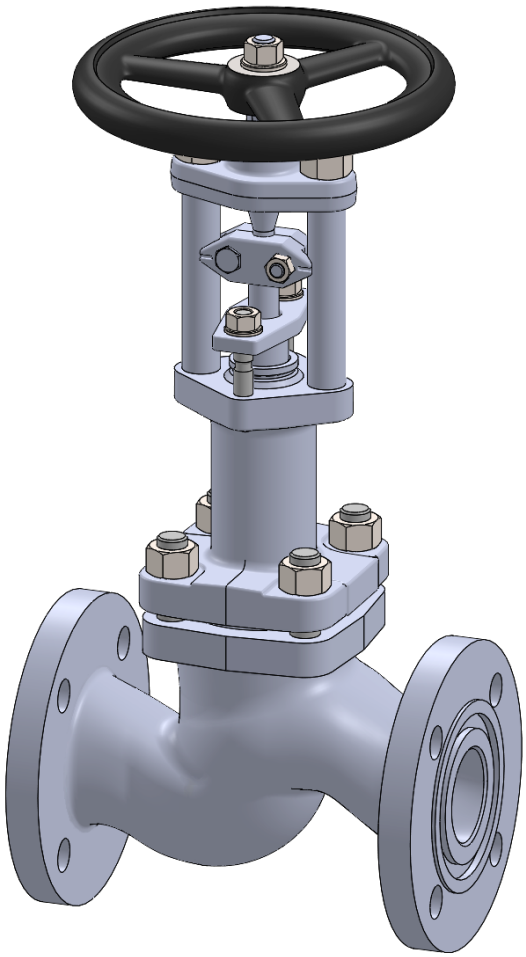
PHÖNIX STRACK DAUME REGELARMATUREN S+P Solent & Pratt Phönix Ltd



Globe Valve

Type 350

PN 160

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PHÖNIX VALVE GROUP

Applications & Design Features

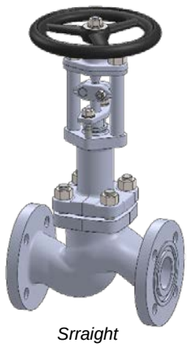
Applications

Model 350 is designed for critical service applications involving lethal, toxic, corrosive, inflammable, volatile, radiating, or expensive fluids. A Fire-Safe approved design per DIN EN 10497 is available for applications that have to comply with fire security standards.

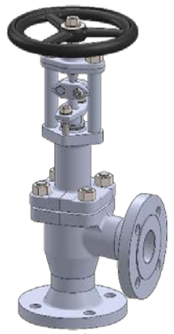
High vacuum resistant design 10-3 to 10-8 mbar, helium leakage test is possible if required
the most common applications are

- Dry Chlorine (Cl2)
- Anhydrous Hydrogen Chloride (HCl)
- Vinyl Chloride Monomer (VCM)
- Ethylene Dichloride (EDC)
- Anhydrous Hydrofluoric Acid (HF)
- Isocyanites (MDI, TDI, HDI, etc.)
- heat transfer fluid application (steam, hot oil, molten Sodium, etc.) and
- fluids of similar nature.

The unique valve design guarantees reliable and excellent protection against leaks or fugitive emissions. The stem seal requires virtually no maintenance due to leak free weld connections of the bellows with bonnet and stem. Constant packing monitoring and re-packing is eliminated. In the unlikely event of a bellows failure the backup packing guarantees safe valve performance until the next scheduled shutdown.



Srraight



Angle

Y-Pattern

Design Features

Bellows and Packing

- bellows protected in extended bonnet against direct impingement from product flow
- multiple walls and hydroformed bellows
- up to 50.000 bellows operations guaranteed

Stem

- two-piece stem protects the bellows against torque stress
- design eliminates stem bearings along with their maintenance needs
- guided stem on top and bottom
- one-piece stem design upon request

Body and Bonnet

- bodies are forgings or castings with larger than required wall thickness and integral flanges
- extended bonnet provides for good thermal insulation
- body bonnet joint gasket is fully confined to prevent gasket flow or blowout

Seats

- solid hardfacings for outstanding corrosion and wear resistance
- knife edge metal-to-metal seat for bubble-tight shutoff
- replaceable disc for inexpensive maintenance

= zero emissions, zero seat leakage, low maintenance

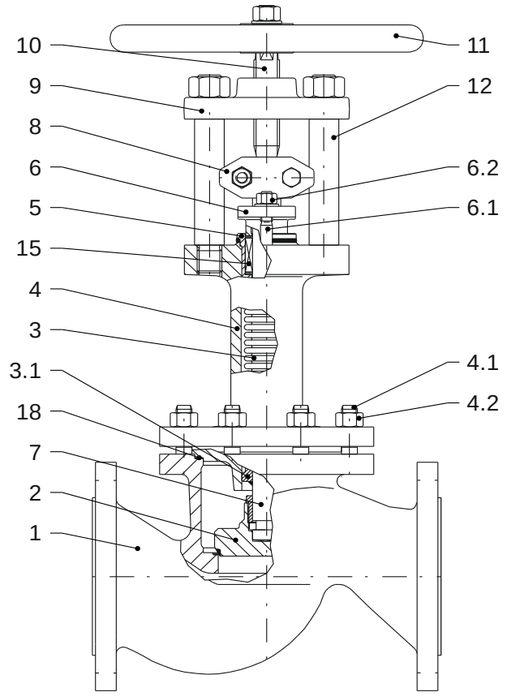
Standard Materials of Construction

Options

Other materials per customer requirements are available!

Notes

Phönix reserves the right to change product design and specification without notice!



Materials

Item	Part Name	Carbon steel Model 350C up to 450°C	low temp. Carbon steel Model 350T -50°C up to 300°C	Stainless steel Model 350V -200°C up to 400°C
1	Body	1.0460 / 1.0619	1.0566 / 1.6220	1.4404 / 1.4408
	Seat overlay	1.4370 (≈ 200HRB)	1.4370 (≈ 200HRB)	like body (≈ 200HRB)
2	Disc	1.4021 hardened / 1.0460	1.4571 / 1.0566	1.4571
	Overlay	1.4009 (≈ 300HRB)	Stellite 6 (≈ 42HRC)	Stellite 6 (≈ 42HRC)
3	Bellows	1.4571	1.4571	1.4571
3.1	Guide ring	1.4571	1.4571	1.4571
4	Bonnet	1.0460 / 1.0619	1.0566 / 1.6220	1.4404 / 1.4408
4.1	Stud bolt	1.7709	A4-70	A4-70
4.2	Hex. nut	1.7218	A4-70	A4-70
5	Stuffing box body	1.4571	1.4571	1.4571
6	Gland follower	1.0619	1.5638	1.4408
6.1	Stud bolt	Steel 5.6	A4-70	A4-70
6.2	Hex. nut	Steel 5	A4-70	A4-70
7	Lower stem	1.4571	1.4571	1.4571
8	Coupling	1.4408	1.4408	1.4408
9	Bridge	1.0460, QPQ-nitrided	1.0460, QPQ-nitrided	1.0460, QPQ-nitrided
10	Upper stem	1.4057	1.4057	1.4057
11	Handwheel	Cast iron	Cast iron	Cast iron
12	Pillar	1.0501	1.4057	1.4057
15	Packing	Graphite	PTFE-silk *	Graphite
18	Gasket	Grooved SS / graphite	Grooved SS / graphite	Grooved SS / graphite

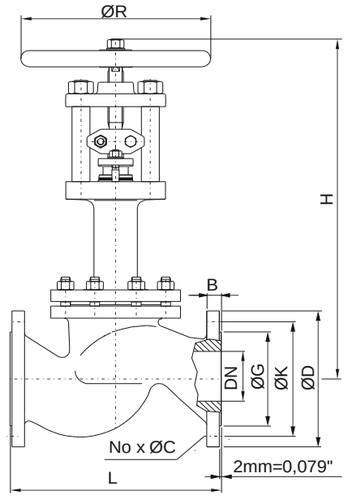
* ³ 220°C Packing of pure graphite

Globe Valve *Bellows Sealed*

Model 350

Straight Way / Protected Bellows

PN160 Sizes DN15 - DN200



Options

- Other customer specific designs on request

Notes

- Design acc. PED 2014/68/EU and harmonized standards
- Marking acc. to EN 19, AD-A4, PED 2014/68/EU, CE
- Standard tests acc. to DIN EN 12266, ISO 5208
- Preservation acc. to manufacturer standard
- Connections: Flanges acc. to DIN EN 1092-1
  Butt Weld Ends acc. to DIN EN 12627
  Socket Weld Ends acc. to DIN EN 12760
- F-T-F Dimensions: Flanges acc. to DIN EN 558-1
  Butt Weld Ends acc. to DIN EN 12982
  Socket Weld Ends acc. to manufacturer standard

Dimensions & Weights & Flow Coefficients

DN	Unit	Globe			Flage facing type B1						Kv [m³/h]
		L	H	ØR	ØG	ØK	No x ØC	ØD	B	Weight	cv *[USGal/min]*
15	[mm]	210	380	150	45	75	4 x 14	105	20	12 kg	3.4
	[in]	*8.27*	*14.96*	*5.91*	*1.77*	*2.95*	*4 x 0.55*	*4.13*	*0.79*	*26 lbs*	*3.95*
20	[mm]	230	380	150	ON REQUEST					14 kg	7
	[in]	*9.06*	*14.96*	*5.91*						*31 lbs*	*8.14*
25	[mm]	230	365	150	68	100	4 x 18	140	24	16 kg	9.5
	[in]	*9.06*	*14.37*	*5.91*	*2.68*	*3.94*	*4 x 0.71*	*5.51*	*0.94*	*35 lbs*	*11.05*
32	[mm]	ON REQUEST									
	[in]										
40	[mm]	260	430	200	88	125	4 x 22	170	28	27 kg	27
	[in]	*10.24*	*16.93*	*7.87*	*3.46*	*4.92*	*4 x 0.87*	*6.69*	*1.10*	*60 lbs*	*31*
50	[mm]	300	430	200	102	145	4 x 26	195	30	31 kg	40
	[in]	*11.81*	*16.93*	*7.87*	*4.02*	*5.71*	*4 x 1.02*	*7.68*	*1.18*	*68 lbs*	*47*
65	[mm]	ON REQUEST									
	[in]										
80*	[mm]	380	660	315	138	180	8 x 26	230	36	65 kg	113
	[in]	*14.96*	*25.98*	*12.40*	*5.43*	*7.09*	*8 x 1.02*	*9.06*	*1.42*	*143 lbs*	*131*
100*	[mm]	430	720	400	162	210	8 x 30	265	40	110 kg	179
	[in]	*16.93*	*28.35*	*15.75*	*6.38*	*8.27*	*8 x 1.18*	*10.43*	*1.57*	*243 lbs*	*208*
125*	[mm]	ON REQUEST									
	[in]										
150*	[mm]	550	870	400	218	290	12 x 33	355	50	200 kg	405
	[in]	*21.65*	*34.25*	*15.75*	*8.58*	*11.42*	*12 x 1.30*	*13.98*	*1.97*	*441 lbs*	*471*
200*	[mm]	650	1080	500	285	360	12 x 36	430	60	304 kg	693
	[in]	*25.59*	*42.52*	*19.69*	*11.22*	*14.17*	*12 x 1.42*	*16.93*	*2.36*	*670 lbs*	*806*

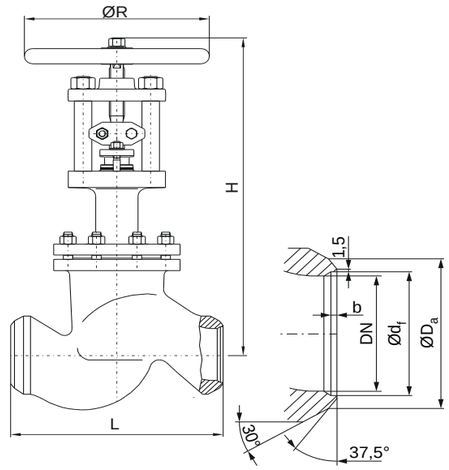
* Nominal Sizes with Equilibrating Disc

Globe Valve *Bellows Sealed*

Model 350

Straight Way / Protected Bellows

PN160 Sizes DN15 - DN200



Options

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Notes

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- Marking acc. to EN 19, AD-A4, PED 2014/68/EU, CE
- Standard tests acc. to DIN EN 12266, ISO 5208
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- Connections: Flanges acc. to DIN EN 1092-1
  Butt Weld Ends acc. to DIN EN 12627
  Socket Weld Ends acc. to DIN EN 12760
- F-T-F Dimensions: Flanges acc. to DIN EN 558-1
  Butt Weld Ends acc. to DIN EN 12982
  Socket Weld Ends acc. to manufacturer standard

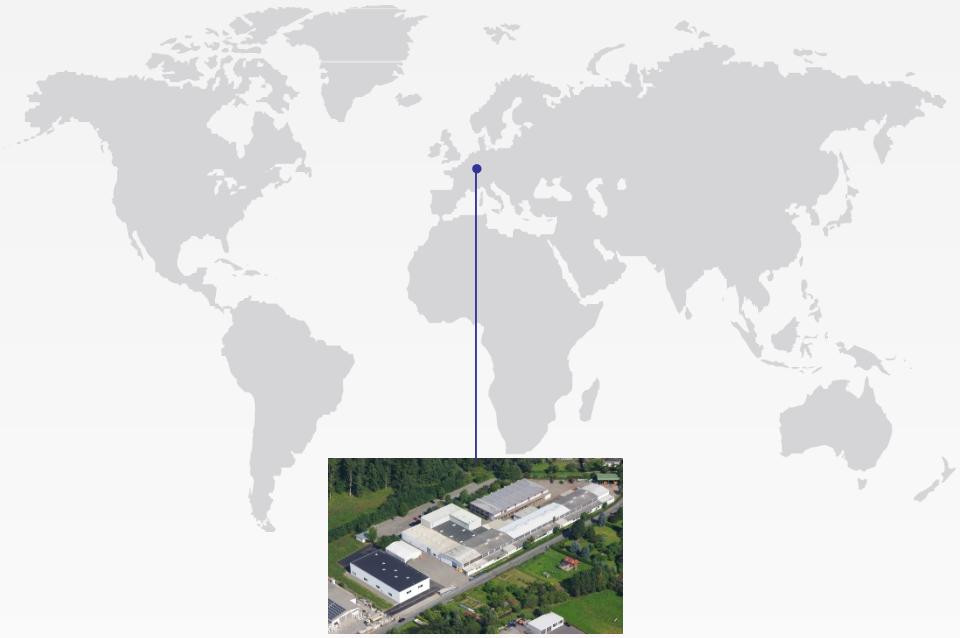
Dimensions & Weights & Flow Coefficients

DN	Unit	Globe			Butt Weld Ends					Kv [m³/h]
		L	H	ØR	$ØD_a$	$Ød_f$	b	for pipe	Weight	cv *[USGal/min]*
15	[mm]	130**	380	150	22	17	3	Ø21.3 x 2.0	10 kg	3.4
	[in]	*5.12*	*14.96*	*5.91*	*0.87*	*0.67*	*0.12*	*Ø0.84 x 0.08*	*22 lbs*	*3.95*
20	[mm]	150**	380	150	ON REQUEST				10 kg	7
	[in]	*5.91*	*14.96*	*5.91*					*22 lbs*	*8.14*
25	[mm]	160**	365	150	35	27	5	Ø33.7 x 3.2	11 kg	9.5
	[in]	*6.30*	*14.37*	*5.91*	*1.38*	*1.06*	*0.20*	*Ø1.33 x 0.13*	*24 lbs*	*11.05*
32	[mm]	ON REQUEST								
	[in]									
40	[mm]	200**	430	200	50	41	5.5	Ø48.3 x 3.6	19 kg	27
	[in]	*7.87*	*16.93*	*7.87*	*1.97*	*1.61*	*0.22*	*Ø1.90 x 0.14*	*42 lbs*	*31*
50	[mm]	230	430	200	62	52	6	Ø60.3 x 4.0	20 kg	40
	[in]	*9.06*	*16.93*	*7.87*	*2.44*	*2.05*	*0.24*	*Ø2.37 x 0.16*	*44 lbs*	*47*
65	[mm]	ON REQUEST								
	[in]									
80*	[mm]	380	660	315	91	76	9.5	Ø88.9 x 6.3	50 kg	113
	[in]	*14.96*	*25.98*	*12.40*	*3.58*	*2.99*	*0.37*	*Ø3.50 x 0.25*	*110 lbs*	*131*
100*	[mm]	430	720	400	117	98	12	Ø114.3 x 8.0	88 kg	179
	[in]	*16.93*	*28.35*	*15.75*	*4.61*	*3.86*	*0.47*	*Ø4.50 x 0.31*	*194 lbs*	*208*
125*	[mm]	ON REQUEST								
	[in]									
150*	[mm]	550	870	400	172	143.3	19	Ø168.3 x 12.5	151 kg	405
	[in]	*21.65*	*34.25*	*15.75*	*6.77*	*5.64*	*0.75*	*Ø6.63 x 0.49*	*333 lbs*	*471*
200*	[mm]	650	1080	500	223	187.1	24	Ø219.1 x 16.0	223 kg	693
	[in]	*25.59*	*42.52*	*19.69*	*8.78*	*7.37*	*0.94*	*Ø8.63 x 0.63*	*492 lbs*	*806*

* Nominal Sizes with Equilibrating Disc

** manufacturer standard

Contact us



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