

# ROD LOCK

## SERIES RL

For cylinders ISO 15552 and ISO 6432  
 Ø 20, 25, 32, 40, 50, 63, 80, 100, 125 mm



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

Series RL rod locks are available in 9 different sizes (diameters: 20, 25, 32, 40, 50, 63, 80, 100 to 125 mm). 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 accidentally disconnected from the system. The holding forces are measured at 8 bar and apply in both directions.

### 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. See the table for the minimum extension lengths for each diameter.

## GENERAL DATA

<b>Type of construction</b>	Compact
<b>Operation</b>	Piston operated clamp
<b>Materials</b>	Housing: anodized AL clamp: brass seals: NBR
<b>Cylinder diameter</b>	Ø 20 - 25 - 32 - 40 - 50 - 63 - 80 - 100 - 125 mm
<b>Operating temperature</b>	0°C ÷ 80°C (with dry air -20°C)
<b>Configuration</b>	Pressure release
<b>Operating pressure</b>	3 ÷ 8 bar
<b>Ports</b>	M5 = Ø 20, 25, 32 - G1/8 = Ø 40, 50, 63, 80, 100, 125
<b>Fluid</b>	Filtered air without lubrication. If lubricated air is used, it is recommended to use ISOVG32 oil. Once applied the lubrication should never be interrupted.

## ROD LOCK

## SERIES RL - CODING EXAMPLE

## CODING EXAMPLE

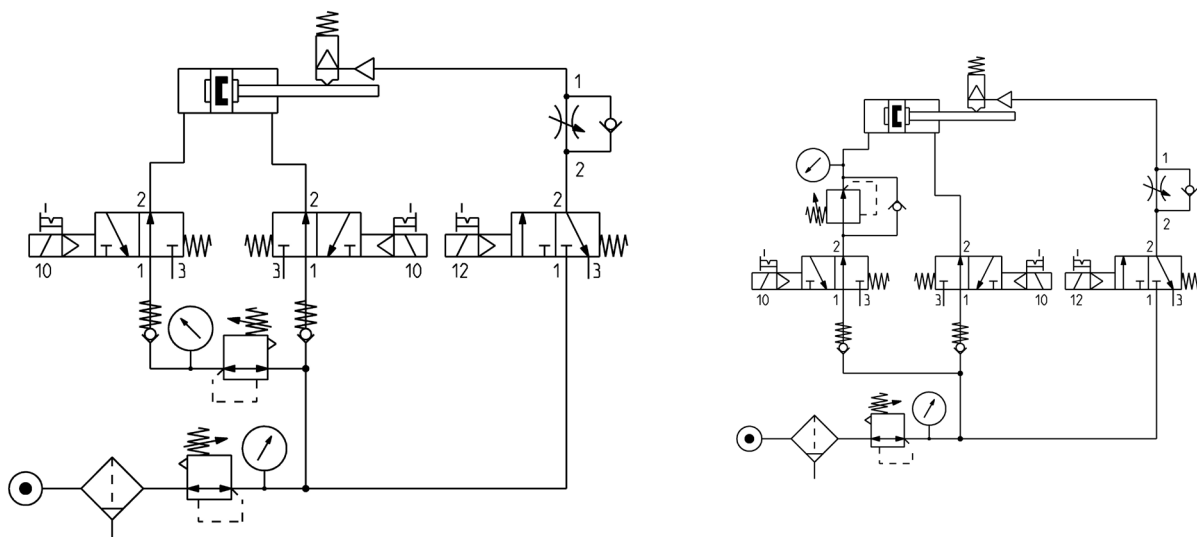
RLC	-	41	-	32
<b>RLC</b>	SERIES RLC = standard, complete with cartridge and housing RLB = cartridge only			
<b>41</b>	CYLINDER SERIES 24 = for Series 24 and 25 41 = for Series 61 and 63			<b>PNEUMATIC SYMBOL</b> RDLK
<b>32</b>	CYLINDER DIAMETER (mm) 20 = 20 mm 25 = 25 mm 32 = 32 mm 40 = 40 mm 50 = 50 mm 63 = 63 mm 80 = 80 mm 100 = 100 mm 125 = 125 mm			

## Pneumatic symbols

The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.



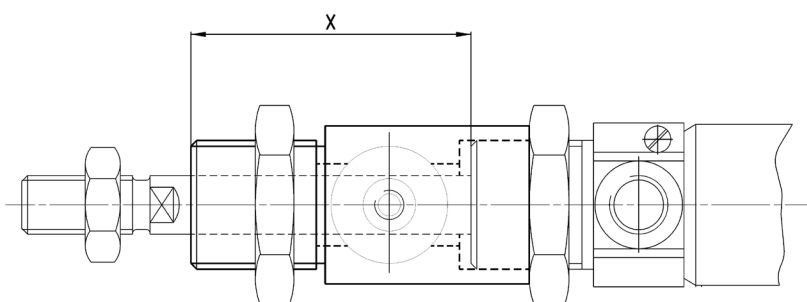
## Connection examples



For a correct use of the rod lock Mod. RLC a pneumatic connection is recommended (as shown in the examples).

## Rod extension and holding force

Table showing the rod extensions which are necessary for the rod lock mounting.



$\emptyset$	Rod extension [X] (mm)	Holding force [static load] (N)
20	+50	300
25	+48	400
32	+40	650
40	+43	1100
50	+57	1600
63	+57	2500
80	+80	4000
100	+80	6300
125	+125	8800

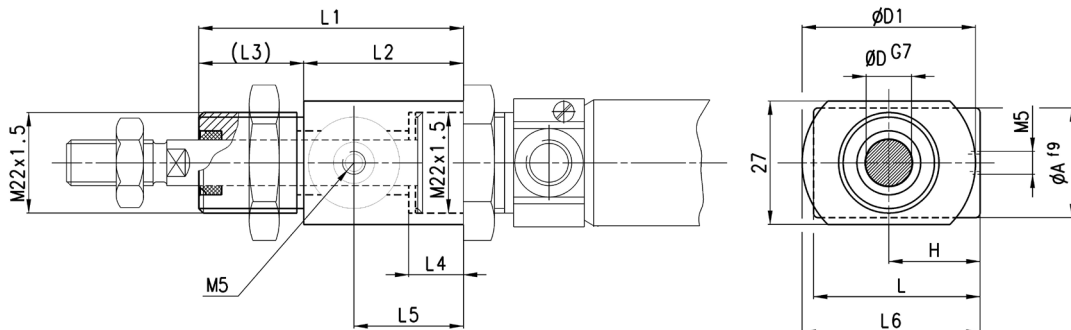
## ROD LOCK

## SERIES RL - DIMENSIONAL CHARACTERISTICS

 Rod Lock -  $\varnothing 20 - 25$  mm

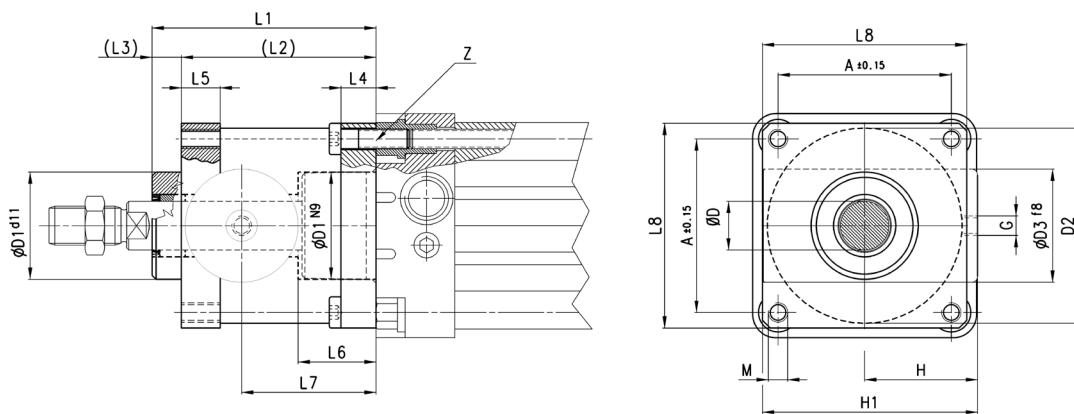
PNEUMATIC ACTUATION

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Mod.	$\varnothing$	D	A	D1	H	L	L1	L2	L3	L4	L5	L6
RLC-24-20	20	8	20	38	21	40	58	35	23	12	24	40
RLC-24-25	25	10	20	38	21	40	58	35	23	12	24	40

 Rod Lock -  $\varnothing 32 \div 125$  mm

 Supplied with:  
4x screws


Mod.	$\varnothing$	D	D1	D2	D3	G	L1	L2	L3	L4	L5	L6	L7	L8	A	M	H	H1	Z
RLC-41-32	32	12	30,5	35	25	M5	58	48	10	8	13	20,5	34	45	32,5	M6	25,5	46,5	M6x20
RLC-41-40	40	16	35	40	28	G1/8	65	55	10	8	13	22,5	38	50	38	M6	30	53	M6x20
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
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
RLC-41-80	80	25	45	80	48	G1/8	110	90	20	18	20	35	61	90	72	M10	50	95	M10x35
RLC-41-100	100	25	55	100	58	G1/8	115	100	15	18	20	39	69	105	89	M10	58	110,5	M10x35
RLC-41-125	125	32	60	130	65	G1/8	167	122	45	22	30	51	86,5	140	110	M12	80	150	M12x40