

HILUX®



HIFLUX is based on the accumulated precision engineering & technological know-hows, high pressure equipment, required for plant valve, fitting, pressure regulator etc., manufacturing and sells.

HIGH SERVICE HIGH QUALITY HIGH PERFORMANCE!

High Pressure equipment

How

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CEO'S Message

Based on years of sophisticated engineering technology, Hiflux has been working hard to localize high-temperature, highpressure industries and open new markets and developed a range of high-pressure products to meet the needs of our customers through constant research and facility investment.

Our products are applied to general pressure to special industry applications which require up to 150,000psig ultra high pressure.

In order to become a global leader in ultra-high pressure, We will do our best to become 'HIFLUX' a company that listens carefully to customers and consistently improves products and service and contributes to enhancing quality and productivity in order to develop and grow together with our customers. Thank you.

CEO Kim Hyeon-hyo

HIGH PRESSURE HISTORY

PASSION FOR THE FUTURE, CONSTANT CHALLENGE AND INNOVATION

Our company has been recognized for its technology by succeeding in various localization of high-pressure instruments which are difficult to manufacture in Korea through continuous research and development and facility investment for new market exploration in ultra-high pressure instruments material field. Based on technology and price competitiveness differentiated from overseas manufacturers such as Europe and USA, we are growing into a global brand by supplying domestic OEM and supplying OEM with overseas Global Waterjet manufacturer.



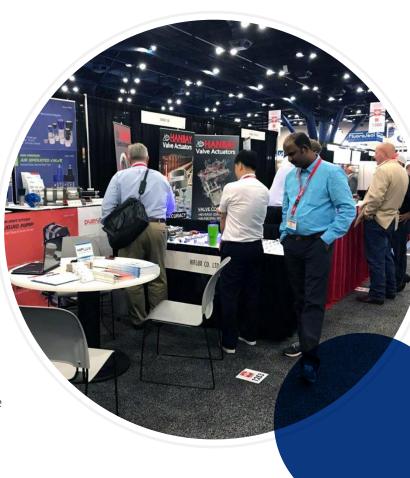
DEVELOP VARIOUS HIGH PRESSURE VALVES EXPAND OVERSEAS MARKET

- Signed supply contract with Denmark and France.
- Development of High Pressure Bleed Valve, Wellhead Gauge Valve, Double Block & Bleed Valve.
- Development of high pressure ball valve 2Way / 3Way Trunnion Ball Valve.
- Development of high pressure relief valve (factory set, field adjustable, proportional type).
- Development of high pressure needle valve 3way 2stem valve.
- Signed OEM supply contract with Global Waterjet Pump manufacturer in China and Austria.
- Russia and Singapore signed contract for supply of goods.



OPENING THE ONLINE MARKET PARTICIPATING IN THE DOMESTIC AND OVERSEAS FAIR

- Participated in Valve World EXPO & CONFERENCE exhibition in USA and China.
- Participated in China International Petrochemical Technology Exhibition (Cippe).
- Participated in international parts and materials industry exhibition / International nanotechnology exhibition / International marine plant exhibition every year.
- Join Open Market(Auction, Gmarket, 11st, Naver Shopping, ebay).
- Opened 'HIFLUX Shopping Mall' for the first time in the high pressure piping materials industry.





ESTABLISHED R & D CENTER HIGH PRESSURE TECHNOLOGY LOCALIZATION

- Transfer of head office and factory to Daedeok Techno Valley.
- Acquiring 'Venture Company Certification'.
- Acquired European Integrated Standard Certification (CE).
- Acquired ISO 9001, ISO 14001 certification.
- Trademark Registration 'HIFLUX, FLUXLOK'.
- Patent Registration (7 types of high pressure valves).
- Establishment and certification of affiliated research institute.

Catalog Numbering System



Simply indicate catalog number and specify option or special requirement

NV	60	V	S	06	А
Product Value NV : Needle Valve	Pressure	Type of Components Needle Valve	Material	Tube Size	Options Needle Valve
CV : Check Valve BV : Ball Valve AOV : Air Operated Valve CON : Control Valve GV : Wellhead Gauge Valve GV : Wellhead Gauge Valve BLV : Bleed Valve DBBV : Double Block & Bleed Valve PBBV : Double Block & Bleed Valve FT : Fitting FA : Fitting Accessory MF : Manifold Block T : Tube N : Nipple GPR : General Pressure Regulator HPR : High Pressure Regulator BPR : Back Pressure Regulator AD : Adapter TS : Tube Support	3,000psi 07 : 7,500psi 15 : Sleeve Type Refer to Valve Select 20 : 20,000psi 30 : 30,000psi 60 : 60,000psi 100 : 100,000psi 150 : 150,000psi	V : Vee Stem R : Regulating Stem Check Valve O : O-Ring Type B : Ball Type Ball Valve O3 : Orifice 4.8mm O5 : Orifice 8mm Control Valve Air Operated Valve O : Normal-Open Type C : Normal-Closed Type Relief Valve FS : Factory Set FA : Field Adjustable PP : Proportional Type Fitting E : Elbow Type T : Tee Type C : Cross Type Fitting Accessory A : Adapter (20,000psi용) S : Sleeve (저압용) G : Gland R : Collar T : Collet	Stainless steel 316 H : Hastelloy C276 wetted part IN : Inconel 600 IN625 : Inconel 625 IN825 : Inconel 825 NI : Nickel 200 TI : Titanium	1/8" 04: 1/4" 06: 3/8" 08: 1/2" 09: 9/16" 12: 3/4" 16: 1" 15: 15A 25: 25A	Control Valve Air Operated Valve S : Straight Type A : Angle Type O : 3way/1on pressure Type T : 3way/2on pressure Type Ball Valve 2-90 : 2WAY 3-180 : 3WAY Switching Type 3-90 : 3WAY Diverting Type Fitting Accessory AV : Anti-Vibration Type GPR N : Normal Type P : Panel Type

X Catalog number can be changed without any notification

Example

• NV60VS06-A : Needle Valve, 60,000psi, Vee Stem, 3/8", Angle Type.

- NV15VS04-O : Needle Valve, 15,000psi, Vee Stem, 1/4", 3Way/1on Pressure Type.
- CON07CS15-S : Control Valve, 7,500psi, Normal-Closed, 15A, Straight Type.
- AOV60CS04-A : Air Operated Valve, 60,000psi, Normal-Closed, 1/4", Angle Type.
- FT60ES06 : Fitting, 60,000psi, Elbow Type, 3/8".
- FA60GS04-AV : Fitting Accessory, 60,000psi, Gland, 1/4", Anti-Vibration Type.

13. Air Operated Valve

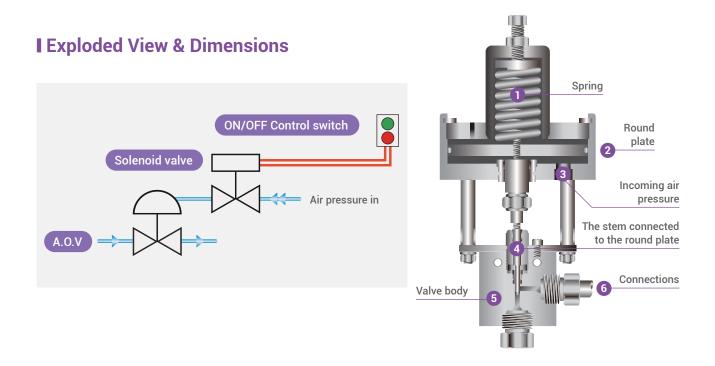


Air automatic valve that automatically open and closed the valve using air pressure



Features

- 2 Patterns Body Types. (Normal Open, Normal Closed Type)
- Normal Open Type : When valve is open in normal, if air is supplied, it will be close automatically.
- Normal Closed Type : When valve is closed in normal, if air is supplied, it will be open automatically.
- The minimum working pressure of air is 5kgf/cm².
- The underbody of A.O.V where liquid or gas passes through also have 4 types as needle valve.
- The system can be controlled remotely.
- Driven by air, the explosion-proof valve is safer than electric type which may explode.
- A valve using stainless steel 316 cold material for excellent corrosion resistant.

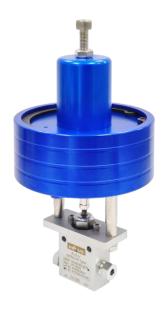


[Normal - Open Type]

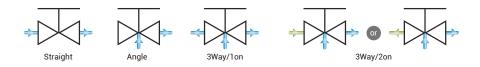


- 1. In the normal open type, the stem connected with the round plate is in an upper position in normal times, so the valve is open.
- 2. If air pressure is applied from the upper side at this time, the round plate is moved downward by incoming air pressure.
- 3. The stem connected to the round plate also moves downward, blocks the open orifice and cuts off the flow of the fluid.
- 4. To open the valve again, you should block incoming air pressure and vent air within the product.
- 5. The round plate and the stem rise again with the restitution force of a spring located in the lower part, the valve opens and the fluid flows again.

[Normal - Closed Type]



- 1. In the normal close type, the stem connected with the round plate goes downward in normal times and the valve is closed.
- 2. If air pressure is applied from the lower side at this time, the round plate is moved upward by incoming air pressure.
- 3. The closed orifice is opened and the fluid (or gas) flows.
- 4. To close the valve again, you should block incoming air pressure and vent air within the product.
- 5. The round plate and the stem go downward again with the restitution force of a spring located in the upper part, the valve closes and blocks the flow of the fluid.



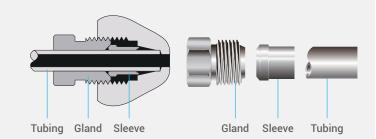
Pressure Tube		NORMAL-OPEN				NORMAL-CLOSED			
Rating Size	Size	Straight	Angle	3way/1on	3way/2on	Straight	Angle	3way/1on	3way/2on
15,000 psi	1/8"	A0V150S02-S	AOV150S02-A	A0V150S02-0	AOV150S02-T	AOV15CS02-S	AOV15CS02-A	A0V15CS02-0	AOV15CS02-T
	1/4"	AOV150S04-S	AOV150S04-A	A0V150S04-0	AOV150S04-T	AOV15CS04-S	AOV15CS04-A	AOV15CS04-0	AOV15CS04-T
	3/8"	AOV150S06-S	AOV15OS06-A	A0V150S06-0	AOV15OS06-T	AOV15CS06-S	AOV15CS06-A	A0V15CS06-0	AOV15CS06-T
10,000 psi	1/2"	AOV100S08-S	AOV100S08-A	A0V100S08-0	AOV100S08-T	AOV10CS08-S	AOV10CS08-A	AOV10CS08-0	AOV10CS08-T
	1/4"	AOV200S04-S	AOV200S04-A	A0V200S04-0	AOV200S04-T	AOV20CS04-S	AOV20CS04-A	AOV20CS04-0	4-0 A0V20CS04-T
	3/8"	A0V200S06-S	A0V200S06-A	A0V200S06-0	AOV200S06-T	AOV20CS06-S	AOV20CS06-A	AOV20CS06-0	AOV20CS06-T
20,000 psi	9/16"	A0V200S09-S	AOV200S09-A	A0V200S09-0	AOV200S09-T	AOV20CS09-S	AOV20CS09-A	AOV20CS09-0	AOV20CS09-T
	3/4"	A0V200S12-S	A0V200S12-A	A0V200S12-0	AOV200S12-T	AOV20CS12-S	AOV20CS12-A	A0V20CS12-0	AOV20CS12-T
-	1″	A0V200S16-S	A0V200S16-A	A0V200S16-0	AOV200S16-T	AOV20CS16-S	AOV20CS16-A	A0V20CS16-0	AOV20CS16-T
	1/4"	AOV600S04-S	AOV600S04-A	A0V600S04-0	AOV600S04-T	AOV60CS04-S	AOV60CS04-A	AOV60CS04-0	AOV60CS04-T
60,000 psi	3/8"	AOV600S06-S	AOV600S06-A	A0V600S06-0	AOV60OS06-T	AOV60CS06-S	AOV60CS06-A	AOV60CS06-0	AOV60CS06-T
	9/16"	AOV600S09-S	AOV600S09-A	A0V600S09-0	AOV600S09-T	AOV60CS09-S	AOV60CS09-A	AOV60CS09-0	AOV60CS09-T

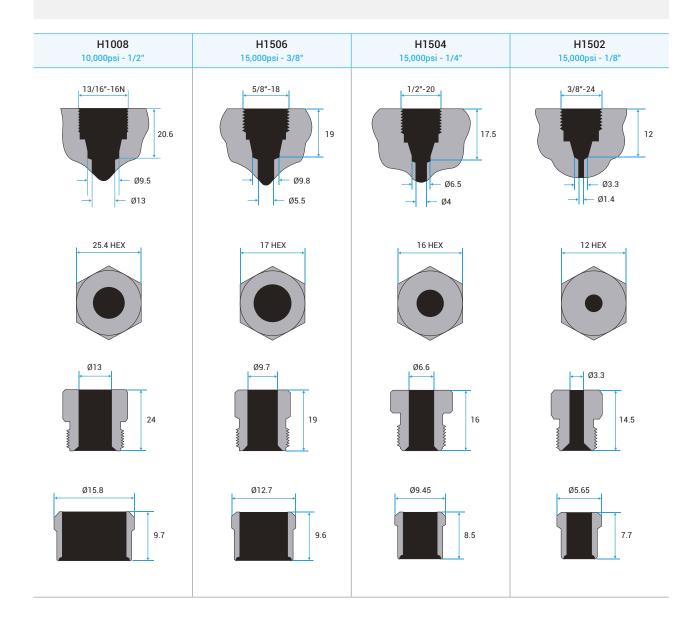
Piping Materials / Port Type

Port Type Low Pressure Port Type

Sleeve Type Connections - 10,000 psi / 15,000 psi

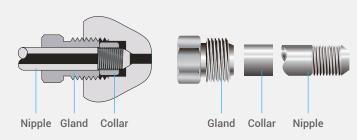
Sleeve Type can be used in 1/8 ", 1/4", 3/8 ", 1/2" piping by fastening sleeve in gland. Tube required for connection between products can be ordered from Hiflux. Stainless steel material ensures optimum performance in high pressure environment.

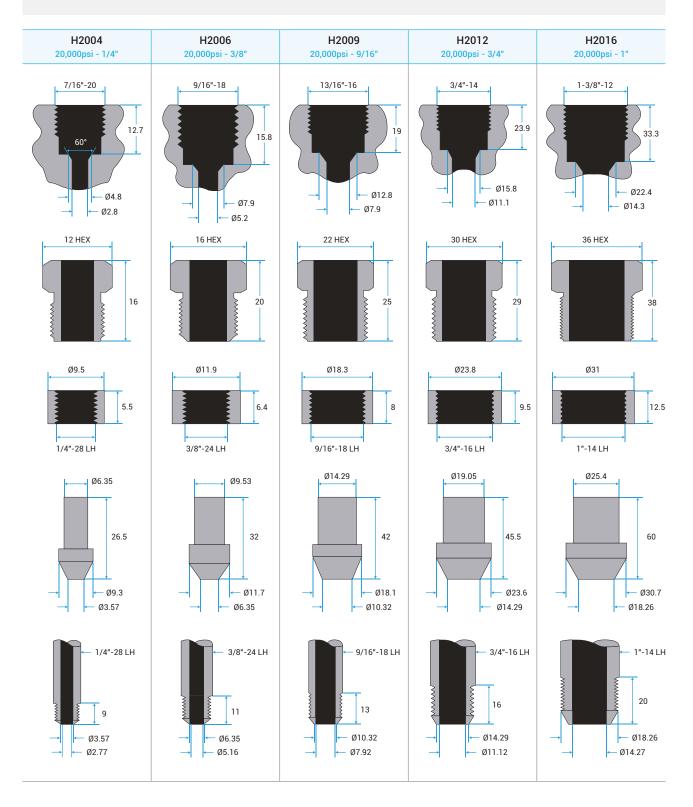




Medium Pressure Connections - 20,000 psi

The Nipple required for connection between the products by using Collar and Nipple in the Gland can be ordered by user's desired length. you can also process directly using our Tooling Set tool.

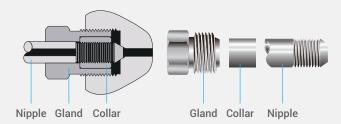




Port Type High Pressure Port Type

High Pressure Connections - 30,000 psi / 60,000 psi

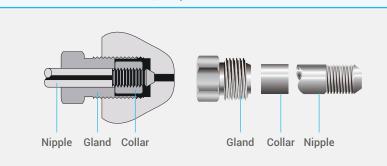
The Nipple required for connection between the products by using Collar and Nipple in the Gland can be ordered by user's desired length. you can also process directly using our Tooling Set tool. This cone and threaded connection is the standard for easy and fast high-pressure equipment configuration with optimum sealing and reliable performance for both liquid and gas at high pressure and temperature.

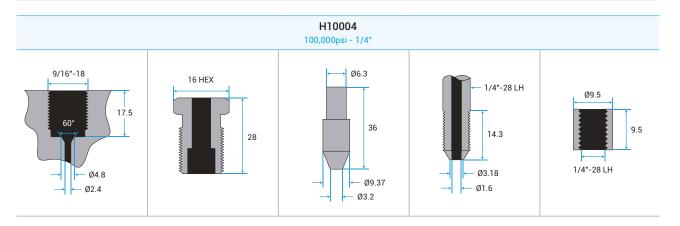




Ultra High Pressure Connections - 100,000 psi

The product is tightened with collar and nipple in Gland. The applicable pipe size is as follows. This cone and threaded connection is the standard for easy and fast high-pressure equipment configuration with optimum sealing and reliable performance for both liquid and gas at high pressure and temperature.

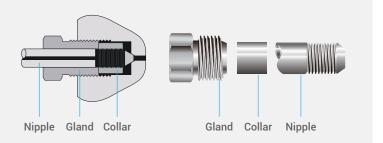


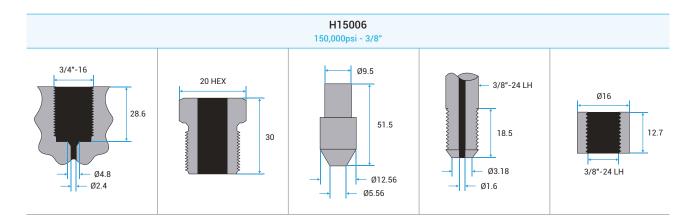


Port Type Ultra High Pressure Port Type

Ultra High Pressure Connections - 150,000 psi

The product is tightened with collar and nipple in Gland. The applicable pipe size is as follows. This cone and threaded connection is the standard for easy and fast high-pressure equipment configuration with optimum sealing and reliable performance for both liquid and gas at high pressure and temperature.



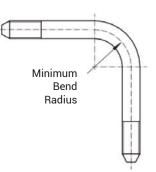


Port Type / Technical Information

Technical Information Recommended Torque

[Recommended Minimum Bend Radius]

Tubing Size O.D. x I.D. in. (mm)	Tubing Pressure psi (bar) @ R.T.	Recommended Minimum Bend Radius in. (mm)
1/4 inch (6.35 x 2.77)	20,000 (1,370)	1.25 (31.8)
3/8 inch (9.53 x 5.16)	20,000 (1,370)	1.75 (44.5)
9/16 inch (14.29 x 7.92)	20,000 (1,370)	2.63 (66.8)
3/4 inch (19.05 x 11.13)	20,000 (1,370)	3.50 (88.9)
1 inch (25.4 x 14.27)	20,000 (1,370)	4.63 (117.6)
1 inch (25.4 x 11.13)	30,000 (2,060)	4.63 (117.6)
1/4 inch (6.35 x 2.11)	60,000 (4,130)	1.25 (31.8)
3/8 inch (9.53 x 3.18)	60,000 (4,130)	1.75 (44.5)
9/16 inch (14.29 x 4.78)	60,000 (4,130)	2.63 (66.8)



As all sizes are for reference, they can be changed without any notification.

HIFLUX - Recommended Torque (Valves Minimum Packing Stem Gland Torque)

Valve Pressure Series	Port Type	Tube Size (PSI)	Stem Gland HEX (mm)	Minimum Torque (kg.f-cm)
10,000 PSI 15,000 PSI	H1502	1/8 Inch (15,000)	13	170
	H1504	1/4 Inch (15,000)	17	550
	H1506	3/8 Inch (15,000)	17	550
	H1008	1/2 Inch (10,000)	24	800
	H2004	1/4 Inch (20,000)	17	550
	H2006	3/8 Inch (20,000)	17	550
20,000 PSI	H2009	9/16 Inch (20,000)	22	1100
	H2010	3/4 Inch (20,000)	30	3,500
	H2012	1 Inch (20,000)	41	5,000
30,000 PSI	H3002	1/8 Inch (30,000)	13	500
	H6004	1/4 Inch (30,000)	20	550
	H6006	3/8 Inch (30,000)	20	550
	H6009	9/16 Inch (30,000)	20	550
	H6004	1/4 Inch (60,000)	20	670
60,000 PSI	H6006	3/8 Inch (60,000)	20	670
	H6009	9/16 Inch (60,000)	20	670
100,000 PSI	H10004	1/4 Inch (100,000)	24	1250
150,000 PSI	H15006	3/8 Inch (150,000)	24	1870
10,000 & 15,000 PSI NPT TYPE	HFN02	1/8 Inch (15,000)	13	500
	HFN04	1/4 Inch (15,000)	17	550
	HFN06	3/8 Inch (15,000)	17	550
	HFN08	1/2 Inch (15,000)	22	1100
	HFN10	3/4 Inch (10,000)	41	-
	HFN12	1 Inch (10,000)	41	-



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