



Operating principle	double-acting
Type	angle
Number fingers	2
Opening angle	40 °
Stroke/angle per finger	20 °
Repeatability	0,02 mm
Lubrication	endurance lubrication
Ambient temperature min./max.	+5 °C / +60 °C (+41 °F to +140 °F)
Medium	compressed air
Max. particle size	5 µm
Compressed air oil content	0 mg/m³ - 5 mg/m³
Operating pressure min./max.	2 bar / 8 bar
Pressure for determining the forces	6 bar
Materials:	
Housing	Aluminium, anodized
Seal	NBR + PU (NBR + Polyurethane)
Functional parts	Aluminium, anodized

Technical Notes

The pressure dew point must be 15 °C below the environmental and medium temperature and must not be higher than 3 °C.

The compressed air oil content must stay constant during the whole life cycle.

Type	Material number	SCHUNK ID
GSP-A-10	R412000448	311220
GSP-A-16	R412000450	311240
GSP-A-25	R412000452	311260
GSP-A-32	R412000454	311270
GSP-A-40	R412000456	311280

	Type	Connection	Max. permitted finger length	Effective gripping torque per finger	Effective total gripping torque	Max. permitted inertia/top jaw	Material number
			[mm]	[Nm]	[Nm]	[kgcm²]	
	GSP-A-10	M5	25	0,11	0,22	0,03	R412000448
	GSP-A-16	M5	32	0,39	0,78	0,7	R412000450
	GSP-A-25	M5	50	1,6	3,2	3,2	R412000452
	GSP-A-32	G 1/8	62	2,8	5,6	5,7	R412000454
	GSP-A-40	G 1/8	80	4,3	8,6	13	R412000456

Material number	Mass moment of inertia	Closing times for 6 bar	Opening times for 6 bar	Recommended workpiece mass	Max. permitted weight/top jaw	Air consumption per double stroke for 1 bar	Weight
	[kgcm²]	[s]	[s]	[kg]	[kg]	[cm³]	[kg]
R412000448	0,045	0,02	0,02	0,08	0,04	0,7	0,06
R412000450	0,145	0,03	0,02	0,19	0,05	2,3	0,08
R412000452	0,83	0,05	0,04	0,5	0,1	9	0,26
R412000454	2,2	0,05	0,05	0,7	0,13	16,1	0,48
R412000456	5,35	0,06	0,06	0,85	0,22	31	0,83

Max. permitted finger length: measured starting from the upper edge of the housing

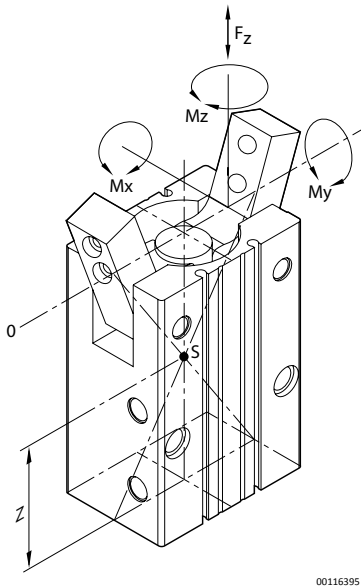
Permitted inertia (kg m²) depending on the size and angular velocity (1/s)

Max. permitted inertia/top jaw: in reference to the pivot bolt central axis

GSP-A

2-Finger Angle Gripper

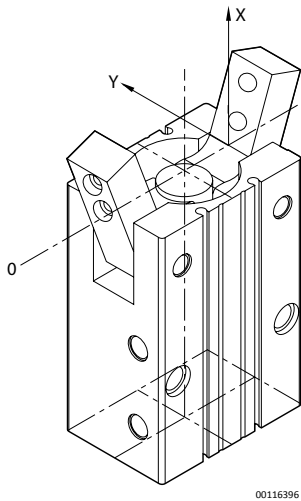
Max. permitted forces and torques for gripper



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Type	Z	Max. permitted force F_z	Torque (M_x)	Torque (M_y)	Torque (M_z)				
		[N]	[Nm]	[Nm]	[Nm]				
GSP-A-10	25,1	18	0,2	0,4	0,3				
GSP-A-16	30,7	35	0,5	1,2	1				
GSP-A-25	40,8	56	1,5	3	2,4				
GSP-A-32	49,2	80	2,5	4,8	4				
GSP-A-40	58,7	130	4	7	5,6				

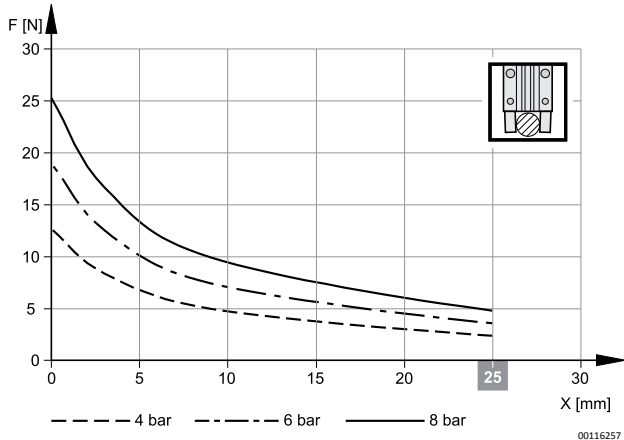
Permitted gripping range



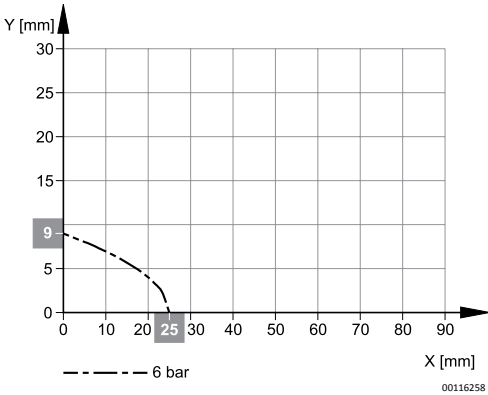
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X = Clamping height
Y = Clamping width

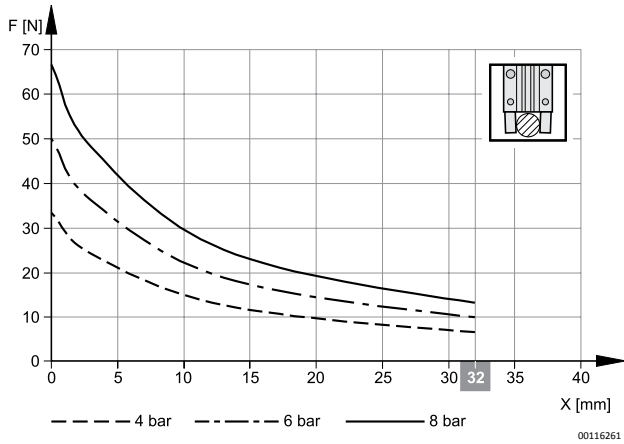
GSP-A-10 Gripping force/finger



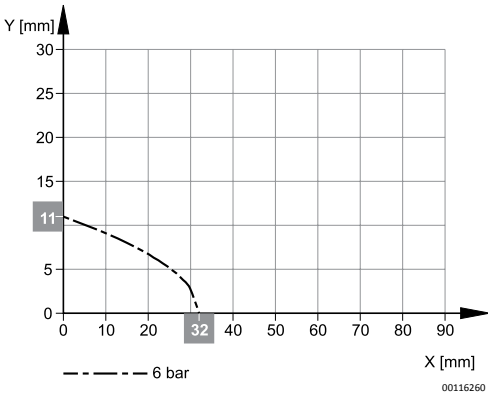
GSP-A-10 Gripping range



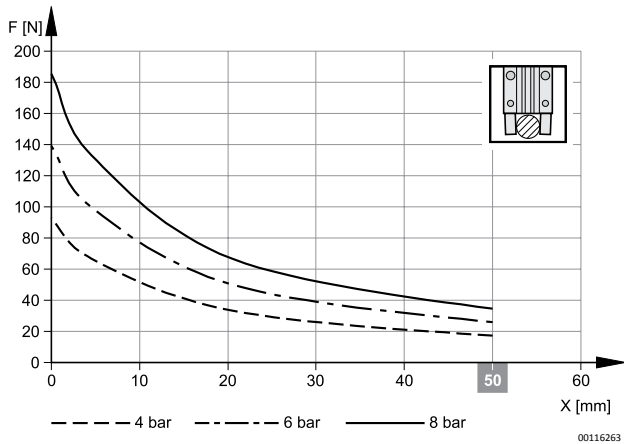
GSP-A-16 Gripping force/finger



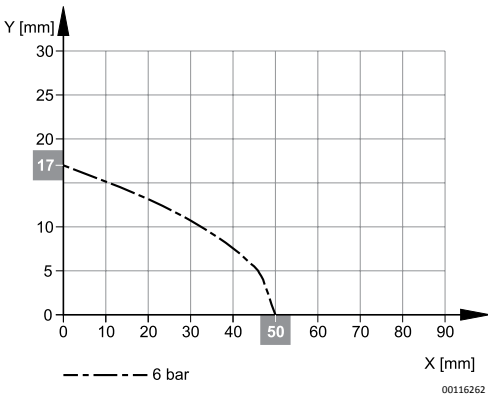
GSP-A-16 Gripping range



GSP-A-25 Gripping force/finger



GSP-A-25 Gripping range

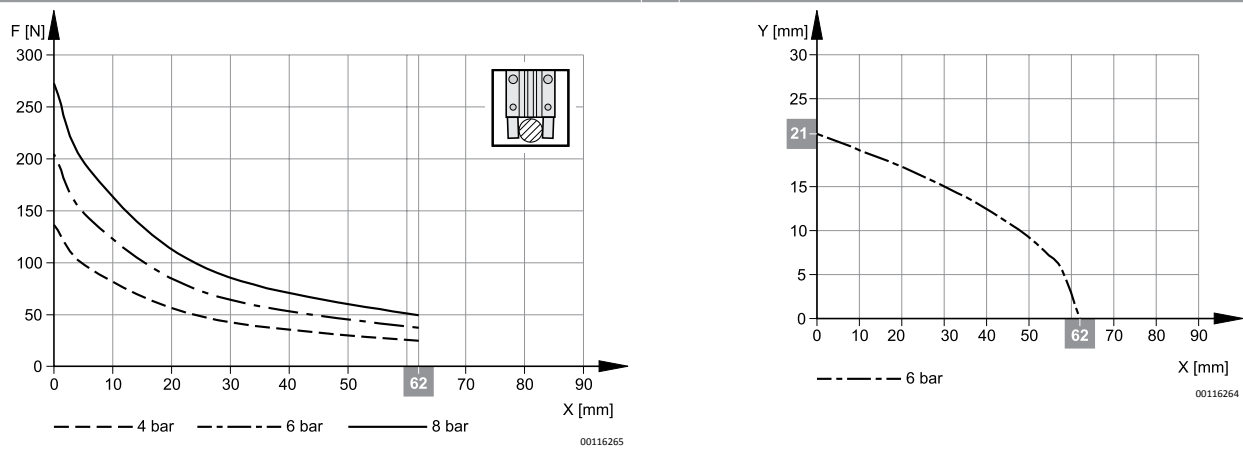


GSP-A

2-Finger Angle Gripper

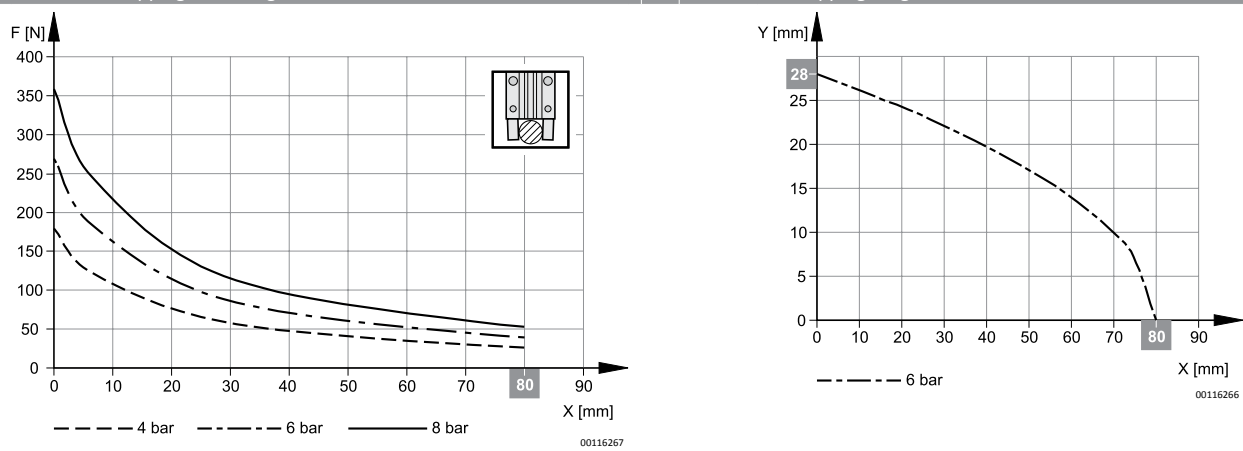
GSP-A-32 Gripping force/finger

GSP-A-32 Gripping range

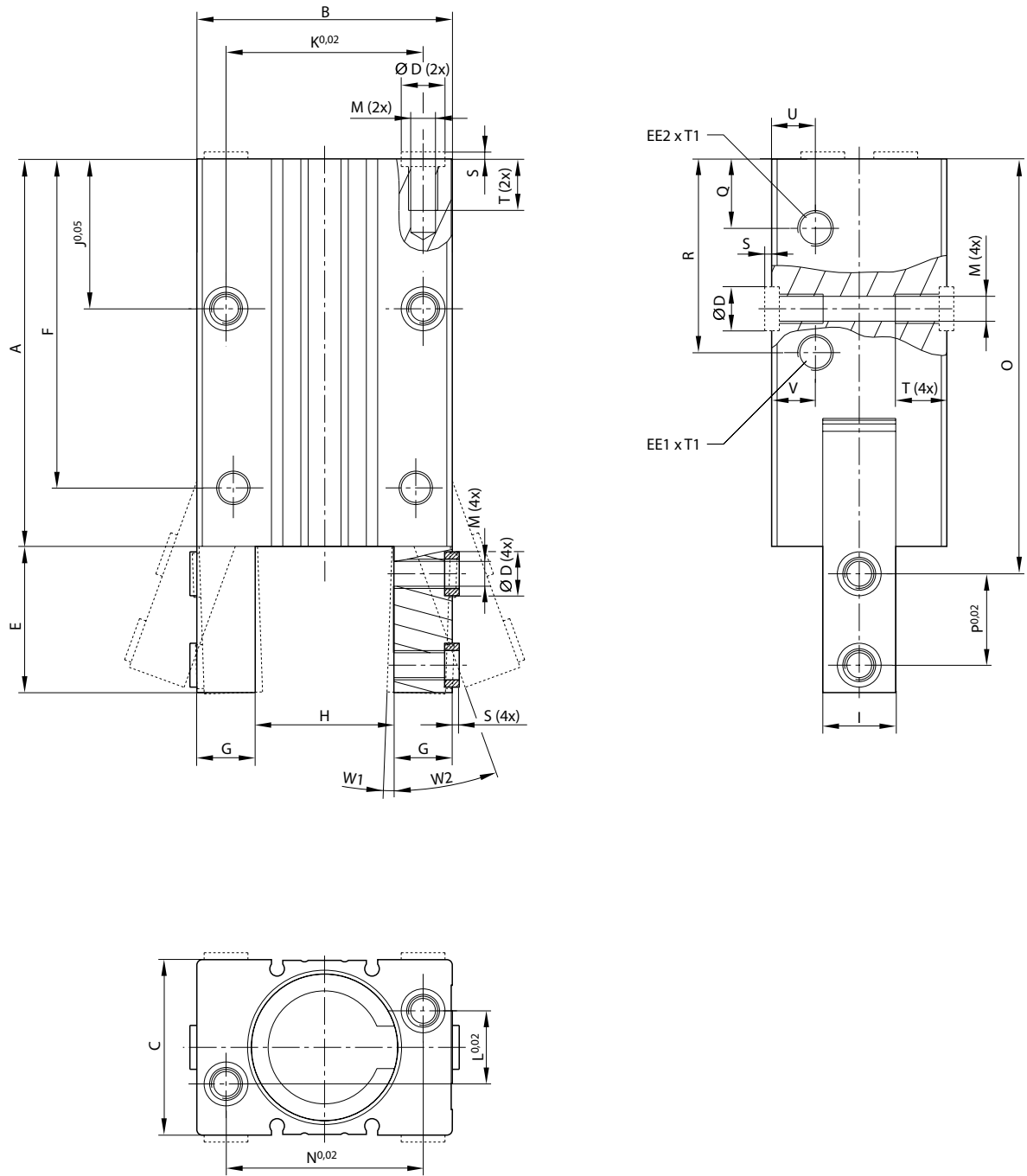


GSP-A-40 Gripping force/finger

GSP-A-40 Gripping range



Dimensions



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EE1 = Close gripper air connection
 EE2 = Open gripper air connection
 Centering rings (6 pieces) are included in the scope of delivery

Type	A	B	C	D K6	E	EE1	EE2	F	G	H	I	J
GSP-A-10	47	28	16	Ø 5	12	M5	M5	41,2	6	15	6,5	24
GSP-A-16	56	36	20	Ø 5	16	M5	M5	48,2	8	20	9	26

GSP-A

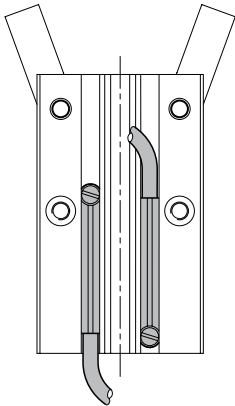
2-Finger Angle Gripper

Type	A	B	C	D K6	E	EE1	EE2	F	G	H	I	J
GSP-A-25	74	50	30	∅ 7	25	M5	M5	62,5	11	28	13	32
GSP-A-32	91	60	38	∅ 9	32	G 1/8	G 1/8	77,3	13	34	16	38
GSP-A-40	106	70	48	∅ 12	40	G 1/8	G 1/8	90	16	38	20	41

Type	K	L	M	N	O	P	Q	R	S	T	T1	U
GSP-A-10	20	–	M3	20	50	6	12,5	29	1,6	6,6	5	8
GSP-A-16	28	–	M3	28	59	10	12,5	33	1,6	6,6	5	7
GSP-A-25	40	–	M5	40	78,5	16	13,5	39	1,6	11,6	5	8
GSP-A-32	40	20	M6	40	97	20	16	49	2,1	12,1	6	19
GSP-A-40	54	20	M8	54	113,5	25	17	53	2,1	14,1	6	12

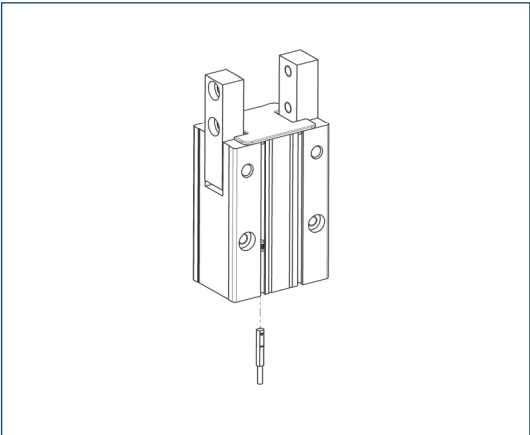
Type	V	W1	W2									
GSP-A-10	8	2°	20°									
GSP-A-16	7	2°	20°									
GSP-A-25	8	2°	20°									
GSP-A-32	19	2°	20°									
GSP-A-40	12	2°	20°									

Sensor ST4, ST4-2P



Groove width = 4 mm
The sensors must be ordered from Aventics.

Sensor MMS-P 22



Position monitoring with two programmable positions for each sensor.
End position monitoring installed in C-groove.

Designation	ID-No.	Recommended product
Programmable magnetic switch		
MMS-P 22-S-M8-PNP	0301370	•
MMSK-P 22-S-PNP	0301371	
Connection cable		
KA BG08-L 4P-0500	0307767	
KA BG08-L 4P-1000	0307768	
KA BW08-L 4P-1000	0307766	
KA BW08-L 4P-0500	0307765	
Sensor distributor		
V2-M8-4P-2XM8-3P	0301380	

- ① Observe the minimum permitted bending radii for sensor cables.
The minimum permitted bending radius is usually 35 mm.
- ① One sensor (turnkey/S) is needed for each gripper and additionally optional extension cables.