



- 1-PC wafer type cast body, short face to face
- full bore
- knife with special guide for fast and trouble-free closing
- metal or soft sealing seat
- rising stem
- wide range of material options for soft elastomer seats
- low torque

APPLICATION:

- sewage treatment plants, sludge management
- paper industry
- food industry
- chemical industry
- storage and transport of bulk materials

ADVANTAGES:

- low pressure drop
- low weight
- easy to install between flanges in or on the end of pipe (or under silo)
- low maintenance costs
- long service life



TECHNICAL DATA:

Working medium:

liquid substances with a maximum solids concentration of 5% (eg. waste water and sludge, paper pulp) or bulk media (powders, granules), in which the size of the mechanical particles does not exceed 10 mm, depending on construction materials of the knife gate valve

Maximal working pressure:

DN	Max. working pressure (bar)
50 - 250	10
300	6
350 - 400	6
450	5
500 - 600	4
700 - 1200	2

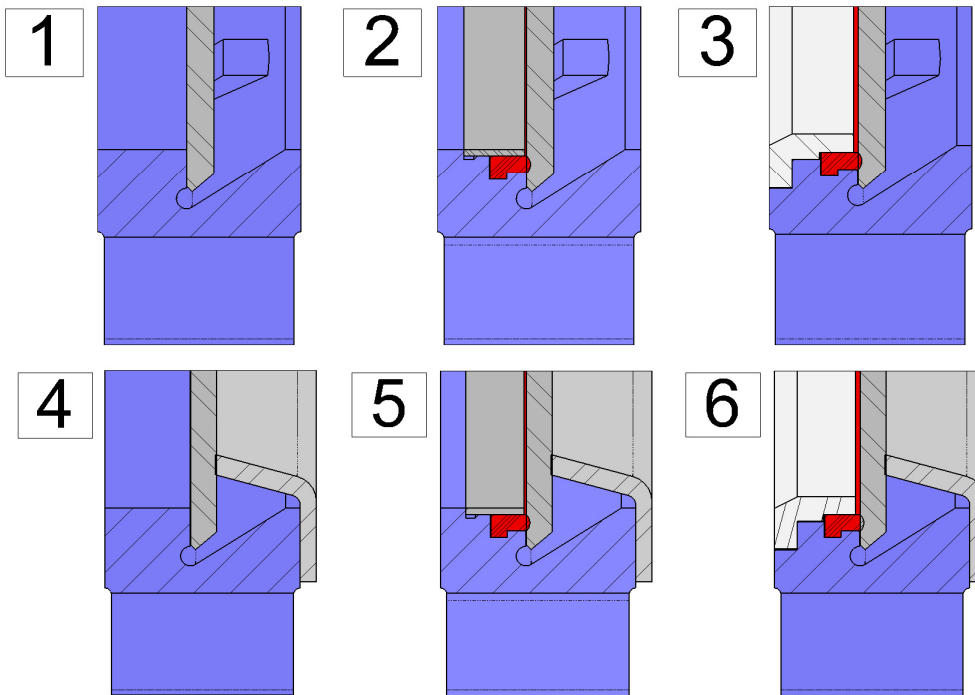
The stated maximum working pressure values are valid for knife gate valves installed with an arrow on the body in accordance with the direction of flow of the working substance in the pipeline.

In the case of gravity flow of loose media (installation of the valve under silo), the knife gate valves serie A are mounted with the arrow on the body in the opposite direction to the flow of the working medium and the maximum working pressure reaches only 30% of the values given above.

Maximum temperature range: depends on the design and construction materials of the knife gate valves, working medium and working conditions

Type of seats

Fig. 1



Type of seat

Type of seat	Tightness (%)
1 metal-metal	98,8
2 metal-elastomer	100
3 metal-elastomer with scraper to protect the seat from abrasion	100
4 metal-metal with deflector to protect the body from abrasion	98,8
5 metal-elastomer with deflector to protect the body from abrasion	100
6 metal-elastomer with scraper to protect the seat from abrasion and with deflector to protect the body from abrasion	100

Note

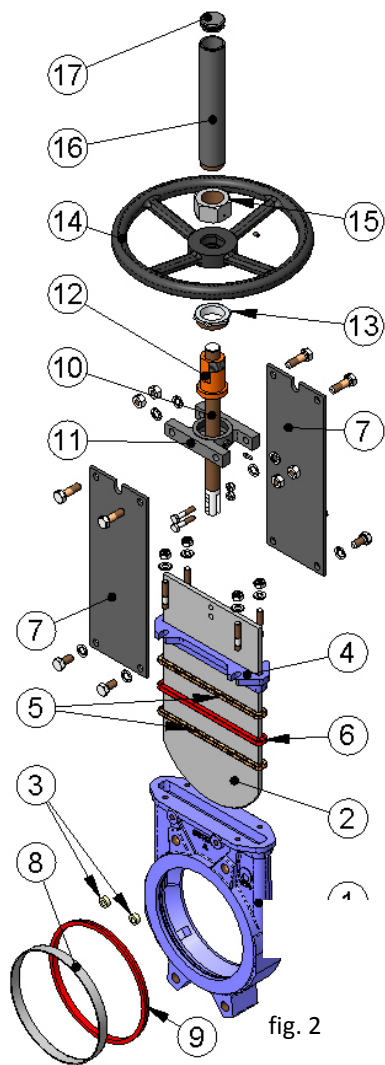
In order to select the appropriate type of seat and materials of body, knife, seat and packing don't hesitate to contact our sales department.

- Face to face: according to manufacturer
- Installation between flanges acc. to: EN 1092-1/ DIN PN10
- Operating: up to DN 500 - hand wheel
DN 600–1200 - gear box with hand wheel
- Options: non-rising stem
extended stem
hand wheel with lock
quick-closing haned lever
chain wheel
electric, pneumatic or hydraulic actuator
low control
knife position indicator
limit switches
other type or color of coating according to customer requirements
delivery including counter-flanges, bolting and sealing material

Testing: each knife gate valve is tested according to EN 12266 and supplied with accompanying documentation according to EN 10204

Certification: PED 2014/68/EU
ATEX (II, 2 a 22 GD) 94/9/ES

Fig. 2



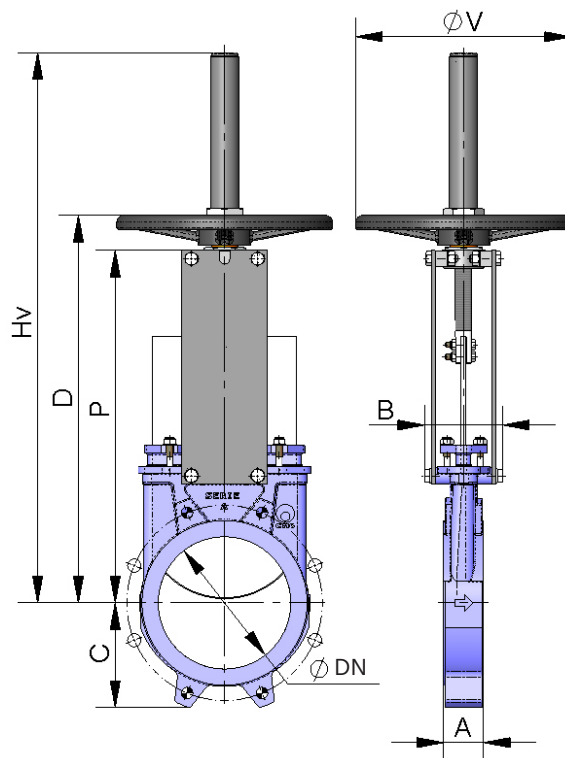
Pozice	Description	Basic material options of knife gate valve with EPDM seat	
1	Body	GJS-500*)	CF8M
2	Knife	AISI 304	AISI 316
3	Guide	RCH1000	
4	Packing gland	GJS-500*)	CF8M
5	Packing	Synt. + PTFE	
6	O-ring	EPDM	
7	Support plate	S275JR	
8	Metallic ring	AISI 316	
9	Seat	EPDM	
10	Stem	AISI 303	
11	Yoke	ocel	
12	Stem nut	bronz	
13	Nut	ST 44.2 galvanized	
14	Hand wheel	GJS-500	
15	Nut	ocel	
16	Hood	ocel	
17	Top cap	plast	

*) With epoxy protective coating: 80 µm, RAL 5015

DIMENSIONS

Serie A with hand wheel

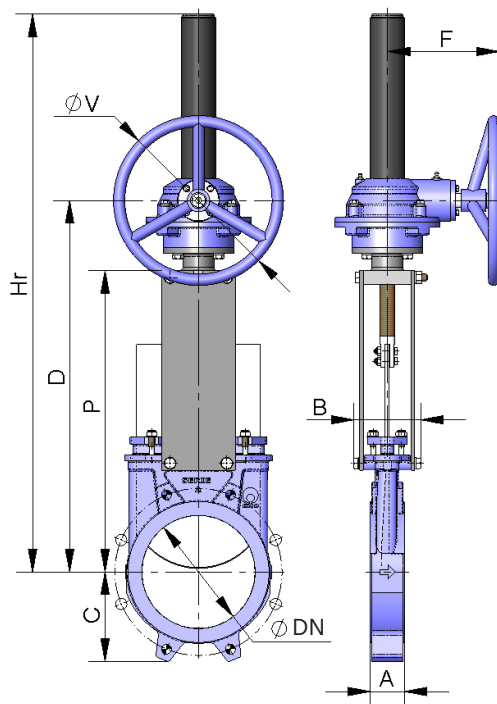
Fig. 3



DN	ΔP (Kg/cm ²)	A	B	C	P	Hv	D	$\varnothing V$	kg
50	10	40	92	63	241	409	280	225	7
65	10	40	92	70	268	436	307	225	8
80	10	50	92	92	294	469	333	225	9
100	10	50	92	105	334	502	373	225	11
125	10	50	102	120	367	585	406	225	13
150	10	60	102	130	419	644	458	225	17
200	10	60	119	160	525	815	578	325	28
250	10	70	119	198	626	1016	679	325	40
300	6	70	119	234	726	1116	779	380	56
350	6	96	290	256	797	1336	906	450	94
400	6	100	290	292	903	1442	1012	450	116
450	5	106	290	308	989	1628	1098	450	162
500	4	110	290	340	1101	1738	1210	450	191

Serie A with gear box

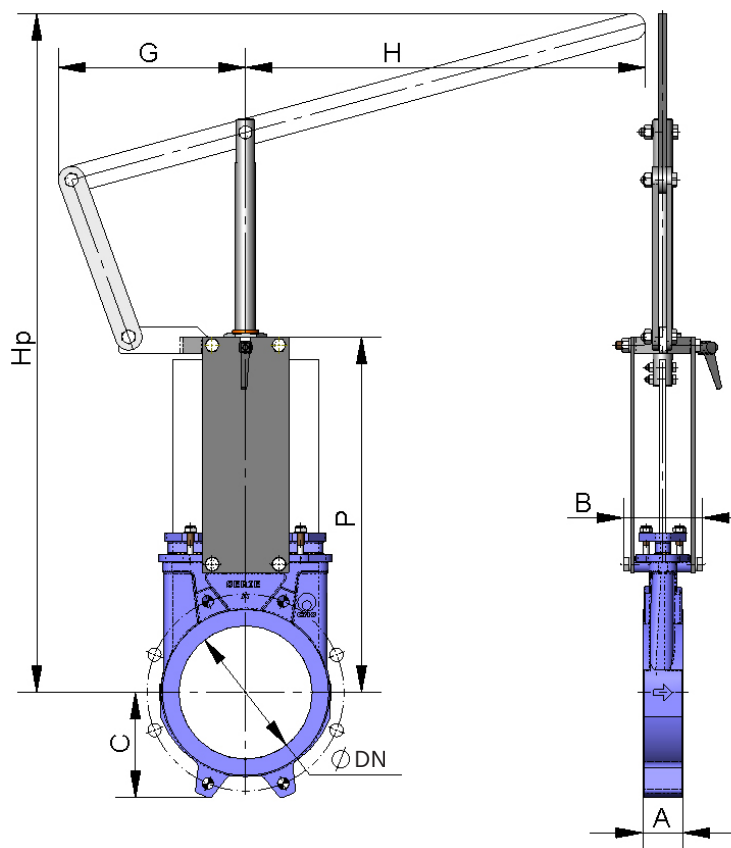
Fig. 4



DN	ΔP (Kg/cm ²)	A	B	C	P	D	F	ØV	Hr	kg
50	10	40	92	63	241	366	198	300	540	17
65	10	40	92	70	268	392	198	300	566	18
80	10	50	92	92	294	418	198	300	592	19
100	10	50	92	105	334	458	198	300	632	20
125	10	50	102	120	367	491	198	300	665	24
150	10	60	102	130	419	543	198	300	717	26
200	10	60	119	160	525	648	198	300	942	50
250	10	70	119	198	626	749	198	300	1043	63
300	6	70	119	234	726	850	198	300	1194	77
350	6	96	290	256	797	891	218	450	1335	106
400	6	100	290	292	903	997	218	450	1441	134
450	5	106	290	308	989	1083	218	450	1677	173
500	4	110	290	340	1101	1195	218	450	1789	216
600	4	110	290	400	1307	1401	218	450	2045	284
700	2	110	320	453	1506	1612	260	450	2401	430
800	2	110	320	503	1720	1825	288	650	2715	615
900	2	110	320	583	1953	2055	288	650	3043	768
1000	2	110	320	613	2137	2246	288	650	3351	972
1100	2	150	340	670	2375	2515	352	850	3675	1142
1200	2	150	340	728	2616	2760	352	850	4042	1298

Serie A with quick-closing lever

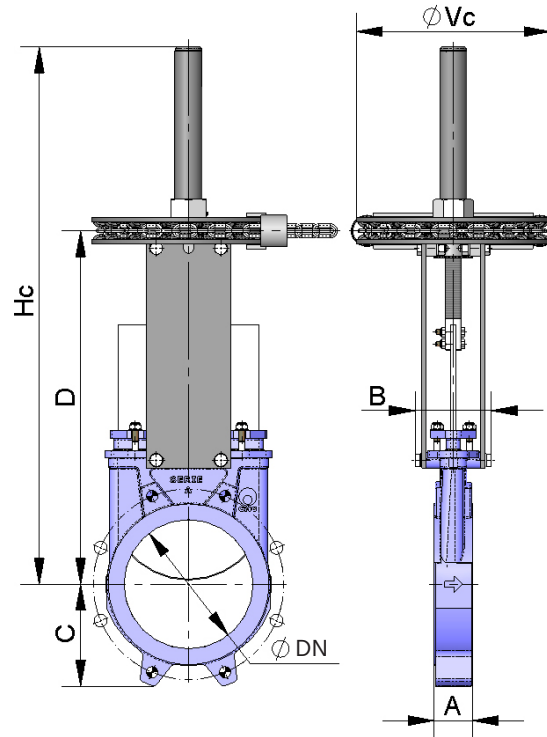
Fig. 5



DN	ΔP (Kg/cm ²)	A	B	C	P	G	H	Hp	kg
50	10	40	92	63	264	155	325	504	8
65	10	40	92	70	291	155	325	526	9
80	10	50	92	92	317	155	325	549	10
100	10	50	92	105	357	155	325	605	11
125	10	50	102	120	390	155	425	902	14
150	10	60	102	130	442	155	425	956	16
200	10	60	119	160	551	290	620	1027	32
250	10	70	119	198	652	290	620	1416	54
300	6	70	119	234	752	290	620	1525	57

Serie A with chain wheel

Fig. 6

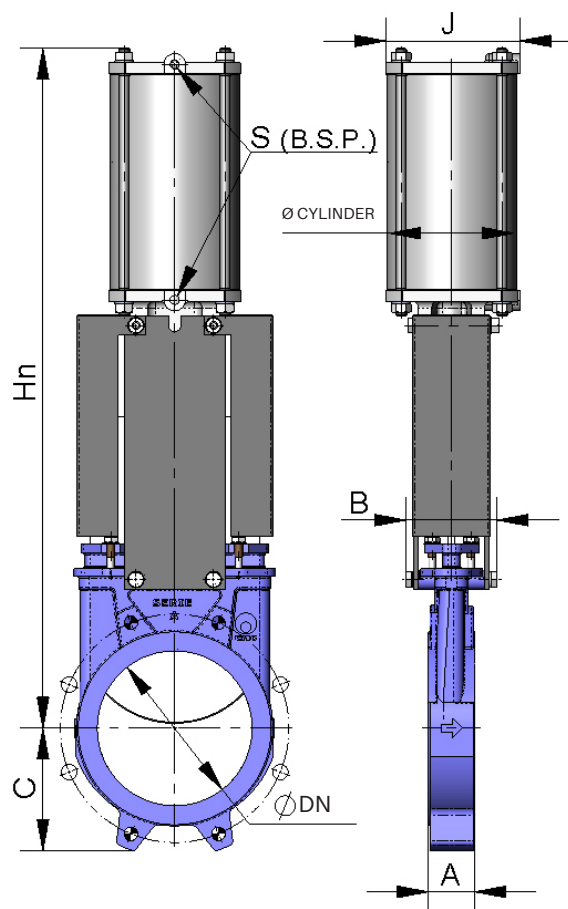


DN	ΔP (Kg/cm ²)	A	B	C	D	Hc	ØVc	kg
50	10	40	92	63	264	409	225	7
65	10	40	92	70	291	436	225	8
80	10	50	92	92	317	469	225	9
100	10	50	92	105	357	502	225	11
125	10	50	102	120	390	585	225	13
150	10	60	102	130	442	644	225	17
200	10	60	119	160	551	815	300	29
250	10	70	119	198	652	1016	300	40
300	6	70	119	234	752	1116	300	53
350	6	96	290	256	879	1336	402	93
400	6	100	290	292	985	1442	402	126
450	5	106	290	308	1071	1628	402	160
500	4	110	290	340	1183	1738	402	193
600*	4	110	290	400	1389	2046	402	264
700*	2	110	320	453	1506	2406	402*	435
800*	2	110	320	503	1720	2790	402*	580
900*	2	110	320	583	1953	3130	402*	740
1000*	2	110	320	613	2137	3440	402*	925
1200*	2	150	340	728	2616	4050	402*	1350

* from DN 600 with gear and chain wheel

Serie A with double-acting pneumatic actuator

Fig. 7

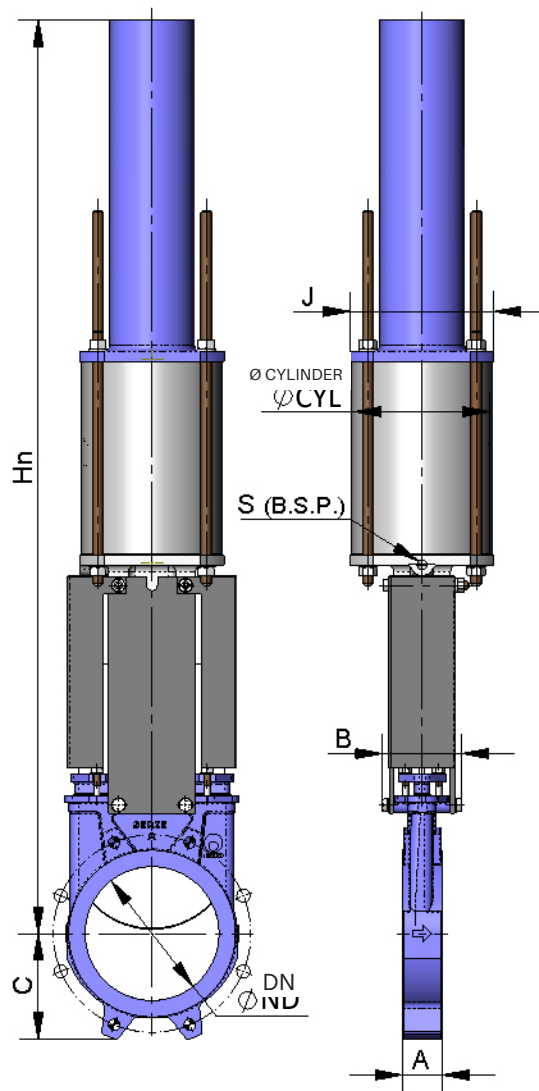


DN	ΔP (Kg/cm ²)	A	B	C	Ø cylinder	Ø piston rod	J	S (B.S.P.)	Hn	kg
50	10	40	92	63	80	20	96	1/4"	415	7
65	10	40	92	70	80	20	96	1/4"	455	8
80	10	50	92	92	80	20	96	1/4"	498	9
100	10	50	92	105	100	20	115	1/4"	565	12
125	10	50	102	120	125	25	138	1/4"	636	18
150	10	60	102	130	125	25	138	1/4"	717	22
200	10	60	119	160	160	30	175	1/4"	874	37
250	10	70	119	198	200	30	218	3/8"	1036	58
300	6	70	119	234	200	30	218	3/8"	1182	72
350	6	96	290	256	250	40	270	3/8"	1380	130
400	6	100	290	292	250	40	270	3/8"	1530	155
450	5	106	290	308	300	45	382	1/2"	1677	225
500	4	110	290	340	300	45	382	1/2"	1839	257
600	4	110	290	400	300	45	382	1/2"	2146	340
700	2	110	320	453	350	45	426	1/2"	2481	556
800	2	110	320	503	350	45	426	1/2"	2798	679
900	2	110	320	583	400	50	508	1/2"	3167	840
1000	2	110	320	613	400	50	508	1/2"	3451	1053
1100	2	150	340	670	400	50	508	1/2"	3792	1210
1200	2	150	340	728	400	50	508	1/2"	4135	1366

Note:
The control air pressure of a standard pneumatic actuator is in the range of 6–10 kg / cm². In order to design a suitable pneumatic if the control air pressure is less than 6 bar, please contact our sales department.

Serie A with single-acting pneumatic actuator

Fig. 8



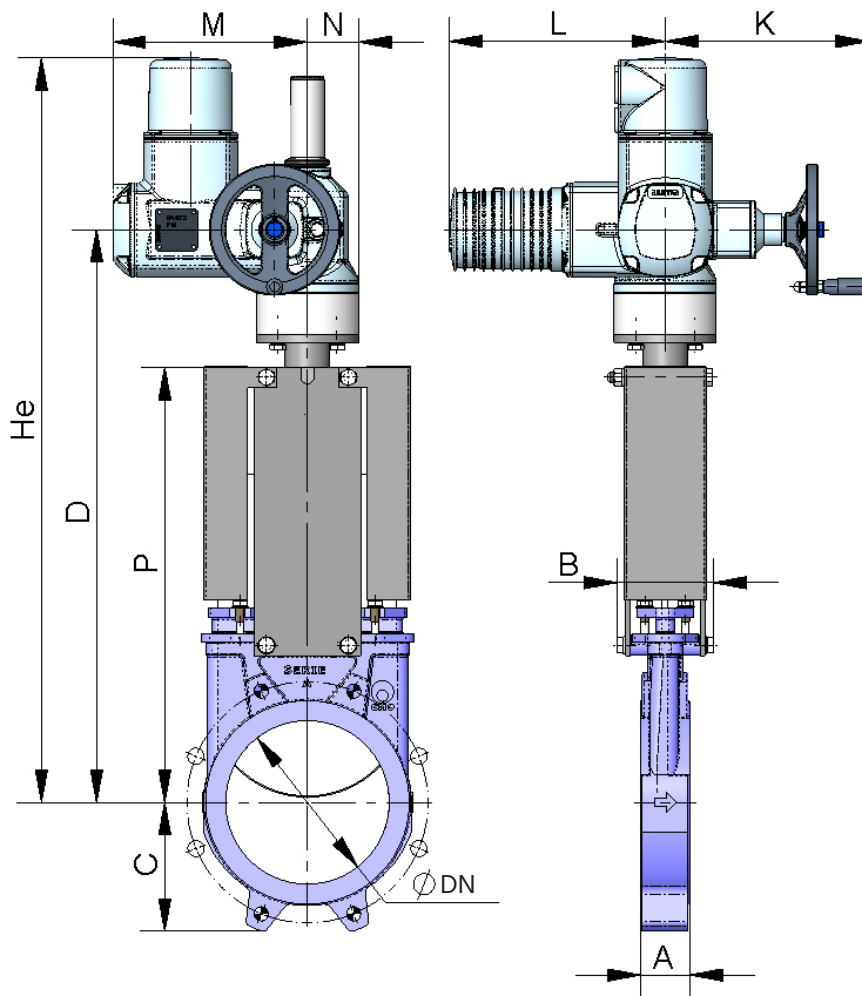
DN	ΔP (Kg/cm ²)	A	B	C	Ø cylinder	Ø piston rod	J	S (B.S.P.)	Hn	kg
50	10	40	92	63	125	25	138	1/4"	781	19
65	10	40	92	70	125	25	138	1/4"	806	22
80	10	50	92	92	125	25	138	1/4"	833	23
100	10	50	92	105	125	25	138	1/4"	873	24
125	10	50	102	120	160	30	175	1/4"	909	35
150	10	60	102	130	160	30	175	1/4"	960	36
200	10	60	119	160	200	30	218	3/8"	1355	66
250	10	70	119	198	250	40	270	3/8"	1844	130
300	6	70	119	234	250	40	270	3/8"	2005	143

Note:

The control air pressure of a standard pneumatic actuator is in the range of 6–10 kg / cm². In order to design a suitable pneumatic if the control air pressure is less than 6 bar, please contact our sales department.

Seria A with electric actuator

Fig. 9

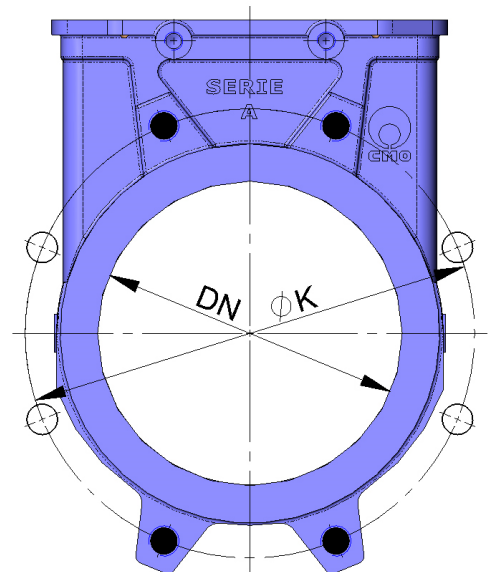


DN	ΔP (Kg/cm ²)	A	B	C	D	K	L	M	N	P	He	kg
50	10	40	92	63	40	249	265	238	62	241	595	24
65	10	40	92	70	426	249	265	238	62	268	622	25
80	10	50	92	92	452	249	265	238	62	294	647	26
100	10	50	92	105	492	249	265	238	62	334	687	27
125	10	50	102	120	525	249	265	238	62	367	720	30
150	10	60	102	130	577	249	265	238	62	419	772	32
200	10	60	119	160	685	249	265	238	62	525	990	42
250	10	70	119	198	785	249	265	238	62	626	1090	55
300	6	70	119	234	885	249	265	238	62	726	1190	72
350	6	96	290	256	940	254	283	248	65	797	1305	99
400	6	100	290	292	1045	254	283	248	65	903	1460	136
450	5	106	290	308	1175	336	389	286	91	989	1755	166
500	4	110	290	340	1290	336	389	286	91	1101	1870	245
600	4	110	290	400	1495	336	389	286	91	1307	2045	362
700	2	110	320	453	1661	336	389	286	91	1506	2401	432
800	2	110	320	503	1875	339	389	286	91	1720	2715	630
900	2	110	320	583	2108	339	389	286	91	1953	3043	764
1000	2	110	320	613	2292	339	389	286	91	2137	3351	998
1200	2	150	340	728	2760	336	389	528	125	2616	4042	1350

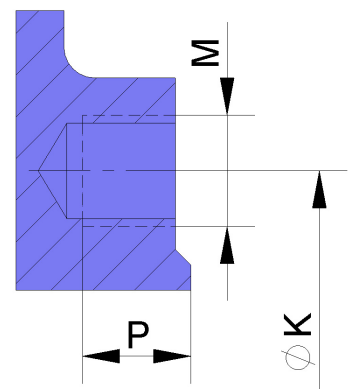
DIMENSIONS FOR ASSEMBLY BETWEEN FLANGES

DN	ΔP (Kg/cm ²)	○	●	M thread	P	ØK
50	10	4	-	M 16	8	125
65	10	4	-	M 16	8	145
80	10	4	4	M 16	9	160
100	10	4	4	M 16	9	180
125	10	4	4	M 16	9	210
150	10	4	4	M 20	10	240
200	8	4	4	M 20	10	295
250	6	6	6	M 20	12	350
300	6	6	6	M 20	12	400
350	5	10	6	M 20	21	460
400	5	10	6	M 24	21	515
450	3	14	6	M 24	22	565
500	3	14	6	M 24	22	620
600	3	14	6	M 27	22	725
700	2	16	8	M 27	22	840
800	2	16	8	M 30	22	950
900	2	20	8	M 30	20	1050
1000	2	20	8	M 33	20	1160
1100	2	20	12	M 33	20	1270
1200	2	20	12	M 36	22	1380

Fig.10



- through holes
- blind holes



The data in the catalogue are informative and the supplier reserves the right to make technical changes.