



Electrically actuated butterfly valve with cast iron body

- Heavy duty top bushing absorbs side thrust load
- Through shaft design
- On/off and modulating control options
- Actuator with adjustable limit switches
- Visual position indicator

Type 2672 can be combined with...



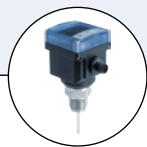
Type 3004

Heavy duty electric actuator, Ex



Type 8644

Electropneumatic control system



Type 8400

Temperature transmitter



Type 8801

ELEMENT on/off control valve

For processing and manufacturing applications.

Permanent and continuous leak tightness delivered by spherical contact between disk and liner.

Electric actuator Type 3003 is available in on/off and modulating control functionality, with a heavy duty industrial model Type 3005 (3004 for hazardous areas).

Valve features:

- Tight sealing with flow in either direction
- The valve body and disc are accurately machined which results in low operating torque, long service life and reliability
- Triple shaft bearings prevent shaft deflection and guarantee optimum guidance even after many years of operational service
- Four flange mounting holes ensure correct valve location
- Can be installed in any desired position.
- Maintenance-free; simple to disassemble

Applications

- Water & wastewater applications
- Food & beverage
- Chemical and petrochemical
- Gas & energy sector
- Universal application

Technical data	
Nominal Diameter	
Wafer	DN 20 - DN 1200 (DN 20 only PN10/16)
Lugged	DN 20 - DN 600 (DN 20 only PN10/16)
	Standard range 50mm - 300mm
Body materials	
Body	Cast iron ASTM A126 CI B
Seal	EPDM
Disk	Stainless steel 316 (cast; CF8M)
Material (Actuator)	
cover	ABS
housing	PA
axis/screws	Stainless steel
gear unit	Steel, PC
Operating pressure	16 Bar (Maximum differential 16 bar)
Vacuum	0.2 bar absolute (pressure and media dependent)
Temperature range	-32 °C to + 90 °C (pressure, media and material dependent)
Ambient temperature	-10 to +55°C
Connection between actuator and ball valve	Flange acc. to ISO 5211
Operating voltage	24 V AC/DC, 100-240 V AC/50-60 Hz (other voltages on request)
Voltage tolerance	DC: +/-20%; AC: +/-10%
Duty rating	At max. torque: 50% of the time
Electrical connection	2 cable glands ISO M20 (cable plug EN175301-803 on request)
Limit switches	4 adjustable (2 for motor and 2 additional for feedback) max. 250 V AC/1.5 A
Protection class	IP65
Flange accommodation	DIN 2501 PN 6/10/16; ANSI B 16.5, Class 150 MSS SP44 Class 150; AWWA C 207 AS 2129 Table D and E; BS 10 Table D and E JIS B 2211-5 K, JIS B 2212-10 K
Installation	Don't mount the actuator upside down

Technical data: valve

Torque

- The torque values specified(MD) are based on liquid and lubricant media
- Powdery (non-lubricant) media Md x 1,3
- Dry gases/high viscous media Md x 1,2
- The values specified are based on the initial breakaway torque

Dynamic torque specification available upon request.

DN [mm]	Size [in]	Operating pressure [bar]			
		3	6	10	16
20	¾	–	–	5	–
25	1	–	–	5	–
32	1¼	–	–	5	–
40	1½	–	–	6	8
50	2	5	7	7	9
65	2½	7	9	15	18
80	3	8	10	18	24
100	4	9	18	28	37
125	5	15	22	45	59
150	6	36	45	110	125
200	8	59	76	140	200
250	10	150	180	200	240
300	12	200	240	280	360
350	14	350	540	610	700
400	16	420	620	750	850
450	18	720	746	860	1,500
500	20	900	1,100	2,255	3,690
600	24	1,050	2,100	3,000	5,830
700	28	1,560	2,240	3,450	8,100
800	32	2,070	3,800	6,600	11,200
900	36	2,700	4,900	7,100	14,500
1,000	40	4,600	6,780	11,500	24,400
1,200	48	7,800	12,000	21,000	44,000

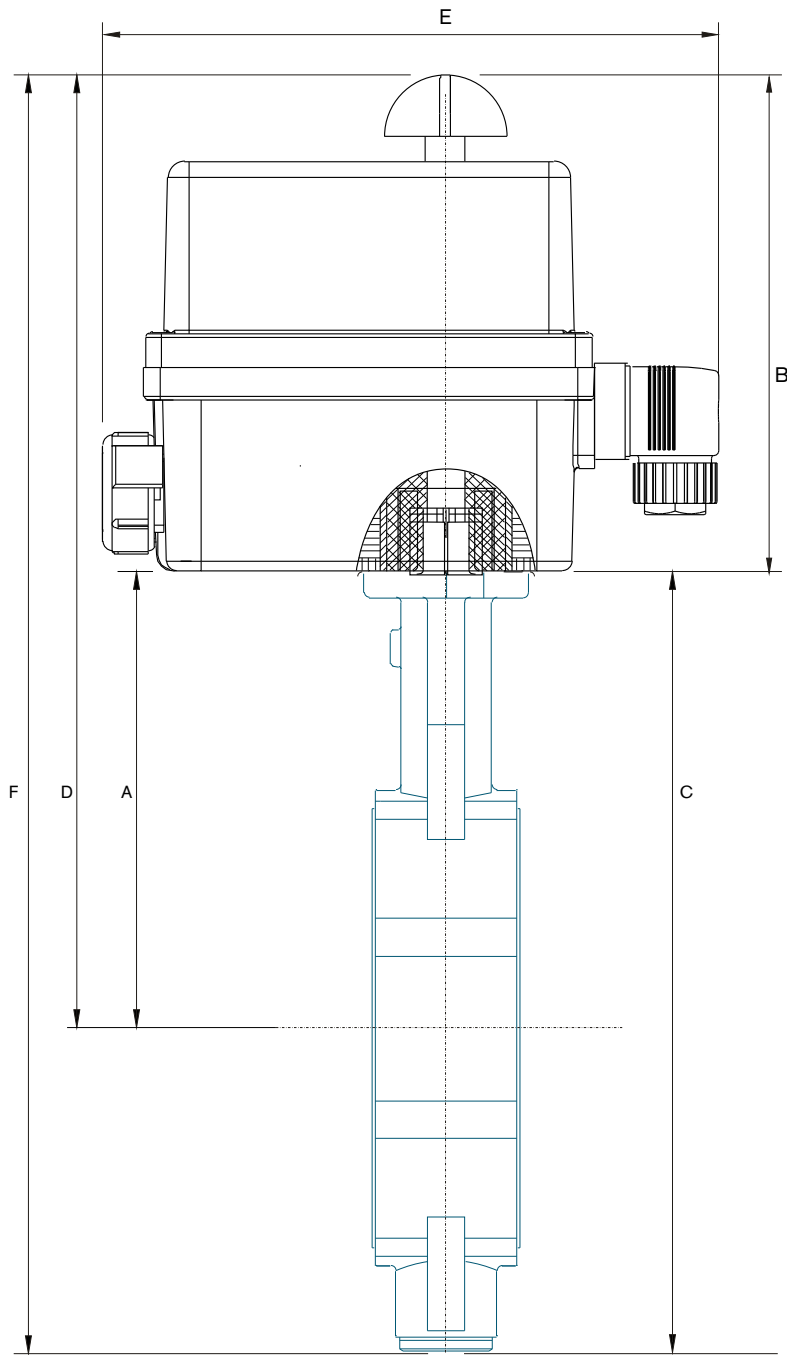
Technical data: valve

- The Kv-value (m³per hour) is the flow of water at a temperature of 5°C to 30°C (41 °F to 86 °F) at 1 bar.
- The Kv-values specified are based on tests carried out by the Delfter Hydraulics Laboratories, the Netherlands.
- Permissible velocity of flow Vmax 4,5 m/s for liquids and Vmax 70 m/s for gases.
- The throttle function is linear at an angle 30°to 70°.
- Avoid cavitation!

For further values, please contact our engineers.

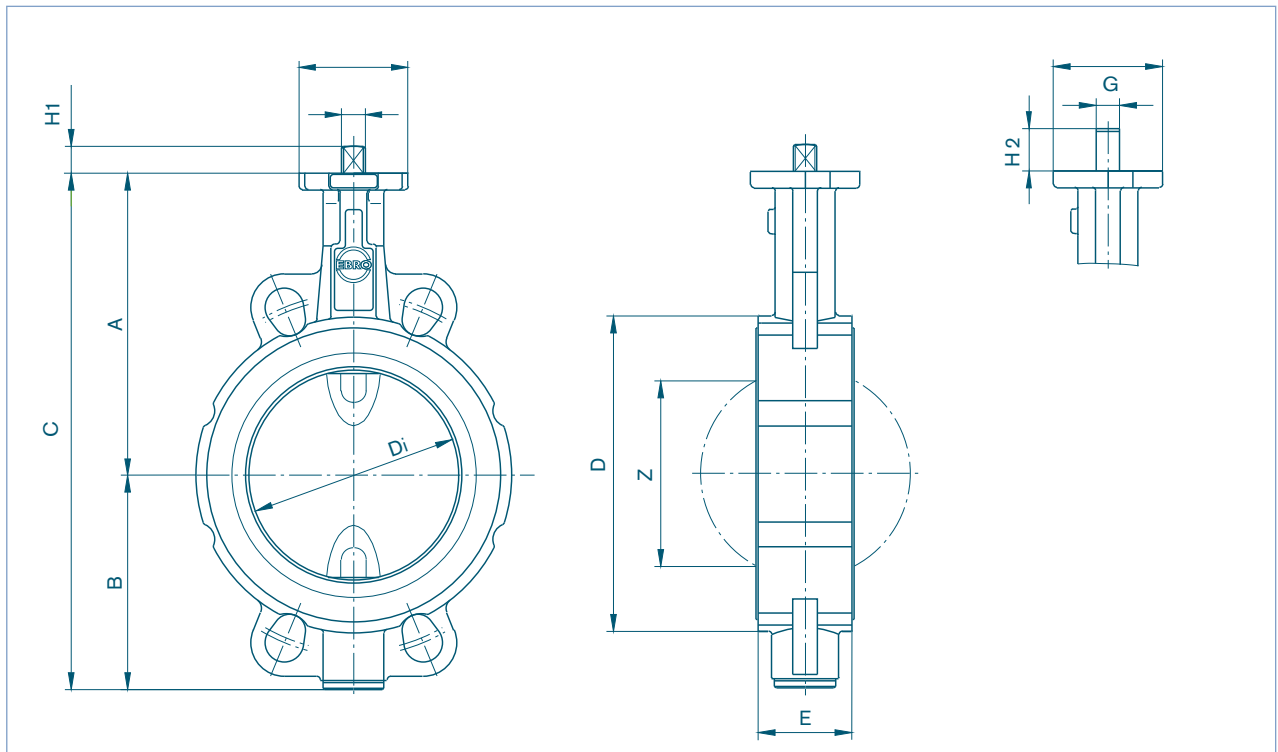
DN [mm]	Size [in]	Opening angle							
		20°	30°	40°	50°	60°	70°	80°	90°
20	¾	–	1	4	8	11	19	27	32
25	1	–	1,5	5	10	15	24	32	36
32	1¼	–	1,5	5	11	16	27	35	40
40	1½	–	2,2	8	15	21	33	43	50
50	2	1,2	8	13	22	38	50	65	85
65	2½	2	9	22	42	77	115	170	215
80	3	8	24	50	95	150	240	330	420
100	4	13	28	65	130	180	340	550	800
125	5	26	65	130	230	350	530	870	1,010
150	6	35	90	200	360	640	900	1,350	2,100
200	8	43	180	350	580	1,000	1,600	3,000	4,000
250	10	125	360	660	1,100	1,800	3,100	5,300	6,400
300	12	200	550	1,000	1,600	2,600	5,000	7,500	8,500
350	14	350	780	1,400	2,400	4,000	8,000	10,800	11,500
400	16	490	1,050	1,800	3,100	5,500	11,000	12,000	14,500
450	18	510	1,080	2,040	3,350	6,100	11,500	14,600	20,500
500	20	520	1,100	2,200	3,500	6,200	12,000	15,100	21,000
600	24	750	1,400	2,800	5,100	8,800	14,000	22,000	29,300
700	28	770	1,755	3,260	5,980	10,600	17,100	25,300	36,000
800	32	1,200	2,260	4,550	8,230	12,900	20,300	29,300	44,600
900	36	1,540	2,280	6,030	10,500	17,600	29,200	42,150	59,000
1,000	40	2,200	3,970	8,300	14,480	24,000	37,100	60,300	81,500
1,200	48	5,050	7,900	13,800	19,700	33,500	53,300	73,050	102,650

Dimensions [mm], wafer type valve with Type 3003 actuator



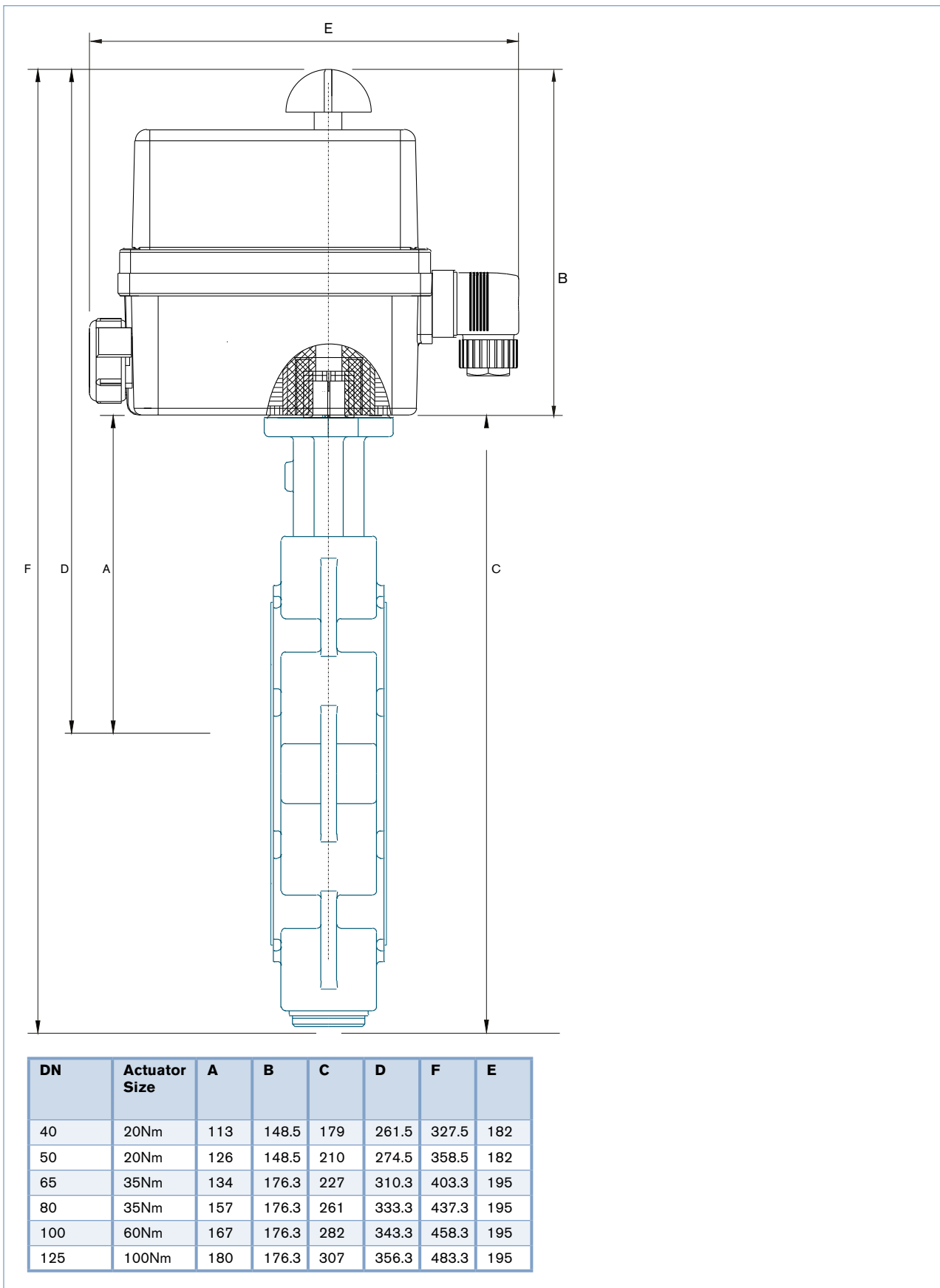
DN	Actuator Size	A	B	C	D	F	E
40	20Nm	113	148.5	179	261.5	327.5	182
50	20Nm	126	148.5	210	274.5	358.5	182
65	35Nm	134	176.3	227	310.3	403.3	195
80	35Nm	157	176.3	261	333.3	437.3	195
100	60Nm	167	176.3	282	343.3	458.3	195
125	100Nm	180	176.3	307	356.3	483.3	195

Dimensions [mm], wafer type valve with Type 3003 actuator

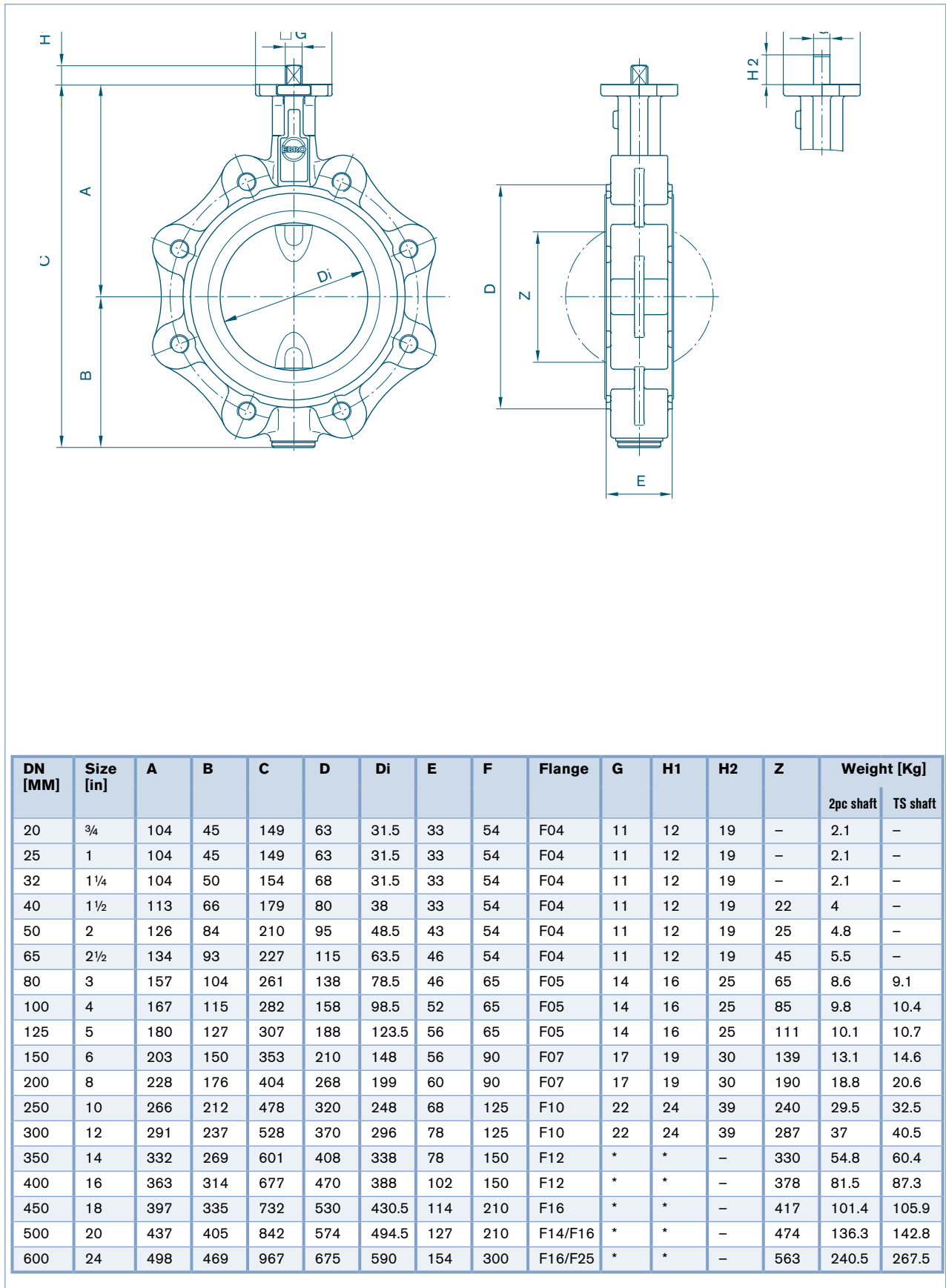


DN [MM]	Size [in]	A	B	C	D	Di	E	F	Flange	G	H1	H2	Z	Weight [Kg]	
														2pc shaft	TS shaft
20	3/4	104	45	149	59	31.5	33	54	F04	11	12	19	-	1.3	-
25	1	104	45	149	63	31.5	33	54	F04	11	12	19	-	1.3	-
32	1 1/4	104	50	154	68	31.5	33	54	F04	11	12	19	-	1.4	-
40	1 1/2	113	66	179	80	38	33	54	F04	11	12	19	22	1.8	-
50	2	126	84	210	95	48.5	43	54	F04	11	12	19	25	2.2	-
65	2 1/2	134	93	227	115	63.5	46	54	F04	11	12	19	45	2.9	-
80	3	157	104	261	138	78.5	46	65	F05	14	16	25	65	4	4.5
100	4	167	115	282	158	98.5	52	65	F05	14	16	25	85	5.2	5.8
125	5	180	127	307	188	123.5	56	65	F05	14	16	25	111	6.9	7.5
150	6	203	150	353	212	148	56	90	F07	17	19	30	139	9.5	11
200	8	228	176	404	268	199	60	90	F07	17	19	30	190	13.2	15
250	10	266	212	478	320	248	68	125	F10	22	24	39	240	22.5	25.5
300	12	291	237	528	370	296	78	125	F10	22	24	39	287	31.5	35
350	14	332	269	601	408	338	78	150	F12	*	*	-	330	39.4	45
400	16	363	314	677	470	388	102	150	F12	*	*	-	378	58.7	64.5
450	18	397	335	732	530	430.5	114	210	F16	*	*	-	417	91	95.5
500	20	437	405	842	574	494.5	127	210	F14/ F16	*	*	-	474	107	113.5
600	24	498	469	967	675	590	154	300	F16/ F25	*	*	-	563	171	198
700	28	581	507	1088	772	680	165	300	F16/ F25	*	*	-	660	251	304
800	32	630	556	1186	874	780	190	300	F25	*	*	-	757	355	375
900	36	696	617	1313	973	880	203	300	F25	*	*	-	860	456	498
1000	40	771	675	1446	1070	980	216	350	F30	*	*	-	956	570	718
1200	48	880	810	1690	1510	1170	254	350	F30	*	*	-	1154	-	1156

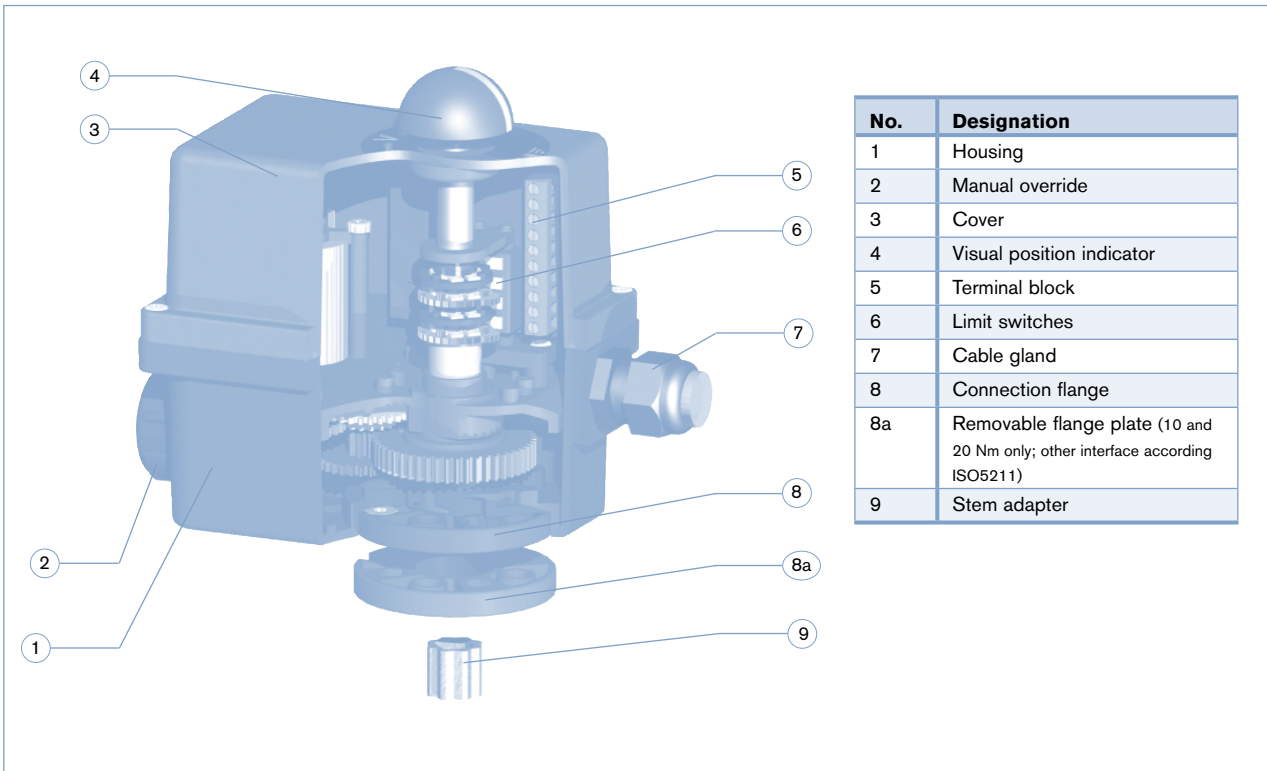
Dimensions [mm], lugged type valve with Type 3003 actuator



Dimensions [mm], lugged type valve with Type 3003 actuator

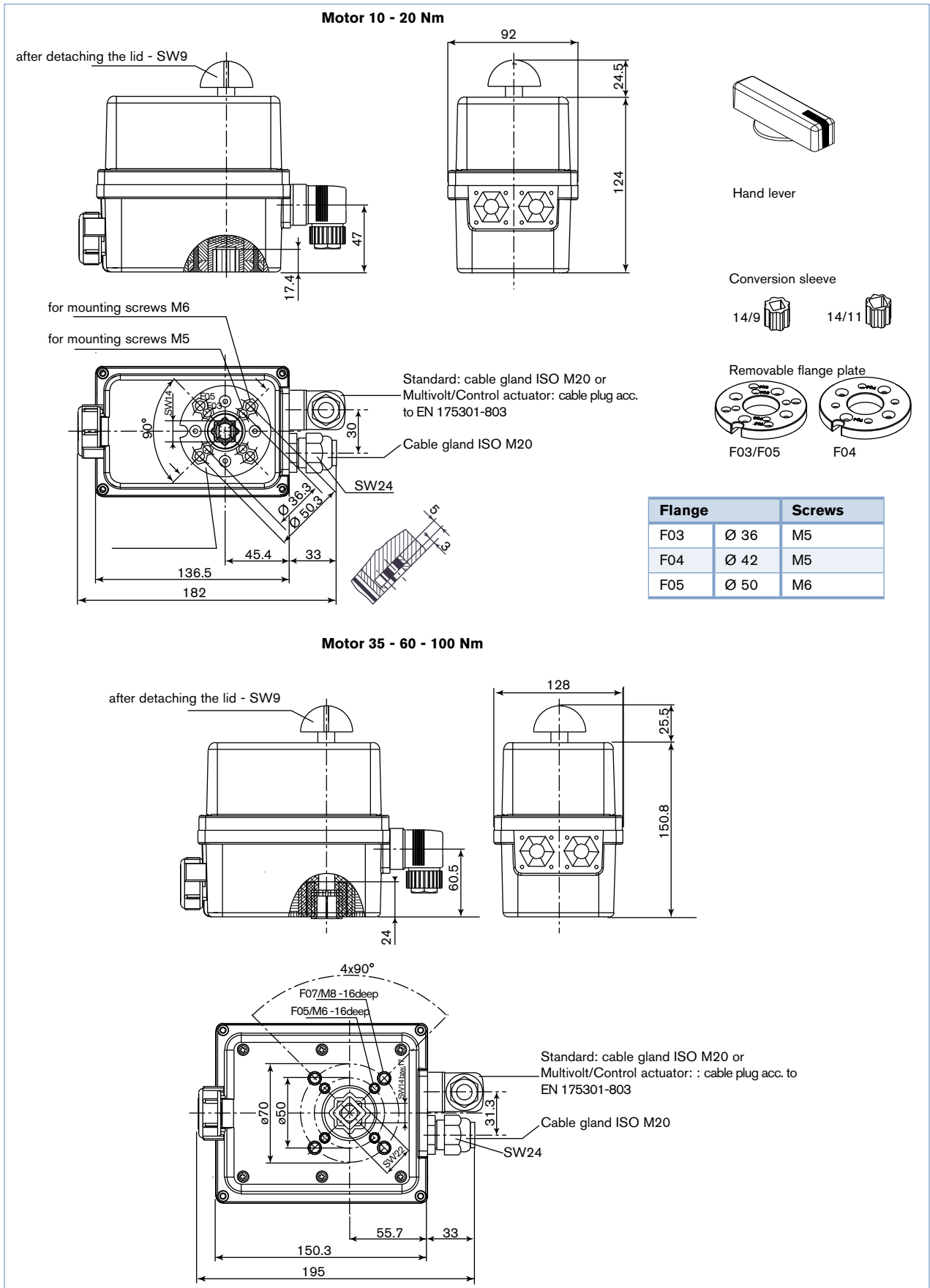


Actuator Type 3003: exploded view



No.	Designation
1	Housing
2	Manual override
3	Cover
4	Visual position indicator
5	Terminal block
6	Limit switches
7	Cable gland
8	Connection flange
8a	Removable flange plate (10 and 20 Nm only; other interface according to ISO5211)
9	Stem adapter

Actuator Type 3003: dimensions

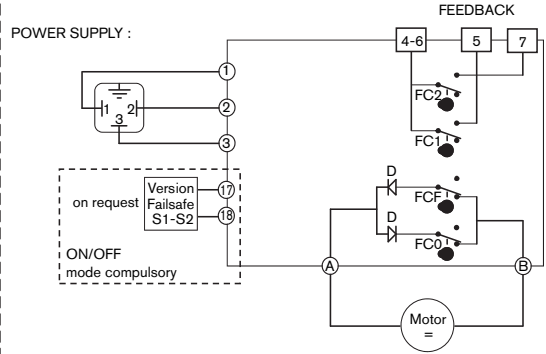
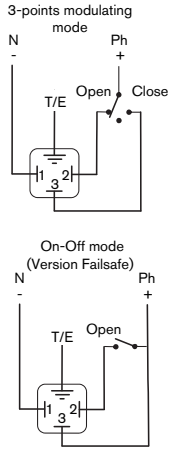


Actuator Type 3003: electrical connection

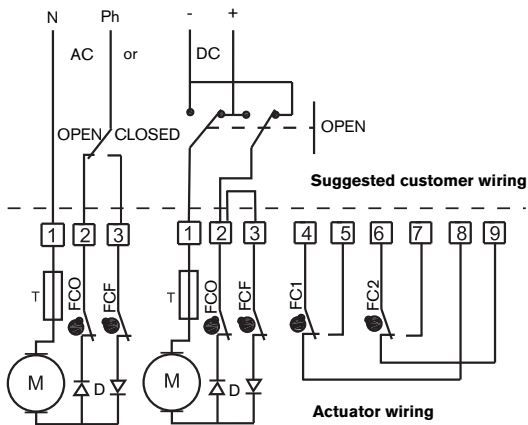
Switch drawings

100 - 240 V AC/50-60 Hz multivolt version

SUGGESTED CUSTOMER WIRING



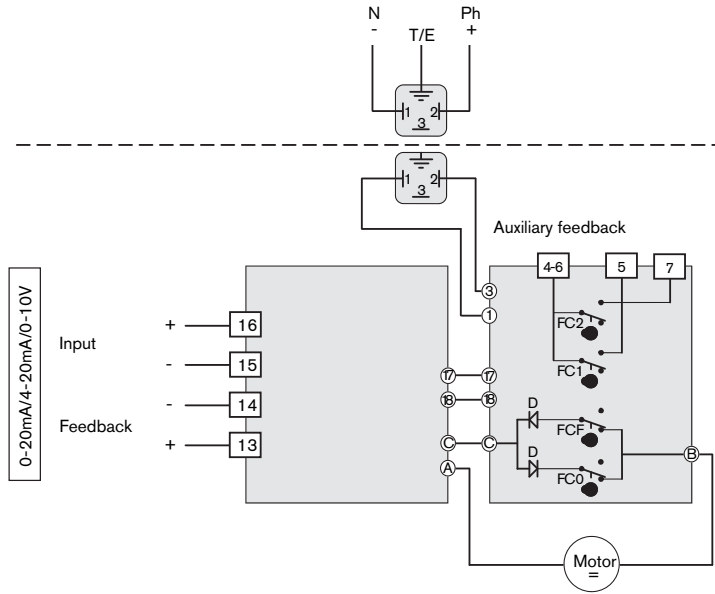
24 V AC/DC standard version



Actuator Type 3003: electrical connection, continued

100 - 240 V AC and 24 V AC/DC

Version with analog input signal (on request)



Symbol	Description
FCO	Open limit switch
FCF	Close limit switch
FC1	Auxiliary 1 limit switch
FC2	Auxiliary 1 limit switch
M	Motor
T	Thermal fuse

Symbol	Description
D	Diode
C	Capacitor
P	Potentiometer
H	Heating resistor
J7	Heating resistor connection
J8	Potentiometer connector

Alternative Electric Actuator, Types 3005 & 3004: Heavy Duty & High Torque





Bürkert's Type 3005 electrical actuator is for heavy duty industrial applications where a higher torque rating or a more rugged IP67 housing is required. The Type 3004 delivers the same heavy duty function, with ATEX and IECEx approvals. The Types 3005 and 3004 come in models with torques 25Nm, 45Nm, 75Nm, 100Nm, 150Nm, 300Nm (plus 600Nm & 1,000 Nm on request).

Similarly to the Type 3003 electrical actuators featured in this datasheet, these heavy duty models offer on/off and modulating control functions, prominent visual position indication and manual override standard. Note that models 25Nm – 75Nm have a gear disengage manual override, while larger torque models come with a hand wheel manual override.



Contact Bürkert on 1300 888 868 (Aust) or 0800 BURKERT (NZ) for more information on Type 3005 and 3004 heavy duty electrical actuators for quarter turn valves.

Ordering chart for valves (other versions on request)

Electrically actuated butterfly valve with on/off function

	Function	Orifice	Kv value [m ³ /h]	Pressure range	Power supply	Body material	Disk material	Seal material	ID no.
	Lugged NO/NC	50	85	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33137
		50	85	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33107
		65	215	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33141
		65	215	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33143
		80	420	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33146
		80	420	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33148
		100	800	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33151
		100	800	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33153
	Wafer NO/NC	50	85	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33109
		50	85	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33111
		65	215	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33114
		65	215	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33006
		80	420	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33118
		80	420	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU29758
100		800	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33108	
100		800	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33300	

Electrically actuated butterfly valve with modulating control function

	Function	Orifice	Kv value [m ³ /h]	Pressure range	Power supply	Body material	Disk material	Seal material	ID no.
	Lugged Modulating, 4 .. 20mA	50	85	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33139
		50	85	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33140
		65	215	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33144
		65	215	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33145
		80	420	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33149
		80	420	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33150
		100	800	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33154
		100	800	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33155
	Wafer Modulating, 4 .. 20mA	50	85	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33112
		50	85	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33113
		65	215	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33116
		65	215	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33117
		80	420	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33121
		80	420	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33122
100		800	16	24V DC	Cast Iron	Stainless Steel	EPDM	AU33125	
100		800	16	240V AC	Cast Iron	Stainless Steel	EPDM	AU33126	

In case of special application conditions, please consult for advice.

We reserve the right to make technical changes without notice.
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