

Knife Gate Valves Series 590-592

Knife Gate valve with Electric Actuator



Main Features :-

Uni Directional

Cast Iron or SS 316 body

To suit PN10 flanges

NBR/ Metal or EPDM seal

Wafer pattern

230VAC On Off electric actuator safe area use only

Available with pneumatic actuator as option



TYPE: 590-592 KNIFE

Technical Details:-

LIMITS OF USE

Pressure of fluid : PS	DN50 to DN200	10 bar
	DN250	8 bar
	DN300	6 bar
Temperature of fluid : TS	See below	
Ambient temperature	-10°C / +55°C	
Ingress Protection rating	IP67	
Duty rating	S4-25% / 10 cycles per h.	

TS / Siège	NBR	EPDM	FKM	PTFE	METAL
170 – 178: cast iron	-10°C +80°C	+0°C +110°C	-10°C +150°C	+0°C +180°C	-
172: stainless steel					
176: cast iron	-	-	-	-	-10°C +90°C
176 : cast iron + PE graphite	-	-	-	-	-10°C +200°C



ISO 9001:2015 Accredited Company

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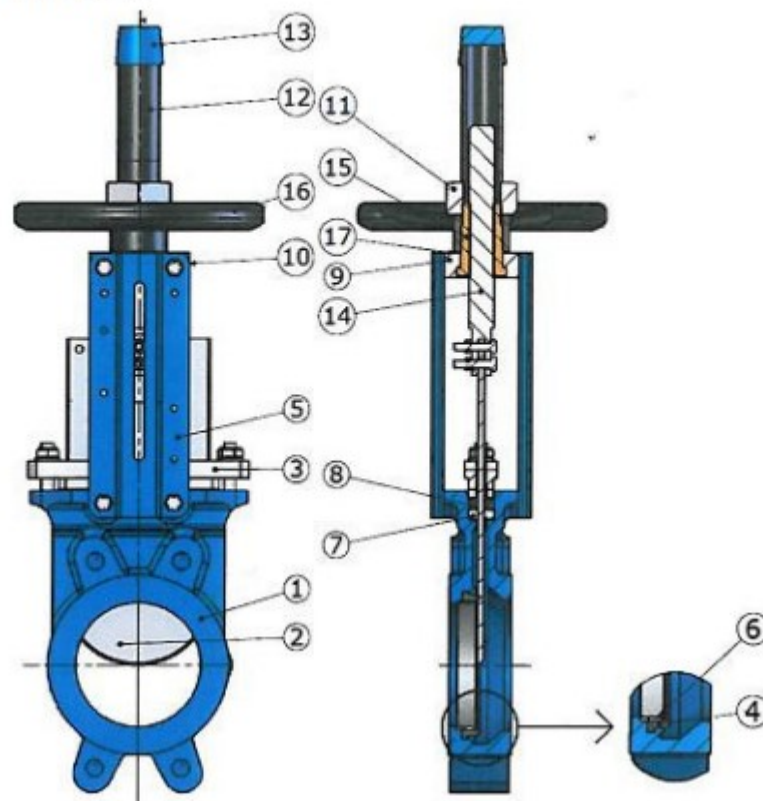
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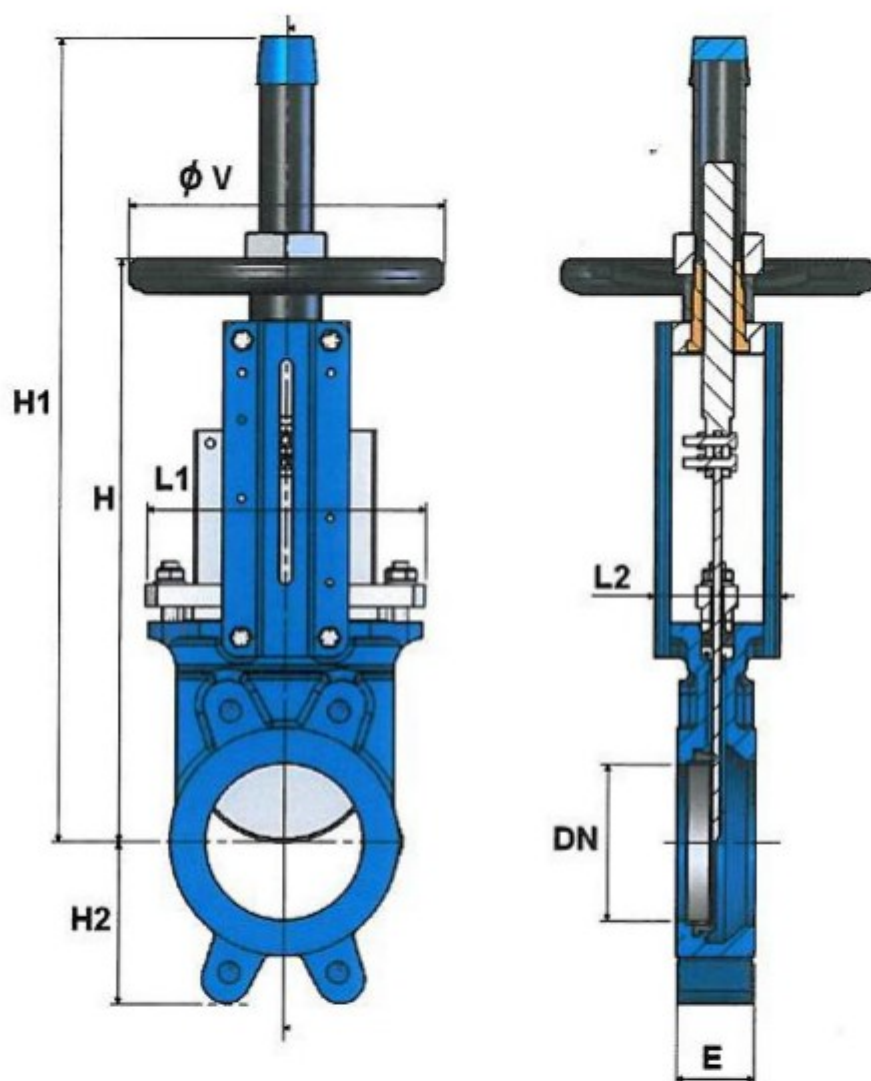
UNIDIRECTIONAL CONSTRUCTION



TYPE: 590-592 KNIFE

N°	Item	S-170 CAST IRON	S-176 CAST IRON	S-172 STAINLESS STEEL
1	Body	EN-GJL 250 cast iron		1.4408 stainless steel
2	Gate	AISI 304 stainless steel		AISI 316 stainless steel
3	Packing gland DN50-200	Aluminium		1.4408 stainless steel
3	Packing gland DN250-300	EN-GJL 250 cast iron		1.4408 stainless steel
4	Seat	NBR	METAL	EPDM
5	Bracket	Epoxy coated carbon steel		Epoxy coated carbon steel
6	Seat retainer	AISI 304 stainless steel		AISI 316 stainless steel
7	Packing	PTFE		PTFE
8	O-ring	NBR		EPDM
9	Support plate	Carbon steel		
10	Grease box	Steel		
11	Handwheel nut	Steel		
12	Stem cap	Steel		
13	Cap	Plastic		
14	Stem	AISI 303 stainless steel		
15	Stem nut	Bronze		
16	Handwheel	Steel		
17	Friction washer	Brass		

DIMENSIONS (mm)



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Size	50	65	80	100	125	150	200	250	300
E	40	40	50	50	50	60	60	70	70
H	289	316	342	382	415	458	575	676	776
H1	409	436	462	502	585	637	815	1016	1116
H2	63	70	92	105	120	130	160	198	234
L1	124	139	154	174	192	217	270	326	380
L2	92	92	92	92	102	102	119	119	119
ϕV	185	185	185	185	225	225	325	325	380
170 -Wg (kg)	6,5	7,1	8,5	9,8	12,7	16,1	26,8	43,5	57,5
172 -Wg (kg)	6,5	7,8	8,5	10	12,7	15,8	27,8	44,6	58,6

ACTUATION WITH REGADA

The actuation with REGADA is offered with following characteristics:

- IP 67 actuator with aluminium epoxy coated housing and carbon steel gearbox ,
- Max. upstream / downstream pressure differential $\Delta P=10$ bar.
- Direct connection between valve and actuator following ISO 5211 - F10

The operators are protected from the movement of the gate through side covers.

Size	Actuator	Power (W)	I (A)	Resistancy (W)	Elec. Connect.	Speed	Operating time (s)*	Standard equipment
50	SO2	60	1,3	20 W	2x M20x1,5	20 tr. min.	39 s	2 adjustable limits switches 2 dry auxiliary switches. 2 torque limiters. Heating resistor. Position indicator. Dec clutchable manual override. ISO 5211 – F10 connection
65							48 s	
80							60 s	
100							75 s	
125							93 s	
150	MO3	370	1	35 W	3x M25x1,5	40 tr. min.	114 s	
200							60 s	
250							75 s	
300							90 s	

For any other working conditions, please consult.

*indicative operating time without pressure

OPTIONS FOR THE ACTUATOR

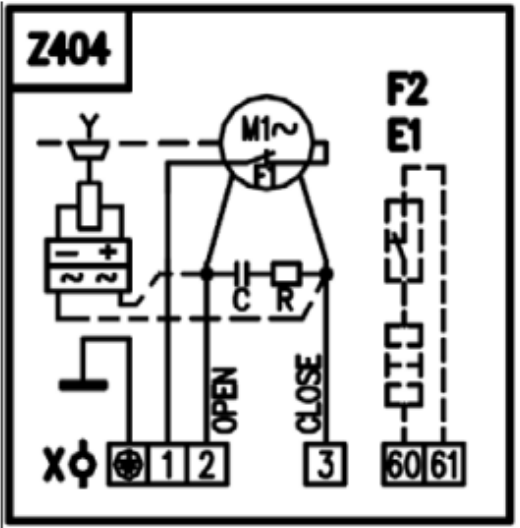
n°	
1	Three-phase 400V, 24 V AC et 24 V DC (SO2 only)
2	Actuator for low temperature -50°C
3	Feedback potentiometer

OPTIONS FOR THE VALVE

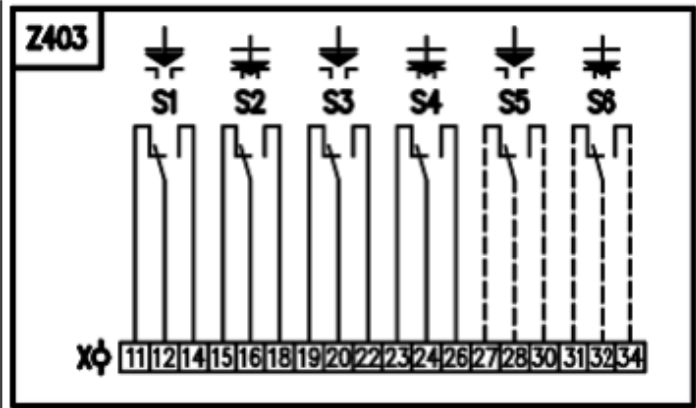
n°	
1	NBR, EPDM, PTFE, FKM seats
2	HT graphited packing
3	Flow deflector
4	Flanged ANSI 150 connections
5	PN25 body
6	Flushing holes

ELECTRIC ACTUATOR SO2 WIRING SCHEME

Power supply and anti-condensate resistance



Limit switch and auxiliary connections

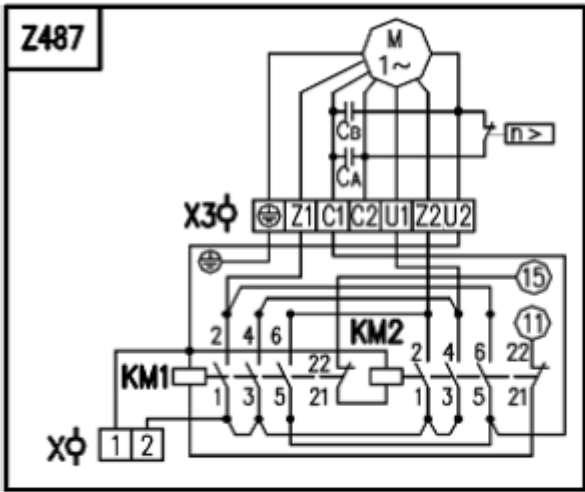


1	Plug in neutral power supply
2	Link with terminal 11 (opening)
3	Link with terminal 15 (closing)
11	Link with terminal 2 (opening)
12	Link with terminal 19 (limit switch)
14	
15	Link with terminal 3 (closing)
16	Link with terminal 23 (limit switch)
18	
19	Link with terminal 12 (limit switch)
20	Plug in power supply phase
22	
23	Link with terminal 16 (limit switch)
24	Plug in phase
26	
27	Auxiliary connections
28	
30	
31	
32	
33	
34	

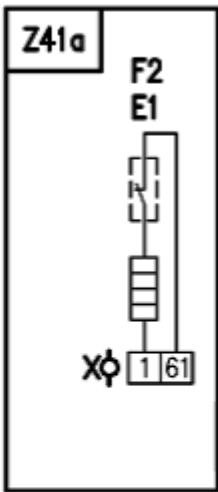
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ELECTRIC ACTUATOR MO3 WIRING SCHEME

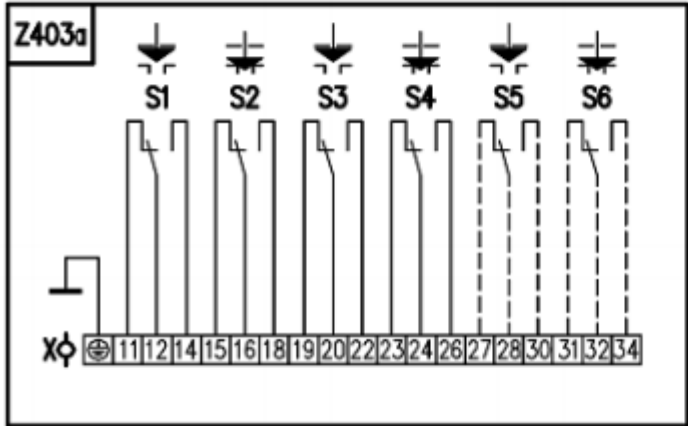
Power supply



Anti-condensate resistance



Limit switch and auxiliary connections



1	Plug in neutral power supply
2	Plug in power supply phase
3	
11	
12	Link with terminal 19 (limit switch)
14	
15	
16	Link with terminal 23 (limit switch)
18	
19	Link with terminal 12 (limit switch)
20	Link with terminal 2 (power supply for closing)
22	
23	Link with terminal 16 (limit switch)
24	Link with terminal 2 (power supply for opening)
26	
27	
28	
30	
31	Auxiliary connections
32	
34	

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