

PUSH-IN FITTINGS FOOD GRADE HFR SERIES



PLUS

TEA+ SURFACE TREATMENT ABLE TO GUARANTEES A HIGH RESISTANCE TO CORROSION AND CHEMICALS

RELIABILITY and **HIGH MECHANICAL EFFICIENCY** are key features for high performances

COMPLETE RANGE for a wide array of applications

Suitable for **FOOD & BEVERAGE AND COFFEE MACHINES**

PRODUCTS CAN BE TAILOR-MADE TO SPECIFIC CUSTOMER NEEDS

M A D E I N I T A L Y

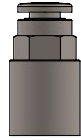




p. 77 / **HFR-C-G**



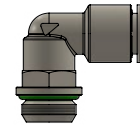
p. 77 / **HFR-O-C**



p. 77 / **HFR-CF-G**



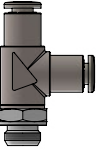
p. 78 / **HFR-MM**



p. 78 / **HFR-L-G**



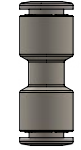
p. 78 / **HFR-T-G**



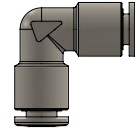
p. 79 / **HFR-ST-G**



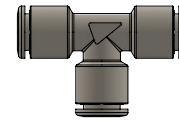
p. 79 / **HFR-A-G**



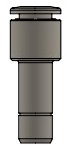
p. 79 / **HFR-UC**



p. 80 / **HFR-L**

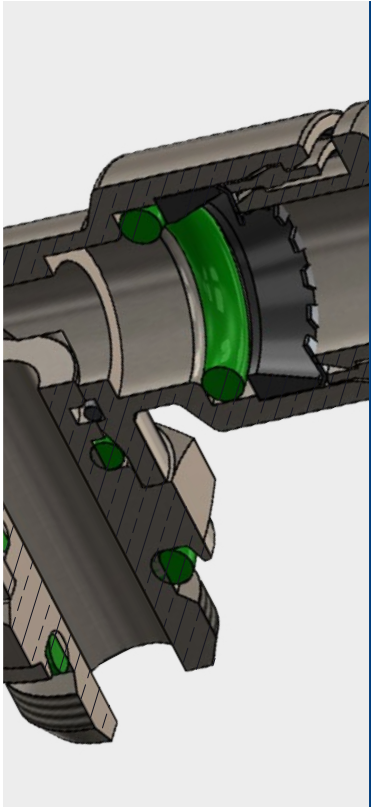


p. 80 / **HFR-T**



p. 80 / **HFR-GJ**





-20°C ÷ 150°C



Working pressure:
20 Bar
Negative pressure:
- 0,95 Bar (- 95 kPa)



Compressed air, vacuum,
water and fluids suitable with
the construction materials



- Parallel gas BSPP ISO 228
from G1/8" to G1/2"
- Metric ISO 262
M5 and M7



Polyamide PA, Polyethylene
PE, FEP and PTFE

Body: TEA+ plated brass

Collet: TEA+ plated brass

Collar: PVDF-UHM FDA compliant



Lock claw: Stainless steel AISI 301

Back ring: PVDF-UHM FDA compliant

O-ring: FKM NSF/ANSI 61 certified
and FDA compliant

Retaining ring for swivel system:
Stainless steel AISI 302



NSF/ANSI 169



Food contact materials
EC 1935/2004



ICIM certified product
food contact materials



Products in compliance with
EC Regulation 1907/2006



Products in compliance with
the directive EU 2015/863



HIGHLY CORROSION RESISTANT in strong acidic or alkaline environments:

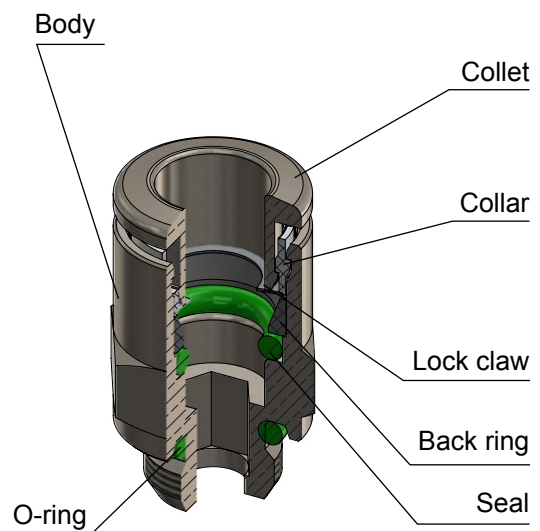
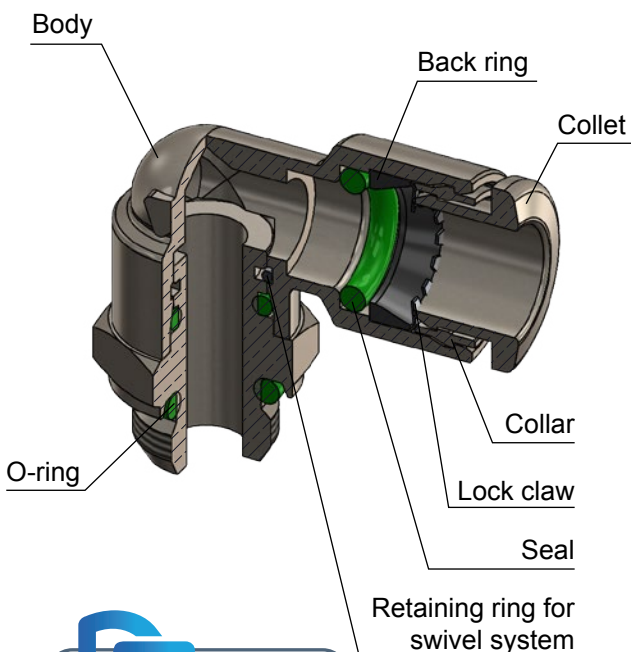
- thicknesses of 2 - 4 µm withstand
- ASS 96h and CASS 48h salt spray tests

EN 16058 rig test (26 weeks)

NSF 61 section 8- pH5 Commercial hot (82°C) for taps, sanitary fittings, HVAC

EN 16889 for professional coffee machines and other "food zone" devices.

CONSTRUCTION DETAILS



drawings and technical data are not binding & can be changed without notice

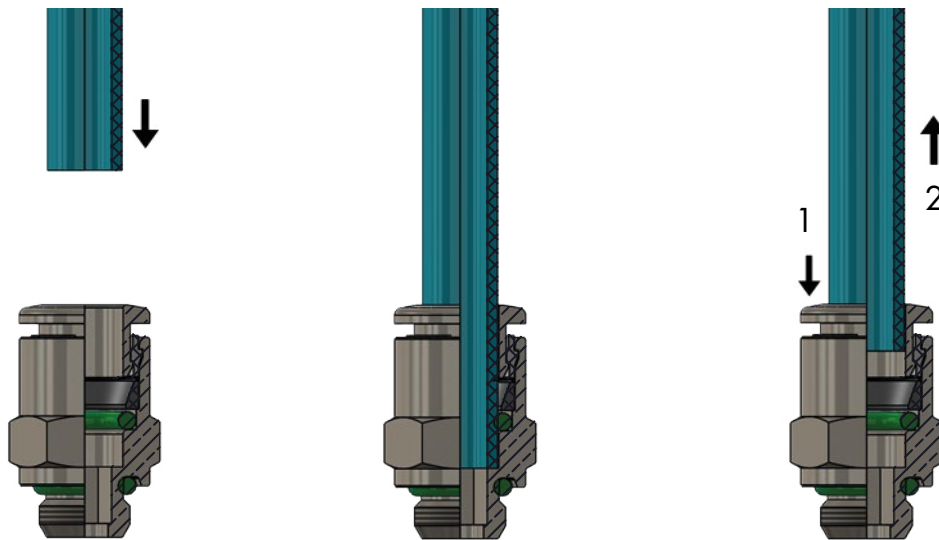
Subject to change

INSERTION OF THE TUBE INTO THE FITTING

- Make sure the tube is fully inserted into the fitting.
- To insert the tube into the fitting cut the tube off square (90°), insert tube up to the fitting end stop, and pull back gently to make sure it is correctly connected.
- If there is any damage or scratches on the tube surface the tube is an oval shape, air leakage and tube release may occur. Check the tube condition carefully.
- The OD of polyurethane tube expands when pressure is applied. Reinsertion into the fitting may not always be possible. Check the OD of the tube and renew it the expansion is out of tolerance.

DISCONNECTION OF THE TUBE FROM THE FITTING

- Make sure the pressure in the system is zero before releasing the tube from the fitting.
- To release the tube, press the release sleeve towards the fitting with one hand (1) and pull the tube away from the fitting with the other hand (2).
- Always remove the section of tube previously inserted into the fitting before reinserting the tube by cutting back the tube. Always use the correct tube cutter in order to cut the tube square and free of damage.



TOLERANCES - METRIC TUBE

| Ø TUBE (mm) | 4 | 6 | 8 | 10 | 12 |
|----------------|-------|-------|-------|--------|--------|
| TOLERANCE (mm) | ± 0,1 | ± 0,1 | ± 0,1 | ± 0,15 | ± 0,15 |

INSERTION DEPTH - METRIC TUBE

| Ø TUBE (mm) | 4 | 6 | 8 | 10 | 12 |
|----------------------------|----|------|------|----|----|
| TUBE INSERTION LENGHT (mm) | 14 | 15,5 | 17,5 | 19 | 21 |

TIGHTENING TORQUE

PARALLEL GAS BSPP ISO 228 & METRIC ISO 262

| THREAD | M5x0,8 | M7x1 | 1/8" | 1/4" | 3/8" | 1/2" |
|--------|---------|---------|---------|-----------|---------|---------|
| Nm | 1 ± 20% | 3 ± 20% | 6 ± 20% | 7,5 ± 20% | 9 ± 20% | 9 ± 20% |



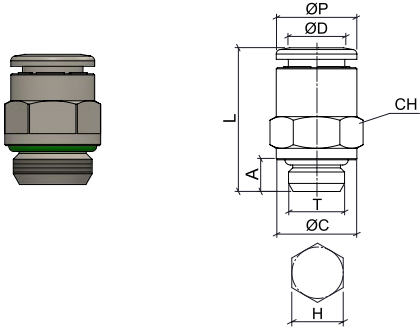
drawings and technical data are not binding & can be changed without notice

Subject to change



HFRC-G

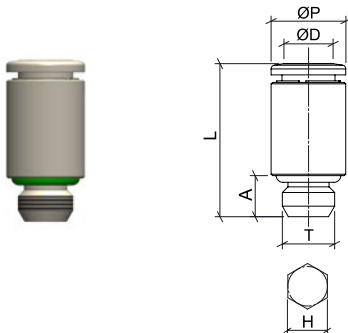
Male connector BSPP & metric thread



| CODE | ØD | T | ØP | ØC | A | L | CH | H |
|-----------|----|--------|----|----|-----|------|----|-----|
| HFRC04M5 | 4 | M5x0,8 | 10 | 7 | 4 | 19,0 | 9 | 2,5 |
| HFRC04G01 | | G 1/8" | 10 | 14 | 5,5 | 18,0 | 10 | 3 |
| HFRC04G02 | | G 1/4" | 10 | 16 | 6,5 | 18,0 | 10 | 3 |
| HFRC06M5 | 6 | M5x0,8 | 12 | 7 | 4 | 21,0 | 11 | 2,5 |
| HFRC06G01 | | G 1/8" | 12 | 14 | 5,5 | 19,5 | 12 | 4 |
| HFRC06G02 | | G 1/4" | 12 | 16 | 6,5 | 19,5 | 12 | 4 |
| HFRC08G01 | 8 | G 1/8" | 14 | 14 | 5,5 | 24,5 | 14 | 5 |
| HFRC08G02 | | G 1/4" | 14 | 16 | 6,5 | 21,5 | 14 | 6 |
| HFRC08G03 | | G 3/8" | 14 | 20 | 7,5 | 21,5 | 14 | 6 |
| HFRC10G02 | 10 | G 1/4" | 16 | 16 | 6,5 | 27,5 | 16 | 7 |
| HFRC10G03 | | G 3/8" | 16 | 20 | 7,5 | 25,0 | 16 | 8 |
| HFRC12G02 | 12 | G 1/4" | 19 | 16 | 6,5 | 30,0 | 19 | 7 |
| HFRC12G03 | | G 3/8" | 19 | 22 | 7,5 | 29,5 | 19 | 10 |
| HFRC12G04 | | G 1/2" | 19 | 25 | 9 | 28,0 | 19 | 10 |

HFROC

Male connector round body metric thread

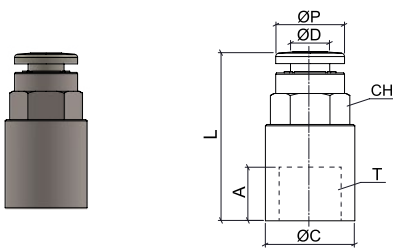


| CODE | ØD | T | ØP | A | L | H |
|--------------|----|------|----|-----|------|-----|
| HFROC04M7 | 4 | M7x1 | 10 | 6 | 20,5 | 2,5 |
| * HFROC06M7C | 6 | M7x1 | 10 | 5,5 | 20,5 | 4 |

* compact version

HFRCF-G

Female connector BSPP thread

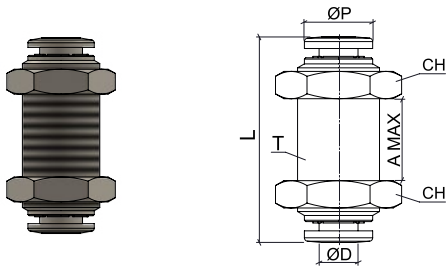


| CODE | ØD | T | ØP | ØC | A | L | CH |
|------------|----|--------|----|----|-----|------|----|
| HFRCF04G01 | 4 | G 1/8" | 10 | 13 | 7,5 | 24,5 | 13 |
| HFRCF04G02 | | G 1/4" | 10 | 16 | 11 | 27,0 | 10 |
| HFRCF06G01 | 6 | G 1/8" | 12 | 13 | 7,5 | 26,0 | 12 |
| HFRCF06G02 | | G 1/4" | 12 | 16 | 11 | 29,0 | 12 |
| HFRCF08G01 | 8 | G 1/8" | 14 | 13 | 7,5 | 27,0 | 14 |
| HFRCF08G02 | | G 1/4" | 14 | 16 | 11 | 30,0 | 14 |



HFRMM

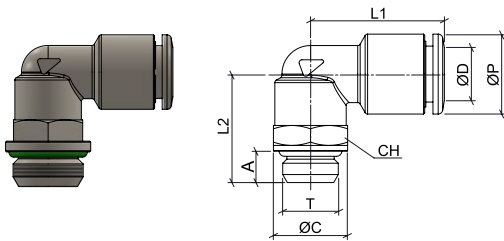
Bulkhead connector



| CODE | ØD | T | ØP | L | A MAX | CH |
|---------|----|---------|----|------|-------|----|
| HFRMM04 | 4 | M12x1 | 10 | 34,0 | 15 | 16 |
| HFRMM06 | 6 | M14x1 | 12 | 32,0 | 12 | 17 |
| HFRMM08 | 8 | M16x1 | 14 | 36,5 | 16 | 19 |
| HFRMM10 | 10 | M20x1 | 16 | 43,0 | 19 | 24 |
| HFRMM12 | 12 | M22x1,5 | 19 | 44,0 | 20 | 25 |

HFRL-G

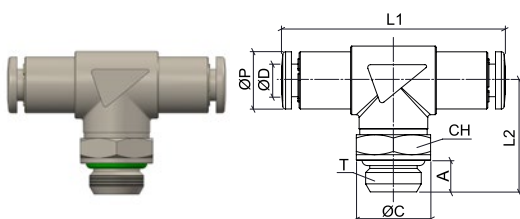
Swivel male elbow BSPP & metric



| CODE | ØD | T | ØP | ØC | A | L1 | L2 | CH |
|------------|----|--------|----|----|-----|------|------|----|
| HFRLO4M5 | 4 | M5x0,8 | 10 | 7 | 4 | 18,0 | 15,0 | 8 |
| HFRLO4G01 | | G 1/8" | 10 | 13 | 5,5 | 19,5 | 19,0 | 13 |
| HFRLO4G02 | | G 1/4" | 10 | 16 | 6,5 | 19,5 | 21,5 | 13 |
| HFRLO6M5 | 6 | M5x0,8 | 12 | 7 | 4 | 19,5 | 16,0 | 8 |
| HFRLO6G01 | | G 1/8" | 12 | 13 | 5,5 | 21,0 | 19,0 | 13 |
| HFRLO6G02 | | G 1/4" | 12 | 16 | 6,5 | 21,0 | 21,5 | 13 |
| HFRLO8G01 | 8 | G 1/8" | 14 | 13 | 5,5 | 23,0 | 19,0 | 13 |
| HFRLO8G02 | | G 1/4" | 14 | 16 | 6,5 | 23,0 | 21,5 | 13 |
| HFRLO8G03 | | G 3/8" | 14 | 20 | 7,5 | 23,0 | 23,0 | 13 |
| HFRLO10G02 | 10 | G 1/4" | 16 | 16 | 6,5 | 26,0 | 23,0 | 16 |
| HFRLO10G03 | | G 3/8" | 16 | 20 | 7,5 | 26,0 | 26,0 | 16 |
| HFRLO12G02 | 12 | G 1/4" | 19 | 16 | 6,5 | 31,0 | 25,5 | 20 |
| HFRLO12G03 | | G 3/8" | 19 | 20 | 7,5 | 31,0 | 26,5 | 20 |
| HFRLO12G04 | | G 1/2" | 19 | 25 | 9 | 31,0 | 29,0 | 20 |

HFRT-G

Swivel male tee BSPP thread

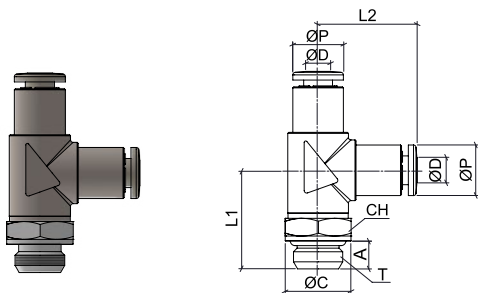


| CODE | ØD | T | ØP | A | L1 | L2 | CH |
|-----------|----|--------|----|-----|------|------|----|
| HFRT04G01 | 4 | G 1/8" | 10 | 5,5 | 39,0 | 19,5 | 13 |
| HFRT06G01 | 6 | G 1/8" | 12 | 5,5 | 42,0 | 19,5 | 13 |
| HFRT06G02 | | G 1/4" | 12 | 6,5 | 42,0 | 22,0 | 13 |
| HFRT08G01 | 8 | G 1/8" | 14 | 5,5 | 46,5 | 19,5 | 13 |
| HFRT08G02 | | G 1/4" | 14 | 6,5 | 46,5 | 22,0 | 13 |



HFRST-G

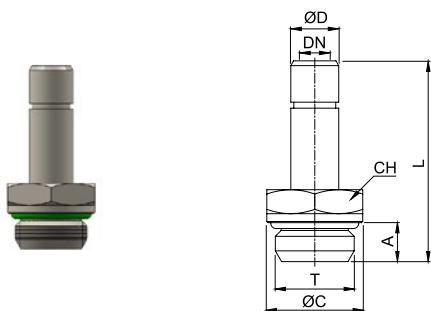
Swivel male lateral tee BSPP thread



| CODE | ØD | T | ØP | ØC | A | L1 | L2 | CH |
|------------|----|--------|----|----|-----|------|------|----|
| HFRST04G01 | 4 | G 1/8" | 10 | 13 | 5,5 | 19,5 | 19,5 | 13 |

HFRA-G

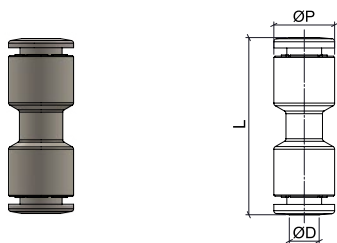
Stem adapter BSPP thread



| CODE | ØD | T | ØC | A | L | DN | CH |
|-----------|----|--------|----|-----|------|-----|----|
| HFRA04G01 | 4 | G 1/8" | 13 | 5,5 | 28,0 | 2,0 | 13 |
| HFRA06G01 | 6 | G 1/8" | 13 | 5,5 | 29,0 | 4,0 | 13 |
| HFRA06G02 | | G 1/4" | 16 | 6,5 | 30,5 | 4,0 | 13 |
| HFRA08G01 | 8 | G 1/8" | 13 | 5,5 | 30,0 | 6,0 | 13 |
| HFRA08G02 | | G 1/4" | 16 | 6,5 | 32,0 | 6,0 | 13 |
| HFRA10G01 | 10 | G 1/8" | 13 | 5,5 | 35,0 | 6,0 | 13 |
| HFRA10G02 | | G 1/4" | 16 | 6,5 | 36,5 | 8,0 | 13 |
| HFRA12G02 | 12 | G 1/4" | 16 | 6,5 | 37,5 | 8,0 | 13 |

HFRUC

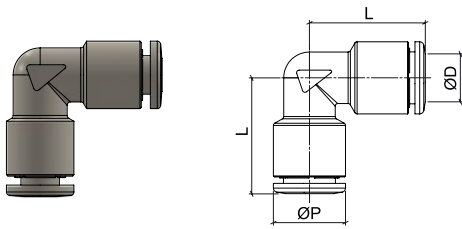
Union connector



| CODE | ØD | ØP | L |
|---------|----|----|------|
| HFRUC04 | 4 | 10 | 29,0 |
| HFRUC06 | 6 | 12 | 32,0 |
| HFRUC08 | 8 | 14 | 35,5 |
| HFRUC10 | 10 | 16 | 39,5 |
| HFRUC12 | 12 | 19 | 44,0 |

HFRUL

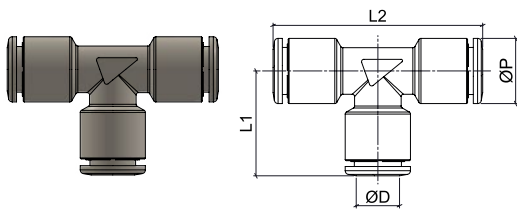
Union elbow



| CODE | ØD | ØP | L |
|---------|----|----|------|
| HFRUL04 | 4 | 10 | 18,0 |
| HFRUL06 | 6 | 12 | 19,5 |
| HFRUL08 | 8 | 14 | 22,5 |
| HFRUL10 | 10 | 16 | 25,5 |
| HFRUL12 | 12 | 19 | 29,0 |

HFRUT

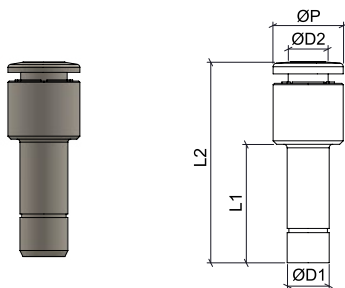
Union tee



| CODE | ØD | ØP | L1 | L2 |
|---------|----|----|------|------|
| HFRUT04 | 4 | 10 | 18,0 | 36,0 |
| HFRUT06 | 6 | 12 | 19,5 | 39,0 |
| HFRUT08 | 8 | 14 | 22,5 | 45,0 |
| HFRUT10 | 10 | 16 | 25,5 | 51,0 |
| HFRUT12 | 12 | 19 | 29,0 | 58,0 |

HFRGJ

Stem reduction



| CODE | ØD1 | ØD2 | ØP | L1 | L2 |
|-----------|-----|-----|----|------|------|
| HFRGJ0604 | 6 | 4 | 10 | 170 | 28,5 |
| HFRGJ0806 | 8 | 6 | 12 | 19,5 | 34,5 |
| HFRGJ1008 | 10 | 8 | 14 | 24,0 | 37,5 |
| HFRGJ1210 | 12 | 10 | 16 | 25,0 | 40,0 |

