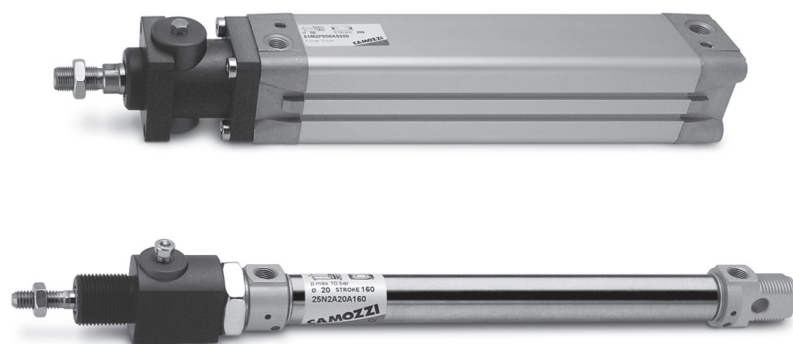


# Series RL rod lock

For cylinders ISO 6431/VDMA 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<br>clamp: brass<br>seals: NBR   |
| <b>Cylinder diameter</b>     | ø 20 - 25 - 32 - 40 - 50 - 63 - 80 - 100 - 125   |
| <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 = ø20, 25, 32 - G1/8 = ø40, 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. |

**CODING EXAMPLE**

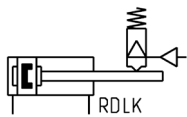
|            |   |           |   |           |
|------------|---|-----------|---|-----------|
| <b>RLC</b> | - | <b>41</b> | - | <b>32</b> |
|------------|---|-----------|---|-----------|

|            |  |                          |  |
|------------|--|--------------------------|--|
| <b>RLC</b> | SERIES<br>RLC = standard, complete with cartridge and housing<br>RLB = cartridge only  |                          |  |
| <b>41</b>  | CYLINDER SERIES<br>24 = for Series 24 and 25<br>41 = for Series 60, 61 and 62  | PNEUMATIC SYMBOL<br>RDLK |  |
| <b>32</b>  | CYLINDER DIAMETER (mm)<br>20 = 20 mm<br>25 = 25 mm<br>32 = 32 mm<br>40 = 40 mm<br>50 = 50 mm<br>63 = 63 mm<br>80 = 80 mm<br>100 = 100 mm<br>125 = 125 mm |                          |  |

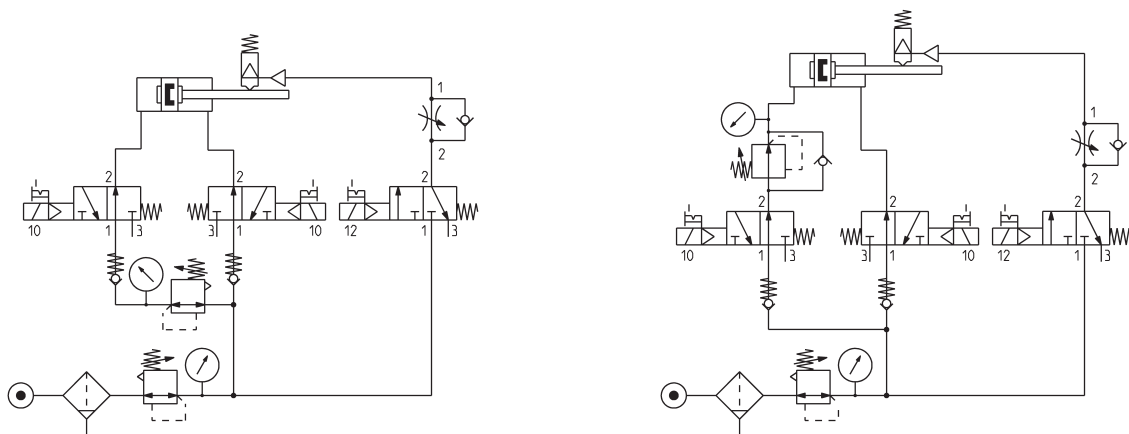
**PNEUMATIC SYMBOLS**

**PNEUMATIC SYMBOLS**

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



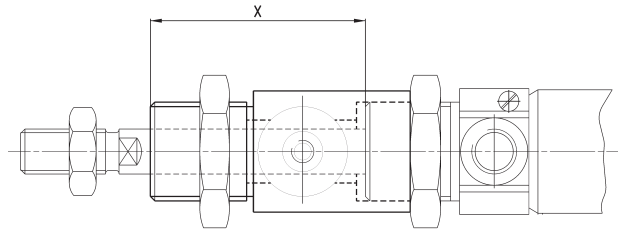
**CONNECTION EXAMPLES**



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

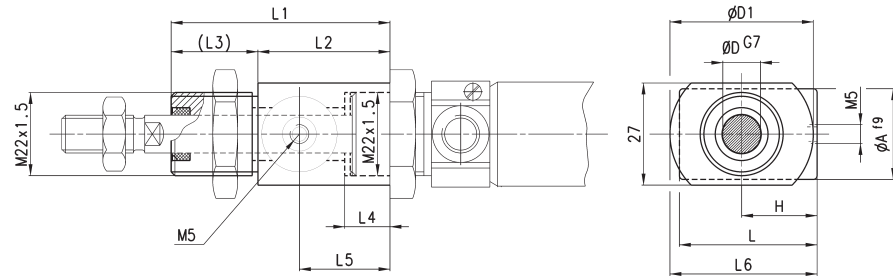
**ROD EXTENSION and HOLDING FORCE**

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



| $\varnothing$ | 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                            |

Series RL Rod Lock - Ø 20 - 25 mm

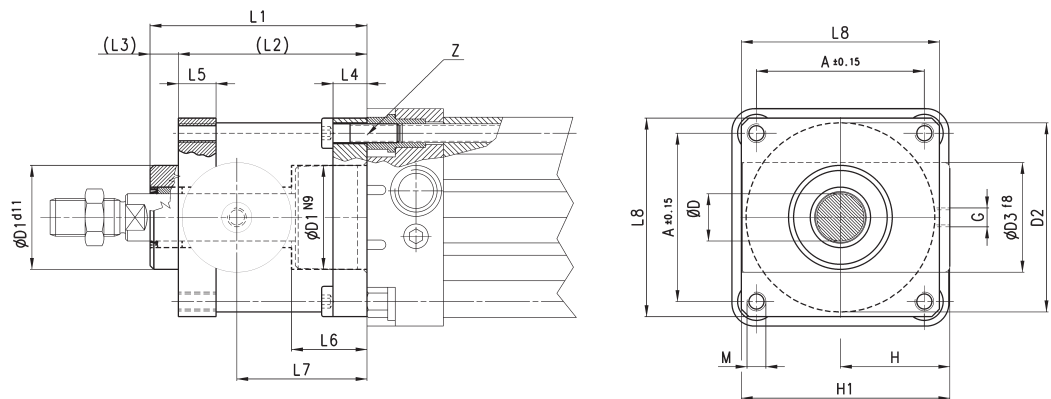


DIMENSIONS

| 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 |

Series RL Rod Lock - Ø 32 ÷ 125 mm

Supplied with:  
- 4x screws



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 |