

Ball Valve Series RBV-R



The ball valve of series RBV-R is applicable for commercial air conditioner, freezing or deep-freezing equipment or other refrigeration circuits in order to open and to shut off inner flow path by operating the valve stem. It can also be used as service valve for vacuum pumping and refrigerant injection etc. The Design Pressure (PS) of the versions RBV-R has been increased to 49 bars allowing the usage in R32 systems. Moreover, the use of graphite sealing material guarantees a wide refrigerant temperature range [from -60°C to +160°C], and the possibility to install RBV-R valves in the high temperature discharge line of R32 systems.

Features

- Straightway type, full port, low pressure drops, cost-effective
- Huge refrigerant temperature range admitted
- Valve body and valve seat with welded structure, with high product reliability
- Rotate 1/4 circles from full-open to full-close, easy to operate
- Bidirectional flow
- Rotation stop on request for full-open and full-close of the valve
- Special sealing materials to prevent internal leakage
- Certified according PED cat.II by TUV Rheinland

General Specification

- Applicable for all common HCFC, HFC and HFO refrigerants such as:
R22, R134a, R404A, R407A/C/F, R410A, R507A, R448A, R449A, R450A, R452A, R513A
R32, R1234yf, R1234ze, R454A/B/C, R455A
R290, R1270, R600a

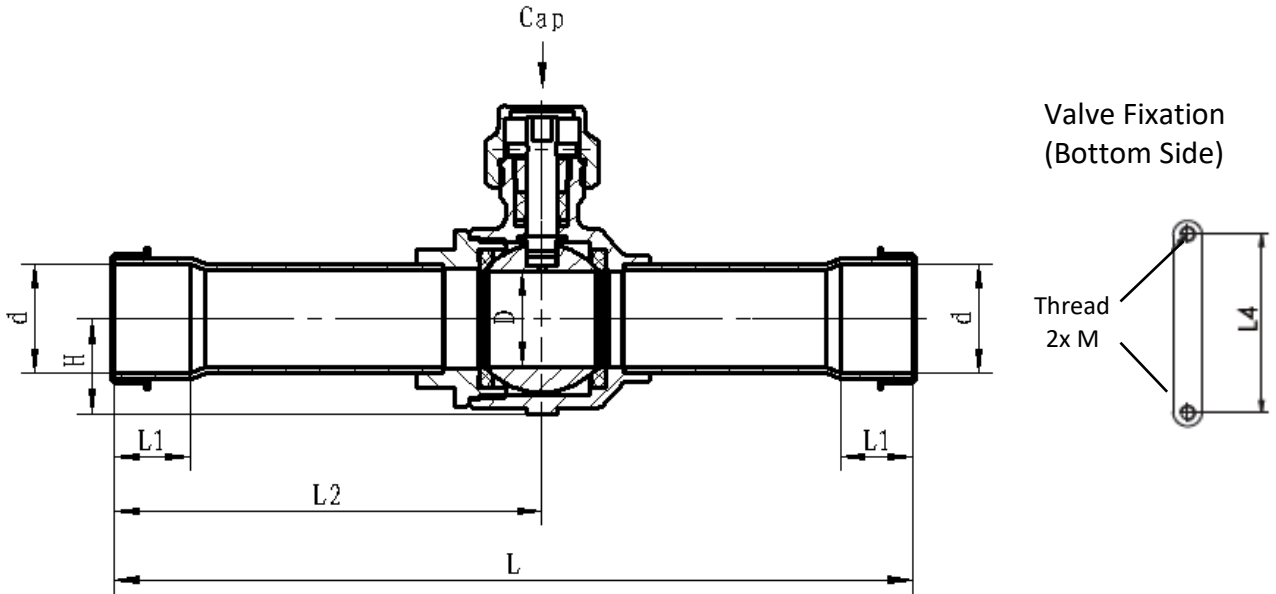
- Medium temperature TS min./max.: -60°C / +160°C
- Max. operating pressure PS: 4,9 MPa (49 bar)
- Installation position: liquid, suction and discharge line in all directions
- Models with access fittings are not available
- PED declaration
- Certifications: UL/CUL not available (on request)

| General Characteristics | | | | | | | |
|-------------------------|-------------------|---------------------------|------|---------------------|-----------------------|---------------------------------|---------------------------------|
| Without Access Fitting | | Connections Ø d ODF | | Kv | Wrench size Cap | PED Category [Fluid Group 1] | PED Category [Fluid Group 2] |
| Model | Product Number | [inch] | [mm] | [m ³ /h] | [mm] | | |
| RBV02-003R | 10150107402 | 1/4 | - | 1,9 | 24 | Art. 4.3 | Art. 4.3 |
| RBV02-004R | 10150107502 | - | 6 | 1,9 | 24 | Art. 4.3 | Art. 4.3 |
| RBV03-003R | 10150107602 | 3/8 | - | 5,5 | 24 | Art. 4.3 | Art. 4.3 |
| RBV03-004R | 10150107702 | - | 10 | 5,5 | 24 | Art. 4.3 | Art. 4.3 |
| RBV04-003R | 10150107802 | 1/2 | - | 7,3 | 24 | Art. 4.3 | Art. 4.3 |
| RBV04-004R | 10150107902 | - | 12 | 7,3 | 24 | Art. 4.3 | Art. 4.3 |
| RBV05-003R | 10150100302 | 5/8 | 16 | 13,8 | 24 | Art. 4.3 | Art. 4.3 |
| RBV06-003R | 10150108002 | 3/4 | 19 | 20,6 | 26 | Art. 4.3 | Art. 4.3 |
| RBV07-003R | 10150108102 | 7/8 | 22 | 29,0 | 26 | Art. 4.3 | Art. 4.3 |
| RBV09-003R | 10150108202 | 1-1/8 | - | 54,3 | 26 | Cat. 2 | Art. 4.3 |
| RBV09-004R | 10150108302 | - | 28 | 54,3 | 26 | Cat. 2 | Art. 4.3 |
| RBV11-003R | 10150108402 | 1-3/8 | 35 | 85,5 | 30 | Cat. 2 | Cat. 1 |
| RBV13-003R | 10150108502 | 1-5/8 | - | 133,7 | 30 | Cat. 2 | Cat. 1 |
| RBV13-004R | 10150108602 | - | 42 | 133,7 | 30 | Cat. 2 | Cat. 1 |
| RBV17-003R | 10150108702 | 2-1/8 | 54 | 225,0 | 30 | Cat. 2 | Cat. 1 |

Note:

- *RBV-R model with connection size 2-5/8" available on request**
- *RBV-R model with connection size 3-1/8" (80mm) available on request**
- *RBV-R model with connection size 3-5/8" (92mm) available on request**

** Size actually not covered by PED cat.II certification*



| Dimensions & Weight | | | | | | | | |
|---|-------|------|------|------|------|------|--------|--------|
| Product Number Without Access Fitting | L | L1 | L2 | L4 | D | H | M | Weight |
| | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [mm] | [kg] |
| RBV02-003R | 136 | 10 | 72 | 22 | 14 | 16,2 | M4×0,7 | 0,33 |
| RBV02-004R | 136 | 10 | 72 | 22 | 14 | 16,2 | M4×0,7 | 0,33 |
| RBV03-003R | 136 | 10 | 72 | 22 | 14 | 16,2 | M4×0,7 | 0,34 |
| RBV03-004R | 136 | 10 | 72 | 22 | 14 | 16,2 | M4×0,7 | 0,34 |
| RBV04-003R | 164 | 10 | 89 | 22 | 14 | 16,2 | M4×0,7 | 0,34 |
| RBV04-004R | 164 | 10 | 89 | 22 | 14 | 16,2 | M4×0,7 | 0,34 |
| RBV05-003R | 164,5 | 13 | 89,5 | 22 | 14 | 16,2 | M4×0,7 | 0,35 |
| RBV06-003R | 187 | 16 | 101 | 30 | 19 | 21 | M4×0,7 | 0,54 |
| RBV07-003R | 185 | 17 | 101 | 30 | 19 | 21 | M4×0,7 | 0,55 |
| RBV09-003R | 208 | 21 | 112 | 38 | 25 | 25 | M4×0,7 | 0,74 |
| RBV09-004R | 208 | 21 | 112 | 38 | 25 | 25 | M4×0,7 | 0,74 |
| RBV11-003R | 251 | 25 | 136 | 48 | 32 | 32 | M6×1,0 | 1,48 |
| RBV13-003R | 281 | 28 | 151 | 55 | 38 | 36 | M6×1,0 | 1,92 |
| RBV13-004R | 281 | 28 | 151 | 55 | 38 | 36 | M6×1,0 | 1,92 |
| RBV17-003R | 305 | 34 | 167 | 74 | 50 | 47 | M6×1,0 | 3,78 |