

# IR-VSERIES

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



Stucchi®



## TECHNICAL FEATURES AND OPTIONS

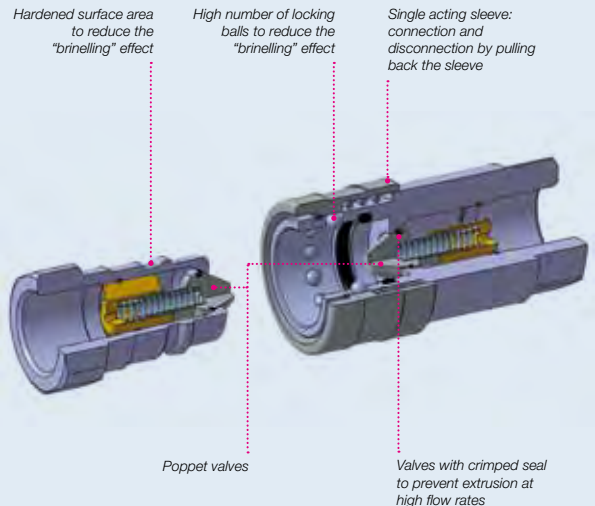
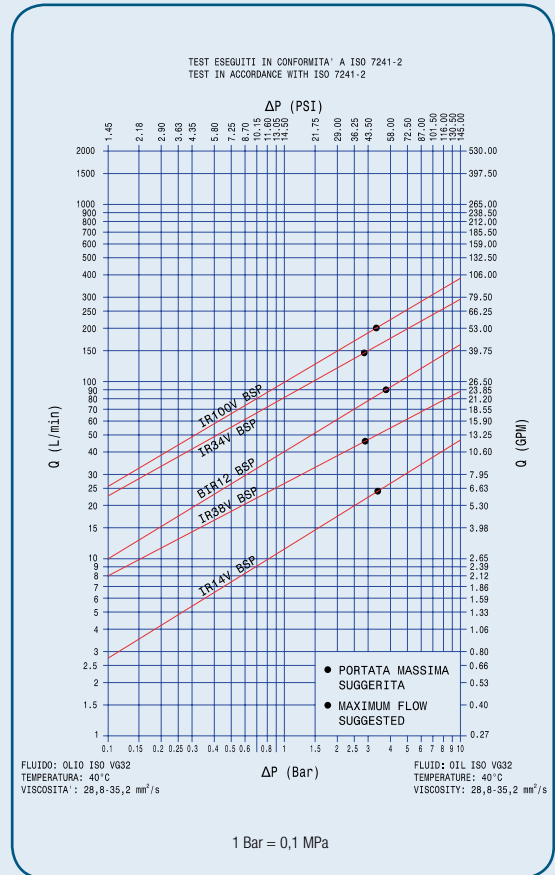
|  |  |   |
|--|--|---|
| <b>Interchange</b><br>With similar couplings IR series, ISO 7241 SERIES "A" (SIZE 1/2" only) | <b>Sealing description</b><br>Nitrile NBR      | <b>Connection system</b><br>Single acting sleeve  |
| <b>Available sizes</b><br>from 1/4" to 1"  | <b>Material/treatment</b><br>Carbon steel /Cr3 | <b>Available threads</b><br>BSP - NPT   |
| <b>Operating pressure</b><br>Up to 300 bar   | <b>Locking mechanism</b><br>Ball Locking       | <b>Flow rate</b><br>Up to 200 L/Min   |
| <b>Temperature (°C)</b><br>-20° / +100°  | <b>Valving style</b><br>Poppet                 | <b>Connection under pressure</b><br>Connection: not allowed<br>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





## PERFORMANCES

| Size |          | Series/Size | Max. flow suggested |       | Connect force |       | Disconnect force |       | Spillage* |
|------|----------|-------------|---------------------|-------|---------------|-------|------------------|-------|-----------|
| Inch | 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 |       |
| Inch |             | 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)

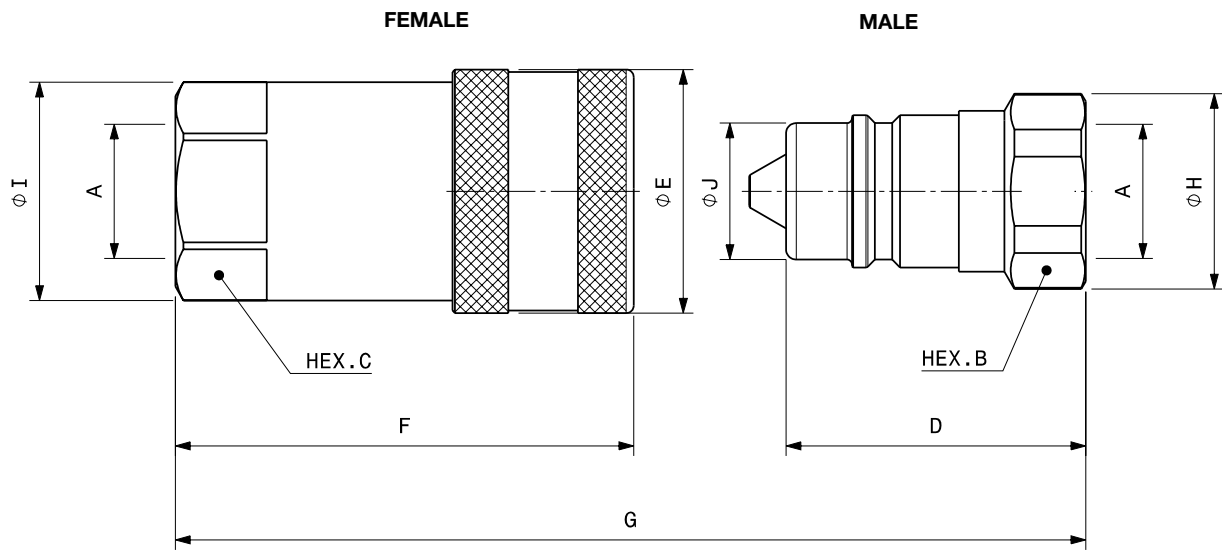
\*\* Size 1/2" is ISO7241-1/A interchangeable.

### Temperature range:

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

Please read carefully "instruction and warning" for proper selection of the 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             | inch  | mm     | inch | mm   | inch | mm               | inch | mm            | inch | Kg     | Lbs  |   |      |      |      |      |
| 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 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 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 |
| 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 |

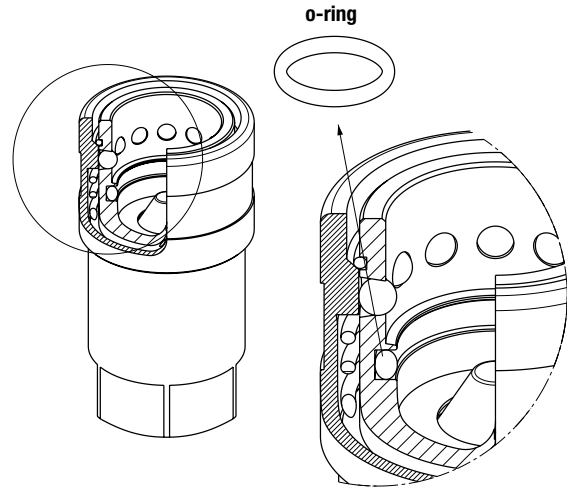
### Port description: FEMALE THREAD NPT (ANSI B1.20.1)

| BODY SIZE | Descriptive Code | Item Code        | ISO DN | PORT (A) | Overall Length |       | Length |      | Hex  |      | Overall Diameter |      | Body Diameter |      | Weight |      |   |      |      |      |      |
|-----------|------------------|------------------|--------|----------|----------------|-------|--------|------|------|------|------------------|------|---------------|------|--------|------|---|------|------|------|------|
|           |                  |                  |        |          | mm             | inch  | mm     | inch | mm   | inch | mm               | inch | mm            | inch | Kg     | Lbs  |   |      |      |      |      |
| 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 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 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   |
| 1"              | F IR-V100   | 815700356   |

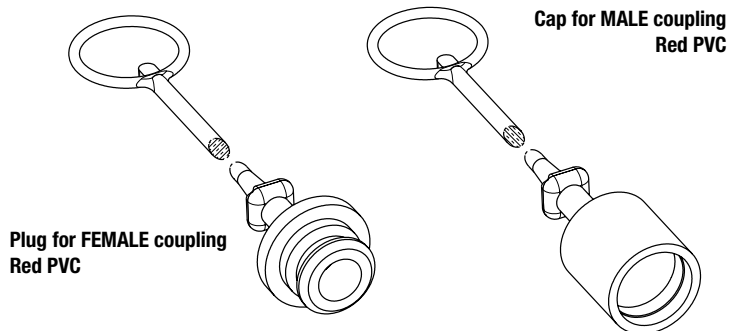
O-Ring in NBR



## 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 PVC 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    | PVC/Red        |
| 3/8"                  | IR-V 38  | 815000002       | 815000003    | PVC/Red        |
| 1/2"                  | IR-V 12  | 815000004       | 815000005    | PVC/Red        |
| 3/4"                  | IR-V 34  | 815000006       | 815000007    | PVC/Red        |
| 1"                    | IR-V 100 | 815000008       | 815000009    | PVC/Red        |