

Knife gate valve Series L2 25 to L2 95

Closing or regulating knife gate valve, direct bore, watertight in both ways.



Options

- Others operating tools:
 - protecting cover - Série L2 95
 - square 30 - Série L2 25
 - lever - Série L2 33
 - chain wheel - Série L2 32
 - electric actuator - Séries L2 93-95
 - pneumatic or hydraulic jack - Série L2 31
 - headstock
 - extension spindle
 - triangular regulating orifice



Alternatives

- EPDM seal (ACS) - Séries L2 40-41-95
- Operating screw
- Stainless steel blade Inox 316 Ti
Séries L2 41-34
- Stainless steel nuts and bolts A4.
- Safety device.

Description

- Easy mounting between flanges.
- Watertight in both ways.
- Direct bore no internal retention zone.
- Materials:
 - Cast iron body FGL 250.
 - Blade: stainless steel 304.
 - Operating nut: stainless steel 420.
 - Operating screw: brass.
 - Seal: NBR.
 - Bolts: stainless steel A2.
 - Blue epoxy coating 250 (GSK).
- Control by hand wheel.
- Clockwise closing.

Assembly

- Little space required between flanges, conform to standard EN 558-1, basic series 20 (DIN 322, part 3 series K1).
- Assembly in chamber, on horizontal pipe or at the end of the pipe ; operate on the top.
- Assembly in other positions, please consult us.

Characteristics

- Range: DN 50 to 600.
- Flanges ISO PN 10.
- Maximum operating pressure:
 - DN 50 to 350 - PFA 10
 - DN 400 to 600 - PFA 4
- Operating temperature: -20°C to +70°C.
- Max flow : 4 m/s.

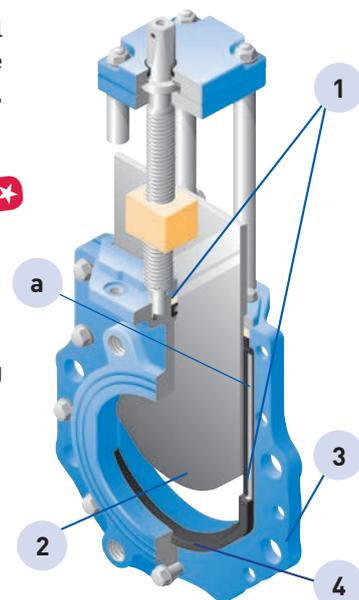
Applications

- Waste water management, rough muds and sharp, feces...
- Paper industry and of cellulose: paper, sawdust pulp...
- Chemical industry: viscous pastes, colloids, pellets, water chemically not purified.
- Sugar industry: cleaning facility of beets, syrup, juice.
- Food industry: rinsing and cleaning facility, installation of transport of cereals, vegetables...
- Industry iron and steel, mining, water of slag, laundrette with coal...

Description

PERFECT TIGHTNESS

- **Adjustable cable sea:** The sealing partly higher is ensured by an external adjustable stuffing box of the DN 50 to 300, and intern of the DN 350 to 600, with PTFE cords, to limit the forces of friction and the driving torques.
- **Sealing element with steel reinforcement profiled, moulded elastomer:** The element of sealing is composed of a steel reinforcement profiled, moulded elastomer (rep.a – fig.I). The steel reinforcement ensures the guidance of the obturator, as well as a permanent pre-tensioning of the elastomer coating. The grooves located on the interior faces of the coating make it possible to obtain a hermetically-sealed behavior, thus guaranteeing a perfect side sealing.
- Peripheral sealing between two half bodies which allows an **easy maintenance and a perfect tightness.**
- Its robust and technical design makes it possible to have a **bidirectional sealing** whatever its type of assembly.



EASY OPERATING

- The slightly bevelled blade enables destruction of elements of small sizes causing obstruction during the closing of the valve.

FLANGE MOUNTING

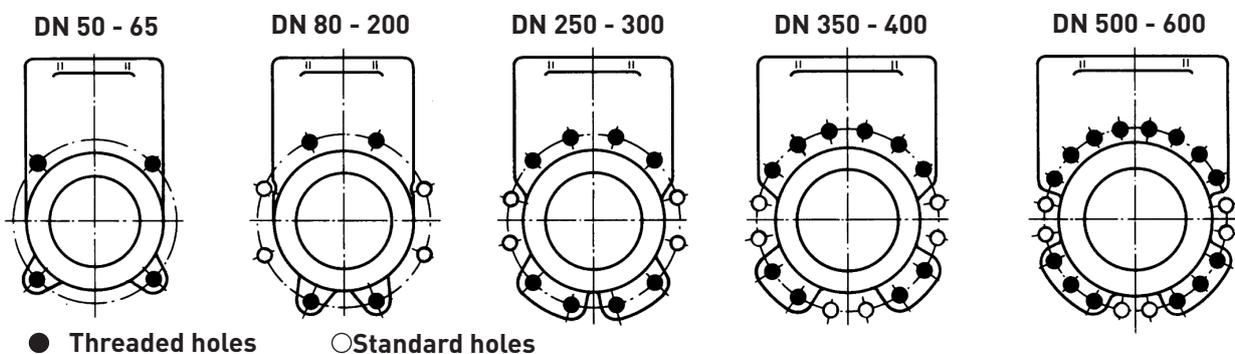
- Reduced square is required.

NO RETENTION AREA

- Flat seal.
- The blade is totally guide into the body.

- The choice of materials and coating reduces the risk of corrosion: epoxy 250 µm, NBR seal, blade stainless steel 304.

Flanges drilling



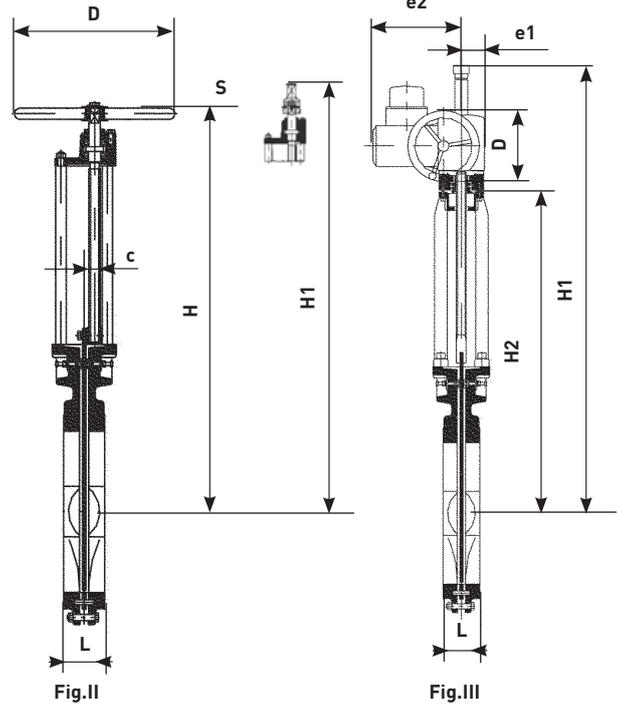
DN	Ø drilling	Ø flanges	Nb holes/ franges	Type holes		Ø Thread	Depth thread	Thruled holes						Standard holes									
				Threaded	Std			Stud NFE27-135		Nut H NFE25-401		Screw H NF E25-112		Screw H NF E25-112		Nut H NF E25-401							
								Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length						
50	125	165	4			M16	10	solution 1		solution 2													
65	145	185						Qty	Length	Qty	Length	Qty	Length	Qty	Length	Qty	Length						
80	160	200	8	4		M16	15	8	M16	8	M16	8	M16x25	M16x30	M16								
100	180	220														M16x35	M20	M20x35	M20x40	M20x110	M20x120	M20x130	M16
125	210	250																					
150	240	285														M24	M24	M24x60	M24x65	M24x200	M24x220	M24	
200	295	340	M27	M27	M27x80	M27x80	M24x250	M27	M27														
250	350	395								12	8	M20	17	16	16	16	M20x45	M20x160	M20				
300	400	445	16	10	M24	20	20	20	20	M24x60	M24x200									M24			
350	460	505										20	14	M27	28	28	28	28	M24x65		M24x220	M24	
400	515	565	20	14	M27	28	28	28	28	M27x80	M27x250									M27			
500	620	670										20	14	M27	28	28	28	28	M27x80		M27x250	M27	
600	725	780	20	14	M27	28	28	28	28	M27x80	M27x250									M27			

Stud's and screw's calculated length are based on:
 - a wafer installation between steel welding necks, according standard ISO 7005-1, PN10.
 - the use of flat flange gasket 3 mm thick, according standard NFE 29-900.

Please, refer to solution 1 to assemble the valve (threaded holes installation).

Operating by wheel or square 30 - Series L2 25 Non rising stem (Fig. II)

DN	PFA bar	L mm	H mm	H1 mm	ØD	Number of turn	S	C	Weight
50	10	43	323	365	200	12	14	19,5	10
65	10	46	348	390	200	16	14	19,5	11
80	10	46	378	420	200	20	14	19,5	13
100	10	52	416	460	250	25	17	22	17
125	10	56	456	500	250	31	17	22	20
150	10	56	509	553	250	30	19	25,5	26
200	10	60	600	654	300	40	19	25,5	39
250	10	68	713	768	300	50	19	32	64
300	10	78	832	891	400	60	24	35	93
350	10	78	919	976	400	70	24	26	135
400	4	102	1016	1073	400	80	24	26	165
500	4	127	1265	1324	500	84	27	35	255
600	4	154	1442	1502	500	100	27	35	370



Operating by electric actuator - Series L2 93 Rising stem (Fig. III)

DN	PFA bar	L mm	H1 mm	H2 mm	e1 mm	e2 mm	ø D mm	Number of turn	Weight Kg	Actuator AUMA	Closing time (depending on RPM speed of actuator T/mn) 45
50	10	43	599	311	62	237	140	12	32	SA07.2	17
65	10	46	624	336	62	237	140	16	33	SA07.2	22
80	10	46	654	366	62	237	140	20	35	SA07.2	27
100	10	52	684	399	62	237	140	25	39	SA07.2	33
125	10	56	727	439	62	237	140	31	42	SA07.2	42
150	10	56	779	491	68	237	160	30	48	SA07.6	40
200	10	60	879	591	68	237	160	40	61	SA07.6	53
250	10	68	1089	712	80	237	160	50	88	SA07.6	67
300	10	78	1198	821	80	237	160	60	112	SA07.6	80
350	10	78	1305	808	65	247	200	58	160	SA10.2	87
400	4	102	1405	908	65	247	200	80	207	SA10.2	107
500	4	127	1715	1118	65	247	200	83	285	SA10.2	111
600	4	154	2075	1322	90	285	315	100	459	SA14.2	133

Other speeds, consult us

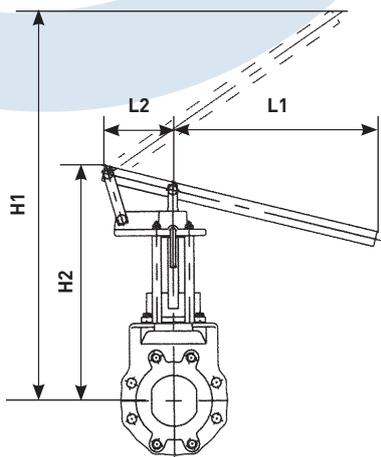
Characteristics standard for electric actuator

- On/off duty standard AUMA SA.
- Supply voltage and frequencies 380/400 V - 3 phase AC 50 Hz.
- Speed 45 turns/minute.
- Base plate of form A.
- Car-controlling resistance of heating from 3 to 15 60-250 volts).
- Enclosure protection IP 68.
- Limit switching closing and the opening direction.
- Torque switching for positions closed/open actuators.
- Intermittent duty S2-15mn normalizes VDE 0530.
- Temperature of service: -25°C with +80°C.
- Corrosion protection KS.
- Disengageable wheel.

Possible options on actuator

- Auma-matic (Am), Aumatic (AC).
- Additional safety device.
- Other supply voltages.
- Other operating speeds.
- Position indicator 4/20 mA 4 wire.
- Explosion protection.
- Actuator of regulation.

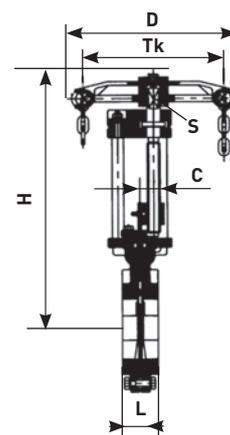
Operating by lever - Series L2 33



DN	PFA	L	H1	H2	L1	L2	Weight
50	2	43	568	336	520	80	10
65	2	46	667	370	590	90	11
80	2	46	741	408	650	100	13
100	2	52	889	458	850	130	17
125	2	56	1025	510	910	140	21
150	2	56	1204	564	980	150	29
200	2	60	1754	690	1137	153	41

Operating by chain wheel - Series L2 32

Non rising stem



DN	PFA	L	H	Tk	D	Number of turn	S	C	Weight
50	10	43	313	177	212	12	14	19,5	10
65	10	46	338	177	212	16	14	19,5	11
80	10	46	368	177	212	20	14	19,5	13
100	10	52	408	213	248	25	17	22,0	18
125	10	56	448	213	248	31	17	22,0	21
150	10	56	501	260	295	30	19	25,5	27
200	10	60	602	260	295	40	19	25,5	39
250	10	68	716	260	295	50	19	32,0	64
300	10	78	835	307	342	60	24	35,0	92
350	10	78	927	307	342	58	24	26,0	135
400	4	102	1024	307	342	80	24	26,0	165
500	4	127	1277	377	412	83	27	35,0	257
600	4	154	1455	377	412	100	27	35,0	371

Operating by double-acting jack hydraulic and pneumatic - Series L2 31

DN	PFA	L mm	H mm	Size* jack	D mm	d1 DIN ISO 28	Jack Vol (l)	d2	Entry pressure Air / oil		Weight Kg
									Min	Max	
50	10	43	444	-	80	G1/8	0,5	140	5	10	13
65	10	46	484	-	80	G1/8	0,5	140	5	10	14
80	10	46	536	-	80	G1/8	0,6	140	5	10	19
				-	100	G1/8	0,9	170	5	10	21
100	10	52	588	PV	100	G1/8	1,1	170	5	10	23
				GV	125	G1/4	1,6	190	5	10	28
125	10	56	653	PV	100	G1/8	1,2	170	6	10	26
				GV	125	G1/4	1,9	190	5	10	32
150	10	56	756	PV	125	G1/4	2,4	190	6	10	36
				GV	160	G1/4	3,9	240	5	10	46
200	10	60	911	PV	160	G1/4	4,7	240	8	10	61
				GV	250	G1/2	11,5	335	5	10	81
250	10	68	1101	PV	160	G1/4	5,6	240	8	10	84
				GV	250	G1/2	13,6	335	5	10	107
300	10	78	1260	PV	160	G1/4	6,4	240	8	10	116
				GV	250	G1/2	15,6	335	5	10	140
350	10	78	1296	PV	250	G1/2	17,5	335	8	10	165
400	4	102	1446	PV	250	G1/2	19,8	335	8	10	210
500	4	127	1756	PV	250	G1/2	27,0	335	8	10	280
600	4	154	2095	PV	300	G1/2	38,0	395	8	10	475

* LJ: little jack BJ: big jack

Materials

- Attach connection of the jack:
 - steel DN 50 to 250
 - cast iron FGL 250 DN 300 to 600.
- Melts of the jack: cast iron FGL 250.
- Body of the jack: treated aluminium.
- Stem of the jack: stainless steel.
- Segments of the piston: NBR.
- Ties: steel.
- Cover: cast iron FGL.

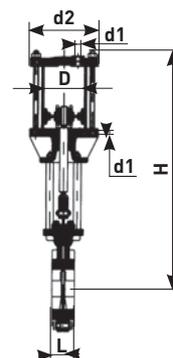
Little jack: operating pressure \leq PN 5.
Big jack: operating and sewage pressure \geq PN 5.

Note: for the same DN, a jack of small diameter is advised for a use out of raw waters, and a jack of large diameter for a use out of worn water.

BAYARD

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The technical data and performance can be modified without prior notice depending on the technical evolution.