

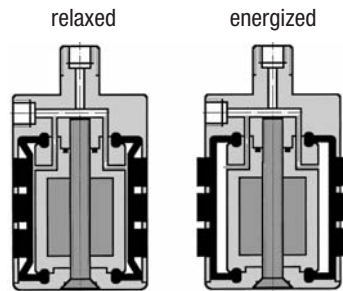
Parallel gripper	Three-jaw gripper	Angle gripper	Internal-hole gripper	Other grippers	Electric gripper
LG15-18 - LG120-135	LG4-20	LG20-30	LG30-50	GV50	



Sommer-automatic
Grippers
Separators
Swivel units
Rotating jaws
Axial compensators
Tool changers
Linear cylinders
Shock absorbers
Rotary cylinders
Air vane motors
Vacuum components
Accessories
Quick finder

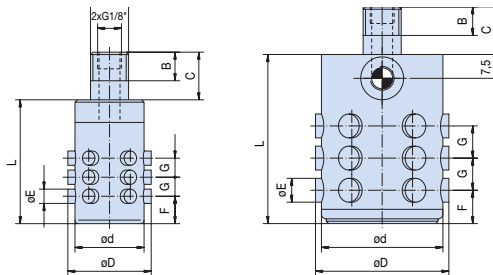


Internal-hole gripper



LG15-18 thru LG30-35

LG35-39 and up



This gripper is designed for handling parts with bores and holes of all types. The circular gripping knobs on the bladder provide a large friction force and eliminate the need for jaws. The Internal Hole Gripper can hold very heavy parts such as engine blocks, pistons and tire rims, as well as delicate objects like laboratory glassware, porcelain, sintered parts, etc. The gripper force can be regulated by adjusting the pneumatic pressure (2-6 bar).

Function:

Air pressure (2-6 bar) expands the knobbed diaphragm, which is restricted by the outer housing of the gripper. The 18 rubber knobs (12 knobs on the LG15-18 and LG18-22) are uniformly distributed around the circumference and along the length of the housing. They project outward, radially, through the cylindrical housing when air is applied, gripping the item with frictional forces. Releasing the air pressure allows the bladder to return to its original form, causing the knobs to retract into the housing.

Order no.:																		
LG 15-18	LG 18-22	LG 22-26	LG 26-30	LG 30-35	LG 35-39	LG 40-45	LG 46-51	LG 51-56	LG 56-62	LG 63-70	LG 71-80	LG 76-84	LG 81-90	LG 91-100	LG 100-110	LG 110-120	LG 120-135	
Drive:																		
pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.	pneum.
Stroke [mm]:																		
2,5	4	4	4	5	4,5	6,5	6	7	7,5	8	10,5	8,5	11	10	11	11	16	
Min. clamping diameter [mm]:																		
15	17,5	21,5	25,5	29,5	34,5	39,5	45,5	50,5	55,5	62,5	70,5	75,5	80,5	90,5	99,5	109,5	119,5	
Max. clamping diameter [mm]:																		
17,5	21,5	25,5	29,5	34,5	39	46	51,5	57,5	63	70,5	81	84	91,5	100,5	110,5	120,5	135,5	
Gripping force in extraction [N]*:																		
100	100	150	150	200	300	400	500	750	900	1100	1500	1700	2000	2500	2800	3500	3500	
Self-locking via:																		
DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8	DSV 1/8
Entry and departure time [s]:																		
0,2	0,2	0,2	0,2	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,4	0,4	0,4	0,4	0,4	
Repeatability± [mm]:																		
0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,2	
Min./max. operating pressure [bar]:																		
2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	2/6	
Air volume per cycle [cm³]:																		
1	1	1	2	3	5	8	13	17	25	33	42	53	67	117	150	200	250	
Min./max. operating temperature. [°C]:																		
5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	5/80	
Dimension A [mm]:																		
M14x1	M14x1	M14x1	M16x1	M16x1	M16x1	M16x1	M16x1	M16x1	M16x1	M16x1	M20x1,5	M20x1,5	M20x1,5	M20x1,5	M20x1,5	M30x1,5	M30x1,5	M30x1,5
Dimension B [mm]:																		
10	10	12	12	12	12	12	12	12	12	12	15	15	15	15	15	15	15	
Dimension C [mm]:																		
18	18	20	20	20	20	20	20	20	20	25	25	25	25	25	30	30	30	
Dimension E [mm]:																		
5	5	5	5	6	7	8	9	10	11	12,5	15	15,5	16	18	20	22	22	
Dimension F [mm]:																		
10,5	10,5	11,5	10,5	11,5	11,5	14	15,5	17	19	21,5	21,5	22,7	24,5	26,5	30	31	37	
Dimension G [mm]:																		
7	7	7	7	8	9	11	12	13	14,5	15,5	18	19	20	22,5	25	25	28	
Dimension L [mm]:																		
42	42	50	50	52	56	62	68	74	80	86	92	96	100	110	120	130	145	
Weight [kg]:																		
0,03	0,05	0,05	0,08	0,1	0,116	0,168	0,245	0,32	0,4	0,52	0,667	0,81	0,750	0,850	0,950	1,0	1,2	

All data measured at 6 bar. * The gripping force is the sum total of the individual forces occurring on the knobs.