

PUSH-IN FITTINGS

Push-in fittings by Metal Work are the best elements for connecting pipes and actuators.

Quick and easy to use, the Metal Work push-in fitting can be re-used thousands of times without affecting the pneumatic and mechanical seal in any way. It comes in various configurations and guarantees a virtually unlimited, highly flexible use. The clamping spring with its special shape grips the pipe without scratching or deforming it, which facilitates release.

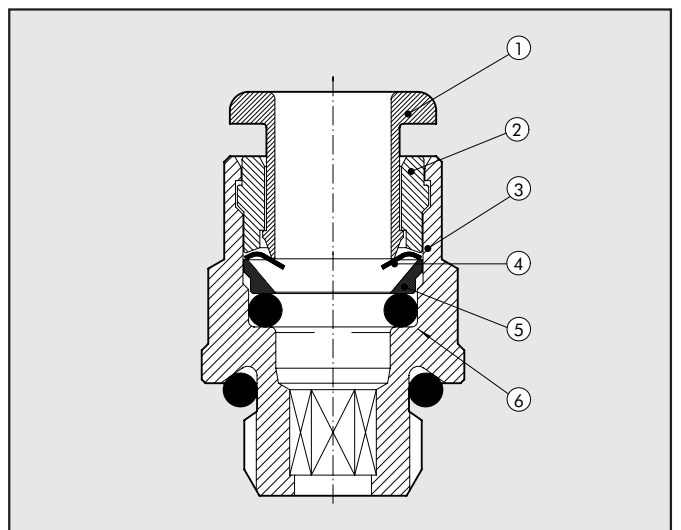
In the fittings, the release bushing has patented screwdriver slots to facilitate release in applications not accessible to the fingers. Configurations RL19, RL21, RL22, RL23, RL23M, RL24, RL44, and RL49 (except for Ø5), have a ring for fixing to the wall asymmetrically in order to contain the head of a screw within the overall dimensions of the fitting.



| TECHNICAL DATA | |
|--|---|
| Threaded coupling | M3 - M5 - M7 - 1/8" - 1/4" - 3/8" - 1/2" |
| Diameter | mm Ø 3 - Ø 3,17 - Ø 4 - Ø 5 - Ø 6 - Ø 8 - Ø 10 - Ø 12 - Ø 14 |
| Temperature range for brass fittings | °C -20 +80 |
| | °F -4 ÷ 162 |
| Temperature range for technopolymer fittings | °C -20 +60 |
| | °F -4 ÷ 140 |
| Pressure range for brass fittings | -0,99 bar ÷ 16 bar / -0,099 MPa ÷ 1,6 MPa |
| Pressure range for technopolymer fittings | -0,99 bar ÷ 12 bar / -0,099 MPa ÷ 1,2 MPa |
| Recommended pipe | RilsanPA 11 - Nylon 6 - Polyamide 12 - Polypropylene |
| Fluid | Vacuum - Compressed air |

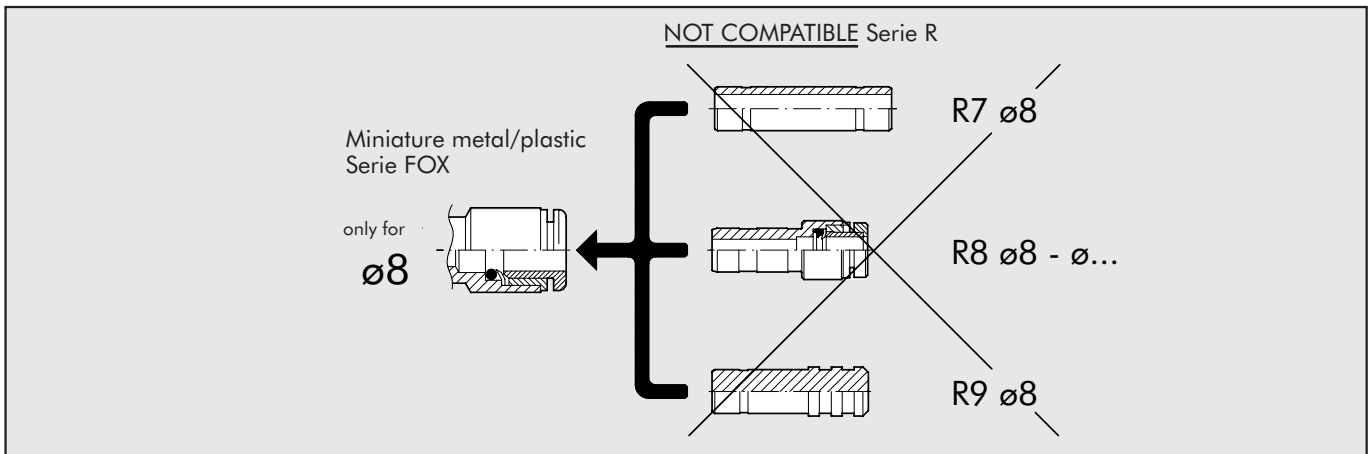
COMPONENTS

- ① Ring or release bushing: technopolymer
- ② Locking bushing: brass or technopolymer
- ③ Body: brass or technopolymer
- ④ Clamping spring: stainless steel (for pipes Ø 3 and Ø 3,17 and R31 and R32: brass gripper)
- ⑤ Spring supporting ring: technopolymer
- ⑥ Seal: NBR





FOR Ø 8 PUSH-IN FITTINGS ONLY

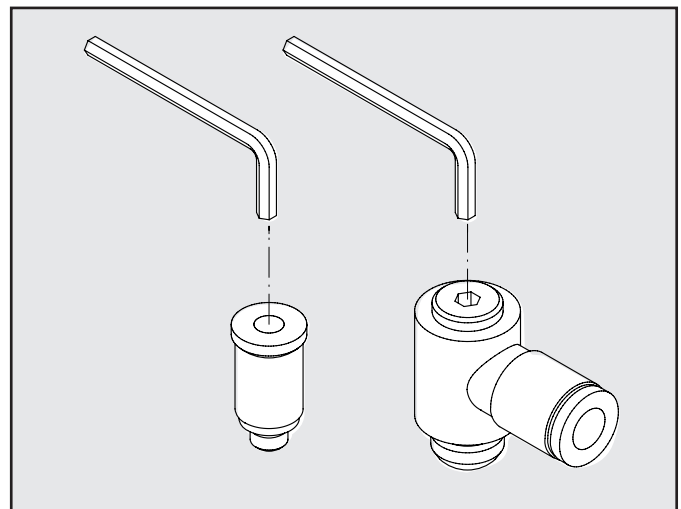
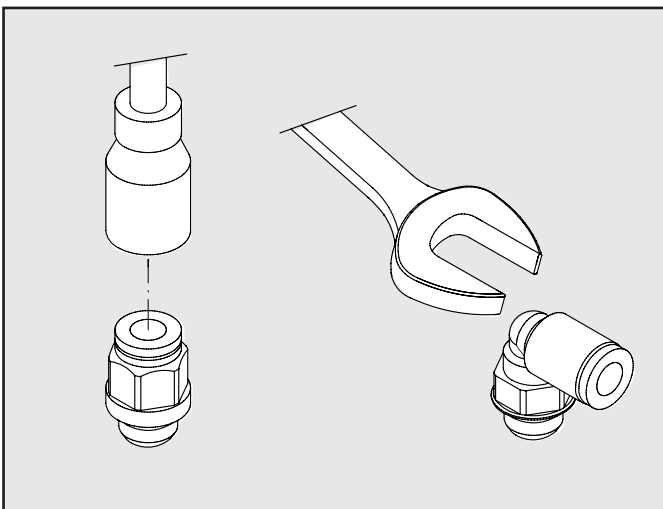


The new series of Ø 8 miniature push-in fittings, identified in the code by a letter L and visually by the screwdriver slot on the release ring, are not compatible with fittings R7, R8 and R9 Ø 8 in the old series.

O-ring BELOW R FITTINGS

| Thread | Initials | Dimensions of O-ring | Thread | Initials | Dimensions of O-ring |
|---------------------|----------|----------------------|--------|----------|----------------------|
| M3 | | 2.6x1 | 1/8 | 2031 | 7.66x1.78 |
| M5 (for Ø 3-Ø 3.17) | | 3x1.2 | 1/4 | 2043 | 10.82x1.78 |
| M5 | | 3.5x1.2 | 3/8 | 2056 | 14x1.78 |
| M7 | | 5x1.5 | 1/2 | 3068 | 17.13x2.62 |
| M12x1,5 | | 9.75x1.78 | | | |

SCREWING METHOD

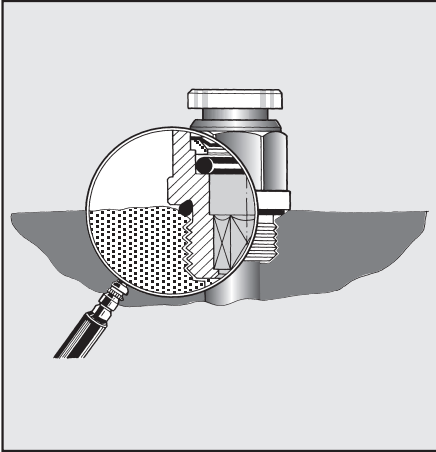


| Thread | Max. Torque [Nm] |
|---------|------------------|
| M3 | 0.4 |
| M5 | 1.8 |
| M7 | 2.5 |
| M12x1,5 | 8 |
| G 1/8" | 6 |
| G 1/4" | 8 |
| G 3/8" | 10 |
| G 1/2" | 15 |

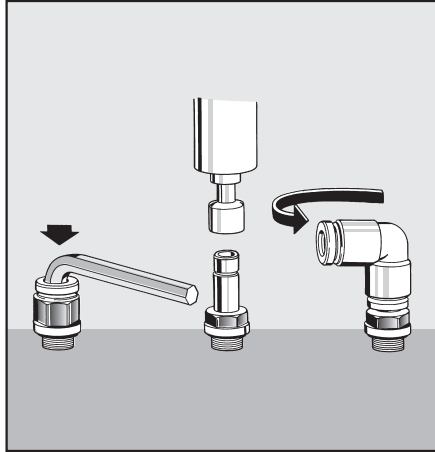
| CH [mm] | Max. Torque [Nm] |
|---------|-----------------------------------|
| 1.5 | 0.4 |
| 2 | 0.7 |
| 2.5 | 1.2 |
| 3 | 2.5 |
| 4 | 5 |
| 5 | 8 |
| Over 5 | See the values concerning threads |

NB: When using a socket spanner, the torque must not exceed that of the thread (e.g. fitting RL1 6 M7, with a 4 mm thread, has a maximum torque of 2.5 Nm).

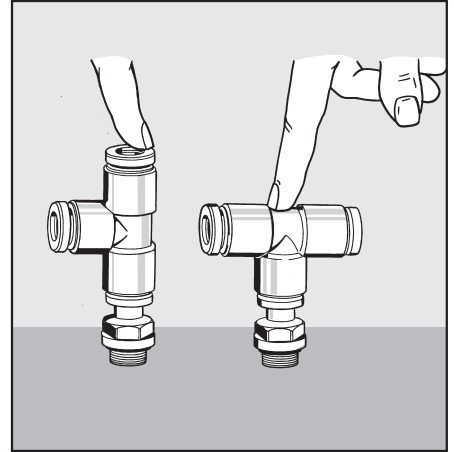
GENERAL FEATURES



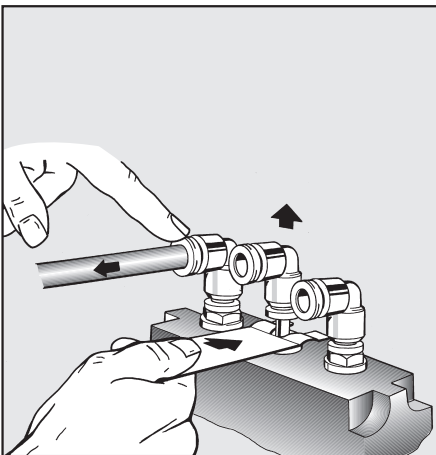
All fittings have cylindrical threading and incorporate a O-ring (Metal Work patent). The use of an O-ring considerably improves the seal of angled, rough, and slightly convex surfaces. Teflon (PTFE) is no longer used.



Mounting fittings with an Allen wrench or pneumatic tool. All the elbows and tees are rotary. Drastic reduction in assembly times.

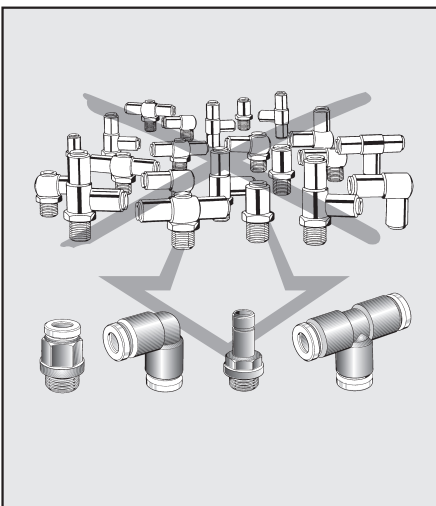


A single tee can give central tees and lateral tees.



The pipe is easy to assemble by pressing lightly on the pusher ring. To remove the fitting, merely push radially on the key.

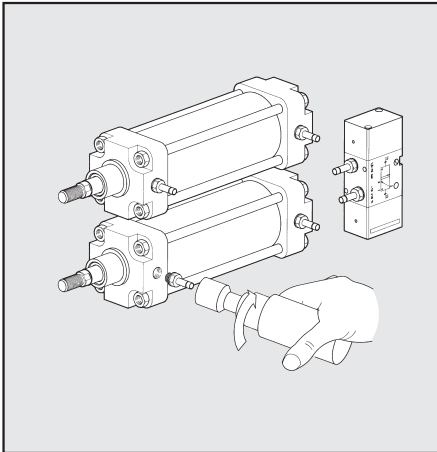
FROM AN IDEA, A SYSTEM



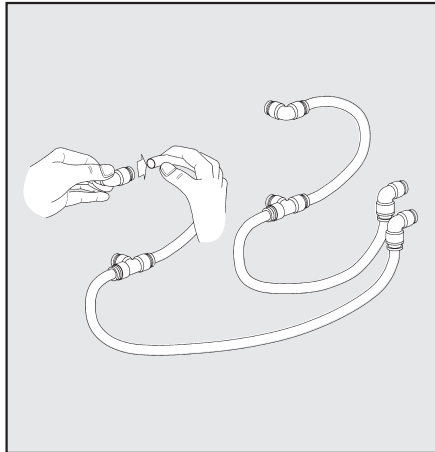
- Four basic fittings can be used to make all possible connections in a pneumatic circuit.
- Sharp drop in the number of fittings to be stocked and hence reduced operating costs.



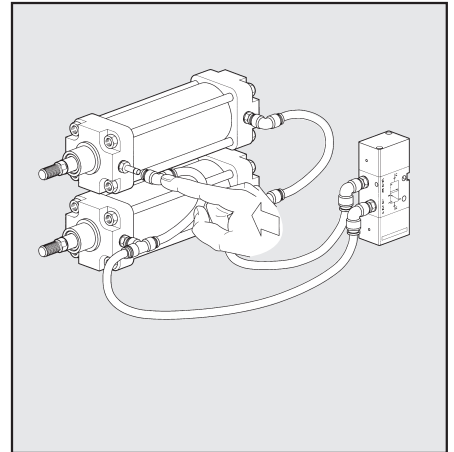
ASSEMBLY DIAGRAM



Pre-assembling fittings on the workbench with pneumatic tool even with very close centre distances.

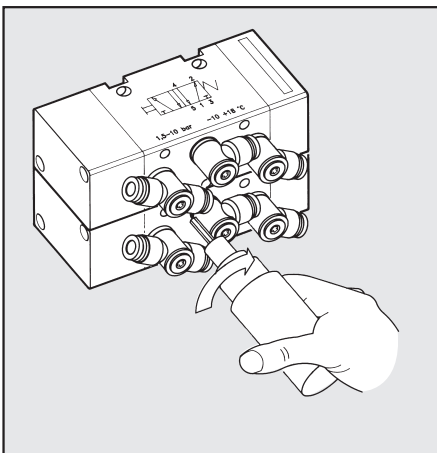


Pre-assembling fittings and pipe sections on the workbench. Pre-assembled configurations can be stocked for assembly in series.

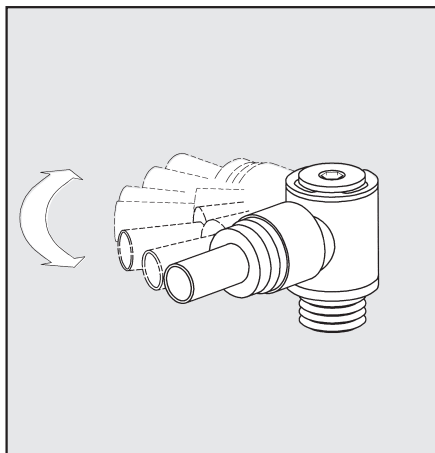


Quick connection and completion of the pneumatic circuit.

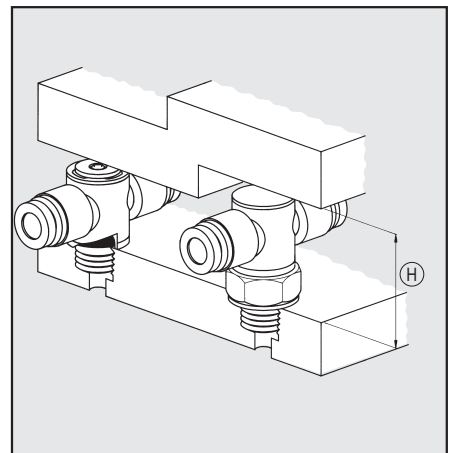
FROM A SYSTEM, INNOVATION



An Allen wrench is used to assemble rotary fittings even with very close centre distances.



The special configuration with two O-rings allows maximum orientation so as to follow pipe movement in the specific application.

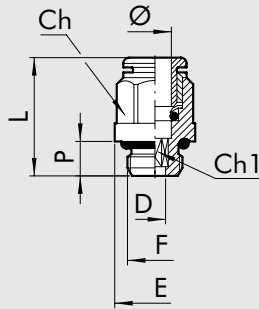


Fittings with a built-in gasket and reduced height (H) with the same threaded coupling and pipe diameter.

BRASS FITTINGS

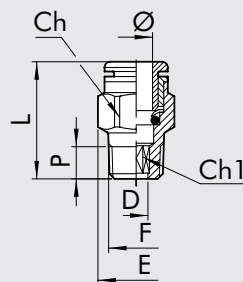
STRAIGHT, CYLINDRICAL, MALE (R1)

| Code | Ref. | Ø | F | Ch | Ch1 | P | L | D | E |
|---------|------|------|---------|-------|-----|-----|------|------|------|
| 2001B01 | R1 | 3 | M3 | Ø 5.8 | 1.5 | 3 | 12.6 | 1.5 | 5.8 |
| 2001B02 | R1 | 3 | M5 | Ø 5.8 | 2 | 3.5 | 13 | 2 | 5.8 |
| 2001A01 | R1 | 3.17 | M3 | Ø 5.8 | 1.5 | 3 | 12.6 | 1.5 | 5.8 |
| 2001A02 | R1 | 3.17 | M5 | Ø 5.8 | 2 | 3.5 | 13 | 2 | 5.8 |
| 2L01001 | RL1 | 4 | M5 | Ø 9 | 2.5 | 4 | 20.3 | 2.6 | 9 |
| 2L01020 | RL1 | 4 | M7 | Ø 9 | 3 | 5 | 18.9 | 3.1 | 9.8 |
| 2L01002 | RL1 | 4 | 1/8 | 10 | 3 | 6 | 18 | 3.1 | 14 |
| 2L01003 | RL1 | 4 | 1/4 | 10 | 3 | 8 | 19.8 | 3.1 | 18 |
| 2001004 | R1 | 5 | M5 | Ø 12 | 2.5 | 4 | 22.5 | 2.6 | 12 |
| 2001005 | R1 | 5 | 1/8 | 13 | 3 | 6 | 22 | 3.1 | 15 |
| 2001006 | R1 | 5 | 1/4 | 12 | 3 | 8 | 24 | 3.1 | 18 |
| 2L01000 | RL1 | 6 | M5 | Ø 11 | 2.5 | 4 | 21.9 | 2.6 | 11 |
| 2L01021 | RL1 | 6 | M7 | Ø 11 | 4 | 5 | 23 | 4.1 | 11 |
| 2L01101 | RL1 | 6 | M12x1,5 | 12 | 4 | 8 | 23.2 | 4.1 | 17 |
| 2L01007 | RL1 | 6 | 1/8 | 12 | 4 | 6 | 21.6 | 4.1 | 14 |
| 2L01008 | RL1 | 6 | 1/4 | 12 | 4 | 8 | 20.3 | 4.1 | 18 |
| 2L01102 | RL1 | 8 | M12x1,5 | 14 | 6 | 8 | 24.5 | 6.2 | 17 |
| 2L01009 | RL1 | 8 | 1/8 | 13 | 5 | 6 | 25.4 | 5.2 | 14 |
| 2L01010 | RL1 | 8 | 1/4 | 14 | 6 | 8 | 24.4 | 6.2 | 18 |
| 2L01011 | RL1 | 8 | 3/8 | 14 | 6 | 9 | 22.8 | 6.2 | 22 |
| 2L01012 | RL1 | 10 | 1/4 | 16 | 7 | 8 | 29.2 | 7.2 | 18 |
| 2L01013 | RL1 | 10 | 3/8 | 16 | 8 | 9 | 26.5 | 8.2 | 22 |
| 2L01018 | RL1 | 10 | 1/2 | 16 | 8 | 11 | 29.8 | 8.2 | 26 |
| 2001019 | RL1 | 12 | 1/4 | 19 | 7 | 8 | 30.5 | 7.2 | 21 |
| 2001014 | RL1 | 12 | 3/8 | 19 | 10 | 9 | 28.1 | 10.2 | 22 |
| 2001015 | RL1 | 12 | 1/2 | 19 | 10 | 11 | 29.3 | 10.2 | 26 |
| 2001016 | RL1 | 14 | 3/8 | 22 | 10 | 9 | 33.8 | 10.2 | 24.6 |
| 2001017 | RL1 | 14 | 1/2 | 22 | 12 | 11 | 31.5 | 12.2 | 26 |



STRAIGHT, CONICAL, MALE (R1C)

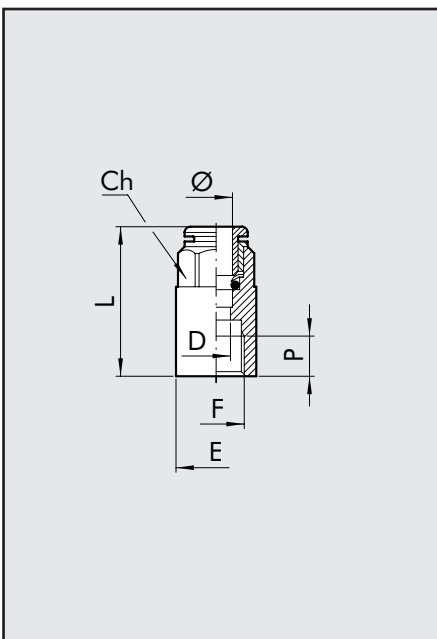
| Code | Ref. | Ø | F | Ch | Ch1 | D | E | L | P |
|---------|------|----|--------------|----|-----|------|------|------|-----|
| 2L01C02 | RL1C | 4 | 1/8 | 10 | 3 | 3.1 | 11.3 | 18.5 | 6.2 |
| 2L01C07 | RL1C | 6 | 1/8 | 12 | 4 | 4.1 | 13.5 | 22.5 | 6.2 |
| 2L01C08 | RL1C | 6 | 1/4 | 12 | 4 | 4.1 | 13.2 | 22.3 | 8.5 |
| 2001Z07 | RL1Z | 6 | 12x1 con. | 12 | 4 | 4.1 | 13.2 | 23.5 | 9 |
| 2001Z08 | RL1Z | 6 | 12x1,25 con. | 12 | 4 | 4.1 | 13.2 | 23.5 | 9 |
| 2L01C09 | RL1C | 8 | 1/8 | 13 | 6 | 6.2 | 14.3 | 26 | 6.2 |
| 2L01C10 | RL1C | 8 | 1/4 | 14 | 6 | 6.2 | 15.8 | 25.5 | 8.5 |
| 2L01C11 | RL1C | 8 | 3/8 | 14 | 6 | 6.2 | 16.6 | 24.9 | 9 |
| 2L01C13 | RL1C | 10 | 1/4 | 16 | 7 | 7.2 | 17.7 | 28.9 | 8.5 |
| 2L01C14 | RL1C | 10 | 3/8 | 16 | 8 | 8.2 | 17.7 | 26 | 9 |
| 2001C15 | RL1C | 12 | 3/8 | 19 | 10 | 10.2 | 21 | 28.5 | 9 |
| 2001C16 | RL1C | 12 | 1/2 | 19 | 10 | 10.2 | 21.3 | 26.6 | 11 |





STRAIGHT, FEMALE (R2)

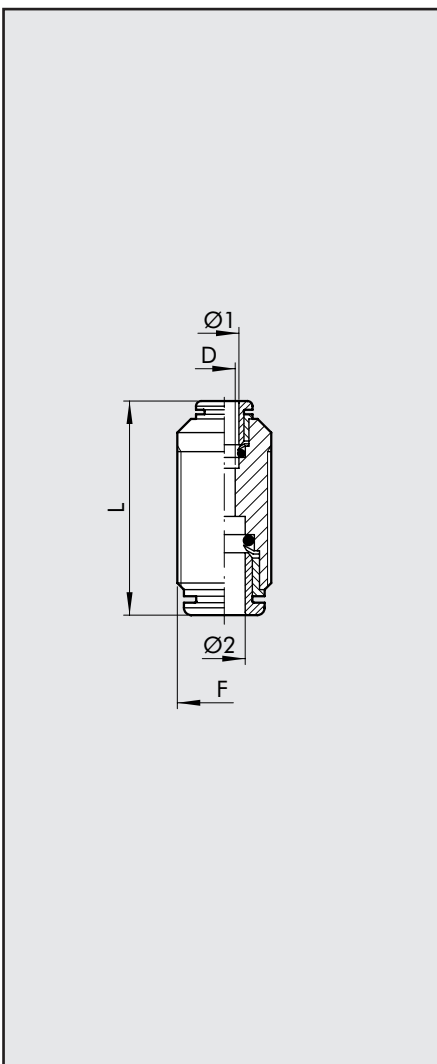
Code Ref. Ø F Ch P L D E



| | | | | | | | | |
|---------|-----|------|-----|----|-----|------|-----|------|
| 2002B02 | R2 | 3 | M5 | 7 | 4.5 | 15.7 | 2.5 | 7.8 |
| 2002A02 | R2 | 3.17 | M5 | 7 | 4.5 | 15.7 | 2.5 | 7.8 |
| 2L02001 | RL2 | 4 | 1/8 | 10 | 7 | 26.2 | 3 | 14 |
| 2L02002 | RL2 | 4 | 1/4 | 10 | 8 | 28.6 | 3 | 17 |
| 2002003 | R2 | 5 | 1/8 | 12 | 7 | 27 | 4 | 14 |
| 2002004 | R2 | 5 | 1/4 | 12 | 8 | 29.5 | 4 | 17 |
| 2L02005 | RL2 | 6 | 1/8 | 12 | 7 | 27.1 | 5 | 14 |
| 2L02006 | RL2 | 6 | 1/4 | 12 | 8 | 29.3 | 5 | 17 |
| 2L02007 | RL2 | 8 | 1/8 | 13 | 7 | 28.1 | 7 | 14 |
| 2L02008 | RL2 | 8 | 1/4 | 14 | 8 | 30 | 7 | 17 |
| 2L02009 | RL2 | 10 | 1/4 | 16 | 8 | 31.8 | 8 | 17,7 |
| 2L02010 | RL2 | 10 | 3/8 | 16 | 10 | 36.8 | 8 | 20,8 |
| 2L02011 | RL2 | 12 | 3/8 | 19 | 10 | 37 | 10 | 20,8 |
| 2L02012 | RL2 | 12 | 1/2 | 19 | 11 | 40.5 | 10 | 23,8 |

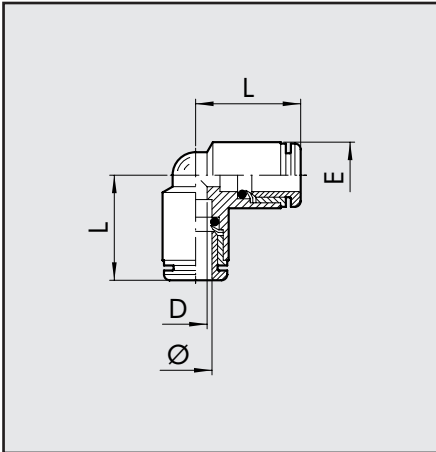
STRAIGHT, INTERMEDIATE (R3)

Code Ref. Ø1 Ø2 F L D



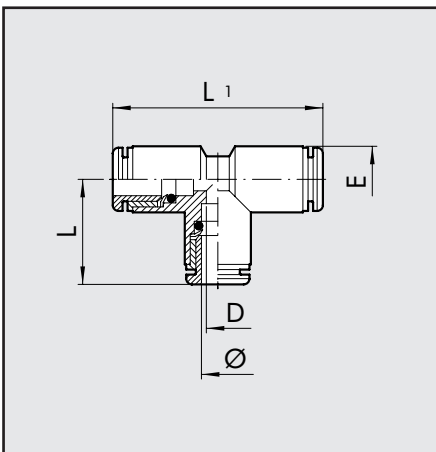
| | | | | | | |
|---------|-----|------|------|---------|------|-----|
| 2003A02 | R3 | 3 | 3 | M8x0.75 | 18.4 | 2 |
| 2003A01 | R3 | 3.17 | 3.17 | M8x0.75 | 18.4 | 2 |
| 2L03001 | RL3 | 4 | 4 | M11x1 | 30.6 | 2.5 |
| 2003002 | R3 | 5 | 5 | M14x1 | 33.5 | 4 |
| 2L03003 | RL3 | 6 | 6 | M13x1 | 33 | 4.5 |
| 2L03004 | RL3 | 8 | 8 | M15x1 | 35.7 | 6.5 |
| 2L03005 | RL3 | 10 | 10 | M17x1 | 39.2 | 8 |
| 2003006 | RL3 | 12 | 12 | M20x1 | 40.7 | 10 |
| 2003007 | RL3 | 14 | 14 | M24x1 | 45.9 | 12 |
| 2L03301 | RL3 | 4 | 6 | M13x1 | 32.7 | 2.5 |
| 2L03302 | RL3 | 4 | 8 | M15x1 | 34.4 | 2.5 |
| 2L03303 | RL3 | 6 | 8 | M15x1 | 35 | 4.5 |
| 2L03304 | RL3 | 6 | 10 | M17x1 | 37.5 | 4.5 |
| 2L03306 | RL3 | 6 | 12 | M20x1 | 39 | 4.5 |
| 2L03305 | RL3 | 8 | 10 | M17x1 | 37.8 | 6.5 |
| 2L03307 | RL3 | 8 | 12 | M20x1 | 40.1 | 6 |
| 2L03308 | RL3 | 10 | 12 | M20x1 | 40.8 | 8 |

ELBOW, INTERMEDIATE (R4)



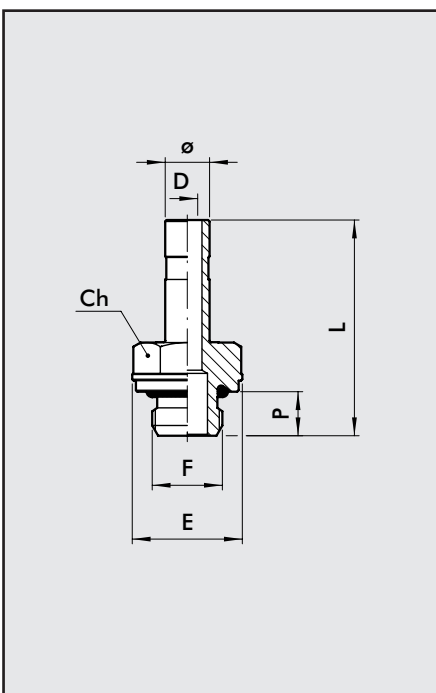
| Code | Ref. | Ø | L | D | E |
|---------|------|------|------|-----|------|
| 2004A02 | R4 | 3 | 10.4 | 2 | 6.3 |
| 2004A01 | R4 | 3.17 | 10.4 | 2 | 6.3 |
| 2L04001 | RL4 | 4 | 16.7 | 2.5 | 9.5 |
| 2004002 | R4 | 5 | 19.2 | 3 | 13.5 |
| 2L04003 | RL4 | 6 | 19 | 4.5 | 11.5 |
| 2L04004 | RL4 | 8 | 21.3 | 6.5 | 13.5 |
| 2L04005 | RL4 | 10 | 23.3 | 8 | 16 |
| 2004006 | RL4 | 12 | 26 | 10 | 20.5 |
| 2004007 | RL4 | 14 | 29.3 | 12 | 22 |

TEE, INTERMEDIATE (R5)



| Code | Ref. | Ø | L | L1 | D | E |
|---------|------|------|------|------|-----|------|
| 2005A02 | R5 | 3 | 10.4 | 20.8 | 2 | 6.3 |
| 2005A01 | R5 | 3.17 | 10.4 | 20.8 | 2 | 6.3 |
| 2L05001 | RL5 | 4 | 16.7 | 33.4 | 2.5 | 9.5 |
| 2005002 | R5 | 5 | 19.2 | 38.4 | 3 | 13.5 |
| 2L05003 | RL5 | 6 | 19 | 38 | 4.5 | 11.5 |
| 2L05004 | RL5 | 8 | 21.3 | 42.6 | 6.5 | 13.5 |
| 2L05005 | RL5 | 10 | 23.3 | 46.6 | 8 | 16 |
| 2005006 | RL5 | 12 | 26 | 52 | 10 | 20.5 |
| 2005007 | RL5 | 14 | 29.3 | 58.6 | 12 | 22 |

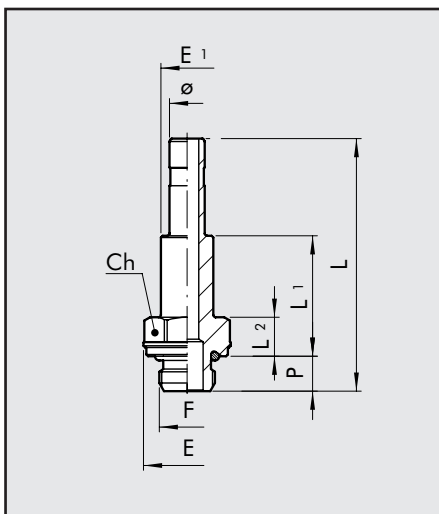
THREADED ADAPTER (R6)



| Code | Ref. | Ø | F | Ch | P | L | D | E |
|---------|------|------|---------|----|-----|------|-----|-----|
| 2006A02 | R6 | 3 | M5 | 5 | 3.5 | 17.1 | 2 | 5.8 |
| 2006A01 | R6 | 3.17 | M5 | 5 | 3.5 | 17.1 | 2 | 5.8 |
| 2006001 | R6 | 4 | M5 | 8 | 4 | 25.2 | 2.5 | 9 |
| 2006020 | R6 | 4 | M7 | 8 | 5 | 26.5 | 2.5 | 9.8 |
| 2006002 | R6 | 4 | 1/8 | 13 | 6 | 28.9 | 2.5 | 15 |
| 2006003 | R6 | 4 | 1/4 | 14 | 8 | 32.4 | 2.2 | 18 |
| 2006004 | R6 | 5 | M5 | 8 | 4 | 25.2 | 2.7 | 9 |
| 2006005 | R6 | 5 | 1/8 | 13 | 6 | 28.9 | 3 | 15 |
| 2006006 | R6 | 5 | 1/4 | 14 | 8 | 32.4 | 3 | 18 |
| 2006000 | R6 | 6 | M5 | 9 | 4 | 25.7 | 2.7 | 10 |
| 2006021 | R6 | 6 | M7 | 8 | 5 | 27 | 4 | 9.8 |
| 2006007 | R6 | 6 | 1/8 | 13 | 6 | 29.4 | 4 | 15 |
| 2006008 | R6 | 6 | 1/4 | 14 | 8 | 32.9 | 4 | 18 |
| 2006009 | R6 | 8 | 1/8 | 13 | 6 | 30.6 | 5.5 | 15 |
| 2006010 | R6 | 8 | 1/4 | 14 | 8 | 34 | 6 | 18 |
| 2006011 | R6 | 8 | 3/8 | 17 | 9 | 35.4 | 6 | 22 |
| 2006012 | R6 | 10 | 1/4 | 14 | 8 | 38.2 | 7.8 | 18 |
| 2006013 | R6 | 10 | 3/8 | 17 | 9 | 38.7 | 8 | 22 |
| 2006022 | R6 | 10 | 1/2 | 19 | 11 | 41 | 8 | 26 |
| 2006019 | R6 | 12 | 1/4 | 14 | 8 | 40.7 | 7.8 | 18 |
| 2006014 | R6 | 12 | 3/8 | 17 | 9 | 42.2 | 10 | 22 |
| 2006015 | R6 | 12 | 1/2 | 22 | 11 | 44.2 | 10 | 26 |
| 2006016 | R6 | 14 | 3/8 | 17 | 9 | 46.2 | 10 | 22 |
| 2006017 | R6 | 14 | 1/2 | 22 | 11 | 48.2 | 12 | 26 |
| 2006101 | R6 | 6 | M12X1.5 | 13 | 8 | 33 | 4 | 17 |
| 2006102 | R6 | 8 | M12X1.5 | 13 | 8 | 33.7 | 6 | 17 |

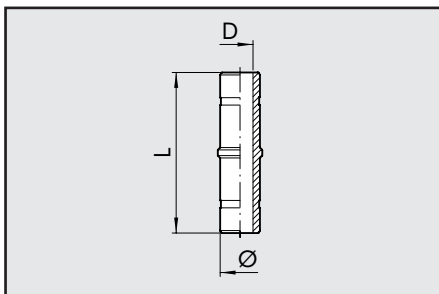


EXTENDED THREADED ADAPTER (R18)



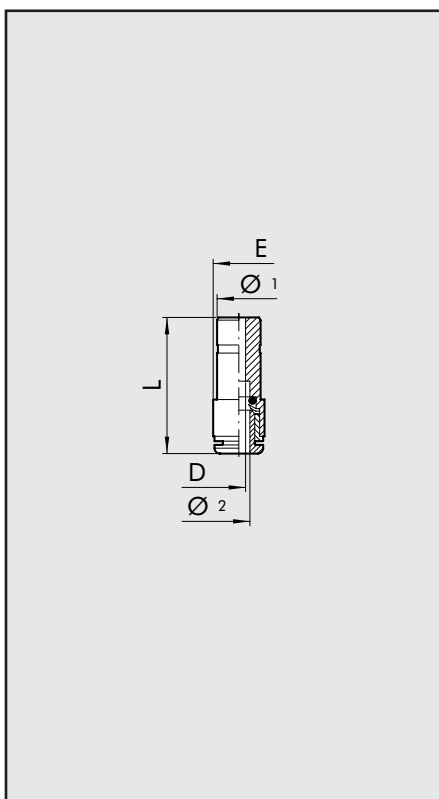
| Code | Ref. | Ø | F | Ch | P | L | L1 | L2 | E | E1 |
|---------|------|----|-----|----|---|------|------|-----|----|----|
| 2018002 | R18 | 4 | 1/8 | 13 | 6 | 40.4 | 18.2 | 6.7 | 15 | 7 |
| 2018007 | R18 | 6 | 1/8 | 13 | 6 | 43.4 | 20.7 | 6.7 | 15 | 9 |
| 2018008 | R18 | 6 | 1/4 | 14 | 8 | 46.9 | 22.2 | 8.2 | 18 | 9 |
| 2018009 | R18 | 8 | 1/8 | 13 | 6 | 46.5 | 22.7 | 6.7 | 15 | 11 |
| 2018010 | R18 | 8 | 1/4 | 14 | 8 | 50 | 24.2 | 8.2 | 18 | 11 |
| 2018011 | R18 | 8 | 3/8 | 17 | 9 | 51.4 | 24.7 | 8.7 | 22 | 13 |
| 2018012 | R18 | 10 | 1/4 | 14 | 8 | 57.2 | 27.2 | 8.2 | 18 | 12 |
| 2018013 | R18 | 10 | 3/8 | 17 | 9 | 58.7 | 27.7 | 8.7 | 22 | 12 |

EXTENSION (R7)



| Code | Ref. | Ø | L | D |
|---------|------|----|------|----|
| 2007001 | R7 | 4 | 34 | 2 |
| 2007002 | R7 | 5 | 34 | 3 |
| 2007003 | R7 | 6 | 37.5 | 4 |
| 2L07004 | RL7 | 8 | 37.5 | 6 |
| 2007005 | R7 | 10 | 45 | 8 |
| 2007006 | R7 | 12 | 48 | 10 |
| 2007007 | R7 | 14 | 58 | 12 |

REDUCER (R8)

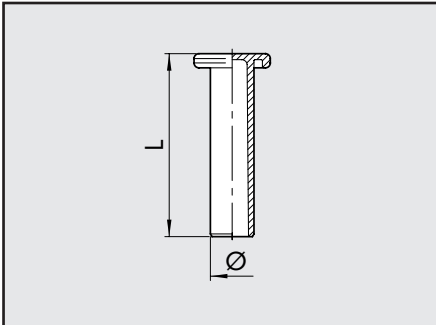


| Code | Ref. | Ø1 | Ø2 | L | D | E |
|---------|------|----|------|------|-----|------|
| 2008A01 | R8 | 4 | 3 | 26 | 2 | 6.3 |
| 2008A02 | R8 | 4 | 3.17 | 26 | 2 | 6.3 |
| 2008001 | RL8 | 5 | 4 | 32.2 | 3 | 9.5 |
| 2L08002 | RL8 | 6 | 4 | 29.9 | 2.8 | 9.5 |
| 2008003 | R8 | 6 | 5 | 36 | 4 | 12 |
| 2L08004 | RL8 | 8 | 4 | 28.7 | 2.8 | 9.5 |
| 2008005 | R8 | 8 | 5 | 34.5 | 4 | 12 |
| 2L08006 | RL8 | 8 | 6 | 31.9 | 4.5 | 11.5 |
| 2L08007 | RL8 | 10 | 6 | 36.2 | 5 | 11.5 |
| 2L08008 | RL8 | 10 | 8 | 40.8 | 7 | 14 |
| 2008009 | RL8 | 12 | 4 | 36.7 | 3 | 13 |
| 2008010 | RL8 | 12 | 6 | 42 | 5 | 13 |
| 2008011 | RL8 | 12 | 8 | 40.1 | 7 | 14 |
| 2008015 | RL8 | 12 | 10 | 44.3 | 8.2 | 16 |
| 2008014 | RL8 | 14 | 8 | 44.1 | 7 | 15.5 |
| 2008017 | RL8 | 14 | 10 | 44.3 | 8.2 | 16 |
| 2008018 | RL8 | 14 | 12 | 50 | 10 | 19.5 |

ADDITION

| | | | | | | |
|---------|-------|---|---|------|-----|------|
| 2009001 | RL8/M | 4 | 6 | 34.5 | 2.5 | 11.5 |
|---------|-------|---|---|------|-----|------|

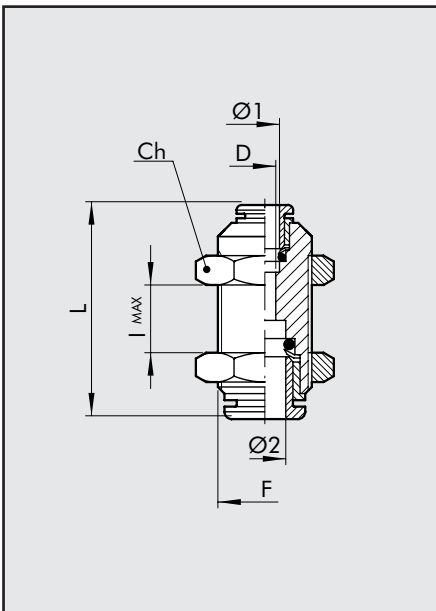
PLUG (R9)



| Code | Ref. | Ø | L |
|----------|------|------|------|
| 2010A02 | R9 | 3 | 20 |
| 2L10A01* | RL9T | 3.17 | 19.6 |
| 2L10001* | RL9T | 4 | 27 |
| 2010002 | R9 | 5 | 27 |
| 2L10003* | RL9T | 6 | 29.8 |
| 2L10004* | RL9T | 8 | 33.6 |
| 2L10005* | RL9T | 10 | 36.8 |
| 2L10006* | RL9T | 12 | 39 |
| 2010007 | R9 | 14 | 39.5 |

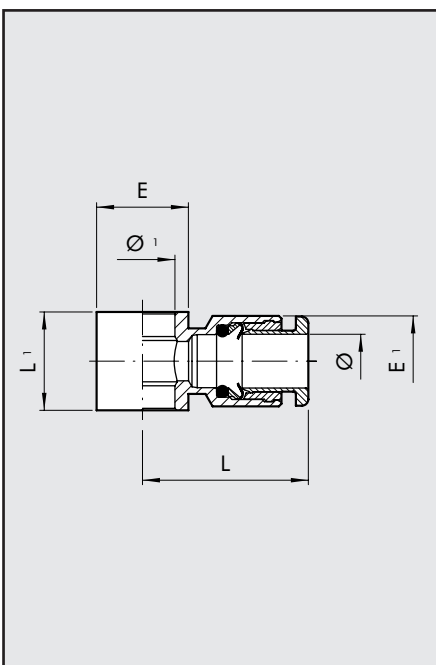
* MADE OF TECHNOPOLYMER

STRAIGHT, INTERMEDIATE, BULKMTAD (R10)



| Code | Ref. | Ø1 | Ø2 | F | Ch | L | D | I max |
|---------|------|------|------|---------|----|------|-----|-------|
| 2011A02 | R10 | 3 | 3 | M8x0.75 | 10 | 18.4 | 2 | 5 |
| 2011A01 | R10 | 3.17 | 3.17 | M8x0.75 | 10 | 18.4 | 2 | 5 |
| 2L11001 | RL10 | 4 | 4 | M11x1 | 13 | 30.6 | 2.5 | 11 |
| 2011002 | R10 | 5 | 5 | M14x1 | 17 | 33.5 | 4 | 8 |
| 2L11003 | RL10 | 6 | 6 | M13x1 | 16 | 33 | 4.5 | 12 |
| 2L11004 | RL10 | 8 | 8 | M15x1 | 17 | 35.7 | 6.5 | 13.5 |
| 2L11005 | RL10 | 10 | 10 | M17x1 | 20 | 39.2 | 8 | 17 |
| 2011006 | RL10 | 12 | 12 | M20x1 | 24 | 40.7 | 10 | 20.3 |
| 2011007 | RL10 | 14 | 14 | M24x1 | 27 | 45.9 | 12 | 21.9 |
| 2L11301 | RL10 | 4 | 6 | M13x1 | 16 | 32.7 | 2.5 | 11 |
| 2L11302 | RL10 | 4 | 8 | M15x1 | 17 | 34.4 | 2.5 | 12 |
| 2L11303 | RL10 | 6 | 8 | M15x1 | 17 | 35 | 4.5 | 13 |
| 2L11304 | RL10 | 6 | 10 | M17x1 | 20 | 37.5 | 4.5 | 14.5 |
| 2L11306 | RL10 | 6 | 12 | M20x1 | 24 | 39 | 4.5 | 16 |
| 2L11305 | RL10 | 8 | 10 | M17x1 | 20 | 37.8 | 6.5 | 15 |
| 2L11307 | RL10 | 8 | 12 | M20x1 | 24 | 40.1 | 6 | 17.5 |
| 2L11308 | RL10 | 10 | 12 | M20x1 | 24 | 40.8 | 8 | 19 |

SINGLE RING (R13)



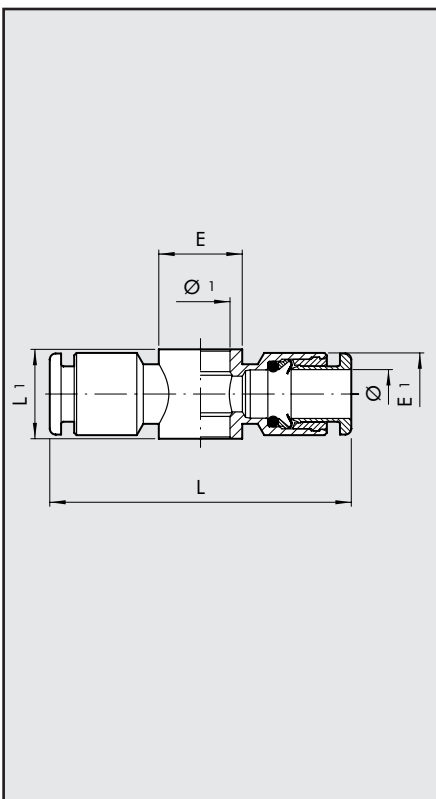
| Code | Ref. | Ø | Ø1 | L | L1 | E | E1 |
|---------|------|------|-----|------|----|-----|------|
| 2012A02 | R13 | 3 | M5 | 12.9 | 9 | 9 | 7 |
| 2012A01 | R13 | 3.17 | M5 | 12.9 | 9 | 9 | 7 |
| 2012001 | RL13 | 4 | M5 | 20.2 | 9 | 9.5 | 9.5 |
| 2012002 | RL13 | 4 | 1/8 | 21.3 | 15 | 14 | 9.5 |
| 2012003 | R13 | 5 | M5 | 23.8 | 9 | 9.5 | 12 |
| 2012004 | R13 | 5 | 1/8 | 24.8 | 15 | 14 | 12 |
| 2012005 | RL13 | 6 | 1/8 | 23 | 15 | 14 | 11.5 |
| 2012006 | RL13 | 6 | 1/4 | 24.5 | 17 | 18 | 11.5 |
| 2012007 | RL13 | 8 | 1/8 | 24.8 | 15 | 14 | 13.8 |
| 2012008 | RL13 | 8 | 1/4 | 26.5 | 17 | 18 | 13.8 |
| 2012009 | RL13 | 8 | 3/8 | 28.5 | 20 | 21 | 13.8 |
| 2012010 | RL13 | 10 | 1/4 | 31.4 | 17 | 18 | 16.5 |
| 2012011 | RL13 | 10 | 3/8 | 32.8 | 20 | 21 | 16 |
| 2012013 | RL13 | 12 | 1/4 | 33 | 17 | 18 | 19.5 |
| 2012012 | RL13 | 12 | 3/8 | 35.3 | 20 | 21 | 19.5 |
| 2012014 | RL13 | 12 | 1/2 | 37 | 24 | 26 | 19.5 |

For the rods series D, see page 4.1/37



DUAL RING (R14)

Code Ref. Ø Ø 1 L L1 E E1

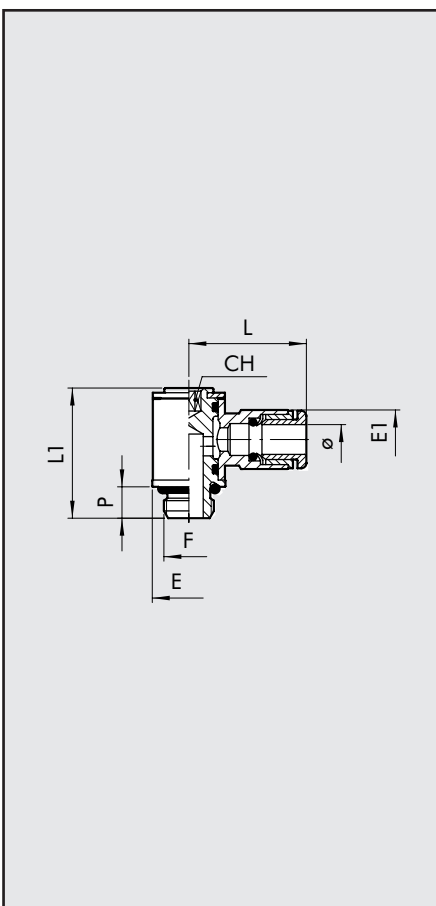


| | | | | | | | |
|---------|------|----|-----|------|----|-----|------|
| 2013001 | RL14 | 4 | M5 | 40.4 | 9 | 9.5 | 9.5 |
| 2013002 | RL14 | 4 | 1/8 | 42.6 | 15 | 14 | 9.5 |
| 2013003 | R14 | 5 | M5 | 48 | 9 | 9.5 | 12 |
| 2013004 | R14 | 5 | 1/8 | 49.5 | 15 | 14 | 13.5 |
| 2013005 | RL14 | 6 | 1/8 | 46 | 15 | 14 | 11.5 |
| 2013006 | RL14 | 6 | 1/4 | 49 | 17 | 18 | 11.5 |
| 2013007 | RL14 | 8 | 1/8 | 49.6 | 15 | 14 | 13.8 |
| 2013008 | RL14 | 8 | 1/4 | 53 | 17 | 18 | 13.8 |
| 2013009 | RL14 | 8 | 3/8 | 57 | 20 | 21 | 13.8 |
| 2013010 | RL14 | 10 | 1/4 | 62.8 | 17 | 18 | 16.5 |
| 2013011 | RL14 | 10 | 3/8 | 65.6 | 20 | 21 | 16 |

For the rods series D, see page 4.1/43

ROD, MALE SINGLE ROTARY RING (R15)

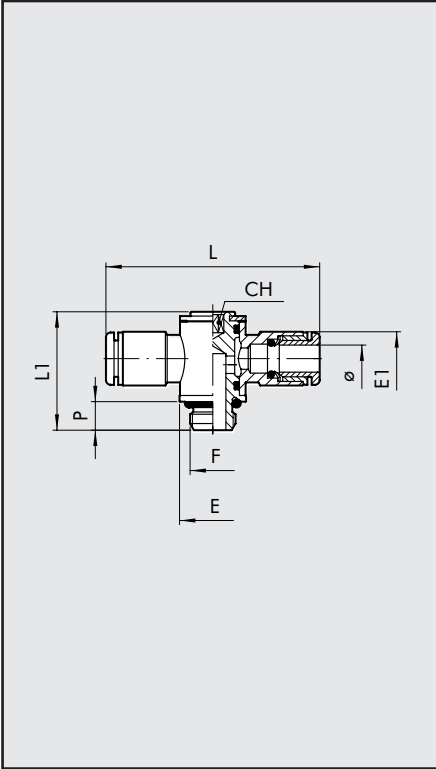
Code Ref. Ø F CH P L L1 E E1



| | | | | | | | | | |
|---------|------|------|-----|-----|-----|------|------|-----|------|
| 2014101 | R15 | 3 | M3 | 1.5 | 3 | 12.2 | 13.2 | 5.8 | 5.8 |
| 2014102 | R15 | 3.17 | M3 | 1.5 | 3 | 12.2 | 13.2 | 5.8 | 5.8 |
| 2014103 | R15 | 3 | M5 | 2 | 3.5 | 12.7 | 13.7 | 5.8 | 7 |
| 2014104 | R15 | 3.17 | M5 | 2 | 3.5 | 12.7 | 13.7 | 5.8 | 7 |
| 2L14001 | RL15 | 4 | M5 | 2 | 4 | 20.2 | 18.4 | 9.5 | 9.5 |
| 2L14020 | RL15 | 4 | M7 | 3 | 5 | 20.2 | 18.5 | 9.8 | 9.5 |
| 2L14002 | RL15 | 4 | 1/8 | 3 | 6 | 21.3 | 24.9 | 14 | 9.5 |
| 2014003 | R15 | 5 | M5 | 2 | 4 | 24 | 19 | 9.9 | 12 |
| 2014004 | R15 | 5 | 1/8 | 3 | 6 | 25 | 27 | 14 | 12 |
| 2L14106 | RL15 | 6 | M5 | 2 | 4 | 23.5 | 18.4 | 9.5 | 11.3 |
| 2L14021 | RL15 | 6 | M7 | 3 | 5 | 23.5 | 18.5 | 9.8 | 11.3 |
| 2L14005 | RL15 | 6 | 1/8 | 3 | 6 | 23 | 24.9 | 14 | 11.5 |
| 2L14007 | RL15 | 6 | 1/4 | 4 | 8 | 24.5 | 29.4 | 18 | 11.5 |
| 2L14006 | RL15 | 8 | 1/8 | 3 | 6 | 24.8 | 24.9 | 14 | 13.8 |
| 2L14008 | RL15 | 8 | 1/4 | 4 | 8 | 26.5 | 29.4 | 18 | 13.8 |
| 2L14013 | RL15 | 8 | 3/8 | 5 | 9 | 28.5 | 35.6 | 22 | 13.8 |
| 2L14009 | RL15 | 10 | 1/4 | 4 | 8 | 31.4 | 29.4 | 18 | 16.5 |
| 2L14014 | RL15 | 10 | 3/8 | 5 | 9 | 32.8 | 35.6 | 22 | 16 |
| 2014010 | RL15 | 12 | 1/4 | 4 | 8 | 33 | 29.4 | 18 | 19.5 |
| 2014011 | RL15 | 12 | 3/8 | 5 | 9 | 35.3 | 35.6 | 22 | 19.5 |
| 2014012 | RL15 | 12 | 1/2 | 8 | 11 | 37 | 40.8 | 26 | 19.5 |

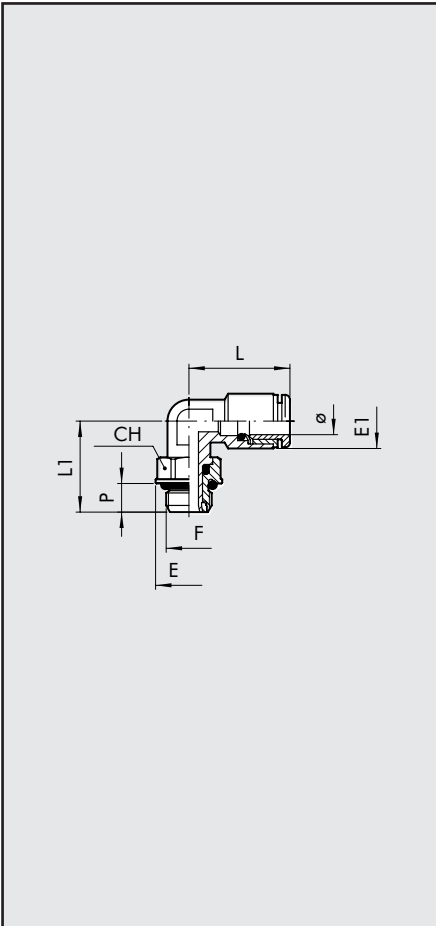
**ROD, MALE
DUAL ROTARY RING (R16)**

| Code | Ref. | Ø | F | CH | P | L | L1 | E | E1 |
|---------|------|----|-----|----|----|------|------|-----|------|
| 2L15001 | RL16 | 4 | M5 | 2 | 4 | 40.4 | 18.4 | 9.5 | 9.5 |
| 2L15020 | RL16 | 4 | M7 | 3 | 5 | 40.4 | 18.5 | 9.8 | 9.5 |
| 2L15002 | RL16 | 4 | 1/8 | 3 | 6 | 42.6 | 24.9 | 14 | 9.5 |
| 2015003 | R16 | 5 | M5 | 2 | 4 | 47.6 | 18.8 | 9.9 | 12 |
| 2015004 | R16 | 5 | 1/8 | 3 | 6 | 49.5 | 27 | 14 | 13.5 |
| 2L15106 | RL16 | 6 | M5 | 2 | 4 | 47 | 18.4 | 9.5 | 11.3 |
| 2L15021 | RL16 | 6 | M7 | 3 | 5 | 47 | 18.5 | 9.8 | 11.3 |
| 2L15005 | RL16 | 6 | 1/8 | 3 | 6 | 46 | 24.9 | 14 | 11.5 |
| 2L15007 | RL16 | 6 | 1/4 | 4 | 8 | 49 | 29.4 | 18 | 11.5 |
| 2L15006 | RL16 | 8 | 1/8 | 3 | 6 | 49.6 | 24.9 | 14 | 13.8 |
| 2L15008 | RL16 | 8 | 1/4 | 4 | 8 | 53 | 29.4 | 18 | 13.8 |
| 2L15013 | RL16 | 8 | 3/8 | 5 | 9 | 57 | 35.6 | 18 | 13.8 |
| 2L15009 | RL16 | 10 | 1/4 | 4 | 8 | 62.8 | 29.4 | 22 | 16.5 |
| 2L15014 | RL16 | 10 | 3/8 | 5 | 9 | 65.6 | 35.6 | 22 | 16 |
| 2015010 | RL16 | 12 | 1/4 | 4 | 8 | 66 | 29.4 | 18 | 19.5 |
| 2015011 | RL16 | 12 | 3/8 | 5 | 9 | 70.6 | 35.6 | 22 | 19.5 |
| 2015012 | RL16 | 12 | 1/2 | 8 | 11 | 74 | 40.8 | 26 | 19.5 |



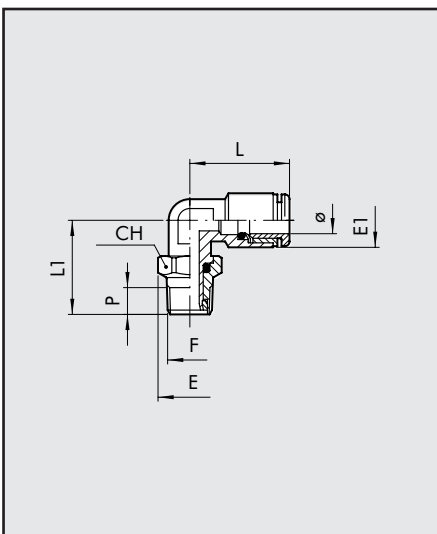
**ROTARY ELBOW, MALE,
CYLINDRICAL (R31)**

| Code | Ref. | Ø | F | CH | E | E1 | L | L1 | P |
|---------|------|----|-----|-----|-----|------|------|------|----|
| 2L31001 | RL31 | 4 | M5 | 9 | 9.9 | 9.5 | 18.6 | 15.3 | 4 |
| 2L31002 | RL31 | 4 | 1/8 | 12 | 14 | 9.5 | 18.6 | 19.1 | 6 |
| 2L31003 | RL31 | 4 | 1/4 | 14 | 18 | 9.5 | 18.6 | 21.1 | 8 |
| 2031004 | R31 | 5 | M5 | 9.9 | 9.9 | 13.5 | 22.8 | 15.3 | 4 |
| 2031005 | R31 | 5 | 1/8 | 12 | 14 | 13.5 | 23 | 19.1 | 6 |
| 2031006 | R31 | 5 | 1/4 | 14 | 18 | 13.5 | 23 | 21.1 | 8 |
| 2L31007 | RL31 | 6 | M5 | 9 | 9.9 | 11.8 | 21.9 | 15.3 | 4 |
| 2L31008 | RL31 | 6 | 1/8 | 12 | 14 | 11.8 | 21.9 | 19.1 | 6 |
| 2L31009 | RL31 | 6 | 1/4 | 14 | 18 | 11.8 | 21.9 | 21.1 | 8 |
| 2L31010 | RL31 | 8 | 1/8 | 12 | 14 | 13.5 | 25.4 | 19.1 | 6 |
| 2L31011 | RL31 | 8 | 1/4 | 14 | 18 | 13.5 | 25.4 | 21.1 | 8 |
| 2L31012 | RL31 | 8 | 3/8 | 17 | 22 | 13.8 | 23.6 | 27.1 | 9 |
| 2L31013 | RL31 | 10 | 1/4 | 14 | 18 | 16 | 27.2 | 24.8 | 8 |
| 2L31014 | RL31 | 10 | 3/8 | 17 | 22 | 16 | 27.2 | 27.1 | 9 |
| 2031015 | RL31 | 10 | 1/2 | 22 | 26 | 16 | 27.2 | 30.7 | 11 |
| 2031016 | RL31 | 12 | 1/4 | 14 | 18 | 20 | 30 | 25.6 | 8 |
| 2031017 | RL31 | 12 | 3/8 | 17 | 22 | 20 | 30 | 27.1 | 9 |
| 2031018 | RL31 | 12 | 1/2 | 22 | 26 | 20 | 30 | 30.7 | 11 |
| 2031019 | RL31 | 14 | 1/2 | 22 | 26 | 21.3 | 33 | 32.3 | 11 |



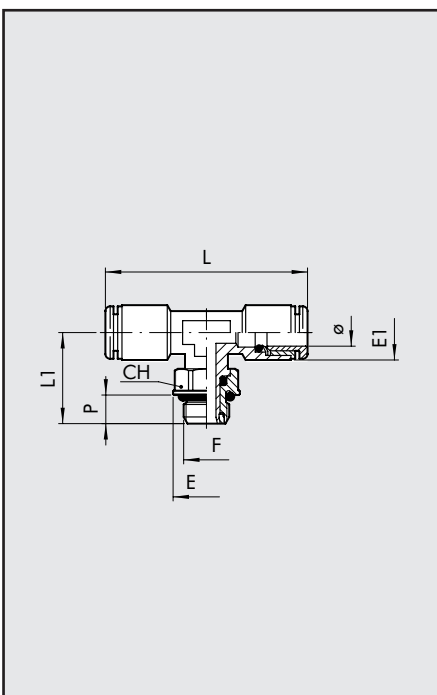


ROTARY ELBOW, MALE, CONICAL (R31C)



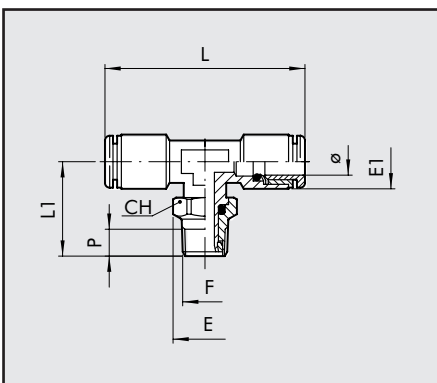
| Code | Ref. | Ø | F | Ch | E | E1 | L | L1 | P |
|---------|--------|----|-----|----|------|------|------|------|-----|
| 2L31C02 | RL31/C | 4 | 1/8 | 12 | 13.3 | 9.5 | 18.6 | 19.8 | 6.2 |
| 2L31C03 | RL31/C | 4 | 1/4 | 14 | 15.4 | 9.5 | 18.6 | 22.6 | 8.5 |
| 2L31C08 | RL31/C | 6 | 1/8 | 12 | 13.3 | 11.8 | 21.9 | 19.8 | 6.2 |
| 2L31C09 | RL31/C | 6 | 1/4 | 14 | 15.4 | 11.8 | 21.9 | 22.6 | 8.5 |
| 2L31C10 | RL31/C | 8 | 1/8 | 12 | 13.3 | 13.5 | 25.4 | 19.8 | 6.2 |
| 2L31C11 | RL31/C | 8 | 1/4 | 14 | 15.4 | 13.5 | 25.4 | 23.6 | 8.5 |
| 2L31C12 | RL31/C | 8 | 3/8 | 17 | 19.2 | 13.8 | 23.6 | 27.1 | 9 |
| 2L31C13 | RL31/C | 10 | 1/4 | 14 | 15.4 | 16 | 27.2 | 26.3 | 8.5 |
| 2L31C14 | RL31/C | 10 | 3/8 | 17 | 19.2 | 16 | 27.2 | 27.1 | 9 |
| 2031C15 | RL31/C | 12 | 3/8 | 17 | 19.2 | 20 | 30 | 27.1 | 9 |
| 2031C16 | RL31/C | 12 | 1/2 | 22 | 24.6 | 20 | 30 | 31.9 | 11 |

CENTRAL TEE, MALE, CYLINDRICAL, ROTARY (R32)

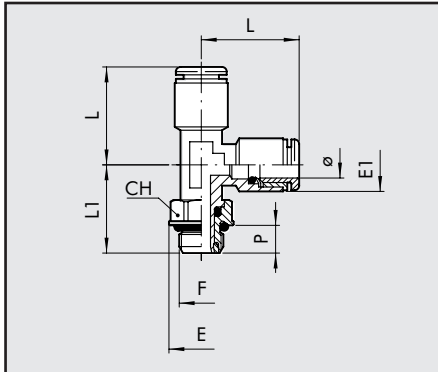


| Code | Ref. | Ø | F | CH | E | E1 | L | L1 | P |
|---------|------|----|-----|----|-----|------|------|------|----|
| 2L32001 | RL32 | 4 | M5 | 9 | 9.9 | 9.5 | 37.2 | 15.3 | 4 |
| 2L32002 | RL32 | 4 | 1/8 | 12 | 14 | 9.5 | 37.2 | 19.1 | 6 |
| 2L32003 | RL32 | 4 | 1/4 | 14 | 18 | 9.5 | 37.2 | 21.1 | 8 |
| 2032005 | R32 | 5 | 1/8 | 12 | 14 | 13.5 | 45.6 | 19.1 | 6 |
| 2L32004 | RL32 | 6 | M5 | 9 | 9.9 | 11.8 | 43.8 | 15.3 | 4 |
| 2L32008 | RL32 | 6 | 1/8 | 12 | 14 | 11.8 | 43.8 | 19.1 | 6 |
| 2L32009 | RL32 | 6 | 1/4 | 14 | 18 | 11.8 | 43.8 | 21.1 | 8 |
| 2L32010 | RL32 | 8 | 1/8 | 12 | 14 | 13.5 | 50.8 | 19.1 | 6 |
| 2L32011 | RL32 | 8 | 1/4 | 14 | 18 | 13.5 | 50.8 | 21.1 | 8 |
| 2L32012 | RL32 | 8 | 3/8 | 17 | 22 | 13.8 | 47.2 | 27.1 | 9 |
| 2L32013 | RL32 | 10 | 1/4 | 14 | 18 | 16 | 44.4 | 21.8 | 8 |
| 2L32014 | RL32 | 10 | 3/8 | 17 | 22 | 16 | 44.4 | 27.1 | 9 |
| 2032017 | RL32 | 12 | 3/8 | 17 | 22 | 20 | 60 | 27.1 | 9 |
| 2032018 | RL32 | 12 | 1/2 | 22 | 26 | 20 | 60 | 30.7 | 11 |
| 2032019 | RL32 | 14 | 1/2 | 22 | 26 | 21.3 | 66 | 32.3 | 11 |

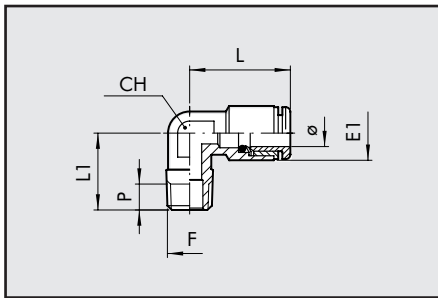
CENTRAL TEE, MALE, CONICAL, ROTARY (R32C)



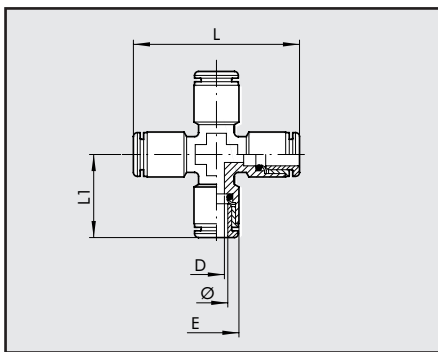
| Code | Ref. | Ø | F | CH | E | E1 | L | L1 | P |
|---------|--------|----|-----|----|------|------|------|------|-----|
| 2L32C02 | RL32/C | 4 | 1/8 | 12 | 13.3 | 9.5 | 37.2 | 19.8 | 6.2 |
| 2L32C03 | RL32/C | 4 | 1/4 | 14 | 15.4 | 9.5 | 37.2 | 22.6 | 8.5 |
| 2L32C08 | RL32/C | 6 | 1/8 | 12 | 13.3 | 11.8 | 43.8 | 19.8 | 6.2 |
| 2L32C09 | RL32/C | 6 | 1/4 | 14 | 15.4 | 11.8 | 43.8 | 22.6 | 8.5 |
| 2L32C10 | RL32/C | 8 | 1/8 | 12 | 13.3 | 13.5 | 50.8 | 19.8 | 6.2 |
| 2L32C11 | RL32/C | 8 | 1/4 | 14 | 15.4 | 13.5 | 50.8 | 23.6 | 8.5 |
| 2L32C12 | RL32/C | 8 | 3/8 | 17 | 19.2 | 13.8 | 47.2 | 27.1 | 9 |
| 2L32C13 | RL32/C | 10 | 1/4 | 14 | 15.4 | 16 | 44.4 | 26.3 | 8.5 |
| 2L32C14 | RL32/C | 10 | 3/8 | 17 | 19.2 | 16 | 44.4 | 27.1 | 9 |

LATERAL TEE, MALE, CYLINDRICAL, ROTARY (R38)


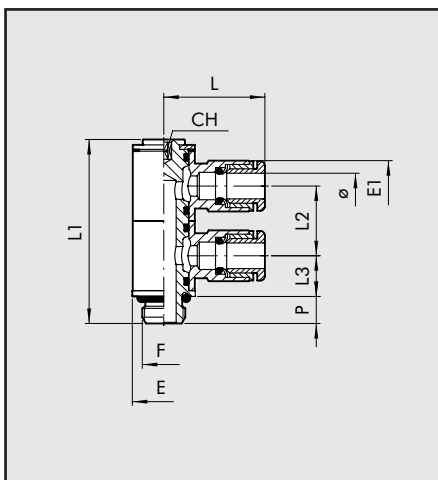
| Code | Ref. | Ø | F | Ch | E | E1 | L | L1 | P |
|---------|------|----|-----|----|----|------|------|------|----|
| 2L38002 | RL38 | 4 | 1/8 | 12 | 14 | 9.5 | 18.6 | 19.1 | 6 |
| 2038005 | R38 | 5 | 1/8 | 12 | 14 | 13.5 | 22.8 | 19.1 | 6 |
| 2L38008 | RL38 | 6 | 1/8 | 12 | 14 | 11.5 | 21.9 | 19.1 | 6 |
| 2L38009 | RL38 | 6 | 1/4 | 14 | 18 | 11.5 | 21.9 | 21.1 | 8 |
| 2L38010 | RL38 | 8 | 1/8 | 12 | 14 | 13.5 | 25.4 | 19.1 | 6 |
| 2L38011 | RL38 | 8 | 1/4 | 14 | 18 | 13.5 | 25.4 | 22.1 | 8 |
| 2L38013 | RL38 | 10 | 1/4 | 14 | 18 | 16 | 27.2 | 21.8 | 8 |
| 2L38014 | RL38 | 10 | 3/8 | 17 | 22 | 16 | 27.2 | 27.1 | 9 |
| 2038015 | RL38 | 12 | 3/8 | 17 | 22 | 20 | 30 | 27.1 | 9 |
| 2038016 | RL38 | 12 | 1/2 | 22 | 26 | 20 | 30 | 30.7 | 11 |

ELBOW, MALE, CONICAL (R39C)


| Code | Ref. | Ø | F | CH | E1 | L | L1 | P |
|---------|--------|----|--------------|----|------|------|------|-----|
| 2L39C02 | RL39/C | 4 | 1/8 | 10 | 9.5 | 18.6 | 16 | 6.2 |
| 2L39C08 | RL39/C | 6 | 1/8 | 10 | 11.8 | 21.9 | 16 | 6.2 |
| 2L39C09 | RL39/C | 6 | 1/4 | 10 | 11.8 | 21.9 | 18.5 | 8.5 |
| 2039Z07 | RL39/Z | 6 | 12x1 con. | 10 | 11.8 | 21.9 | 17.5 | 7 |
| 2039Z08 | RL39/Z | 6 | 12x1.25 con. | 10 | 11.8 | 21.9 | 17.5 | 7 |
| 2L39C10 | RL39/C | 8 | 1/8 | 10 | 13.5 | 25.4 | 16 | 6.2 |
| 2L39C11 | RL39/C | 8 | 1/4 | 10 | 13.5 | 25.4 | 18.5 | 8.5 |
| 2L39C13 | RL39/C | 10 | 1/4 | 14 | 16 | 27.2 | 22 | 8.5 |

CROSS FITTING (RL40)


| Code | Ref. | Ø | D | E | L | L1 |
|---------|------|---|-----|------|------|------|
| 2L40001 | RL40 | 4 | 3 | 9.5 | 37.2 | 18.6 |
| 2L40003 | RL40 | 6 | 4.5 | 11.3 | 43.8 | 21.9 |
| 2L40004 | RL40 | 8 | 6.5 | 14 | 50.8 | 25.4 |

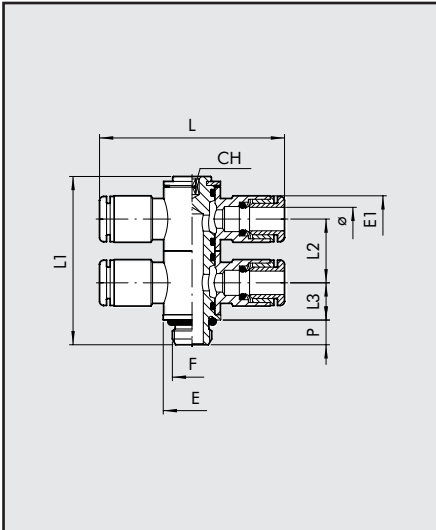
DUAL ROD SINGLE ROTARY RINGS (R50)


| Code | Ref. | Ø | F | CH | E | E1 | L | L1 | L2 | L3 | P |
|---------|------|----|-----|----|-----|------|------|------|------|------|---|
| 2L50001 | RL50 | 4 | M5 | 2 | 9.5 | 9.5 | 20.2 | 30.3 | 11.5 | 6.8 | 4 |
| 2L50002 | RL50 | 4 | 1/8 | 3 | 14 | 9.5 | 20.2 | 40.9 | 15.5 | 9.1 | 6 |
| 2033002 | R33 | 5 | 1/8 | 5 | 14 | 12 | 25 | 42 | 15 | 10.5 | 6 |
| 2L50007 | RL50 | 6 | M5 | 2 | 9.5 | 11.3 | 23.5 | 30.3 | 11.5 | 6.8 | 4 |
| 2L50008 | RL50 | 6 | 1/8 | 3 | 14 | 11.3 | 23.5 | 40.9 | 15.5 | 9.1 | 6 |
| 2L50009 | RL50 | 6 | 1/4 | 4 | 18 | 11.5 | 23 | 47 | 17.2 | 10.2 | 8 |
| 2L50010 | RL50 | 8 | 1/8 | 3 | 14 | 13.8 | 24.8 | 40.9 | 15.5 | 9.1 | 6 |
| 2L50011 | RL50 | 8 | 1/4 | 4 | 18 | 13.8 | 26.5 | 47 | 17.2 | 10.2 | 8 |
| 2L50013 | RL50 | 10 | 1/4 | 4 | 18 | 16.5 | 31.4 | 47 | 17.2 | 10.2 | 8 |



**DUAL ROD
DUAL ROTARY RINGS (RL51)**

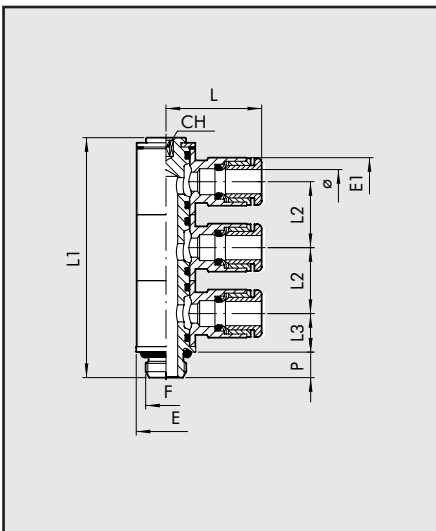
| Code | Ref. | ∅ | F | Ch | E | E1 | L | L1 | L2 | L3 | P |
|------|------|---|---|----|---|----|---|----|----|----|---|
|------|------|---|---|----|---|----|---|----|----|----|---|



| | | | | | | | | | | | |
|---------|------|----|-----|---|-----|------|------|------|------|------|---|
| 2L51001 | RL51 | 4 | M5 | 2 | 9.5 | 9.5 | 40.4 | 30.3 | 11.5 | 6.8 | 4 |
| 2L51002 | RL51 | 4 | 1/8 | 3 | 14 | 9.5 | 40.4 | 40.9 | 15.5 | 9.1 | 6 |
| 2L51007 | RL51 | 6 | M5 | 2 | 9.5 | 11.3 | 47 | 30.3 | 11.5 | 6.8 | 4 |
| 2L51008 | RL51 | 6 | 1/8 | 3 | 14 | 11.3 | 47 | 40.9 | 15.5 | 9.1 | 6 |
| 2L51009 | RL51 | 6 | 1/4 | 4 | 18 | 11.5 | 46 | 47 | 17.2 | 10.2 | 8 |
| 2L51010 | RL51 | 8 | 1/8 | 3 | 14 | 13.8 | 49.6 | 40.9 | 15.5 | 9.1 | 6 |
| 2L51011 | RL51 | 8 | 1/4 | 4 | 18 | 13.8 | 53 | 47 | 17.2 | 10.2 | 8 |
| 2L51013 | RL51 | 10 | 1/4 | 4 | 18 | 16.5 | 62.8 | 47 | 17.2 | 10.2 | 8 |

**TRIPLE ROD
SINGLE ROTARY RINGS (RL52)**

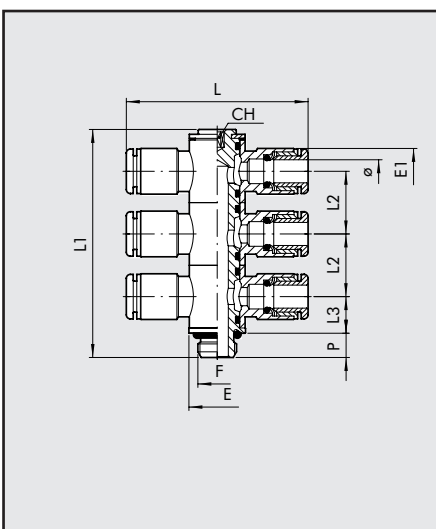
| Code | Ref. | ∅ | F | Ch | E | E1 | L | L1 | L2 | L3 | P |
|------|------|---|---|----|---|----|---|----|----|----|---|
|------|------|---|---|----|---|----|---|----|----|----|---|



| | | | | | | | | | | | |
|---------|------|----|-----|---|----|------|------|------|------|------|---|
| 2L52002 | RL52 | 4 | 1/8 | 3 | 14 | 9.5 | 20.2 | 56.7 | 15.5 | 9.1 | 6 |
| 2L52008 | RL52 | 6 | 1/8 | 3 | 14 | 11.3 | 23.5 | 56.7 | 15.5 | 9.1 | 6 |
| 2L52009 | RL52 | 6 | 1/4 | 4 | 18 | 11.5 | 23 | 64.3 | 17.2 | 10.2 | 8 |
| 2L52010 | RL52 | 8 | 1/8 | 3 | 14 | 13.8 | 24.8 | 56.7 | 15.5 | 9.1 | 6 |
| 2L52011 | RL52 | 8 | 1/4 | 4 | 18 | 13.8 | 26.5 | 64.3 | 17.2 | 10.2 | 8 |
| 2L52013 | RL52 | 10 | 1/4 | 4 | 18 | 16.5 | 31.4 | 64.3 | 17.2 | 10.2 | 8 |

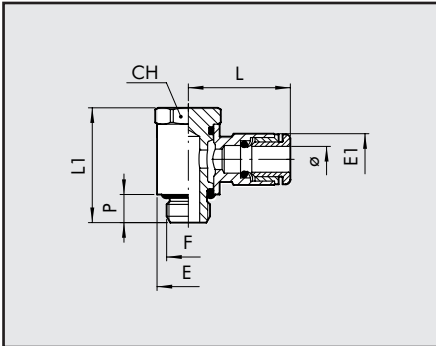
**TRIPLE ROD
DUAL ROTARY RINGS (RL53)**

| Code | Ref. | ∅ | F | Ch | E | E1 | L | L1 | L2 | L3 | P |
|------|------|---|---|----|---|----|---|----|----|----|---|
|------|------|---|---|----|---|----|---|----|----|----|---|



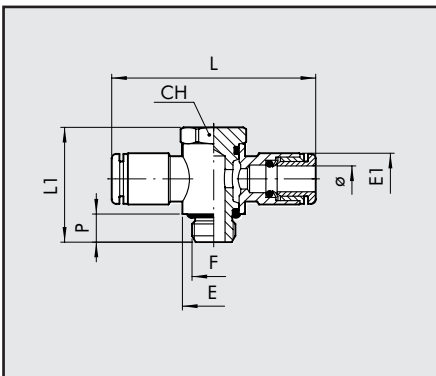
| | | | | | | | | | | | |
|---------|------|----|-----|---|----|------|------|------|------|------|---|
| 2L53002 | RL53 | 4 | 1/8 | 3 | 14 | 9.5 | 40.2 | 56.7 | 15.5 | 9.1 | 6 |
| 2L53008 | RL53 | 6 | 1/8 | 3 | 14 | 11.3 | 47 | 56.7 | 15.5 | 9.1 | 6 |
| 2L53009 | RL53 | 6 | 1/4 | 4 | 18 | 11.5 | 46 | 64.3 | 17.2 | 10.2 | 8 |
| 2L53010 | RL53 | 8 | 1/8 | 3 | 14 | 13.8 | 49.6 | 56.7 | 15.5 | 9.1 | 6 |
| 2L53011 | RL53 | 8 | 1/4 | 4 | 18 | 13.8 | 53 | 64.3 | 17.2 | 10.2 | 8 |
| 2L53013 | RL53 | 10 | 1/4 | 4 | 18 | 16.5 | 62.8 | 64.3 | 17.2 | 10.2 | 8 |

**MALE ROD,
SINGLE SWIVEL RING (RL54)**



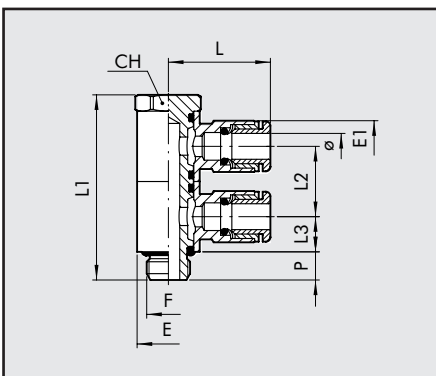
| Code | Ref. | Ø | F | Ch | E | E1 | L | L1 | P |
|---------|------|----|-----|----|-----|------|------|------|-----|
| 2L54001 | RL54 | 4 | M5 | 9 | 9.5 | 9.5 | 20.2 | 18.7 | 4.5 |
| 2L54002 | RL54 | 4 | 1/8 | 13 | 14 | 9.5 | 21.3 | 25.3 | 6.2 |
| 2L54007 | RL54 | 6 | M5 | 9 | 9.5 | 11.3 | 23.5 | 18.7 | 4.5 |
| 2L54008 | RL54 | 6 | 1/8 | 13 | 14 | 11.5 | 23 | 25.3 | 6.2 |
| 2L54009 | RL54 | 6 | 1/4 | 16 | 18 | 11.5 | 24.5 | 29.2 | 8 |
| 2L54010 | RL54 | 8 | 1/8 | 13 | 14 | 13.8 | 24.8 | 25.3 | 6.2 |
| 2L54011 | RL54 | 8 | 1/4 | 16 | 18 | 13.8 | 26.5 | 29.2 | 8 |
| 2L54012 | RL54 | 8 | 3/8 | 20 | 21 | 13.8 | 28.5 | 35.4 | 9 |
| 2L54013 | RL54 | 10 | 1/4 | 16 | 18 | 16.5 | 31.4 | 29.2 | 8 |
| 2L54014 | RL54 | 10 | 3/8 | 20 | 21 | 16 | 32.8 | 35.4 | 9 |
| 2L54018 | RL54 | 12 | 1/4 | 16 | 18 | 19.5 | 33 | 29.2 | 8 |
| 2L54016 | RL54 | 12 | 3/8 | 20 | 21 | 19.5 | 35.3 | 35.4 | 9 |
| 2L54017 | RL54 | 12 | 1/2 | 25 | 26 | 19.5 | 37 | 40 | 11 |

**MALE ROD,
DUAL SWIVEL RING (RL55)**



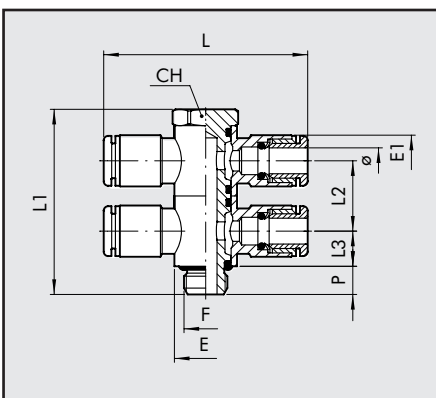
| Code | Ref. | Ø | F | Ch | E | E1 | L | L1 | P |
|---------|------|----|-----|----|-----|------|------|------|-----|
| 2L55001 | RL55 | 4 | M5 | 9 | 9.5 | 9.5 | 40.4 | 18.7 | 4.5 |
| 2L55002 | RL55 | 4 | 1/8 | 13 | 14 | 9.5 | 42.6 | 25.3 | 6 |
| 2L55007 | RL55 | 6 | M5 | 9 | 9.5 | 11.3 | 47 | 18.7 | 4.5 |
| 2L55008 | RL55 | 6 | 1/8 | 13 | 14 | 11.5 | 46 | 25.3 | 6 |
| 2L55009 | RL55 | 6 | 1/4 | 16 | 18 | 11.5 | 49 | 29.2 | 8 |
| 2L55010 | RL55 | 8 | 1/8 | 13 | 14 | 13.8 | 49.6 | 25.3 | 6 |
| 2L55011 | RL55 | 8 | 1/4 | 16 | 18 | 13.8 | 53 | 29.2 | 8 |
| 2L55012 | RL55 | 8 | 3/8 | 20 | 21 | 13.8 | 57 | 35.4 | 9 |
| 2L55013 | RL55 | 10 | 1/4 | 16 | 18 | 16.5 | 62.8 | 29.2 | 8 |
| 2L55014 | RL55 | 10 | 3/8 | 20 | 21 | 16 | 65.6 | 35.4 | 9 |
| 2L55018 | RL55 | 12 | 1/4 | 16 | 18 | 19.5 | 66 | 29.2 | 8 |
| 2L55016 | RL55 | 12 | 3/8 | 20 | 21 | 19.5 | 70.6 | 35.4 | 9 |
| 2L55017 | RL55 | 12 | 1/2 | 25 | 26 | 19.5 | 74 | 40 | 11 |

**DUAL ROD, MALE
SINGLE SWIVEL RINGS (RL56)**



| Code | Ref. | Ø | F | Ch | E | E1 | L | L1 | L2 | L3 | P |
|---------|------|----|-----|----|-----|------|------|------|------|------|-----|
| 2L56001 | RL56 | 4 | M5 | 9 | 9.5 | 9.5 | 20.2 | 30.2 | 11.5 | 5.8 | 4.5 |
| 2L56002 | RL56 | 4 | 1/8 | 13 | 14 | 9.5 | 21.3 | 41 | 15.5 | 7.8 | 6 |
| 2L56007 | RL56 | 6 | M5 | 9 | 9.5 | 11.3 | 23.5 | 30.2 | 11.5 | 5.8 | 4.5 |
| 2L56008 | RL56 | 6 | 1/8 | 13 | 14 | 11.5 | 23 | 41 | 15.5 | 7.8 | 6 |
| 2L56009 | RL56 | 6 | 1/4 | 16 | 18 | 11.5 | 24.5 | 46.4 | 17.2 | 8.6 | 8 |
| 2L56010 | RL56 | 8 | 1/8 | 13 | 14 | 13.8 | 24.8 | 41 | 15.5 | 7.8 | 6 |
| 2L56011 | RL56 | 8 | 1/4 | 16 | 18 | 13.8 | 26.5 | 46.4 | 17.2 | 8.6 | 8 |
| 2L56012 | RL56 | 8 | 3/8 | 20 | 21 | 13.8 | 28.5 | 56.8 | 21.4 | 10.7 | 9 |
| 2L56013 | RL56 | 10 | 1/4 | 16 | 18 | 16.5 | 31.4 | 46.4 | 17.2 | 8.6 | 8 |
| 2L56014 | RL56 | 10 | 3/8 | 20 | 21 | 16 | 32.8 | 56.8 | 21.4 | 10.7 | 9 |
| 2L56016 | RL56 | 12 | 3/8 | 20 | 21 | 19.5 | 35.3 | 56.8 | 21.4 | 10.7 | 9 |
| 2L56017 | RL56 | 12 | 1/2 | 25 | 26 | 19.5 | 37 | 64 | 24 | 12 | 11 |

**DUAL ROD, MALE
DUAL SWIVEL RINGS (RL57)**

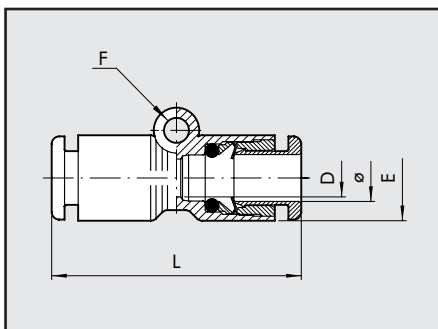


| Code | Ref. | Ø | F | Ch | E | E1 | L | L1 | L2 | L3 | P |
|---------|------|----|-----|----|-----|------|------|------|------|------|-----|
| 2L57001 | RL57 | 4 | M5 | 9 | 9.5 | 9.5 | 40.4 | 30.2 | 11.5 | 5.8 | 4.5 |
| 2L57002 | RL57 | 4 | 1/8 | 13 | 14 | 9.5 | 42.6 | 41 | 15.5 | 7.8 | 6 |
| 2L57007 | RL57 | 6 | M5 | 9 | 9.5 | 11.3 | 47 | 30.2 | 11.5 | 5.8 | 4.5 |
| 2L57008 | RL57 | 6 | 1/8 | 13 | 14 | 11.5 | 46 | 41 | 15.5 | 7.8 | 6 |
| 2L57009 | RL57 | 6 | 1/4 | 16 | 18 | 11.5 | 49 | 46.4 | 17.2 | 8.6 | 8 |
| 2L57010 | RL57 | 8 | 1/8 | 13 | 14 | 13.8 | 49.6 | 41 | 15.5 | 7.8 | 6 |
| 2L57011 | RL57 | 8 | 1/4 | 16 | 18 | 13.8 | 53 | 46.4 | 17.2 | 8.6 | 8 |
| 2L57012 | RL57 | 8 | 3/8 | 20 | 21 | 13.8 | 57 | 56.8 | 21.4 | 10.7 | 9 |
| 2L57013 | RL57 | 10 | 1/4 | 16 | 18 | 16.5 | 62.8 | 46.4 | 17.2 | 8.6 | 8 |
| 2L57014 | RL57 | 10 | 3/8 | 20 | 21 | 16 | 65.6 | 56.8 | 21.4 | 10.7 | 9 |
| 2L57016 | RL57 | 12 | 3/8 | 20 | 21 | 19.5 | 70.6 | 56.8 | 21.4 | 10.7 | 9 |
| 2L57017 | RL57 | 12 | 1/2 | 25 | 26 | 19.5 | 74 | 64 | 24 | 12 | 11 |



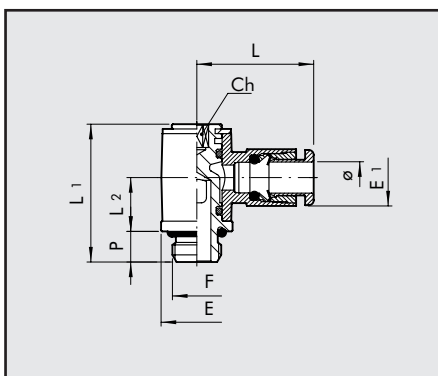
TECHNOPOLYMER FITTINGS

STRAIGHT, INTERMEDIATE, TECHNOPOLYMER (R19)



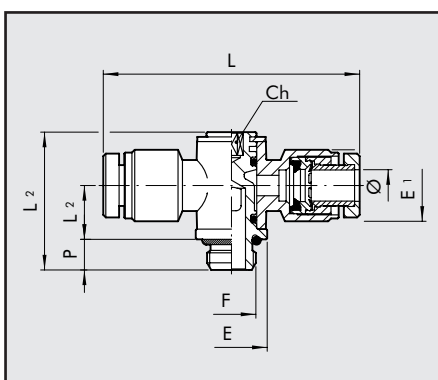
| Code | Ref. | Ø | E | L | D | F |
|---------|------|----|------|------|------|-----|
| 2019001 | RL19 | 4 | 9.2 | 30.4 | 3 | 3.3 |
| 2019002 | R19 | 5 | 14 | 33.5 | 4 | - |
| 2019003 | RL19 | 6 | 11.3 | 33 | 5 | 3.3 |
| 2019004 | RL19 | 8 | 13.8 | 36.2 | 6.5 | 3.3 |
| 2019005 | RL19 | 10 | 16 | 38 | 8.5 | 3.3 |
| 2019006 | RL19 | 12 | 19.5 | 40 | 10.5 | 3.3 |

MALE ROD, SINGLE ROTARY RING, TECHNOPOLYMER (R20)



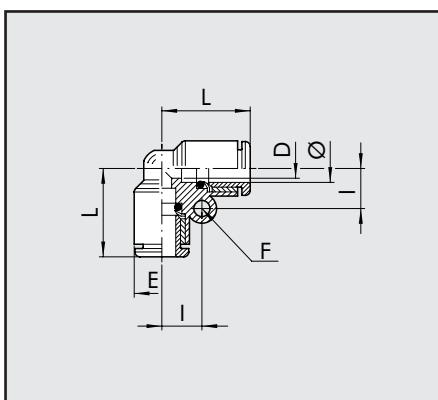
| Code | Ref. | Ø | F | Ch | P | L | L1 | L2 | E | E1 |
|---------|------|----|-----|----|----|------|------|------|-----|------|
| 2020001 | RL20 | 4 | M5 | 2 | 4 | 18.7 | 18.4 | 9.1 | 8 | 9.2 |
| 2020002 | RL20 | 4 | 1/8 | 3 | 6 | 21 | 24.9 | 12.3 | 14 | 9.2 |
| 2020003 | R20 | 5 | M5 | 2 | 4 | 21.5 | 18.8 | 8.5 | 9.9 | 13.5 |
| 2020004 | R20 | 5 | 1/8 | 3 | 6 | 23 | 27 | 10.5 | 14 | 13.5 |
| 2020016 | RL20 | 6 | M5 | 2 | 4 | 20.8 | 18.4 | 9.1 | 8 | 11.3 |
| 2020005 | RL20 | 6 | 1/8 | 3 | 6 | 22.3 | 24.9 | 12.3 | 14 | 11.3 |
| 2020007 | RL20 | 6 | 1/4 | 4 | 8 | 24.3 | 29.4 | 14.3 | 18 | 11.3 |
| 2020006 | RL20 | 8 | 1/8 | 3 | 6 | 25.6 | 24.9 | 12.3 | 14 | 13.8 |
| 2020008 | RL20 | 8 | 1/4 | 4 | 8 | 27.2 | 29.4 | 14.3 | 18 | 13.8 |
| 2020009 | RL20 | 10 | 1/4 | 4 | 8 | 28.6 | 29.4 | 14.3 | 18 | 16 |
| 2L20017 | RL20 | 10 | 3/8 | 5 | 9 | 30.5 | 35.6 | 15.3 | 22 | 16 |
| 2020010 | RL20 | 12 | 1/4 | 4 | 8 | 31 | 29.4 | 14.3 | 18 | 19.5 |
| 2020011 | RL20 | 12 | 3/8 | 5 | 9 | 32.4 | 35.6 | 17.5 | 22 | 19.5 |
| 2020012 | RL20 | 12 | 1/2 | 8 | 11 | 34 | 40.8 | 19.2 | 26 | 19.5 |

MALE ROD, DUAL ROTARY RING, TECHNOPOLYMER (R20/A)



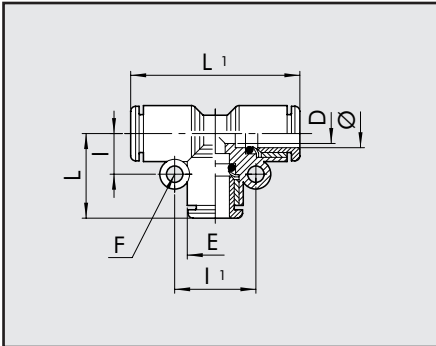
| Code | Ref. | Ø | F | Ch | P | L | L1 | L2 | E | E1 |
|---------|-------|----|-----|----|----|----|------|------|-----|------|
| 2020A01 | R20/A | 4 | M5 | 2 | 4 | 40 | 16.8 | 6.5 | 9.9 | 10.9 |
| 2020A02 | R20/A | 4 | 1/8 | 3 | 6 | 45 | 27 | 10.5 | 14 | 12.5 |
| 2020A03 | R20/A | 5 | M5 | 2 | 4 | 43 | 18.8 | 8.5 | 9.9 | 13.5 |
| 2020A04 | R20/A | 5 | 1/8 | 3 | 6 | 46 | 27 | 10.5 | 14 | 13.5 |
| 2020A05 | R20/A | 6 | 1/8 | 3 | 6 | 45 | 27 | 10.5 | 14 | 15 |
| 2020A07 | R20/A | 6 | 1/4 | 4 | 8 | 48 | 31.5 | 11.5 | 18 | 15 |
| 2020A06 | R20/A | 8 | 1/8 | 3 | 6 | 51 | 27 | 10.5 | 14 | 16.3 |
| 2020A08 | R20/A | 8 | 1/4 | 4 | 8 | 54 | 31.5 | 11.5 | 18 | 16.3 |
| 2020A09 | R20/A | 10 | 1/4 | 4 | 8 | 64 | 31.5 | 11.5 | 18 | 18.5 |
| 2020A10 | R20/A | 12 | 1/4 | 4 | 8 | 64 | 31.5 | 11.5 | 18 | 21 |
| 2020A11 | R20/A | 12 | 3/8 | 5 | 9 | 68 | 36 | 13.5 | 22 | 21 |
| 2020A12 | R20/A | 12 | 1/2 | 8 | 11 | 72 | 42 | 16.2 | 26 | 21 |

ELBOW, INTERMEDIATE, TECHNOPOLYMER (R21)



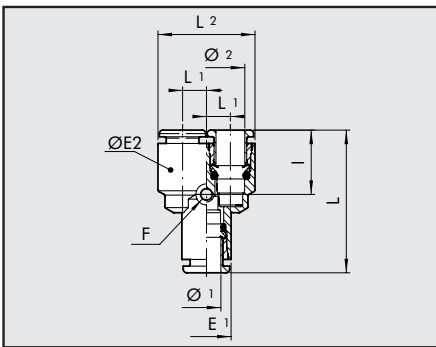
| Code | Ref. | Ø | L | D | E | I | F |
|---------|------|----|------|------|------|------|-----|
| 2L21001 | RL21 | 4 | 16.7 | 2.5 | 9.2 | 7.2 | 3.3 |
| 2021002 | R21 | 5 | 20 | 3.5 | 13.5 | - | - |
| 2L21003 | RL21 | 6 | 19 | 4.2 | 11.3 | 8.2 | 3.3 |
| 2L21004 | RL21 | 8 | 21.4 | 6.2 | 13.8 | 9.6 | 3.3 |
| 2021005 | RL21 | 10 | 24 | 8.5 | 16 | 10.9 | 3.3 |
| 2021006 | RL21 | 12 | 25.8 | 10.5 | 19.5 | 12.5 | 3.3 |

INTERMEDIATE TEE, TECHNOPOLYMER (R22)



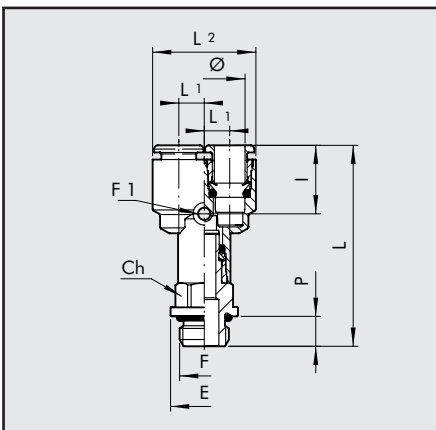
| Code | Ref. | Ø | L | L1 | D | E | I | I1 | F |
|---------|------|----|------|------|------|------|------|------|-----|
| 2L22001 | RL22 | 4 | 16.7 | 33.4 | 2.5 | 9.2 | 7.2 | 14.4 | 3.3 |
| 2022002 | R22 | 5 | 20 | 40 | 3.5 | 13.5 | - | - | - |
| 2L22003 | RL22 | 6 | 19 | 38 | 4.2 | 11.3 | 8.2 | 16.4 | 3.3 |
| 2L22004 | RL22 | 8 | 21.4 | 42.8 | 6.2 | 13.8 | 9.6 | 19.2 | 3.3 |
| 2022005 | RL22 | 10 | 24 | 48 | 8.5 | 16 | 10.9 | 21.8 | 3.3 |
| 2022006 | RL22 | 12 | 25.8 | 51.6 | 10.5 | 19.5 | 12.5 | 25 | 3.3 |

WYE (R23)



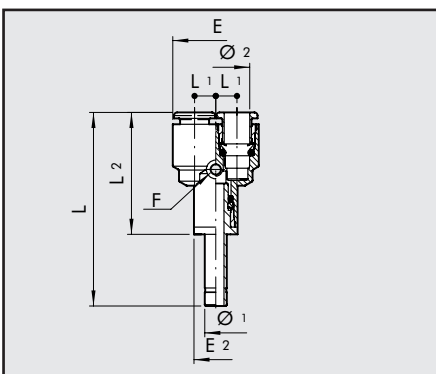
| Code | Ref. | Ø1 | Ø2 | L | L2 | L1 | E1 | ØE2 | I | F |
|---------|------|----|----|------|------|-----|------|------|------|-----|
| 2023001 | RL23 | 4 | 4 | 32.9 | 19.2 | 5 | 9.2 | 9.2 | 14.8 | 3.3 |
| 2023002 | R23 | 5 | 5 | 35.5 | 26.5 | 6.5 | 13.5 | 13.5 | - | - |
| 2023003 | RL23 | 6 | 6 | 35.5 | 22.8 | 5.8 | 11.3 | 11.3 | 15 | 3.3 |
| 2023004 | RL23 | 8 | 8 | 39.5 | 28.2 | 7.2 | 13.8 | 13.8 | 15.8 | 3.3 |
| 2L23005 | RL23 | 10 | 10 | 43.1 | 32.6 | 8.3 | 16 | 16 | 17.4 | 3.3 |
| 2L23006 | RL23 | 12 | 12 | 48 | 39.5 | 10 | 19.5 | 19.5 | 18 | 3.3 |
| 2L23301 | RL23 | 6 | 4 | 34.2 | 19.2 | 5 | 11.3 | 9.2 | 14.8 | 3.3 |
| 2L23303 | RL23 | 8 | 6 | 37.8 | 22.8 | 5.8 | 13.8 | 11.3 | 15 | 3.3 |
| 2L23306 | RL23 | 10 | 8 | 40.4 | 28.2 | 7.2 | 16 | 13.8 | 15.8 | 3.3 |
| 2L23309 | RL23 | 12 | 10 | 44.2 | 32.6 | 8.3 | 19.5 | 16 | 17.4 | 3.3 |

Y TECHNOPOLYMER, THREADED INPUT (RL23/M)



| Code | Ref. | Ø | F | L | L1 | L2 | I | Ch | P | E | F1 |
|---------|--------|----|-----|------|------|------|------|----|----|-----|-----|
| 2L23401 | RL23/M | 4 | M5 | 38.7 | 5 | 19.2 | 14.8 | 9 | 4 | 9.9 | 3.3 |
| 2L23402 | RL23/M | 4 | 1/8 | 42.6 | 5 | 19.2 | 14.8 | 12 | 6 | 14 | 3.3 |
| 2L23403 | RL23/M | 4 | 1/4 | 46.6 | 5 | 19.2 | 14.8 | 14 | 8 | 18 | 3.3 |
| 2L23406 | RL23/M | 6 | 1/8 | 44.9 | 5.75 | 22.8 | 15 | 12 | 6 | 14 | 3.3 |
| 2L23407 | RL23/M | 6 | 1/4 | 47.9 | 5.75 | 22.8 | 15 | 14 | 8 | 18 | 3.3 |
| 2L23409 | RL23/M | 8 | 1/8 | 48.4 | 7.2 | 28.2 | 15.8 | 14 | 6 | 15 | 3.3 |
| 2L23410 | RL23/M | 8 | 1/4 | 52.8 | 7.2 | 28.2 | 15.8 | 14 | 8 | 18 | 3.3 |
| 2L23412 | RL23/M | 8 | 3/8 | 54.4 | 7.2 | 28.2 | 15.8 | 17 | 9 | 22 | 3.3 |
| 2L23413 | RL23/M | 10 | 1/4 | 53.8 | 8.3 | 32.6 | 17.4 | 16 | 8 | 18 | 3.3 |
| 2L23415 | RL23/M | 10 | 3/8 | 56 | 8.3 | 32.6 | 17.4 | 17 | 9 | 20 | 3.3 |
| 2L23419 | RL23/M | 12 | 3/8 | 62 | 10 | 39.5 | 18 | 19 | 9 | 22 | 3.3 |
| 2L23420 | RL23/M | 12 | 1/2 | 62.3 | 10 | 39.5 | 18 | 22 | 11 | 26 | 3.3 |

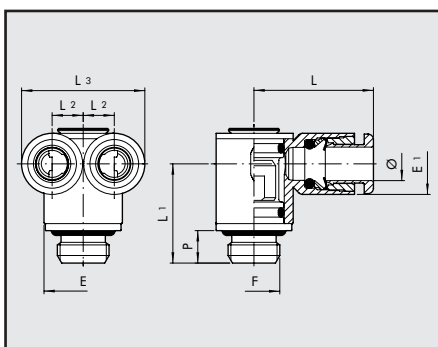
Y BRANCH WITH ADAPTER, TECHNOPOLYMER (R24)



| Code | Ref. | Ø1 | Ø2 | L | L1 | L2 | E1 | E2 | I | F |
|---------|------|----|----|------|------|------|------|------|------|-----|
| 2024001 | RL24 | 4 | 4 | 46.9 | 5 | 29.7 | 9.2 | 9.2 | 14.8 | 3.3 |
| 2024003 | RL24 | 6 | 6 | 49.7 | 5.75 | 32 | 11.3 | 11.3 | 15 | 3.3 |
| 2L24004 | RL24 | 8 | 8 | 55.1 | 7.2 | 35.9 | 13.8 | 13.8 | 15.8 | 3.3 |
| 2L24005 | RL24 | 10 | 10 | 63.1 | 8.3 | 39.2 | 16 | 16 | 17.4 | 3.3 |
| 2L24006 | RL24 | 12 | 12 | 70.5 | 10 | 44 | 19.5 | 19.5 | 18 | 3.3 |
| 2L24301 | RL24 | 6 | 4 | 48.4 | 5 | 30.7 | 9.2 | 11.3 | 14.8 | 3.3 |
| 2L24303 | RL24 | 8 | 6 | 53.4 | 5.75 | 34.2 | 11.3 | 13.8 | 15 | 3.3 |
| 2L24306 | RL24 | 10 | 8 | 60.4 | 7.2 | 36.6 | 13.8 | 16 | 15.8 | 3.3 |
| 2L24309 | RL24 | 12 | 10 | 66.7 | 8.3 | 40.2 | 16 | 19.5 | 17.4 | 3.3 |

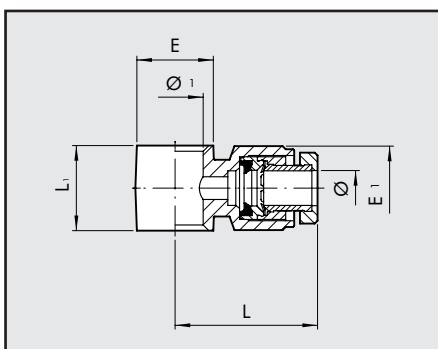


TECHNOPOLYMER PARALLEL Y, THREADED INPUT (RL25)



| Code | Ref. | Ø | F | L | L1 | L2 | L3 | E | E1 | Ch | P |
|---------|------|---|-----|------|------|------|------|------|------|----|---|
| 2L25001 | RL25 | 4 | M5 | 17.7 | 13.1 | 5 | 19.2 | 8 | 9.2 | 2 | 4 |
| 2L25002 | RL25 | 4 | M7 | 17.7 | 14.6 | 5 | 19.2 | 9.8 | 9.2 | 3 | 5 |
| 2L25003 | RL25 | 4 | 1/8 | 17.7 | 16.5 | 5 | 19.2 | 13 | 9.2 | 3 | 6 |
| 2L25004 | RL25 | 6 | 1/8 | 23 | 18.3 | 5.75 | 22.8 | 14 | 11.3 | 3 | 6 |
| 2L25005 | RL25 | 6 | 1/4 | 23 | 21.2 | 5.75 | 22.8 | 16.4 | 11.3 | 4 | 8 |
| 2L25008 | RL25 | 8 | 1/4 | 25.8 | 22.2 | 7.2 | 28.2 | 18 | 13.8 | 4 | 8 |
| 2L25009 | RL25 | 8 | 3/8 | 25.8 | 23.8 | 7.2 | 28.2 | 20 | 13.8 | 5 | 9 |

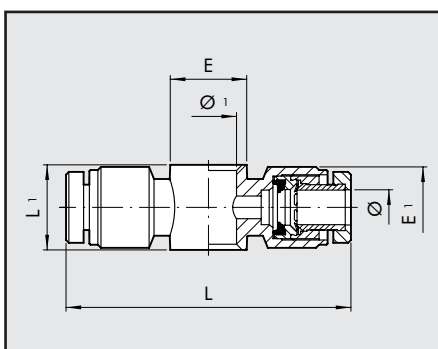
SINGLE RING, TECHNOPOLYMER (R28)



| Code | Ref. | Ø | Ø1 | L | L1 | E | E1 |
|---------|------|----|-----|------|----|------|------|
| 2012102 | R28 | 4 | 1/8 | 22.5 | 17 | 15 | 12.5 |
| 2012104 | R28 | 5 | 1/8 | 23 | 17 | 15 | 13.5 |
| 2012106 | R28 | 6 | 1/8 | 22.5 | 17 | 15 | 15 |
| 2012107 | R28 | 6 | 1/4 | 24 | 19 | 18 | 15 |
| 2012108 | R28 | 8 | 1/8 | 25.5 | 17 | 15 | 16.5 |
| 2012109 | R28 | 8 | 1/4 | 27 | 19 | 18 | 16.5 |
| 2012110 | R28 | 8 | 3/8 | 29 | 22 | 21.5 | 16.5 |
| 2012111 | R28 | 10 | 1/4 | 32 | 19 | 18 | 18.5 |
| 2012112 | R28 | 10 | 3/8 | 32 | 22 | 21.5 | 18.5 |
| 2012113 | R28 | 12 | 1/4 | 32 | 19 | 18 | 21 |
| 2012114 | R28 | 12 | 3/8 | 34 | 22 | 21.5 | 21 |
| 2012115 | R28 | 12 | 1/2 | 36 | 24 | 26 | 21 |

For the rods series D, see page 4.1/43

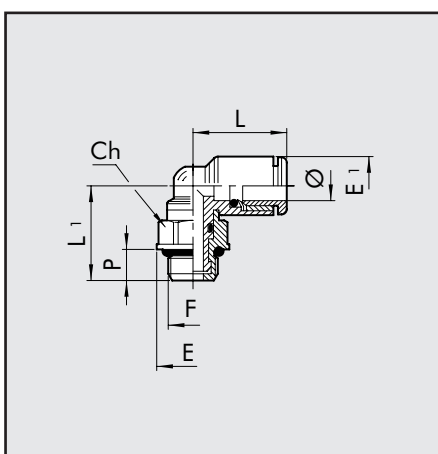
DUAL RING, TECHNOPOLYMER (R29)



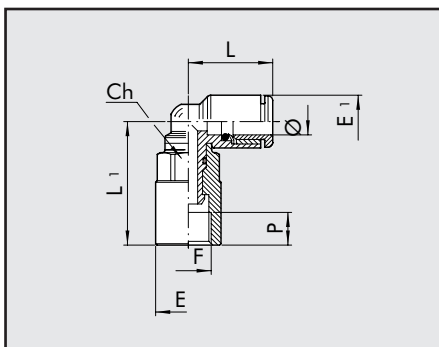
| Code | Ref. | Ø | Ø1 | L | L1 | E | E1 |
|---------|------|----|-----|----|----|------|------|
| 2013102 | R29 | 4 | 1/8 | 45 | 17 | 15 | 12.5 |
| 2013104 | R29 | 5 | 1/8 | 46 | 17 | 15 | 13.5 |
| 2013106 | R29 | 6 | 1/8 | 45 | 17 | 15 | 15 |
| 2013107 | R29 | 6 | 1/4 | 48 | 19 | 18 | 15 |
| 2013108 | R29 | 8 | 1/8 | 51 | 17 | 15 | 16.5 |
| 2013109 | R29 | 8 | 1/4 | 54 | 19 | 18 | 16.5 |
| 2013110 | R29 | 8 | 3/8 | 58 | 22 | 21.5 | 16.5 |
| 2013111 | R29 | 10 | 1/4 | 64 | 19 | 18 | 18.5 |
| 2013112 | R29 | 10 | 3/8 | 64 | 22 | 21.5 | 18.5 |
| 2013113 | R29 | 12 | 1/4 | 64 | 19 | 18 | 21 |
| 2013114 | R29 | 12 | 3/8 | 68 | 22 | 21.5 | 21 |
| 2013115 | R29 | 12 | 1/2 | 72 | 24 | 26 | 21 |

For the rods series D, see page 4.1/43

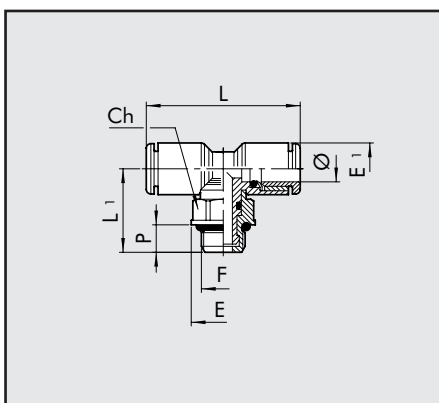
ROTARY ELBOW, MALE, TECHNOPOLYMER (RL 34)



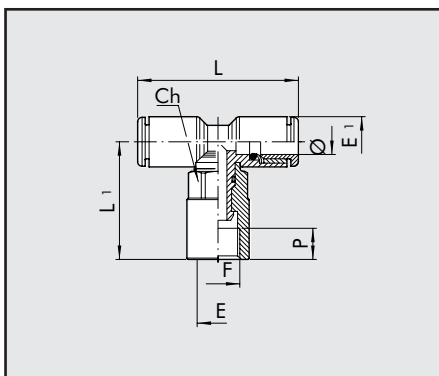
| Code | Ref. | Ø | F | Ch | P | L | L1 | E | E1 |
|---------|------|----|-----|----|----|------|------|-----|------|
| 2L34001 | RL34 | 4 | M5 | 8 | 4 | 16.4 | 15.2 | 9 | 9.2 |
| 2L34020 | RL34 | 4 | M7 | 8 | 5 | 16.4 | 16.2 | 9.8 | 9.2 |
| 2L34002 | RL34 | 4 | 1/8 | 12 | 6 | 16.4 | 17.2 | 14 | 9.2 |
| 2L34003 | RL34 | 4 | 1/4 | 14 | 8 | 16.4 | 20.1 | 18 | 9.2 |
| 2L34006 | RL34 | 6 | M5 | 8 | 4 | 18 | 16.3 | 9 | 11.3 |
| 2L34021 | RL34 | 6 | M7 | 9 | 5 | 19 | 17.5 | 9.9 | 11.3 |
| 2L34007 | RL34 | 6 | 1/8 | 12 | 6 | 19 | 18.3 | 14 | 11.3 |
| 2L34008 | RL34 | 6 | 1/4 | 14 | 8 | 19 | 21.2 | 18 | 11.3 |
| 2L34009 | RL34 | 8 | 1/8 | 12 | 6 | 20.2 | 19.5 | 14 | 13.8 |
| 2L34010 | RL34 | 8 | 1/4 | 14 | 8 | 20.2 | 22.4 | 18 | 13.8 |
| 2L34011 | RL34 | 8 | 3/8 | 17 | 9 | 20.2 | 24.4 | 22 | 13.8 |
| 2L34013 | RL34 | 10 | 1/4 | 14 | 8 | 23.3 | 23.5 | 18 | 16 |
| 2L34014 | RL34 | 10 | 3/8 | 17 | 9 | 23.3 | 25.6 | 22 | 16 |
| 2L34016 | RL34 | 12 | 3/8 | 17 | 9 | 25.2 | 27.3 | 22 | 19.5 |
| 2L34017 | RL34 | 12 | 1/2 | 19 | 11 | 25.2 | 30.3 | 26 | 19.5 |

ELBOW, FEMALE, ROTARY, TECHNOPOLYMER (RL34/F)


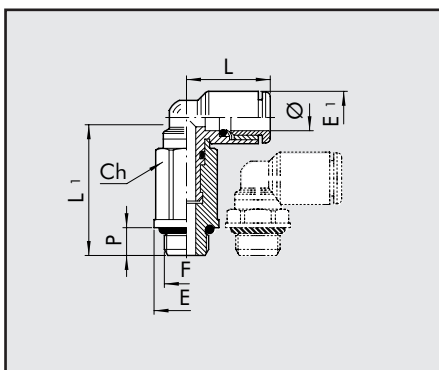
| Code | Ref. | Ø | F | CH | E | E1 | L | L1 | P |
|---------|--------|----|-----|----|------|------|------|------|----|
| 2L34F01 | RL34/F | 4 | M5 | 8 | 9 | 9.2 | 16.4 | 15.3 | 4 |
| 2L34F05 | RL34/F | 4 | 1/8 | 12 | 14 | 9.2 | 16.4 | 20.9 | 7 |
| 2L34F06 | RL34/F | 6 | M5 | 8 | 9 | 11.3 | 18 | 16.4 | 4 |
| 2L34F07 | RL34/F | 6 | 1/8 | 12 | 14 | 11.3 | 19 | 26.5 | 7 |
| 2L34F08 | RL34/F | 6 | 1/4 | 14 | 17 | 11.3 | 19 | 28.2 | 8 |
| 2L34F09 | RL34/F | 8 | 1/8 | 12 | 14 | 13.8 | 20.2 | 27.7 | 7 |
| 2L34F10 | RL34/F | 8 | 1/4 | 14 | 17 | 13.8 | 20.2 | 29.4 | 8 |
| 2L34F13 | RL34/F | 10 | 1/4 | 14 | 17 | 16 | 23.3 | 33 | 8 |
| 2L34F14 | RL34/F | 10 | 3/8 | 17 | 21 | 16 | 23.3 | 38 | 10 |
| 2L34F16 | RL34/F | 12 | 3/8 | 17 | 21 | 19.5 | 25.2 | 40.3 | 10 |
| 2L34F17 | RL34/F | 12 | 1/2 | 19 | 23.8 | 19.5 | 25.2 | 42.8 | 11 |

CENTRAL TEE, MALE, TECHNOPOLYMER (RL35)


| Code | Ref. | Ø | F | Ch | P | L | L1 | E | E1 |
|---------|------|----|-----|----|----|------|------|-----|------|
| 2L35001 | RL35 | 4 | M5 | 8 | 4 | 31 | 32.8 | 9 | 9.2 |
| 2L35020 | RL35 | 4 | M7 | 8 | 5 | 31 | 32.8 | 9.8 | 9.2 |
| 2L35002 | RL35 | 4 | 1/8 | 12 | 6 | 31 | 32.8 | 14 | 9.2 |
| 2L35003 | RL35 | 4 | 1/4 | 14 | 8 | 31 | 32.8 | 18 | 9.2 |
| 2L35006 | RL35 | 6 | M5 | 8 | 4 | 34.2 | 36 | 9 | 11.3 |
| 2L35007 | RL35 | 6 | 1/8 | 12 | 6 | 36.2 | 38 | 14 | 11.3 |
| 2L35008 | RL35 | 6 | 1/4 | 14 | 8 | 36.2 | 38 | 18 | 11.3 |
| 2L35009 | RL35 | 8 | 1/8 | 12 | 6 | 38.6 | 40.4 | 14 | 13.8 |
| 2L35010 | RL35 | 8 | 1/4 | 14 | 8 | 38.6 | 40.4 | 18 | 13.8 |
| 2L35011 | RL35 | 8 | 3/8 | 17 | 9 | 38.6 | 40.4 | 22 | 13.8 |
| 2L35013 | RL35 | 10 | 1/4 | 14 | 8 | 46.6 | 23.5 | 18 | 16 |
| 2L35014 | RL35 | 10 | 3/8 | 17 | 9 | 46.6 | 25.6 | 22 | 16 |
| 2L35016 | RL35 | 12 | 3/8 | 17 | 9 | 50.4 | 27.3 | 22 | 19.5 |
| 2L35017 | RL35 | 12 | 1/2 | 19 | 11 | 50.4 | 30.3 | 26 | 19.5 |

CENTRAL TEE, FEMALE, ROTARY, TECHNOPOLYMER (RL35/F)


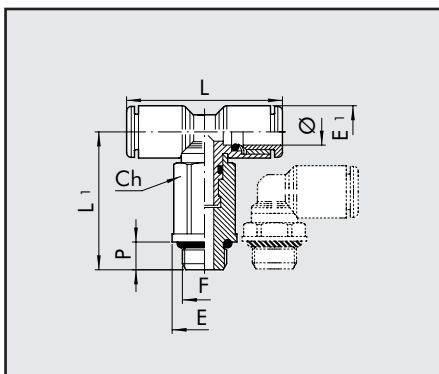
| Code | Ref. | Ø | F | CH | E | E1 | L | L1 | P |
|---------|--------|----|-----|----|------|------|------|------|----|
| 2L35F01 | RL35/F | 4 | M5 | 8 | 9 | 9.2 | 32.8 | 15.3 | 4 |
| 2L35F06 | RL35/F | 6 | M5 | 8 | 9 | 11.3 | 36 | 16.4 | 4 |
| 2L35F07 | RL35/F | 6 | 1/8 | 12 | 14 | 11.3 | 38 | 26.5 | 7 |
| 2L35F08 | RL35/F | 6 | 1/4 | 14 | 17 | 11.3 | 38 | 28.2 | 8 |
| 2L35F09 | RL35/F | 8 | 1/8 | 12 | 14 | 13.8 | 40.4 | 27.7 | 7 |
| 2L35F10 | RL35/F | 8 | 1/4 | 14 | 17 | 13.8 | 40.4 | 29.4 | 8 |
| 2L35F13 | RL35/F | 10 | 1/4 | 14 | 17 | 16 | 46.6 | 33 | 8 |
| 2L35F14 | RL35/F | 10 | 3/8 | 17 | 21 | 16 | 46.6 | 38 | 10 |
| 2L35F16 | RL35/F | 12 | 3/8 | 17 | 21 | 19.5 | 50.4 | 40.3 | 10 |
| 2L35F17 | RL35/F | 12 | 1/2 | 19 | 23.8 | 19.5 | 50.4 | 42.8 | 11 |

ROTARY ELBOW, MALE, EXTENDED, TECHNOPOLYMER (RL 36)


| Code | Ref. | Ø | F | Ch | P | L | L1 | E | E1 |
|---------|------|----|-----|----|---|------|------|-----|------|
| 2L36001 | RL36 | 4 | M5 | 8 | 4 | 16.4 | 26.7 | 9 | 9.2 |
| 2L36020 | RL36 | 4 | M7 | 8 | 5 | 16.4 | 27.7 | 9.8 | 9.2 |
| 2L36002 | RL36 | 4 | 1/8 | 12 | 6 | 16.4 | 25.3 | 14 | 9.2 |
| 2L36006 | RL36 | 6 | M5 | 8 | 4 | 18 | 27.8 | 9 | 11.3 |
| 2L36021 | RL36 | 6 | M7 | 9 | 5 | 18 | 29.3 | 9.9 | 11.3 |
| 2L36007 | RL36 | 6 | 1/8 | 12 | 6 | 19 | 30.9 | 14 | 11.3 |
| 2L36008 | RL36 | 6 | 1/4 | 14 | 8 | 19 | 33.2 | 18 | 11.3 |
| 2L36009 | RL36 | 8 | 1/8 | 12 | 6 | 20.2 | 32.1 | 14 | 13.8 |
| 2L36010 | RL36 | 8 | 1/4 | 14 | 8 | 20.2 | 34.4 | 18 | 13.8 |
| 2L36012 | RL36 | 10 | 1/4 | 14 | 8 | 23.3 | 38 | 18 | 16 |

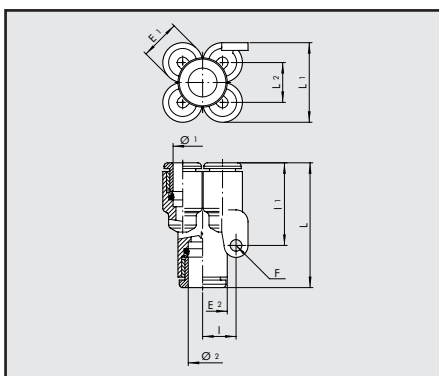


CENTRAL TEE, MALE, ROTARY, EXTENDED, TECHNOPOLYMER (RL37)



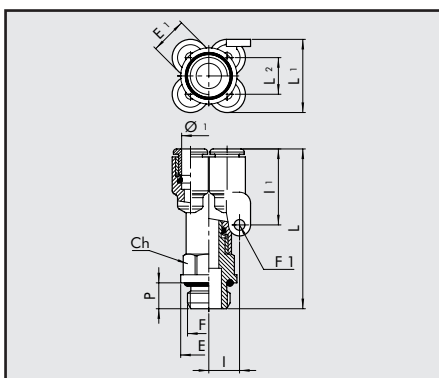
| Code | Ref. | Ø | F | Ch | P | L | L1 | E | E1 |
|---------|------|----|-----|----|---|------|------|-----|------|
| 2L37001 | RL37 | 4 | M5 | 8 | 4 | 32.8 | 26.7 | 9 | 9.2 |
| 2L37020 | RL37 | 4 | M7 | 8 | 5 | 32.8 | 27.5 | 9.8 | 9.2 |
| 2L37002 | RL37 | 4 | 1/8 | 12 | 6 | 32.8 | 25.3 | 14 | 9.2 |
| 2L37006 | RL37 | 6 | M5 | 8 | 4 | 36 | 27.8 | 9 | 11.3 |
| 2L37007 | RL37 | 6 | 1/8 | 12 | 6 | 38 | 30.9 | 14 | 11.3 |
| 2L37008 | RL37 | 6 | 1/4 | 14 | 8 | 38 | 33.2 | 18 | 11.3 |
| 2L37009 | RL37 | 8 | 1/8 | 12 | 6 | 40.4 | 32.1 | 14 | 13.8 |
| 2L37010 | RL37 | 8 | 1/4 | 14 | 8 | 40.4 | 34.4 | 18 | 13.8 |
| 2L37012 | RL37 | 10 | 1/4 | 14 | 8 | 46.6 | 38 | 18 | 16 |

DUAL Y BRANCH TECHNOPOLYMER (RL42)



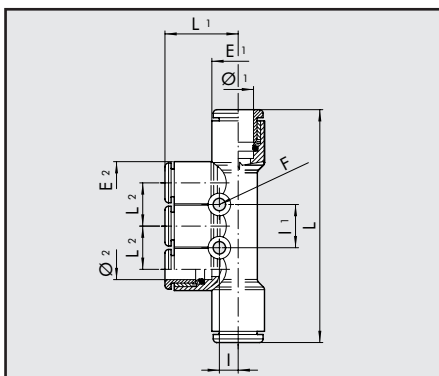
| Code | Ref. | Ø ₁ | Ø ₂ | E1 | E2 | L | L1 | L2 | I | I1 | F |
|---------|------|----------------|----------------|------|------|------|------|------|-----|------|-----|
| 2L42001 | RL42 | 4 | 4 | 9.2 | 9.2 | 28.8 | 17.9 | 8.7 | 8 | 21.3 | 3.3 |
| 2L42002 | RL42 | 4 | 6 | 9.2 | 11.3 | 31.3 | 17.9 | 8.7 | 8 | 21.3 | 3.3 |
| 2L42004 | RL42 | 6 | 6 | 11.3 | 11.3 | 33.4 | 22.6 | 11.3 | 9.5 | 25.6 | 3.3 |
| 2L42005 | RL42 | 6 | 8 | 11.3 | 14 | 34.8 | 22.6 | 11.3 | 9.5 | 25.6 | 3.3 |

DUAL Y BRANCH TECHNOPOLYMER, THREADED INPUT (RL43)



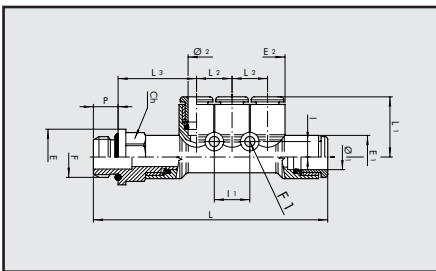
| Code | Ref. | Ø ₁ | F | E1 | E | Ch | P | L | L1 | L2 | I | I1 | F1 |
|---------|------|----------------|-----|------|----|----|---|------|------|------|-----|------|-----|
| 2L43001 | RL43 | 4 | M5 | 9.2 | 8 | 9 | 4 | 35.5 | 17.9 | 8.7 | 8 | 21.3 | 3.3 |
| 2L43002 | RL43 | 4 | 1/8 | 9.2 | 14 | 12 | 6 | 41.6 | 17.9 | 8.7 | 8 | 21.3 | 3.3 |
| 2L43003 | RL43 | 4 | 1/4 | 9.2 | 18 | 14 | 8 | 44.6 | 17.9 | 8.7 | 8 | 21.3 | 3.3 |
| 2L43008 | RL43 | 6 | 1/8 | 11.3 | 14 | 12 | 6 | 43.7 | 22.6 | 11.3 | 9.5 | 25.6 | 3.3 |
| 2L43009 | RL43 | 6 | 1/4 | 11.3 | 18 | 14 | 8 | 46.7 | 22.6 | 11.3 | 9.5 | 25.6 | 3.3 |

MULTIPLE MANIFOLD TECHNOPOLYMER (RL44)



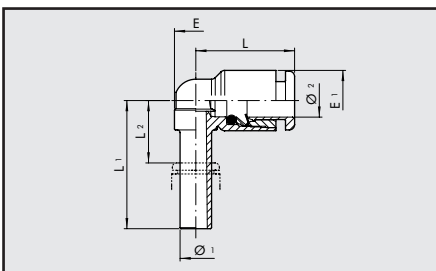
| Code | Ref. | Ø1 | Ø2 | E1 | E2 | L | L1 | L2 | I | I1 | F |
|---------|------|----|----|------|------|------|------|------|-----|------|-----|
| 2L44001 | RL44 | 6 | 4 | 11.3 | 9.2 | 53.2 | 17.2 | 9.4 | 4.3 | 9.4 | 3.3 |
| 2L44003 | RL44 | 8 | 6 | 14 | 11.3 | 61.4 | 19.6 | 11.5 | 5 | 11.5 | 3.3 |

MULTIPLE MANIFOLD, INPUT, THREADED, TECHNOPOLYMER (RL45)



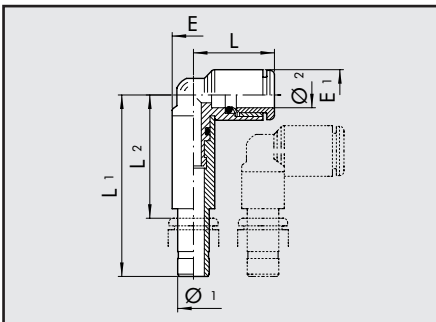
| Code | Ref. | F | Ø1 | Ø2 | E1 | E2 | E | Ch | P | L | L1 | L2 | L3 | I | I1 | F1 |
|---------|------|-----|----|----|------|------|----|----|---|------|------|------|------|-----|------|-----|
| 2L45001 | RL45 | 1/8 | 6 | 4 | 11.3 | 9.2 | 14 | 12 | 6 | 63.5 | 17.2 | 9.4 | 21.5 | 4.3 | 9.4 | 3.3 |
| 2L45002 | RL45 | 1/4 | 6 | 4 | 11.3 | 9.2 | 18 | 14 | 8 | 66.5 | 17.2 | 9.4 | 22.5 | 4.3 | 9.4 | 3.3 |
| 2L45007 | RL45 | 1/8 | 8 | 6 | 14 | 11.3 | 15 | 14 | 6 | 71.2 | 19.6 | 11.5 | 23 | 5 | 11.5 | 3.3 |
| 2L45008 | RL45 | 1/4 | 8 | 6 | 14 | 11.3 | 18 | 14 | 8 | 75.6 | 19.6 | 11.5 | 25.4 | 5 | 11.5 | 3.3 |
| 2L45009 | RL45 | 3/8 | 8 | 6 | 14 | 11.3 | 22 | 17 | 9 | 77.2 | 19.6 | 11.5 | 26 | 5 | 11.5 | 3.3 |

PLUG-IN ELBOWS (RL46)



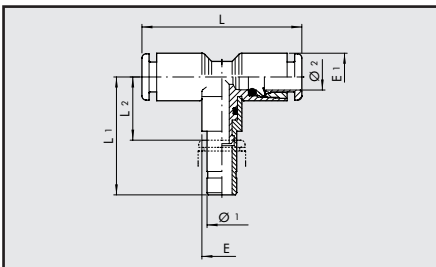
| Code | Ref. | Ø1 | Ø2 | L | L1 | L2 | E | E1 |
|---------|------|----|----|------|------|------|------|------|
| 2L46001 | RL46 | 4 | 4 | 16 | 22.5 | 8.1 | 6.8 | 9.2 |
| 2L46002 | RL46 | 6 | 6 | 18.5 | 24 | 8.4 | 8 | 11.3 |
| 2L46003 | RL46 | 8 | 8 | 21.2 | 28.5 | 11.3 | 10 | 13.8 |
| 2L46004 | RL46 | 10 | 10 | 23.3 | 32 | 13.3 | 12.5 | 16 |

EXTENDED PLUG-IN ELBOWS (RL47)



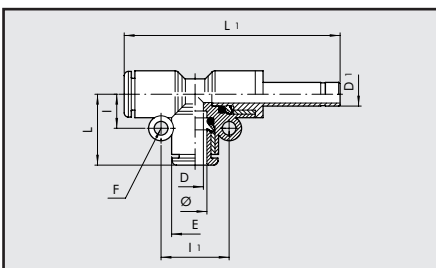
| Code | Ref. | Ø1 | Ø2 | L | L1 | L2 | E | E1 |
|---------|------|----|----|------|------|------|-----|------|
| 2L47001 | RL47 | 4 | 4 | 15.5 | 36.9 | 23.4 | 7.7 | 9.2 |
| 2L47002 | RL47 | 6 | 6 | 18.1 | 40.6 | 25.9 | 9.3 | 11.3 |
| 2L47003 | RL47 | 8 | 8 | 19.3 | 44.9 | 28.8 | 9.7 | 13.8 |

DOUBLE ELBOW (RL48)



| Code | Ref. | Ø1 | Ø2 | L | L1 | L2 | E | E1 |
|---------|------|----|----|------|------|------|-----|------|
| 2L48001 | RL48 | 4 | 4 | 32 | 22.5 | 8.1 | 6.8 | 9.2 |
| 2L48002 | RL48 | 6 | 6 | 37 | 37.5 | 16.4 | 9.7 | 11.3 |
| 2L48003 | RL48 | 8 | 8 | 42.4 | 28.5 | 11.3 | 10 | 13.8 |
| 2L48004 | RL48 | 10 | 10 | 46.6 | 46 | 27.7 | 14 | 16 |

DOUBLE LATERAL ELBOW (RL49)

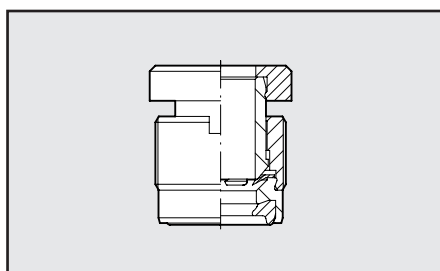


| Code | Ref. | Ø | L | L1 | I | I1 | E | D | D1 | F |
|---------|------|----|------|------|------|------|------|------|----|-----|
| 2L49001 | RL49 | 4 | 16.7 | 47.4 | 7.2 | 14.4 | 9.2 | 2.5 | 4 | 3.3 |
| 2L49003 | RL49 | 6 | 19 | 52.5 | 8.2 | 16.4 | 11.3 | 4.2 | 6 | 3.3 |
| 2L49004 | RL49 | 8 | 21.4 | 58.4 | 9.6 | 19.2 | 13.8 | 6.2 | 8 | 3.3 |
| 2L49005 | RL49 | 10 | 24.1 | 68.2 | 10.9 | 21.8 | 16 | 8.5 | 10 | 3.3 |
| 2L49006 | RL49 | 12 | 25.8 | 74.1 | 12.5 | 25 | 19.5 | 10.5 | 12 | 3.3 |



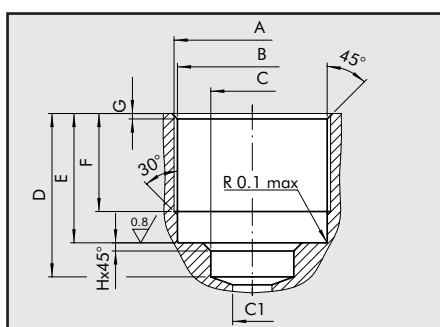
CARTRIDGES AND ACCESSORIES

BRASS CARTRIDGE WITH THREAD (R26)



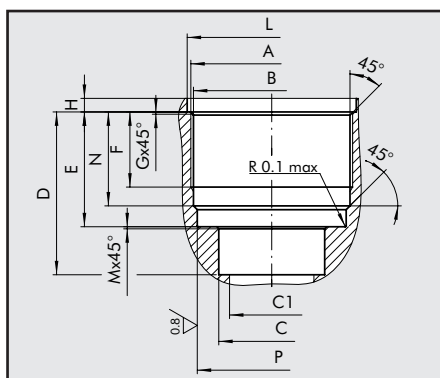
| Code | Ref. | Ø | Brace of serration on centers in plastic material (Nm) | Brace of serration on metallic centers (Nm) |
|-----------------|------|------|--|---|
| SERIES R | | | | |
| 2026A02 | R26 | 3 | 0.6 | 0.8 |
| 2026A01 | R26 | 3.17 | 0.6 | 0.8 |
| 2026001 | R26 | 4 | 0.8 | 1 |
| 2026002 | R26 | 5 | 0.8 | 1.5 |
| 2026003 | R26 | 6 | 0.8 | 1.2 |
| 2026004 | R26 | 8 | 1 | 1.8 |
| 2026005 | R26 | 10 | 0.8 | 2 |
| 2026006 | R26 | 12 | 0.8 | 2 |

CARTRIDGE SLOT R26 Ø 3-3.17-4-6-8



| Ref. | Ø | A | B | C | C1 | D | E | F | G | H |
|------------|--------|------------|-----------------------------------|------------------------------------|--------|-----------------------------------|---------------------------------------|----------------------|-----|-----|
| SE.CA. R26 | 3-3.17 | M7x0,75 | Ø6,5 ^{+0,1} ₀ | Ø4,5 ^{+0,12} ₀ | Ø4 max | 10,5 ^{+0,3} ₀ | 9,5 ^{+0,1} _{0,3} | 7 ^{+0,20} | 0,5 | - |
| SE.CA. R26 | 4 | M9,5x0,75 | Ø9 ^{+0,10} ₀ | Ø4,1 ^{+0,10} ₀ | Ø3 max | 12 ⁺⁰ _{-0,20} | 9,5 ^{+0,15} _{0,05} | 7,5 ^{+0,20} | 0,4 | 0,6 |
| SE.CA. R26 | 6 | M11,5x0,75 | Ø11 ^{+0,10} ₀ | Ø6,1 ^{+0,10} ₀ | Ø5 max | 12 ^{+0,1} | 9,5 ^{+0,1} | 7,5 ^{+0,20} | 0,4 | 0,6 |
| SE.CA. R26 | 8 | M13,5x0,75 | Ø13 ^{+0,10} ₀ | Ø8,1 ^{+0,10} ₀ | Ø7 max | 15 ⁺⁰ _{-0,20} | 10,5 ^{+0,15} _{0,05} | 8,5 ^{+0,20} | 0,4 | 0,6 |

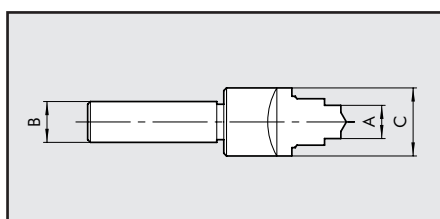
CARTRIDGE SLOT R26 Ø 5-10-12



| Ref. | Ø | A | B | C | C1 | D | E | F | G | H |
|------------|----|------------|---------------------------------------|--|---------|----------------------|-----------------------------------|----------------------------------|-----|-----------------------------------|
| SE.CA. R26 | 5 | M10,5x0,75 | Ø10 ^{+0,1} ₀ | Ø5,1 ^{+0,15} ₀ | Ø4 max | 11,8 ^{+0,1} | 8,9 ^{+0,10} ₀ | 5,8 ^{+0,3} ₀ | 0,3 | 0,9 ⁺⁰ _{-0,3} |
| SE.CA. R26 | 10 | M15,5x0,75 | Ø15 ^{+0,1} ₀ | Ø10,1 ^{+0,15} ₀ | Ø9 max | 15,6 ^{+0,1} | 11 ^{+0,05} ₀ | 7,5 ^{+0,3} ₀ | 0,3 | 1,3 ⁺⁰ _{-0,3} |
| SE.CA. R26 | 12 | M18x1 | Ø17,5 ^{+0,05} _{0,1} | Ø12,1 ^{+0,05} _{0,15} | Ø11 max | 18 ^{+0,1} | 12 ^{+0,05} | 6,8 ^{+0,3} ₀ | 0,6 | 1,3 ⁺⁰ _{-0,3} |

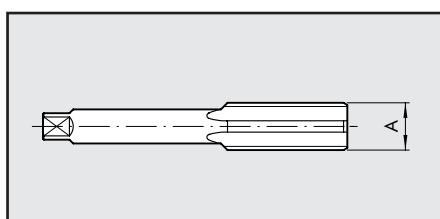
| L | M | N | P |
|---|-----|-------------------------------------|-------------------------------------|
| Ø11,2 ^{+0,12} _{+0,02} | 0,1 | 7,8 ^{+0,05} | Ø9,7 ^{+0,05} |
| Ø16,2 ^{+0,1} _{-0,05} | 0,2 | 9 ^{+0,05} | Ø14,9 ^{+0,10} ₀ |
| Ø18,8 ^{+0,1} ₀ | 0,2 | 9,75 ⁺⁰ _{-0,15} | Ø17 ^{+0,1} ₀ |

TOOL FOR SLOT R26



| Code | Ref. | A | B | C |
|---------|-------------------|------|------|------|
| 2025010 | UT.SE. R26 3-3.17 | 4,5 | Ø 10 | Ø 10 |
| 2025011 | UT.SE. R26 4 | 4,1 | Ø 12 | Ø 15 |
| 2025012 | UT.SE. R26 5 | 5,1 | Ø 15 | Ø 19 |
| 2025013 | UT.SE. R26 6 | 6,1 | Ø 16 | Ø 19 |
| 2025014 | UT.SE. R26 8 | 8,1 | Ø 16 | Ø 21 |
| 2025015 | UT.SE. R26 10 | 10,1 | Ø 18 | Ø 25 |
| 2025016 | UT.SE. R26 12 | 12,1 | Ø 15 | Ø 25 |

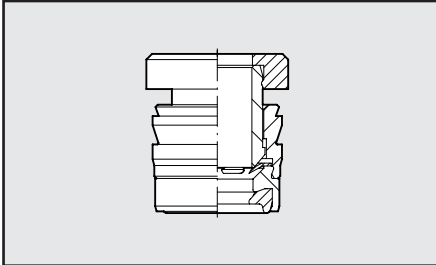
MALE FOR CARTRIDGE SLOT R26



| Code | Ref. | Ø | A |
|---------|---------------|--------|------------|
| 2025020 | MA R26 3-3.17 | 3-3.17 | M7x0,75 |
| 2025021 | MA R26 4 | 4 | M9,5x0,75 |
| 2025022 | MA R26 5 | 5 | M10,5x0,75 |
| 2025023 | MA R26 6 | 6 | M11,5x0,75 |
| 2025024 | MA R26 8 | 8 | M13,5x0,75 |
| 2025025 | MA R26 10 | 10 | M15,5x0,75 |
| 2025026 | MA R26 12 | 12 | M18x1 |

BRASS COMPRESSION CARTRIDGE (R27)

Code Ref. Ø

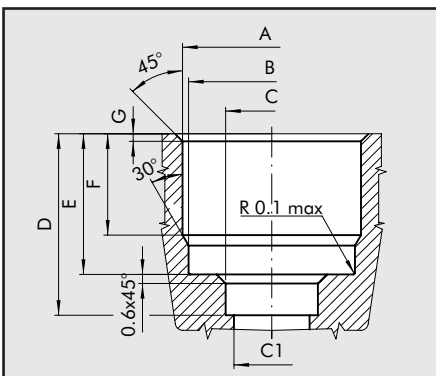


SERIES R

| | | |
|---------|-----|----|
| 2027001 | R27 | 4 |
| 2027002 | R27 | 5 |
| 2027003 | R27 | 6 |
| 2027004 | R27 | 8 |
| 2027005 | R27 | 10 |
| 2027006 | R27 | 12 |

CARTRIDGE SLOT R27 Ø 4-6-8

Ref. Ø A B C C1 D E F G



Aluminium

| | | | | | | | | | |
|--------------|---|--------------------------------------|------------------------------------|-------------------------------------|--------|-----------------------------------|-------------------------------------|------------------------------------|-----|
| SE.CA. R27 4 | 4 | Ø9,2 ⁺⁰ _{-0,10} | Ø9 ^{+0,10} ₋₀ | Ø4,1 ^{+0,10} ₋₀ | Ø3 max | 12 ⁺⁰ _{-0,20} | 9,3 ⁺⁰ _{-0,10} | 6,7 ^{+0,10} ₋₀ | 0,5 |
| SE.CA. R27 6 | 6 | Ø11,3 ⁺⁰ _{-0,08} | Ø11 ^{+0,10} ₋₀ | Ø6,1 ^{+0,10} ₋₀ | Ø5 max | 12 ⁺⁰ _{-0,20} | 9,3 ⁺⁰ _{-0,10} | 6,7 ^{+0,10} ₋₀ | 0,5 |
| SE.CA. R27 8 | 8 | Ø13,3 ⁺⁰ _{-0,08} | Ø13 ^{+0,10} ₋₀ | Ø8,1 ^{+0,10} ₋₀ | Ø7 max | 15 ⁺⁰ _{-0,20} | 10,3 ⁺⁰ _{-0,10} | 7,7 ^{+0,10} ₋₀ | 0,5 |

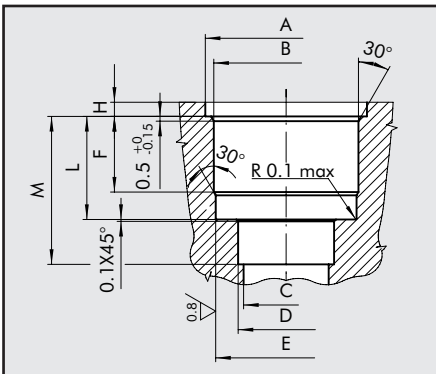
Technopolymer

| | | | | | | | | | |
|--------------|---|--|------------------------------------|-------------------------------------|--------|-----------------------------------|-------------------------------------|------------------------------------|-----|
| SE.CA. R27 4 | 4 | * Ø9,2 ⁺⁰ _{-0,10} | Ø9 ^{+0,10} ₋₀ | Ø4,1 ^{+0,10} ₋₀ | Ø3 max | 12 ⁺⁰ _{-0,20} | 9,3 ⁺⁰ _{-0,10} | 6,7 ^{+0,10} ₋₀ | 0,5 |
| SE.CA. R27 6 | 6 | * Ø11,2 ⁺⁰ _{-0,10} | Ø11 ^{+0,10} ₋₀ | Ø6,1 ^{+0,10} ₋₀ | Ø5 max | 12 ⁺⁰ _{-0,20} | 9,3 ⁺⁰ _{-0,10} | 6,7 ^{+0,10} ₋₀ | 0,5 |
| SE.CA. R27 8 | 8 | * Ø13,2 ⁺⁰ _{-0,10} | Ø13 ^{+0,10} ₋₀ | Ø8,1 ^{+0,10} ₋₀ | Ø7 max | 15 ⁺⁰ _{-0,20} | 10,3 ⁺⁰ _{-0,10} | 7,7 ^{+0,10} ₋₀ | 0,5 |

* N.B.: the diameter in interference is purely an indication and depends on the type of plastic material used and on its thickness. We suggest you should effect practical assembling tests.

CARTRIDGE SLOT R27 Ø 5-10-12

Ref. Ø A B C D E F H L M



Technopolymer

| | | | | | | | | | | |
|---------------|----|--------------------------------------|---|---------|--------------------------------------|------------------------|---------------------------------|-----------------------------------|-------------------------------------|-----------------------|
| SE.CA. R27 5 | 5 | Ø12,1 ^{+0,15} ₋₀ | * Ø10,2 ⁺⁰ _{-0,10} | Ø4 MAX | Ø5,1 ^{+0,15} ₋₀ | Ø9,7 ^{±0,05} | 6 ^{+0,2} ₋₀ | 1,2 ⁻⁰ _{-0,2} | 8,75 ⁻⁰ _{-0,1} | 11,8 ^{±0,10} |
| SE.CA. R27 10 | 10 | Ø17,1 ^{+0,15} ₋₀ | * Ø15,15 ⁺⁰ _{-0,08} | Ø9 MAX | Ø10,15 ^{+0,1} ₋₀ | Ø14,9 ^{±0,05} | 8 ^{+0,2} ₋₀ | 1,5 ⁻⁰ _{-0,2} | 10,9 ⁻⁰ _{-0,1} | 15,6 ^{±0,10} |
| SE.CA. R27 12 | 12 | Ø19,7 ^{+0,15} ₋₀ | * Ø17,55 ⁺⁰ _{-0,08} | Ø11 MAX | Ø12,15 ^{+0,1} ₋₀ | Ø17,1 ^{±0,05} | 9 ^{+0,2} ₋₀ | 1,5 ⁻⁰ _{-0,2} | 11,85 ⁻⁰ _{-0,1} | 18 ^{±0,10} |

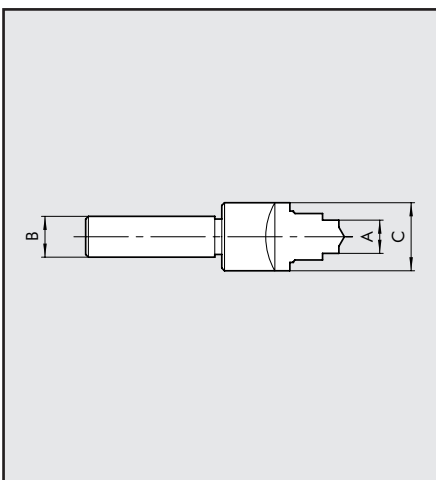
Aluminium

| | | | | | | | | | | |
|---------------|----|--------------------------------------|--------------------------------------|---------|--------------------------------------|------------------------|---------------------------------|-----------------------------------|-------------------------------------|-----------------------|
| SE.CA. R27 5 | 5 | Ø12,1 ^{+0,15} ₋₀ | Ø10,3 ⁺⁰ _{-0,08} | Ø4 MAX | Ø5,1 ^{+0,15} ₋₀ | Ø9,7 ^{±0,05} | 6 ^{+0,2} ₋₀ | 1,2 ⁻⁰ _{-0,2} | 8,75 ⁻⁰ _{-0,1} | 11,8 ^{±0,10} |
| SE.CA. R27 10 | 10 | Ø17,1 ^{+0,15} ₋₀ | Ø15,4 ⁺⁰ _{-0,08} | Ø9 MAX | Ø10,15 ^{+0,1} ₋₀ | Ø14,9 ^{±0,05} | 8 ^{+0,2} ₋₀ | 1,5 ⁻⁰ _{-0,2} | 10,9 ⁻⁰ _{-0,1} | 15,6 ^{±0,10} |
| SE.CA. R27 12 | 12 | Ø19,7 ^{+0,15} ₋₀ | Ø17,8 ⁺⁰ _{-0,08} | Ø11 MAX | Ø12,15 ^{+0,1} ₋₀ | Ø17,1 ^{±0,05} | 9 ^{+0,2} ₋₀ | 1,5 ⁻⁰ _{-0,2} | 11,85 ⁻⁰ _{-0,1} | 18 ^{±0,10} |

* N.B.: the diameter in interference is purely an indication and depends on the type of plastic material used and on its thickness. We suggest you should effect practical assembling tests.

TOOL FOR SLOT R27

Code Ref. A B C



Aluminium

| | | | | |
|---------|-------------------|------|------|------|
| 2027021 | UT.SE. R27 AL. 4 | 4,1 | Ø 10 | 11.5 |
| 2027022 | UT.SE. R27 AL. 5 | 5,1 | Ø 12 | 16 |
| 2027023 | UT.SE. R27 AL. 6 | 6,1 | Ø 12 | 13.5 |
| 2027024 | UT.SE. R27 AL. 8 | 8,1 | Ø 12 | 15.5 |
| 2027025 | UT.SE. R27 AL. 10 | 10,1 | Ø 16 | 20 |
| 2027026 | UT.SE. R27 AL. 12 | 12,1 | Ø 16 | 22 |

Plastic

| | | | | |
|---------|------------------|------|------|------|
| 2027011 | UT.SE. R27 P. 4 | 4,1 | Ø 10 | 11.5 |
| 2027012 | UT.SE. R27 P. 5 | 5,1 | Ø 12 | 16 |
| 2027013 | UT.SE. R27 P. 6 | 6,1 | Ø 12 | 13.5 |
| 2027014 | UT.SE. R27 P. 8 | 8,1 | Ø 12 | 15.5 |
| 2027015 | UT.SE. R27 P. 10 | 10,1 | Ø 16 | 20 |
| 2027016 | UT.SE. R27 P. 12 | 12,1 | Ø 16 | 22 |

