

# Rod Lock Series RL

For cylinders ISO 6431/VDMA and ISO 6432  
 ø 20 - 25 - 32 - 40 - 50 - 63 - 80 - 100 - 125



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

The 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

Type of construction	compact
Operation	piston operated clamp
Materials	housing: anodized AL clamp: brass seals: NBR
Cylinder diameter	ø 20 - 25 - 32 - 40 - 50 - 63 - 80 - 100 - 125
Operating temperature	0°C ÷ 80°C (with dry air -20°C)
Configuration	pressure release
Operating pressure	3 ÷ 8 bar
Ports	M5 = ø20, 25, 32 - G1/8 = ø40, 50, 63, 80, 100, 125
Fluid	Filtered air without lubrication. If lubricated air is used, it is recommended to use ISOVG32 oil. Once applied the lubrication should never be interrupted.

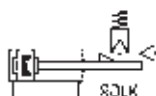
## CODING EXAMPLE

RLC	-	41	-	32
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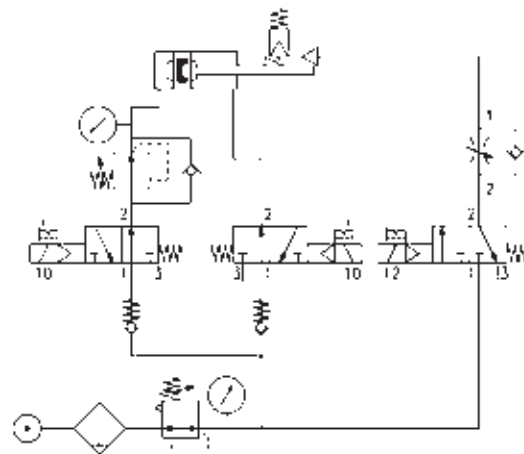
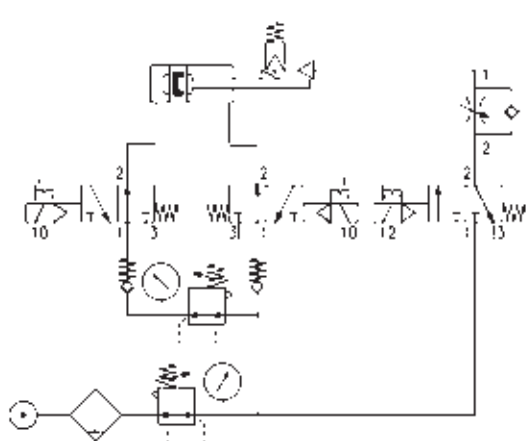
<b>RLC</b>	<b>SERIES</b> RLC = standard, complete with cartridge and housing RLB = cartridge only		
<b>41</b>	<b>CYLINDER SERIES</b> 24 = for Series 24 and 25 41 = for Series 60, 61 and 62		<b>PNEUMATIC SYMBOL</b> RDLK
<b>32</b>	<b>CYLINDER DIAMETER (mm)</b> 20 = 20 mm 25 = 25 mm 32 = 32 mm 40 = 40 mm 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.



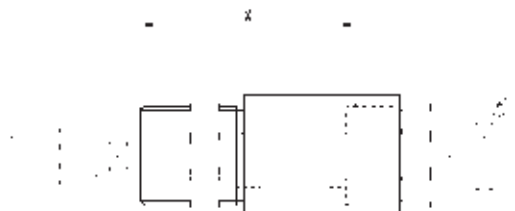
## CONNECTION EXAMPLES



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

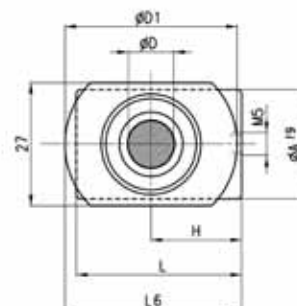
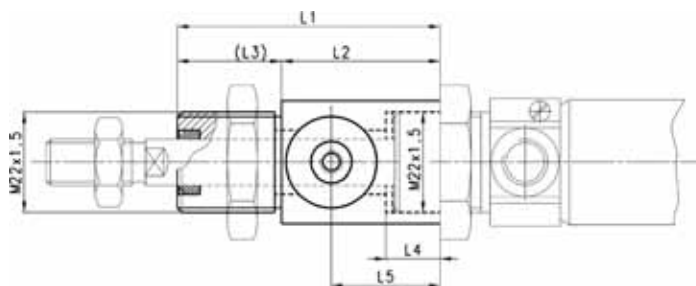
Table showing the rod extensions which are necessary for the rod lock mounting.



ø	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

ø 20 - 25.

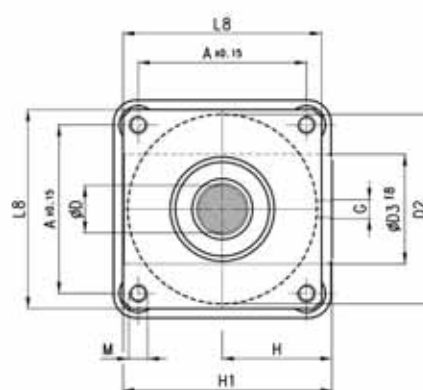
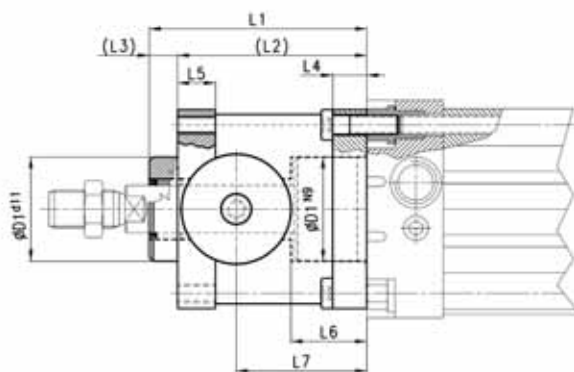


## DIMENSIONS

Mod.	Ø	D	A	D1	H	L	L1	L2	L3	L4	L5	L6
<b>RLC-24-20</b>	20	8	20	38	21	40	58	35	23	12	24	40
<b>RLC-24-25</b>	25	10	20	38	21	40	58	35	23	12	24	40

## Rod Lock Series RL

ø 32 - 125.



## DIMENSIONS

Mod.	Ø	D	D1	D2	D3	G	L1	L2	L3	L4	L5	L6	L7	L8	A	M	H	H1	Z
<b>RLC-41-32</b>	32	12	30,5	35	25	M5	58	48	10	8	13	20,5	34	45	32,5	M6	25,5	46,5	M6X20
<b>RLC-41-40</b>	40	16	35	40	28	G1/8	65	55	10	8	13	22,5	38	50	38	M6	30	53	M6X20
<b>RLC-41-50</b>	50	20	40	50	35	G1/8	82	70	12	15	16	29,5	48	60	46,5	M8	36	64	M8X30
<b>RLC-41-63</b>	63	20	45	60	38	G1/8	82	70	12	15	16	29,5	49,5	70	56,5	M8	40	75	M8X30
<b>RLC-41-80</b>	80	25	45	80	48	G1/8	110	90	20	18	20	35	61	90	72	M10	50	95	M10X35
<b>RLC-41-100</b>	100	25	55	100	58	G1/8	115	100	15	18	20	39	69	105	89	M10	58	110,5	M10X35
<b>RLC-41-125</b>	125	32	60	130	65	G1/8	167	122	45	22	30	51	86,5	140	110	M12	80	150	M12X40