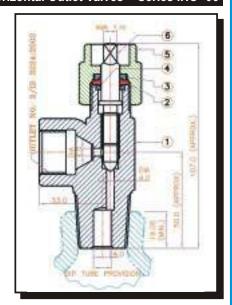


Key operated cylinder valves (packed type) for Oxygen, Acetylene, Inert, Medical and other non corrosive high pressure gases

#### Horizontal Outlet Valves - Series IHO -06



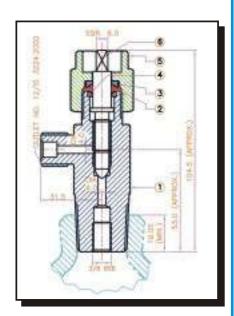






## Material of Construction

| Item<br>No. | Description                 | Material   |  |  |  |
|-------------|-----------------------------|--|--|--|--|
| 1           | Valve body-<br>forged       | High tensile brass<br>CuZn40Mn1Pb1FeSn<br>to En12165 |  |  |  |
| 2           | Packing                     | Teflon <sup>®</sup>                                  |  |  |  |
| 3           | Packing/<br>Gland<br>washer |  |  |  |  |
| 4           | Packing<br>collar           | Free cutting brass to IS 319 (Grade 1)               |  |  |  |
| 5           | Gland nut                   |  |  |  |  |
| 6           | Spindle                     | Stainless steel<br>AISI 304                          |  |  |  |





#### Product Features

- Strong durable brass body forged from high tensile brass. Robust design with offset body ideal for industrial use.
- One piece spindle assures a positive metal seal for durability and long cycle life.
- Operating assembly has a top brass washer (packing washer) in addition to a bottom brass washer (packing collar) so that the gland nut is not torqued directly against the packing and to compress teflon® packing from both sides.
- Simplicity in design ensures ease of component interchangeability & replacement.
- Valve body and gland nut are bright chrome plated for medical gases to service condition No 2 of IS:1068 for corrosion resistance and to protect from harmful effect of cleaning solutions.
- Acetylene valves can be provided with fuse plugs conforming to IS: 13497 having melting temperature 98°C-104°C. Acetylene valves can also be provided with safety disc having burst pressure (53,+0,-10% kgf/cm²).
- Reseating tools and gauges available on request.
  Optional:
  - Flow control spindle for medical cylinders.
  - Pressure relief device to requirements of CGA S.1.1.
  - Threads for dip tube fitment.



Key operated cylinder valves (packed type) for Oxygen, Acetylene, Inert, Medical and other non corrosive high pressure gases

### Service Chart - for Horizontal (Series IHO -06) and Vertical (Series IVO-06) Outlet Valves

|   | Test Pressure<br>Kgf/cm² |           | Outlet connection |                       |                          |                        |                                  |  |                                  |  |
|---|--------------------------|-----------|-------------------|-----------------------|--------------------------|------------------------|----------------------------------|--|----------------------------------|--|
| Gas service                             | Pneumatic                | Hydraulic | IS 3224:2002      |                       | CGA V-1-2005             |                        | BS 341-3: 2002<br>(Upto 250 bar) |  | DIN 477-1:1990<br>(Upto 300 bar) |  |
|   |                          |           | No.               | Thread                | No.                      | Thread                 | No.                              | Thread                                   | No.                              | Thread   |
| Oxygen/<br>Medical Oxygen               | 143-306                  | 215-459   | 3                 | G 5/8<br>Internal     | 540<br>(Up to 3000 psig) | .903-14<br>NGO-RH-EXT  | 3                                | G ⁵/₃<br>Internal                        | 9                                | G ³/₄<br>(External)  |
| Hydrogen                                | 150-200                  | 225-300   |                   | G 5/8-LH<br>Internal  | 350<br>(Up to 3000 psig) | .825-14<br>NGO-LH-EXT  | 4                                | G ⁵/』-LH<br>Internal                     | 1                                | W 21.80 x <sup>1</sup> / <sub>14</sub><br>LH (External)                  |
| Acetylene                               | 60-90                    | 90-135    | 2                 |                       | 510<br>(Up to 500 psig)  | .885-14<br>NGO-LH-INT  | 2, 4                             |  | 3                                | Yoke Type connection.  |
| , |                          |           |                   |                       |                          |                        |                                  |  | 3.1                              | M 24x 2<br>External LH   |
| Nitrogen                                |                          | 215-459   | 20                | G 3/4 A<br>(External) | 580<br>(Up to 3000 psig) | .965-14<br>NGO-RH -INT | 3                                | G ⁵/ <sub>8</sub><br>Internal            | 10                               | W 24.32 x <sup>1</sup> / <sub>14</sub><br>(External)                     |
| Argon /Helium<br>Krypton/ Xenon<br>Neon | 143-306                  |           |                   |                       |                          |                        |                                  |  | 6                                | W 21.80 x <sup>1</sup> / <sub>14</sub><br>(External)                     |
| Air                                     |                          |           | 19                | G 7/8 A<br>(External) | 346<br>(Up to 3000 psig) | .825 -14<br>NGO-RH-EXT |                                  |  | 13                               | G ⁵/₅<br>Internal  |
| Isobutylene                             | 20-30<br>40<br>150-200   | 30-45     | 2                 | G 5/8-LH<br>Internal  | 510<br>(Up to 500 psig)  | .885-14<br>NGO-LH-INT  | 4                                | G ⁵/。-LH<br>Internal                     | 1                                | W 21.80 x <sup>1</sup> / <sub>14</sub>                                   |
| Butadiene                               |                          | 60        |                   |                       |                          |                        |                                  |  |                                  | LH (External)  |
| Carbon<br>Monoxide                      |                          | 225-300   |                   |                       | 350<br>(Up to 3000 psig) | .825-14<br>NGO-LH-EXT  |                                  |  | 5                                | 1 in -8 BSW<br>- LH<br>(External)  |
| Methane/<br>Ethylene                    |                          |           |                   |                       |                          |                        |                                  |  | 1                                | W 21.80 x <sup>1</sup> / <sub>14</sub><br>LH (External)                  |
| Nitrous Oxide                           | 177                      | 266       | 12                | EXT-W<br>17.46 X 1.27 | 326<br>(Up to 3000 psig) | .825-14<br>NGO-RH-EXT  | 13                               | 11/16" 20 TPI<br>Whit form<br>(External) | 11                               | G <sup>3</sup> / <sub>8</sub><br>(External)<br>For Cyl above<br>3 litres |
| Methyl Bromide                          | 30                       | 45        | 15                | G 1/4 A<br>(External) | 330<br>(Up to 3000 psig) | .825-14<br>NGO-LH-EXT  | 7                                | G⁵/。 A-LH<br>(External)                  | 8                                | 1 in - 8 BSW<br>(External)   |

### 📍 Torque Values 🔫

| Torquo turaco (        |          |  |  |  |  |  |  |
|------------------------|----------|--|--|--|--|--|--|
| Closing                | 8 Nm     |  |  |  |  |  |  |
| Gland Nut Installation | 60 Nm    |  |  |  |  |  |  |
| Fuse plug              | 15-20 Nm |  |  |  |  |  |  |



# Vertical Outlet Valves - Series IVO-06



