

HIGH PRESSURE INSULATE BONNET NEEDLE VALVES



Features & Specifications

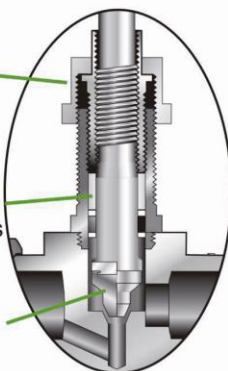
- End connections size : 1/8" ~1/2" pipe
- Variety of end connections include , female - male to female NPT or P.T. pipe threads
Socket weld end.
- Temperatures from 165 °F to 450 °F (156 °C to 232 °C) with standard PTFE Packing.
- Up to 1200 °F (648 °C) Temperatures with Optional Grafoil® packing.
- 10000 psi (690bar) pressure rating (@ 100 °F maximum) .
- Cv Factor : 0.35 to 0.86
- Orifice : 4.0mm to 6.4mm (0.156 in. to 0.25 in.)
- All 316 Stainless Steel stems for long life.

Features

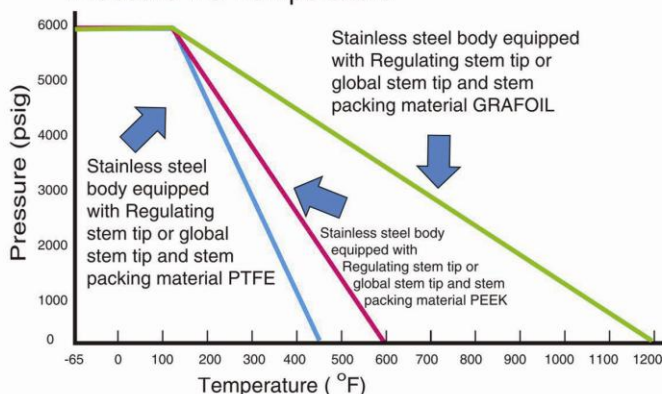
Packing nut for in service adjustment.

Packing installed below operating threads constructions. Isolates the lubricants from system fluids and

Non rotating stem tip design for leak tight shut-off and long seat life.



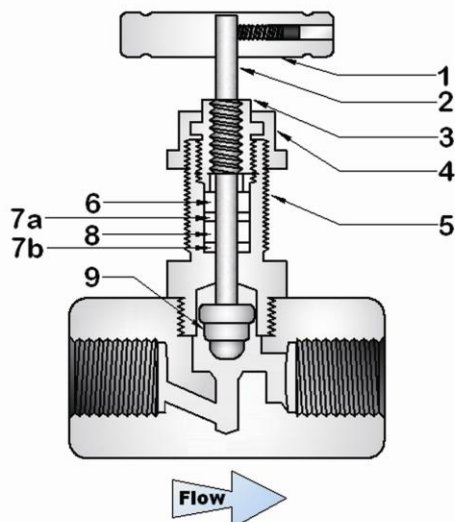
Pressure VS Temperature



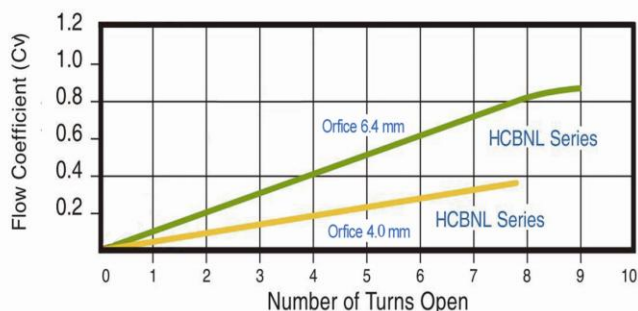
when valves with end connection fittings are connected to tubes, the working pressure of tubes must be considered in calculation of total system working pressure.

Material of construction

Part NO.	Material
1 Handle Bar	ASTM-A-276 TYPE 304 / Anodized aluminum
2 Stem	ASTM-A-276 TYPE 316
3 Packing Bolt	ASTM-A-479 TYPE 316
4 Lock Nut	ASTM-A-479 TYPE 316
5 Bonnet	ASTM-A-479 TYPE 316
6 Gland	316 Stainless Steel
7a Upper Packing	PTFE{optional, PEEK Grafoil}
7b Lower Packing	PTFE{optional, PEEK Grafoil}
8 Stem Packing	PTFE{optional, PEEK Grafoil}
9 Regulating Tip	ASTM-A-479 TYPE 316



Flow Data at 100°F (37°C)
Regulating Stems
Flow Coefficient at Turns Open



Stem of Tip



Regulating



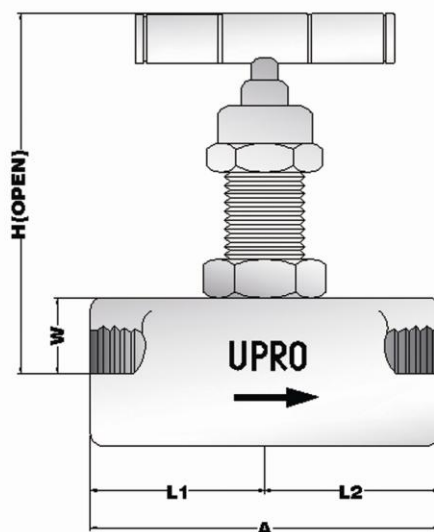
Global stem tip (S)

Non rotating stem
CBN series regulating tip is standard.

Test

Every integral needle valves is factory tested with nitrogen at 1000psig (69 bar) to maximum leak rate of 0.1SCCM. Include standard production test and

Female Pipe
TO
Female Pipe
(NPT - PT)



DIMENSIONS

Dimensions for reference only. Subject to change.

Part No.	End Connections	Dimensions										Flow Data		
Female NPT To Female NPT	Pipe	A		L1		L2		W		H		Cv	Orifice	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		mm	in.
HCBNL-S3-F20N	1/8	57.0	2.24	28.5	1.12	28.5	1.12	13.0	0.51	70.0	2.76	0.35	4.00	0.16
HCBNL-S3-F40N	1/4	80.0	3.15	40.0	1.57	40.0	1.57	16.5	0.65	81.0	3.19	0.86	6.40	0.25
HCBNL-S3-F80N	1/2	83.0	3.27	41.5	1.63	41.5	1.63	20.0	0.79	85.0	3.35			
Female P.T To Female P.T	Pipe	A		L1		L2		W		H		Cv	Orifice	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		mm	in.
HCBNL-S3-F20P	1/8	57.0	2.24	28.5	1.12	28.5	1.12	13.0	0.51	70.0	2.76	0.35	4.00	0.16
HCBNL-S3-F40P	1/4	80.0	3.15	40.0	1.57	40.0	1.57	16.5	0.65	81.0	3.19	0.86	6.40	0.25
HCBNL-S3-F80P	1/2	83.0	3.27	41.5	1.63	41.5	1.63	20.0	0.79	85.0	3.35			

Ordering No. Description

HCBNL-S3-F80N-

Pattern type	Code
Straight pattern	HCBNL
Angle pattern	HCBNA (see figure 4)

Body material	Code
316 Stainless Steel	S3

Available end connections	Code
Female NPT threads	N
Female P.T. threads	P

Options	Code
Stem tip design	Regulating tip - [*] Note
	Global tip -S
Packing	PTFE - [*]
	PEEK -E
	Grafoil® -G

Figure 4

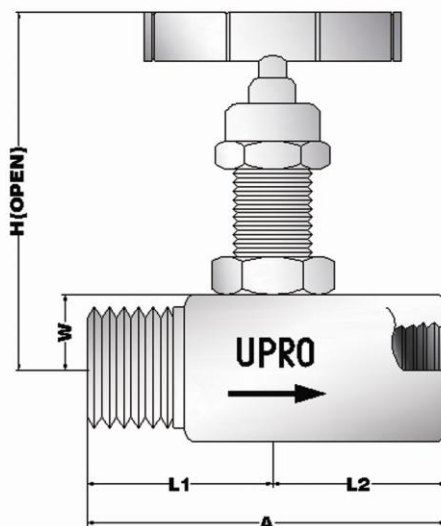


Ex.HCBNA-S3-F80P-SG

Describes a angle pattern **HCBNA** series valve equipped with stainless steel construction, 1/2 in. female pipe P.T.threads inlet and 1/2 in. female pipe P.T.threads outlet connection port, a global stem tip and Grafoil® stem packing.

Note : " -^{*} " The CODE is standard part, eliminate the CODE.

Male Pipe
TO
Female Pipe
(NPT · PT)



DIMENSIONS

Dimensions for reference only. Subject to change.

Part No.	End Connections	Dimensions										Folw Data		
Female NPT To Female NPT	Pipe	A		L1		L2		W		H		Cv	Orifice	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		mm	in.
HCBNL-S3-MF40N	1/4	79.0	3.11	41.0	1.61	38.0	1.50	16.5	0.65	81.0	3.19	0.86	6.40	0.25
HCBNL-S3-MF80N	1/2	87.0	3.42	45.0	1.77	42.0	1.65	20.0	0.79	85.0	3.45			
Female P.T To Female P.T	Pipe	A		L1		L2		W		H		Cv	Orifice	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		mm	in.
HCBNL-S3-MF40P	1/4	79.0	3.11	41.0	1.61	38.0	1.50	16.5	0.65	81.0	3.19	0.86	6.40	0.25
HCBNL-S3-MF80P	1/2	87.0	3.42	45.0	1.77	42.0	1.65	20.0	0.79	85.0	3.45			

Ordering No. Description

HCBNL-S3-MF80N-

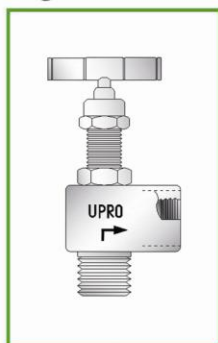
Pattern type	Code
Straight pattern	HCBNL
Angle pattern	HCBNA (see figure 4)

Body material	Code
316 Stainless Steel	S3

Available end connections	Code
M-Female NPT threads	N
M-Female P.T. threads	P

Options	Code
Stem tip design	Regulating tip -*
	Global tip -S
Packing	PTFE -*
	PEEK -E
	Grafoil® -G

Figure 4

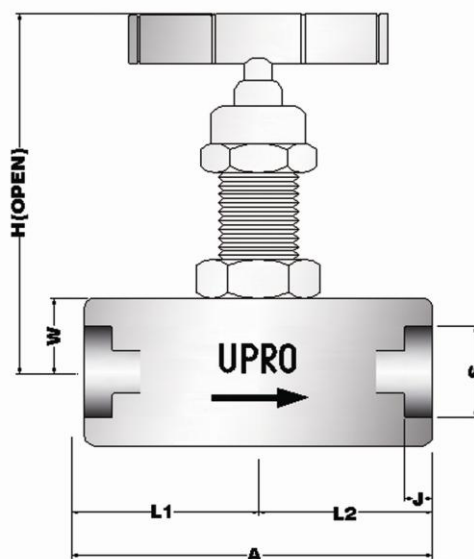


Ex.HCBNA-S3-MF80P-SG

Describes a angle pattern HCBNA series valve equipped with stainless steel construction, 1/2 in. male pipe P.T.threads inlet and 1/2 in. female pipe P.T.threads outlet connection port, a global stem tip and Grafoil® stem packing.

Note : " -* " The CODE is standard part,eliminate the CODE.

Socket weld
end
Connection
ANSI / ASME B16.11
JIS B 2306



DIMENSIONS

Dimensions for reference only. Subject to change.

Part No.	End Connections	Dimensions												Flow Data	
Socket Weld / ANSI	Pipe (S)	A		L1		L2		W		H		J		Cv	Orifice
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		
HCBNL-S3-20SWU	1/8	57.0	2.24	28.5	1.12	28.5	1.12	13.0	0.51	70.0	2.76	9.70	0.38	0.35	4.00 0.16
HCBNL-S3-40SWU	1/4	80.0	3.15	40.0	1.57	40.0	1.57	16.5	0.65	81.0	3.19	9.70	0.38	0.86	6.40 0.25
HCBNL-S3-80SWU	1/2	83.0	3.27	41.5	1.63	41.5	1.63	20.0	0.79	85.0	3.35	9.70	0.38		
Socket Weld / JIS	Pipe (S)	A		L1		L2		W		H		J		Cv	Orifice
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.		
HCBNL-S3-20SWJ	1/8	57.0	2.24	28.5	1.12	28.5	1.12	13.0	0.51	70.0	2.76	9.70	0.38	0.35	4.00 0.16
HCBNL-S3-40SWJ	1/4	80.0	3.15	40.0	1.57	40.0	1.57	16.5	0.65	81.0	3.19	9.70	0.38	0.86	6.40 0.25
HCBNL-S3-80SWJ	1/2	83.0	3.27	41.5	1.63	41.5	1.63	20.0	0.79	85.0	3.35	9.70	0.38		

Ordering No. Description

HCBNL-S3-SW80U-

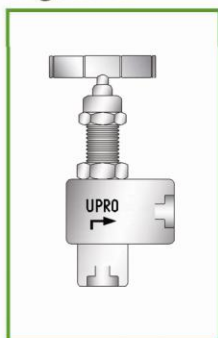
Pattern type	Code
Straight pattern	HCBNL
Angle pattern	HCBN A (see figure 4)

Body material	Code
316 Stainless Steel	S3

Available end connections	Code
Socket weld ANSI	U
Socket weld JIS	J

Options	Code
Stem tip design	Regulating tip -* Note
	Global tip -S
Packing	PTFE -*
	PEEK -E
	Grafoil® -G

Figure 4



Ex.HCBNA-S3-SW80U-SG

Describes a angle pattern **HCBN A** series valve equipped with stainless steel construction, 1/2 in. **Socket weld** inlet and 1/2 in. **Socket weld** outlet connection port, a global stem tip and Grafoil® stem packing.

Note : " -* " The CODE is standard part, eliminate the CODE.

C-BNV-030806-V1

Yung Hong

BONNET VALVES

BN SERIES

Variety of end connections

- Male NPT to Female NPT
- Female NPT to Female NPT
- Male NPT to Bulk Weld
- Female NPT to Bulk Weld

Nonrotating stem tip

- Resistant to deformation of stem tip
- Prevents repetitive leak tight shut off

YUNGHONG INDUSTRIAL COMPANY

C-INV-091211-V2

U-FITTINGS INC.

Integral Needle Valves

Designed for process, power & instrumentation applications

Features

- Three kind of Stem
- Two kind of handle
- Valve size: 1/4", 3/8" and 1/2"
- Connector type: Male NPT (P.T.), Female NPT (P.T.), Fractional Tube
- Stem Packing Material: PTFE and PEEK
- Angle and straight body types

Specifications

Pressure Rating

- 316SS 5000 psig (345 bar) at 100°F (38°C)
- Brass 3000 psig (207 bar) at 100°F (38°C)
- Cv Factor: 0.08 - 0.25
- Orifice: 0.078 to 0.252 in. (2mm to 6.4mm)

Temperature Rating

- PTFE stem packing: -65°F to 650°F (-45°C to 332°C)
- Optional PEEK stem packing: -65°F to 600°F (-45°C to 315°C)

U-PRO fittings Inc.

U-PRO BALL VALVES

Designed to be used for instrumentation, power and process application.

One quarter turn actuation.

End connections YH-LOK tube fitting and a variety of others.

Temperature Rating: -20°F to 400°F (-29°C to 260°C) with PTFE packing.

Pressure Rating: 1000 psig @ 100°F (69 bar @ 38°C)

upro BV series have been cleaned (BVX, BVY and BVZ are option)

ONE-PIECE BALL VALVE

- Economical one piece body.
- Reduced port design.
- Pressure Rating at 1000 psig W.O.G.
- Body material 316 stainless steel (CFR6).

TWO-PIECE BALL VALVE

- Full port design.
- Pressure Rating at 1000 psig W.O.G.
- Body material 316 stainless steel (CFR6).

THREE-PIECE BALL VALVE

- Full port design.
- Pressure Rating at 1000 psig W.O.G.
- Body material 316 stainless steel (CFR6).

C BY 041015-V1

U-PRO FITTINGS INC.

TUBE FITTINGS

METRIC

U-PRO TUBE FITTINGS

Fractional

優普洛科技股份有限公司
U-PRO Fittings Inc.

Yung Hong

Poppet Check Valves

For Process, Power and Instrumentation

CVC™ Series

- YH-Lok tube connections
- Pressure rating: 3000 psig
- Standard materials: Stainless Steel 316
- Temperature rating: -15°F to +400°F
- Cracking pressures: 1/3, 1, 5 and 10 psi
- 100% factory tested
- Available in 1/4", 3/8", 1/2" (Fractional)
- 6, 10, 12 (Metric)

For directional flow control of liquidant.

YUNGHONG Industrial Co., Ltd.

ISO 9001 Certified

優普洛科技股份有限公司
永鴻管件工業有限公司
防爆型電管配件

U-PRO Rigid Conduit Fitting

YUNG HONG Fitting Inc.

ISO 9001

U-FITTINGS INC.

INSTRUMENT TUBE & PIPE CLAMPS

優普洛科技股份有限公司

Yung Hong

Manifold Valves

FEATURES

- One piece bonnet with a metal to a metal seal to the valve body below the bonnet threads.
- Bonnet lock pin to prevent accidental loosening.
- 316 stainless steel construction of Manifold.
- Standard stem packing is PTFE.
- Two bonnet needle valve designs.
- 100% factory tested.

INTRODUCTIONS

The YUNGHONG 2 valve Manifolds has been specifically designed for mounting on differential pressure transmitters in liquid level applications. It contains a bleed valve and block valve the 3 valves manifolds are designed for use with differential pressure transmitters in incorporating an equalizing valves and two block valves in differential pressure applications.

U-PRO FITTINGS INC.