

Wey Knife Gate Valve MG

2.5.00



PN 16

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

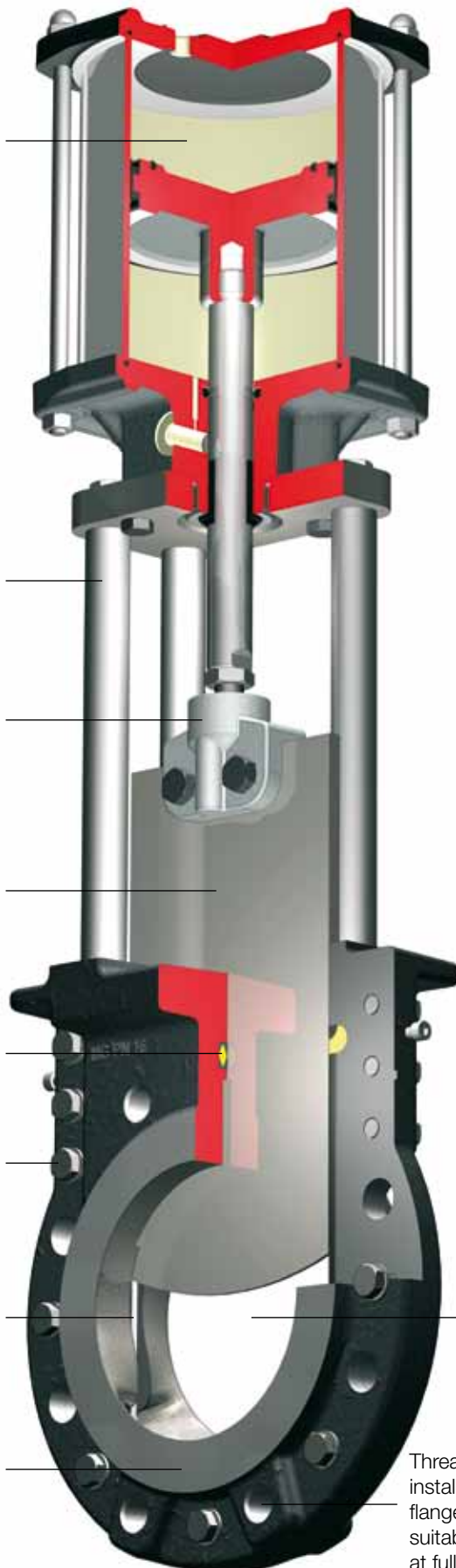
Gate surface ground on 4-sides provides long-life high performance sealing

Unique transverse seal eliminates stuffing box and compensates for wear

All stainless steel valve bolting

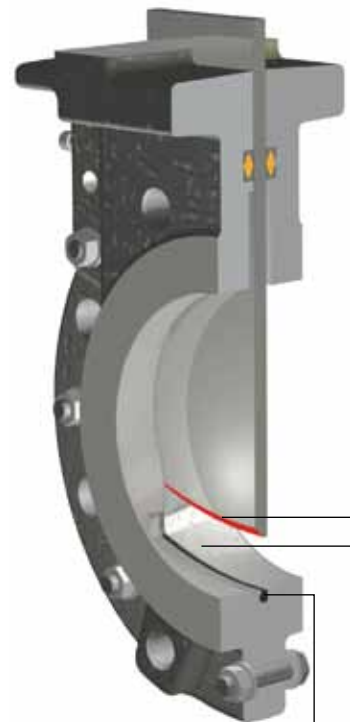
Gate guided for full length of stroke to insure «flutter-free» operation

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»

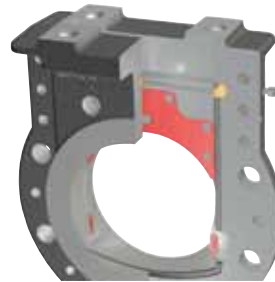
Pigable enlarged bore reduces pressure drop. Unique self-cleaning bore configuration prevents high solids content slurries and dry solids from packing in seat area

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

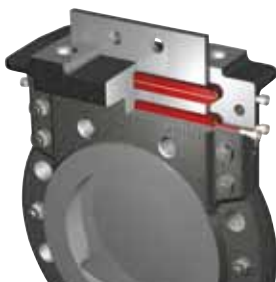
Design options



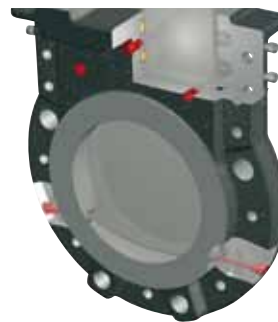
Powder gate design with a scraper edge and sharpened face to cut through sticky medium



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



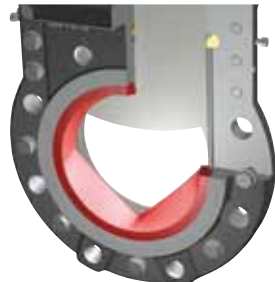
Double transverse seal for extremely severe service condition



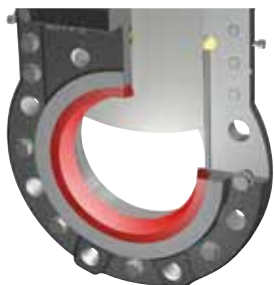
Flush port connections for body corners and/or chest area; isolating barrier between transverse seal; both options for severe service conditions



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



V-Notch insert for flow regulation



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

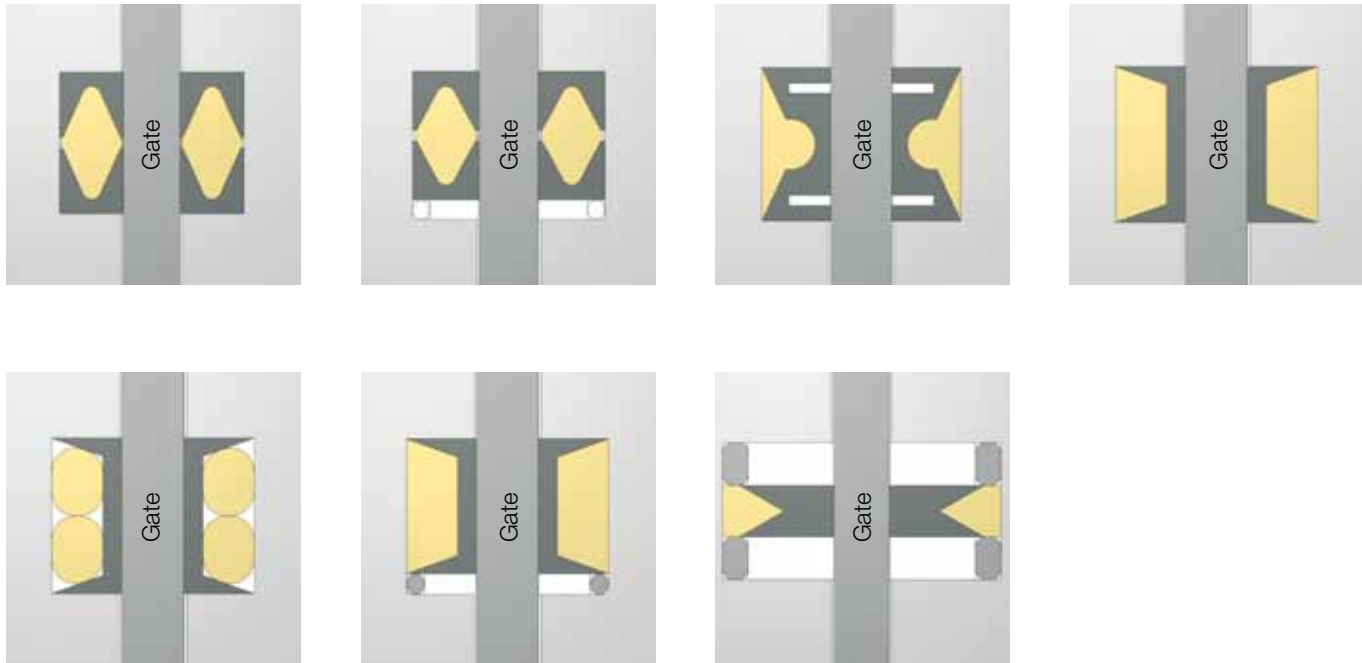


Safety guard in stainless steel according to machinery directive no 98/37 EG



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

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

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

Flange connection EN 1092 (DIN 2501)

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

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

²⁾ Flange can be drilled acc. PN 10 or for most sizes acc. ANSI 150 lbs.

Wey coating

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

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

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/EG)

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

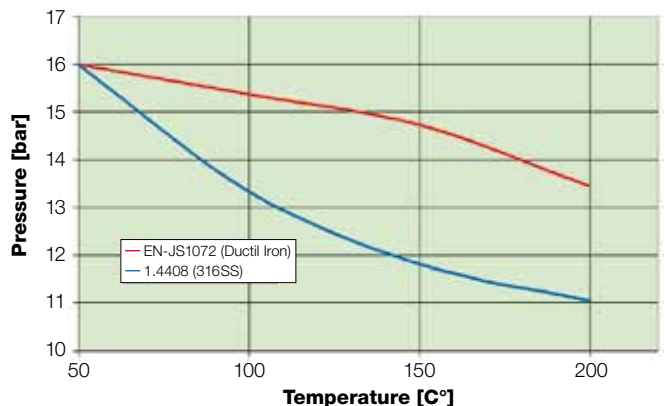
DN [mm]	Cylinder sizing [bar]	Selected cylinder [mm] / Valve nominal pressure [bar]							
		1	2.5	4	6	8	10	12	16
50	8	100	100	100	100	100	100	100	100
	6	100	100	100	100	100	100	100	100
	5	100	100	100	100	100	100	100	100
	4	100	100	100	100	100	100	100	160
80	8	100	100	100	100	100	100	100	160
	6	100	100	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	200	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 MG

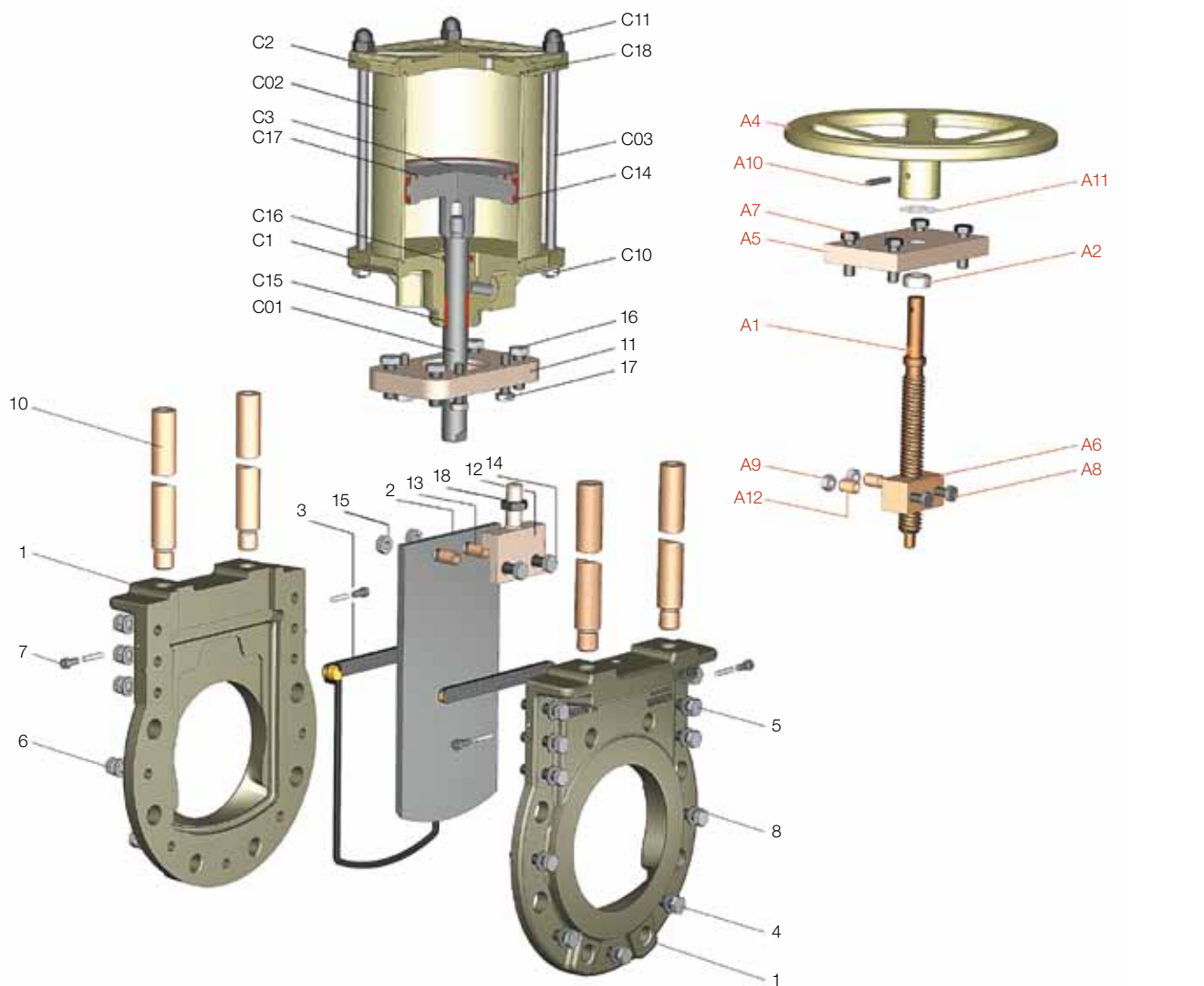
DN [mm/inch]	KV* [m³/h]	CV* [USgal/min]
50/2	1'460	1'690
80/3	3'730	4'330
100/4	5'840	6'770
150/6	13'200	15'300
200/8	23'300	27'000
250/10	36'500	42'300
300/12	52'500	60'900
350/14	71'500	82'900
400/16	93'400	108'300
500/20	146'000	199'400
600/24	210'000	243'600

* 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	
1	Body	EN-JS1072	1.4408
2	Gate	1.4404	1.4462
3	Seal	NBR	
4	Hex screw	A4.70	
5	Hex screw	A4.70	
6	Hex nut	A4	
7	Cylinder head screw	A4.70	
8	Washer	A4	
10	Post	Steel	V4A
11	Yoke plate	Al	V4A
12	Clevis	Steel	V4A
13	Connex pin	1.8159 galv.	
14	Hex screw	A4.70	
15	Hex nut	A4	
16	Hex screw	A4.70	
17	Hex screw	A4.70	
18	Hex nut	A4	
C01	Piston rod	1.4104	1.4404
C02	Cylinder tube	Al	
C03	Tie rod	1.4404	

Item	Part	Material	
C1	Cylinder bottom	Al	
C2	Cylinder top	Al	
C3	Piston	Al	
C10	Hex nut	A4	
C11	Cap nut	A4	
C14	Piston seal	NBR80	
C15	Piston rod seal	PUR	
C16	Damping ring	NBR70	
C17	Seal cord	NBR70	
C18	O-Ring	NBR70	
A1	Stem	1.4104	1.4404
A2	Stem ring	1.4104	Brass
A4	Handweel	Steel	
A5	Yoke plate	Steel	V4A
A6	Stem nut	Brass	
A7	Hex screw	A4.70	
A8	Hex screw	A4.70	
A9	Hex nut	A4	
A10	Split pin	A2.70	
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



Flexible pallet-based
manufacturing system with
machining centers

Further products



Wey Sluice Gates



Wey Check Valves
(dirty water)



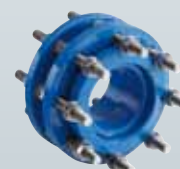
Wey Off-center
Butterfly Valves



Wey Check Valves
(clean water)



Centric Butterfly
Valves



Wey Dismantling
pieces

Your contact