

CENTERLINE

Butterfly Valves Series VIA/RS



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Series VIA/RS

The preferred Industrial Valves for Critical Applications and Processes

Areas of application:

CENTERLINE Butterfly Valves Series VIA/RS are reliable, maintenance-free shutoff and control valves with permanently gas-tight seal. This valve has proved itself as a leakage-free and corrosion-resistant valve in various applications under most difficult operating conditions.

The safety and reliability of a valve is especially important when used for aggressive media – all components within the CENTERLINE Butterfly Valves Series VIA/RS have been designed accordingly.

Product features:

- Concentric design
- Soft seat design
- No pins needed to attach the disc to the shaft, only 2 parts in contact with the medium
- Replaceable body lining with firm back-up ring
- Permanently tight closure
- Optimum operation under vacuum conditions
- Standardized head flange for actuator adaption
- Materials for almost all media
- Short face-to-face dimension
- Maintenance-free version
- Blow-out proof shaft
- Direct mounting of actuators without any additional brackets

Over 70,000 Butterfly Valves Series VIA/RS are installed in 60 power generation sites and many sugar refineries worldwide. Used on the most arduous conditions, this is proof of the Series VIA/RS durability and reliability when in operation.

Main areas of application:

- Paper industry
- Sugar industry
- Power generation plants
- Chemical and petrochemical industry
- Steel industry
- Automotive industry
- Energy supply
- Shipbuilding industry
- Breweries
- Cement plants

Applications:

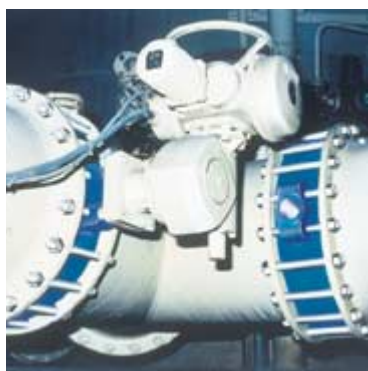
- Hot and cooling water
- Air-conditioning systems
- Drinking water systems
- Flue-gas desulphurisation
- Compressed air systems
- Vacuum systems
- Purification plants
- Sewage treatment plants
- Gas systems





Technical data:

- DN 40 – 1200
- PN 6, 10, 16, ANSI 150
- Temperature range from -34°C (-29°F) to +150°C (+302°F)
- Tightness in accordance with DIN 3230-T3, leakage rate 1
- Face-to-face dimension in accordance with EN 558-1, series 20
- Mounting flange in accordance with ISO 5211
- Shaft end DN 50 – 300 with square in accordance with DIN 3337
- Insulation in accordance with heating system regulation possible
- DVGW – gas approval
- Quality assurance in accordance with ISO 9001



Design features

Corrosion resistance

With CENTERLINE Butterfly Valves Series VIA/RS only 2 parts of the valve come into contact with the medium. This means that neither the body nor mechanical parts such as the shaft are subject to the danger of corrosion.

The only two parts in contact with the medium are the body lining and the disc. These are available in a selection of materials so that a suitable corrosion resistant combination can be chosen for almost any application.

Permanently tight closure

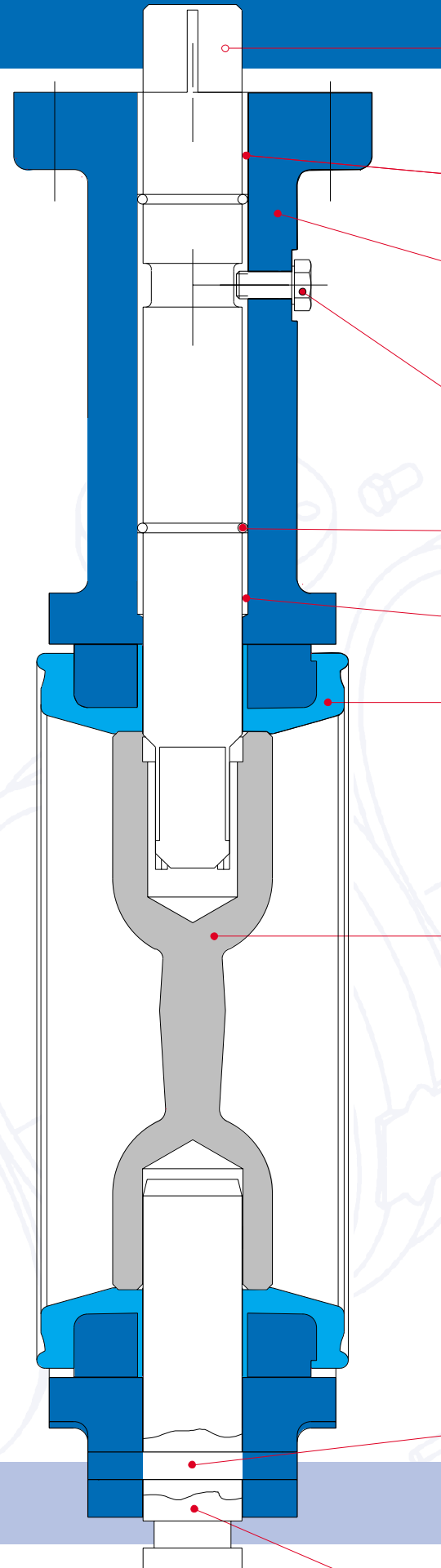
CENTERLINE Butterfly Valves seal absolutely liquid and gas-tight in both flow directions due to their centric design.

The disc presses with a defined, uniform compression into the elastic body lining over the entire circumference of 360°. The power transmission between shaft and disc is accomplished by a square and enables axial movement and automatic centering of the disc. Excess stress and wear of the elastomer are avoided.

Elastic body lining

The replaceable body lining consists of a reinforced back-up ring, on which the elastic seat material is vulcanized. When mounting the valve between the pipe flanges this stable seat cannot be displaced or pushed out. When the valve closes a stretching and bulging of the elastomer in front of the closing disc is avoided.

The fixed connection between elastomer and back-up ring enables the application of the valve even under vacuum or high flow velocities. The slightly protruding sealing lip of the body lining constitutes at the same time the flange seal.



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- 1 Shaft
- 2 Bearing bush
- 3 Body
- 4 Shaft lock
- 5 Citclip
- 6 Body lining
(with vulcanized back-up ring)
- 7 Disc
- 8 Dowelling
- 9 Lower Stem

8

9



Maintenance-free operation

The shafts of the CENTERLINE Butterfly Valves Series VIA/RS are mounted in self-lubricating DU bearing bushes so that there is no need for maintenance even after a long operating period.

Shaft lock

All CENTERLINE Butterfly Valves Series VIA/RS feature a lock at the valve neck avoiding a blowing-out of the shaft during the valves operations life.

Actuator mounting

All CENTERLINE Butterfly Valves Series VIA/RS feature a mounting in accordance with ISO 5211 for the mounting of hand lever, gear, pneumatic REVO or other automatic actuators. A conversion – even during operation – from manual to automatic actuator and reverse is possible without any difficulties.

Actuator adaptation

CENTERLINE Butterfly Valves Series VIA/RS are available for 3 closing pressures (operating pressures) – 3.5 bar (51 psi), 10 bar (145 psi) and 16 bar (232 psi). The actuator size can be selected individually against the pipeline pressure available, so that with lower pipeline pressures even smaller actuators can be utilised due to the lower torque's.



Versions available

With the proven modular system, CENTERLINE Butterfly Valves Series VIA/RS can be directly equipped with a variety of actuators. Available ex stock, various manual actuators together with those from the REVO pneumatic range can be fitted and assembled quickly to meet your needs. A number of accessories including three way version and shaft extensions are also available. Contact your local stockist for more information.



**Wafer body
with centering lugs**

DN 50 - 300
PN 6, 10, 16
ANSI 150

Wafer body

DN 50 - 600
PN 6, 10, 16
ANSI 150

Lug-type body

DN 50 - 600
PN 6, 10, 16
ANSI 150

Standards considered

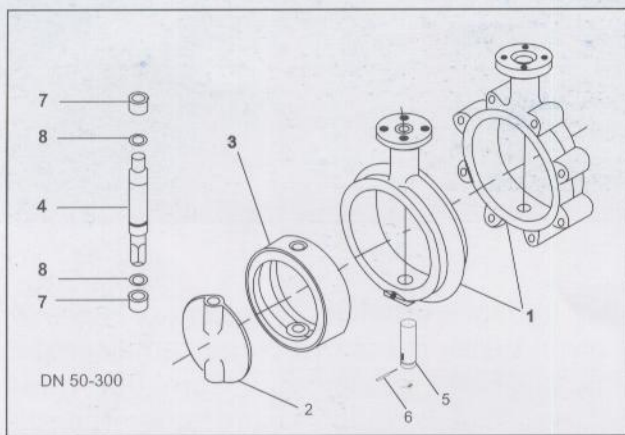


Lug-type body
Flange body

DN 700 - 1200
PN 10, 16
MSS-SP44

Design:	EN 593
Face-to-face dimension:	EN 558-1, Series 20 (previously DIN 3202-K1) ISO 5752-short
Head flange:	ISO 5211
Shaft end:	DIN 3337-square (only for DN 40-300)
Flange connection:	EN 1092-1, EN 1759-1, ANSI B16.5, Class 150 MSS-SP 44
Testing:	DIN 3230-T3, leakage rate 1
Identification:	EN 19 MSS SP-25 CE in accordance with PED 97/23 EG
Quality assurance:	ISO 9001
Approvals:	DVGW Lloyds Register Det Norske Veritas American Bureau of Shipping Leybold Systems Vakuumtest





Components not in contact with line fluids other than disc (2) and liner (3)

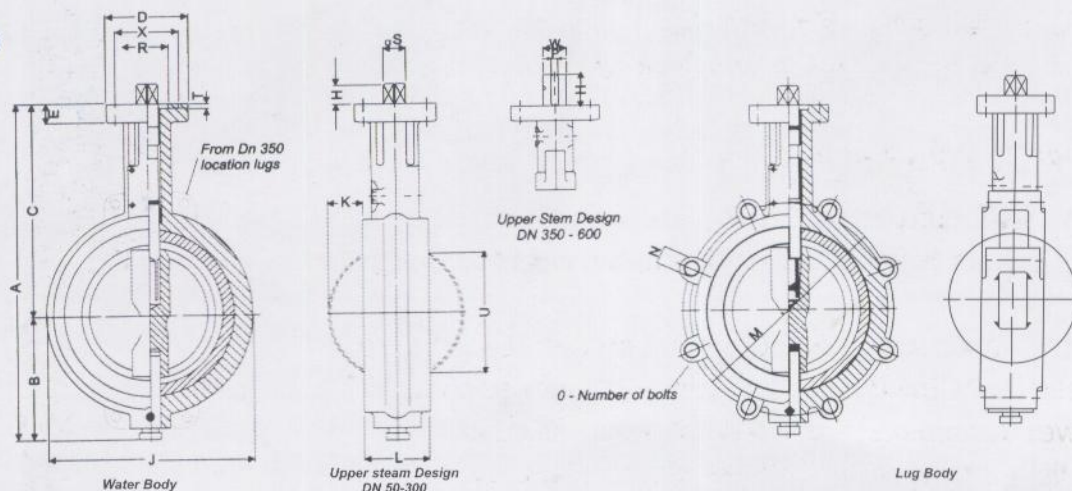
Component	Material
Body (1)	Cast Iron (Gr GG 25) SG Iron (GGG 40) Stainless steel Cast Carbon steel
Upper and Lower Stem (4) (5)	Chromium steel Chromium nickel steel
Pin (6)	Spring Steel, Zinc Plated
Bushing (7)	DU or Plastic
Circlip (8)	Spring Steel

For disc and liner material recommendations please contact Crane Process Flow Technologies (India) Ltd.

Weight in Kg - without actuator

Nominal Diameter	50	65	80	100	125	150	200	250	300	350	400	450	500	600
	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"
Wafer body	2.4	3.0	3.2	4.5	7.0	8.0	12.1	19.8	31.2	50	72	92	111	195
Lug body	3.4	4.0	4.8	6.9	10.6	11.4	15.9	26.0	38.2	60	92	108	151	245

Dimensions



DN 50 -600 Dimensions In mm

Nominal Diameter	50	65	80	100	125	150	200	250	300	350	400	450	500	600
	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"

A(1)	204	225	239	268	292	320	386	462	542	627	677	743	793	934
A(2)	204	225	250	286	314	342	401	462	542	-	-	-	-	-
B	74	79	85	101	112	125	156	192	242	277	302	341	366	424
C	130	146	154	167	180	195	230	270	300	350	375	402	427	510
D ISO	65	65	65	65	90	90	90	125	125	175	175	175	175	210
E ISO	14	14	14	14	15	15	15	18	18	23	23	23	23	25
H ISO	16	16	16	16	19	19	19	24	24	65	65	65	65	80
J	105	124	138	162	192	218	273	328	378	438	489	539	595	696
K	7	13	19	27	37	49	70	90	111	129	141	162	181	221
L	43	46	46	52	56	56	60	68	78	78	102	114	127	154
M PN 10	125	145	160	180	210	240	295	350	400	460	515	565	620	725
M PN 16	125	145	160	180	210	240	295	355	410	470	525	585	650	770
M ANSI 150	120.7	139.7	152.4	190.5	215.9	241.3	298.5	362	431.8	479.3	539.8	577.9	635	749.3
N PN 10	M16	M16	M16	M16	M16	M20	M20	M20	M20	M20	M24	M24	M24	M27
N PN 16	M16	M16	M16	M16	M16	M20	M20	M24	M24	M24	M27	M27	M30	M33
N ANSI 150	5/8"-11 UNC	5/8"-11 UNC	5/8"-11 UNC	3/4"-10 UNC	3/4"-10 UNC	3/4"-10 UNC	7/8"-9 UNC	7/8"-9 UNC	1"-8 UNC	1"-8 UNC	1 1/8"-7 UNC	1 1/8"-7 UNC	1 1/8"-7 UNC	1 5/8"-7 UNC
O PN 10	4	4	8	8	8	8	8	12	12	12	16	16	20	20
O PN 16	4	4	8	8	8	8	12	12	12	12	16	16	20	20
O ANSI 150	4	4	8	8	8	8	8	12	12	12	16	16	20	20
P	-	-	-	-	-	-	-	-	-	14	14	14	14	20
R	35	35	35	35	55	55	55	70	70	100	100	100	100	130
S DIN-ISO	14-0.1	14-0.1	14-0.1	14-0.1	17.01	17-0.1	17-0.1	22-0.1	22-0.1	-	-	-	-	-
T	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	5	5	5	5	7	-
U	39	56	71	93	117	144	191	240	291	327	371	423	472	575
W	-	-	-	-	-	-	-	-	-	45	45	45	45	70
X	Ø50/4 X Ø7	Ø50/4 X Ø7	Ø50/4 X Ø7	Ø50/4 X Ø7	Ø70/4 X Ø9	Ø70/4 X Ø9	Ø70/4 X Ø9	Ø102/4 X Ø11	Ø102/4 X Ø11	Ø140/4 X Ø18	Ø140/4 X Ø18	Ø140/4 X Ø18	Ø140/4 X Ø18	Ø165/4 X Ø22



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