



Cleanness by Purpose

CHECK Valve

CHY Series



IHARA SCIENCE CORPORATION

CHY Check Valve Series

【Features】

CHY Series is a spring-loaded UHP check valve product. The check valve is high Cv value of Y-type design, available in both a cast and forged body option. Used in Bulk Gas delivery systems to eliminate backflow.

- Configurable cracking pressures; 10 psig standard [to 1"] and 2.2 psig standard [1-1/2" & 2"]
- The valve design originates from our proven Y-Type Bellows Valve (CVY series) engineered design.
- The valve is equipped with 316L SS trim, a 316SS spring, FKM (Viton) o-ring and PCTFE soft seals.
- As standard with a 5Ra or 20Ra micro-inch internal surface finish, and 100% He leak tested.
- Cleaning, assembly, and packaging are conducted in an ISO 4, ISO 5 & ISO 6 cleanroom environment.

Specification

| | |
|-----------------------------|-------------------------------------|
| Nominal sizes | 1/4" to 2" sizes |
| Working pressure (※1) | Vac. ~ 1.73MPa (250psi) |
| Working temperature (※2) | -10 ~ +80°C (14 ~ 176° F) |
| Valve end | Tube stub weld |
| | Metal gasket face seal fitting VCR® |

(※1) Higher pressures available, please inquire.

(※2) PCTFE seat standard (Polyimide, PFA, PVDF, PEEK options)

(※3) Specification of specific valve.

| | | | |
|------------------------|---------------------------------|---------------------------|-----|
| Valve Cv value (※3) | UHP Check Valve (CHY Series) | 1/4" CHY8 type | 1.8 |
| | | 3/8" 1/2" CHY8 type | 11 |
| | | 3/4" CHY12 type | 12 |
| | | 1" CHY16 type | 13 |
| | | 1-1/2" & 2" CHY32 type | 34 |

Description of CHY Check Valve Model Numbers

CAST = CHY - ① ② ③ - ④ - ⑤ - ⑥ - ⑦ - ⑧

Ex.) CHY - 8TW1.24 - EP [CHY Check Valve, 1/2" Tube weld ends, 1.24mm (.049") tube thickness, EP treated, No Purge Ports, Cast Body]

FORGED = CHY-F - ① ② ③ - ④ - ⑤ - ⑥ - ⑦ - ⑧

Ex.) CHY-F - 16TW1.65 - EP - IOPP - GD4N [CHY Check Valve, 1" Tube weld ends, 1.65mm (.065") tube thickness, EP treated, 1/4" Dual PP Capped, Forged Body]

| ① | | ② | | TW③ | | PW③ | | ④ | |
|------|------------|------|---------------|------------------|----------------|------------------|----------------|------|---|
| Mark | Valve size | Mark | Connection | Mark | Tube thickness | Mark | Pipe thickness | Mark | Surface treated |
| 4 | 1/4" | FJ | Flanged | 0.89 | .035" | 10 | Sch10/S | EP | Electro polished 5Ra µin (7Ra max.) |
| 6 | 3/8" | D | BI-Lok | 1.24 | .049" | 40 | Sch40/S | BA | Bright Annealed 20Ra µin (32Ra max.) |
| 8 | 1/2" | VM | VCR® (Male) | 1.65 | .065" | 80 | Sch80/S | | |
| 12 | 3/4" | VF | VCR® (Female) | ※ TW option only | | ※ PW option only | | | |
| 16 | 1" | TW | Tube weld | | | | | | |
| 24 | 1-1/2" | PW | Pipe weld | | | | | | |
| 32 | 2" | | | | | | | | |
| - | - | | | | | | | | |

| ⑤ | | ⑥ | | ⑦ | | ⑧ | |
|---------|---------------------------------|---------|-------------------------------------|---------|---------------|---------|---|
| Mark | Purge Port location | Mark | Purge Port feature | Mark | material | Mark | temperature |
| (Blank) | No purge ports | (Blank) | No purge ports | (Blank) | 316LSS | (Blank) | standard |
| IOPP | Inlet/Outlet (Up/Downstream) | GD4N | 1/4" VCR® (Male) capped w/gasket | DM | 316LSS VAR | LT | low-temp design *multiple options |
| OPP | Outlet (Downstream) | | | HC | Hastelloy C22 | | |
| IPP | Inlet (Upstream) | | | | | | |

DVF Compact Diaphragm Valve
(1MPa – 150psi)



HFD High Flow Diaphragm Valve



CVY Y-Type Bellows Seal Valve



PYB Pipe-Welded Y-Type Bellows Seal Valve
(1MPa~2MPa)



ISO9001, ISO14001 Certified Office
Certified office for high-pressure gas facility testing and manufacturing,
certified office for N valves and N-II fittings

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WARNING

If you don't select and handle fittings, valves and related accessories in an adequate manner, it may damage human beings and applicable systems.
Within the responsibility and authorization of users and piping designers, fittings, valves and related accessories shall be adequately selected, used and maintained based on the applicable conditions and product conformity to the system to be applied. Please read carefully the operation manual and feel free to contact with Ihara if you have any question or request.

WARRANTY CLAUSE

1. Warranty Period

The warranty period of the products is one (1) year from putting into service or one and half (1.5) years after delivery whichever comes earlier. However, the products specially specified and/or the cases used under deviating from the specification shall be exempted.

2. Scope of Warranty

Any failure and damage under maker's responsibility will be found during the warranty period, the substitutes and/or replacement parts shall be provided free of charge. The warranty shall not be applied to a claim for the liquidated damages.

■ URL: <http://www.ihara-sc.co.jp/>

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