



## YG Series Valve



## > INTRODUCTION

Parker YG series valves are Y pattern globe valves that are widely used in the power industry, petroleum, and chemical/petrochemical industries. With a maximum operating pressure of 414bar(6,000psi) and a maximum operating temperature of 676°C(1,250° F), the YG series valves are designed with a combined bonnet design to provide a stable sealing under high temperature and high pressure demanding working conditions. Two-stage stem/non-rotating head design effectively reduces the wear and tear caused by rotary motion on packing and seat, thus extending the packing and seat life and reducing operating torque. In addition, the packing is located below the stem thread, can prevent the thread lubricant contamination process medium, and also can remove the process medium to the lubricant erosion, thus effectively improve the lubrication effect of stem thread.

## > SPECIFICATION

- 316H forging body.
- Maximum working pressure 414 bar(6000 psi).
- Maximum working temperature 676°C(1250°F).
- Butt weld or socket weld end.
- Orifice: 7.9mm.

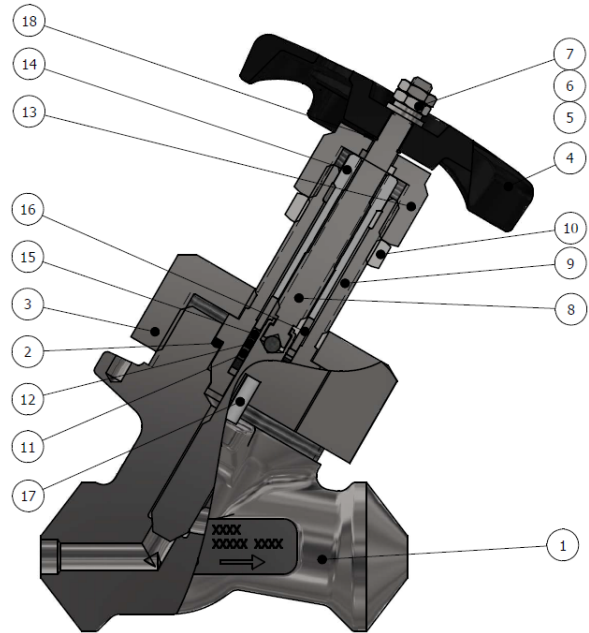


## > FEATURE

- Round handwheel with direction indication, easy to operate
- Forged body and bonnet nuts enhance reliability in harsh service conditions.
- Metal Wire-reinforced graphite packing, extended service life, suitable for high temperature and high pressure working conditions.
- the packing is located below the stem thread, can prevent the thread lubricant contamination process medium, and also can remove the process medium to the lubricant erosion
- Two-stage stem/non-rotating head design effectively reduces the wear and tear caused by rotary motion on packing and seat, thus extending the packing and seat life and reducing operating torque.
- Safety stop pin design to prevent accidental disassembly.
- Combined bonnet design of metal hard seal and soft seal, to provide a stable sealing under high temperature and high pressure demanding working conditions.
- Y-shaped body design provides better fluid mobility.
- Valve body and bonnet nuts have traceable material lot codes.

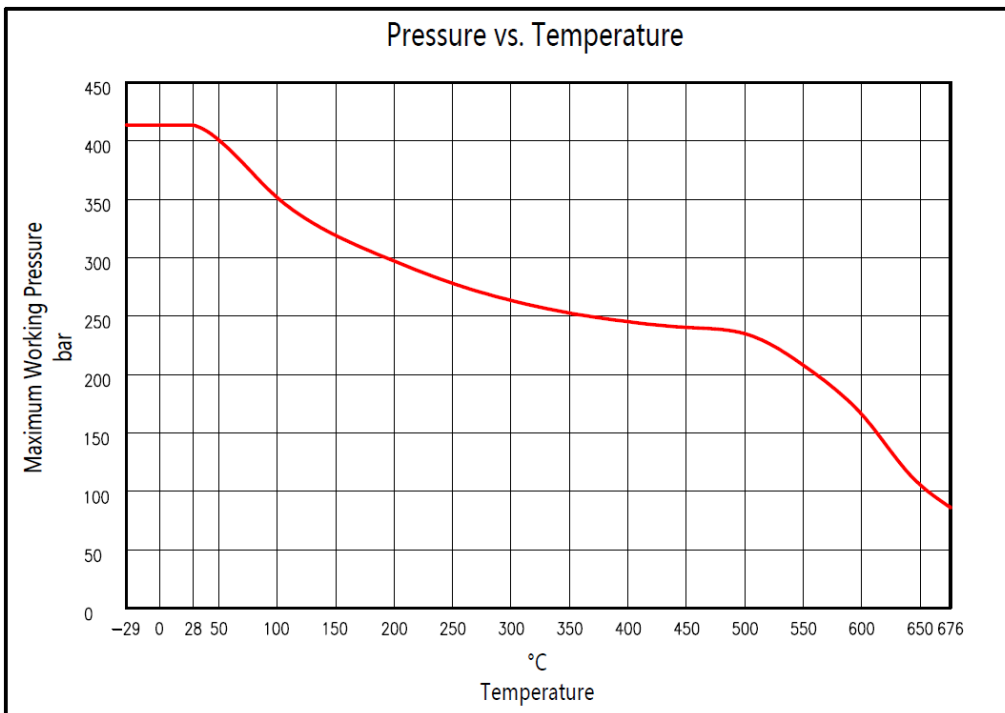
## > MATERIALS OF CONSTRUCTION

Item#	Description	Material
1	Body	ASTM A182, F316H
2	Packing	Reinforced Graphite
3	Bonnet Nut	ASTM A182, F316H
4	Hand Wheel	Cast Steel
5	Spring Washer	304SS
6	Nut	304SS
7	Plain Washer	304SS
8	Stem Assembly	316SS+440C
9	Bonnet	ASTM A479, 316H
10	Lock Nut	ASTM A479, 316SS
11	Packing	Graphite
12	Packing	Reinforced Graphite
13	Packing Nut	ASTM A479, 316SS
14	Stem Guide	ASTM A479, 316SS
15	Packing Washer	ASTM A479, 316SS
16	Bushing	ASTM A479, 316SS
17	Lock Pin	304SS
18	Retainer Ring	304SS



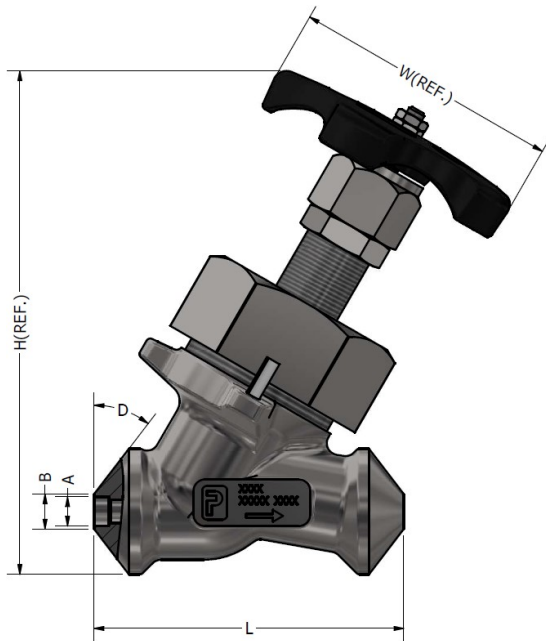
Note: more body and bonnet nut materials are available, please contact parker Hannifin if required.

## > PRESSURE VS TEMPERATURE

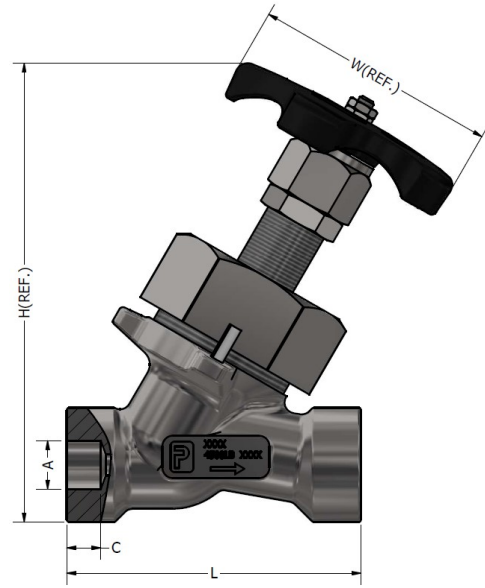


A182-F316H Pressure vs Temperature (2500LB)	
T (°C)	P (bar)
-29	413.7
38	413.7
50	400.9
100	351.6
150	320.8
200	297.2
250	278.1
300	263.5
350	252.7
400	245.3
450	240.4
500	235
550	208
600	165.9
650	105.5
676	86

## ➤ CONSTRUCTION DIMENSIONS



Butt Weld Type



Socket Weld Type

P/N	ΦA mm	ΦB mm	C mm	D°	L mm	H mm	W mm
BW10-YG12-G-316H-2500	10	12	/	37.5	106	172	95
SW14-YG12-G-316H-2500	14.2	/	11.1	/	110	172	95
SW16-YG12-G-316H-2500	16.2	/	11.9	/	110	172	95
SW18-YG12-G-316H-2500	18.2	/	12.7	/	110	172	95

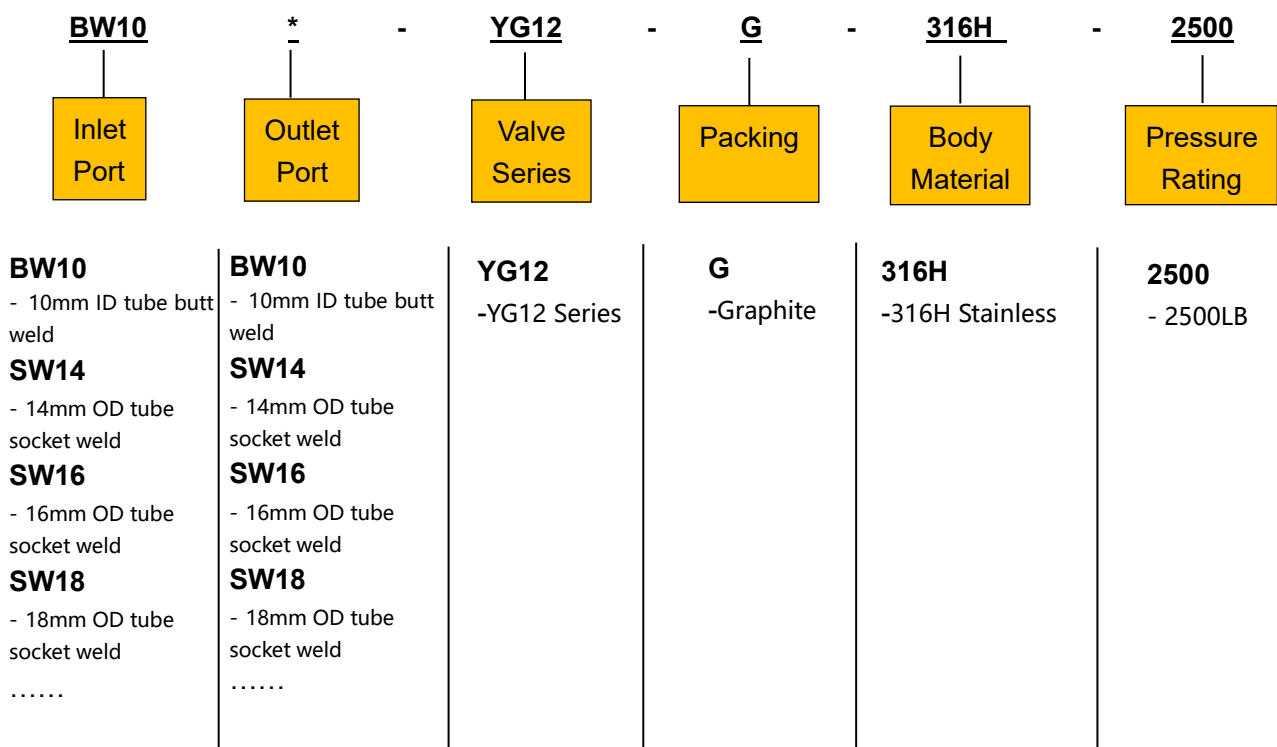
The dimensions in table are approximate, which may change. For more P/Ns and size requirements, please contact Parker Hannifin.

## > HOW TO ORDER

The correct part number is easily derived from the following number sequence. The six product characteristics required are coded as shown below. \*Note: If the inlet and outlet ports are the same, eliminate the outlet port designator.

Below example describes an YG Series needle valve equipped with 10mm ID tube butt weld inlet and outlet ports, graphite packing, stainless steel construction.

Examples:



Other inlet / outlet requirements, please contact Parker Hannifin.

Ongoing product development may require changes to the details contained in this catalog from time to time. Parker Hannifin reserves the right to make such changes without notice. All dimensions shown in this catalog are approximate and subject to change.



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Failure, improper selection or improper use of the products and/or systems described herein or related items can cause death, personal injury and property damage.

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