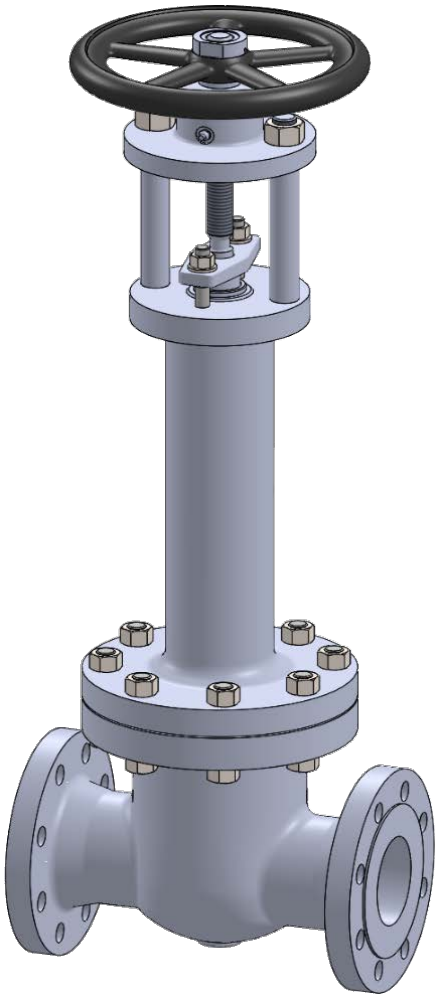
PHÖNIX STRACK DAUME REGELARMATUREN S+P Solent & Pratt Phönix Ltd



Gate Valve

Type 834

PN 100

Phönix Valve Group
Am Stadtbruch 6
34471 Volkmarsen

Phone: +49 5693 988 0
web: www.phoenix-valvegroup.com
eMail: info@phoenix-valvegroup.com

PHÖNIX VALVE GROUP

Model 834

Superlong Protected Bellows

Applications & Design Features

Applications

Model 834 is designed for critical service applications involving lethal, toxic, corrosive, inflammable, volatile, radiating, or expensive fluids. Common applications are refineries as well as chemical plants to eliminate constant emissions monitoring involved with conventional packed gland valves.

The most common applications are:

- Benzene
- Ammonia
- Ethylene
- Dry Chlorine (Cl2)
- Fuel / petrol
- heat transfer fluid application (steam, hot oil, 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 valve monitoring and re-adjustment of the packing is eliminated. In the unlikely event of a bellows failure the backup packing guarantees safe valve performance until the next scheduled shutdown.

Design Features

Bellows and Packing

- bellows protected in extended bonnet against direct impingement from product flow
- multiple walls and hydroformed bellows
- large sizes with multiple stage, telescopic bellows assembly for long cycle life

Stem

- non-rotating stem prevents bellows torsion
- back seat for added safety
- guided stem on top and bottom

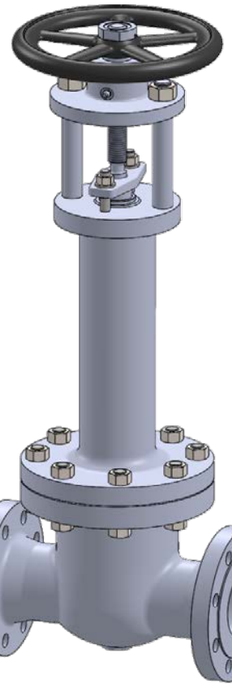
Body and Bonnet

- full-port bodies
- bolted body-bonnet joint for ease of maintenance and quick servicablilty, seal welded design optional
- body bonnet joint gasket is fully confined to prevent gasket flow or blowout

Seats

- solid hardfacings for outstanding corrosion and wear resistance
- fexible, solid, or split wedge design
- replaceable wedge for inexpensive maintenance

= zero emissions, zero seat leakage, low maintenance

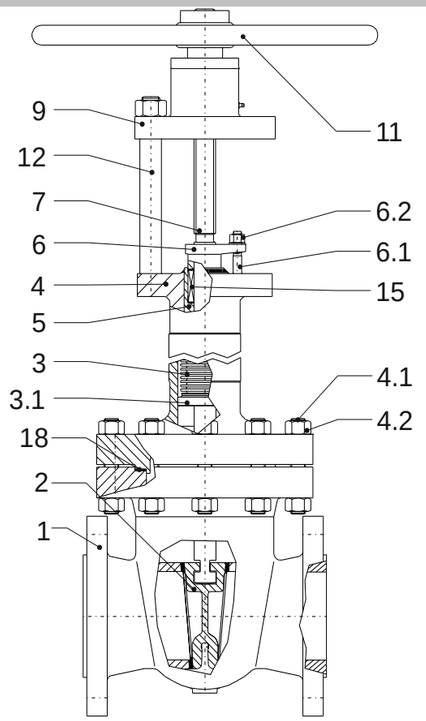


Model 834

Superlong Protected Bellows

Standard Materials of Construction

834 / D ...



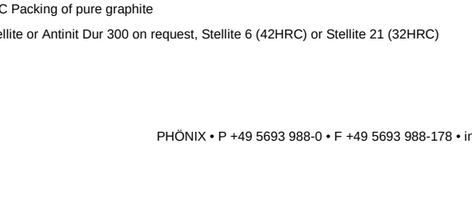
Options

Other materials per customer requirements are available!

Notes

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

DN15 - DN50



Materials

Item	Part Name	Carbon steel **Model 834C** up to 450°C	low temp. Carbon steel **Model 834T** -50°C up to 300°C	Stainless steel **Model 834V** -200°C up to 400°C
1	Body	1.0460 / 1.0619	1.0566 / 1.6220 / 1.1138	1.4404 / 1.4408
	Seat overlay	1.4370** (≈ 200HRB)	1.4370** (≈ 200HRB)	like body** (≈ 200HRB)
2	Disc	1.4027	1.4408	1.4408
		1.0619 with overlay	1.6220	
	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 / 1.1138	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
9	Bridge	1.0460	1.0460	1.0460
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
24	Seat	1.4571	1.4571	1.4571
	Overlay	* *	* *	* *

* 220°C Packing of pure graphite

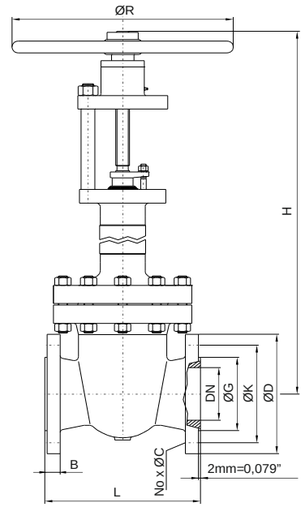
* * Stellite or Antinit Dur 300 on request, Stellite 6 (42HRC) or Stellite 21 (32HRC)

Gate Valve *Bellows Sealed*

Model 834

Superlong Protected Bellows

PN100 Sizes DN15 - DN80



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

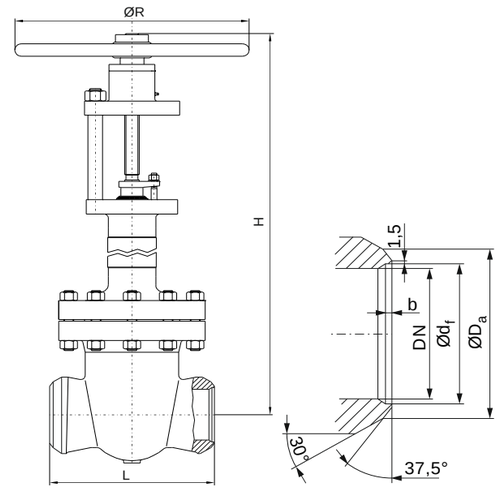
DN	Unit	L	Lift	closed H	ØR	Flage facing type B1 ØG	ØK	No x ØC	ØD	B	Weight	Kv [m³/h] cv *[USGal/min]*
15	[mm]	210	25	360	150	45	75	4 x 14	105	20	10 kg	18
	[in]	*8.27*	*0.98*	*14.17*	*5.91*	*1.77*	*2.95*	*4 x 0.55*	*4.13*	*0.79*	*22 lbs*	*20.93*
20	[mm]	230	25	360	150	58	90	4 x 18	130	22	10 kg	32
	[in]	*9.06*	*0.98*	*14.17*	*5.91*	*2.28*	*3.54*	*4 x 0.71*	*5.12*	*0.87*	*22 lbs*	*37*
25	[mm]	230	27	360	150	68	100	4 x 18	140	24	11 kg	50
	[in]	*9.06*	*1.06*	*14.17*	*5.91*	*2.68*	*3.94*	*4 x 0.71*	*5.51*	*0.94*	*24 lbs*	*58*
40	[mm]	260	54	615	200	88	125	4 x 22	170	28	19 kg	127
	[in]	*10.24*	*2.13*	*24.21*	*7.87*	*3.46*	*4.92*	*4 x 0.87*	*6.69*	*1.10*	*42 lbs*	*148*
50	[mm]	300	54	615	200	102	145	4 x 26	195	30	23 kg	199
	[in]	*11.81*	*2.13*	*24.21*	*7.87*	*4.02*	*5.71*	*4 x 1.02*	*7.68*	*1.18*	*51 lbs*	*231*
80	[mm]	310	93	900	400	138	180	8 x 26	230	36	75 kg	511
	[in]	*12.20*	*3.66*	*35.43*	*15.75*	*5.43*	*7.09*	*8 x 1.02*	*9.06*	*1.42*	*165 lbs*	*594*

Gate Valve *Bellows Sealed*

Model 834

Superlong Protected Bellows

PN100 Sizes DN15 - DN80



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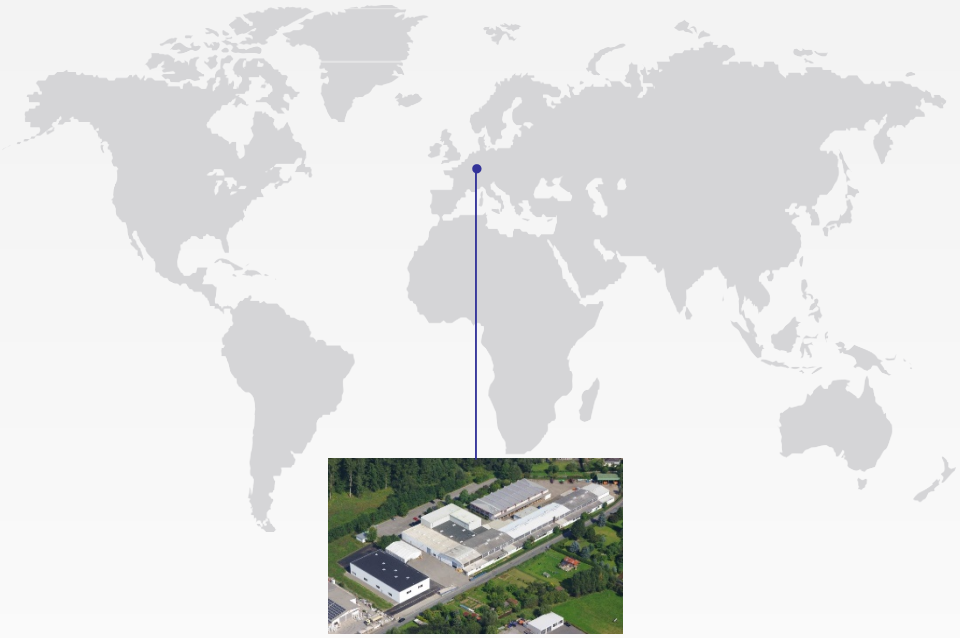
  Butt Weld Ends acc. to DIN EN 12982
  Socket Weld Ends acc. to manufacturer standard

Dimensions & Weights & Flow Coefficients

DN	Unit	L	Lift	closed H	ØR	Butt Weld Ends $ØD_a$	$Ød_f$	b	for pipe	Weight	Kv [m³/h] cv *[USGal/min]*
15	[mm]	210	25	360	150	22	17	3	Ø21.3 x 2.0	8 kg	18
	[in]	*8.27*	*0.98*	*14.17*	*5.91*	*0.87*	*0.67*	*0.12*	*Ø0.84 x 0.08*	*17.6 lbs*	*20.93*
20	[mm]	230	25	360	150	28	on request			7 kg	32
	[in]	*9.06*	*0.98*	*14.17*	*5.91*	*1.10*				*15.4 lbs*	*37*
25	[mm]	230	27	360	150	35	28.5	4	Ø33.7 x 2.6	7 kg	50
	[in]	*9.06*	*1.06*	*14.17*	*5.91*	*1.38*	*1.12*	*0.16*	*Ø1.33 x 0.10*	*15.4 lbs*	*58*
40	[mm]	260	54	615	200	50	43	4	Ø48.3 x 2.6	12 kg	127
	[in]	*10.24*	*2.13*	*24.21*	*7.87*	*1.97*	*1.69*	*0.16*	*Ø1.90 x 0.10*	*26 lbs*	*148*
50	[mm]	260	54	615	200	62	53.5	5	Ø60.3 x 3.2	12 kg	199
	[in]	*10.24*	*2.13*	*24.21*	*7.87*	*2.44*	*2.11*	*0.20*	*Ø2.37 x 0.13*	*26 lbs*	*231*
80	[mm]	300	93	900	400	91	80.5	6	Ø88.9 x 4.0	60 kg	511
	[in]	*11.81*	*3.66*	*35.43*	*15.75*	*3.58*	*3.17*	*0.24*	*Ø3.50 x 0.16*	*132 lbs*	*594*

Contact us



Volkmarsen, Germany

Sales and Operations

Phönix Valve Group GmbH
Volkmarsen, Germany
Phone: +49 5693 988 0
Email: info@phoenix-valvegroup.com
Website: www.phoenix-valvegroup.com

Phönix Armaturen Werke-Bregel GmbH
Volkmarsen, Germany
Phone: +49 5693 988 0
Email: info@phoenix-valvegroup.com
Website: www.phoenix-valvegroup.com

Strack GmbH
Volkmarsen, Germany
Phone: +49 5693 988 0
Email: info@phoenix-valvegroup.com
Website: www.phoenix-valvegroup.com

PAW SARL
Genay Cedex, France
Phone: +33 437 408 195
Email: commercial@phoenix-valvegroup.com
Website: www.phoenix-valvegroup.com

Daume Regelarmaturen GmbH
Volkmarsen, Germany
Phone: +49 5693 988 0
Email: info@phoenix-valvegroup.com
Website: www.phoenix-valvegroup.com

Solent & Pratt Phönix Ltd.
Volkmarsen, Germany
Phone: +49 5693 988 0
Email: info@phoenix-valvegroup.com
Website: www.phoenix-valvegroup.com

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