



## Series: **IV-HP**



**INTERCHANGE:** With similar couplings

### MAIN APPLICATIONS

- Hydraulic jacks
- Hydraulic clamping devices
- Hydraulic cylinders
- Hydraulic tools

“IV-HP” is a screw to connect coupling series with ball valves. This series is intended for high pressure hydraulic applications up to 700 bar / 10000 psi. The couplings are manufactured with high resistance carbon steel with zinc plated treatment. They are interchangeable with similar couplings existing on the market and used mainly for hydraulic jacks and cylinders.

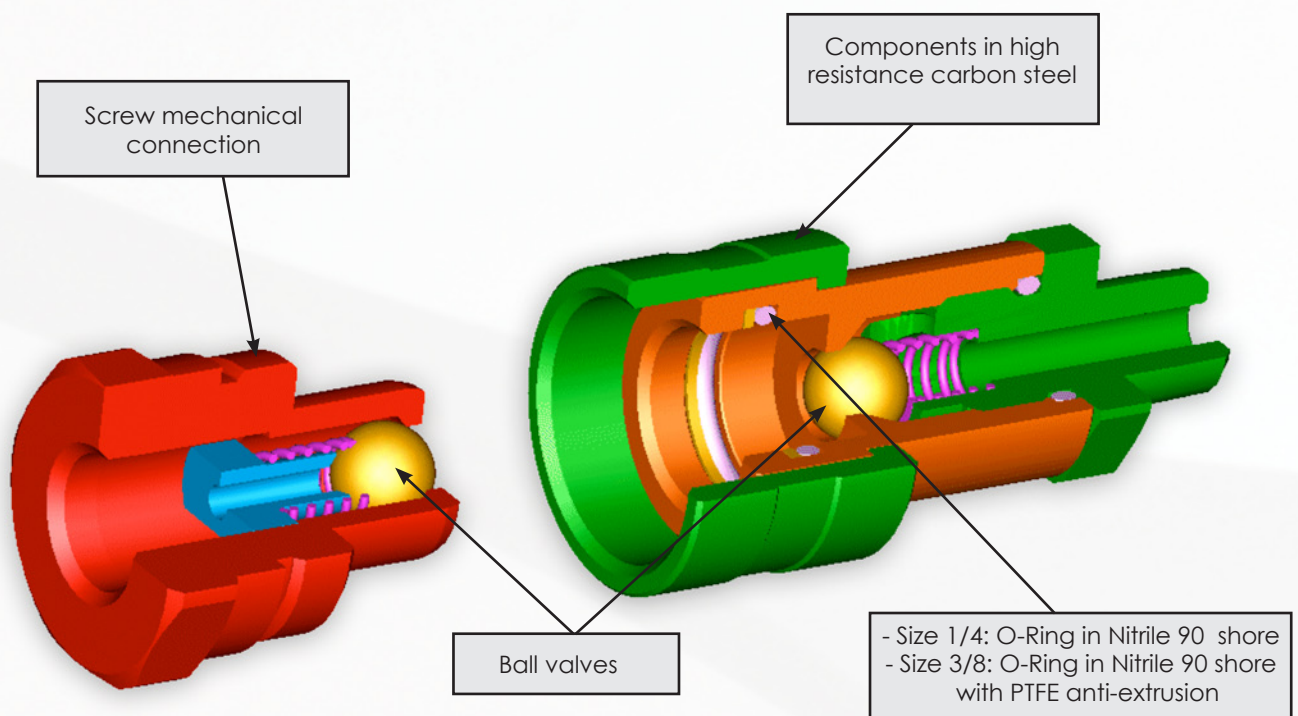


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A CONSTANT FLOW OF SOLUTIONS

## TECHNICAL FEATURES AND OPTIONS

- Interchangeability: With similar couplings
- Valve system: Ball valve
- Mechanical connection: Screw system
- Connection system: Screw to connect
- Disconnection system: Unscrew to disconnect
- Connection with residual pressure: Not allowed
- Disconnection with residual pressure: Not allowed
- Threads available: NPT
- Construction material: High resistance carbon steel
- Surface treatment: CrIII zinc plated
- Springs: C72 steel
- Balls: Hard steel 100 C6
- Seals: NBR (Nitrile)
- Anti-extrusion rings: PTFE



## BENEFITS

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

## HOW TO USE

- Before connecting clean the mating parts of the couplings to avoid contamination in the circuit.
- To connect insert the male coupling in the female coupling, move forward the sleeve of the female coupling and screw it manually on the male coupling till it blocks.
- To disconnect unscrew totally the sleeve from the male coupling.

## WARNING!

- Do not couple-uncouple with flow and/or pressure in the circuit.
- Use protection whenever connecting or disconnecting with high temperature (max. allowed 80°C, 176 °F).
- When the couplings are disconnected, it is suggested to use the protection caps.

## PERFORMANCE

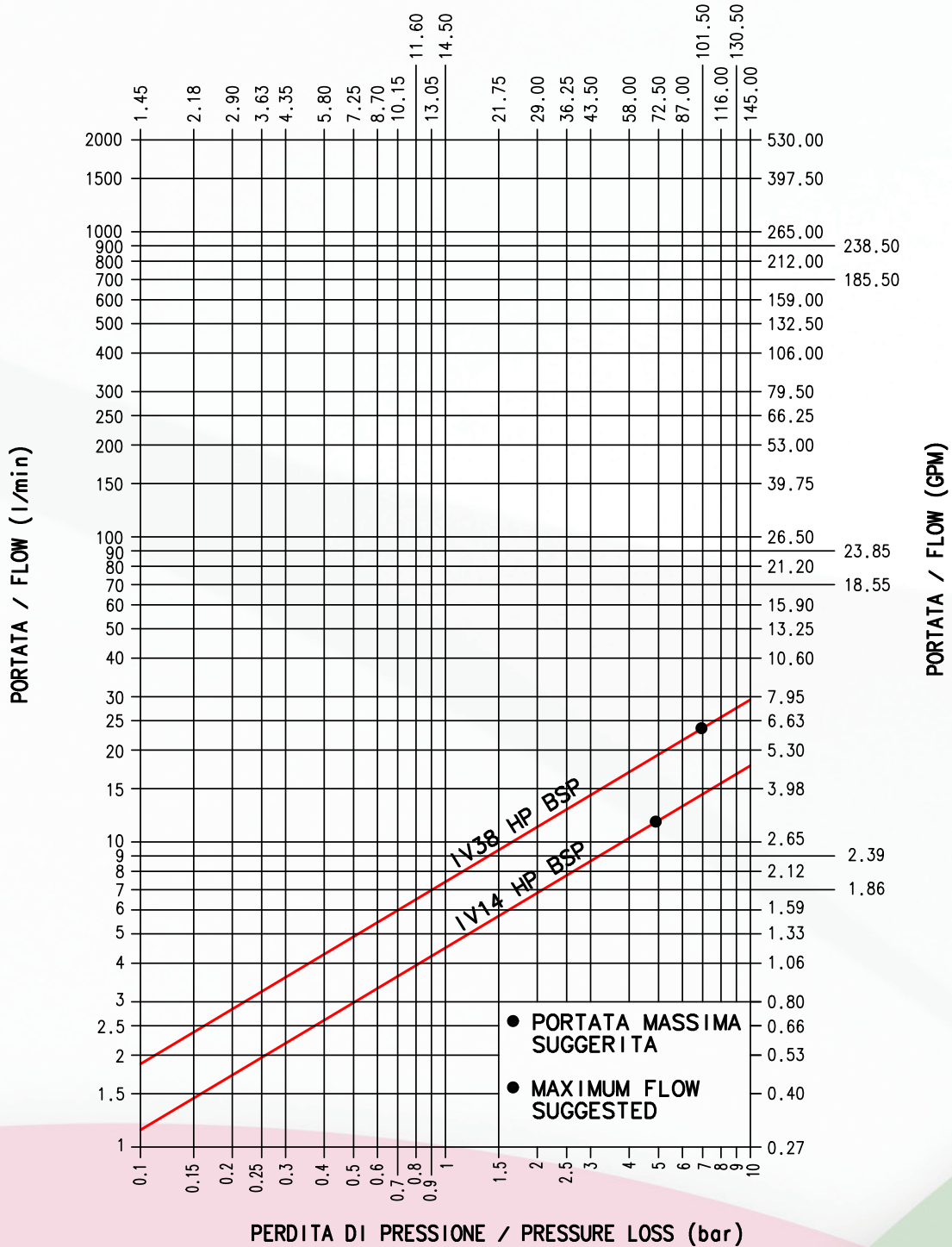
| Description | Size |    | Max. flow suggested |      | Max. operating pressure |       |
|-------------|------|----|---------------------|------|-------------------------|-------|
|             | Inch | mm | l/min               | GPM  | Mpa                     | psi   |
| IV14HP      | 1/4  | -  | 12                  | 3,18 | 70                      | 10000 |
| IV38HP      | 3/8  | -  | 23                  | 6,10 | 70                      | 10000 |

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

**PRESSURE DROP**

TESTS ESEGUITI IN CONFORMITA' A ISO 7241-2  
 TESTS IN ACCORDANCE WITH ISO 7241-2

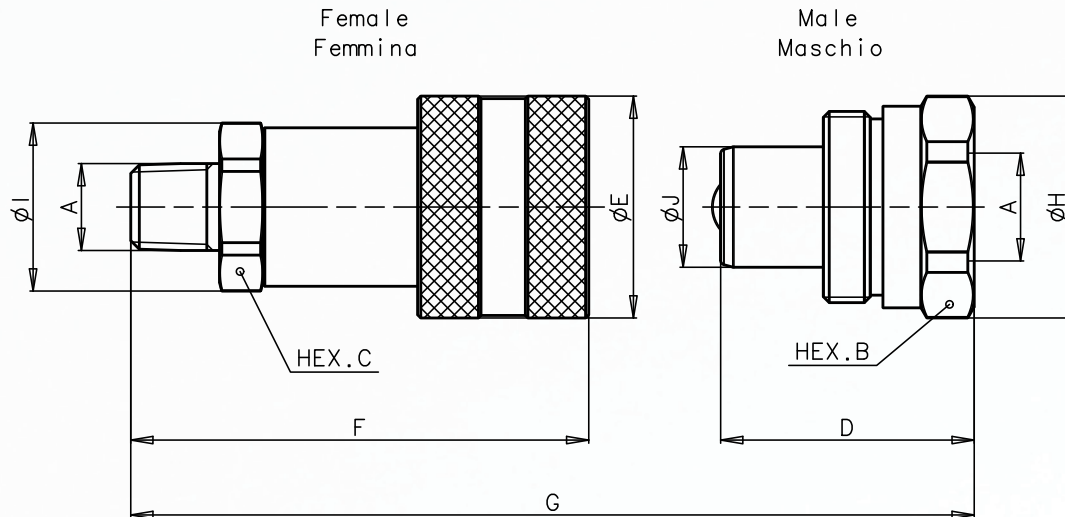
**PERDITA DI PRESSIONE / PRESSURE LOSS (psi)**



FLUIDO: OLIO ISO VG32  
 TEMPERATURA: 40°C  
 VISCOSITA': 28.8-35.2 mm<sup>2</sup>/s

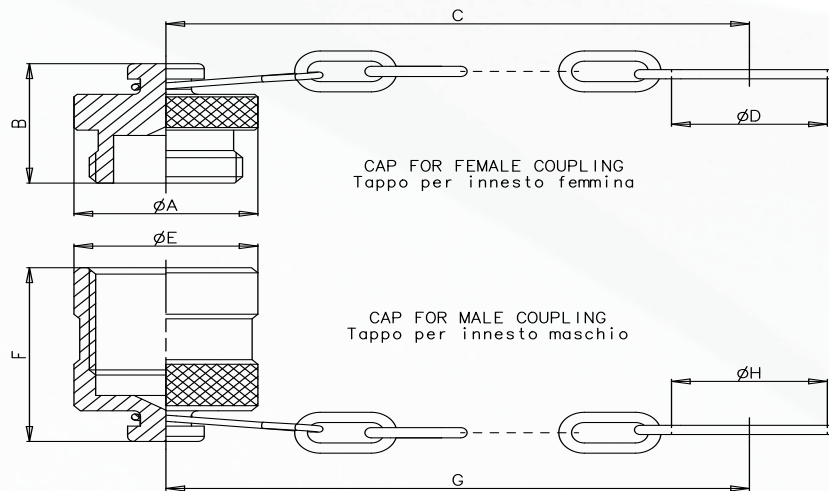
FLUID: OIL ISO VG32  
 TEMPERATURE: 40°C  
 VISCOSITY: 28.8-35.2 mm<sup>2</sup>/s

## OVERALL DIMENSIONS



## NPT THREAD (ANSI B.1.20.3)

| Description | A   | Unit       | B          | C          | D            | E          | F            | G            | H          | I            | J            | Unit     | Weight        |               |
|-------------|-----|------------|------------|------------|--------------|------------|--------------|--------------|------------|--------------|--------------|----------|---------------|---------------|
|             |     |            |            |            |              |            |              |              |            |              |              |          | Male          | Female        |
| IV14HP NPT  | 1/4 | mm<br>Inch | 19<br>0,75 | 22<br>0,87 | 32,5<br>1,28 | 28<br>1,10 | 60,8<br>2,39 | 74,5<br>2,93 | 28<br>1,10 | 24,5<br>0,96 | 15,8<br>0,62 | Kg<br>lb | 0,074<br>0,16 | 0,138<br>0,30 |
| IV38HP NPT  | 3/8 | mm<br>Inch | 32<br>1,26 | 24<br>0,94 | 40<br>1,57   | 35<br>1,38 | 72,2<br>2,84 | 86,8<br>3,42 | 35<br>1,38 | 26,5<br>1,04 | 19<br>0,75   | Kg<br>lb | 0,140<br>0,31 | 0,223<br>0,49 |



## OVERALL DIMENSIONS CAPS FOR IV-HP

| Description | Coupling | Unit       | A          | B            | C           | D          | E          | F            | G           | H          | Unit     | Weight        |
|-------------|----------|------------|------------|--------------|-------------|------------|------------|--------------|-------------|------------|----------|---------------|
|             |          |            |            |              |             |            |            |              |             |            |          |               |
| -           | M-IV14HP | mm<br>Inch | -<br>-     | -<br>-       | -<br>-      | -<br>-     | 28<br>1,10 | 28,5<br>1,12 | 98<br>3,86  | 24<br>0,94 | Kg<br>lb | 0,040<br>0,09 |
| -           | F-IV38HP | mm<br>Inch | 35<br>1,38 | 23,5<br>0,93 | 110<br>4,33 | 24<br>0,94 | -<br>-     | -<br>-       | -<br>-      | -<br>-     | Kg<br>lb | 0,070<br>0,15 |
| -           | M-IV38HP | mm<br>Inch | -<br>-     | -<br>-       | -<br>-      | -<br>-     | 35<br>1,38 | 36,6<br>1,44 | 110<br>4,33 | 24<br>0,94 | Kg<br>lb | 0,095<br>0,21 |

