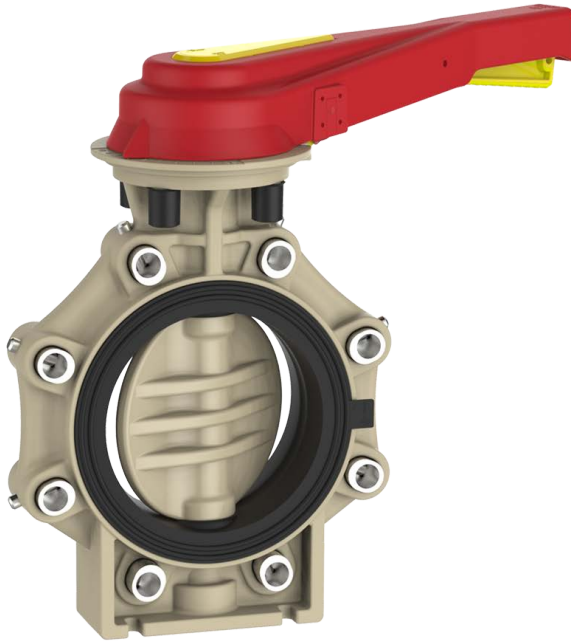




Butterfly Valve

K4

PPH

DATASHEET

Overview

General		
Material	Body material Seal material Disc	PP-GF EPDM / FPM PVC-U
Dimensions	DN65 – DN250 d75 – d280 2 ½" – 10"	
Connector types	Flange	DIN 2501 PN10 ANSI B 16,5 Class 150 JIS 10 K [only DN65-DN150] BS Table D&E
Operating pressure	DN65 – DN200 DN250	PN10 PN8
Insert material		INOX A4
Pin material		INOX A2

Range summary

NOTE: Pneumatic and Electric actuators depicted on this page, are offered by Praher Plastics. Unless specified by the customer, Fluidflo Valve Solutions will offer locally supported actuators (Maxtorque Range)



Hand operated



without
actuation



Position
Feedback



Pneumatic



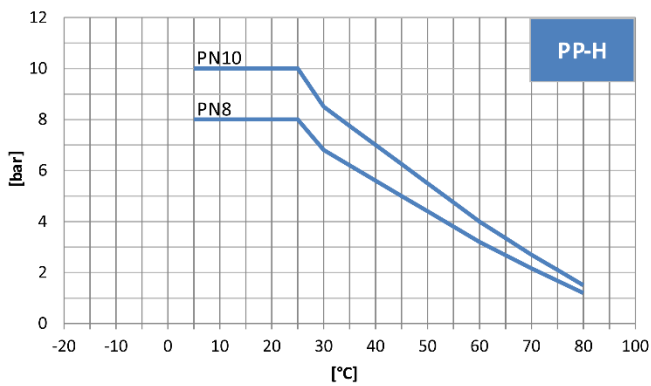
Electric

Table of contents

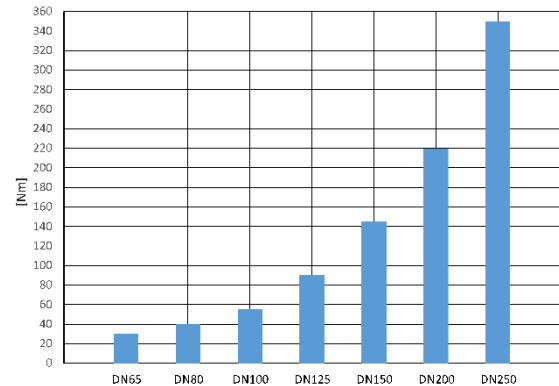
	Technical data	page 4
	Butterfly Valve with hand lever	page 6
	Butterfly Valve with hand lever and Position Feedback	page 9
	Butterfly Valve without actuation	page 13
	Butterfly valve with handwheel	page 17
	Butterfly valve with handwheel and Position Feedback	page 20
	Butterfly valve electric ER / VS / VT	page 24
	Butterfly valve pneumatic	page 28
	Accessories / spare parts	page 32

Technical data

Pressure – temperature – diagram

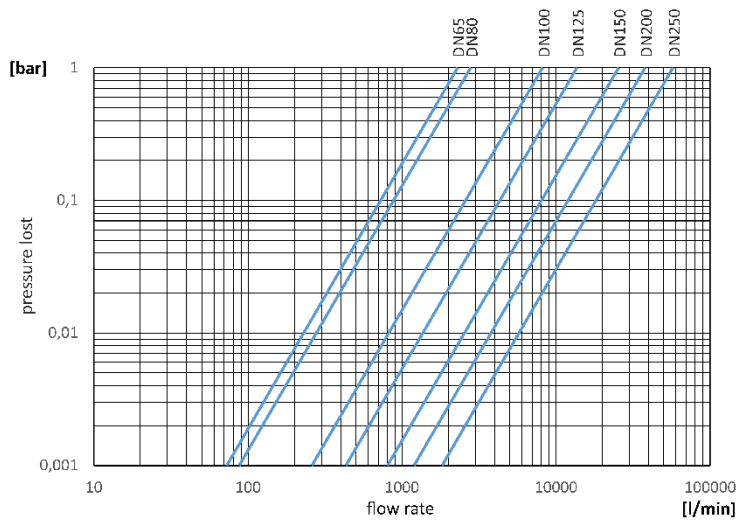


Torque at the shaft

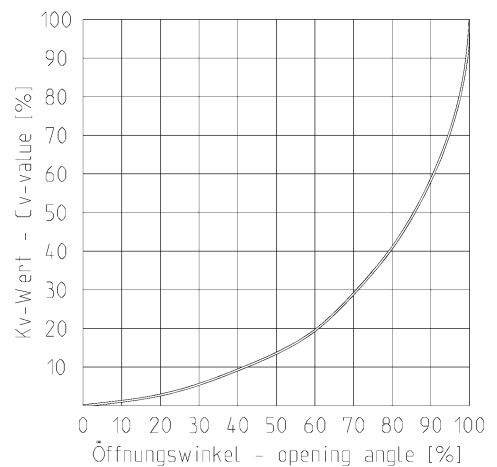


The values of the pressure-temperature-diagram are based on a service life of 25 years at static pressure load and apply to water or water-like media.

Flow rate – pressure loss



Flow characteristics



Kv-value-table

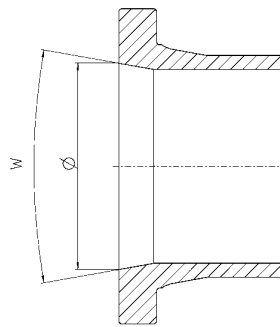
pressure loss	DN65	DN80	DN100	DN125	DN150	DN200	DN250
0,001 bar	73	88	260	433	805	1200	1820
1,0 bar	2300	2800	8200	13700	25500	38000	57600

specification in l/min (PN16 pipe)

Technical data

Installation in pipeline:

For a correct and complete opening of the damper it is necessary that the connection pieces have at least an inner diameter according to the table.



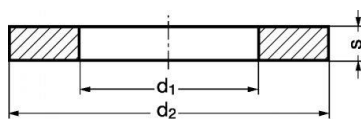
DN	DN 50*	DN65	DN80	DN100	DN125	DN150	DN200	DN250
d	d 63*	d 75	d 90	D 110	d 140	d 160	d 225	d 280
ø (mm)	60	60	77	96,5	121,5	146,5	203	248
w (°)	40	40	40	40	40	40	40	40

* Only DIN DN50 d63 couplings or welding collars can be used.

General installation instructions:

Lug Type

- It is recommended to use the appropriate shims according to DIN125A:



DN	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Thread	M16	M16	M16	M16	M20	M20	M20
d1	17	17	17	17	21	21	21
d2	30	30	30	30	37	37	37
s	3	3	3	3	3	3	3

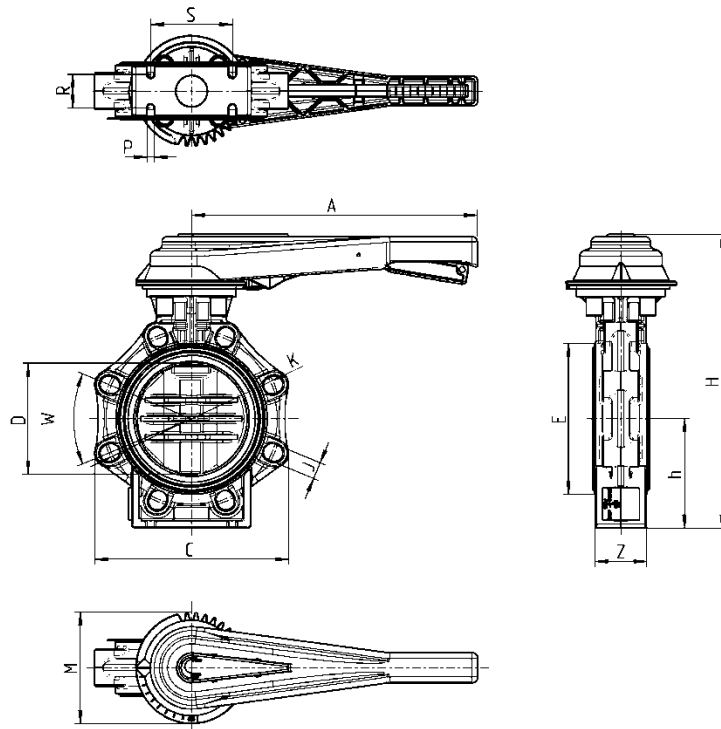
Dimensions in mm

- Adjust the bolt length to the flange or welding neck.
- In case of one-sided disassembly, check the torque of the bolts on the opposite side (see information on tightening torque of bolts for flange connections).

Dimensions hand lever

Connector types

Flange (dimensions in mm)



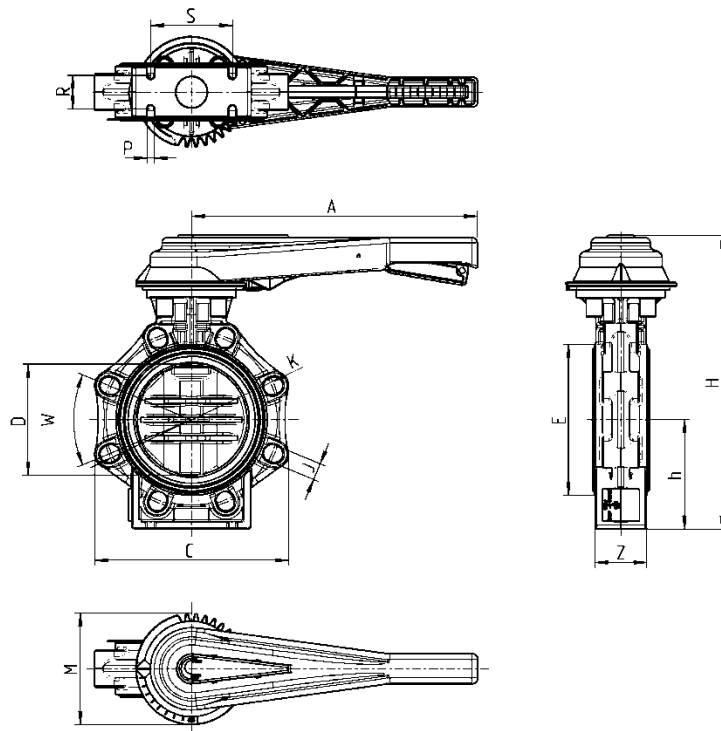
DN	65	80	100	125	150	200
d	75	90	110	140	160	225
Zoll	2 1/2"	3"	4"	5"	6"	8"
A	230	230	300	300	386	386
D	65	80	100	125	150	200
C	133	176	206	234,5	261	314
W	90°	45°	45°	45°	45°	45°
J	19	19	19	23	23	23
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,3	290 – 298,5
H	285	292	322	358	396	458
h	100	100	115	130	147,5	175
E	98	116	146	170	196	251
M	114	114	114	114	150	150
Z	46	49	56	64	70	71
S	55	70	85	100	110	145
R	25	30	35	45	45	40
P	7	9	9	9	9	9
PN	10	10	10	10	10	10

*DN 250 only with handwheel

Dimensions hand lever

Connector types

Flansch Lug Type (Dimensionen in mm)

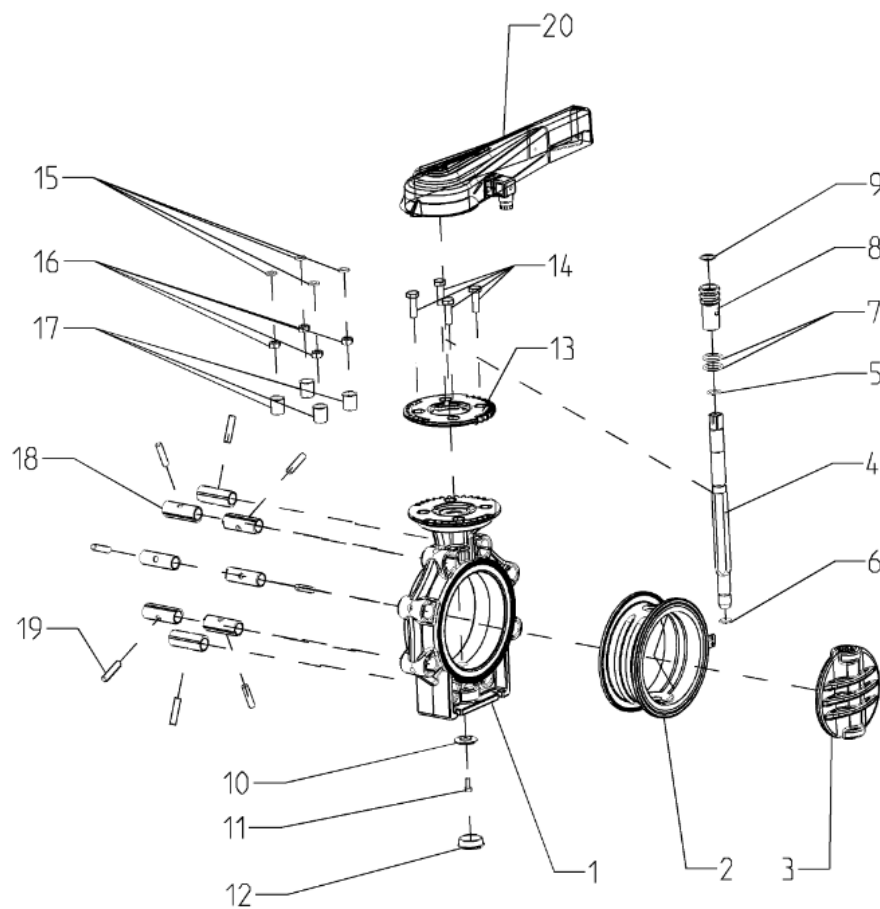


DN	65	80	100	125	150	200
d	75	90	110	140	160	225
Zoll	2 1/2"	3"	4"	5"	6"	8"
A	230	230	300	300	386	386
D	65	80	100	125	150	200
C	133	176	206	234,5	261	314
W	90°	45°	45°	45°	45°	45°
J	19	19	19	23	23	23
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,3	290 – 298,45
K-DIN	145	160	180	210	240	295
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,45
H	285	292	322	358	396	458
h	100	100	115	130	147,5	175
E	98	116	146	170	196	251
M	114	114	114	114	150	150
Z	46	49	56	64	70	71
S	55	70	85	100	110	145
R	25	30	35	45	45	40
P	7	9	9	9	9	9
PN	10	10	10	10	10	10

*DN 250 only with handwheel

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Exploded drawing hand lever

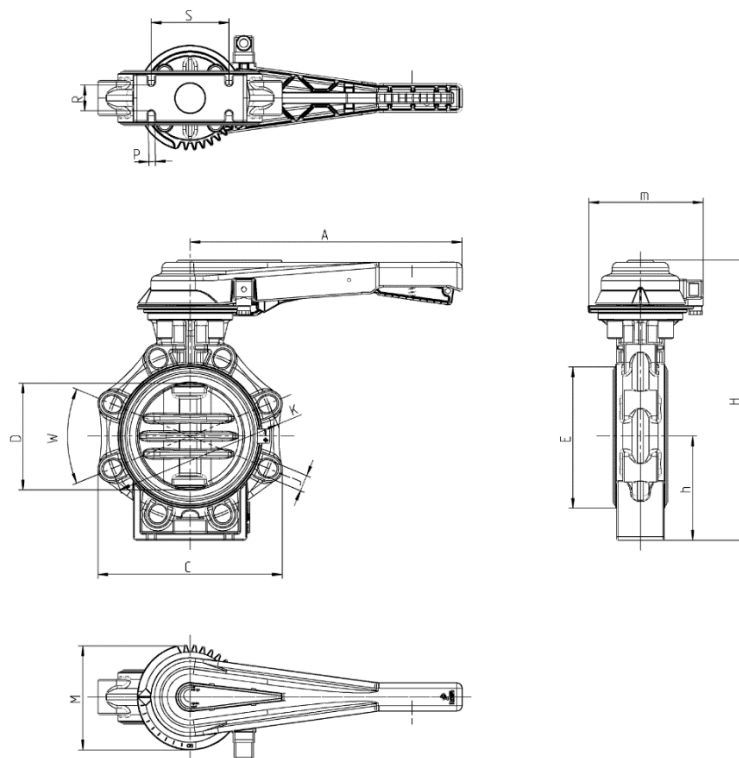


Nr.	Description	Material
01.	Body	PP-GF
02.	Sleeve	EPDM/FKM
03.	Disc	PP-H
04.	Shaft	1.4301
05.	Seal shaft above	FPM
06.	Seal shaft below	FPM
07.	Seal pilot bushing	FPM
08.	Pilot bushing	PVDF
09.	Retaining ring	A2
10.	Holding disc	1.4305
11.	Screw	A4
12.	Cap	PVC
13.	toothed washer	PP-GFK
14.	Screw	A4
15.	washers	A4
16.	Nuts	A4
17.	cover cap	PE
18.	inserts	INOX A4
19.	Pin	INOX A2
20.	Handle	PP-GFK

Dimensions hand lever with position feedback

Connector types

Flange (dimensions in mm)

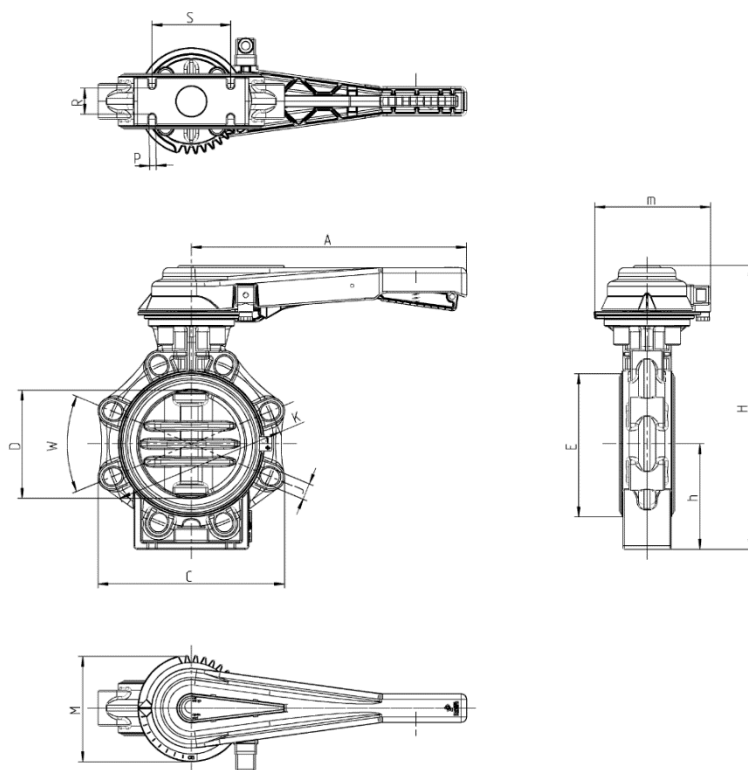


DN	65	80	100	125	150	200
d	75	90	110	140	160	225
Zoll	2 1/2"	3"	4"	5"	6"	8"
A	230	230	300	300	386	386
D	65	80	100	125	150	200
C	133	176	206	234,5	261	314
W	90°	45°	45°	45°	45°	45°
J	19	19	19	23	23	23
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,3	290 – 298,5
H	285	292	322	358	396	458
h	100	100	115	130	147,5	175
E	98	116	146	170	196	251
M	114	114	114	114	150	150
m	125	125	131	131	163	163
Z	46	49	56	64	70	71
S	55	70	85	100	110	145
R	25	30	35	45	45	40
P	7	9	9	9	9	9
PN	10	10	10	10	10	10

Dimensions hand lever with position feedback

Connector types

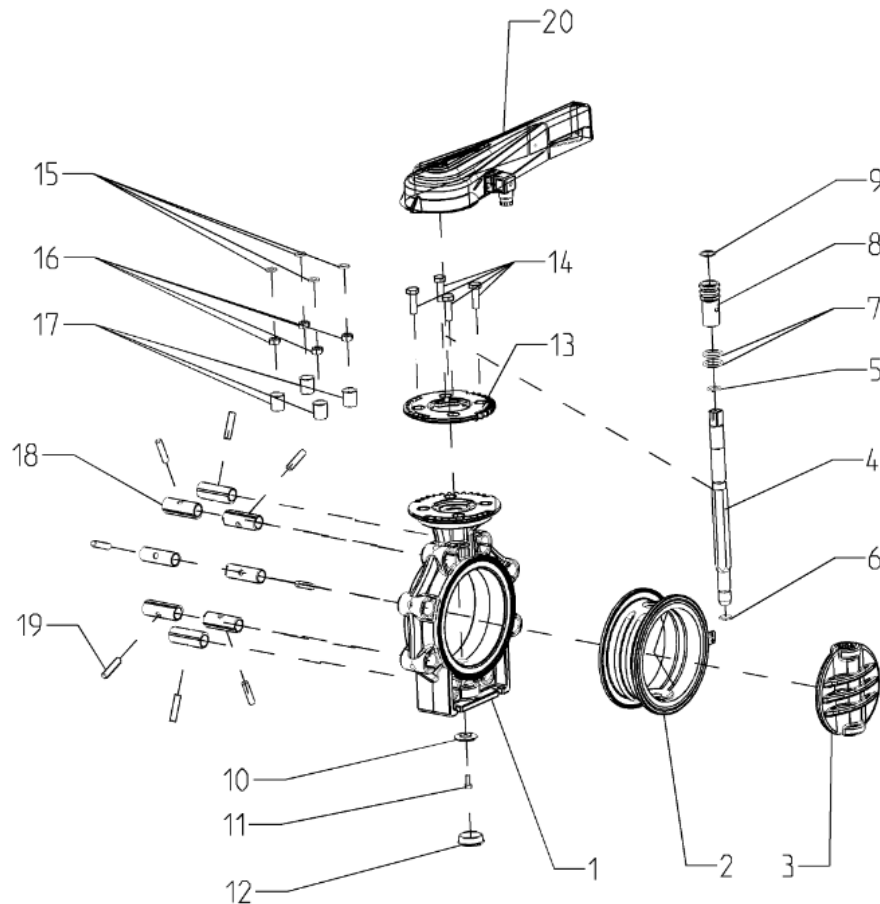
Flansch Lug Type (dimensions in mm)



DN	65	80	100	125	150	200
d	75	90	110	140	160	225
Zoll	2 1/2"	3"	4"	5"	6"	8"
A	230	230	300	300	386	386
D	65	80	100	125	150	200
C	133	176	206	234,5	261	314
W	90°	45°	45°	45°	45°	45°
J	19	19	19	23	23	23
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,3	290 – 298,45
K-DIN	145	160	180	210	240	295
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,45
H	285	292	322	358	396	458
h	100	100	115	130	147,5	175
E	98	116	146	170	196	251
M	114	114	114	114	150	150
m	125	125	131	131	163	163
Z	46	49	56	64	70	71
S	55	70	85	100	110	145
R	25	30	35	45	45	40
P	7	9	9	9	9	9
PN	10	10	10	10	10	10

*DN 250 only with handwheel

Exploded drawing hand lever with position feedback



Nr. Description

- 01. Body
- 02. Sleeve
- 03. Disc
- 04. Shaft
- 05. Seal shaft above
- 06. Seal shaft below
- 07. Seal pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. Cap
- 13. toothed washer
- 14. Screws
- 15. washers
- 16. Nuts
- 17. cover cap
- 18. inserts
- 19. pins
- 20. Hand lever with position feedback

Material

- PP-GF
- EPDM/FKM
- PP-H
- 1.4301
- FPM
- FPM
- FPM
- PVDF
- A2
- 1.4305
- A4
- PVC
- PP-GFK
- A4
- A4
- A4
- PE
- INOX A4
- INOX A2
- PP-GFK

Technical data position feedback

Limit switch mechanical		
Type	(Ag-Ni) NO/NC*	(Au) NO*/NC*
Voltage max.	15-250V AC (15-30V DC)	5-250V AC (5-30V DC)
Current max.	100mA-5A	1mA-3A
Protection limit switch	IP67	
Protection DIN-plug	IP65	
Ambient temperature	-10°C bis +50°C	
Electric wiring	NO	NC
A pressed .. open B pressed.. closed		

* on request

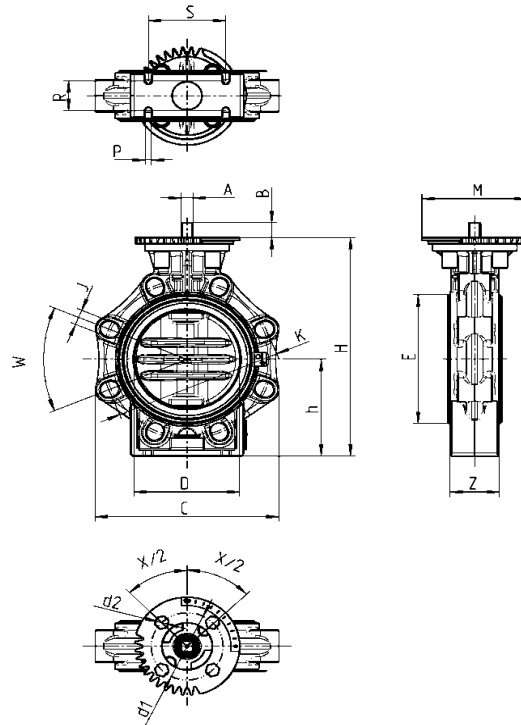
Limit switch inductive		
Type	NPN*/PNP	NAMUR EMV acc. IEC / EN 60947-5-2:2004; NE 21 DIN EN 60947-5-6
Voltage max.	10-30V DC	8V DC
Current max.	0-100mA	NAMUR intrinsically safe
Protection limit switch	IP67	
Protection DIN-plug	IP65	
Ambient temperature	-10°C bis +50°C	
Electric wiring		

* on request

Dimensions without actuation

Connector types

Flange (dimensions in mm)

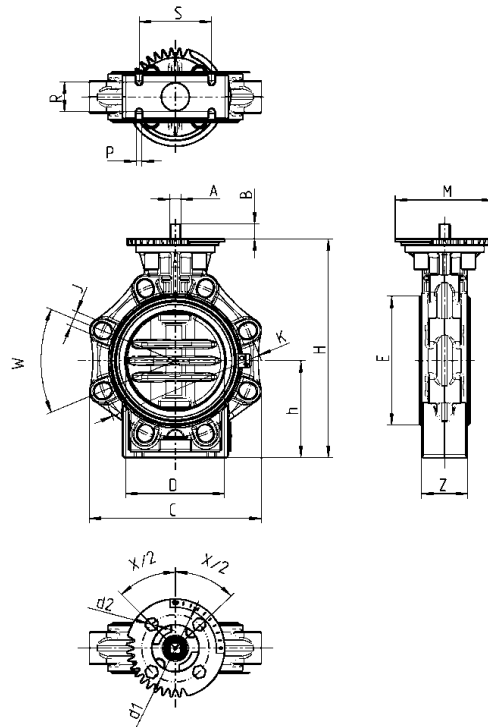


								with adapter plate	
DN	65	80	100	125	150	200	250	150	200
d	75	90	110	140	160	225	280	160	225
Zoll	2 1/2"	3"	4"	5"	6"	8"	10"	6"	8"
A	11	11	14	14	17	17	22	17	17
B	17,5	17,5	19,5	19,5	23	23	23,5	23	23
C	133	176	206	234,5	261	314	392	261	314
D	65	80	100	125	150	200	231	150	200
E	98	116	146	170	196	251	317	196	251
H	232	239	269	303,5	333	395	333	333	395
h	100	100	115	130	147,5	175	147,5	147,5	175
J	19	19	19	23	23	23	22 / 25,4	23	23
K	127-145	146-160	175-190,5	209,5-216	234,5-241,5	290-298,5	350-362	234,5-241,5	290-298,5
M	114	114	114	114	150	150	125	138	138
P	7	9	9	9	9	9	9	9	9
R	25	30	35	45	45	40	40	45	40
S	55	70	85	100	110	145	160	110	145
W	90°	45°	45°	45°	45°	45°	30°	45°	45°
Z	46	49	56	64	70	71	114	70	71
PN	10	10	10	10	10	10	8	10	10

Dimensions without actuation

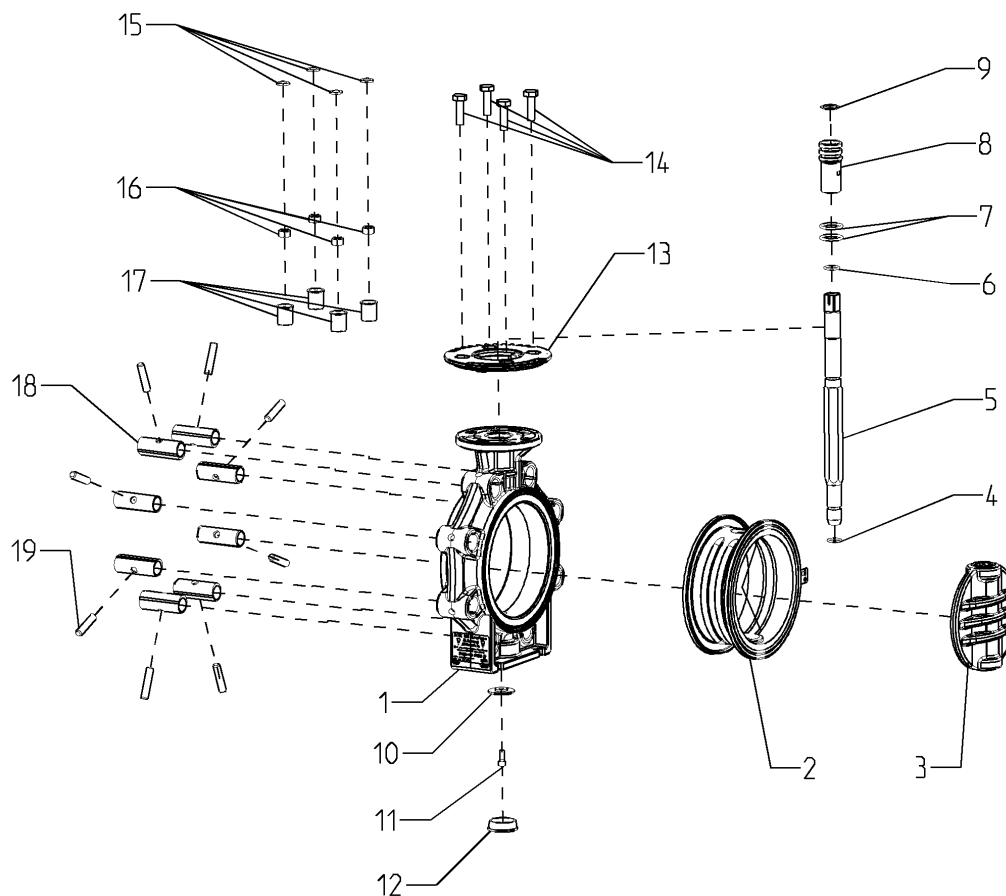
Connector types

Flansch Lug Type (Dimensionen in mm)



									with adapter plate
DN	65	80	100	125	150	200	250	150	200
d	75	90	110	140	160	225	280	160	225
Zoll	2 ½"	3"	4"	5"	6"	8"	10"	6"	8"
A	11	11	14	14	17	17	22	17	17
B	17,5	17,5	19,5	19,5	23	23	23,5	23	23
C	133	176	206	234,5	261	314	392	261	314
D	65	80	100	125	150	200	231	150	200
E	98	116	146	170	196	251	317	196	251
H	232	239	269	303,5	333	395	460	333	395
h	100	100	115	130	147,5	175	215	147,5	175
J	19	19	19	23	23	23	22 / 25,4	23	23
K	127-145	146-160	175-190,5	209,5-216	234,5-241,5	290-298,45	350-362	234,5-241,5	290-298,45
K-DIN	145	160	180	210	240	295	350	240	295
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,5	362	241,3	298,45
M	114	114	114	114	150	150	125	138	138
P	7	9	9	9	9	9	9	9	9
R	25	30	35	45	45	40	40	45	40
S	55	70	85	100	110	145	160	110	145
W	90°	45°	45°	45°	45°	45°	30°	45°	45°
Z	46	49	56	64	70	71	114	70	71
PN	10	10	10	10	10	10	8	10	10

Exploded drawing without actuation



Nr. Description

- 01. Body
- 02. Sleeve
- 03. Disc
- 04. Seal shaft below
- 05. Shaft
- 06. Seal shaft above
- 07. Seal pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. Cap
- 13. toothed washer
- 14. Screw
- 15. washer
- 16. Nuts
- 17. Caps
- 18. Inserts
- 19. Pin

Material

- PP-GF
- EPDM/FKM
- PP-H
- FPM
- 1.4301
- FPM
- FPM
- PVDF
- A2
- 1.4305
- A4
- PVC
- PP-GFK
- A4
- A4
- A4
- PE
- INOX A4
- INOX A2

Technical data without actuation

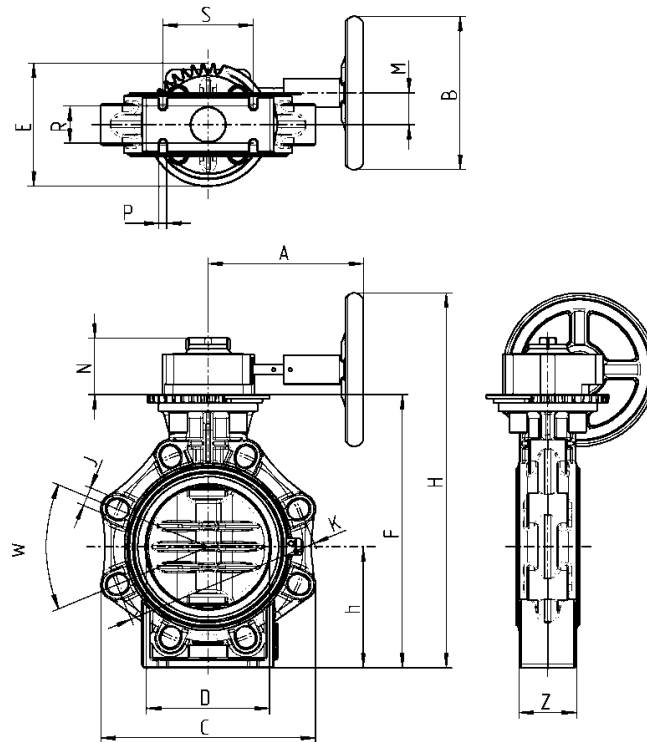
Butterfly valve connections- Flange dimensions

DN	Flange type ISO 5211	d1	d2	X/2	A
65	F07	70	M8	45°	11
80	F07	70	M8	45°	11
100	F07	70	M8	45°	14
125	F07	70	M8	45°	14
152	F10	102	M10	45°	17
200	F10	102	M10	45°	17
250	F10	102	M10	45°	22
with adapter plate					
150	F07	70	M8	45°	17
200	F07	70	M8	45°	17

Dimensions handwheel

Connector types

Flange (dimensions in mm)

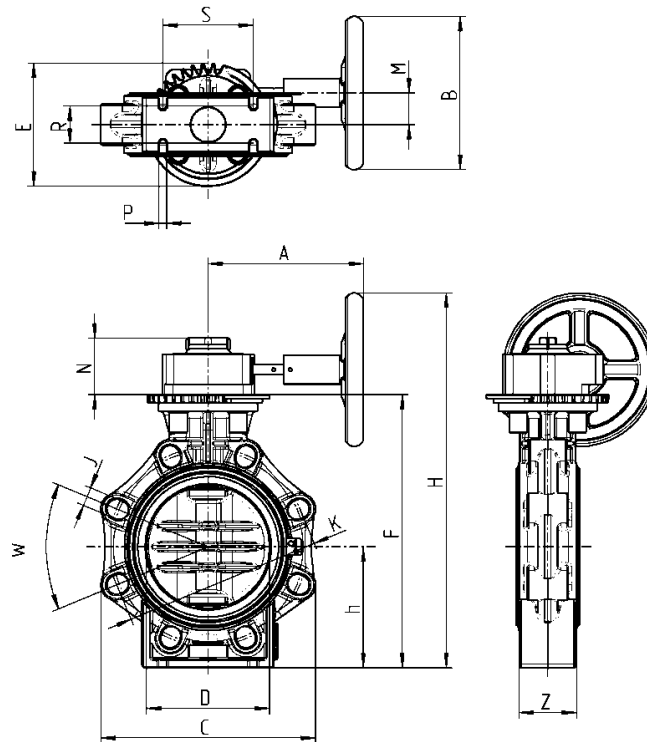


DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 ½"	3"	4"	5"	6"	8"	10"
A	121	121	120	120	179	179	209,5
D	65	80	100	125	150	200	231
C	133	176	206	234,5	261	314	392
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,5	290 – 298,45	350-362
H	308,5	315,5	358	393	444,5	507	613
h	100	100	115	130	147,5	175	215
E	122	122	122	122	138	138	125
M	42,5	42,5	42,5	42,5	42,5	42,5	50
Z	46	49	56	64	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
F	231,5	238,5	268,5	303,5	337,5	400	460
N	53	53	53	53	60,5	60,5	68
B	100	100	125	125	160	160	250
PN	10	10	10	10	10	10	8

Dimensions handwheel

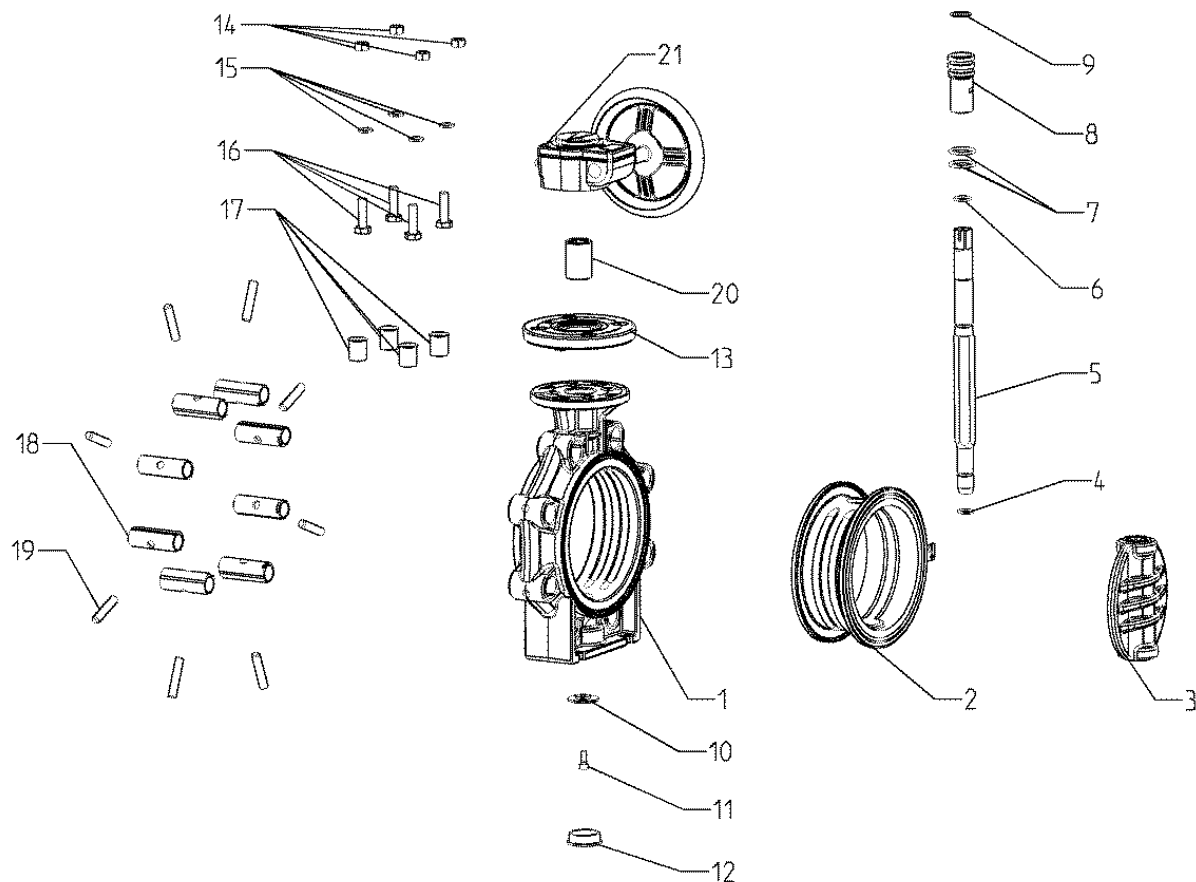
Connector types

Flansch Lug Type (Dimensionen in mm)



DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 ½"	3"	4"	5"	6"	8"	10"
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,5	290 – 298,45	350-362
K-DIN	145	160	180	210	240	295	350
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,45	362
D	65	80	100	125	150	200	231
C	133	176	206	234,5	261	314	392
Z	46	49	56	64	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
h	100	100	115	130	147,5	175	215
F	232	239	269	303,5	337,5	399,5	460
N	52	52	52	52	60	60	68
H	308	315	357,5	392	447,5	509,5	613
A	120	120	121	121	122	122	209,5
B	100	100	125	125	160	160	250
M	42,5	42,5	42,5	42,5	50	50	50
E	114	114	114	114	137	137	125
PN	10	10	10	10	10	10	8

Exploded drawing handwheel



Nr. Description

- 01. Body
- 02. Sleeve
- 03. Disc
- 04. Seal shaft below
- 05. Shaft
- 06. Seal shaft above
- 07. Seal pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. Cap
- 13. Cover plate
- 14. Nuts
- 15. washer
- 16. Screw
- 17. Caps
- 18. Inserts
- 19. Pin
- 20. Coupling
- 21. manual gearbox

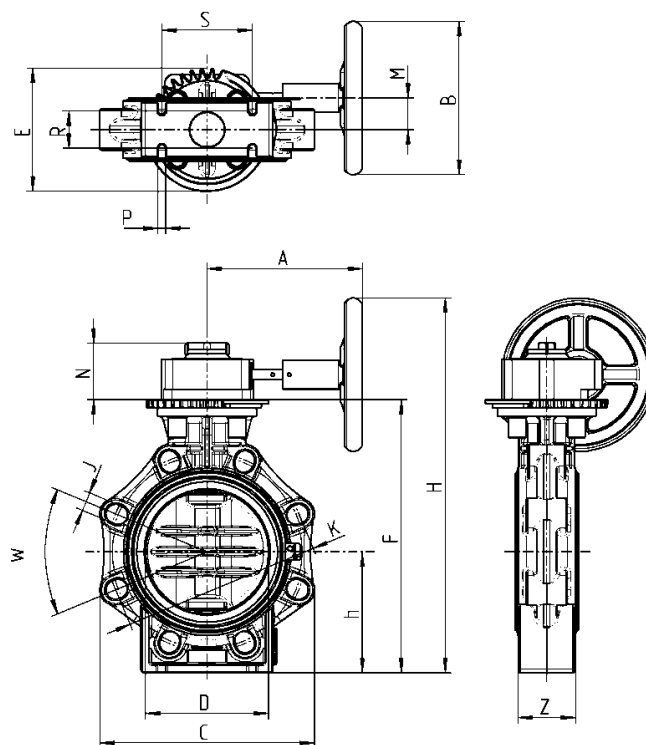
Material

- PP-GF
- EPDM/FKM
- PP-H
- FPM
- 1.4301
- FPM
- FPM
- PVDF
- A2
- 1.4305
- A4
- PVC
- PE
- A4
- A4
- A4
- PE
- INOX A4
- INOX A2

Dimensions handwheel with position feedback

Connector types

Flange (dimensions in mm)

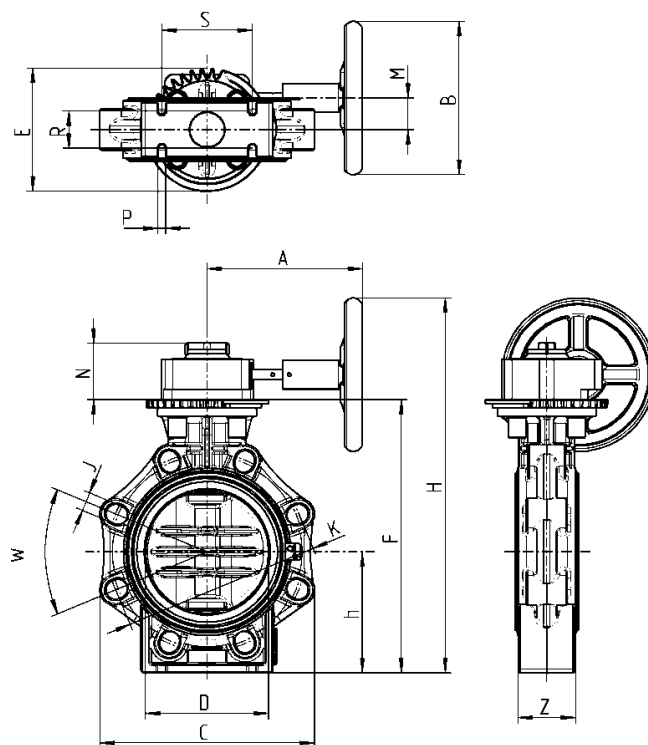


DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 ½"	3"	4"	5"	6"	8"	10"
A	121	121	120	120	179	179	209,5
D	65	80	100	125	150	200	231
C	133	176	206	234,5	261	314	392
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,5	290 – 298,45	350-362
H	308,5	315,5	358	393	444,5	507	613
h	100	100	115	130	147,5	175	215
E	122	122	122	122	138	138	125
M	52,5	52,5	52,5	52,5	52,5	52,5	60
Z	46	49	56	64	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
F	231,5	238,5	268,5	303,5	337,5	400	460
N	59	59	59	59	59	59	75,5
B	100	100	125	125	160	160	250
PN	10	10	10	10	10	10	8

Dimensions handwheel with position feedback

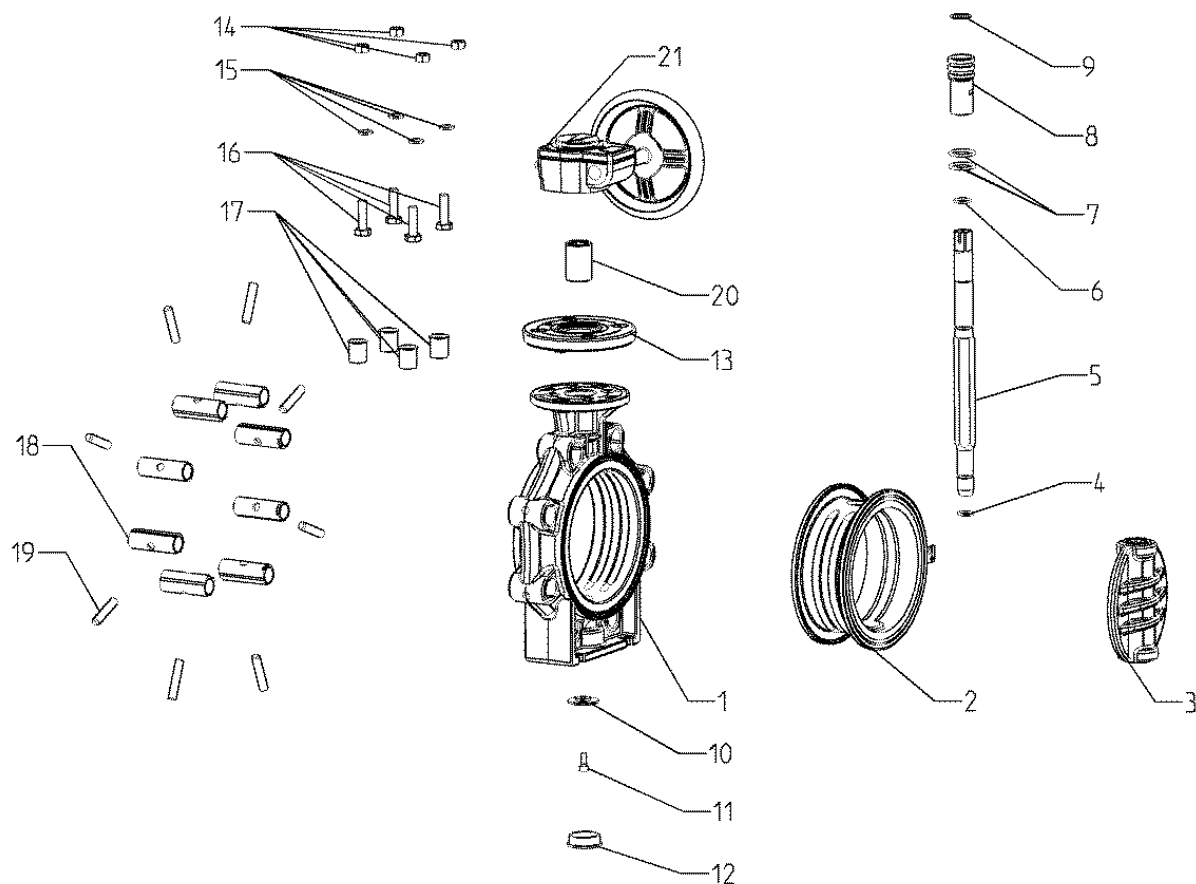
Connector types

Flansch Lug Type (Dimensionen in mm)



DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 1/2"	3"	4"	5"	6"	8"	10"
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127 – 145	146 – 160	175 – 190,5	209,5 – 216	234,5 – 241,5	290 – 298,45	350-362
K-DIN	145	160	180	210	240	295	350
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,45	362
D	65	80	100	125	150	200	250
C	133	176	206	234,5	261	314	392
Z	46	49	56	64	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
h	100	100	115	130	147,5	175	215
F	232	239	269	303,5	337,5	399,5	460
N	52	52	52	52	60	60	75,5
H	308	315	357,5	392	447,5	509,5	613
A	120	120	121	121	122	122	209
B	100	100	125	125	160	160	160
M	42,5	42,5	42,5	42,5	50	50	50
E	114	114	114	114	137	137	137
PN	10	10	10	10	10	10	8

Exploded drawing handwheel with position



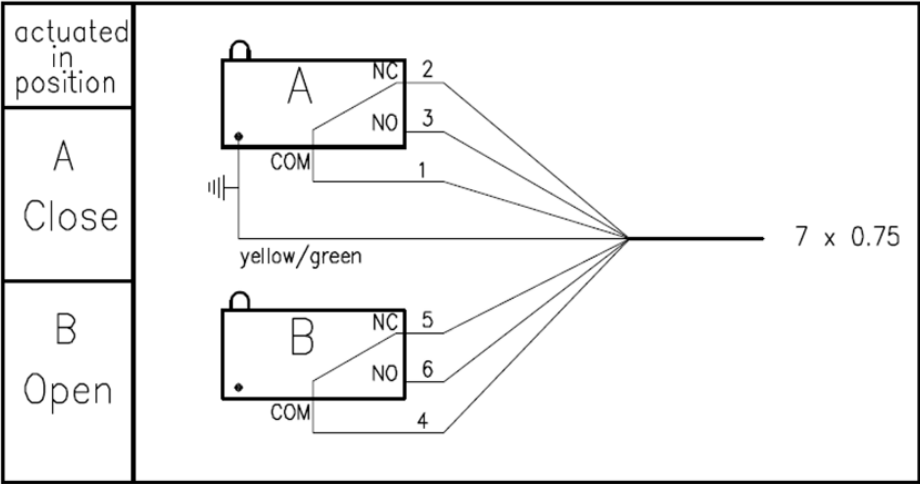
Nr. Description

- 01. Body
- 02. Sleeve
- 03. Disc
- 04. Seal shaft below
- 05. Shaft
- 06. Seal shaft above
- 07. Seal pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. Cap
- 13. Cover plate
- 14. Nuts
- 15. disk
- 16. Screw
- 17. Caps
- 18. inserts
- 19. Pin
- 20. coupling
- 21. manual gearbox with position feedback

Material

- PP-GF
- EPDM/FKM
- PP-H
- FPM
- 1.4301
- FPM
- FPM
- PVDF
- A2
- 1.4305
- A4
- PVC
- PE
- A4
- A4
- A4
- PE
- INOX A4
- INOX A2

Wiring diagram handwheel with position feedback

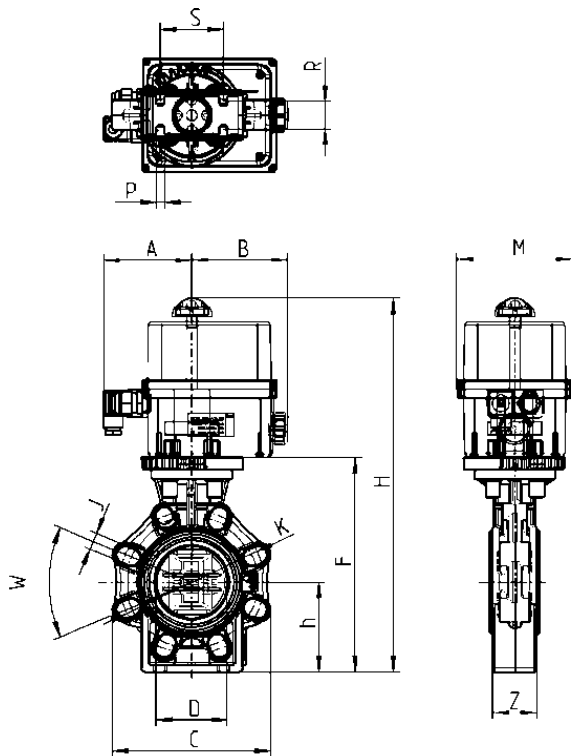


Dimensions electric actuator

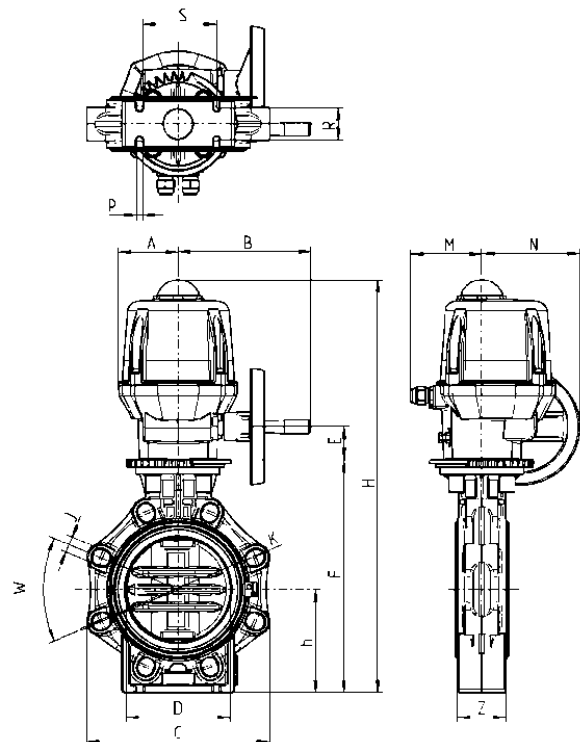
Connector types

Flange (dimensions in mm)

Actuator ER35 / ER60 / ER100



actuator VS150 / VS300 / VT400



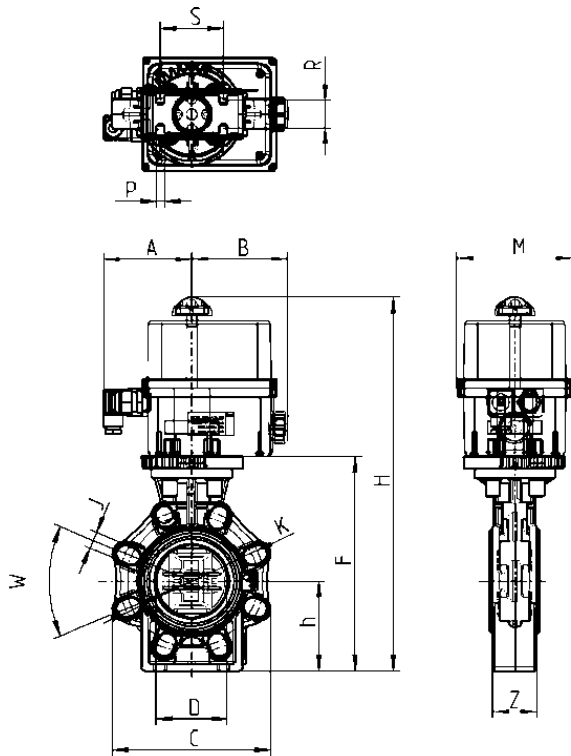
DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 1/2"	3"	4"	5"	6"	8"	10"
actuator	ER35	ER60	ER60	ER100	VS150	VS300	VT400
D	65	80	100	125	150	200	250
C	133	176	206	234,5	261	314	392
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127-145	146-160	175-190,5	209,5-216	234,5-241,3	290-298,5	350-362
H	409	416	446	480,5	591	653	772
h	100	100	115	130	147,5	175	215
A	98	98	98	98	85	85	155
B	107	107	107	107	190	190	274
M	128	128	128	128	94	94	165
N	-	-	-	-	140	140	118
Z	46	49	56	67	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
F	232	239	269	303,5	333	395	460
E	-	-	-	-	48	48	116
PN	10	10	10	10	10	10	8

Dimensions electric actuator

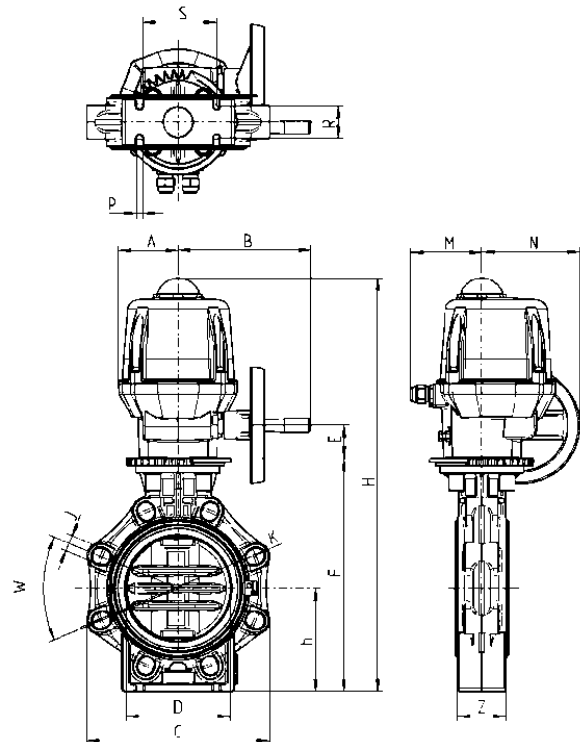
Connector types

Flansch Lug Type (Dimensionen in mm)

Actuator ER35 / ER60 / ER100

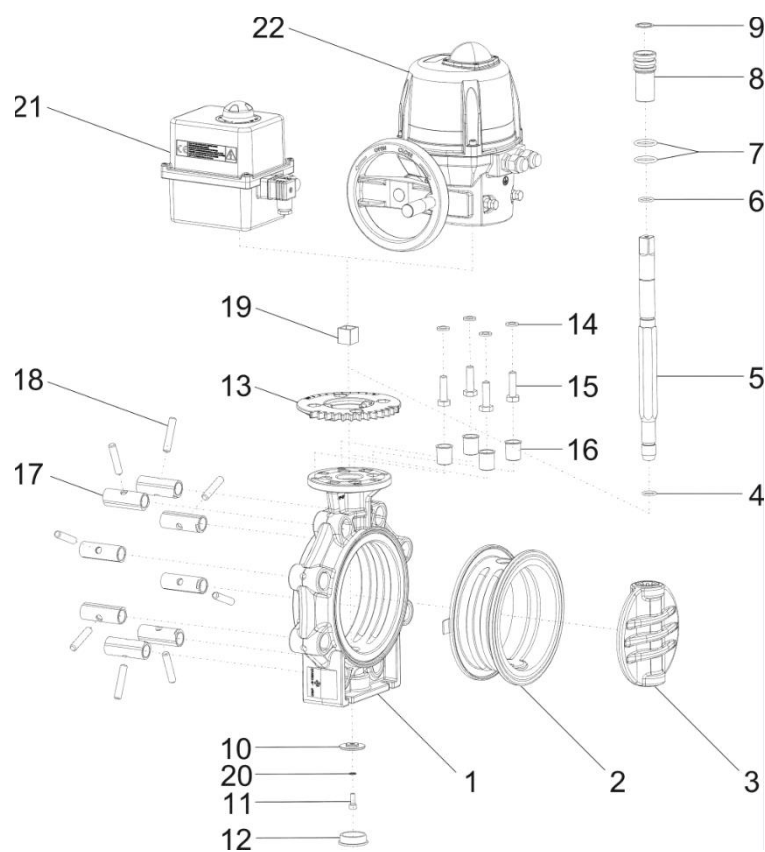


Actuator VS150 / VS300 / VT400



DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 ½"	3"	4"	5"	6"	8"	10"
actuator	ER35	ER60	ER60	ER100	VS150	VS300	VT400
D	65	80	100	125	150	200	250
C	133	176	206	234,5	261	314	392
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127-145	146-160	175-190,5	209,5-216	234,5-241,3	290-298,45	350-362
K-DIN	145	160	180	210	240	295	350
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,45	362
H	409	416	446	480,5	591	653	772
h	100	100	115	130	147,5	175	215
A	98	98	98	98	85	85	155
B	107	107	107	107	190	190	274
M	128	128	128	128	94	94	165
N	-	-	-	-	140	140	118
Z	46	49	56	67	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
F	232	239	269	303,5	333	395	460
E	-	-	-	-	48	48	116
PN	10	10	10	10	10	10	8

Exploded drawing electric actuator



Nr. Description

- 01. Body
- 02. Sleeve
- 03. Disc
- 04. Seal shaft below
- 05. Shaft
- 06. Seal shaft above
- 07. Seal pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. CapPVC
- 13. Cover plate
- 14. Screw
- 15. Nuts
- 16. Caps
- 17. inserts
- 18. Pin
- 19. coupling
- 20. Toothed washer
- 21. ER-actuator
- 22. VS-actuator / VT-actuator

Material

- PP-GF
- EPDM/FKM
- PP-H
- FPM
- 1.4301
- FPM
- FPM
- PVDF
- A2
- 1.4305
- A4
-
- PE
- A4
- A4
- PE
- INOX A4
- INOX A2
-
- A4

Technical data Electric actuator

Electric drive ER

2 limit switches preset
2 Feedback unit
Mechanical stop at 90°
180° or 270° without mechanical stop
Duty cycle 30%
Protection class IP65
Ambient temperature -10°C to 50°C
ISO connector F05-F07
Octagon 22 mm
Weight 2,1 kg

Electric drive VS

Integrated anti-condensation heating
2 limit switches preset
2 Feedback unit
Mechanical stop at 90°
180° or 270° without mechanical stop
Duty cycle 50%
Protection class IP67
Ambient temperature -20°C to 70°C
ISO connector F07-F10
Octagon 22 mm
Weight 5,6 kg

Electric drive VT

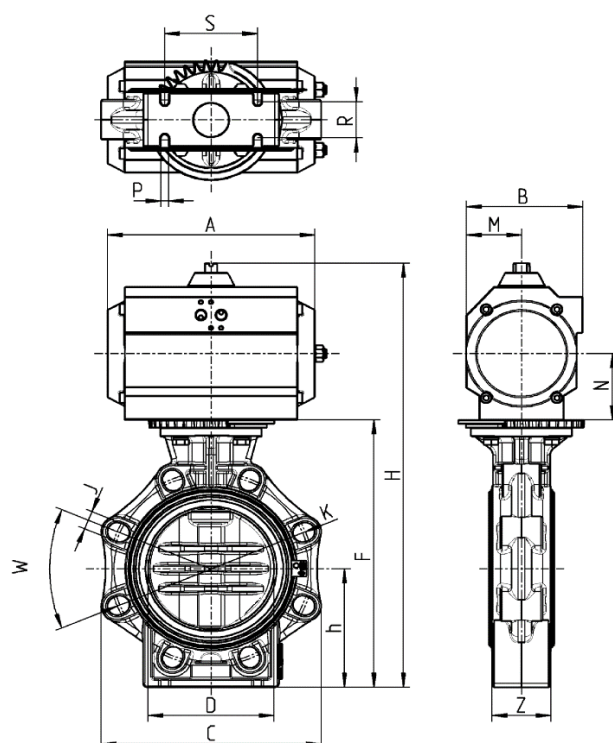
Integrated anti-condensation heating
4 limit switches preset
2 Feedback unit
Mechanical stop at 90°
180° or 270° without mechanical stop
Duty cycle 50%
Protection class IP68
Ambient temperature -20°C to 70°C
ISO connector F01-F12
Octagon 36 mm
Weight 25 kg

Type	ER35	ER60	ER100	VS150	VS300	VT+400
Torque	35Nm	60Nm	100Nm	150Nm	300Nm	400NM
Tensions		24V AC/DC, 90-240V AC			24V AC/DC, 100-240V AC	
Operating time	10s	15s	24s	30s	50s	35S
Power	15W	45W	45W	45W	85W	300w

Dimensions pneumatic actuator

Connector types

Flange (dimensions in mm)



DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 ½"	3"	4"	5"	6"	8"	10"
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127 - 145	146 - 160	175 - 190,5	209,5 - 216	234,5 - 241,5	290 - 298,5	350-362
D	65	80	100	125	150	200	250
C	133	176	206	234,5	261	314	392
Z	46	49	56	64	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
h	100	100	115	130	147,5	175	215
F	232	239	269	303,5	333	395	460
PN	10	10	10	10	10	10	8
drive	MT-25 SR	MT-30 SR	MT-35 SR	MT-40 SR	MT-45 SR	MT-50 SR	MT-60SR
H	339	368	401	488,5	520,5	576	747
A	248	241	261	305	367	380	467
B	96	114	131	131	145	181	232
N	-	-	-	-	-	-	-
M	42	52	65	65	72	90	181
drive	MT-17 DA	MT-20 DA	MT-25 DA	MT-30 DA	MT-35 DA	MT-40 DA	MT-50 DA
H	344	368	325	354	390	477,5	677
A	207	186	248	241	261	305	380
B	81	96	96	114	131	131	181
N	-	-	-	-	-	-	-
M	34	42	42	52	65	65	90

*DA ... double acting (PO-DA)

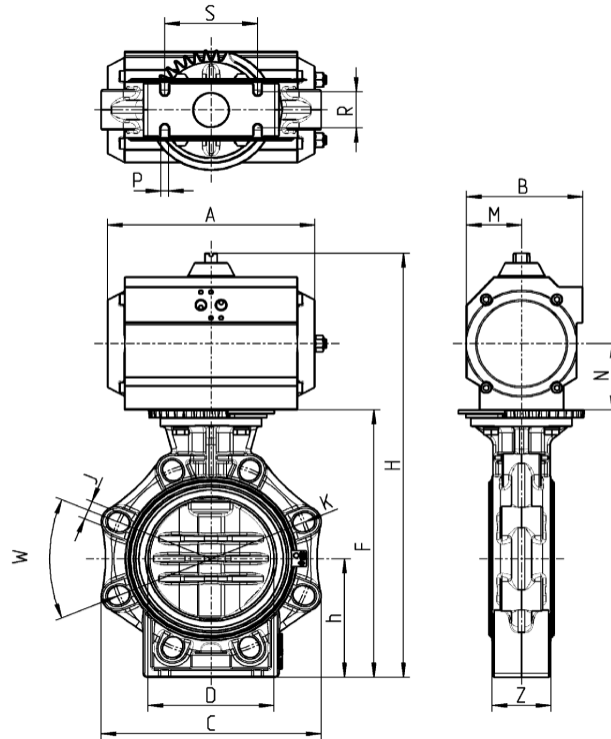
**SR ... spring return (PO-NC / PO-NO)

We recommend using a damper and supporting the actuator accordingly when installing the valve in a vertical position.
For additional information and dimensions for solenoid valve and position feedback see accessories and spare parts

Dimensions pneumatic actuator

Connector types

Flansch (Dimensionen in mm)



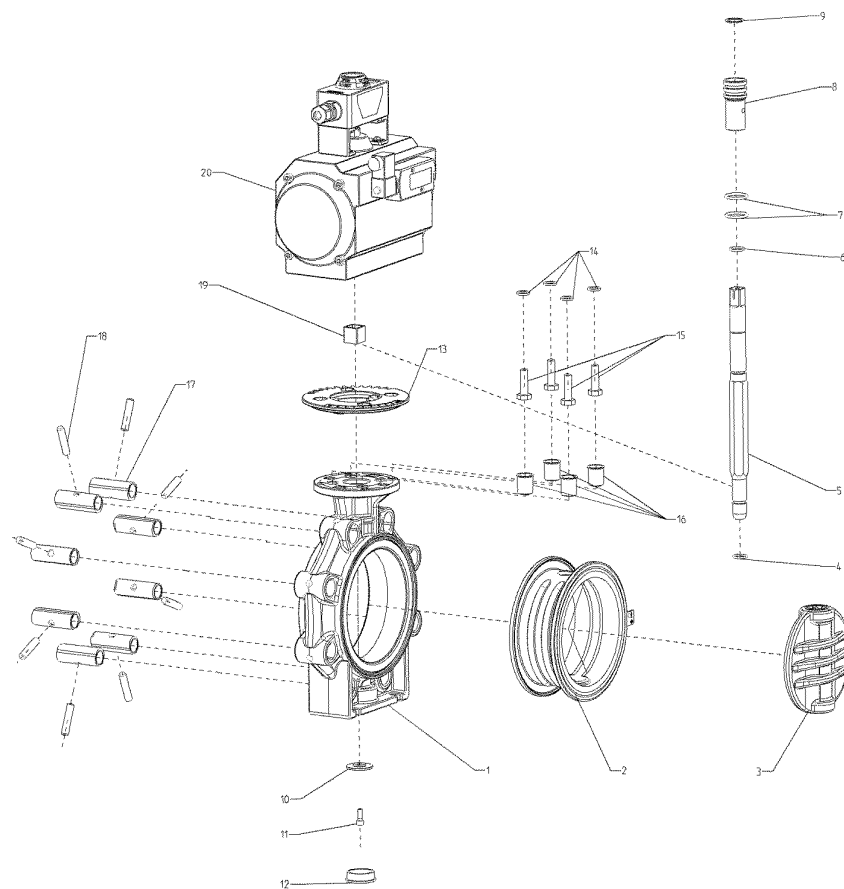
DN	65	80	100	125	150	200	250
d	75	90	110	140	160	225	280
Zoll	2 ½"	3"	4"	5"	6"	8"	10"
W	90°	45°	45°	45°	45°	45°	30°
J	19	19	19	23	23	23	22 / 25,4
K	127 - 145	146 - 160	175 - 190,5	209,5 - 216	234,5 - 241,5	290 - 298,45	350-362
K-DIN	145	160	180	210	240	295	350
K-ANSI	139,7	152,4	190,5	215,9	241,3	298,45	362
D	65	80	100	125	150	200	250
C	133	176	206	234,5	261	314	392
Z	46	49	56	64	70	71	114
S	55	70	85	100	110	145	160
R	25	30	35	45	45	40	40
P	7	9	9	9	9	9	9
h	100	100	115	130	147,5	175	215
F	232	239	269	303,5	333	395	460
PN	10	10	10	10	10	10	8
drive	MT-25 SR	MT-30 SR	MT-35 SR	MT-40 SR	MT-45 SR	MT-50 SR	MT-60SR
H	339	368	401	488,5	520,5	576	747
A	248	241	261	305	367	380	467
B	96	114	131	131	145	181	232
N	-	-	-	-	-	-	-
M	42	52	65	65	72	90	181
drive	MT-17 DA	MT-20 DA	MT-25 DA	MT-30 DA	MT-35 DA	MT-40 DA	MT-50 DA
H	344	368	325	354	390	477,5	677
A	207	186	248	241	261	305	380
B	81	96	96	114	131	131	181
N	-	-	-	-	-	-	-
M	34	42	42	52	65	65	90

*DA ... double acting (PO-DA)

**SR ... spring return (PO-NC / PO-NO)

We recommend using a damper and supporting the actuator accordingly when installing the valve in a vertical position.
For additional information and dimensions for solenoid valve and position feedback see accessories and spare parts
www.praher-plastics.com

Exploded drawing pneumatic actuator



Nr. Description

- 01. Body
- 02. Sleeve
- 03. Disc
- 04. Seal shaft below
- 05. Shaft
- 06. Seal shaft above
- 07. Seal pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. Cap
- 13. Cover plate
- 14. Nuts
- 15. Screw
- 16. Caps
- 17. inserts
- 18. Pins
- 19. Reduction
- 20. pneumatic cylinder

Material

- PP-GF
- EPDM/FKM
- PP-H
- FPM
- 1.4301
- FPM
- FPM
- PVDF
- A2
- 1.4305
- A4
- PVC
- PE
- A4
- A4
- PE
- INOX A4
- INOX A2

Technical data pneumatic

Technical features of pneumatic actuator

Description actuator:

Piston actuation with two opposed pistons, power transmission with tooth rack, seal elastic

Material actuator:

- o Body: Aluminium anodized
- o End caps: Aluminium epoxy powder
- o Screws / nuts: Stainless steel

Ambient temperature: -20°C to +80°C

Control fluid:

Filtered air according to PNEUROP/ISO class 4 – Thread ¼"

Mounting: in every possible direction

Control function / control pressure:

DA: double acting / max. 10 bar

SR: spring return / max. 8 bar

Rotation angle:

90°; adjustment in both directions from -10° to +10° (MT15 and bigger)

Installation:

- o actuator – valve: ISO 5211
- o actuator – solenoid valve: NAMUR (VDI/VDE 3845)
- o actuator – limit switch box: NAMUR (VDI/VDE 3845)

AIR CONSUMPTION (FULL CYCLE)

DA DOUBLE ACTING

Antrieb	MT-17 DA	MT-20 DA	MT-25 DA	MT-30 DA	MT-35 DA	MT-40 DA
N. Lt.	0,55	0,17	1,10	1,40	2,45	3,05

AIR CONSUMPTION (FULL CYCLE)

SR SPRING RETURN

Antrieb	MT-25 SR	MT-30 SR	MT-35 SR	MT-40 SR	MT-45 SR	MT-50 SR
N. Lt.	0,48	0,65	1,2	1,6	1,85	2,90

Accessories / Spare parts

Hand lever

consisting of:

- Hand lever incl. safety handle
- Assembly screw
- Assembly instruction



Hand lever with position feedback

consisting of:

- Hand lever incl. limit switch mechanical, inductive or NAMUR
- Unit plug
- Mounting screw
- Assembly instructions



Handwheel

consisting of:

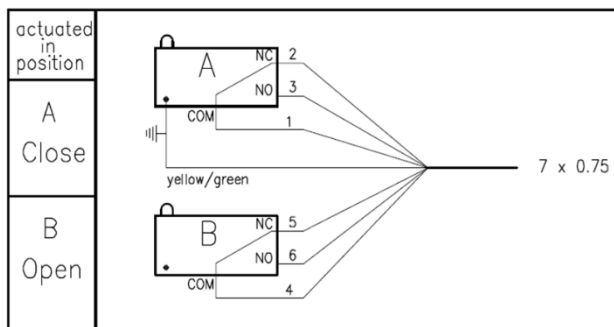
- Hand gear incl. handwheel and insert
- Mounting screws
- Assembly instructions



Handwheel with position feedback

consisting of:

- Handwheel incl. mechanical limit switch
- unit plug
- Mounting screws
- Assembly instructions



Accessories / Spare parts

PLS – Praher Labeling System

Features

- Unique permanent marking
- Reliable, indelible marking by paint pen or laser
- Standard version in the colours yellow, blue, green and red
- Labelling plates are easily exchangeable
- Corrosion resistant
- No effect on the function of the hand lever



Limit switch box for pneumatic rotary actuator

General

- Limit switch box with two mechanical limit switches
- Protection class IP65
- Cable gland M20*1.5

Material

- Housing: polycarbonate black
- Cover: polycarbonate clear
- Mounting bridge and screws: stainless steel
- Seals: EPDM

Voltage

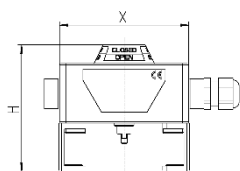
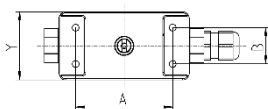
- 1 – 250V

Current

- 16 A (250V AC)
- 2,5 A (24 DC)

Dimensions in mm

A	B	H	X	Y
80	30	110	107	56



Accessories / Spare parts

Magnetic valve

General

- Solenoid valve Namur with combined 5/2- and 3/2-way function and standard coil
- easy switching from 5/2- to 3/2- way function due to innovative reversible seal
- with emergency actuation as standard
- Protection class IP65

Material

- Housing: Aluminium
- Piston: Aluminium
- Seals: NBR
- Screws and springs: Stainless steel

Voltage

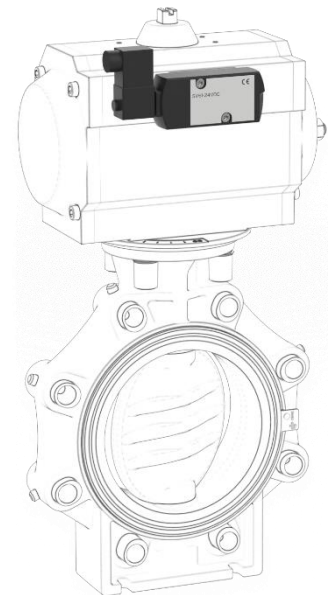
- 24V DC
- 110V AC
- 230V AC

Accessories

- Throttle silencer
- Silencer

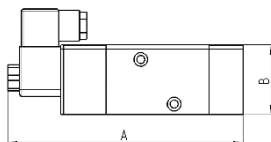
Versions

- Atex protected



Dimensions in mm

A	B	C
168,3	49,8	31,8



Accessories / Spare parts

Adapterset

consisting of:

- Adapter plate
- hexagon head screws
- lock washers



Cover plate

Is required when retrofitting a hand lever with position feedback

consisting of:

- Cover plate



Flange set

consisting of:

- loose flange
- flange bushing
- bolts
- nuts
- washers



Sealing set

consisting of:

- Flap
- O-ring
- collar
- gasket
- supplementary sheet

Versions:

- PVC-U → EPDM or FPM
- PVC-C → EPDM or FPM
- PP → EPDM or FPM
- PVDF → FPM





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