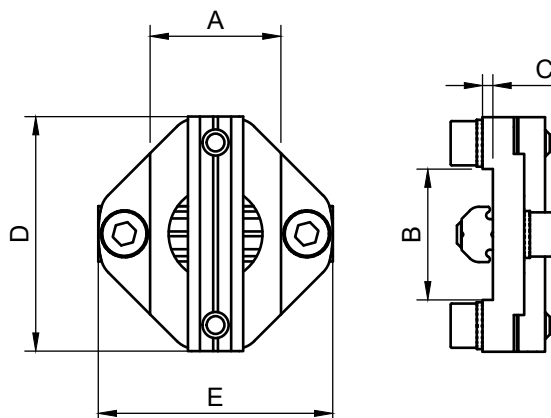
Part No.	A	B	C	REF	Weight (g)
MP.WIV.X.25.0	25	25	16	X	28
MP.WIV.X.50.25	51	51	16	X	80
MP.WIV.X.25	25	25	19	X	33
MP.WIV.X.50	50	50	19	X	82
MP.WIV.J.40	40	40	40	J	60
MP.WIV.J.80	78	78	37	J	184

Reinforcement of profile joints.



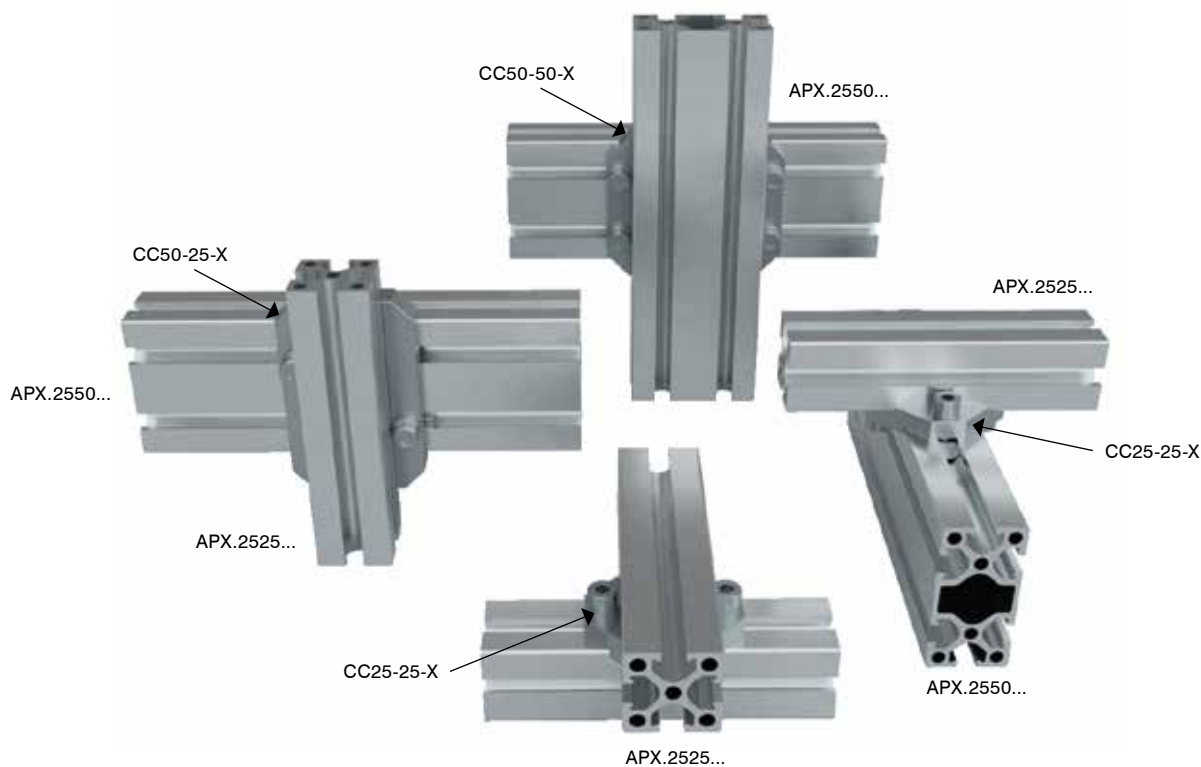
CROSS JOINT CONNECTORS

CC – Profile Cross Joint Connector

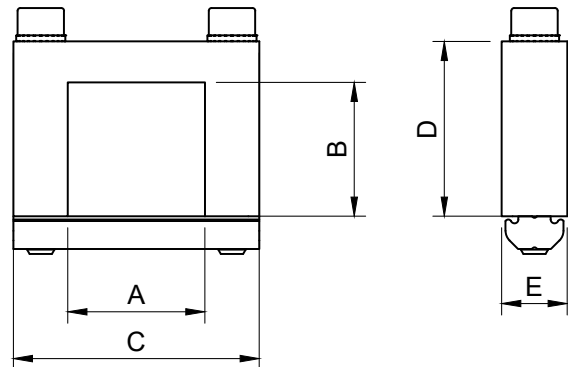


Part No.	A	B	C	D	E	REF	Weight (g)
CC18-18-L	18	18	38	38	3	L	40
CC25-18-X	25	18	45	45	4	X	60
CC25-25-X	25	25	45	45	4	X	67
CC50-25-X	50	25	45	70	4	X	76
CC50-50-X	50	50	70	70	4	X	192
CC40-25-J	40	25	45	60	4	X/J	77
CC40-40-J	40	40	65	65	4	J	81
CC80-40-J	80	40	100	60	4	J	156
CC80-80-J	80	80	100	100	4	J	268

Exact 90° connection of two profiles.
 Highly rigid, connection.
 Allows adjustment of both profiles.

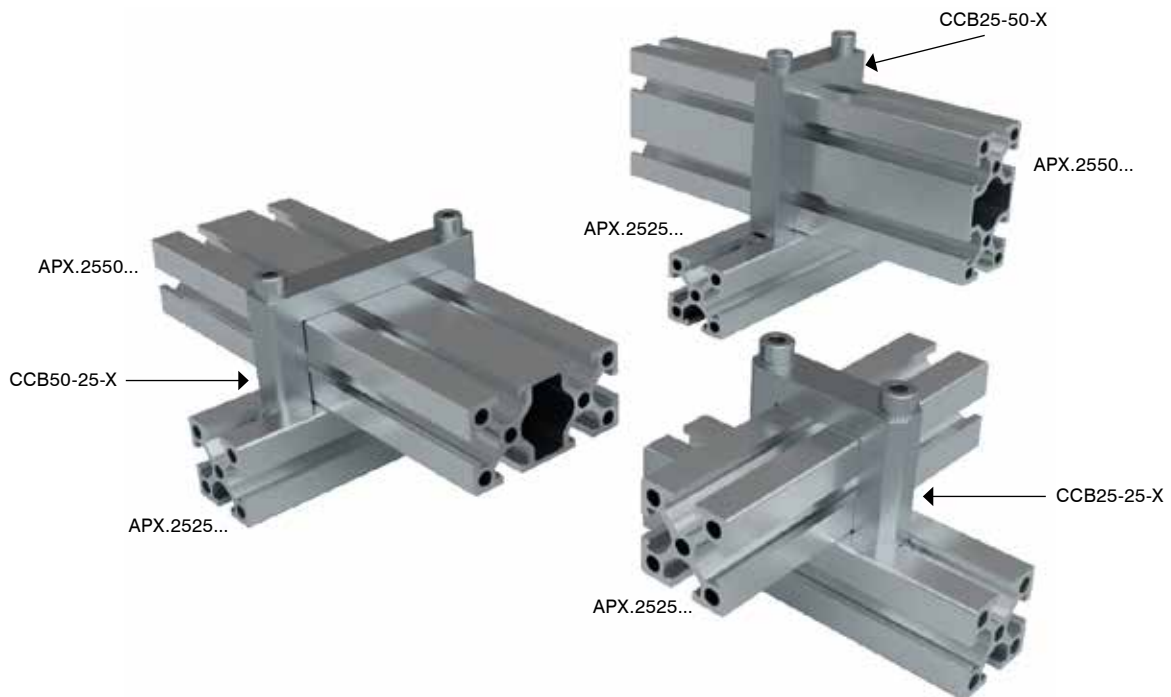


CCB - Square Joint Connectors



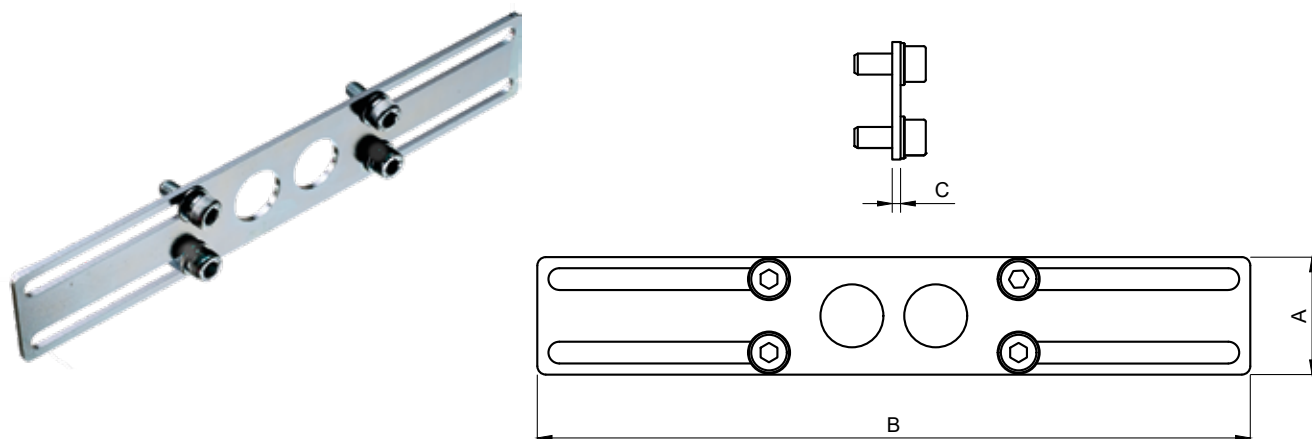
Part No.	A	B	C	D	E	REF	Weight (g)
CBB18-18-L	18	18	32	24,5	10	L	22
CCB25-25-X	25	25	45	30	15	X	40
CCB25-50-X	25	50	70	30	15	X	54
CCB50-25-X	50	25	45	55	15	X	57
CCB40-40-J	40	40	60	48,5	15	J	72
CCB80-40-J	80	40	100	50	15	J	107

For 90° connection of two profiles.
Allows adjustment of both profiles.



END CONNECTORS

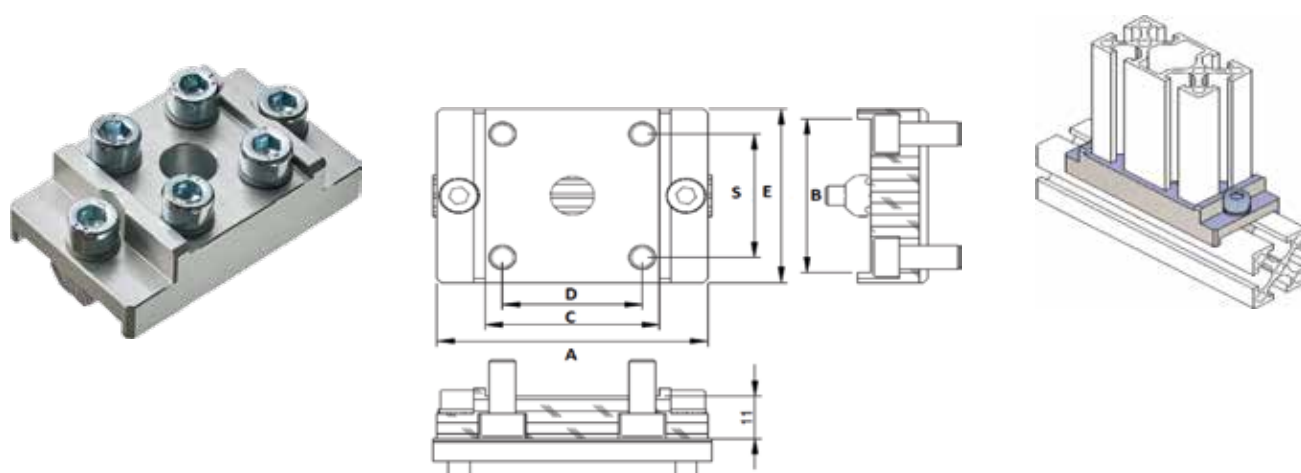
EP. – Profile End Plate



Part No.	A	B	C	Reference	Weight (g)
EP.25.170	25	170	2	APX25-25..	48
EP.25.220	25	220	2	APX25-25..	60
EP.25.270	25	270	2	APX25-25..	69
EP.25.320	25	320	2	APX25-25..	85
EP.50.25.170	50	170	2	APX25-50..	100
EP.50.25.220	50	220	2	APX25-50..	130
EP.50.25.270	50	270	2	APX25-50..	162
EP.50.25.320	50	320	2	APX25-50..	192

End plate connection for added rigidity of framework.

PE. – Profile End Connector



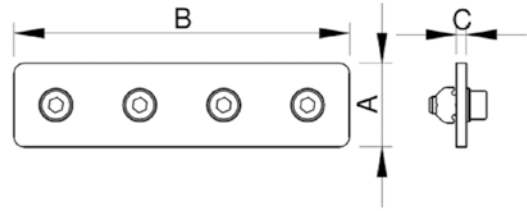
Part No.	A	B	C	D	S	E	REF	Weight (g)
PE.25.25	50	25	25	17,5	17,5	30	APX.2525	69
PE.25.50	70	25	50	42,5	17,5	30	APX.2550	87
PED.25.50	55	50	-	14,5	17,5	25	APX.2525/APX.2550	69
PED.50.50	75	55	-	42,5	17,5	25	APX.2550/APX.2550	87
PE.40.40	62	40	40	32	32	45	APX.4040	128

Strong 90° connection of two profiles.

End connected profile, adjustable along length of other profile.

End of profile needs to be tapped.

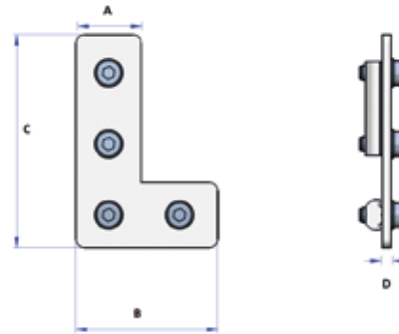
MA.VBG. – Profile Connector Straight



Part No.	A	B	C	REF	Weight (g)
MA.VBG.X.25.50	25	50	3	X	47
MA.VBG.X.50.50	50	50	3	X	94
MA.VBG.X.25.100	25	100	3	X	99
MA.VBG.J.40.80	40	80	3	J	97
MA.VBG.J.40.160	40	10	3	J	215

Material: Steel

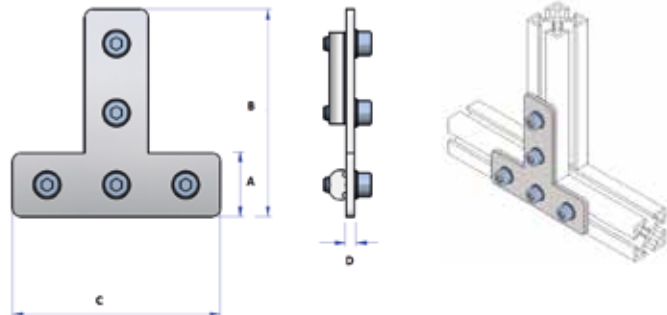
MA.VBL. – Profile Connector L-Style



Part No.	A	B	C	D	REF	Weight (g)
MA.VBL.50.50	23	50	50	3	X	71
MA.VBL.50.75	23	50	75	3	X	96
MA.VBL.80.80	40	80	80	3	J	147
MA.VBL.80.120	40	80	120	3	J	200

Material: Steel

MA.VBT. – Profile Connector T-Style

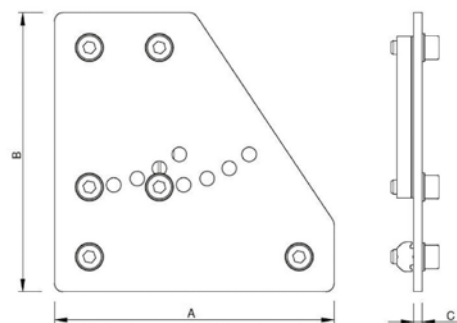


Part No.	A	B	C	D	REF	Weight (g)
MA.VBT.50.75	25	75	75	3	X	123
MA.VBT.75.100	25	75	100	3	X	149
MA.VBT.120.80	40	120	80	3	J	264

Material: Steel.

ADJUSTABLE CONNECTORS

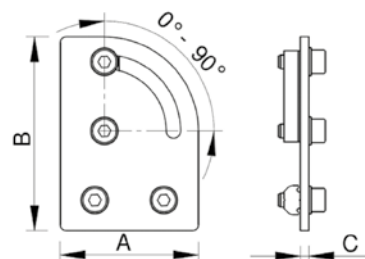
MP.EVB. – Corner Joint Plate



Part No.	A	B	C	REF	Weight (g)
MP.EVB.100.X	100	100	3	X	292
MP.EVB.100.J	80	100	3	J	206

Material: Steel.

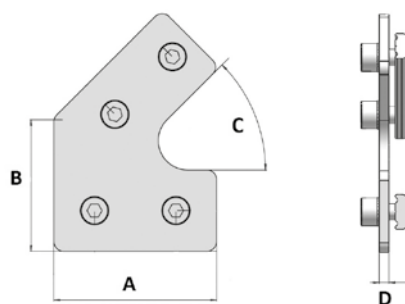
MP.VBW. – Adjustable Profile Connector 0-90°



Part No.	A	B	C	Weight (g)
MP.VBW.X.0.90	50	70	3	112
MP.VBW.J.0.90	80	120	3	249

Material: Steel.

MP.VBW. – Profile Connector 45°



Part No.	A	B	C	D	REF	Weight (g)
MP.VBW.X.45	50	77	45°	3	X	104
MP.VBW.J.45	130	147	45°	3	J	372

Material: Steel.



CLAMPS

29 Cross Clamps



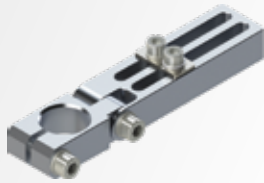
30 Angle Clamps



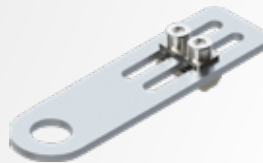
33 Angle Clamps With Ball Joint



34 Angle Clamps With Swivel Head



35 Slotted Mounting Brackets



36 Threaded Mounting Brackets



37 Cross Tube Connector



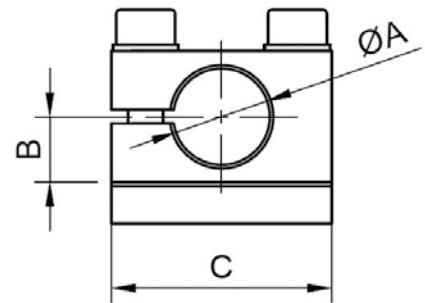
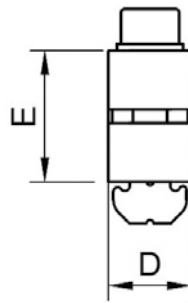
37 Parallel Tube Connector



37 Reducer



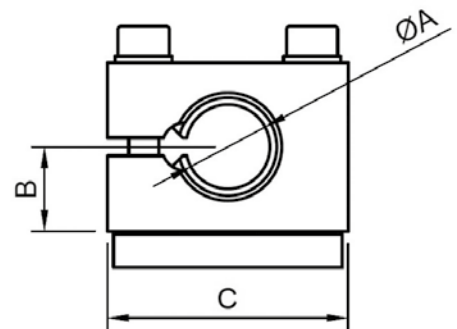
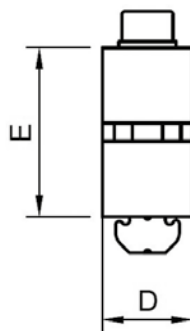
CCR. – Cross Connector - Round



Part No.	A	B	C	D	E	Weight (g)
CCR.10.X	10	7	25	10	14	22
CCR.14.X	14	9,5	32	12	19	36
CCR.20.X	20	14	40	15	28	58
CCR.20.J	20	14	40	20	28	75
CCR.30.J	30	18	50	20	36	97

Connects tubular components to profiles at 90°.
Adjustment of componets witout lose of clamp position.

CCRB – Cross Connector - Round With Ball Joint

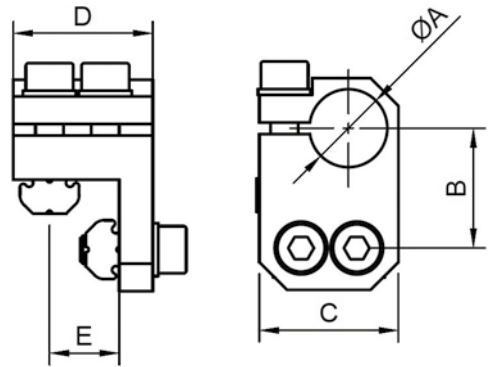


Part No.	A	B	C	D	E	Weight (g)
CCRB.10.X	10	12	35	12	24	51
CCRB.14.X	14	14	40	15	28	68
CCRB.20.X	20	18	50	20	36	135
CCRB.20.J	20	18	55	20	36	156

Flexibility of positioning of components.
Adjustment of componets witout lose of clamp position.

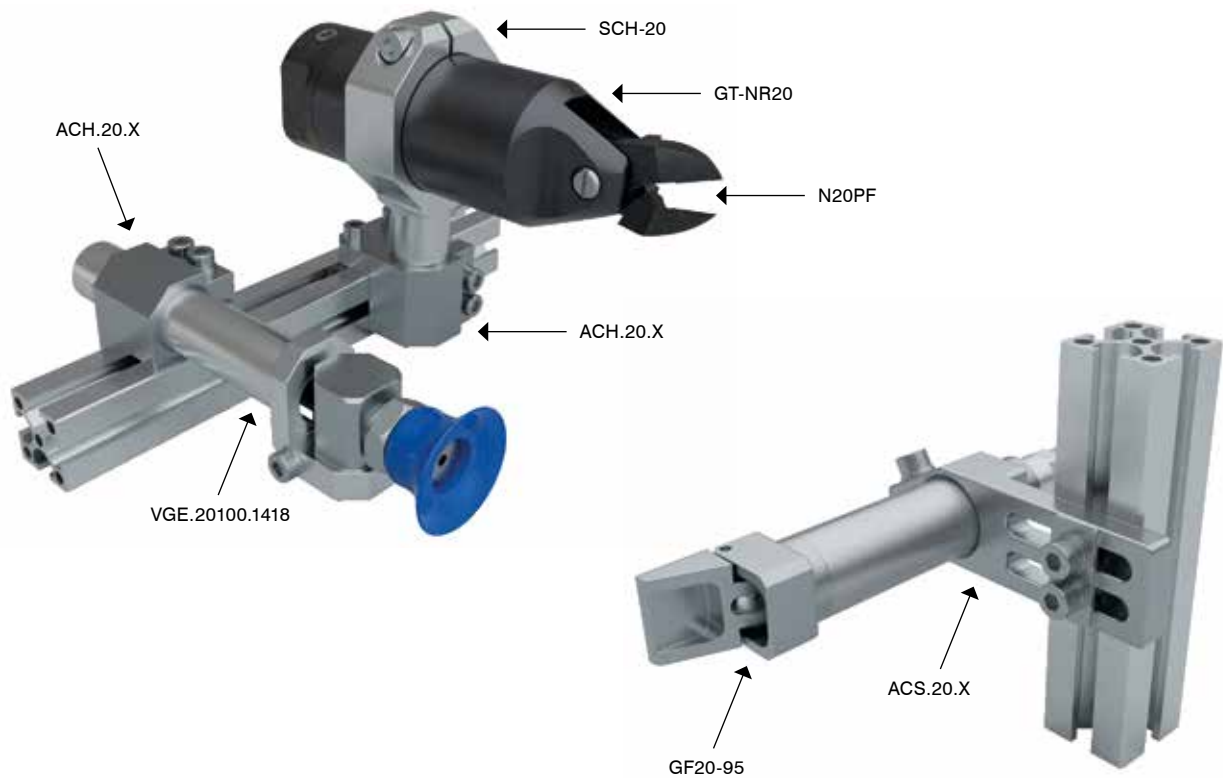
CLAMPS - PROFILE TO COMPONENT

ACH. – Angle Clamp - Heavy Duty

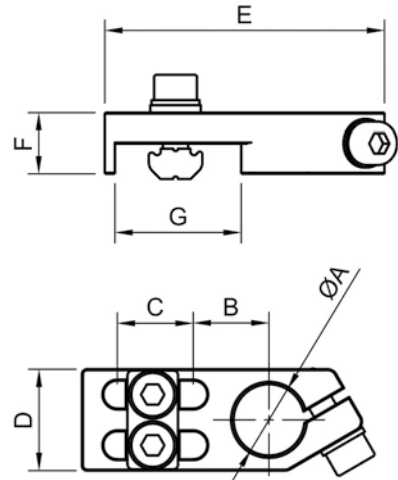


Part No.	A	B	C	D	E	Weight (g)
ACH.10.L	10	16	20	20	18	25
ACH.10.X	10	19,5	25	25	12,5	50
ACH.14.X	14	21,5	25	25	12,5	51
ACH.20.X	20	24,5	32	30	12,5	77
ACH.20.J	20	33	35	40	20	105
ACH.30.J	30	39	45	45	20	162

Heavy duty clamp.
Minimises deflection due to wrap around connection.



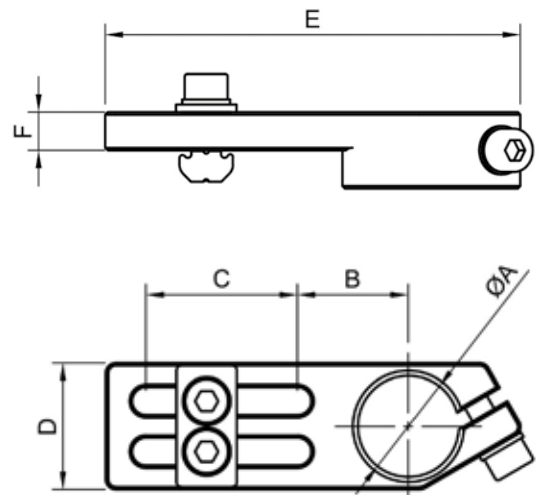
ACS. – Short Angle Clamp



Part No.	A	B	C	D	E	F	G	Weight (g)
ACS.10.L	10	12,2	9	16	42	8	18	21
ACS.10.X	10	12,2	15	16	49	8	25	22
ACS.14.X	14	15	15	20	55	12	25	37
ACS.20.X	20	18	15	25	63	15	25	50
ACS.20.J	20	18	30	25	78	15	40	54
ACS.30.X	30	23,5	15	35	75,5	20	25	82
ACS.30.J	30	23,5	29	35	90,5	20	40	92

Material: Aluminium.
ACS clamps allow for mounting flexibility.
Kit with screws.

ACM. – Medium Angle Clamp

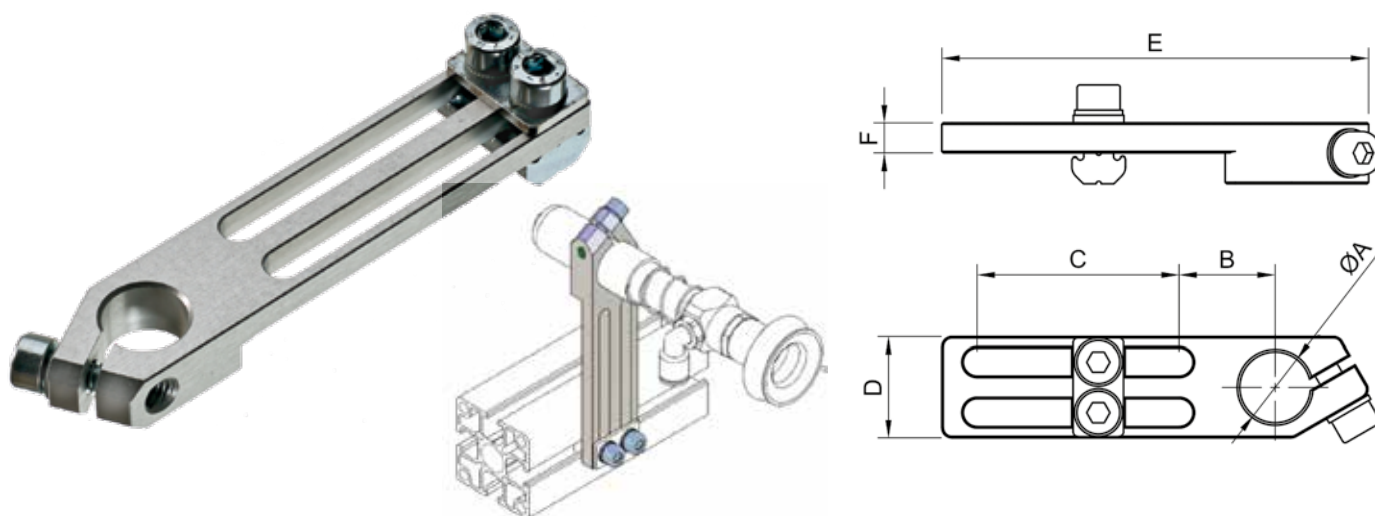


Part No.	A	B	C	D	E	F	Weight (g)
ACM.1020.L	10	16,5	20	16	56	4	23
ACM.1425.X	14	19	25	20	70	6	36
ACM.2035.X	20	22	35	25	82	7,5	55
ACM.3035.X	30	28,5	35	35	96	10	94

Material: Aluminium.
ACM clamps allow for mounting flexibility.
Kit with screws.

CLAMPS - PROFILE TO COMPONENT

ACL. – Long Angle Clamp - Universal



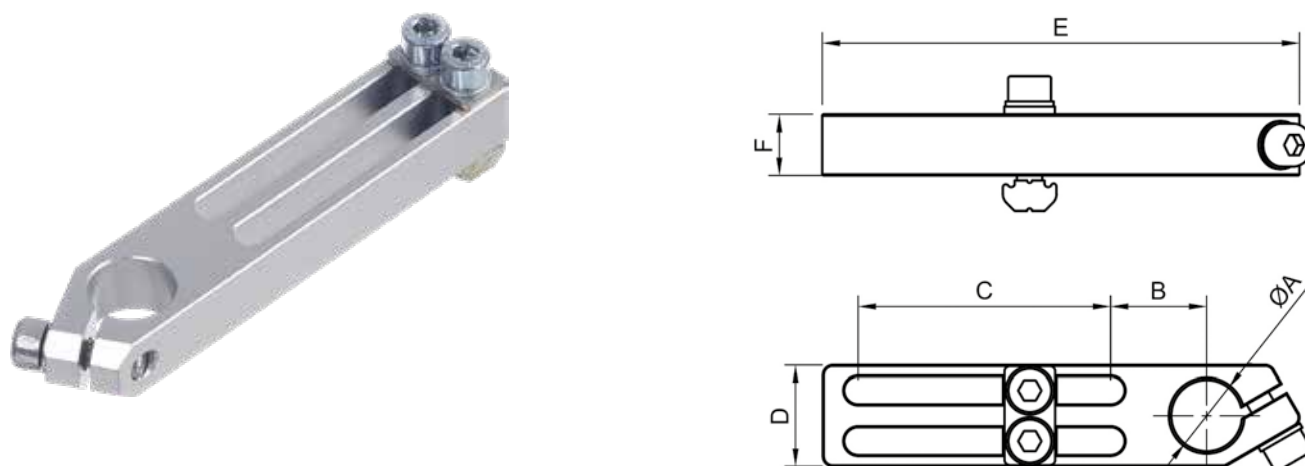
Part No.	A	B	C	D	E	F	Weight (g)
ACL.1040.L	10	16,5	40	16	76	4	24
ACL.1040.X	10	16,5	40	16	76	4	24
ACL.1440.X	14	19	40	20	85	6	39
ACL.1450.X	14	19	50	20	95	6	42
ACL.2060.X	20	22	60	25	112	7,5	62
ACL.2070.J	20	22	70	28	123	7,5	77
ACL.3060.X	30	28,5	60	35	126	10	113
ACL.3070.J	30	28,5	70	35	136	10	130

Material: Aluminium.

ACL clamps allow for mounting flexibility.

Kit with screws.

ACLH. – Long Angle Clamp - Heavy Duty



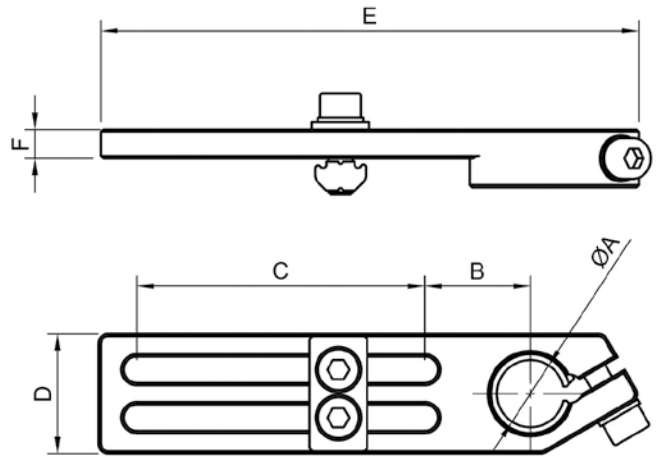
Part No.	A	B	C	D	E	F	Weight (g)
ACLH.1040.X	10	16,5	40	16	76	8	30
ACLH.1450.X	14	19	50	20	95	12	57
ACLH.2060.X	20	22	60	25	112	15	90
ACLH.2070.X	20	22	70	28	123	15	112
ACLH.3070.J	30	28,5	70	35	136	20	185

Material: Aluminium.

ACLH Heavy duty clamps allow for mounting flexibility with higher loads.

Kit with screws.

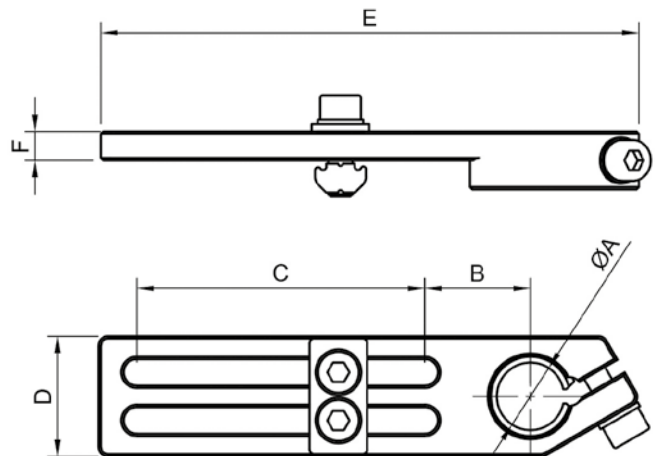
ACMB- – Medium Angle Clamp - with Ball Joint



Part No.	A	B	C	D	E	F	Weight (g)
ACMB.1020.L	10	19	20	20	65	6	52
ACMB.1425.X	14	22	35	25	87	6	60
ACMB.2035.X	20	28,5	35	35	102	10	150

Material: Aluminium
 ACMB clamps feature an integrated ball joint for rotational adjustemnt.
 Kit with Screws

ACLB. – Long Angle Clamp With Ball Joint

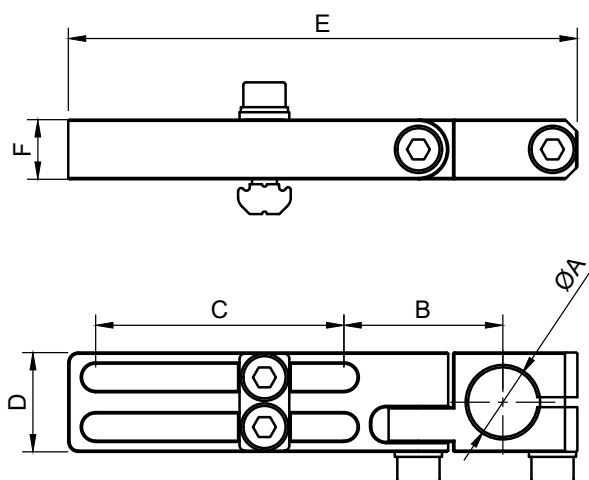


Part No.	A	B	C	D	E	F	Weight (g)
ACLB.1050.X	10	19	50	20	95	6	56
ACLB.1460.X	14	22	60	25	112	6	66
ACLB.2060.X	20	28,5	60	35	127	10	166

Material: Aluminium.
 ACLB clamps feature an integrated ball joint for rotational adjustment.
 Kit with screws.

CLAMPS - PROFILE TO COMPONENT

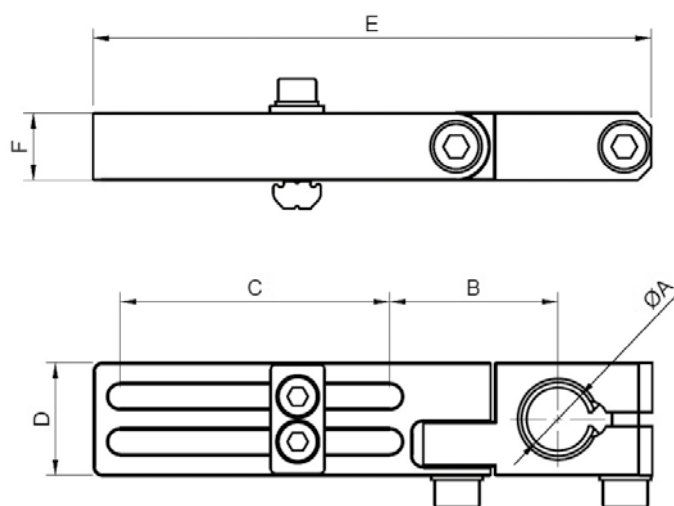
ACLS. – Long Angle Clamp - Swivel Head



Part No.	A	B	C	D	E	F	Weight (g)
ACLS.1040.X	10	27,5	40	20	86	10	55
ACLS.1450.X	14	32	50	20	102,5	12	67
ACLS.2060.X	20	37,5	60	25	124,5	15	115
ACLS.3080.X	30	50	80	35	166,5	20	254

Material: Aluminium.
 Increased flexibility in component positioning.
 Heavy duty design ensures component stability.

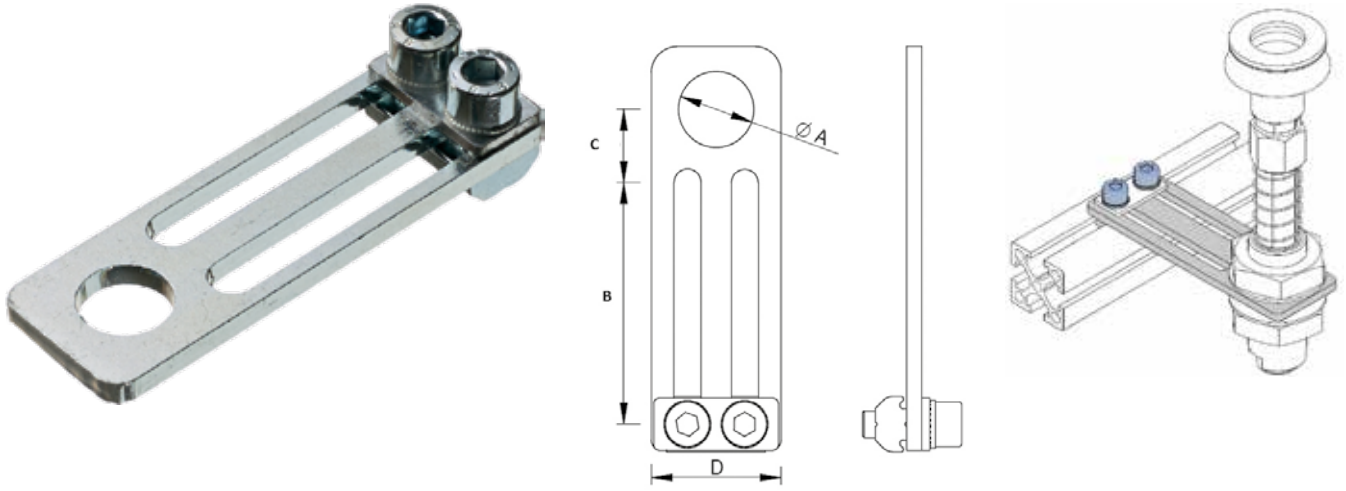
ACLSB. – Long Angle Clamp - Swivel Head and Ball Joint



Part No.	A	B	C	D	E	F	Weight (g)
ACLSB.1050.X	10	32	50	20	102,5	12	74
ACLSB.1460.X	14	37,5	60	25	124,5	15	126
ACLSB.2080.X	20	50	80	35	166,5	20	304

Maximum flexibility in component positioning.
 Heavy duty design ensures component stability.

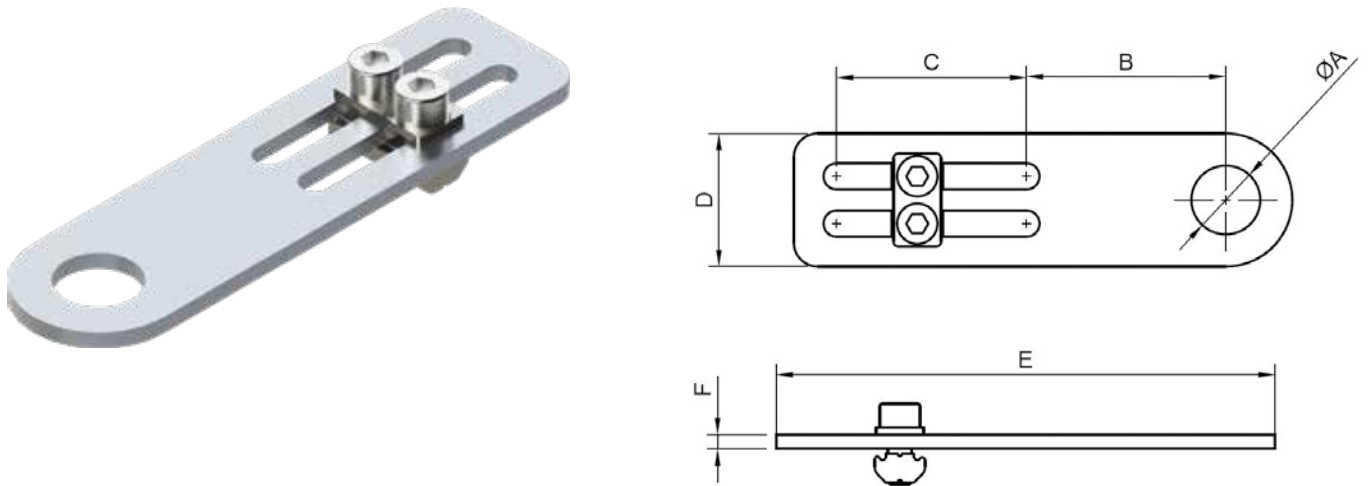
MB.04. – Mounting Bracket



Part No.	A	B	C	D	Weight (g)
MB.04.20.10.X	10	40	11	20	35 g
MB.04.20.14.X	14	46	14	25	45 g

Material: Aluminum.
Surface: Silver anodized.

MBS. – Slotted Mounting Bracket

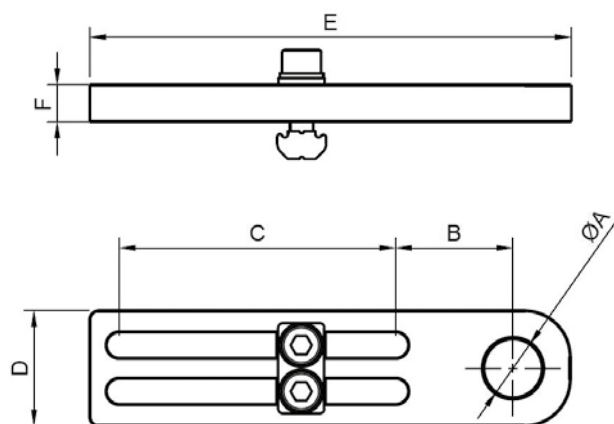


Part No.	A	B	C	D	E	F	Weight (g)
MBS.1040.X	10,5	42	40	28	105	3	69
MBS.1240.X	12,5	42	40	28	105	3	69
MBS.1440.X	14,5	42	40	28	105	3	68
MBS.1640.X	16,5	42	40	28	105	3	67
MBS.2040.X	20,5	42	40	28	105	3	65

Material: Steel.
Economy mounting of threaded suspensions.

CLAMPS - PROFILE TO COMPONENT

MBT. – Threaded Mounting Bracket



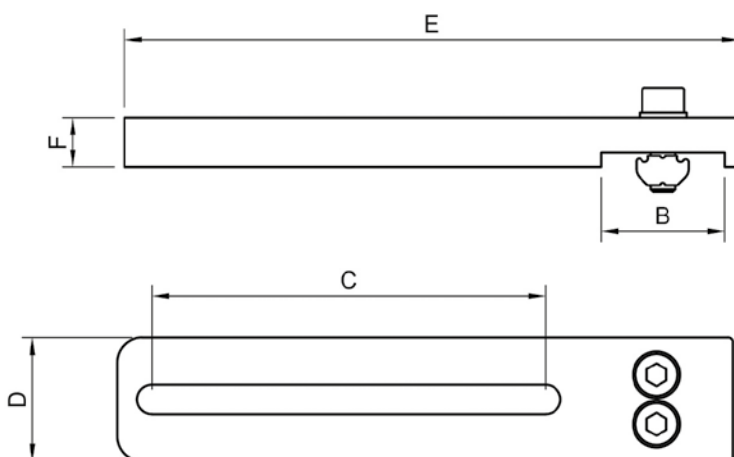
Part No.	A	B	C	D	E	F	Weight (g)
MBT.G840.X	G1/8	18,5	40	20	75	8	40
MBT.1040.X	M10x1	18,5	40	25	75	8	40
MBT.1260.X	M12x1	25,5	60	25	104,5	8	57
MBT.1460.X	M14x1.5	25,5	60	25	104,5	8	56
MBT.1660.X	M16x1	25,5	60	25	104,5	8	55
MBT.2060.X	M20x1.5	25,5	60	25	104,5	8	55
MBT.2560.X	M25x1.5	33,5	60	30	104,5	8	71
MBTS.60.X	Solid	25,5	60	25	104,5	8	59

Material: Aluminium.

Simplified mounting of threaded suspensions.

Kit with screws.

MPW. – Clamp Extension Arm



Part No.	A	B	C	D	E	F	Weight (g)
MPW.1818.X		18	80	20	118	10	62
MPW.2580.X		25	80	25	125	10	81
MPW.4080.X		40	80	25	140	10	88

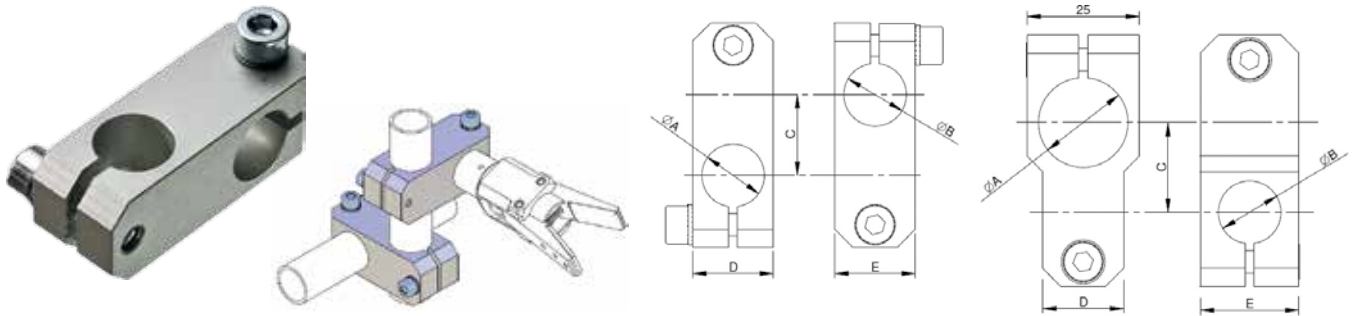
Material: Aluminium

MPW extension arms allow for greater flexibility in the mounting of clamps.

Reduces the amount of hardware required, saving weight and cost.

Kit with screws

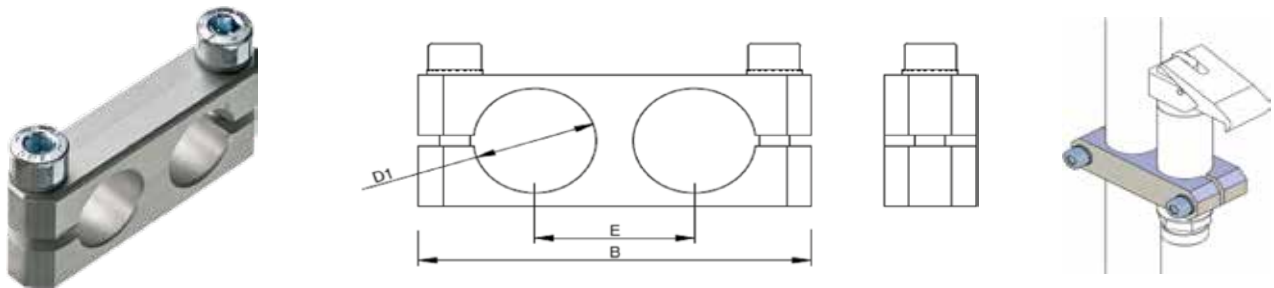
CCT. – Cross Tube Connector



Part No.	A	B	C	D	E	Weight (g)
CCT.10.10	10	10	16	14	14	17
CCT.14.14	14	14	18	18	18	35
CCT.20.20	20	20	26	25	25	71
CCT.20.10	20	10	20	14	20	41
CCT.20.14	20	14	20	18	22	48

90° Connection of two components with one clamp.

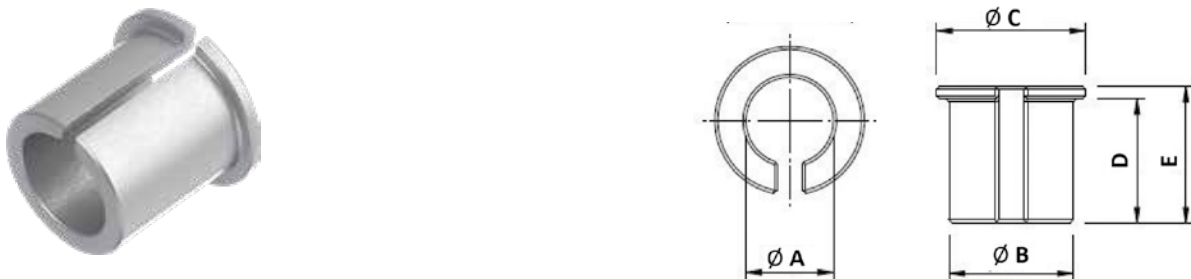
CA. – Parallel Tube Connector



Part No.	D1	B	E	Weight (g)
CA.1010.15	10	38	15	12
CA.1414.20	14	52	20	27
CA.2020.26	20	64	26	47
CA.3030.38	30	88	38	104

Parallel connection of two components with one clamp.

RID. – Reducer



Part No.	A	B	C	D	E	Weight (g)
RID.1410	10	14	18	14	16	4
RID.2014	14	20	24	20	22	9
RID.3020	20	30	30	30	30	30

Enables the use of smaller diameter shafts in a larger clamp.

GRIPPER ARMS

39 Heavy Duty Elbow Arms



39 Elbow Arms



40 Angle Arms



41 Centering Pin



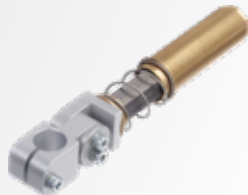
41 Extension Tubes



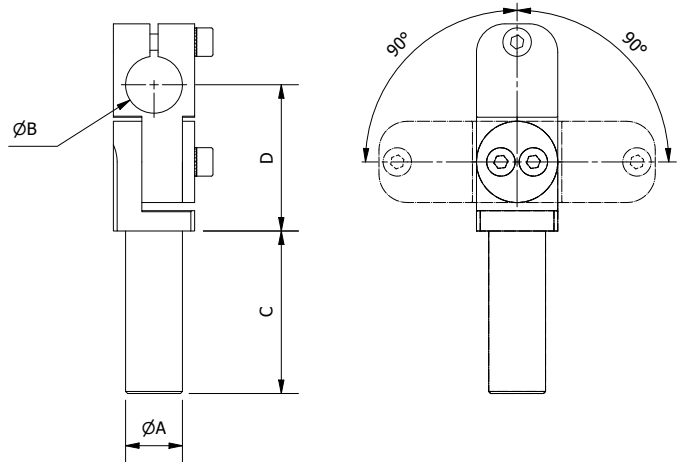
42 Gripper Suspension – Swivel Head



42 Spring Loaded Elbow Arm – Swivel Head



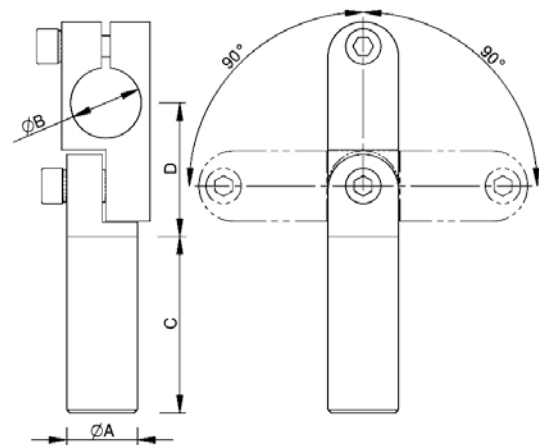
MA.GLH. – Gripper Elbow Arm Heavy Duty



Part No.	A	B	C	D	Weight (g)
MA.GLH.1010.030	10	10	30	30	27
MA.GLH.1010.060	10	10	60	30	31
MA.GLH.1010.090	10	10	90	30	37
MA.GLH.1414.040	14	14	40	36	56
MA.GLH.1414.080	14	14	80	36	66
MA.GLH.1414.120	14	14	120	36	83
MA.GLH.2020.050	20	20	50	45,5	111
MA.GLH.2020.100	20	20	100	45,5	127
MA.GLH.2020.150	20	20	150	45,5	169
MA.GLH.3030.080	30	30	80	60	302
MA.GLH.3030.140	30	30	140	60	394
MA.GLH.3030.200	30	30	200	60	509

Secure clamping for high loads.

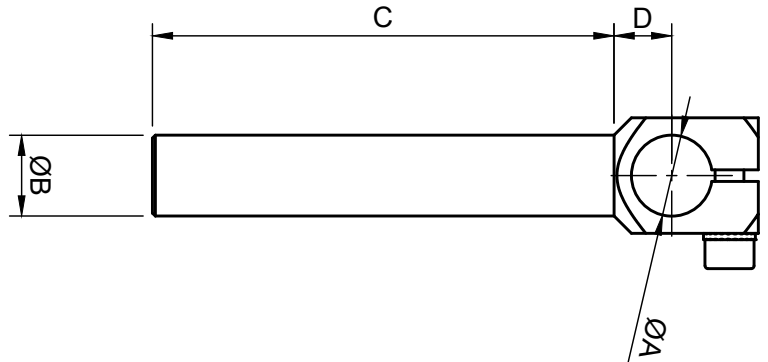
MA.GLA. – Gripper Elbow Arm



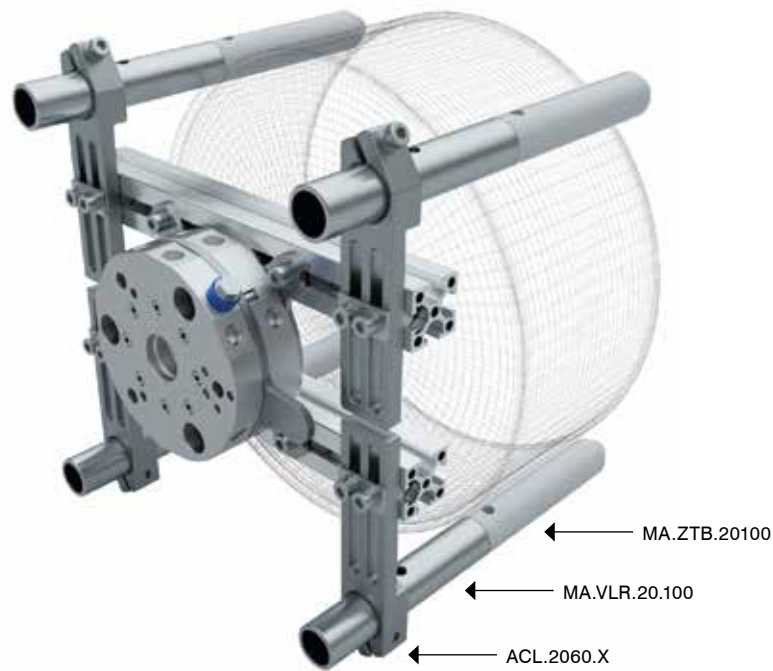
Part No.	A	B	C	D	Weight (g)
MA.GLA.1010.30	10	10	30	22	17
MA.GLA.1010.60	10	10	60	22	21
MA.GLA.1010.90	10	10	90	22	28
MA.GLA.1414.40	14	14	40	30	43
MA.GLA.1414.80	14	14	80	30	51
MA.GLA.1414.120	14	14	120	30	70
MA.GLA.2020.50	20	20	50	38	99
MA.GLA.2020.100	20	20	100	38	106
MA.GLA.2020.150	20	20	150	38	165
MA.GLA.2030.100	20	30	100	47	315
MA.GLA.3030.100	30	30	100	52,5	315

RIGID GRIPPER ARMS

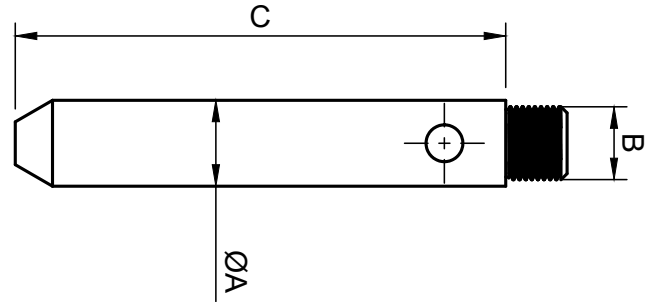
MA.WKA. – Angle Gripper Arm



Part No.	A	B	C	D	Weight (g)
MA.WKA.1010.30	10	10	30	8	13
MA.WKA.1010.60	10	10	60	8	17
MA.WKA.1010.90	10	10	90	8	22
MA.WKA.1414.40	14	14	40	10	22
MA.WKA.1414.80	14	14	80	10	35
MA.WKA.1414.120	14	14	120	10	48
MA.WKA.2020.50	20	20	50	12	47
MA.WKA.2020.100	20	20	100	12	78
MA.WKA.2020.150	20	20	150	12	96
MA.WKA.3030.80	30	30	80	17	136
MA.WKA.3030.140	30	30	140	17	178
MA.WKA.3030.200	30	30	200	17	278

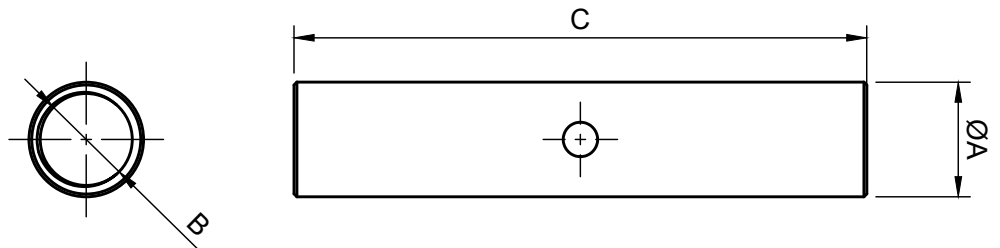


MA.ZTB. – Centering Pin



Part No.	A	B	C	REF	Weight (g)
MA.ZTB.1060	10	M8x1	60	MA.VLR.10	7
MA.ZTB.1480	14	M12x1	80	MA.VLR.14	18
MA.ZTB.20100	20	M17x1	100	MA.VLR.20	47
MA.ZTB.30100	30	M27x1	100	MA.VLR.30	104

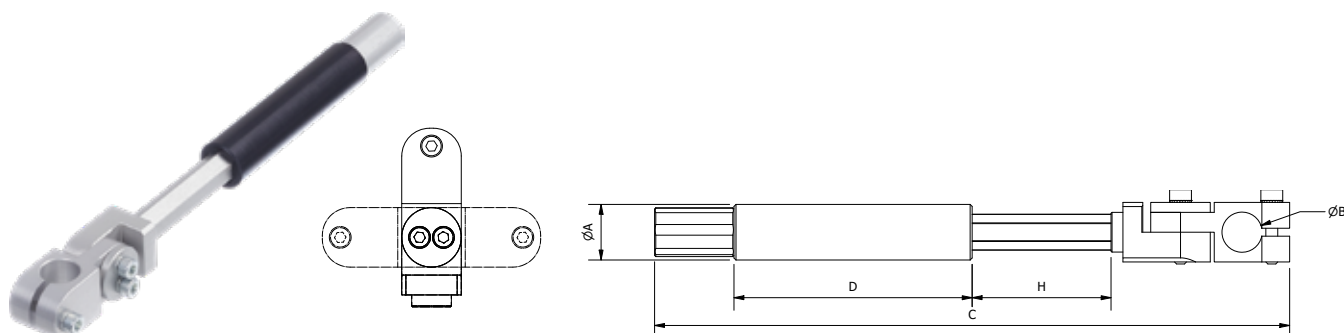
MA.VLR. – Extension Tube



Part No.	A	B	C	Weight (g)
MA.VLR.10.30	10	M8x1	30	3
MA.VLR.10.60	10	M8x1	60	6
MA.VLR.10.90	10	M8x1	90	10
MA.VLR.14.40	14	M12x1	40	6
MA.VLR.14.80	14	M12x1	80	13
MA.VLR.14.120	14	M12x1	120	19
MA.VLR.20.050	20	M17x1	50	15
MA.VLR.20.100	20	M17x1	100	31
MA.VLR.20.150	20	M17x1	150	46
MA.VLR.30.80	30	M27x1	80	38
MA.VLR.30.140	30	M27x1	140	67

SUSPENSIONS FOR GRIPPERS

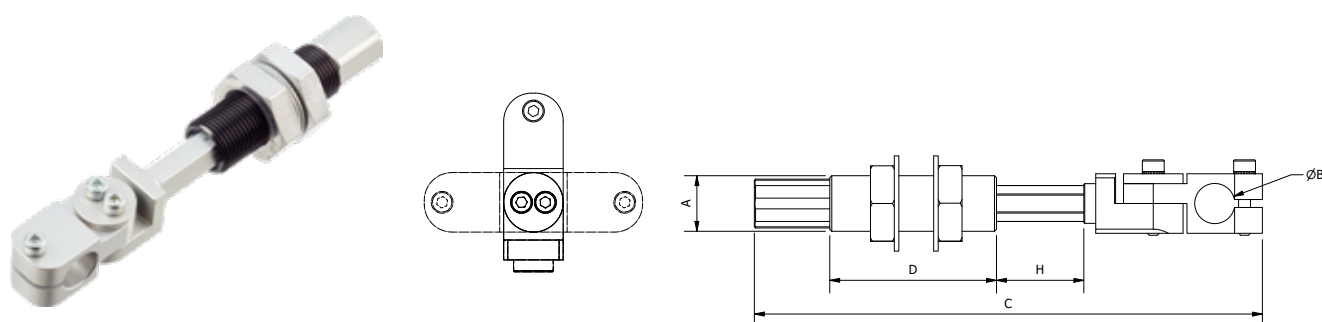
SXPC. – Gripper Suspension Smooth Body (Non-rotative) Adjustable Clamp



Part No.	A	B	C	D	H	F(N)	Weight (g)
SXPC.1420.10	14	10	128	42	20	8,9	43
SXPC.1435.10	14	10	160	60	35	9,5	50
SXPC.2025.14	20	14	153	55	25	11	95
SXPC.2025.20	20	20	166	55	25	11	111

Clamp angle adjustable between 0° and 90°.

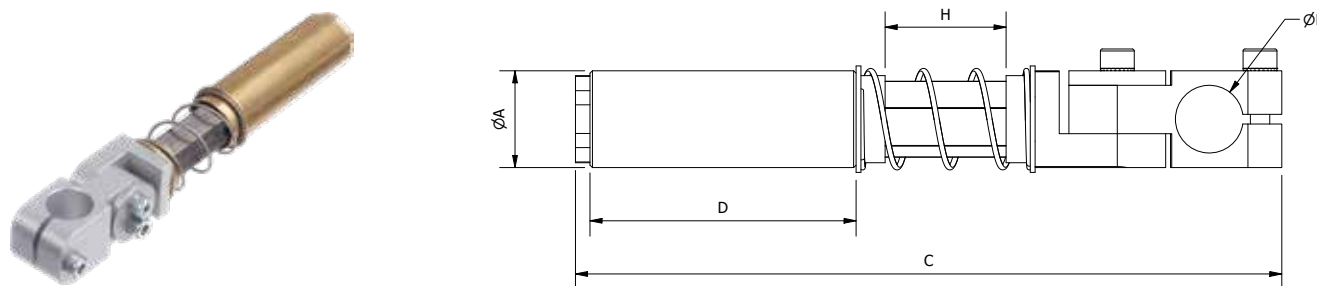
SXPCT. – Gripper Suspension Threaded Body (Non-rotative) Adjustable Clamp



Part No.	A	B	C	D	H	F(N)	Weight (g)
SXPCT.1420.10	M14x1.5	10	128	42	20	8,9	55
SXPCT.2025.14	M20x1.5	14	153	55	25	11	130

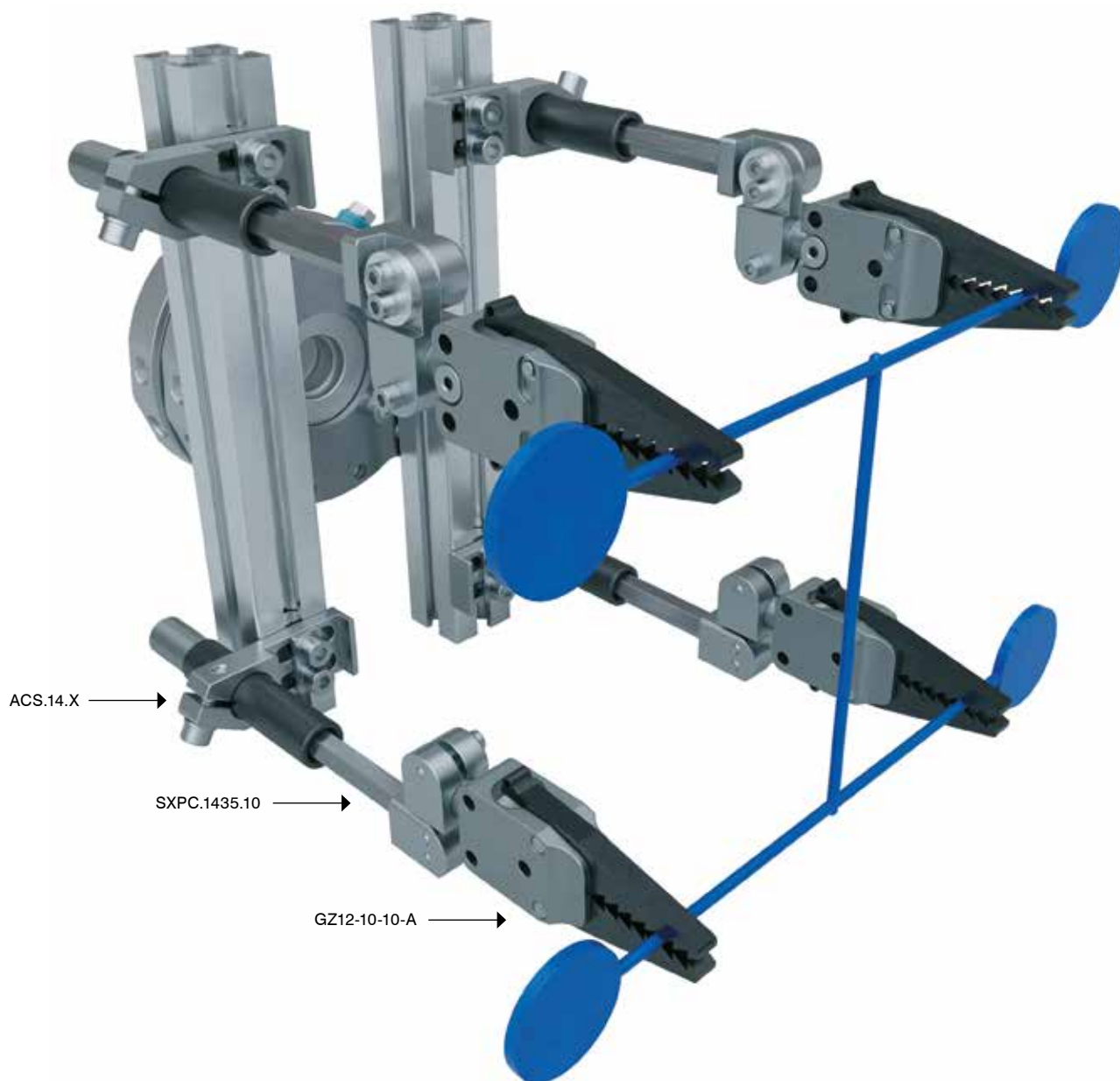
Clamp angle adjustable between 0° and 90°.

SVPC. – Spring Loaded Elbow Arm Smooth Body (Non-rotative) Swivel Head



Part No.	A	B	C	D	H	Weight (g)
SVPC.1415.10	14	10	106	32	15	58
SVPC.2025.14	20	14	144	55	25	149
SVPC.2025.20	20	20	157	55	25	164

Clamp angle adjustable between 0° and 90°.



VACUUM CUP MOUNTS

45 Rigid Vacuum Cup Arms



47 Vacuum Cup Mounts



48 Vacuum Cup Mounts – Long



50 Suspensions Rotative



51 Suspensions Non-Rotative



52 Suspensions Non-Rotative Swivel Head



54 Spring Loaded Vacuum Cup Arm Rotative



55 Spring Loaded Vacuum Cup Arm Non-Rotative



56 Spring Loaded Vacuum Cup Arm Non-Rotative Swivel Head



57 Level Compensators Non-Rotative



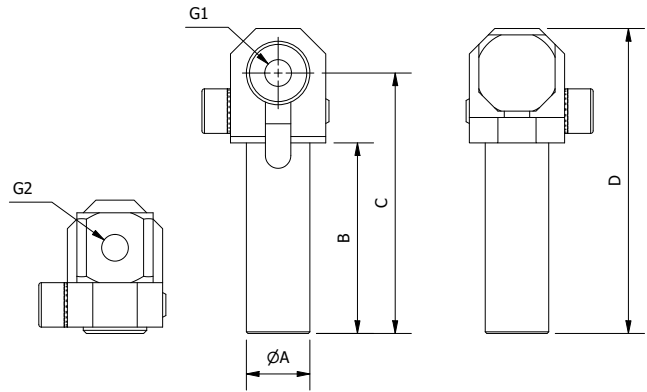
58 Telescopic Self-Retracting Suspensions



58 Spring Rod



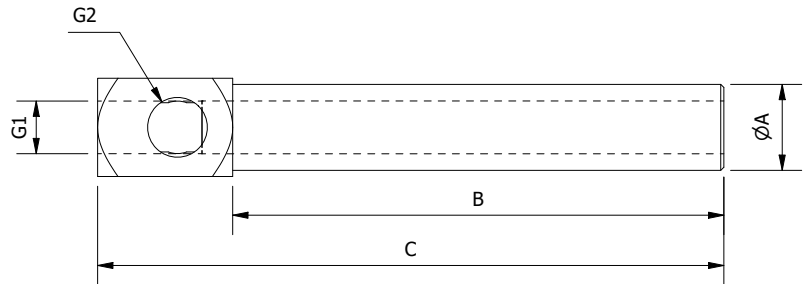
VGE. – Elbow Arm for Vacuum Cups



Part No.	A	B	C	D	G1	G2	Weight (g)
VGE.10030.0505	10	30	41	48	M5	M5	14
VGE.10060.0505	10	60	71	78	M5	M5	17
VGE.10090.0505	10	90	101	108	M5	M5	20
VGE.14040.1818	14	40	56	65	G 1/8	G 1/8	29
VGE.14080.1818	14	80	96	105	G 1/8	G 1/8	38
VGE.14120.1818	14	120	136	145	G 1/8	G 1/8	45
VGE.20050.1418	20	50	68	80	G 1/8	G 1/4	56
VGE.20100.1418	20	100	118	130	G 1/8	G 1/4	70
VGE.20150.1418	20	150	168	180	G 1/8	G 1/4	87
VGE.20050.1414	20	50	68	80	G 1/4	G 1/4	55
VGE.20100.1414	20	100	118	130	G 1/4	G 1/4	69
VGE.20150.1414	20	150	168	180	G 1/4	G 1/4	86

Allows optimal positioning of vacuum to part contour.
 Angle adjustable between 0° and 90°.
 Side vacuum port.

VGA. – Gripper Arm for Vacuum Cups

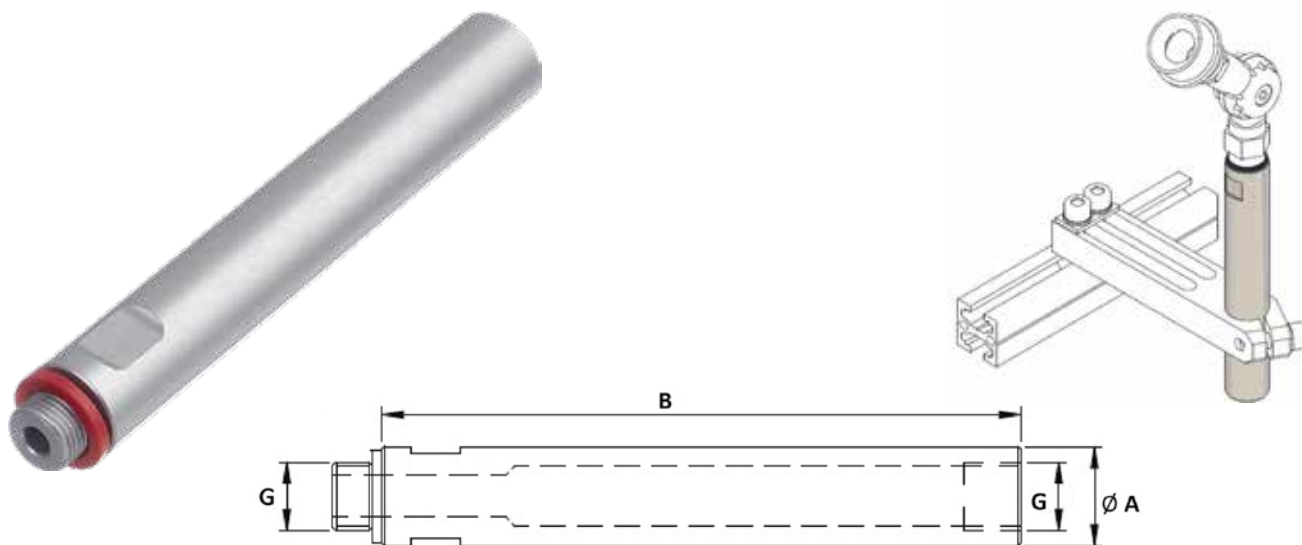


Part No.	A	B	C	G1	G2	Weight (g)
VGA.10030.0505	10	30	46	M5	M5	9
VGA.10060.0505	10	60	76	M5	M5	15
VGA.10090.0505	10	90	106	M5	M5	24
VGA.10030.1805	10	30	52	G 1/8	M5	15
VGA.10060.1805	10	60	82	G 1/8	M5	18
VGA.10090.1805	10	90	112	G 1/8	M5	25
VGA.14040.1818	14	40	62	G 1/8	G1/8	18
VGA.14080.1818	14	80	102	G 1/8	G1/8	30
VGA.14120.1818	14	120	142	G 1/8	G1/8	43
VGA.20050.1418	20	50	73	G 1/4	G1/8	44
VGA.20100.1418	20	100	123	G 1/4	G1/8	63
VGA.20150.1418	20	150	173	G 1/4	G1/8	78

To optimise position of a vacuum cup.
 Side vacuum port.

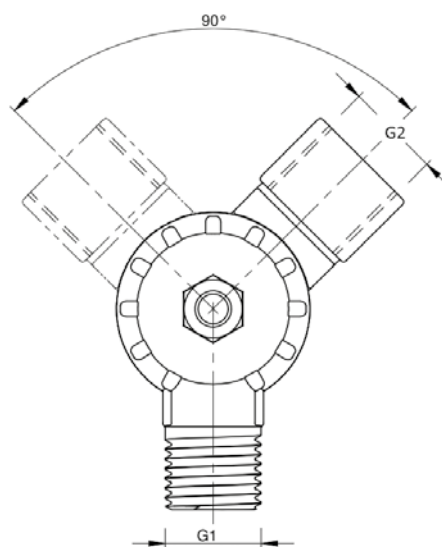
RIGID VACUUM CUP MOUNTS

VTE. – Vacuum Extension Tube



Part No.	A	B	G1	Weight (g)
VTE.1030.05	10	30	M5	6
VTE.1045.05	10	45	M5	9
VTE.1090.05	10	90	M5	16
VTE.1445.18	14	45	G 1/8	14
VTE.1490.18	14	90	G 1/8	26
VTE.2045.14	20	45	G 1/4	30
VTE.2090.14	20	90	G 1/4	58

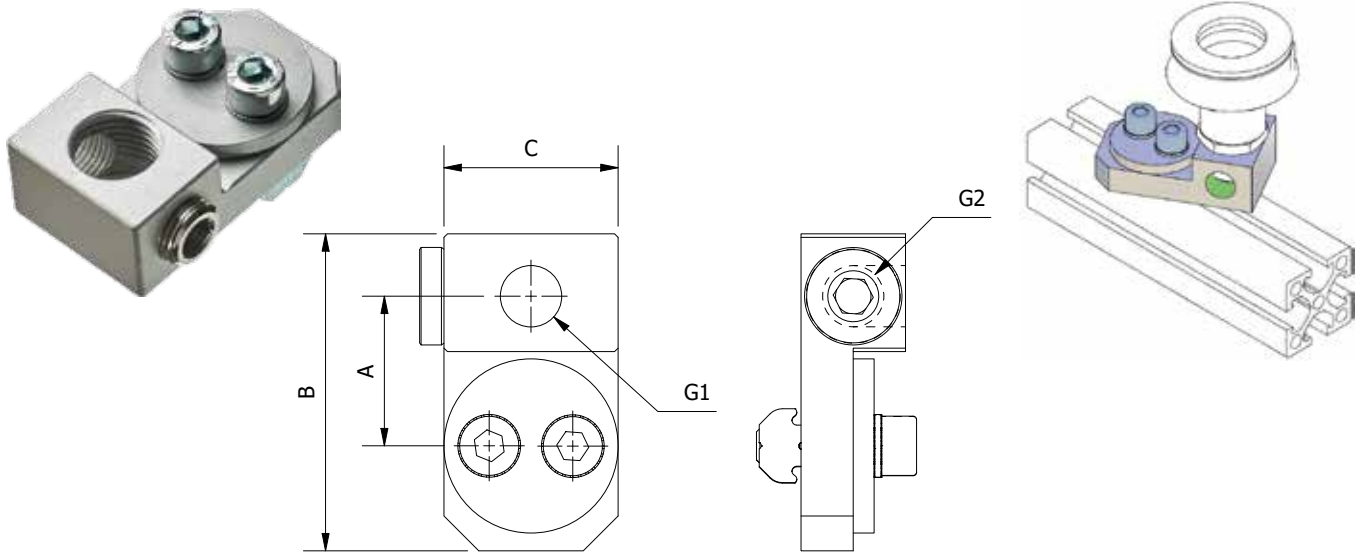
VSE. – Vacuum Elbow - Adjustable



Part No.	G1	G2	Weight (g)
VSE.18F18M	G1/8	G 1/8	7
VSE.14F14M	G1/4	G 1/4	15

For vacuum only.
Angle of vacuum cup adjustable between 0° and 90°.

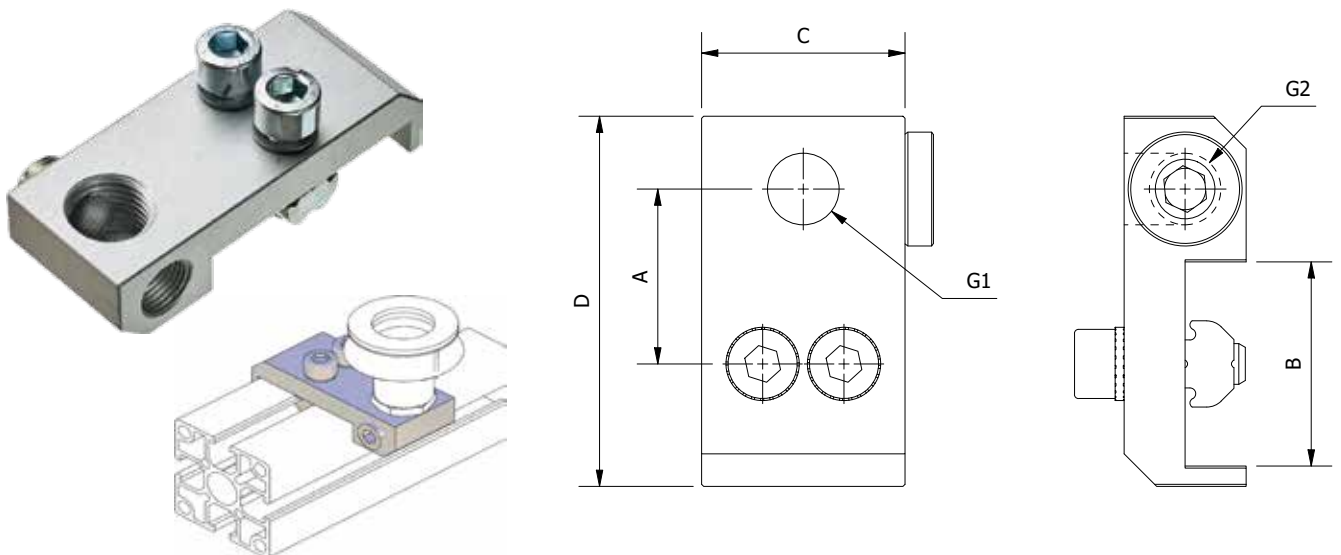
VMA. – Vacuum Cup Mounting Bracket - Adjustable



Part No.	A	B	C	G1	G2	Weight (g)
VMA.0505.L	14	28	16	M5	M5	19
VMA.1818.X	21	46	25	G 1/8	G 1/8	44
VMA.1418.X	21	46	25	G 1/4	G 1/8	44

Vacuum connection with adjustable 360° rotation.

VMF. – Vacuum Cup Mounting Bracket - Fixed

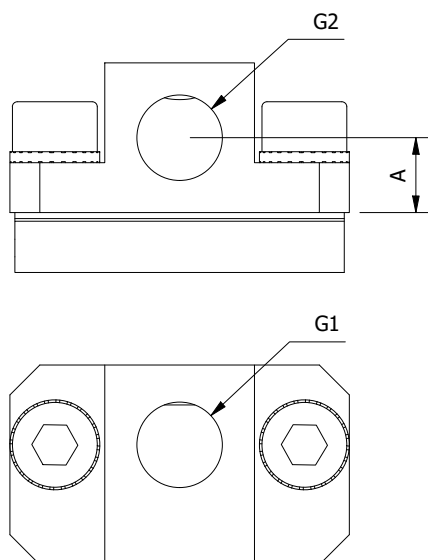


Part No.	A	B	C	D	G1	G2	Weight (g)
VMF.0505.L	17	18	16	32	M5	M5	18
VMF.1818.X	22	25	25	46	G 1/8	G 1/8	46
VMF.1418.X	22	25	25	46	G 1/4	G 1/8	49
VMF.1418.J	29	40	25	60	G 1/4	G 1/8	

Vacuum connection for use where space is limited.

RIGID VACUUM CUP MOUNTS

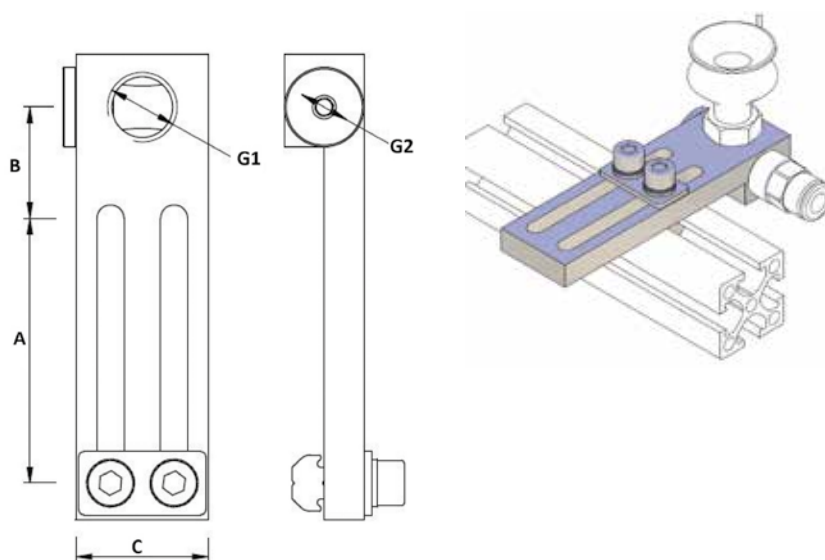
VMB. – Vacuum Cup Mounting Bracket



Part No.	A	G1	G2	Weight (g)
VMB.0505.X	4	M5	M5	27
VMB.1818.X	7,5	G 1/8	G 1/8	35
VMB.1414.X	10	G 1/4	G 1/4	39

Vacuum connection for use where space is limited.

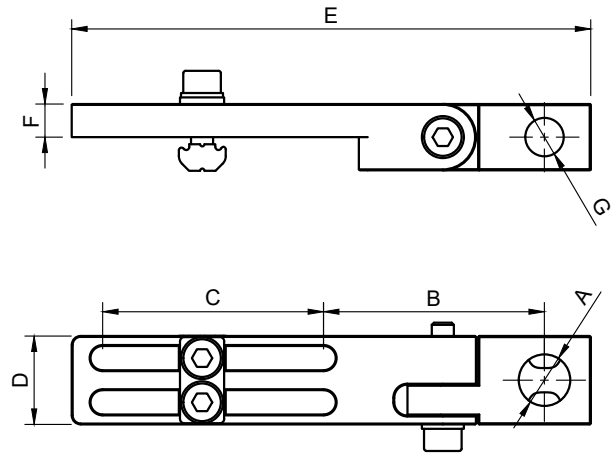
VML. – Vacuum Cup Mounting Bracket - Long



Part No.	A	B	C	G1	G2	Weight (g)
VML.0505.40.L	40	14	16	M5	M5	24
VML.1818.50.X	50	21	25	G 1/8	G 1/8	65
VML.1418.50.X	50	21	25	G 1/4	G 1/8	65
VML.1414.50.J	50	23	25	G 1/4	G 1/4	73

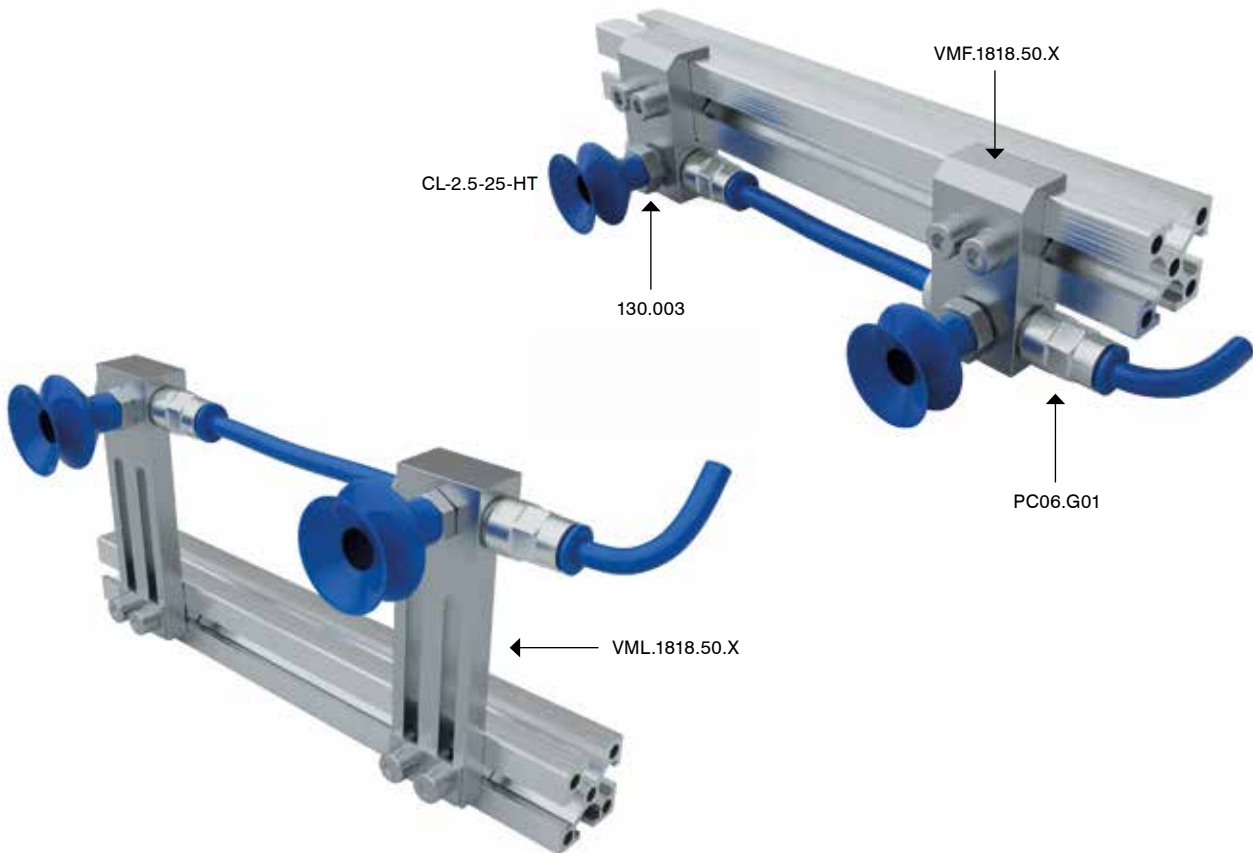
Allows inline adjustment of vacuum cup position.

VMS. – Vacuum Cup Mounting Bracket - Long, Swivel Head



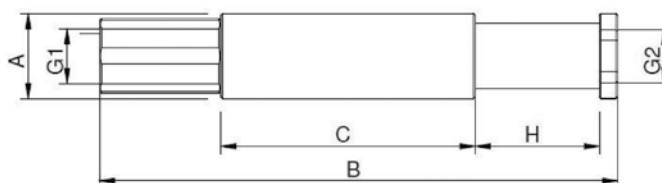
Part No.	A	B	C	D	E	F	G	Weight (g)
VMS.1418.50.X	G1 / 4	50	50	20	117.5	7.5	G 1/8	72

Allows inline and radial adjustment of vacuum cup position.



SUSPENSIONS FOR VACUUM CUPS

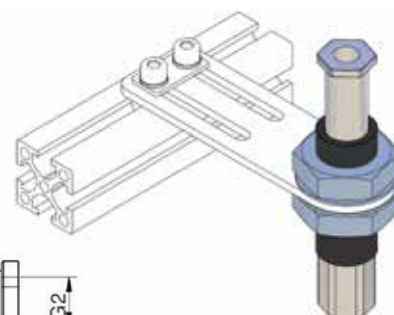
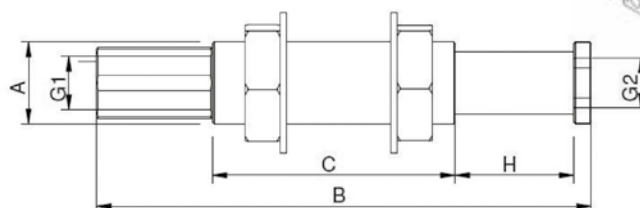
MP.SDR. – Telescopic Suspension Smooth Body (Rotative)



Part No.	A	B	C	G1	G2	H	F(N)	Weight (g)
MP.SDR.1010	10	51	20	M5	M5	10	3,6	7
MP.SDR.1025	10	86	40	M5	M5	25	3,7	11
MP.SDR.1420	14	85	42	G 1/8	G 1/8	20	8,9	19
MP.SDR.1435	14	120	62	G 1/8	G 1/8	35	9,5	26
MP.SDR.2025	20	97	47	G 1/8	G 1/8	25	11	56
MP.SDR.2050	20	147	72	G 1/8	M10	50	11,4	76
MP.SDR.2025.14	20	107	47	G 1/4	G 1/4	25	11	54
MP.SDR.2050.14	20	157	72	G 1/4	G 1/4	50	11,4	74

Body and rod made of aluminium - anodized.

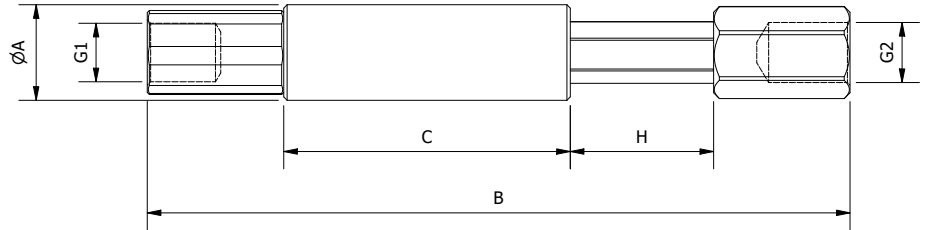
MP.SDRG. – Telescopic Suspension Threaded Body (Rotative)



Part No.	A	B	C	G1	G2	H	F(N)	Weight (g)
MP.SDRG.1010	M10x1	51	20	M5	M5	10	3,6	12
MP.SDRG.1025	M10x1	86	40	M5	M5	25	3,7	16
MP.SDRG.1420	M14x1.5	85	42	G 1/8	G 1/8	20	8,9	30
MP.SDRG.1435	M14x1.5	120	62	G 1/8	G 1/8	35	9,5	37
MP.SDRG.1620	M16x1	85	42	G 1/8	G 1/8	20	8,9	37
MP.SDRG.2025	M20x1.5	97	47	G 1/8	G 1/8	25	11	88
MP.SDRG.2050	M20x1.5	147	72	G 1/8	G 1/8	50	11,4	108

Body and rod made of aluminium - anodized.

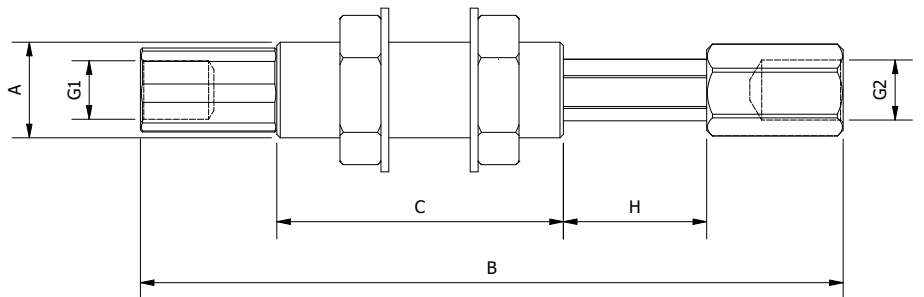
MP.SDN. – Telescopic Suspension Smooth Body (Non-rotative)



Part No.	A	B	C	G1	G2	H	F(N)	Weight (g)
MP.SDN.1010	10	61	26	M5	M5	10	3,6	8
MP.SDN.1025	10	91	41	M5	M5	25	3,7	11
MP.SDN.1420	14	103	42	G 1/8	G 1/8	20	8,9	25
MP.SDN.1435	14	135	60	G 1/8	G 1/8	35	9,5	32
MP.SDN.2025	20	114	55	G 1/8	G 1/8	25	11	63
MP.SDN.2050	20	167	82	G 1/8	G 1/8	50	11,4	81
MP.SDN.2025.14	20	114	55	G 1/4	G 1/4	25	11	59
MP.SDN.2050.14	20	161	82	G 1/4	G 1/4	50	11,4	77

Body and rod made of aluminium - anodized.
Non Rotative.

MP.SDNG. – Telescopic Suspension Threaded Body (Non-rotative)

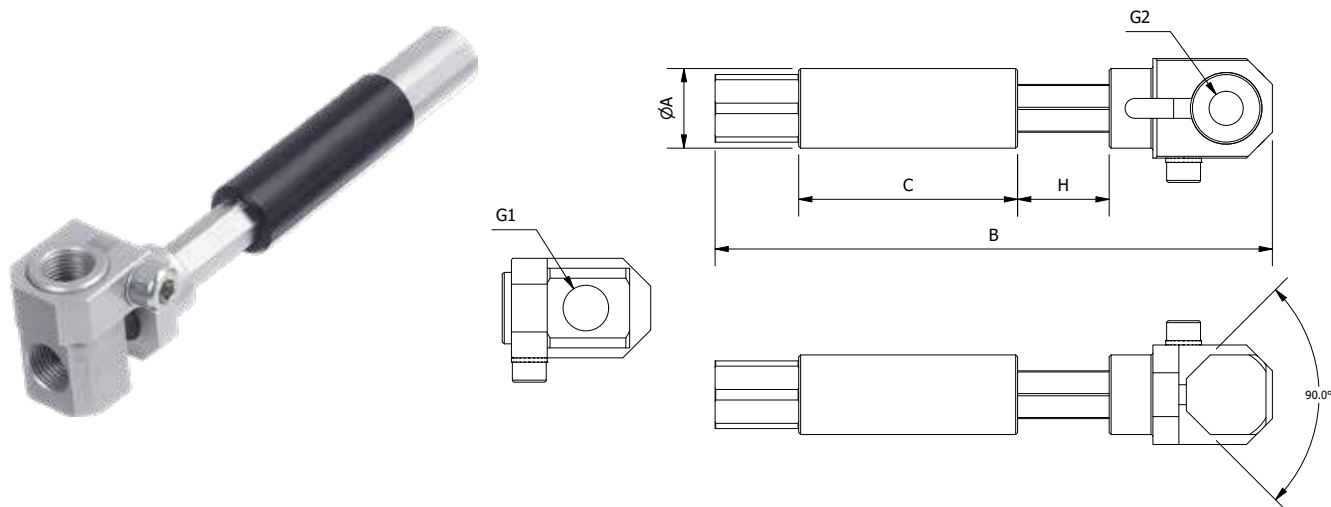


Part No.	A	B	C	G1	G2	H	F(N)	Weight (g)
MP.SDNG.1010	M10x1	61	26	M5	M5	10	3,6	13
MP.SDNG.1025	M10x1	91	41	M5	M5	25	3,7	16
MP.SDNG.1420	M14x1.5	103	42	G 1/8	G 1/8	20	8,9	36
MP.SDNG.1435	M14x1.5	135	60	G 1/8	G 1/8	35	9,5	42
MP.SDNG.2025	M20x1.5	114	55	G 1/8	G 1/8	25	11	96
MP.SDNG.2050	M20x1.5	174	82	G 1/8	G 1/8	50	11,4	115
MP.SDNG.2025.14	M20x1.5	114	55	G 1/4	G 1/4	25	11	92
MP.SDNG.2050.14	M20x1.5	167	82	G 1/4	G 1/4	50	11,4	111

Body and rod made of aluminium - anodized.
Non Rotative.

SUSPENSIONS FOR VACUUM CUPS

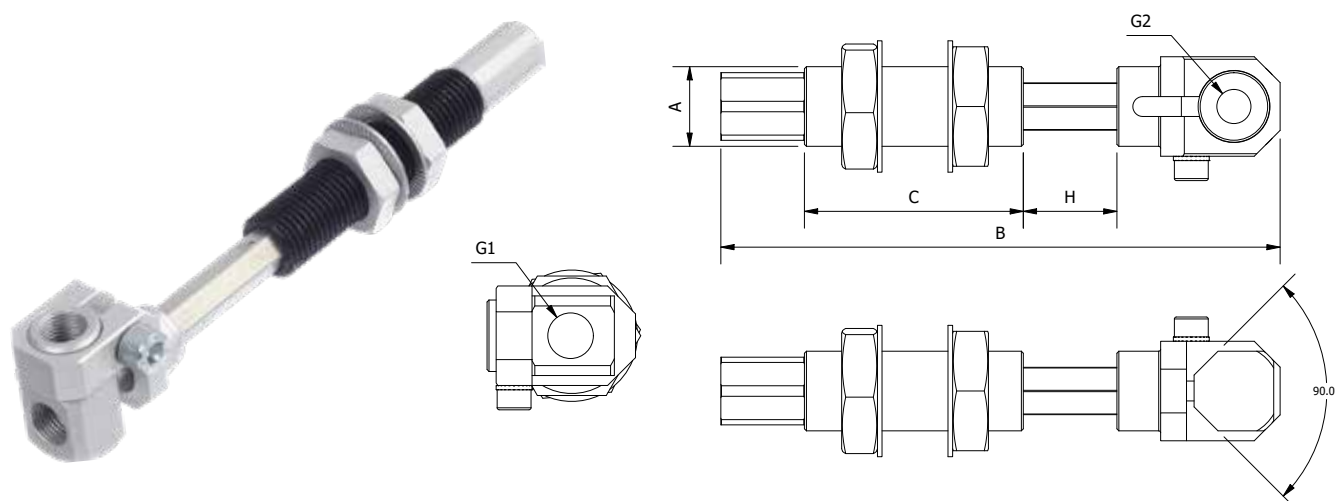
MP.SSN. – Telescopic Suspension Smooth Body (Non-rotative) Swivel Head



Part No.	A	B	C	G1	G2	H	F(N)	Weight (g)
MP.SSN.10100505	10	78	26	M5	M5	10	3,6	20
MP.SSN.10250505	10	108	41	M5	M5	25	3,7	23
MP.SSN.14201818	14	116	42	G 1/8	G 1/8	20	8,9	45
MP.SSN.14351818	14	148	60	G 1/8	G 1/8	35	9,5	51
MP.SSN.20251418	20	140	55	G 1/4	G 1/8	25	11	102
MP.SSN.20501418	20	193	82	G 1/4	G 1/8	50	11,4	121

Body and rod made of aluminium - anodized.
 Angle of vacuum cup adjustable between 0° and 90°.
 Non Rotative.

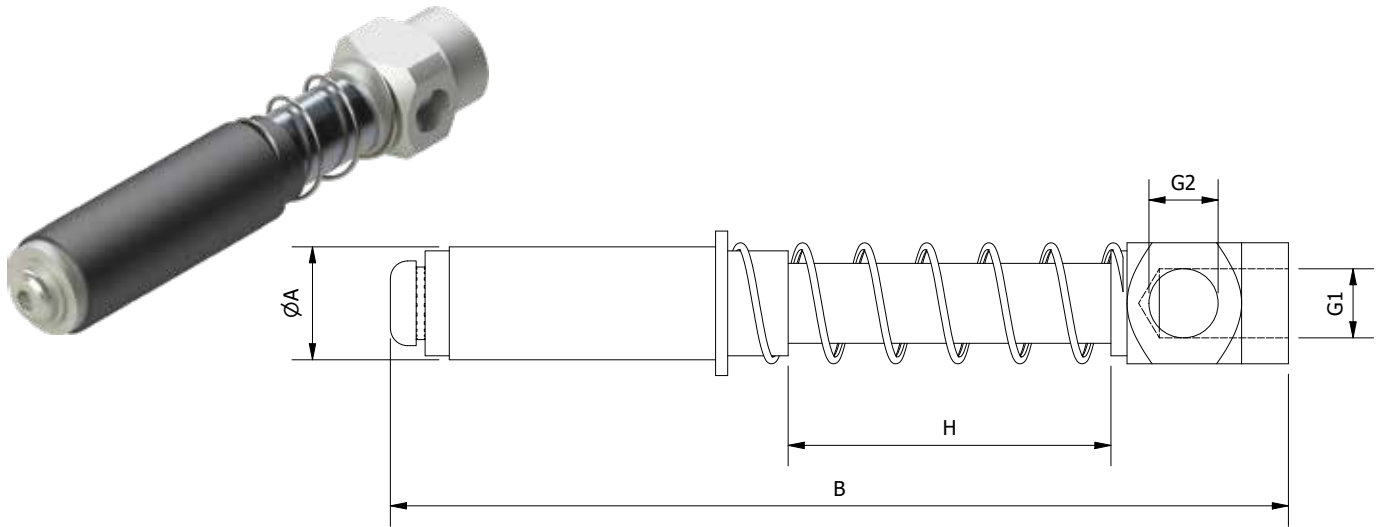
MP.SSNG. – Telescopic Suspension Threaded Body (Non-rotative) Swivel Head



Part No.	A	B	C	G1	G2	H	F(N)	Weight (g)
MP.SSNG.10100505	M10x1	78	26	M5	M5	10	3,6	13
MP.SSNG.10250505	M10x1	108	41	M5	M5	25	3,7	16
MP.SSNG.14201818	M14x1.5	116	42	G 1/8	G 1/8	20	8,9	36
MP.SSNG.14351818	M14x1.5	148	60	G 1/8	G 1/8	35	9,5	42
MP.SSNG.20251418	M20x1.5	140	55	G 1/4	G 1/8	25	11	96
MP.SSNG.20501418	M20x1.5	193	82	G 1/4	G 1/8	50	11,4	115

Body and rod made of aluminium - anodized.
 Angle of vacuum cup adjustable between 0° and 90°.
 Non Rotative.

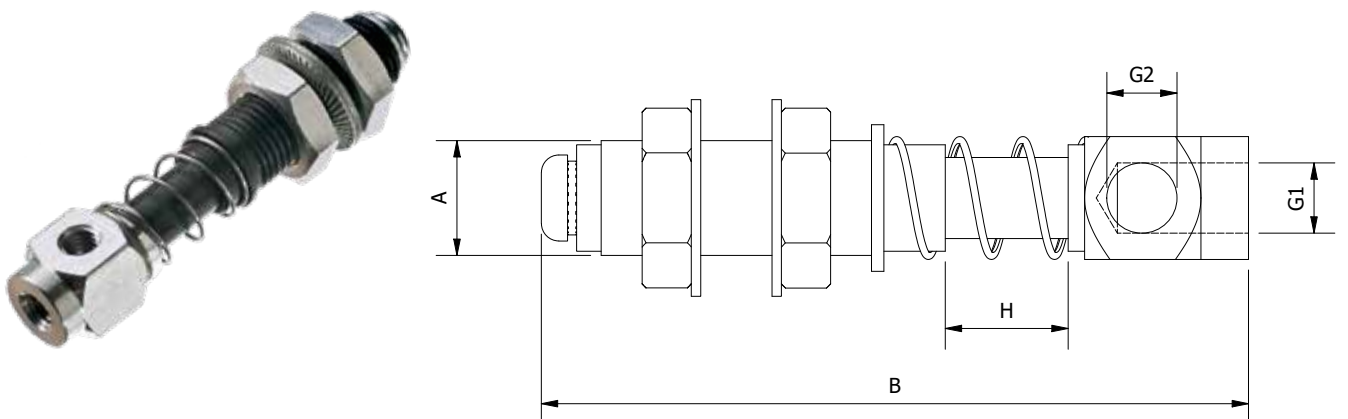
MA.GGD. – Spring Loaded Vacuum Cup Arm Smooth Body (Rotative)



Part No.	A	B	G1	G2	H	F(N)	Weight (g)
MA.GGD.10050510	10	59	M5	M5	10	8	11
MA.GGD.10050530	10	85	M5	M5	30	11	15
MA.GGD.14181815	14	84	G 1/8	G 1/8	15	9	33
MA.GGD.14181840	14	109	G 1/8	G 1/8	40	14,6	38
MA.GGD.20141820	20	109	G 1/4	G 1/8	20	11,7	76
MA.GGD.20141850	20	147	G 1/4	G 1/8	50	16,8	92

For use with round vacuum cups only.

MA.GGDG. – Spring Loaded Vacuum Cup Arm Threaded Body (Rotative)

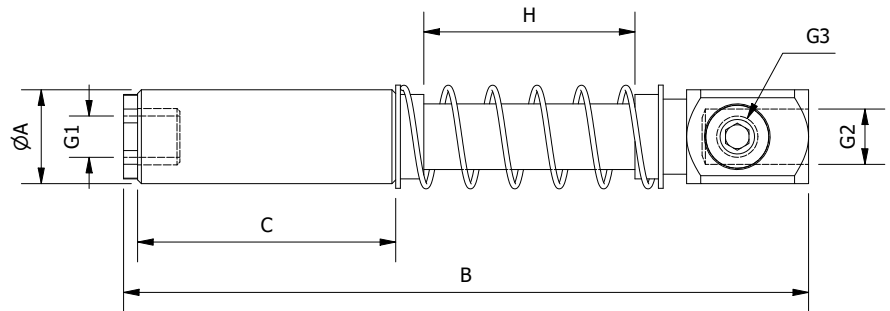


Part No.	A	B	G1	G2	H	F(N)	Weight (g)
MA.GGDG.10050510	M10x1	59	M5	M5	10	8	17
MA.GGDG.10050530	M10x1	85	M5	M5	30	11	20
MA.GGDG.14181815	M14x1.5	86	G 1/8	G 1/8	15	9	41
MA.GGDG.14181840	M14x1.5	111	G 1/8	G 1/8	40	14.6	45
MA.GGDG.20141820	M20x1.5	109	G 1/4	G 1/8	20	11.7	99
MA.GGDG.20141850	M20x1.5	147	G 1/4	G 1/8	50	16.8	118

For use with round vacuum cups only.

SUSPENSIONS FOR VACUUM CUPS

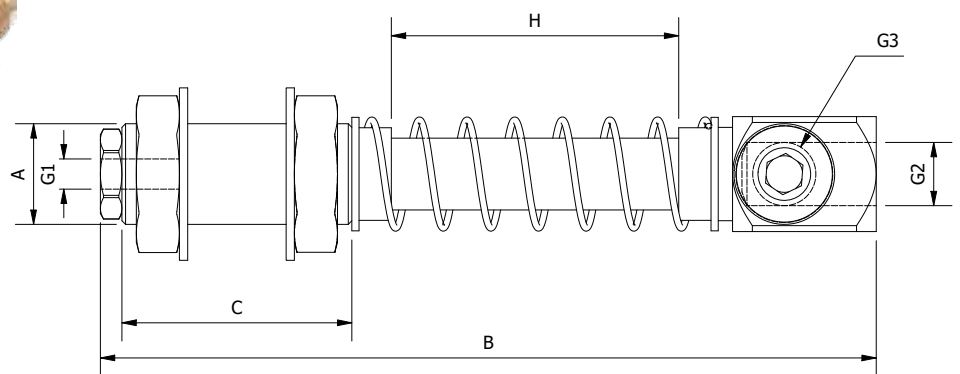
SZR. – Spring Loaded Vacuum Cup Arm Smooth Body (Rotative)



Part No.	A	B	C	G1	G2	G3	H	Weight (g)
SZR.1010.0505	10	59	25	M5	M5		10	28
SZR.1030.0505	10	79	25	M5	M5		30	31
SZR.1415.1818	14	83	32	M5	G 1/8	G 1/8	15	55
SZR.1440.1818	14	108	32	M5	G 1/8	G 1/8	40	60
SZR.2025.1418	20	121	55	G 1/8	G 1/4	G 1/8	25	137
SZR.2050.1418	20	146	55	G 1/8	G 1/4	G 1/8	50	144

For use with round vacuum cups only.

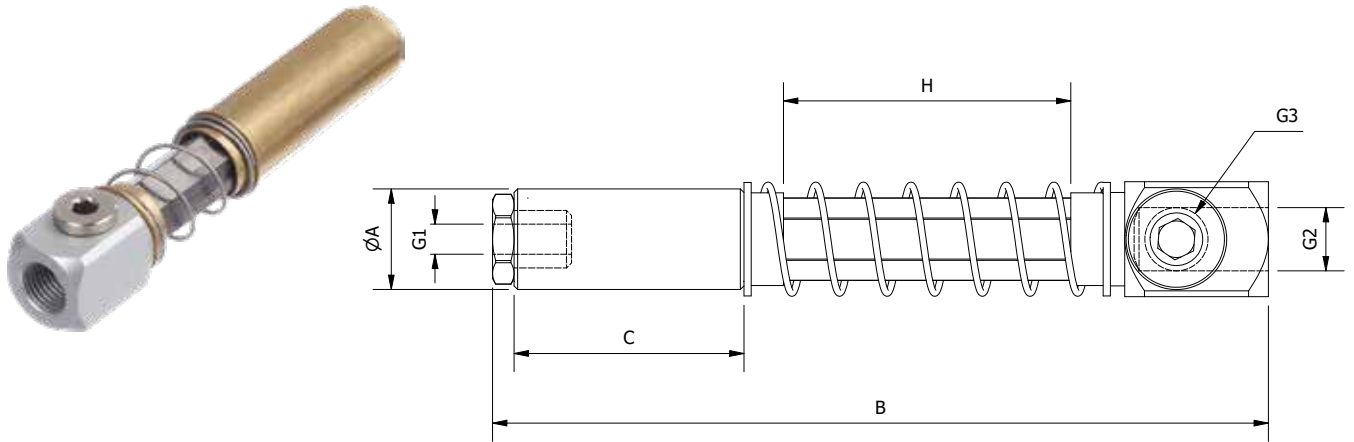
SZRG. – Spring Loaded Vacuum Cup Arm Threaded Body (Rotative)



Part No.	A	B	C	G1	G2	G3	H	Weight (g)
SZRG.1010.0505	M10x1	59	25	M5	M5		10	32
SZRG.1030.0505	M10x1	79	25	M5	M5		30	35
SZRG.1415.1818	M14x1.5	83	32	M5	G 1/8	G 1/8	15	67
SZRG.1440.1818	M14x1.5	108	32	M5	G 1/8	G 1/8	40	72
SZRG.2025.1418	M20x1.5	121	55	G 1/8	G 1/4	G 1/8	25	171
SZRG.2050.1418	M20x1.5	146	55	G 1/8	G 1/4	G 1/8	50	187

For use with round vacuum cups only.

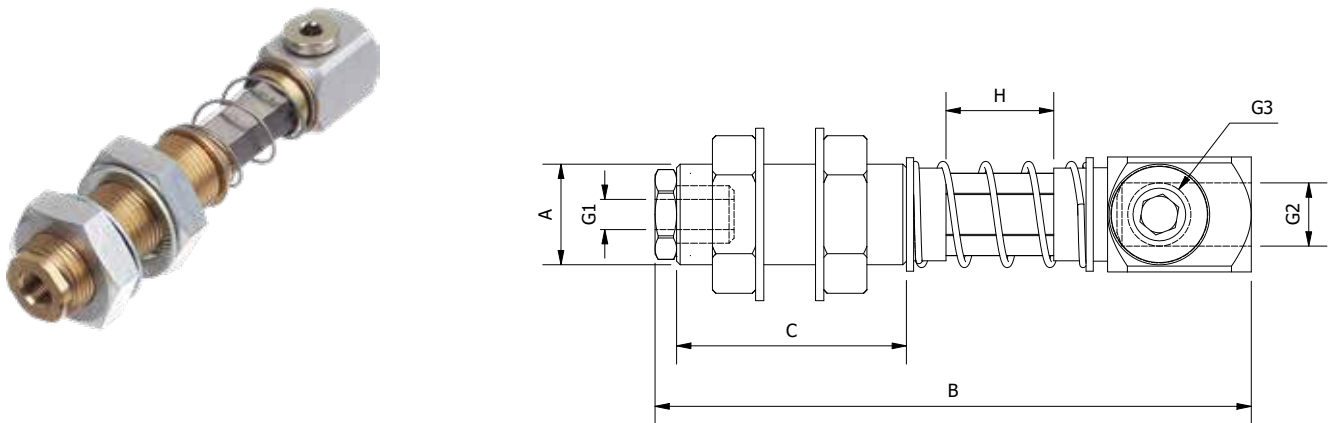
SZN. – Spring Loaded Vacuum Cup Arm Smooth Body (Non-rotative)



Part No.	A	B	C	G1	G2	G3	H	Weight (g)
SZN.1010.0505	10	59	25	M5	M5		10	25
SZN.1030.0505	10	79	25	M5	M5		30	27
SZN.1415.1818	14	83	32	M5	G 1/8	G 1/8	15	52
SZN.1440.1818	14	108	32	M5	G 1/8	G 1/8	40	55
SZN.2025.1418	20	121	55	G 1/8	G 1/4	G 1/8	25	137
SZN.2050.1418	20	146	55	G 1/8	G 1/4	G 1/8	50	140

For use with round and oval vacuum cups.
Non Rotative.

SZNG. – Spring Loaded Vacuum Cup Arm Threaded Body (Non-rotative)

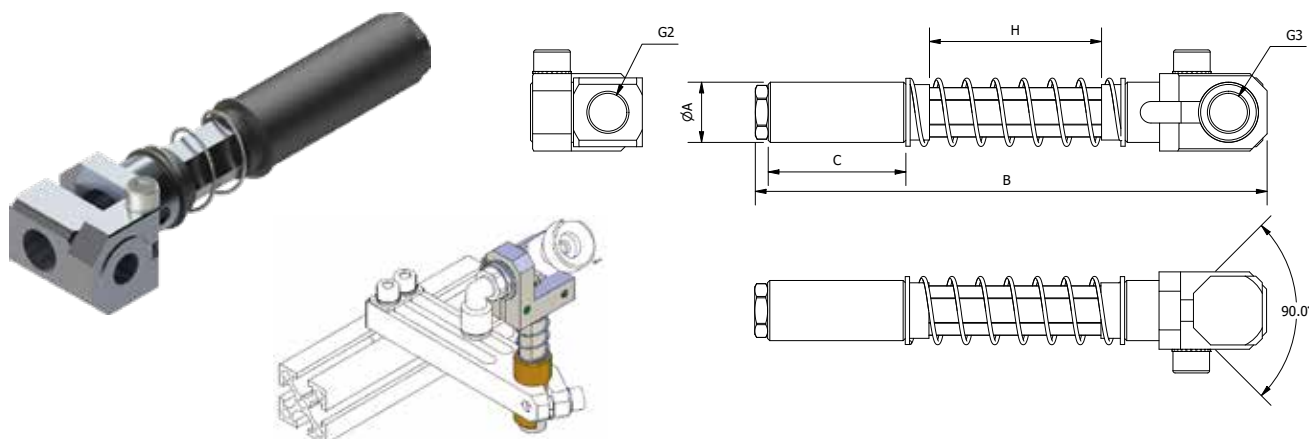


Part No.	A	B	C	G1	G2	G3	H	Weight (g)
SZNG.1010.0505	M10x1	59	25	M5	M5	-	10	30
SZNG.1030.0505	M10x1	79	25	M5	M5	-	30	32
SZNG.1415.1818	M14x1.5	83	32	M5	G 1/8	G 1/8	15	63
SZNG.1440.1818	M14x1.5	108	32	M5	G 1/8	G 1/8	40	65
SZNG.2025.1418	M20x1.5	121	55	G 1/8	G 1/4	G 1/8	25	170
SZNG.2050.1418	M20x1.5	146	55	G 1/8	G 1/4	G 1/8	50	173

For use with round and oval vacuum cups.
Non Rotative.

SUSPENSIONS FOR VACUUM CUPS

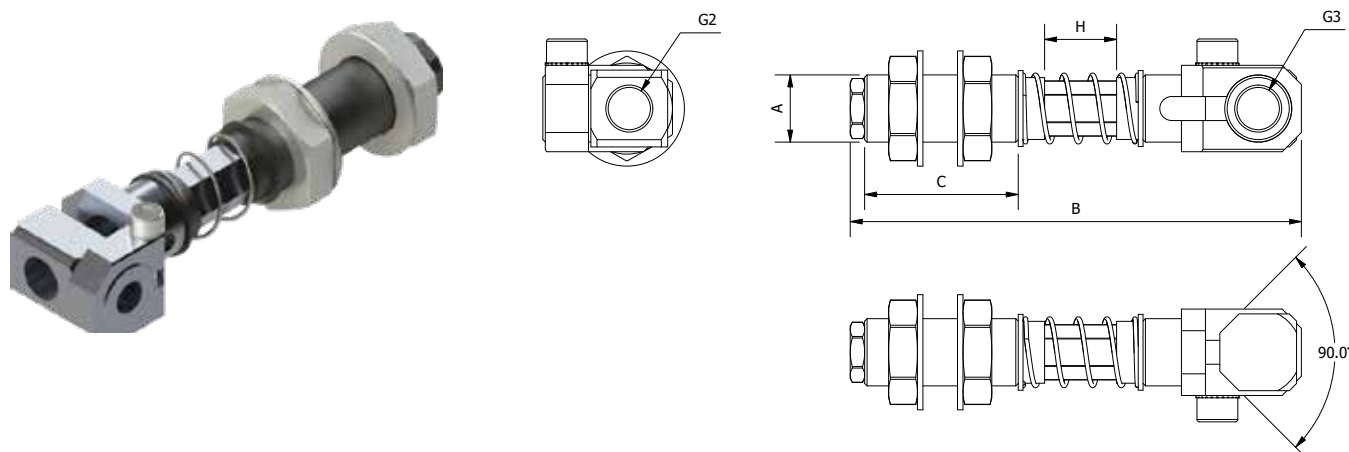
SZP. – Spring Loaded Vacuum Cup Arm Smooth Body (Non-rotative) Swivel Head



Part No.	A	B	C	G2	G3	H	Weight (g)
SZP.1010.0505	10	76	25	M5		10	32
SZP.1030.0505	10	96	25	M5		30	35
SZP.1415.1818	14	94	32	G 1/8	G 1/8	15	67
SZP.1440.1818	14	119	32	G 1/8	G 1/8	40	72
SZP.2025.1418	20	131	55	G 1/4	G 1/8	25	171
SZP.2050.1418	20	156	55	G 1/4	G 1/8	50	187

For use with round and oval vacuum cups .
 Angle of vacuum cup adjustable between 0°and 90°.
 Non Rotative.

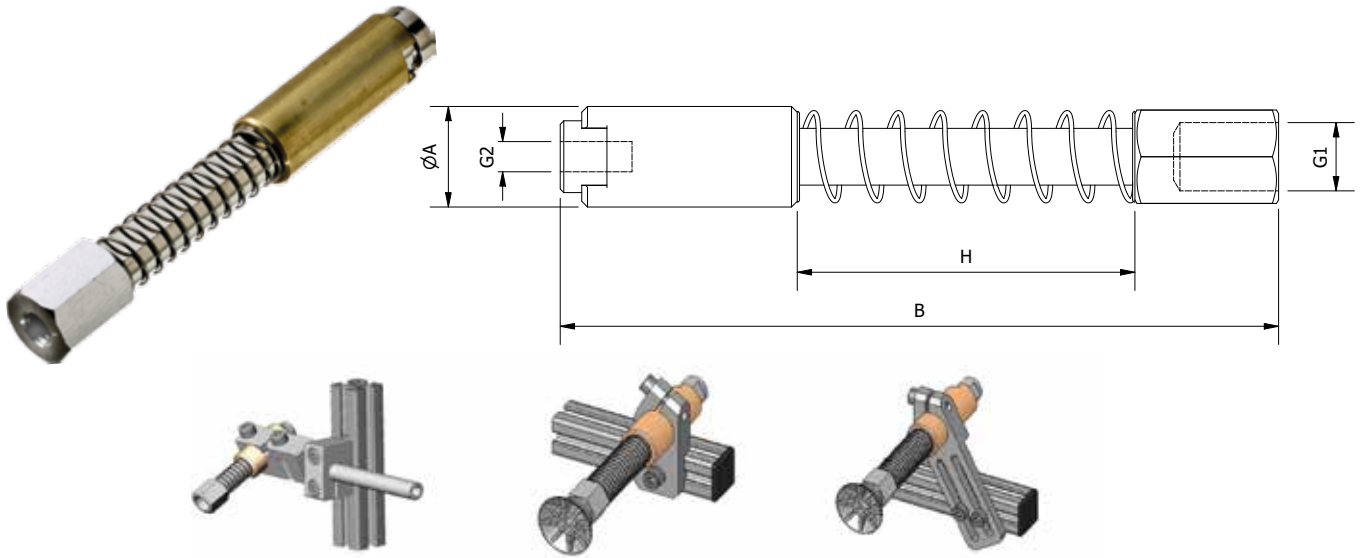
SZPG. – Spring Loaded Vacuum Cup Arm Threaded Body (Non-rotative) Swivel Head



Part No.	A	B	C	G2	G3	H	Weight (g)
SZPG.1010.0505	M10x1	76	25	M5	-	10	39
SZPG.1030.0505	M10x1	96	25	M5	-	30	44
SZPG.1415.1818	M14x1.5	94	32	G 1/8	G 1/8	15	70
SZPG.1440.1818	M14x1.5	119	32	G 1/8	G 1/8	40	90
SZPG.2025.1418	M20x1.5	131	55	G 1/4	G 1/8	25	188

For use with round and oval vacuum cups.
 Angle of vacuum cup adjustable between 0°and 90°.
 Non Rotative.

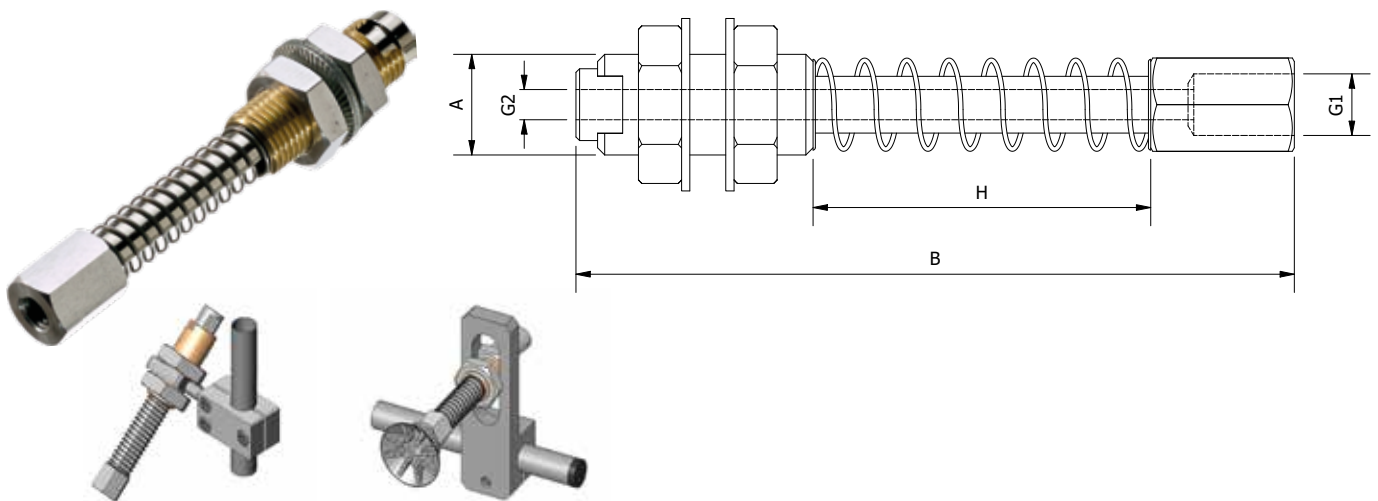
LC. – Level Compensator Smooth Body (Non-rotative)



Part No.	A	B	G1	G2	H	F(N)	Weight (g)
LC.10.20	10	69	M5	M5	20	3,4	26
LC.12.20	12	69	M5	M5	20	18,4	33
LC.14.38	14	100	G 1/8	M5	38	23,3	63
LC.20.48	20	125	G 1/4	G 1/8	48	16,6	155

Spring: Steel.
 Sliding Parts: Chrome-plated Brass.
 Terminal Parts: Anodized Aluminium.

LC.M. – Level Compensator Threaded Body (Non-rotative)

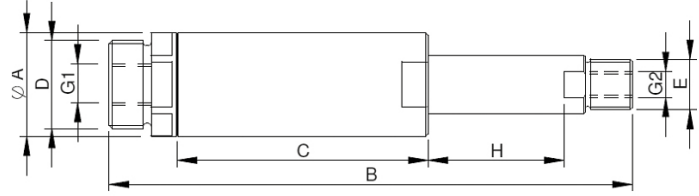


Part No.	A	B	G1	G2	H	F(N)	Weight (g)
LC.M10.20	M10x1	70	M5	M5	20	3,4	36
LC.M12.20	M12x1.25	77	G 1/8	M5	20	6	40
LC.M14.38	M14x1.5	100	G 1/8	M5	38	23,2	71
LC.M20.48	M20x1.5	125	G 1/4	G 1/8	48	16,7	189

Spring: Steel.
 Sliding Parts: Chrome-plated Brass.
 Terminal Parts: Anodized Aluminium.

SUSPENSIONS FOR VACUUM CUPS

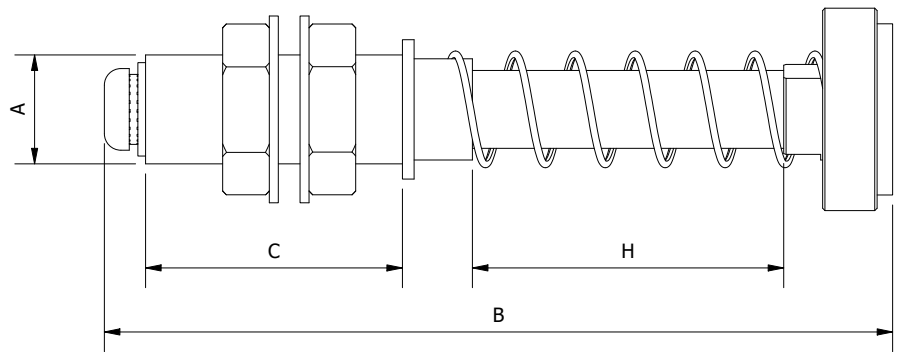
MPTSS – Telescopic Self-Retracting Suspension



Part No.	A	B	C	D	E	G1	G2	H	F(N)	Weight (g)
MPTSS2025	20	100	48	M17x1	G 1/8	G 1/8	M5	25	3,6	42
MPTSS2050	20	150	73	M17x1	G 1/8	G 1/8	M5	50	4,2	68

Automatic retraction of vacuum cup once vacuum is established.
Reset on part release.

SR. – Spring Rod

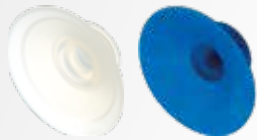


Part No.	A	B	C	H	Weight (g)
SRR.1440	M14x1.5	101	42	40	47



VACUUM CUPS

62 G Series,
Flat Cups



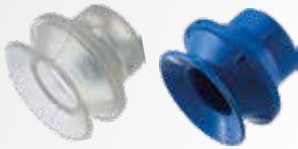
63 F Series,
Flat Cups with Cleats



64 B Series,
1.5 Bellow Cups



65 CM Series,
1.5 Bellow Cups



66 CL Series,
1.5 Bellow Cups



67 CL Series,
2.5 Bellow Cups



68 G Series, 1.5 Bellow Cups
with Foam Ring



69 G Series, 2.5 Bellow Cups
with Foam Ring



70 Fittings for
G Series Cups



71 Multiflex,
1.5 Bellow Cups



72 Multiflex,
2.5 Bellow Cups



Type Selection Guide

Type

Flat Cups

The flat suction cups provide accuracy in load gripping and speeds up the cycle process. Flat cups are used for flat and slightly curved surfaces.



1,5 Bellow Cups

The 1,5 bellow cups combine the advantages of the flat suction cups (precision and positioning) with the freedom of belows (angle and flexibility). They provide flexibility, precision and low internal volume suitable for high-speed applications.

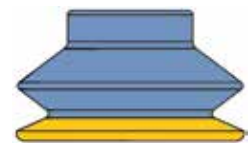
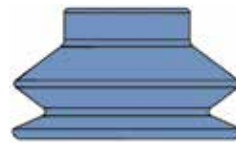
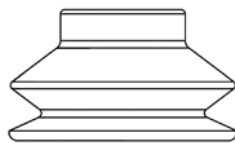


2,5 Bellow Cups

The suction cups with 2,5 bellow are recommended for gripping products with un-even surfaces (large deflection). The 2,5 bellow allow objects to be gripped from an angle (ball-joint effect).



Material Properties



Application	Silicone	FlexTemp HT	Multiflex
Ozone resistance	✓✓✓	✓✓	✓✓✓
Oil resistance	✓	✓✓✓	✓✓
Wear resistance	✓✓	✓✓	✓✓✓
Tensile strength (lifting force)	✓	✓	✓✓✓
Leaves marks on products	✓	✓✓	✓✓✓
Temperature resistance	-70 to + 200°C	-40 to + 160°C	-20 to + 80°C
Shore hardness	30-60°	60°	30-60°

The holding force of the suction cups increases proportionally with the difference between the ambient pressure and the pressure inside the cup.

The holding force of a suction pad is calculated with the formula:

$$F = \Delta p \times A.$$

F = Holding force.

Δp = Difference between ambient pressure and pressure of the system.

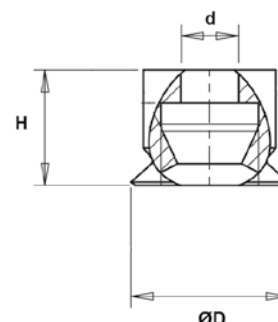
A = Effective suction area (the effective area of a suction pad under vacuum).

This means the holding force is proportional to the pressure difference and the suction area. The greater the difference between ambient pressure and pressure in the suction cup or the larger the effective suction area, the greater the holding force.

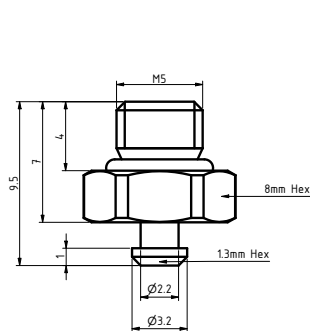
The force can vary depending on a change of the pressure difference and area parameters.

VACUUM CUPS

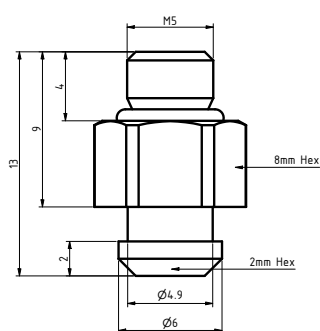
G Series, Flat Vacuum Cups



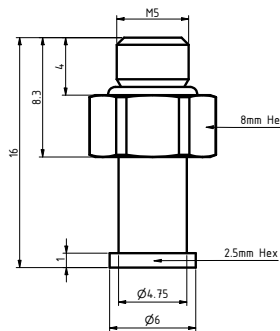
Part No. Silicone	Part No. TempFlex HT	ØD	d	H		Fitting	Fitting	Weight (g)
G10.06F	G10.06H	6	2,0	4,5	0,3		140.005	0,06
G10.09F	G10.09H	9,5	3,5	7	0,5		140.405	0,21
G10.11F	G10.11H	11,0	3,5	10,0	0,5	140.410	140.414	0,5
G10.16F	G10.16H	16,2	3,5	10,5	1,5	140.410	140.414	0,62
G10.22F	G10.22H	22,0	8,0	11,5	2,5	140.428	140.432	1,1
G10.33F	G10.33H	32,0	8,0	12,5	3,5	140.428	140.432	2
G10.42F	G10.42H	41,0	8,0	15,5	4,5	140.428	140.432	4
G10.53F	G10.53H	51,5	8,0	20,0	6,0	140.428	140.432	8



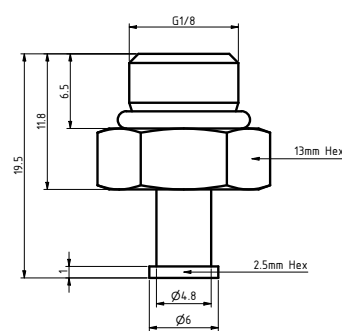
140.005



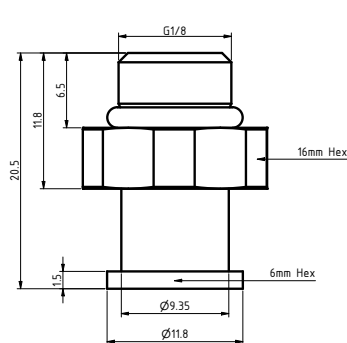
140.405



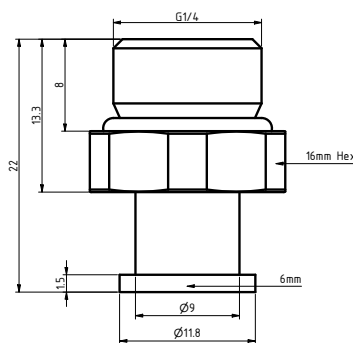
140.410



140.414



140.428



140.432

For gripping flat, smooth and slightly curved products.

HNBR - Suitable for handling plastic parts.

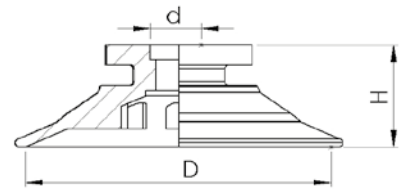
HNBR - PWIS free.


HNBR: Temperature range, -25 to +150°C.

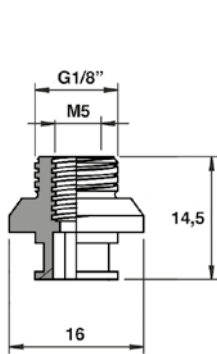
Food grade silicone (FDA approved).

Silicone: Temperature range, -70 to +200°C.

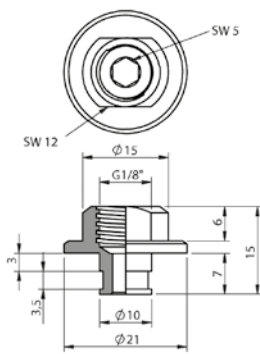
F Series, Flat Vacuum Cups with Cleats



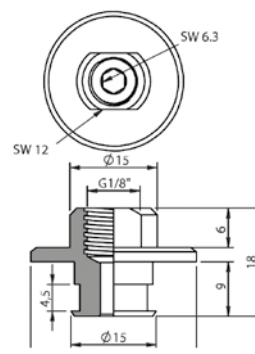
Part No. Silicone	Part No. TempFlex HT	ØD	H		Fitting	Fitting	Fitting	Weight (g)
F20S	F20HT	22	8	0,5	F250			
F25S	F25HT	28	9	1	F250			
F30S	F30HT	32	10	1,5	F250			
F40S	F40HT	42	13	2		F251		
F50S	F50HT	53	17,5	3			F252	



F250



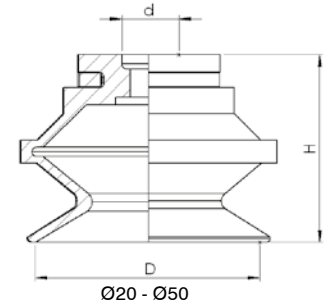
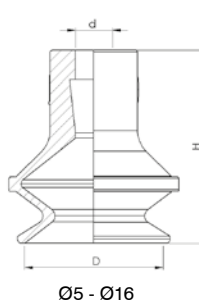
F251




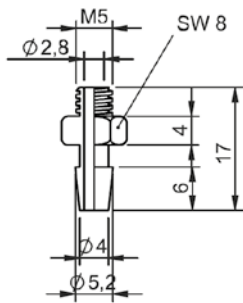
F252

VACUUM CUPS

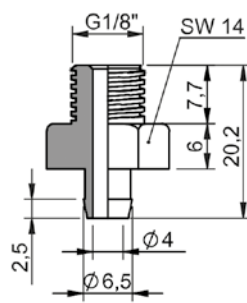
B Series, 1.5 Bellow Vacuum Cups



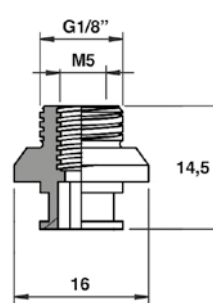
Part No. Silicone	Part No. TempFlex HT	ØD	D1	d	H		Fitting	Fitting	Weight (g)
B05S	B05HT	5		2,6	9,5	2		130.591	0,12
B08S	B08HT	8,8		2	12	2		130.591	0,2
B11S	B11HT	11,0		4	17	5	F134	130.003	1,0
B16S	B16HT	16,0		4	19	7	F134	130.003	1,4
B20S	B20HT	21,5	24,0	4,8	20	9	F250		2,5
B30S	B30HT	33,0	36,0	6	26	9	F250		6,5
B40S	B40HT	42,0	46,0	7	28	9	F251		10
B50S	B50HT	52,0	58,0	10,5	35	12	F252		22



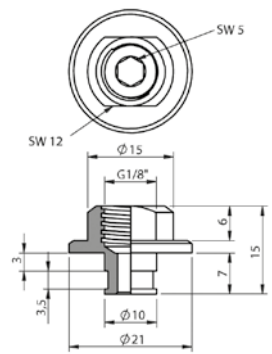
F134



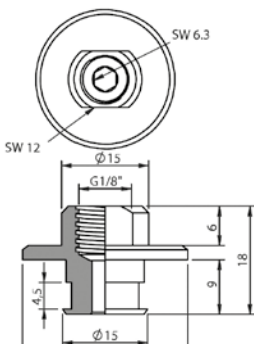
130.003



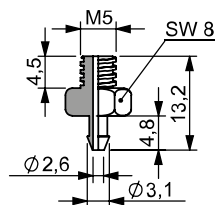
F250



F251

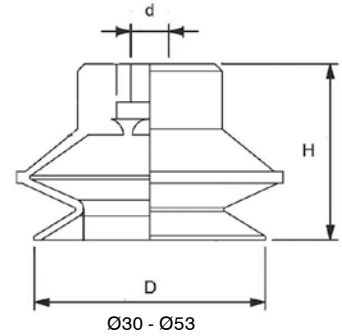
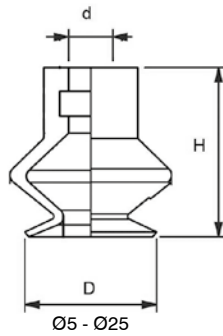



F252

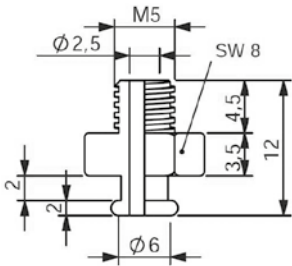


130.591

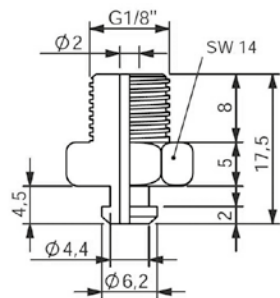
CM Series, 1.5 Bellow Vacuum Cups



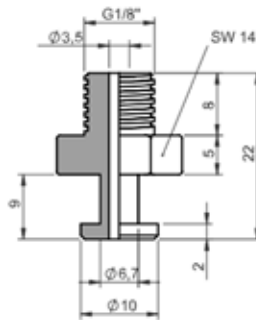
Part No. Silicone	Part No. TempFlex HT	ØD	d	H		Fitting	Fitting	Weight (g)
CM-1.5-10-S	CM-1.5-10-HT	10	2	13,5	4	130.301	130.009	0,7
CM-1.5-15-S	CM-1.5-15-HT	15	4	16	5	130.301	130.009	0,7
CM-1.5-20-S	CM-1.5-20-HT	20	5	20	8	130.030	130.274	2,4
CM-1.5-30-S	CM-1.5-30-HT	32	6	30,5	9	130.030	130.274	9
CM-1.5-40-S	CM-1.5-40-HT	40	6	30,5	10	130.030	130.274	12



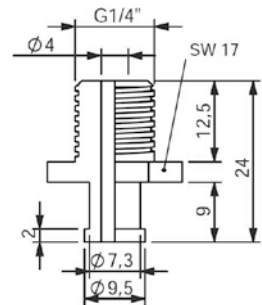
130,301



130,009



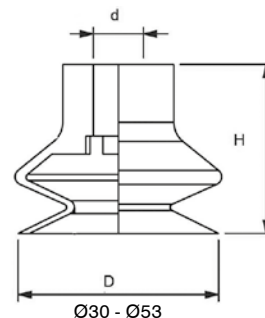
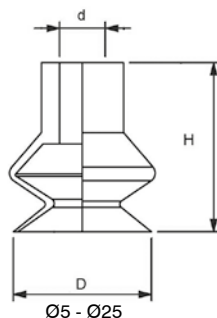
130,030



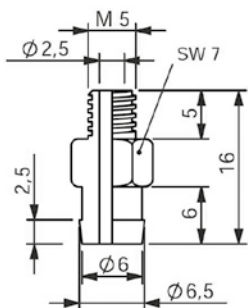
130,274

VACUUM CUPS

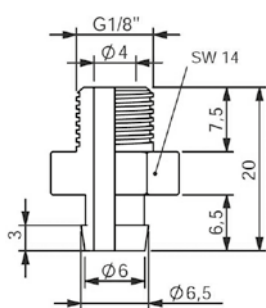
CL Series, 1.5 Bellow Vacuum Cups



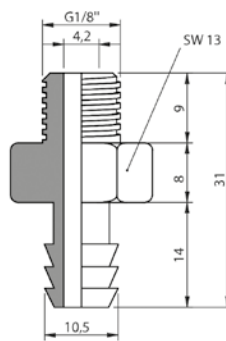
Part No. Silicone	Part No. TempFlex HT	ØD	d	H		Fitting	Fitting	Weight (g)
CL-1.5-06-S	CL-1.5-06-HT	6	4	9	5	130.301	130.009	0,2
CL-1.5-11-S	CL-1.5-11-HT	11	5	16	4,5	130.013	130.003	1
CL-1.5-14-S	CL-1.5-14-HT	14	5	15	4	130.013	130.003	1
CL-1.5-16-S	CL-1.5-16-HT	16	5	19	6	130.013	130.003	1,2
CL-1.5-20-S	CL-1.5-20-HT	20	4	16	4	130.013	130.003	1,7
CL-1.5-25-S	CL-1.5-25-HT	25	4	23	9	130.013	130.003	2,4
CL-1.5-30-S	CL-1.5-30-HT	33	8	28	12	130.132	130.190	7
CL-1.5-43-S	CL-1.5-43-HT	43	8	28	12	130.132	130.190	10
CL-1.5-53-S	CL-1.5-53-HT	53	8	34	11	130.132	130.190	19
CL-1.5-63-S	CL-1.5-63-HT	63	8	34	15	130.132	130.190	28
CL-1.5-78-S	CL-1.5-78-HT	78	12	47	14	130.622		55



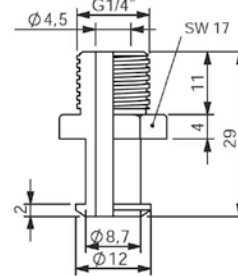
130.013



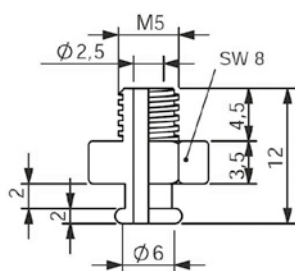
130.003



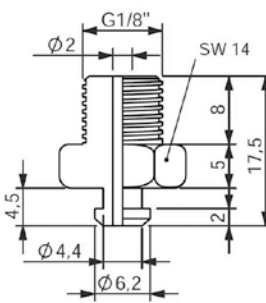
130.132



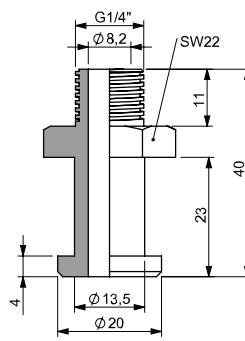
130.190



130.301

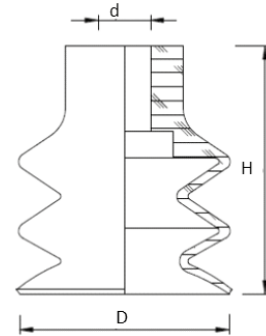


130.009

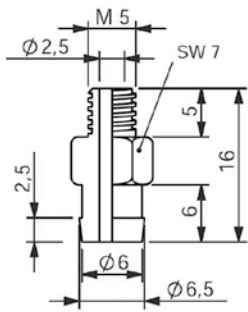


130.622

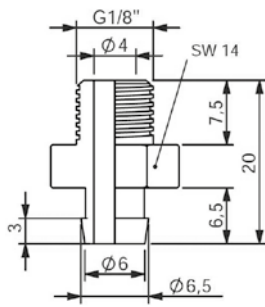
CL Series, 2.5 Bellow Vacuum Cups



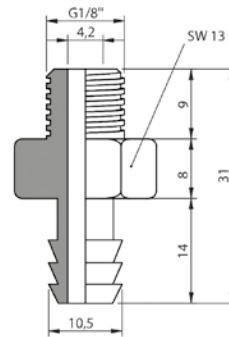
Part No. Silicone	Part No. TempFlex HT	ØD	d	H		Fitting	Fitting	Weight (g)
CL-2.5-5	CL-2.5-5-HT	5	4	14	3	130.013	130.003	0,3
CL-2.5-7	CL-2.5-7-HT	7	3,8	14	3	130.013	130.003	0,5
CL-2.5-9	CL-2.5-9-HT	9	4	15	2	130.013	130.003	0,6
CL-2.5-12	CL-2.5-12-HT	12	5	21	8,5	130.013	130.003	1,0
CL-2.5-14	CL-2.5-14-HT	14	4	22	11	130.013	130.003	1,3
CL-2.5-20	CL-2.5-20-HT	20	4,5	23	8	130.013	130.003	2,1
CL-2.5-25	CL-2.5-25-HT	25	4	34	19	130.013	130.003	3,5
CL-2.5-32	CL-2.5-32-HT	32	8	37	13	130.132	130.190	8,3
CL-2.5-42	CL-2.5-42-HT	42	8	46	19	130.132	130.190	18,0
CL-2.5-52	CL-2.5-52-HT	52	8	49	27	130.132	130.190	24,2
CL-2.5-62	CL-2.5-62-HT	62	9	53	25	130.093	130.281	45,7



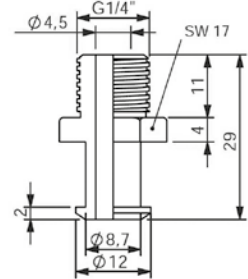
130.013



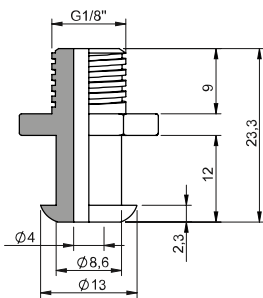
130.003



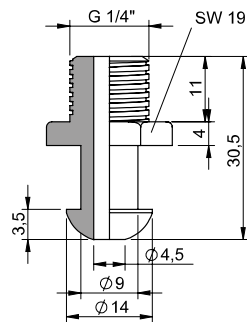
130.132



130.190



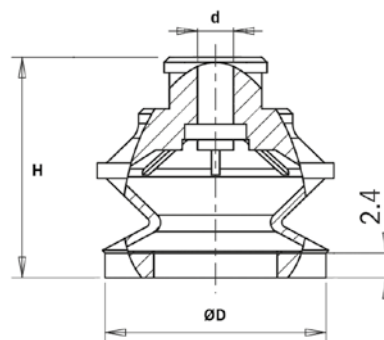
130.093



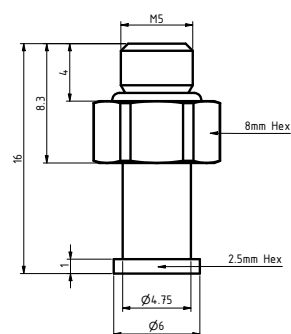
130.281

VACUUM CUPS

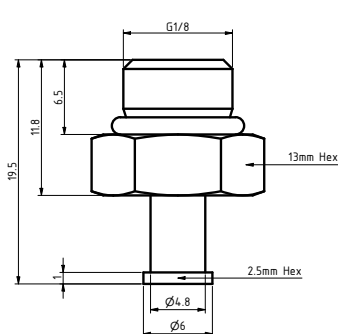
G Series, Suction Cups, 1.5 Bellow with Silicone Foam Ring



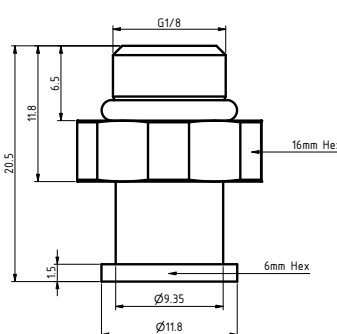
Part No.	ØD	d	H		Fitting	Fitting	Weight (g)
G15.16F.SF	15,50	3,4	21,2	7,5	140.410	140.414	2,2
G15.22F.SF	21,5	3,5	21,4	11	140.410	140.414	2,0
G15.33F.SF	32,5	8	28,4	16	140.428	140.432	6,2
G15.42F.SF	41,5	8	30,6	13	140.428	140.432	9,3
G15.53F.SF	52,5	8	37,4	20	140.428	140.432	16,0



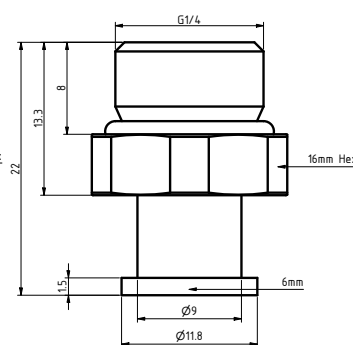
140.410



140.414



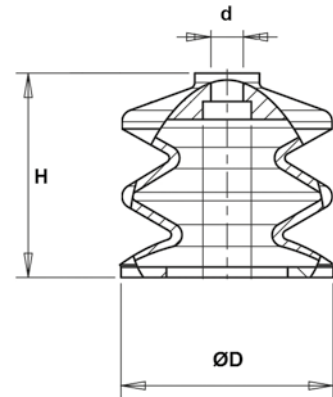
140.428




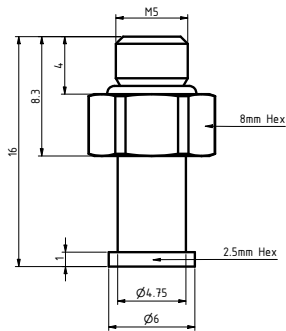
140.432

Ideal to handle uneven, textured and porous surfaces.
 Ring in mark-free silicone foam.
 Transparent Silicone - 50 Shore.
 Temperature range -55 to +200°C.

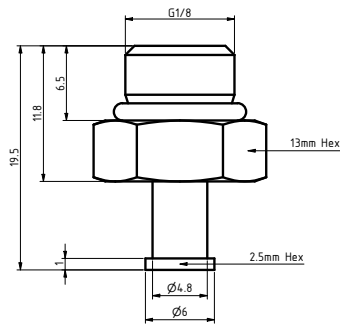
G Series, Suction Cups 2.5 Bellow with Silicone Foam Ring



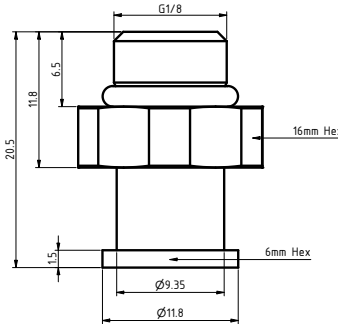
Part No.	ØD	d	H		Fitting	Fitting	Weight (g)
G25.16F.SF	16	3,5	24	10	140.410	140.414	1,2
G25.22F.SF	22	3,5	24	19	140.410	140.414	2,2
G25.33F.SF	33	8	32,6	16	140.428	140.432	7,2
G25.42F.SF	42	8	43,5	21	140.428	140.432	16
G25.53F.SF	53	8	50,5	26	140.428	140.432	27



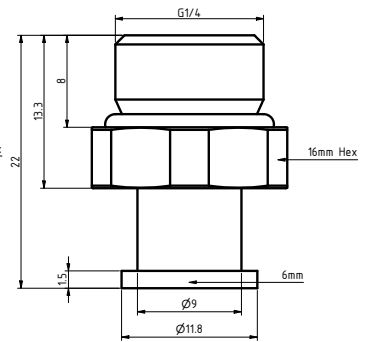
140.410



140.414



140.428

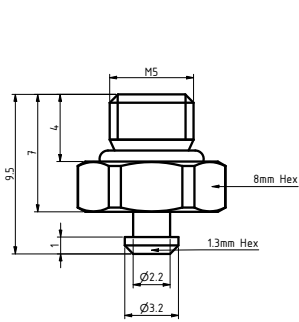


140.432

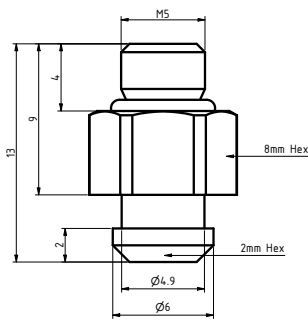
Ideal to handle uneven, textured and porous surfaces.
 Ring in mark-free silicone foam.
 Enable to compensate for differences in height.
 Transparent Silicone - 50 Shore.
 Temperature range -70 to +200°C.

VACUUM CUPS

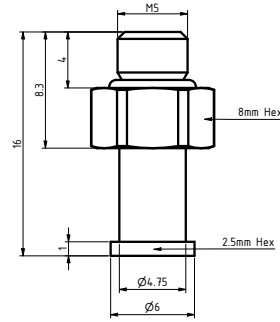
Fittings for G Series Vacuum Cups



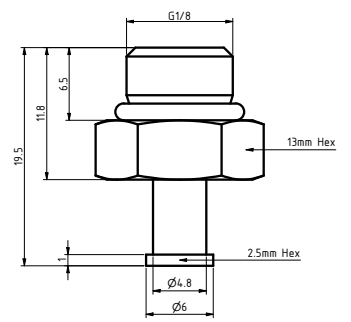
140.005



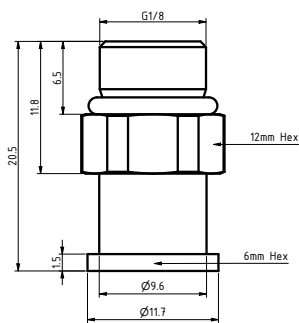
140.405



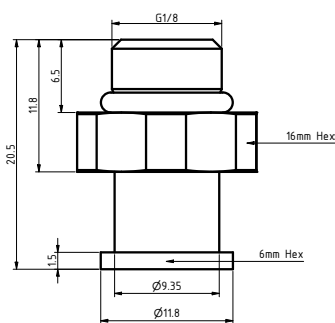
140.410



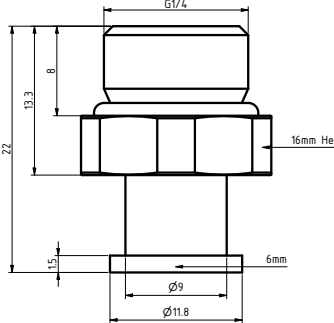
140.414



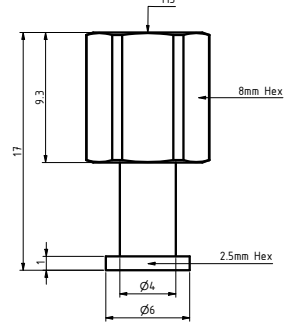
140.424



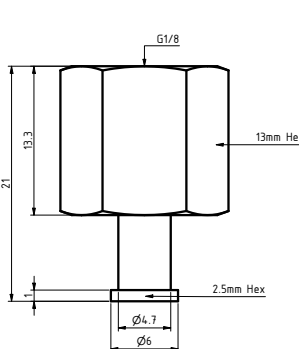
140.428



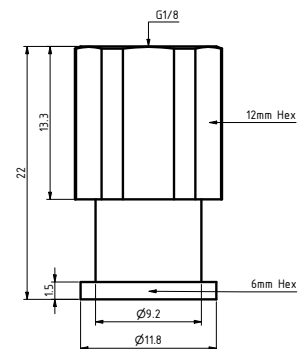
140.432



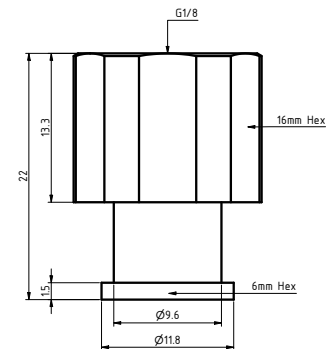
140.408



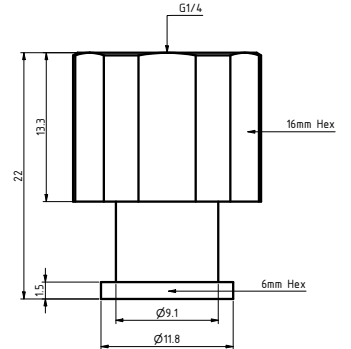
140.412



140.422



140.426



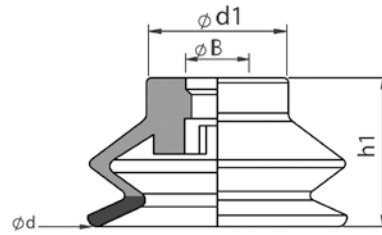
140.430



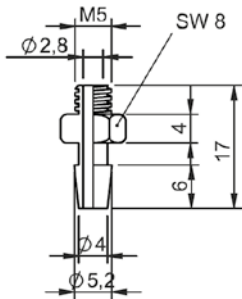
Mouldpro Multiflex vacuum cups offer outstanding advantages

- Extremely high wear resistance
- Very high lifting force
- Best static friction qualities
- No sticking tendency
- Elasticity remains unchanged for minus temperatures
- Working temperatures from -20°C to + 80°C
- Antimarking

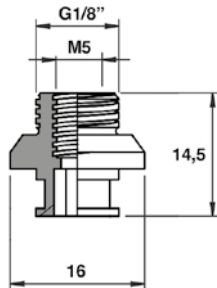
B Series, Multiflex, 1.5 Bellow Vacuum Cups



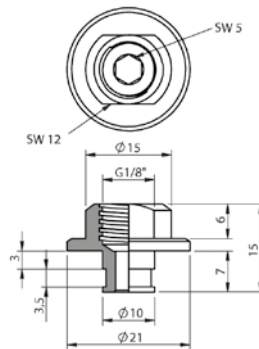
Part No.	d	B	d1	h1	Hardness	5	Fitting	Fitting	Fitting	Fitting	Weight (g)
B15-10MF	10	3,9	9	16,5	40	5,5	F134				
B15-16MF	16	3,9	9	19	30/60	5,5	F134				
B15-20MF	21	5,2	12	18	30/60	7,6		F250			
B15-30MF	31	6,5	16,8	17	30/60	7,5			F251		
B15-40MF	41	6,3	22,4	22,4	30/60	9,3			F251		
B15-50MF	51	10,5	28	29,2	30/60	14,4				F252	



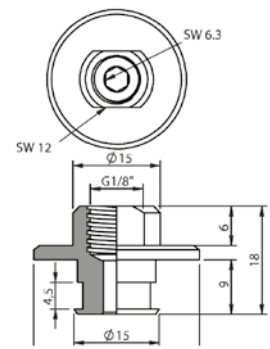
F134



F250



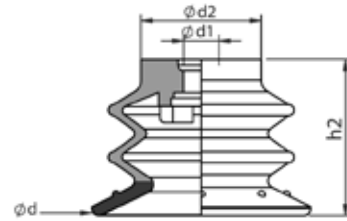
F251




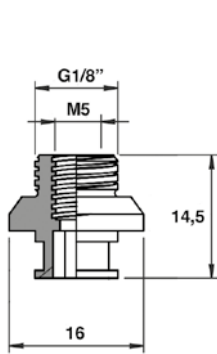
F252

VACUUM CUPS

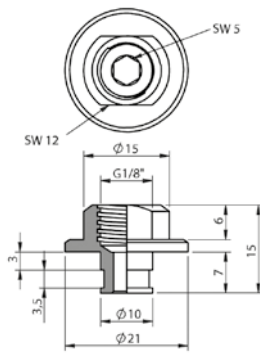
B Series, Multiflex, 2.5 Bellow Vacuum Cups



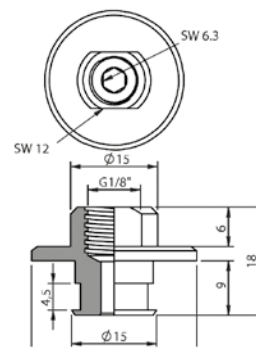
Part No.	d	d1	d2	h2	Hardness		Fitting	Fitting	Fitting	Weight (g)
B25-20MF	20,5	5	12	14,8	30/60	6,5	F250			
B25-25MF	26	5	15,4	18,9	30/60	8	F250			
B25-30MF	30	5	16,5	21,3	30/60	11	F250			
B25-35MF	35	6,5	21	25,63	30/60	11		F251		
B25-40MF	40	6,5	22	28,4	30/60	14,7		F251		
B25-50MF	50	10,5	27,5	35,5	30/60	20			F252	



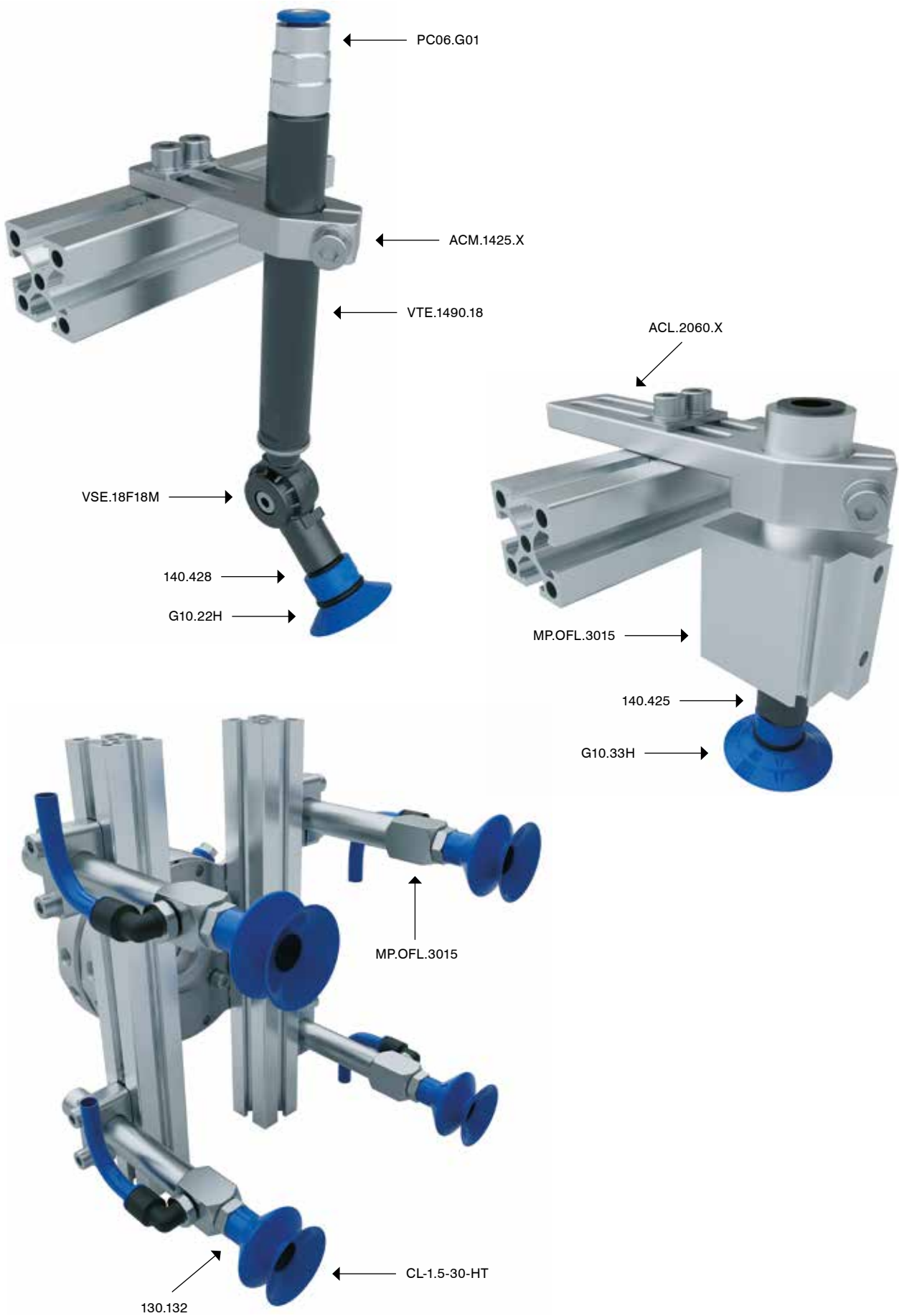
F250



F251



F252



SPRUE GRIPPERS

75 M Series,
Sprue Grippers



76 Mini Sprue Grippers



77 Small Sprue Grippers



79 Compact Sprue Grippers
– 2016



82 Compact Sprue Grippers
– GZ.AA



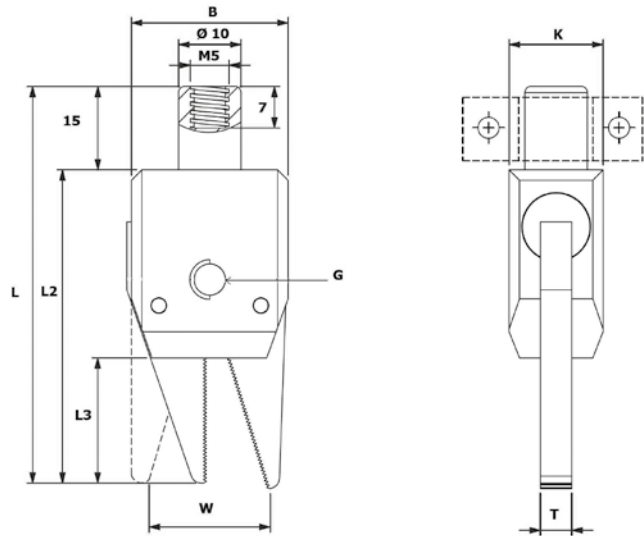
83 Large Sprue Grippers



84 Power Grippers



MSG. – Sprue Grippers M Series

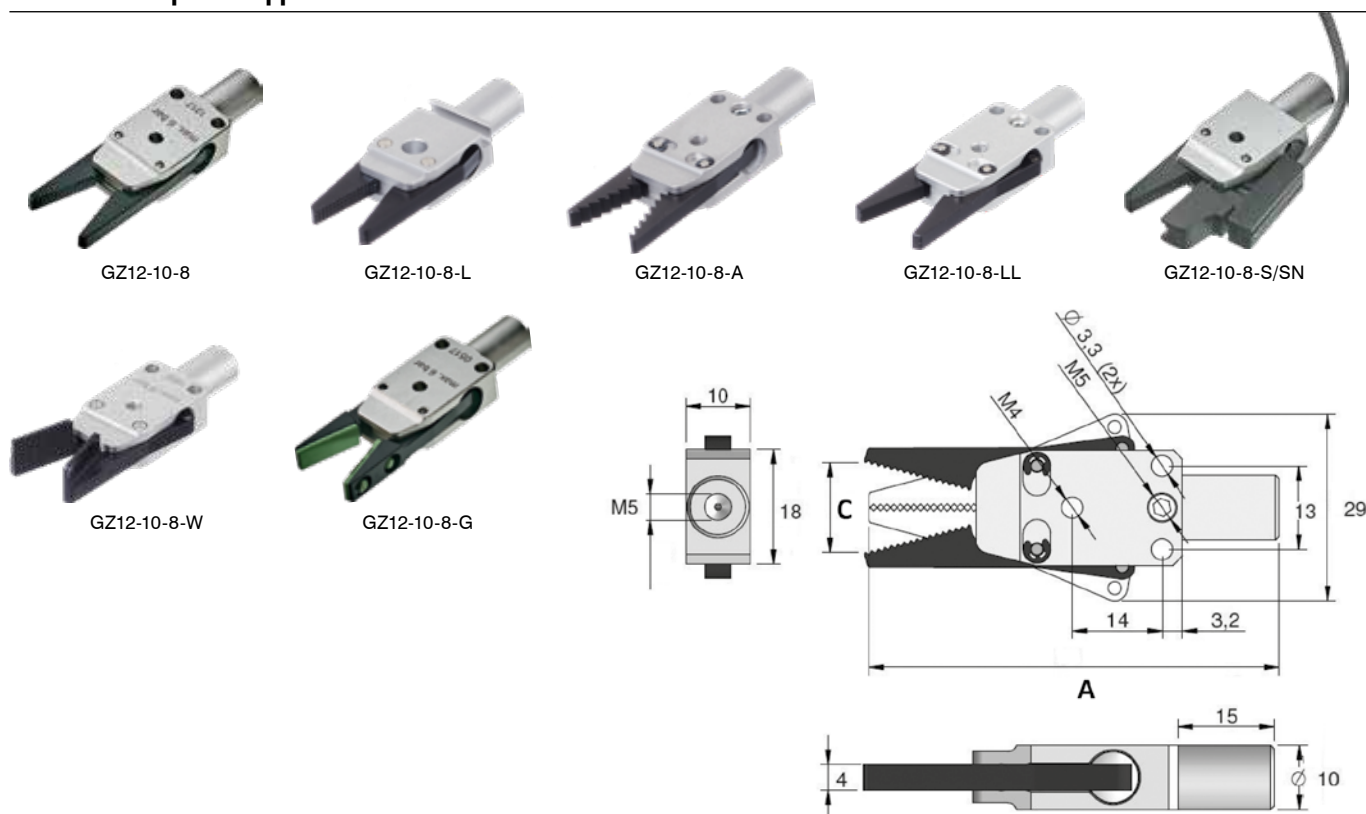


Part No.	W	T	L3	L2	G	L	K	Grip Force	B	Weight (g)
MSG30	6,0	3	12	30	M4	45	8	10 N	15	
MSG40	9,4	4	16	40	M6	55	10	15 N	20	
MSG50	14,0	5	20	50	M6	66	12	23 N	25	
MSG60	16,3	6	24	60	M6	76	14	31 N	30	

Compressed air supply: max. 6 bar.
 Operating Temperature : 5° to 70°C

MINI SPRUE GRIPPERS

GZ12-10-8 - Sprue Grippers - Short Series



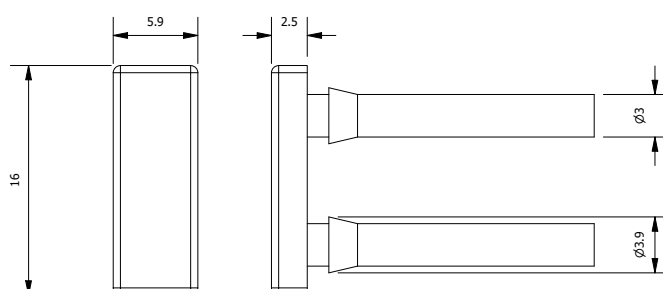
Part No.	C	A	Jaw Type	Sensor	Closing Force (6 bar)	Weight (g)
GZ12-10-8	14	63,9	Serrated	-	19N	30
GZ12-10-8-L	11	59	Diamond Pattern	-	19N	32
GZ12-10-8-A	13	64	Saw tooth	-	19N	30
GZ12-10-8-LL	14	64	Smooth	-	19N	30
GZ12-10-8-W	14	64,1	Extra Wide	-	19N	30
GZ12-10-8-G	14	63,9	Viton rubber Pad	-	19N	30
GZ12-10-8-S	11	61,8	Serrated	PNP	19N	30
GZ12-10-8-SN	11	61,8	Serrated	NPN	19N	30

Compressed air in compliance with ISO 8573-1:2010 [7:4:4].
Maximum Operating Pressure 8 bar.

GZ-SCP – Last Minute Sensor for GZ-10-8

Part No.	Output	Sensor Type	Sensing Distance	Connector	Weight (g)
GZ-SCP-10-8	PNP	Magnetic	0-50mm	M8 4pin	65

GZ-VIT – Insert Pad, Viton



Part No.	Material	REF	Weight (g)
GZ-VIT-4	FKM	GZ12-10-8-G	

GZ12-10-10 - Sprue Grippers - Standard Series



GZ12-10-10-M



GZ12-10-10-C



GZ12-10-10-CKP/CKN



GZ12-10-10-MC



GZ12-10-10-W



GZ12-10-10-B



GZ12-10-10-L



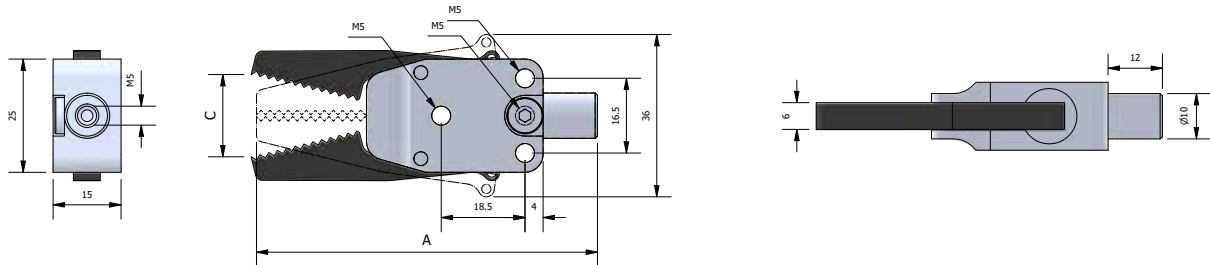
GZ12-10-10-L90



GZ12-10-10-LL



GZ12-10-10-MF



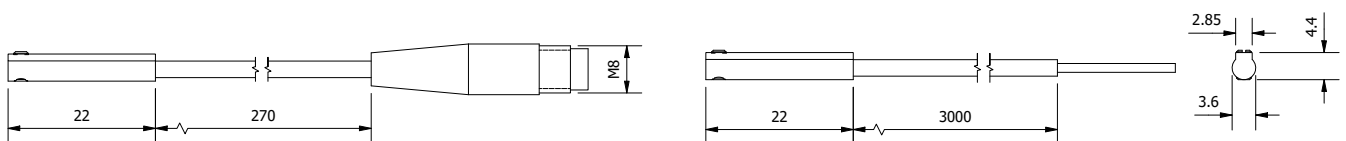
Part No.	C	A	Jaw Type	Sensor	Closing Force (6 bar)	Weight (g)
GZ12-10-10-M	19,5	75	Serrated		30N	40
GZ12-10-10-C	17,9	75	Curved		30N	36
GZ12-10-10-CKP	19	76	Curved	PNP	30N	45
GZ12-10-10-CKN	19	76	Curved	NPN	30N	45
GZ12-10-10-MC	19	75	1 Serrated/1 Curved		30N	37
GZ12-10-10-W	20	75,3	Wide		30N	39
GZ12-10-10-B	13	59,3	Custom		30N	32
GZ12-10-10-L	20	76,5	Diamond Pattern		30N	36
GZ12-10-10-L90	19,3	76	Diamond Pattern - 90°		30N	43
GZ12-10-10-LL	19,8	75,3	Smooth		30N	40
GZ12-10-10-MF	19,6	76,5	Serrated Steel		30N	58

Compressed air in compliance with ISO 8573-1:2010 [7:4:4].
Maximum Operating Pressure 8 bar.

GZ-SCP – Last Minute Sensor for GZ-12-10

Part No.	Output	Sensor Type	Sensing Distance	Connector	Weight (g)
GZ-SCP-12-10	PNP	Magnetic	0-50mm	M8 4pin	65

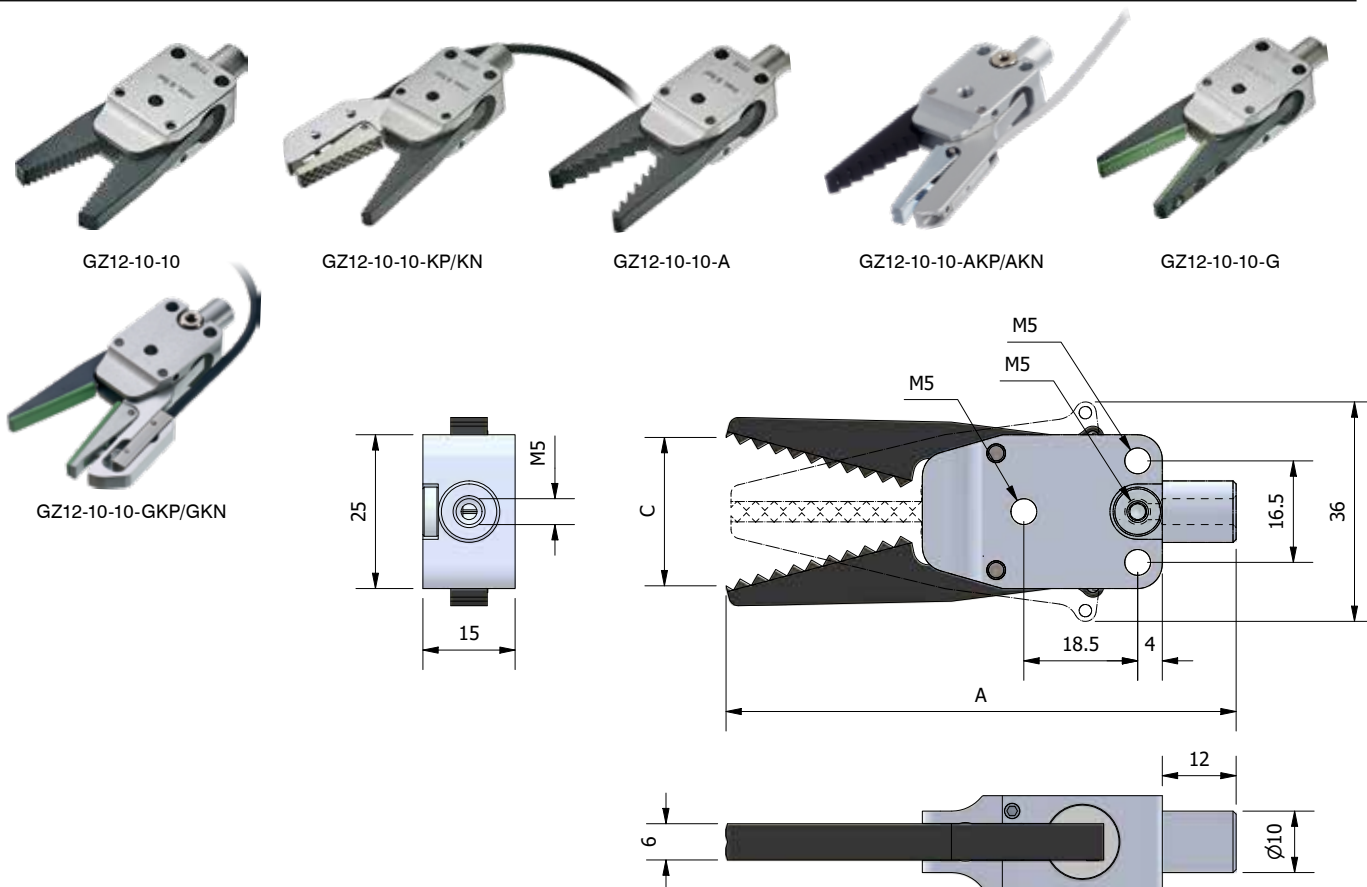
SN. – C-Slot Sensor



Part No.	Output	Sensor type	Connector	Lead - m	Weight (g)
SN.K5P.M8	PNP	Electronic	M8 3pin	0,3	4
SN.K5N.M8	NPN	Electronic	M8 3pin	0,3	4
SN.K5P.3MW	PNP	Electronic	-	3	4
SN.K5N.3MW	NPN	Electronic	-	3	4

SMALL SPRUE GRIPPERS

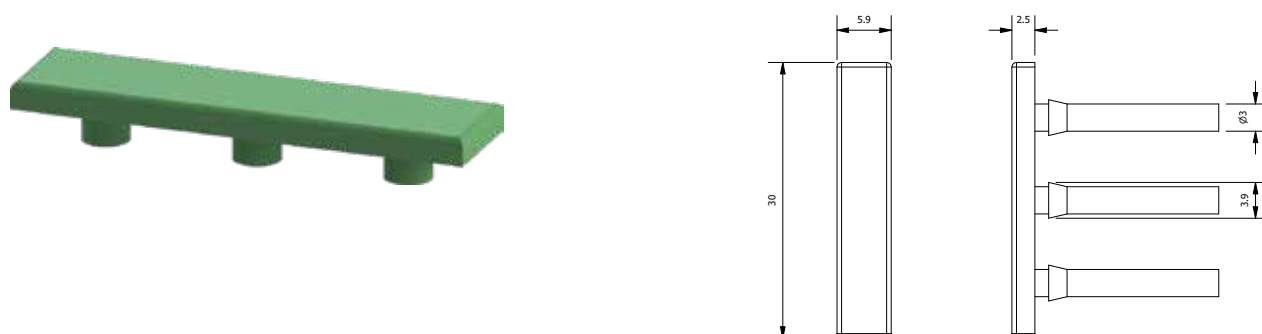
GZ12-10-10 - Sprue Grippers - Long Series



Part No.	C	A	Jaw Type	Sensor	Closing Force (6 bar)	Weight (g)
GZ12-10-10	24	83	Diamond Pattern		30N	40
GZ12-10-10-KP	23	83	Diamond Pattern	PNP	30N	51
GZ12-10-10-KN	23	83	Diamond Pattern	NPN	30N	51
GZ12-10-10-A	21,3	82	Saw Tooth		30N	38
GZ12-10-10-AKP	23	83	Saw Tooth	PNP	30N	51
GZ12-10-10-AKN	23	83	Saw Tooth	NPN	30N	51
GZ12-10-10-G	22,3	82	Viton Rubber Pad		30N	37
GZ12-10-10-GKP	22	83	Viton Rubber Pad	PNP	30N	48
GZ12-10-10-GKN	22	83	Viton Rubber Pad	NPN	30N	48

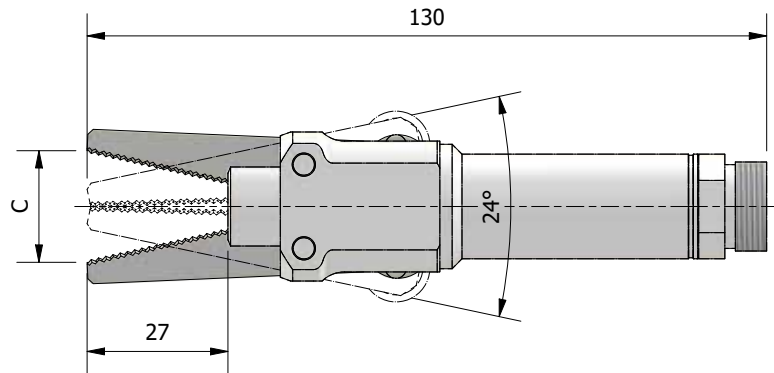
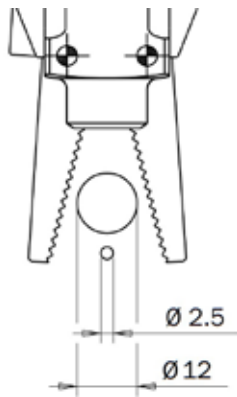
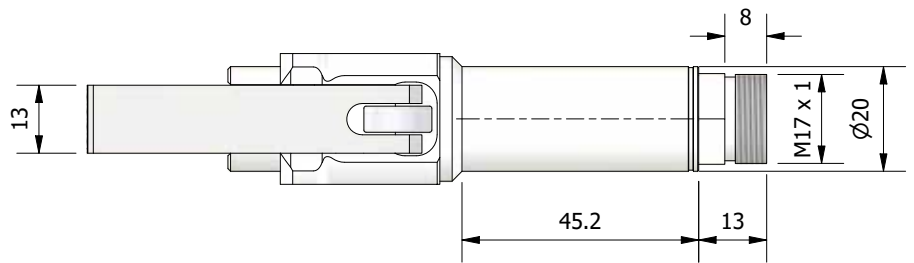
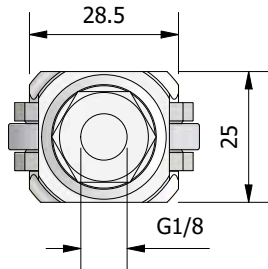
Compressed air in compliance with ISO 8573-1:2010 [7:4:4].
Maximum Operating Pressure 8 bar.

GZ-VIT – Jaw Insert Pad - Viton



Part No.	Material	REF	Weight (g)
GZ-VIT-6	FKM	GZ-12-10-G	4

GZ.2016. – Sprue Gripper 20-16, Series

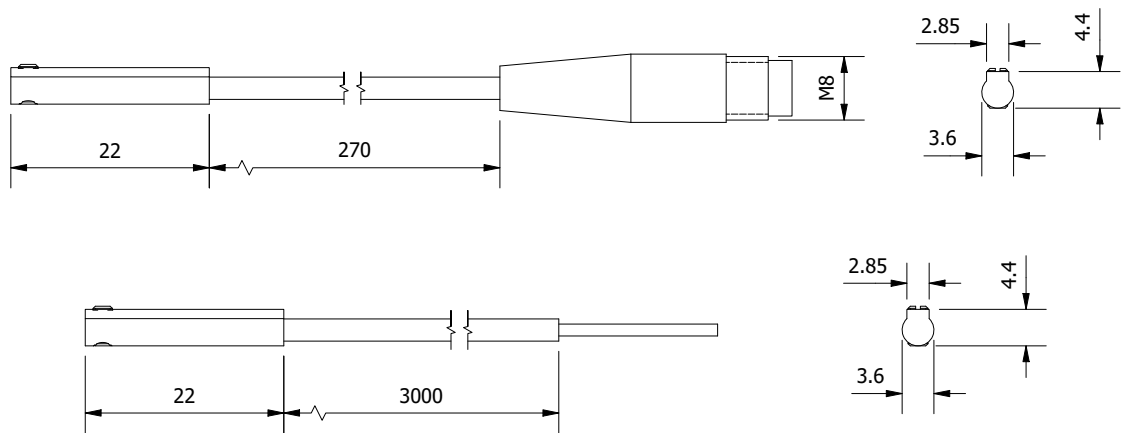


Part No.	Jaw Type	C	Sensor	Closing Force (6 bar)	Weight (g)
GZ.2016	Diamond Pattern	20		65N	163
GZ.2016.KP	Diamond Pattern	22	PNP	65N	160
GZ.2016.KN	Diamond Pattern	22	NPN	65N	160
GZ.2016ST	Saw Tooth	24		65N	157
GZ.2016ST.KP	Saw Tooth	21	PNP	65N	154
GZ.2016ST.KN	Saw Tooth	21	NPN	65N	154
GZ.2016V	Viton Rubber Pads	20		65N	109
GZ.2016V.KP	Viton Rubber Pads	21	PNP	65N	117
GZ.2016V.KN	Viton Rubber Pads	21	NPN	65N	117
GZ.2016CC	Curved	19		65N	163
GZ.2016C	1 Curved/1 Diamond Pattern	19		65N	163
GZ.2016C.KP	1 Curved/1 Diamond Pattern	21	PNP	65N	170
GZ.2016C.KN	1 Curved/1 Diamond Pattern	21	NPN	65N	170
GZ.2016A	Custom			65N	135

Compressed air in compliance with ISO 8573-1:2010 [7:4:4].
Maximum Operating Pressure 8 bar.

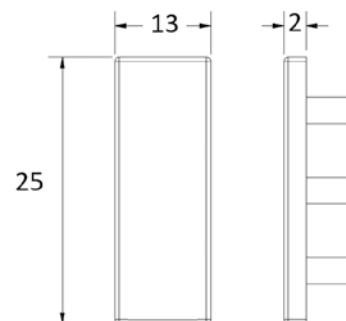
COMPACT SPRUE GRIPPERS

SN. – Sensor



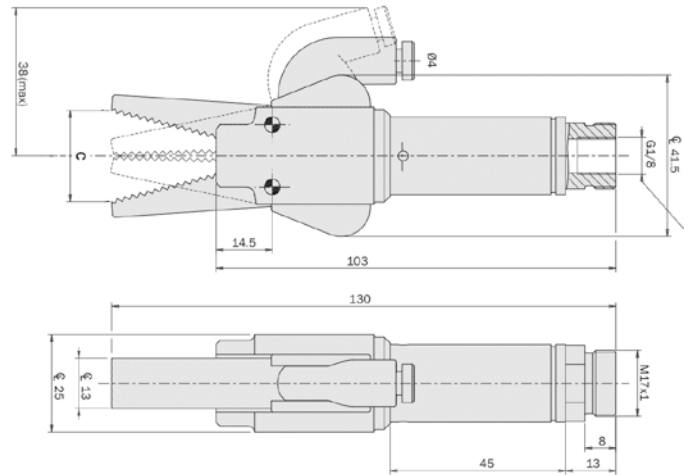
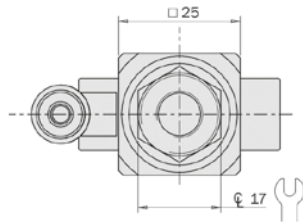
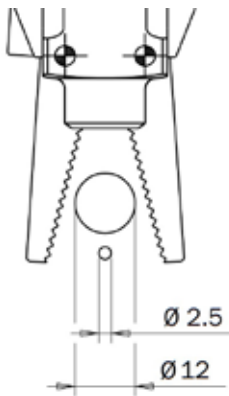
Part No.	Output	Sensor type	Connector	Lead - m	Weight (g)
SN.K5P.M8	PNP	Electronic	M8 3pin	0,3	4
SN.K5N.M8	NPN	Electronic	M8 3pin	0,3	4
SN.K5P.3MW	PNP	Electronic	-	3	4
SN.K5N.3MW	NPN	Electronic	-	3	4

GZ-VIT-8 - Insert Pad, Viton



Part No.	Material	REF	Weight (g)
GZ-VIT-8	FKM	GZ.2016V	4

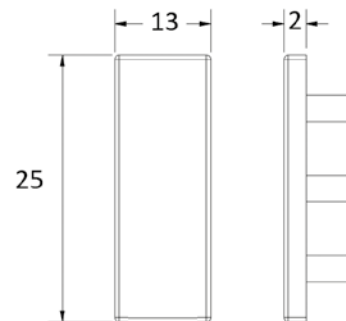
GZ2016- – Compact Sprue Gripper



Part No.	Jaw Type	C	Sensor	Closing Force (6 bar)	Weight (g)
GZ.2016.LV	HNBR Pads	20,9	Vacuum	60N	116
GZ.2016.MV	Diamond Pattern	23,5	Vacuum	60N	119

Single Acting.
 Gripper has G1/8 air por.
 Compressed air in compliance with ISO 8573-1:2010 (7:4:4).
 Maximum Operating pressure: 8 bar.
 Temperature Range: 5 ÷ 60°C.

GZ-HNBR-8 - Insert Pad, HNBR



Part No.	Material	Ref	Weight (g)
GZ-HNBR-8	HNBR	GZ.2016.LV	4

COMPACT SPRUE GRIPPERS

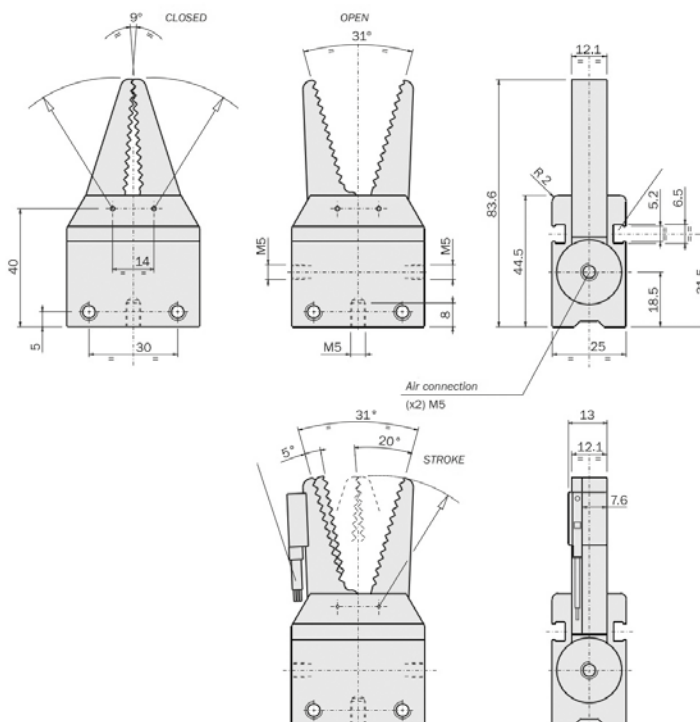
GZ.AA. – Self-Centering Sprue Gripper



GZ.AA24



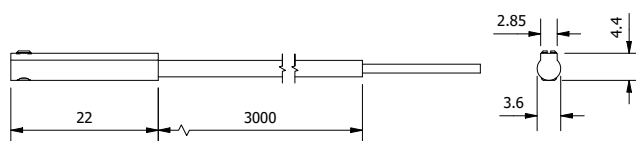
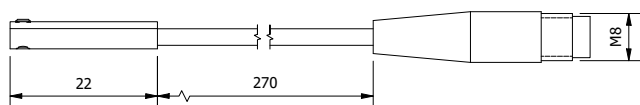
GZ.AA24.1N/NP



Part No.	Jaw Type	Operation	Sensor	Weight (g)
GZ.AA24	Serrated	Double Acting		115
GZ.AA24.1N	Serrated	Normally Open	NPN	151
GZ.AA24.1P	Serrated	Normally Open	PNP	151

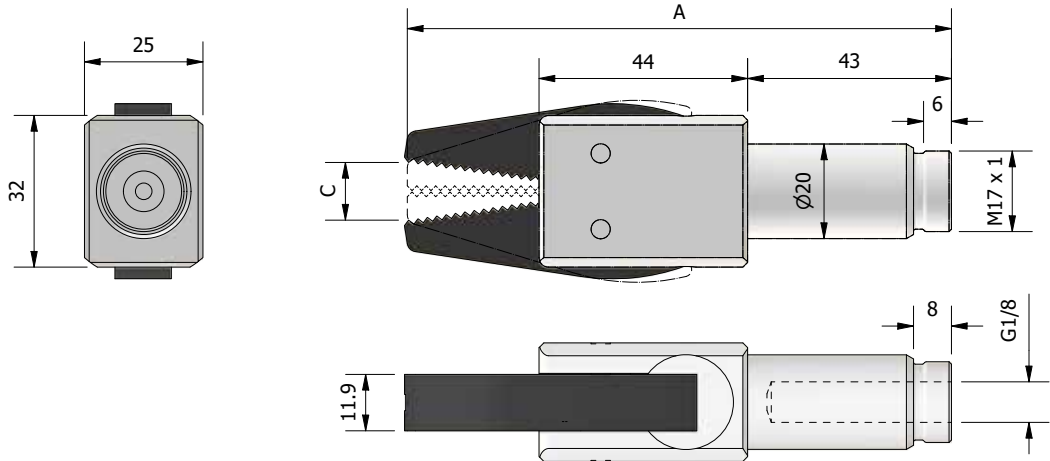
Compressed air in compliance with ISO 8573-1:2010 [7:4:4].
Maximum Operating Pressure 8 bar.

SN. – C-Slot Sensor



Part No.	Output	Sensor type	Connector	Lead - m	Weight (g)
SN.K5P.M8	PNP	Electronic	M8 3pin	0,3	4
SN.K5N.M8	NPN	Electronic	M8 3pin	0,3	4
SN.K5P.3MW	PNP	Electronic	-	3	4
SN.K5N.3MW	NPN	Electronic	-	3	4

GZ20 – Sprue Grippers GZ20 Series



Part No.	Jaw Type	A	C	Sensor Type	Closing Force (6 bar)	Weight (g)
GZ20-10-A	Custom	100	15		90N	114
GZ20-10-E	Curved	115	21		90N	117
GZ20-10-L	Curve-Smooth	115	23		90N	120
GZ20-10-10	Serrated	115	21		90N	121
GZ20-10-10-S	Serrated	115	21	PNP	90N	127
GZ20-10-10-SN	Serrated	115	21	NPN	90N	127
GZ20-10-W-S	Curved	115	21	PNP	90N	123
GZ20-10-W-SN	Curved	115	21	NPN	90N	123

Work principle: Single acting.
 Working pressure: 6 bar clean and dry air.
 Material: Jaws made of hard-coated Aluminium. Body made of anodized Aluminium.

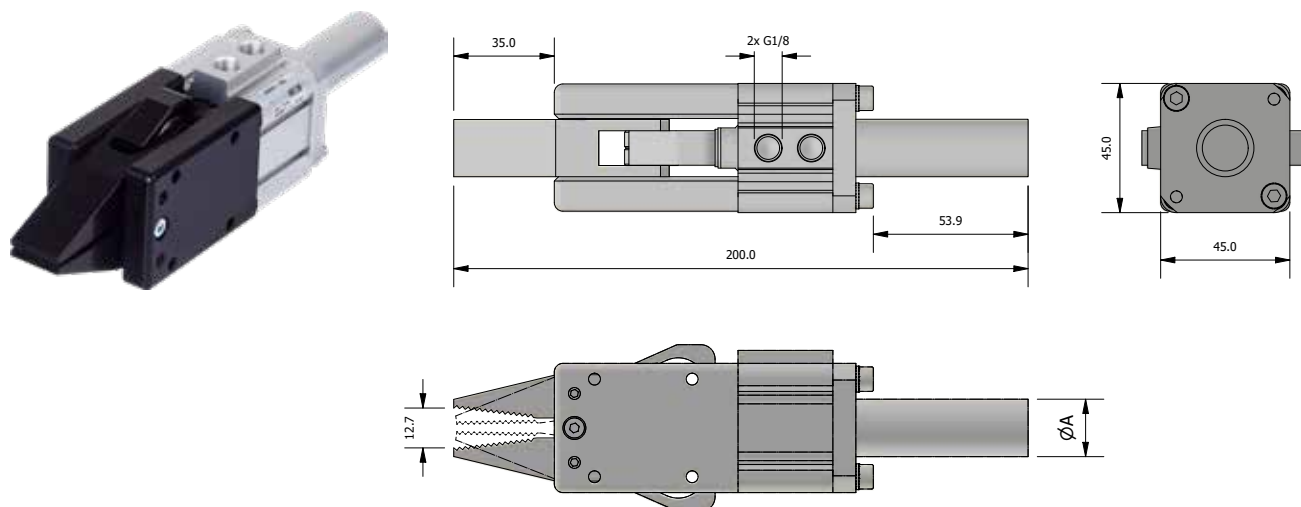
GZ. – Sensor



Part No.	Type	Cable length	Connection
GZ20.SM8.PNP	PNP	300	M8
GZ20.SM8.NPN	NPN	300	M8

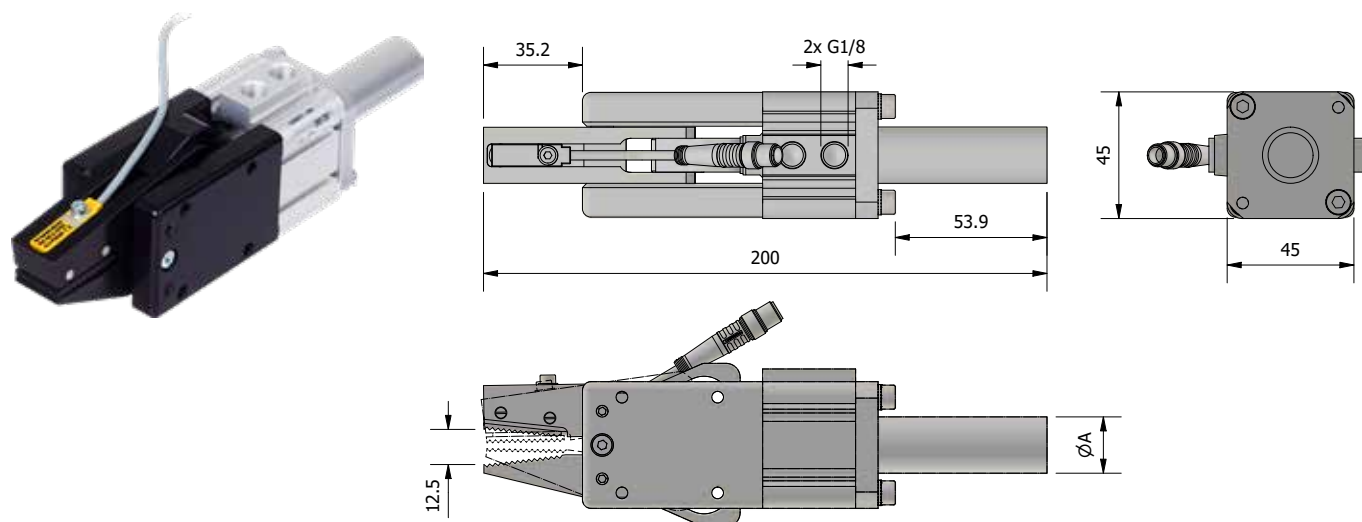
POWER GRIPPERS

GSZ.32. – Power Grippers GSZ.32 Series



Part No.	A	Jaw Opening - mm	Closing Force (6 bar)	Weight (g)
GSZ.3220	20	12,5	350N	563

GSZ.32. – Power Grippers GSZ.32 Series



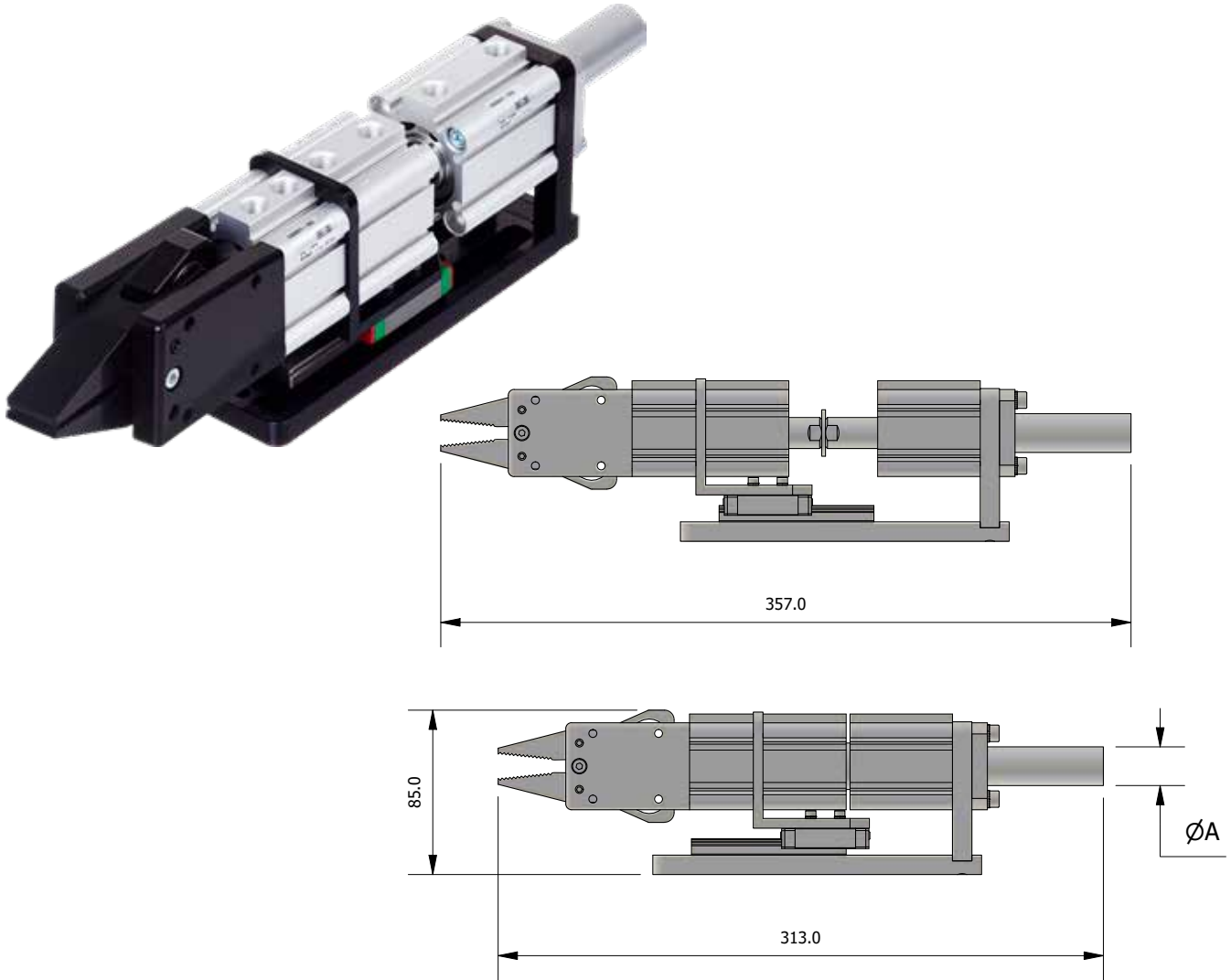
Part No.	A	Jaw Opening - mm	Closing Force (6 bar)	Weight (g)
GSZ.3220-1P	20	12,5	350N	563

GZ. – Sensor



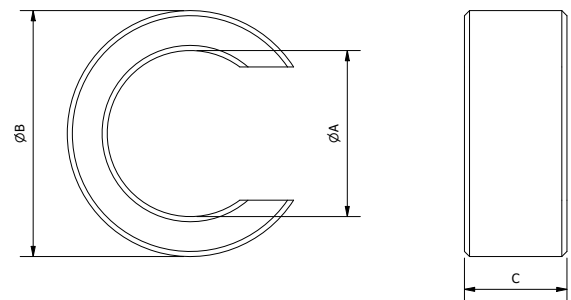
Part No.	Type	Cable length	Connection
GZ20.SM8.PNP	PNP	300	M8
GZ20.SM8.NPN	NPN	300	M8

GSZ.32 - Power Grippers GSZ.32 Series - Double Stroke



Part No.	A	Jaw Opening - mm	Closing Force (6 bar)	Weight (g)
GSZ.3220.2010	20	12,5	350N	1455

SRB. – Stroke Reducer



Part No.	A	B	C	Cylinder	Weight (g)
SRB.05.32	16	24	5	32	1
SRB.10.32	16	24	10	32	2
SRB.15.32	16	24	15	32	3

FINGER GRIPPERS

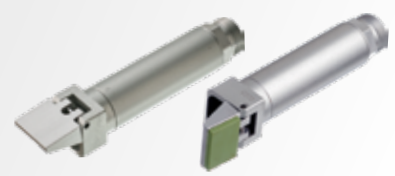
87 Finger Grippers
21°



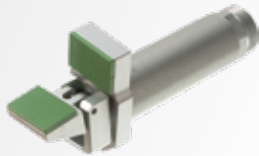
88 Finger Grippers
21°, 25°



89 Finger Grippers
35°, 90°, 95°



90 Finger Grippers with Stops



92 Stops, Guides & Spares



94 Sensor & Sensor Mounting
Brackets



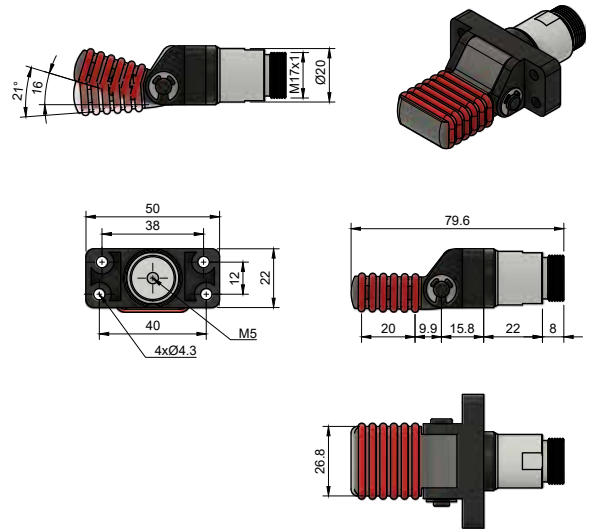
95 Pneumatic Tilt Units



96 Perpendicular
Finger Grippers



GFM. - Finger Grippers 21° Direct Mounting



Part No.	Style	Stroke	Max temp of Rings/Pads	Weight (g)
GFM.2020.H	HNBR Pad	21°	150°C	39
GFM.2022.N	Nitrile rings	21°	100°C	42
GFM.2022.S	Silicone Rings	21°	200°C	42

Single-acting.
Soft contact HNBR pads or O-rings in Silicone, NBR.
FDA-H1 food-grade grease.

PAD. – Replacement Pads



PAD.H.20152.5



PAD.H.30223

Part No.	Material	Dimensions mm	Max temp °C
PAD.H.20152.5	HNBR	20x15x2.5	150°
PAD.H.30223	HNBR	30x22x3	150°

KIT-GF. – Replacement O - Rings



KIT-GF20N

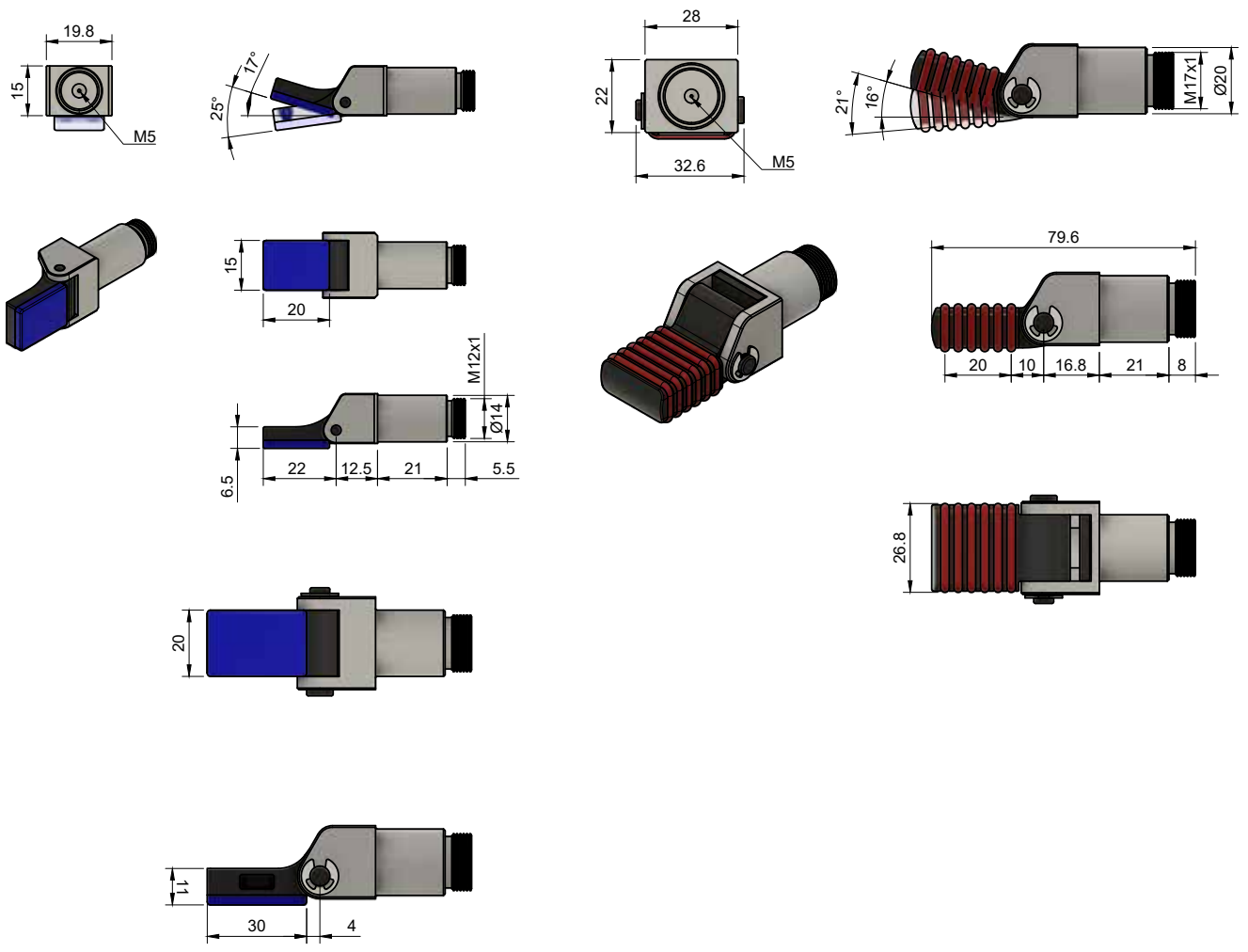


KIT-GF20S

Part No.	Material	Max temp °C
KIT-GF20N	Nitrile	100°
KIT-GF20S	Silicon	200°

21° - 25° FINGER GRIPPERS

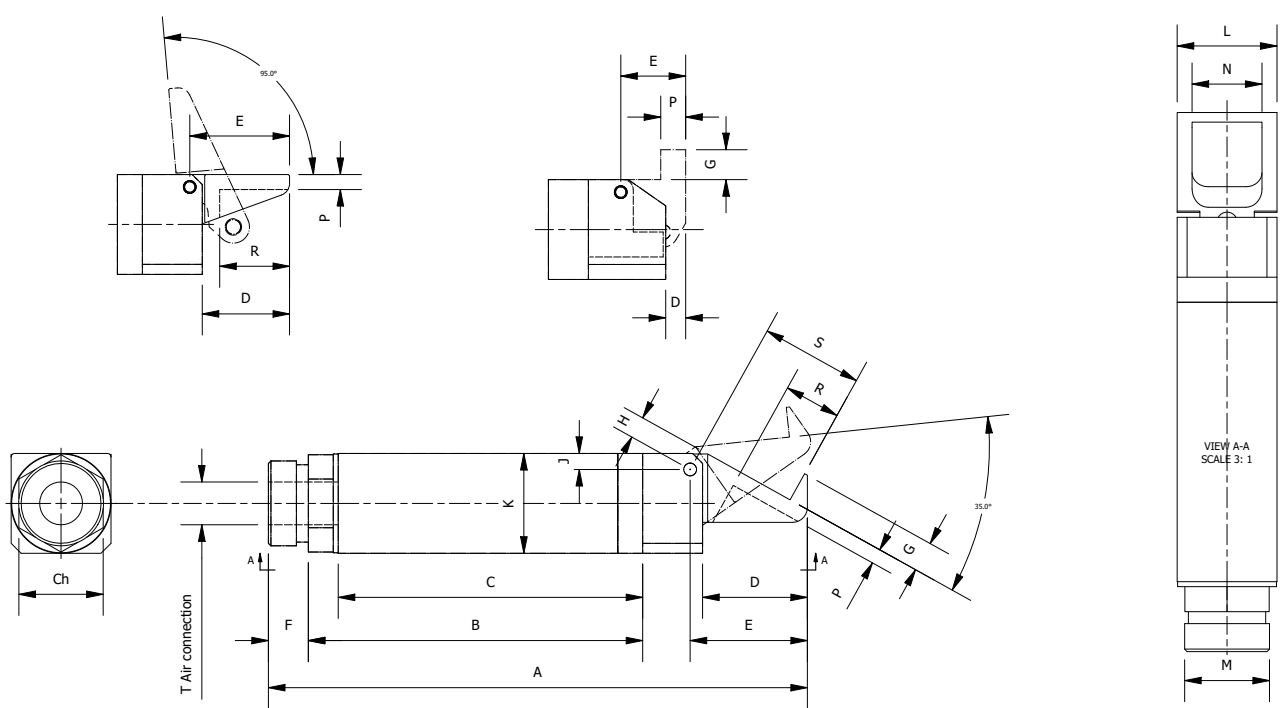
GF. - Finger Grippers 21° - 25°



Part No.	Style	Stroke	Max temp of Rings/Pads	Weight (g)
GF.1425.H	HNBR Pads	25°	150°C	17
GF.2021.H	HNBR Pads	21°	150°C	41
GF.2021.N	Nitrile Rings	21°	100°C	45
GF.2021.S	Silicone Rings	21°	200°C	45

Single-acting.
Soft contact HNBR pads or O-rings in Silicone, NBR FDA-H1 food-grade grease.

GF. – Finger Gripper

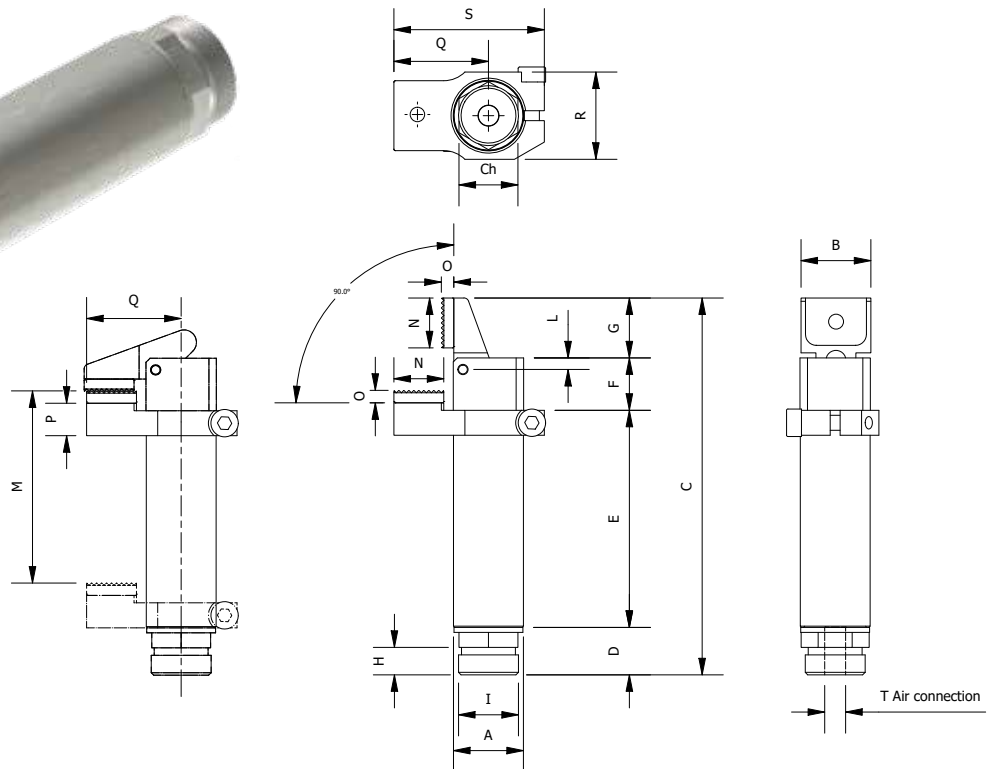
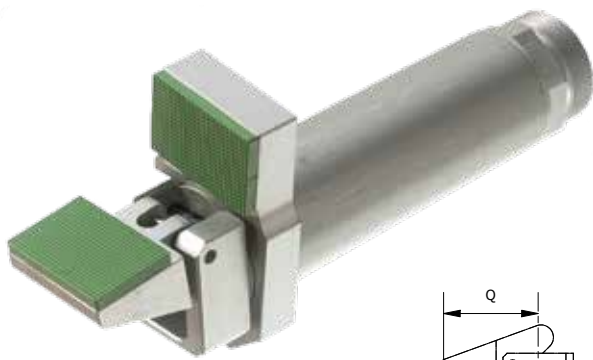


Part No.	Stroke	Grip Force (6 bar)	Dimensions (mm)																	
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	CH
GF14-35	35°	26 N	77	47,5	43,5	14	16	5,5	4,5	3,4	2	Ø14	14	M1xX1	10	2	6	13,5	M5	12
GF20-35	35°	100 N	107	66	60	21	23,5	8	6	3,8	2,5	Ø20	20	M17x1	14	3	11,5	20,7	G1/8	17
GF30-35	35°	430 N	156	100	92	30	34	11	8	6	4	Ø30	30	M27x1	22	5	17	30,8	G1/8	27
GF14-90	90°	19 N	69	45,5	41,5	2	8	5,5			2	Ø14	14	M1xX1	10	4			M5	12
GF20-90	90°	70 N	92,5	61	55	2	13	8			2,5	Ø20	20	M17x1	14	5			G1/8	17
GF30-90	90°	300 N	135	91	83	2	20	11			4	Ø30	30	M27x1	22	6			G1/8	27
GF14-95	95°	19 N	75,5	47,5	43,5	12	14	5,5			2	Ø14	14	M1xX1	10	2	9		M5	12
GF20-95	95°	70 N	103,5	66	60	17,5	20	8			2,5	Ø20	20	M17x1	14	3	14		G1/8	17
GF30-95	95°	300 N	148	100	90	25	29	11			4	Ø30	30	M27x1	22	5	21		G1/8	27
GF14-95V	95°	19 N	75,5	47,5	43,5	12	14	5,5			2	Ø14	14	M1xX1	10	2	9		M5	12
GF20-95V	95°	70 N	103,5	66	60	17,5	20	8			2,5	Ø20	20	M17x1	14	3	14		G1/8	17
GF30-95V	95°	300 N	148	100	90	25	29	11			4	Ø30	30	M27x1	22	5	21		G1/8	27

Working Principle: Single acting.
 Working pressure: 6 bar clean, dry air.
 Material: Silver anodised Aluminium.

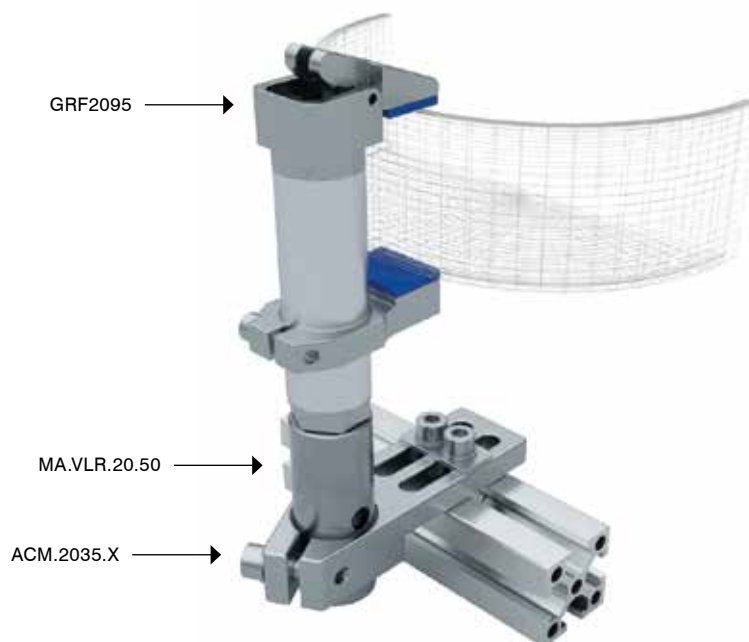
95° FINGER GRIPPERS

GFR-95 – 95° Finger Grippers with Stop

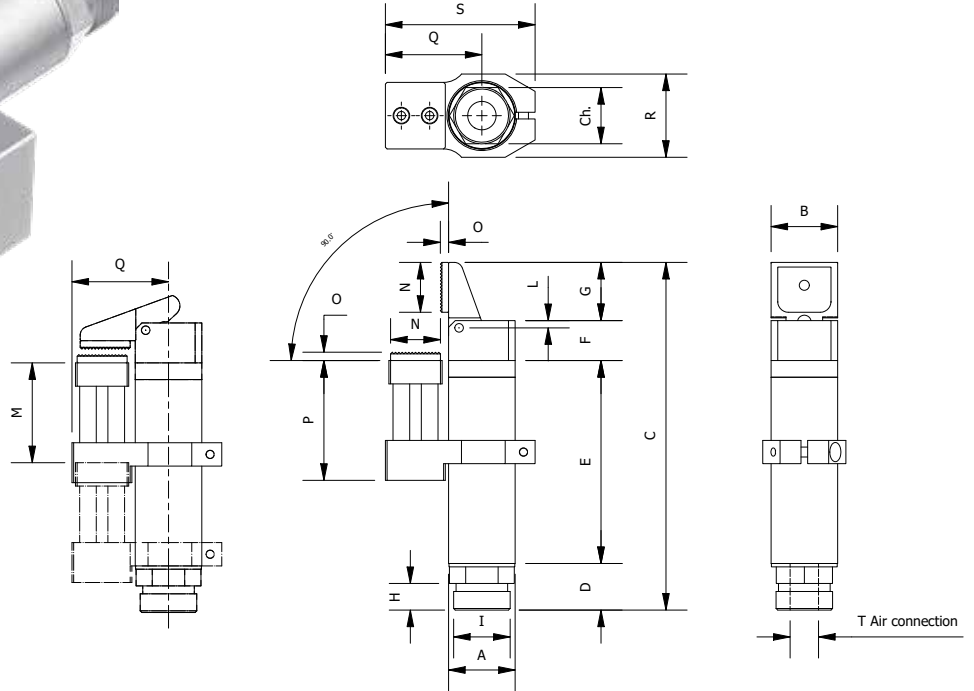
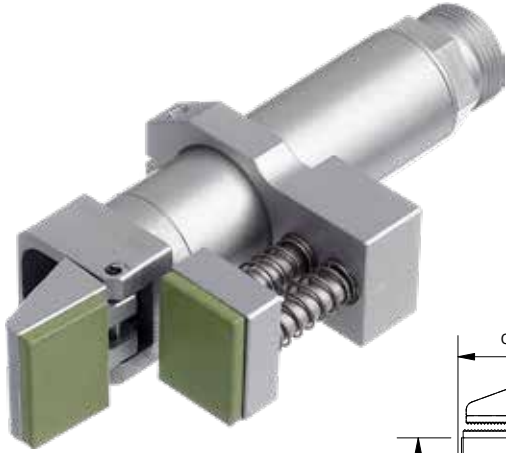


Part No.	Grip force	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	CH
GFR1495	19 N	Ø 14	14	75,5	9,5	43,5	10,5	12	5,5	M12X1	2	38,5	10	2,5	6,5	19	17,5	30	M5	12
GFR2095	70 N	Ø 20	20	103,5	14	60	12	17,5	8	M17X1	2,5	52,5	15	2,5	10	27,5	25	43,5	G 1/8	17
GFR3095	300 N	Ø 30	30	148	20	90	15	25	11	M27X1	4	81	20	3	9	40	37	60	G 1/8	27

Work principle: Single acting.
 Working pressure: 6 bar clean and dry air.
 Material: Silver anodized Aluminium Viton Pads.



GFRX-95V – 95° Finger Grippers with Stop

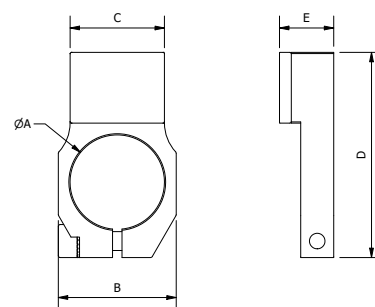


Part No.	Stroke	Grip Force (6 bar)	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T
GFRX14-95V	95°	19N	Ø14	14	75,5	9,5	43,5	10,5	12	5,5	M12x1	2	16,5	10	2,5	6,5	19	17,5	30	M5
GFRX20-95V	95°	70N	Ø20	20	104,5	14	61	12	17,5	8	M17x1	2,5	41,5	25	2,5	36	29	25	45	G1/8
GFRX30-95V	95°	300N	Ø30	30	148	20	90	15	25	11	M27x1	4	53	20	3	9	40	37	60	G1/8

Working Principle: Single acting.
 Working pressure: 6 bar clean, dry air.
 Material: Silver anodised Aluminium Viton Pads.

ACCESSORIES FOR FINGER GRIPPERS

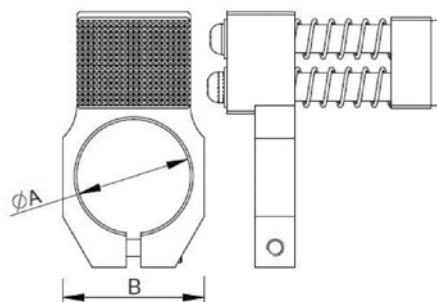
MP.ANF. – Stoppers for Finger Grippers with Soft Pad



Part No.	A	B	C	D	E	REF	Weight (g)
MP.ANF.14V	Ø14	17.5	14	30.2	9	GF14..	5
MP.ANF.20V	Ø20	25	20	43.5	11.5	GF20..	14
MP.ANF.30V	Ø30	36	30	63	14	GF30..	33

Viton Pad.
Low marking

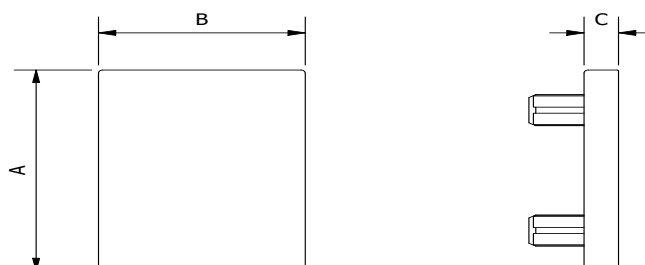
MP.ANF.VSX – Stoppers for Finger Grippers



Part No.	A	B	REF	Weight (g)
MP.ANF.14.VSX	Ø14	20	GF14..	15
MP.ANF.20.VSX	Ø20	25	GF20..	20
MP.ANF.30.VSX	Ø30	37	GF30..	50

Viton Pad.
Low marking.

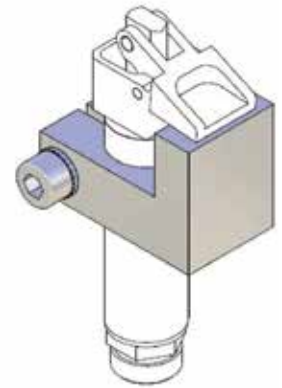
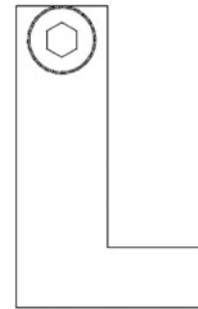
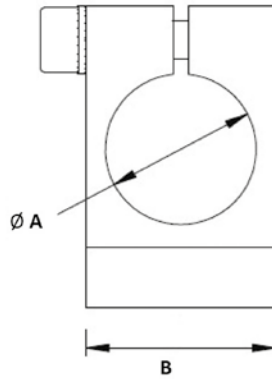
GFR. – Insert Pad Viton



Part No.	A	B	C	REF	Weight (g)
GFR149508V	14	10	2.5	GF14..	1
GFR209508V	20	15	2.5	GF20..	2
GFR309508V	30	20	3	GF30..	3

Low marking.
UV resistant.
Maximum Temp: 210° (<30 sec.).

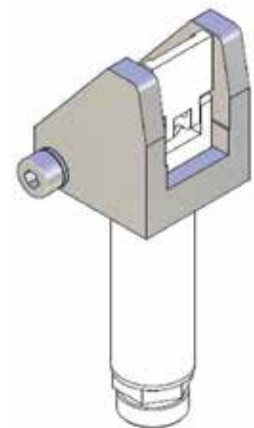
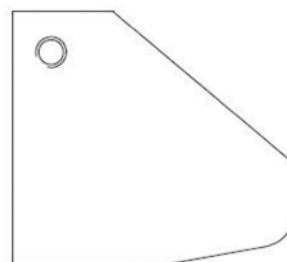
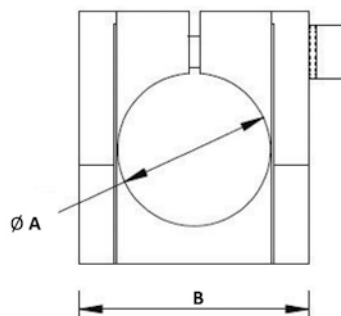
MP.ANS. – Stoppers for Finger Grippers



Part No.	A	B	REF	Weight (g)
MP.ANS.14	Ø14	20	GF14..	17
MP.ANS.20	Ø20	25	GF20..	21
MP.ANS.30	Ø30	35	GF30..	30

Material: POM

MP.ZTS. – Finger Gripper Guide

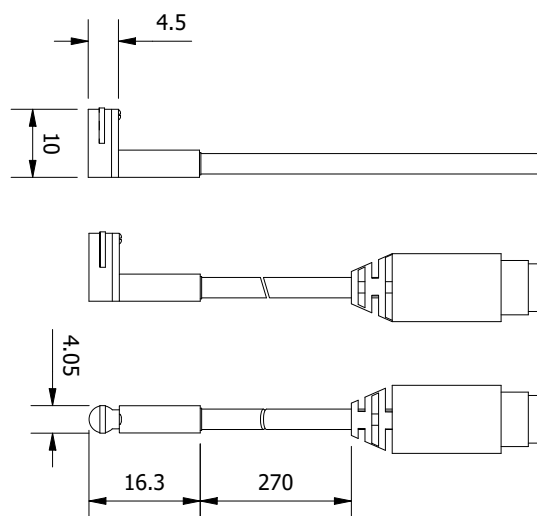


Part No.	A	B	REF	Weight (g)
MP.ZTS.14	Ø14	20	GF14..	15
MP.ZTS.20	Ø20	25	GF20..	20
MP.ZTS.30	Ø30	35	GF30..	60

Material: POM

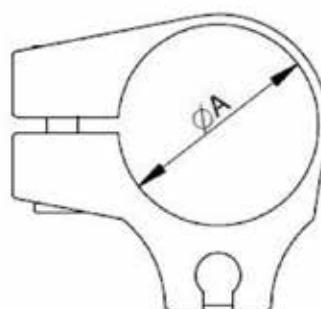
ACCESSORIES FOR FINGER GRIPPERS

SN. – C-Slot Sensor



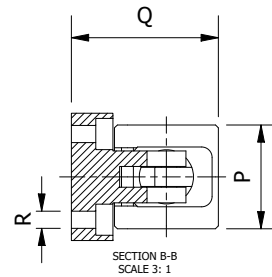
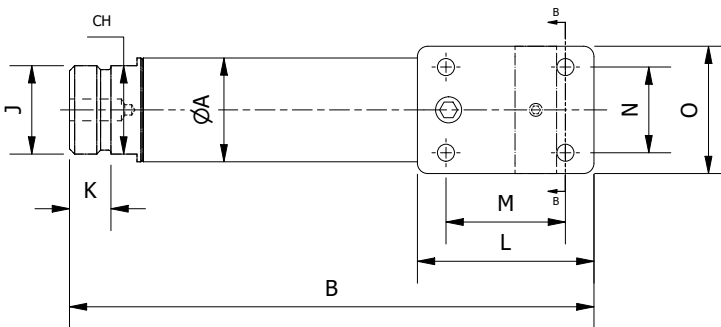
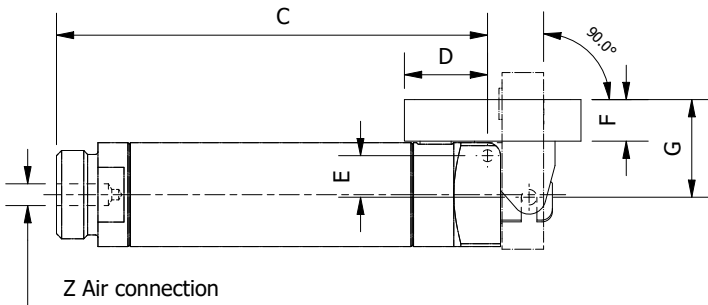
Part No.	Output	Sensor type	Connector	Lead - m	Weight (g)
SN.K3P.M8	PNP	Electronic	M8 3pin	0,3	4
SN.K3N.M8	NPN	Electronic	M8 3pin	0,3	4
SN.K3P.3MW	PNP	Electronic	M8 3pin	3	4
SN.K3N.3MW	NPN	Electronic	M8 3pin	3	4

SMB. – Sensor Mounting Brackets



Part No.	A	REF	Sensor	Weight (g)
SMB.14	Ø14	GF14..	SN.K3	
SMB.20	Ø20	GF20..	SN.K3	
SMB.30	Ø30	GF30..	SN.K3	
SMB.14.P	Ø14	GF14..	SN.K3	
SMB.20.P	Ø20	GF20..	SN.K3	
SMB.30.P	Ø30	GF30..	SN.K3	
SMB.14.L	Ø14	GF14..	SN.K3	
SMB.20.L	Ø20	GF20..	SN.K3	
SMB.30.L	Ø30	GF30..	SN.K3	

GFT. – Pnuematic Tilt Unit

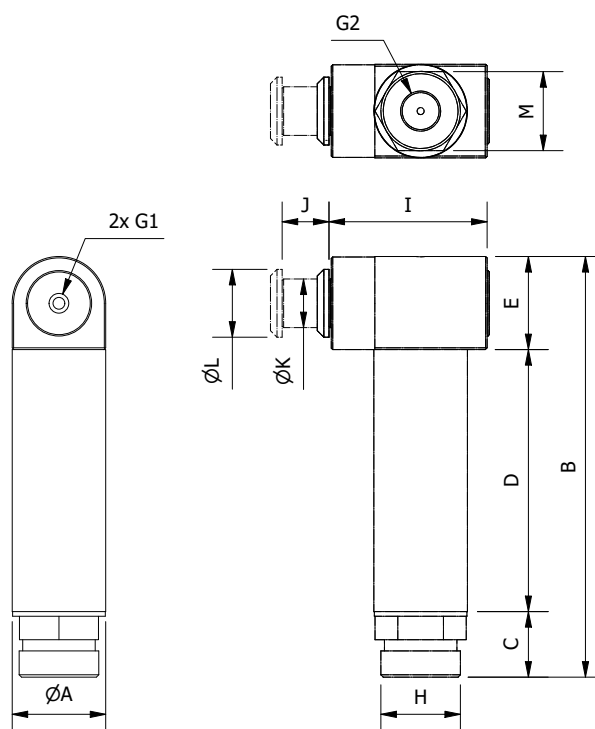


Part No.	A	B	C	D	E	F	G	J	K	L	M	N	O	P	Q	R	CH	Z	Weight (g)
GFT.2090	20	101	83	16	8	8	18.8	M17x1	8	34	23	16.5	24.5	20	28.3	3.3	17	M5	75
GFT.3090	30	146.5	119	21.6	11	10	25.5	M27x1	11	49	25	25	37	30	40.3	5.3	27	G1/8	270

Single-acting.
Tilt angle: 90°.
Pressure range: 2.5-8 bar.

PERPENDICULAR FINGER GRIPPERS

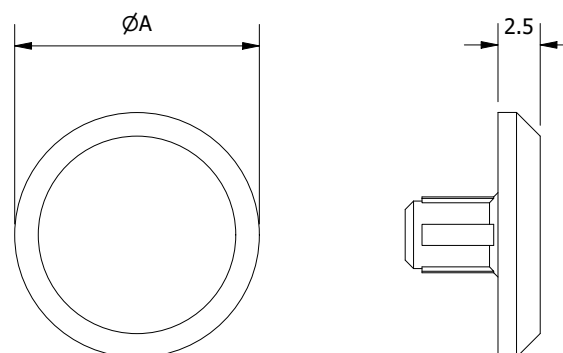
GFP. – Perpendicular Finger Gripper



Part No.	A	Stroke	B	C	D	E	G1	G2	H	I	J	K	L	M	Grip force	Weight
GFP.1406	14	6mm	65	9.5	41.5	14	M5	M5	M12X1	31.5	6	8	10	CH12	63N	47
GFP.2010	20	10mm	89.5	14	56	20	M5	G1/8	M17X1	34	10	10.5	14.5	CH17	115N	115
GFP.3015	30	15mm	131	19	82	30	G1/8	G1/8	M27X1	49	15	14	20	CH27	230N	380

Working Principle: Single acting.
 Working pressure: 6 bar clean, dry air.
 Material: Silver anodised Aluminium.
 Through hole for vacuum to a cup.
 Viton pad for soft contact.

PAD.V. – Viton Pad for Perpendicular Finger Gripper



Part No.	A	REF	Weight (g)
PAD.V.D9.5X2.5	10	GPF.1406	1
PAD.V.D14.5X2.5	14,5	GPF.2010	1
PAD.V.D19.5X3.0	20	GPF.3015	4

Viton Pad.
 Low marking.



GENERAL PURPOSE GRIPPERS

99 Compact Parallel Grippers



101 Parallel Grippers



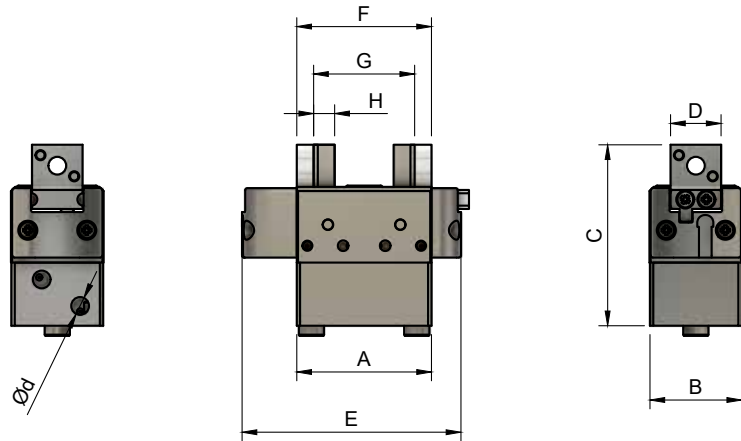
102 Jaws for Parallel Grippers



103 Angular Grippers



MP.SGP - Compact Parallel Gripper



Part No.	Stroke	Closing force at 6 bar	Opening force at 6 bar	Weight (g)
MP.SGP-20S	4mm	40N	46N	33
MP.SGP-25S	6mm	94N	104N	43
MP.SGP-32S	8mm	120N	134N	86
MP.SGP-40S	12mm	146N	160N	170

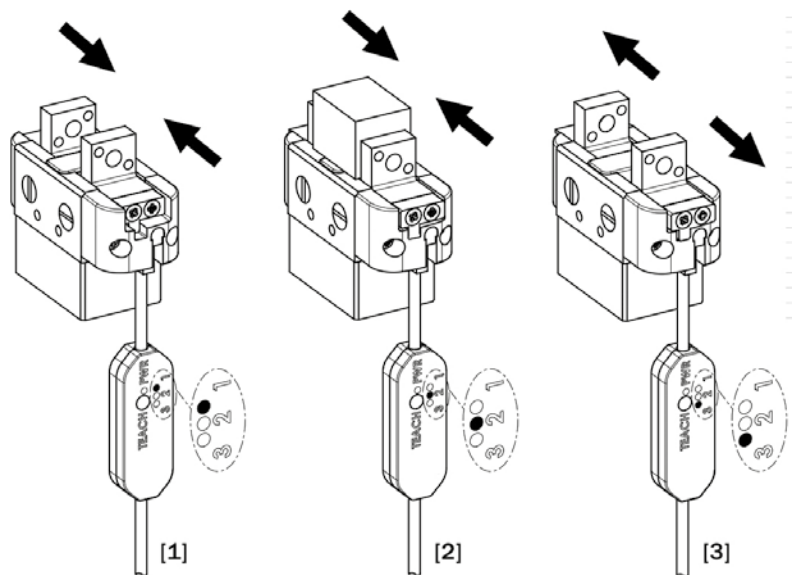
Part No.	A	B	C	D	Ød	E	F	G	H
MP.SGP-20S	20	15,8	32	9	M3	36,5	20	16	3,5
MP.SGP-25S	26	17,8	34	10	M3	42,5	25	19	4
MP.SGP-32S	32	21,8	43	12	M3	52	32	24	5
MP.SGP-40S	40	25,8	51	16	M3	62	40	28	6

Double Acting.
 Compact Size.
 Maximum Operating pressure: 8 bar.
 Temperature Range: 5 ÷ 60°C.

The operating position can be checked by one 3 - outputs programmable sensor (not included), detecting the position of the magnet on the right jaw.

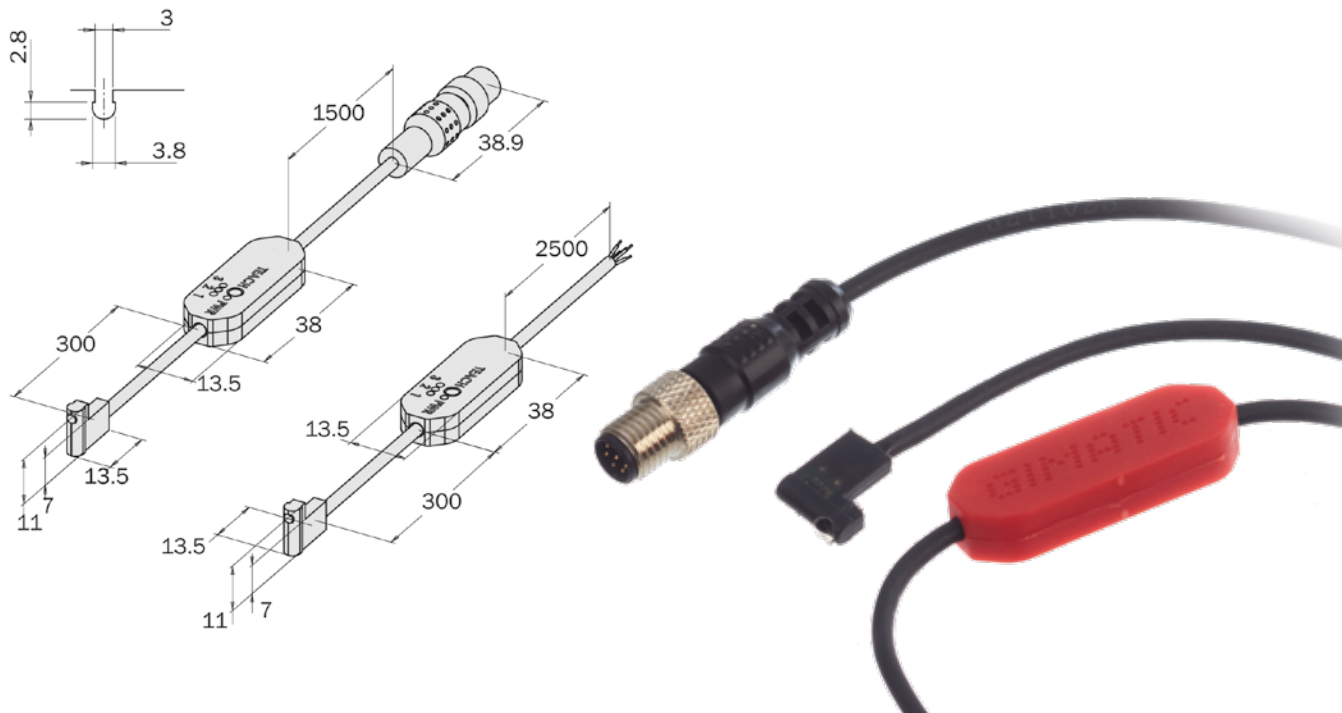
The Detected positions can be adjusted by a teaching procedure, so that 3 digital outputs can be:

- Output 1 - totally closed gripper (1)
- Output 2 - gripped part intermediate position (2)
- Output 3 - totally open gripper (3)



COMAPCT PARALLEL GRIPPER

PRO.SN-HS – Programmable Magnetic Sensor for MP.SGP-



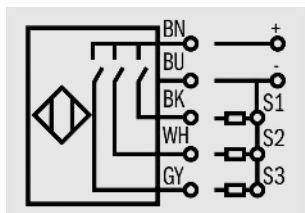
Part No.	Output	Sensor Type	Connector Lead - m	Ref.	Weight (g)	
PRO.SN3N215HS-G	PNP	Magneto-resistive NO/NC	M8 -3 pin	0,3	MP.SGP	70
PRO.SN3M215HS-G	NPN	Magneto-resistive NO/NC	M8 -3 pin	0,3	MP.SGP	70
PRO.SN4N225HS-G	PNP	Magneto-resistive NO/NC		2,5	MP.SGP	70
PRO.SN4M225HS-G	NPN	Magneto-resistive NO/NC		2,5	MP.SGP	70

Programmable GMP magneto-resistive sensors.
3 independent digital outputs.
Each programmable output in NO or NC logic.

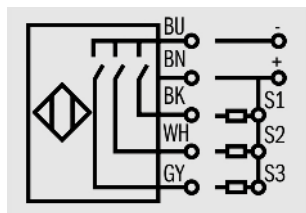
The sensor's remote programming circuit has a button for the configuration and programming of outputs. Following a simple procedure, the user can configure each output as normally open (NO - yellow LED) or normally closed (NC - green LED) and store the switching point (separate for each output).

Wiring Diagram

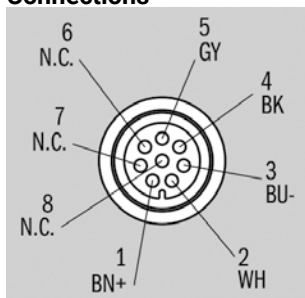
PNP



NPN

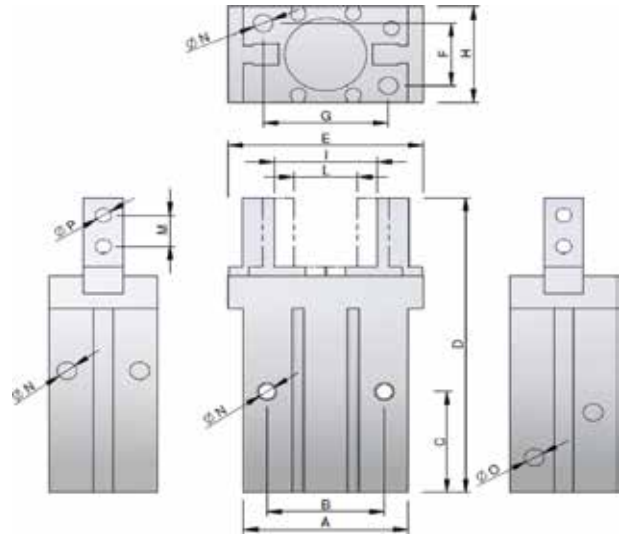


Connections



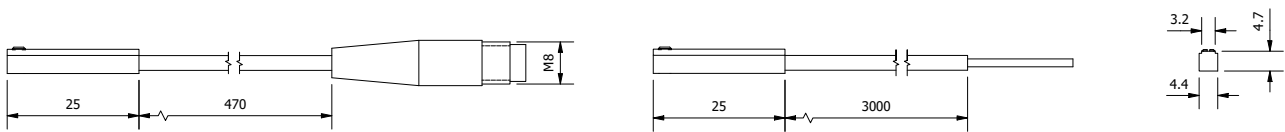
Brown (BN +); Blue (BU -); Black (BK OUT1)
White (WH OUT 2); Grey (GY OUT 3); Not connected N.C.

PG. – Parallel Gripper



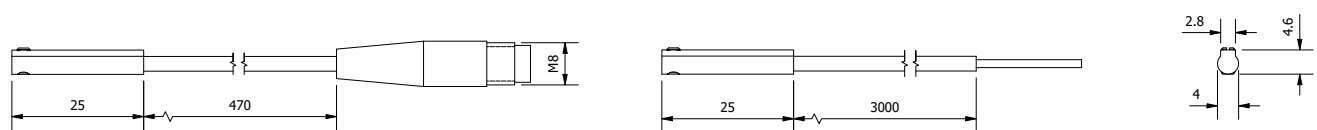
Part No.	Bore Size	A	B	C	D	E	F	G	H	I open	L closed	Stroke	M	N	O	P	Force (N) Open/Close	Weight (g)
PG-10	10	23	16	23	57	30	12	18	16,5	15,5	11,5	4	5,7	M3	M3	M2.5	22/34	56
PG-10NO	10	23	16	23	57	30	12	18	16,5	15,5	11,5	4	5,7	M3	M3	M2.5	14/	57
PG-10L	10	23	16	25	57	35	12	18	16,5	20,3	11	8	5,7	M3	M3	M2.5	22/34	64
PG-16	16	30,5	24	24,5	67,3	39	15	22	23,5	21	15	6	7	M4	M5	M3	68/90	124
PG-16NO	16	30,5	24	24,5	67,3	39	15	22	23,5	21	15	6	7	M4	M5	M3	54/	125
PG-16L	16	30,5	24	31	70	47	15	22	23,5	28	14,7	12	7	M4	M5	M3	68/90	146
PG-20	20	42	30	29	85	53	18	32	27,5	26,5	16,5	10	9	M5	M5	M4	90/132	236
PG-20NO	20	42	30	29	85	53	18	32	27,5	26,5	16,5	10	9	M5	M5	M4	70/	238
PG-20L	20	42	30	36	90	62	18	32	27,5	33,5	16,1	18	9	M5	M5	M4	84/132	273
PG-25	25	52	36	30	103	71	22	40	33,5	33,5	19,5	14	12	M6	M5	M5	138/204	428
PG-25NO	25	52	36	30	103	71	22	40	33,5	33,5	19,5	14	12	M6	M5	M5	110/	430
PG-25L	25	52	36	40	106	75	22	40	33,5	42,6	19,3	22	12	M6	M5	M5	130/208	489
PG-32	32	60	46	49	113	106	26	46	40	48	26	22	14	M6	M5	M6	320/390	729

SN.DMSG. – T-Slot Sensor



Part No.	Output	Sensor type	Connector	Lead m	REF	Weight (g)
SN.DMSGP.M8	PNP	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.M8	NPN	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGP.3M	PNP	Magnetic		3	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.3M	NPN	Magnetic		3	PG/AG/CCTQ/CCAQ	4

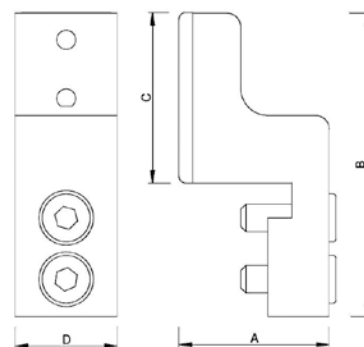
SN.DMSH. – C-Slot Sensor



Part No.	Output	Sensor type	Connector	Lead m	REF	Weight (g)
SN.DMSHPM8	PNP	Electronic	M8 3pin	0.5	PG	4
SN.DMSHNM8	NPN	Electronic	M8 3pin	0.5	PG	4
SN.DMSHP3M	PNP	Electronic		3	PG	4
SN.DMSHN3M	NPN	Electronic		3	PG	4

JAWS FOR PARALLEL GRIPPERS

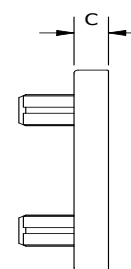
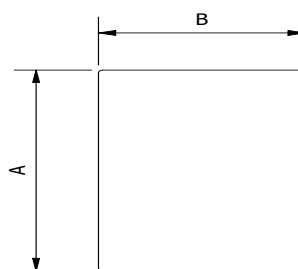
MA.KB. – Jaws for Parallel Gripper PG (complete)



Part No.	Insert	A	B	C	D	Gripper Ref.	Weight (g)
MA.KB.10	FKM-10	15,5	27	14	10	PG-10	14
MA.KB.16	FKM-16	18,5	35	20	15	PG-16	28
MA.KB.20	FKM-20	22	44,5	25	15	PG-20	41
MA.KB.25	FKM-25	29	55	25	20	PG-25	73
MA.KB.32	FKM-32	36	65,5	36,5	25	PG-32	166

Extremely light weight (Material Aluminium).

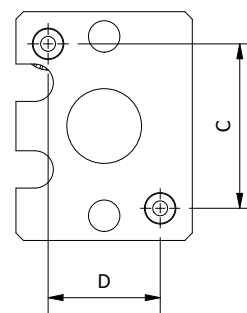
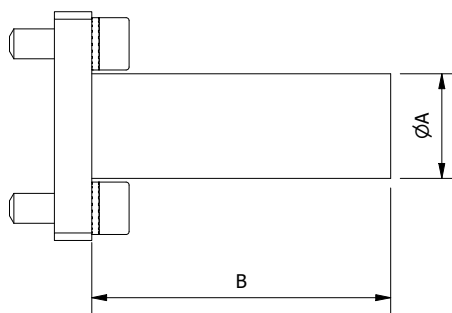
FKM – Insert Pad Viton



Part No.	Colour	A	B	C	Jaw Ref.	Weight (g)
FKM-10	■	14	10	2,5	PG-10	1
FKM-16	■	20	15	2,5	PG-16	2
FKM-20	■	25	13	2	PG-20	1
FKM-25	■	25	13	2	PG-25	1
FKM-32	■	30	20	3	PG-32	3

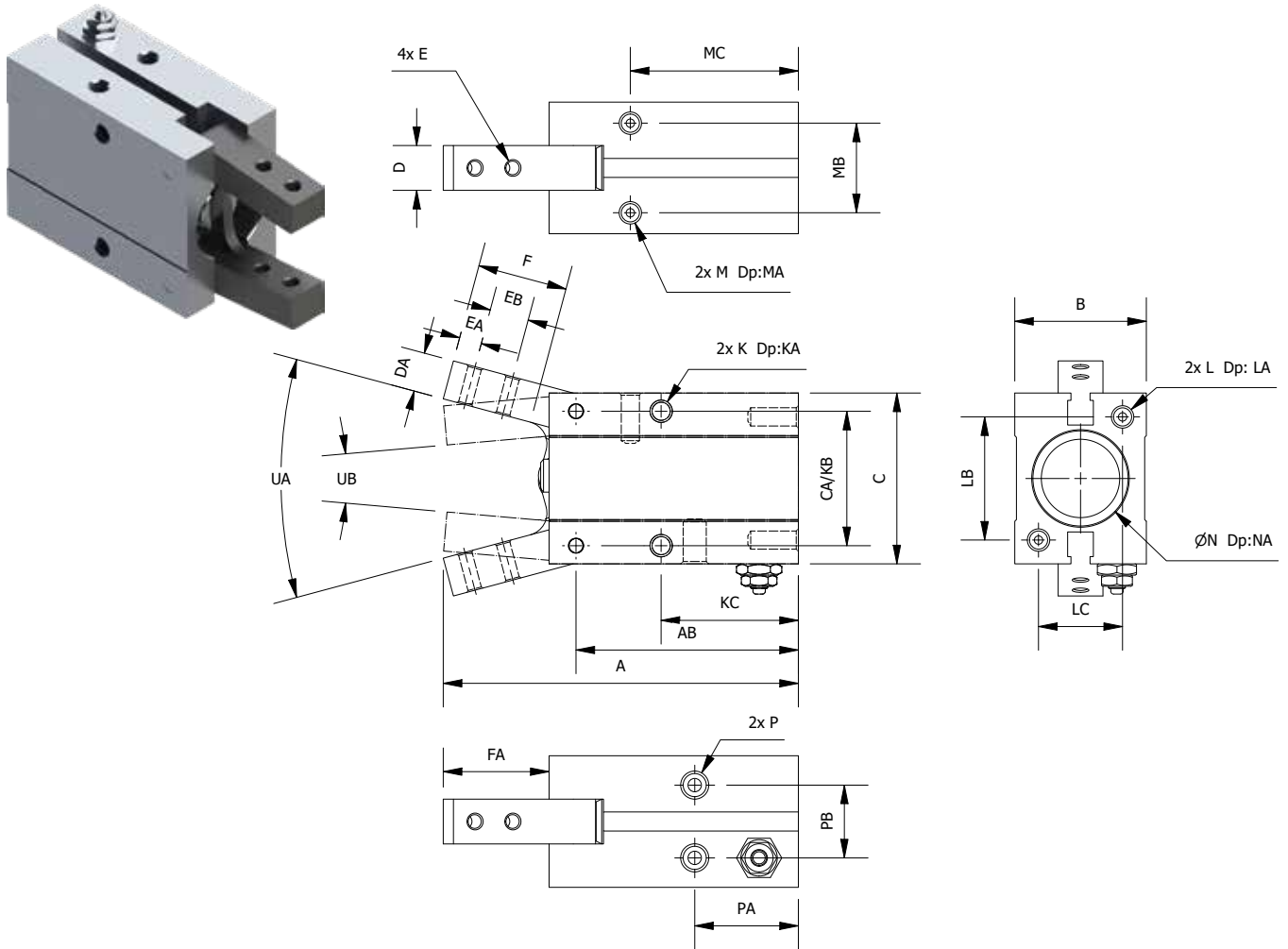
FKM = Viton (flur=oroelastomer).

GA – Mounting Bracket for Grippers PG, AG



Part No.	A	B	C	D	REF	Weight (g)
GA-10	10	30	18	12	PG-10	11
GA-16	14	40	22	15	PG-16	21
GA-20	20	50	32	18	PG-20	38
GA-25	20	50	40	22	PG-25	55
GA-32	20	50	46	26	PG-32	102

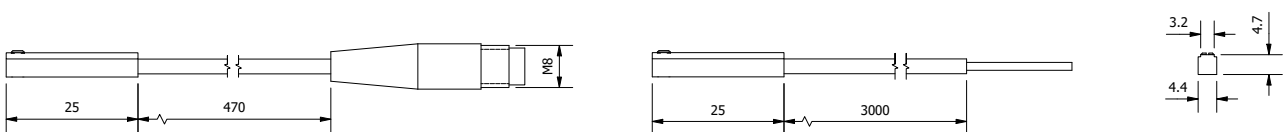
AG – Angular Gripper



Part No.	Bore Size	A	AB	B	C	CA	D	DA	E	EA	EB	F	FA	K	KA	KB	KC	L
AG-10-D	10	52,5	38,5	16,5	23	14	6,4	4	M2.5	3	5,7	12	14,5	M3x0.5	5	16	23	M3x0.5
AG-16-D	16	62,5	44,5	23,5	30,5	24	8	7	M3	4	7	16	19	M4x0.7	7	24	24,5	M4x0.7
AG-20-D	20	78	55	27,5	42	30	10	8	M4	5	9	20	23,5	M5x0.8	8	30	29	M5x0.8
AG-25-D	25	92	60,5	33,5	52	36	12	10	M5	8	12	27	33	M6x1.0	10	36	30	M6x1.0
AG-32-D	32	96,5	68	44	60	42	18	10	M6	6	14	27	29,5	M6x1.0	10	44	37,5	M6x1.0

Part No.	Bore Size	LA	LB	LC	M	MA	MB	MC	N	NA	P	PA	PB	UA(Open)	UB(Closed)	Weight (g)
AG-10-D	10	6	18	12	M3x0.5	6	11,5	27	11	1,5	M3x0.5	19	10	30°	10°	36
AG-16-D	16	8	22	15	M4x0.7	8	16	30	17	1,5	M5x0.8	10,5	13	30°	10°	59
AG-20-D	20	10	32	18	M5x0.8	10	18,5	35	21	1,5	M5x0.8	22	15	30°	10°	64
AG-25-D	25	12	40	22	M6x1.0	10	22	36,5	26	1,5	M5x0.8	23,5	20	30°	10°	155
AG-32-D	32	12	46	26	M6x1.0	10	26	30	34	2	M5x0.8	31	24	30°	10°	161

SN.DMSG. – T-Slot Sensor



Part No.	Output	Sensor type	Connector	Lead m	REF	Weight (g)
SN.DMSGP.M8	PNP	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.M8	NPN	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGP.3M	PNP	Magnetic		3	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.3M	NPN	Magnetic		3	PG/AG/CCTQ/CCAQ	4

SPECIALITY GRIPPERS

105 Expansion Grippers

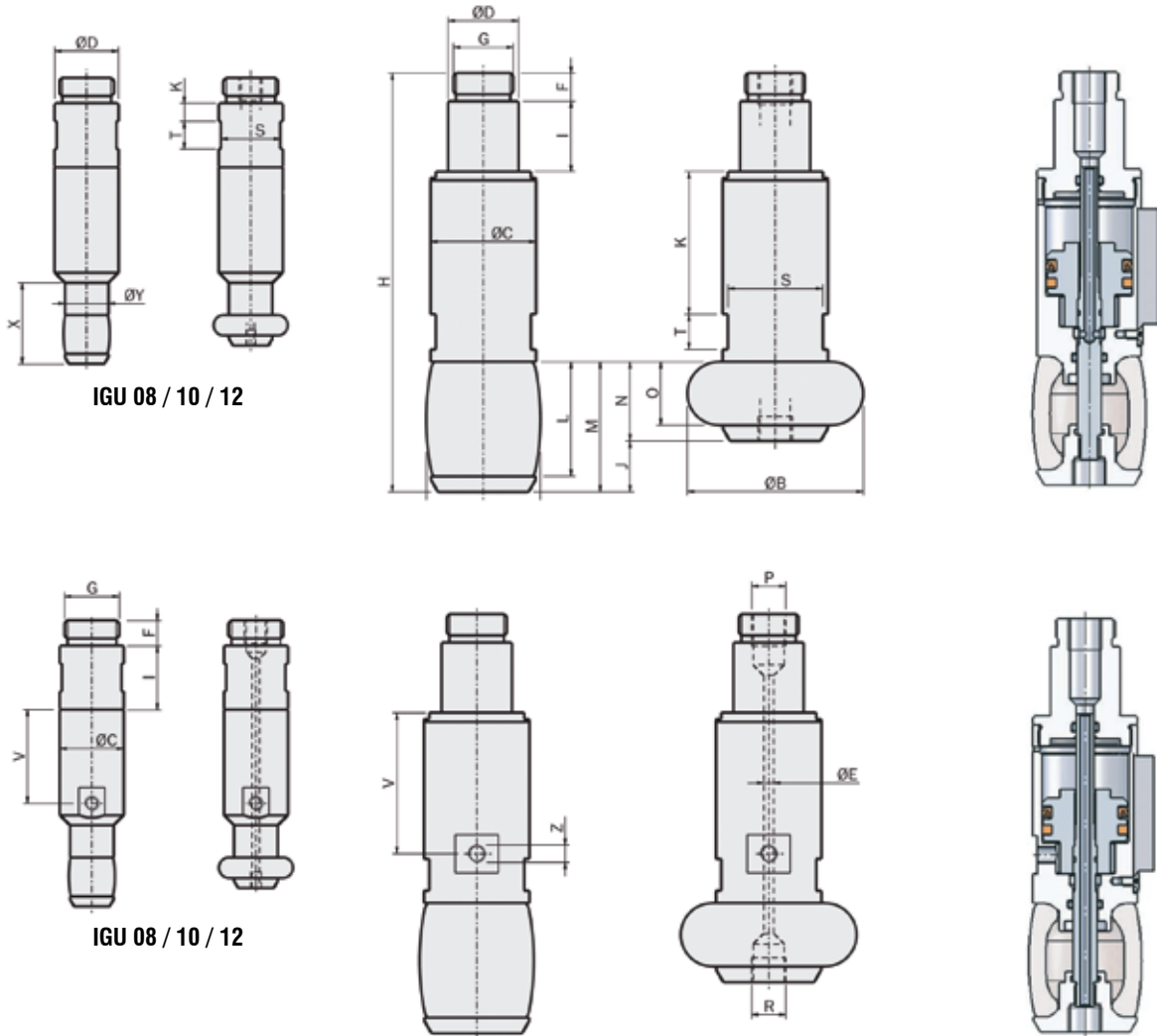


109 Dock & Lock Grippers



IGU - Expansion Grippers

Dimensions (mm)



Part No.	ØA	ØB	ØC	ØD	ØE	F	G	H	I	J	K	L	M	N	O	P	R	S	T	V	Z	X	ØY	Weight (g)
IGU08E	8	11	14	14	1,1	5,5	M12x1	61,5	14	3,5	4	7	9,2	5,7	3,5	M5	M2	13	6	20	M3	16,3	7,6	16
IGU10E	10,5	13,5	14	14	1,1	5,5	M12x1	62,5	14	4	4	8,5	10,7	6,7	4,5	M5	M2	13	6	20,5	M3	17,7	9,5	17
IGU12E	13	17	14	14	1,3	5,5	M12x1	65	14	5,5	4	10,5	13	7,5	5	M5	M3	13	6	21,5	M3	20	11,8	18
IGU14E	15	19,5	14	14	1,3	5,5	M12x1	68,5	14	7	24,2	13	15,8	8,8	6	M5	M3	13	6	23,2	M3			20
IGU16E	18	21,5	14	14	1,3	5,5	M12x1	68,5	14	7	24,2	13	15,8	8,8	6	M5	M3	13	6	23,2	M3			20
IGU18E	19,5	24,5	18	14	1,3	5,5	M12x1	78	14	7,5	29	16,5	19,5	12	9	M5	M3	16	7	28	M5			35
IGU20E	22,5	26,5	18	14	1,3	5,5	M12x1	78	14	7,5	29	16,5	19,5	12	9	M5	M3	16	7	28	M5			35
IGU22E	24	31,5	21,5	14	1,8	5,5	M12x1	86,5	14	10	31,8	21	24,2	14,2	11	M5	M3	20	8	31,5	M5			50
IGU27E	28	36	25	20	2,5	8	M17x1	108	20	12	37,5	26	30	18	14	M5	M5	22	9	37	M5			100
IGU33E	34	44	30	20	2,8	8	M17x1	119	20	14,5	40,5	32,5	37	22,5	18	G1/8	G1/8	28	10	40	M5			130
IGU41E	42	54	40	30	4,5	11	M27x1	147	30	15,5	45	39,5	45	29,5	24	G1/8	G1/8	36	12	45	M5			30
IGU47E	50	58	40	30	4,5	11	M27x1	147	30	15,5	45	39,5	45	29,5	24	G1/8	G1/8	36	12	45	M5			300
IGU51E	54	68	50	30	5	11	M27x1	169	30	18	54	48	55	37	30	G1/8	G1/8	45	14	56,5	G1/8			500
IGU63E	66	84	60	30	5	11	M27x1	194	30	25	62	61	70	45	36	G1/8	G1/8	54	16	64,5	G1/8			785

Downward movement (IGD - on request), or upward movement (IGU).

The elastic part can be in Silicone or EPDM.

Grip diameters from 8 to 85 mm.

Optional proximity magnetic sensors.

Use standard Ø14, 20 and 30mm clamps.

Has a central through hole which can be used to blow compressed air, or to provide vacuum, with the purpose of cooling a part, or checking sealing.

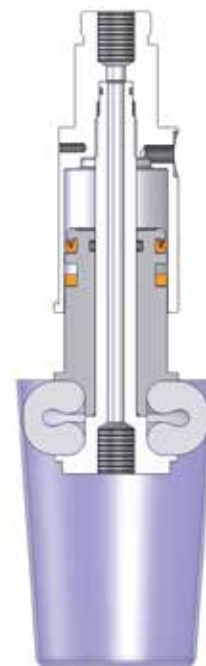
EXPANSION GRIPPERS

IGU - Expansion Grippers



ID expansion grippers series IGU

- New concept for innovative air hand.s
- Upward movement.
- Central trough holefor compressed airor vacuum.
- The elastic part can be in Silicone or EPDM.
- Grip diameters from 8mm to 85mm.
- Optional nose cone for centering.
- Optional proximity magnetic sensors.
- Several mounting accessories.



Grip diameters

- The gripper size is indicated in the gripper code with nominal diameter of the elastic part.
- Each model can work in a diameter range between a minium and maximum valve.

	Diameter (mm)							
	10	20	30	40	50	60	70	80
08	8	11						
10	10.5	13.5						
12		13	17					
14		15	19.5					
16		18	21.5					
18		19.5	24.5					
20		22.5	26.5					
22		24	31.5					
27			28	36				
33			34	44				
41				42	54			
47					50	58		
51					54		68	
63						66		84

IF-E & IF-S – Spare Silicone Elastomers for IGD/IGU Expansion Grippers



EPDM



Silicone

Part No. EPDM	Part No. Silicone	Ref	Weight (g)
IF08E02	IF08S01	IGU08E	1
IF10E02	IF10S01	IGU10E	1
IF12E02U	IF12S01U	IGU12E	2
IF14E02U	IF14S01U	IGU14E	3
IF16E02U	IF16S01U	IGU16E	3
IF18E02	IF18S01	IGU18E	4
IF20E02	IF20S01	IGU20E	3,3
IF22E02	IF22S01	IGU22E	7
IF27E02	IF27S01	IGU27E	10
IF33E02	IF33S01	IGU33E	20
IF41E02	IF41S01	IGU41E	33
IF47E02	IF47S01	IGU47E	60
IF51E02	IF51S01	IGU51E	65
IF63E02	IF63S01	IGU63E	130

EPDM temperature range (-50°C to +140°C).

EPDM is mark-free and provides a higher coefficient of friction.

The expected medium life time of the elastic part in EPDM is about 0.5 million cycles.

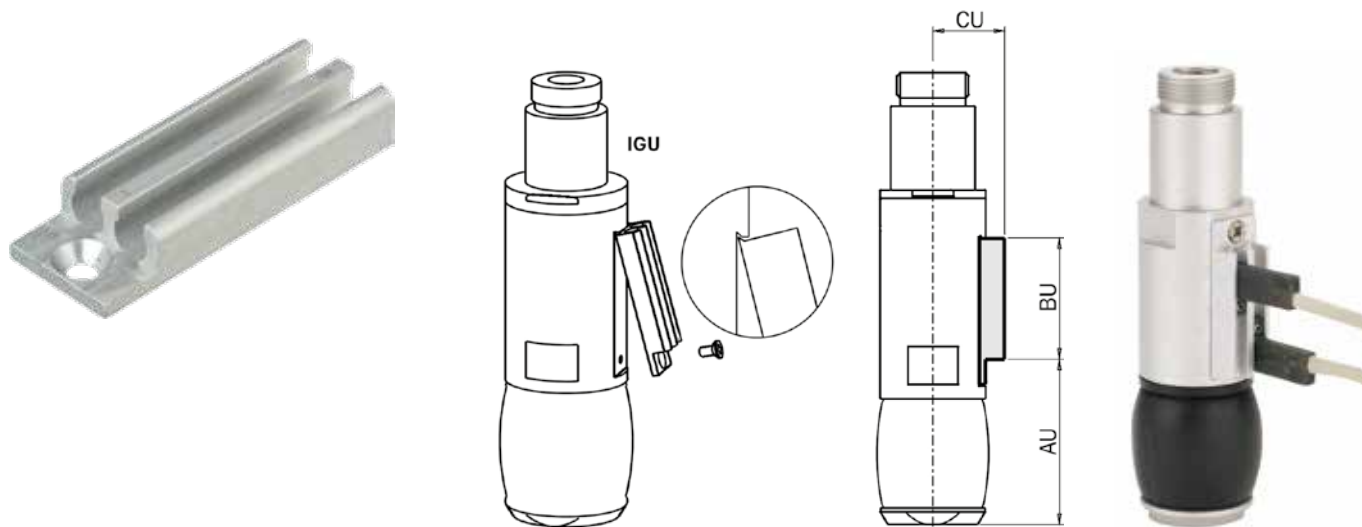
Silicone temperature range (-70°C to +200°C).

The expected medium life time of the elastic part in Silicone is about 1 million cycles.

Not suitable in some industries, due to residue left after contact with silicone.

EXPANSION GRIPPERS

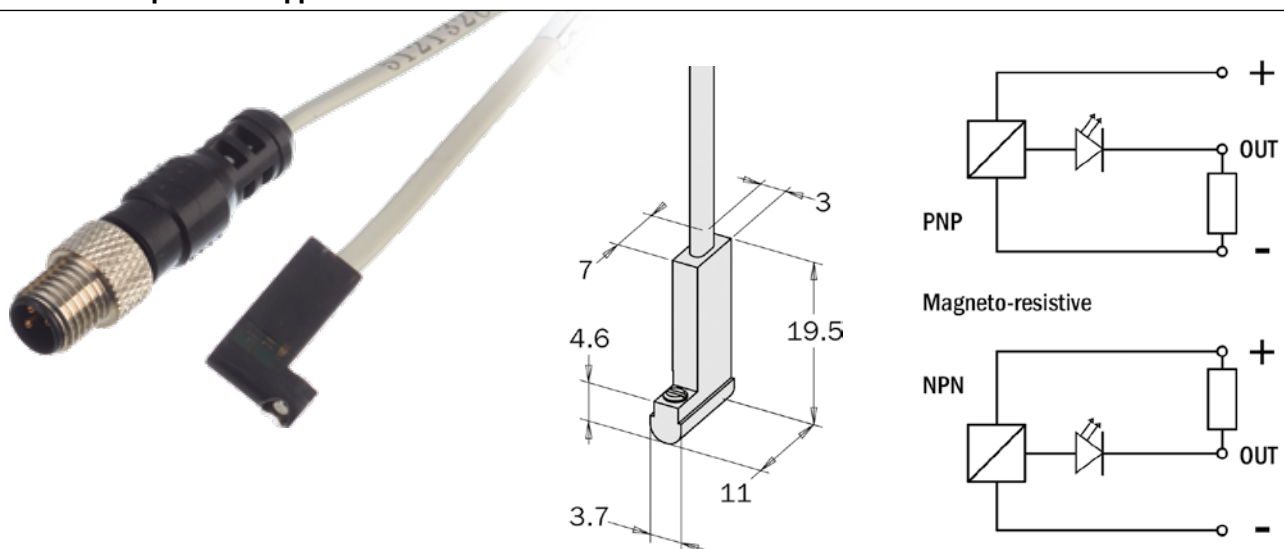
IGU-SB Sensor Holder



Part No.	AU mm	BU mm	CU mm	Ref IGU	Weight (g)
IGU27-SB	39,5	29	17	Ø27	4
IGU33-SB	46,5	33	19,8	Ø33	5
IGU41-SB	55,5	36,5	23,8	Ø41,Ø47	5
IGU51-SB	71,5	39	28,5	Ø51	5
IGU63-SB	87,5	45	33,5	Ø63	7

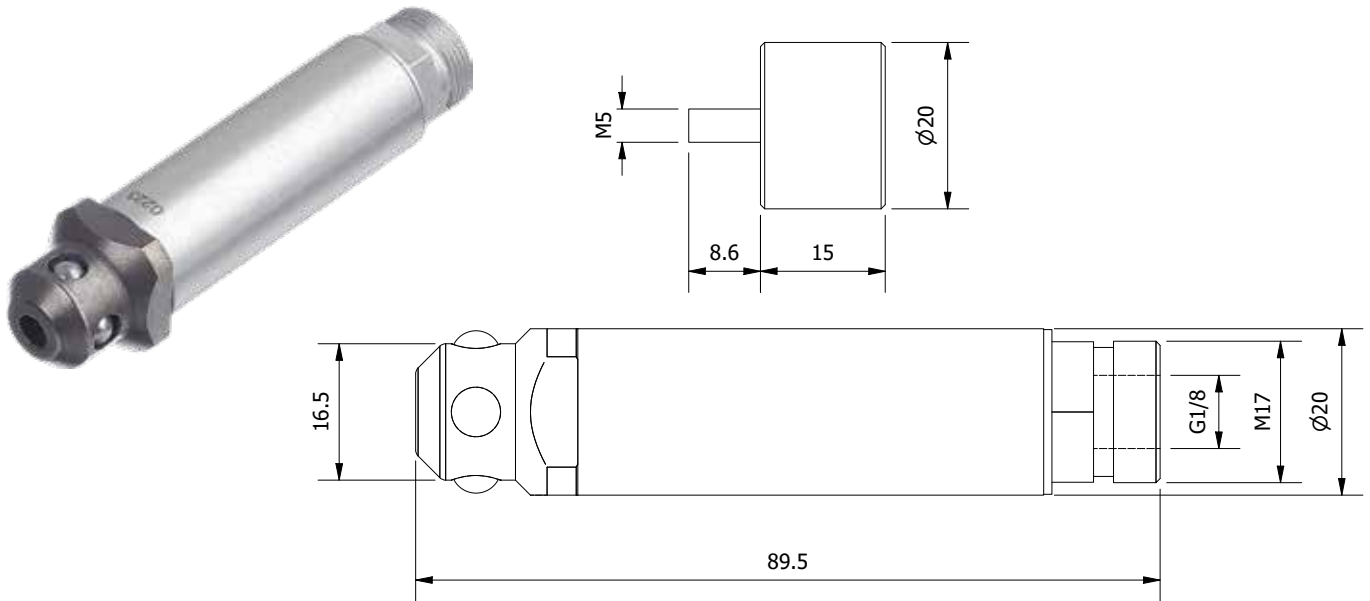
Expansion grippers sizes 27 to 63, have magnets integrated into their pistons.
This sensor mounting bracket allows sensors to be equipped in order to detect magnet position.
One or two sensors can be fitted on a gripper.

SN – Sensor for Expansion Grippers IGD & IGU



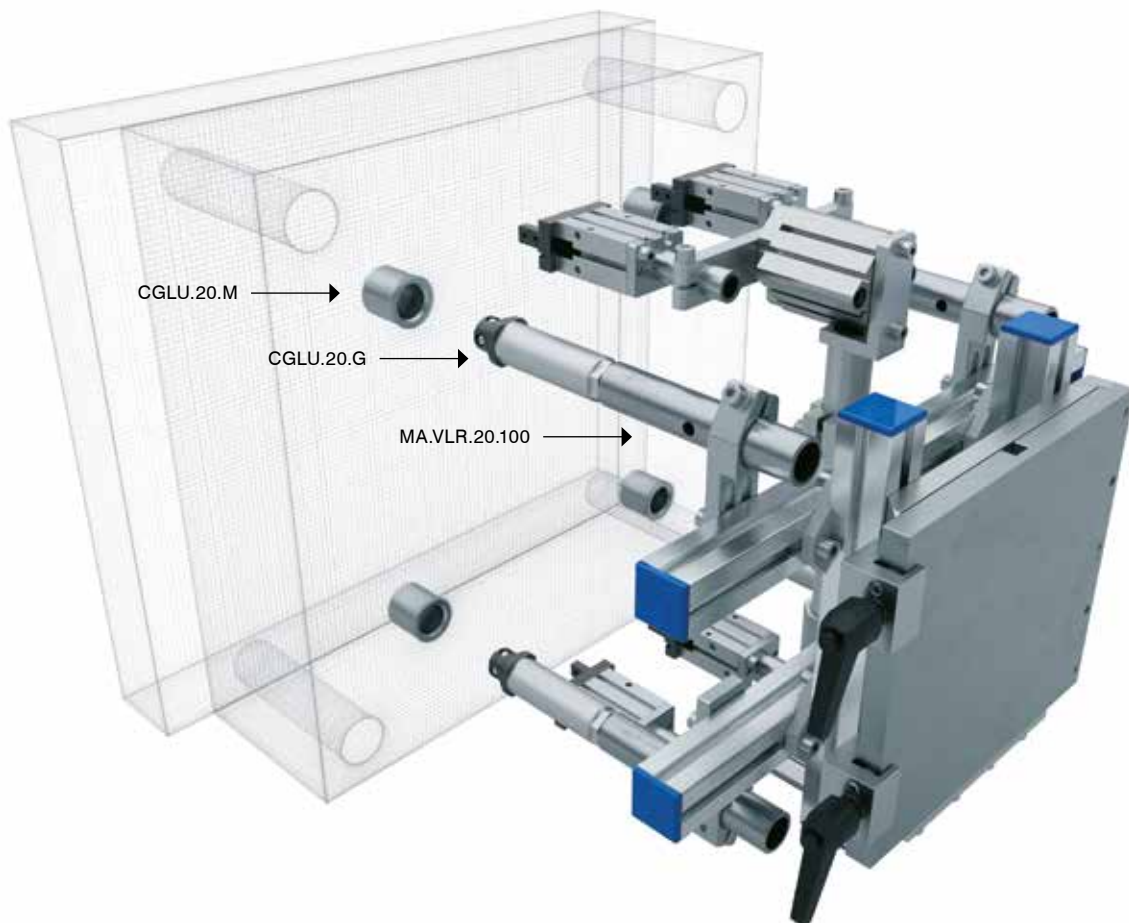
Part No.	Output	Sensor Type	Connector Lead - m	Ref.	Weight (g)
SN.3N203-G	PNP	Magnetoresistive NO	M8 -3 pin	IGD/IGU	4
SN.3M203-G	NPN	Magnetoresistive NO	M8 -3 pin	IGD/IGU	4
SN.4N225-G	PNP	Magnetoresistive NO	2,5	IGD/IGU	22
SN.4M225-G	NPN	Magnetoresistive NO	2,5	IGD/IGU	22

GCLU. – Centering Locking Unit



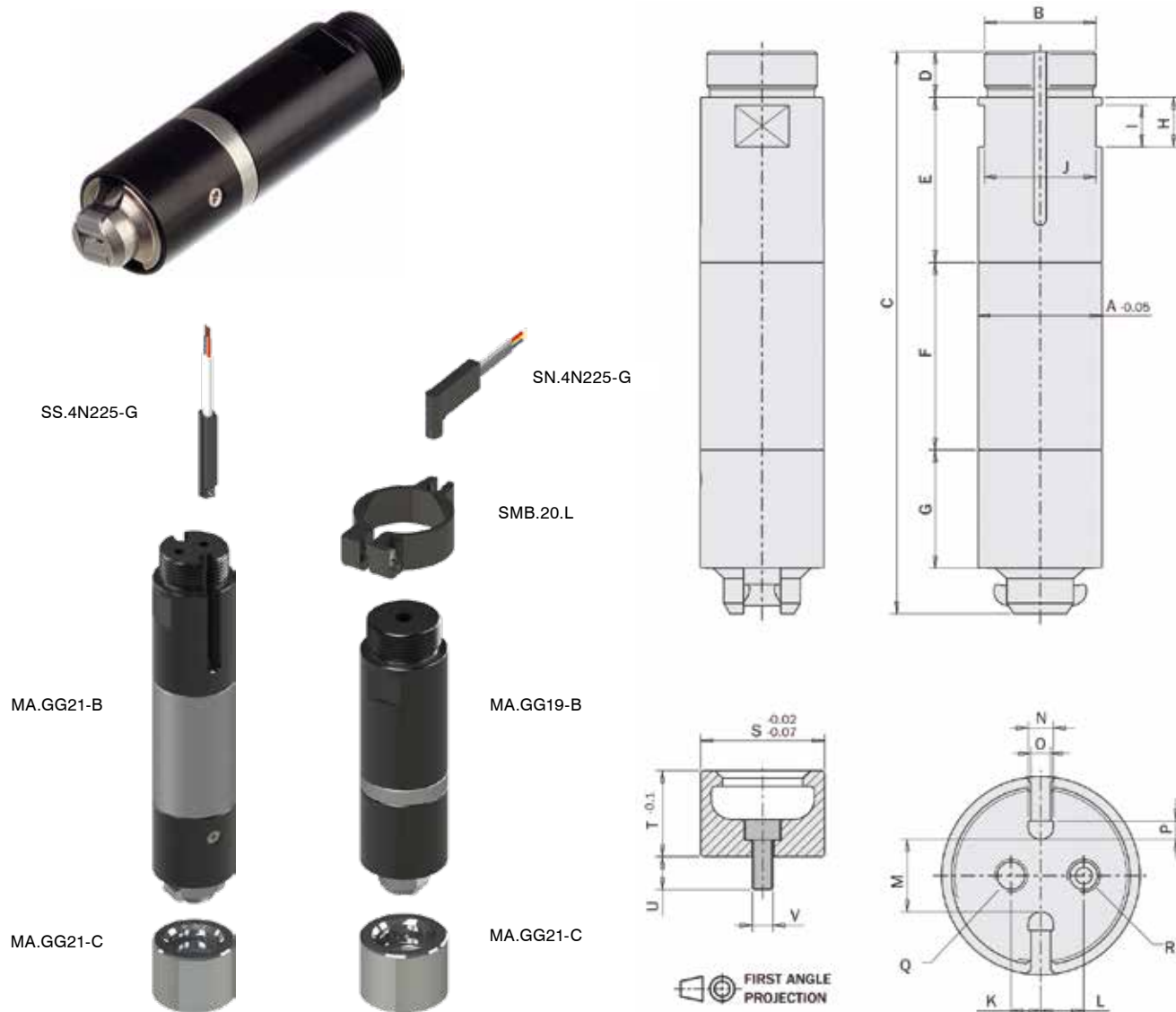
Part No.		Closing force (6 bar)	Weight (g)
GCLU.20.G	Gripper side	750N	93
GCLU.20.M	Mould side		60

Single acting.
 High gripping force.
 ISO H7 tolerance is used for positioning.



DOCK AND LOCK GRIPPERS

MA.AGG – Engagement Gripper



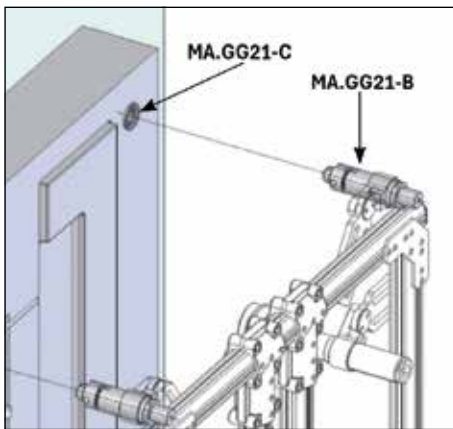
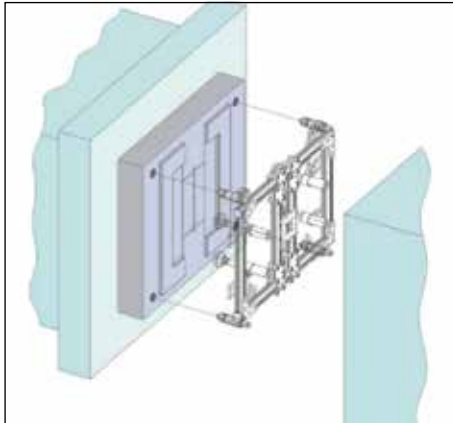
Part No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Weight (g)
MA.GG19-B	Ø20	M17x1	70,5	8	32	4	19,5	10	8	18	0								85
MA.GG21-B	Ø20	M17x1	96,5	8	28	34	19,5	10	8	18	2,8	4,6	6	3,8	3	2,8	M3	M3	115

The MA.GG is used to provide a precise centering between the robot and the mould.
 MA.GG...B is fitted to the Robot, MA.GG...C is fitted to the mould.
 Ideal for insert loading.
 MA.GG19-B: Single acting, spring return (NO).
 MA.GG21-B: Double acting, with safety spring (NC).
 Maximum operating pressure: 8 bar.
 Operating temperature range: 5° to 60°C.

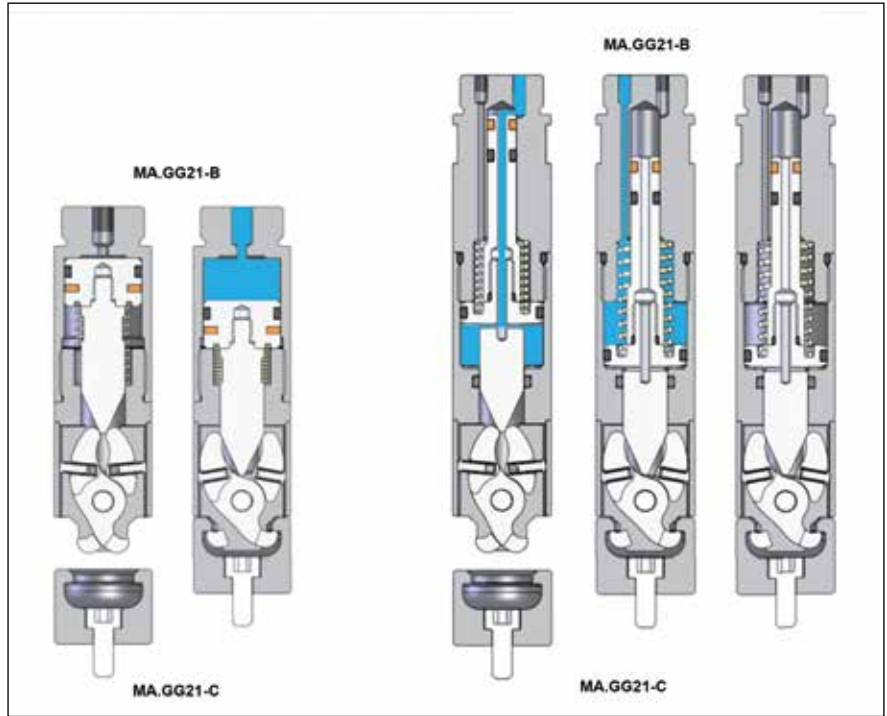


Part No.	S	T	U	V	Weight (g)
MA.GG21-C	Ø20	15,3	6,7	M4	25

MA.GG – Engagement Gripper

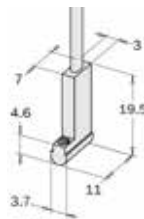


	MA.GG19-B	MA.GG21-B
Maximum axial load without compressed air before releasing	0 N	600 N
Maximum axial load with compressed air before releasing	2000 N	2000 N
Pressure range	2 - 8 bar (NO)	4 - 8 bar (NC)
Temperature range	5° - 60°C.	5° - 60°C.



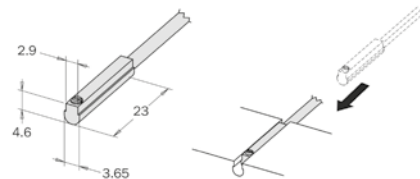
SN – Sensor for Grippers MA.GG19-B

Sensor Mounting Bracket Ø20 – SMB.20.L



Part No.	Output	Sensor Type	Connector	Lead - m	Ref.	Weight (g)
SN.3N203-G	PNP	Magneto-resistive NO	M8 -3 pin	0,3	MA.GG19-B	4
SN.3M203-G	NPN	Magneto-resistive NO	M8 -3 pin	0,3	MA.GG19-B	4
SN.4N225-G	PNP	Magneto-resistive NO		2,5	MA.GG19-B	4
SN.4M225-G	NPN	Magneto-resistive NO		2,5	MA.GG19-B	4

SS – Sensor for Grippers MA.GG21-B



Part No.	Output	Sensor Type	Connector	Lead - m	Ref.	Weight (g)
SS.3N203-G	PNP	Magneto-resistive NO	M8 -3 pin	0,3	MA.GG21-B	4
SS.3M203-G	NPN	Magneto-resistive NO	M8 -3 pin	0,3	MA.GG21-B	4
SS.4N225-G	PNP	Magneto-resistive NO		2,5	MA.GG21-B	22
SS.4M225-G	NPN	Magneto-resistive NO		2,5	MA.GG21-B	22

113 Nipper Bodies – Round



114 N. Series Nipper Blades



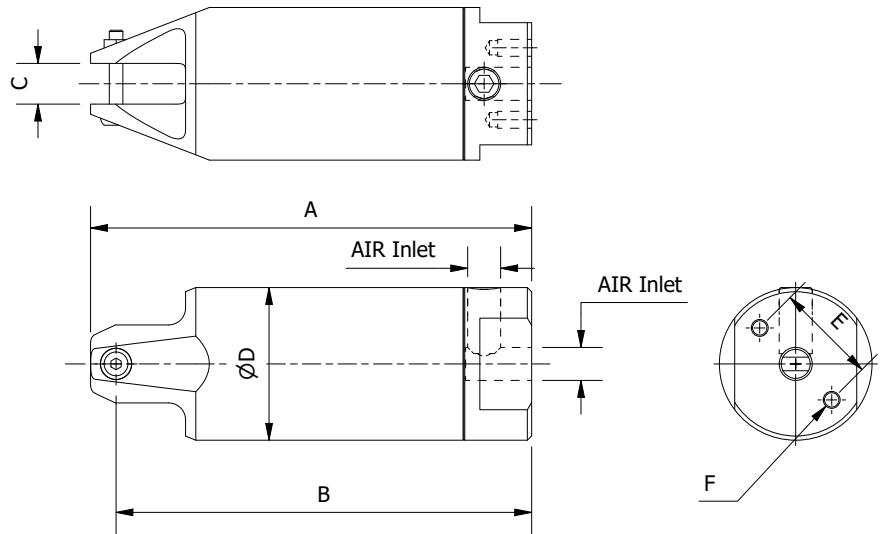
117 GPT Series Nipper Blades



120 Nipper Mounting Brackets

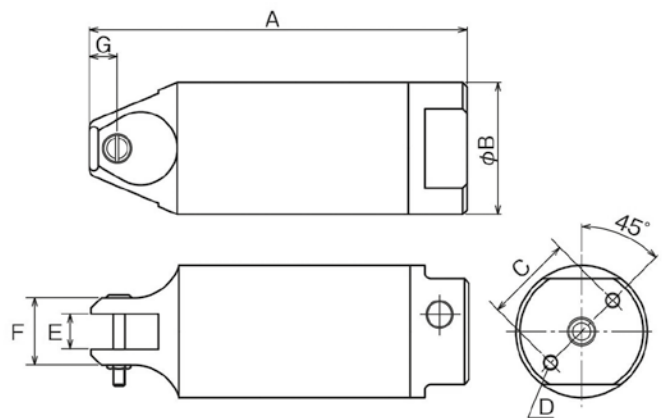


SPT. – Air Nipper Bodies S - Series



Part No.	Sprue Ø Cut	A	ØD	B	C	E	F	Cutting Pressure	Working Air Pressure	Air Port	Weight (g)
SPT-20R	7mm	130	45	126	12	30	M5x12	140 kg	5-6 Bar	G 1/8"	272
SPT-30R	10mm	166	56	163	17	40	M6x12	280 kg	5-6 Bar	G 1/8"	508

GT – Air Nipper Bodies GT - Series - Round

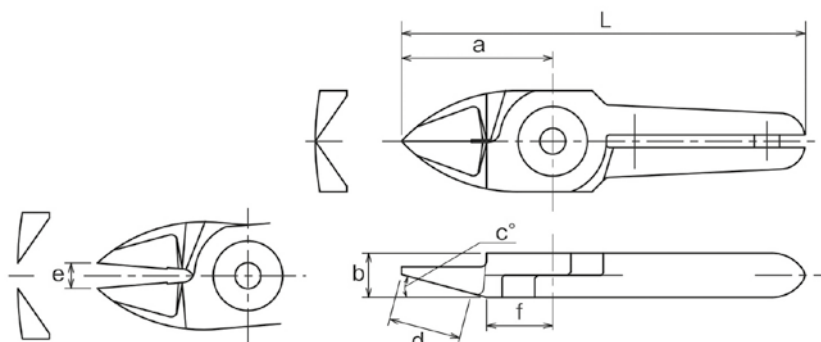


Part No.	Sprue Ø Cut	A	B	C	D	E	F	G	Cuting pressure	Working Pressure	Air Port	Weight (g)
GT-NR5	2mm	94	30	20	M4x10	7	17	7	40Kg	4-5 Bar	R1/8	110
GT-NR10L	4mm	113	36	24	M4x10	12	20	7	60Kg	5-6 Bar	R1/8	215
GT-NR20	7mm	129	45	30	M5x12	12	23	9,5	140Kg	5-6 Bar	R1/8	280
GT-NR30	10mm	165	56	40	M6x12	17	30	10,5	280kg	5-6 Bar	R1/8	505
GT-NR50	12mm	222	75	50	M8x12	25,2	43	15	480Kg	5-6 Bar	R1/4	1190

High quality and reliable performance.
Two air intakes provided.

N. SERIES NIPPER BLADES

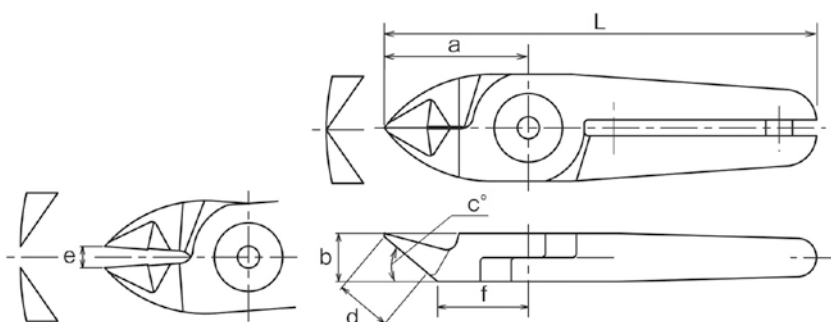
N.AP – Standard Blades, 15°



Part No.	a	b	c(°)	d: Effective Length	e: Blade Oppening	f	L	Weight (g)
N5AP	24	7	15	11,5	4	10,5	64	40
N10LAB152	61	12	15	35	10		115	165
N10LAP	35	12	15	16	5	15	89	85
N20AP	35	12	15	16	11	15	95	125
N30AP	66	17	15	38	16	24	150	380

Material: Special Alloy Steel

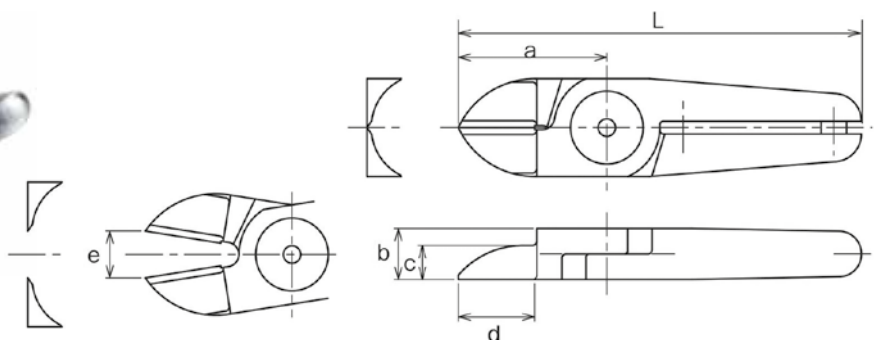
N.PF – Deep Angle Blades, 30°/40°



Part No.	a	b	c(°)	d: Effective Length	e: Blade Oppening	f	L	Weight (g)
N10LPF	35	12	40	13,5	5	21	89	120
N20PF	35	12	40	13,5	11	21	95	130
N30PF	58	17	30	25	15	33	142	390
N30AA114	76	17	30	50	20		160	385

Material: Special Alloy Steel

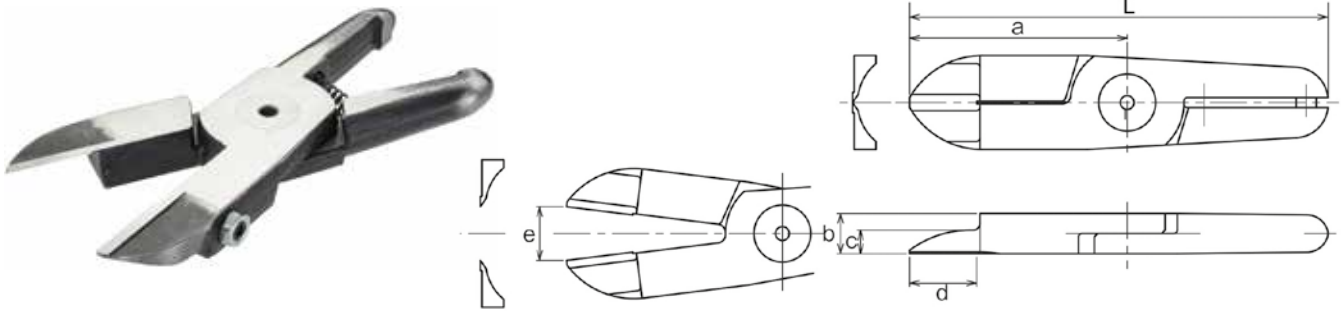
N.AJ – Straight Blades



Part No.	a	b	c(°)	d: Effective Length	e: Blade Oppening	L	Weight (g)
N20AJ	35	12	8	18	11	95	125
N30AJ	52	17	8	28	11	136	370

Material: Special Alloy Steel

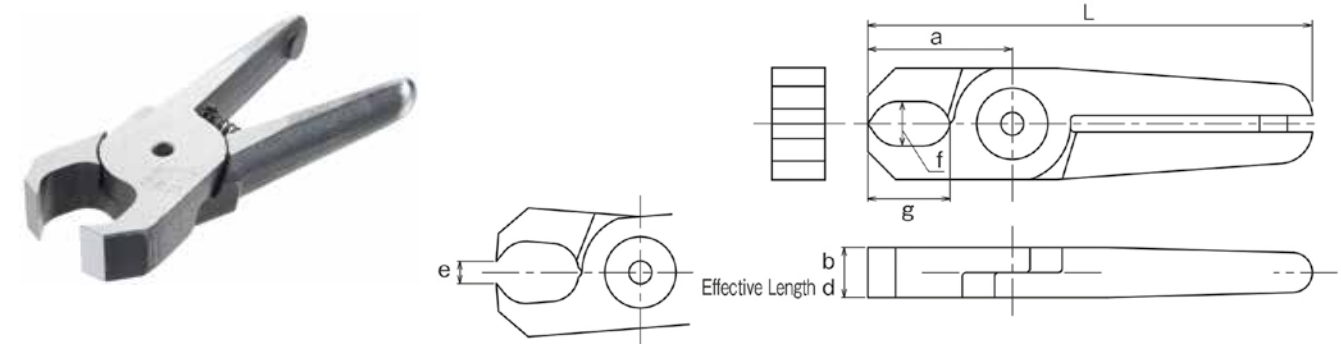
N.AJL – Long Straight Blades



Part No.	a	b	c(°)	d: Effective Length	e: Blade Opening	L	Weight (g)
N10LAJ	61	12	7	34	10	115	165
N20AJL	65	12	7	20	16	125	230
N30AJL	75	17	8	25	19	159	470

Material: Special Alloy Steel

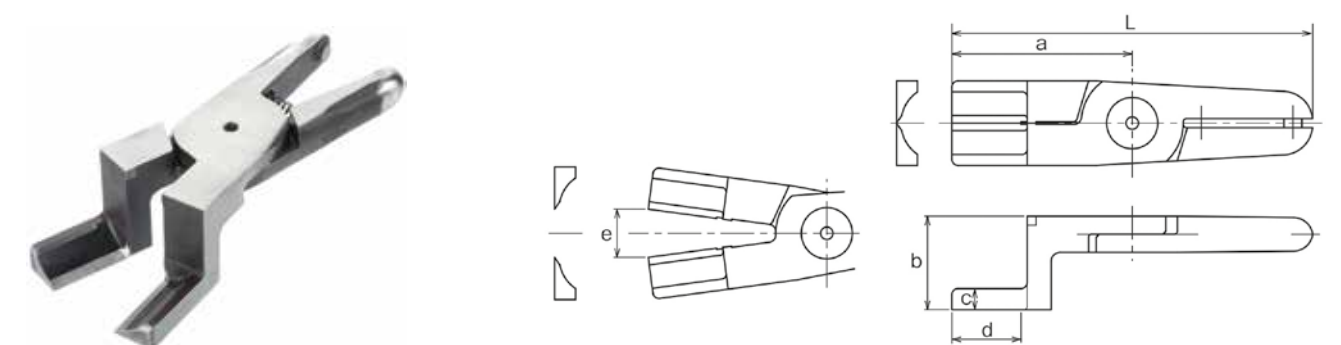
N.AE – Perpendicular End Cut Blades



Part No.	a	b	c(°)	d: Effective Length	e: Blade Opening	L	Weight (g)
N20AE	28	12	10x15.5	12	8	88	135
N30AE	35	17	13x28	17	12	129	395

Material: Special Alloy Steel

N.AH – Offset Blades

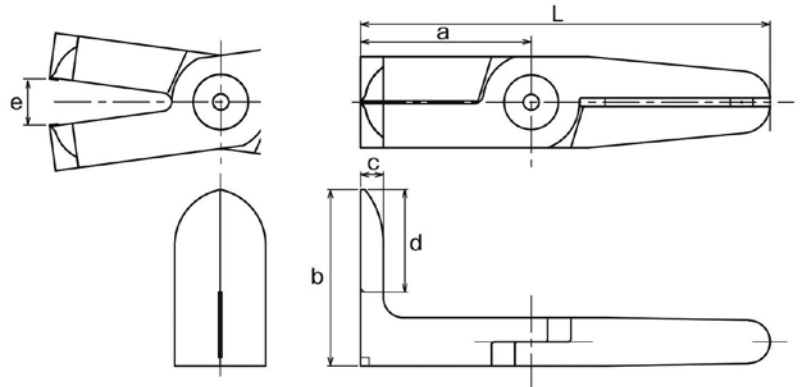


Part No.	a	b	c(°)	d: Effective Length	e: Blade Opening	L	Weight (g)
N20AH	60	31	7	23	16	120	240

Material: Special Alloy Steel

N. SERIES NIPPER BLADES

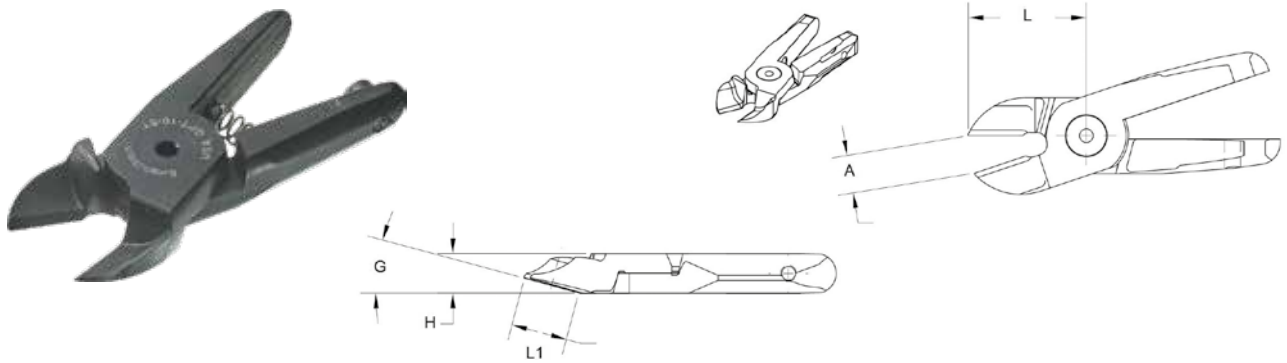
N.AL – L Blade



Part No.	a	b	c(°)	d: Effective Length	e: Blade Opening	L	Weight (g)
N30AL525	60	62		36	16	144	520

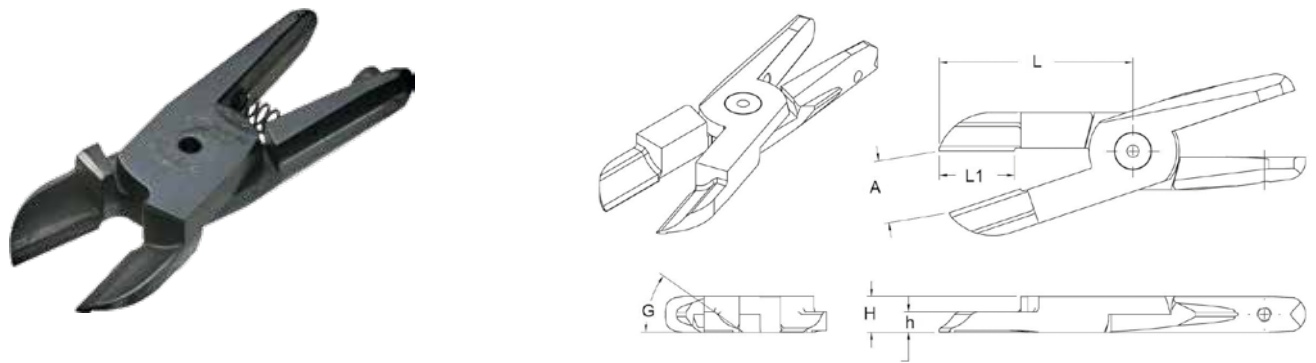
Material: Special Alloy Steel

GPT.ST – Standard Blade 15°



Part No.	Size	A	L	L1	H	G
GPT-20-ST	20	11	36	17	12	15°
GPT-30-ST	30	18	63	36	17	15°

GPT.LI – Inline Straight Blade

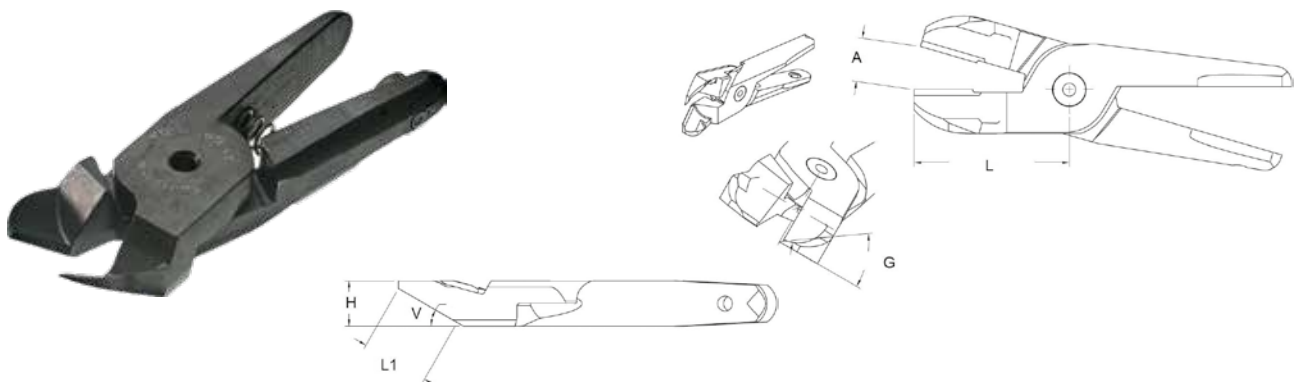


Part No.	Size	A	L	L1	H	h	G
GPT-20-LI	20	21	66	25	12	7	35°
GPT-30-LI	30	22	77	29	17	8	35°

Part No.	a	b	c (°)	d: Effective Length	e: Blade Oppening	L	Weight (g)
N30AL525	60	62		36	16	144	520

Material: Special Alloy Steel

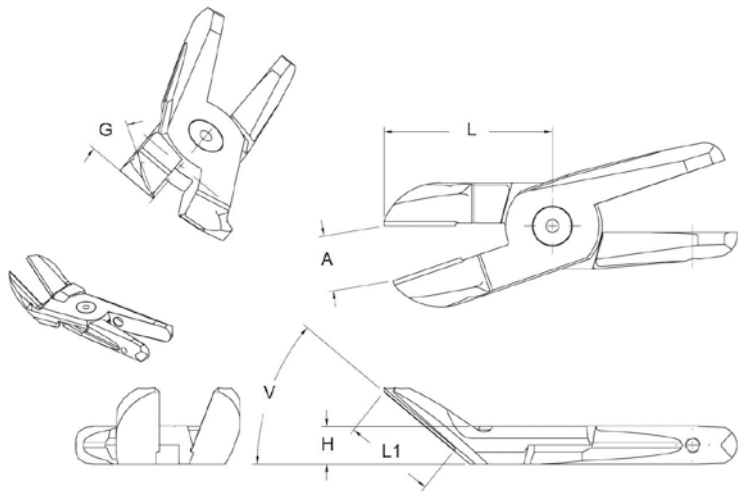
GPT.DA – Deep Angle



Part No.	Size	A	L	L1	H	V	G
GPT-20-DA	20	11	36	15	12	40°	35°
GPT-30-DA	30	16	58	25	17	30°	35°

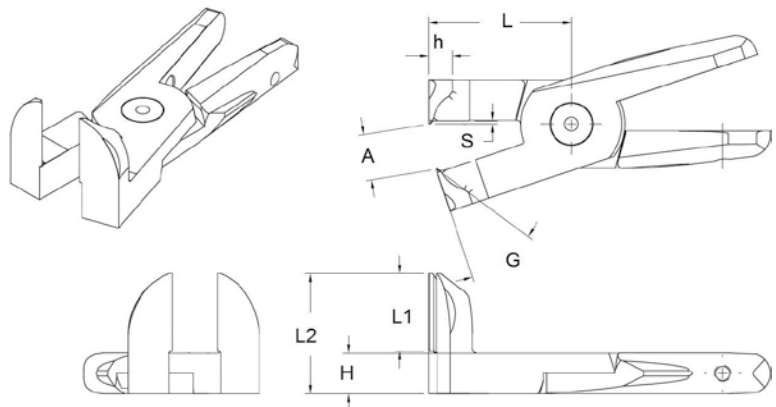
GPT. SERIES NIPPER BLADES

GPT.LA – Long Angle Blade



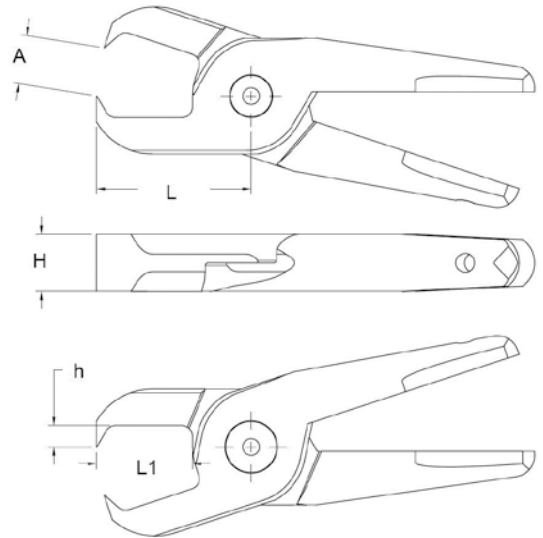
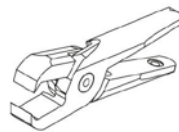
Part No.	Size	A	L	L1	H	V	G
GPT-20-LA	20	17	53	29	12	40°	30°
GPT-30-LA	30	23	83	53	17	30°	30°

GPT.DA90 – Long 90° Angle Blade



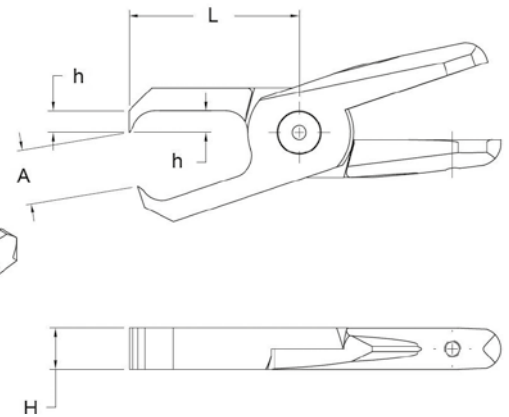
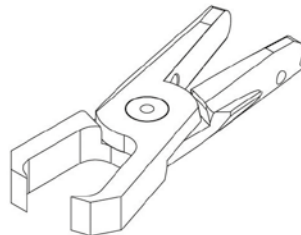
Part No.	Size	A	L	L1	L2	G	H	h	S
GPT-20-DA90	20	13	42	23	35	35°	12	7	1
GPT-30-DA90	30	11	39	33	52	35°	17	8	2

GPT.PE – Perpendicular End Cut Blade



Part No.	Size	A	L	L1	H	h
GPT-20-PE	20	9	28	12	12	4
GPT-30-PE	30	14	46	28	17	6

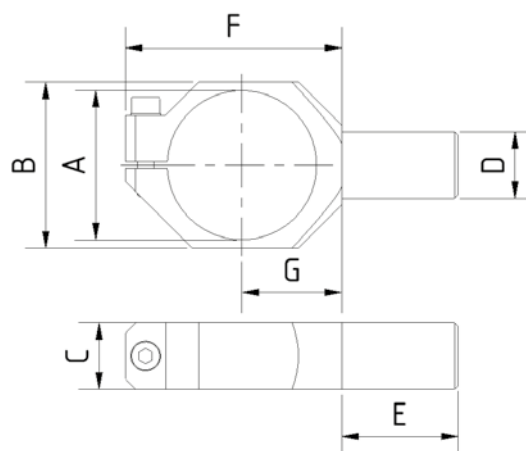
GPT.LA – Long Angle Blade



Part No.	Size	A	L	H	h
GPT-20-PELA49	20	16	49	12	6

NIPPER MOUNTING BRACKETS

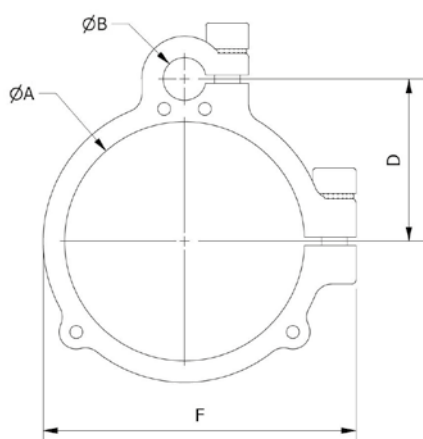
SCH – Mounting Brackets for Air Nippers



Part No.	A	B	C	D	E	F	G	REF	Weight (g)
SCH-05	30	38	20	20	48	54	25	GT-NR5	91
SCH-10	36	43	20	20	48	60	28	GT-NR10L	95
SCH-20	45	52	20	20	48	68	33	GT-NR20/SPT-20R	102
SCH-30	56	54	20	20	48	80	38	GT-NR30/SPT-30R	117
SCH-50	75	83	30	30	50	96	47	GT-NR50	275

Material: Aluminium
Surface: Silver anodized.

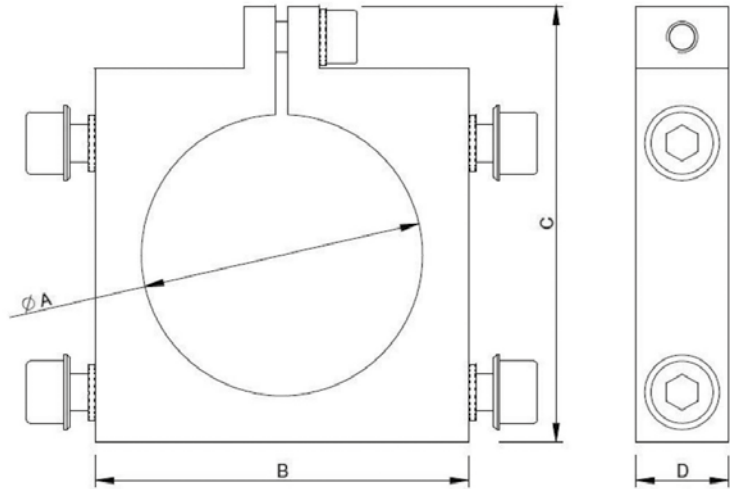
NGC. – Nipper / Gripper Combination Clamp



Part No.	A	B	C	D	E	F	REF	Weight (g)
NGC.1010	36	10	10	28	62,8	53	GT-NR10L	27
NGC.2010	45	10	10	32,5	70	62	GT-NR20/SPT-20R	30
NGC.3010	56	10	10	38	81	73	GT-NR30/SPT-30R	43
NGC.5010	75	10	10	47,5	100	92,5	GT-NR50	43

Material: Aluminium.
Surface: Silver anodized.

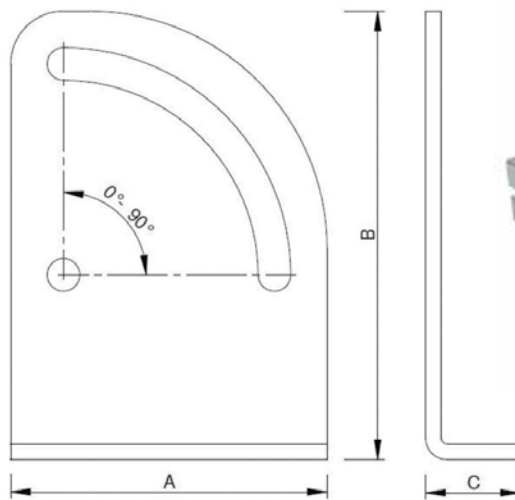
NSB.A – Swivel Mounting Bracket for Air Nippers - Part A



Part No.	A	B	C	D	REF	Weight (g)
NSB.30A	30	45	55	15	GT-NR5	87
NSB.36A	36	50	62	15	GT-NR10L	97
NSB.45A	45	60	70	15	GT-NR20/SPT-20R	115
NSB.56A	56	70	85	15	GT-NR30/SPT-30R	136
NSB.75A	75	90	105	15	GT-NR50	188

Material: Aluminium
Surface: Silver anodized.

NSB.B – Swivel Mounting Bracket for Air Nippers - Part B

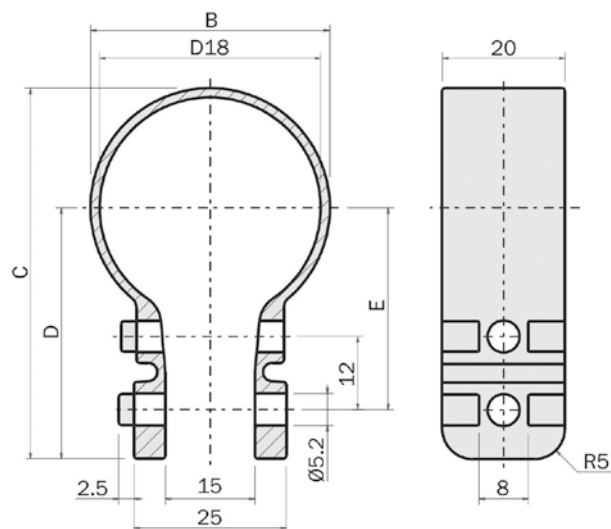


Part No.	A	B	C	REF	Weight (g)	F
NSB.30B	50	75	18	GT-NR5	84	54
NSB.36B	55	80	18	GT-NR10L	100	60
NSB.45B	60	85	18	GT-NR20/SPT-20R	116	68
NSB.56B	65	90	18	GT-NR30/SPT-30R	134	80
NSB.75B	85	122	28	GT-NR50	246	96

Material: Zinc plated steel.

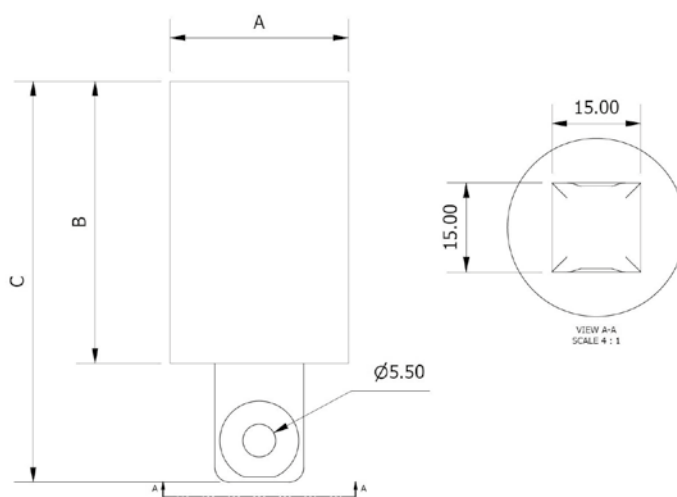
NIPPER MOUNTING BRACKETS

NMBS. – Mounting Brackets Steel for Air Nippers



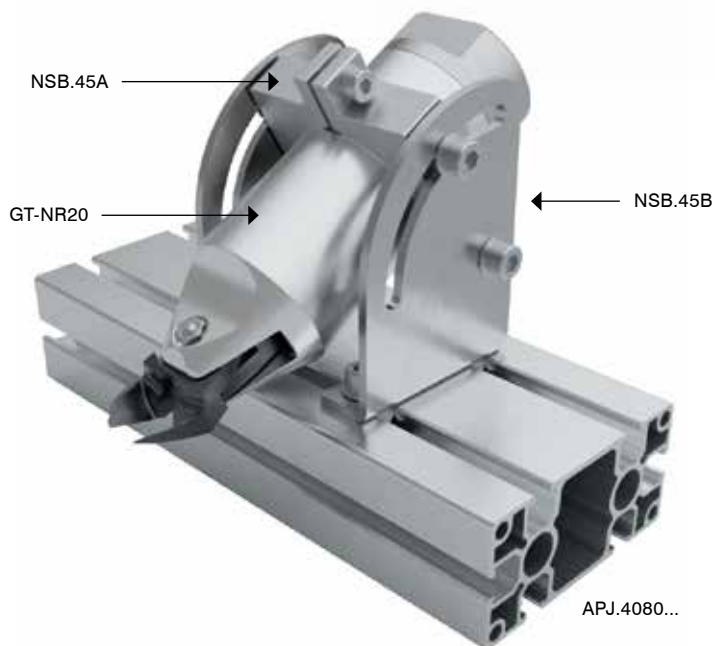
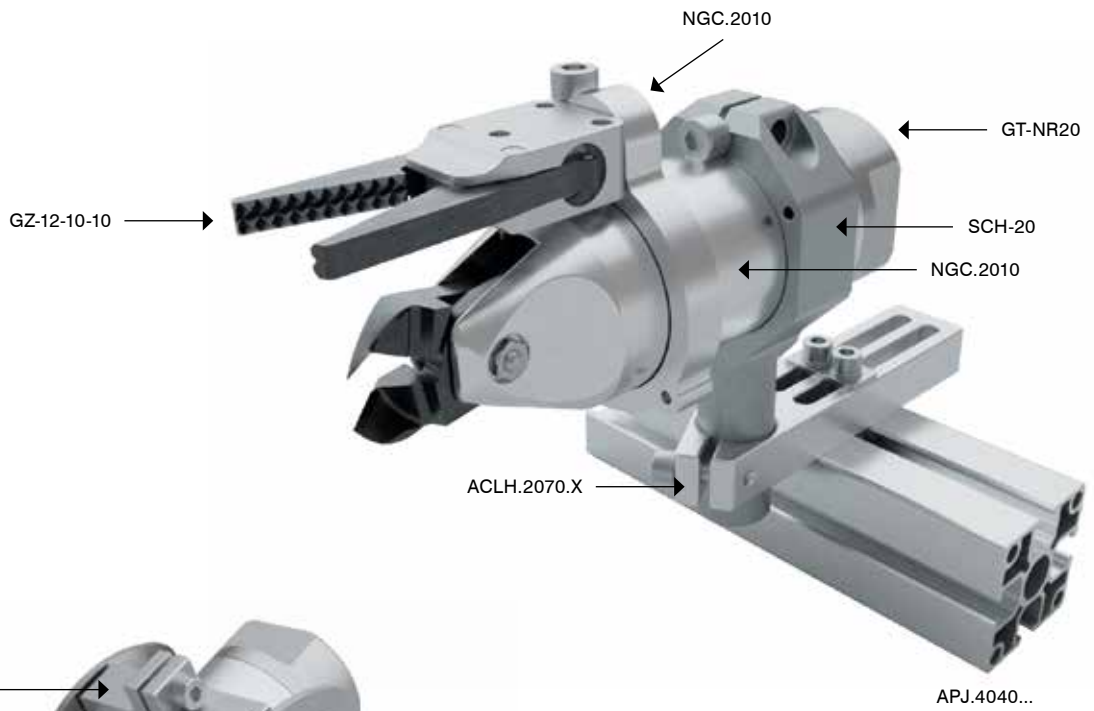
Part No.	D18	B	C	D	E	Weight (g)
NMBS.30	30	33	55	38,5	30,5	69
NMBS.36	36	39	60,5	41	33	75
NMBS.45	45	48	70	46	38	80
NMBS.56	56	60	83,5	53,5	45,5	102

NMS. – Nipper Mounting Bracket Shaft



Part No.	A	B	C	Weight (g)
NMS.2048	20	48	67,5	56
NMS.3048	30	48	67,5	82

Material: Aluminium.
Surface: Silver anodized.



CYLINDERS & SLIDES

125 Compact Cylinders with Guide Rod



126 Compact Cylinders



127 Mounts & Accessories



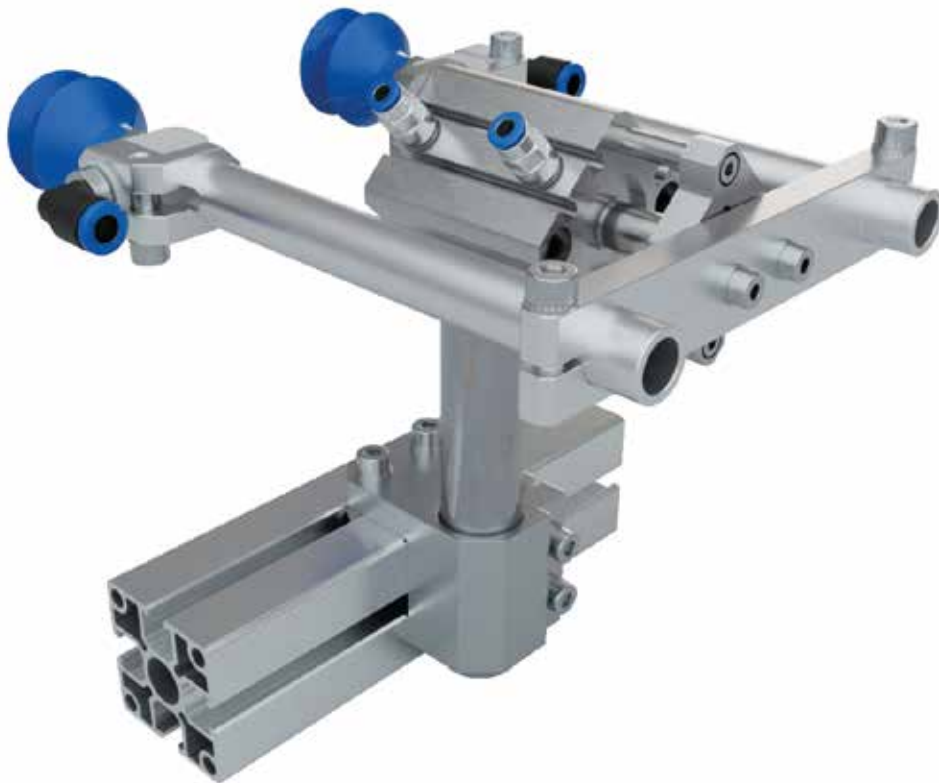
129 Vacuum Cylinders



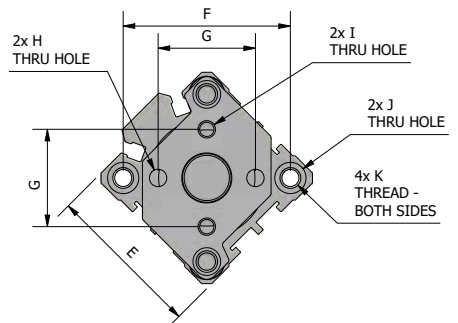
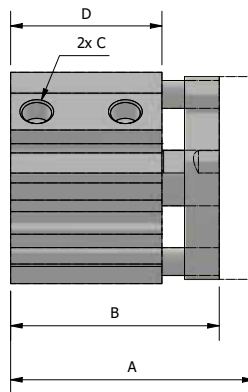
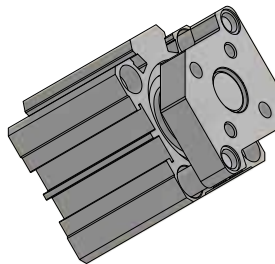
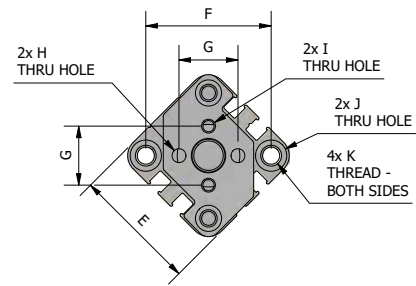
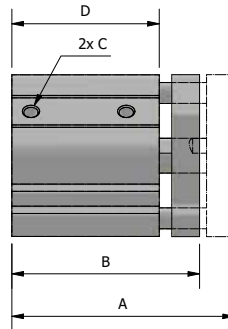
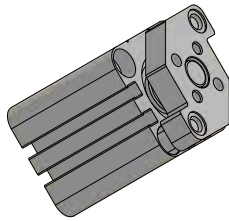
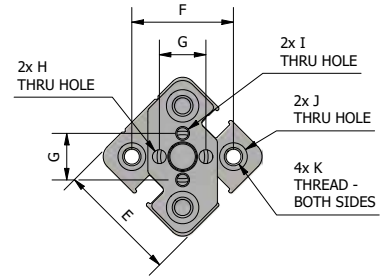
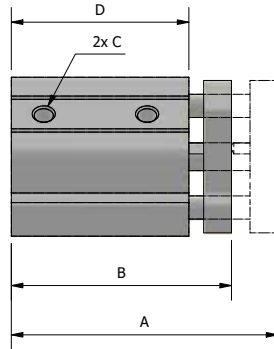
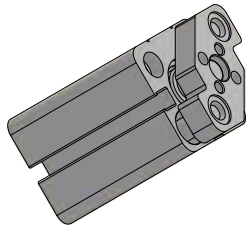
130 Mini Cylinders



131 Accessories



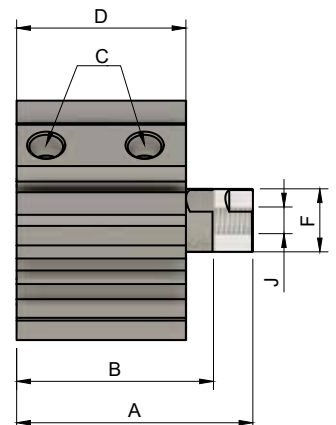
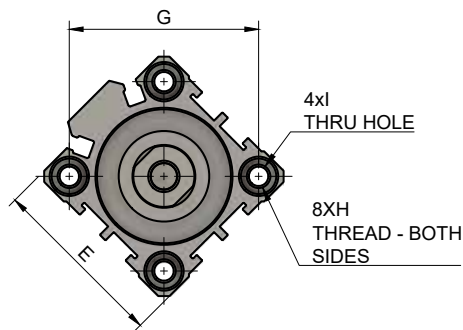
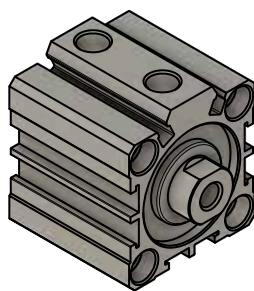
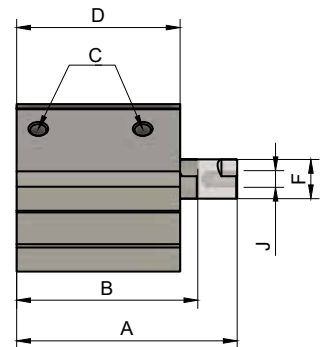
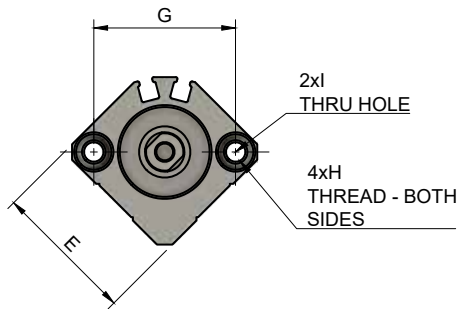
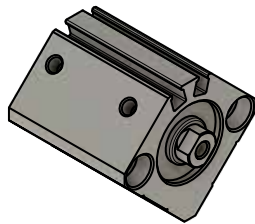
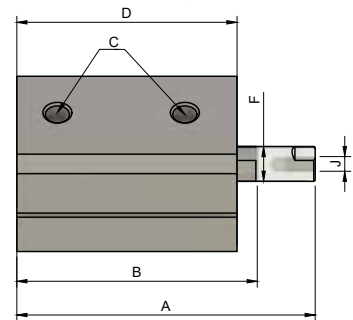
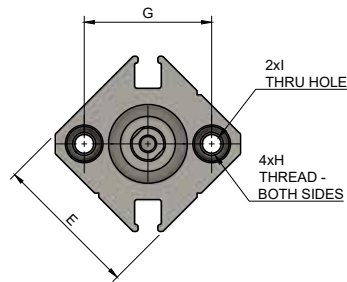
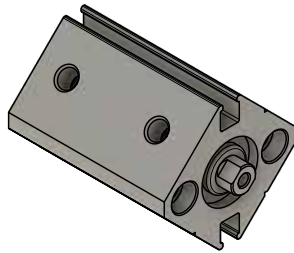
CCTQ. – Compact Cylinder, Guide Rod Type



Part No.	Piston bore	Stroke	A	B	C	D	E	F	G	H	I	J	K	Weight (g)
CCTQ.1210	12	10	57,5	47,5	M5X0.8	38,3	26	22	10	M3X0.5	Ø3	Ø3.4	M4X0.7	59
CCTQ.1220	12	20	77,5	57,5	M5X0.8	48,3	26	22	10	M3X0.5	Ø3	Ø3.4	M4X0.7	77
CCTQ.1230	12	30	97,5	67,5	M5X0.8	58,3	26	22	10	M3X0.5	Ø3	Ø3.4	M4X0.7	93
CCTQ.2010	20	10	64	54	M5X0.8	42,5	36	36	17	M4X0.7	Ø4	Ø5.2	M6X1.0	138
CCTQ.2020	20	20	84	64	M5X0.8	52,5	36	36	17	M4X0.7	Ø4	Ø5.2	M6X1.0	168
CCTQ.2030	20	30	104	74	M5X0.8	62,5	36	36	17	M4X0.7	Ø4	Ø5.2	M6X1.0	197
CCTQ.3210	32	10	70	60	G 1/8	43,5	45	48	28	M5X0.8	Ø5	Ø5.2	M6X1.0	264
CCTQ.3220	32	20	90	70	G 1/8	53,5	45	48	28	M5X0.8	Ø5	Ø5.2	M6X1.0	309
CCTQ.3230	32	30	110	80	G 1/8	63,5	45	48	28	M5X0.8	Ø5	Ø5.2	M6X1.0	356

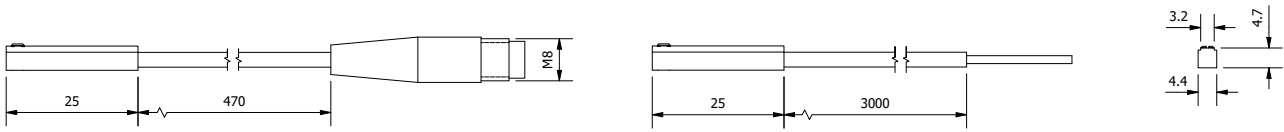
COMPACT CYLINDERS

CCAQ. – Compact Cylinder



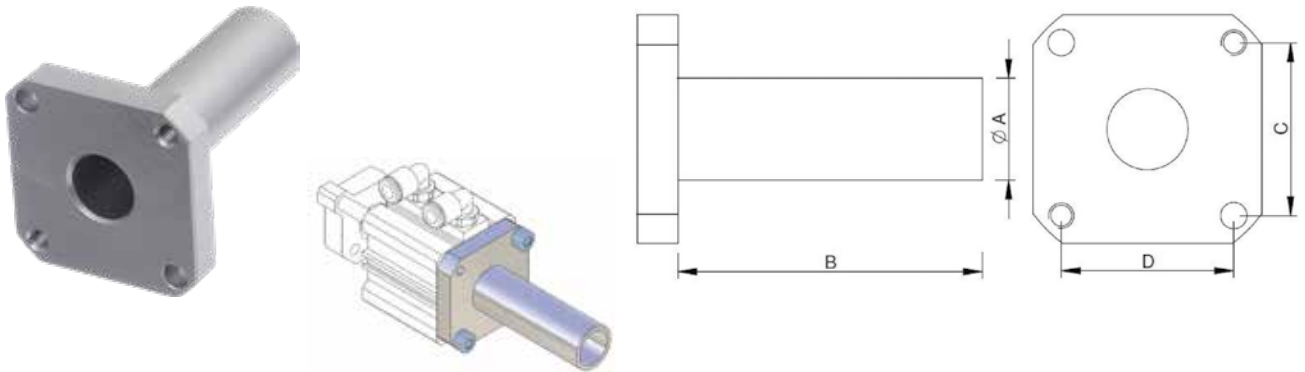
Part No.	Piston bore	Stroke	A	B	C	D	E	F	G	H	I	J	Weight (g)
CCAQ.1210	12	10	51,5	41,5	M5X0.8	38	25	6	22	M4X0.7	Ø3.4	M3X0.5	44
CCAQ.1220	12	20	71,5	51,5	M5X0.8	48	25	6	22	M4X0.7	Ø3.4	M3X0.5	69
CCAQ.1230	12	30	91,5	61,5	M5X0.8	58	25	6	22	M4X0.7	Ø3.4	M3X0.5	81
CCAQ.2010	20	10	56	46	M5X0.8	41,5	36	10	36	M6X1.0	Ø5.2	M5X0.8	106
CCAQ.2020	20	20	76	56	M5X0.8	51,5	36	10	36	M6X1.0	Ø5.2	M5X0.8	138
CCAQ.2030	20	30	96	66	M5X0.8	61,5	36	10	36	M6X1.0	Ø5.2	M5X0.8	158
CCAQ.3210	32	10	60	50	G 1/8	43	45	16	48	M6X1.0	Ø5.2	M8X1.25	186
CCAQ.3220	32	20	80	60	G 1/8	53	45	16	48	M6X1.0	Ø5.2	M8X1.25	231
CCAQ.3230	32	30	100	70	G 1/8	63	45	16	48	M6X1.0	Ø5.2	M8X1.25	281

SN.DMSG. – T-Slot Sensor



Part No.	Output	Sensor type	Connector	Lead m	REF	Weight (g)
SN.DMSGP.M8	PNP	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.M8	NPN	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGP.3M	PNP	Magnetic		3	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.3M	NPN	Magnetic		3	PG/AG/CCTQ/CCAQ	4

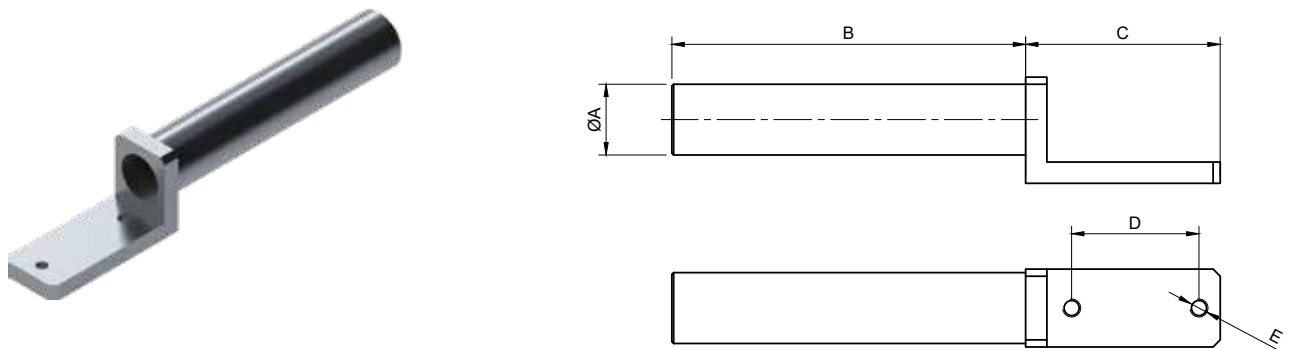
MB.CC. – Mounting Bracket for Compact Cylinder



Part No.	A	B	C	D	REF	Weight (g)
MB.CC12.1430	14	30	15,5	15,5	Ø12	19
MB.CC20.1440	14	40	25,5	25,5	Ø20	32
MB.CC32.2060	20	60	34	34	Ø32	55
MB.CC32.2090	20	90	34	34	Ø32	74

Material: Aluminium.
 Surface: Silver anodized.
 REF: Suitable for cylinders CCAQ and CCTQ.

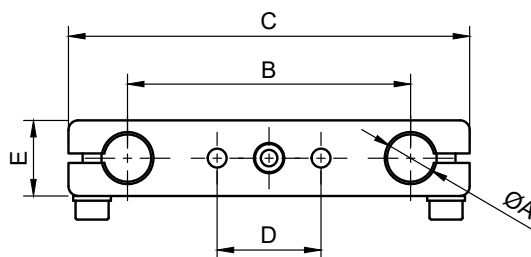
MB.ZC. – Mounting Bracket for Compact Cylinder



Part No.	A	B	C	D	E	Weight (g)
MB.ZC12.1060	10	60	38	22	M3	14
MB.ZC20.2080	20	80	55	36	M5	55
MB.ZC32.20100	20	100	68	48	M5	58

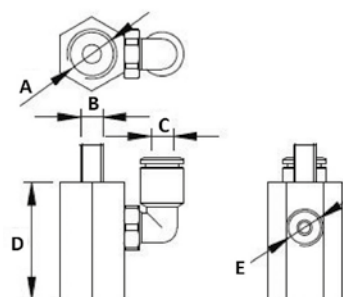
MOUNTS & ACCESSORIES

MCC. – Clamp Brackets for Cylinders



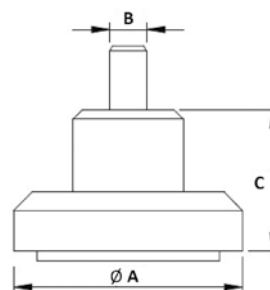
Part No.	A	B	C	D	E	Weight (g)
MCC.12.1060	10	60	85	10	16	29
MCC.20.1480	14	80	140	17	20	67
MCC.32.20120	20	120	160	28	25	135

VCA. – Adapters for Vacuum Cups



Part No.	A	B	C	D	E	REF	Weight (g)
VCA.M4.18	G 1/8	M4	4	24,5	M5	Ø12	13
VCA.M6.18	G 1/8	M5	4	24,5	M5	Ø16	15
VCA.M6.14	G 1/4	M6	6	31	G1/8	Ø25	24
VCA.M5.18	G 1/8	M6	4	34,5	M5	Ø20	21
VCA.M8.14	G 1/4	M8	6	31	G1/8	Ø32	22

CPP. – Cylinder Pressure Plate



Part No.	A	B	C	REF	Weight (g)
CPP.20.03	20	M3	14	Ø12	5
CPP.25.04	25	M4	15	Ø16	10
CPP.30.05	30	M5	18	Ø20	17
CPP.40.08	40	M8	20	Ø32	46
CPP.40.18	40	G 1/8	20		40

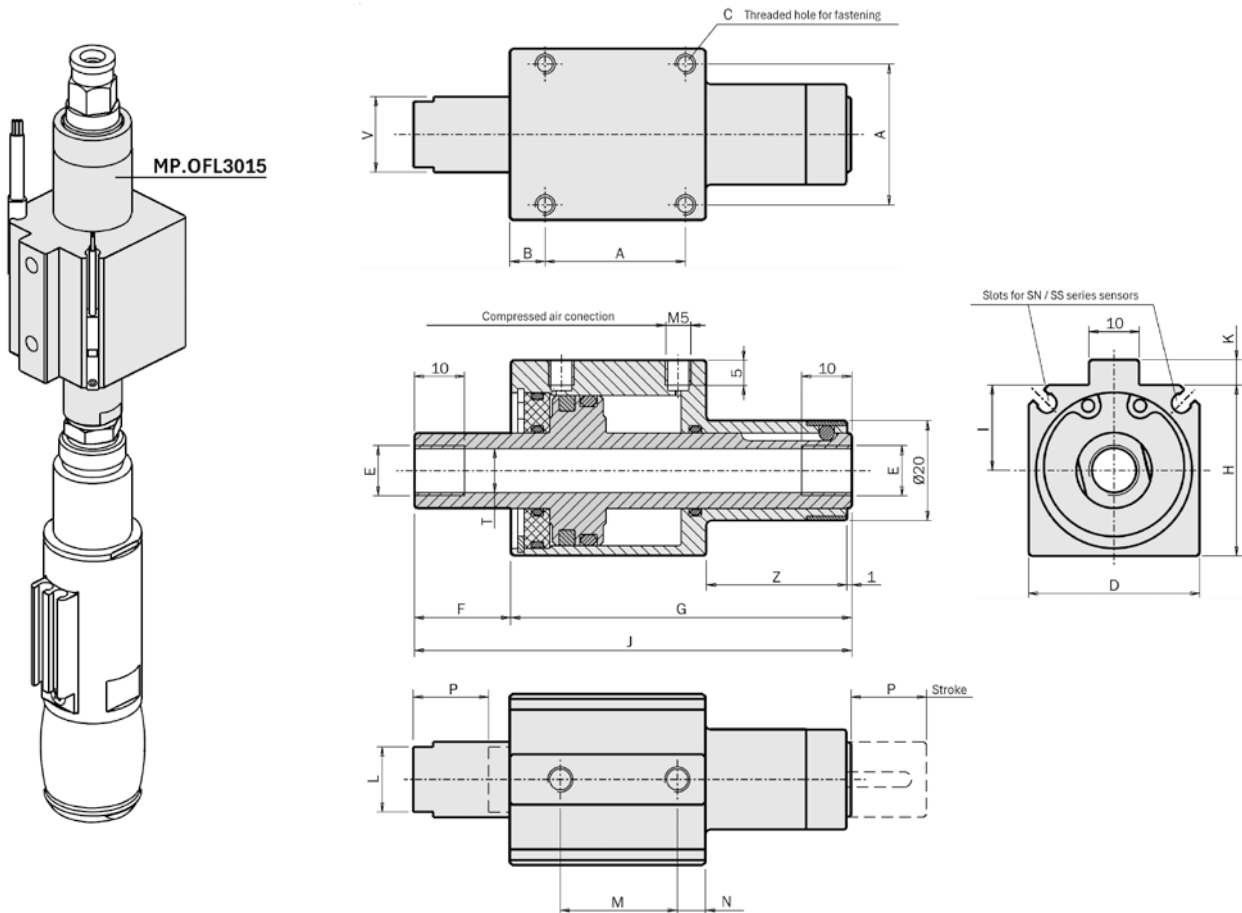
Material: Aluminium.
Surface: Silver anodized.

MP.OFL – Short Stroke Pneumatic Cylinder



Part No.	Stroke	Piston Bore	Closing force at 6 bar	Weight (g)
MP.OFL2010	10mm	20mm	130N	60
MP.OFL3015	15mm	30mm	300N	110
MP.OFL3030	30mm	30mm	300N	140

Double Acting and Non rotating.
 Through hole for vacuum cup mounting - M5 or G1/8.
 Ø20mm Clampable shaft.
 Maximum operating pressure: 8 bar.
 Operating temperature range: 5° to 60°C.
 Optional magnetic sensors.



Part No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	T	V	Z
MP.OFL2010	19	9	M3x4	24	M5	14,2	59	25	13	74,2	4	8	16	5	10	Ø4.2	Ø10	28
MP.OFL3015	28	7	M4x6	34	G1/8	19,2	68	34	17	87,2	5	13	23,3	5,6	15	Ø8.8	Ø15	28
MP.OFL3030	28	7	M4x6	34	G1/8	34,2	91	34	17	125,2	5	13	38,3	5,6	30	Ø8.8	Ø15	36

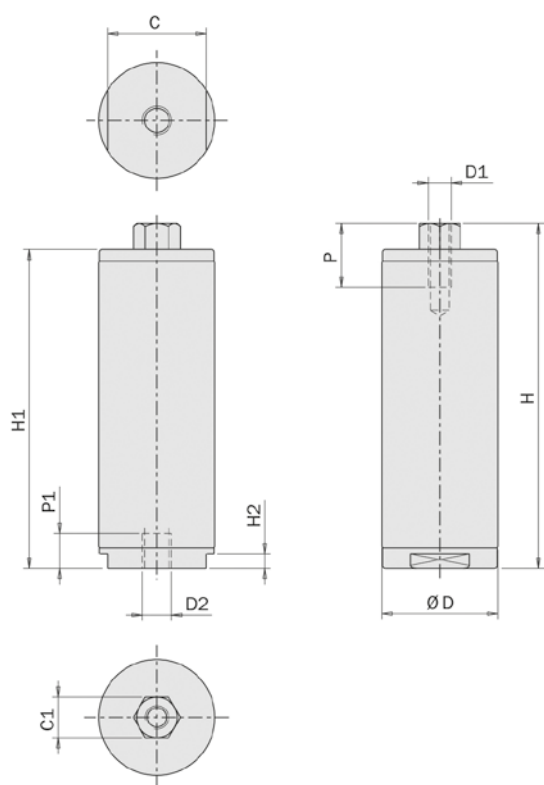
MINI CYLINDERS

MP.OFC – Non-rotative Mini-Cylinder



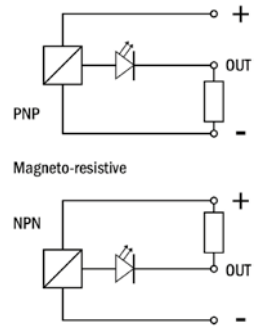
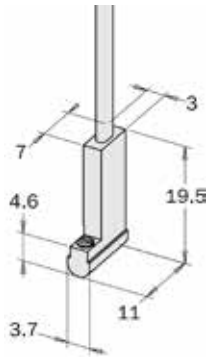
Part No.	Body Ø	Stroke	Piston Bore	Opening force at 6 bar	Weight (g)
MP.OFC1410	14mm	10mm	20mm	43N	20
MP.OFC2020	20mm	15mm	30mm	113N	40
MP.OFC3030	30mm	30mm	30mm	271N	85

Single Acting and Non rotating.
Clampable body.
Maximum operating pressure: 8 bar.
Operating temperature range: 5° to 60°C.
Optional magnetic sensors.



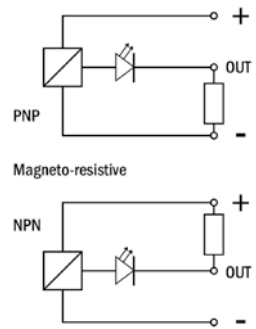
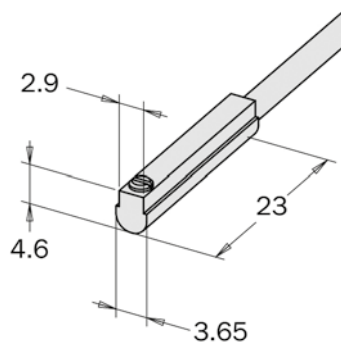
Part No.	C	C1	D	D1	D2	H	H1	H2	P	P1
MP.OFC1410	12	5,5	Ø14	M3	M5	50	45,5	2,5	7	6
MP.OFC2020	17	7	Ø20	M4	M5	59,5	55	2,5	8	6
MP.OFC3030	27	7	Ø30	M4	M5	75	70,5	2,5	9	6

SN – Sensor for Short Stroke & Mini Cylinders



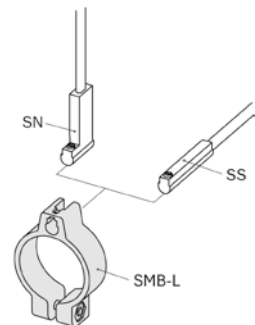
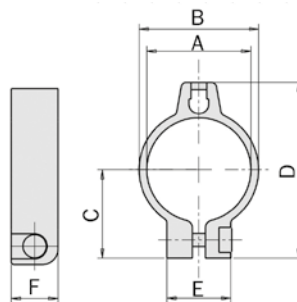
Part No.	Output	Sensor Type	Connector Lead - m	Weight (g)
SN.3N203-G	PNP	Magneto-resistive NO	M8 -3 pin	0,3
SN.3M203-G	NPN	Magneto-resistive NO	M8 -3 pin	0,3
SN.4N225-G	PNP	Magneto-resistive NO	2,5	22
SN.4M225-G	NPN	Magneto-resistive NO	2,5	22

SS – Sensor for Short Stroke & Mini Cylinders



Part No.	Output	Sensor Type	Connector Lead - m	Weight (g)
SS.3N203-G	PNP	Magneto-resistive NO	M8 -3 pin	0,3
SS.3M203-G	NPN	Magneto-resistive NO	M8 -3 pin	0,3
SS.4N225-G	PNP	Magneto-resistive NO	2,5	22
SS.4M225-G	NPN	Magneto-resistive NO	2,5	22

SMB.L – Sensor Mounting Bracket



Part No.	A mm	B mm	C mm	D mm	E mm	F mm	Ref	Weight (g)
SMB.14.L	Ø14	16,8	13,5	27,3	12,3	9	MP.OF 14	2
SMB.20.L	Ø20	23	17	33,8	12,3	9	MP.OF 20	2,5
SMB.30.L	Ø30	33,2	23	44,8	12,3	9	MP.OF 30	3

FITTINGS, TUBES & MANIFOLDS

133 Manifolds



135 Fittings – G Thread with O-Ring



137 Push to Connect Fittings



139 Fitting – R Thread



140 Male Elbow Flow Controller



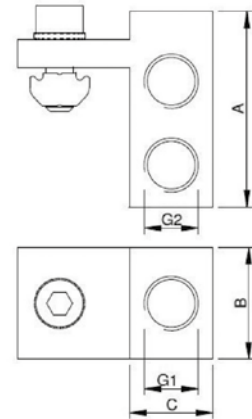
140 Inline Flow Controller



141 Tubes



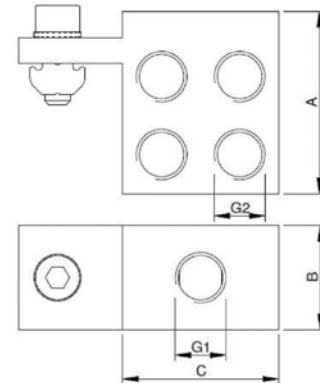
VMB. – Air/Vacuum Manifold 1 - 4



Part No.	A	B	C	G1	G2	REF	Weight (g)
VMB.14.1818.X	35	20	15	G 1/8	G 1/8	X	35
VMB.14.1818.J	35	20	15	G 1/8	G 1/8	J	37

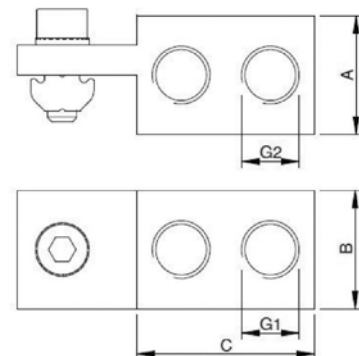
Material: Aluminium.
Surface: Silver anodized.

VMB. – Air/Vacuum Manifold 1 - 8



Part No.	A	B	C	G1	G2	REF	Weight (g)
VMB.18.1818.X	35	20	30	G 1/8	G 1/8	X	55
VMB.18.1818.J	35	20	30	G 1/8	G 1/8	J	58

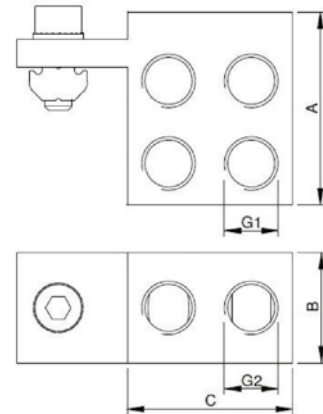
VMB. – Air vacuum Manifold 2 - 4



Part No.	A	B	C	G1	G2	REF	Weight (g)
VMB.24.1818.X	20	20	30	G 1/8	G 1/8	X	39
VMB.24.1818.J	40	20	30	G 1/8	G 1/8	J	41

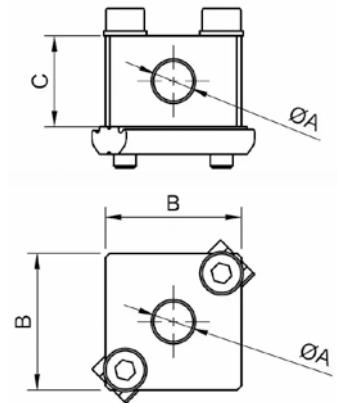
MANIFOLDS

VMB. – Air vacuum Manifold 2 - 8



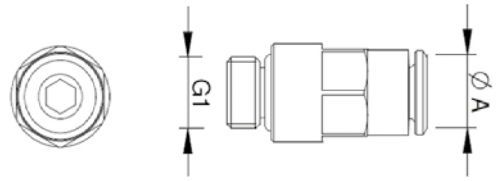
Part No.	A	B	C	G1	G2	REF	Weight (g)
VMB.28.1818.X	35	20	30	G 1/8	G 1/8	X	54
VMB.28.1818.J	35	20	30	G 1/8	G 1/8	J	57


VML. – Manifold Block 1 - 4



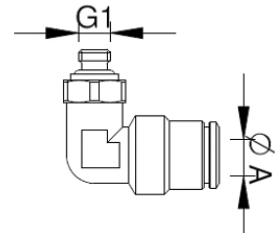
Part No.	A	B	C	REF	Weight (g)
VML.X.14.18	G 1/8	30	20	X	60
VML.X.14.14	G 1/4	40	20	X	85


PC - Push In Male Threaded Stud



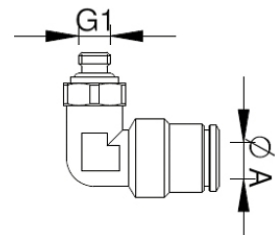
Part No.	Ø A	G1		Weight (g)
PC04-M5	4	M5	10	6
PC04-G01	4	G1/8	10	7,4
PC06-M5	6	M5	10	8
PC06-G01	6	G1/8	10	8,2
PC06-G02	6	G1/4	10	15
PC08-G02	8	G1/4	10	14


PL - Push In Male Threaded Elbow



Part No.	Ø A	G1		Weight (g)
PL04-M5	4	M5	10	6
PL04-G01	4	G1/8	10	10
PL06-M5	6	M5	10	9
PL06-G01	6	G1/8	10	11
PL06-G02	6	G1/4	10	19
PL08-G02	8	G1/4	10	20

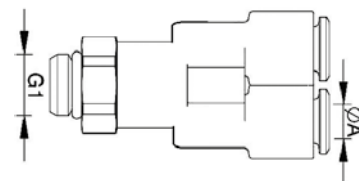
PLL - Push In Male Threaded Extended Elbow



Part No.	Ø A	G1		Weight (g)
PLL04-G01	4	G1/8	10	11
PLL06-G01	6	G1/8	10	13

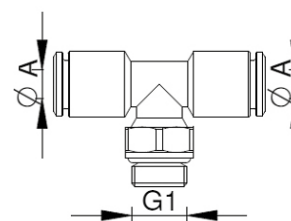
FITTINGS - G THREAD WITH O-RING

PX - Push In Male Threaded Y



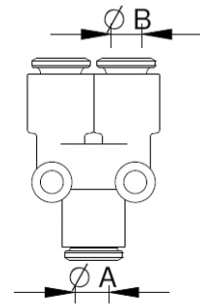
Part No.	Ø A	G1		Weight (g)
PX04-G01	4	G1/8	10	
PX06-G01	6	G1/8	10	
PX06-G02	6	G1/4	10	


PB - Push In Male Threaded Branch T



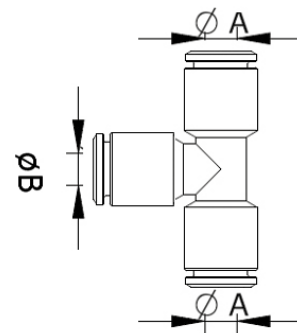
Part No.	Ø A	G1		Weight (g)
PB04-M5	4	M5	10	8
PB04-G01	4	G1/8	10	13
PB06-M5	6	M5	10	12
PB06-G01	6	G1/8	10	14
PB06-G02	6	G1/4	10	22
PB08-G02	8	G1/4	10	25


MSY - Push in Union Y



Part No.	Ø A	Ø B	
MSY04	4	4	10
MSY06	6	6	10
MSY08	8	8	10

MST - Push in Union T



Part No.	Ø A	Ø B	
MST04	4	4	10
MST06	6	6	10
MST08	8	8	10

PU - Push in Union Straight



Part No.	Ø A	Ø B		Weight (g)
PU 06	6	6	10	6,5

FITTINGS – PUSH IN UNION

PG. – Push In Union Straight-Reducer



Part No.	Ø A	Ø B		Weight (g)
PG 06-04	6	4	10	6,5
PG 08-06	8	6	10	9

PZ. – Push In Union Cross



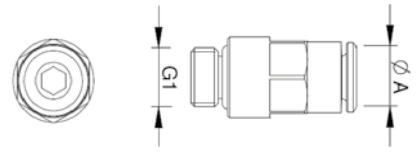
Part No.	Ø A	Ø B		Weight (g)
PZA 06	6	6	10	18


PP. – Push In Blanking Plug



Part No.	Ø A		Weight (g)
PP 04	4	10	0,3
PP 06	6	10	0,6

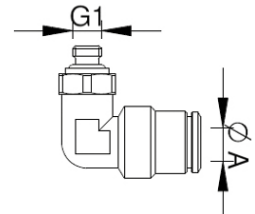
MSM-R - Push in Male Threaded Stud




Part No.	Ø A	G1		Weight (g)
MSM04R1/8	4	R1/8	10	7,5
MSM06R1/8	6	R1/8	10	8
MSM06R1/4	6	R1/4	10	15
MSM08R1/4	8	R1/4	10	14

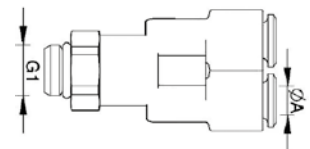
Material: Technopolymer / Brass (Nickel Plated).
 Pressure: Max 10 bar.
 Temperature: 0°C to +60°C.


MSW-R - Push in Male Threaded Elbow



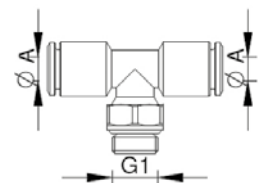
Part No.	Ø A	G1		Weight (g)
MSW04R1/8	4	R1/8	10	10
MSW06R1/8	6	R1/8	10	11
MSW06R1/4	6	R1/4	10	19
MSW08R1/4	8	R1/4	10	20


MSTY-R - Push in Male Threaded Y



Part No.	Ø A	G1		Weight (g)
MSTY04G1/8	4	R1/8	10	13
MSTY06G1/8	6	R1/8	10	15
MSTY06G1/4	6	R1/4	10	22

MSA-R - Push in Male Threaded Branch T



Part No.	Ø A	G1		Weight (g)
MSA04R1/8	4	R1/8	10	13
MSA06R1/8	6	R1/8	10	14
MSA06R1/4	6	R1/4	10	22
MSA08R1/4	8	R1/4	10	25

FLOW CONTROL VALVES

JSC-B - Push in Male Elbow Flow Control - in Valve



Part No.	ØA	Thread	Control		Weight (g)
JSCM5-G04B	4	M5	Supply	10	9
JSCM5-G06B	6	M5	Supply	10	10
JSC06-G01B	6	G1/8	Supply	10	20

JSC - Push in Male Elbow Flow Control - out Valve



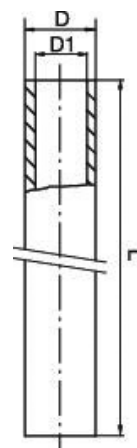
Part No.	ØA	Thread	Control		Weight (g)
JSC M5-G04	4	M5	Exhaust	10	9
JSC M5-G06	6	M5	Exhaust	10	10
JSC 06-G01	6	G1/8	Exhaust	10	20

PA - Push in inline Flow Controller



Part No.	ØA	Contol		Weight (g)
PA 04	4	In-line	10	12
PA 06	6	In-line	10	33

PPU - Tubing



Part No.	D (mm)	D1 (mm)	Working pressure	Bend radius	Coil Length L
PPU4B	4	2,5	Max 10 bar	20 mm.	30 m.
PPU6B	6	4	Max 10 bar	30 mm.	30 m.
PPU8B	8	6	Max 10 bar	31 mm.	30 m.

143 Cable Connectors



144 Magnetic Sensors for C Slots



146 Magnetic Sensors for T Slots



147 Programmable Sensors for C Slots



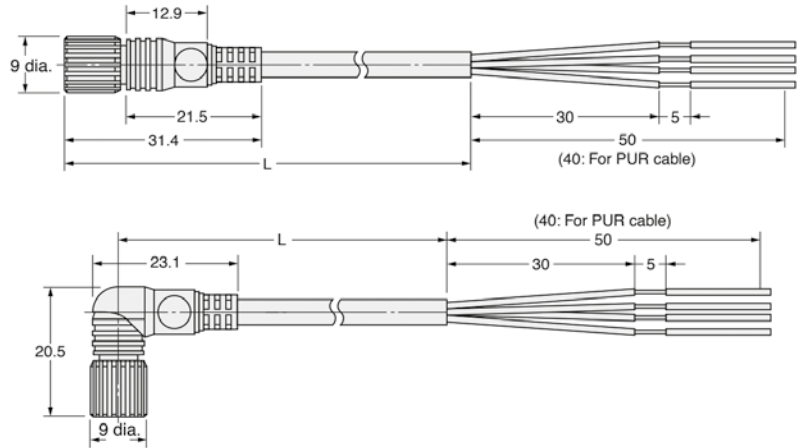
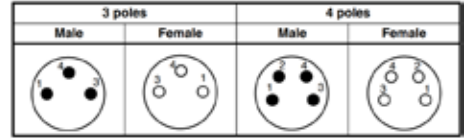
148 Inductive Sensors



149 Sensor Boxes



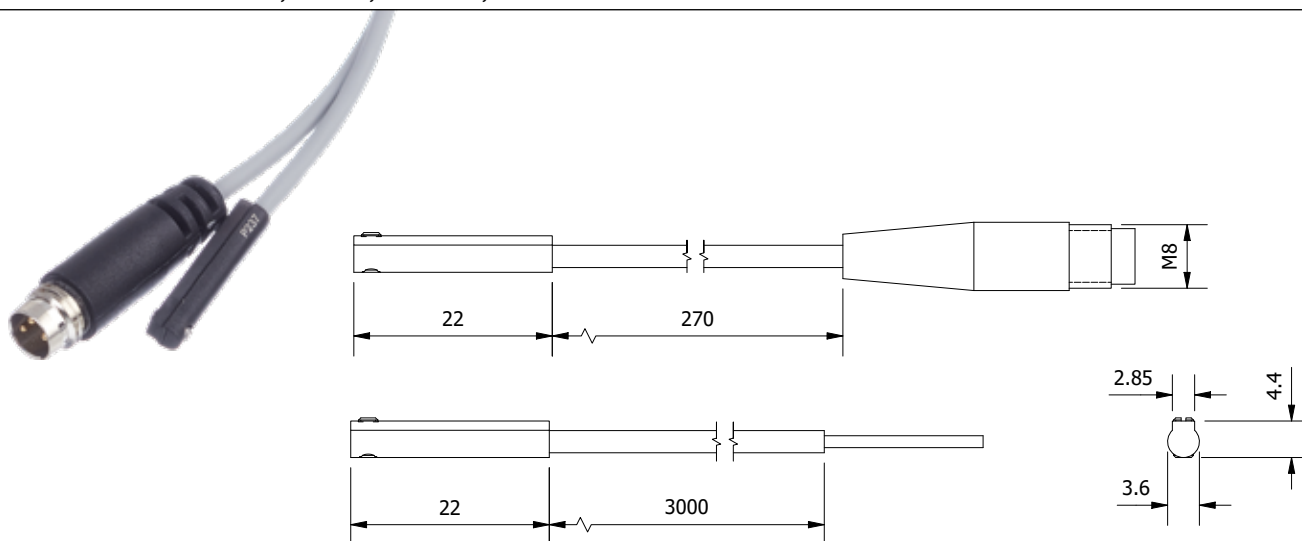
CB. – M8 Screw-on Cable Connectors



Part No.	Connector Type	Size	No. of Cable Cores.	Cable Length
CB.XS3F.M83S5M	Straight	M8	3 - wire	5
CB.XS3F.M83E5M	Elbow	M8	3 - wire	5
CB.XS3F.M84S5M	Straight	M8	4 - wire	5
CB.XS3F.M84E5M	Elbow	M8	4 - wire	5

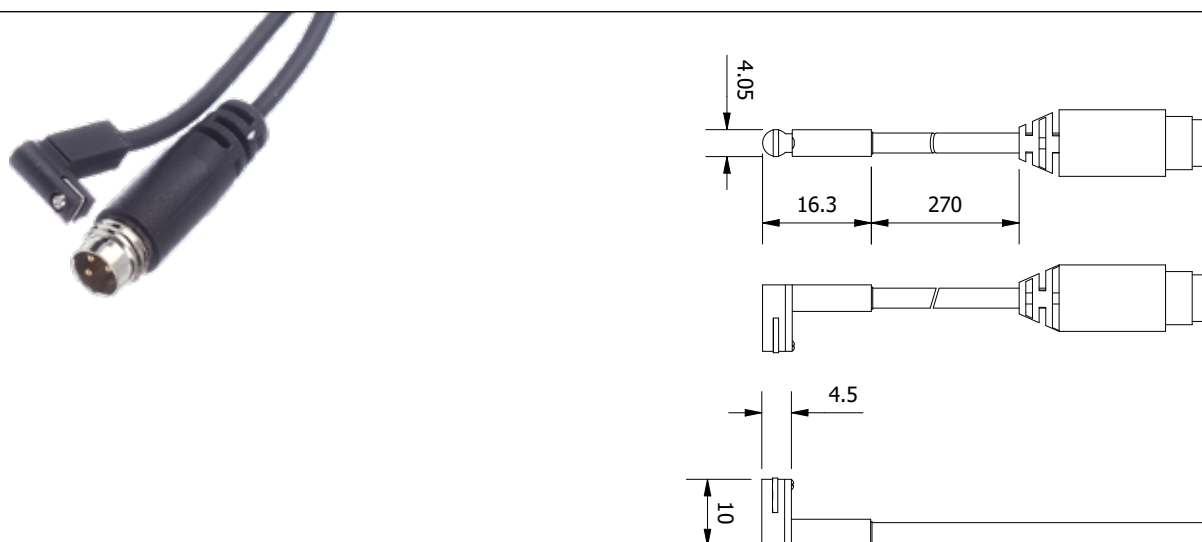
SENSORS

SN. – Sensor for GZ12-10, GZ.AA, GZ.2016, CC.

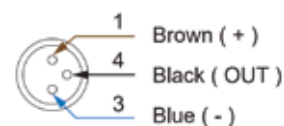
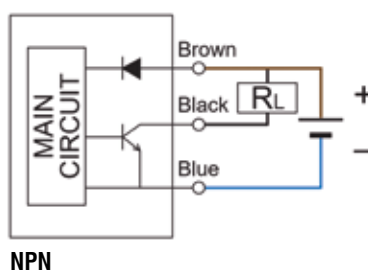
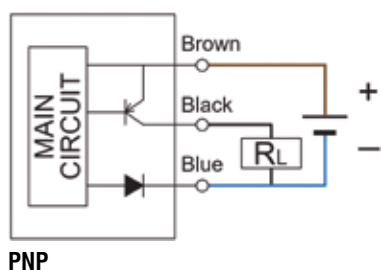


Part No.	Output	Sensor type	Connector	Lead - m	Weight (g)
SN.K5P.M8	PNP	Electronic	M8 3pin	0,3	4
SN.K5N.M8	NPN	Electronic	M8 3pin	0,3	4
SN.K5P.3MW	PNP	Electronic		3	4
SN.K5N.3MW	NPN	Electronic		3	4

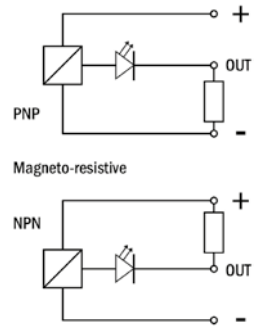
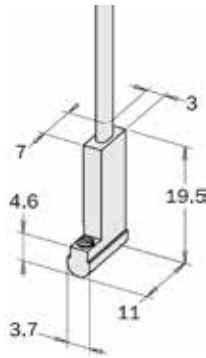
SN. – Sensor for GF.



Part No.	Output	Sensor type	Connector	Lead - m	Weight (g)
SN.K3P.M8	PNP	Electronic	M8 3pin	0,3	4
SN.K3N.M8	NPN	Electronic	M8 3pin	0,3	4
SN.K3P.3MW	PNP	Electronic		3	4
SN.K3N.3MW	NPN	Electronic		3	4

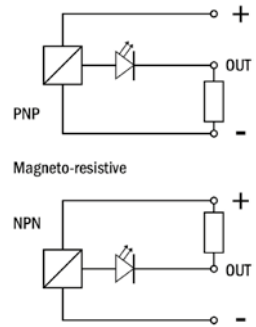
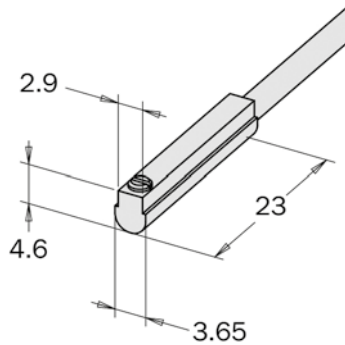


SN – Sensor for Short Stroke & Mini Cylinders



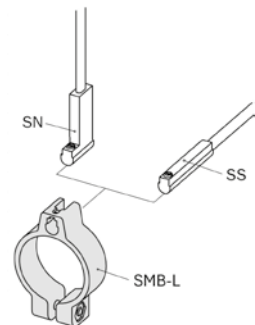
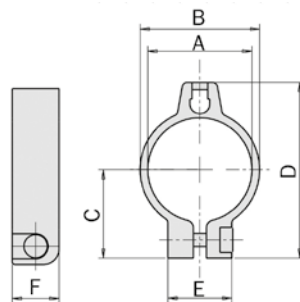
Part No.	Output	Sensor Type	Connector Lead - m	Weight (g)
SN.3N203-G	PNP	Magnetoresistive NO	M8 -3 pin	0,3
SN.3M203-G	NPN	Magnetoresistive NO	M8 -3 pin	0,3
SN.4N225-G	PNP	Magnetoresistive NO	2,5	22
SN.4M225-G	NPN	Magnetoresistive NO	2,5	22

SS – Sensor for Short Stroke & Mini Cylinders



Part No.	Output	Sensor Type	Connector Lead - m	Weight (g)
SS.3N203-G	PNP	Magnetoresistive NO	M8 -3 pin	0,3
SS.3M203-G	NPN	Magnetoresistive NO	M8 -3 pin	0,3
SS.4N225-G	PNP	Magnetoresistive NO	2,5	22
SS.4M225-G	NPN	Magnetoresistive NO	2,5	22

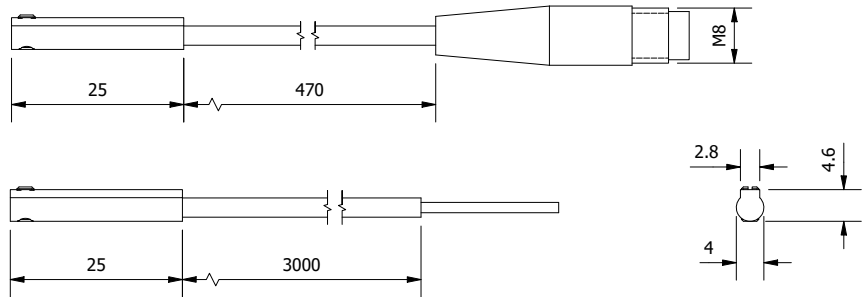
SMB.L – Sensor Mounting Bracket



Part No.	A mm	B mm	C mm	D mm	E mm	F mm	Ref	Weight (g)
SMB.14.L	Ø14	16,8	13,5	27,3	12,3	9	MP.OF 14	2
SMB.20.L	Ø20	23	17	33,8	12,3	9	MP.OF 20	2,5
SMB.30.L	Ø30	33,2	23	44,8	12,3	9	MP.OF 30	3

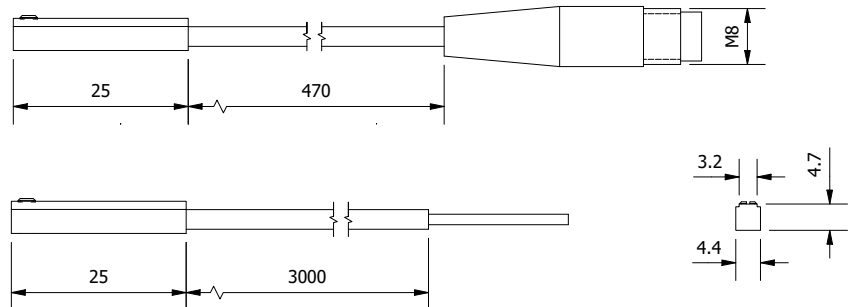
SENSORS

SN.DMSH – C-Slot Sensors



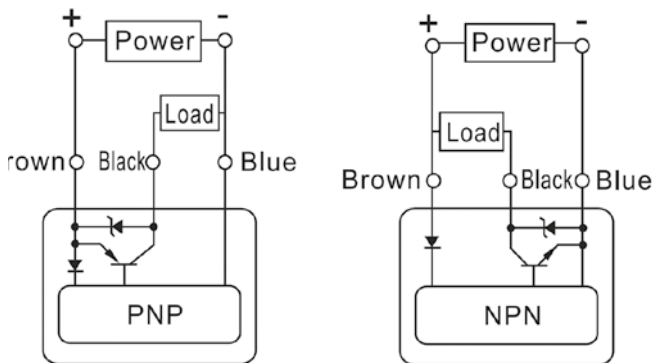
Part No.	Output	Sensor type	Connector	Lead m	REF	Weight (g)
SN.DMSHPM8	PNP	Electronic	M8 3pin	0.5	PG	4
SN.DMSHNM8	NPN	Electronic	M8 3pin	0.5	PG	4
SN.DMSHP3M	PNP	Electronic	M8 3pin	3	PG	4
SN.DMSHN3M	NPN	Electronic	M8 3pin	3	PG	4

SN.DMSG. – T-Slot Sensors

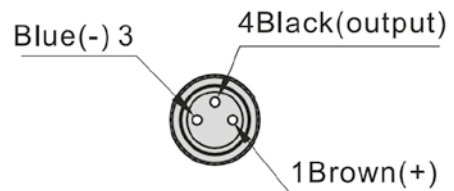


Part No.	Output	Sensor type	Connector	Lead m	REF	Weight (g)
SN.DMSGP.M8	PNP	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.M8	NPN	Magnetic	M8 3pin	0.5	PG/AG/CCTQ/CCAQ	4
SN.DMSGP.3M	PNP	Magnetic	M8 3pin	3	PG/AG/CCTQ/CCAQ	4
SN.DMSGN.3M	NPN	Magnetic	M8 3pin	3	PG/AG/CCTQ/CCAQ	4

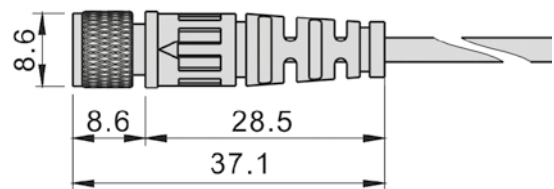
General connection - 3 Wire



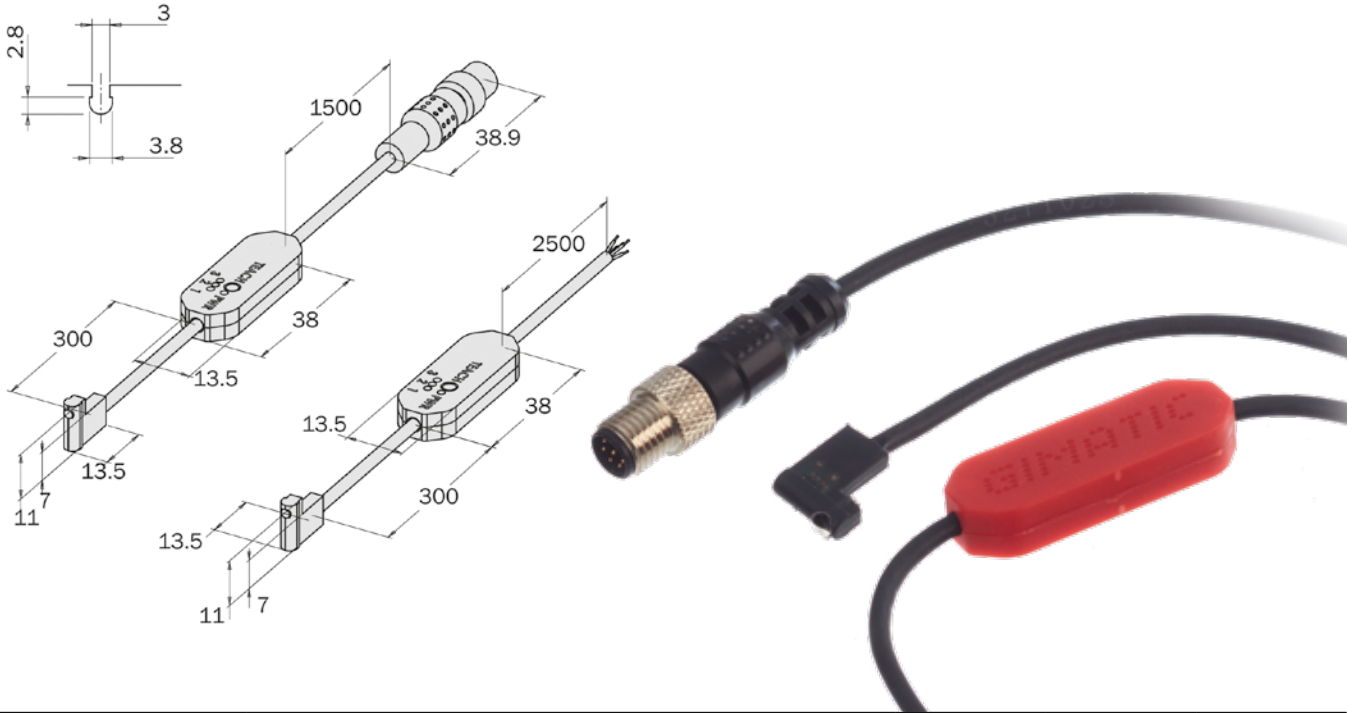
M8 socket



3-wire



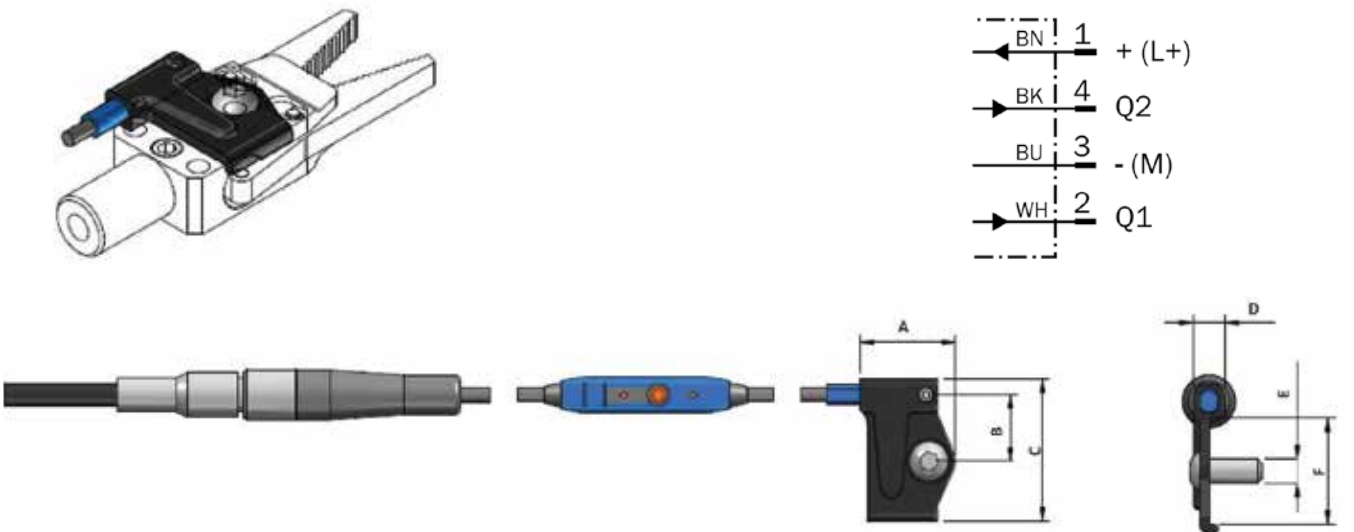
PRO.SN-HS – Programmable Magnetic Sensor for MP.SGP-



Part No.	Output	Sensor Type	Connector	Lead - m	Ref.	Weight (g)
PRO.SN3N215HS-G	PNP	Magneto-resistive NO/NC	M8 -3 pin	0,3	MP.SGP	70
PRO.SN3M215HS-G	NPN	Magneto-resistive NO/NC	M8 -3 pin	0,3	MP.SGP	70
PRO.SN4N225HS-G	PNP	Magneto-resistive NO/NC		2,5	MP.SGP	70
PRO.SN4M225HS-G	NPN	Magneto-resistive NO/NC		2,5	MP.SGP	70

Programmable GMP magneto-resistive sensors.
3 independent digital outputs.
Each programmable output in NO or NC logic.

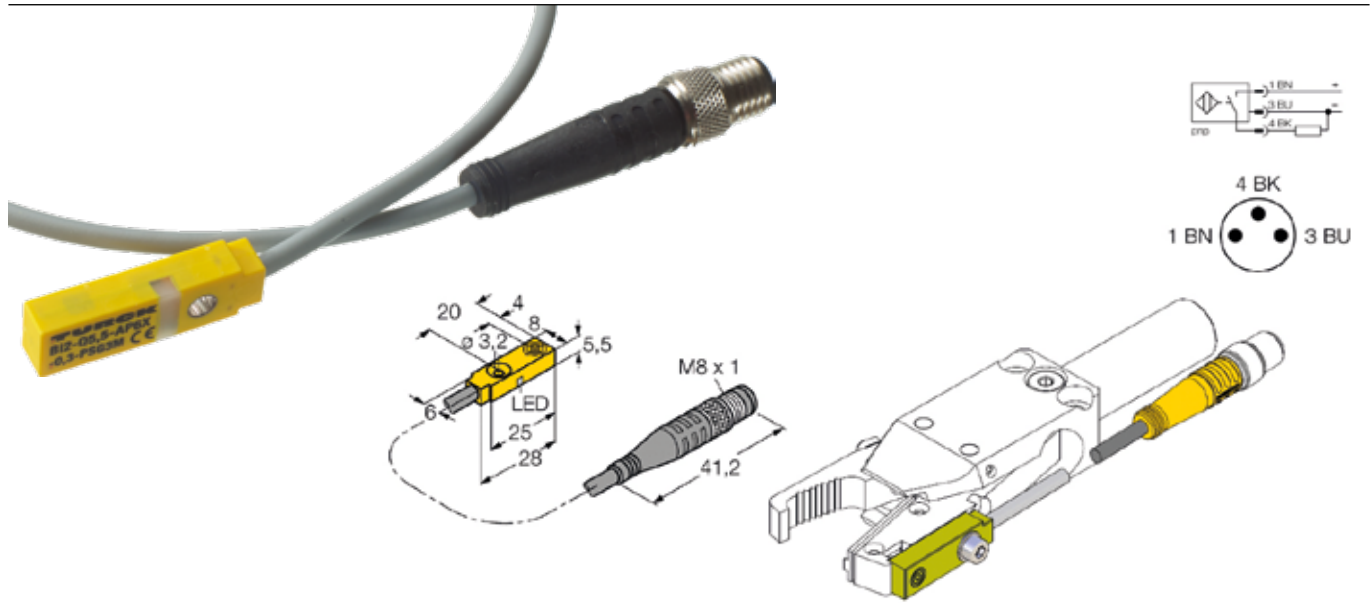
GZ-SCP – Sensor for GZ-10-8, 12-10



Part No.	Output	Sensor Type	Sensing Distance	Connector	Weight (g)
GZ-SCP-10-8	PNP	Magnetic	0-50mm	M8 4pin	65
GZ-SCP-12-10	PNP	Magnetic	0-50mm	M8 4pin	65

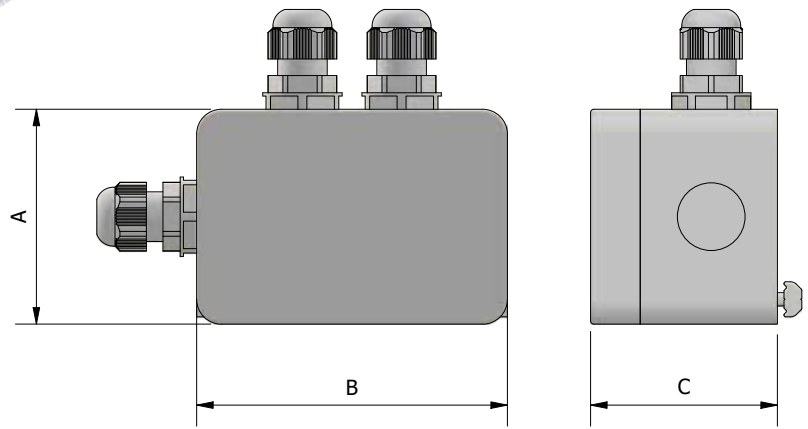
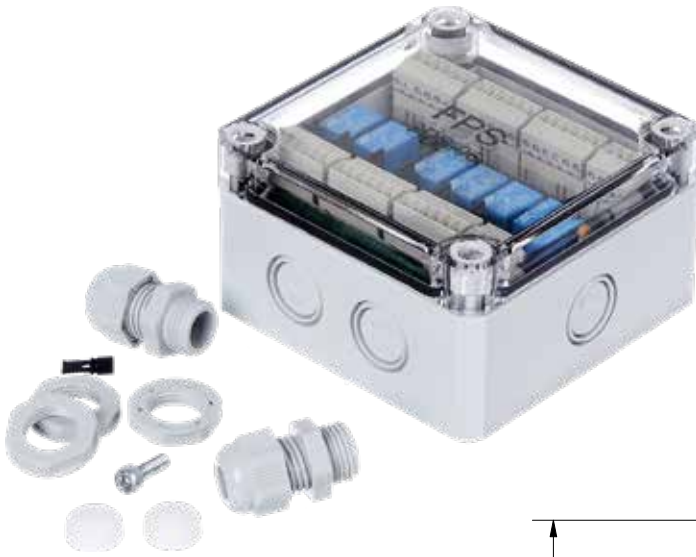
SENSORS

GZ20. – Inductive Sensor for GZ 20



Part No.	Type	Cable length	Connection
GZ20.SM8.PNP	PNP	300	M8
GZ20.SM8.NPN	NPN	300	M8

SNB. – Sensor Box



Part No.	Power supply	Max. # of Sensors	A	B	C
SNB.02C	24V dc (+/- 10%)	2	45	100	45
SNB.04C	"	4	65	94	57
SNB.06C	"	6	94	94	57
SNB.08C	"	8	94	130	57
SNB.12C	"	12	94	180	57

- Used for sensor wiring on an EOAT
- PNP and NPN signals can be converted.
- I/O can be current sourcing (PNP), sinking (NPN) or dry contact.
- Sensor boxes can be connected in series.
- LED indicators allow for easy trouble shooting.
- Programming method - jump wire.
- Provided with strain reliefs and fastening set.

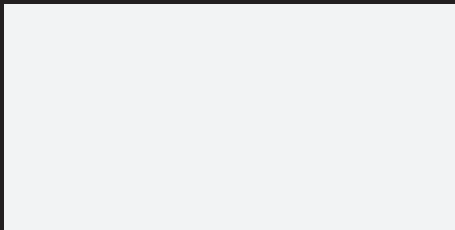


MOULDPRO APS

Baltorpbakken 10, DK-2750 Ballerup, Denmark

Phone: +45 7020 3131

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