Rod Lock Series RL

For cylinders ISO 6431/VDMA and ISO 6432*
Series RL ø20 - 25 - 32 - 40 - 50 - 63 - 80 - 100 - 125

The Series RL rod locks are available in 9 different sizes to fit (DIN/ISO 6432) cylinders 20-25 mm diameter and (DIN/ISO 6431 VDMA) cylinders 32, 40, 50, 63, 80, 100 and 125 mm diameter.
The compact dimensions allow units to be fitted on cylinders where space is limited.
Rod lock units are often used to hold the load in position during Emergency Stop conditions or when the air supply may be accidently disconnected from the system. The holding forces are measured at 8 bar. g. and apply in both directions. When operating the cylinder to achieve intermediate stroke positions a 5/3 pressure centre valve should be used.
The piston rod should remain in the locked position when the directional valve is in the mid position. Caution: the rod lock should not be used to "brake" the piston rod in dynamic conditions and must only be applied when movement has ceased.

Note: the cylinder piston rod length must be increased when using a rod lock unit. Minimum extension lengths for each diameter are given on the table..

- Compact design
- Functioning in both directions
- Blocks without pressure releases with pressure

*Exception for rod projection.

GENERAL DATA

Type of construction	compact
Operation	piston operated clamp
Materials	housing: anodized aluminium
	clamp: brass, seals: NBR
Cylinder diameter	ø20 - 32 - 40 - 50 - 63 - 80 - 100 - 125
Operating temperature	0°C ÷ 80°C (with dry air -20°C)
Configuration	pressure release
Ports	M5 = ø20 - 25 - 32
	G1/8 = ø40 - 50 - 63 - 80 - 100 - 125

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CYLINDERS

PNEUMATIC SPECIFICATIONS

Operating pressure	3 ÷ 10 bar
Fluid	clean air with or without lubrication
Frequency of operation	up to 80 Hz

ROD LOCK CODING

RLC-41-32

SERIES
RLC = standard, complete with cartridge and housing
RLS = housing only
RLB = cartridge only

CYLINDER SERIES
24 = for Series 24 and 25
41 = for Series 40 and 41

CYLINDER DIAMETER (mm)
20 = ø20
25 = ø25
32 = ø32
40 = ø40
50 = ø50
63 = ø63
80 = ø80
100 = ø100
125 = ø125

HOLDING FORCE (STATIC LOAD)

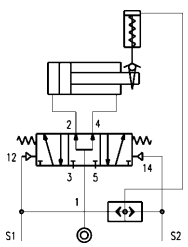
ø	20	25	32	40	50	63	80	100	125
holding force N	300	400	650	1100	1600	2500	4000	6300	8800

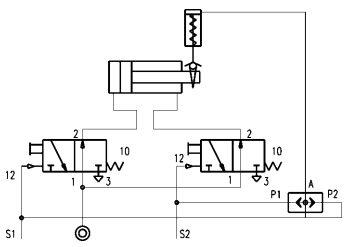
MINIMUM OPERATIONAL STROKES

ø	20	25	32	40	50	63	80	100	125
extension	+46	+46	+40	+43	+57	+57	+80	+80	+125

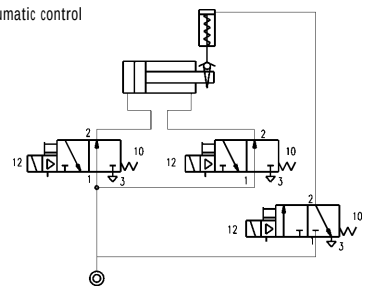
SCHEME OF OPERATION

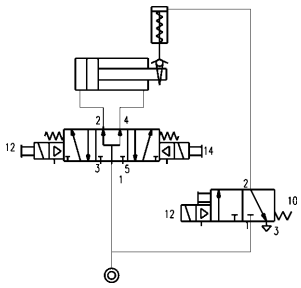
Pneumatic control





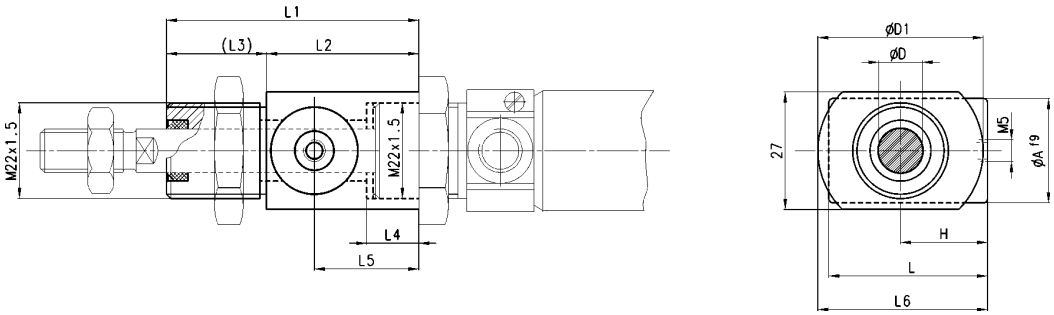
Electropneumatic control





Rod Lock Series RL

ø20 ÷ 25

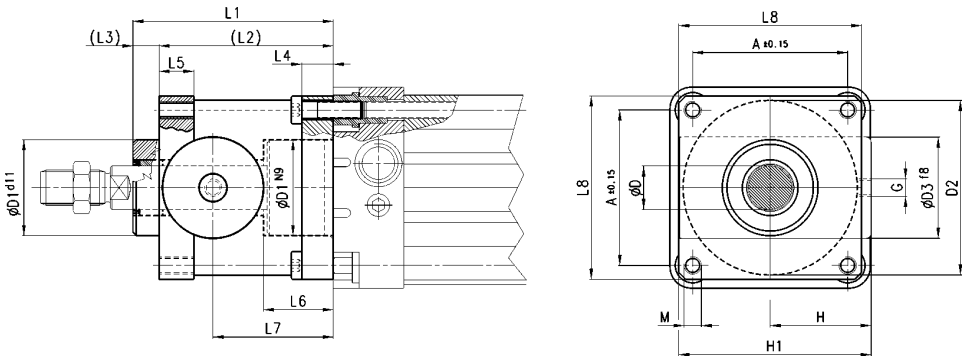


DIMENSIONS

Mod.	øcyl.	D	A f9	D1	H	L	L1	L2	L3	L4	L5	L6	Holding force N
RLC-24-20	20	8	20	38	21	40	58	35	23	12	24	40	250
RLC-24-25	25	10	20	38	21	40	58	35	23	12	24	40	400

Rod Lock Series RL

ø32 ÷ 125



DIMENSIONS

Mod.	øcyl.	D	D1	D2	D3	G	L1	L2	L3	L4	L5	L6	L7	L8	A	M	H	H1	Z	Holding force N
RLC-41-32	32	12	30	35	25	M5	58	48	10	8	13	20,5	34	45	32,5	M6	25,5	46,5	M6X20	650
RLC-41-40	40	16	35	40	28	G1/8	65	55	10	8	13	22,5	38	50	38	M6	30	53	M6X20	1100
RLC-41-50	50	20	40	50	35	G1/8	82	70	12	15	16	29,5	48	60	46,5	M8	36	64	M8X30	1600
RLC-41-63	63	20	45	60	38	G1/8	82	70	12	15	16	29,5	49,5	70	56,5	M8	40	75	M8X30	2500
RLC-41-80	80	25	45	80	48	G1/8	110	90	20	18	20	35	61	90	72	M10	50	95	M10X35	4000
RLC-41-100	100	25	55	100	58	G1/8	115	100	15	18	20	39	68	105	89	M10	58	110,5	M10X35	6300
RLC-41-125	125	32	60	130	65	G1/8	167	122	45	22	30	51	86,5	140	110	M12	80	150	M12X40	8700