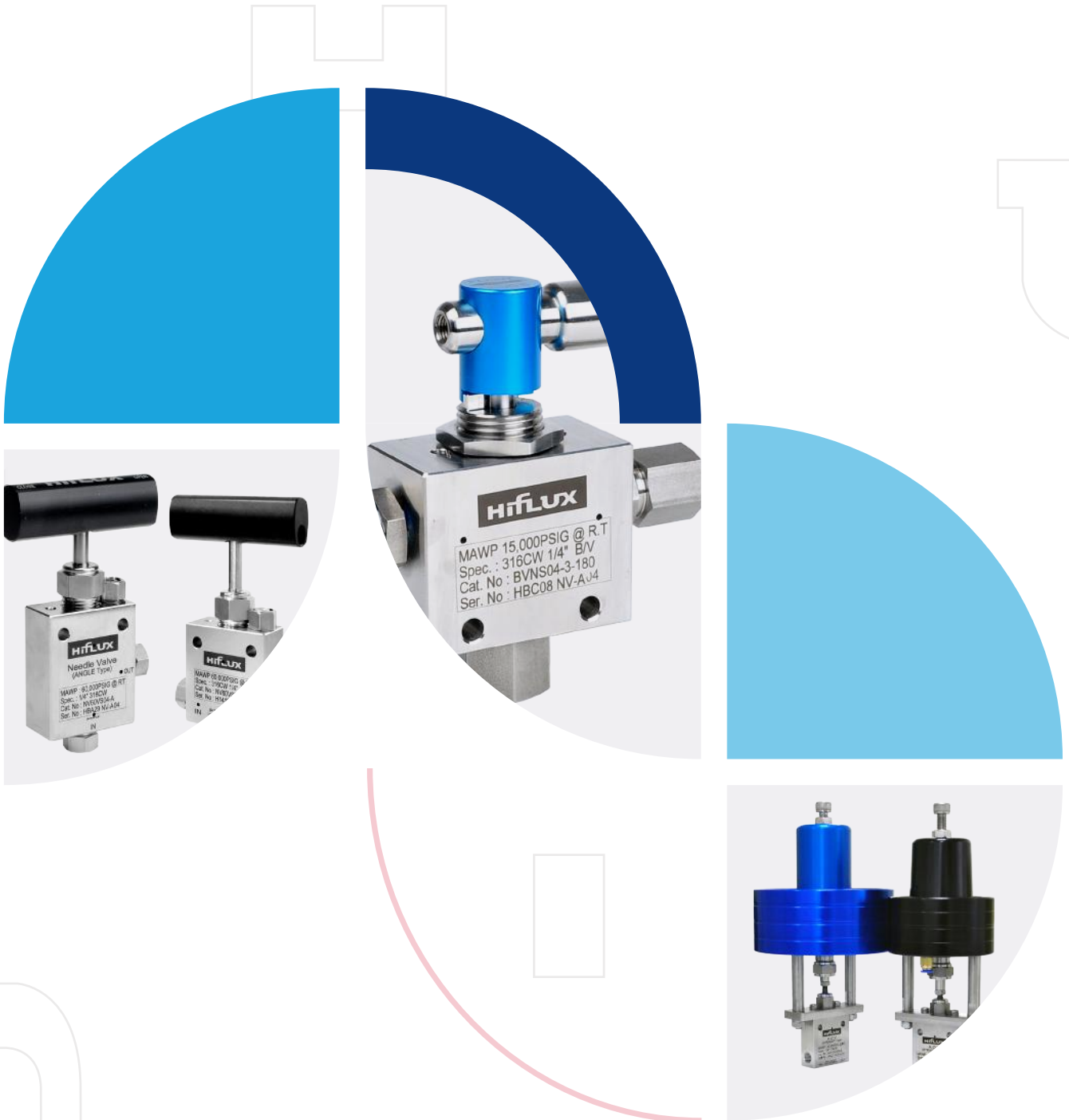


# HIFLUX

High Pressure Valves & Fittings



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



**HIGH SERVICE  
HIGH QUALITY  
HIGH PERFORMANCE!**

**High Pressure equipment**



## CEO'S Message



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

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

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

CEO ***Kim Hyeon-hyo***

# HIGH PRESSURE HISTORY

## PASSION FOR THE FUTURE, CONSTANT CHALLENGE AND INNOVATION

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



## DEVELOP VARIOUS HIGH PRESSURE VALVES EXPAND OVERSEAS MARKET

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



Certificate of patent  
10-2136732



Certificate of patent  
10-2103737



Certificate of patent  
10-2080599



Certificate of patent  
10-2080603



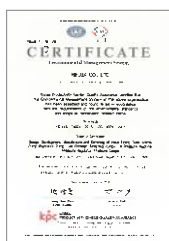
Certificate of patent  
10-2225407



Certificate of patent  
10-1151733



ISO 9000



ISO 14001



European Integrated  
Standard Certification (CE)



Research laboratory  
certification



Venture company  
confirmation



Trademark  
(HIFLUX)

## OPENING THE ONLINE MARKET PARTICIPATING IN THE DOMESTIC AND OVERSEAS FAIR

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



## ESTABLISHED R & D CENTER HIGH PRESSURE TECHNOLOGY LOCALIZATION

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

# Catalog Numbering System



Simply indicate catalog number and specify option or special requirement

NV	60	V	S	06	A
----	----	---	---	----	---

Product Value	Pressure	Type of Components	Material	Tube Size	Options
NV : Needle Valve CV : Check Valve BV : Ball Valve AOV : Air Operated Valve CON : Control Valve GV : Wellhead Gauge Valve BLV : Bleed Valve DBBV : Double Block & Bleed Valve RV : Relief Valve FT : Fitting FA : Fitting Accessory MF : Manifold Block T : Tube N : Nipple GPR : General Pressure Regulator HPR : High Pressure Regulator BPR : Back Pressure Regulator AD : Adapter TS : Tube Support	03 : 3,000psi  07 : 7,500psi  15 : Sleeve Type Refer to Valve Select  20 : 20,000psi  30 : 30,000psi  60 : 60,000psi  100 : 100,000psi  150 : 150,000psi	<b>Needle Valve</b> V : Vee Stem R : Regulating Stem  <b>Check Valve</b> O : O-Ring Type B : Ball Type  <b>Ball Valve</b> 03 : Orifice 4.8mm 05 : Orifice 8mm  <b>Control Valve</b> <b>Air Operated Valve</b> O : Normal-Open Type C : Normal-Closed Type  <b>Relief Valve</b> FS : Factory Set FA : Field Adjustable PP : Proportional Type  <b>Fitting</b> E : Elbow Type T : Tee Type C : Cross Type  <b>Fitting Accessory</b> A : Adapter (20,000psi용) S : Sleeve (저압용) G : Gland R : Collar T : Collet	S : Stainless steel 316  H : Hastelloy  HC : Hastelloy C276 wetted part  IN : Inconel 600  IN625 : Inconel 625  NI : Nickel 200  TI : Titanium	02 : 1/8"  04 : 1/4"  06 : 3/8"  08 : 1/2"  09 : 9/16"  12 : 3/4"  16 : 1"  15 : 15A  25 : 25A	<b>Needle Valve</b> <b>Control Valve</b> <b>Air Operated Valve</b> S : Straight Type A : Angle Type O : 3way/1on pressure Type T : 3way/2on pressure Type  <b>Ball Valve</b> 2-90 : 2WAY 3-180 : 3WAY Switching Type 3-90 : 3WAY Diverting Type  <b>Fitting Accessory</b> AV : Anti-Vibration Type  <b>GPR</b> N : Normal Type P : Panel Type

※ Catalog number can be changed without any notification

## Example

- NV60VS06-A : Needle Valve, 60,000psi, Vee Stem, 3/8", Angle Type.
- NV15VS04-O : Needle Valve, 15,000psi, Vee Stem, 1/4", 3Way/1on Pressure Type.
- CON07CS15-S : Control Valve, 7,500psi, Normal-Closed, 15A, Straight Type.
- AOV60CS04-A : Air Operated Valve, 60,000psi, Normal-Closed, 1/4", Angle Type.
- FT60ES06 : Fitting, 60,000psi, Elbow Type, 3/8".
- FA60GS04-AV : Fitting Accessory, 60,000psi, Gland, 1/4", Anti-Vibration Type.

# 03. High Pressure Check Valve & Line Filter

Gas or liquid prevents flowing backward



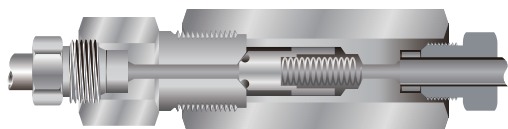
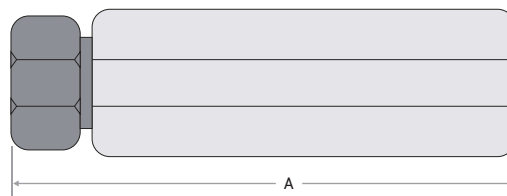
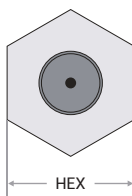
Check valve, a valve to prevent the reverse flow of liquid (gas), is designed to block the flow in one direction and to promote the flow in the opposite direction. A ball or o-ring is used for the sealing purposes to prevent the reverse flow for certain. Both gas and liquid can be used.

## I Features

- 2 patterns sealing types. (O-Ring Type, Ball Type)
- 2~90 $\mu$ m's 2 patterns sealing types filter element. (Cup Type)
- O-Ring for easy replacement and ball replacement type check valve.
- Excellent corrosion resistant.
- A valve using stainless steel 316 cold material for preventing reverse flow.
- A valve that facilitates one-directional movement by blocking the reverse flow of gas or liquid.
- Cone and thread connection to prevent gas or liquid leaking.

		Check Valve		Line Filter
Pressure	Tube Size	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

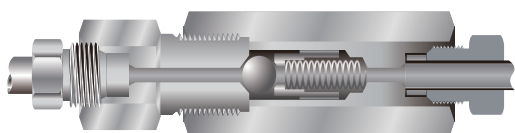
### [O-Ring Type]



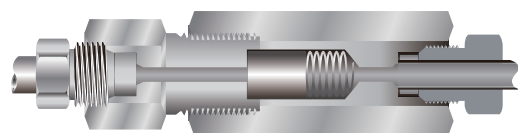
(Unit : mm)

Catalog No.	Pressure Rating	Tube Size	Orifice Size	Dimensions		
				HEX	A	
CV15OS02	15,000 psi	1/8"	1.4	22	68	
CV15BS02		1/4"	3.2	25.4	81	
CV15OS04			3/8"	5	36	93
CV15BS04				5	36	93
CV15OS06			1/2"	5	41	108
CV15BS06		5		41	108	
CV20OS08	20,000 psi	1/4"	2.8	25.4	77	
CV20BS04		3/8"	5.2	25.4	91	
CV20OS06			9/16"	7.9	35	107
CV20BS06		3/4"		11.1	36	131
CV20OS09			1"	7	55	167
CV20BS09		7		55	167	
CV20OS12	30,000 psi	1/8"	1.2	20.6	69	
CV20BS12		1"				
CV20OS16			1/4"	2.4	32	85
CV20BS16				3/8"	3.2	36
CV30OS02			9/16"		4.8	38
CV30BS02		4.8		38	118	
CV30OS16	60,000 psi	1/4"	2	ø36	103	
CV30BS16		1"				
CV60OS04			1/4"	2.4	32	85
CV60BS04				3/8"	3.2	36
CV60OS06			9/16"		4.8	38
CV60BS06		4.8		38	118	
CV60OS09	100,000 psi	1/4"	2	ø36	103	
CV60BS09		2	ø36	103		
CV100OS04						
CV100BS04						

### [Ball Type]



### [Filter Element (Cup Type)]



(Unit : mm)

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

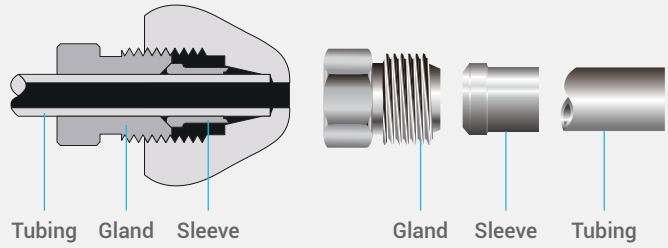
- As all sizes are for reference, they can be changed without any notification.
- We recommend you to use HIFLUX Fitting accessory Tube, Nipple for the most effective fitting.
- NPT connections are available on request. Please consult the authorized sales representative.

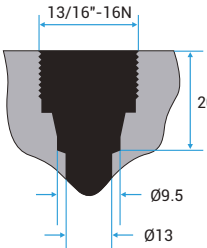
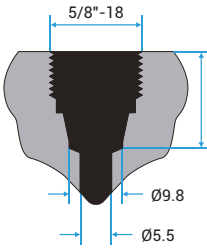
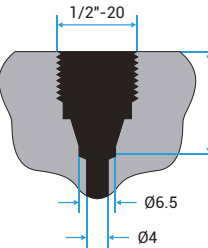
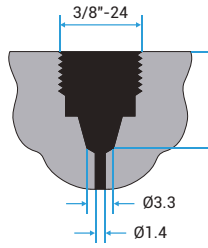
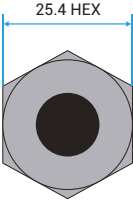
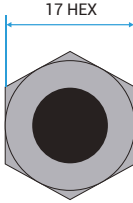
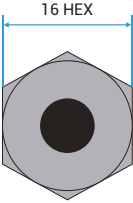
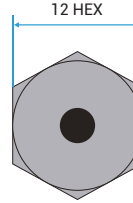
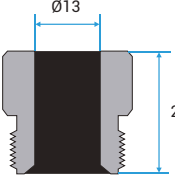
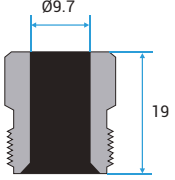
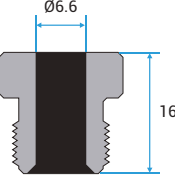
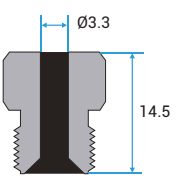
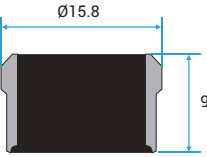
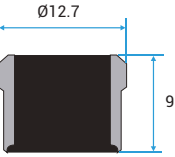
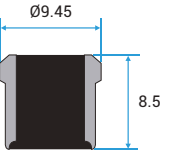
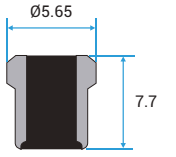


# Port Type Low Pressure Port Type

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

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

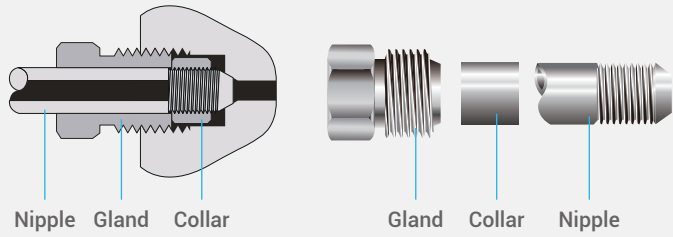


<b>H1008</b> 10,000psi - 1/2"	<b>H1506</b> 15,000psi - 3/8"	<b>H1504</b> 15,000psi - 1/4"	<b>H1502</b> 15,000psi - 1/8"
			
			
			
			

# Port Type Medium Pressure Port Type

## Medium Pressure Connections - 20,000 psi

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

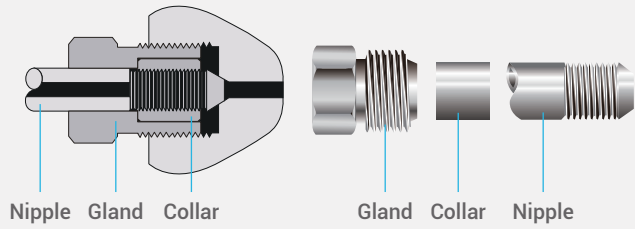


H2004 20,000psi - 1/4"	H2006 20,000psi - 3/8"	H2009 20,000psi - 9/16"	H2012 20,000psi - 3/4"	H2016 20,000psi - 1"

# 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.

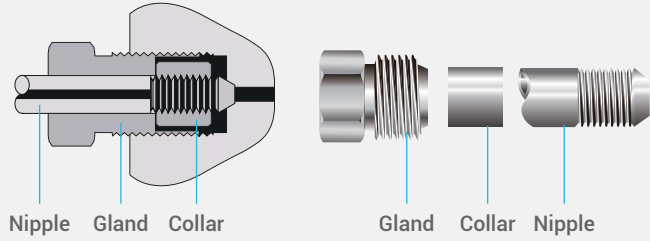


<b>H3002</b> 30,000psi - 1/8"	<b>H3016</b> 30,000psi - 1"	<b>H6004</b> 60,000psi - 1/4" (M : Metric)	<b>H6006</b> 60,000psi - 3/8" (M : Metric)	<b>H6009</b> 60,000psi - 9/16" (M : Metric)

# Port Type Ultra High Pressure Port Type

## Ultra High Pressure Connections - 100,000 psi

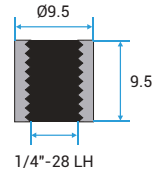
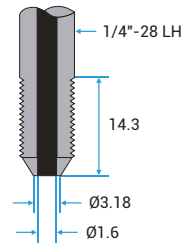
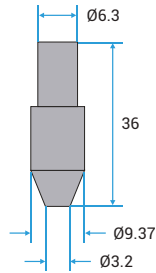
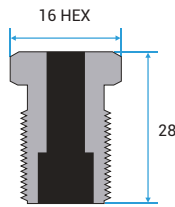
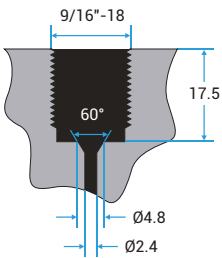
The product is tightened with collar and nipple in Gland. The applicable pipe size is as follows. This cone and threaded connection is the standard for easy and fast high-pressure equipment configuration with optimum sealing and reliable performance for both liquid and gas at high pressure and temperature.



Nipple Gland Collar

Gland Collar Nipple

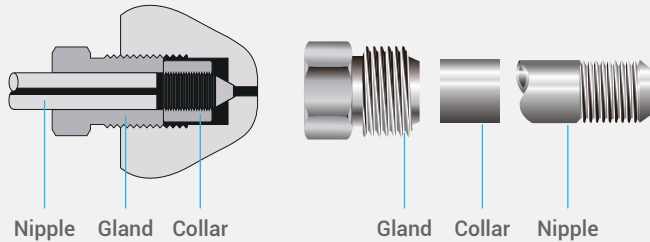
### H10004 100,000psi - 1/4"



# Port Type Ultra High Pressure Port Type

## Ultra High Pressure Connections - 150,000 psi

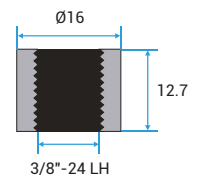
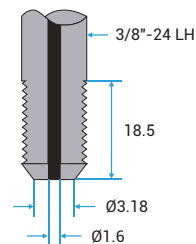
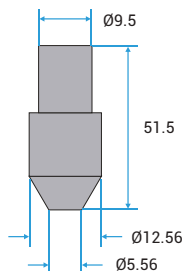
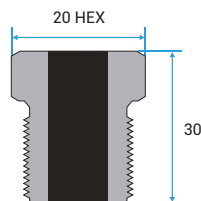
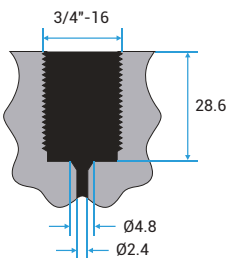
The product is tightened with collar and nipple in Gland. The applicable pipe size is as follows. This cone and threaded connection is the standard for easy and fast high-pressure equipment configuration with optimum sealing and reliable performance for both liquid and gas at high pressure and temperature.



Nipple Gland Collar

Gland Collar Nipple

### H15006 150,000psi - 3/8"

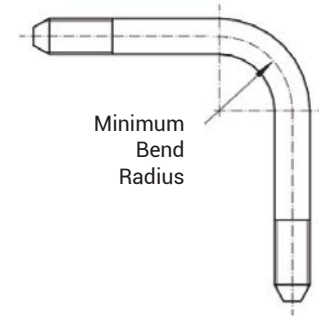


# Technical Information Recommended Torque

## [Recommended Minimum Bend Radius]

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

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



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

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

All dimensions and values are for reference only and subject to change.

**HiFLUX<sup>®</sup>**

**HIFLUX Co., LTD**

Address. 361-23, Gapcheon-ro, Yuseong-gu, Daejeon, 34037, Republic of Korea  
Tel. +82-42-933-5670 Fax. +82-0303-0799-1241 E-mail. sales@hiflux.com  
Web Site. [www.hiflux.com](http://www.hiflux.com) Shopping Mall. [www.hifluxshop.com](http://www.hifluxshop.com)