schneider
Tailored to Your Business

Instrumentation Products

Needle Type Globe Valves and Accessories

Type A6A

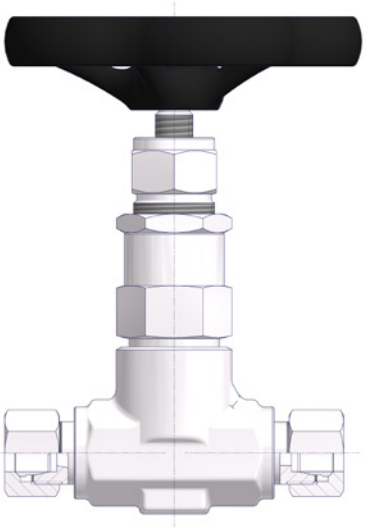
Primary Isolation Valves
DN 8 / Bore Size 8 mm

- Forged Body
- Screwed Bonnet
- Replaceable Valve Seat
- External Stem Thread

Type A6B

Needle Valves
DN 8 / Bore Size 8 mm

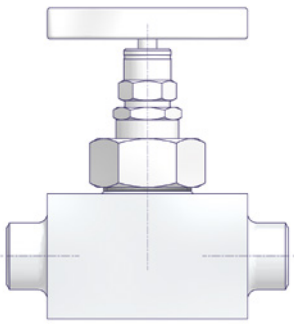
- Forged Body
- Srewed Bonnet
- Replaceable Valve Seat
- External Stem Thread



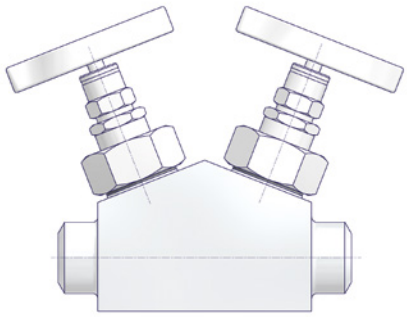
Type A1 / B1

Union Bonnet Needle Valves
Type A1: DN 11 / Bore Size = 11 mm
Type B1: DN 8 / Bore Size = 8 mm

- Barstock Body
- Union Bonnet Design
- Integral Valve Seat
- External Stem Thread



Type A1



Type B1

General Features

Standard Features

Packing:

PTFE and Graphite Packings are available for all valve types.

Surface Treatment:

Carbon Steel Valves are phosphatized by default.

Pressure Test:

A shell test and a seat test are performed at 1.5 times the max. allowable (working) pressure acc. to EN 12266-1 - P10, P11 and P12 respectively MSS-SP61 at every standard AS-Schneider Needle Type Globe Valve.

Certification:

Inspection certificate 3.1 acc. to EN 10 204 for valve body material and pressure test available on request. The heat resisting materials (see table on Page 6) are available by default with inspection certificate 3.2!

Optional Features

Fugitive Emission Applications:

For Fugitive Emission Applications AS-Schneider is providing bellows sealed valves with safety packing. Choice of Pressure class PN 100 or PN 250 - Suffix P5 or P6.

The bellows are submitted to a 100% Helium leak test. Leak rate: 10^{-8} mbar l/s.

Optional available are TA-Luft and ISO 15848 solutions. For more details please contact the factory.

Oxygen Service:

AS-Schneider offers an option with Reinforced PTFE Packing cleaned and lubricated for Oxygen Service – Suffix F5:

Pressure-Temperature Rating:

Max. 420 bar @ 60°C
Max. 200°C @ 90 bar

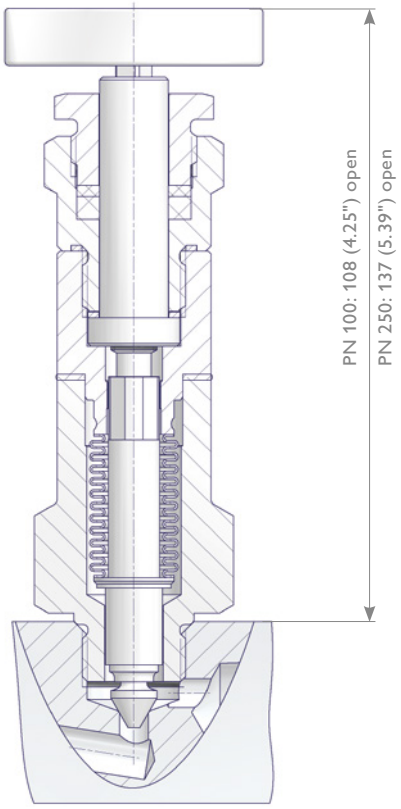
Not every Valve type is available for Oxygen Service.

If you don't find your options in this catalogue, please contact the factory.

Valve Head Unit Options

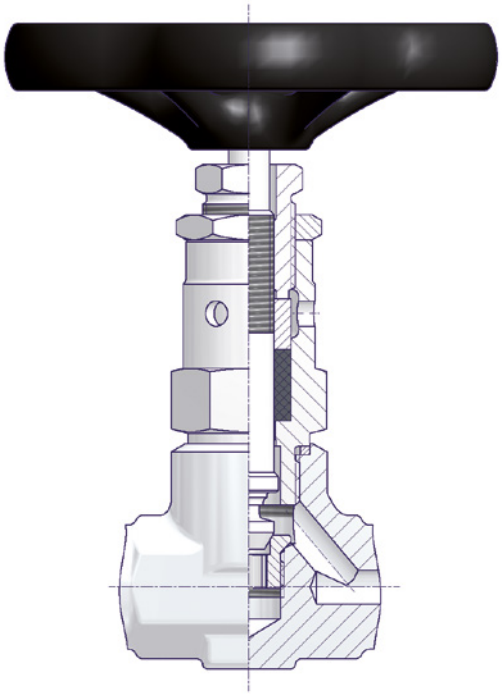
Bellows Sealed Head Units

Bellows Sealed Head Units are mainly used for applications requiring the highest tightness class – such as toxic or vacuum service.



External Stem Thread

External Stem Thread means Packing below Stem Threads. Stem Threads are protected from process media (non-wetted), helps to prevent stems from galling.



Stem Features

- Stem with cold rolled threads
- Back seat (except Integral Bonnet Needle Valve)
- Non-rotating needle tip or alternatively non-rotating needle

Valve Seat (Metal to Metal)

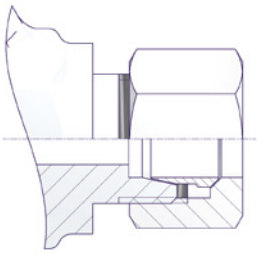
- Integral Valve Seat or Replaceable Valve Seat

Connections

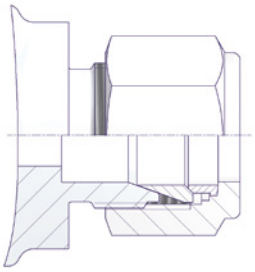
AS-Schneider is manufacturing a lot of different connections and connection combinations. In this catalogue we are showing the most popular types. On this page you will find the standard connections in detail.

Tube Fittings

Single Ferrule Tube Fittings
acc. to EN ISO 8434-1 Size S

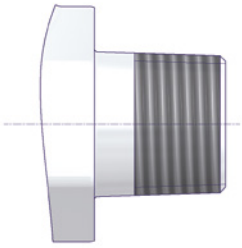


Twin Ferrule Tube Fittings

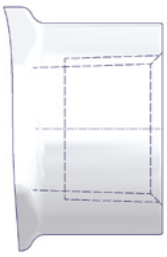


Tapered Pipe Threads

NPT Male Threads
acc. to ASME B 1.20.1

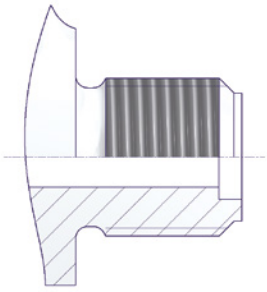


NPT Female Threads
acc. to ASME B 1.20.1

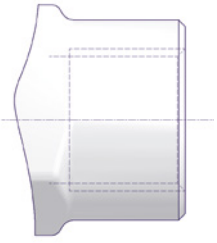


Parallel Pipe Threads

BSP Parallel Male Threads
acc. to DIN 19207 (G1/2)
acc. to DIN 3852

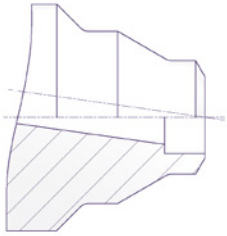


BSP Parallel Female Threads
acc. to ISO 228 (e.g. G 1/2)
acc. to DIN 3852-2 Form Z

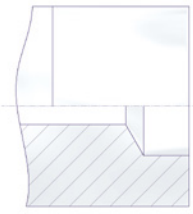


Weld Ends

Butt Weld Ends
for Pipes and Tubes
acc. to ASME B16.9 and
EN 12627



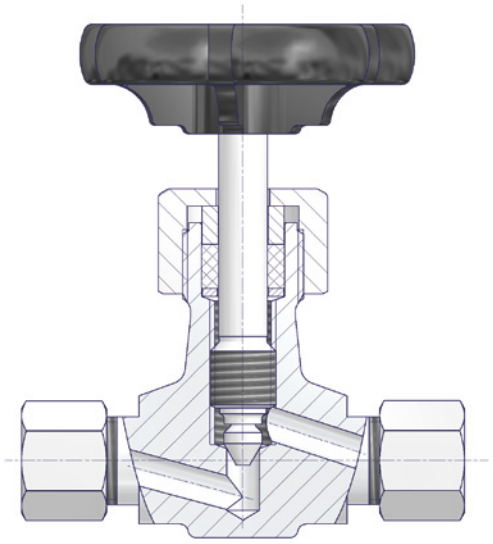
Socket Weld Ends
for Pipes and Tubes
acc. to ASME B16.11 and
EN 12760



Integral Bonnet Needle Valves

Features

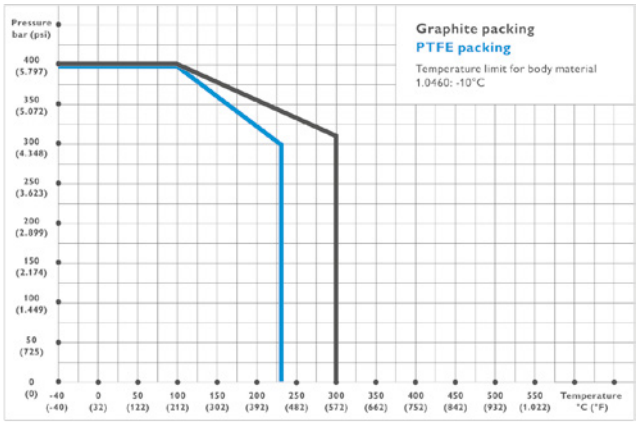
- Forged Body - DN 6 / Bore Size 6 mm
- Integral Bonnet
- Integral Valve Seat
- Internal Stem Thread
- Stem with cold rolled surface and non-rotating needle tip
- Standard-Packing PTFE (max. 232°C)
- Optional Graphite Packing (max. 300°C)



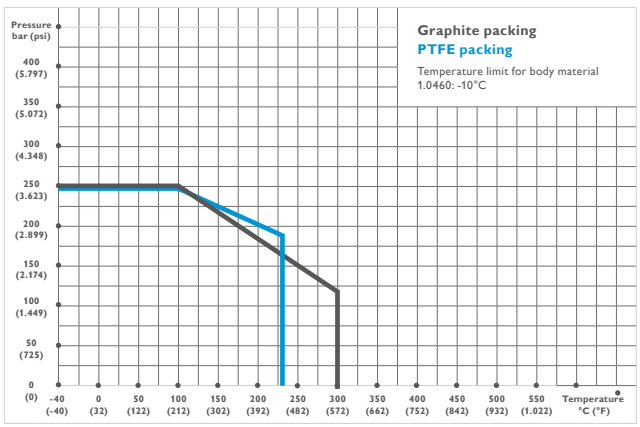
Components	Carbon Steel	Stainless Steel
	Material / Material No.	
Body	1.0460 / A105	1.4571
Valve Stem	1.4104	
Needle Tip	1.4122	
Packing	PTFE (Optional Graphite)	
Union Nut	Unalloyed Steel	1.4571
Tube Fitting		
Handwheel	Plastic	

Pressure-Temperature Ratings

Series S



Series L

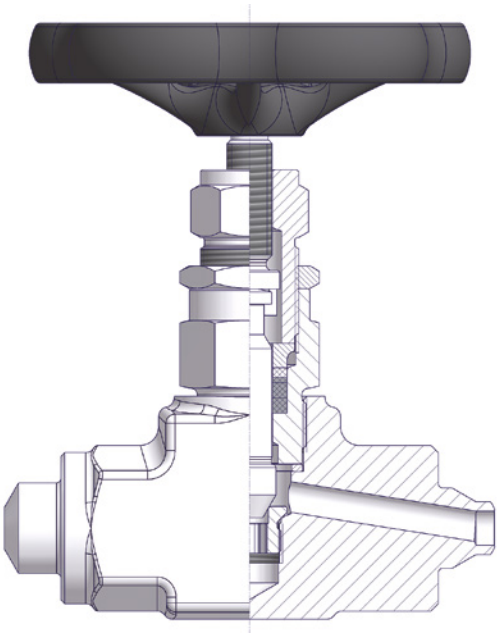


Screwed Bonnet Needle Valves Type A6A

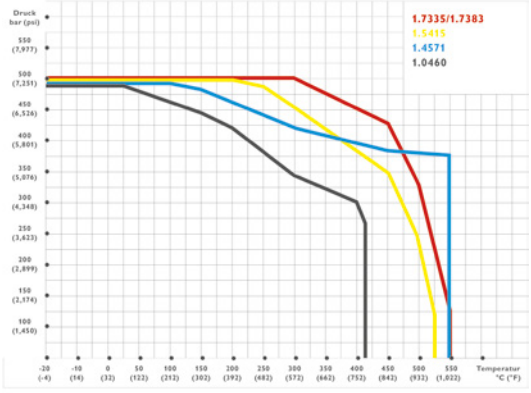
Features

- Forged Body - DN 8 / Bore Size 8 mm
- Screwed Bonnet M30x1.5
- Replaceable Valve Seat
- Stem, back seat and non-rotating needle tip
- Butt or Socket Weld Ends
- Face-to-Face 130mm

Needle Valve mainly used as Primary Isolation Valve.

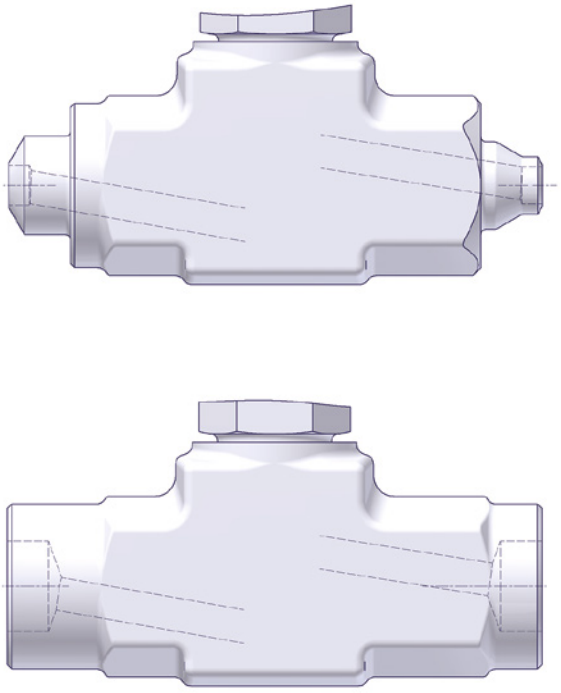


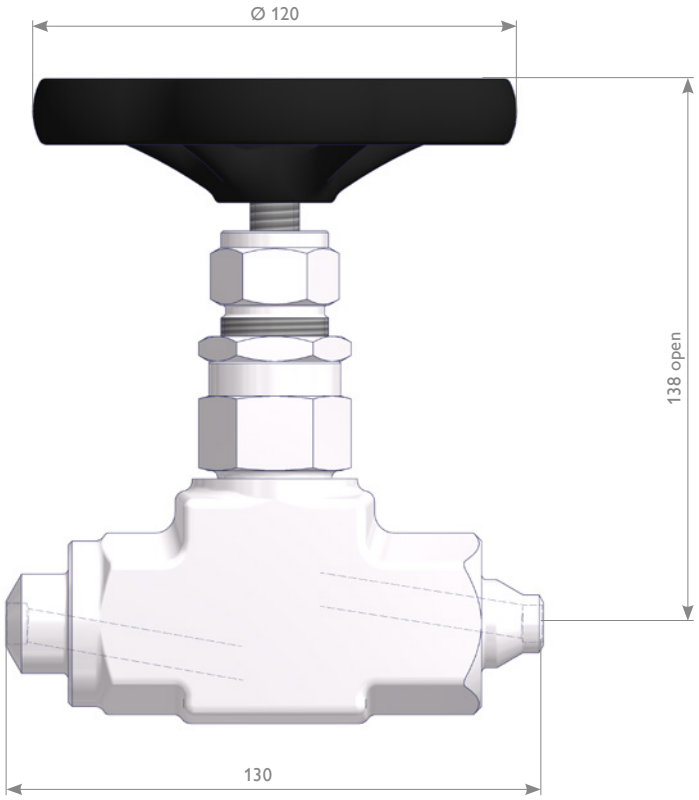
	Certificate 3.1	1.0460/A105	1.4401/1.4404/ F316/F316L	1.5415	1.7335	1.7383
Max. Temperature	-	-29°/420°C	-29°/538°C -60°C mit Arctic Operation	-10°C/ 530°C	-10°C/ 550°C	-10°C/ 550°C
Bonnet	x	1.7709	1.4401/316	1.7709	1.7709	1.7709
Gasket	-	1.7709	1.4571 (316Ti)	1.7709	1.7709	1.7709
Needle	x	1.4122	1.4401/316	1.4122	1.4122	1.4122
Needle Tip	-	*Optional in Stellite 6, otherwise Needle as single piece*				
Valve Seat	-	1.4021	1.4571 (316Ti)	1.4021	1.4021	1.4981
Valve Seat inlay	-	*Optional Valve Seat with welded Stellite 6 inlay*				
Stem	-	1.4401/316				
Gland Nut	-					
Lock Nut	-					
Gland	-					
Hand Wheel	-	Steel				



The respective max. allowable (Working) Pressure (PS) depends on the tube / pipe connection used. For further information please contact the factory.

Weld Ends





Inlet	Outlet	Material	Part Number
Weld End Ø 21.3 x 2.9	Ø 14 x 2.5	1.0460 / A105	A6ABBCB-49E8
		1.4401/1.4404/ F316/F316L	A6ABBSB-49E8
Weld End Ø 22 x Ø 22		1.0460 / A105	A6ASSCB-4A4A
		1.4401/1.4404/ F316/F316L	A6ASSSB-A4A4

Weld End Connections		Part Number				
		Material				
Inlet	Outlet	1.0460 / A105	1.7335	1.5415	1.7383	1.4401/1.4404/ F316/F316L
Tube Butt Weld End Ø 14 x 2.5		A6ABBCB-E8E8	A6ABBRB-E8E8	A6ABBQB-	A6ABBUB-E8E8	A6ABBSB-E8E8
Pipe Butt Weld End Ø 21.3 x 3.2		A6ABBCB-4343	A6ABBRB-4343	A6ABBQB-4343	A6ABBUB-4343	A6A-BBSB-4343
Pipe Butt Weld End Ø 21.3 x 2.9		A6ABBCB-4949	A6ABBRB-4949	A6ABBQB-4949	A6ABBUB-4949	A6A-BBSB-4949
Pipe Butt Weld End Ø 21.3 x 3.2	Tube Butt Weld End Ø 14 x 2.5	A6ABBCB-43E8	A6ABBRB-43E8	A6ABBQB-43E8	A6ABBUB-43E8	A6A-BBSB-43E8
Pipe Butt Weld End Ø 21.3 x 2.9	Tube Butt Weld End Ø 14 x 2.5	A6ABBCB-49E8	A6ABBRB-49E8	A6ABBQB-49E8	A6ABBUB-49E8	A6ABBSB-49E8
Pipe Butt Weld End Ø 21.3 x 6.3	Tube Butt Weld End Ø 14 x 2.5	A6ABBCB-4FE8	A6ABBRB-4FE8	A6ABBQB-4FE8	A6ABBUB-4FE8	A6A-BBSB-4FE8
Pipe Butt Weld End Ø 24 x 7.1	Tube Butt Weld End Ø 14 x 2.5	A6ABBCB-UGE8	A6ABBRB-UGE8	A6ABBQB-UGE8	A6ABBUB-UGE8	A6A-BBSB-UGE8
Pipe Socket Weld End 1/2"		A6ABBCB-4A4A	A6ABBRB-4A4A	A6ABBQB-4A4A	A6ABBUB-4A4A	A6ASSSB-4A4A

Ordering Information A6A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	6	A	B	B	C	B	-	4	3	4	3	-	M	S	

A6	**Globe Valves**

	Face-to-Face-Length
A	130 mm

	Inlet
B	Butt Weld End
S	Socket Weld End

	Outlet
B	Butt Weld End
S	Socket Weld End

	Material		
C	1.0460 / A105	Q	1.5415*
S	F316/F316L**	R	1.7335*
		U	1.7383*

	Bonnet		
A	PTFE	2	Bellows sealed PN100
B	Graphite	4	Bellows sealed PN250

Inlet

	Butt Weld Ends for Tubes and Pipes. Outside Diameter (O.D.) and Wall Thickness acc. to						**Socket Weld End**
	ISO 4200, Table 3		**ISO 4200, Table 2**		**ASME B36.10M**		**Bore acc. to EN 12760 (ASMEB16.11)**
	Tube O.D.		**Series 1 Pipe O.D.**		**NPS (Pipe O.D)**		**For Pipe**
C	10 mm	2	13,5 mm	2	NPS 1/4 (13,7 mm)	2	DN 8 (NPS 1/4)
D	12 mm	3	17,2 mm	3	NPS 3,8 (17,1 mm)	4	DN 15 (NPS 1/2)
E	14 mm	4	21,3 mm	4	NPS 1/2 (21,3 mm)	6	DN 20 (NPS 3/4)
F	16 mm	U	24 mm	6	NPS 3/4 (26,7 mm)	8	DN 25 (NPS 1)
G	18 mm	6	26,9 mm	8	NPS 1 (33,4 mm)		
J	22 mm	8	33,7 mm				
							For Tube O.D
						C	10 mm
						D	12 mm
						E	14 mm
						F	16 mm
						G	18 mm
						H	NPS 1/2
	Wall Thickness in mm				**Schedule No.**	**A**	**Socket Weld End**
5	1,5 mm	8	2,6 mm	N	Schedule 40	4	1/2“
2	2,0 mm	9	2,9 mm	P	Schedule 80		
8	2,5 mm	3	3,2 mm	Q	Schedule 160		
9	3,0 mm	A	3,6 mm				
A	3,5 mm	4	4,0 mm				
D	5,0 mm	C	4,5 mm				
		D	5,0 mm				
		E	5,6 mm				
		F	6,3 mm				
		G	7,1 mm				

Outlet

	Butt Weld Ends for Tubes and Pipes. Outside Diameter (O.D.) and Wall Thickness acc. to						**Socket Weld End**
	ISO 4200, Table 3		**ISO 4200, Table 2**		**ASME B36.10M**		**Bore acc. to EN 12760 (ASMEB16.11)**
	Tube O.D.		**Series 1 Pipe O.D.**		**NPS (Pipe O.D)**		**For Pipe**
C	10 mm	2	13,5 mm	2	NPS 1/4 (13,7 mm)	2	DN 8 (NPS 1/4)
D	12 mm	3	17,2 mm	3	NPS 3,8 (17,1 mm)	4	DN 15 (NPS 1/2)
E	14 mm	4	21,3 mm	4	NPS 1/2 (21,3 mm)	6	DN 20 (NPS 3/4)
F	16 mm	U	24 mm	6	NPS 3/4 (26,7 mm)	8	DN 25 (NPS 1)
G	18 mm	6	26,9 mm	8	NPS 1 (33,4 mm)		
J	22 mm	8	33,7 mm				
							For Tube O.D
						C	10 mm
						D	12 mm
						E	14 mm
						F	16 mm
						G	18 mm
						H	NPS 1/2
	Wall Thickness in mm				**Schedule No.**	**A**	**Socket Weld End**
5	1,5 mm	8	2,6 mm	N	Schedule 40	4	1/2“
2	2,0 mm	9	2,9 mm	P	Schedule 80		
8	2,5 mm	3	3,2 mm	Q	Schedule 160		
9	3,0 mm	A	3,6 mm				
A	3,5 mm	4	4,0 mm				
D	5,0 mm	C	4,5 mm				
		D	5,0 mm				
		E	5,6 mm				
		F	6,3 mm				
		G	7,1 mm				

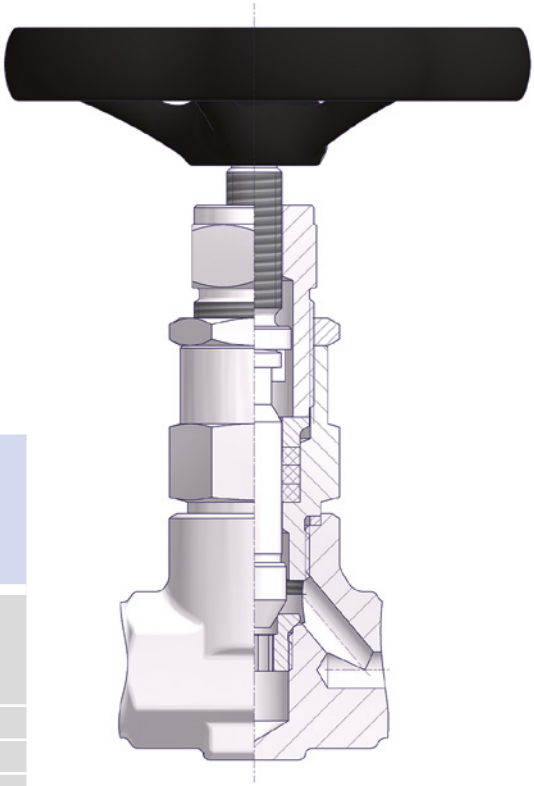
	Options - Specify in alphabetical order		
S	Stellite Valve Tip	M	Wetted Parts with 3.1 certificate
V	Stellite Valve Seat	T	Tandem Valve

	Operation Options		
R	Anti-Tamper Bonnet (1 Key supplied per Valve)	Q	Bonnet with Position Indicator
U	Padlock for Anti-Tamper Bonnet	G	With Mounting Plate

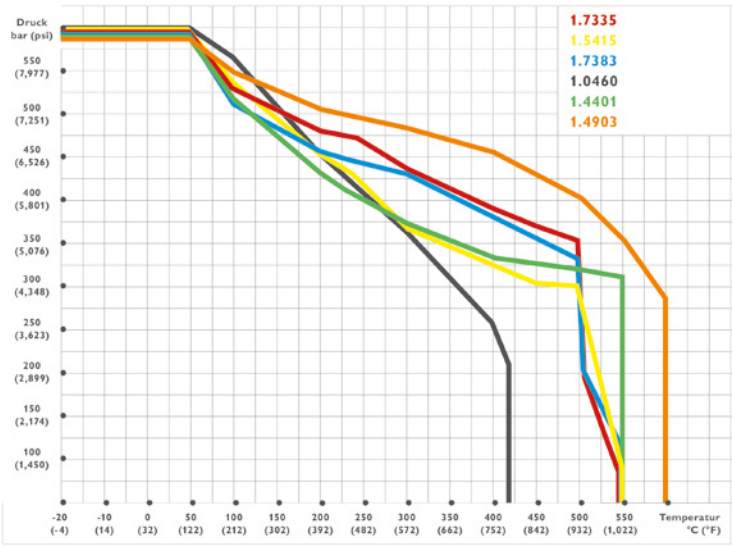
Wetted Parts for Carbon Steel and Stainless Steel are supplied according to NACE MR0175/MR0103 and ISO 15156/17945 (latest Issue)
Note: Not every configuration which can be created in the ordering information is feasible / available.
*Forgings available for Butt Weld End with NPS 3/4 / Pipe O.D. 26,9 mm resp. Socket Weld End for NPS 1/2 with reduced max. allowable (Working) Pressure.
**Quadruple certified F316/F316L/1.4401/1.4404

Features

- Forged Body - DN 8 / Bore Size 8 mm
- Screwed Bonnet M24x1.5
- Replaceable Valve Seat
- Stem, back seat and non-rotating needle tip
- Various connections possible
- Face-to-Face 90mm

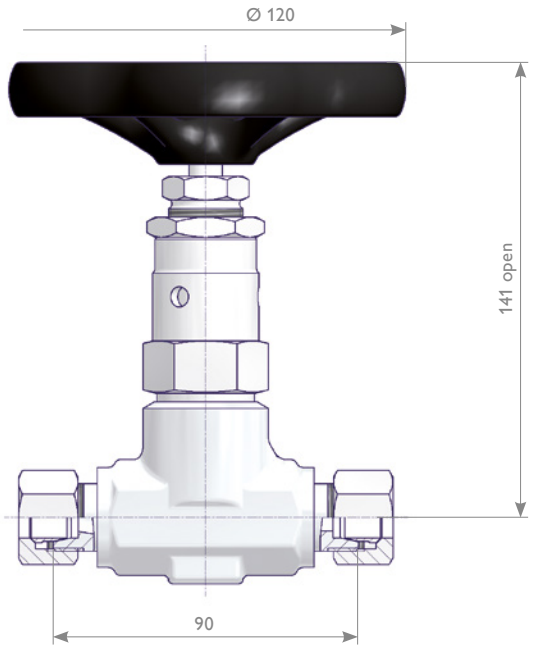


Body (S350.11.x01.01R)	Certificate 3.1	1.0460/A105	1.4571
Max. Temperature	-	-29°/420°C	-40°/538°C -60°C mit Arctic Operation
Bonnet	x	1.7709	1.4401/316
Dichtring (Gasket)	-	1.4571	1.4571
Needle	x	1.4122	1.4401/316
Valve Seat	-	1.4021	1.4571 (316Ti)
Stem	-	1.4401/316	
Gland Nut	-		
Lock Nut	-		
Gland	-		
Hand Wheel	-	Steel	



Needle Valves Type A6B

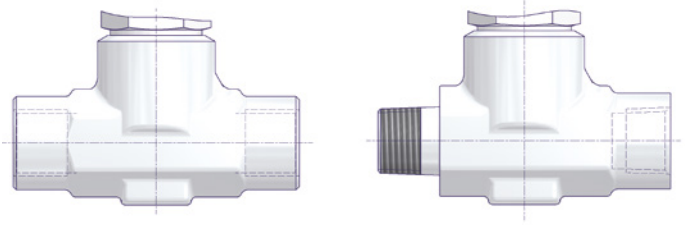
Tube Fitting Connections Size S



Inlet / Tube Fitting Size	Outlet	Material	Part Number
12S		1.0460 / A105	A6BTTCB-*4C4
		1.4571	A6BTTPB-*4C4
14S		1.0460 / A105	A6BTTCB-*5C5
		1.4571	A6BTTPB-*5C5

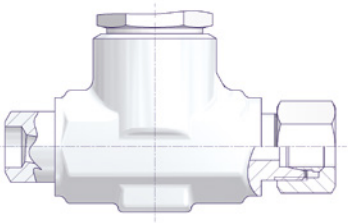
* = Various brands are available

Threaded Connections



Inlet	Outlet	Material	Part Number
G 1/2 Female		1.0460 / A105	A6BFFCB-HJ4H4
		1.4571	A6BFFPB-HJ4H4
1/2 NPT Female		1.0460 / A105	A6BFFCB-N4N4
		1.4571	A6BFFPB-N4N4
1/2 NPT Male	1/2 NPT Female	1.0460 / A105	A6BMFCB-N4N4
		1.4571	A6BMFPB-N4N4

Weld Ends / Tube Fitting Connection



Inlet	Outlet	Material	Part Number
Weld End Ø 21.3 x 4.5	Tube Fitting Size 12S	1.0460 / A105	A6MTCB-4C*4
		1.4571	A6MTPB-4C*4

* = Various brands are available

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	6	B	E	T	P	B	-	4	D	C	4	-	M		

A6	**Globe Valves**				
	Face-to-Face-Length				
B	90 mm				
	Inlet				
E	Pipe Butt Weld End x Tube Socket Weld End	F	Female Thread		
M	Male Thread	T	Integral Tube Fitting		
	Outlet				
E	Pipe Butt Weld End x Tube Socket Weld End	F	Female Thread		
M	Male Thread	T	Integral Tube Fitting		
	Material				
C	1.0460 / A105				
P	1.4571				
	Bonnet				
A	PTFE (Bellows sealed PN100)				
B	Graphite (Bellows sealed PN250)				
D	ISO FE Series Type 1				
E	ISO FE Series Type 3				
W	TA-Luft (PTFE/RPTFE)				
	Inlet				
	Pipe Butt Weld End x Tube Socket Weld End		**Thread Type**		**Fitting Type**
	Butt Weld Wend for Pipe O.D.				
4	21,3 mm	L	DIN 19207 Form R	C	Single Ferrule Tube Fitting
		N	NPT Thread	K	Twin Ferrule Tube Fitting
		H	BSP Parallel (G) DIN 3852		
	Socket Weld End for Tube O.D		**Thread Size**		**Fitting Size**
C	10 mm	4	1/2	4	12 mm resp. 12S
D	12 mm			5	14 mm resp. 14S
	Outlet				
	Pipe Butt Weld End x Tube Socket Weld End		**Thread Type**		**Fitting Type**
	Butt Weld Wend for Pipe O.D.				
	21,3 mm	L	DIN 19207 Form R	C	Single Ferrule Tube Fitting
		N	NPT Thread	K	Twin Ferrule Tube Fitting
		H	BSP Parallel (G) DIN 3852		
	Socket Weld End for Tube O.D		**Thread Size**		**Fitting Size**
	10 mm	4	1/2	4	12 mm resp. 12S
	12 mm			5	14 mm resp. 14S
	Options - Specify in alphabetical order				
M	Wetted Parts with 3.1 certificate				
S	Stellite Valve Tip				
	Operation Options				
R	Anti-Tamper Bonnet (1 Key supplied per Valve)				
U	Padlock for Anti-Tamper Bonnet				

Wetted Parts for Carbon Steel and Stainless Steel are supplied according to NACE MR0175/MR0103 and ISO 15156/17945 (latest Issue)
Note: Not every configuration which can be created in the ordering information is feasible / available.