



Operating principle	double-acting
Type	radial
Number fingers	2
Opening angle	180 °
Gripping tolerance	0,02 mm
Lubrication	endurance lubrication

Ambient temperature min./max.	+5°C / +60°C
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	Steel, hardened

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-R-10	R412000438	311320
GSP-R-16	R412000440	311340
GSP-R-25	R412000442	311360
GSP-R-32	R412000444	311370
GSP-R-40	R412000446	311380

	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-R-10	M5	25	0,15	0,3	0,03	R412000438
	GSP-R-16	M5	32	0,45	0,9	0,7	R412000440
	GSP-R-25	M5	50	2	4	3,2	R412000442
	GSP-R-32	G 1/8	62	4	8	5,7	R412000444
	GSP-R-40	G 1/8	80	6	12	13	R412000446

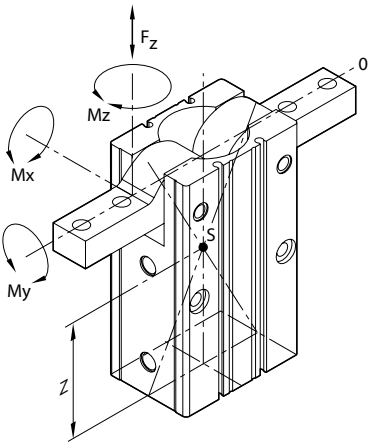
Material number	Mass moment of inertia	Closing times for 6 bar	Opening times for 6 bar	Recommended workpiece mass	Max. permitted weight/top jaw	Air consumption per double stroke for 1 bar	Weight
	[kgcm²]	[s]	[s]	[kg]	[kg]	[cm³]	[kg]
R412000438	0,07	0,07	0,06	0,08	0,04	1,2	0,08
R412000440	0,223	0,07	0,05	0,19	0,05	3,8	0,15
R412000442	1,28	0,1	0,09	0,58	0,1	13	0,4
R412000444	3,42	0,11	0,12	0,93	0,13	25	0,72
R412000446	7,98	0,11	0,18	1,15	0,22	42	1,2

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-R

2-Finger Radial Gripper

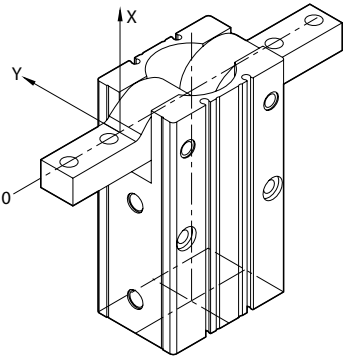
Max. permitted forces and torques for gripper



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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-R-10	34	18	0,3	0,5	0,5				
GSP-R-16	40,8	35	0,7	1,5	1,1				
GSP-R-25	55,8	58	1,8	3,7	2,5				
GSP-R-32	66,1	80	2,8	5,5	3,9				
GSP-R-40	74,5	130	4,5	8	6				

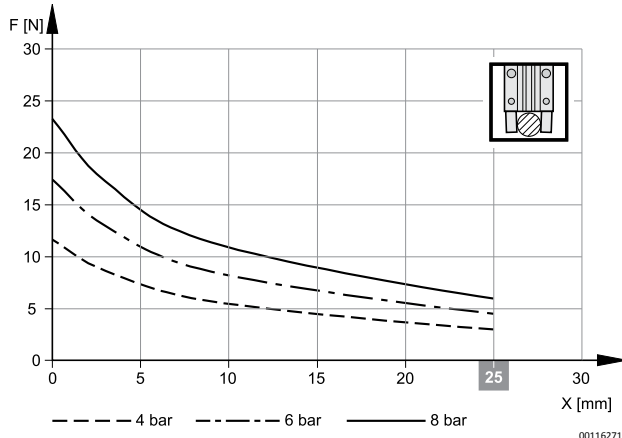
Permitted gripping range



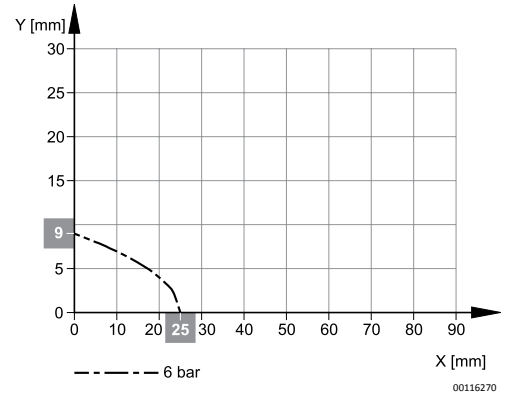
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X = Clamping height
Y = Clamping width

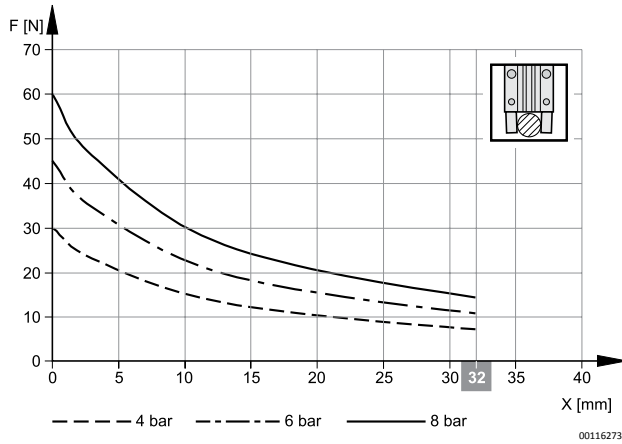
GSP-R-10 Gripping force/finger



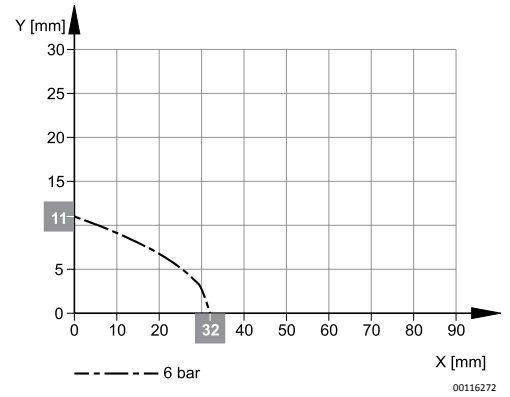
GSP-R-10 Gripping range



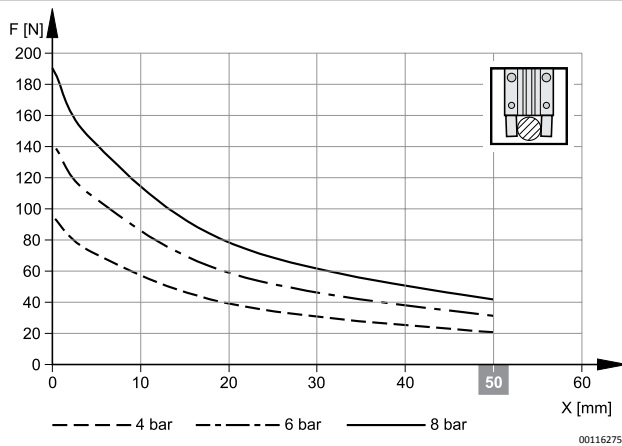
GSP-R-16 Gripping force/finger



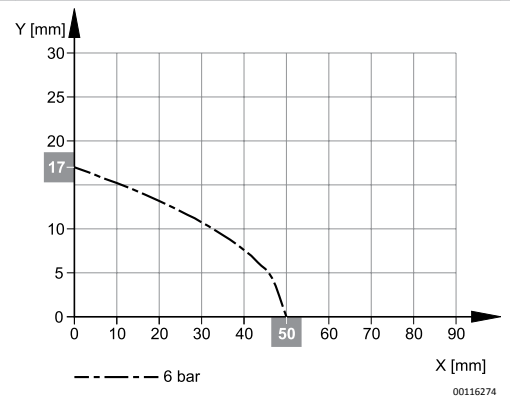
GSP-R-16 Gripping range



GSP-R-25 Gripping force/finger



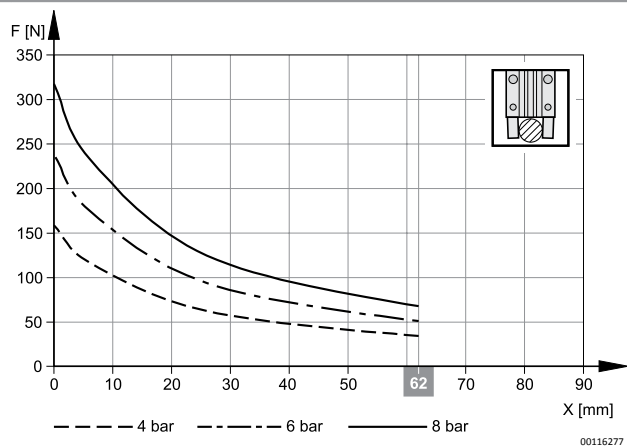
GSP-R-25 Gripping range



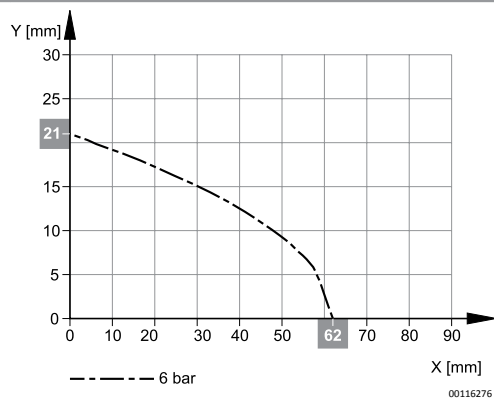
GSP-R

2-Finger Radial Gripper

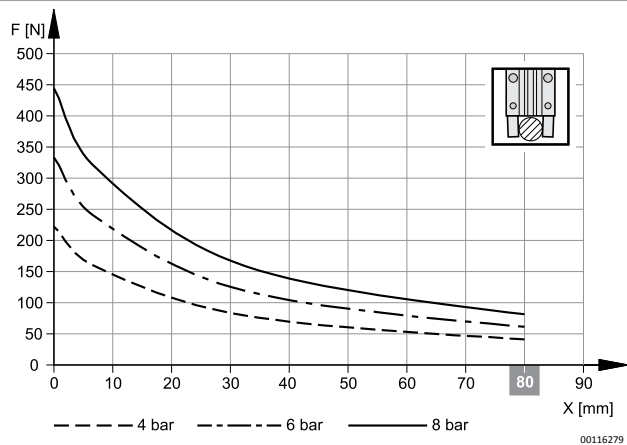
GSP-R-32 Gripping force/finger



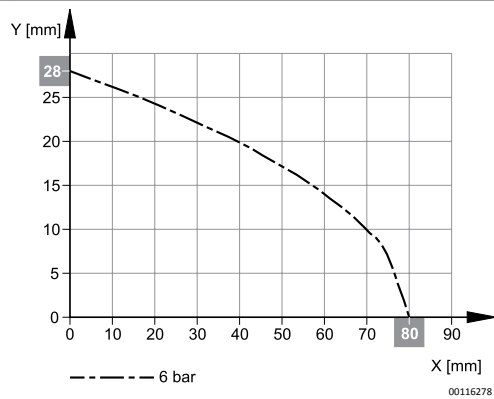
GSP-R-32 Gripping range



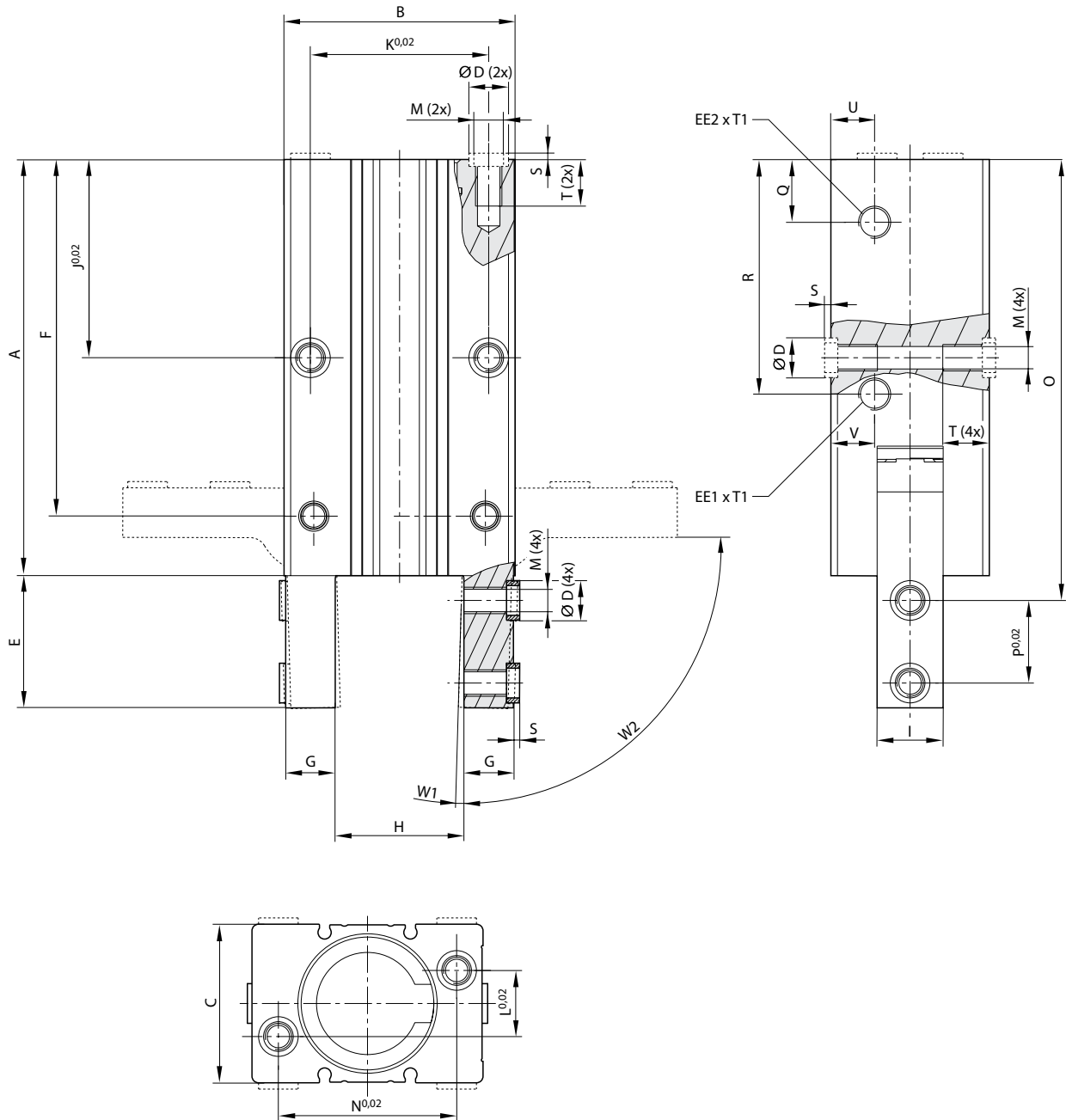
GSP-R-40 Gripping force/finger



GSP-R-40 Gripping range



Dimensions



EE1 = Air connection close gripper
 EE2 = Air connection open gripper
 Centering rings (6 pieces) are included in the scope of delivery

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Type	A	B	C	D K6	E	EE1	EE2	F	G	H	I	J
GSP-R-10	63	28	16	Ø 5	12	M5	M5	54,3	5	17	6,5	30,5
GSP-R-16	71	36	20	Ø 5	16	M5	M5	61,1	7,5	20	9	36
GSP-R-25	94,5	50	30	Ø 7	25	M5	M5	80,5	10	29	13	46,5
GSP-R-32	112,5	60	38	Ø 9	32	G 1/8	G 1/8	95,6	12,5	34	16	54

GSP-R

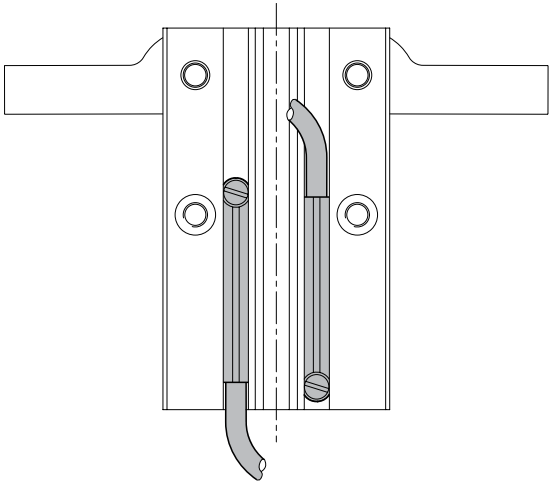
2-Finger Radial Gripper

Type	A	B	C	D K6	E	EE1	EE2	F	G	H	I	J
GSP-R-40	126	70	48	∅ 12	40	G 1/8	G 1/8	108	15	39	20	60

Type	K	L	M	N	O	P	Q	R	S	T	T1	U
GSP-R-10	20	0	M3	20	66	6	12,5	36,5	1,6	6,6	5	8
GSP-R-16	28	0	M3	28	74	10	12,5	42	1,6	6,6	5	7
GSP-R-25	40	0	M5	40	99	16	13,5	53	1,6	11,6	5	8
GSP-R-32	40	20	M6	40	118,5	20	16	64	2,1	12,1	6	19
GSP-R-40	54	20	M8	54	133,5	25	17	71	2,1	14,1	6	24

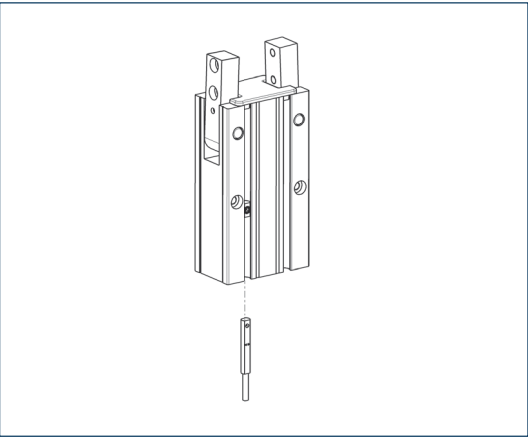
Type	V	W1	W2									
GSP-R-10	8	2°	90°									
GSP-R-16	7	2°	90°									
GSP-R-25	8	2°	90°									
GSP-R-32	19	2°	90°									
GSP-R-40	24	2°	90°									

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 minimum permitted bending radii for the 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.