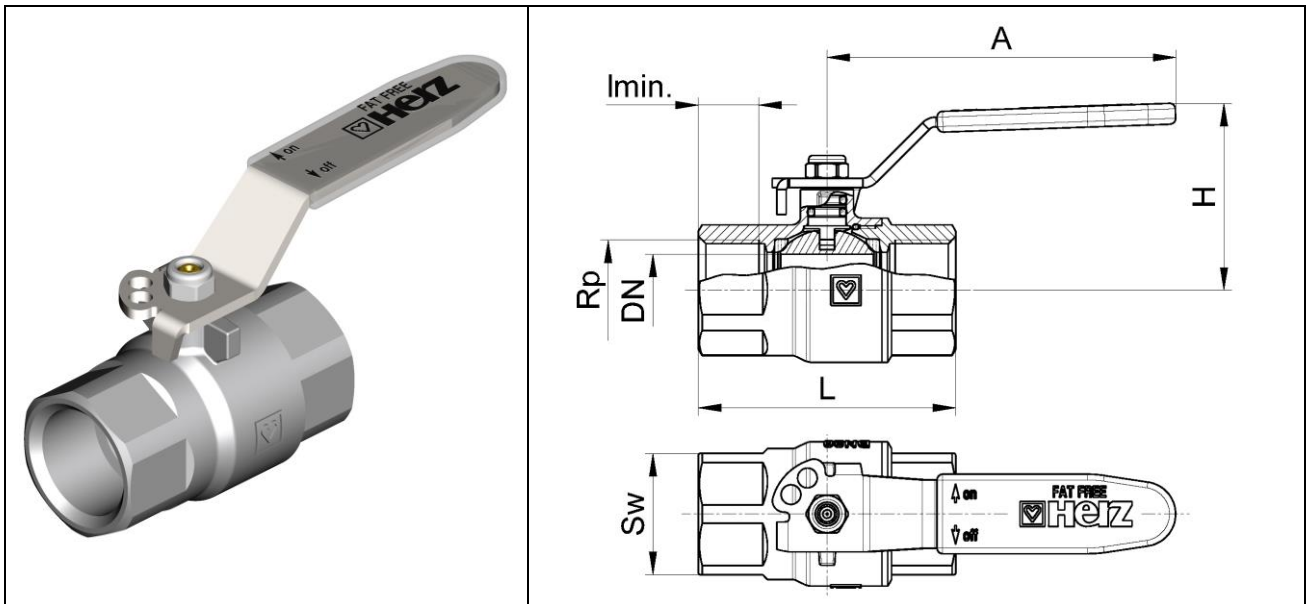


Ball valves KV000 - KV007 for oxygen (degreased)

1. General

Brass ball valve, FxF threaded (acc. ISO 7-1), full bore, made from forged brass (body, nut end connection and ball) Ni plated (ball Cr plated), stem made from brass, PTFE ball and FKM seals (stem), steel handle (Zn plated) with plastic cover.

Ball valve for oxygen is open-closed valve, which is primarily installed in the installation of medium pressure oxygen up to 30 bar (degreased level 200 mg/m²). It can be installed in technical gas plumbing installations, industrial applications, agricultural requirements, heatings and sanitary, pneumatic systems, water services. Generally can be used as shut off valve for all non-aggressive mediums such as water, air, paint, varnish, oil, lubricants, petroleum ... pressure up to 40 bar.



| Figure | PN | DN | Rp | L | lmin. | A | H | Mt (Nm) | Sw |
|---------------|----|----|------|-----|-------|-----|----|---------|----|
| KV 000 | 30 | 8 | 1/4" | 50 | 11,0 | 90 | 40 | 20 | 17 |
| KV 001 | 30 | 10 | 3/8" | 60 | 11,4 | 90 | 40 | 35 | 21 |
| KV 002 | 30 | 15 | 1/2" | 75 | 15,0 | 90 | 44 | 75 | 26 |
| KV 003 | 30 | 20 | 3/4" | 80 | 16,3 | 90 | 48 | 100 | 32 |
| KV 004 | 30 | 25 | 1" | 90 | 19,1 | 135 | 61 | 125 | 41 |
| KV 005 | 30 | 32 | 5/4" | 110 | 21,4 | 135 | 65 | 160 | 50 |
| KV 006 | 30 | 40 | 6/4" | 120 | 21,4 | 180 | 86 | 200 | 55 |
| KV 007 | 30 | 50 | 2" | 140 | 25,7 | 180 | 92 | 250 | 70 |

2. Pressure Rating (nominal)

| | |
|---------------|---|
| PN 30 | - operating pressure (bar) oxygen |
| PN 40 | - operating pressure (bar) non-aggressive mediums and technical gases |
| PN 1,5 | - operating pressure (bar) acetylene |

3. Temperature Rating

| | |
|------------------------|----------------------------|
| -10°C to +60°C | Oxygen and technical gases |
| -10°C to +120°C | Non-aggressive mediums |

4. Design

| Item | Material | Designation | W. Nr. | Standard | Suplied by | Certificate |
|--------------|------------------------|-------------|-----------------------|----------|---------------------|----------------------|
| Body | Brass Ms58 | CuZn40Pb2 | 2.0402 | EN 12165 | Almag Italy | Chemical analyze |
| Nut end | Brass Ms58 | CuZn40Pb2 | 2.0402 | EN 12165 | Almag Italy | Chemical analyze |
| Stem | Brass Ms58 | CuZn39Pb3 | 2.0401 | EN 12164 | Almag Italy | Chemical analyze |
| Ball | Brass Ms58 | CuZn40Pb2 | 2.0402 | EN 12165 | Almag Italy | Chemical analyze |
| Stem | Rubber | FKM 70 | 70FKM576 | EN 549 | Freudenberg Germany | II-4430/2005 II |
| Ball sealing | Teflon | PTFE | P1000 | | Pagnoni Italy | Producer declaration |
| Lubricant | Oil | Turmoxygen | Turmoxygen LC40 fluid | EN 377 | Lubcon Slovenia | 2-1215/2011 II |
| Paste | Acrylic | Loctite | Loctite 586 | | Henkel Slovenia | II-980/2007 E |
| Lever | Steel w. plastic cover | | | | | |

5. Standards applied

| DESIGN STANDARD | TESTING STANDARD |
|-----------------|------------------------|
| DIN 32509 | DIN 32509, DIN 3230-T3 |
| EN 377, EN 549 | |
| ISO 7-1 | |

6. Edurance test

The manual valve shall withstand a series of operating cycles specified in table bellow (at nominal pressure). Equipment related forces that act horizontally or vertically onto the headwork and might result abnormal wear ought to be eliminated. A frictionless connection to the operating spindle shall be ensured.

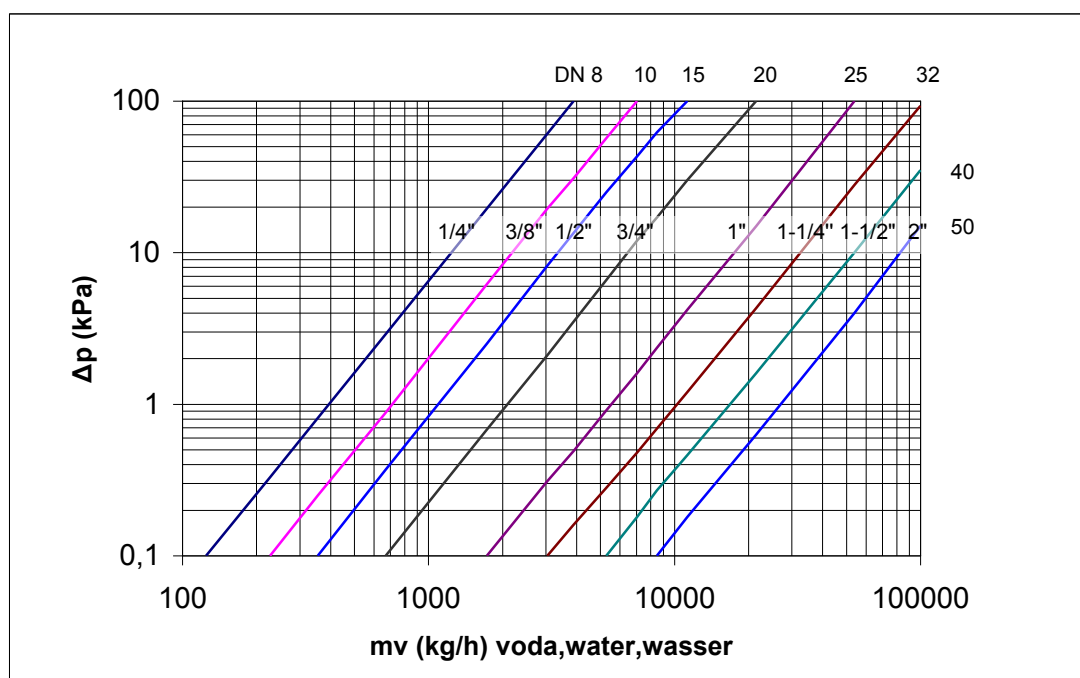
| DN | Operating speed (s) | Cycle |
|--------|---------------------|-------|
| 8, 10 | 2 | 1000 |
| 15, 20 | 5 | 1000 |
| 25, 32 | 6 | 1000 |
| 40, 50 | 8 | 1000 |

7. Pressure flow Diagram

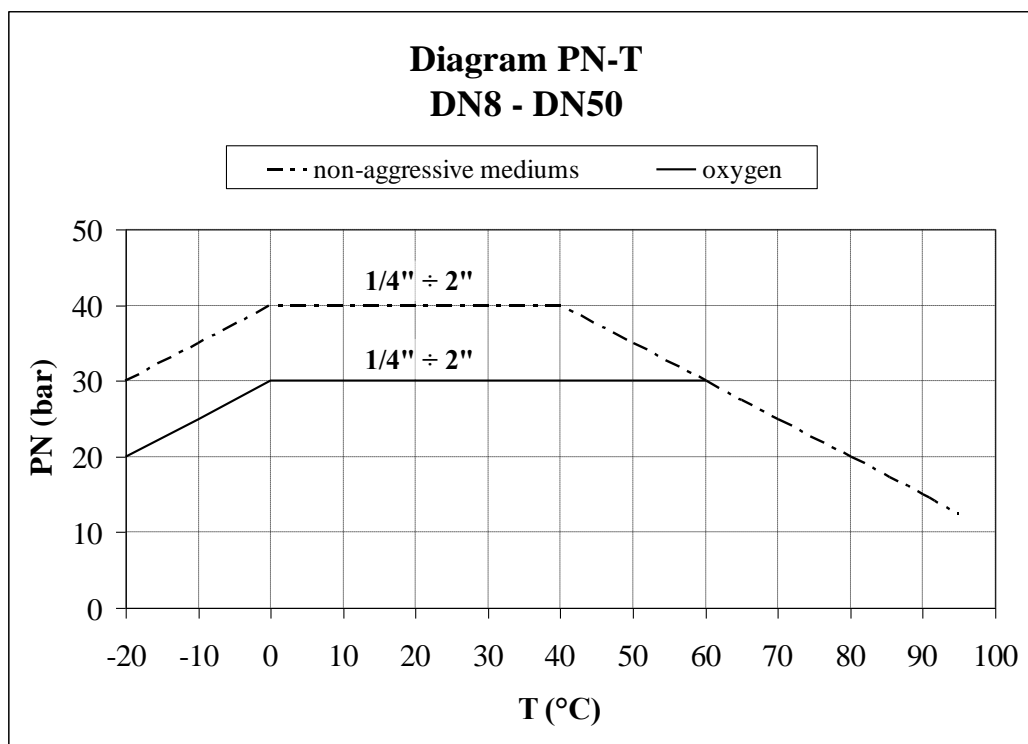
mv...flow (kg/h)

p...pressure (kPa)

Kv...discharge coefficient (m³/h): means the water flow at 15.5 °C and at pressure drop 100 kPa (1 bar) thru full opened valve



8. Pressure/ Temperature Diagram



9. Marking

Ball valve is marking in a durable way (stamped):

