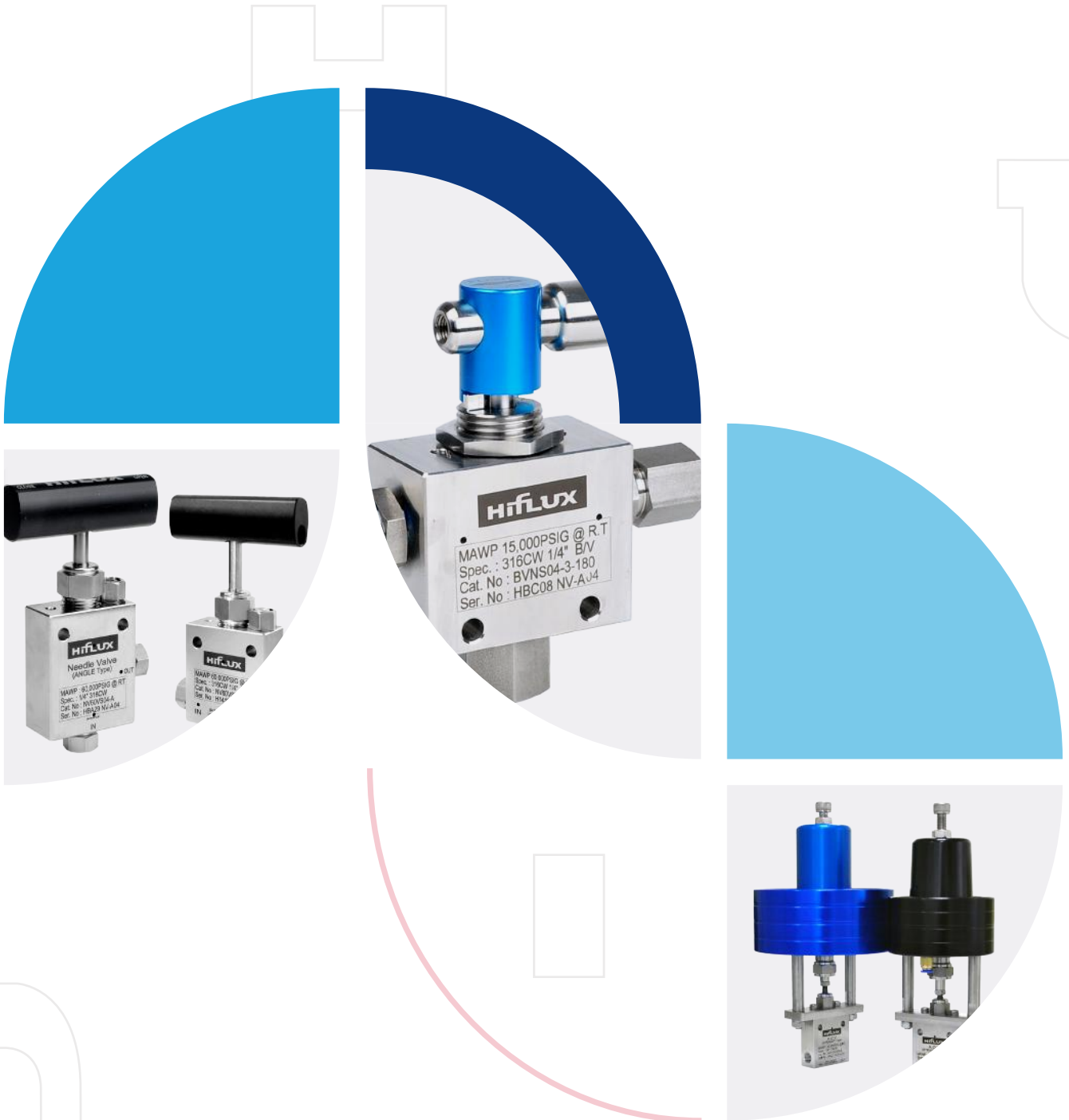


# HIFLUX

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



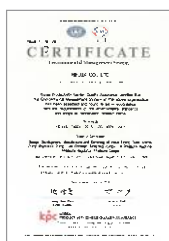
Certificate of patent  
10-2225407



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
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Product Value	Pressure	Type of Components	Material	Tube Size	Options
NV : Needle Valve	03 : 3,000psi	<b>Needle Valve</b> V : Vee Stem R : Regulating Stem	S : Stainless steel 316	02 : 1/8"	<b>Needle Valve</b> <b>Control Valve</b> <b>Air Operated Valve</b>
CV : Check Valve	07 : 7,500psi	<b>Check Valve</b> O : O-Ring Type B : Ball Type	H : Hastelloy	04 : 1/4"	S : Straight Type A : Angle Type O : 3way/1on pressure Type T : 3way/2on pressure Type
BV : Ball Valve	15 : Sleeve Type Refer to Valve Select	<b>Ball Valve</b> 03 : Orifice 4.8mm 05 : Orifice 8mm	HC : Hastelloy C276 wetted part	06 : 3/8"	
AOV : Air Operated Valve	20 : 20,000psi	<b>Control Valve</b> <b>Air Operated Valve</b> O : Normal-Open Type C : Normal-Closed Type	IN : Inconel 600	08 : 1/2"	<b>Ball Valve</b> 2-90 : 2WAY 3-180 : 3WAY Switching Type 3-90 : 3WAY Diverting Type
CON : Control Valve	30 : 30,000psi	<b>Relief Valve</b> FS : Factory Set FA : Field Adjustable PP : Proportional Type	IN625 : Inconel 625	09 : 9/16"	<b>Fitting Accessory</b> AV : Anti-Vibration Type
GV : Wellhead Gauge Valve	60 : 60,000psi	<b>Fitting</b> E : Elbow Type T : Tee Type C : Cross Type	IN825 : Inconel 825	12 : 3/4"	
BLV : Bleed Valve	100 : 100,000psi		NI : Nickel 200	16 : 1"	<b>GPR</b> N : Normal Type P : Panel Type
DBBV : Double Block & Bleed Valve	150 : 150,000psi		TI : Titanium	15 : 15A 25 : 25A	
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					

※ 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.

# 24. Regulator



General Pressure & High pressure & Back pressure regulator series



The regulator is a pressure control device designed to maintain pressure by controlling the pressure being released to the outlet within the range of the pressure coming into the inlet. The regulator is divided into GPR for low pressure and HPR for high pressure and BPR for back pressure, so you can use this product according to the pressure options you want. It is based on a contrary concept to the regulator that is generally used. Unlike the pressure regulator which is widely used to control the pressure of the outlet, the BPR steadily maintains the inlet pressure which you need.

Product	GPR (General Pressure Regulator)	HPR (High Pressure Regulator)	BPR (Back Pressure Regulator)
Photos			
Maximum rated inlet pressure	3,500 psi	15,000 psi	15,000 psi
Max working pressure. (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	2,000 psi 4,000 psi 6,000 psi 10,000 psi 15,000 psi
Maximum temperature	-40°C~100°C	-55°C~100°C	-55°C~100°C

# 25. Air Operating BPR



Setting pressure can be adjusted through electronic regulator (10,000psi 0~5bar, 20,000psi 0~3bar)

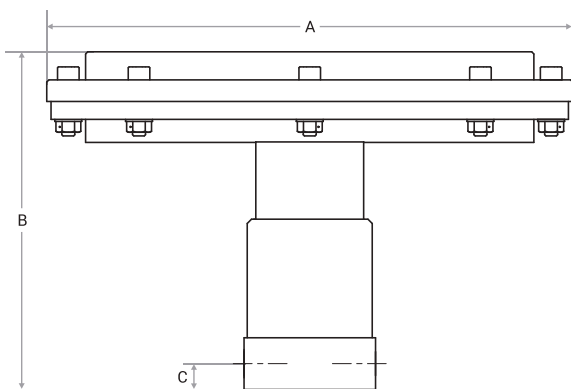


BPR, Back pressure regulator (or Back pressure reducer regulator) it is based on a contrary concept to the regulator that is generally used. Unlike the pressure regulator which is widely used to control the pressure of the outlet, the BPR steadily maintains the inlet pressure which you need. Setting pressure can be adjusted through electronic regulator (10,000psi 0~5bar, 20,000psi 0~3bar), and can be controlled remotely.

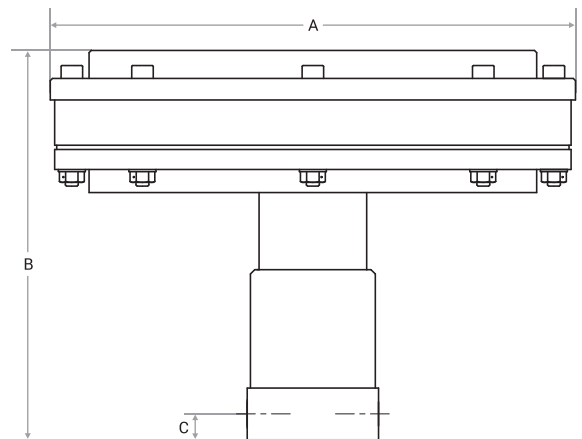
## Features

- Operating Air Pressure : 10,000psi, 20,000psi
- Setting pressure can be adjusted through electronic regulator, and can be controlled remotely.
- Accuracy : 1% of relief pressure range
- High flow Cv=0.6 model optional
- Six different relief pressure ranges
- Bubble-tight shut-off at all reseal pressures

## Exploded View & Dimensions



Air Operating BPR 10,000 psi



Air Operating BPR 20,000 psi

(Unit : mm)

Catalog No.	Pressure Rating	Dimensions		
		A	B	C
ABPR-10000-U	10,000 psi	ø244	156.6	12
ABPR-20000-U	20,000 psi	ø244	180.8	12

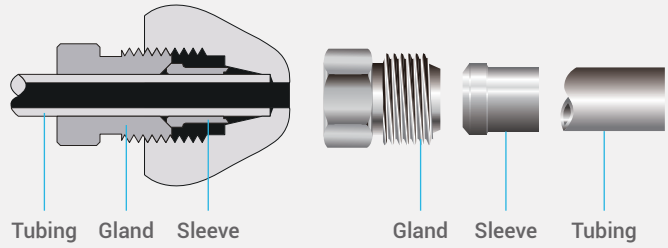
As all sizes are for reference, they can be changed without any notification.



# 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.

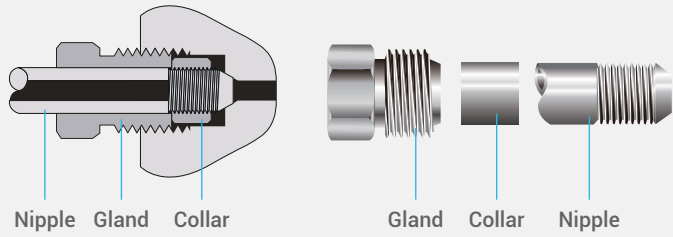


<b>H1008</b> 10,000psi - 1/2"	<b>H1506</b> 15,000psi - 3/8"	<b>H1504</b> 15,000psi - 1/4"	<b>H1502</b> 15,000psi - 1/8"

# 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.

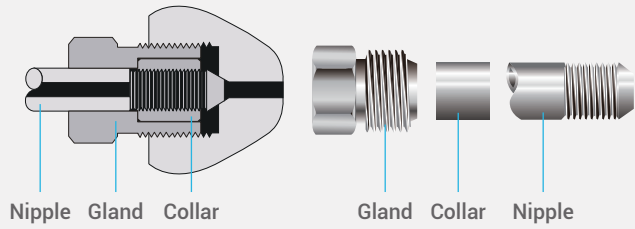


H2004 20,000psi - 1/4"	H2006 20,000psi - 3/8"	H2009 20,000psi - 9/16"	H2012 20,000psi - 3/4"	H2016 20,000psi - 1"

# 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.

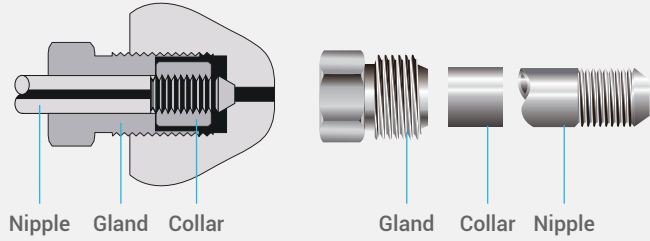


<b>H3002</b> 30,000psi - 1/8"	<b>H3016</b> 30,000psi - 1"	<b>H6004</b> 60,000psi - 1/4" (M : Metric)	<b>H6006</b> 60,000psi - 3/8" (M : Metric)	<b>H6009</b> 60,000psi - 9/16" (M : Metric)

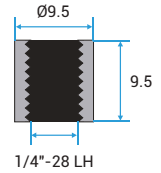
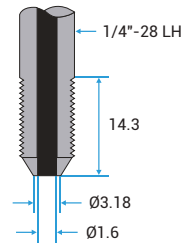
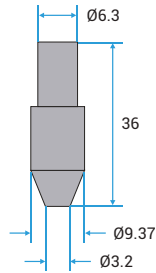
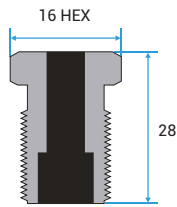
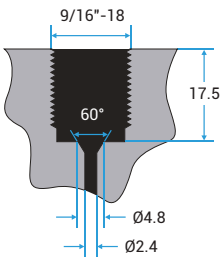
# Port Type Ultra High Pressure Port Type

## 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.



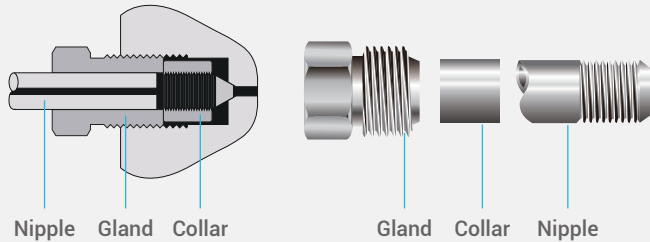
### H10004 100,000psi - 1/4"



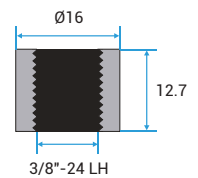
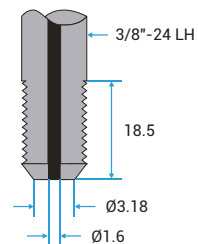
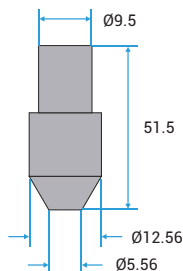
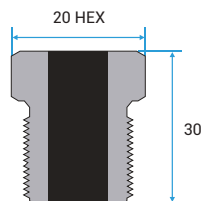
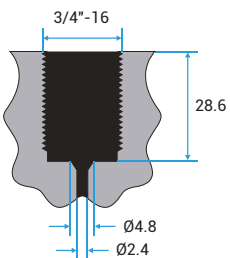
# Port Type Ultra High Pressure Port Type

## 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.



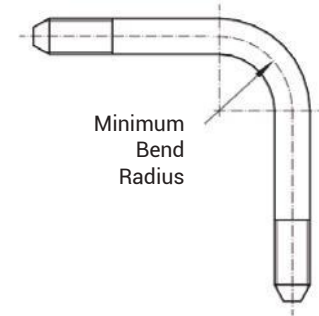
### H15006 150,000psi - 3/8"



# 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>**

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