



STUCCHI
Innesti Rapidi
Funghetto



 HYDRAULIC
COMPONENTS
& FLUID CONTAMINATION
CONTROL



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BIRSERIES

INTERCHANGE > ISO7241-1 "A"



TECHNICAL FEATURES AND OPTIONS

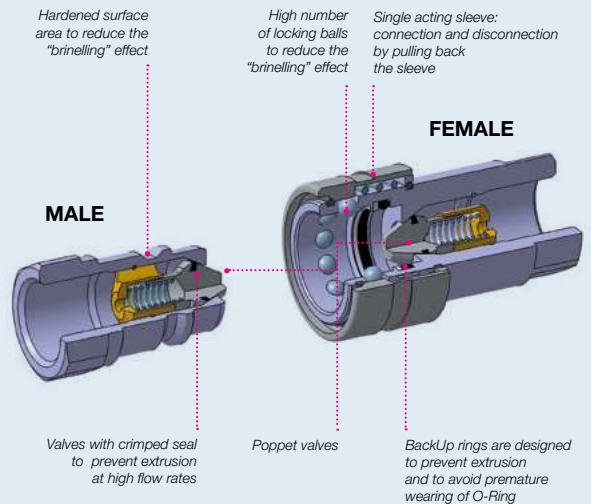
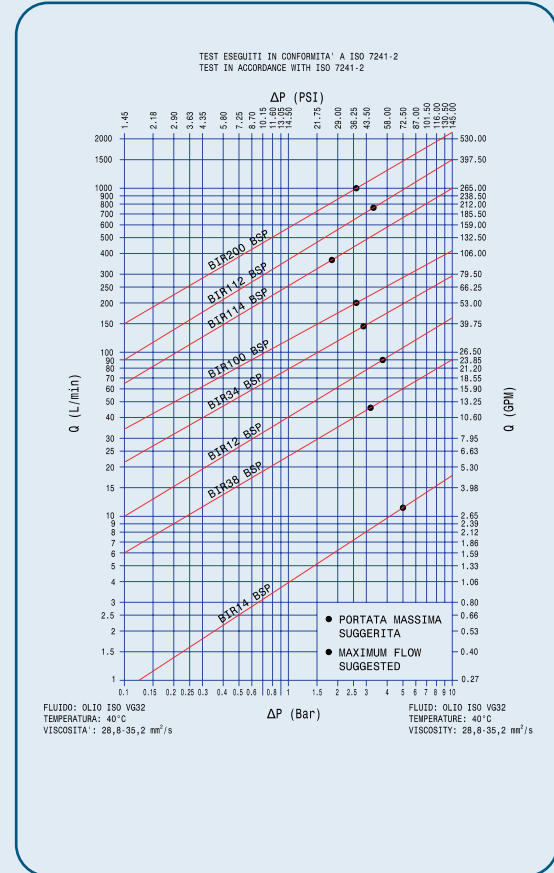
| | | |
|--|---|---|
| Interchange ISO 7241 A | Sealing description Nitrile NBR | Connection system Single acting sleeve |
| Available sizes From 1/4" to 2" | Material/treatment Carbon steel /Cr3 | Available threads BSP - NPT - BSPT - SAE |
| Operating pressure Up to 350 bar | Locking mechanism Locking ball system | Flow rate Up to 1000 l/min |
| Temperature (°C) -20°C / +100°C | Valving style Poppet | Connection under pressure Only PC version Connection: one side Disconnection: not allowed |

BENEFITS

- Connection under residual pressure is allowed in the male or in the female (PC version). Please notice that the counterpart side should be drained and should use a standard ISO A poppet half.
- The poppet valve with elastomer seal provides maximum sealing of the couplings once disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Compact design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



MAIN APPLICATIONS



POPPET

PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|-------|----------|-------------|---------------------|--------|---------------|-------|------------------|-------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/4 | 6,3 | BIR14 | 12 | 3,18 | 60 | 13,50 | 25 | 5,63 | 0,70 |
| 3/8 | 10,0 | BIR38 | 46 | 12,19 | 90 | 20,25 | 30 | 6,75 | 1,20 |
| 1/2 | 12,5 | BIR12 | 90 | 23,85 | 70 | 15,75 | 55 | 12,38 | 2,10 |
| 3/4 | 20,0 | BIR34 | 148 | 39,22 | 140 | 31,50 | 55 | 12,38 | 5,20 |
| 1 | 25,0 | BIR100 | 200 | 53,00 | 190 | 42,75 | 55 | 12,38 | 9,00 |
| 1-1/4 | 31,5 | BIR114 | 378 | 100,17 | 230 | 51,75 | 55 | 12,38 | 27,00 |
| 1-1/2 | 40 | BIR112 | 750 | 198,75 | 250 | 56,25 | 70 | 13,75 | 49,00 |
| 2 | 50 | BIR200 | 1000 | 265,00 | 270 | 60,75 | 60 | 13,50 | 75,00 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|-------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/4 | BIR14 | 35 | 5075 | 35 | 5075 | 35 | 5075 | 126 | 18270 | 126 | 18270 | 126 | 18270 |
| 3/8 | BIR38 | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 1/2 | BIR12 | 25 | 3625 | 25 | 3625 | 25 | 3625 | 80 | 11600 | 80 | 11600 | 100 | 14500 |
| 3/4 | BIR34 | 25 | 3625 | 25 | 3625 | 25 | 3625 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 1 | BIR100 | 23 | 3335 | 23 | 3335 | 23 | 3335 | 80 | 11600 | 80 | 11600 | 80 | 11600 |
| 1-1/4 | BIR114 | 23 | 3335 | 23 | 3335 | 23 | 3335 | 80 | 11600 | 80 | 11600 | 80 | 11600 |
| 1-1/2 | BIR112 | 18 | 2610 | 18 | 2610 | 18 | 2610 | 64 | 9280 | 64 | 9280 | 64 | 9280 |
| 2 | BIR200 | 13 | 1885 | 13 | 1885 | 13 | 1885 | 40 | 5800 | 40 | 5800 | 40 | 5800 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Different possible configurations:

Thread BSPT and SAE available upon request.

For size 12, different female and male threads configurations available upon request.

PC version, special valve to connect under residual pressure possible either on male or on female side.

PL version, free flow (without valve) on both sides.

TIC version, shielded poppet to avoid flow-checking when used with other connect-under-pressure type couplers.

For complete technical information please contact Stucchi Technical Support.

Temperature range:

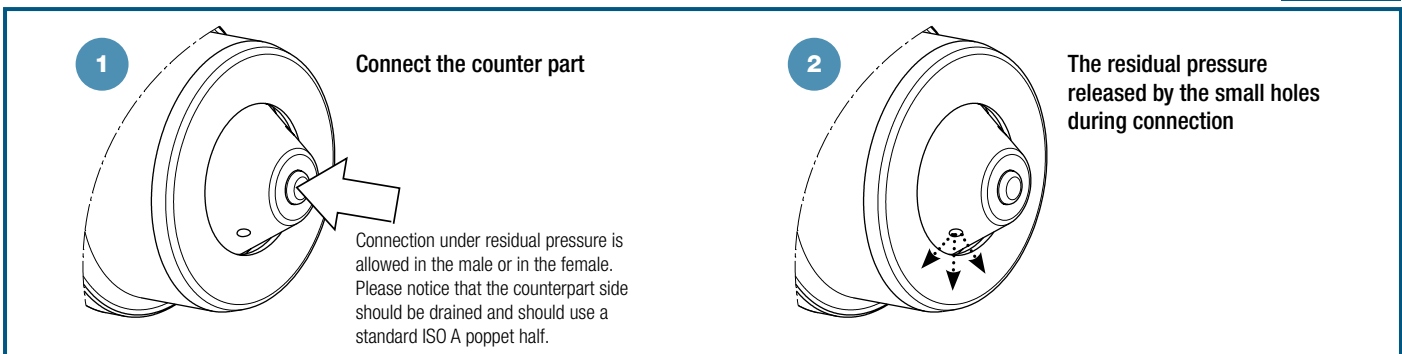
Standard seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Upon request seals in FKM (VITON®):

from -15°C to +180°C (from +5 °F to +356 °F).

Please read carefully Instructions and warnings for proper selection of the products.

PC version



! WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Connect under pressure products (PC version) are suitable to be connected under residual (static) pressure.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow and pressure in the circuit (except PC version).

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

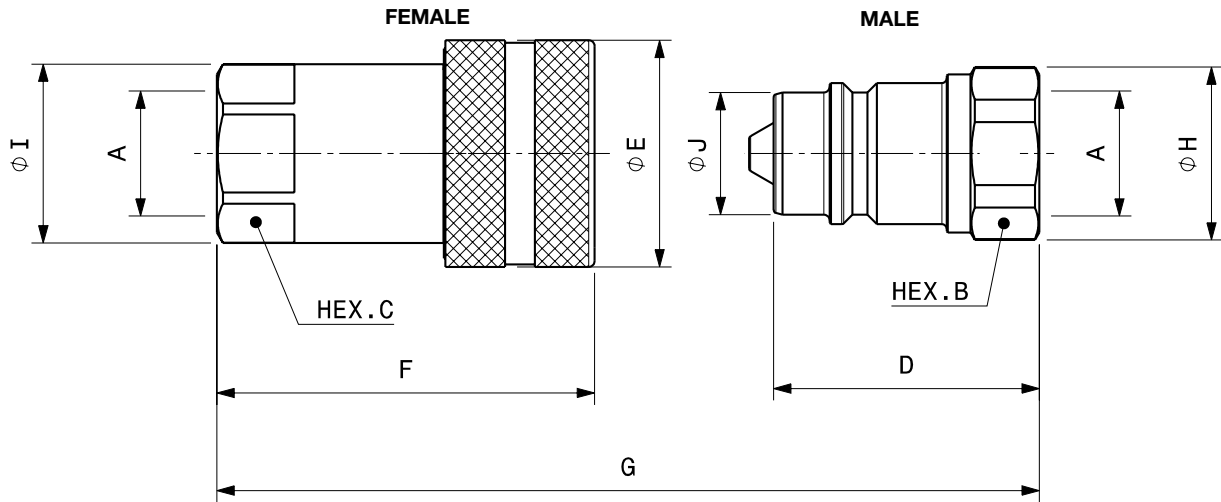
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

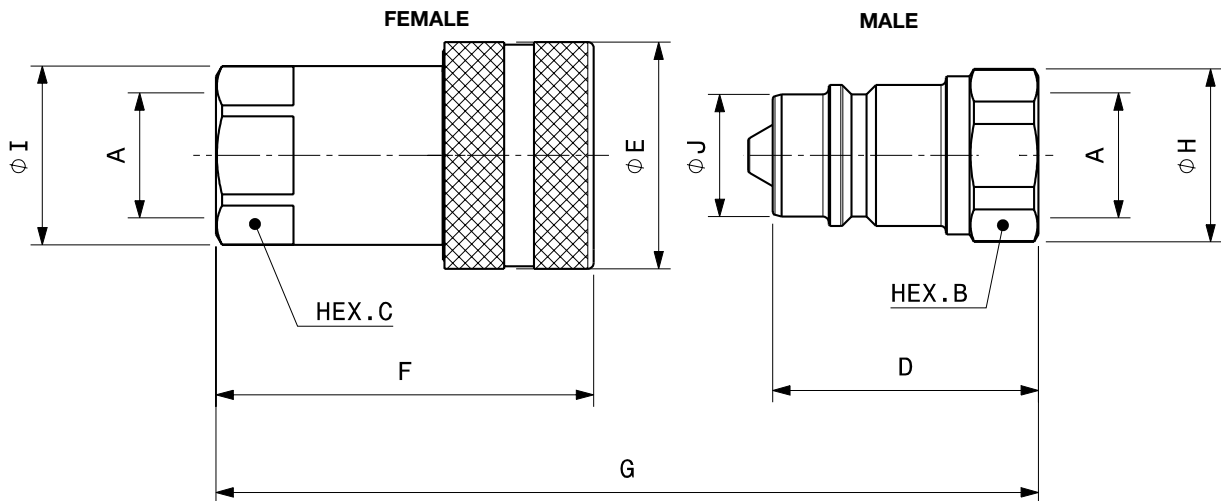
For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



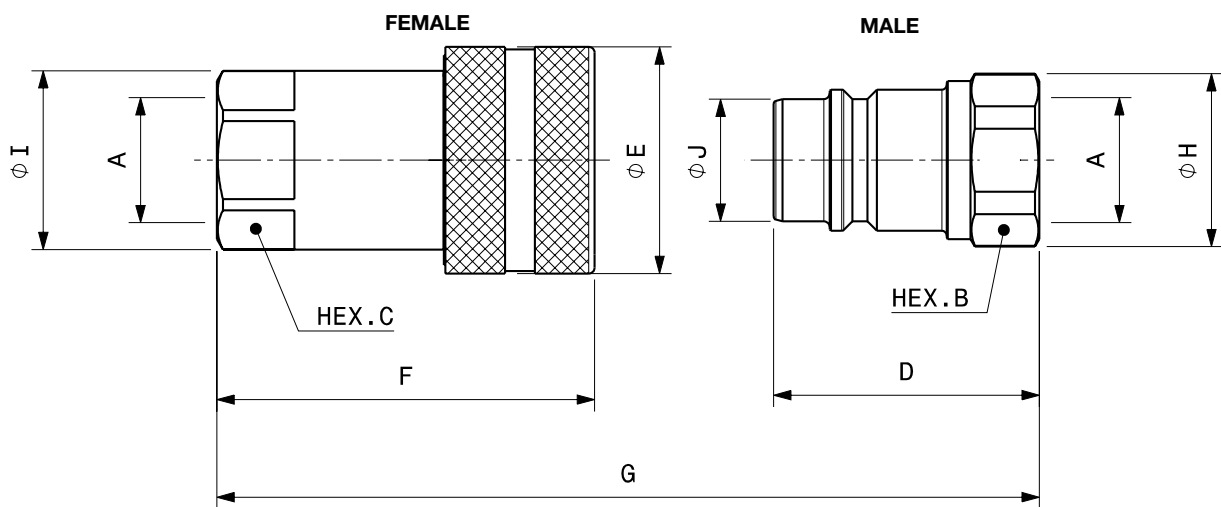
Port description: FEMALE THREAD BSP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|----------|------|----------|----|--------|------|---|-------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F BIR14 BSP | Female 800500000 | 6,3 | 1/4" | G | 64,8 | 2,55 | F | 47,1 | 1,85 | C | 19,0 | 0,75 | I | 22,0 | 0,87 | E | 26,0 | 1,02 | 0,10 | 0,21 |
| | M BIR14 BSP | Male 800500001 | | | | | | D | 32,0 | 1,26 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 11,8 | 0,46 | 0,03 | 0,07 |
| 3/8" | F BIR38 BSP | Female 800500002 | 10 | 3/8" | G | 76,8 | 3,02 | F | 56,1 | 2,21 | C | 22,0 | 0,87 | I | 24,0 | 0,94 | E | 31,0 | 1,22 | 0,14 | 0,32 |
| | M BIR38 BSP | Male 800500003 | | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 17,3 | 0,68 | 0,05 | 0,11 |
| 1/2" | F BIR12 BSP | Female 800500004 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M BIR12 BSP | Male 800500005 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |
| 3/4" | F BIR34 BSP | Female 800500006 | 20 | 3/4" | G | 111,1 | 4,37 | F | 82,2 | 3,24 | C | 38,0 | 1,50 | I | 44,0 | 1,73 | E | 48,0 | 1,89 | 0,49 | 1,09 |
| | M BIR34 BSP | Male 800500007 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 29,1 | 1,15 | 0,21 | 0,45 |
| 1" | F BIR100 BSP | Female 800500008 | 25 | 1" | G | 127,3 | 5,01 | F | 97,1 | 3,82 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,76 | 1,68 |
| | M BIR100 BSP | Male 800500009 | | | | | | D | 63,1 | 2,48 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 34,3 | 1,35 | 0,28 | 0,61 |
| 1-1/4" | F BIR114 BSP | Female 800500010 | 31,5 | 1-1/4" | G | 151,2 | 5,95 | F | 117,2 | 4,61 | C | 50,0 | 1,97 | I | 55,5 | 2,19 | E | 65,0 | 2,56 | 1,25 | 2,76 |
| | M BIR114 BSP | Male 800500011 | | | | | | D | 75,0 | 2,95 | B | 55,0 | 2,17 | H | 60,0 | 2,36 | J | 45,0 | 1,77 | 0,59 | 1,31 |
| 1-1/2" | F BIR112 BSP | Female 800500012 | 40 | 1-1/2" | G | 171,3 | 6,74 | F | 135,3 | 5,33 | C | 60,0 | 2,36 | I | 65,5 | 2,58 | E | 80,0 | 3,15 | 2,13 | 4,70 |
| | M BIR112 BSP | Male 800500013 | | | | | | D | 85,0 | 3,35 | B | 60,0 | 2,36 | H | 65,5 | 2,58 | J | 55,0 | 2,17 | 0,88 | 1,94 |
| 2" | F BIR200 BSP | Female 800500014 | 50 | 2" | G | 201,2 | 7,92 | F | 160,2 | 6,31 | C | 75,0 | 2,95 | I | 83,7 | 3,30 | E | 100,0 | 3,94 | 4,13 | 9,10 |
| | M BIR200 BSP | Male 800500015 | | | | | | D | 100,0 | 3,94 | B | 75,0 | 2,95 | H | 82,5 | 3,25 | J | 65,0 | 2,56 | 1,44 | 3,17 |



PC version poppet sealing system connectable under pressure

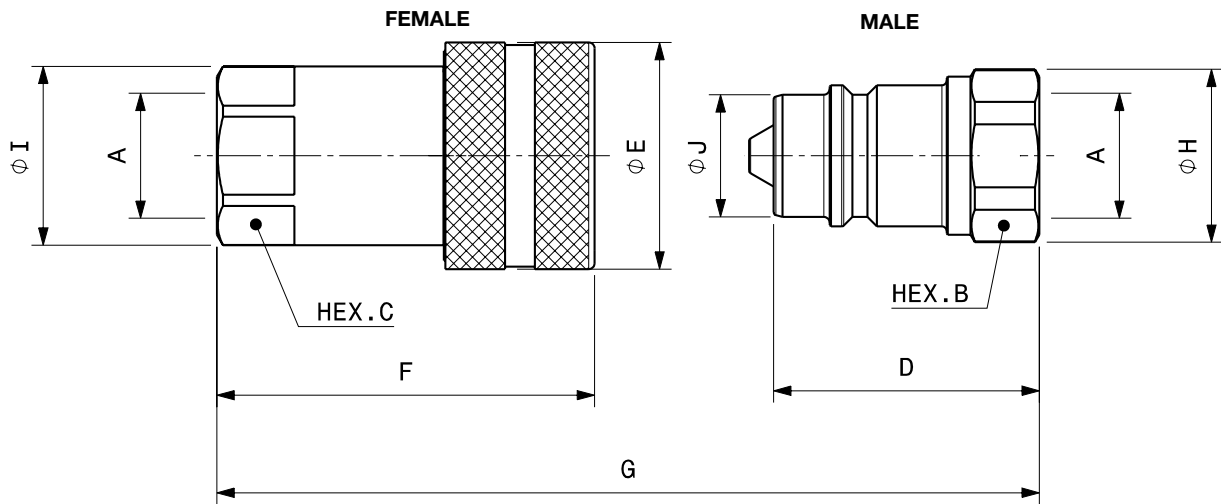
| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|------|--------|----|------|------|----------|------|----------|-----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | inc | kg | lb | | | | | |
| 1/2" | F BIR12PC BSP | Female 805600002 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M BIR12PC BSP | Male 805600003 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |



Port description: FEMALE THREAD BSPP (ISO 1179-1)

PL version full flow (without valve)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|------|------|----------|------|----------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F BIR14PL BSP | Female 800500018 | 6,3 | 1/4" | G | 64,8 | 2,55 | F | 47,1 | 1,85 | C | 19,0 | 0,75 | I | 22,0 | 0,87 | E | 26,0 | 1,02 | 0,10 | 0,21 |
| | M BIR14PL BSP | Male 800500019 | | | | | | D | 32,0 | 1,26 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 11,8 | 0,46 | 0,03 | 0,07 |
| 3/8" | F BIR38PL BSP | Female 800500022 | 10 | 3/8" | G | 76,8 | 3,02 | F | 56,1 | 2,21 | C | 22,0 | 0,87 | I | 24,0 | 0,94 | E | 31,0 | 1,22 | 0,14 | 0,32 |
| | M BIR38PL BSP | Male 800500023 | | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 17,3 | 0,68 | 0,05 | 0,11 |
| 1/2" | F BIR12PL BSP | Female 800500020 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M BIR12PL BSP | Male 800500021 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |
| 3/4" | F BIR34PL BSP | Female 800500016 | 20 | 3/4" | G | 111,1 | 4,37 | F | 82,2 | 3,24 | C | 38,0 | 1,50 | I | 44,0 | 1,73 | E | 48,0 | 1,89 | 0,49 | 1,09 |
| | M BIR34 PL BSP | Male 800500017 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 29,1 | 1,15 | 0,21 | 0,45 |
| 1" | F BIR100PL BSP | Female 800500024 | 25 | 1" | G | 127,3 | 5,01 | F | 97,1 | 3,82 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,76 | 1,68 |
| | M BIR100PL BSP | Male 800500025 | | | | | | D | 63,1 | 2,48 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 34,3 | 1,35 | 0,28 | 0,61 |



Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|----------|------|----------|----|--------|------|---|-------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F BIR14 NPT | Female 800501000 | 6,3 | 1/4" | G | 64,8 | 2,55 | F | 47,1 | 1,85 | C | 19,0 | 0,75 | I | 22,0 | 0,87 | E | 26,0 | 1,02 | 0,09 | 0,21 |
| | M BIR14 NPT | Male 800501001 | | | | | | D | 32,0 | 1,26 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 11,8 | 0,46 | 0,03 | 0,07 |
| 3/8" | F BIR38 NPT | Female 800501002 | 10 | 3/8" | G | 76,8 | 3,02 | F | 56,1 | 2,21 | C | 22,0 | 0,87 | I | 24,0 | 0,94 | E | 31,0 | 1,22 | 0,15 | 0,32 |
| | M BIR38 NPT | Male 800501003 | | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 17,3 | 0,68 | 0,05 | 0,12 |
| 1/2" | F BIR12 NPT | Female 800501004 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M BIR12 NPT | Male 800501005 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |
| 3/4" | F BIR34 NPT | Female 800501006 | 20 | 3/4" | G | 111,1 | 4,37 | F | 82,2 | 3,24 | C | 38,0 | 1,50 | I | 44,0 | 1,73 | E | 48,0 | 1,89 | 0,50 | 1,11 |
| | M BIR34 NPT | Male 800501007 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 29,1 | 1,15 | 0,21 | 0,46 |
| 1" | F BIR100 NPT | Female 800501008 | 25 | 1" | G | 127,3 | 5,01 | F | 97,1 | 3,82 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,77 | 1,70 |
| | M BIR100 NPT | Male 800501009 | | | | | | D | 63,1 | 2,48 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 34,3 | 1,35 | 0,28 | 0,63 |
| 1-1/4" | F BIR114 NPT | Female 800501010 | 31,5 | 1-1/4" | G | 151,2 | 5,95 | F | 117,2 | 4,61 | C | 50,0 | 1,97 | I | 55,5 | 2,19 | E | 65,0 | 2,56 | 1,24 | 2,74 |
| | M BIR114 NPT | Male 800501011 | | | | | | D | 75,0 | 2,95 | B | 55,0 | 2,17 | H | 60,0 | 2,36 | J | 45,0 | 1,77 | 0,62 | 1,36 |
| 1-1/2" | F BIR112 NPT | Female 800501012 | 40 | 1-1/2" | G | 171,3 | 6,74 | F | 135,3 | 5,33 | C | 60,0 | 2,36 | I | 65,5 | 2,58 | E | 80,0 | 3,15 | 2,13 | 4,70 |
| | M BIR112 NPT | Male 800501013 | | | | | | D | 85,0 | 3,35 | B | 60,0 | 2,36 | H | 65,5 | 2,58 | J | 55,0 | 2,17 | 0,88 | 1,94 |
| 2" | F BIR200 NPT | Female 800501014 | 50 | 2" | G | 201,2 | 7,92 | F | 160,2 | 6,31 | C | 75,0 | 2,95 | I | 83,7 | 3,30 | E | 100,0 | 3,94 | 4,13 | 9,10 |
| | M BIR200 NPT | Male 800501015 | | | | | | D | 100,0 | 3,94 | B | 75,0 | 2,95 | H | 82,5 | 3,25 | J | 65,0 | 2,56 | 1,44 | 3,17 |

PC version poppet sealing system connectable under pressure

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|------|------|----------|------|----------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/2" | F BIR12PC NPT | Female 805601000 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M BIR12PC NPT | Male 805601001 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |
| 1" | F BIR100PC NPT | Female 805601004 | 25 | 1" | G | 127,3 | 5,01 | F | 97,1 | 3,82 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,81 | 1,79 |
| | M BIR100PC NPT | Male 805601005 | | | | | | D | 63,1 | 2,48 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 34,3 | 1,35 | 0,30 | 0,66 |

TIC version Shielded poppet to eliminate flow-checking when used with connect-under-pressure competitor couplers

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | |
|-----------|------------------|----------------|--------|----------|----------------|------|--------|----|------|------|----------|------|----------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/2" | M BIR12TIC NPT | Male 800501017 | 12,5 | 1/2" | G | 86,3 | 3,40 | D | 47,0 | 1,85 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | J | 20,5 | 0,81 | 0,08 | 0,19 |

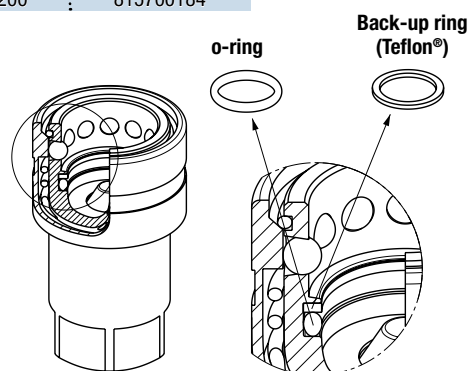
POPPET



SPARE KIT SEAL FOR FEMALE

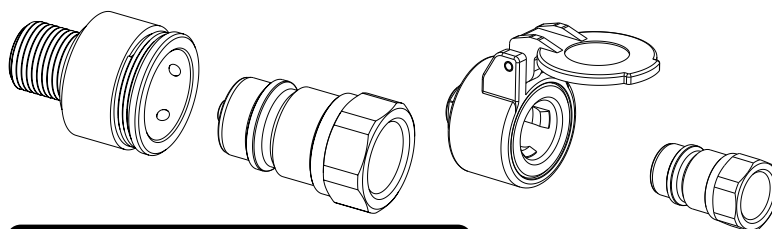
| Repair kit / OR (+BK) | | |
|-----------------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/4" | F BIR14 | 815700170 |
| 3/8" | F BIR38 | 815700172 |
| 1/2" | F BIR12 | 815700174 |
| 3/4" | F BIR34 | 815700176 |
| 1" | F BIR100 | 815700178 |
| 1-1/4" | F BIR114 | 815700180 |
| 1-1/2" | F BIR112 | 815700182 |
| 2" | F BIR200 | 815700184 |

O-Ring in Nitrile
BackUp in Teflon®



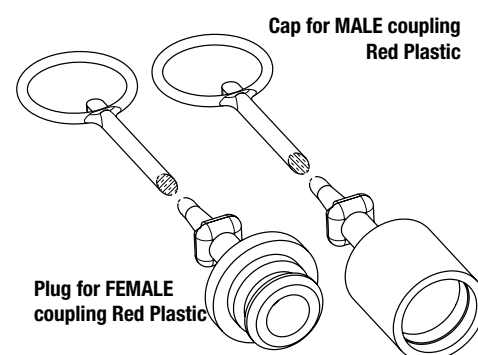
PARKING STATION FOR MALE

| Parking station only (male coupling not included) | | |
|---|-------------------------------------|-------------|
| Body Size | Description | Part Number |
| 1/2" | PARK STATION FOR MALE BIR12 | 815515003 |
| 1/2" | PARK STATION PLASTIC FOR MALE BIR12 | 815515005 |



PROTECTIVE CAPS FOR BIR SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in agriculture applications where exposure to weather and aggregate materials are common. The protective caps for BIR series are manufactured in with connection lanyard (standard color red, other colors available upon request).



| Body Size/Description | | Protective Cap | | Material/Color |
|-----------------------|--------|-----------------|--------------|----------------|
| | | Plug for Female | Cap for Male | |
| 1/4" | BIR14 | 815000012 | 815000013 | Plastic/Red |
| 3/8" | BIR38 | 815000014 | 815000015 | Plastic/Red |
| 1/2" | BIR12 | 815000004 | 815000005 | Plastic/Red |
| 3/4" | BIR34 | 815000016 | 815000017 | Plastic/Red |
| 1" | BIR100 | 815000018 | 815000019 | Plastic/Red |



IP SERIES

INTERCHANGE > ISO 7241 A



Stucchi®



TECHNICAL FEATURES AND OPTIONS

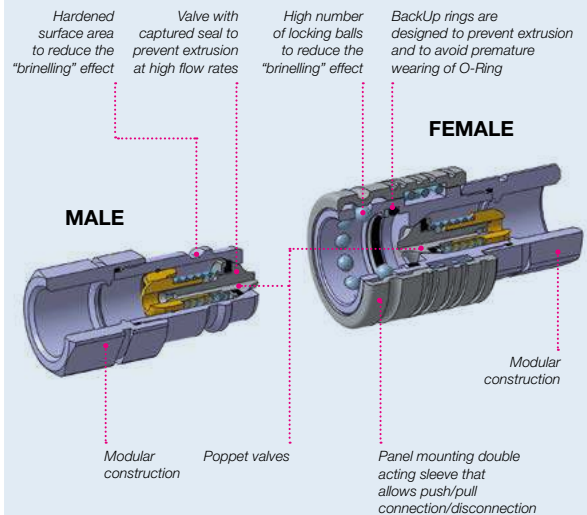
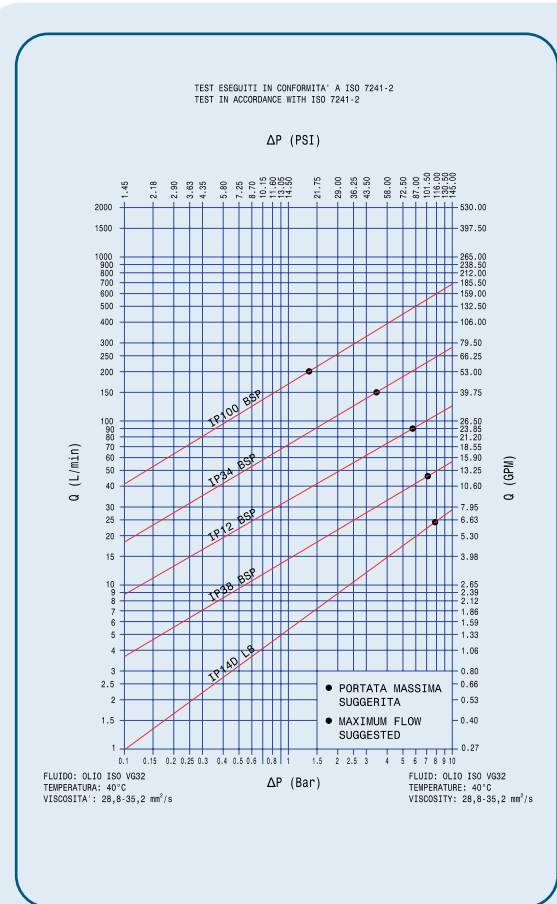
| | | |
|--|---|---|
| Interchange ISO 7241 A | Sealing description Nitrile NBR | Connection system Push - pull |
| Available sizes From 1/4" to 1" | Material /treatment Carbon steel /Cr3 | Available threads BSP - NPT - METRIC |
| Operating pressure Up to 350 bar | Locking mechanism Locking Ball System | Flow rate Up to 200 l/min |
| Temperature (°C) -20°C / +100°C | Valving style Poppet | Connection under pressure Connection: not allowed Disconnection: not allowed |

BENEFITS

- Breakaway function to avoid damages of the hydraulic connections in case of strong axial force during unintended disconnection.
- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- The modular design allows for broad range of port configurations.
- Compact design.
- Simple to use.

HOW TO USE

- For the breakaway function, the female coupling must be mounted in a panel, locking the sleeve using seeger/ snap rings.
- Provide the IP female with a flexible hose, in order to permit the movements of the internal body during connection and disconnection of the couplings.
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect push the male coupling into the female coupling.
- To disconnect pull back the male coupling.



MAIN APPLICATIONS



POPPET



PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|----------|-------------------|---------------------|-------|---------------|-------|------------------|-------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/4 | 6,3 | F IP14D-M I14D ** | 24 | 6,36 | 27 | 6,08 | 17 | 3,83 | 0,30 |
| 3/8 | 10,0 | F IP38-M I38 | 46 | 12,19 | 75 | 16,88 | 30 | 6,75 | 1,20 |
| 1/2 | 12,5 | F IP12-M I12GS | 90 | 23,85 | 90 | 20,25 | 80 | 18,00 | 1,80 |
| 3/4 | 20,0 | F IP34-M I34 | 148 | 39,22 | 130 | 29,25 | 70 | 15,75 | 5,20 |
| 1 | 25,0 | F IP100-M I100 | 200 | 53,00 | 300 | 67,50 | 70 | 15,75 | 13,00 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/4 | F IP14D-M I14D ** | 35 | 5075 | 35 | 5075 | 35 | 5075 | 110 | 15950 | 126 | 18270 | 126 | 18270 |
| 3/8 | F IP38-M I38 | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 1/2 | F IP12-M I12GS | 25 | 3625 | 25 | 3625 | 25 | 3625 | 90 | 13050 | 100 | 14500 | 100 | 14500 |
| 3/4 | F IP34-M I34 | 25 | 3625 | 25 | 3625 | 25 | 3625 | 90 | 13050 | 100 | 14500 | 100 | 14500 |
| 1 | F IP100-M I100 | 25 | 3625 | 25 | 3625 | 25 | 3625 | 80 | 11600 | 100 | 14500 | 100 | 14500 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

** I-IP 14 type "D" couplings are not ISO7241-1/A interchangeable.

Different possible configurations:

Different threads available upon request.

Temperature range:

Seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Please read carefully Instructions and warnings for proper selection of the products.

Tests:

The couplings have been tested at max. operating pressure for 200.000 impulses according to ISO norm test method.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

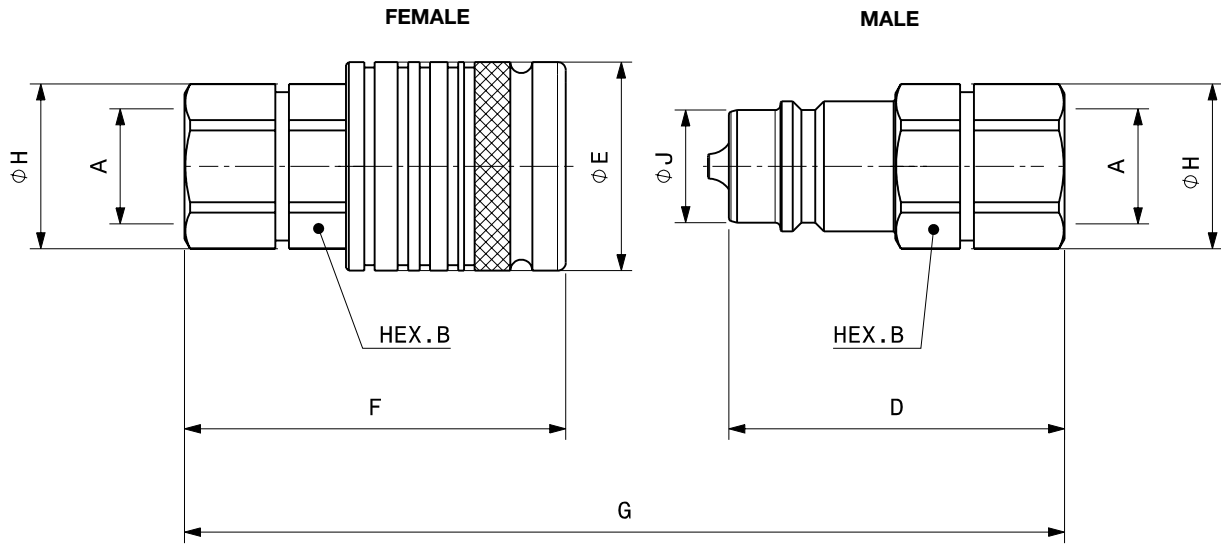
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



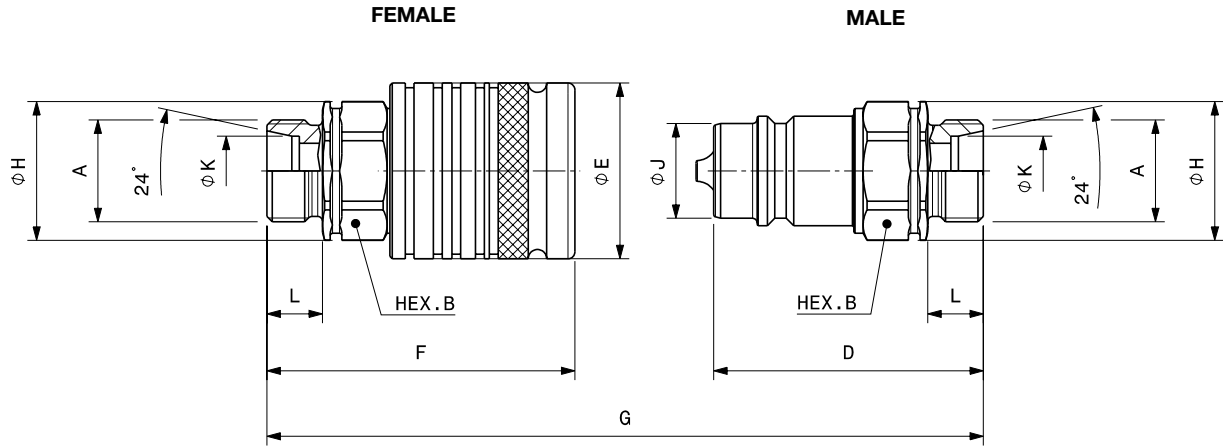
Port description: FEMALE THREAD BSP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | | |
|-----------|------------------|------------------|--------|----|----------|----------------|--------|------|-----|-------|------------------|----|---------------|------|--------|------|------|----|------|------|------|------|
| | | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | |
| 3/8" | F IP38 1/4 BSP | Female 809400008 | 10 | 2 | 1/4" | G | 64,8 | 2,55 | F | 67,5 | 2,66 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | E | 32,0 | 1,26 | 0,22 | 0,49 |
| | M I38 1/4 BSP | Male 809400009 | | | | | | | D | 49,3 | 1,94 | J | 17,3 | 0,68 | 0,09 | 0,20 | | | | | | |
| 3/8" | F IP38 3/8 BSP | Female 809400010 | 10 | 2 | 3/8" | G | 76,8 | 3,02 | F | 70,5 | 2,78 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | E | 32,0 | 1,26 | 0,22 | 0,49 |
| | M I38 3/8 BSP | Male 809400011 | | | | | | | D | 52,3 | 2,06 | J | 17,3 | 0,68 | 0,09 | 0,20 | | | | | | |
| 1/2" | F IP12 3/8 BSP | Female 809400004 | 12,5 | 3 | 3/8" | G | 86,3 | 3,40 | F | 65,6 | 2,58 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,26 | 0,57 |
| | M I12GS 3/8 BSP | Male 809400005 | | | | | | | D | 57,3 | 2,26 | J | 20,5 | 0,81 | 0,14 | 0,31 | | | | | | |
| 1/2" | F IP12 1/2 BSP | Female 809400000 | 12,5 | 3 | 1/2" | G | 111,1 | 4,37 | F | 69,4 | 2,73 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,26 | 0,56 |
| | M I12GS 1/2 BSP | Male 809400001 | | | | | | | D | 61,1 | 2,41 | J | 20,5 | 0,81 | 0,14 | 0,31 | | | | | | |
| 3/4" | F IP34 3/4 BSP | Female 809400014 | 20 | 4 | 3/4" | G | 127,3 | 5,01 | F | 91,5 | 3,60 | B | 36,0 | 1,42 | H | 40,0 | 1,57 | E | 46,0 | 1,81 | 0,62 | 1,36 |
| | M I34 3/4 BSP | Male 809400015 | | | | | | | D | 64,4 | 2,54 | J | 29,0 | 1,14 | 0,28 | 0,62 | | | | | | |
| 1" | F IP100 3/4 BSP | Female 809400016 | 25 | 6 | 3/4" | G | 151,2 | 5,95 | F | 103,5 | 4,07 | B | 41,0 | 1,61 | H | 45,0 | 1,77 | E | 54,0 | 2,13 | 0,90 | 1,98 |
| | M I100 3/4 BSP | Male 809400017 | | | | | | | D | 69,5 | 2,74 | J | 34,3 | 1,35 | 0,40 | 0,88 | | | | | | |
| 1" | F IP100 1" BSP | Female 809400018 | 25 | 6 | 1" | G | 171,3 | 6,74 | F | 109,0 | 4,29 | B | 41,0 | 1,61 | H | 45,0 | 1,77 | E | 54,0 | 2,13 | 0,89 | 1,96 |
| | M I100 1" BSP | Male 809400019 | | | | | | | D | 75,0 | 2,95 | J | 34,3 | 1,35 | 0,39 | 0,86 | | | | | | |

Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | | |
|-----------|------------------|------------------|--------|----|----------|----------------|--------|------|-----|------|------------------|----|---------------|------|--------|------|------|----|------|------|------|------|
| | | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | |
| 1/2" | F IP12 1/2 NPT | Female 809401000 | 12,5 | 3 | 1/2" | G | 111,1 | 4,37 | F | 68,1 | 2,68 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,11 |
| | M I12GS 1/2 NPT | Male 809401001 | | | | | | | D | 59,8 | 2,35 | J | 20,5 | 0,81 | 0,14 | 0,06 | | | | | | |

Panel mounting on the sleeve: please contact, your local Stucchi sales engineer to get detailed dimensions.



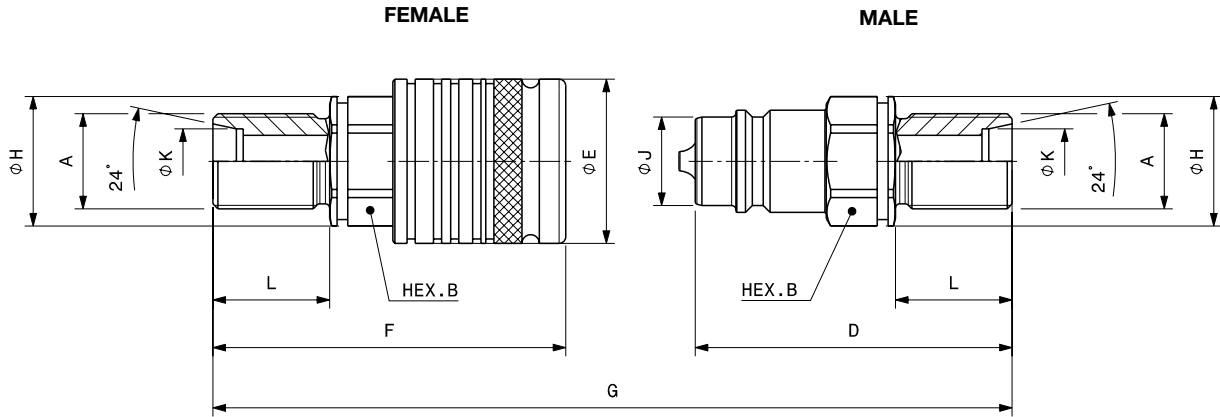
Port description: MALE THREAD METRIC L SERIES – 24° CONE (ISO 8434-1 & DIN 2353)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Diameter | | Length | | Body Diameter | | Weight | | | | | | | | |
|-----------|------------------|------------------|--------|----|-----------|----------------|-------|--------|----|-------|------|------------------|------|----------|----|--------|------|---------------|------|--------|----|------|------|---|------|------|------|------|
| | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F IP14D L8 | Female 809408010 | 6,3 | 1 | M14 X 1,5 | G | 90,5 | 3,56 | F | 62,9 | 2,48 | B | 19,0 | 0,75 | H | 21,0 | 0,83 | K | 8,2 | 0,32 | L | 10,0 | 0,39 | E | 26,0 | 1,02 | 0,13 | 0,29 |
| | M I14D L8 | Male 809408011 | | | | D | 45,0 | 1,77 | J | 11,9 | 0,47 | 0,05 | 0,10 | | | | | | | | | | | | | | | |
| 3/8" | F IP38 L8 | Female 809408012 | 10 | 2 | M14X 1,5 | G | 93,2 | 3,67 | F | 64,5 | 2,54 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | K | 8,2 | 0,32 | L | 10,0 | 0,39 | E | 32,0 | 1,26 | 0,20 | 0,44 |
| | M I38 L8 | Male 809408013 | | | | D | 46,3 | 1,82 | J | 17,3 | 0,68 | 0,07 | 0,15 | | | | | | | | | | | | | | | |
| 3/8" | F IP38 L10 | Female 809408014 | 10 | 2 | M16 X 1,5 | G | 95,2 | 3,75 | F | 65,5 | 2,58 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | K | 10,2 | 0,40 | L | 11,0 | 0,43 | E | 32,0 | 1,26 | 0,20 | 0,44 |
| | M I38 L10 | Male 809408015 | | | | D | 47,3 | 1,86 | J | 17,3 | 0,68 | 0,07 | 0,15 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 L8 | Female 809408002 | 12,5 | 3 | M14 X 1,5 | G | 101,0 | 3,98 | F | 65,6 | 2,58 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 8,2 | 0,32 | L | 10,0 | 0,39 | E | 38,0 | 1,50 | 0,24 | 0,52 |
| | M I12GS L8 | Male 809408003 | | | | D | 57,3 | 2,26 | J | 20,5 | 0,81 | 0,12 | 0,26 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 L10 | Female 809408006 | 12,5 | 3 | M16 X 1,5 | G | 101,0 | 3,98 | F | 65,6 | 2,58 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 10,2 | 0,40 | L | 11,0 | 0,43 | E | 38,0 | 1,50 | 0,23 | 0,51 |
| | M I12GS L10 | Male 809408007 | | | | D | 57,3 | 2,26 | J | 20,5 | 0,81 | 0,12 | 0,26 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 L12 | Female 809408000 | 12,5 | 3 | M18x1,5 | G | 120,0 | 4,72 | F | 84,6 | 3,33 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 12,2 | 0,48 | L | 11,0 | 0,43 | E | 38,0 | 1,50 | 0,23 | 0,51 |
| | M I12GS L12 | Male 809408001 | | | | D | 57,3 | 2,26 | J | 20,5 | 0,81 | 0,12 | 0,26 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 L15 | Female 809408004 | 12,5 | 3 | M22x1,5 | G | 103,0 | 4,06 | F | 66,6 | 2,62 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 15,2 | 0,60 | L | 12,0 | 0,47 | E | 38,0 | 1,50 | 0,24 | 0,53 |
| | M I12GS L15 | Male 809408005 | | | | D | 58,3 | 2,30 | J | 20,5 | 0,81 | 0,12 | 0,27 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 L18 | Female 809408008 | 12,5 | 3 | M26x1,5 | G | 103,0 | 4,06 | F | 66,6 | 2,62 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 18,2 | 0,72 | L | 12,0 | 0,47 | E | 38,0 | 1,50 | 0,24 | 0,54 |
| | M I12GS L18 | Male 809408009 | | | | D | 58,3 | 2,30 | J | 20,5 | 0,81 | 0,13 | 0,28 | | | | | | | | | | | | | | | |
| 3/4" | F IP34 L18 | Female 809408026 | 20 | 4 | M26x1,5 | G | 120,5 | 4,74 | F | 87,1 | 3,43 | B | 36,0 | 1,42 | H | 40,0 | 1,57 | K | 18,2 | 0,72 | L | 12,0 | 0,47 | E | 46,0 | 1,81 | 0,57 | 1,26 |
| | M I34 L18 | Male 809408027 | | | | D | 60,0 | 2,36 | J | 29,0 | 1,14 | 0,24 | 0,52 | | | | | | | | | | | | | | | |
| 3/4" | F IP34 L22 | Female 809408028 | 20 | 4 | M30x2 | G | 122,4 | 4,82 | F | 88,0 | 3,46 | B | 36,0 | 1,42 | H | 40,0 | 1,57 | K | 22,0 | 0,87 | L | 14,0 | 0,55 | E | 46,0 | 1,81 | 0,57 | 1,25 |
| | M I34 L22 | Male 809408029 | | | | D | 61,0 | 2,40 | J | 29,0 | 1,14 | 0,23 | 0,51 | | | | | | | | | | | | | | | |
| 1" | F IP100 L15 | Female 809408030 | 25 | 6 | M22x1,5 | G | 138,6 | 5,46 | F | 103,0 | 4,06 | B | 41,0 | 1,61 | H | 45,0 | 1,77 | K | 15,2 | 0,60 | L | 12,0 | 0,47 | E | 54,0 | 2,13 | 0,85 | 1,87 |
| | M I100 L15 | Male 809408031 | | | | D | 69,0 | 2,72 | J | 34,3 | 1,35 | 0,35 | 0,76 | | | | | | | | | | | | | | | |
| 1" | F IP100 L18 | Female 809408032 | 25 | 6 | M26x1,5 | G | 138,6 | 5,46 | F | 103,0 | 4,06 | B | 41,0 | 1,61 | H | 45,0 | 1,77 | K | 18,2 | 0,72 | L | 12,0 | 0,47 | E | 54,0 | 2,13 | 0,85 | 1,87 |
| | M I100 L18 | Male 809408033 | | | | D | 69,0 | 2,72 | J | 34,3 | 1,35 | 0,35 | 0,76 | | | | | | | | | | | | | | | |
| 1" | F IP100 L22 | Female 809408034 | 25 | 6 | M30x2 | G | 142,6 | 5,61 | F | 105,0 | 4,13 | B | 41,0 | 1,61 | H | 45,0 | 1,77 | K | 22,2 | 0,87 | L | 14,0 | 0,55 | E | 54,0 | 2,13 | 0,85 | 1,88 |
| | M I100 L22 | Male 809408035 | | | | D | 71,0 | 2,80 | J | 34,3 | 1,35 | 0,35 | 0,77 | | | | | | | | | | | | | | | |
| 1" | F IP100 L28 | Female 809408036 | 25 | 6 | M36x2 | G | 142,6 | 5,61 | F | 105,0 | 4,13 | B | 41,0 | 1,61 | H | 45,0 | 1,77 | K | 28,2 | 1,11 | L | 14,0 | 0,55 | E | 54,0 | 2,13 | 0,85 | 1,88 |
| | M I100 L28 | Male 809408037 | | | | D | 71,0 | 2,80 | J | 34,3 | 1,35 | 0,35 | 0,77 | | | | | | | | | | | | | | | |

Port description: MALE THREAD METRIC S SERIES – 24° CONE (ISO 8434-1 & DIN 2353)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Diameter | | Length | | Body Diameter | | Weight | | | | | | | | |
|-----------|------------------|------------------|--------|----|----------|----------------|-------|--------|----|------|------|------------------|------|----------|----|--------|------|---------------|------|--------|----|------|------|---|------|------|------|------|
| | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/2" | F IP12 S10 | Female 809409000 | 12,5 | 3 | M18x1,5 | G | 103,0 | 4,06 | F | 66,6 | 2,62 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 10,2 | 0,40 | L | 12,0 | 0,47 | E | 38,0 | 1,50 | 0,24 | 0,53 |
| | M I12GS S10 | Male 809409001 | | | | D | 58,3 | 2,30 | J | 20,5 | 0,81 | 0,12 | 0,27 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 S12 | Female 809409002 | 12,5 | 3 | M20x1,5 | G | 103,0 | 4,06 | F | 66,6 | 2,62 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 12,2 | 0,48 | L | 12,0 | 0,47 | E | 38,0 | 1,50 | 0,24 | 0,53 |
| | M I12GS S12 | Male 809409003 | | | | D | 58,3 | 2,30 | J | 20,5 | 0,81 | 0,13 | 0,28 | | | | | | | | | | | | | | | |
| 1/2" | F IP12 S14 | Female 809409004 | 12,5 | 3 | M22x1,5 | G | 107,0 | 4,21 | F | 68,6 | 2,70 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | K | 14,2 | 0,56 | L | 14,0 | 0,55 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M I12GS S14 | Male 809409005 | | | | D | 60,3 | 2,37 | J | 20,5 | 0,81 | 0,13 | 0,29 | | | | | | | | | | | | | | | |

Panel mounting on the sleeve: please contact your local Stucchi sales engineer to get detailed dimensions.



Port description: MALE THREAD METRIC L SCHOTT – BULKHEAD SERIES – 24° CONE (ISO 8434-1 & DIN 2353)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Diameter | | Length | | Body Diameter | | Weight | | |
|-----------|-----------------------|------------------|--------|----|-----------|----------------|--------|--------|---------|------|--------|------------------|--------|----------|--------|--------|--------|---------------|--------|--------|------|------|
| | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | |
| 1/4" | F IP14D L8 SCHOTT | Female 809410010 | 6,3 | 1 | M14 X 1,5 | G | 120,5 | 4,74 | F 77,9 | 3,07 | B 19,0 | 0,75 | H 21,0 | 0,83 | K 8,2 | 0,32 | L 25,0 | 0,98 | E 26,0 | 1,02 | 0,14 | 0,31 |
| | M 114D L8 SCHOTT | Male 809410011 | | | | | D 60,0 | 2,36 | D 22,0 | 0,87 | H 24,0 | 0,94 | K 8,2 | 0,32 | J 11,9 | 0,47 | 0,06 | 0,13 | | | | |
| 3/8" | F IP38 L8 SCHOTT | Female 809410012 | 10 | 2 | M14 X 1,5 | G | 123,2 | 4,85 | F 79,5 | 3,13 | B 22,0 | 0,87 | H 24,0 | 0,94 | K 8,2 | 0,32 | L 25,0 | 0,98 | E 32,0 | 1,26 | 0,21 | 0,46 |
| | M 138 L8 SCHOTT | Male 809410013 | | | | | D 61,3 | 2,41 | D 22,0 | 0,87 | H 24,0 | 0,94 | K 8,2 | 0,32 | J 17,3 | 0,68 | 0,08 | 0,18 | | | | |
| 3/8" | F IP38 L10 SCHOTT | Female 809410014 | 10 | 2 | M16 X 1,5 | G | 125,2 | 4,93 | F 80,5 | 3,17 | B 22,0 | 0,87 | H 24,0 | 0,94 | K 10,2 | 0,40 | L 26,0 | 1,02 | E 32,0 | 1,26 | 0,21 | 0,47 |
| | M 138 L10 SCHOTT | Male 809410015 | | | | | D 62,3 | 2,45 | D 22,0 | 0,87 | H 24,0 | 0,94 | K 10,2 | 0,40 | J 17,3 | 0,68 | 0,08 | 0,18 | | | | |
| 1/2" | F IP12 L8 SCHOTT | Female 809410002 | 12,5 | 3 | M14 X 1,5 | G | 133,0 | 5,24 | F 81,6 | 3,21 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 8,2 | 0,32 | L 26,0 | 1,02 | E 38,0 | 1,50 | 0,25 | 0,55 |
| | M 112GS L8 SCHOTT | Male 809410003 | | | | | D 73,3 | 2,89 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 8,2 | 0,32 | J 20,5 | 0,81 | 0,13 | 0,29 | | | | |
| 1/2" | F IP12 L10 SCHOTT | Female 809410006 | 12,5 | 3 | M16 X 1,5 | G | 131,0 | 5,16 | F 80,6 | 3,17 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 10,2 | 0,40 | L 26,0 | 1,02 | E 38,0 | 1,50 | 0,25 | 0,54 |
| | M 112GS L10 SCHOTT | Male 809410007 | | | | | D 72,3 | 2,85 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 10,2 | 0,40 | J 20,5 | 0,81 | 0,13 | 0,29 | | | | |
| 1/2" | F IP12 L12 SCHOTT 30 | Female 809410000 | 12,5 | 3 | M18 X 1,5 | G | 139,0 | 5,47 | F 84,6 | 3,33 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 12,2 | 0,48 | L 30,0 | 1,18 | E 38,0 | 1,50 | 0,25 | 0,56 |
| | M 112GS L12 SCHOTT 30 | Male 809410001 | | | | | D 76,3 | 3,00 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 12,2 | 0,48 | J 20,5 | 0,81 | 0,14 | 0,31 | | | | |
| 1/2" | F IP12 L15 SCHOTT | Female 809410004 | 12,5 | 3 | M22x1,5 | G | 133,0 | 5,24 | F 81,6 | 3,21 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 15,2 | 0,60 | L 27,0 | 1,06 | E 38,0 | 1,50 | 0,27 | 0,59 |
| | M 112GS L15 SCHOTT | Male 809410005 | | | | | D 73,3 | 2,89 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 15,2 | 0,60 | J 20,5 | 0,81 | 0,15 | 0,34 | | | | |
| 1/2" | F IP12 L18 SCHOTT | Female 809410008 | 12,5 | 3 | M26x1,5 | G | 133,0 | 5,24 | F 81,6 | 3,21 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 18,2 | 0,72 | L 27,0 | 1,06 | E 38,0 | 1,50 | 0,28 | 0,62 |
| | M 112GS L18 SCHOTT | Male 809410009 | | | | | D 73,3 | 2,89 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 18,2 | 0,72 | J 20,5 | 0,81 | 0,16 | 0,36 | | | | |
| 3/4" | F IP34 L15 SCHOTT | Female 809410024 | 20 | 4 | M22x1,5 | G | 148,5 | 5,85 | F 101,1 | 3,98 | B 36,0 | 1,42 | H 40,0 | 1,57 | K 15,2 | 0,60 | L 27,0 | 1,06 | E 46,0 | 1,81 | 0,59 | 1,29 |
| | M 134 L15 SCHOTT | Male 809410025 | | | | | D 74,0 | 2,91 | D 36,0 | 1,42 | H 40,0 | 1,57 | K 15,2 | 0,60 | J 29,0 | 1,14 | 0,25 | 0,55 | | | | |
| 3/4" | F IP34 L22 SCHOTT 36 | Female 809410028 | 20 | 4 | M30x2 | G | 166,5 | 6,56 | F 110,1 | 4,33 | B 36,0 | 1,42 | H 40,0 | 1,57 | K 22,0 | 0,87 | L 36,0 | 1,42 | E 46,0 | 1,81 | 0,63 | 1,38 |
| | M 134 L22 SCHOTT 36 | Male 809410029 | | | | | D 83,0 | 3,27 | D 36,0 | 1,42 | H 40,0 | 1,57 | K 22,0 | 0,87 | J 29,0 | 1,14 | 0,29 | 0,64 | | | | |

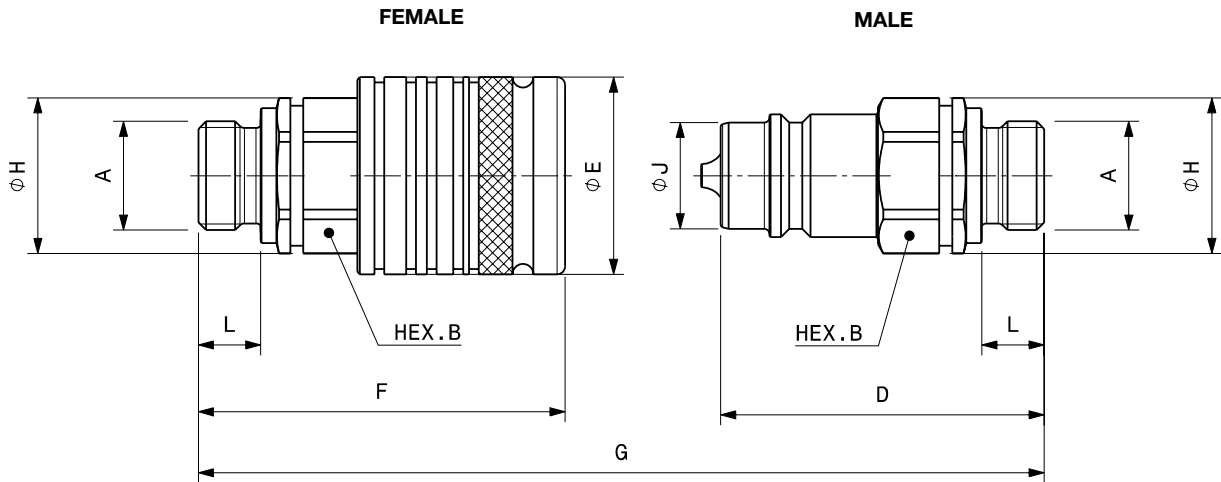
Locknuts available upon request.

Port description: MALE THREAD METRIC S SCHOTT – BULKHEAD SERIES – 24° CONE (ISO 8434-1 & DIN 2353)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Diameter | | Length | | Body Diameter | | Weight | | |
|-----------|-----------------------|------------------|--------|----|-----------|----------------|--------|--------|---------|------|--------|------------------|--------|----------|--------|--------|--------|---------------|--------|--------|------|------|
| | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | |
| 1/2" | F IP12 S10 SCHOTT | Female 809411000 | 12,5 | 3 | M18 X 1,5 | G | 133,0 | 5,24 | F 81,6 | 3,21 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 10,2 | 0,40 | L 27,0 | 1,06 | E 38,0 | 1,50 | 0,27 | 0,60 |
| | M 112GS S10 SCHOTT | Male 809411001 | | | | | D 73,3 | 2,89 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 10,2 | 0,40 | J 20,5 | 0,81 | 0,16 | 0,35 | | | | |
| 1/2" | F IP12 S12 SCHOTT | Female 809411002 | 12,5 | 3 | M20x1,5 | G | 133,0 | 5,24 | F 81,6 | 3,21 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 12,2 | 0,48 | L 27,0 | 1,06 | E 38,0 | 1,50 | 0,27 | 0,59 |
| | M 112GS S12 SCHOTT | Male 809411003 | | | | | D 73,3 | 2,89 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 12,2 | 0,48 | J 20,5 | 0,81 | 0,15 | 0,33 | | | | |
| 1/2" | F IP12 S16 SCHOTT | Female 809411006 | 12,5 | 3 | M24x1,5 | G | 137,0 | 5,39 | F 83,6 | 3,29 | B 27,0 | 1,06 | H 30,0 | 1,18 | K 16,2 | 0,64 | L 29,0 | 1,14 | E 38,0 | 1,50 | 0,28 | 0,62 |
| | M 112GS S16 SCHOTT | Male 809411007 | | | | | D 75,3 | 2,96 | D 27,0 | 1,06 | H 30,0 | 1,18 | K 16,2 | 0,64 | J 20,5 | 0,81 | 0,17 | 0,37 | | | | |
| 3/4" | F IP34 S16 SCHOTT | Female 809411010 | 20 | 4 | M24x1,5 | G | 152,5 | 6,00 | F 103,1 | 4,06 | B 36,0 | 1,42 | H 40,0 | 1,57 | K 16,2 | 0,64 | L 29,0 | 1,14 | E 46,0 | 1,81 | 0,60 | 1,33 |
| | M 134 S16 SCHOTT | Male 809411011 | | | | | D 76,0 | 2,99 | D 36,0 | 1,42 | H 40,0 | 1,57 | K 16,2 | 0,64 | J 29,0 | 1,14 | 0,27 | 0,59 | | | | |
| 3/4" | F IP34 S20 SCHOTT | Female 809411012 | 20 | 4 | M30x2 | G | 166,5 | 6,56 | F 110,1 | 4,33 | B 36,0 | 1,42 | H 40,0 | 1,57 | K 20,0 | 0,79 | L 36,0 | 1,42 | E 46,0 | 1,81 | 0,65 | 1,43 |
| | M 134 S20 SCHOTT | Male 809411013 | | | | | D 83,0 | 3,27 | D 36,0 | 1,42 | H 40,0 | 1,57 | K 20,0 | 0,79 | J 29,0 | 1,14 | 0,31 | 0,69 | | | | |
| 1" | F IP100 S20 SCHOTT 38 | Female 809411014 | 25 | 6 | M30x2 | G | 190,6 | 7,50 | F 129,0 | 5,08 | B 41,0 | 1,61 | H 45,0 | 1,77 | K 20,2 | 0,80 | L 38,0 | 1,50 | E 54,0 | 2,13 | 0,94 | 2,07 |
| | M 1100 S20 SCHOTT 38 | Male 809411015 | | | | | D 95,0 | 3,74 | D 41,0 | 1,61 | H 45,0 | 1,77 | K 20,2 | 0,80 | J 34,3 | 1,35 | 0,44 | 0,96 | | | | |
| 1" | F IP100 S25 SCHOTT | Female 809411016 | 25 | 6 | M36x2 | G | 190,6 | 7,50 | F 129,0 | 5,08 | B 41,0 | 1,61 | H 45,0 | 1,77 | K 25,2 | 0,99 | L 38,0 | 1,50 | E 54,0 | 2,13 | 0,98 | 2,16 |
| | M 1100 S25 SCHOTT | Male 809411017 | | | | | D 95,0 | 3,74 | D 41,0 | 1,61 | H 45,0 | 1,77 | K 25,2 | 0,99 | J 34,3 | 1,35 | 0,48 | 1,06 | | | | |

Locknuts available upon request.

Panel mounting on the sleeve: please contact, your local Stucchi sales engineer to get detailed dimensions.



Port description: MALE THREAD BSPP (DIN3852/A)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | BG | PORT (A) | Overall Length | Length | | Length | | Hex | | Overall Diameter | | Overall Diameter | | Weight | | | | | | | | |
|-----------|--------------------------------|-----------|--------|----|----------|----------------|--------|------|--------|------|------|----|------------------|------|------------------|------|--------|----|------|------|---|------|------|------|------|
| | | | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | | | |
| 3/8" | FIP38 3/8 BSP EXT - A : Female | 809400012 | 10 | 2 | 3/8" | G | 102,2 | 4,02 | F | 69,0 | 2,72 | L | 12,0 | 0,47 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | E | 32,0 | 1,26 | 0,42 | 0,91 |
| | M I38 3/8 BSP EXT - A : Male | 809400013 | | | | | | | D | 50,8 | 2,00 | | | | | | | | | | J | 17,3 | 0,68 | 0,08 | 0,18 |
| 1/2" | FIP12 1/2 BSP EXT - A : Female | 809400002 | 12,5 | 3 | 1/2" | G | 111,0 | 4,37 | F | 70,6 | 2,78 | L | 12,0 | 0,47 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,28 | 0,62 |
| | M I12GS 1/2 BSP EXT - A : Male | 809400003 | | | | | | | D | 62,3 | 2,45 | | | | | | | | | | J | 20,5 | 0,81 | 0,14 | 0,30 |


Panel mounting on the sleeve: please contact, your local Stucchi sales engineer to get detailed dimensions.

IRS version

IRS Series is the ISO 7241 A interchangeable quick coupling with single body.

It is available with poppet valving style (IRS-VA version) and with ball valving style (IRS-A version).

The specific datasheet is available upon request; please contact Stucchi Technical Support for additional information.

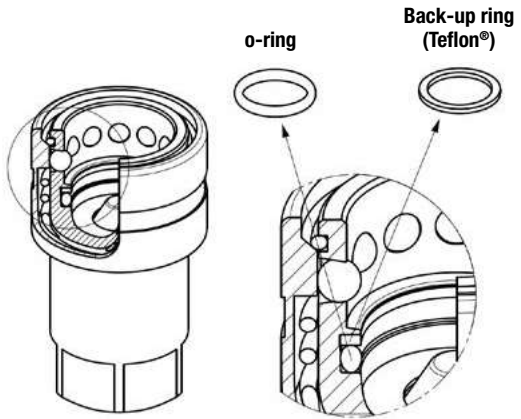




SPARE KIT SEAL FOR FEMALE

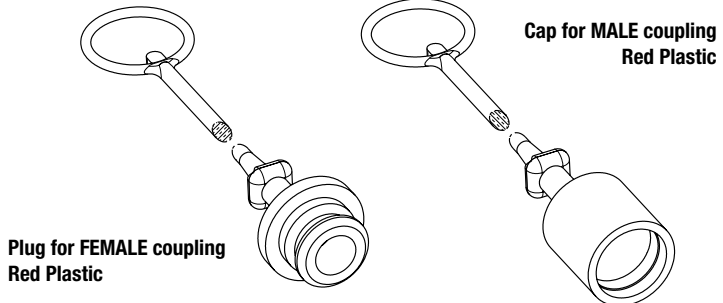
| Repair kit / OR+BK | | |
|--------------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/4" | F IP14D | 815700924 |
| 3/8" | F IP38 | 815700926 |
| 1/2" | F IP12 | 815700928 |
| 3/4" | F IP34 | 815700930 |
| 1" | F IP100 | 815700932 |

O-Ring in NBR
BackUp in Teflon®



PROTECTIVE CAPS FOR I-IP SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in agriculture applications where exposure to weather and aggregate materials are common. The protective caps for I-IP series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request). A flip cap version is also available for the size 1/2".

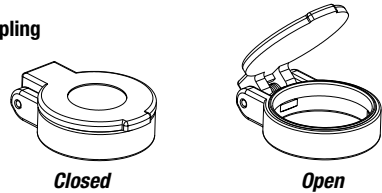


Plug for FEMALE coupling
Red Plastic

Cap for MALE coupling
Red Plastic

| Body Size/Description | Protective Cap | | Material/Color |
|-----------------------|------------------------------|---------------------------|----------------|
| | Part Number | Part Number | |
| 3/8" IP38 | Plug for Female 815000014 | Cap for Male 815000015 | Plastic/Red |
| 1/2" IP12 | 815000004 | 815000005 | Plastic/Red |
| 3/4" IP34 | 815000016 | 815000017 | Plastic/Red |
| 1" IP100 | 815000018 | 815000019 | Plastic/Red |

Flip cap for FEMALE coupling
Plastic



Closed

Open

| Body Size/Description | Protective Cap | | Material/Color |
|-----------------------|------------------------------|-------------|----------------|
| | Part Number | Part Number | |
| 1/2" IP12 | Plug for Female 815200004 | | Plastic/Red |

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POPPET















IRSERIES

INTERCHANGE > With similar couplings, ISO 7241 A (size 1/2" only)



TECHNICAL FEATURES AND OPTIONS

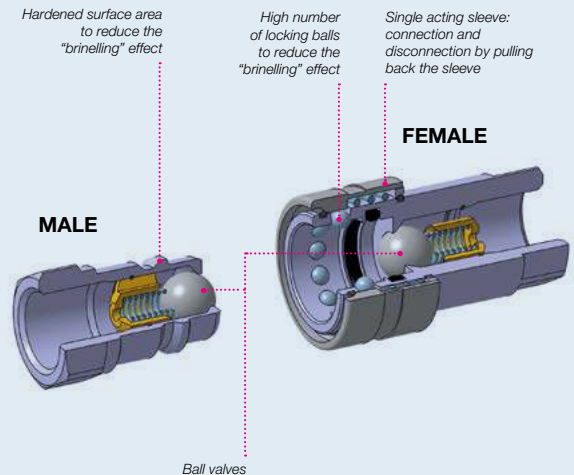
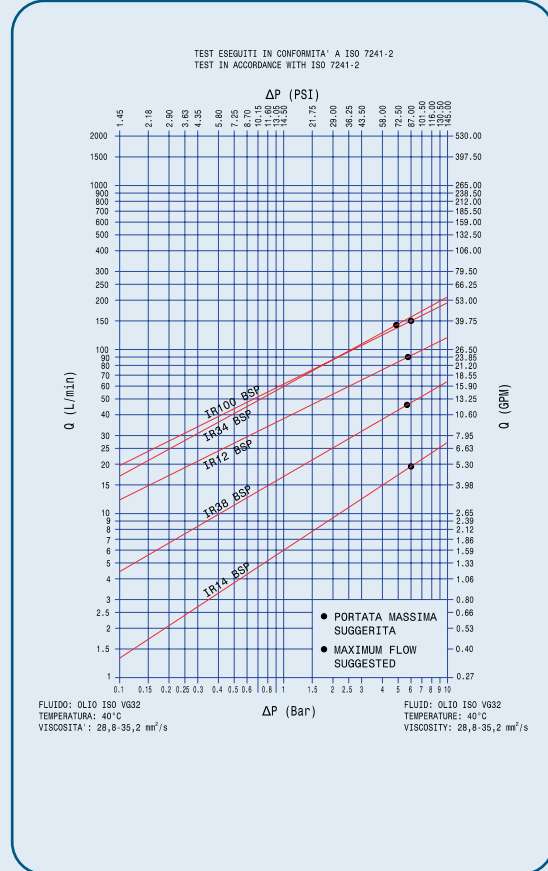
| | | |
|---|---|---|
|  Interchange With similar couplings, ISO 7241 A (size 1/2" only) |  Sealing description Nitrile NBR |  Connection system Single acting sleeve |
|  Available sizes from 1/4" to 1" |  Material /treatment Carbon steel /Cr3 |  Available threads BSP - NPT |
|  Operating pressure Up to 300 bar |  Locking mechanism Locking Ball system |  Flow rate Up to 150 l/min |
|  Temperature (°C) -20°C / +100°C |  Valving style Ball |  Connection under pressure Connection: not allowed Disconnection: not allowed |

BENEFITS

- Ball valves in hardened steel provide a good wearing resistance.
- Compact slim design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



MAIN APPLICATIONS





PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|----------|-------------|---------------------|-------|---------------|-------|------------------|-------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/4 | | IR14 | 20 | 5,30 | 50 | 11,25 | 45 | 10,13 | 0,13 |
| 3/8 | | IR38 | 46 | 12,19 | 125 | 28,13 | 45 | 10,13 | 0,45 |
| 1/2 | 12,5 | IR12** | 90 | 23,85 | 80 | 18,00 | 50 | 11,25 | 2,30 |
| 3/4 | | IR34 | 148 | 39,22 | 190 | 42,75 | 45 | 10,13 | 4,50 |
| 1 | | IR100 | 150 | 39,75 | 100 | 22,50 | 45 | 10,13 | 6,00 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|-----|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | | | |
| in | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | |
| 1/4 | IR14 | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 3/8 | IR38 | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 90 | 13050 | 90 | 13050 |
| 1/2 | IR12** | 25 | 3625 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 55 | 7975 | 55 | 7975 | 55 | 7975 |
| 3/4 | IR34 | 25 | 3625 | 20 | 2900 | 25 | 3625 | 100 | 14500 | 60 | 8700 | 90 | 13050 | 90 | 13050 |
| 1 | IR100 | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 60 | 8700 | 80 | 11600 | 80 | 11600 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

** Size 1/2" is ISO7241-1/A interchangeable.

Temperature range:

Seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Please read carefully Instructions and warnings for proper selection of the products.

Different possible configurations:

TIC version, shielded poppet to eliminate flow-checking when used with connect-under-pressure competitor couplers.

⚠ WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

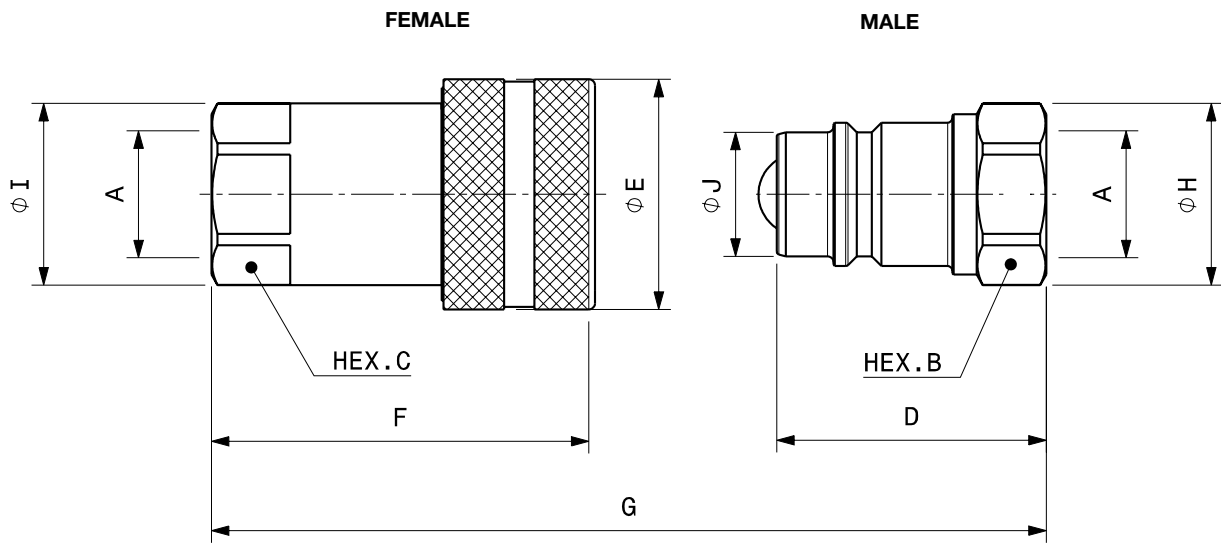
Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is MANDATORY to read and closely follow the instructions. Last updated version always apply at time of installation, see latest written Instructions on Stucchi website (stucchigroup.com) before selecting or using Stucchi products.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|-------------------|--------|----------|----------------|-------|--------|----|------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F IR14 BSP | Female 80000000 | - | 1/4" | G | 64,4 | 2,54 | F | 48,9 | 1,93 | C | 19,0 | 0,75 | I | 21,0 | 0,83 | E | 27,0 | 1,06 | 0,11 | 0,25 |
| | M IR14 BSP | Male 80000001 | | | | | | D | 32,5 | 1,28 | B | 19,0 | 0,75 | H | 22,0 | 0,87 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IR38 BSP | Female 80000002 | - | 3/8" | G | 76,3 | 3,00 | F | 58,3 | 2,30 | C | 24,0 | 0,94 | I | 26,5 | 1,04 | E | 34,0 | 1,34 | 0,22 | 0,49 |
| | M IR38 BSP | Male 80000003 | | | | | | D | 38,0 | 1,50 | B | 24,0 | 0,94 | H | 27,7 | 1,09 | J | 19,0 | 0,75 | 0,08 | 0,17 |
| 1/2" | F IR12 BSP | Female 80000004 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,24 | 0,54 |
| | M IR12 BSP | Male 80000005 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | J | 20,5 | 0,81 | 0,10 | 0,21 |
| 3/4" | F IR34 BSP | Female 80000006 | - | 3/4" | G | 118,3 | 4,66 | F | 90,3 | 3,56 | C | 38,0 | 1,50 | I | 43,0 | 1,69 | E | 48,0 | 1,89 | 0,68 | 1,50 |
| | M IR34 BSP | Male 80000007 | | | | | | D | 59,0 | 2,32 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 26,9 | 1,06 | 0,19 | 0,43 |
| 3/4" | F IR34FA BSP | Female 82000020 * | - | 3/4" | G | 106,5 | 4,19 | F | 82,0 | 3,23 | C | 38,0 | 1,50 | I | 41,8 | 1,65 | E | 46,3 | 1,82 | 0,50 | 1,10 |
| | M IR34FA BSP | Male 82000021 * | | | | | | D | 53,0 | 2,09 | B | 34,0 | 1,34 | H | 39,1 | 1,54 | J | 28,0 | 1,10 | 0,19 | 0,41 |
| 1" | F IR100 BSP | Female 80000008 | - | 1" | G | 132,8 | 5,23 | F | 99,6 | 3,92 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,87 | 1,92 |
| | M IR100 BSP | Male 80000009 | | | | | | D | 66,1 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 31,4 | 1,24 | 0,30 | 0,66 |

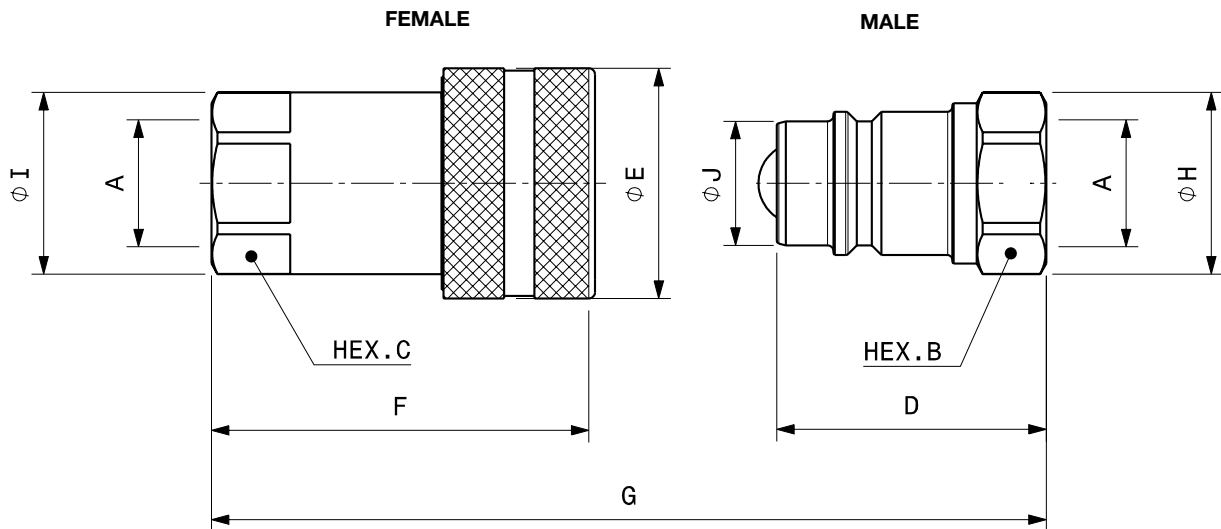
* alternative interchange

IR-TIC Version designed for high backflow

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|---------------|--------|----------|----------------|------|--------|----|------|------|------------------|----|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/2" | M IR12TIC BSP | Male 80000011 | 12,5 | 1/2" | G | 86,3 | 3,40 | D | 47,0 | 1,85 | B | 27 | 1,06 | H | 30,0 | 1,18 | J | 20,5 | 0,81 | 0,10 | 0,21 |

TIC VERSION: shielded valving to prevent flow-checking when used with connect-under-pressure competitor couplers.

POPPE



Port description: FEMALE THREAD NPT (ANSI B1.20.1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F IR14 NPT | Female 800001000 | - | 1/4" | G | 64,4 | 2,54 | F | 48,9 | 1,93 | C | 19,0 | 0,75 | I | 21,0 | 0,83 | E | 27,0 | 1,06 | 0,13 | 0,28 |
| | M IR14 NPT | Male 800001001 | | | | | | D | 32,5 | 1,28 | B | 19,0 | 0,75 | H | 22,0 | 0,87 | J | 14,2 | 0,56 | 0,04 | 0,09 |
| 3/8" | F IR38 NPT | Female 800001002 | - | 3/8" | G | 76,3 | 3,00 | F | 58,3 | 2,30 | C | 24,0 | 0,94 | I | 26,5 | 1,04 | E | 34,0 | 1,34 | 0,22 | 0,49 |
| | M IR38 NPT | Male 800001003 | | | | | | D | 38,0 | 1,50 | B | 24,0 | 0,94 | H | 27,7 | 1,09 | J | 19,0 | 0,75 | 0,08 | 0,18 |
| 1/2" | F IR12 NPT | Female 800001004 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,28 | 0,61 |
| | M IR12 NPT | Male 800001005 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | J | 20,5 | 0,81 | 0,09 | 0,20 |
| 3/4" | F IR34 NPT | Female 800001006 | - | 3/4" | G | 118,3 | 4,66 | F | 90,3 | 3,56 | C | 38,0 | 1,50 | I | 43,0 | 1,69 | E | 48,0 | 1,89 | 0,70 | 1,54 |
| | M IR34 NPT | Male 800001007 | | | | | | D | 59,0 | 2,32 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 26,9 | 1,06 | 0,21 | 0,47 |
| 1" | F IR100 NPT | Female 800001008 | - | 1" | G | 132,8 | 5,23 | F | 99,6 | 3,92 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,89 | 1,97 |
| | M IR100 NPT | Male 800001009 | | | | | | D | 66,1 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 31,4 | 1,24 | 0,30 | 0,66 |

IR-TIC Version designed for high backflow

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|----------------|--------|----------|----------------|------|--------|----|------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/2" | M IR12TIC NPT | Male 800001011 | 12,5 | 1/2" | G | 86,3 | 3,40 | D | 47,0 | 1,85 | B | 27,0 | 1,06 | H | 30,0 | 1,18 | J | 20,5 | 0,81 | 0,10 | 0,21 |

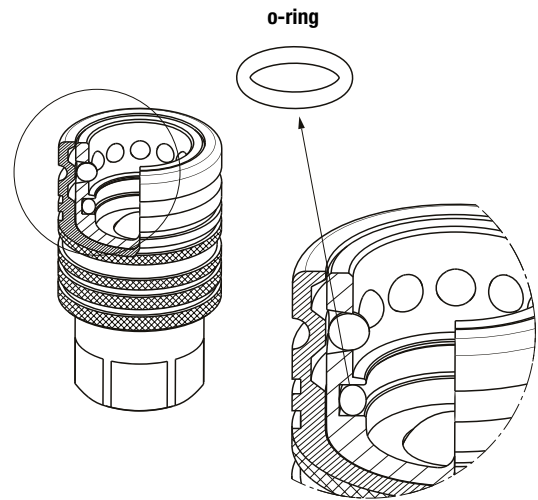
TIC VERSION: shielded valving to prevent flow-checking when used with connect-under-pressure competitor couplers.



SPARE KIT SEAL FOR FEMALE

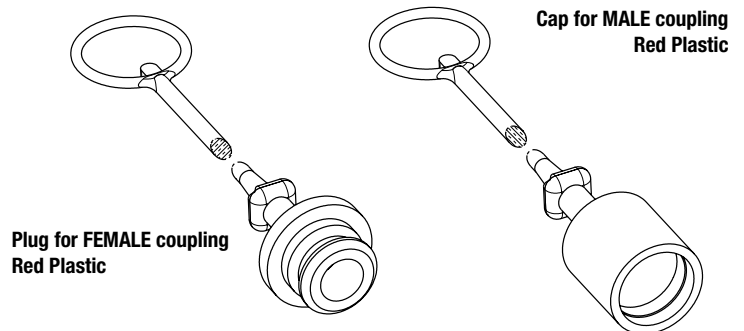
| Repair kit / OR | | |
|-----------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/4" | F IR14 | 815700348 |
| 3/8" | F IR38 | 815700350 |
| 1/2" | F IR12 | 815700352 |
| 3/4" | F IR34 | 815700354 |
| 3/4" | F IR34 FA | 815700734 |
| 1" | F IR100 | 815700356 |

O-Ring in NBR



PROTECTIVE CAPS FOR IR SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in agriculture applications where exposure to weather and aggregate materials are common. The protective caps for IR series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



| Body Size/Description | Protective Cap | | Material/Color |
|-----------------------|-----------------|--------------|----------------|
| | Plug for Female | Cap for Male | |
| 1/4" IR14 | 815000000 | 815000001 | Plastic/Red |
| 3/8" IR38 | 815000002 | 815000003 | Plastic/Red |
| 1/2" IR12 | 815000004 | 815000005 | Plastic/Red |
| 3/4" IR34 | 815000006 | 815000007 | Plastic/Red |
| 1" IR100 | 815000008 | 815000009 | Plastic/Red |



IR-VSERIES

INTERCHANGE > With similar couplings IR series, ISO 7241 SERIES "A" (SIZE 1/2" only)



Stucchi®



TECHNICAL FEATURES AND OPTIONS



Interchange
With similar couplings IR series, ISO 7241 SERIES "A" (SIZE 1/2" only)



Sealing description
Nitrile NBR



Connection system
Single acting sleeve



Available sizes
from 1/4" to 1"



Material/treatment
Carbon steel /Cr3



Available threads
BSP - NPT - SAE



Operating pressure
Up to 300 bar



Locking mechanism
Ball Locking



Flow rate
Up to 200 l/min



Temperature (°C)
-20°C / +100°C



Valving style
Poppet



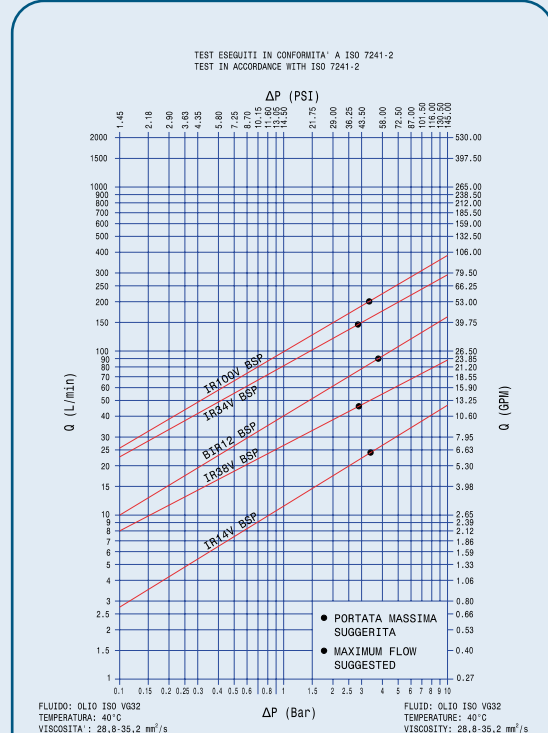
Connection under pressure
Connection: not allowed
Disconnection: not allowed

BENEFITS

- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Compact slim design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



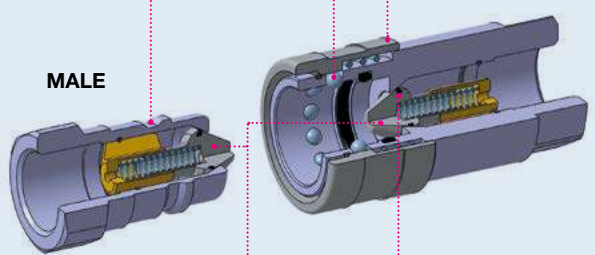
Hardened surface area to reduce the "brinelling" effect

High number of locking balls to reduce the "brinelling" effect

Single acting sleeve: connection and disconnection by pulling back the sleeve

MALE

FEMALE



Poppet valves

Valves with crimped seal to prevent extrusion at high flow rates

MAIN APPLICATIONS



Agriculture



Oil/Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry

POPPET



PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|----------|-------------|---------------------|-------|---------------|-------|------------------|-------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/4 | | IR14V | 24 | 6,36 | 80 | 18,00 | 40 | 9,00 | 0,33 |
| 3/8 | | IR38V | 46 | 12,19 | 120 | 27,00 | 35 | 7,88 | 1,30 |
| 1/2 | 12,5 | BIR12** | 90 | 23,85 | 70 | 15,75 | 55 | 12,38 | 2,10 |
| 3/4 | | IR34V | 148 | 39,22 | 175 | 39,38 | 45 | 10,13 | 4,20 |
| 1 | | IR100V | 200 | 53,00 | 210 | 47,25 | 65 | 14,63 | 5,50 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/4 | IR14V | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 3/8 | IR38V | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 1/2 | BIR12** | 25 | 3625 | 25 | 3625 | 25 | 3625 | 80 | 11600 | 80 | 11600 | 100 | 14500 |
| 3/4 | IR34V | 25 | 3625 | 25 | 3625 | 25 | 3625 | 100 | 14500 | 90 | 13050 | 100 | 14500 |
| 1 | IR100V | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 80 | 11600 | 80 | 11600 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

** Size 1/2" is ISO7241-1/A interchangeable.

Different possible configurations:

PL version (free flow without valve): available upon request.
SAE thread upon request.

Temperature range:

Standard seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).
Upon request seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F). Please read carefully Instructions and warnings for proper selection of the products.

⚠ WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

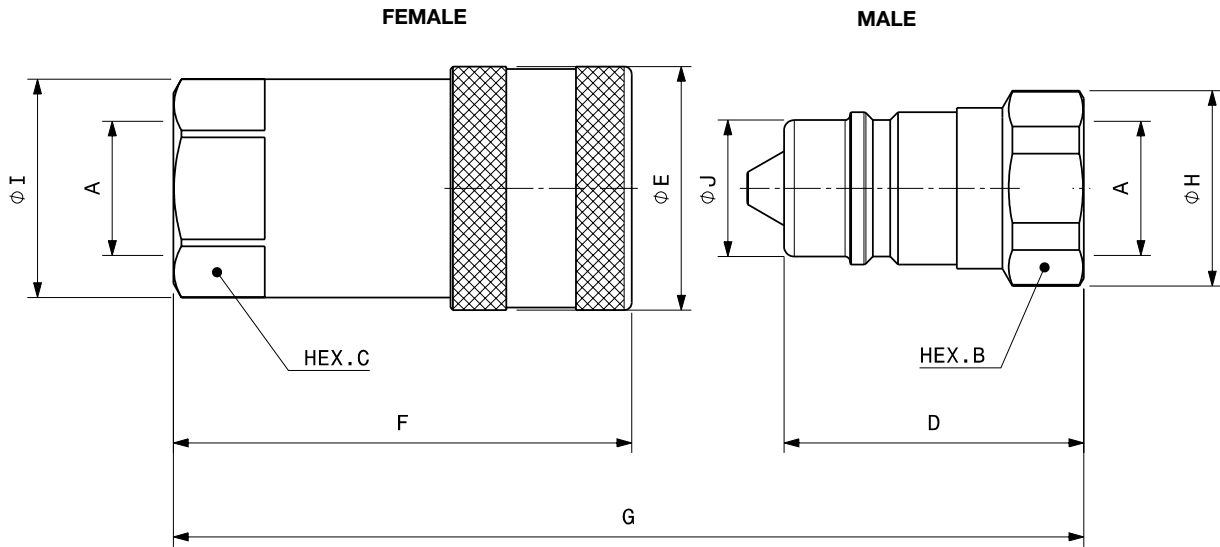
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|--------------------|--------|----------|----------------|-------|--------|----|------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F IR14V BSP | Female 800100000 | - | 1/4" | G | 65,9 | 2,59 | F | 50,4 | 1,98 | C | 19,0 | 0,75 | I | 21,0 | 0,83 | E | 27,0 | 1,06 | 0,12 | 0,25 |
| | M IR14V BSP | Male 800100001 | | | | | | D | 32,5 | 1,28 | B | 19,0 | 0,75 | H | 22,0 | 0,87 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IR38V BSP | Female 800100002 | - | 3/8" | G | 76,3 | 3,00 | F | 58,3 | 2,30 | C | 24,0 | 0,94 | I | 26,5 | 1,04 | E | 34,0 | 1,34 | 0,22 | 0,47 |
| | M IR38V BSP | Male 800100003 | | | | | | D | 38,0 | 1,50 | B | 24,0 | 0,94 | H | 27,7 | 1,09 | J | 19,0 | 0,75 | 0,07 | 0,16 |
| 1/2" | F IR12 BSP | Female 800500004 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M IR12 BSP | Male 800500005 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |
| 3/4" | F IR34V BSP | Female 800100004 | - | 3/4" | G | 118,3 | 4,66 | F | 90,3 | 3,56 | C | 38,0 | 1,50 | I | 43,0 | 1,69 | E | 48,0 | 1,89 | 0,68 | 1,50 |
| | M IR34V BSP | Male 800100005 | | | | | | D | 59,0 | 2,32 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 26,9 | 1,06 | 0,19 | 0,41 |
| 3/4" | F IR34VFA BSP | Female 820000022 * | - | 3/4" | G | 106,5 | 4,19 | F | 82,0 | 3,23 | C | 38,0 | 1,50 | I | 41,8 | 1,65 | E | 46,3 | 1,82 | 0,49 | 1,07 |
| | M IR34VFA BSP | Male 820000023 * | | | | | | D | 53,0 | 2,09 | B | 34,0 | 1,34 | H | 39,1 | 1,54 | J | 28,0 | 1,10 | 0,18 | 0,40 |
| 1" | F IR100V BSP | Female 800100006 | - | 1" | G | 128,8 | 5,07 | F | 97,6 | 3,84 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,83 | 1,83 |
| | M IR100V BSP | Male 800100007 | | | | | | D | 64,1 | 2,52 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 31,4 | 1,24 | 0,26 | 0,58 |

* alternative interchange

Port description: FEMALE THREAD NPT (ANSI B1.20.1)

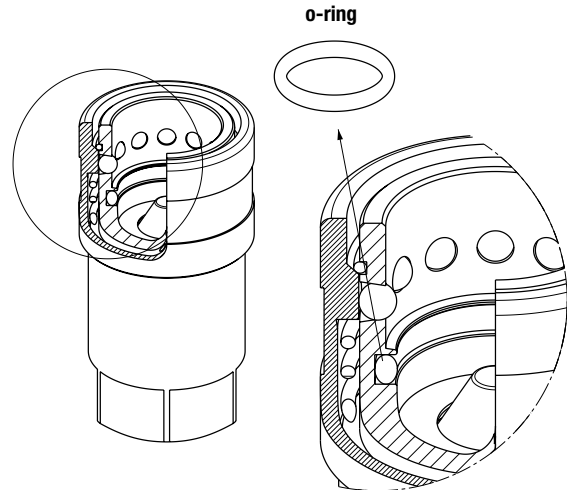
| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/4" | F IR14V NPT | Female 800101000 | - | 1/4" | G | 65,9 | 2,59 | F | 50,4 | 1,98 | C | 19,0 | 0,75 | I | 21,0 | 0,83 | E | 27,0 | 1,06 | 0,13 | 0,28 |
| | M IR14V NPT | Male 800101001 | | | | | | D | 32,5 | 1,28 | B | 19,0 | 0,75 | H | 22,0 | 0,87 | J | 14,2 | 0,56 | 0,04 | 0,09 |
| 3/8" | F IR38V NPT | Female 800101002 | - | 3/8" | G | 76,3 | 3,00 | F | 58,3 | 2,30 | C | 24,0 | 0,94 | I | 26,5 | 1,04 | E | 34,0 | 1,34 | 0,22 | 0,49 |
| | M IR38V NPT | Male 800101003 | | | | | | D | 38,0 | 1,50 | B | 24,0 | 0,94 | H | 27,7 | 1,09 | J | 19,0 | 0,75 | 0,08 | 0,18 |
| 1/2" | F IR12 NPT | Female 800501004 | 12,5 | 1/2" | G | 86,3 | 3,40 | F | 63,3 | 2,49 | C | 27,0 | 1,06 | I | 30,0 | 1,18 | E | 38,0 | 1,50 | 0,25 | 0,54 |
| | M IR12 NPT | Male 800501005 | | | | | | D | 44,5 | 1,75 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 20,5 | 0,81 | 0,08 | 0,19 |
| 3/4" | F IR34V NPT | Female 800101004 | - | 3/4" | G | 118,3 | 4,66 | F | 90,3 | 3,56 | C | 38,0 | 1,50 | I | 43,0 | 1,69 | E | 48,0 | 1,89 | 0,66 | 1,46 |
| | M IR34V NPT | Male 800101005 | | | | | | D | 59,0 | 2,32 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 26,9 | 1,06 | 0,19 | 0,41 |
| 1" | F IR100V NPT | Female 800101006 | - | 1" | G | 128,8 | 5,07 | F | 97,6 | 3,84 | C | 45,0 | 1,77 | I | 52,0 | 2,05 | E | 54,0 | 2,13 | 0,86 | 1,90 |
| | M IR100V NPT | Male 800101007 | | | | | | D | 64,1 | 2,52 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 31,4 | 1,24 | 0,28 | 0,61 |



SPARE KIT SEAL FOR FEMALE

| Repair kit / OR | | |
|-----------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/4" | F IR-V14 | 815700348 |
| 3/8" | F IR-V38 | 815700350 |
| 1/2" | F IR-V12 | 815700352 |
| 3/4" | F IR-V34 | 815700354 |
| 3/4" | F IR34V FA | 815700734 |
| 1" | F IR-V100 | 815700356 |

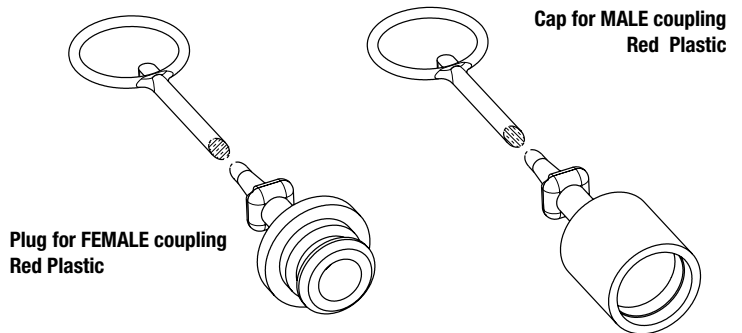
O-Ring in NBR



PROTECTIVE CAPS FOR IR-V SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in agriculture applications where exposure to weather and aggregate materials are common.

The protective caps for IR-V series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



| Body Size/Description | | Protective Cap | | Material/Color |
|-----------------------|----------|-----------------|--------------|----------------|
| | | Plug for Female | Cap for Male | |
| 1/4" | IR-V 14 | 815000000 | 815000001 | Plastic/Red |
| 3/8" | IR-V 38 | 815000002 | 815000003 | Plastic/Red |
| 1/2" | IR-V 12 | 815000004 | 815000005 | Plastic/Red |
| 3/4" | IR-V 34 | 815000006 | 815000007 | Plastic/Red |
| 1" | IR-V 100 | 815000008 | 815000009 | Plastic/Red |



IRB SERIES

INTERCHANGE > ISO 7241 B



TECHNICAL FEATURES AND OPTIONS

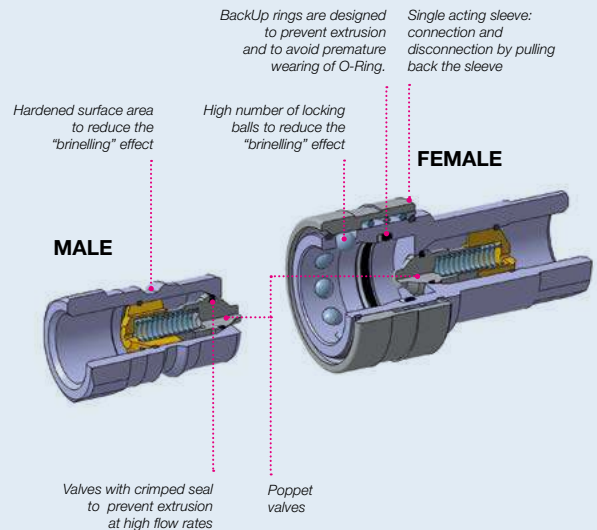
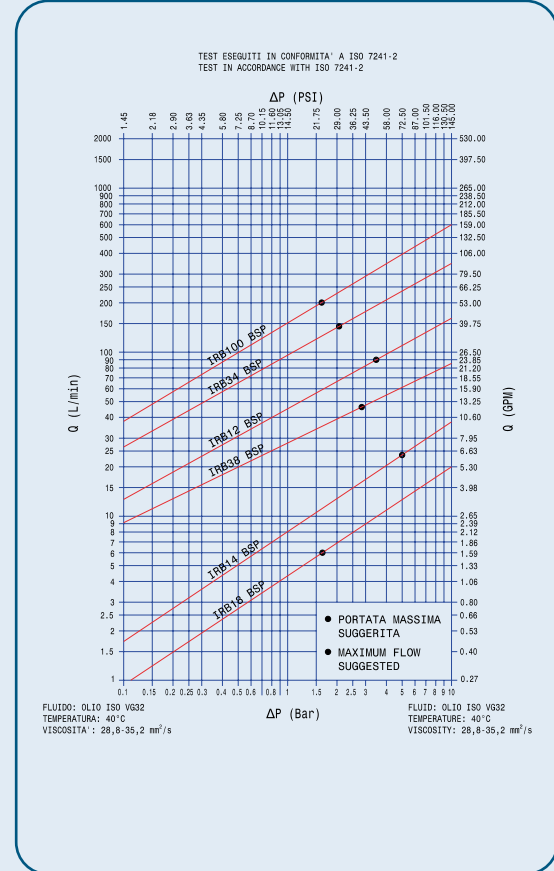
| | | |
|--|---|---|
| Interchange ISO 7241 B | Sealing description Nitrile NBR | Connection system Single acting sleeve |
| Available sizes From 1/8" to 1" | Material/treatment Carbon steel /Cr3 | Available threads BSP - NPT - SAE |
| Operating pressure Up to 350 bar | Locking mechanism Locking Ball system | Flow rate Up to 200 l/min |
| Temperature (°C) -20°C / +100°C | Valving style Poppet | Connection under pressure Connection: not allowed Disconnection: not allowed |

BENEFITS

- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Compact slim design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



MAIN APPLICATIONS



POPPET



PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|----------|-------------|---------------------|-------|---------------|-------|------------------|-------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/8 | 5,0 | IRB18 | 6 | 1,59 | 75 | 16,88 | 35 | 7,88 | 0,18 |
| 1/4 | 6,3 | IRB14 | 24 | 6,36 | 50 | 11,25 | 35 | 7,88 | 0,33 |
| 3/8 | 10,0 | IRB38 | 46 | 12,19 | 80 | 18,00 | 45 | 10,13 | 2,20 |
| 1/2 | 12,5 | IRB12 | 90 | 23,85 | 105 | 23,63 | 35 | 7,88 | 3,00 |
| 3/4 | 20,0 | IRB34 | 148 | 39,22 | 125 | 28,13 | 40 | 9,00 | 9,40 |
| 1 | 25,0 | IRB100 | 200 | 53,00 | 130 | 29,25 | 45 | 10,13 | 14,00 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/8 | IRB18 | 35 | 5075 | 35 | 5075 | 35 | 5075 | 120 | 17400 | 120 | 17400 | 120 | 17400 |
| 1/4 | IRB14 | 35 | 5075 | 35 | 5075 | 35 | 5075 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 3/8 | IRB38 | 30 | 4350 | 30 | 4350 | 30 | 4350 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 1/2 | IRB12 | 28 | 4060 | 28 | 4060 | 28 | 4060 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 3/4 | IRB34 | 23 | 3335 | 23 | 3335 | 23 | 3335 | 92 | 13340 | 92 | 13340 | 92 | 13340 |
| 1 | IRB100 | 18 | 2610 | 18 | 2610 | 18 | 2610 | 72 | 10440 | 72 | 10440 | 72 | 10440 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Different possible configurations:

PL version (free flow without valve) available upon request.
SAE thread available upon request.

Temperature range:

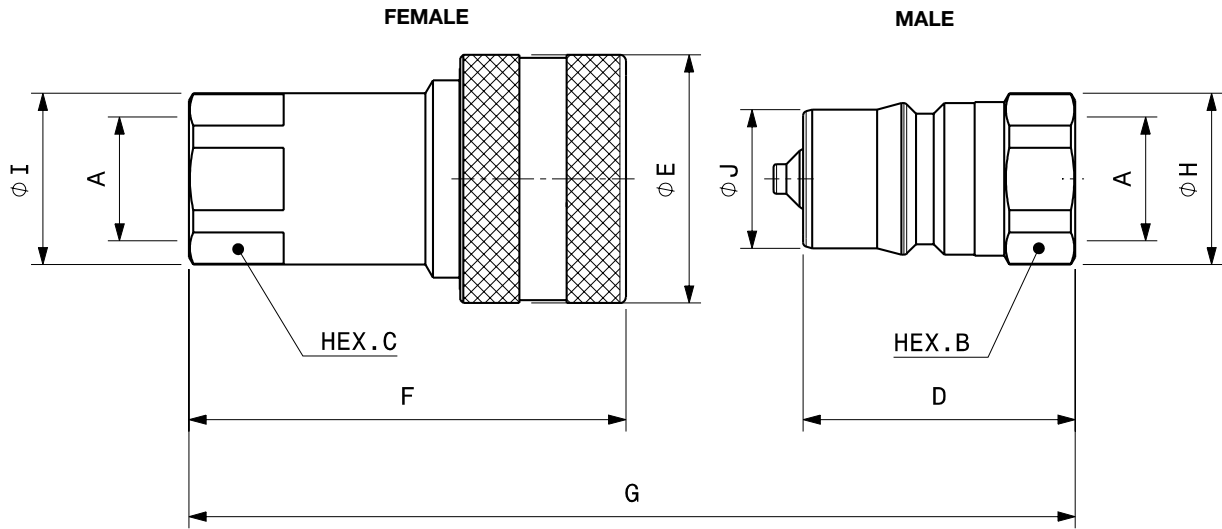
Standard seals in NBR (Nitrile): from -20°C to +100°C (from -4 °F to +212 °F).
Upon request seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).

Please read carefully Instructions and warnings for proper selection of the products.

WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.
Never connect or disconnect with dynamic pressure (e.g. pump on).
Do not use the coupling disconnected with high impulse pressure.
Do not couple-uncouple with flow and/or pressure in the circuit.
Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
Check the maximum allowable working pressure of the port in use.
Make sure that the medium used is compatible with seal and material as indicated for each series.
In case of doubt please contact Stucchi Technical Support.
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.
It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.
Always refer to the version uploaded in the Instructions and warning section of stuchigroup.com website for the latest release.
For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/8" | F IRB18 BSP | Female 800600000 | 5,0 | 1/8" | G | 60,5 | 2,38 | F | 48,8 | 1,92 | C | 14,0 | 0,55 | I | 15,8 | 0,62 | E | 23,0 | 0,91 | 0,07 | 0,15 |
| | M IRB18 BSP | Male 800600001 | | | | | | D | 30,0 | 1,18 | B | 14,0 | 0,55 | H | 15,8 | 0,62 | J | 10,8 | 0,43 | 0,02 | 0,04 |
| 1/4" | F IRB14 BSP | Female 800600002 | 6,3 | 1/4" | G | 70,7 | 2,78 | F | 57,0 | 2,24 | C | 19,0 | 0,75 | I | 21,2 | 0,83 | E | 27,0 | 1,06 | 0,12 | 0,26 |
| | M IRB14 BSP | Male 800600003 | | | | | | D | 35,0 | 1,38 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IRB38 BSP | Female 800600004 | 10,0 | 3/8" | G | 82,7 | 3,26 | F | 66,0 | 2,60 | C | 24,0 | 0,94 | I | 27,0 | 1,06 | E | 34,0 | 1,34 | 0,22 | 0,49 |
| | M IRB38 BSP | Male 800600005 | | | | | | D | 41,0 | 1,61 | B | 24,0 | 0,94 | H | 26,0 | 1,02 | J | 19,1 | 0,75 | 0,07 | 0,15 |
| 1/2" | F IRB12 BSP | Female 800600006 | 12,5 | 1/2" | G | 92,6 | 3,65 | F | 73,9 | 2,91 | C | 27,0 | 1,06 | I | 29,0 | 1,14 | E | 42,0 | 1,65 | 0,32 | 0,71 |
| | M IRB12 BSP | Male 800600007 | | | | | | D | 46,0 | 1,81 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 23,5 | 0,93 | 0,10 | 0,22 |
| 3/4" | F IRB34 BSP | Female 800600008 | 20,0 | 3/4" | G | 111,1 | 4,37 | F | 90,1 | 3,55 | C | 36,0 | 1,42 | I | 38,5 | 1,52 | E | 50,0 | 1,97 | 0,56 | 1,24 |
| | M IRB34 BSP | Male 800600009 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 31,4 | 1,24 | 0,20 | 0,45 |
| 1" | F IRB100 BSP | Female 800600010 | 25,0 | 1" | G | 133,2 | 5,24 | F | 106,2 | 4,18 | C | 41,0 | 1,61 | I | 44,8 | 1,76 | E | 60,0 | 2,36 | 0,86 | 1,90 |
| | M IRB100 BSP | Male 800600011 | | | | | | D | 66,0 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 37,7 | 1,48 | 0,33 | 0,72 |

Port description: FEMALE THREAD NPT (ANSI B1.20.1)

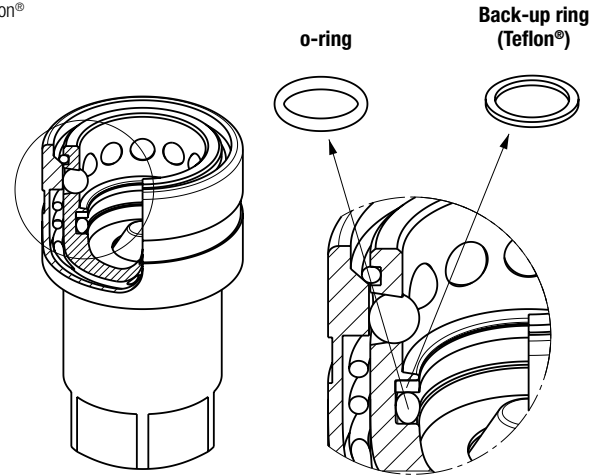
| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/8" | F IRB18 NPT | Female 800601000 | 5,0 | 1/8" | G | 60,5 | 2,38 | F | 48,8 | 1,92 | C | 14,0 | 0,55 | I | 15,8 | 0,62 | E | 23,0 | 0,91 | 0,07 | 0,15 |
| | M IRB18 NPT | Male 800601001 | | | | | | D | 30,0 | 1,18 | B | 14,0 | 0,55 | H | 15,8 | 0,62 | J | 10,8 | 0,43 | 0,02 | 0,04 |
| 1/4" | F IRB14 NPT | Female 800601002 | 6,3 | 1/4" | G | 70,7 | 2,78 | F | 57,0 | 2,24 | C | 19,0 | 0,75 | I | 21,2 | 0,83 | E | 27,0 | 1,06 | 0,12 | 0,26 |
| | M IRB14 NPT | Male 800601003 | | | | | | D | 35,0 | 1,38 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IRB38 NPT | Female 800601004 | 10,0 | 3/8" | G | 82,7 | 3,26 | F | 66,0 | 2,60 | C | 24,0 | 0,94 | I | 27,0 | 1,06 | E | 34,0 | 1,34 | 0,22 | 0,49 |
| | M IRB38 NPT | Male 800601005 | | | | | | D | 41,0 | 1,61 | B | 24,0 | 0,94 | H | 26,0 | 1,02 | J | 19,1 | 0,75 | 0,07 | 0,15 |
| 1/2" | F IRB12 NPT | Female 800601006 | 12,5 | 1/2" | G | 92,6 | 3,65 | F | 73,9 | 2,91 | C | 27,0 | 1,06 | I | 29,0 | 1,14 | E | 42,0 | 1,65 | 0,32 | 0,71 |
| | M IRB12 NPT | Male 800601007 | | | | | | D | 46,0 | 1,81 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 23,5 | 0,93 | 0,11 | 0,23 |
| 3/4" | F IRB34 NPT | Female 800601008 | 20,0 | 3/4" | G | 111,1 | 4,37 | F | 90,1 | 3,55 | C | 36,0 | 1,42 | I | 38,5 | 1,52 | E | 50,0 | 1,97 | 0,56 | 1,24 |
| | M IRB34 NPT | Male 800601009 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 31,4 | 1,24 | 0,21 | 0,46 |
| 1" | F IRB100 NPT | Female 800601010 | 25,0 | 1" | G | 133,2 | 5,24 | F | 106,2 | 4,18 | C | 41,0 | 1,61 | I | 44,8 | 1,76 | E | 60,0 | 2,36 | 0,88 | 1,94 |
| | M IRB100 NPT | Male 800601011 | | | | | | D | 66,0 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 37,7 | 1,48 | 0,34 | 0,75 |



SPARE KIT SEAL FOR FEMALE

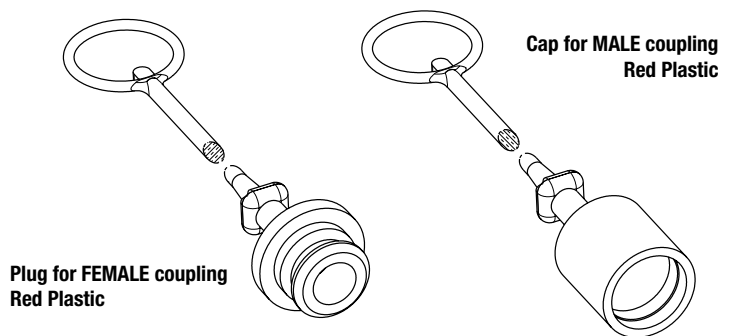
| Repair kit / OR+BK | | |
|--------------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/8" | F IRB18 | 815700202 |
| 1/4" | F IRB14 | 815700204 |
| 3/8" | F IRB38 | 815700206 |
| 1/2" | F IRB12 | 815700208 |
| 3/4" | F IRB34 | 815700210 |
| 1" | F IRB100 | 815700212 |

O-Ring in Nitrile
BackUp in Teflon®

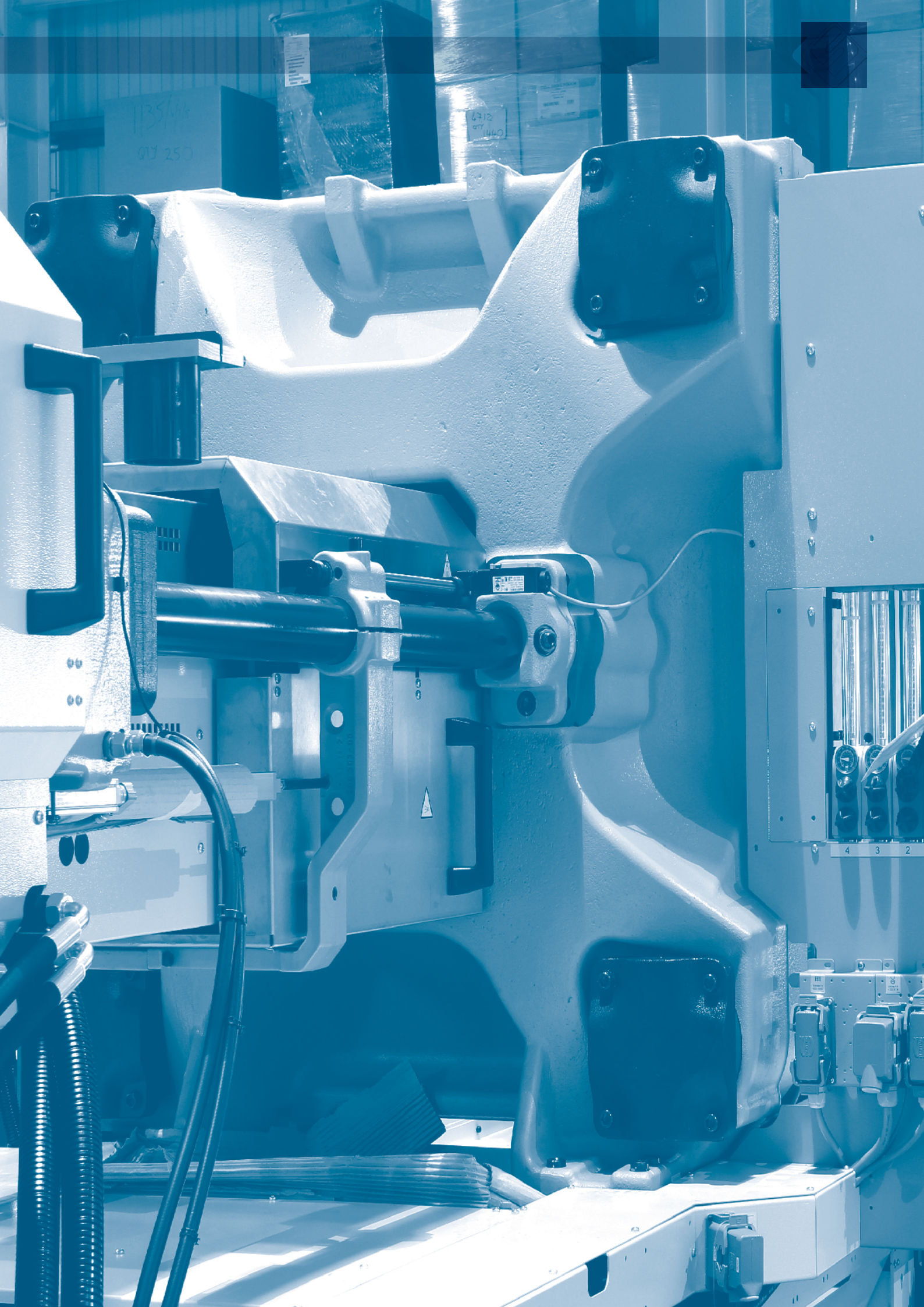


PROTECTIVE CAPS FOR IRB SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. The protective caps for IRB series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



| Protective Cap | | | | |
|-----------------------|-----------------|--------------|----------------|--|
| Body Size/Description | Part Number | | Material/Color | |
| | Plug for Female | Cap for Male | | |
| 1/4" IRB14 | 815000032 | 815000033 | Plastic/Red | |
| 3/8" IRB38 | 815000034 | 815000035 | Plastic/Red | |
| 1/2" IRB12 | 815000036 | 815000037 | Plastic/Red | |
| 3/4" IRB34 | 815000038 | 815000039 | Plastic/Red | |
| 1" IRB100 | 815000040 | 815000041 | Plastic/Red | |



IRBOSERIES

INTERCHANGE > ISO 7241 B



TECHNICAL FEATURES AND OPTIONS

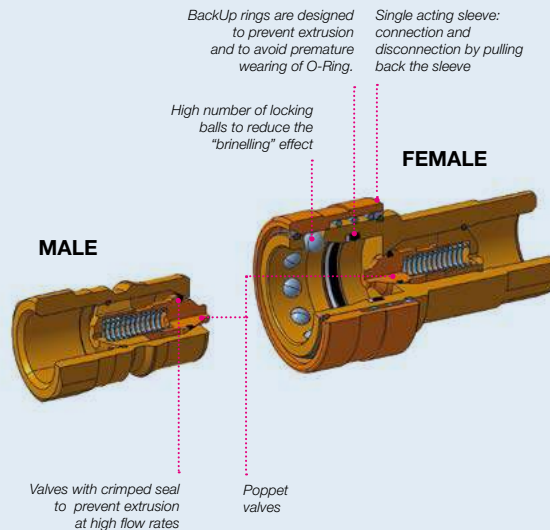
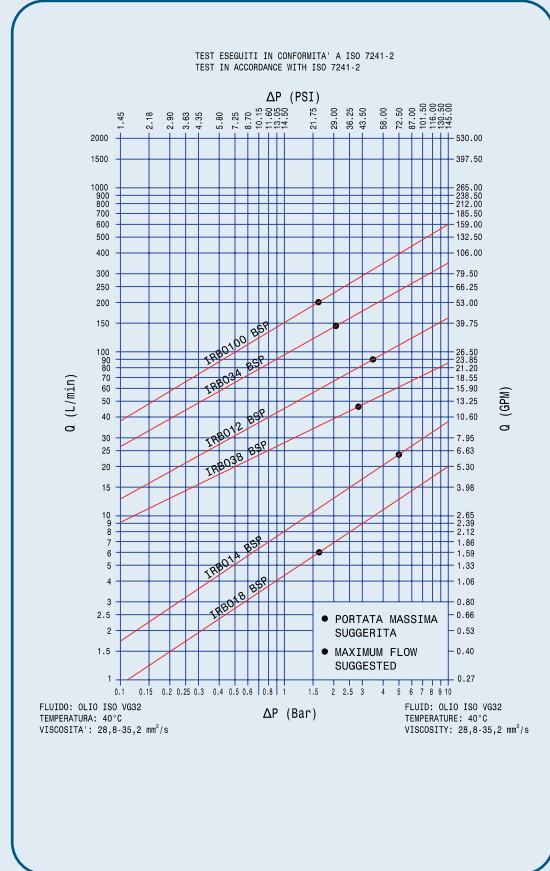
| | | |
|--|---|---|
| Interchange ISO 7241 B | Sealing description FKM (VITON®) | Connection system Single acting sleeve |
| Available sizes From 1/8" to 1" | Material Brass | Available threads BSP - NPT |
| Operating pressure Up to 200 bar | Locking mechanism Locking Ball system | Flow rate Up to 200 l/min |
| Temperature (°C) -15°C / + 180°C | Valving style Poppet | Connection under pressure Connection: not allowed Disconnection: not allowed |

BENEFITS

- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Superior corrosion resistance compared to Chrome 3.
- Compact slim design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



MAIN APPLICATIONS



POPPET

PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|----------|-------------|---------------------|-------|---------------|-------|------------------|------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/8 | 5,0 | IRB018 | 6 | 1,59 | 75 | 16,88 | 35 | 7,88 | 0,18 |
| 1/4 | 6,3 | IRB014 | 24 | 6,36 | 60 | 13,50 | 30 | 6,75 | 0,33 |
| 3/8 | 10,0 | IRB038 | 46 | 12,19 | 95 | 21,38 | 35 | 7,88 | 2,20 |
| 1/2 | 12,5 | IRB012 | 90 | 23,85 | 95 | 21,38 | 35 | 7,88 | 3,00 |
| 3/4 | 20,0 | IRB034 | 148 | 39,22 | 125 | 28,13 | 40 | 9,00 | 9,40 |
| 1 | 25,0 | IRB0100 | 200 | 53,00 | 140 | 31,50 | 40 | 9,00 | 14,00 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/8 | IRB018 | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 80 | 11600 | 80 | 11600 |
| 1/4 | IRB014 | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 100 | 11600 | 80 | 11600 |
| 3/8 | IRB038 | 16 | 2320 | 16 | 2320 | 16 | 2320 | 64 | 9280 | 64 | 9280 | 64 | 9280 |
| 1/2 | IRB012 | 16 | 2320 | 16 | 2320 | 16 | 2320 | 64 | 9280 | 64 | 9280 | 64 | 9280 |
| 3/4 | IRB034 | 12,5 | 1813 | 12,5 | 1813 | 12,5 | 1813 | 50 | 7250 | 45 | 6525 | 50 | 7250 |
| 1 | IRB0100 | 10 | 1450 | 10 | 1450 | 10 | 1450 | 40 | 5800 | 40 | 5800 | 40 | 5800 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Different possible configurations

PL version (free flow without valve) available upon request.

SAE thread available upon request.

Temperature range:

Standard seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).

Upon request seals in NBR (Nitrile) from -20 °C to +100 °C (from -4 °F to +212 °F).

Seals in NBR (Nitrile) with water from +5°C to +60°C (from +41°F to +140°F).

Upon request seals in EPDM (Ethylene Propylene): from -40 °C to +150 °C

(from -40 °F to +302 °F).

Please read carefully Instructions and warnings for proper selection of the products.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

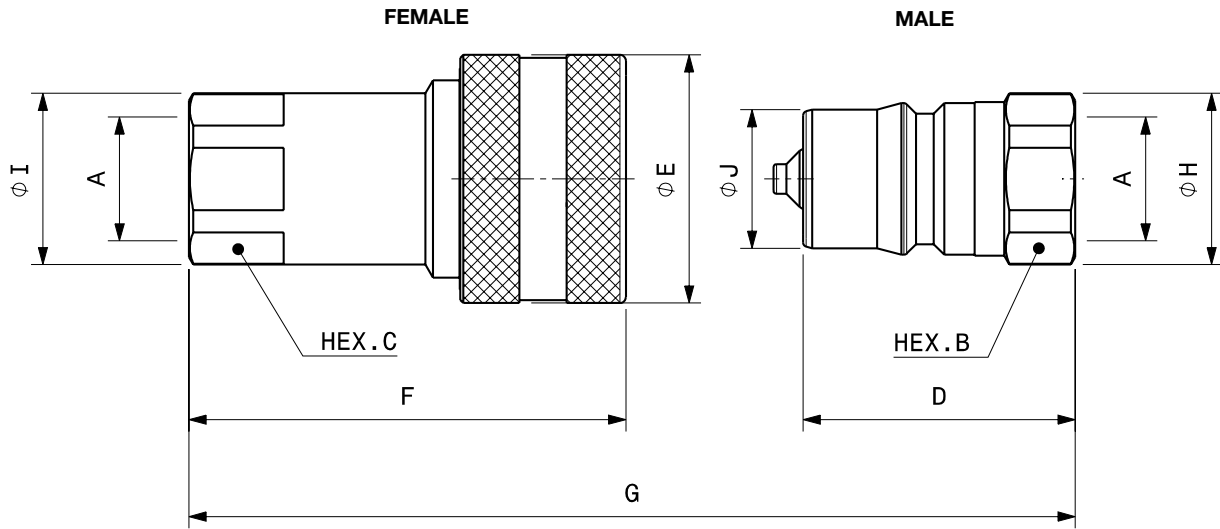
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/8" | F IRB018V BSP | Female 804500100 | 5,0 | 1/8" | G | 60,5 | 2,38 | F | 48,8 | 1,92 | C | 14,0 | 0,55 | I | 15,8 | 0,62 | E | 23,0 | 0,91 | 0,07 | 0,15 |
| | M IRB018V BSP | Male 804500101 | | | | | | D | 30,0 | 1,18 | B | 14,0 | 0,55 | H | 15,8 | 0,62 | J | 10,8 | 0,43 | 0,02 | 0,04 |
| 1/4" | F IRB014V BSP | Female 804500102 | 6,3 | 1/4" | G | 70,7 | 2,78 | F | 57,0 | 2,24 | C | 19,0 | 0,75 | I | 21,2 | 0,83 | E | 27,0 | 1,06 | 0,13 | 0,29 |
| | M IRB014V BSP | Male 804500103 | | | | | | D | 35,0 | 1,38 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IRB038V BSP | Female 804500104 | 10,0 | 3/8" | G | 82,7 | 3,26 | F | 66,0 | 2,60 | C | 24,0 | 0,94 | I | 27,0 | 1,06 | E | 34,0 | 1,34 | 0,24 | 0,52 |
| | M IRB038V BSP | Male 804500105 | | | | | | D | 41,0 | 1,61 | B | 24,0 | 0,94 | H | 26,0 | 1,02 | J | 19,1 | 0,75 | 0,07 | 0,16 |
| 1/2" | F IRB012V BSP | Female 804500106 | 12,5 | 1/2" | G | 92,6 | 3,65 | F | 73,9 | 2,91 | C | 27,0 | 1,06 | I | 29,0 | 1,14 | E | 42,0 | 1,65 | 0,34 | 0,76 |
| | M IRB012V BSP | Male 804500107 | | | | | | D | 46,0 | 1,81 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 23,5 | 0,93 | 0,11 | 0,24 |
| 3/4" | F IRB034V BSP | Female 804500108 | 20,0 | 3/4" | G | 111,1 | 4,37 | F | 90,1 | 3,55 | C | 36,0 | 1,42 | I | 38,5 | 1,52 | E | 50,0 | 1,97 | 0,61 | 1,33 |
| | M IRB034V BSP | Male 804500109 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 31,4 | 1,24 | 0,22 | 0,48 |
| 1" | F IRB0100V BSP | Female 804500110 | 25,0 | 1" | G | 133,2 | 5,24 | F | 106,2 | 4,18 | C | 41,0 | 1,61 | I | 44,8 | 1,76 | E | 60,0 | 2,36 | 0,93 | 2,04 |
| | M IRB0100V BSP | Male 804500111 | | | | | | D | 66,0 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 37,7 | 1,48 | 0,35 | 0,78 |

Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

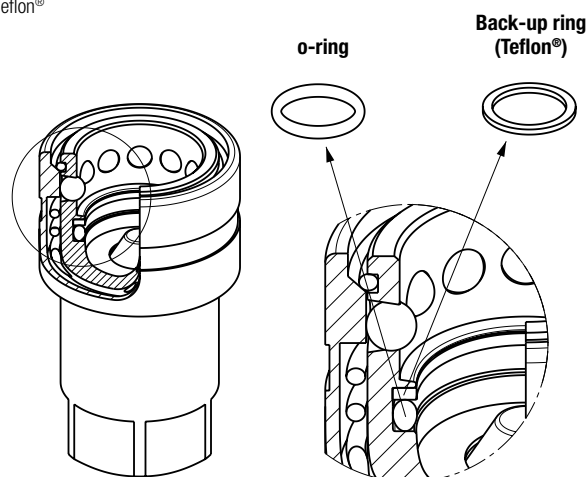
| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/8" | F IRB018V NPT | Female 804501100 | 5,0 | 1/8" | G | 60,5 | 2,38 | F | 48,8 | 1,92 | C | 14,0 | 0,55 | I | 15,8 | 0,62 | E | 23,0 | 0,91 | 0,08 | 0,17 |
| | M IRB018V NPT | Male 804501101 | | | | | | D | 30,0 | 1,18 | B | 14,0 | 0,55 | H | 15,8 | 0,62 | J | 10,8 | 0,43 | 0,02 | 0,04 |
| 1/4" | F IRB014V NPT | Female 804501102 | 6,3 | 1/4" | G | 70,7 | 2,78 | F | 57,0 | 2,24 | C | 19,0 | 0,75 | I | 21,2 | 0,83 | E | 27,0 | 1,06 | 0,13 | 0,29 |
| | M IRB014V NPT | Male 804501103 | | | | | | D | 35,0 | 1,38 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 14,2 | 0,56 | 0,04 | 0,09 |
| 3/8" | F IRB038V NPT | Female 804501104 | 10,0 | 3/8" | G | 82,7 | 3,26 | F | 66,0 | 2,60 | C | 24,0 | 0,94 | I | 27,0 | 1,06 | E | 34,0 | 1,34 | 0,23 | 0,51 |
| | M IRB038V NPT | Male 804501105 | | | | | | D | 41,0 | 1,61 | B | 24,0 | 0,94 | H | 26,0 | 1,02 | J | 19,1 | 0,75 | 0,08 | 0,17 |
| 1/2" | F IRB012V NPT | Female 804501106 | 12,5 | 1/2" | G | 92,6 | 3,65 | F | 73,9 | 2,91 | C | 27,0 | 1,06 | I | 29,0 | 1,14 | E | 42,0 | 1,65 | 0,35 | 0,76 |
| | M IRB012V NPT | Male 804501107 | | | | | | D | 46,0 | 1,81 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 23,5 | 0,93 | 0,12 | 0,25 |
| 3/4" | F IRB034V NPT | Female 804501108 | 20,0 | 3/4" | G | 111,1 | 4,37 | F | 90,1 | 3,55 | C | 36,0 | 1,42 | I | 38,5 | 1,52 | E | 50,0 | 1,97 | 0,61 | 1,33 |
| | M IRB034V NPT | Male 804501109 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 31,4 | 1,24 | 0,22 | 0,49 |
| 1" | F IRB0100V NPT | Female 804501110 | 25,0 | 1" | G | 133,2 | 5,24 | F | 106,2 | 4,18 | C | 41,0 | 1,61 | I | 44,8 | 1,76 | E | 60,0 | 2,36 | 0,94 | 2,07 |
| | M IRB0100V NPT | Male 804501111 | | | | | | D | 66,0 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 37,7 | 1,48 | 0,36 | 0,79 |



SPARE KIT SEAL FOR FEMALE

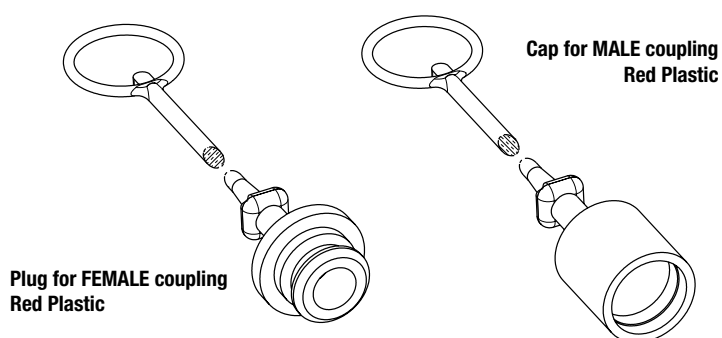
| Repair kit / OR+BK | | |
|--------------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/8" | F IRB018 | 815700214 |
| 1/4" | F IRB014 | 815700216 |
| 3/8" | F IRB038 | 815700218 |
| 1/2" | F IRB012 | 815700220 |
| 3/4" | F IRB034 | 815700222 |
| 1" | F IRB0100 | 815700224 |

O-Ring in FKM (VITON®)
BackUp in Teflon®



PROTECTIVE CAPS FOR IRBO SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. The protective caps for IRBO series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



| Body Size/Description | | Protective Cap | | Material/Color |
|-----------------------|---------|-----------------|--------------|----------------|
| | | Plug for Female | Cap for Male | |
| 1/4" | IRB014 | 815000032 | 815000033 | Plastic/Red |
| 3/8" | IRB038 | 815000034 | 815000035 | Plastic/Red |
| 1/2" | IRB012 | 815000036 | 815000037 | Plastic/Red |
| 3/4" | IRB034 | 815000038 | 815000039 | Plastic/Red |
| 1" | IRB0100 | 815000040 | 815000041 | Plastic/Red |



IRBX SERIES

INTERCHANGE > ISO 7241 B



TECHNICAL FEATURES AND OPTIONS

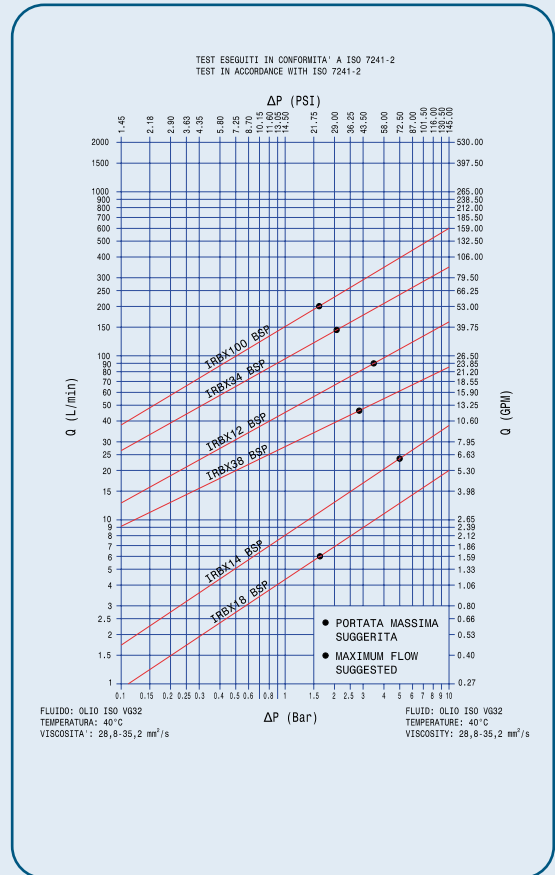
| | | |
|--|---|---|
| Interchange ISO 7241 B | Sealing description FKM (VITON®) | Connection system Single acting sleeve |
| Available sizes From 1/8" to 1" | Material Stainless steel (AISI 316L) Retainer in brass | Available threads BSP - NPT |
| Operating pressure Up to 250 bar | Locking mechanism Locking Ball system | Flow rate Up to 200 l/min |
| Temperature (°C) -15°C / +180°C | Valving style Poppet | Connection under pressure Connection: not allowed Disconnection: not allowed |

BENEFITS

- The poppet valve with elastomer seal provides maximum sealing of the couplings when disconnected.
- Shape of internal parts is designed to reduce turbulence and pressure drop.
- Good corrosion resistance.
- Compact slim design.
- Simple to use.

HOW TO USE

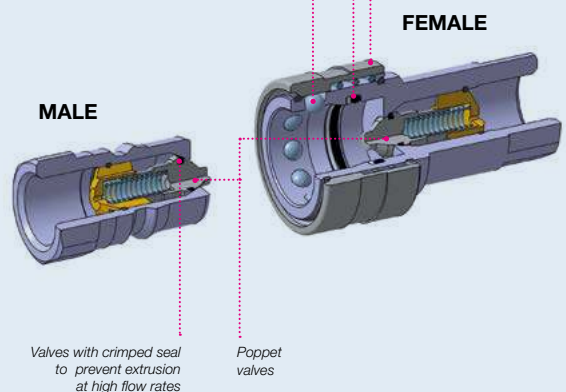
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



High number of locking balls to reduce the "brinelling" effect

BackUp rings are designed to prevent extrusion and to avoid premature wearing of O-Ring

Single acting sleeve: connection and disconnection by pulling back the sleeve



MAIN APPLICATIONS



POPPET



PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|----------|-------------|---------------------|-------|---------------|-------|------------------|-------|-----------|
| in | mm (ISO) | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/8 | 5,0 | IRBX18 | 6 | 1,59 | 75 | 16,88 | 35 | 7,88 | 0,18 |
| 1/4 | 6,3 | IRBX14 | 24 | 6,36 | 60 | 13,50 | 30 | 6,75 | 0,33 |
| 3/8 | 10,0 | IRBX38 | 46 | 12,19 | 90 | 20,25 | 35 | 7,88 | 2,20 |
| 1/2 | 12,5 | IRBX12 | 90 | 23,85 | 125 | 28,13 | 45 | 10,13 | 3,00 |
| 3/4 | 20,0 | IRBX34 | 148 | 39,22 | 135 | 30,38 | 55 | 12,38 | 9,40 |
| 1 | 25,0 | IRBX100 | 200 | 53,00 | 140 | 31,50 | 40 | 9,00 | 14,00 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|-----|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | | | |
| in | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | |
| 1/8 | IRBX18 | 25 | 3625 | 25 | 3625 | 25 | 3625 | 100 | 14500 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 1/4 | IRBX14 | 25 | 3625 | 25 | 3625 | 25 | 3625 | 100 | 14500 | 100 | 14500 | 100 | 14500 | 100 | 14500 |
| 3/8 | IRBX38 | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 80 | 11600 | 80 | 11600 | 80 | 11600 |
| 1/2 | IRBX12 | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 80 | 11600 | 80 | 11600 | 80 | 11600 |
| 3/4 | IRBX34 | 16 | 2320 | 16 | 2320 | 16 | 2320 | 64 | 9280 | 64 | 9280 | 64 | 9280 | 64 | 9280 |
| 1 | IRBX100 | 12,5 | 1813 | 12,5 | 1813 | 12,5 | 1813 | 50 | 7250 | 50 | 7250 | 50 | 7250 | 50 | 7250 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Different possible configurations:

PL version (free flow without valve) available upon request.
 IRBX-X internal retainer in stainless steel available upon request.
 SAE thread available upon request.

Temperature range:

Standard seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).
 Please read carefully Instructions and warnings for proper selection of the products.
 Upon request seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).
 Seals in NBR (Nitrile) with water from +5°C to +60°C (from +41°F to +140°F).
 Upon request seals in EPDM (Ethylene Propylene): from -40 °C to +150 °C (from -40 °F to +302 °F).

Material:

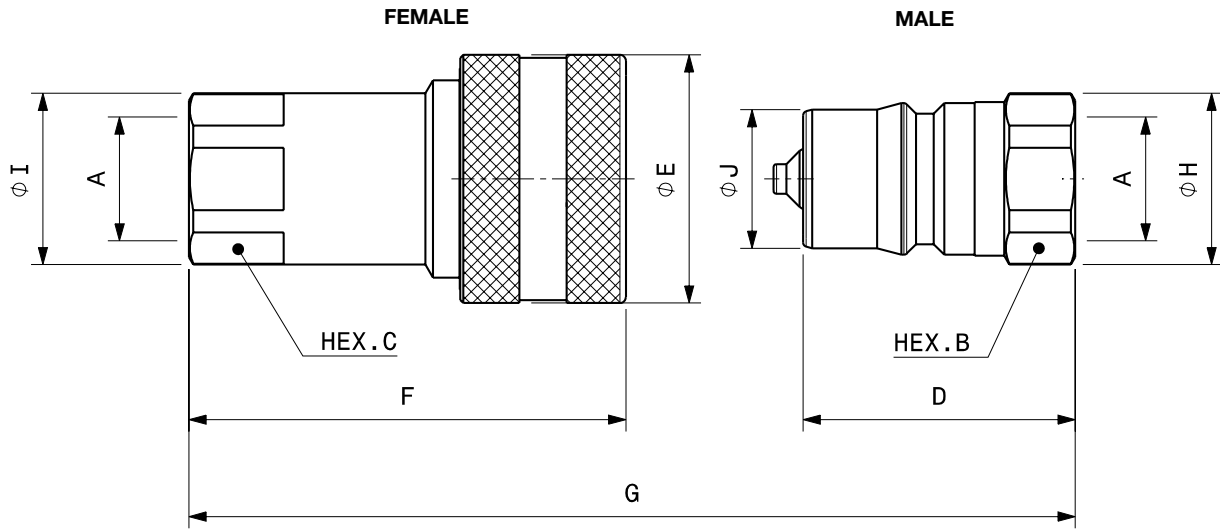
- Construction: Stainless steel AISI 316L
- Springs: AISI 302
- Locking ball: AISI 316



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.
 Never connect or disconnect with dynamic pressure (e.g. pump on).
 Do not use the coupling disconnected with high impulse pressure.
 Do not couple-uncouple with flow and/or pressure in the circuit.
 Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).
 Check the maximum allowable working pressure of the port in use.
 Make sure that the medium used is compatible with seal and material as indicated for each series.
 In case of doubt please contact Stucchi Technical Support.
 The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.
It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.
Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.
For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/8" | F IRBX18 BSP | Female 804600100 | 5,0 | 1/8" | G | 60,5 | 2,38 | F | 48,8 | 1,92 | C | 14,0 | 0,55 | I | 15,8 | 0,62 | E | 23,0 | 0,91 | 0,07 | 0,15 |
| | M IRBX18 BSP | Male 804600101 | | | | | | D | 30,0 | 1,18 | B | 14,0 | 0,55 | H | 15,8 | 0,62 | J | 10,8 | 0,43 | 0,02 | 0,04 |
| 1/4" | F IRBX14 BSP | Female 804600102 | 6,3 | 1/4" | G | 70,7 | 2,78 | F | 57,0 | 2,24 | C | 19,0 | 0,75 | I | 21,2 | 0,83 | E | 27,0 | 1,06 | 0,12 | 0,27 |
| | M IRBX14 BSP | Male 804600103 | | | | | | D | 35,0 | 1,38 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IRBX38 BSP | Female 804600104 | 10,0 | 3/8" | G | 82,7 | 3,26 | F | 66,0 | 2,60 | C | 24,0 | 0,94 | I | 27,0 | 1,06 | E | 34,0 | 1,34 | 0,23 | 0,50 |
| | M IRBX38 BSP | Male 804600105 | | | | | | D | 41,0 | 1,61 | B | 24,0 | 0,94 | H | 26,0 | 1,02 | J | 19,1 | 0,75 | 0,07 | 0,15 |
| 1/2" | F IRBX12 BSP | Female 804600106 | 12,5 | 1/2" | G | 92,6 | 3,65 | F | 73,9 | 2,91 | C | 27,0 | 1,06 | I | 29,0 | 1,14 | E | 42,0 | 1,65 | 0,33 | 0,72 |
| | M IRBX12 BSP | Male 804600107 | | | | | | D | 46,0 | 1,81 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 23,5 | 0,93 | 0,10 | 0,23 |
| 3/4" | F IRBX34 BSP | Female 804600108 | 20,0 | 3/4" | G | 111,1 | 4,37 | F | 90,1 | 3,55 | C | 36,0 | 1,42 | I | 38,5 | 1,52 | E | 50,0 | 1,97 | 0,58 | 1,27 |
| | M IRBX34 BSP | Male 804600109 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 31,4 | 1,24 | 0,21 | 0,45 |
| 1" | F IRBX100 BSP | Female 804600110 | 25,0 | 1" | G | 133,2 | 5,24 | F | 106,2 | 4,18 | C | 41,0 | 1,61 | I | 44,8 | 1,76 | E | 60,0 | 2,36 | 0,88 | 1,94 |
| | M IRBX100 BSP | Male 804600111 | | | | | | D | 66,0 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 37,7 | 1,48 | 0,34 | 0,74 |

Port description: FEMALE THREAD NPT (ANSI B.1.20.1)

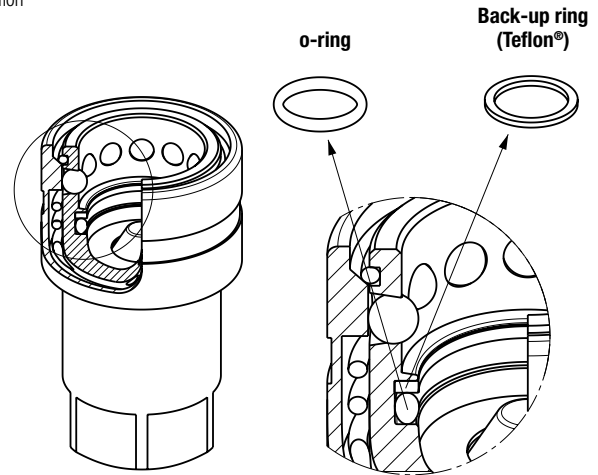
| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Overall Diameter | | Body Diameter | | Weight | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|----|-------|------|------------------|------|---------------|----|--------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | |
| 1/8" | F IRBX18 NPT | Female 804601100 | 5,0 | 1/8" | G | 60,5 | 2,38 | F | 48,8 | 1,92 | C | 14,0 | 0,55 | I | 15,8 | 0,62 | E | 23,0 | 0,91 | 0,07 | 0,15 |
| | M IRBX18 NPT | Male 804601101 | | | | | | D | 30,0 | 1,18 | B | 14,0 | 0,55 | H | 15,8 | 0,62 | J | 10,8 | 0,43 | 0,02 | 0,04 |
| 1/4" | F IRBX14 NPT | Female 804601102 | 6,3 | 1/4" | G | 70,7 | 2,78 | F | 57,0 | 2,24 | C | 19,0 | 0,75 | I | 21,2 | 0,83 | E | 27,0 | 1,06 | 0,12 | 0,27 |
| | M IRBX14 NPT | Male 804601103 | | | | | | D | 35,0 | 1,38 | B | 19,0 | 0,75 | H | 20,8 | 0,82 | J | 14,2 | 0,56 | 0,04 | 0,08 |
| 3/8" | F IRBX38 NPT | Female 804601104 | 10,0 | 3/8" | G | 82,7 | 3,26 | F | 66,0 | 2,60 | C | 24,0 | 0,94 | I | 27,0 | 1,06 | E | 34,0 | 1,34 | 0,23 | 0,50 |
| | M IRBX38 NPT | Male 804601105 | | | | | | D | 41,0 | 1,61 | B | 24,0 | 0,94 | H | 26,0 | 1,02 | J | 19,1 | 0,75 | 0,07 | 0,15 |
| 1/2" | F IRBX12 NPT | Female 804601106 | 12,5 | 1/2" | G | 92,6 | 3,65 | F | 73,9 | 2,91 | C | 27,0 | 1,06 | I | 29,0 | 1,14 | E | 42,0 | 1,65 | 0,33 | 0,72 |
| | M IRBX12 NPT | Male 804601107 | | | | | | D | 46,0 | 1,81 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 23,5 | 0,93 | 0,11 | 0,24 |
| 3/4" | F IRBX34 NPT | Female 804601108 | 20,0 | 3/4" | G | 111,1 | 4,37 | F | 90,1 | 3,55 | C | 36,0 | 1,42 | I | 38,5 | 1,52 | E | 50,0 | 1,97 | 0,58 | 1,28 |
| | M IRBX34 NPT | Male 804601109 | | | | | | D | 55,0 | 2,17 | B | 36,0 | 1,42 | H | 38,5 | 1,52 | J | 31,4 | 1,24 | 0,21 | 0,46 |
| 1" | F IRBX100 NPT | Female 804601110 | 25,0 | 1" | G | 133,2 | 5,24 | F | 106,2 | 4,18 | C | 41,0 | 1,61 | I | 44,8 | 1,76 | E | 60,0 | 2,36 | 0,89 | 1,96 |
| | M IRBX100 NPT | Male 804601111 | | | | | | D | 66,0 | 2,60 | B | 41,0 | 1,61 | H | 44,8 | 1,76 | J | 37,7 | 1,48 | 0,34 | 0,74 |



SPARE KIT SEAL FOR FEMALE

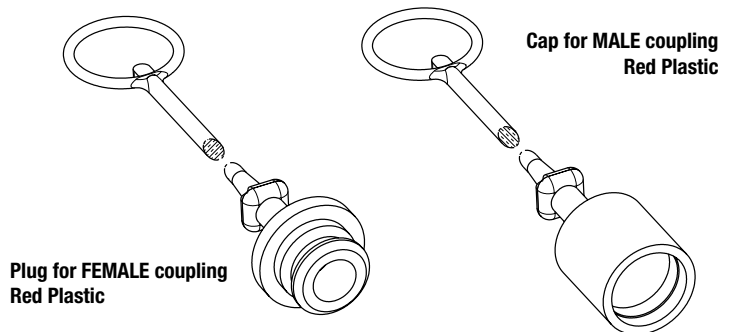
| Repair kit / OR+BK | | |
|--------------------|-------------|-------------|
| Body Size | Description | Part Number |
| 1/8" | F IRBX18 | 815700214 |
| 1/4" | F IRBX14 | 815700216 |
| 3/8" | F IRBX38 | 815700218 |
| 1/2" | F IRBX12 | 815700220 |
| 3/4" | F IRBX34 | 815700222 |
| 1" | F IRBX100 | 815700224 |

O-Ring in FKM (VITON®)
BackUp in Teflon®



PROTECTIVE CAPS FOR IRBX SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. The protective caps for IRBX series are manufactured in plastic with connection lanyard (standard color red, other colors available upon request).



| Body Size/Description: | | Protective Cap | | Material/Color |
|------------------------|---------|-----------------|--------------|----------------|
| | | Plug for Female | Cap for Male | |
| 1/4" | IRBX14 | 815000032 | 815000033 | Plastic/Red |
| 3/8" | IRBX38 | 815000034 | 815000035 | Plastic/Red |
| 1/2" | IRBX12 | 815000036 | 815000037 | Plastic/Red |
| 3/4" | IRBX34 | 815000038 | 815000039 | Plastic/Red |
| 1" | IRBX100 | 815000040 | 815000041 | Plastic/Red |



IRCSERIES

INTERCHANGE > with similar product (Nordic interface)



Stucchi®



TECHNICAL FEATURES AND OPTIONS

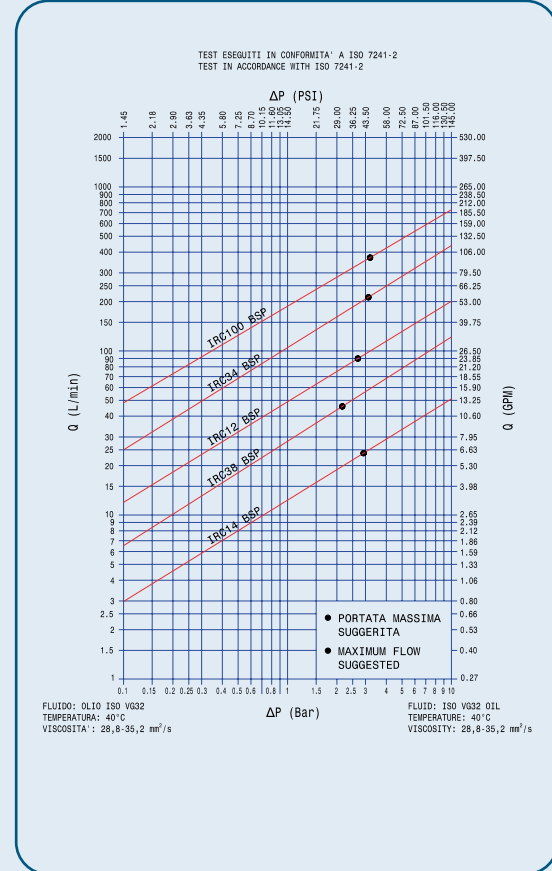
| | | |
|---|--|---|
| Interchange With similar product (Nordic interface) | Sealing description Nitrile NBR | Connection system Single acting sleeve |
| Available sizes From 1/4" to 1" | Material/treatment Carbon steel ZnNi | Available threads BSP - NPT - SAE |
| Operating pressure Up to 450 bar | Locking mechanism Ball locking + safety sleeve | Flow rate Up to 378 l/min |
| Temperature (°C) -20°C / +100°C | Valving style Poppet | Connection under pressure Only PC version Connection: one side Disconnection: not allowed |

BENEFITS

- Connection under residual pressure is allowed in the male or in the female (PC version). Please notice that the counterpart side should be drained and should use a standard poppet half.
- The poppet valve with elastomer seal provides maximum sealing of the couplings once disconnected.
- O-Ring + BackUp ring for optimum protection sealing.
- The Zinc Nickel plating ensures high resistance to corrosion and it is ideal for hydraulic equipment applications where an improved corrosion resistance is necessary.
- Additional O-Ring for extra sealing capacity and to contain spray effect to avoid soil contamination.
- High durability.
- Reference products for tough applications, typically used in Nordic countries.
- Safety sleeve to prevent accidental disconnection.
- Shape of internal parts is optimized to reduce turbulence and pressure drop.
- High resistance to pressure impulses.
- Compact design.
- Simple to use.

HOW TO USE

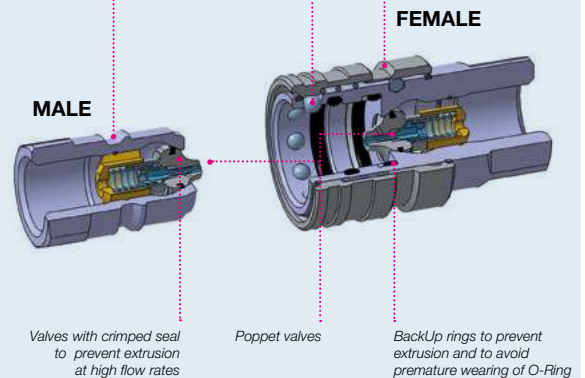
- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect: pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To avoid accidental disconnection rotate safety sleeve.
- To disconnect: unlock the safety sleeve and pull back the sleeve of the female coupling, pull out the mating half.



Hardened surface area to reduce the "brinelling" effect

High number of locking balls to reduce the "brinelling" effect

Safety sleeve zinc plated to prevent accidental disconnection



This image represents PC version (release pressure device system)

MAIN APPLICATIONS



POPPET

PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|------|-------------|---------------------|--------|---------------|-------|------------------|-------|-----------|
| in | mm | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/4 | 6,3 | IRC14 | 24 | 6,36 | 60 | 13,49 | 30 | 6,74 | 1,1 |
| 3/8 | 10 | IRC38 | 46 | 12,19 | 90 | 20,23 | 35 | 7,87 | 2,5 |
| 1/2 | 12,5 | IRC12 | 90 | 23,85 | 120 | 26,98 | 35 | 7,87 | 3,5 |
| 3/4 | 20 | IRC34 | 212 | 56,18 | 170 | 38,22 | 45 | 10,12 | 15 |
| 1 | 25 | IRC100** | 378 | 100,17 | 210 | 47,21 | 45 | 10,12 | 18 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | Steel | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/4 | IRC14 | 45 | 6525 | 30 | 4350 | 30 | 4350 | 180 | 26100 | 120 | 17400 | 120 | 17400 |
| 3/8 | IRC38 | 35 | 5075 | 28 | 4060 | 28 | 4060 | 130 | 18850 | 110 | 15950 | 110 | 15950 |
| 1/2 | IRC12 | 33 | 4785 | 25 | 3625 | 25 | 3625 | 110 | 15950 | 100 | 14500 | 100 | 14500 |
| 3/4 | IRC34 | 33 | 4785 | 25 | 3625 | 25 | 3625 | 100 | 14500 | 80 | 11600 | 80 | 11600 |
| 1 | IRC100** | 33 | 4785 | 25 | 3625 | 25 | 3625 | 100 | 14500 | 100 | 14500 | 100 | 14500 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

** Specific dimensions of Stucchi IRC series are certified with Lloyd Type Approval in accordance with API 16D at specific rating pressure of 207 bar/3000 PSI. For complete technical information please contact Stucchi Technical Support.

Different possible configurations:

PC version, connectable under residual pressure.

PL version, free flow.

SAE thread available upon request.

For complete technical information please contact Stucchi Technical Support.

Temperature range:

Seals in NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).

Upon request seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).

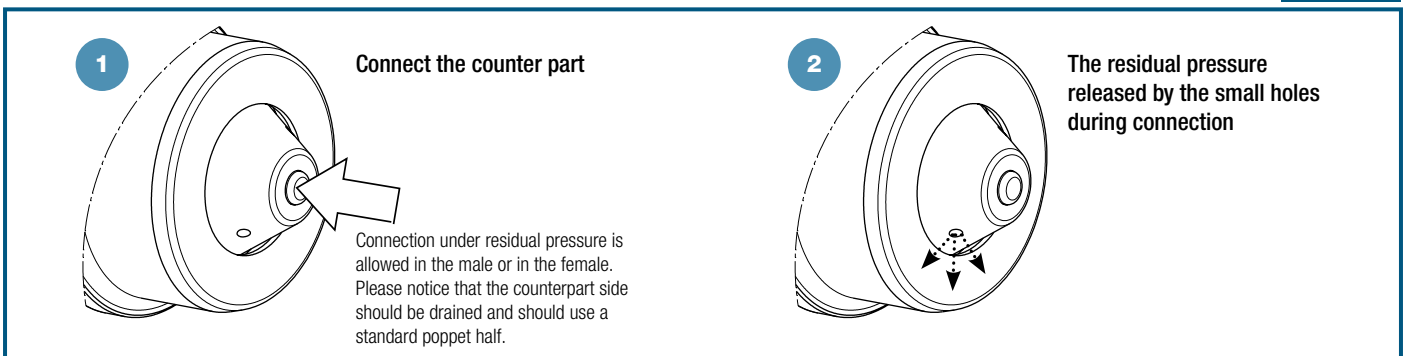
Please read carefully Instructions and warnings for proper selection of the products.

Tests performed:

The couplings have been tested according to ISO norm.

The couplings have been tested at max. operating pressure for 200.000 impulses in coupled position and 100.000 impulses in uncoupled position.

PC version



! WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Connect under pressure products (PC version) are suitable to be connected under residual (static) pressure.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not couple-uncouple with flow and pressure in the circuit (except PC version).

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Do not use the coupling disconnected with high impulse pressure.

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

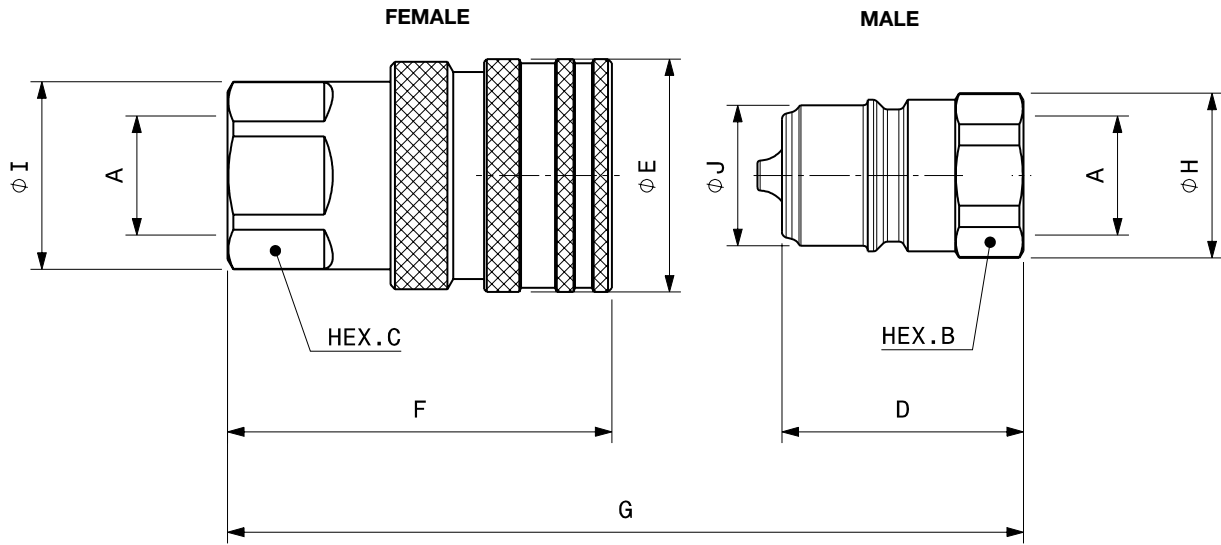
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



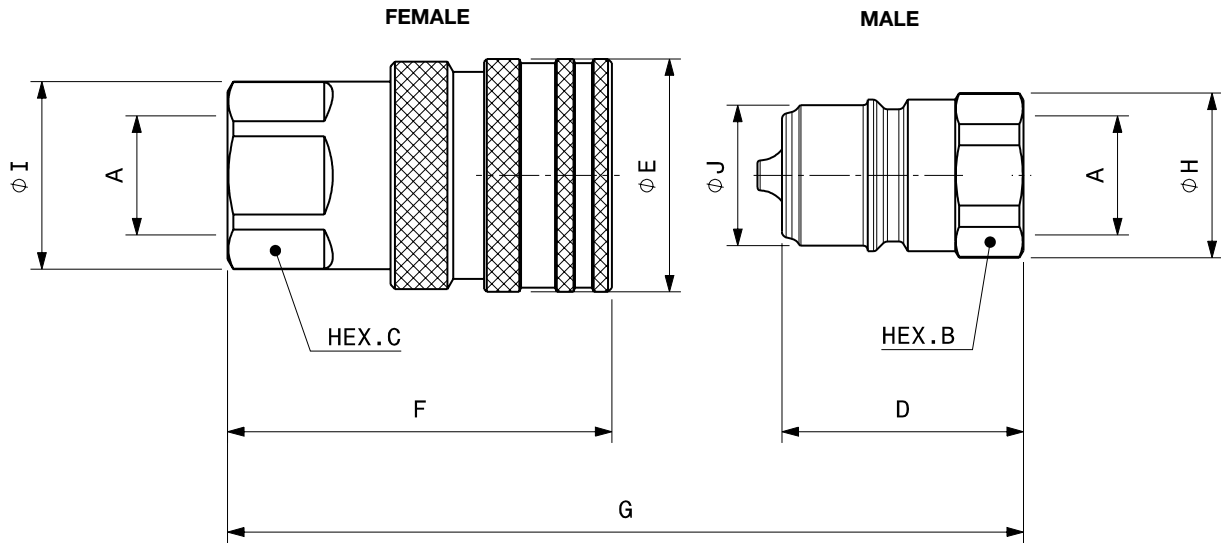
Port description: FEMALE THREAD BSPP (ISO 1179-1)

| BODY SIZE | Descriptive Code | Item Code | PORT (A) | Overall Length | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | | |
|-----------|------------------|------------------|----------|----------------|--------|------|-----|------|----------|----|----------|------|--------|------|------|----|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | |
| 1/4" | F IRC14 BSP | Female 812100000 | 1/4" | G | 81,7 | 3,22 | F | 60,0 | 2,36 | C | 21,0 | 0,83 | I | 21,0 | 0,83 | E | 26,0 | 1,02 | 0,15 | 0,32 |
| | M IRC14 BSP | Male 812100001 | | | | | D | 48,2 | 1,90 | B | 19,0 | 0,75 | H | 21,0 | 0,83 | J | 12,0 | 0,47 | 0,05 | 0,11 |
| 3/8" | F IRC38 BSP | Female 812100002 | 3/8" | G | 76,4 | 3,01 | F | 61,6 | 2,43 | C | 24,0 | 0,94 | I | 26,0 | 1,02 | E | 35,0 | 1,38 | 0,22 | 0,48 |
| | M IRC38 BSP | Male 812100003 | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 19,9 | 0,78 | 0,06 | 0,12 |
| 1/2" | F IRC12 BSP | Female 812100004 | 1/2" | G | 85,2 | 3,35 | F | 67,6 | 2,66 | C | 30,0 | 1,18 | I | 33,0 | 1,30 | E | 41,0 | 1,61 | 0,33 | 0,72 |
| | M IRC12 BSP | Male 812100005 | | | | | D | 42,5 | 1,67 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 24,7 | 0,97 | 0,10 | 0,21 |
| 3/4" | F IRC34 BSP | Female 812100006 | 3/4" | G | 94,6 | 3,72 | F | 76,2 | 3,00 | C | 38,0 | 1,50 | I | 41,6 | 1,64 | E | 52,0 | 2,05 | 0,58 | 1,27 |
| | M IRC34 BSP | Male 812100007 | | | | | D | 47,0 | 1,85 | B | 36,0 | 1,42 | H | 39,0 | 1,54 | J | 32,7 | 1,29 | 0,19 | 0,41 |
| 1" | F IRC100 BSP | Female 812100008 | 1" | G | 113,4 | 4,46 | F | 92,0 | 3,62 | C | 45,0 | 1,77 | I | 48,0 | 1,89 | E | 62,0 | 2,44 | 0,97 | 2,14 |
| | M IRC100 BSP | Male 812100009 | | | | | D | 56,5 | 2,22 | B | 45,0 | 1,77 | H | 48,0 | 1,89 | J | 40,9 | 1,61 | 0,35 | 0,77 |

Port description: FEMALE THREAD BSPP (ISO 1179-1)

PC version poppet sealing system connectable under pressure

| BODY SIZE | Descriptive Code | Item Code | PORT (A) | Overall Length | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | | |
|-----------|------------------|------------------|----------|----------------|--------|------|-----|------|----------|----|----------|------|--------|------|------|----|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | |
| 3/8" | F IRC38PC BSP | Female 812100010 | 3/8" | G | 76,4 | 3,01 | F | 61,6 | 2,43 | C | 24,0 | 0,94 | I | 26,0 | 1,02 | E | 35,0 | 1,38 | 0,22 | 0,48 |
| | M IRC38PC BSP | Male 812100011 | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 19,9 | 0,78 | 0,06 | 0,12 |
| 1/2" | F IRC12PC BSP | Female 812100012 | 1/2" | G | 85,2 | 3,35 | F | 67,6 | 2,66 | C | 30,0 | 1,18 | I | 33,0 | 1,30 | E | 41,0 | 1,61 | 0,33 | 0,72 |
| | M IRC12PC BSP | Male 812100013 | | | | | D | 42,5 | 1,67 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 24,7 | 0,97 | 0,10 | 0,21 |
| 3/4" | F IRC34PC BSP | Female 812100014 | 3/4" | G | 94,6 | 3,72 | F | 76,2 | 3,00 | C | 38,0 | 1,50 | I | 41,6 | 1,64 | E | 52,0 | 2,05 | 0,58 | 1,27 |
| | M IRC34PC BSP | Male 812100015 | | | | | D | 47,0 | 1,85 | B | 36,0 | 1,42 | H | 39,0 | 1,54 | J | 32,7 | 1,29 | 0,19 | 0,41 |
| 1" | F IRC100PC BSP | Female 812100016 | 1" | G | 113,4 | 4,46 | F | 92,0 | 3,62 | C | 45,0 | 1,77 | I | 48,0 | 1,89 | E | 62,0 | 2,44 | 0,97 | 2,14 |
| | M IRC100PC BSP | Male 812100017 | | | | | D | 56,5 | 2,22 | B | 45,0 | 1,77 | H | 48,0 | 1,89 | J | 40,9 | 1,61 | 0,35 | 0,77 |



Port description: FEMALE THREAD NPTF (ANSI B.1.20.3)

| BODY SIZE | Descriptive Code | Item Code | PORT (A) | Overall Length | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | | |
|-----------|------------------|------------------|----------|----------------|--------|------|-----|------|----------|----|----------|------|--------|------|------|----|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | |
| 1/4" | F IRC14 NPTF | Female 812102000 | 1/4" | G | 81,7 | 3,22 | F | 60,0 | 2,36 | C | 21,0 | 0,83 | I | 21,0 | 0,83 | E | 26,0 | 1,02 | 0,15 | 0,32 |
| | M IRC14 NPTF | Male 812102001 | | | | | D | 48,2 | 1,90 | B | 19,0 | 0,75 | H | 21,0 | 0,83 | J | 12,0 | 0,47 | 0,05 | 0,11 |
| 3/8" | F IRC38 NPTF | Female 812102002 | 3/8" | G | 76,4 | 3,01 | F | 61,6 | 2,43 | C | 24,0 | 0,94 | I | 26,0 | 1,02 | E | 35,0 | 1,38 | 0,22 | 0,49 |
| | M IRC38 NPTF | Male 812102003 | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 19,9 | 0,78 | 0,06 | 0,13 |
| 1/2" | F IRC12 NPTF | Female 812102004 | 1/2" | G | 85,2 | 3,35 | F | 67,6 | 2,66 | C | 30,0 | 1,18 | I | 33,0 | 1,30 | E | 41,0 | 1,61 | 0,33 | 0,72 |
| | M IRC12 NPTF | Male 812102005 | | | | | D | 42,5 | 1,67 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 24,7 | 0,97 | 0,10 | 0,22 |
| 3/4" | F IRC34 NPTF | Female 812102006 | 3/4" | G | 94,6 | 3,72 | F | 76,2 | 3,00 | C | 38,0 | 1,50 | I | 41,6 | 1,64 | E | 52,0 | 2,05 | 0,58 | 1,27 |
| | M IRC34 NPTF | Male 812102007 | | | | | D | 47,0 | 1,85 | B | 36,0 | 1,42 | H | 39,0 | 1,54 | J | 32,7 | 1,29 | 0,19 | 0,42 |
| 1" | F IRC100 NPTF | Female 812102008 | 1" | G | 113,4 | 4,46 | F | 92,0 | 3,62 | C | 45,0 | 1,77 | I | 48,0 | 1,89 | E | 62,0 | 2,44 | 0,97 | 2,14 |
| | M IRC100 NPTF | Male 812102009 | | | | | D | 56,5 | 2,22 | B | 45,0 | 1,77 | H | 48,0 | 1,89 | J | 40,9 | 1,61 | 0,35 | 0,78 |

Port description: FEMALE THREAD NPTF (ANSI B.1.20.3)

PC version poppet sealing system connectable under pressure

| BODY SIZE | Descriptive Code | Item Code | PORT (A) | Overall Length | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | | |
|-----------|------------------|-------------------|----------|----------------|--------|------|-----|------|----------|----|----------|------|--------|------|------|----|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | |
| 3/8" | F IRC38PC NPTF | Female 812102010* | 3/8" | G | 76,4 | 3,01 | F | 61,6 | 2,43 | C | 24,0 | 0,94 | I | 26,0 | 1,02 | E | 35,0 | 1,38 | 0,22 | 0,49 |
| | M IRC38PC NPTF | Male 812102011* | | | | | D | 38,0 | 1,50 | B | 22,0 | 0,87 | H | 24,0 | 0,94 | J | 19,9 | 0,78 | 0,06 | 0,13 |
| 1/2" | F IRC12PC NPTF | Female 812102012 | 1/2" | G | 85,2 | 3,35 | F | 67,6 | 2,66 | C | 30,0 | 1,18 | I | 33,0 | 1,30 | E | 41,0 | 1,61 | 0,33 | 0,72 |
| | M IRC12PC NPTF | Male 812102013 | | | | | D | 42,5 | 1,67 | B | 27,0 | 1,06 | H | 29,0 | 1,14 | J | 24,7 | 0,97 | 0,10 | 0,22 |
| 3/4" | F IRC34PC NPTF | Female 812102014 | 3/4" | G | 94,6 | 3,72 | F | 76,2 | 3,00 | C | 38,0 | 1,50 | I | 41,6 | 1,64 | E | 52,0 | 2,05 | 0,58 | 1,27 |
| | M IRC34PC NPTF | Male 812102015 | | | | | D | 47,0 | 1,85 | B | 36,0 | 1,42 | H | 39,0 | 1,54 | J | 32,7 | 1,29 | 0,19 | 0,42 |
| 1" | F IRC100PC NPTF | Female 812102016 | 1" | G | 113,4 | 4,46 | F | 92,0 | 3,62 | C | 45,0 | 1,77 | I | 48,0 | 1,89 | E | 62,0 | 2,44 | 0,97 | 2,14 |
| | M IRC100PC NPTF | Male 812102017 | | | | | D | 56,5 | 2,22 | B | 45,0 | 1,77 | H | 48,0 | 1,89 | J | 40,9 | 1,61 | 0,35 | 0,78 |

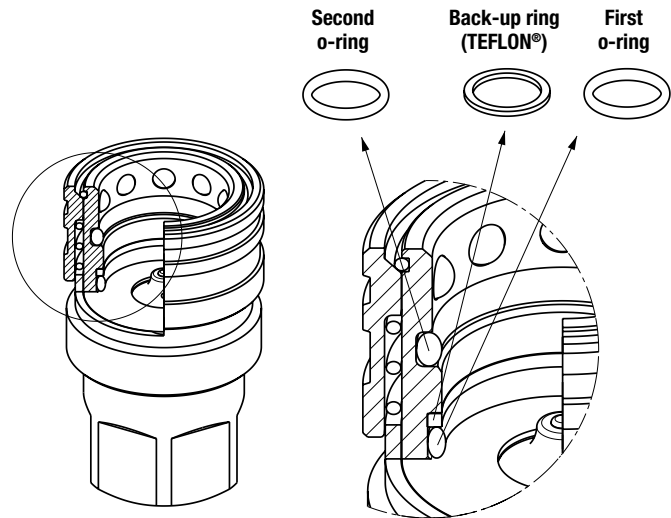
* Available upon request.



SPARE PARTS: SEAL KIT FOR FEMALE

| Repair kit / OR+BK | | | | |
|--------------------|-------|---------------------|-------------|-----------|
| Body Size | NBR | Version Description | Part Number | |
| 1/4" | | F IRC14 | | 815700700 |
| 3/8" | | F IRC38 | | 815700702 |
| 1/2" | | F IRC12 | | 815700704 |
| 3/4" | | F IRC34 | | 815700706 |
| 1" | | F IRC100 | | 815700708 |

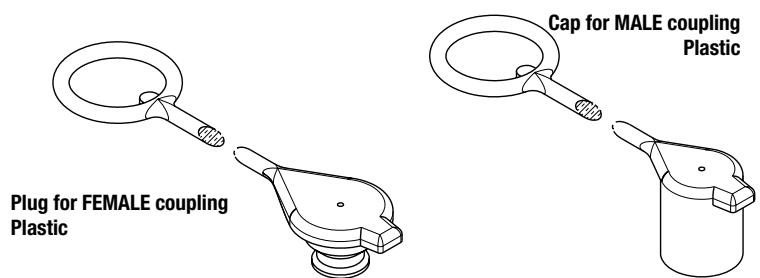
BackUp ring in Teflon®



PROTECTIVE CAPS FOR IRC SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

The protective caps for IRC couplings are manufactured in plastic with connection lanyard.



| Body Size/Description | | Protective Cap | | Material/Color |
|-----------------------|--------|-----------------|--------------|----------------|
| | | Plug for Female | Cap for Male | |
| 1/4" | IRC14 | 815000042 | 815000043 | Plastic/Red |
| 3/8" | IRC38 | 815000044 | 815000045 | Plastic/Red |
| 1/2" | IRC12 | 815000046 | 815000047 | Plastic/Red |
| 3/4" | IRC34 | 815000048 | 815000049 | Plastic/Red |
| 1" | IRC100 | 815000050 | 815000051 | Plastic/Red |

Other colours available upon request.



IRCXSERIES

INTERCHANGE > with similar product (Nordic interface)



TECHNICAL FEATURES AND OPTIONS

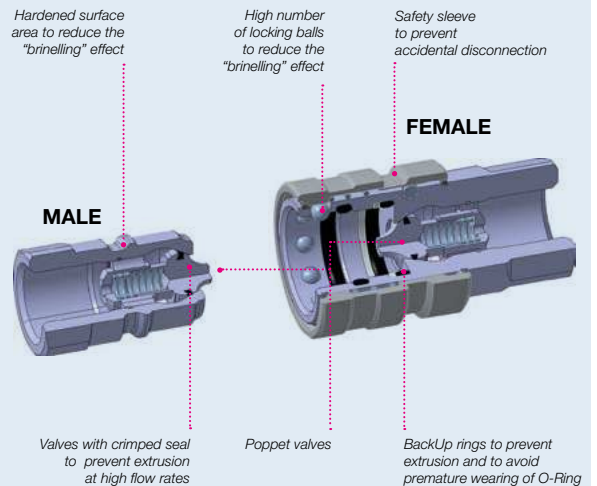
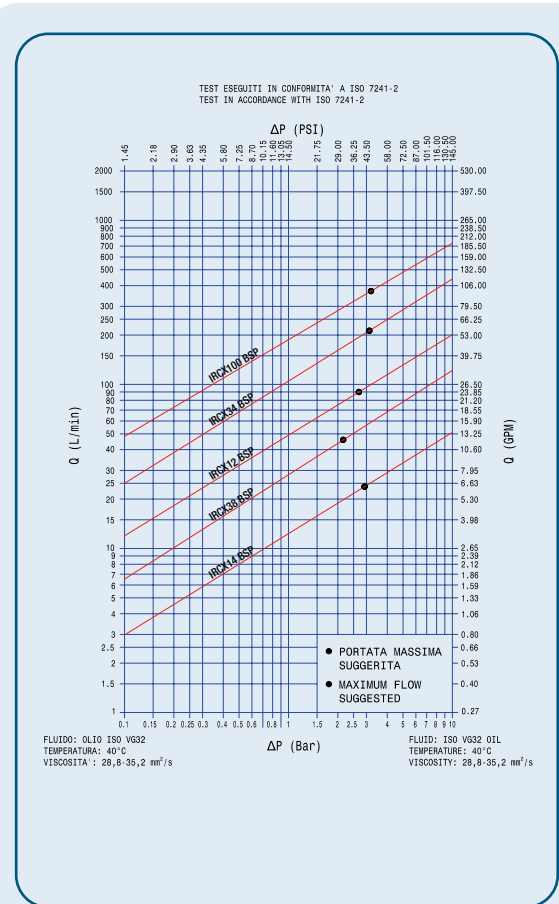
| | | |
|---|--|--|
| Interchange With similar product (Nordic interface) | Sealing description FKM (VITON®) | Connection system Single acting sleeve |
| Available sizes From 1/4" to 1" | Material Stainless steel (AISI 316L) | Available threads BSP |
| Operating pressure Up to 300 bar | Locking mechanism Ball locking + safety sleeve | Flow rate Up to 378 l/min |
| Temperature (°C) -15°C / +180°C | Valving style Poppet | Connection under pressure Not allowed |

BENEFITS

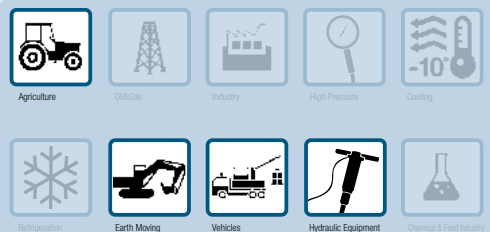
- The poppet valve with elastomer seal provides maximum sealing of the couplings once disconnected.
- O-Ring + BackUp ring for optimum protection sealing.
- Additional O-Ring for extra sealing capacity and to contain spray effect to avoid soil contamination.
- High durability.
- Reference products for tough applications, typically used in Nordic countries.
- Safety sleeve to prevent accidental disconnection.
- Shape of internal parts is optimized to reduce turbulence and pressure drop.
- High resistance to pressure impulses.
- Compact design.
- Simple to use.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect: pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To avoid accidental disconnection rotate safety sleeve.
- To disconnect: unlock the safety sleeve and pull back the sleeve of the female coupling, pull out the mating half.



MAIN APPLICATIONS





PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|------|-------------|---------------------|--------|---------------|-------|------------------|-------|-----------|
| in | mm | | l/min | gpm | N | lbf | N | lbf | ml |
| 1/4 | 6,3 | IRC14 | 24 | 6,36 | 60 | 13,48 | 30 | 6,74 | 1,1 |
| 3/8 | 10 | IRC38 | 46 | 12,19 | 90 | 20,23 | 35 | 7,86 | 2,5 |
| 1/2 | 12,5 | IRC12 | 90 | 23,85 | 120 | 26,97 | 35 | 7,86 | 3,5 |
| 3/4 | 20 | IRC34 | 212 | 56,18 | 170 | 38,21 | 45 | 10,11 | 15 |
| 1 | 25 | IRC100 | 378 | 100,17 | 210 | 47,20 | 45 | 10,11 | 18 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-----------------|-------------------------|------|------|------|--------|------|----------------|-------|------|-------|--------|-------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| in | Stainless steel | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 1/4 | IRC14X | 30 | 4350 | 30 | 4350 | 30 | 4350 | 120 | 17400 | 120 | 17400 | 120 | 17400 |
| 3/8 | IRC38X | 30 | 4350 | 25 | 3625 | 25 | 3625 | 120 | 17400 | 100 | 14500 | 100 | 14500 |
| 1/2 | IRC12X | 30 | 4350 | 25 | 3625 | 25 | 3625 | 120 | 17400 | 100 | 14500 | 100 | 14500 |
| 3/4 | IRC34X | 20 | 2900 | 20 | 2900 | 20 | 2900 | 80 | 11600 | 60 | 8700 | 80 | 11600 |
| 1 | IRC100X | 20 | 2900 | 15 | 2175 | 15 | 2175 | 80 | 11600 | 45 | 6525 | 60 | 8700 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Material:

- Construction: Stainless steel AISI 316L
- Springs: AISI 302
- Locking ball: AISI 316

Different configuration possible

PL version (free flow without valve): available upon request.
SAE thread available upon request.

Temperature range:

Seals in FKM (VITON®): from -15°C to +180°C (from +5 °F to +356 °F).
Seals in NBR (Nitrile) with water from +5°C to +60°C (from +41°F to +140°F).
Please read carefully Instructions and warnings for proper selection of the products.

Tests performed:

The couplings have been tested according to ISO norm.
The couplings have been tested at max. operating pressure for 200.000 impulses in coupled position and 100.000 impulses in uncoupled position.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

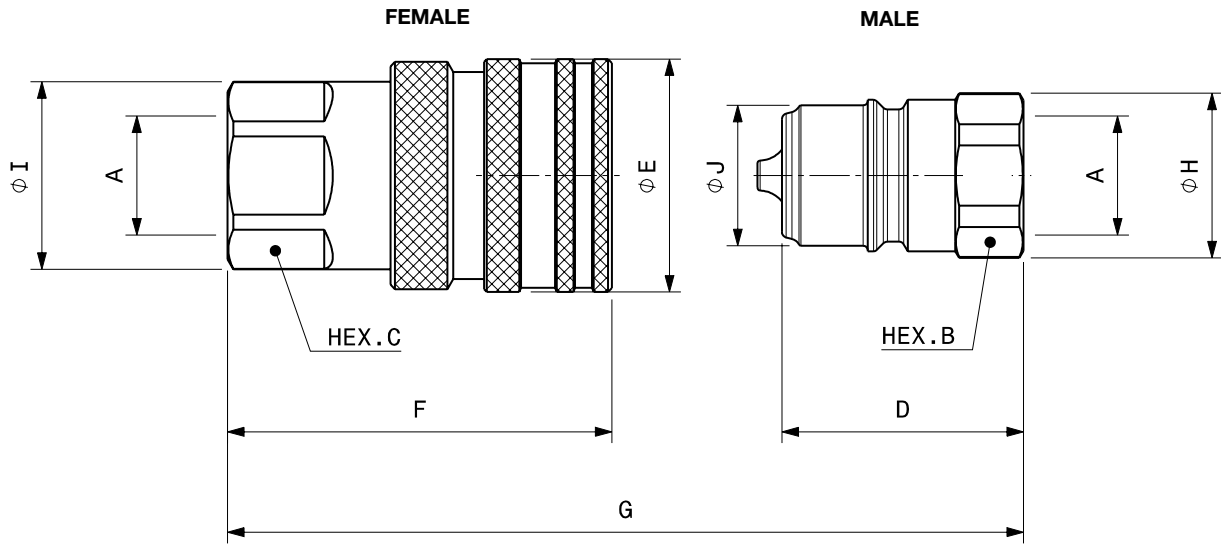
The interchangeability is mentioned under the assumption that the manufacturer of the considered products has not changed any dimension.

It is mandatory to carefully read and closely follow the instructions before selecting or using any Stucchi products.

Always refer to the version uploaded in the Instructions and warning section of stucchigroup.com website for the latest release.

For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSPP (ISO 1179-1 & DIN 3852-2 form X)

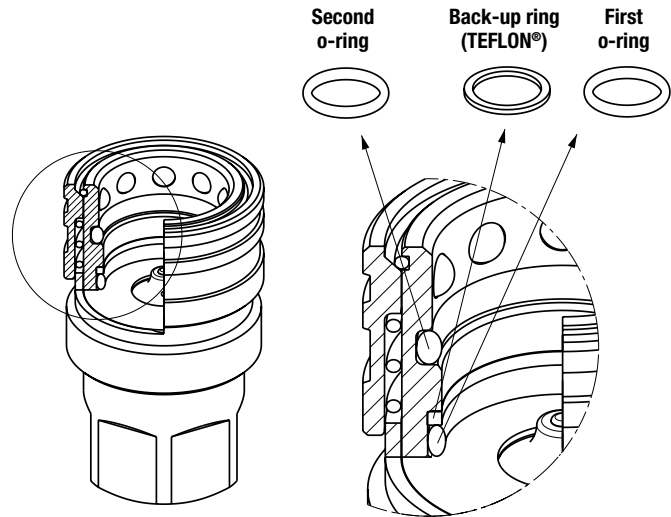
| BODY SIZE | Descriptive Code | Item Code | PORT (A) | Overall Length | Length | | Hex | | Diameter | | Diameter | | Weight | | | | | | | |
|-----------|------------------|------------------|----------|----------------|--------|------|-----|------|----------|----|----------|------|--------|------|------|---|------|------|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | kg | lb | | | | | | |
| 1/4" | F IRC14X BSP | Female 808900100 | 1/4" | G | 81,7 | 3,22 | F | 61,6 | 2,36 | C | 24,0 | 0,83 | I | 23,0 | 0,83 | E | 26,0 | 1,02 | 0,15 | 0,32 |
| | M IRC14X BSP | Male 808900101 | | | | | D | 38,0 | 1,90 | B | 22,0 | 0,75 | H | 24,5 | 0,83 | J | 12,0 | 0,47 | 0,05 | 0,11 |
| 3/8" | F IRC38X BSP | Female 808900102 | 3/8" | G | 76,4 | 3,01 | F | 67,6 | 2,43 | C | 30,0 | 0,94 | I | 26,0 | 1,02 | E | 35,0 | 1,38 | 0,22 | 0,48 |
| | M IRC38X BSP | Male 808900103 | | | | | D | 42,5 | 1,50 | B | 27,0 | 0,87 | H | 24,0 | 0,94 | J | 19,9 | 0,78 | 0,06 | 0,12 |
| 1/2" | F IRC12X BSP | Female 808900104 | 1/2" | G | 85,2 | 3,35 | F | 76,2 | 2,66 | C | 38,0 | 1,18 | I | 33,0 | 1,30 | E | 41,0 | 1,61 | 0,33 | 0,72 |
| | M IRC12X BSP | Male 808900105 | | | | | D | 47,0 | 1,67 | B | 36,0 | 1,06 | H | 29,0 | 1,14 | J | 24,7 | 0,97 | 0,10 | 0,21 |
| 3/4" | F IRC34X BSP | Female 808900106 | 3/4" | G | 94,6 | 3,72 | F | 92,0 | 3,00 | C | 45,0 | 1,50 | I | 41,6 | 1,64 | E | 52,0 | 2,05 | 0,58 | 1,27 |
| | M IRC34X BSP | Male 808900107 | | | | | D | 56,5 | 1,85 | B | 45,0 | 1,42 | H | 39,0 | 1,54 | J | 32,7 | 1,29 | 0,19 | 0,41 |
| 1" | F IRC100X BSP | Female 808900108 | 1" | G | 113,4 | 4,46 | F | 92,0 | 3,62 | C | 45,0 | 1,77 | I | 48,0 | 1,89 | E | 62,0 | 2,44 | 0,97 | 2,14 |
| | M IRC100X BSP | Male 808900109 | | | | | D | 56,5 | 2,22 | B | 45,0 | 1,77 | H | 48,0 | 1,89 | J | 40,9 | 1,61 | 0,35 | 0,77 |



SPARE PARTS: SEAL KIT FOR FEMALE

| Repair kit / OR+BK | | | |
|--------------------|-----|-------------|-------------|
| Body Size | NBR | Description | Part Number |
| 1/4" | F | IRC14X | 815700978 |
| 3/8" | F | IRC38X | 815700980 |
| 1/2" | F | IRC12X | 815700982 |
| 3/4" | F | IRC34X | 815700984 |
| 1" | F | IRC100X | 815700986 |

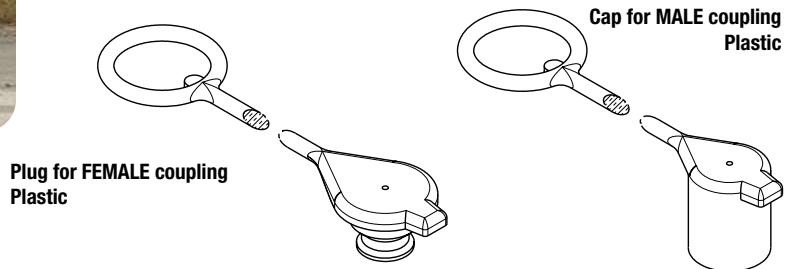
BackUp ring in Teflon®



PROTECTIVE CAPS FOR IRC SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in mobile applications where exposure to weather and aggregate materials are common.

The protective caps for IRC couplings are manufactured in plastic with connection lanyard.



| Body Size/Description | | Protective Cap | | Material/Color |
|-----------------------|--------|-----------------|--------------|----------------|
| | | Plug for Female | Cap for Male | |
| 1/4" | IRC14 | 815000042 | 815000043 | Plastic/Red |
| 3/8" | IRC38 | 815000044 | 815000045 | Plastic/Red |
| 1/2" | IRC12 | 815000046 | 815000047 | Plastic/Red |
| 3/4" | IRC34 | 815000048 | 815000049 | Plastic/Red |
| 1" | IRC100 | 815000050 | 815000051 | Plastic/Red |

Other colours available upon request.



IFR SERIES

INTERCHANGE > ISO 5676 "NF U 16-006"



Stucchi®



TECHNICAL FEATURES AND OPTIONS



Interchange

ISO 5676
"NF U 16-006"



Sealing description

Nitrile NBR



Connection system

Single acting sleeve



Available sizes
3/8"



Material /treatment
Carbon steel
/Cr3



Available threads
BSP - METRIC



Operating pressure
Up to 150 bar



Locking mechanism
Locking Ball system



Flow rate
Up to 46 l/min



Temperature (°C)
-20°C / +100°C



Valving style
Flat face
Non spill



Connection under pressure

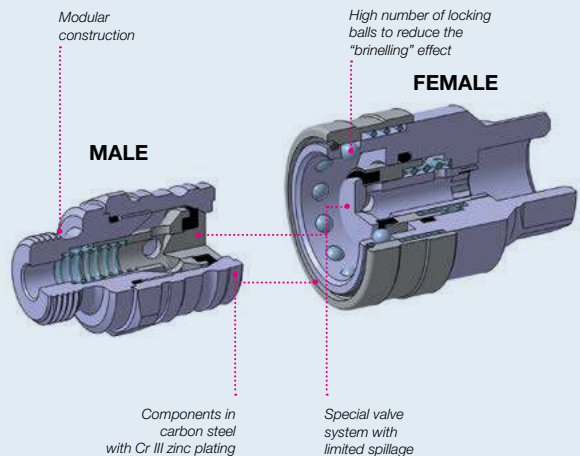
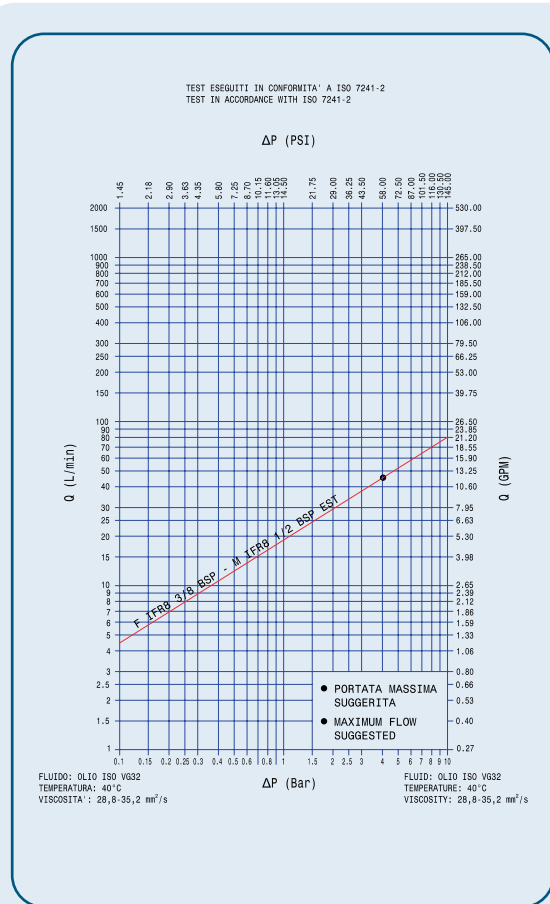
Connection: not allowed
Disconnection: not allowed

BENEFITS

- Minimal fluid spillage during disconnection, reducing fluid spillage to the environment.
- Minimal air inclusion during connection.
- Compact slim design.
- Simple to use.
- Metallic plug for female and plastic cap for male are included with the couplings.

HOW TO USE

- Before to connect, clean the mating surface of the couplings to avoid dirt inclusion in the circuit.
- To connect pull back the sleeve of the female coupling, align the female with the male coupling and push one into the other until both halves are fully connected and release the sleeve.
- To disconnect push back the sleeve of the female coupling, pull out the mating half.



MAIN APPLICATIONS



Agriculture



Oil/Gas



Industry



High Pressure



Cooling



Refrigeration



Earth Moving



Vehicles



Hydraulic Equipment



Chemical & Food Industry

POPET SCREW



PERFORMANCES

| Size | | Series/Size | Max. flow suggested | | Connect force | | Disconnect force | | Spillage* |
|------|-----|-------------|---------------------|-------|---------------|-------|------------------|------|-----------|
| in | mm | | l/min | gpm | N | lbf | N | lbf | ml |
| 3/8 | 6,3 | IFR8 | 46 | 12,15 | 170 | 38,25 | 27 | 6,08 | 0,06 |

| Size | Series/Size | Max. operating pressure | | | | | | Burst pressure | | | | | |
|------|-------------|-------------------------|------|------|------|--------|------|----------------|------|------|------|--------|------|
| | | Coupled | | Male | | Female | | Coupled | | Male | | Female | |
| | in | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi | MPa | psi |
| 3/8 | IFR8 | 15 | 2175 | 15 | 2175 | 15 | 2175 | 60 | 8700 | 60 | 8700 | 30 | 4350 |

* Spillage is an indicative value of the fluid loss during disconnection (according to ISO norm test method).

Different possible configurations:

Female without plug available upon request.
Different threads available upon request.

Temperature range:

Standard seal NBR (Nitrile): from -20 °C to +100 °C (from -4 °F to +212 °F).
Please read carefully Instructions and warnings for proper selection of the products.

Tests:

The couplings have been tested at max. operating pressure for 100.000 impulses according to ISO norm test method.



WARNING

A defect, a wrong choice or an improper use of products, can cause injury to persons, animals and objects.

Never connect or disconnect with dynamic pressure (e.g. pump on).

Do not use the coupling disconnected with high impulse pressure.

Do not couple-uncouple with flow and/or pressure in the circuit.

Do not couple-uncouple when the temperature inside of the circuit is higher than 80 °C (176 °F).

Check the maximum allowable working pressure of the port in use.

Make sure that the medium used is compatible with seal and material as indicated for each series.

In case of doubt please contact Stucchi Technical Support.

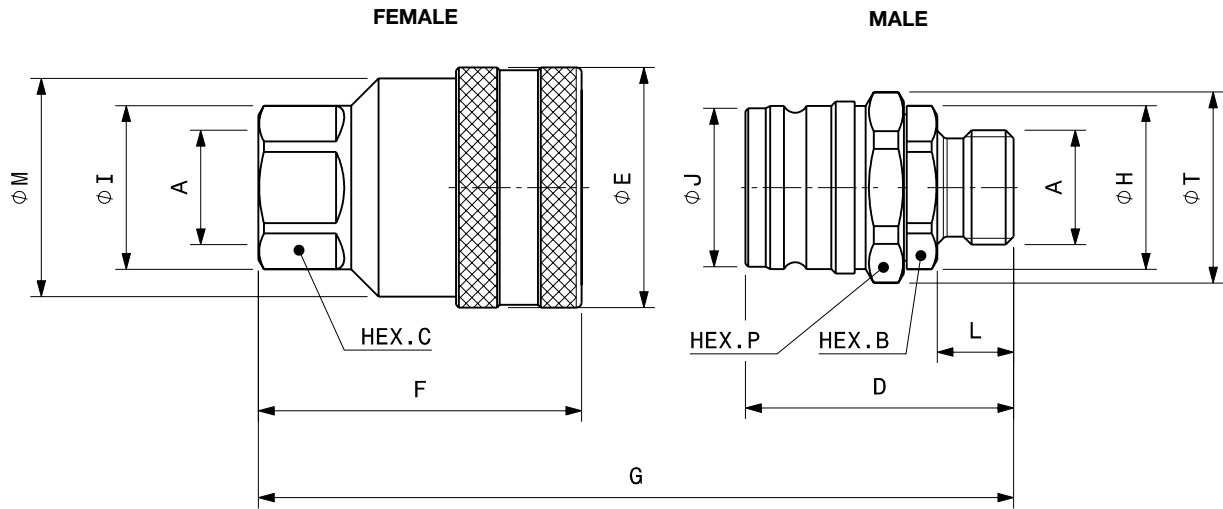
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For specific, product-related, instructions, please contact Stucchi technical service.

OVERALL DIMENSIONS



Port description: FEMALE THREAD BSP (ISO 1179-1) FEMALE THREAD METRIC

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Hex | | Diameter | | Diameter | | Diameter | | | | | | | |
|-----------|------------------|------------------|--------|----------|----------------|------------|--------------|----|------|------|----------|------|----------|----|----------|------|---|------|------|---|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | | | | | | |
| 3/8" | F IFR8 3/8 BSP | Female 800200048 | 6,3 | G3/8" | G | G = F+D-15 | G = F+D-0.59 | F | 56,2 | 2,21 | C | 27,0 | 1,06 | M | 40,0 | 1,57 | I | 30,0 | 1,18 | E | 44,0 | 1,73 |
| 3/8" | F IFR8 1/2 BSP | Female 800200050 | 6,3 | G 1/2" | G | G = F+D-15 | G = F+D-0.59 | F | 59,2 | 2,33 | C | 27,0 | 1,06 | M | 40,0 | 1,57 | I | 30,0 | 1,18 | E | 44,0 | 1,73 |
| 3/8" | F IFR8 M18X1.5 | Female 800212000 | 6,3 | M18X1.5 | G | G = F+D-15 | G = F+D-0.59 | F | 54,2 | 2,13 | C | 27,0 | 1,06 | M | 40,0 | 1,57 | I | 30,0 | 1,18 | E | 44,0 | 1,73 |

| Descriptive Code | Item Code | Weight | |
|------------------|------------------|--------|------|
| | | kg | lb |
| F IFR8 3/8 BSP | Female 800200048 | 0,36 | 0,80 |
| F IFR8 1/2 BSP | Female 800200050 | 0,43 | 0,94 |
| F IFR8 M18X1.5 | Female 800212000 | 0,36 | 0,80 |

Port description: MALE THREAD BSP (DIN 3852-2 form A) MALE THREAD METRIC L series 24° (ISO 8434-1 & DIN 2353)

| BODY SIZE | Descriptive Code | Item Code | ISO DN | PORT (A) | Overall Length | | Length | | Length | | Hex | | Hex | | Diameter | | | | | | | |
|-----------|----------------------|----------------|--------|----------|----------------|------------|--------------|----|--------|------|-----|------|------|----|----------|------|---|------|------|---|------|------|
| | | | | | mm | in | mm | in | mm | in | mm | in | mm | in | mm | in | | | | | | |
| 3/8" | M IFR8 1/2 BSP EXT | Male 800200051 | 6,3 | G 1/2" | G | G = F+D-15 | G = F+D-0.59 | D | 49,1 | 1,93 | L | 14,0 | 0,55 | B | 27,0 | 1,06 | P | 32,0 | 1,26 | T | 35,0 | 1,38 |
| 3/8" | M IFR8 L12 SCHOTT 23 | Male 800210003 | 6,3 | M18X1.5 | G | G = F+D-15 | G = F+D-0.59 | D | 58,1 | 2,29 | L | 23,0 | 0,91 | B | 27,0 | 1,06 | P | 32,0 | 1,26 | T | 35,0 | 1,38 |
| 3/8" | M IFR8 L12 SCHOTT 30 | Male 800210005 | 6,3 | M18X1.5 | G | G = F+D-15 | G = F+D-0.59 | D | 65,1 | 2,56 | L | 30,0 | 1,18 | B | 27,0 | 1,06 | P | 32,0 | 1,26 | T | 35,0 | 1,38 |
| 3/8" | M IFR8 M20X1,5 EXT | Male 800215003 | 6,3 | M20X1.5 | G | G = F+D-15 | G = F+D-0.59 | D | 58,1 | 2,29 | L | 23,0 | 0,91 | B | 27,0 | 1,06 | P | 32,0 | 1,26 | T | 35,0 | 1,38 |

| Descriptive Code | Item Code | Diameter | | Diameter | | Weight | | | |
|----------------------|----------------|----------|------|----------|----|--------|------|------|------|
| | | mm | in | mm | in | kg | lb | | |
| M IFR8 1/2 BSP EXT | Male 800200051 | H | 30,0 | 1,18 | J | 29,0 | 1,14 | 0,19 | 0,42 |
| M IFR8 L12 SCHOTT 23 | Male 800210003 | H | 30,0 | 1,18 | J | 29,0 | 1,14 | 0,19 | 0,43 |
| M IFR8 L12 SCHOTT 30 | Male 800210005 | H | 30,0 | 1,18 | J | 29,9 | 1,18 | 0,20 | 0,45 |
| M IFR8 M20X1,5 EXT | Male 800215003 | H | 30,0 | 1,18 | J | 29,0 | 1,14 | 0,20 | 0,44 |



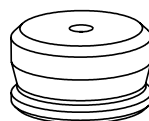
PROTECTIVE CAPS FOR IFR SERIES

Protective caps are always recommended to protect the couplings from damage, dirt inclusion, and will increase the product life. This is particularly important in agricultural applications where exposure to weather and aggregate materials are common.

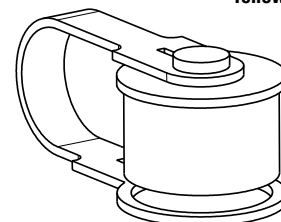
Metallic plug for female and plastic cap for male are included with the IFR couplings.

- The plug for female coupling is in carbon steel Cr III zinc plated.
- The standard color of plastic cap for male coupling is Yellow.
- Temperature range: from -20°C to +100°C.

Plug for FEMALE coupling
Carbon steel



Cap for MALE coupling
Yellow plastic



| Protective Cap | | | |
|-----------------------|------|--------------------------|----------------------|
| Body Size/Description | | Part Number | |
| | | Metallic plug for Female | Plastic cap for Male |
| 3/8" | IFR8 | 815701120 | 814901027 |

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