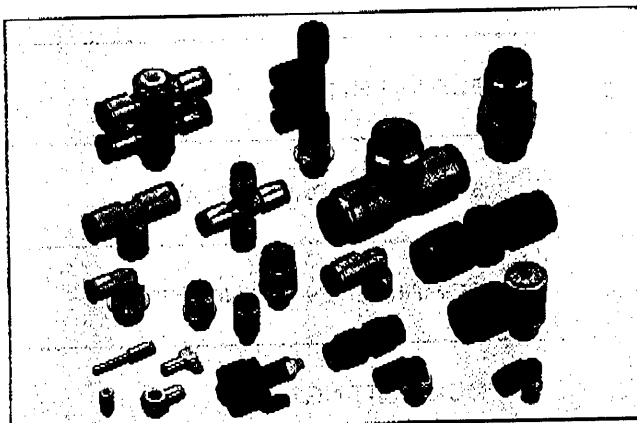


Series R push-in fittings and series Fox miniature fittings by Metal Work are the best elements for connecting pipes and actuators.

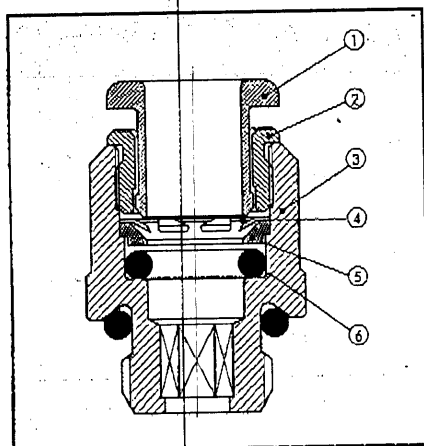
Quick and easy to use, the Metal Work push-in fitting can be re-used thousands of times without affecting the pneumatic and mechanical seal in any way. It comes in various configurations and guarantees a virtually unlimited, highly flexible use. The clamping spring with its special shape grips the pipe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

In the RL fittings Ø 4 and Ø 8, the release bushing has patented screwdriver slots to facilitate release in applications not accessible to the fingers. Configurations RL21 (elbow and tee) 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.



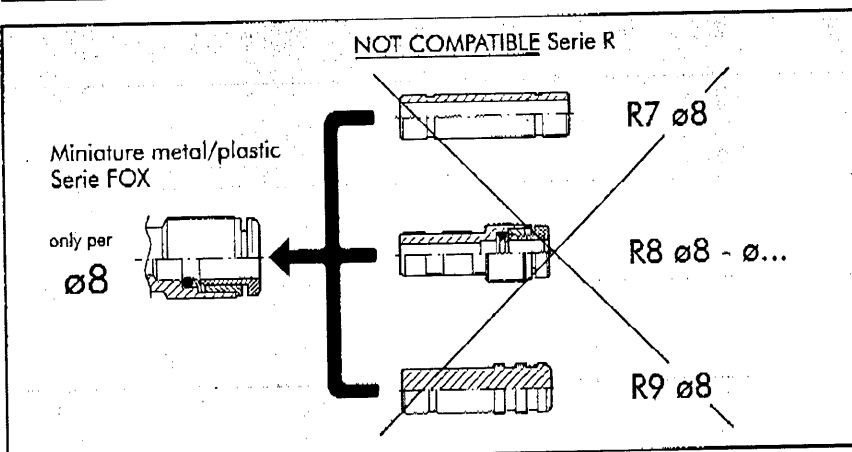
| TECHNICAL DATA                               |     |                                                           |
|----------------------------------------------|-----|-----------------------------------------------------------|
| Threaded coupling                            |     | M3 - M5 - M7 - 1/8" - 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°C +80°C                                               |
|                                              | °F  | -4°F +162°F                                               |
| Temperature range for technopolymer fittings | °C  | -20°C +60°C                                               |
|                                              | °F  | -4°F +132°F                                               |
| 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

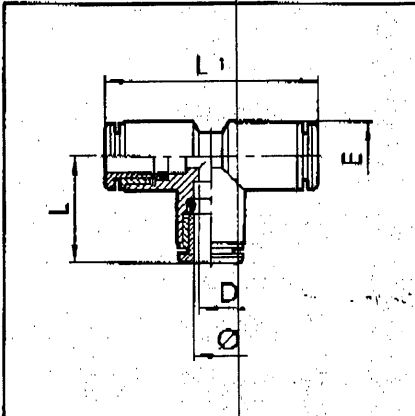


The new series of Ø 8 miniature push-in fittings, identified in the code by a letter L and visually by the screwdriver slot on the release ring, are not compatible with fittings R7, R8 and R9 Ø 8 in the old series.

## 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     | .....    | 3x1,2                | 1/4    | 2043     | 10,82x1,78           |
| M7     | .....    | 5x1,5                | 3/8    | 2056     | 14x1,78              |

**TEE INTERMEDIATE (R5)**



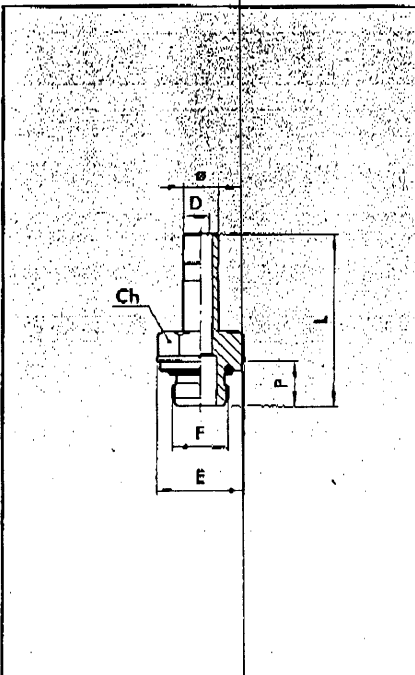
**MINIATURE SERIES FOX**

|         |     |      |      |      |     |      |
|---------|-----|------|------|------|-----|------|
| 2005A02 | R5  | 3    | 10.4 | 20.8 | 2   | 6.3  |
| 2005A01 | R5  | 3.17 | 10.4 | 20.8 | 2   | 6.36 |
| 2L05001 | RL5 | 4    | 16   | 32   | 2.5 | 9.5  |
| 2L05003 | RL5 | 6    | 18.3 | 36.6 | 4.5 | 11.5 |
| 2L05004 | RL5 | 8    | 20.7 | 41.4 | 6.5 | 13.5 |
| 2L05005 | RL5 | 10   | 23   | 46   | 8   | 15.5 |

**SERIES R**

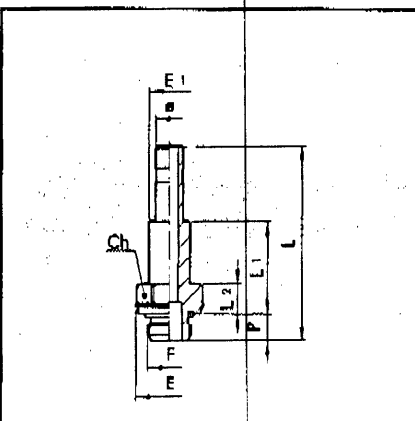
|         |    |    |      |      |     |      |
|---------|----|----|------|------|-----|------|
| 2005001 | R5 | 4  | 18.2 | 36.4 | 3   | 11.5 |
| 2005002 | R5 | 5  | 19.2 | 38.4 | 3   | 13.5 |
| 2005003 | R5 | 6  | 19.7 | 39.4 | 4.5 | 13.5 |
| 2005004 | R5 | 8  | 23.2 | 46.4 | 6   | 15.5 |
| 2005005 | R5 | 10 | 27.5 | 55   | 8   | 18.0 |
| 2005006 | R5 | 12 | 32.5 | 65   | 10  | 22.0 |
| 2005007 | R5 | 14 | 33.5 | 67   | 12  | 25.0 |

**THREADED ADAPTER (R6)**

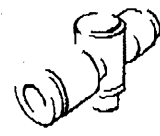


|         |    |      |         |    |      |      |      |      |
|---------|----|------|---------|----|------|------|------|------|
| 2006A02 | R6 | 3    | M5      | 5  | 3.5  | 17.1 | 2.0  | 5.8  |
| 2006A01 | R6 | 3.17 | M5      | 5  | 3.5  | 17.1 | 2.0  | 5.8  |
| 2006001 | R6 | 4    | M5      | 8  | 4.0  | 25.2 | 2.5  | 9.0  |
| 2006020 | R6 | 4    | M7      | 8  | 5.0  | 26.5 | 2.5  | 9.8  |
| 2006002 | R6 | 4    | 1/8     | 13 | 6.0  | 28.9 | 2.5  | 15.0 |
| 2006003 | R6 | 4    | 1/4     | 14 | 8.0  | 32.4 | 2.2  | 18.0 |
| 2006004 | R6 | 5    | M5      | 8  | 4.0  | 25.2 | 2.7  | 9.0  |
| 2006005 | R6 | 5    | 1/8     | 13 | 6.0  | 28.9 | 3.0  | 15.0 |
| 2006006 | R6 | 5    | 1/4     | 14 | 8.0  | 32.4 | 3.0  | 18.0 |
| 2006000 | R6 | 6    | M5      | 9  | 4.0  | 25.7 | 2.7  | 10.0 |
| 2006021 | R6 | 6    | M7      | 8  | 5.0  | 27   | 4    | 9.8  |
| 2006007 | R6 | 6    | 1/8     | 13 | 6.0  | 29.4 | 4.0  | 15.0 |
| 2006008 | R6 | 6    | 1/4     | 14 | 8.0  | 32.9 | 4.0  | 18.0 |
| 2006009 | R6 | 8    | 1/8     | 13 | 6.0  | 30.6 | 5.5  | 15.0 |
| 2006010 | R6 | 8    | 1/4     | 14 | 8.0  | 34.0 | 6.0  | 18.0 |
| 2006011 | R6 | 8    | 3/8     | 17 | 9.0  | 35.4 | 6.0  | 22.0 |
| 2006012 | R6 | 10   | 1/4     | 14 | 8.0  | 35.6 | 7.8  | 18.0 |
| 2006013 | R6 | 10   | 3/8     | 17 | 9.0  | 37.1 | 8.0  | 22.0 |
| 2006019 | R6 | 12   | 1/4     | 14 | 8    | 38.0 | 7.8  | 18.0 |
| 2006014 | R6 | 12   | 3/8     | 17 | 9.0  | 39.5 | 10.0 | 22.0 |
| 2006015 | R6 | 12   | 1/2     | 22 | 11.0 | 41.5 | 10.0 | 26.0 |
| 2006016 | R6 | 14   | 3/8     | 17 | 9.0  | 44.9 | 10.0 | 22.0 |
| 2006017 | R6 | 14   | 1/2     | 22 | 11.0 | 46.9 | 12.0 | 26.0 |
| 2006101 | R6 | 6    | M12X1.5 | 13 | 8    | 33.0 | 4.0  | 17.0 |
| 2006102 | R6 | 8    | M12X1.5 | 13 | 8    | 33.7 | 6.0  | 17.0 |

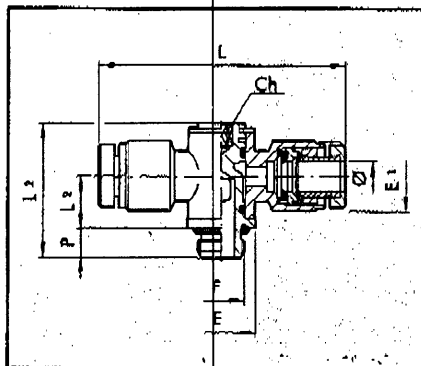
**EXTENDED THREADED ADAPTER (R18)**



|         |     |    |     |    |   |      |      |     |    |    |
|---------|-----|----|-----|----|---|------|------|-----|----|----|
| 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 | 50.0 | 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 | 54.6 | 27.2 | 8.2 | 18 | 12 |
| 2018013 | R18 | 10 | 3/8 | 17 | 9 | 56.1 | 27.7 | 8.7 | 22 | 12 |



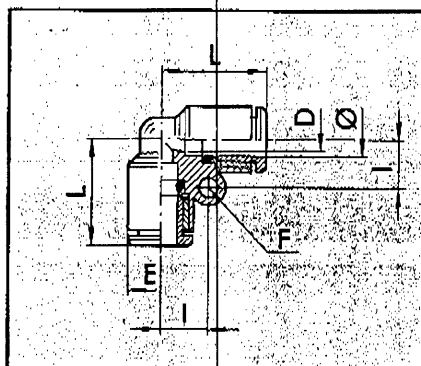
# MALE ROD DUAL ROTARY RING TECHNOPOLYMER (R20/A)



## SERIES R

|         |       |    |     |   |    |    |      |      |     |      |
|---------|-------|----|-----|---|----|----|------|------|-----|------|
| 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 | 9  | 64 | 31.5 | 11.5 | 18  | 21   |
| 2020A11 | R20/A | 12 | 3/8 | 5 | 11 | 68 | 36   | 13.5 | 22  | 21   |
| 2020A12 | R20/A | 12 | 1/2 | 8 |    | 72 | 42   | 16.2 | 26  | 21   |

# ELBOW INTERMEDIATE TECHNOPOLYMER (R21)



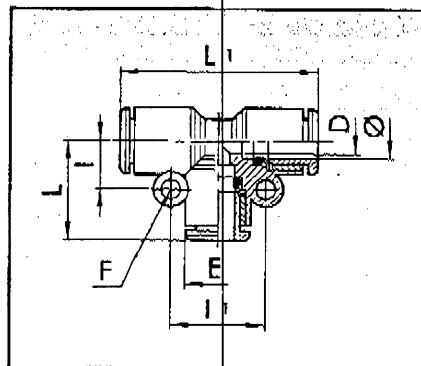
## MINIATURE SERIES FOX

|         |      |   |      |     |      |     |     |
|---------|------|---|------|-----|------|-----|-----|
| 2L21001 | RL21 | 4 | 15.8 | 2.5 | 9.2  | 7.2 | 3.3 |
| 2L21003 | RL21 | 6 | 18.1 | 4.2 | 11.3 | 8.2 | 3.3 |
| 2L21004 | RL21 | 8 | 20.5 | 6.2 | 13.8 | 9.6 | 3.3 |

## SERIES R

|         |     |    |      |     |      |   |   |
|---------|-----|----|------|-----|------|---|---|
| 2021001 | R21 | 4  | 19   | 3   | 12.5 | - | - |
| 2021002 | R21 | 5  | 20   | 3.5 | 13.5 | - | - |
| 2021003 | R21 | 6  | 20   | 4   | 15   | - | - |
| 2021004 | R21 | 8  | 23.5 | 6   | 16.5 | - | - |
| 2021005 | R21 | 10 | 27.5 | 8   | 18.5 | - | - |
| 2021006 | R21 | 12 | 32.5 | 10  | 21   | - | - |

# INTERMEDIATE TEE TECHNOPOLYMER (R22)



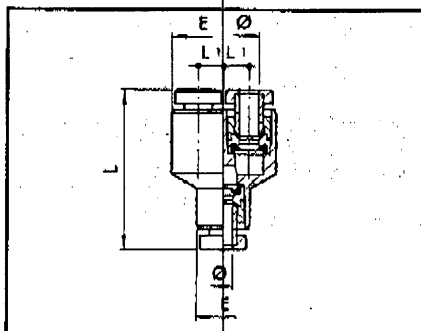
## MINIATURE SERIES FOX

|         |      |   |      |      |     |      |     |      |     |
|---------|------|---|------|------|-----|------|-----|------|-----|
| 2L22001 | RL22 | 4 | 15.8 | 31.6 | 2.5 | 9.2  | 7.2 | 14.4 | 3.3 |
| 2L22003 | RL22 | 6 | 18.1 | 36.2 | 4.2 | 11.3 | 8.2 | 16.4 | 3.3 |
| 2L22004 | RL22 | 8 | 20.5 | 41   | 6.2 | 13.8 | 9.6 | 19.2 | 3.3 |

## SERIES R

|         |     |    |      |    |     |      |   |   |   |
|---------|-----|----|------|----|-----|------|---|---|---|
| 2022001 | R22 | 4  | 19   | 38 | 3   | 12.5 | - | - | - |
| 2022002 | R22 | 5  | 20   | 40 | 3.5 | 13.5 | - | - | - |
| 2022003 | R22 | 6  | 20   | 40 | 4   | 15   | - | - | - |
| 2022004 | R22 | 8  | 23.5 | 47 | 6   | 16.5 | - | - | - |
| 2022005 | R22 | 10 | 27.5 | 55 | 8   | 18.5 | - | - | - |
| 2022006 | R22 | 12 | 32.5 | 65 | 10  | 21   | - | - | - |

# WYE (R23)



## SERIES R

|         |     |   |      |     |      |
|---------|-----|---|------|-----|------|
| 2023001 | R23 | 4 | 34   | 5.5 | 11   |
| 2023002 | R23 | 5 | 35.5 | 6.5 | 13.5 |
| 2023003 | R23 | 6 | 35.5 | 7   | 14   |
| 2023004 | R23 | 8 | 44   | 8   | 16   |