

Features

The cushioned cylinder prevents pressure shocks and initiates flushing

4-post heavy duty solid steel topwork

High strength clevis or stemnut for long lasting performance

Gate surface ground on 4-sides provides long-life high performance sealing

Unique transverse seal eliminates stuffing box and compensates for wear

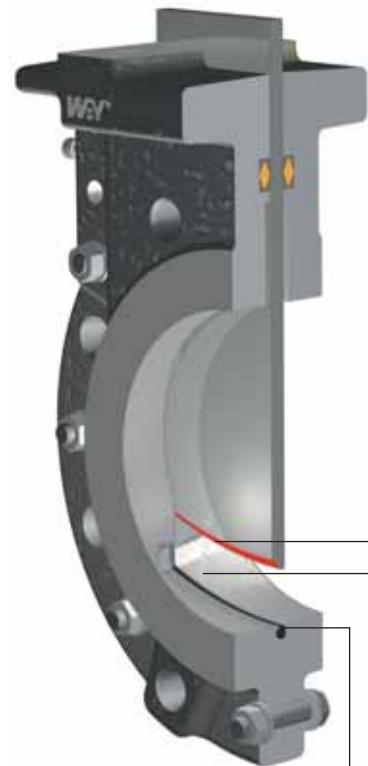
All stainless steel valve bolting

Gate guided for full length of stroke to insure «flutter-free» operation

Flange raised face; EN558-1 Series 20 face-to face

Bi-directional, bubble-tight shut-off at full pressure

Gate 60° arc geometry prevents jamming during closure because solids are pushed ahead by the gate into enlarged flushing corners



Seat mechanically retained to prevent «pull-out»

Pigable enlarged bore reduces pressure drop. Unique self-cleaning bore configuration prevents high solids content slurries and dry solids from packing in seat area

Threaded lugs permit easy installation and by using all flange screws, valve is suitable for dead-end-service at full pressure



Design options



Powder gate design with a scraper edge and sharpened face to cut through sticky medium



Wear ring in Ni-Hard or Polyurethane to protect body and seal from abrasion



Chest and guide liner for increased cycle life and reduced operating force in severe service condition



Double transverse seal for extremely severe service condition



Flush port connections for body corners and/or chest area; isolating barrier between transverse seal; both options for severe service conditions



Safety guard in stainless steel according to machinery directive no 98/37EC



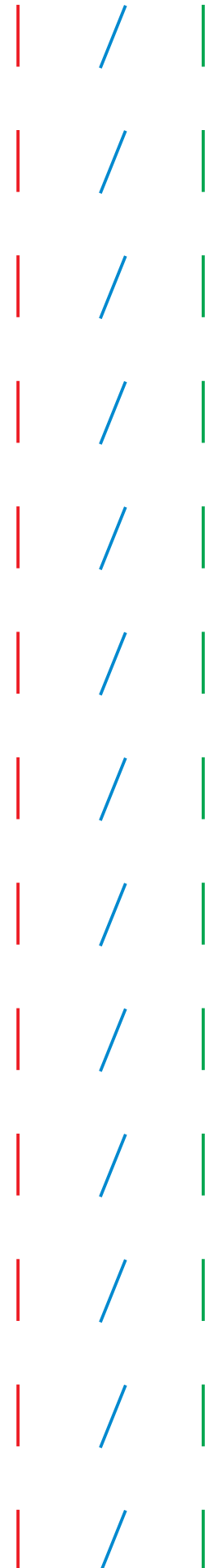
Deflector cone to protect body and seal from solids build-up



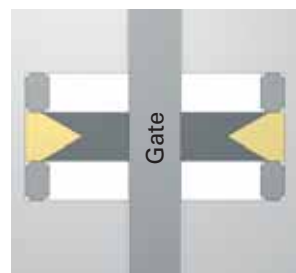
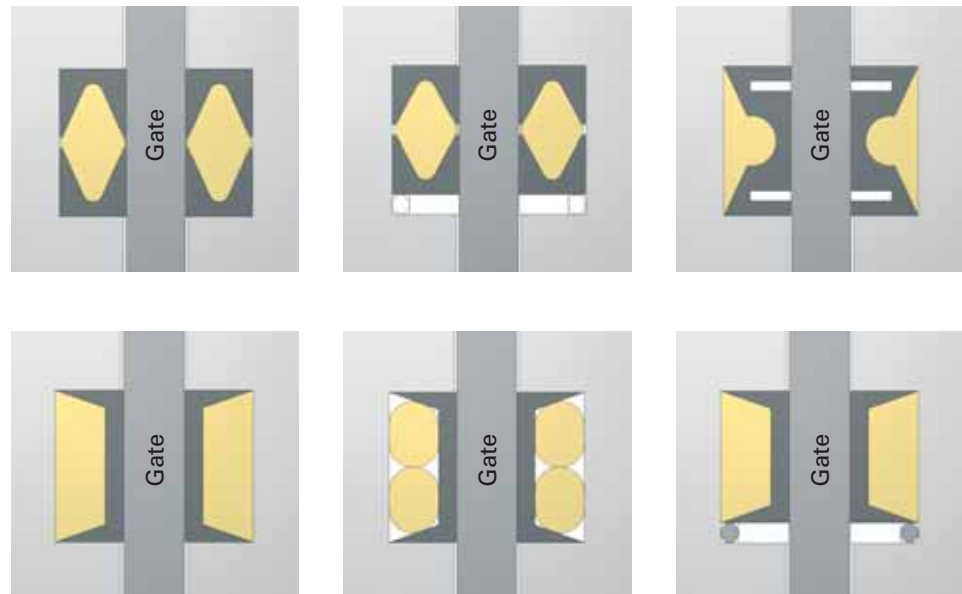
Gas-tight bonnet in stainless steel for max. pressur 0,5bar



V-Notch insert for flow regulation



Seat Type



Material

NBR, PUR	max. temp. 80°C
EPDM, Hytrel	max. temp. 120°C
FPM, Aflas	max. temp. 180°C
PTFE	max. temp. 220°C
Ceramic cord	max. temp. 400°C ¹⁾

¹⁾ For powder, waste gas and pellets at atmospheric pressure condition

Flange connection EN 1092 (DIN 2501)

Size	Material	Flange ²⁾	Nominal Pressure PN	Standart Material Body/Gate
50 – 600	Stainless steel	PN16	16 bar	316SS/Duplex
		PN16	10 bar	316SS/316L
250 – 600 ¹⁾	Ductile Iron	PN16	16 bar	Ductile Iron EN-JS1030/1072/Duplex
		PN16	10 bar	Ductile Iron EN-JS1030/1072/304SS

¹⁾ Size 50 – 200 is covered by the type MF

²⁾ Flange can be drilled acc. PN10 or for most sizes acc. ANSI 150 lbs.

Temperature

–40°C to 400°C with adequate material- and construction adaption.

Test Pressure

Test acc. EN-12266-1, rate A

Face-to-face dimension

Face-to-face EN 558-1 / ISO 5752 part 20)

SISTAG coating

All steel parts are coated with type SL 29125, 2-compounde primer coat 100 µm and 2-comp. polyurethane top coat 80 µm, RAL 7030.

PED (Pressure Equipment Directive No 97/23/EC)

All equipment with pressure of < 0.5bar is subject to PED. Furthermore, the directive is distinguished between gas and liquid and dangerous fluids. The standard type MH design corresponds up to the category III.

ATEX (Atmosphere Explosible Directive 94/9/EC)

The directive describes the basic safety requirements for electrical and non-electrical mechanical equipment and protection systems which are installed in a hazardous area.

Option: The type MG can be supplied according to category 1GD IIB (inside) and category 2GD IIB (outside); refer to factory

Pneumatic cylinder sizing

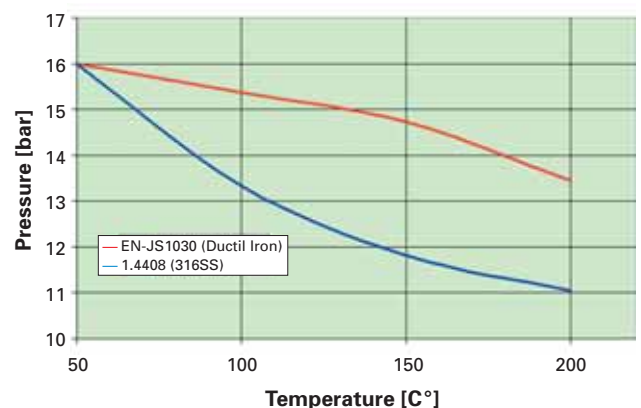
DN [mm]	Cylinder- sizing [bar]	Selected cylinder [mm]							
		Valve nominal pressure [bar]							
		1	2.5	4	6	8	10	12	16
50	8	100	100	100	100	100	100	100	100
	6	100	100	100	100	100	100	100	100
	5	100	100	100	100	100	100	100	100
	4	100	100	100	100	100	100	100	160
80	8	100	100	100	100	100	100	100	160
	6	100	100	100	100	100	100	160	160
	5	100	100	100	100	100	160	160	160
	4	100	100	100	100	160	160	160	160
100	8	100	100	100	100	100	100	160	160
	6	100	100	100	100	160	160	160	160
	5	100	100	100	160	160	160	160	160
	4	100	100	160	160	160	160	160	200
150	8	100	100	100	160	160	160	160	200
	6	100	100	160	160	160	160	200	200
	5	100	160	160	160	160	200	200	250
	4	160	160	160	160	200	200	250	250
200	8	100	100	160	160	160	160	200	200
	6	100	160	160	160	160	200	250	250
	5	160	160	160	200	200	250	250	300
	4	160	160	160	200	250	250	250	300
250	8	160	160	160	160	200	200	250	250
	6	160	160	160	200	200	250	250	300
	5	160	160	200	200	250	250	300	350
	4	160	200	200	250	250	300	300	350
300	8	160	160	160	200	250	250	250	300
	6	160	160	200	250	250	300	300	350
	5	160	200	200	250	300	300	350	400
	4	160	200	250	250	300	350	350	400
350	8	200	200	200	200	250	300	300	350
	6	200	200	200	250	300	300	350	400
	5	200	200	250	300	300	350	400	450
	4	200	250	250	300	350	400	400	500
400	8	200	200	200	250	300	300	350	400
	6	200	200	250	250	300	350	400	450
	5	200	200	250	300	350	400	400	450
	4	200	250	300	350	400	400	450	500
500	8	250	250	250	300	350	400	400	450
	6	250	250	300	350	400	450	450	600
	5	250	250	300	400	450	450	500	600
	4	250	300	350	400	500	600	600	650
600	8	250	250	300	350	400	450	500	600
	6	250	300	350	400	450	500	600	650
	5	250	300	350	450	500	600	600	750
	4	250	350	400	500	600	600	750	

KV/CV Value Type MG

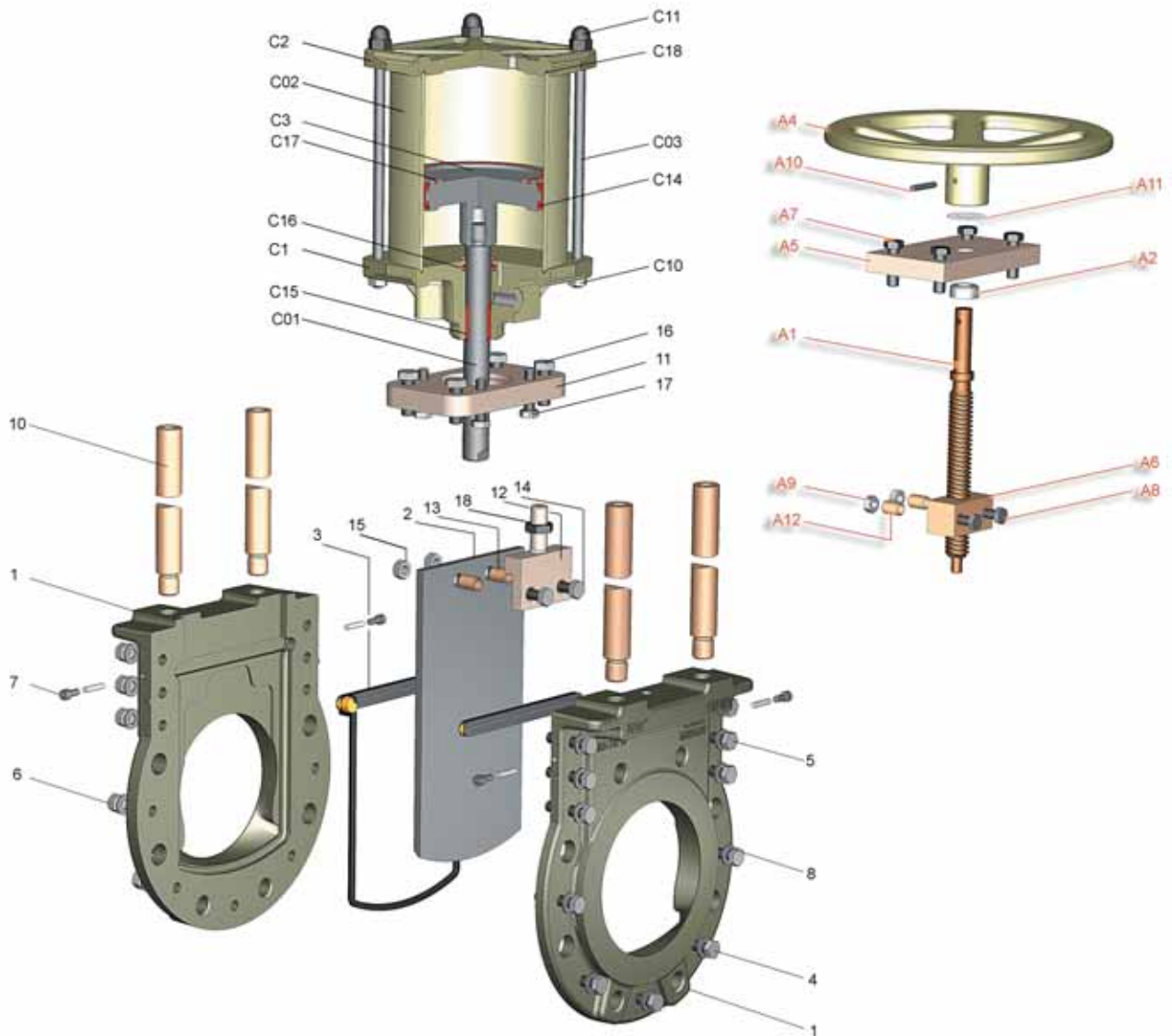
DN mm/inch	KV* m³/h	CV* USgal/min
50/2	1460	1690
80/3	3730	4330
100/4	5840	6770
150/6	13200	15300
200/8	23300	27000
250/10	36500	42300
300/12	52500	60900
350/14	71500	82900
400/16	93400	108300
500/20	146000	199400
600/24	210000	243600

* The CV-Value is the flow of water (m³/h) at a pressure drop of 1 bar (USgal/min at 1 PSI).

Temperature/Pressure Chart



Material List



Item	Part	Material		Item	Part	Material	
1	Body	EN-JS1072	1.4408	C1	Cylinder bottom	Al	
2	Gate	1.4404	1.4462	C2	Cylinder top	Al	
3	Seal	NBR		C3	Piston	Al	
4	Hex screw	A4.70		C10	Hex nut	A4	
5	Hex screw	A4.70		C11	Cap nut	A4	
6	Hex nut	A4		C14	Piston seal	NBR80	
7	Cylinder head screw	A4.70		C15	Piston rod seal	PUR	
8	Washer	A4		C16	Damping ring	NBR70	
10	Post	Steel	V4A	C17	Seal cord	NBR70	
11	Yoke plate	Al	V4A	C18	O-Ring	NBR70	
12	Clevis	Steel	V4A	A1	Stem	1.4104	1.4404
13	Connex pin	1.8159 galv.		A2	Stem ring	1.4104	Brass
14	Hex screw	A4.70		A4	Handweel	Steel	
15	Hex nut	A4		A5	Yoke plate	Steel	V4A
16	Hex screw	A4.70		A6	Stem nut	Brass	
17	Hex screw	A4.70		A7	Hex screw	A4.70	
18	Hex nut	A4		A8	Hex screw	A4.70	
C01	Piston rod	1.4104	1.4404	A9	Hex nut	A4	
C02	Cylinder tube	Al		A10	Split pin	A2.70	
C03	Tie rod	1.4404		A11	Friction washer	POM	
				A12	Connex pin	1.8159 galv.	

Optional material construction

For severe applications SISTAG is offering next to special cast materials various material treatment such as chrome plating, hardening, plasmanitriding, anti-stick teflon coat type CC2011.



Pulp and Paper Industry



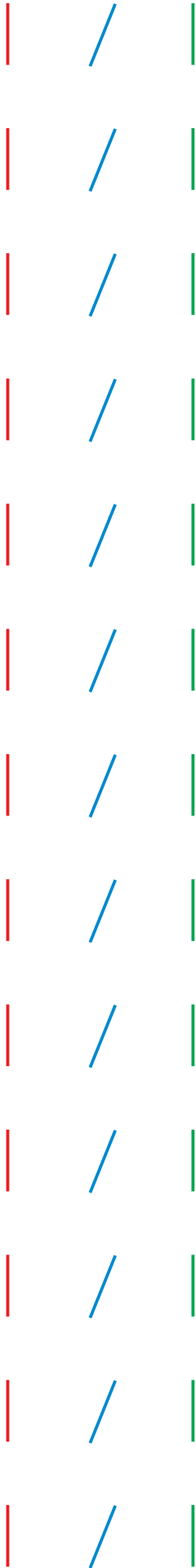
Coal Fired Power Station



Off-Shore



Highly contaminated Liquids



Production MG



Further products



WEY® Sluice Gates



WEY® Check Valves
(dirty water)



WEY® Off-center Butterfly
Valves



WEY® Check Valves
(clean water)



Centric Butterfly Valves



WEY® Dismantling pieces

