

HiFLUX

High Pressure Valves & Fittings



HIGH SERVICE
HIGH QUALITY
HIGH PERFORMANCE
High Pressure equipment

Hiflux

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Passion for a high-pressure future, constant challenge and innovation

HIFLUX Co., Ltd. has been recognized for its technological prowess by successfully producing various of high-pressure piping materials that are difficult to manufacture domestically through continuous R&D and facility investment to open up new markets in the ultra-high pressure piping materials sector.

Based on differentiated technological prowess and price competitiveness compared to overseas manufacturers in Europe and the United States, it is growing into a global brand by concluding OEM supply contracts with domestic OEM suppliers and overseas global waterjet manufacturers.

In addition, in order to open up new markets, we have developed air-operated valves, high-pressured pressure regulators, back pressure regulators, and other fittings for various purposes and pressure-specific accessories, and now our products are being applied to mass production facilities in various industries.

Expanding R&D investment to achieve carbon neutrality

In order to contribute to carbon neutrality, HIFLUX has researched and developed manual valves for hydrogen refueling stations with pure domestic capital and technology, obtained KS certification, and is currently being supplied to hydrogen refueling station plant sites. It is also developing check valves and pneumatic valves (AOV) KS propulsion and valves for liquefied hydrogen.

In addition, based on its technology related to high-pressure piping for hydrogen refueling stations, it was selected as a hydrogen specialized company by the Ministry of Trade, Industry and Energy in 2024. We will continue to do our best to contribute to the development of the hydrogen industry through steady investment and marketing.

We will always listen to our customers' voices and contribute to productivity and quality improvement through continuous product improvement and service provision, and strive to become HIFLUX that can grow and develop together with our customers.

Thank you.

HIFLUX Co., Ltd. | CEO

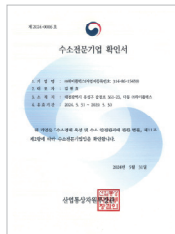
Overview

Company name	HIFLUX Co., Ltd.	CEO	Kim Hyeon Hyo
Date of Establishment	May 26, 2010	Business Area	Various valves, hydraulic equipment, pumps, etc
Address	(34037) Da Dong, 361-33, Gapcheon-ro, Yuseong-gu, Daejeon, Republic of Korea	Telephone	+82 042-933-5670 (Extension number 1.Technical Sales Department 2.Design Department 3.Public Relations Department 4.Purchasing Department 5.Production Department)
E-mail	Technical Sales Dept : sales@hiflux.com Promotion Dept : min@hiflux.com	Main Product	Needle Valve, Check Valve, Ball Valve, Relief Valve, Air Operated Valve, High-Temp Valve, Control Valve, Fitting, Fitting Accessory, Tube, Nipple, Regulator, Union, Adapter, Tube Support, Radiating Pipe, Pressure Gauge, Tooling Set, Lok Type Products

HIFLUX HISTORY

2024.05. Selected as a 'Hydrogen Specialist Company' by Government
 2023.10. Acquired 'KS certification for manual valve for hydrogen refueling station' by KGS
 2023.05. KS Q ISO 45001 certification
 2023.05. Selected as a 2023 HIFLUX Small Giant Company
 2021.08. Patent (Double-sealed check valve) acquired
 2021.07. Received a commendation from KGS
 2021.03. Patent (High-pressure valve) acquired
 2020.07. 'Material/Component/Equipment Specialist Company Confirmation' acquired
 2020.07. Patent (High-temperature/high-pressure valve) acquired
 2020.06. R&D (Valve and fittings for H70 hydrogen refueling stations)
 2020.04. Patent (Valves including stem carriers) acquired
 2020.02. 2 types of valve patents acquired
 2019.01. Joined the Korea Hydrogen Industry Association
 2018.09. Moved to new headquarters and factory in Daedeok Techno Valley
 2018.08. Acquired 'Venture Business Certification' from the Technology Guarantee Fund
 2018.02. HIFLUX acquired European Standard Certification (CE)
 2016.09. Self-developed 3 types of high-pressure valves
 2016.04. Self-developed high-pressure Trunnion Ball Valve
 2015.11. Self-developed high-pressure relief valve
 2015.11. Factory expansion
 2015.10. High pressure manifold block, high pressure ball valve self-development
 2015.08. High pressure relief valve, high pressure needle valve self-development
 2014.07. Corporate research institute certification
 2013.10. KS Q ISO 9001 certification, KS I ISO 14001 certification
 2010.05. Establishment of HIFLUX

Certification Patents



Certificate of Hydrogen Specialist Company



KS Certificate of Needle valve for Hydrogen Station



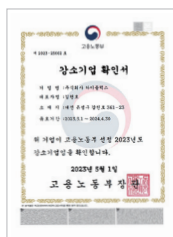
ISO 9001, 14001, 45001 (Quality, Environment, Health)



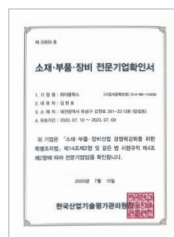
CE Certifications



Certificate of Corporate Research Institute



Certificate of Small and Medium Enterprise



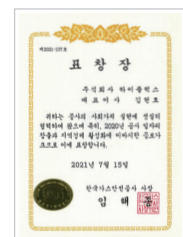
Certificate of Materials/Parts/Equipment Specialist Enterprise



Certificate of Venture Enterprise



Hydrogen Association Membership Card



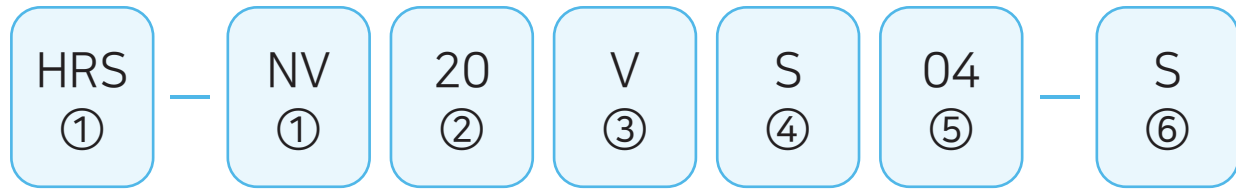
Gas Safety Corporation Award



Patent Certificate / Trademark Registration Certificate

Catalog Numbering System

simply indicate catalog number and specify option or special requirement



① Products	② Pressure	③ Type of Components	④ Material	⑤ Tube Size	⑥ Options
HRS-NV : Hydrogen Refueling System Needle Valve	03 : 3,000 psi	Needle Valve - V : Vee Stem - R : Regulating Stem	S : Stainless Steel 316	02 : 1/8 inch	Needle Valve Control Valve
NV : Needle Valve	07 : 7,500 psi	Check Valve - O : O-Ring Type - B : Ball Type	H : Hastelloy	04 : 1/4 inch	Air Operated Valve High Temperature Valve
CV : Check Valve	15 : 15,000 psi	Ball Valve - 03 : Orifice 4.8mm - 05 : Orifice 8mm	HC : Hastelloy C276 Wetted Part	06 : 3/8 inch	- S : Straight Type - A : Angle Type
BV : Ball Valve	20 : 20,000 psi	Control Valve Air Operated Valve - O : Normal-Open Type - C : Normal-Closed Type	IN : Inconel 600	08 : 1/2 inch	- O : 3way/1on Type - T : 3way/2on Type - D : 3way 2stem Type
ABV : Actuator Ball Valve	30 : 30,000 psi	Relief Valve - FS : Factory Set - FA : Field Adjustable - PP : Proportional Type	IN625 : Inconel 625	09 : 9/16 inch	Ball Valve - 20-90 : 2way - 3-180 : 3way Switching - 3-90 : 3way Diverting
AOV : Air Operated Valve	60 : 60,000 psi	Fitting - E : Elbow Type - T : Tee Type - C : Cross Type	IN825 : Inconel 825	12 : 3/4 inch	Relief Valve Field Adjustable - 1 : 1 Inlet - 2 : 2 Inlet
RV : Relief Valve	100 : 100,000 psi	Fitting Accessory - A : Adapter - S : Sleeve - G : Gland - R : Collar - T : Collet	NI : Nickel 200	16 : 1 inch	Proportional Type - N : NPT Inlet port
KGC-RV : Gsa Relief Valve	150 : 150,000 psi		TI : Titanium	15 : 15A	Fitting Accessory - AV : Anti-Vibration Type
SH : Safety Head	N : NPT			25 : 25A	GPR - N : Normal Type - P : Panel Type
CON : Control Valve	P : PT				
HV : High Temperature Valve					
GV : Wellhead Gauge Valve					
BLV : Bleed Valve					
DBBV : Double Block and Bleed Valve					
FT : Fitting					
FA : Fitting Accessory					
MF : Manifold Block					
FATC : Tube Cap					
T : Tube					
N : Nipple					
A : Adapter					
BPR : Back Pressure Regulator					
HPR : High Pressure Regulator					
GPR : General Pressure Regulator					
ABPR : Air Operating Back Pressure Regulator					

➤ Example

- NV60VS06-A : Needle Valve, 60,000 psi, Vee Stem, 3/8", Angle Type.
- NV15VS04-O : Needle Valve, 15,000 psi, Vee Stem, 1/4", 3Way/1on Pressure Type.
- AOV60CS04-A : Air Operated Valve, 60,000 psi, Normal-Closed, 1/4", Angle Type.
- FT60ES06 : Fitting, 60,000 psi, Elbow Type, 3/8".
- FA60GS04-AV : Fitting Accessory, 60,000 psi, Gland, 1/4", Anti-Vibration Type.

Hydrogen Fuel Station Needle Valve

KS-certified valve for hydrogen refueling station that supplement for hydrogen embrittlement



KS인증 밸브
제 KGS-23-0003호



Hydrogen



This product has changed the sealing method of existing high-pressure needle valve products to allow use with hydrogen, and has completed refueling station testing and received KS certification.

Features

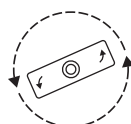
- Prevents galling with non-rotating stem
- Packing designed for reliable sealing
- Metal to metal seating method that extends the life of sealing
- Outstanding corrosion resistance required at high pressure due to use of STS316
- Straight type body
- Temperature range: -40°C ~ 85°C
- **Water pressure strength: 231 MPa**

Minimum recommended torque by size

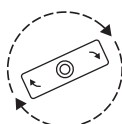
(Unit : kg.f-cm)

	Tube Size	Stem Gland	Tube fastening Gland
Tightening torque value	1/4"	700	280
	3/8"	700	420
	9/16"	1,200	750
	3/4"	3,500	1,250

Handle direction



Counterclockwise
CCW
OPEN



Clockwise
CW
Close

Material

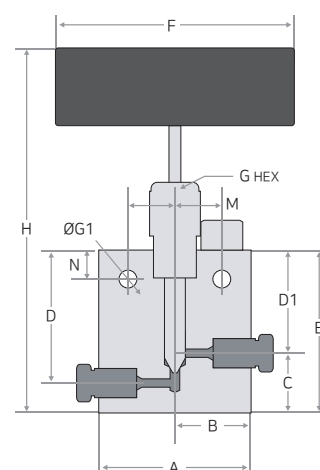
- Body : STS316CW
- Stem : STR660
- O-ring : EPDM
- Packing : TEFLON

Straight Type

																		(Unit : mm)
Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions												Block Thickness
						A	B	C	D	D1	E	F	G(HEX)	G1	H	M	N	
HRS-NV20VS04-S	H70 (70MPa)	H2004	1/4"	0.31	3.2	50	25	20	44.5	34.5	54.5	80	17	6.5	122.15	15.7	9.7	20
HRS-NV20VS06-S		H2006	3/8"	0.75	5.5	50	25	20	44.5	34.5	54.5	80	17	6.5	122.15	15.7	9.7	20
HRS-NV20VS09-S		H2009	9/16"	1.30	7.9	63	31.5	29	63	47	76	100	22	8	150.7	17.5	12.7	30
HRS-NV20VS12-S		H2012	3/4"	2.50	11	76	38	38	81	62	100	253	30	10	177.63	23	15.8	35

G: Mounting hole size using the stem gland
G1: Mounting hole size using the body
H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.
NPT, PT standard and specification production possible
(please contact customer service center)



High Pressure Needle Valve

Manual valve to control flow or open/close the flow



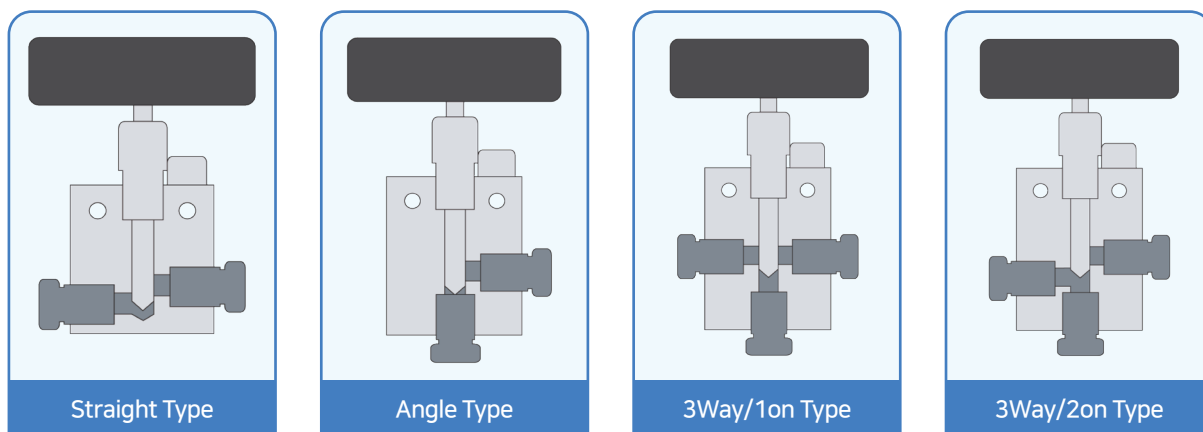
A needle valve is a manual valve that controls the flow rate or opens and closes the flow of fluids or gases. HiFLUX high-pressure needle valves are designed and manufactured considering the characteristics of the fluid or gas, as well as the operating pressure and temperature, boasting excellent safety and corrosion resistance. In particular, the occurrence of galling on the stem has been minimized to extend the product's lifespan.

	Pressure	Tube Size	Cv	Stem Type	Body Type			
					Straight	Angle	3Way/1on	3Way/2on
NVP~: PT Thread NVN~: NPT Thread	15,000 psi	1/8"		Vee	NVPVS02-S / NVNVS02-S	NVPVS02-A / NVNVS02-A		
				Reg	NVPRS02-S / NVNRS02-S	NVPRS02-A / NVNRS02-A		
		1/4"		Vee	NVPVS04-S / NVNVS04-S	NVPVS04-A / NVNVS04-A		
				Reg	NVPRS04-S / NVNRS04-S	NVPRS04-A / NVNRS04-A		
		3/8"		Vee	NVPVS06-S / NVNVS06-S	NVPVS06-A / NVNVS06-A		
				Reg	NVPRS06-S / NVNRS06-S	NVPRS06-A / NVNRS06-A		
	10,000 psi	1/2"		Vee	NVPVS08-S / NVNVS08-S	NVPVS08-A / NVNVS08-A		
				Reg	NVPRS08-S / NVNRS08-S	NVPRS08-A / NVNRS08-A		
		3/4"		Vee	NVPVS12-S / NVNVS12-S	NVPVS12-A / NVNVS12-A		
				Reg	NVPRS12-S / NVNRS12-S	NVPRS12-A / NVNRS12-A		
		1"		Vee	NVPVS16-S / NVNVS16-S	NVPVS16-A / NVNVS16-A		
				Reg	NVPRS16-S / NVNRS16-S	NVPRS16-A / NVNRS16-A		
Low Pressure	15,000 psi	1/8"	0.12	Vee	NV15VS02-S	NV15VS02-A	NV15VS02-O	NV15VS02-T
				Reg	NV15RS02-S	NV15RS02-A	NV15RS02-O	NV15RS02-T
		1/4"	0.20	Vee	NV15VS04-S	NV15VS04-A	NV15VS04-O	NV15VS04-T
				Reg	NV15RS04-S	NV15RS04-A	NV15RS04-O	NV15RS04-T
	10,000 psi	1/2"	1.62	Vee	NV10VS08-S	NV10VS08-A	NV10VS08-O	NV10VS08-T
				Reg	NV10RS08-S	NV10RS08-A	NV10RS08-O	NV10RS08-T
Medium Pressure	20,000 psi	1/4"	0.31	Vee	NV20VS04-S	NV20VS04-A	NV20VS04-O	NV20VS04-T
				Reg	NV20RS04-S	NV20RS04-A	NV20RS04-O	NV20RS04-T
		3/8"	0.75	Vee	NV20VS06-S	NV20VS06-A	NV20VS06-O	NV20VS06-T
				Reg	NV20RS06-S	NV20RS06-A	NV20RS06-O	NV20RS06-T
		9/16"	1.30	Vee	NV20VS09-S	NV20VS09-A	NV20VS09-O	NV20VS09-T
				Reg	NV20RS09-S	NV20RS09-A	NV20RS09-O	NV20RS09-T
		3/4"	2.50	Vee	NV20VS12-S	NV20VS12-A	NV20VS12-O	NV20VS12-T
				Reg	NV20RS12-S	NV20RS12-A	NV20RS12-O	NV20RS12-T
		1"	4.40	Vee	NV20VS16-S	NV20VS16-A	NV20VS16-O	NV20VS16-T
				Reg	NV20RS16-S	NV20RS16-A	NV20RS16-O	NV20RS16-T
High Pressure	30,000 psi	1/8"	0.03	Vee	NV30VS02-S	NV30VS02-A	NV30VS02-O	NV30VS02-T
				Reg	NV30RS02-S	NV30RS02-A	NV30RS02-O	NV30RS02-T
		1/4"	0.12	Vee	NV30VS04-S	NV30VS04-A	NV30VS04-O	NV30VS04-T
				Reg	NV30RS04-S	NV30RS04-A	NV30RS04-O	NV30RS04-T
		3/8"	0.2	Vee	NV30VS06-S	NV30VS06-A	NV30VS06-O	NV30VS06-T
				Reg	NV30RS06-S	NV30RS06-A	NV30RS06-O	NV30RS06-T
	60,000 psi	9/16"	0.33	Vee	NV30VS09-S	NV30VS09-A	NV30VS09-O	NV30VS09-T
				Reg	NV30RS09-S	NV30RS09-A	NV30RS09-O	NV30RS09-T
		1/4"	0.08	Vee	NV60VS04-S	NV60VS04-A	NV60VS04-O	NV60VS04-T
				Reg	NV60RS04-S	NV60RS04-A	NV60RS04-O	NV60RS04-T
		3/8"	0.09	Vee	NV60VS06-S	NV60VS06-A	NV60VS06-O	NV60VS06-T
				Reg	NV60RS06-S	NV60RS06-A	NV60RS06-O	NV60RS06-T
Ultra High Pressure	100,000 psi	1/4"	0.09	Vee	NV100VS04-S	NV100VS04-A	NV100VS04-O	NV100VS04-T
				Reg	NV100RS04-S	NV100RS04-A	NV100RS04-O	NV100RS04-T
		9/16"	0.09	Vee	NV100VS09-S	NV100VS09-A		
	150,000 psi	3/8"	0.06	Vee	NV150VS06-S	NV150VS06-A	NV150VS06-O	NV150VS06-T
				Reg	NV150RS06-S	NV150RS06-A	NV150RS06-O	NV150RS06-T

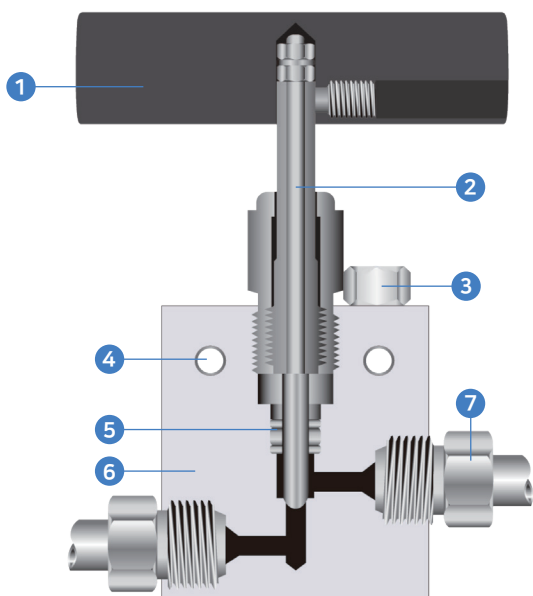
► Features

- 4 types of body (Straight, angle, 3Way/1on, 3Way/2on Type)
- Non-rotating stem prevents galling phenomenon
- Packing designed for reliable sealing
- Metal to Metal Sealing method that extends the life of the seat
- Outstanding corrosion resistance required at high pressure due to use of STS316
- Regulating Stem for flow control and Vee Stem with Shut-off method

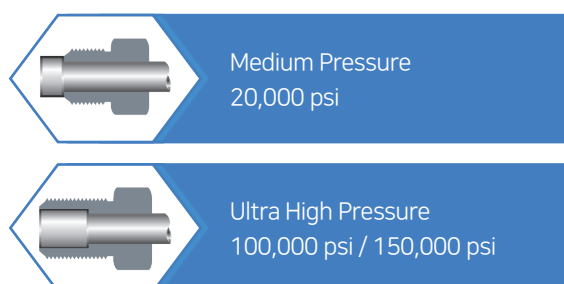
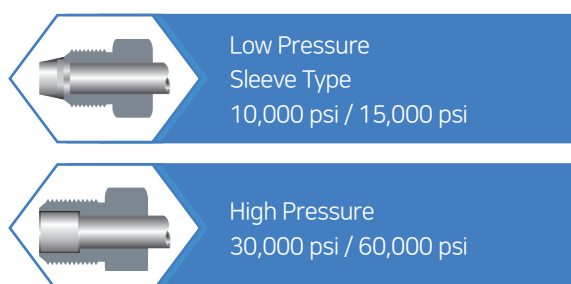
► Body Type



► Exploded View & Connection Components



No	Description
1	Valve handle
2	Stem
3	Anti-loosening device
4	Valve mounting hole
5	Leak-proof packing
6	Valve body
7	Connections



➤ Straight Type

																				(Unit : mm)
Catalog No	Stem	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions													Block Thickness
							A	B	C	D	D1	E	F	G	G1	H	M	N		
NV15VS02-S	Vee Reg	15,000 psi	H1502	1/8"	0.12	1.4	38	19	22	30	23	45	50	13	5	85.6	12.8	8	20	
NV15RS02-S	Reg		H1504	1/4"	0.20	3.2	50	25	20	40	30	50	80	17	6.5	118.2	15.7	9.7	20	
NV15VS04-S	Vee Reg		H1506	3/8"	0.20	3.2	50	25	20.5	40.3	29.5	50	80	17	6.5	119	15.7	9.7	20	
NV15RS04-S	Reg		H1508	1/2"	1.62	8.5	63	31.5	30.5	60.5	44.5	75	100	22	9	151.8	17.5	12.7	25	
NV15VS06-S	Vee Reg	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	30.5	60.5	44.5	75	100	22	9	151.8	17.5	12.7	25	
NV15RS06-S	Reg		H1008	1/2"	1.62	8.5	63	31.5	30.5	60.5	44.5	75	100	22	9	151.8	17.5	12.7	25	
NV20VS08-S	Vee Reg		H2004	1/4"	0.31	3.2	50	25	20	40	30	50	80	17	6.5	118.2	15.7	9.7	20	
NV20RS04-S	Reg		H2006	3/8"	0.75	5.5	50	25	20	40	30	50	80	17	6.5	117.5	15.7	9.7	20	
NV20VS06-S	Vee Reg	20,000 psi	H2006	3/8"	0.75	5.5	50	25	20	40	30	50	80	17	6.5	117.5	15.7	9.7	20	
NV20RS06-S	Reg		H2009	9/16"	1.30	7.9	63	31.5	29	60	44	73	100	22	8	145	17.5	12.7	30	
NV20VS09-S	Vee Reg		H3002	1/8"	0.03	1.6	38	19	22	30	23	45	50	13	5	82.2	12.75	8	20	
NV20RS09-S	Reg		H3004	1/4"	0.12	2.4	50	25	21	43	33	54	80	20	6.5	121.36	17	9.7	25	
NV30VS02-S	Vee Reg	30,000 psi	H3006	3/8"	0.2	3.2	50	25	24	43	33	57	80	20	6.5	124.4	17	9.7	25	
NV30RS02-S	Reg		H3009	9/16"	0.33	3.2	67	33.5	29	43	33	62	80	20	6.5	130.3	17	9.7	38	
NV30VS04-S	Vee Reg		H6004	1/4"	0.08	2	50	25	21	43	33	54	80	20	6.5	121.4	17	9.7	25	
NV30RS04-S	Reg		H6006	3/8"	0.09	2	50	25	24	43	33	57	80	20	6.5	124.9	17	9.7	25	
NV30VS06-S	Vee Reg	60,000 psi	H6009	9/16"	0.14	2	67	33.5	29	43	33	62	80	20	6.5	130	17	9.7	38	
NV30RS06-S	Reg		H10004	1/4"	0.09	2	67	33.5	28.5	46	35	63.5	100	24	6.5	130.8	20	9.7	38	
NV30VS09-S	Vee Reg		H10006	3/8"	0.09	2	85	42.5	30	43	34	64	100	24	6.5	126.3	20	12.7	38	
NV30RS09-S	Reg		H10009	9/16"	0.09	2	85	42.5	30	43	34	64	100	24	6.5	126.3	20	12.7	38	
NV100VS04-S	Vee Reg	100,000 psi	H10004	1/4"	0.09	2	67	33.5	28.5	46	35	63.5	100	24	6.5	130.8	20	9.7	38	
NV100VS06-S	Vee Reg		H10006	3/8"	0.09	2	85	42.5	30	43	34	64	100	24	6.5	126.3	20	12.7	38	
NV100VS09-S	Vee Reg		H10009	9/16"	0.09	2	85	42.5	30	43	34	64	100	24	6.5	126.3	20	12.7	38	
NV150VS06-S	Vee	150,000 psi	H15006	3/8"	0.06	1.6	85	42.5	27	43	35	62	100	24	6.5	130.3	20	12.7	38	

G: Mounting hole size using the stem gland

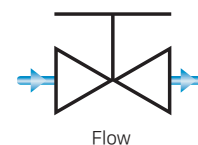
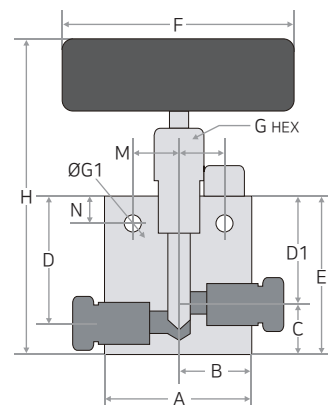
G1: Mounting hole size using the body

H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.

NPT, PT standard and specification production possible.

(please contact customer service center)



➤ Angle Type

																			(Unit : mm)
Catalog No	Stem	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions												Block Thickness
							A	B	C	D	E	F	G	G1	H	M	N		
NV15VS02-A	Vee Reg	15,000 psi	H1502	1/8"	0.12	1.4	38	19	22	23	45	50	13	5	82	12.8	8	20	
NV15RS02-A	Reg		H1504	1/4"	0.2	3.2	50	25	32	30	62	80	17	6	130.2	15.7	9.7	20	
NV15VS04-A	Vee Reg		H1506	3/8"	0.2	3.2	50	25	32	30	62	80	17	6	131	15.7	9.7	20	
NV15RS06-A	Vee Reg																		
NV15RS06-A	Reg																		
NV10VS08-A	Vee Reg	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	41.5	44.5	86	100	22	9	162.8	17.6	12.7	25	
NV10RS08-A	Reg																		
NV20VS04-A	Vee Reg																		
NV20RS04-A	Vee Reg	20,000 psi	H2004	1/4"	0.31	3.2	50	25	32	30	62	80	17	6.5	130.2	15.7	9.7	20	
NV20VS06-A	Vee Reg		H2006	3/8"	0.75	5.5	50	25	32	30	62	80	17	6.5	129.5	15.7	9.7	20	
NV20RS06-A	Vee Reg																		
NV20VS09-A	Vee Reg		H2009	9/16"	1.3	7.9	63	31.5	41.5	44	85.5	100	22	8	156.6	17.5	12.7	30	
NV20RS09-A	Reg																		
NV30VS02-A	Vee Reg	30,000 psi	H3002	1/8"	0.03	1.6	38	19	22	23	45	50	13	5	86	12.75	8	20	
NV30RS02-A	Reg																		
NV30VS04-A	Vee Reg		H3004	1/4"	0.12	2.4	50	25	27.5	33	60.5	80	20	6.5	126.4	17	9.7	25	
NV30RS04-A	Reg																		
NV30VS06-A	Vee Reg		H3006	3/8"	0.2	3.2	50	25	33.5	33	66.5	80	20	6.5	133.9	17	9.7	25	
NV30RS06-A	Reg																		
NV30VS09-A	Vee Reg	60,000 psi	H3009	9/16"	0.33	3.2	67	33.5	34	33	67	80	20	6.5	133.8	17	9.7	38	
NV30RS09-A	Reg																		
NV60VS04-A	Vee Reg		H6004	1/4"	0.08	2	50	25	27.5	33	60.5	80	20	6.5	127.9	17	9.7	25	
NV60RS04-A	Reg																		
NV60VS06-A	Vee Reg		H6006	3/8"	0.09	2	50	25	33.5	33	66.5	80	20	6.5	134.4	17	9.7	25	
NV60RS06-A	Reg																		
NV60VS09-A	Vee Reg	100,000 psi	H6009	9/16"	0.14	2	67	33.5	34	33	67	80	20	6.5	134.4	17	9.7	38	
NV60RS09-A	Reg																		
NV100VS04-A	Vee Reg		H10004	1/4"	0.09	2	67	33.5	28.5	35	63.5	100	24	6.5	130.8	20	9.7	38	
NV100RS04-A	Reg		H10006	3/8"	0.09	2	76.2	38.1	42.2	34	76.2	100	24	6.5	143.5	20	9.7	38	
NV100VS09-A	Vee Reg		H10009	9/16"	0.09	2	76.2	38.1	42.2	34	76.2	100	24	6.5	143.5	20	9.7	38	
NV150VS06-A	Vee	150,000 psi	H15006	3/8"	0.06	1.6	62	42.5	50	35	85	100	24	6.5	152.3	19	12.7	38	

G: Mounting hole size using the stem gland

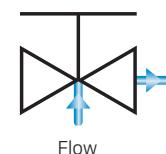
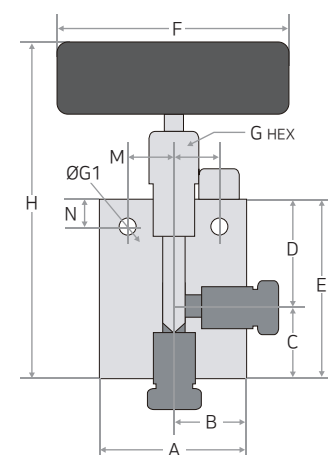
G1: Mounting hole size using the body

H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.

NPT, PT standard and specification production possible.

(please contact customer service center)



➤ 3way/1on Type

(Unit : mm)

Catalog No	Stem	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions											Block Thickness
							A	B	C	D	E	F	G	G1	H	M	N	
NV15VS02-O	Vee	15,000 psi	H1502	1/8"	0.12	1.4	38	19	22	23	45	50	13	5	82	12.8	8	20
NV15RS02-O	Reg		H1504	1/4"	0.2	3.2	50	25	32	30	62	80	17	6.5	130.2	15.6	9.7	20
NV15VS04-O	Vee		H1506	3/8"	0.2	3.2	50	25	32	30	62	80	17	6.5	128.9	15.7	9.7	20
NV15RS04-O	Reg	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	41.5	44.5	86	100	24	9	162.8	17.5	12.7	25
NV15VS06-O	Vee		H2004	1/4"	0.31	3.2	50	25	32	30	62	80	17	6.5	130.2	15.7	9.7	20
NV10VS08-O	Vee		H2006	3/8"	0.75	5.5	50	25	32	30	62	80	17	6.5	128.9	15.7	9.7	20
NV10RS08-O	Reg	20,000 psi	H2009	9/16"	1.3	7.9	63	31.5	42	44	86	100	22	8	156.1	17.5	12.7	30
NV20VS04-O	Vee		H3002	1/8"	0.03	1.6	38	19	22	23	45	50	13	5	82.2	12.8	8	20
NV20RS04-O	Reg		H3004	1/4"	0.12	2.4	50	25	27.5	33	60.5	80	20	6.5	126.4	17	9.7	25
NV20VS06-O	Vee	30,000 psi	H3006	3/8"	0.2	3.2	50	25	34	33	66.5	80	20	6.5	126.4	17	9.7	25
NV20RS06-O	Reg		H3009	9/16"	0.33	3.2	67	33.5	38.5	33	71.5	80	20	6.5	130.3	17	9.7	38
NV20VS09-O	Vee		H6004	1/4"	0.08	2	50	25	27.5	33	60.5	80	20	6.5	127.9	17	9.7	25
NV20RS09-O	Reg	60,000 psi	H6006	3/8"	0.09	2	50	25	34	33	67	80	20	6.5	135.2	17	9.7	25
NV30VS02-O	Vee		H6009	9/16"	0.14	2	67	33.5	38.5	33	71.5	80	20	6.5	139.7	17	9.7	38
NV30RS02-O	Reg	100,000 psi	H10004	1/4"	0.09	1.59	67	33.5	32	30	62	100	24	6.5	130.2	20	9.7	38
NV30VS04-O	Vee		H15006	3/8"	0.06	1.59	90	45	32	30	62	100	24	7	130.2	19	12.7	38
NV30RS04-O	Reg																	
NV30VS06-O	Vee	150,000 psi																
NV30RS06-O	Reg																	
NV30VS09-O	Vee																	
NV30RS09-O	Reg																	

G: Mounting hole size using the stem gland

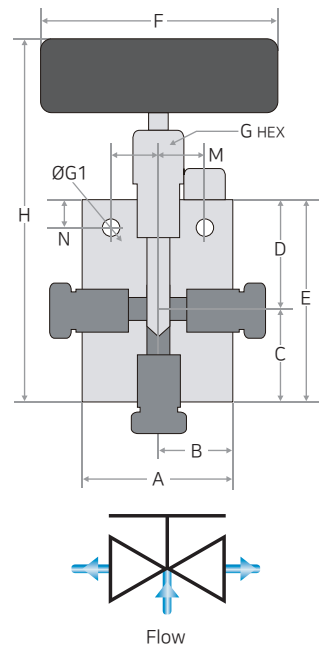
G1: Mounting hole size using the body

H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.

NPT, PT standard and specification production possible.

(please contact customer service center)



➤ 3way/2on Type

(Unit : mm)																				
Catalog No	Stem	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions												Block Thickness	
							A	B	C	D	D1	E	F	G	G1	H	M	N		
NV15VS02-T	Vee	15,000 psi	H1502	1/8"	0.12	1.4	38	19	22	30	23	45	50	13	5	82	12.8	8	20	
NV15RS02-T	Reg		H1504	1/4"	0.2	3.2	50	25	36.5	40	30	66.5	80	17	6.5	134.8	15.7	9.7	20	
NV15VS04-T	Vee		H1506	3/8"	0.2	3.2	50	25	36.5	41	30	66.5	80	17	6.5	133.3	15.7	9.7	20	
NV15RS04-T	Reg																			
NV15VS06-T	Vee	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	47.5	60.5	44.5	92	100	24	9	168.8	17.5	12.7	25	
NV15RS06-T	Reg																			
NV10VS08-T	Vee																			
NV10RS08-T	Reg																			
NV20VS04-T	Vee	20,000 psi	H2004	1/4"	0.31	3.2	50	25	36.5	40	30	66.5	80	17	6.5	134.7	15.7	9.7	20	
NV20RS04-T	Reg		H2006	3/8"	0.75	5.5	50	25	36.5	40	30	66.5	80	17	6.5	133.3	15.7	9.7	20	
NV20VS06-T	Vee																			
NV20RS06-T	Reg																			
NV20VS09-T	Vee	30,000 psi	H2009	9/16"	1.3	7.9	63	31.5	48	60	44	92	100	22	8	159.9	17.5	12.7	30	
NV20RS09-T	Reg																			
NV30VS02-T	Vee		H3002	1/8"	0.03	1.6	38	19	22	30	23	45	50	13	5	87.2	12.8	8	20	
NV30RS02-T	Reg		H3004	1/4"	0.12	2.4	50	25	27.2	43	33	60.5	80	20	6.5	126.4	17.2	9.7	25	
NV30VS04-T	Vee	60,000 psi	H3006	3/8"	0.2	3.2	50	25	38.5	43	33	71.5	80	20	6.5	138.3	17	9.7	25	
NV30RS04-T	Reg		H3009	9/16"	0.33	3.2	67	33.5	44	43	33	77	80	20	6.5	145.3	17	9.7	38	
NV30VS06-T	Vee		H6004	1/4"	0.08	2	50	25	27.2	43	33	60.5	80	20	6.5	127.9	17	9.7	25	
NV30RS06-T	Reg		H6006	3/8"	0.09	2	50	25	38.5	43	33	71.5	80	20	6.5	138.9	17	9.7	25	
NV30VS09-T	Vee	100,000 psi	H6009	9/16"	0.14	2	67	33.5	44	43	33	77	80	20	6.5	144.4	17	9.7	38	
NV30RS09-T	Reg																			
NV100VS04-T	Vee		150,000 psi	H10004	1/4"	0.09	1.59	67	33.5	36.5	41	30	66.5	100	24	6.5	134.7	20	9.7	38
NV150VS06-T	Vee			H15006	3/8"	0.06	1.59	90	45	36.5	41	30	66.5	100	24	7	134.7	19	12.7	38

G: Mounting hole size using the stem gland

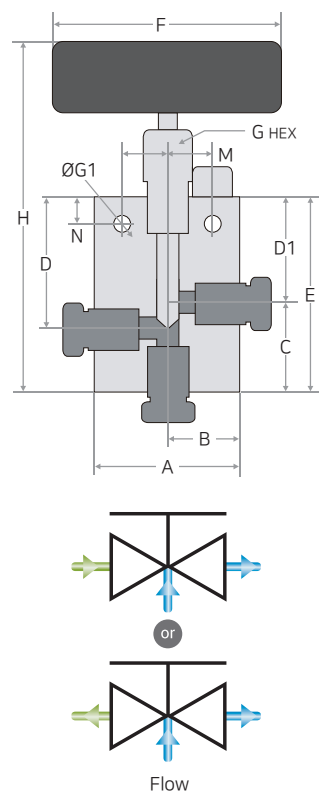
G1: Mounting hole size using the body

H: Height when the valve is completely closed

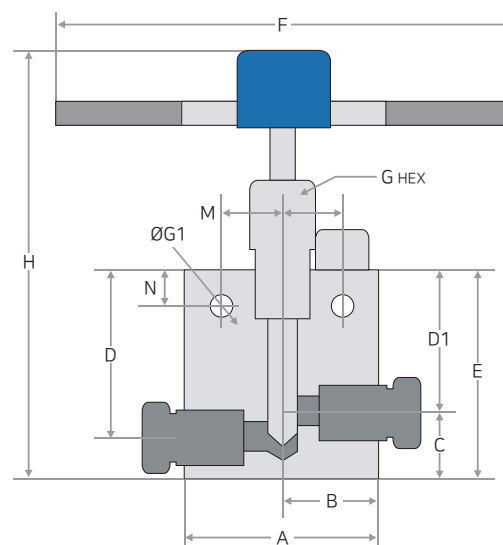
All dimensions are for reference only and may differ from the actual size.

NPT, PT standard and specification production possible.

(please contact customer service center)



➤ Needle Valve - 3/4 · 1 inch



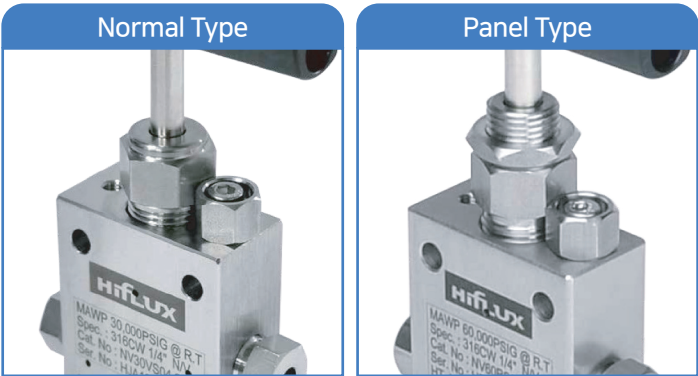
(Unit : mm)

Catalog No	Stem	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions												Block Thickness
							A	B	C	D	D1	E	F	G	G1	H	M	N	
NV20VS12-S	Vee	20,000 psi	H2012	3/4"	2.50	11	76	38	38	76	57	95	253	30	10	177.8	23	15.8	35
NV20RS12-S	Reg																		
NV20VS16-S	Vee		H2016	1"	4.40	14.3	105	52.5	49	96	71	120	260	41	14	217.8	31.75	28.5	45
NV20RS16-S	Reg																		

G: Mounting hole size using the stem gland
G1: Mounting hole size using the body
H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.
NPT, PT standard and specification production possible.
(please contact customer service center)

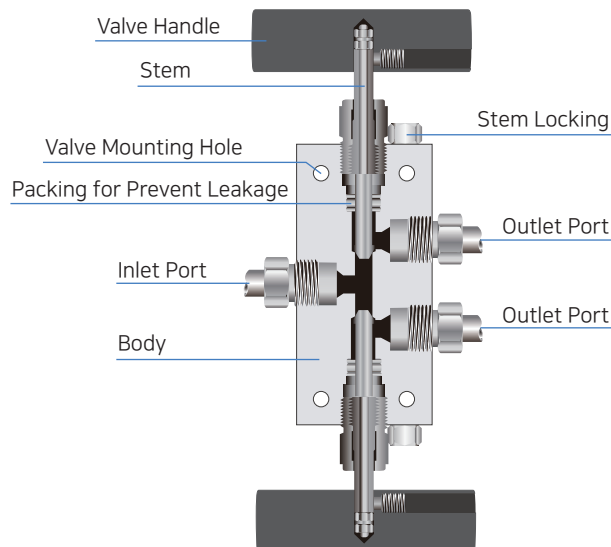
➤ Needle Valve - Panel Type



Panel type can be applied only 1/4, 3/8, 9/16" inch
Recommend thickness for panel : 2~5mm.

3way/2stem Needle Valve

A valve that allows two outlets to be controlled by one inlet



The 3way 2stem needle valve has a slightly modified structure from the basic needle valve, with one inlet port and two outlet ports, and each outlet port can be turned on/off. It is mainly installed on two lines and uses one line, and when A/S is required, it is a product that allows continuous use of the equipment by changing it to a by-pass line.

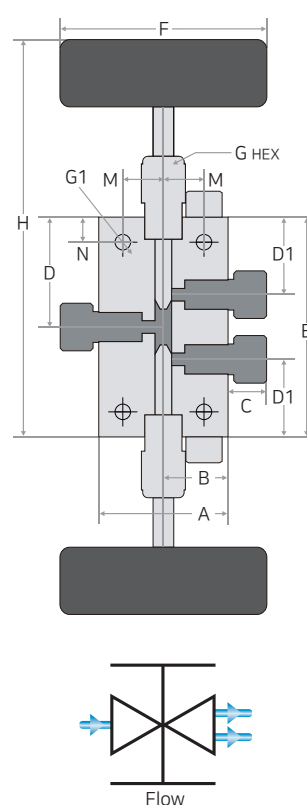
Features

- Prevents galling phenomenon with non-rotating stem
- Packing designed for reliable sealing
- Metal to Metal Sealing method that extends the life of the seat
- Outstanding corrosion resistance required at high pressure due to use of STS316
- Regulating Stem & Vee Stem with flow control and Shut-off method
- Control two outlets with one inlet

(Unit : mm)																			
Catalog No	Stem	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions													Block Thickness
						A	B	C	D	D1	E	F	G	G1	H	M	N		
NV15VS02-D	Vee	15,000 psi	H1502	1/8"	2.39	38	19	11.7	28.5	20.5	57	50	13	5	94	12.8	8	20	
NV15RS02-D	Reg																		
NV15VS04-D	Vee		H1504	1/4"	3.18	51	25.5	12	43	27.7	86	80	17	6	154.2	15.6	9.7	20	
NV15RS04-D	Reg																		
NV15VS06-D	Vee		H1506	3/8"	3.18	51	25.5	14.3	43	27.7	86	80	17	6	152.9	15.7	9.7	20	
NV15RS06-D	Reg	10,000 psi	H1008	1/2"	8.5	63	31.5	19.6	65	44.5	130	100	22	9	200.51	17.5	12.7	25	
NV10VS08-D	Reg																		
NV20VS04-D	Vee		H2004	1/4"	3.2	50	25	13.8	42.5	30	85	80	17	6	153.2	15.7	9.7	20	
NV20RS04-D	Reg																		
NV20VS06-D	Vee		H2006	3/8"	5.5	50	25	14.2	42.5	30	85	80	17	6	151.9	15.7	9.7	20	
NV20RS06-D	Reg	20,000 psi	H2009	9/16"	7.9	64	32	16	65	44.5	130	80	22	8	200.1	15.7	12.7	25	
NV20VS09-D	Vee																		
NV20RS09-D	Reg		H2009	9/16"	7.9	64	32	16	65	44.5	130	80	22	8	200.1	15.7	12.7	25	
NV20VS12-D	Vee																		
NV20RS12-D	Reg		H2012	3/4"	11.1	76	38	18	82.5	57	165	260	30	10	187.8	46	15.8	35	
NV20VS16-D	Vee	20,000 psi	H2016	1"	14.3	105	52.5	22.1	95.5	71	191	260	41	14	290.8	63.5	28.5	45	
NV20RS16-D	Reg																		
NV30VS04-D	Vee		H3004	1/4"	2.4	51	25.5	9	43.5	33	87	80	20	6	147.9	17	9.7	25	
NV30RS04-D	Reg																		
NV30VS06-D	Vee		H3006	3/8"	3.2	51	25.5	14	47.5	33	95	80	20	6	153.6	17	9.7	25	
NV30RS06-D	Reg	30,000 psi	H3009	9/16"	3.2	67	33.5	21	52.5	33	105	80	20	6	173.3	17	9.7	38	
NV30VS09-D	Vee																		
NV30RS09-D	Reg																		
NV60VS04-D	Vee		H6004	1/4"	2	51	25.5	12.8	43.5	33	87	80	20	6	154.4	17	9.7	25	
NV60RS04-D	Reg																		
NV60VS06-D	Vee	60,000 psi	H6006	3/8"	2	51	25.5	18.6	47.5	33	95	80	20	6	162.9	17	9.7	25	
NV60RS06-D	Reg																		
NV60VS09-D	Vee		H6009	9/16"	2	67	33.5	21.7	52.5	33	105	80	20	6	170.4	17	9.7	38	
NV60RS09-D	Reg																		

G: Mounting hole size using the stem gland
G1: Mounting hole size using the body
H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.
NPT, PT standard and specification production possible.
(please contact customer service center)



High Pressure Check Valve & Line Filter

A valve that prevents the backflow of gas or liquid



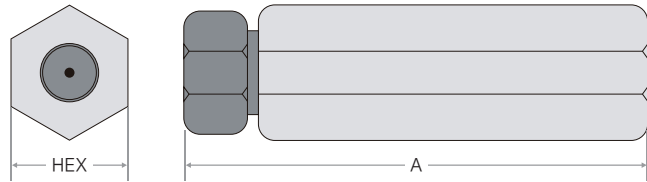
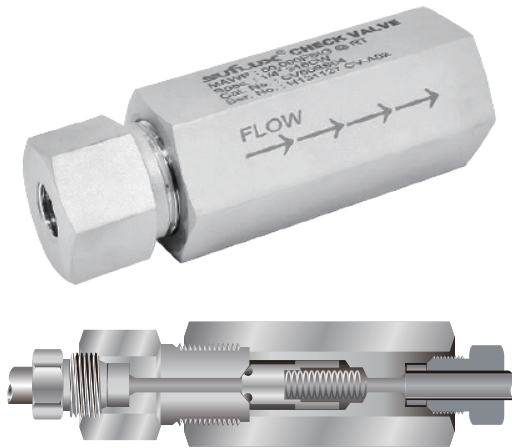
A check valve is a valve that prevents the backflow of fluid, and is manufactured to block the flow in one direction and allow the flow in the opposite direction to proceed freely. The HIFLUX check valve uses a ball or O-ring in the sealing area to reliably prevent the backflow, and can be used for both gas and liquid. It is classified by pressure, port size, and type, so you can use it according to the specifications you want.

Features

- 2 types of sealing (O-Ring Type, Ball Type)
- 2~90 μ m 2 types of sealing type filter element (Cup Type)
- Easy O-Ring and Ball replacement
- Stainless Steel 316 cold material used
- Cone and Thread Connection to prevent gas liquid leaking.
- Valve that prevents backflow of gas and liquid and facilitates one-way transport

Pressure	Tube Size	Check Valve		Line Filter
		Sealing Type		Element Type
		O-Ring	Ball	Cup
15,000 psi	1/8"	CV15OS02	CV15BS02	FL15CS02
	1/4"	CV15OS04	CV15BS04	FL15CS04
	3/8"	CV15OS06	CV15BS06	FL15CS06
10,000 psi	1/2"	CV10OS08	CV10BS08	FL10CS08
20,000 psi	1/4"	CV20OS04	CV20BS04	FL20CS04
	3/8"	CV20OS06	CV20BS06	FL20CS06
	9/16"	CV20OS09	CV20BS09	FL20CS09
	3/4"	CV20OS12	CV20BS12	FL20CS12
	1"	CV20OS16	CV20BS16	FL20CS16
30,000 psi	1/8"	CV30OS02	CV30BS02	FL30CS02
	1"	CV30OS16	CV30BS16	FL30CS16
60,000 psi	1/4"	CV60OS04	CV60BS04	FL60CS04
	3/8"	CV60OS06	CV60BS06	FL60CS06
	9/16"	CV60OS09	CV60BS09	FL60CS09
100,000 psi	1/4"		CV100BS04	
	3/8"		CV100BS06	

➤ [O-Ring Type]

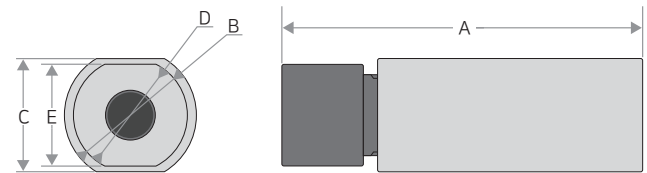
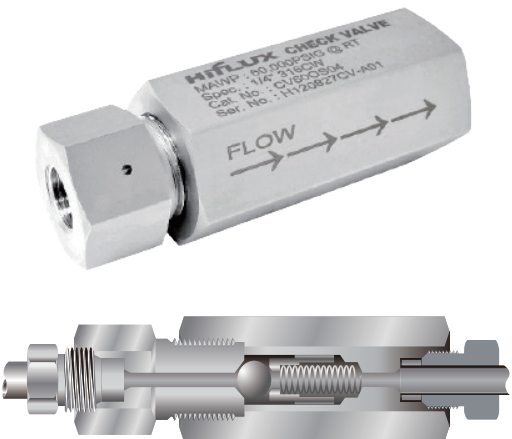


< 15,000 ~ 60,000 psi >

(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions	
					A	HEX
CV150S02	15,000 psi	H1502	1/8"	1.4	68	22
CV15BS02		H1504	1/4"	3.2	81	25.4
CV150S04			3/8"	5	93	36
CV15BS04		H1506	1/2"	5	108	41
CV150S06			3/4"	11.1	131	36
CV100S08	10,000 psi	H1008	1/2"	5	108	41
CV10BS08		H2004	1/4"	2.8	77	25.4
CV200S04			3/8"	5.2	91	25.4
CV20BS04		H2006	9/16"	5	107	35
CV200S06			3/4"	11.1	131	36
CV20BS06	20,000 psi	H2009	9/16"	5	107	35
CV200S09		H2012	3/4"	11.1	131	36
CV20BS09			1"	7	167	55
CV200S12		H2016	1"	7	167	55
CV20BS12			1"	7	167	55
CV300S02	30,000 psi	H3002	1/8"	1.2	69	20.6
CV30BS02		H3016	1"			
CV300S16			1"			
CV30BS16		H6004	1/4"	2.4	85	32
CV600S04			3/8"	3.2	102.6	36
CV60BS04	60,000 psi	H6006	3/8"	3.2	102.6	36
CV60S06		H6009	9/16"	4.8	118	38
CV60BS06			9/16"	4.8	118	38
CV600S09		H6009	9/16"	4.8	118	38
CV60BS09			9/16"	4.8	118	38

➤ [Ball Type]



< 100,000 psi >

(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions				
					A	B	C	D	E
CV100BS04	100,000 psi	H10004	1/4"	2.4	103.1	Ø42	32	Ø36	32
CV100BS06		H10006	3/8"	2.4	114.5	Ø42	32	Ø36	32

※ 100,000 psi check valve does not have O-ring type.

➤ [Filter Element (Cup Type)]



Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions	
					A	HEX
FL15CS02	15,000 psi	H1502	1/8"	1.4	68	22
FL15CS04		H1504	1/4"	3.2	81	25.4
FL15CS06		H1506	3/8"	5	93	36
FL10CS08	10,000 psi	H1008	1/2"	5	108	41
FL20CS04	20,000 psi	H2004	1/4"	2.8	77	25.4
FL20CS06		H2006	3/8"	5.2	91	25.4
FL20CS09		H2009	9/16"	7.9	107	35
FL20CS12		H2012	3/4"	11.1	131	36
FL20CS16		H2016	1"	7	167	55
FL30CS02	30,000 psi	H3002	1/8"	1.2	69	20.6
FL30CS16		H3016	1"			
FL60CS04	60,000 psi	H6004	1/4"	2.4	85	32
FL60CS06		H6006	3/8"	3.2	102.6	36
FL60CS09		H6009	9/16"	4.8	118	38

All dimensions are for reference only and may differ from the actual size.
NPT, PT standard and specification production possible.
(please contact customer service center)

High Pressure Fitting

High pressure fittings and dedicated accessories for high pressure connections with STS316 material and simple structural design



Features

- 3 types of body (Elbow, Tee, Cross Type)
- Excellent corrosion resistance required at high pressure due to use of cold-formed stainless steel 316 material
- Leak-resistant Cone and Thread Connection
- Operating temperature range: -423°F(-252°C) to 1200°F(649°C)
- Used for various pressures (up to 150,000 psi) as fittings in chemical, refining, research, oil, and gas industries

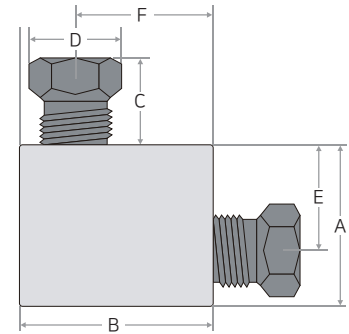
Pressure Rating	Tube Size	Fitting			Fitting Accessory		
		Elbow	Tee	Cross	Gland	Sleeve	Collar
15,000 psi	1/8"	FT15ES02	FT15TS02	FT15CS02	FA15GS02	FA15SS02	
	1/4"	FT15ES04	FT15TS04	FT15CS04	FA15GS04	FA15SS04	
	3/8"	FT15ES06	FT15TS06	FT15CS06	FA15GS06	FA15SS06	
10,000 psi	1/2"	FT10ES08	FT10TS08	FT10CS08	FA10GS08	FA10SS08	
20,000 psi	1/4"	FT20ES04	FT20TS04	FT20CS04	FA20GS04		FA20RS04
	3/8"	FT20ES06	FT20TS06	FT20CS06	FA20GS06		FA20RS06
	9/16"	FT20ES09	FT20TS09	FT20CS09	FA20GS09		FA20RS09
	3/4"	FT20ES12	FT20TS12	FT20CS12	FA20GS12		FA20RS12
	1"	FT20ES16	FT20TS16	FT20CS16	FA20GS16		FA20RS16
30,000 psi	1/8"	FT30ES02	FT30TS02	FT30CS02	FA30GS02		FA30RS02
	1"	FT30ES16	FT30TS16	FT30CS16	FA30GS16		FA30RS16
60,000 psi	1/4"	FT60ES04	FT60TS04	FT60CS04	FA60GS04		FA60RS04
	3/8"	FT60ES06	FT60TS06	FT60CS06	FA60GS06		FA60RS06
	9/16"	FT60ES09	FT60TS09	FT60CS09	FA60GS09		FA60RS09
100,000 psi	1/4"	FT100ES04	FT100TS04	FT100CS04	FA100GS04		FA100RS04
	3/8"	FT100ES06	FT100TS06	FT100CS06	FA100GS06		FA100RS06
	9/16"	FT100ES09	FT100TS09	FT100CS09	FA100GS09		FA100RS09
150,000 psi	3/8"	FT150ES06	FT150TS06	FT150CS06	FA150GS06		FA150RS06

Anti-Vibration	Tube Size	Elbow	Tee	Cross	Gland	Collar	Collet
20,000 psi	1/4"	FT20ES04-AV	FT20TS04-AV	FT20CS04-AV	FA20GS04-AV	FA20RS04-AV	FA20TS04-AV
	3/8"	FT20ES06-AV	FT20TS06-AV	FT20CS06-AV	FA20GS06-AV	FA20RS06-AV	FA20TS06-AV
	9/16"	FT20ES09-AV	FT20TS09-AV	FT20CS09-AV	FA20GS09-AV	FA20RS09-AV	FA20TS09-AV
	3/4"	FT20ES12-AV	FT20TS12-AV	FT20CS12-AV	FA20GS12-AV	FA20RS12-AV	FA20TS12-AV
	1"	FT20ES16-AV	FT20TS16-AV	FT20CS16-AV	FA20GS16-AV	FA20RS16-AV	FA20TS16-AV
60,000 psi	1/4"	FT60ES04-AV	FT60TS04-AV	FT60CS04-AV	FA60GS04-AV	FA60RS04-AV	FA60TS04-AV
	3/8"	FT60ES06-AV	FT60TS06-AV	FT60CS06-AV	FA60GS06-AV	FA60RS06-AV	FA60TS06-AV
	9/16"	FT60ES09-AV	FT60TS09-AV	FT60CS09-AV	FA60GS09-AV	FA60RS09-AV	FA60TS09-AV

Elbow Type

(Unit : mm)

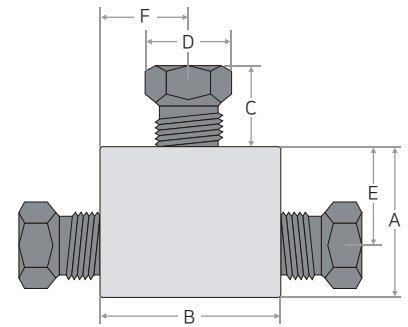
Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions						Block Thickness
					A	B	C	D(HEX)	E	F	
FT15ES02	15,000	H1502	1/8"	1.4	25	25	12.2	12	19	18	15.5
FT15ES04		H1504	1/4"	3.2	35	35	12.2	16	25	25	20
FT15ES06		H1506	3/8"	5	35	35	14	17	25	25	20
FT10ES08	10,000	H1008	1/2"	9.5	45	45	16.3	22	31.5	31.5	25
FT20ES04		H2004	1/4"	2.8	28.5	28.5	13.8	12	19	19	16
FT20ES06		H2006	3/8"	5.2	35	35	14.2	16	25	25	20
FT20ES09	20,000	H2009	9/16"	7.9	45	45	19.3	22	31.5	31.5	25
FT20ES12		H2012	3/4"	11.1	57	57	19.3	30	38	38	35
FT20ES16		H2016	1"	17.5	76	76	21.7	36	52.5	52.5	45
FT30ES02	30,000	H3002	1/8"	1.2	28	28	8.7	13	19	19	20
FT30ES16		H3016	1"	11.1	76	76	21.7	36	52.5	52.5	45
FT60ES04	60,000	H6004	1/4"	2.4	35	35	12.83	16	22.5	22.5	25
FT60ES06		H6006	3/8"	3.2	38	45	18.6	20.6	25	31.5	25
FT60ES09		H6009	9/16"	4.8	47.5	67	21.66	30	28.5	48	38
FT100ES04	100,000	H10004	1/4"	2.4	44.5	44.5	14.4	16	31.5	31.5	25
FT100ES06		H10006	3/8"	2.4	54	76.2	18.11	20.6	38.1	38.1	35
FT100ES09		H10009	9/16"	4.8	47.5	67	21.66	30	28.5	48	38
FT150ES06	150,000	H15006	3/8"	2.4	60	60	18.3	20.6	45	45	38



Tee Type

(Unit : mm)

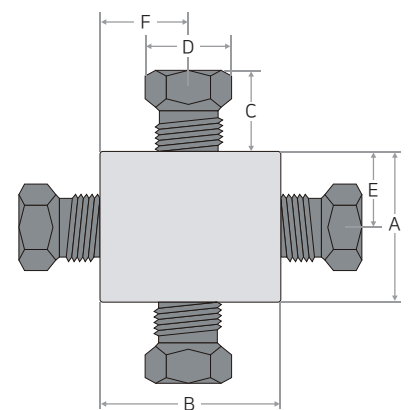
Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions						Block Thickness
					A	B	C	D(HEX)	E	F	
FT15TS02	15,000	H1502	1/8"	1.4	25	38	12.2	12	19	19	15.5
FT15TS04		H1504	1/4"	3.2	35	50	12.2	16	25	25	20
FT15TS06		H1506	3/8"	5	35	50	14	17	25	25	20
FT10TS08	10,000	H1008	1/2"	9.5	45	63	16.3	22	31.5	31.5	25
FT20TS04		H2004	1/4"	2.8	28.5	38	13.8	12	19	19	16
FT20TS06		H2006	3/8"	5.2	35	50	14.2	16	25	25	20
FT20TS09	20,000	H2009	9/16"	7.9	45	63	19.3	22	31.5	31.5	25
FT20TS12		H2012	3/4"	11.1	57	76	19.3	30	38	38	35
FT20TS16		H2016	1"	17.5	76	105	21.7	36	52.5	52.5	45
FT30TS02	30,000	H3002	1/8"	1.2	38	28	8.7	13	19	19	20
FT30TS16		H3016	1"	11.1	76	105	21.7	36	52.5	52.5	45
FT60TS04	60,000	H6004	1/4"	2.4	35	50	12.83	16	22.5	25	25
FT60TS06		H6006	3/8"	3.2	40	50	18.6	20.6	27	25	25
FT60TS09		H6009	9/16"	4.8	54	67	21.66	30	35	33.25	38
FT100TS04	100,000	H10004	1/4"	2.4	63	44.5	14.4	16	31.5	31.5	25
FT100TS06		H10006	3/8"	2.4	54	76.2	18.11	20.6	38.1	38.1	35
FT100TS09		H10009	9/16"	4.8	54	67	21.66	30	35	33.5	38
FT150TS06	150,000	H15006	3/8"	2.4	60	90	18.3	20.6	45	45	38



Cross Type

(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions						Block Thickness
					A	B	C	D(HEX)	E	F	
FT15CS02	15,000	H1502	1/8"	1.4	38	38	12.2	12	19	19	15.5
FT15CS04		H1504	1/4"	3.2	50	50	12.2	16	25	25	20
FT15CS06		H1506	3/8"	5	50	50	14	17	25	25	20
FT10CS08	10,000	H1008	1/2"	9.5	63	63	16.3	22	31.5	31.5	25
FT20CS04		H2004	1/4"	2.8	38	38	13.8	12	19	19	16
FT20CS06		H2006	3/8"	5.2	50	50	14.2	16	25	25	20
FT20CS09	20,000	H2009	9/16"	7.9	63	63	19.3	22	31.5	31.5	25
FT20CS12		H2012	3/4"	11.1	76	76	19.3	30	38	38	35
FT20ES16		H2016	1"	17.5	105	105	21.7	36	52.5	52.5	45
FT30CS02	30,000	H3002	1/8"	1.2	38	38	8.7	13	19	19	20
FT30CS16		H3016	1"	11.1	105	105	21.7	36	52.5	52.5	45
FT60CS04	60,000	H6004	1/4"	2.4	38	50	12.83	16	19	25	25
FT60CS06		H6006	3/8"	3.2	50	54	18.6	20.6	25	27	25
FT60CS09		H6009	9/16"	4.8	67	70	21.66	30	33.25	35	38
FT100CS04	100,000	H10004	1/4"	2.4	63	63	14.4	16	31.5	31.5	25
FT100CS06		H10006	3/8"	2.4	76.2	76.2	18.11	20.6	38.1	38.1	35
FT100CS09		H10009	9/16"	4.8	67	70	21.66	30	33.5	35	38
FT150CS06	150,000	H15006	3/8"	2.4	90	90	18.3	20.6	45	45	38

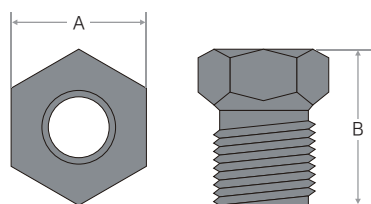


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NPT, PT standard and specification production possible.
(please contact customer service center)

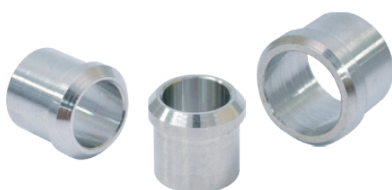
High Pressure Fitting Accessory

High pressure fittings and dedicated accessories for high pressure connections with STS316 material and simple structural design

➤ Gland



➤ Sleeve



➤ Collar



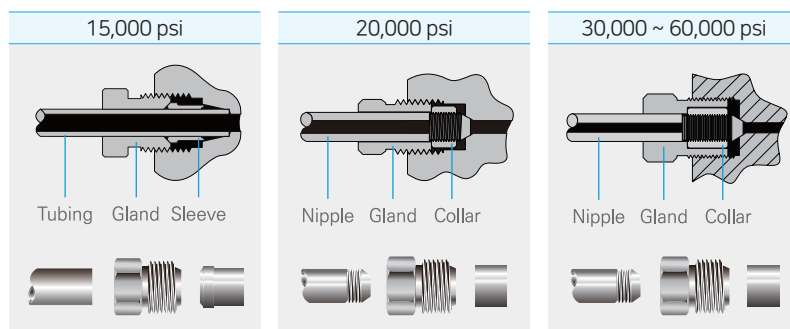
➤ Collet



(Unit : mm)

Catalog No				Pressure Rating	Port Type	Tube Size	Dimensions	
Gland	Sleeve	Collar	Plug				A(HEX)	B
FA15GS02	FA15SS02		FA15PS02	15,000	H1502	1/8"	12	14.5
FA15GS04	FA15SS04		FA15PS04		H1504	1/4"	16	16
FA15GS06	FA15SS06		FA15PS06		H1506	3/8"	17	19
FA10GS08	FA10SS08		FA10PS08	10,000	H1008	1/2"	22	21
FA20GS04		FA20RS04	FA20PS04	20,000	H2004	1/4"	12	16
FA20GS06		FA20RS06	FA20PS06		H2006	3/8"	16	20
FA20GS09		FA20RS09	FA20PS09		H2009	9/16"	22	25
FA20GS12		FA20RS12	FA20PS12		H2012	3/4"	30	29
FA20GS16		FA20RS16	FA20PS16		H2016	1"	36	38
FA30GS02		FA30RS02	FA30PS02	30,000	H3002	1/8"	13	18
FA30GS16		FA30RS16	FA30PS16		H3016	1"	36	38
FA60GS04		FA60RS04	FA60PS04	60,000	H6004	1/4"	16	21
FA60GS06		FA60RS06	FA60PS06		H6006	3/8"	20.6	28
FA60GS09		FA60RS09	FA60PS09		H6009	9/16"	30	38
FA100GS04		FA100RS04	FA100PS04	100,000	H10004	1/4"	16	28
FA100GS06		FA100RS06	FA100PS06		H10006	3/8"	20.6	30
FA100GS09		FA100RS09	FA100PS09		H10009	9/16"	30	38
FA150GS06		FA150RS06	FA150PS06	150,000	H15006	3/8"	20.6	30

All dimensions are for reference only and may differ from actual size.

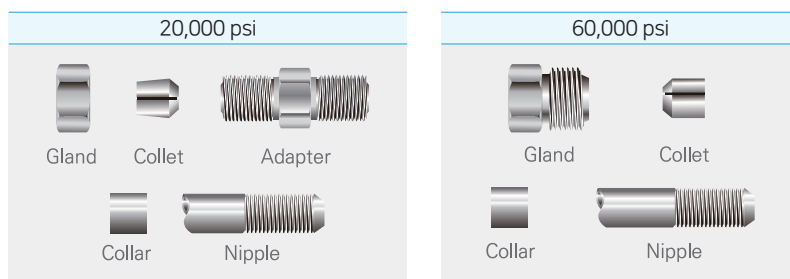


Anti-Vibration Type

(Unit : mm)

Catalog No					Pressure Rating	Port Type	Tube Size
Anti - Set	Gland	Collar	Collet	Adapter			
FA20AS04-AV	FA20GS04-AV	FA20RS04	FA20TS04	FA20DS04	20,000	H2004	1/4"
FA20AS06-AV	FA20GS06-AV	FA20RS06	FA20TS06	FA20DS06		H2006	3/8"
FA20AS09-AV	FA20GS09-AV	FA20RS09	FA20TS09	FA20DS09		H2009	9/16"
FA20AS12-AV	FA20GS12-AV	FA20RS12	FA20TS12	FA20DS12		H2012	3/4"
FA20AS16-AV	FA20GS16-AV	FA20RS16	FA20TS16	FA20DS16	60,000	H2016	1"
FA60AS04-AV	FA60GS04-AV	FA60RS04	FA60TS04			H6004	1/4"
FA60AS06-AV	FA60GS06-AV	FA60RS06	FA60TS06			H6006	3/8"
FA60AS09-AV	FA60GS09-AV	FA60RS09	FA60TS09			H6009	9/16"

All dimensions are for reference only and may differ from actual size.



Tube Cap

Tube Cap is a product used for pressure testing of tubes and finishing of pipes



(Unit : mm)

Features

- Tube Size: 1/4", 3/8", 9/16"
- Packing designed for reliable sealing
- STS 316
- Simple construction
- Easy closing method

Catalog No	Pressure Rating	Tube Size	Dimensions	
			A	B
FATC15S02	15,000 psi	1/8"	12.7	16
FATC15S04		1/4"	16	25.5
FATC15S06		3/8"	20	28
FATC10S08	10,000 psi	1/2"	25.4	32
FATC20S04		1/4"	16	21
FATC20S06		3/8"	19	30
FATC20S09	20,000 psi	9/16"	25.4	35
FATC20S12		3/4"	36	44.5
FATC20S16		1"	46	57.5
FATC20S04	60,000 psi	1/4"	20	19
FATC20S06		3/8"	25.4	27
FATC20S09		9/16"	36	40

All dimensions are for reference only and may differ from actual size.

Oil Based Thread Lubricant

Special grease for long-term lubrication, blended with oil-based PTFE

Blue lube is a special grease mixed with oil-based PTFE as a thread lubricant. It is used in various ways such as stainless steel, general metals, titanium, aluminum, and nickel-based alloys, and when screwing, it lowers the torque due to the solid lubricant on the fastening surface, and prevents wear and seizure. In addition, it can maintain lubrication ability even in a water (moisture) atmosphere, and has excellent anti-oxidation and anti-corrosion performance.

(Application - various stainless steel, carbon steel, titanium, aluminum, and special alloys)



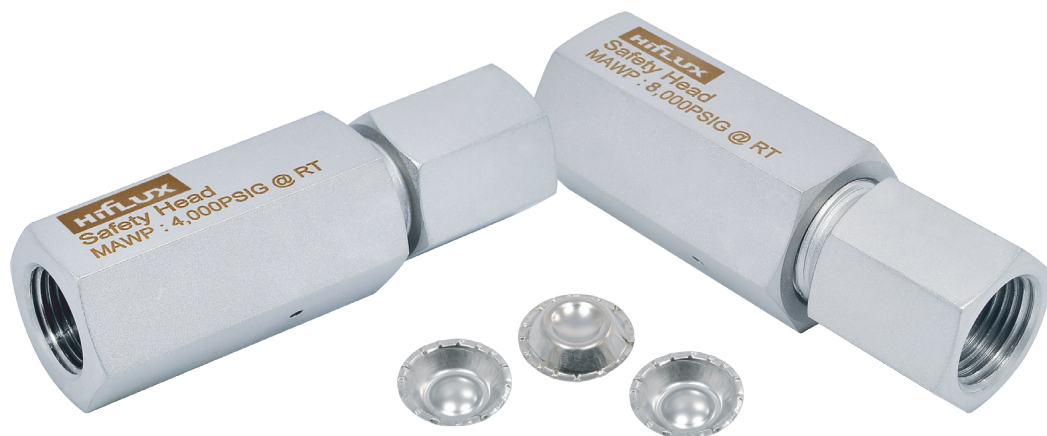
Features

- Long-term lubrication grease
- Prevents screw sticking
- Oil-based lubricant that does not flow easily in water
- Maintains low torque during screw assembly
- Excellent wear resistance
- Excellent anti-oxidation and anti-corrosion performance
- Usable temperature range: -35 to 204°C
- Contains PTFE

※ Product handling precautions - It is difficult to use in areas where halogen, freon, nitrogen dioxide, strong acids, or strong bases come into contact. It can be used as a replacement for existing similar overseas products (Blue Goop).

Safety Head & Rupture Disc

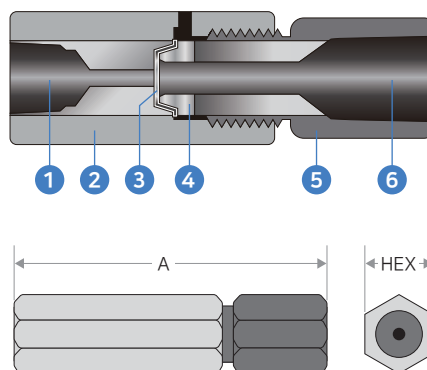
Safety valve that can protect and prevent overpressure of equipment or pipes



Safety Head, also called Safety Head Assembly, is used to quickly release excess pressure when the internal pressure of system equipment or pressure vessel increases to prevent equipment damage or explosion. This product must be used with a safety plate (rupture plate) called a Rupture Disc, which acts as a thin plate that ruptures and releases internal pressure when the pressure increases above the set pressure.

Features

- Protection against secondary damage to devices or equipment due to accidental explosion
- Totally sealed and leak-free before rupture
Stainless Steel 316 material used
(However, 1,000 psi Rupture Disc uses Nickel material)
- 3/8" NPT outlet port design that can be connected to vent line
- Accessories for each pressure specification port included
- Rupture Disc tolerance: $\pm 10\%$
- Safety head products require separate purchase of safety disc
(Refer to Rupture Disc Spec table below)



No	DESCRIPTION
1	Inlet Port
2	Body
3	Rupture Disc
4	Rupture Support Seal
5	Connector
6	Outlet Port

(Unit : mm)

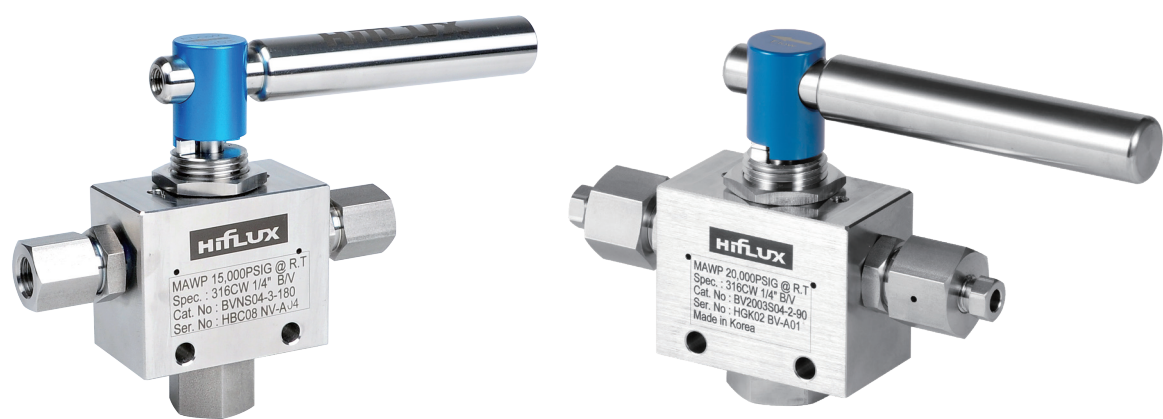
Catalog No	Pressure Rating	Inlet Port type	Tube Size	Outlet Port type	Orifice Size	Dimension	
						A	HEX
SH15S02	15,000 psi	H1502	1/8"	3/8" NPT	1.4	81.3	25.4
SH15S04		H1504	1/4"		3.2		
SH15S06		H1506	3/8"		5		
SH10S08	10,000 psi	H1008	1/2"		5		
SH20S04	20,000 psi	H2004	1/4"		2.8		
SH20S06		H2006	3/8"		5		
SH20S09		H2009	9/16"		5		
SH60S04	60,000 psi	H6004	1/4"		2.4	81.3	25.4
SH60S06		H6006	3/8"		3.2		
SH60S09		H6009	9/16"		4.8	84.5	36

All dimensions are for reference only and may differ from actual size.

Rupture Disc Spec Standard Burst Pressure (in psi at 72 °F)			
1,000	1,500	2,000	2,500
3,000	3,500	4,000	4,500
5,000	5,500	6,000	6,500
7,000	7,500	8,000	8,500
9,000	9,500	10,000	10,500
11,000	11,500	12,500	15,000
17,500	18,000	20,000	22,500
25,000	27,000	30,000	35,000
35,000	35,000	35,000	50,000
55,000	60,000	65,000	

High Pressure Ball Valve

Unlike a needle valve, a manual valve that opens/closes the flow of fluid by turning the handle 1/4 (90°) or 1/2 (180°)



Unlike needle valves, ball valves are manual valves that open or close the flow of fluid by turning the handle 1/4 (90°) or 1/2 (180°). The seat is tightly attached to the trunnion-style ball located at the center of the ball valve, so it can be used without leakage even at low and high pressures. The seat material used at this time is Peek, boasting excellent wear resistance, friction resistance, and chemical resistance.

Features

- Trunnion Style Ball
- 1/4 (90°) or 1/2 (180°) rotation
- Max Working Pressure : ~ 20,000 psi
- Using Peek as seat material for excellent wear resistance, friction resistance, and chemical resistance
- O-ring Material : Viton
- Standard Material : STS316
- Actuator option available
Applicable to Ø4.8 product (90° 2-Way Trunnion, 3-Way Diverter)

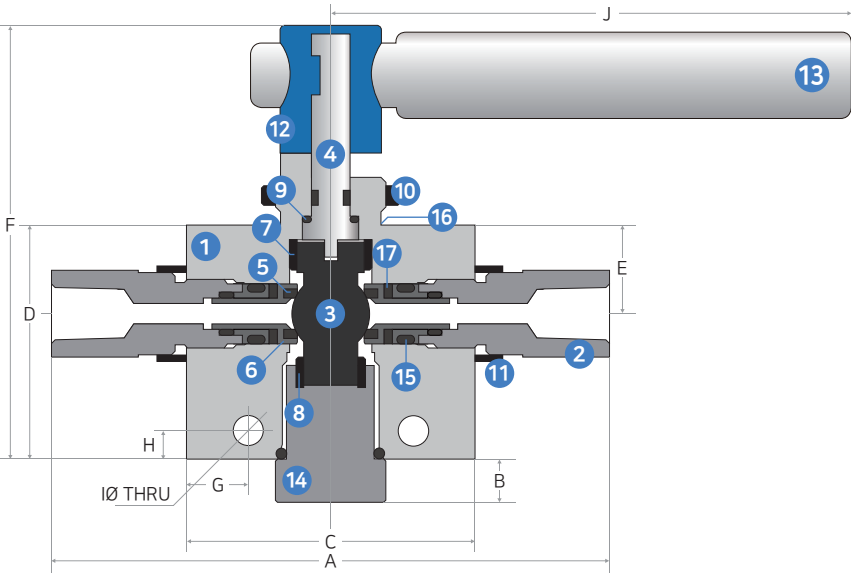
OPTION

- Please inquire when ordering actuator type.



<Pneumatic Actuator>

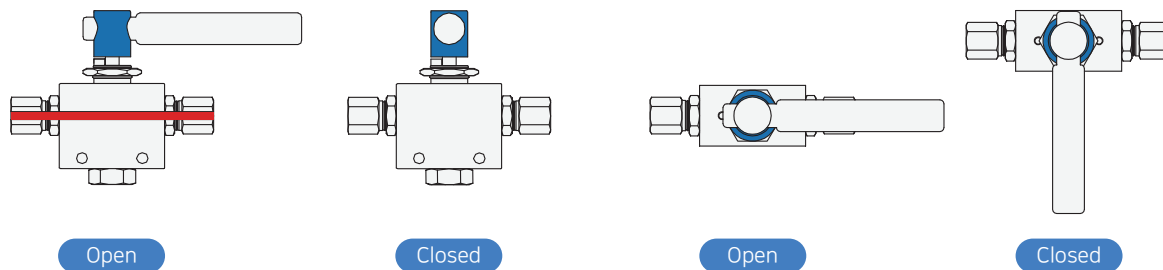
Exploded View & Dimensions



No	Description
1	Body
2	Connector
3	Ball
4	Stem
5	Ball Seat
6	Seat Carrier
7	Bearing 1
8	Bearing 2
9	Washer
10	Panel Lock Nut
11	Lock Nut
12	Handle Holder
13	Handle
14	Bottom Connector
15	Seat Carrier Guide
16	Panel
17	Belleville Washers

➤ 2way Type

90° 2-Way Trunnion



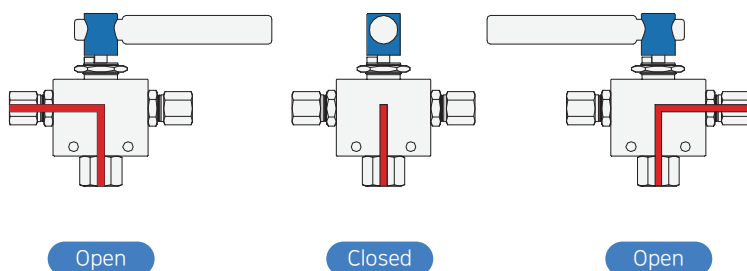
(Unit : mm)

Catalog No	Pressure Rating (psi)	Orifice Size	Port Type	Tube Size	Minimum Orifice	Dimensions												Panel	
2-way 90° Straight Type						A	B	C	D	E	F	G	H	I	J	Block Thickness	Diameter	Max Thickness	
BV1503S02-2-90	15,000	4.8	H1502	1/8"	1.4	128	10	66.5	54	20.5	100	14.2	6.5	7	120	38	25.4	6.4	
BV1503S04-2-90			H1504	1/4"	3.2	128													
BV1503S06-2-90			H1506	3/8"	4.8	128													
BV2003S04-2-90	20,000		H2004	1/4"	2.8	128													
BV2003S06-2-90			H2006	3/8"	4.8	128													
BV2003S09-2-90			H2009	9/16"	4.8	138													
BV6003S04-2-90			H6004	1/4"	2.4	128													
BV6003S06-2-90	H6006		3/8"	3.2	128														
BV6003S09-2-90	H6009		9/16"	4.8	138														
BVN03S02-2-90	15,000		1/8" NPT	1/8"	2.4	128													
BVN03S04-2-90			1/4" NPT	1/4"	4.8	128													
BVN03S06-2-90			3/8" NPT	3/8"	4.8	128													
BVN03S08-2-90			1/2" NPT	1/2"	4.8	138.6													
BVP03S02-2-90	15,000		1/8" PT	1/8"	2.4	128													
BVP03S04-2-90			1/4" PT	1/4"	4.8	128													
BVP03S06-2-90			3/8" PT	3/8"	4.8	128													
BVP03S08-2-90			1/2" PT	1/2"	4.8	138.6													
BV1505S02-2-90	15,000	8	H1502	1/8"	1.4	147	15	85	65	30	110	17.1	10.3	7	120	35	32	6.4	
BV1505S04-2-90			H1504	1/4"	3.2	147													
BV1505S06-2-90			H1506	3/8"	5	147													
BV1005S08-2-90	10,000		H1008	1/2"	7.9	147													
BV2005S04-2-90	20,000		H2004	1/4"	2.8	147													
BV2005S06-2-90			H2006	3/8"	5.2	147													
BV2005S09-2-90			H2009	9/16"	7.9	147													
BV2005S12-2-90			H2012	3/4"	7.9	163													
BV6005S04-2-90	H6004		1/4"	2.4	147														
BV6005S06-2-90	H6006		3/8"	3.2	147														
BV6005S09-2-90	H6009		9/16"	4.8	154														
BVN05S02-2-90	15,000		1/8" NPT	1/8"	2.4	147													
BVN05S04-2-90			1/4" NPT	1/4"	4.8	147													
BVN05S06-2-90			3/8" NPT	3/8"	7.1	147													
BVN05S08-2-90			1/2" NPT	1/2"	7.9	147													
BVP05S02-2-90	15,000		1/8" PT	1/8"	2.4	147													
BVP05S04-2-90			1/4" PT	1/4"	4.8	147													
BVP05S06-2-90			3/8" PT	3/8"	7.1	147													
BVP05S08-2-90			1/2" PT	1/2"	7.9	147													

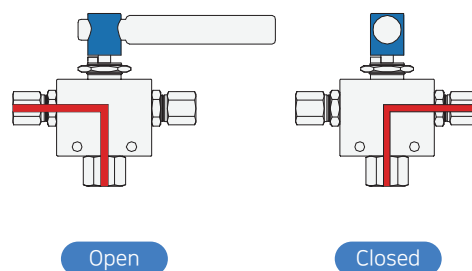
All dimensions are for reference only and may differ from actual size.

3way Type

180° 3-Way Switching



90° 3-Way Diverter



(Unit : mm)

Catalog No		Pressure Rating (psi)	Orifice Size	Port Type	Tube Size	Minimum Orifice	Dimensions												Panel	
3-way 180 ° Switching	3-way 90 ° Diverting						A	B	C	D	E	F	G	H	I	J	Block Thickness	Diameter	Max Thickness	
BV1503S02-3-180	BV1503S02-3-90	15,000	4.8	H1502	1/8"	1.4	128	13	66.5	54	20.5	100	14.2	6.5	7	120	38	25.4	6.4	
BV1503S04-3-180	BV1503S04-3-90			H1504	1/4"	3.2	128	17												
BV1503S06-3-180	BV1503S06-3-90			H1506	3/8"	4.8	128	21												
BV2003S04-3-180	BV2003S04-3-90	20,000		H2004	1/4"	2.8	128	17												
BV2003S06-3-180	BV2003S06-3-90			H2006	3/8"	4.8	128	21												
BV2003S09-3-180	BV2003S09-3-90			H2009	9/16"	4.8	138	25												
BV6003S04-3-180	BV6003S04-3-90			H6004	1/4"	2.4	128	17												
BV6003S06-3-180	BV6003S06-3-90			H6006	3/8"	3.2	128	21												
BV6003S09-3-180	BV6003S09-3-90			H6009	9/16"	4.8	138	25												
BVN03S02-3-180	BVN03S02-3-90	15,000		1/8" NPT	1/8"	2.4	128	13												
BVN03S04-3-180	BVN03S04-3-90			1/4" NPT	1/4"	4.8	128	21												
BVN03S06-3-180	BVN03S06-3-90			3/8" NPT	3/8"	4.8	128	21												
BVP03S02-3-180	BVP03S02-3-90			1/8" PT	1/8"	2.4	128	13												
BVP03S04-3-180	BVP03S04-3-90			1/4" PT	1/4"	4.8	128	21												
BVP03S06-3-180	BVP03S06-3-90			3/8" PT	3/8"	4.8	128	21												
BV1505S02-3-180	BV1505S02-3-90	15,000	8	H1502	1/8"	1.4	147	23	85	65	30	110	17.1	10.3	7	120	35	32	6.4	
BV1505S04-3-180	BV1505S04-3-90			H1504	1/4"	3.2	147	23												
BV1505S06-3-180	BV1505S06-3-90			H1506	3/8"	5	147	23												
BV1005S08-3-180	BV1005S08-3-90	10,000		H1008	1/2"	7.9	147	23												
BV2005S04-3-180	BV2005S04-3-90	20,000		H2004	1/4"	2.8	147	23												
BV2005S06-3-180	BV2005S06-3-90			H2006	3/8"	5.2	147	23												
BV2005S09-3-180	BV2005S09-3-90			H2009	9/16"	7.9	147	23												
BV2005S12-3-180	BV2005S12-3-90			H2012	3/4"	7.9	163	28												
BV6005S04-3-180	BV6005S04-3-90			H6004	1/4"	2.4	147	23												
BV6005S06-3-180	BV6005S06-3-90			H6006	3/8"	3.2	147	23												
BV6005S09-3-180	BV6005S09-3-90	15,000		H6009	9/16"	4.8	154	23.5												
BVN05S02-3-180	BVN05S02-3-90			1/8" NPT	1/8"	2.4	147	23												
BVN05S04-3-180	BVN05S04-3-90			1/4" NPT	1/4"	4.8	147	23												
BVN05S06-3-180	BVN05S06-3-90			3/8" NPT	3/8"	7.1	147	23												
BVN05S08-3-180	BVN05S08-3-90			1/2" NPT	1/2"	7.9	147	23												
BVP05S02-3-180	BVP05S02-3-90			1/8" PT	1/8"	2.4	147	23												
BVP05S04-3-180	BVP05S04-3-90			1/4" PT	1/4"	4.8	147	23												
BVP05S06-3-180	BVP05S06-3-90			3/8" PT	3/8"	7.1	147	23												
BVP05S08-3-180	BVP05S08-3-90			1/2" PT	1/2"	7.9	147	23												

All dimensions are for reference only and may differ from actual size.

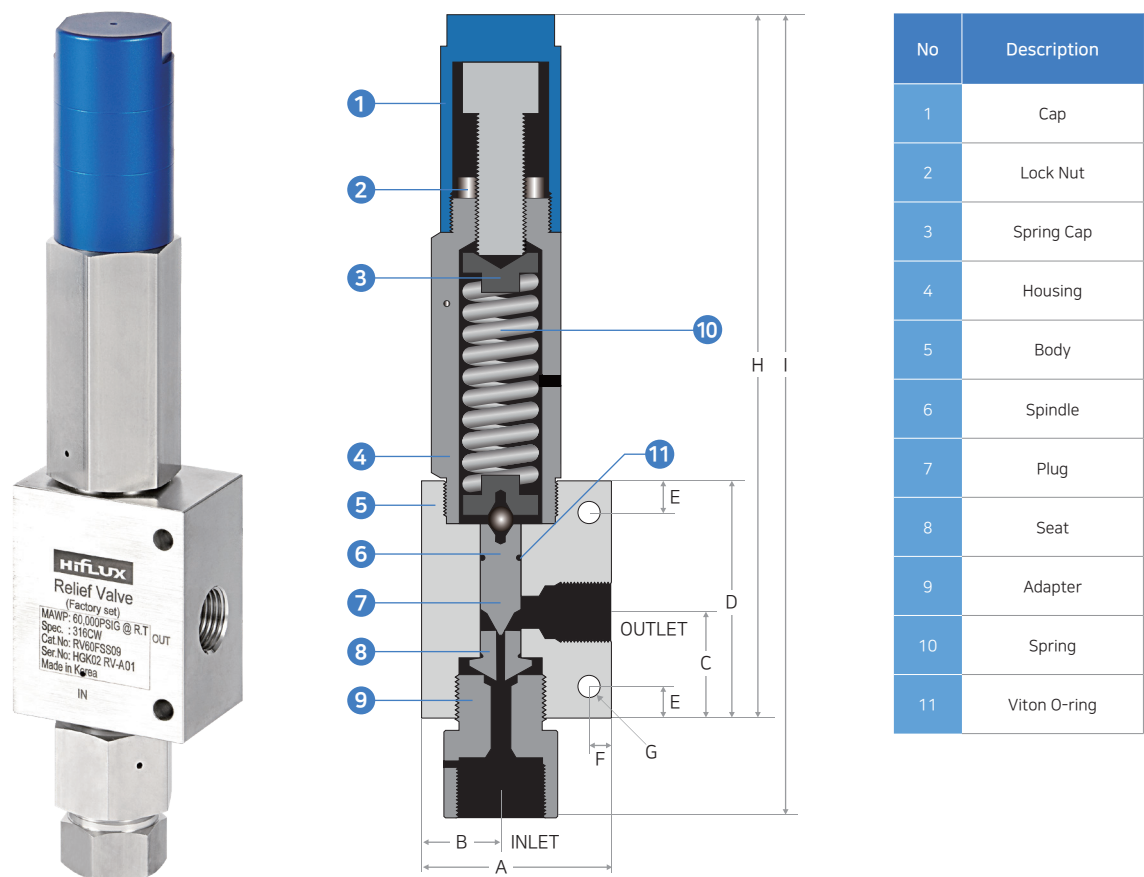
Relief Valve - Factory Set

Safety valve that protects the system by venting the pressure when over pressure occurs

Relief Valve Factory Set products are valves that protect the system and other devices by releasing pressure when the internal pressure of the system rises above the set pressure due to system malfunction, etc. The set pressure (customer-specified) is set to the requested pressure before shipment and is sealed with a pressure tag.

Features

- Pressure Range : 3,000 psi ~ 60,000 psi
- Setting Pressure Range : $\pm 8\%$
- Inlet Port : H6009(Orifice size : $\varnothing 6.4$)
- Outlet Port : 1/2" NPT
- Standard Material : Stainless Steel
- O-ring Material on Piston : Viton
- Max Operating Temperature : 160°C



(Unit : mm)															
Catalog No	Port Type		Orifice inches (mm)	Pressure Range(PSI)		Dimensions (mm)									Block Thickness
	Inlet	Outlet		Minimum	Maximum	A	B	C	D	E	F	G	H	I	
RV11FSS09	H6009 (9/16")	1/2" NPT	6.2	3,000	11,000	60	25	33.5	75	10	7	7	292.5	323.87	44
RV21FSS09			4.5	11,000	21,000										
RV30FSS09			3.9	21,000	30,000										
RV45FSS09			3.2	30,000	45,000										
RV60FSS09			2.6	45,000	60,000										

All dimensions are for reference only and may differ from actual size.

Relief Valve - Field Adjustable

Safety valve that protects the system by venting the pressure when over pressure occurs

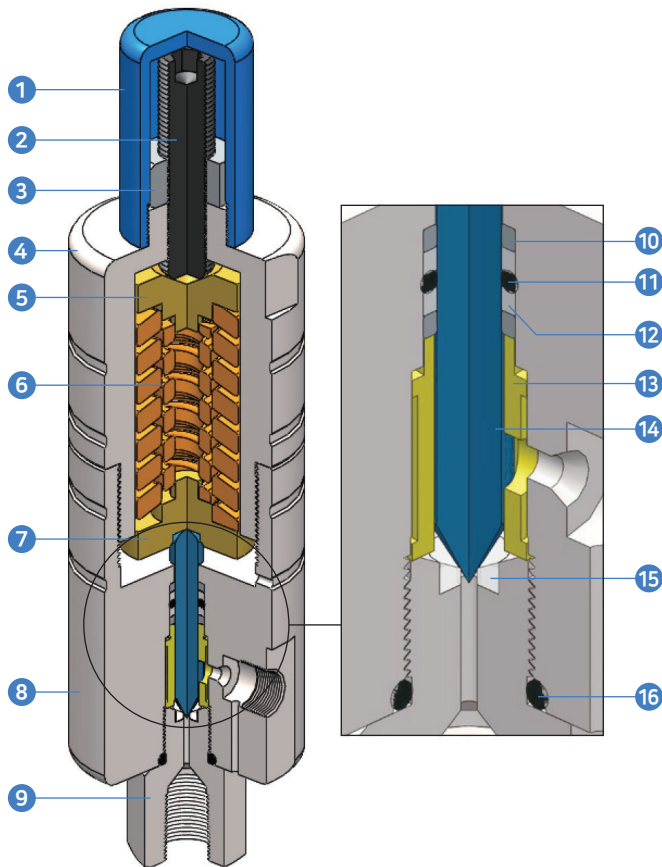
Relief Valve Field Adjustable products protect the system from overpressure by releasing pressure when the internal pressure of the system rises above the set pressure, and the pressure setting can be easily adjusted at the field by the customer directly adjusting socket set screw on the top of the valve.

Features

- Pressure Range : 1,000 psi ~ 10,000 psi, 10,000 psi ~ 20,000 psi
- Setting Pressure Range : $\pm 8\%$
- Max Working Temperature : $-20^{\circ}\text{C} \sim 65^{\circ}\text{C}(\text{NYLON}) / -20^{\circ}\text{C} \sim 160^{\circ}\text{C}$
- Inlet Port : 1/4" NPT, H2004
- Outlet Port : 1/4" NPT
- Orifice Size : $\varnothing 1.8$
- Adapters allow connection of pipes of various pressures and sizes

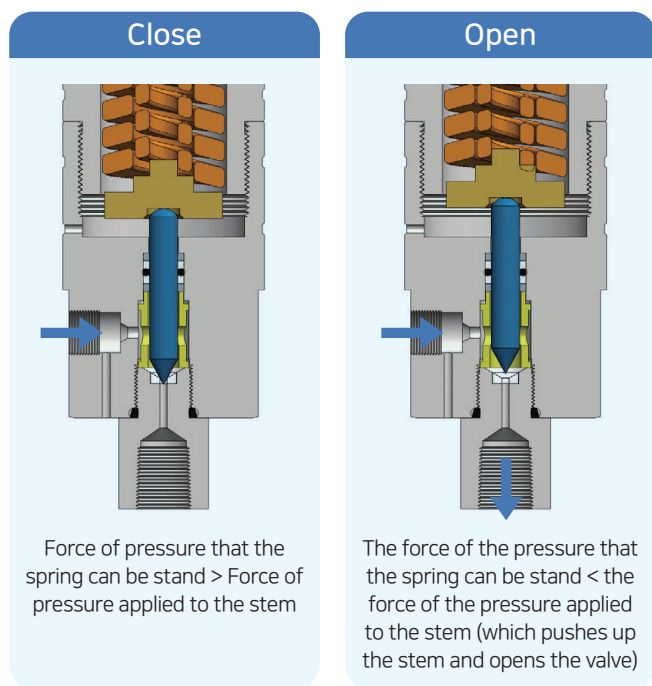


Table Of Material

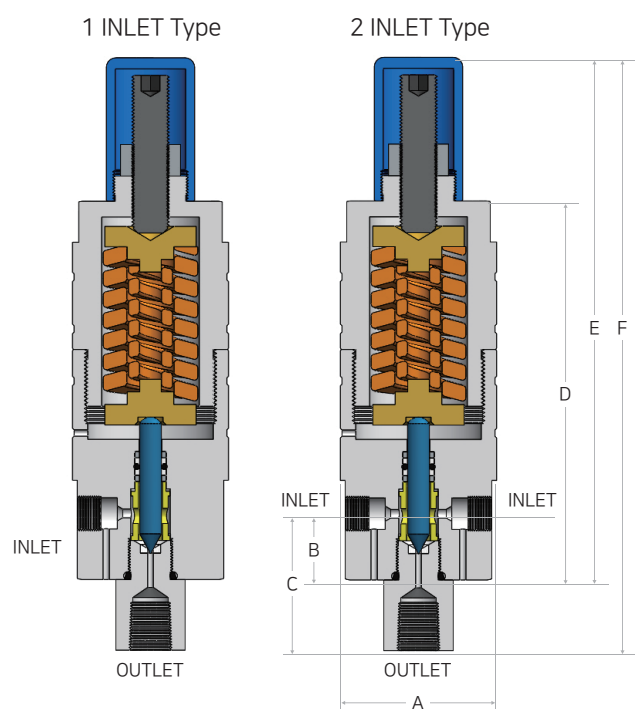


No	DESCRIPTION	MATERIAL
1	CAP	AL6061
2	Socket Set Screw	SCM435
3	NUT	STS304
4	HOUSING 1	STS304
5	SPRING GUIDE 1	STS304
6	SPRING	Carbon Steel
7	SPRING GUIDE 2	STS304
8	HOUSING 2	STS316CW
9	SEAT GLAND	STS316CW
10	STS SEAL	STS316CW
11	O-RING	Viton
12	SEAL	TEFLON
13	STEM GUIDE	STS316CW
14	STEM	STS630-660
15	SEAT	PEEK
16	O-RING	Viton

➤ HOW & WHERE



➤ Dimension Table



How it works

The relief valve opens when the pressure applied to the stem exceeds the set pressure, and closes when it falls below the set pressure.

WHERE

- Where you want to protect the system from over pressure caused by system malfunction.
- Where you want to control over pressure caused by thermal expansion.
- Where low discharge is not a problem in a system where high pressure is applied.
- Where perfect flow blocking without leakage is required.

WHERE NOT

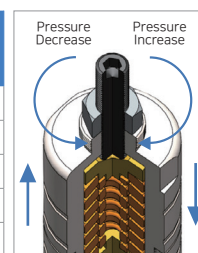
- Pressure ~ 1,000 psi or less.
- Systems where discharge capacity must also increase as pressure increases.
- If the back pressure occurs at the drain port.
- Corrosive liquids or gases that can damage the valve, cryogenic fluids or gases such as liquid nitrogen.

➤ Technical Features

Feature	RV10FAS Type	RV20FAS Type
Pressure Range (PSIG)	1,000 ~ 10,000	10,000 ~ 20,000
Inlet Port	1/4" NPT	H2004
Outlet Port	1/4" NPT	
Orifice Size	1.8mm	
CV	0.12	
Packing Material	PEEK	
O-ring Material	Viton	
Max Working Temperature	-20°C ~65°C (NYLON) / -20°C~160°C	
Hexagon Wrench Tool Size	5mm Use a ranch with six angles	6mm Use a ranch with six angles
Adjust Dimension Tolerance ±%	±8%	
Useable area	Water	

➤ Set Pressure

Catalog No	SET PRESSURE (psi)	Spring Compression Length(mm)
1,000 ~ 10,000 psi RV10FAS04	4,000	1.92
	8,000	3.84
	12,000	5.76
10,000 ~ 20,000 psi RV20FAS04	16,000	7.68
	20,000	9.06



(Unit : mm)

Catalog No	Port Type			Orifice inches (mm)	Pressure Range(Psi)		Dimensions (mm)						
	1 Inlet	2 Inlet	Outlet		Minimum	Maximum	A	B	C	D	E	F	G
RV10FAS04-1	1/4" NPT		1/4" NPT	1.8	1,000	10,000	38	21	43.1	112.5	158	180.1	28
RV10FAS04-2		1/4" NPT											
RV20FAS04-1	H2004 (1/4")		1/4" NPT	1.8	10,000	20,000	49.5	21	43.1	120	165.5	187.6	28
RV20FAS04-2		H2004 (1/4")											

All dimensions are for reference only and may differ from actual size.

Relief Valve - Proportional Type

Safety valve that protects the system by venting the pressure when over pressure occurs

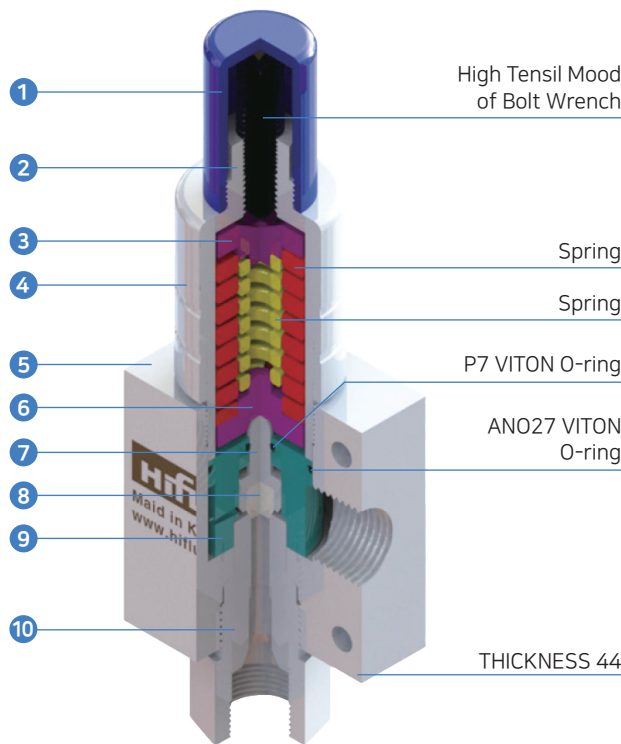
Relief Valve Proportional Type products are valves that open gradually as the internal pressure of the system increases. Since the flow rate increases as the differential pressure increases, they can be used in systems where the flow rate is high or the pressure suddenly increases rapidly.

Features

- Pressure Range : 1,000 psi ~ 15,000 psi, 1,000 psi ~ 20,000 psi
- Setting Pressure Error Range : $\pm 8\%$
- Inlet Port : 1/2" NPT, H2009 (9/16")
- Outlet Port : 1/2" NPT
- Orifice Size : $\varnothing 6.3$
- Standard Material : STS316
- O-ring Material on Piston : Viton
- Max Operating Temperature : 160°C
- Adapters allow connection to pipes of various pressures and sizes
- Stable sealing is possible by using PEEK stem
- Pressure setting can be adjusted by the customer by adjusting socket set screw on the top of the valve



Table Of Material

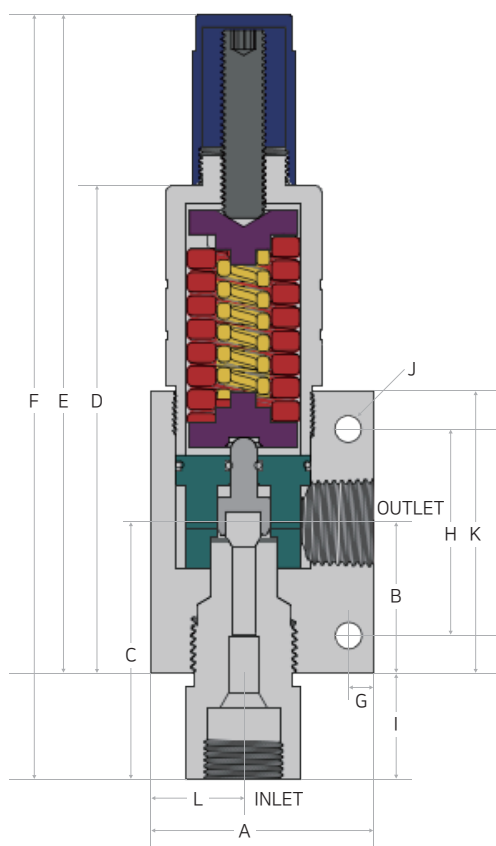


No	DESCRIPTION	MATERIAL
1	CAP	AL6061
2	STS NUT	STS304
3	SPRING GUIDE 1	STS304
4	HOUSING	STS304
5	BODY	STS316CW
6	SPRING GUIDE 2	STS304
7	STEM	STS630
8	SEAT	PEEK
9	STEM GUIDE	STS316CW
10	BOTTOM CONNECTOR	STS316CW

➤ Technical Features

Feature	RV15PPS08N	RV20PPS09
Pressure Range (PSIG)	1,000 ~ 15,000	1,000 ~ 20,000
Inlet Port	1/2" NPT	H2009 (9/16")
Outlet Port	1/2" NPT	
Orifice Size	Ø 6.3	
Packing Material	PEEK	
O-ring Material	Viton	
Max working temperature	-20°C ~ 160°C	
Hexagon Wrench Tool Size	6mm Use a ranch with six angles	
Adjust Dimension Tolerance ±%	±8%	
Useable area	Water, Gas	

➤ Specification



➤ HOW & WHERE

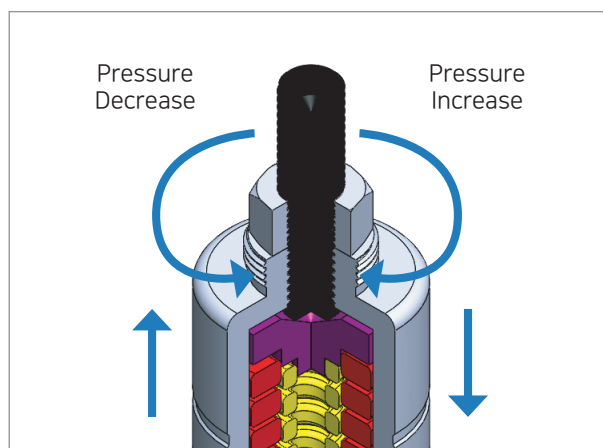
WHERE

- Where you want to protect the system from over pressure caused by system malfunction.
 - Where you want to control over pressure caused by thermal expansion.
 - Where low discharge is not a problem in a system where high pressure is applied.
- Where perfect flow blocking without leakage is required.

WHERE NOT

- Pressure ~ 1,000 psi or less.
- Systems where discharge capacity must also increase as pressure increases.
- If the back pressure occurs at the drain port.
- Corrosive liquids or gases that can damage the valve, cryogenic fluids or gases such as liquid nitrogen.

➤ Set Pressure



The pressure on the Inlet side where the fluid flow starts determines the Set Pressure.
Turning to the right increases the Set Pressure.
Turning to the left decreases the Set Pressure

(Unit : mm)

Catalog No	Port Type		Orifice inches (mm)	Pressure Range(Psi)		Dimensions (mm)											
	1 Inlet	Outlet		Minimum	Maximum	A	B	C	D	E	F	G	H	I	J	K	L
RV15PPS08N	1/2" NPT	1/2" NPT	6.3	1,000	15,000	60	40	68.2	130	175.5	203.7	7	55	28	7	75	25
RV20PPS09	H2009 (9/16")	1/2" NPT	6.3	1,000	20,000	60	40	68.2	130	175.5	203.7	7	55	28.2	7	75	25

All dimensions are for reference only and may differ from actual size.

Relief Valve - Proportional Gas Relief Valve

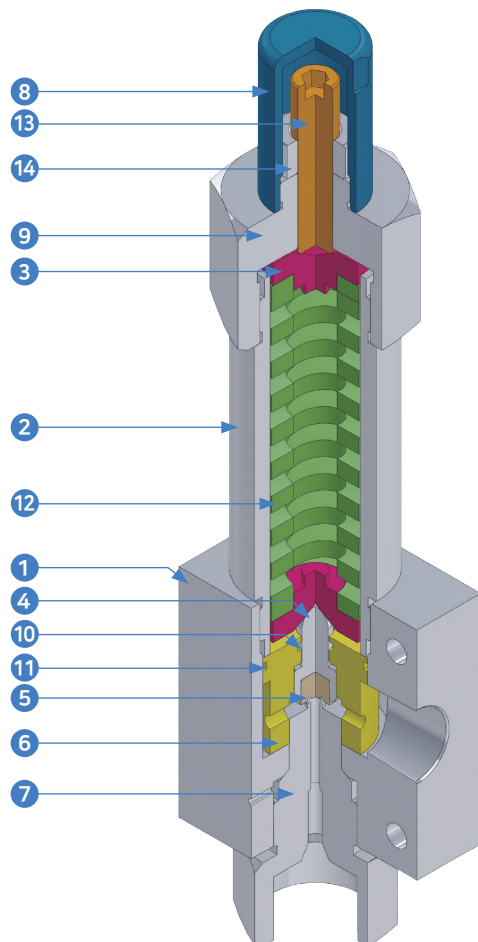
Safety valve that protects the system by venting the pressure when over pressure occurs

Relief valve Proportional Type products are valves that open gradually as the internal pressure of the system increases. Since the flow rate increases as the differential pressure increases, it can be used in systems with high flow rates or where pressure rises suddenly and rapidly.

Features

- Atmosphere discharge type safety valve.
- Connection to piping of various pressure specifications and sizes is possible using an Adapter.
- Stable sealing is possible by using PEEK stem.
- STEM part material: For general gas - STS630, For hydrogen gas - STR660
- Set to customer's operating pressure before shipment.
- Product testing follows Korea Gas Safety Corporation (KGS) AA319.

Table Of Material

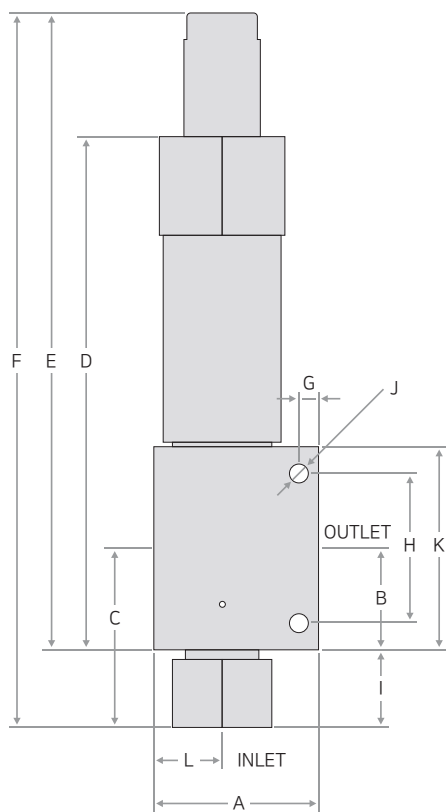


No	DESCRIPTION	MATERIAL
1	Body	STS316
2	Housing	STS304
3	Spring guide	STS304
4	Stem	Hydrogen Gas: STR660 General Gas: STS630
5	Seat	PEEK
6	Stem guide	STS316
7	Bottom Connector	STS316
8	Cap	AL6061
9	Cover	STS304
10	O-ring1	Viton
11	O-ring2	Viton
12	Spring	SAE9254
13	Mood of Bolt Wrench	STS304
14	Nut	STS304

➤ Technical Features

Feature	KCG-RV18PPS09	KCG-RV29PPS09
	KCH-RV18PPS09	KCH-RV29PPS09
Pressure Range (PSIG)	1,000 ~ 18,000	1,000 ~ 29,000
Inlet Port	H6009 (9/16")	
Outlet Port	1/2" NPT	
Orifice Size	Ø3	
Packing Material	PEEK	
O-ring Material	Viton	
Max working temperature	-20°C ~ 160°C	
Adjust Dimension Tolerance ±%	±3%	
Useable area	General Gas: STS630 / Hydrogen Gas: STR660	

➤ Specification



➤ HOW & WHERE

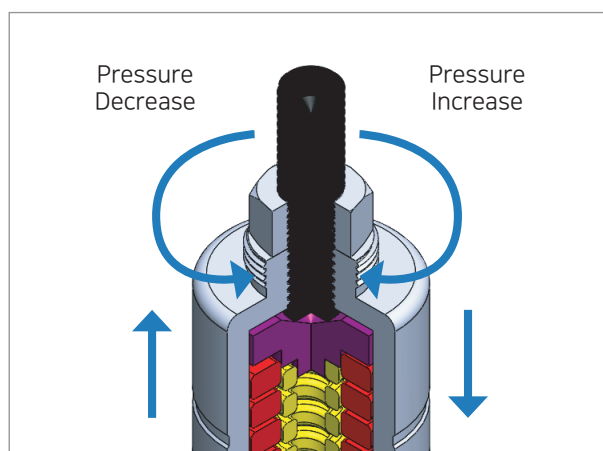
WHERE

- Where protection of the system from overpressure due to system malfunction is required.
- Where control of overpressure caused by thermal expansion is required.
- Systems where high pressure is applied and pressure fluctuations are severe.
- Where a perfect, leak-free flow path shut-off is required.

WHERE NOT

- Pressure ~ 1,000 psi or less.
- Systems where back pressure is generated on the discharge side.
- Corrosive liquids or gases that can damage the valve, cryogenic fluids or gases like liquid nitrogen.
- High-temperature fluids that can damage the valve.

➤ Set Pressure



The pressure on the Inlet side where the fluid flow starts determines the Set Pressure.
Turning to the right increases the Set Pressure.
Turning to the left decreases the Set Pressure

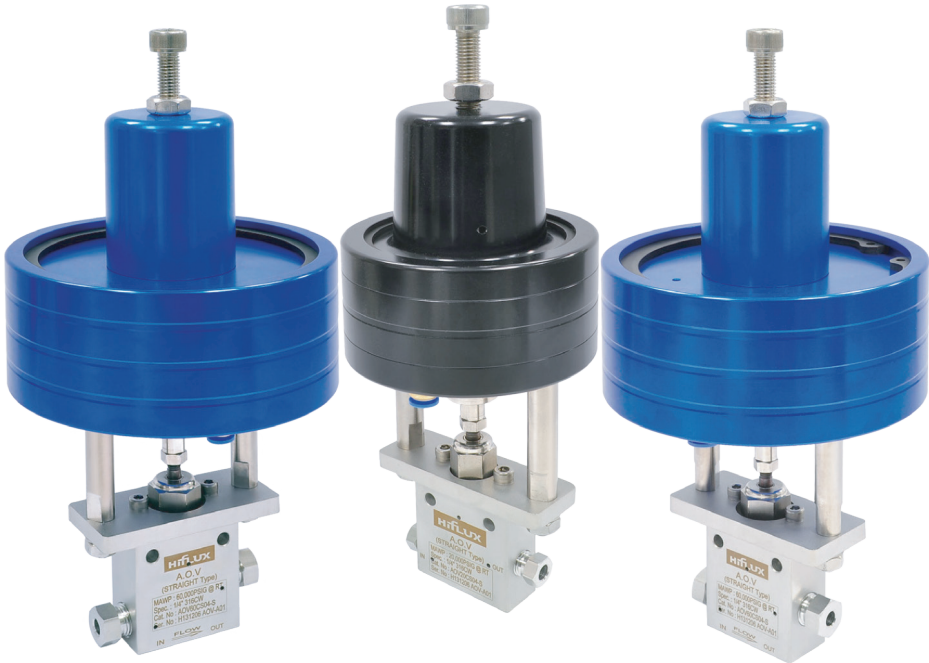
(Unit : mm)

Catalog No	Port Type		Orifice inches (mm)	Pressure Range(PSI)		Dimensions (mm)												
	Inlet	Outlet		Minimum	Maximum	A	B	C	D	E	F	G	H	I	J	K	L	Block Thickness
KCG-RV18PPS09	H6009	1/2" NPT	3	1,000	18,000	60	40	68.2	189	234.5	262.9	7	55	28.2	7	75	25	44
KCH-RV18PPS09																		
KCG-RV29PPS09																		
KCH-RV29PPS09																		

All dimensions are for reference only and may differ from actual size.

Air Operated Valve

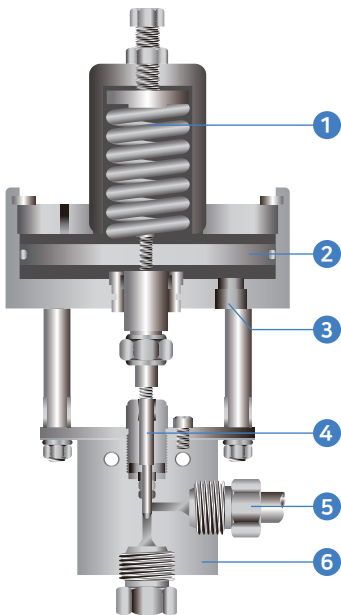
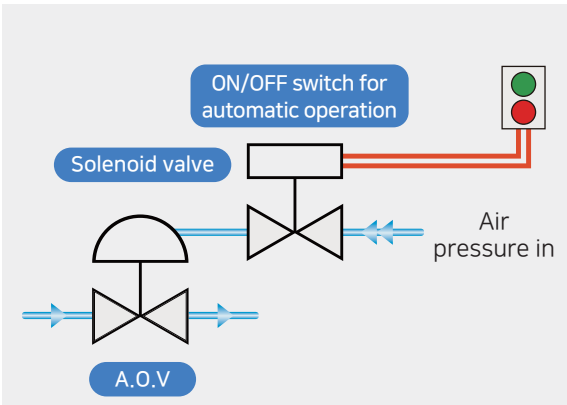
Valve that automatically opens and closes the valve using air pressure



Features

- 2 types of upper body (Normal Open, Normal Closed Type)
- Normal Open Type: The valve closes when air is supplied while the valve is normally open
- Normal Closed Type: The valve opens when air is supplied while the valve is normally closed
- Minimum air pressure for operation: 5 kgf/cm²
- The lower part through which the fluid or gas flows has the same 4 types of shapes as the needle valve
- The tension of the spring can be adjusted by adjusting the bolt on the upper part
- When system control is required, AOV can be operated by controlling air pressure without moving from a distance
- An explosion-proof valve that is safer than an electric valve that is operated by air pressure and has the risk of explosion

Exploded View & Dimensions



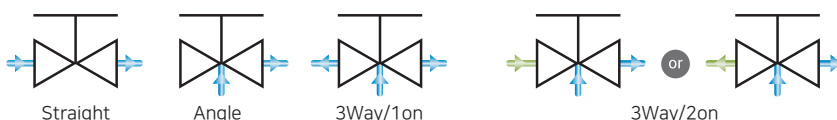
No	DESCRIPTION
1	Spring
2	Round plate
3	Lower air pressurized part
4	Stem connected to round plate
5	Connections
6	Valve Body

➤ Normal Open Type



1. Normally, the stem connected to the round plate is raised, so the valve is open.
2. The air pressure from the top is supplied, so the round plate moves down due to the air pressure,
3. The stem connected to the round plate also moves down, blocking the open orifice, so the flow of fluid or gas is blocked.
4. To open the valve again, block the incoming air pressure and vent the air already in the product, and the round plate and stem are raised again by the restoring force of the spring located at the bottom, so that the valve opens and the fluid flows again.

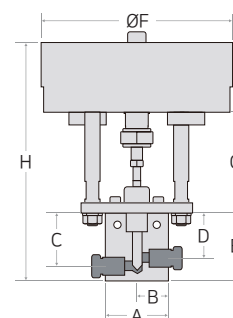
The lower body of A.O.V. has four types identical to needle valves depending on the direction in which the fluid flows



Straight

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV150S02-S	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	151	79.5	179.5	20
AOV150S04-S		H1504	1/4"	0.2	3.2	50	25	40	30	50	151	79.5	184.5	20
AOV150S06-S		H1506	3/8"	0.2	3.2	50	25	40.3	29.5	50	151	79.5	184.5	20
AOV100S08-S	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	75	159	81.5	247.1	25
AOV200S04-S	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	50	151	79.5	184.5	20
AOV200S06-S		H2006	3/8"	0.75	5.5	50	25	40	30	50	151	79.5	184.5	20
AOV200S09-S		H2009	9/16"	1.3	7.9	63	31.5	60	44	73	159	81.5	245.1	25
AOV600S04-S	60,000 psi	H6004	1/4"	0.08	2	50	25	43	33	54	151	79.5	188.5	25
AOV600S06-S		H6006	3/8"	0.09	2	50	25	43	33	57	151	79.5	191.5	25
AOV600S09-S		H6009	9/16"	0.14	2	67	33.5	43	33	62	151	79.5	196.5	38

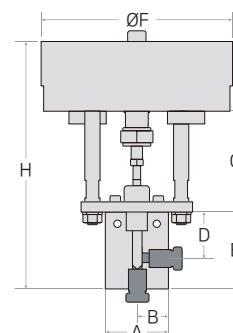
All dimensions are for reference only and may differ from actual size.



Angle

Angle													(Unit : mm)
Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions							Block Thickness
						A	B	D	E	F	G	H	
AOV150S02-A	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	151	79.5	179.5	20
AOV150S04-A		H1504	1/4"	0.2	3.2	50	25	30	62	151	79.5	196.5	20
AOV150S06-A		H1506	3/8"	0.2	3.2	50	25	30	62	151	79.5	196.5	20
AOV100S08-A	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	159	81.5	258.1	25
AOV200S04-A	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	151	79.5	196.5	20
AOV200S06-A		H2006	3/8"	0.75	5.5	50	25	30	62	151	79.5	196.5	20
AOV200S09-A		H2009	9/16"	1.3	7.9	63	31.5	44	85.5	159	81.5	275.6	25
AOV600S04-A	60,000 psi	H6004	0.08	2	50	25	25	33	60.5	151	79.5	195	25
AOV600S06-A		H6006	0.09	2	50	25	25	33	66.5	151	79.5	201	25
AOV600S09-A		H6009	0.14	2	67	31.5	33.5	33	67	151	79.5	201.5	38

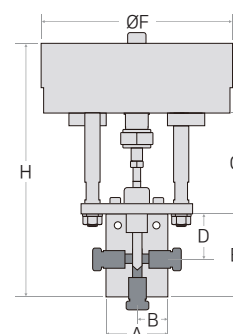
All dimensions are for reference only and may differ from actual size.



3Way/1on

3Way/1on												(Unit : mm)	
Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions						Block Thickness	
						A	B	D	E	F	G		H
AOV150S02-O	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	151	79.5	179.5	20
AOV150S04-O		H1504	1/4"	0.2	3.2	50	25	30	62	151	79.5	196.5	20
AOV150S06-O		H1506	3/8"	0.2	3.2	50	25	30	62	151	79.5	196.5	20
AOV100S08-O	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	159	81.5	258.1	25
AOV200S04-O	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	151	79.5	196.5	20
AOV200S06-O		H2006	3/8"	0.75	5.5	50	25	30	62	151	79.5	196.5	20
AOV200S09-O		H2009	9/16"	1.3	7.9	63	31.5	44	86	159	81.5	258.1	25
AOV600S04-O	60,000 psi	H6004	1/4"	0.08	2	50	25	33	60.5	151	79.5	195	25
AOV600S06-O		H6006	3/8"	0.09	2	50	25	33	67	151	79.5	201.5	25
AOV600S09-O		H6009	9/16"	0.14	2	67	33.5	33	71.5	151	79.5	206	38

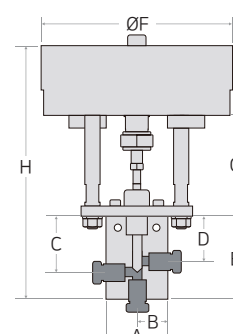
All dimensions are for reference only and may differ from actual size.



3Way/2on

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV150S02-T	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	151	79.5	179.5	20
AOV150S04-T		H1504	1/4"	0.2	3.2	50	25	40	30	66.5	151	79.5	201	20
AOV150S06-T		H1506	3/8"	0.2	3.2	50	25	41	30	66.5	151	79.5	201	20
AOV100S08-T	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	92	159	81.5	264.1	25
AOV200S04-T	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	66.5	151	79.5	201	20
AOV200S06-T		H2006	3/8"	0.75	5.5	50	25	40	30	66.5	151	79.5	201	20
AOV200S09-T		H2009	9/16"	1.3	7.9	63	31.5	60	44	92	159	81.5	264.1	25
AOV600S04-T	60,000 psi	H6004	1/4"	0.08	2	50	25	43	33	60.5	151	79.5	195	25
AOV600S06-T		H6006	3/8"	0.09	2	50	25	43	33	71.5	151	79.5	206	25
AOV600S09-T		H6009	9/16"	0.14	2	67	33.5	43	33	77	151	79.5	211.5	38

All dimensions are for reference only and may differ from actual size.

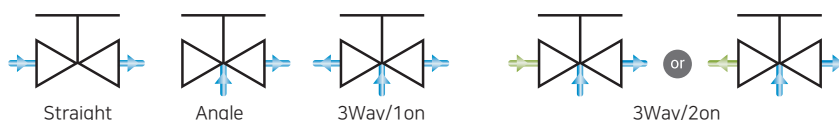


➤ Normal Close Type



1. Normally, the stem connected to the round plate is lowered, so the valve is closed.
2. The air pressure at the bottom is supplied from below, and the round plate moves upward due to the air pressure,
3. The closed orifice is opened, allowing fluid or gas to flow.
4. To close the valve again, block the incoming air pressure and vent the air already in the product, and the round plate and stem are lowered again by the restoring force of the spring located at the top, which closes the valve and blocks the flow of fluid.

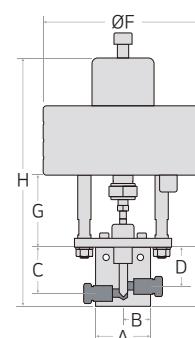
The lower body of A.O.V. has four types identical to needle valves depending on the direction in which the fluid flows.



Straight

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV15CS02-S	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	99	79.5	261.8	20
AOV15CS04-S		H1504	1/4"	0.2	3.2	50	25	40	30	50	141	66	239	20
AOV15CS06-S		H1506	3/8"	0.2	3.2	50	25	40.3	29.5	50	141	66	239	20
AOV10CS08-S	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	75	145	81.5	321.3	25
AOV20CS04-S	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	50	141	66	239	20
AOV20CS06-S		H2006	3/8"	0.75	5.5	50	25	40	30	50	141	66	239	20
AOV20CS09-S		H2009	9/16"	1.3	7.9	63	31.5	60	44	73	145	81.5	319.3	25
AOV60CS04-S	60,000 psi	H6004	1/4"	0.08	2	50	25	43	33	54	141	66	243	25
AOV60CS06-S		H6006	3/8"	0.09	2	50	25	43	33	57	141	66	246	25
AOV60CS09-S		H6009	9/16"	0.14	2	67	33.5	43	33	62	141	66	251	38

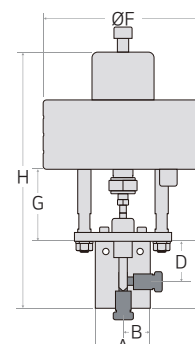
All dimensions are for reference only and may differ from actual size.



Angle

													(Unit : mm)
Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions							Block Thickness
						A	B	D	E	F	G	H	
AOV15CS02-A	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	99	79.5	261.8	20
AOV15CS04-A		H1504	1/4"	0.2	3.2	50	25	30	62	141	66	251	20
AOV15CS06-A		H1506	3/8"	0.2	3.2	50	25	30	62	141	66	251	20
AOV10CS08-A	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	145	81.5	332.3	25
AOV20CS04-A	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	141	66	251	20
AOV20CS06-A		H2006	3/8"	0.75	5.5	50	25	30	62	141	66	251	20
AOV20CS09-A		H2009	9/16"	1.3	7.9	63	31.5	44	85.5	145	81.5	331.8	25
AOV60CS04-A	60,000 psi	H6004	1/4"	0.08	2	50	25	33	60.5	141	66	249.5	25
AOV60CS06-A		H6006	3/8"	0.09	2	50	25	33	66.5	141	66	255.5	25
AOV60CS09-A		H6009	9/16"	0.14	2	67	31.5	33	67	141	66	256	38

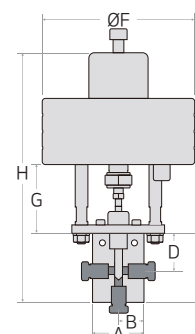
All dimensions are for reference only and may differ from actual size.



3Way/1on

													(Unit : mm)
Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions							Block Thickness
						A	B	D	E	F	G	H	
AOV15CS02-O	15,000 psi	H1502	1/8"	0.12	1.4	38	19	23	45	99	79.5	261.8	20
AOV15CS04-O		H1504	1/4"	0.2	3.2	50	25	30	62	141	66	251	20
AOV15CS06-O		H1506	3/8"	0.2	3.2	50	25	30	62	141	66	251	20
AOV10CS08-O	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	44.5	86	145	81.5	332.3	25
AOV20CS04-O	20,000 psi	H2004	1/4"	0.31	3.2	50	25	30	62	141	66	251	20
AOV20CS06-O		H2006	3/8"	0.75	5.5	50	25	30	62	141	66	251	20
AOV20CS09-O		H2009	9/16"	1.3	7.9	63	31.5	44	86	145	81.5	332.3	25
AOV60CS04-O	60,000 psi	H6004	1/4"	0.08	2	50	25	33	60.5	141	66	249.5	25
AOV60CS06-O		H6006	3/8"	0.09	2	50	25	33	67	141	66	256	25
AOV60CS09-O		H6009	9/16"	0.14	2	67	33.5	33	71.5	141	66	260.5	38

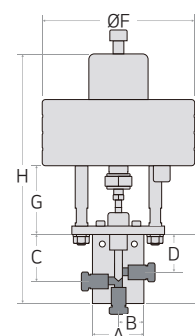
All dimensions are for reference only and may differ from actual size.



3Way/2on

Catalog No	Pressure Rating	Port Type	Tube Size	Cv	Orifice Size	Dimensions								Block Thickness
						A	B	C	D	E	F	G	H	
AOV15CS02-T	15,000 psi	H1502	1/8"	0.12	1.4	38	19	30	23	45	99	79.5	261.8	20
AOV15CS04-T		H1504	1/4"	0.2	3.2	50	25	40	30	66.5	141	66	255.5	20
AOV15CS06-T		H1506	3/8"	0.2	3.2	50	25	41	30	66.5	141	66	255.5	20
AOV10CS08-T	10,000 psi	H1008	1/2"	1.62	8.5	63	31.5	60.5	44.5	92	145	81.5	338.3	25
AOV20CS04-T	20,000 psi	H2004	1/4"	0.31	3.2	50	25	40	30	66.5	141	66	255.5	20
AOV20CS06-T		H2006	3/8"	0.75	5.5	50	25	40	30	66.5	141	66	255.5	20
AOV20CS09-T		H2009	9/16"	1.3	7.9	63	31.5	60	44	92	145	81.5	338.3	25
AOV60CS04-T	60,000 psi	H6004	1/4"	0.08	2	50	25	43	33	60.5	141	66	249.5	25
AOV60CS06-T		H6006	3/8"	0.09	2	50	25	43	33	71.5	141	66	260.5	25
AOV60CS09-T		H6009	9/16"	0.14	2	67	33.5	43	33	77	141	66	266	38

All dimensions are for reference only and may differ from actual size.



Wellhead Gauge Valve

Needle valve to enable removal of tools for sampling and calibration of measuring instruments

Wellhead Gauge Valve is a needle valve that is installed in places where sampling or calibration of measuring tools is required, and enables sampling when used with a Bleed Valve, and enables the removal of measuring tools for calibration. It can be used with a maximum pressure of 30,000 psi, and has one inlet port and three outlet ports, so it can be used by attaching a gauge or bleed valve, depending on the application.

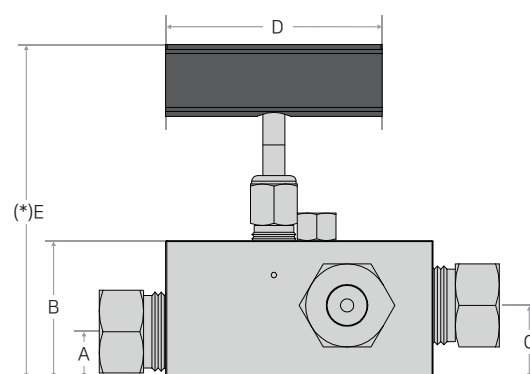
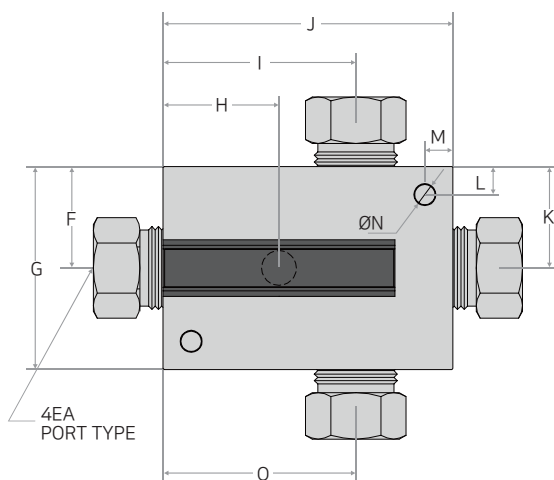
(Application - Line sampling, calibration of measuring tools)

Features

- Tube Size : 1/4", 3/8", 9/16"
- Usable up to 30,000 psi pressure
- Non-rotating stem prevents galling
- Packing designed for reliable sealing
- Metal to Metal Sealing Method
- One Inlet Port and 3 Outlet Ports
- Body made of STS316CW
- Packing located below stem threads



Exploded View & Dimensions



N: Punch Size, (*) : Height at which the valve is completely closed

(Unit : mm)

Catalog No	Stem	Port Type	Pressure Rating	Tube Size	Orifice Size	Dimensions														
						A	B	C	D	(*)E	F	G	H	I	J	K	L	M	N	O
GV20VS04	Vee	H2004	20,000 psi	1/4"	3.2	10	50	22.5	80	118.6	25	50	30	51.5	80	25	6.4	6.4	7	51.5
GV20VS06		H2006		3/8"																
GV30VS09		H6009	30,000 psi	9/16"		17	50	26.5	80	121	35	70	40	66.5	100	35	9.7	9.7	7	66.5

All dimensions are for reference only and may differ from actual size.

Bleed Valve

A valve used to vent pressure on a line and collect small samples

Bleed Valve is a valve used in instrumentation devices such as gauge valves to vent the pressure in the line to atmospheric pressure before removing the device, to assist in the calibration of the control device or to collect a small amount of sample.

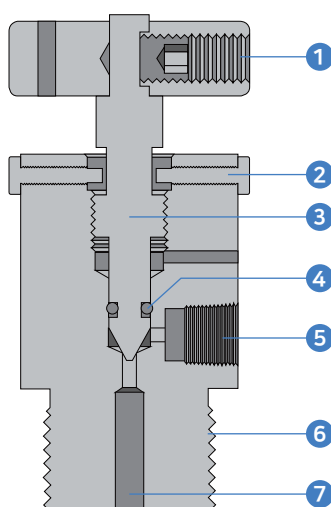
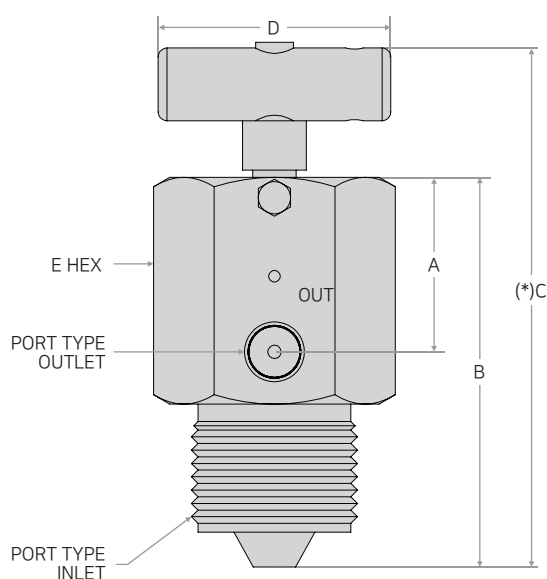
(Application - Pressure relief, small amount of sampling)

Features

- Compact product using one hexagonal material for easy installation
- Usable up to 30,000 psi pressure
- Can be used as a vent for safe plumbing work
- Easy operation with tee handle
- Metal to Metal Sealing Method



Exploded View & Dimensions



No	DESCRIPTION
1	Handle
2	Back Stop Screw
3	Stem
4	Viton O-ring
5	1/8" NPT OUT PORT
6	Screw
7	IN PORT

(*) : Height at which the valve is completely closed

(Unit : mm)

Catalog No	Port Type		Pressure Rating		Dimensions				
	INLET	OUTLET	INLET	OUTLET	A	B	(*)C	D	E(HEX)
BLV20VS04	H2004	1/8" NPT	20,000 psi	10,000 psi	33	59	78.24	40	36
BLV20VS06	H2006					63	82.24		
BLV20VS09	H2009					67	86.24		
BLV30VS04	H6004		30,000 psi	10,000 psi		57	76.24		
BLV30VS06	H6006					65.5	84.74		
BLV30VS09	H6009					70	89.24		

All dimensions are for reference only and may differ from actual size.

Double Block and Bleed Valve

A valve installed on a line using gas or oil to block only the side where a leak occurs for maintenance purposes

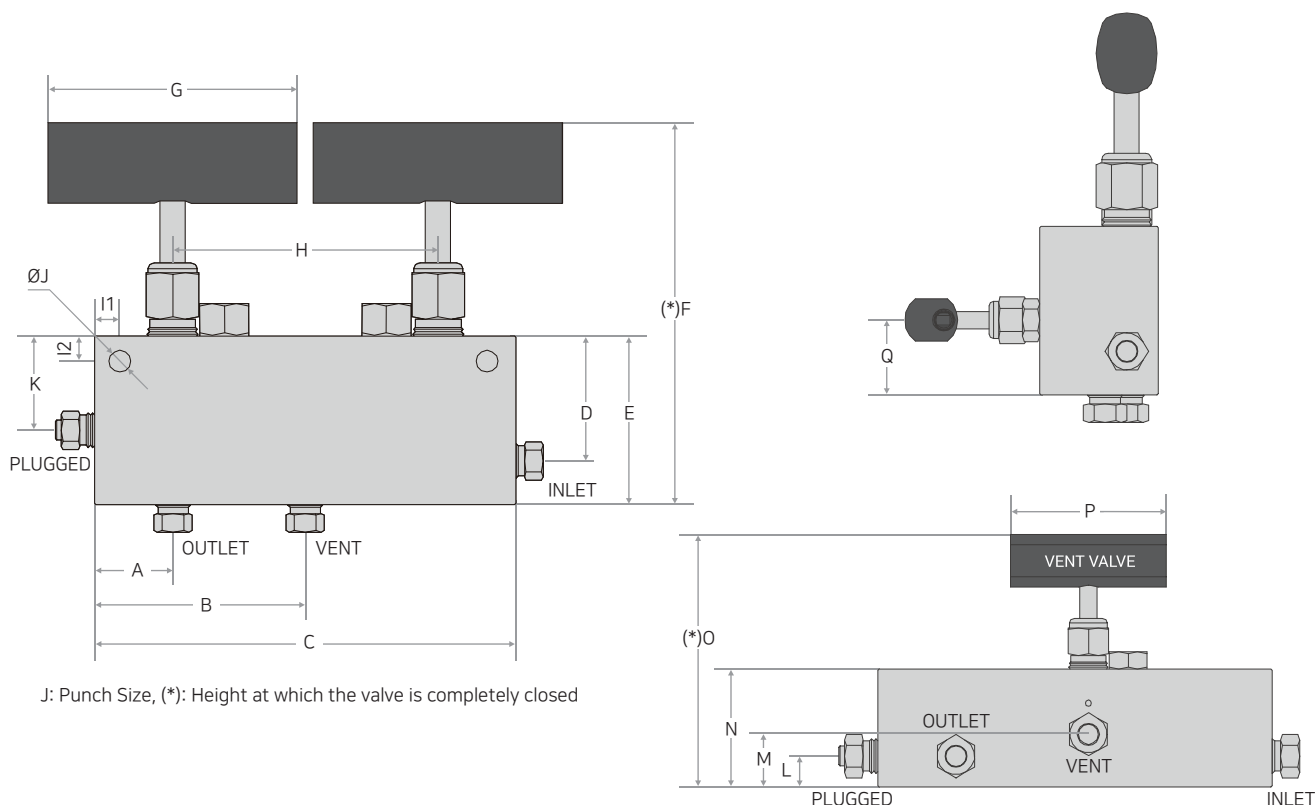
Double Block and Bleed Valve is a valve that is installed on a line using gas or oil to easily check the leaking area and, when a leak occurs, blocks only the leaking area to enable maintenance. It can also be used for chemical injection and sampling on the line. (Application - Pressure monitoring, pressure testing, chemical injection, sampling, drain pipe isolation)

Features

- Tube Size: 1/4", 3/8"
- Non-rotating stem prevents galling
- Packing designed for reliable sealing
- Metal to Metal Sealing method
- Excellent corrosion resistance based on 316 material
- Cone and Thread Connection for leak resistance when using gas and liquid



Exploded View & Dimensions



(Unit : mm)

Catalog No	Stem	Port Type	Vent Port	Pressure Rating	Tube Size	Orifice Size	Dimensions																	
							A	B	C	D	E	(*)F	G	H	I1	I2	J	K	L	M	N	(*)O	P	Q
DBBV20VS04	Vee	H2004	H2004	20,000 psi	1/4"	2.8	25	67.5	135	40	54	120.07	80	85	8	8	7	30	10	17	38	81.3	50	24
DBBV20VS06		H2006	H2006		3/8"	3.2	28	70	140	40	60.5	126.57	80	84	8	8	7	30	10	17	38	81.3	50	30.5
DBBV20VS09		H2009	H2004		9/16"	7.9	38.1	95	190	60	76	147.98	100	113.8	14	12.7	8	44	14	23.5	45	88.1	50	32

All dimensions are for reference only and may differ from actual size.

High Temperature Valve

High temperature valve usable up to 500°C

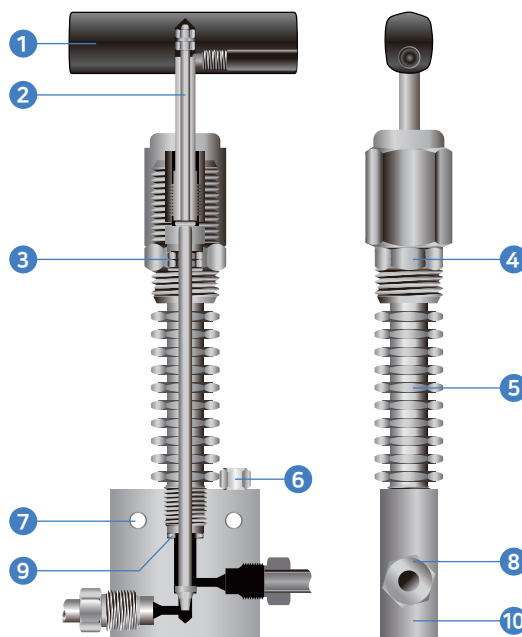
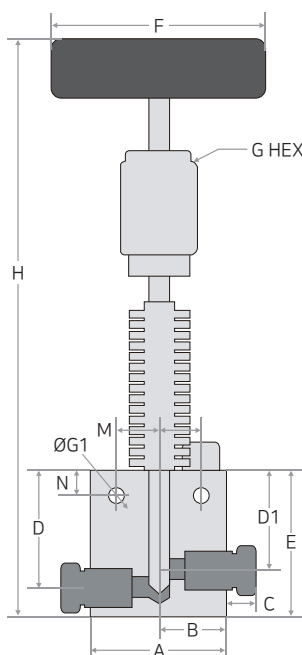
High-temperature valves are products that lower the temperature directly applied to the packing by isolating the packing from the high-temperature area where the fluid flows.

Features

- Up to 20,000 psi
- Non-rotating stem prevents galling
- Packing designed for reliable sealing
- Metal to Metal Sealing method
- Excellent corrosion resistance
- Valve usable up to 500°C
- Packing zone is located outside of hot zone
- Using a heat sink between the packing zone and hot zone increases the contact surface with air and reduces the heat effect on the packing zone



Exploded View & Dimensions



No	DESCRIPTION
1	Handle
2	Stem
3	Leak-proof packing
4	Fixing nut
5	Radiator tube
6	Anti-loosening device
7	Valve fixing hole
8	Connections (Fittings)
9	STS Seal
10	Valve body

(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Stem	Orifice Size	Dimensions												Block Thickness
						A	B	C	D	D1	E	F	G	G1	H	M	N	
HV20S04-S	20,000 psi	H2004	1/4"	Vee	2.8	50	25	11	40	30	50	80	28	6	211	16.7	9.7	20
HV20S06-S		H2006	3/8"		5.2	50	25	13	40	30	50	80	28	6	211	16.7	9.7	20
HV20S09-S		H2009	9/16"		9.1	63	31.5	16	60	44	73	80	32	8	235	17.6	12.7	25

G: Mounting hole size using the gland (body plane)
G1: Mounting hole size using the body (body front)
H: Height when the valve is completely closed

All dimensions are for reference only and may differ from the actual size.
NPT, PT standard and specification production possible.
(please contact customer service center)

Control Valve

A control valve that automatically adjusts the amount of fluid according to the signal from the positioner

The control valve is a valve that automatically controls the flow rate of the fluid according to the purpose by changing the position of the stem and changing the opening/closing rate of the orifice when an operation signal is transmitted to the positioner through an electric signal.

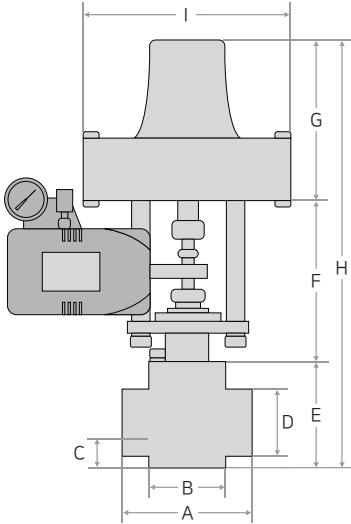
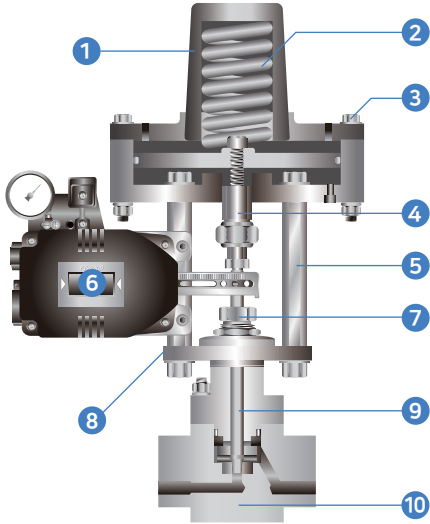
Features

- Minimum air pressure for operation: 5 kgf/cm²
- Non-rotating stem prevents galling
- Packing designed for reliable sealing
- Metal to Metal Seating extends seat life
- Regulating Stem with flow control
- Max Working Pressure: 3,000 psi, 7,500 psi
- Pipe Size: 15A, 25A
- Use of cold-working stainless steel materials



Exploded View & Dimensions

No	Description
1	Spring Housing
2	Spring
3	Nut
4	Connecting ROD
5	Support bar
6	Positioner
7	Stem Seal Gland
8	Bracket
9	Stem
10	Valve Body



(Unit : mm)

Catalog No	Pressure Rating	Pipe Size	Dimensions								
			A	B	C	D	E	F	G	H	I
CON03CS15-S	3,000 psi	15A	136	80	30	21.4	110	166.6	171	448	219
CON03CS25-S	3,000 psi	25A	136	80	30	33.4	110	166.6	171	448	219
CON07CS15-S	7,500 psi	15A	136	80	30	21.4	110	166.6	171	448	219

All dimensions are for reference only and may differ from actual size.

High Pressure Tube

High pressure tubing for optimal tubing effect



Features

- The tube is sold in basic 6M units.
- Excellent corrosion resistance required at high pressure due to the use of cold-formed stainless steel 316 material
- Tubing used in the chemical, oil refining, research, oil, and gas industries for various pressures (up to 150,000 psi)
- If you want a hydraulic test, we can perform it on your behalf according to the rules (Gas Safety Act) set under the operating pressure.

(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Dimensions		Thickness	Flow Area(mm ²)	Working pressure psi (Bar)				
				Outside Diameter	Inside Diameter			-198~-37.8°C -325~-100°F	93°C 200°F	204°C 400°F	316°C 600°F	427°C 800°F
T15S02	15,000 psi	H1502	1/8"	3.18	1.32	0.91	1.29	1034.20	1034.20	992.83	937.67	868.73
T15S04	15,000 psi	H1504	1/4"	6.35	2.13	2.11	18.71	1034.16	1034.16	992.83	937.67	868.73
T15S06	15,000 psi	H1506	3/8"	9.53	3.53	3	47.10	1034.16	1034.16	992.83	937.67	868.73
T10S08	10,000 psi	H1008	1/2"	12.7	6.86	3	35.48	689.46	689.46	665.33	620.52	579.15
T20S04	20,000 psi	H2004	1/4"	6.35	2.77	1.78	5.81	1378.93	1378.93	1327.22	1244.48	1158.30
T20S06		H2006	3/8"	9.53	5.16	2.18	20.65	1378.93	1378.93	1327.22	1244.48	1158.30
T20S09		H2009	9/16"	14.29	7.92	3.18	49.03	1378.93	1378.93	1327.22	1244.48	1158.30
T20S12		H2012	3/4"	19.05	11.13	3.96	97.42	1378.93	1378.93	1327.22	1244.48	1158.30
T20S16		H2016	1"	25.4	14.27	5.56	160.0	1378.93	1378.93	1327.22	1244.48	1158.30
T30S02	30,000 psi	H3002	1/8"	3.18	1.02	1.08						
T30S16		H3016	1"	25.4	11.1	7.15						
T60S04	60,000 psi	H6004	1/4"	6.35	2.11	2.11	3.23	4136.79	4136.79	3981.66	3740.35	3495.59
T60S06		H6006	3/8"	9.53	3.18	3.18	7.74	4136.79	4136.79	3981.66	3740.35	3495.59
T60S09		H6009	9/16"	14.29	4.78	4.75	18.06	4136.79	4136.79	3981.66	3740.35	3495.59
T100S04	100,000 psi	H10004	1/4"	6.35	1.59	2.38	3.23	6894.64	6894.64	6633.24	6230.55	5820.46
T150S04	150,000 psi	H15006	3/8"	9.53	1.59	3.97	7.74	10341.97	10341.97	9955.87	9400.85	8738.97

All dimensions are for reference only and may differ from actual size.

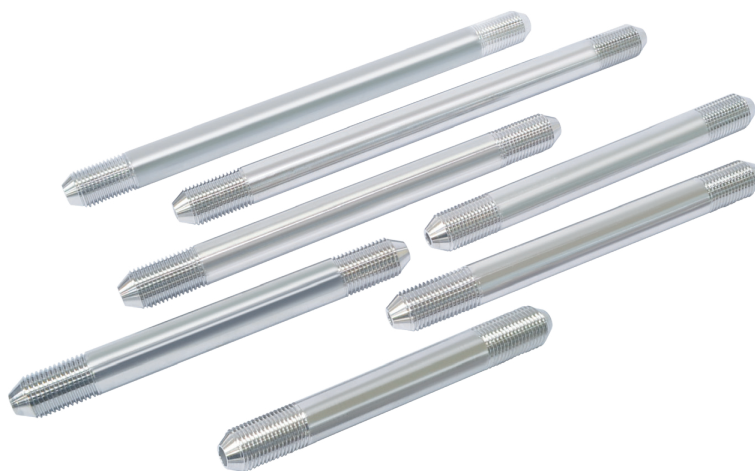
(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Dimensions		Thickness
				Outside Diameter	Inside Diameter	
Sandvic HPT	100,000 psi	H10006	3/8"	9.52	3.20	3.16
		H10009	9/16"	14.30	4.76	4.77

All dimensions are for reference only and may differ from actual size.

High Pressure Nipple

High pressure nipples for easy and quick configuration of equipment and piping



Features

- Cone and Thread Nipple for easy and quick equipment configuration
- Excellent corrosion resistance required at high pressure due to use of cold-formed stainless steel 316
- Can be manufactured in two types: one-way and two-way

(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Dimensions		Thickness	Minimum Length	Flow Area(mm ²)	Working pressure psi (Bar)				
				Outside Diameter	Inside Diameter				-198~-37.8℃ -325~-100°F	93℃ 200°F	204℃ 400°F	316℃ 600°F	427℃ 800°F
N20S04	20,000 psi	H2004	1/4"	6.35	2.8	1.78	70	6.16	1378.93	1378.93	1327.22	1244.48	1158.30
N20S06		H2006	3/8"	9.53	5.2	2.17	88	21.24	1378.93	1378.93	1327.22	1244.48	1158.30
N20S09		H2009	9/16"	14.29	7.9	3.2	110	49.02	1378.93	1378.93	1327.22	1244.48	1158.30
N20S12		H2012	3/4"	19.05	11.1	3.98	118	96.77	1378.93	1378.93	1327.22	1244.48	1158.30
N20S16		H2016	1"	25.4	14.3	5.55	168	160.61	1378.93	1378.93	1327.22	1244.48	1158.30
N30S02	30,000 psi	H3002	1/8"	3.18	1	1.09	43	0.79					
N30S16		H3016	1"	25.4	11.1	7.15	168	96.77					
N60S04	60,000 psi	H6004	1/4"	6.35	2.1	2.13	74	3.46	4136.79	4136.79	3981.66	3740.35	3495.59
N60S06		H6006	3/8"	9.53	3.2	3.17	104	8.04	4136.79	4136.79	3981.66	3740.35	3495.59
N60S09		H6009	9/16"	14.29	4.8	4.75	135	18.10	4136.79	4136.79	3981.66	3740.35	3495.59
N100S04	100,000 psi	H10004	1/4"	6.35	1.6	2.38	103	2.01	6894.64	6894.64	6633.24	6230.55	5820.46
N150S06	150,000 psi	H15006	3/8"	9.53	1.6	3.97	135	2.01	10341.97	10341.97	9955.87	9400.85	8738.97

All dimensions are for reference only and may differ from actual size.

One Side Type



Both Side Type



Tooling Set

Tools for coning and threading

Threading Tool

It is designed to prepare left-hand threads for high pressure tubing such as 20,000psig, 60,000psig, etc. and ultra-high pressure tubing, and the thread dies and guide bushings are designed to be interchangeable. (Except for 1/8")



Coning Tool

Designed to prepare high pressure tubing such as 20,000psig, 60,000psig, and ultra high pressure tubing for finishing, and designed at an angle of approximately 57 to 59°. Both cutters and collets are interchangeable. (Except 9/16" for 20,000 psi and 60,000 psi)



Reseating Tool

A tool that can repair the connecting seat of old or damaged valves or fittings without the need for separate tubing preparation.

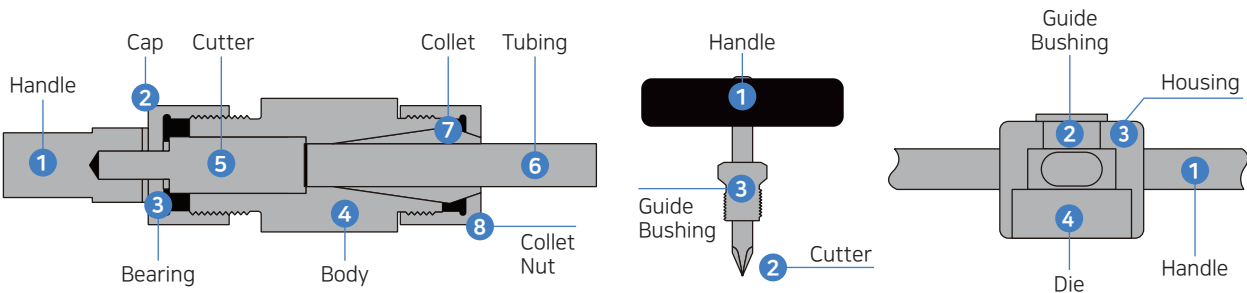


Spare Collet & Cutter

Capable of finishing ultra-high pressure & high pressure tubing. Designed for angles of 57 to 59°



Exploded View & Dimensions

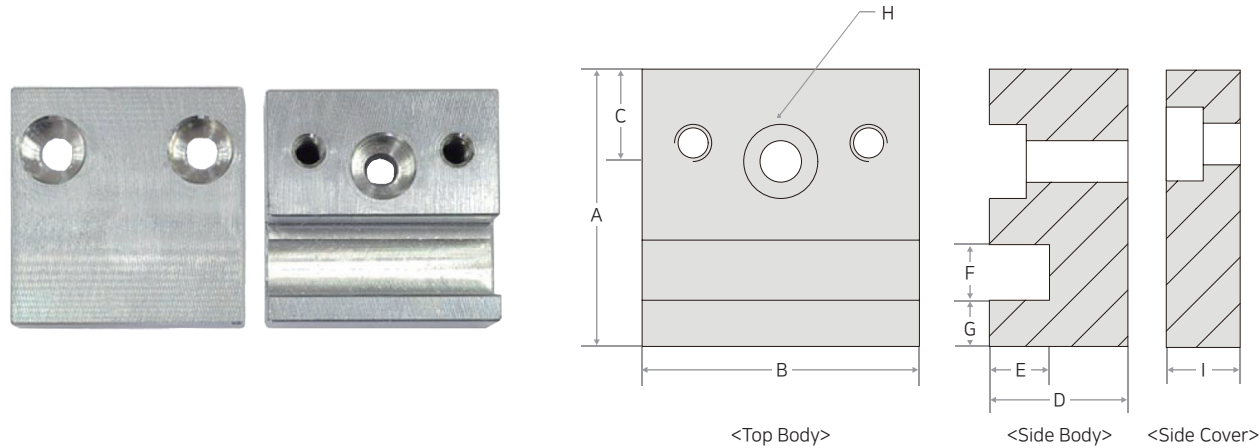


Pressure Rating	Tube Size	Catalog No						
		Coning Tool			Threading Tool			Reseating Tool
		Set	Spare Cutter	Spare Collet	Set	Die	Guide Bushing	
20,000 psi	1/4"	CT-LF4	CT-LF4L	CT-LF4P	CT-MLF4	1/4" - 28LH	CT-MLF4P	RT-LF4
	3/8"	CT-LF6	CT-LF6L	CT-LF6P	CT-MLF6	3/8" - 24LH	CT-MLF6P	RT-LF6
	9/16"	CT-LF9	CT-LF9L	CT-LF9P	CT-MLF9	9/16" - 18LH	CT-MLF9P	RT-LF9
60,000 psi	1/4"	CT-HF4	CT-HF4L	CT-HF4P	CT-MHF4	1/4" - 28LH	CT-MHF4P	RT-HF4
	3/8"	CT-HF6	CT-HF6L	CT-HF6P	CT-MHF6	3/8" - 24LH	CT-MHF6P	RT-HF6
	9/16"	CT-HF9	CT-HF9L	CT-HF9P	CT-MHF9	9/16" - 18LH	CT-MHF9P	RT-HF9

Tube Support

Supports tubes or secures pipes installed in equipment that generates vibrations to reduce tube shaking caused by vibrations

1 Line - 1/4-3/8 inch

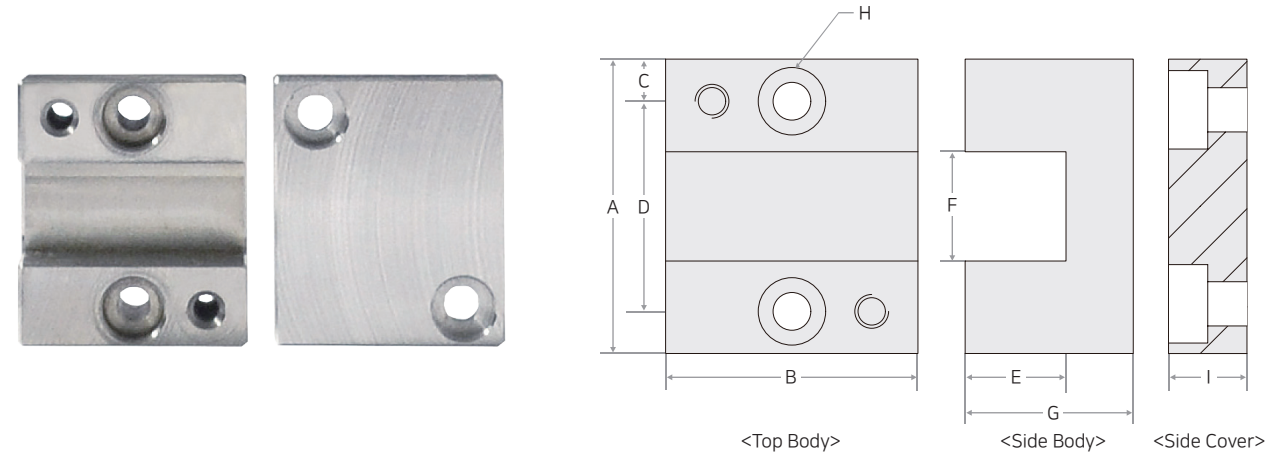


(Unit : mm)

Catalog No	Tube Size	Dimensions								
		A	B	C	D	E	F	G	H	I
TS04L1	1/4"	30	30	10	15	6	6.5	5	M4 C'B	8
TS06L1	3/8"	30	30	10	15	9	9.7	4	M4 C'B	8

All dimensions are for reference only and may differ from actual size.

1 Line - 1/2-9/16 inch

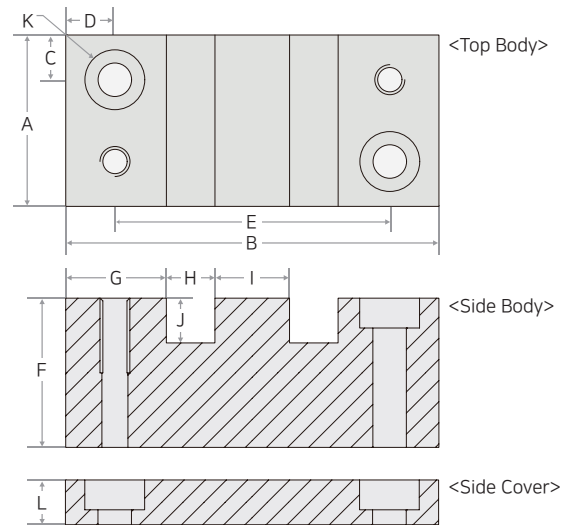
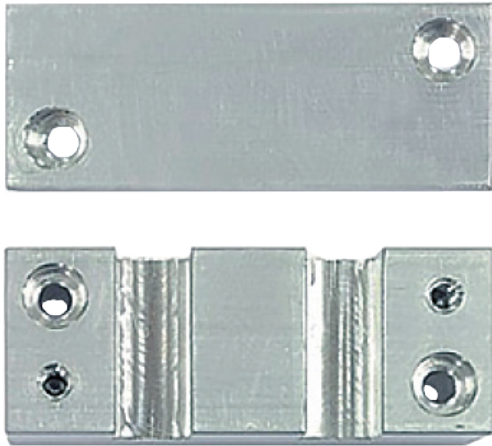


(Unit : mm)

Catalog No	Tube Size	Dimensions								
		A	B	C	D	E	F	G	H	I
TS08L1	1/2"	35	30	5	25	12	13	20	M4 C'B	8
TS09L1	9/16"	35	30	5	25	13.8	14.6	20	M4 C'B	8

All dimensions are for reference only and may differ from actual size.

➤ 2 Line

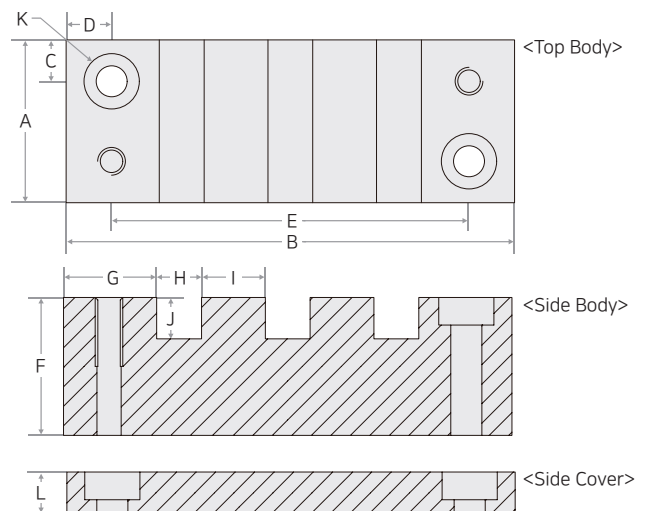


(Unit : mm)

Catalog No	Tube Size	Dimensions											
		A	B	C	D	E	F	G	H	I	J	K	L
TS04L2	1/4"	25	50	6	6.6	36.8	20	13.5	6.5	5	6	M4 C'B	6
TS06L2	3/8"	25	65	6	6.6	51.8	20	13.5	9.7	18.6	9	M4 C'B	6
TS08L2	1/2"	25	65	6	6.6	51.8	20	13.5	12.7	12.6	12	M4 C'B	6
TS09L2	9/16"	25	65	6	6.6	51.8	20	13.5	14.5	9	14	M4 C'B	6

All dimensions are for reference only and may differ from actual size.

➤ 3 Line



(Unit : mm)

Catalog No	Tube Size	Dimensions											
		A	B	C	D	E	F	G	H	I	J	K	L
TS04L3	1/4"	25	65	6	6.6	51.8	20	13.5	6.5	9.25	6	M4 C'B	6
TS06L3	3/8"	25	90	6	6.6	76.8	20	13.5	9.7	16.95	9	M4 C'B	6
TS08L3	1/2"	25	90	6	6.6	76.8	20	13.5	12.7	12.45	12	M4 C'B	6
TS09L3	9/16"	25	90	6	6.6	76.8	20	13.5	14.5	9.75	14	M4 C'B	6

All dimensions are for reference only and may differ from actual size.

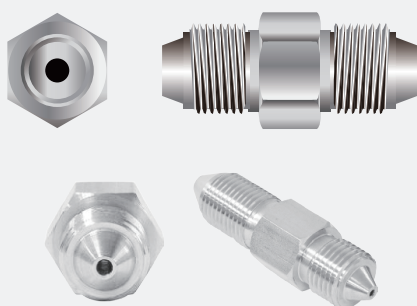
High Pressure Union & Adapter

High pressure union and adapter series that facilitate pressure and size compatibility without separate coupling

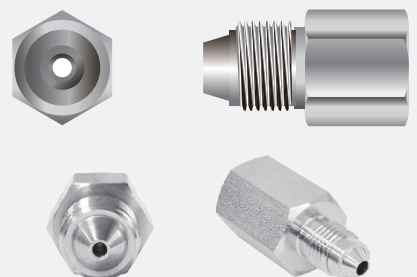
Female ▶ Female (Union)



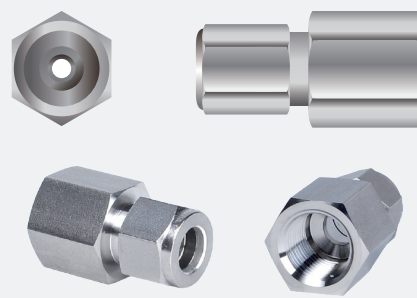
male ▶ male



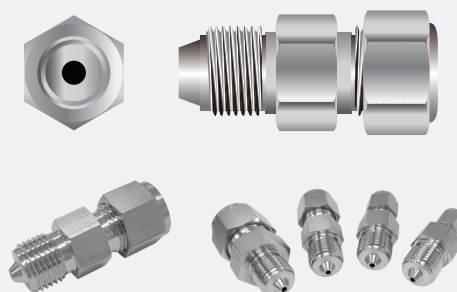
male ▶ Female



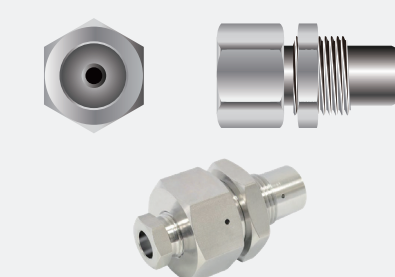
Adapter - Female to LOK(Female)



Adapter - Male to LOK(Female)



Bulkhead Union



Features

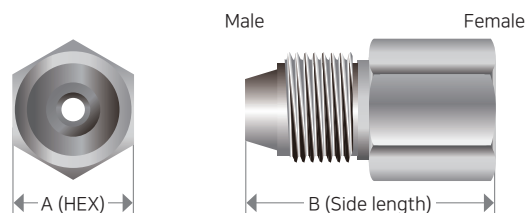
- Stainless Steel 316 cold material used for excellent corrosion resistance required at high pressure
- A variety of configurations for all pressures of HIFLUX products and up to National Pipe Thread (NPT)
- Leak-resistant Cone and thread Connection
- The high pressure part of the female port is provided with a gland, collar or sleeve.
- Please contact the customer center for the anti-vibration type and other material use.
- It is manufactured to be safely connected with a cone and thread type, so it can be used without leakage even at high pressure regardless of fluid or gas.

How to use the table and select products

※ (Example) When selecting a Male → Female adapter product

- ① Select a Male port that matches the pressure and Tube Size (vertical lines in the table)
- ② Check the pressure and Tube Size to be connected, then select the Female2 port (horizontal lines in the table)
- ③ Confirm the Catalog No. and product dimensions of the product and then place an order

[Example Image]



(단위 : mm)

All dimensions are for reference only and may differ from actual size.

➤ [Male → Female]

(Unit : mm)

Pressure Rating		15,000 psi (Female)								20,000 psi (Female)								30,000 psi (Female)				60,000 psi (Female)				NPT (Female)																		
		Catalog No / Dimensions																																										
	Tube Size (Port Type)	1/8" (H1502)		1/4" (H1504)		3/8" (H1506)		1/2" (H1008)		1/4" (H2004)		3/8" (H2006)		9/16" (H2009)		3/4" (H2012)		1" (H2016)		1/8" (H3002)		1" (H3016)		1/4" (H6004)		3/8" (H6006)		9/16" (H6009)		1/8"		1/4"		3/8"		1/2"		3/4"		1"				
	Dimensions	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B			
15,000 psi (Male)	1/8" (H1502)			A015M2/015F4	A015M2/015F6	A015M2/010F8	A015M2/020F4	A015M2/020F6	A015M2/020F9									A015M2/030F2					A015M2/060F4	A015M2/060F6	A015M2/060F9	A015M2/NPTF2	A015M2/NPTF4	A015M2/NPTF6	A015M2/NPTF8															
	1/4" (H1504)	A015M4/015F2		A015M4/015F6	A015M4/010F8	A015M4/020F4	A015M4/020F6	A015M4/020F9	A015M4/020F12									A015M4/030F2					A015M4/060F4	A015M4/060F6	A015M4/060F9	A015M4/NPTF2	A015M4/NPTF4	A015M4/NPTF6	A015M4/NPTF8	A015M4/NPTF12														
	3/8" (H1506)	A015M6/015F2	A015M6/015F4			A015M6/010F8	A015M6/020F4	A015M6/020F6	A015M6/020F9	A015M6/020F12	A015M6/020F16	A015M6/030F2	A015M6/030F16	A015M6/060F4	A015M6/060F6	A015M6/060F9	A015M6/NPTF2	A015M6/NPTF4	A015M6/NPTF6	A015M6/NPTF8	A015M6/NPTF12	A015M6/NPTF16																						
	1/2" (H1008)	A010M8/015F2	A010M8/015F4	A010M8/015F6			A010M8/020F4	A010M8/020F6	A010M8/020F9	A010M8/020F12	A010M8/020F16	A010M8/030F2	A010M8/030F16	A010M8/060F4	A010M8/060F6	A010M8/060F9	A010M8/NPTF2	A010M8/NPTF4	A010M8/NPTF6	A010M8/NPTF8	A010M8/NPTF12	A010M8/NPTF16																						
20,000 psi (Male)	1/4" (H2004)	A020M4/015F2	A020M4/015F4	A020M4/015F6	A020M4/010F8					A020M4/020F6	A020M4/020F9	A020M4/020F12	A020M4/020F16	A020M4/030F2	A020M4/030F16	A020M4/060F4	A020M4/060F6	A020M4/060F9	A020M4/NPTF2	A020M4/NPTF4	A020M4/NPTF6	A020M4/NPTF8	A020M4/NPTF12																					
	3/8" (H2006)	A020M6/015F2	A020M6/015F4	A020M6/015F6	A020M6/010F8	A020M6/020F4				A020M6/020F9	A020M6/020F12	A020M6/020F16	A020M6/030F2	A020M6/030F16	A020M6/060F4	A020M6/060F6	A020M6/060F9	A020M6/NPTF2	A020M6/NPTF4	A020M6/NPTF6	A020M6/NPTF8	A020M6/NPTF12	A020M6/NPTF16																					
	9/16" (H2009)	A020M9/015F2	A020M9/015F4	A020M9/015F6	A020M9/010F8	A020M9/020F4	A020M9/020F6					A020M9/020F12	A020M9/020F16	A020M9/030F2	A020M9/030F16	A020M9/060F4	A020M9/060F6	A020M9/060F9	A020M9/NPTF2	A020M9/NPTF4	A020M9/NPTF6	A020M9/NPTF8	A020M9/NPTF12	A020M9/NPTF16																				
	3/4" (H2012)			A020M12/015F4	A020M12/015F6	A020M12/010F8	A020M12/020F4	A020M12/020F6	A020M12/020F9					A020M12/020F16			A020M12/030F16	A020M12/060F4	A020M12/060F6	A020M12/060F9					A020M12/NPTF4	A020M12/NPTF6	A020M12/NPTF8	A020M12/NPTF12	A020M12/NPTF16															
	1" (H2016)			A020M16/015F4	A020M16/015F6	A020M16/010F8	A020M16/020F4	A020M16/020F6	A020M16/020F9	A020M16/020F12							A020M16/030F16	A020M16/060F4	A020M16/060F6	A020M16/060F9					A020M16/NPTF4	A020M16/NPTF6	A020M16/NPTF8	A020M16/NPTF12	A020M16/NPTF16															
				36	54	36	54	36	54	36	56	36	59	36	63	36	70							46	81	36	54	36	60	36	64			36	60	46	60	36	60	36	68	46	78	
30,000 psi (Male)	1/8" (H3002)	A030M2/015F2	A030M2/015F4	A030M2/015F6	A030M2/010F8	A030M2/020F4	A030M2/020F6	A030M2/020F9																A030M2/060F4	A030M2/060F6	A030M2/060F9	A030M2/NPTF2	A030M2/NPTF4	A030M2/NPTF6	A030M2/NPTF8														
	1" (H3016)			A030M16/015F4	A030M16/015F6	A030M16/010F8	A030M16/020F4	A030M16/020F6	A030M16/020F9	A030M16/020F12	A030M16/020F16													A030M16/060F4	A030M16/060F6	A030M16/060F9			A030M16/NPTF4	A030M16/NPTF6	A030M16/NPTF8	A030M16/NPTF12	A030M16/NPTF16											
				36	55	36	55	36	55	36	57	36	60	36	64	36	70	46	82						36	55	36	61	36	65			36	61	36	61	36	61	36	69	46	79		
60,000 psi (Male)	1/4" (H6004)	A060M4/015F2	A060M4/015F4	A060M4/015F6	A060M4/010F8	A060M4/020F4	A060M4/020F6	A060M4/020F9	A060M4/020F12									A060M4/030F2										A060M4/060F6	A060M4/060F9	A060M4/NPTF2	A060M4/NPTF4	A060M4/060F16												
	3/8" (H6006)	A060M6/015F2	A060M6/015F4	A060M6/015F6	A060M6/010F8	A060M6/020F4	A060M6/020F6	A060M6/020F9	A060M6/020F12	A060M6/020F16	A060M6/030F2	A060M6/030F16	A060M6/060F4														A060M6/060F9	A060M6/NPTF2	A060M6/NPTF4	A060M6/NPTF6	A060M6/NPTF8	A060M6/NPTF12	A060M6/NPTF16											
	9/16" (H6009)	A060M9/015F2	A060M9/015F4	A060M9/015F6	A060M9/010F8	A060M9/020F4	A060M9/020F6	A060M9/020F9	A060M9/020F12	A060M9/020F16	A060M9/030F2	A060M9/030F16	A060M9/060F4	A060M9/060F6																														
		30	38	30	42.5	30	42.5	30	44.5	30	42.5	30	46	30	51	36	61	46	78	30	38	46	78	30	44	30	40	30	50															
NPT (Male)	1/8"			ANPTM2/015F4	ANPTM2/015F6	ANPTM2/010F8	ANPTM2/020F4	ANPTM2/020F6	ANPTM2/020F9									ANPTM2/030F2																										
	1/4"	ANPTM4/015F2	ANPTM4/015F4	ANPTM4/015F6	ANPTM4/010F8	ANPTM4/020F4	ANPTM4/020F6	ANPTM4/020F9	ANPTM4/020F12	ANPTM4/020F16	ANPTM4/030F2	ANPTM4/030F16	ANPTM4/060F4	ANPTM4/060F6	ANPTM4/060F9																													
	3/8"	ANPTM6/015F2	ANPTM6/015F4	ANPTM6/015F6	ANPTM6/010F8	ANPTM6/020F4	ANPTM6/020F6	ANPTM6/020F9	ANPTM6/020F12	ANPTM6/020F16	ANPTM6/030F2	ANPTM6/030F16	ANPTM6/060F4	ANPTM6/060F6	ANPTM6/060F9																													
	1/2"	ANPTM8/015F2	ANPTM8/015F4	ANPTM8/015F6	ANPTM8/010F8	ANPTM8/020F4	ANPTM8/020F6	ANPTM8/020F9	ANPTM8/020F12	ANPTM8/020F16	ANPTM8/030F2	ANPTM8/030F16	ANPTM8/060F4	ANPTM8/060F6	ANPTM8/060F9																													
	3/4"			ANPTM12/015F4	ANPTM12/015F6	ANPTM12/010F8	ANPTM12/020F4	ANPTM12/020F6	ANPTM12/020F9	ANPTM12/020F12	ANPTM12/020F16	ANPTM12/030F2	ANPTM12/030F16	ANPTM12/060F4	ANPTM12/060F6	ANPTM12/060F9	ANPTM12/NPTF2																											
	1"																																											

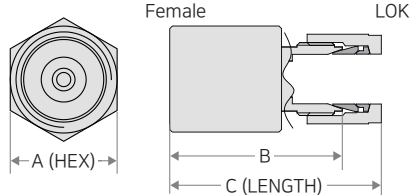
Pressure Rating		15,000 psi (Male 2)								20,000 psi (Male 2)								30,000 psi (Male 2)				60,000 psi (Male 2)				NPT (Male 2)																	
		Catalog No / Dimensions																																									
	Tube Size (Port Type)	1/8" (H1502)		1/4" (H1504)		3/8" (H1506)		1/2" (H1008)		1/4" (H2004)		3/8" (H2006)		9/16" (H2009)		3/4" (H2012)		1" (H2016)		1/8" (H3002)		1" (H3016)		1/4" (H6004)		3/8" (H6006)		9/16" (H6009)		1/8"		1/4"		3/8"		1/2"		3/4"		1"			
	Dimensions	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
15,000 psi (Male 1)	1/8" (H1502)	A015M2 /015M2		A015M2 /015M4		A015M2 /015M6		A015M2 /010M8		A015M2 /020M4		A015M2 /020M6		A015M2 /020M9						A015M2 /030M2				A015M2 /060M4		A015M2 /060M6		A015M2 /060M9															
		12.7	35	16	41	19	46.5	25.4	49.5	12.7	39.5	16	43.5	24	49.5					16	36.5			16	41	20.6	50	30	54.5														
	1/4" (H1504)			A015M4 /015M4		A015M4 /015M6		A015M4 /010M8		A015M4 /020M4		A015M4 /020M6		A015M4 /020M9		A015M4 /020M12				A015M4 /030M2				A015M4 /060M4		A015M4 /060M6		A015M4 /060M9															
				16	47	19	51.5	25.4	54.5	16	44.5	16	48.5	24	56.5	30	65			16	41.5			16	46	20.6	55	30	59.5														
20,000 psi (Male 1)	3/8" (H1506)					A015M6 /015M6		A015M6 /010M8		A015M6 /020M4		A015M6 /020M6		A015M6 /020M9		A015M6 /020M12		A015M6 /020M16		A015M6 /030M2		A015M6 /030M16		A015M6 /060M4		A015M6 /060M6		A015M6 /060M9															
						19	54	25.4	57	19	47	19	51	24	59	30	67.5	36	77.5	19	44	36	78.5	19	48.5	20.6	57.5	30	62														
	1/2" (H1008)					A010M8 /010M8		A010M8 /020M4		A010M8 /020M6		A010M8 /020M9		A010M8 /020M12		A010M8 /020M16		A010M8 /030M2		A010M8 /030M16		A010M8 /060M4		A010M8 /060M6		A010M8 /060M9																	
						25.4		57.5	25.4	54	25.4	58	25.4	62	30	70	36	80	25.4	51	36	81	25.4	51.5	25.4	60	30	64.5															
30,000 psi (Male 1)	1/4" (H2004)							A020M4 /020M4		A020M4 /020M6		A020M4 /020M9		A020M4 /020M12		A020M4 /020M16		A020M4 /030M2				A020M4 /060M4		A020M4 /060M6		A020M4 /060M9																	
								12.7		44	16	48	24	56	30	64.5	36	78.5	16	41			16	45.5	20.6	54.5	30	61															
	3/8" (H2006)											A020M6 /020M6		A020M6 /020M9		A020M6 /020M12		A020M6 /020M16		A020M6 /030M2		A020M6 /030M16		A020M6 /060M4		A020M6 /060M6		A020M6 /060M9															
												16		54	24	60	30	70	36	84.5	16	45	36	85.5	16	49.5	20.6	58.5	30	65													
	9/16" (H2009)													A020M9 /020M9		A020M9 /020M12		A020M9 /020M16		A020M9 /030M2		A020M9 /030M16		A020M9 /060M4		A020M9 /060M6		A020M9 /060M9															
60,000 psi (Male 1)	3/4" (H2012)															A020M12 /020M12		A020M12 /020M16		A020M12 /030M2		A020M12 /030M16		A020M12 /060M4		A020M12 /060M6		A020M12 /060M9															
														30		82	36	97	30	65	36	98	30	62	30	70.5	30	75															
	1" (H2016)															A020M16 /020M16				A020M16 /030M16		A020M16 /060M4		A020M16 /060M6		A020M16 /060M9																	
																		A030M2 /030M2				A030M2 /060M4		A030M2 /060M6		A030M2 /060M9																	
																				14		38			16	42.5	20.6	51.5	30	58													
NPT (Male 1)	1/8"	ANPTM2 /015M2		ANPTM2 /015M4		ANPTM2 /015M6		ANPTM2 /010M8		ANPTM2 /020M4		ANPTM2 /020M6		ANPTM2 /020M9						ANPTM2 /030M2				ANPTM2 /060M4		ANPTM2 /060M6		ANPTM2 /060M9		ANPTM2 /NPTM2		ANPTM2 /NPTM4		ANPTM2 /NPTM6		ANPTM2 /NPTM8							
		12.7	34.5	16	39.5	19	42	25.4	44.5	12.7	41	16	45	24	50.5					16	36			16	41.5	20.6	47.5	30	53	12.7	33	16	39	19	42	25.4	46						
	1/4"	ANPTM4 /015M2		ANPTM4 /015M4		ANPTM4 /015M6		ANPTM4 /010M8		ANPTM4 /020M4		ANPTM4 /020M6		ANPTM4 /020M9		ANPTM4 /020M12		ANPTM4 /020M16		ANPTM4 /030M2		ANPTM4 /030M16		ANPTM4 /060M4		ANPTM4 /060M6		ANPTM4 /060M9				ANPTM4 /NPTM4		ANPTM4 /NPTM6		ANPTM4 /NPTM8		ANPTM4 /NPTM12					
		16	41.5	16	44.5	19	47	25.4	47.5	16	44	16	49	24	55	30	63	36	80	16	41	36	79	16	44.5	20.6	50.5	30	56			16	42	19	45	25.4	49	30	54				
NPT (Male 1)	3/8"	ANPTM6 /015M2		ANPTM6 /015M4		ANPTM6 /015M6		ANPTM6 /010M8		ANPTM6 /020M4		ANPTM6 /020M6		ANPTM6 /020M9		ANPTM6 /020M12		ANPTM6 /020M16		ANPTM6 /030M2		ANPTM6 /030M16		ANPTM6 /060M4		ANPTM6 /060M6		ANPTM6 /060M9						ANPTM6 /NPTM6		ANPTM6 /NPTM8		ANPTM6 /NPTM12		ANPTM6 /NPTM16			
		19	44.5	19	47.5	19	50	25.4	50.5	19	46	19	50	24	54	30	64	36	81	19	46	36	80	19	46.5	20.6	52.5	30	57						19	46	25.4	50	30	55	36	61	
	1/2"	ANPTM8 /015M2		ANPTM8 /015M4		ANPTM8 /015M6		ANPTM8 /010M8		ANPTM8 /020M4		ANPTM8 /020M6		ANPTM8 /020M9		ANPTM8 /020M12		ANPTM8 /020M16		ANPTM8 /030M2		ANPTM8 /030M16		ANPTM8 /060M4		ANPTM8 /060M6		ANPTM8 /060M9								ANPTM8 /NPTM8		ANPTM8 /NPTM12		ANPTM8 /NPTM16			
		25.4	49.5	25.4	54.5	25.4	57	25.4	57.5	25.4	54	25.4	58	25.4	62	30	68	36	84	25.4	51	36	83	25.4	51.5	25.4	57.5	30	61							25.4	57	30	58	36	64		
NPT (Male 1)	3/4"			ANPTM12 /015M4		ANPTM12 /015M6		ANPTM12 /010M8		ANPTM12 /020M4		ANPTM12 /020M6		ANPTM12 /020M9		ANPTM12 /020M12		ANPTM12 /020M16				ANPTM12 /030M16		ANPTM12 /060M4		ANPTM12 /060M6		ANPTM12 /060M9										ANPTM12 /NPTM12		ANPTM12 /NPTM16			
				30	57.5	30	60	30	60.5	30	59	30	63	30	67	30	73	36	85			36		84	30	56.5	30	62.5	30	66									30	59	36	65	
	1"					ANPTM16 /015M6		ANPTM16 /010M8				ANPTM16 /020M6		ANPTM16 /020M9		ANPTM16 /020M12		ANPTM16 /020M16				ANPTM16 /030M16				ANPTM16 /060M6		ANPTM16 /060M9												ANPTM16 /NPTM16			
						36	66	36	66.5			36	69	36	73	36	79	36	89			36		88			36	68.5	36	72											36	69	

All dimensions are for reference only and may differ from actual size.

➤ [Adapter - Female → LOK (Female)]



[Female to LOK]



(Unit : mm)

Pressure Rating		20,000 psi(Female)														
LOK (Female)		Catalog No / Dimensions														
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	Tube Size (Port Type)	1/4" (H2004)			3/8" (H2006)			9/16" (H2009)			3/4" (H2012)			1" (H2016)		
	1/8"	ALOKF02/020F4			ALOKF02/020F6			ALOKF02/020F9			ALOKF02/020F12			ALOKF02/020F16		
		16	30.9	37.9	20.6	35.6	42.6	25.4	42.7	49.7	36	48.4	55.4	46	59.4	66.4
	1/4"	ALOKF04/020F4			ALOKF04/020F6			ALOKF04/020F9			ALOKF04/020F12			ALOKF04/020F16		
		16	33.3	40.67	20.6	37	44.37	25.4	44.1	51.47	36	49.8	57.17	46	60.8	68.17
	3/8"	ALOKF06/020F4			ALOKF06/020F6			ALOKF06/020F9			ALOKF06/020F12			ALOKF06/020F16		
		16	34.8	42.17	20.6	38.5	45.87	25.4	45.6	52.97	36	51.3	58.67	46	62.3	69.67
	1/2"	ALOKF08/020F4			ALOKF08/020F6			ALOKF08/020F9			ALOKF08/020F12			ALOKF08/020F16		
		20.6	37.2	47.46	20.6	39.4	49.66	25.4	46.5	56.76	36	52.2	62.46	46	63.2	73.46
	3/4"	ALOKF12/020F4			ALOKF12/020F6			ALOKF12/020F9			ALOKF12/020F12			ALOKF12/020F16		
		30	39.4	49.56	30	43.1	53.26	30	48.2	58.36	36	53.9	64.06	46	65.4	75.56
	1"	ALOKF16/020F4			ALOKF16/020F6			ALOKF16/020F9			ALOKF16/020F12			ALOKF16/020F16		
		36	45.5	57.75	36	49.2	61.45	36	54.3	66.55	36	60	72.25	46	71	83.25

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(Unit : mm)

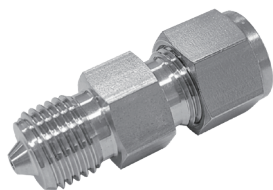
Pressure Rating		60,000 psi(Female)								
LOK (Female)		Catalog No / Dimensions								
		A	B	C	A	B	C	A	B	C
	Tube Size (Port Type)	1/4" (H2004)			3/8" (H2006)			9/16" (H6009)		
	1/8"	ALOKF02/060F4			ALOKF02/060F6			ALOKF02/060F9		
		20.6	29.1	36.1	25.4	37.9	44.9	36	42.2	49.2
	1/4"	ALOKF04/060F4			ALOKF04/060F6			ALOKF04/060F9		
		20.6	33	40.37	25.4	39.3	46.67	36	43.6	50.97
	3/8"	ALOKF06/060F4			ALOKF06/060F6			ALOKF06/060F9		
		20.6	34.5	41.87	25.4	40.8	48.17	36	45.1	52.47
	1/2"	ALOKF08/060F4			ALOKF08/060F6			ALOKF08/060F9		
		20.6	35.4	45.66	25.4	41.7	51.96	36	46	56.26
	3/4"	ALOKF12/060F4			ALOKF12/060F6			ALOKF12/060F9		
		30	37.6	47.76	30	43.9	54.06	36	48.2	58.36
	1"	ALOKF16/060F4			ALOKF16/060F6			ALOKF16/060F9		
		36	43.7	55.95	36	50	62.25	36	54.3	66.55

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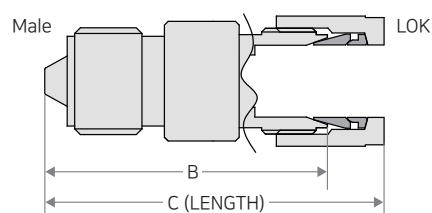
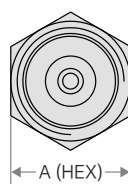
➤ How to use the table and select products

- ① Check the pressure and Tube Size to be connected, then select LOK (Female) (horizontal lines in the table)
- ② Select Female according to the pressure and Tube Size you will be using (vertical lines in the table)
- ③ Check the Catalog No. and dimensions of the product

➤ [Adapter - Male to LOK (Female)]



[Male to LOK]



(Unit : mm)

Pressure Rating		LOK(Female)																	
20,000 psi (Male)		Catalog No / Dimensions																	
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	Tube Size (Port Type)	1/8"			1/4"			3/8"			1/2"			3/4"			1"		
	1/4" (H2004)	A020M4/LOKF02			A020M4/LOKF04			A020M4/LOKF06			A020M4/LOKF08			A020M4/LOKF12			A020M4/LOKF16		
		12.7	38	45	12.7	39.3	46.67	16	40.8	48.17	20.6	40.8	51.06	30	45.9	56.06	36	48.1	60.35
	3/8" (H2006)	A020M6/LOKF02			A020M6/LOKF04			A020M6/LOKF06			A020M6/LOKF08			A020M6/LOKF12			A020M6/LOKF16		
		16	41.6	48.6	16	43.3	50.67	16	44.8	52.17	20.6	44.8	55.06	30	49.9	60.06	36	52.1	64.35
	9/16" (H2009)	A020M9/LOKF02			A020M9/LOKF04			A020M9/LOKF06			A020M9/LOKF08			A020M9/LOKF12			A020M9/LOKF16		
		24	45.1	52.1	24	46.8	54.17	24	48.3	55.67	24	48.3	58.56	30	53.4	63.56	36	55.6	67.85
	3/4" (H2012)	A020M12/LOKF02			A020M12/LOKF04			A020M12/LOKF06			A020M12/LOKF08			A020M12/LOKF12			A020M12/LOKF16		
	30	56.1	63.1	30	57.8	65.17	30	59.3	66.67	30	59.3	69.56	30	59.4	69.56	36	61.6	73.85	
1" (H2016)	A020M16/LOKF02			A020M16/LOKF04			A020M16/LOKF06			A020M16/LOKF08			A020M16/LOKF12			A020M16/LOKF16			
	36	66.6	73.6	36	68.3	75.67	36	69.8	77.17	36	69.8	80.06	36	69.9	80.06	36	72.1	84.35	

All dimensions are for reference only and may differ from actual size.

(Unit : mm)

Pressure Rating		LOK(Female)																	
60,000 psi (Male)		Catalog No / Dimensions																	
		A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
	Tube Size (Port Type)	1/8"			1/4"			3/8"			1/2"			3/4"			1"		
	1/4" (H6004)	A060M4/LOKF02			A060M4/LOKF04			A060M4/LOKF06			A060M4/LOKF08			A060M4/LOKF12			A060M4/LOKF16		
		16	35.6	42.6	16	37.3	44.67	16	38.8	46.17	20.6	38.8	48.56	30	43.9	54.06	36	46.1	58.35
	3/8" (H6006)	A060M6/LOKF02			A060M6/LOKF04			A060M6/LOK06			A060M6/LOK08			A060M6/LOKF12			A060M6/LOKF16		
		20.6	43.1	50.1	20.6	44.8	52.17	20.6	46.3	53.67	20.6	46.3	56.06	30	51.4	61.56	36	53.6	65.85
	9/16" (H6009)	A060M9/LOKF02			A060M9/LOKF04			A060M9/LOKF06			A060M9/LOKF08			A060M9/LOKF12			A060M9/LOKF16		
		30	52.6	59.6	30	54.3	61.67	30	55.8	63.17	30	55.8	66.06	30	55.9	66.06	36	58.1	70.35

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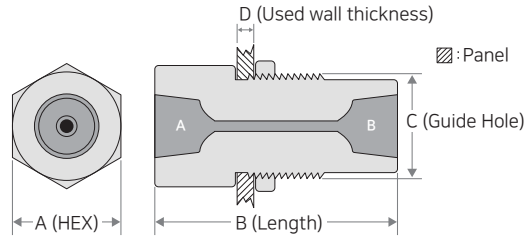
➤ How to use the table and select products

- ① Select Female according to the pressure and Tube Size you will be using (vertical lines in the table)
- ② Check the pressure and Tube Size to be connected, then select LOK (Female) (horizontal lines in the table)
- ③ Check the Catalog No. and dimensions of the product

➤ [Adapter - Bulkhead Union]



[Female to Female]



(Unit : mm)

Catalog No		Pressure Rating	Port Type	Tube Size	Dimensions	
Female1	Female2				A	HEX
A015F2 / 015F2-B		15,000 psi	H1502	1/8"	25.4	53.9
A015F4 / 015F4-B			H1504	1/4"	25.4	53.9
A015F6 / 015F6-B			H1506	3/8"	34.9	60.3
A010F8 / 010F8-B			H1008	1/2"	38.1	60.3
A020F4 / 020F4-B		20,000 psi	H2004	1/4"	25.4	47.6
A020F6 / 020F6-B			H2006	3/8"	25.4	50.8
A020F9 / 020F9-B			H2009	9/16"	36	61
A020F12 / 020F12-B			H2012	3/4"	48	67
A020F16 / 020F16-B			H2016	1"	55	88.9
A060F4 / 060F4-B		60,000 psi	H6004	1/4"	25.4	50.8
A060F6 / 060F6-B			H6006	3/8"	36	60
A060F9 / 060F9-B			H6009	9/16"	47.6	69.8
ANPTF2 / NPTF2-B		15,000 psi NPT		1/8"	25.4	53.9
ANPTF4 / NPTF4-B				1/4"	25.4	53.9
ANPTF6 / NPTF6-B				3/8"	34.9	60.3
ANPTF8 / NPTF8-B				1/2"	38.1	60.3
ANPTF12 / NPTF12-B		10,000 psi NPT		3/4"	47.6	66.6
ANPTF16 / NPTF16-B				1"	53.9	88.9

All dimensions are for reference only and may differ from actual size.

➤ How to use the table and select products

- ① Select Female 1 according to the pressure and tube size you will use
- ② Check the pressure tube size to be connected and select Female 2
- ③ Check the catalog number and dimensions of the product

➤ Example

- A010F8/ 010F8-B : 15,000 psi, H1008, 1/2"
- ANPTF4 / NPTF4-B : 15,000 psi (NPT), 1/4"

High Pressure Manifold Block

Connects or distributes tubes of various sizes with different pressure specifications into one block

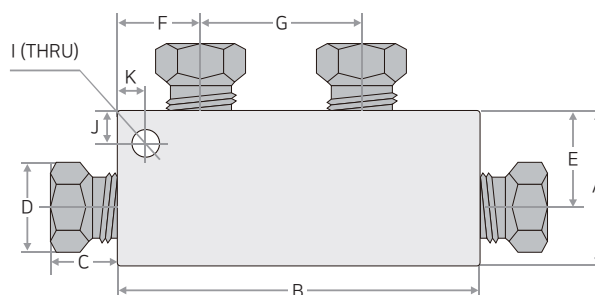
The HIFLUX Manifold Block is a product for connecting or distributing tubes of the same size with the same pressure specifications or tubes of different sizes with different pressure specifications into a single block. We can also manufacture products with the customer's desired specifications and specifications, and with a combination of multiple port types.



Features

- Stainless Steel 316 cold material
- Usage temperature: -423°F (-252°C) to 1200°F (649°C)
- Can be manufactured to customer's desired size and specifications (please contact customer service center)
- Products combined with various port types can also be manufactured (please contact customer service center)

4-way Type

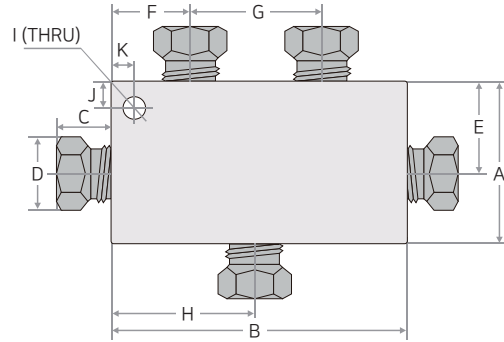


(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions										Block Thickness
					A	B	C	D (HEX)	E	F	G	I	J	K	
MF15S02-4	15,000 psi	H1502	1/8"	1.4	25	54	12.1	12	19	17	20	6.5	7	7	15.5
MF15S04-4		H1504	1/4"	3.2	35	85	11.8	16	25	25	35	6.5	7	7	20
MF15S06-4		H1506	3/8"	5	35	85	14	17	25	25	35	6.5	7	7	20
MF10S08-4	10,000 psi	H1008	1/2"	9.5	45	128	16.3	22	31.5	31.5	65	6.5	7	7	25
MF20S04-4		H2004	1/4"	2.8	25	74	10.8	12	17.5	22	30	6.5	6	7	16
MF20S06-4		H2006	3/8"	5.2	35	85	13.1	16	25	25	35	6.5	7	7	20
MF20S09-4	20,000 psi	H2009	9/16"	7.9	45	118	16	22	31.5	31.5	55	6.5	7	7	25
MF20S12-4		H2012	3/4"	11.1	57	151	18.6	30	38	38	75	10	10	10	35
MF20S16-4		H2016	1"	17.5	76	195	21.7	36	52.5	52.5	90	10	10	10	45
MF60S04-4	60,000 psi	H6004	1/4"	2.4	35	80	14.5	16	22.5	22.5	35	6.5	7	7	25
MF60S06-4		H6006	3/8"	3.2	38	108	17	20.6	25	31.5	45	6.5	7	7	25
MF60S09-4		H6009	9/16"	4.8	47.5	171	23.5	30	28.5	48	75	6.5	7	7	38

All dimensions are for reference only and may differ from actual size.

➤ 5-way Type

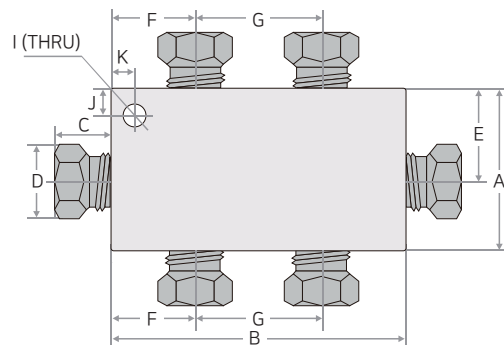


(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions											Block Thickness
					A	B	C	D (HEX)	E	F	G	H	I	J	K	
MF15S02-5	15,000 psi	H1502	1/8"	1.4	38	54	12.1	12	19	17	20	27	6.5	7	7	15.5
MF15S04-5		H1504	1/4"	3.2	50	85	11.8	16	25	25	35	42.5	6.5	7	7	20
MF15S06-5		H1506	3/8"	5	50	85	14	17	25	25	35	42.5	6.5	7	7	20
MF10S08-5	10,000 psi	H1008	1/2"	9.5	63	128	16.3	22	31.5	31.5	65	64	6.5	7	7	25
MF20S04-5	20,000 psi	H2004	1/4"	2.8	35	74	10.8	12	17.5	22	30	37	6.5	6	7	16
MF20S06-5		H2006	3/8"	5.2	50	85	13.1	16	25	25	35	42.5	6.5	7	7	20
MF20S09-5		H2009	9/16"	7.9	63	118	16	22	31.5	31.5	55	59	6.5	7	7	25
MF20S12-5		H2012	3/4"	11.1	76	151	18.6	30	38	38	75	75.5	10	10	10	35
MF20S16-5	60,000 psi	H2016	1"	17.5	105	195	21.7	36	52.5	52.5	90	97.5	10	10	10	45
MF60S04-5		H6004	1/4"	2.4	50	80	14.5	16	25	22.5	35	40	6.5	7	7	25
MF60S06-5		H6006	3/8"	3.2	50	108	17	20.6	25	31.5	45	54	6.5	7	7	25
MF60S09-5		H6009	9/16"	4.8	67	171	23.5	30	33.5	48	75	85.5	6.5	7	7	38

All dimensions are for reference only and may differ from actual size.

➤ 6-way Type



(Unit : mm)

Catalog No	Pressure Rating	Port Type	Tube Size	Orifice Size	Dimensions										Block Thickness
					A	B	C	D (HEX)	E	F	G	I	J	K	
MF15S02-6	15,000 psi	H1502	1/8"	1.4	38	54	12.1	12	19	17	20	6.5	7	7	15.5
MF15S04-6		H1504	1/4"	3.2	50	85	11.8	16	25	25	35	6.5	7	7	20
MF15S06-6		H1506	3/8"	5	50	85	14	17	25	25	35	6.5	7	7	20
MF10S08-6	10,000 psi	H1008	1/2"	9.5	63	128	16.3	22	31.5	31.5	65	6.5	7	7	25
MF20S04-6	20,000 psi	H2004	1/4"	2.8	35	74	10.8	12	17.5	22	30	6.5	6	7	16
MF20S06-6		H2006	3/8"	5.2	50	85	13.1	16	25	25	35	6.5	7	7	20
MF20S09-6		H2009	9/16"	7.9	63	118	16	22	31.5	31.5	55	6.5	7	7	25
MF20S12-6		H2012	3/4"	11.1	76	151	18.6	30	38	38	75	10	10	10	35
MF20S16-6		H2016	1"	17.5	105	195	21.7	36	52.5	52.5	90	10	10	10	45
MF60S04-6	60,000 psi	H6004	1/4"	2.4	50	80	14.5	16	25	22.5	35	6.5	7	7	25
MF60S06-6		H6006	3/8"	3.2	50	108	17	20.6	25	31.5	45	6.5	7	7	25
MF60S09-6		H6009	9/16"	4.8	67	171	23.5	30	33.5	48	75	6.5	7	7	38

All dimensions are for reference only and may differ from actual size.

Regulator

Low pressure regulator (GPR), high pressure regulator (HPR), and back pressure regulator (BPR) series

The HIFLUX pressure regulator is a pressure control device that maintains the pressure at the inlet and outlet of the regulator at a constant level within the maximum usable pressure range, and applies a sealing type that suits the characteristics of the gas or liquid. It can be divided into low-pressure GPR, high-pressure HPR, and back pressure regulator BPR, so that you can use it according to the desired application and pressure specifications. BPR products are the opposite concept of generally used regulators, and unlike generally used regulators that regulate the pressure at the outlet, they are products that maintain the front pressure at a constant level at the desired pressure.

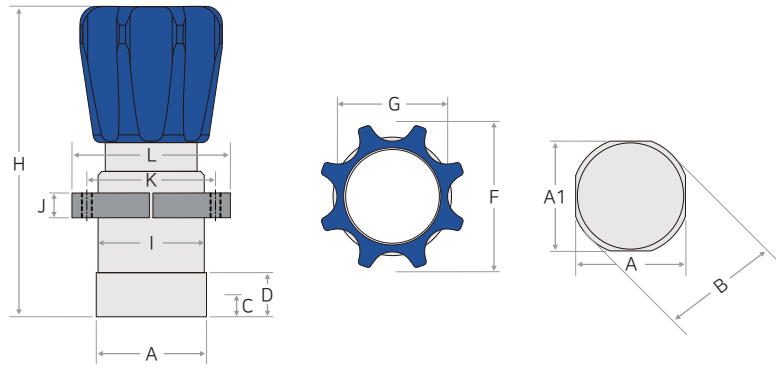
Features

- Accuracy: 1% relief pressure range
- Ambient operating and fluid media temperature: -55℃ to 100℃
- NACE compatibility options
- 6 relief pressure ranges
- Anti-bubble shutoff at all re-mounting pressures
- Unbalanced stem provides positive shutoff
- Main valve cartridge for easy maintenance
- Convertible to 6 outlet pressure ranges
- Safety and reliability of spring-loaded piston sensor
- Various porting options



Product Name	GPR (General Pressure Regulator)	HPR (High Pressure Regulator)	BPR (Back Pressure Regulator)
Product			
Maximum Operating Pressure	3,500 psi	15,000 psi	15,000 psi
Product Series	500 psi / 1,000 psi / 1,500 psi 2,000 psi / 2,500 psi / 3,000 psi	2,000 psi / 4,000 psi 6,000 psi / 10,000 psi / 15,000 psi	800 psi / 2,000 psi / 4,000 psi 6,000 psi / 10,000 psi / 15,000 psi
Operating Temperature	-40℃ ~ 100℃	-55℃ ~ 100℃	-55℃ ~ 100℃

➤ BPR

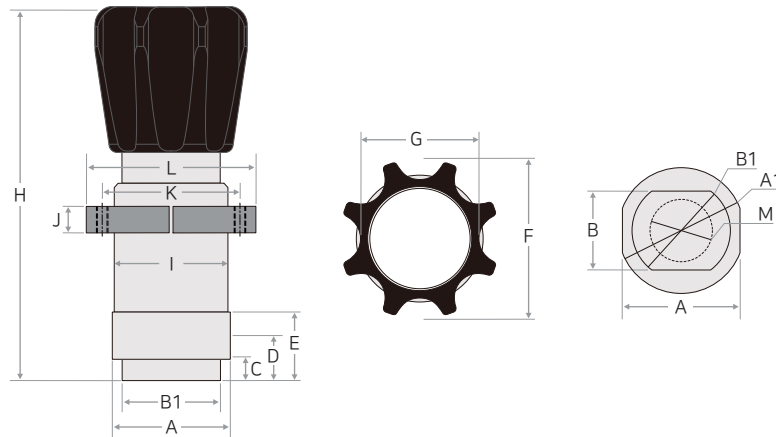


(Unit : mm)

Catalog No	GAS	Pressure Rating	Port type		Orifice Size	Dimensions											
			Inlet	Outlet		A	A1	B	C	D	F	G	H	I	J	K	L
BPR800	Normal	800	1/4" NPT	1/4" NPT	2.5	61	61	64	12	24	82	60	168.7	58	13.5	70	86
BPR800	CO ₂	800															
BPR2000	Normal	2,000															
BPR2000	CO ₂	2,000															
BPR4000	Normal	4,000															
BPR4000	CO ₂	4,000															
BPR6000	Normal	6,000															
BPR6000	CO ₂	6,000															
BPR10000	Normal	10,000															
BPR10000	CO ₂	10,000															
BPR15000	Normal	15,000															
BPR15000	CO ₂	15,000															

All dimensions are for reference only and may differ from actual size.

➤ HPR



(Unit : mm)

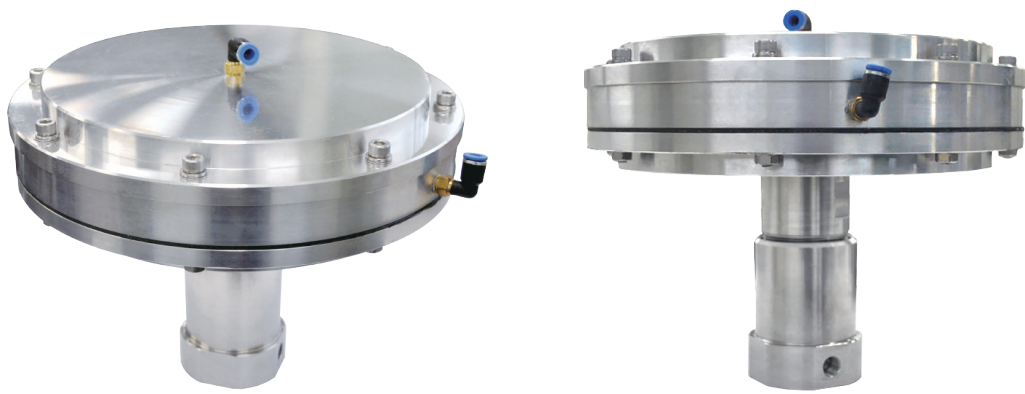
Catalog No	GAS	Pressure Rating	Port type		Orifice Size	Dimensions												
			Inlet	Outlet		A	A1	B	B1	C	D	F	G	H	I	J	K	L
HPR2000	Normal	2,000	1/4" NPT	1/4" NPT	2.1	61	64	40	50	11	23	82	60	190	58	13.5	70	86
HPR2000	CO2	2,000																
HPR4000	Normal	4,000																
HPR4000	CO2	4,000																
HPR6000	Normal	6,000																
HPR6000	CO2	6,000																
HPR10000	Normal	10,000																
HPR10000	CO2	10,000																
HPR15000	Normal	15,000																
HPR15000	CO2	15,000																

All dimensions are for reference only and may differ from actual size.

Air Operating BPR

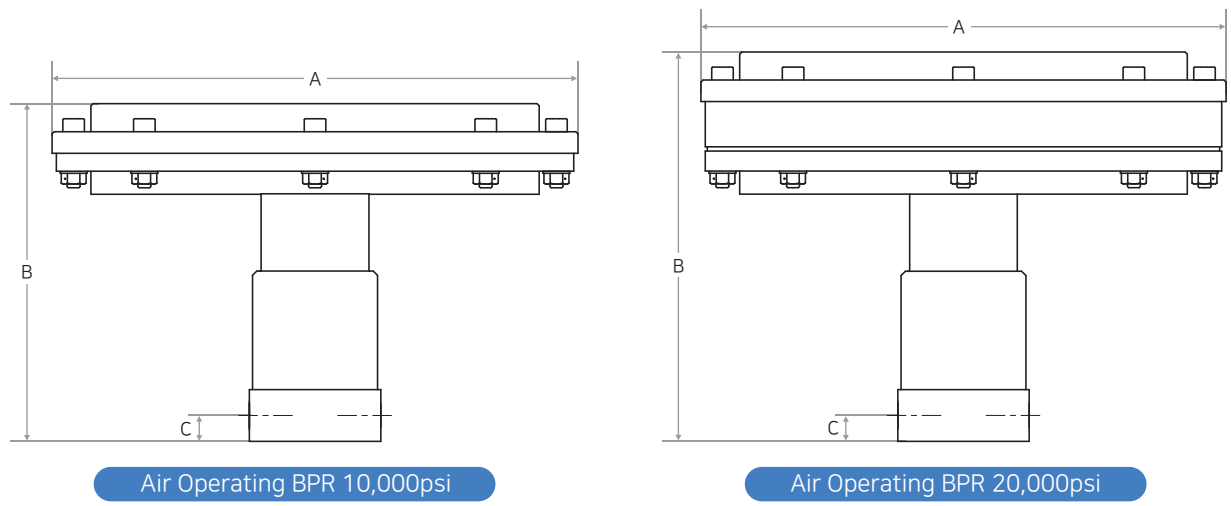
High pressure setting value can be adjusted via electronic regulator (10,000 psi 0~5 bar, 20,000 psi 0~3 bar)

Back Pressure Regulator is the opposite concept of a pressure regulator that is commonly used. Unlike the pressure regulator that controls the pressure at the outlet, the BPR maintains the pressure at the inlet at a constant desired pressure. The setting value can be adjusted by air pressure through the electronic regulator (10,000 psi 0~5bar, 20,000 psi 0~3bar), and can be controlled remotely.



Features

- Operating Air Pressure : 10,000 psi, 20,000 psi
- Setting value can be adjusted by air pressure through electronic regulator, remote control
- High flow Cv=0.6 model option
- 6 discharge pressure ranges
- Bubble tight shut-off possible at all re-mounting pressures
- Operating ambient temperature & fluid medium temperature : -55℃ ~ 100℃



(Unit : mm)

Catalog No	Pressure Rating	Dimensions(Ø)		
		A	B	C
ABPR-10000-U	10,000psi	Ø244	156.6	12
ABPR-20000-U	20,000psi	Ø244	180.8	12

All dimensions are for reference only and may differ from actual size.

Pressure Gauge

Pressure gauge for precise measurement and multi-purpose use



A type
62mm/100mm



TECSIS - A Type
63mm/100mm



J Type
60mm/100mm



TECSIS - J Type
63mm/100mm



Features

- Excellent corrosion resistance against external condition changes
- Used for high-precision pressure gauges using Stainless Steel
- Suitable to use under the high mechanical vibration environment
- better performance and high durability
- Possible to vibration suppression with using oil
- Can be used in various fields such as chemical, oil refining, research, oil, and gas industries

Catalog No & Pressure Range	Bottom connection direct		Bottom connection, Flush	
	HI60A4c-20	0~20 kgf/cm ²	HI60J4c-35	0~35 kgf/cm ²
	HI60A4c-50	0~50 kgf/cm ²	HI60J4c-100	0~100 kgf/cm ²
	HI60A4c-150	0~150 kgf/cm ²	HI60J4c-250	0~250 kgf/cm ²
	HI60A4c-250	0~250 kgf/cm ²	HI60J4c-500	0~500 kgf/cm ²
	HI60A4c-500	0~500 kgf/cm ²	HI60J4c-1000	0~1000 kgf/cm ²
	HI60A4c-1000	0~1000 kgf/cm ²		
Outside Diameter	62mm	100mm	60mm	100mm
Connection thread	NPT 1/4"	PF 3/8"	NPT 1/4"	PF 3/8"
Accuracy	±1.5%			
Type	Bottom Connection direct-A type		Bottom connection, Flush-J Type	
Temperature	with glycerin : -5 ~ 55℃ / with silicone oil : -25~55℃ / No oil filled : -40~200℃			
Case	304SS			
Cover	whole-steel			
Movement	304SS			
Pointer	Black Aluminum			
Element & Socket	Organic glass		Flat glass	
Window	Black electrophoresis manganese steel belt			
Ductility	-0.1~0.06MPa ~ -0.1~2.4Mpa			
Vacuum	-0.1MPa~0			

Thermocouples

High Pressure Thermocouple Temperature Sensor - Thermocouple Temperature Sensor 60,000 psi



HIFLUX Thermocouple (temperature sensor) is connected to a fitting in a high-pressure environment, and the sensor part comes into contact with the fluid to measure the temperature. It can be connected directly to a port to measure the temperature.

Features

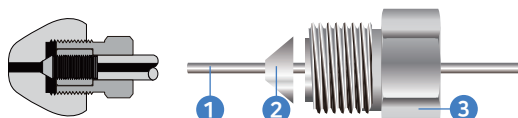
- Port size: All ports available
 - Sensor length negotiable
 - Can be used directly on the port (Cone & Thread method) without the need for separate parts
- Minimum assembly torque 700kgf·cm**

Specification

- Pressure : 60,000 psi
- Measuring range : -100°C ~ 500°C
- Material : STS316CW, STS630
- Sensor type : K Type
- Sensor size : Ø1, Ø1.6
- Sensor length : 150mm

Inside the product

Port size
60,000 psi 1/4"



No	1	2	3
DESCRIPTION	Sensor	Sleeve	Gland

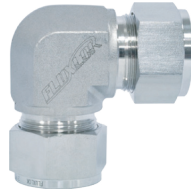
Lok Fitting & Valve

Used in various processes and system equipment configurations across the business spectrum, including plant industry, chemical, oil refining, water jet, research, oil, and gas.

> Lok Type Valve

Needle Valve NVP1	Needle Valve NVS1	Check Valve CV1	Ball Valve HBV1	Ball Valve HBV10
				
Ball Valve HBV10-NF	Ball Valve BV1	Ball Valve BV3	LF Coaxial Filter	Key Lock Ball Valve
				

> Lok Type Fitting

Tee	Elbow	Cross	Front Ferrule	Back Ferrule	Plug
					
Bulkhead Union	Union Fitting	Reducing Union	Reducer	Male Connector	Female Connector
					
Male Adapter	Female Adapter	Nut	Port Connector	Cap	AN Union
					

Piping Materials

Used in various processes and system equipment configurations across the business spectrum, including plant industry, chemical, oil refining, water jet, research, oil, and gas.

➤ Threaded Valves & Fittings

2PCS Full Bore Ball Valve	1PCS Ball Valve	Gate Valve	Nipple for Welding	Tee	Bushing
					

➤ Sanitary Valves & fittings

Ferrule Clamp	Ferrule For Expanded	Ferrule Blank	Ferrule Elbow 90°	Ball Valve 2 Ferrule	Butterfly Valve 2 Ferrule
					

➤ Vacuum Valves & fittings

KF Centering (SUS304) + O-ring (VITON)	KF Hinged Clamp	Outer Ring	KF Flange(weld)	KF Bored Blank Flange	Angle Valve SS304
					

➤ Solenoid Valve / Cam Lock Coupler

Solenoid Valve HPB2140~2160 (15A~25A)	Solenoid Valve HPB2130~2190SP (10A~50A)	Cam Lock Coupler(AL) - C Type1/2"~8"	Cam Lock Coupler(PP) - DC Type3/4"~4"	Cam Lock Coupler(AL) - E Type1/2"~8"	Cam Lock Coupler(PP) - F Type1/2"~4"
					

➤ Brass Valves

Drain valve (high-end type)	Brass ball valve three-way L type	Brass ball valve	Brass ball cock	Lever nipple valve	Stop valve for pressure gauge (forged)

➤ VCR Fittings

Female Nut	Plug	Cap	Male Connector NPT	Gland	Male Nut

➤ White and Black Pipes Accessories

White pipe short elbow	White pipe welding reducer	White pipe welding cap	Black pipe welding elbow 45°	Black pipe welding tee	Black pipe welding eccentric reducer

➤ Copper Pipes Fittings

Copper pipe 45° elbow	Copper pipe 90 degree elbow	Copper pipe Tee/Tee-shaped	Copper pipe Reducer	Copper pipe Return band	Copper pipe P-trap

➤ Stainless steel hydraulic fittings

Stainless steel hydraulic hex socket	Stainless steel hydraulic elbow	Stainless steel hydraulic nipple	Stainless steel hydraulic nipple	Stainless steel hydraulic service nipple	Stainless steel hydraulic plug

> Weldless Fitting / Pipe Fitting / One-Touch Fitting

Copper Loflink Coupling	Manual Assembly Tools	Pipe Fitting - Hex Nipple (HN - Male NPT)	Pipe Fitting - Pipe Plug (PP - Male NPT)	Pipe Fitting - Hex Bushing (HB - Male NPT)
				
One-Touch Fitting - PC	One-Touch Fitting - PG	One-Touch Fitting - PL	One-Touch Fitting - PY	One-Touch Fitting - PUC
				

> High Pressure Hoses / Flexible Hose

CEJN High Pressure Hoses 700 BAR HOSE	CEJN High Pressure Hoses 1,800 BAR HOSE	CEJN Coupler 217 series (700 BAR)	CEJN Coupler 116 series (1,800 BAR)	Parker SUS Flexible Hose PTFE Tube - 1/4 inch
				

> Pressure / Temperature / Flow Meter

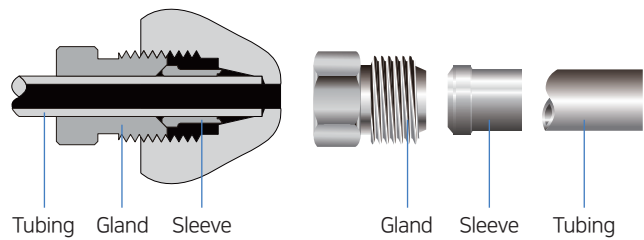
Digital Pressure Gauge SMAV & SMAH	Digital Pressure Gauge PDR250 (0.25%)	Precision Pressure Sensor PSC(0.25%)	Pressure Transmitter PMH(0.25%)	Differential Pressure Transmitter DPC(0.5%)
				
Pressure Transmitter M5200	Pressure Transmitter PTC(0.5%)	Differential Pressure Gauge DPB(0.5%~1.5%)	Differential Pressure Transmitter DWS(0.25%, 0.5%)	Digital Indicator
				

Port Type

Low Pressure Port Type

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

Sleeve Type is a method of attaching a sleeve inside a gland and can be used on 1/8", 1/4", 3/8", and 1/2" pipes. The tubes used for connecting products can be ordered from HIFLUX Mall and are made of stainless steel to ensure optimal performance in high-pressure environments.



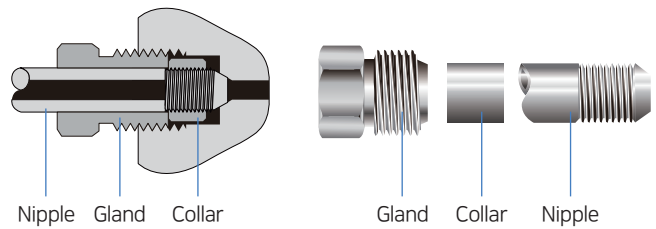
H1502 15,000psi - 1/8"	H1504 15,000psi - 1/4"	H1506 15,000psi - 3/8"	H1008 10,000psi - 1/2"

Port Type

Medium Pressure Port Type

➤ Medium Pressure Connections - 20,000 psi

Products are connected using Collar and Nipple within the Gland, and the Nipple required for connecting products can be ordered in the desired length by the user, and can also be processed directly using our tooling set.



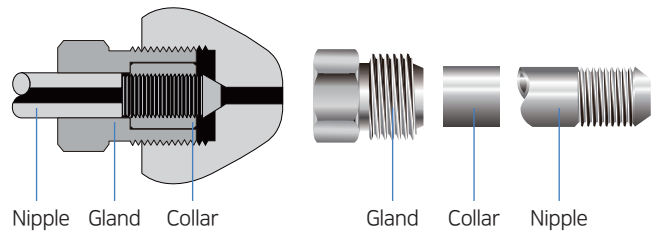
H2004 20,000psi - 1/4"	H2006 20,000psi - 3/8"	H2009 20,000psi - 9/16"	H2012 20,000psi - 3/4"	H2016 20,000psi - 1"

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.



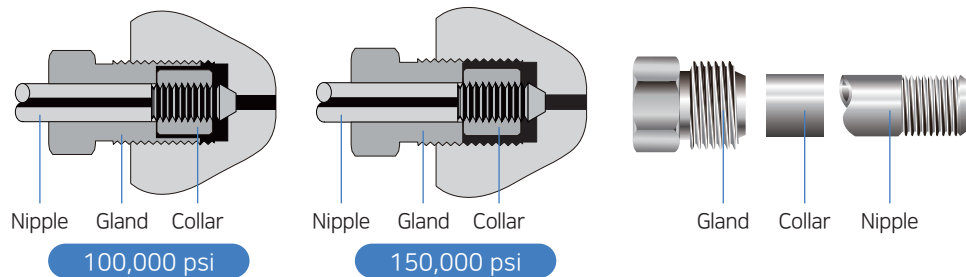
H3002 30,000psi - 1/8"	H3016 30,000psi - 1"	H6004 60,000psi - 1/4" (M : Metric)	H6006 60,000psi - 3/8" (M : Metric)	H6009 60,000psi - 9/16" (M : Metric)

Port Type

Ultra High Pressure Port Type

Ultra High Pressure Connections - 100,000 psi / 150,000 psi

The product is connected using a collar and nipple within the gland, and the corresponding pipe sizes are as follows. This Cone and Thread method connection is the optimal sealing method, and it provides reliable performance for both liquids and gases at high pressures and temperatures, and is the standard for easy and quick high-pressure equipment configuration.



H10004 100,000psi - 1/4"	H10006 100,000psi - 3/8"	H10009 100,000psi - 9/16"	H15006 150,000psi - 3/8"
9/16"-18 UNF 60° 17.5 16 HEX 28 36 14.3 9.5	5/8"-18 UNF 60° 27 20.6 HEX 30 47 19 11.1	1-1/8"-12 UNF 60° 19 30 HEX 38 47 24 15.9	3/4"-16 UNF 60° 28.6 20.6 HEX 30 51.5 20 12.7
1/4"-28 LH 3 1.6 0.95	3/8"-28 LH 4.7 3.2 12.7	9/16"-18 LH 7 4.8 20.7	3/8"-24 LH 3.18 1.6 16

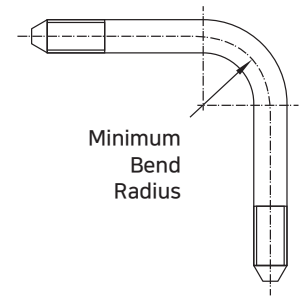
Technical Information

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)

All dimensions are for reference only and may differ from actual size.



➤ HIFLUX Tube Tightening Torque Chart

Valve Pressure Series	Port Type	Tube Size (Inches) (PSI)	Tubing Gland HEX (mm)	Recommended Torque (kg.f-cm)
15,000 PSI	H1502	1/8 Inch (15,000)	12	-
	H1504	1/4 Inch (15,000)	16	200
	H1506	3/8 Inch (15,000)	17	450
	H1008	1/2 Inch (10,000)	22	500
20,000 PSI	H2004	1/4 Inch (20,000)	12	280
	H2006	3/8 Inch (20,000)	16	420
	H2009	9/16 Inch (20,000)	22	750
	H2010	3/4 Inch (20,000)	30	1,250
30,000 PSI	H2012	1 Inch (20,000)	36	1,800
	H3002	1/8 Inch (30,000)	13	1040
30,000 PSI	H6004	1/4 Inch (30,000)	16	350
	H6006	3/8 Inch (30,000)	20	700
	H6009	9/16 Inch (30,000)	30	1500
60,000 PSI	H6004	1/4 Inch (60,000)	16	350
	H6006	3/8 Inch (60,000)	20	700
	H6009	9/16 Inch (60,000)	30	1500
100,000 PSI	H10004	1/4 Inch (100,000)	16	690
150,000 PSI	H15006	3/8 Inch (150,000)	20	1450

All dimensions are for reference only and may differ from actual size.

➤ HIFLUX Needle Valve Assembly Torque Chart

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 (15,000)	24	800
20,000 PSI	H2004	1/4 Inch (20,000)	17	550
	H2006	3/8 Inch (20,000)	17	550
	H2009	9/16 Inch (20,000)	22	1100
	H2010	3/4 Inch (20,000)	30	3,500
30,000 PSI	H2012	1 Inch (20,000)	41	5,000
	H3002	1/8 Inch (30,000)	13	500
	H6004	1/4 Inch (30,000)	20	550
	H6006	3/8 Inch (30,000)	20	550
60,000 PSI	H6009	9/16 Inch (30,000)	20	550
	H6004	1/4 Inch (60,000)	20	670
	H6006	3/8 Inch (60,000)	20	670
100,000 PSI	H6009	9/16 Inch (60,000)	20	670
	H10004	1/4 Inch (100,000)	24	1250
	H10006	3/8 Inch (100,000)	24	1250
150,000 PSI	H10009	9/16 Inch (100,000)	24	1250
	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	-

Torque values apply to glass-impregnated Teflon packaging and may vary by ±10%



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