

# Ø6 ÷ 12 BALL VALVE FOR R744 TRANSCRITICAL SYSTEMS

Ball valve for HVAC-R systems.

This new shut-off valve is the result of a consolidated experience in applications with R744 in the transcritical cycle. The main technical features of this valve are the high energy efficiency and the optimum pressure tightness, both results have been obtained through the choice of innovative and high quality materials.



## MAIN FEATURES

- These new valves have been designed with the use of high performance materials for a perfect internal tightness in any application. New generation technopolymers guarantee high mechanical and thermal resistance, which combined with a low rotation torque enable to achieve high results in terms of energy efficiency.
- The valves are suitable for the applications in liquid, suction and hot gas lines in Refrigeration Systems.
- The valves are suitable for the applications where a bidirectional flow is required.
- Functional tests are executed on 100% of the produced ball valves by using a proper high pressure system.

## SPECIFICATIONS

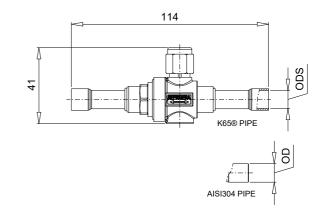
| Refrigerants                  | R744 (transcritical)         |  |
|-------------------------------|------------------------------|--|
| Media temperature range       | - 40 °C + 150 °C             |  |
| Maximum working pressure (PS) | 140 bar ( 2031 psig )        |  |
| Maximum test pressure         | PS x 1,43                    |  |
| Oils                          | POE, PAG                     |  |
| Valve Body                    | Z-TYPE                       |  |
| Approvals                     | <b>CE</b> 2014 / 68 / UE PED |  |

#### ■ CONNECTIONS SIZE AND OVERALL DIMENSIONS

The valves are available with standard K65® ODS connections.

They are also available with special AISI304 stainless steel OD connections.

|               | CONNECTIONS SIZE |     | Kv<br>(ON-OFF) |
|---------------|------------------|-----|----------------|
|               | mm               | in  | 2 way          |
| ODS<br>K65®   | 6                |     | 1.2            |
|               |                  | 1/4 | 1.2            |
|               |                  | 3/8 | 4.0            |
|               | 10               |     | 4.0            |
|               | 12               |     | 3.5            |
|               |                  | 1/2 | 3.5            |
| OD<br>AISI304 | 10               |     | 3.2            |
|               | 12               |     | 3.3            |

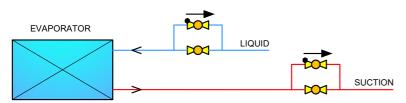


### MANUALLY DRIVEN

This valve can only be manually controlled. There is no motorization for this valve. Only 2-way version is available.

#### BY PASS OVERPRESSURE RELIEF

After the ball valve has closed its way, the kit lets the flow going into the opposite direction whenever any appreciable differential pressure is present. It is useful to protect components with coils and for evaporator service.





#### ■ HYBRID SERVICE VALVE

Special connection sizes are available for this valve to be used as service valve. Most requested connections are: 1/4 SAE FLARE, 1/4 NPT, 1/4 BSPP



with 1/4 NPT (male) with ODS K65® connection

with 1/4 NPT (female) with ODS K65® connection



A robust stainless steel manifold can be used to put on the same line more devices: pressure gauge, pressure transmitters and service valve.





APPLICATION

1/4 SAE (male) + 1/4 SAE (female) service valve mounted on the service port of an ON-OFF ball valve.



