

econ[®] High Performance Double Eccentric Butterfly Valves



econ® High Performance Double Eccentric Butterfly Valves

Econ®'s double offset design and patented floating seat construction provides a reliable 100% bi-directional disc sealing. This unique construction meets the high demands of applications in which High Performance butterfly valves are being used. Econ® High Performance butterfly valves can be used for a maximum pressure up to 51 bar or a maximum temperature of 500°C. Econ® High Performance butterfly valves can therefore very well be used for applications, where rubber lined butterfly valves no longer can be used, due to their limited pressure and temperature range.

Applicable certifications

- PED Module H according to 97/23/EG
- Fire safe approved acc. API 607 6th edition and ISO 10497
- SIL 3 according to IEC 61508-1
- ATEX according to ATEX 94/9/CE Group II Category 2GD
- EAC (TR CU 010 and 032)
- Leakage rate according to API 598 or EN12266-1 class A
- Leakage rate for metal seated valves according to ANSI FCI 70-2-2003 table 1 class V
- Fugitive emission according to ISO 15848-1 (optional)

Models

- Wafer type
- Lug type
- Double flange

Range

- **ANSI 150** | 2" – 48"
- **DIN PN16/25** | DN50 – 1200

Optional

- **ANSI 300** | 2.1/2" – 24"
- **DIN PN40** | DN65 – 600

Standard seat material

- PTFE: -29°C to 210°C
- R-PTFE: -29°C to 250°C
- PTFE/SS316 (fire safe): -29°C to 210°C
- R-PTFE/SS316 (fire safe): -29°C to 250°C
- Inconel B637: -29°C to 500°C

Standard body material

- A216 WCB / 1.0619
- A351 CF8M / 1.4408



Econ® series 91
with lever



Econ® series 93
with gearbox



Econ® series 94
with gearbox



Features

One piece shaft, anti-blowout design and equipped with an anti-static device.

Direct Mount Flange according to ISO 5211 and DIN 3337 for easy and fast assembly of actuators.

The adjustable gland packing provides a constant compression for a reliable stem sealing. Optionally a stem seal can be supplied, which complies with the ISO 15848-1 fugitive emission standard.

Anti-static design with earth connection.

The shaft is supported by top and bottom long life bearings. The two bearings provide excellent resistance to corrosion and distortion as a result of high temperatures and mechanical forces.

Available seat constructions:

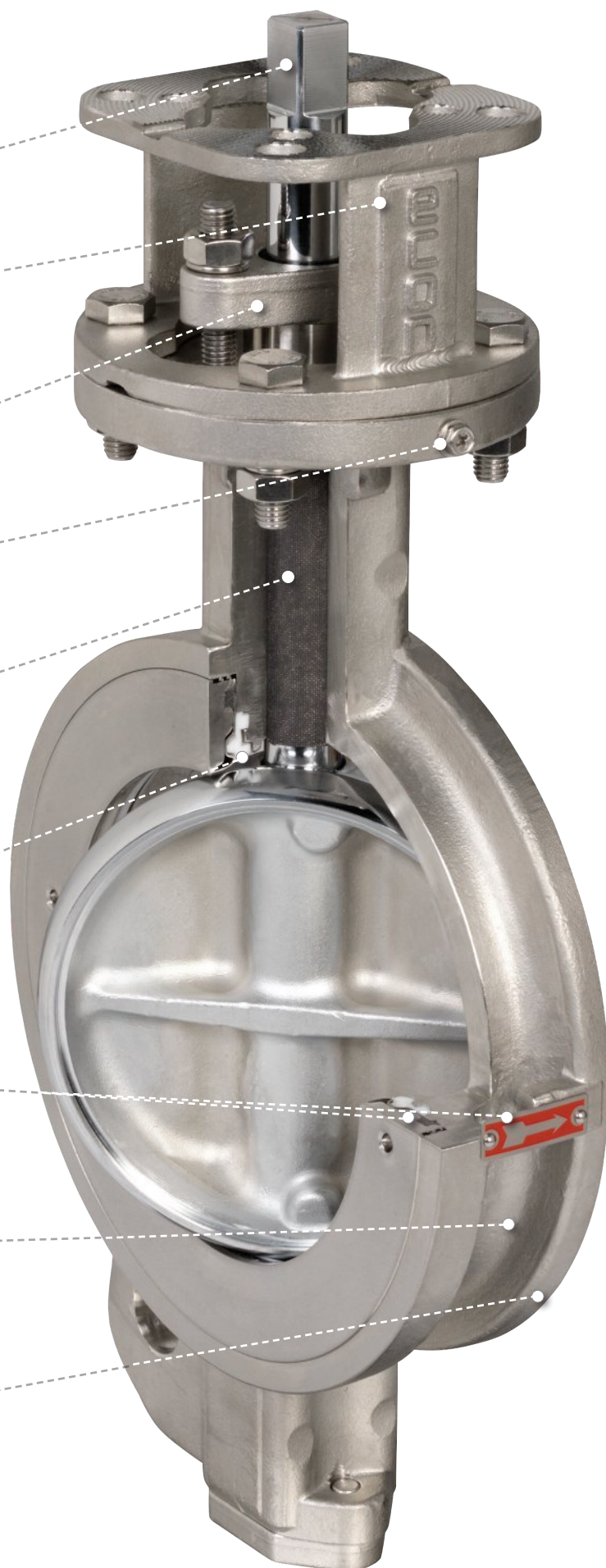
- PTFE or R-PTFE soft seated
- PTFE/SS316 or R-PTFE/SS316 fire safe soft seated
- Inconel B637 metal seated

Econ® High Performance butterfly valves have a preferred flow direction for an optimal performance and long life span. Due to the patented floatable seat construction the valve still is 100% bi-directional for the full pressure rating of the valve.

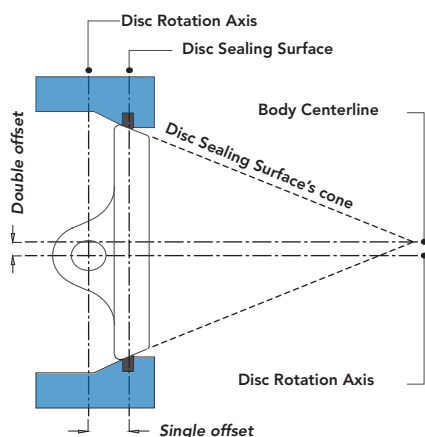
High quality body and disc, realized by the "lost wax" molding process.

Face to face dimensions according to:

- API 609 Category A (wafer and lug type) and B (double flange type)
- EN 558 series 20 (wafer and lug type) and series 13 and 14 (double flange type)

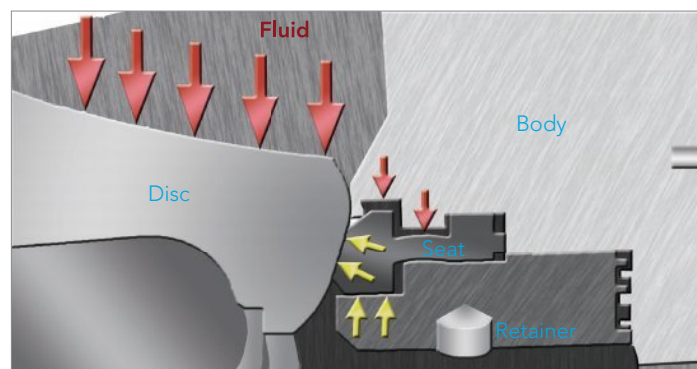
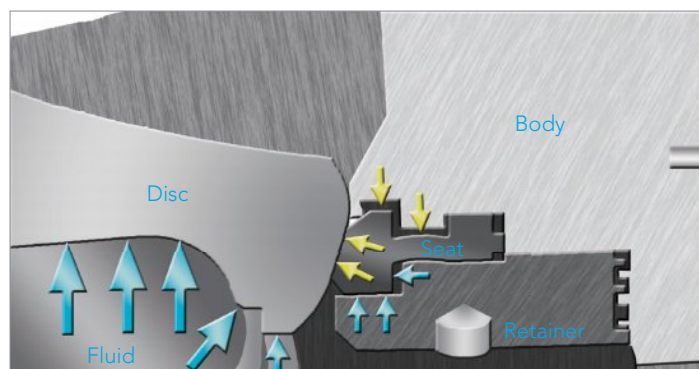


Double eccentric design



High Performance valves, also known as double eccentric butterfly valves have a stem which is mounted slightly out of the pipeline center and also behind the disc seat. This design leads to minimal wear and low operating torques.

Seat construction



The special patented floatable retaining ring and the special designed seat ring ensures a 100% sealing construction, low torques, an increase of the life span and makes the valve 100% bi-directional for the full pressure rating of the valve.

econ[®] design

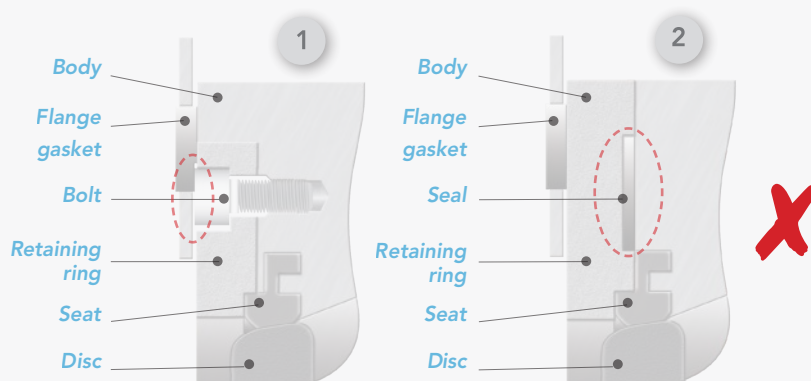
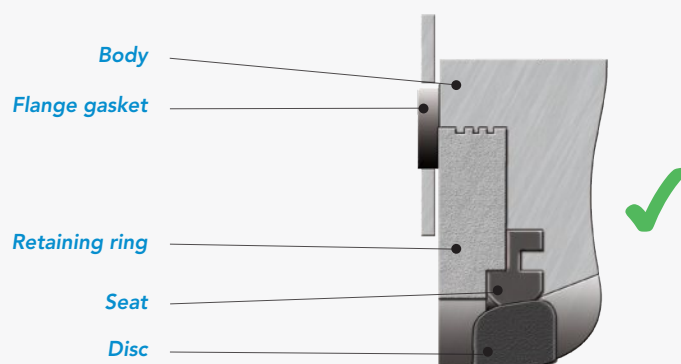
The patented retaining ring has a special twin threaded design which ensures the most optimal clamping force of the seat on the disc.

Unlike conventional designs, the outside surface of the retaining ring does not contain unevenness or interruptions, which increases the reliability of the flange gasket.

Conventional designs

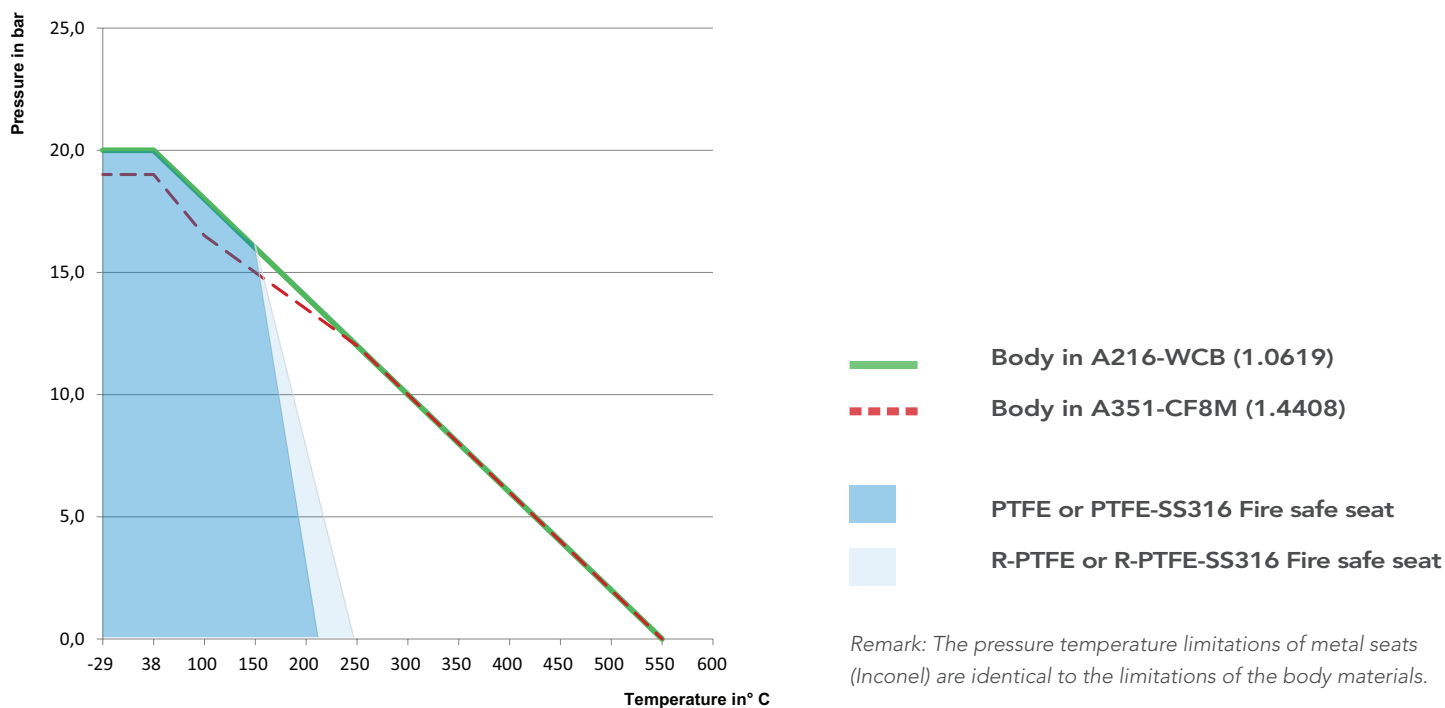
1 Conventional double eccentric butterfly valves have fixed socket bolts to mount the retaining ring to the valve. This reduces the sealing surface between the valve and pipe flange, which increases the risk of leakage.

2 Another frequently used design requires an additional seal in order to prevent leakage to the outside. Additional seals however increase the risk of leakage.

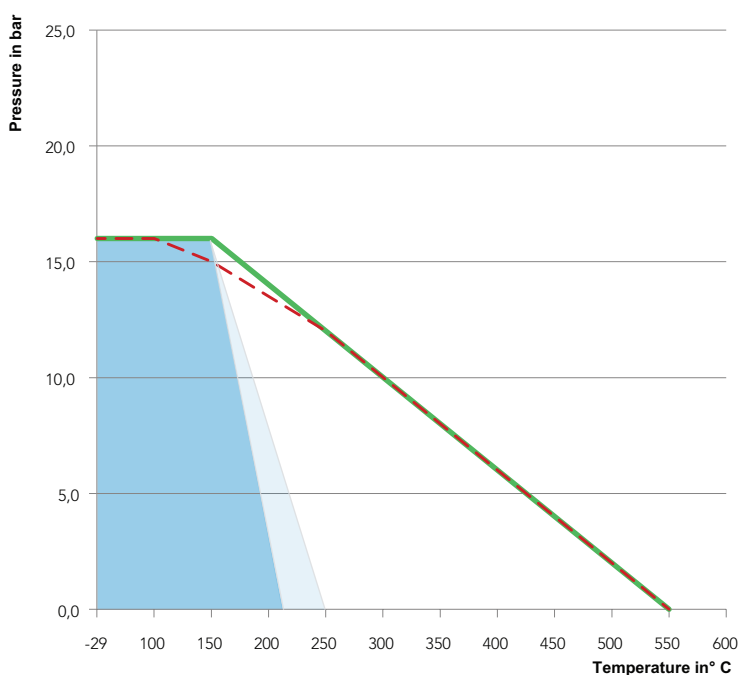


Pressure-Temperature charts

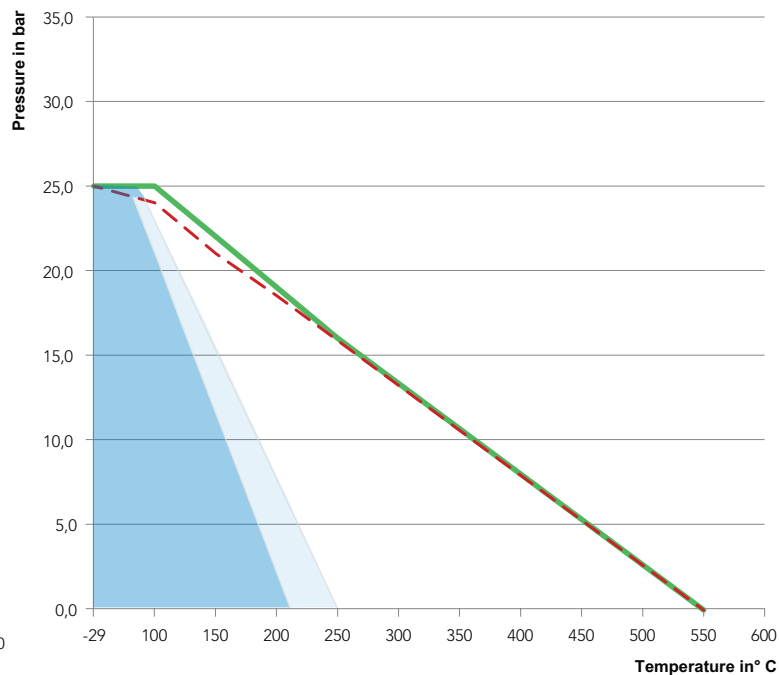
ANSI Class 150 version



DIN PN16 version



DIN PN25 version



Parts and materials Serie 91, 93 and 94 with soft seat

Pos.	Part	Material		Pos.	Part	Material	
		Carbon steel valve	Stainless steel valve			Carbon steel valve	Stainless steel valve
1	Body	A216-WCB (1.0619)	A351-CF8M (1.4408)	9	Thrust ring	A240-F316 (1.4404)	A240-F316 (1.4404)
2	Disc	A351-CF8M (1.4408)	A351-CF8M (1.4408)	10	Seal	PTFE	PTFE
3	Retainer ring	A351-CF8M (1.4408)	A351-CF8M (1.4408)	11	Bottom cover	A216-WCB (1.0619)	A351-CF8M (1.4408)
4	Seat	PTFE	PTFE	12	Gland packing	PTFE	PTFE
		R-PTFE-GF15% ²	PTFE-GF15% ²	13	Gland	A351-CF8M (1.4408)	A351-CF8M (1.4408)
		R-PTFE-CF15% ²	PTFE-CF15% ²	14	Bracket	A351-CF8 (1.4308)	A351-CF8 (1.4308)
5+6	Bushing	PTFE+SS316	PTFE+SS316	15	Stud bolt	A193-B8 (1.4301)	A193-B8 (1.4301)
7	Shaft	A182-F316 (1.4401)	A182-F316 (1.4401)	16	Nut	A194-8 (1.4571)	A194-8 (1.4571)
8	Pin	A182-F316 (1.4401)	A182-F316 (1.4401)	17	Bolt	A193-B8 (1.4301)	A193-B8 (1.4301)

Parts and materials Serie 91, 93 and 94 with fire safe soft seat

Pos.	Part	Material		Pos.	Part	Material	
		Carbon steel valve	Stainless steel valve			Carbon steel valve	Stainless steel valve
1	Body	A216-WCB (1.0619)	A351-CF8M (1.4408)	10	Seal	Graphite	Graphite
2	Disc	A351-CF8M (1.4408) ¹	A351-CF8M (1.4408) ¹	11	Bottom cover	A216-WCB (1.0619)	A351-CF8M (1.4408)
3	Retainer ring	A351-CF8M (1.4408)	A351-CF8M (1.4408)	12	Gland packing	Graphite	Graphite
4	Seat	PTFE	PTFE	13	Gland	A351-CF8M (1.4408)	A351-CF8M (1.4408)
		R-PTFE-GF15% ²	PTFE-GF15% ²	14	Bracket	A351-CF8 (1.4308)	A351-CF8 (1.4308)
		R-PTFE-CF15% ²	PTFE-CF15% ²	15	Stud bolt	A193-B8 (1.4301)	A193-B8 (1.4301)
5+6	Bushing	PTFE+SS316	PTFE+SS316	16	Nut	A194-8 (1.4571)	A194-8 (1.4571)
7	Shaft	A564-630 (1.4542) ¹	A564-630 (1.4542) ¹	17	Bolt	A193-B8 (1.4301)	A193-B8 (1.4301)
8	Pin	A182-F316 (1.4401)	A182-F316 (1.4401)	18	Gasket	Graphite	Graphite
9	Thrust ring	A240-F316 (1.4404)	A240-F316 (1.4404)	19	Fire safe seat	A240-F316 (1.4401)	A240-F316 (1.4401)

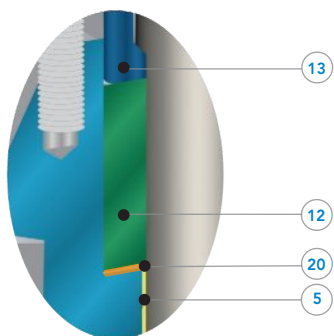
Parts and materials Serie 91, 93 and 94 with metal seat

Pos.	Part	Material		Pos.	Part	Material	
		Carbon steel valve	Stainless steel valve			Carbon steel valve	Stainless steel valve
1	Body	A216-WCB (1.0619)	A351-CF8M (1.4408)	11	Bottom cover	A216-WCB (1.0619)	A351-CF8M (1.4408)
2	Disc	A351-CF8M (1.4408) ¹	A351-CF8M (1.4408) ¹	12	Gland packing	Graphite	Graphite
3	Retainer ring	A351-CF8M (1.4408)	A351-CF8M (1.4408)	13	Gland	A351-CF8M (1.4408)	A351-CF8M (1.4408)
4	Seat	B637 (2.4668)	B637 (2.4668)	14	Bracket	A351-CF8 (1.4308)	A351-CF8 (1.4308)
5+6	Bushing	A182-F316 (1.4401)	A182-F316 (1.4401)	15	Stud bolt	A193-B8 (1.4301)	A193-B8 (1.4301)
7	Shaft	A564-630 (1.4542) ¹	A564-630 (1.4542) ¹	16	Nut	A194-8 (1.4571)	A194-8 (1.4571)
8	Pin	A182-F316 (1.4401)	A182-F316 (1.4401)	17	Bolt	A193-B8 (1.4301)	A193-B8 (1.4301)
9	Thrust ring	A240-F316 (1.4404)	A240-F316 (1.4404)	18	Gasket	Graphite	Graphite
10	Seal	Graphite	Graphite	20+21	Washer	A240-F316 (1.4404)	A240-F316 (1.4404)

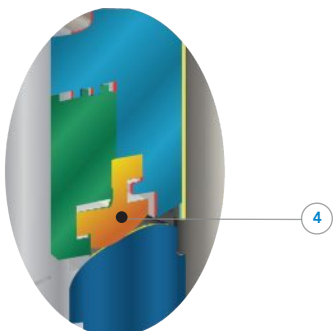
¹ Disc edge and shaft hard chrome plated

² Optional seat materials

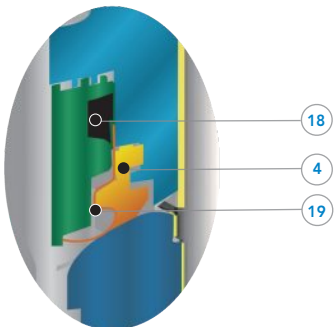
Upper stem bearing and sealing



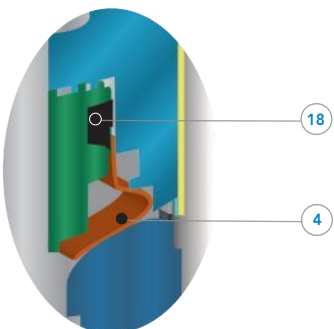
Soft seat



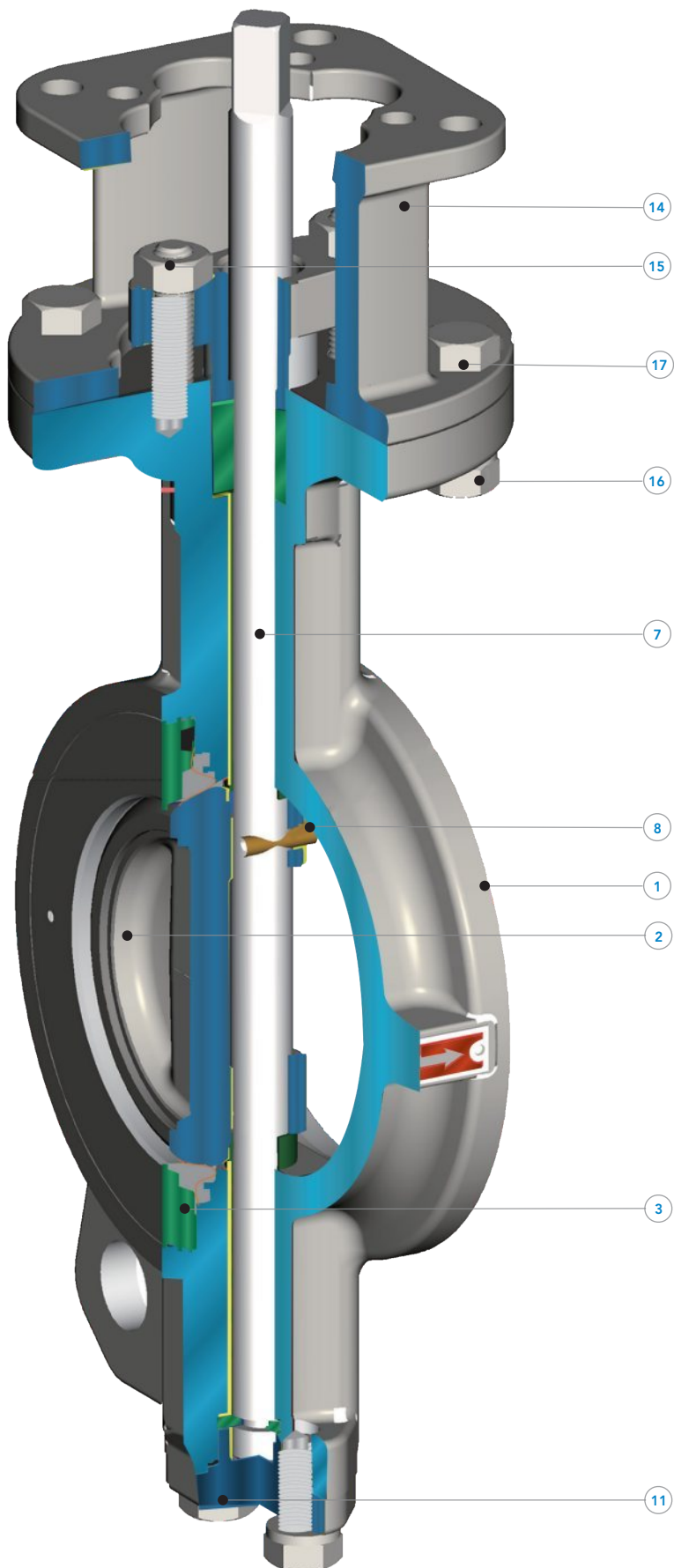
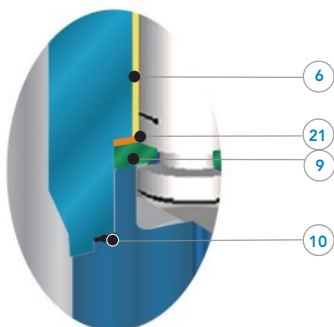
Fire Safe Soft seat



Metal seat



Lower stem bearing and sealing



Kv-values class 150, PN16 and PN25 versions

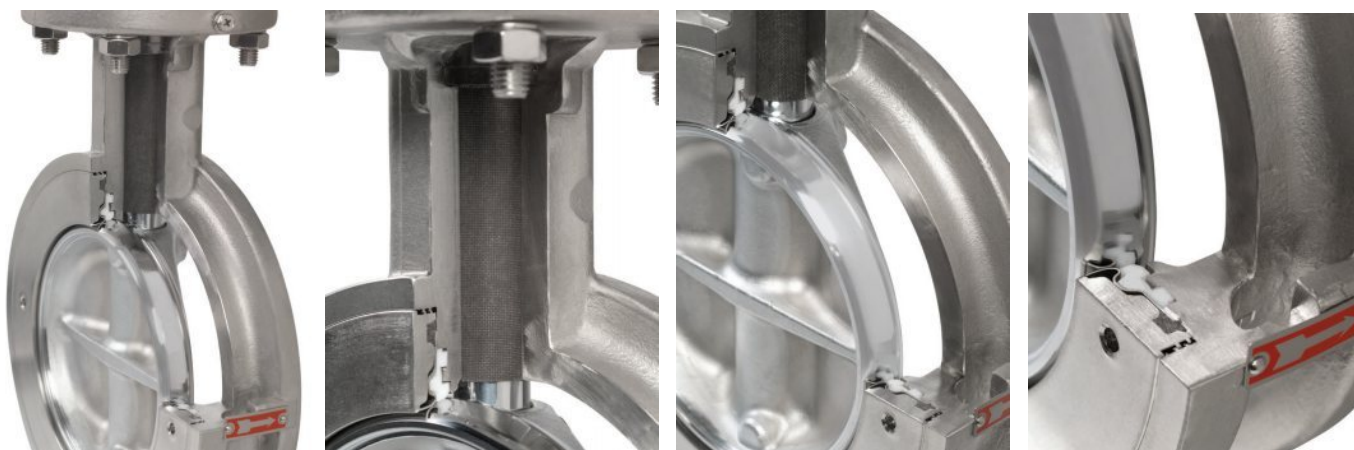
DN	NPS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
50	2"	3	11	22	34	62	109	132	176	202	138
65	(2½")	6	20	39	57	106	208	223	298	340	224
80	3"	9	29	59	87	160	280	338	452	516	344
100	4"	10	35	62	95	185	324	360	468	497	530
125	(5")	15	46	92	136	251	438	529	706	805	848
150	6"	21	67	131	195	361	630	761	1.017	1.159	1.189
200	8"	36	119	234	348	472	662	851	1.127	1.254	1.514
250	10"	108	264	426	504	798	1.090	1.427	1.782	2.111	2.307
300	12"	147	359	579	835	1.125	1.518	2.646	2.988	3.329	3.777
350	14"	192	438	689	1.008	1.396	1.938	2.701	3.659	4.636	5.159
400	16"	272	465	780	1.145	1.647	2.150	3.203	4.667	5.957	6.714
450	18"	339	818	1.259	1.765	2.436	3.389	4.685	6.108	7.383	8.091
500	20"	444	1.035	1.586	2.213	3.032	4.276	6.218	7.869	9.525	10.228
600	24"	731	1.610	2.380	3.383	4.758	6.629	9.377	12.477	15.870	17.181

Kv-values class 300, PN40 versions (optional)

DN	NPS	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
65	(2½")	6	20	39	57	106	185	223	298	340	224
80	3"	9	29	59	87	160	280	338	452	516	344
100	4"	10	35	62	95	185	324	360	468	497	530
125	(5")	15	46	92	136	251	438	529	706	805	848
150	6"	18	58	129	188	303	588	692	822	1.081	1.099
200	8"	29	103	203	319	461	622	839	1.061	1.151	1.411
250	10"	62	184	338	501	695	915	1.242	1.618	2.001	2.156
300	12"	90	257	446	690	1.013	1.436	1.989	2.592	3.301	3.447
350	14"	106	332	586	901	1.321	1.822	2.502	3.308	3.962	4.145
400	16"	212	412	728	1.092	1.594	2.097	2.885	4.348	5.289	5.543
450	18"	268	522	1.060	1.543	2.236	3.012	4.078	5.386	6.733	7.085
500	20"	330	644	1.308	1.905	2.760	3.719	5.369	6.991	8.846	9.499
600	24"	476	927	1.884	2.744	3.976	5.354	7.731	10.067	12.738	13.612

Remark:

- Kv is the capacity in m³/h for water at 20°C at a differential pressure of 1 bar.



Torque values (Nm) soft seated butterfly valves *

Size		ΔP (bar)					
DN	NPS	0	5	10	15	20	25
50	2"	10	12	14	16	17	20
65	(2½")	15	17	23	27	32	40
80	3"	20	23	29	34	40	46
100	4"	27	32	40	47	60	66
125	(5")	40	42	59	69	81	98
150	6"	48	64	80	91	114	136
200	8"	69	88	114	128	157	187
250	10"	116	163	201	238	304	377
300	12"	151	227	288	415	481	637
350	14"	294	415	604	754	905	1.018
400	16"	441	528	754	905	1.056	1.207
450	18"	603	741	943	1.131	1.282	1.470
500	20"	770	1.086	1.357	1.584	1.900	2.171
600	24"	943	1.293	1.697	2.047	2.343	2.558

Torque values (Nm) fire safe soft seated butterfly valves *

Size		ΔP (bar)					
DN	NPS	0	5	10	15	20	25
50	2"	23	25	30	34	38	46
65	(2½")	29	36	47	54	64	75
80	3"	39	47	59	71	83	98
100	4"	59	68	80	91	108	125
125	(5")	91	106	131	150	172	187
150	6"	114	151	174	204	227	257
200	8"	136	181	227	272	324	370
250	10"	197	249	324	370	437	498
300	12"	257	362	423	528	664	777
350	14"	355	558	641	762	920	1.094
400	16"	506	739	973	1.161	1.297	1.448
450	18"	649	814	1.048	1.312	1.606	2.036
500	20"	830	1.064	1.387	1.667	2.247	2.624
600	24"	980	1.244	1.712	2.141	2.910	3.619

Torque values (Nm) metal seated butterfly valves *

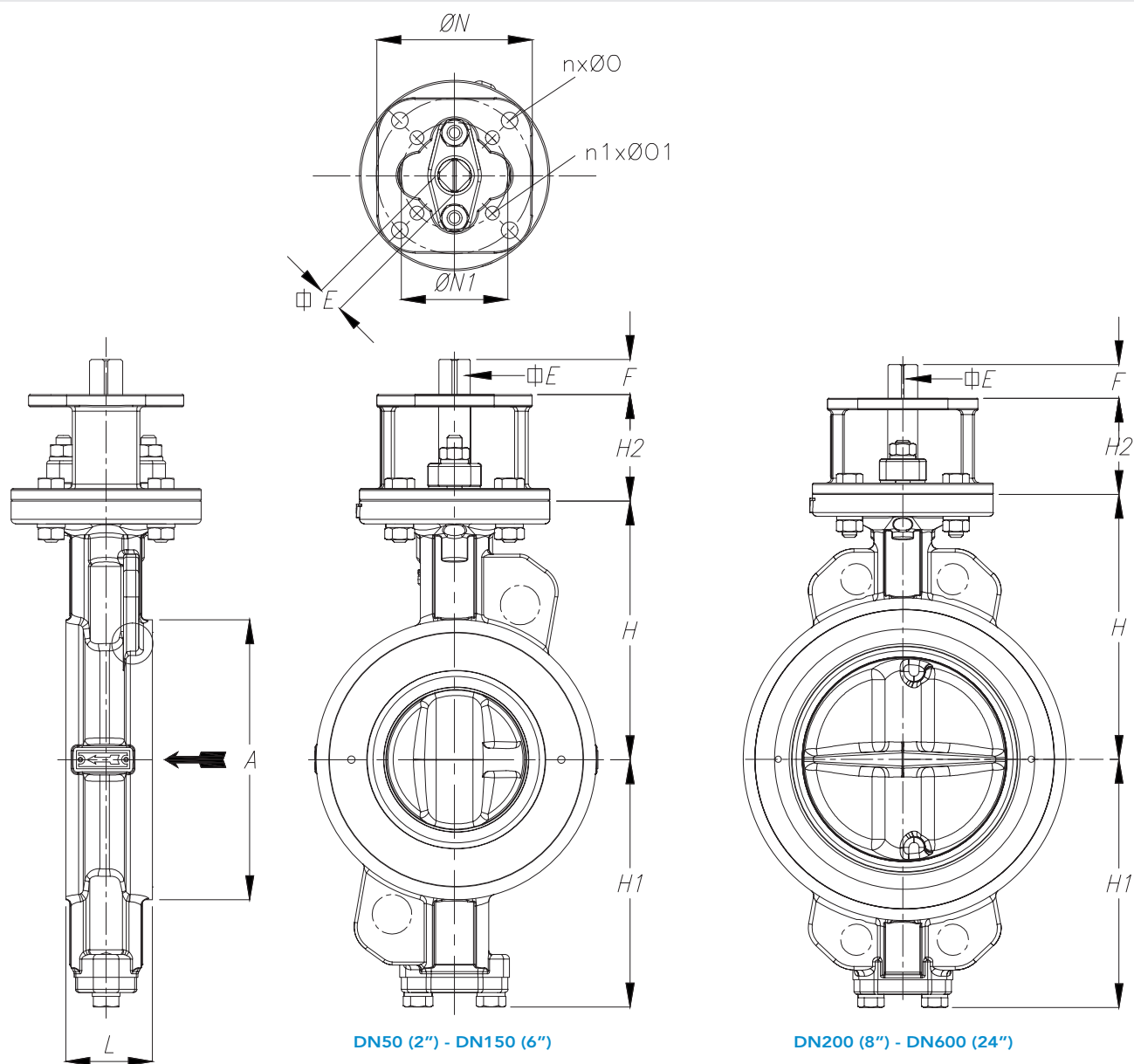
Size		ΔP (bar)					
DN	NPS	0	5	10	15	20	25
50	2"	30	38	46	50	58	64
65	(2½")	36	44	60	79	98	114
80	3"	44	55	68	91	108	129
100	4"	60	79	94	121	137	167
125	(5")	84	108	119	140	163	191
150	6"	106	130	154	179	204	246
200	8"	159	197	227	257	287	334
250	10"	204	257	310	362	445	528
300	12"	287	355	430	566	717	905
350	14"	415	520	649	784	958	1.094
400	16"	588	762	943	1.147	1.357	1.584
450	18"	694	852	1.109	1.387	1.697	2.209
500	20"	996	1.086	1.448	1.810	2.262	2.624
600	24"	1.177	1.357	1.674	2.262	3.137	4.674

* Basic principles:

- Break To Open (BTO) and Break To Close (BTC) torque values without safety factor.
- For standard applications, like lubricating fluids, a safety factor of 1.3 must be applied for the selection of an actuator.
- For a gas or non-lubricating medium a safety factor of at least 1.5 must be applied for the selection of an actuator.

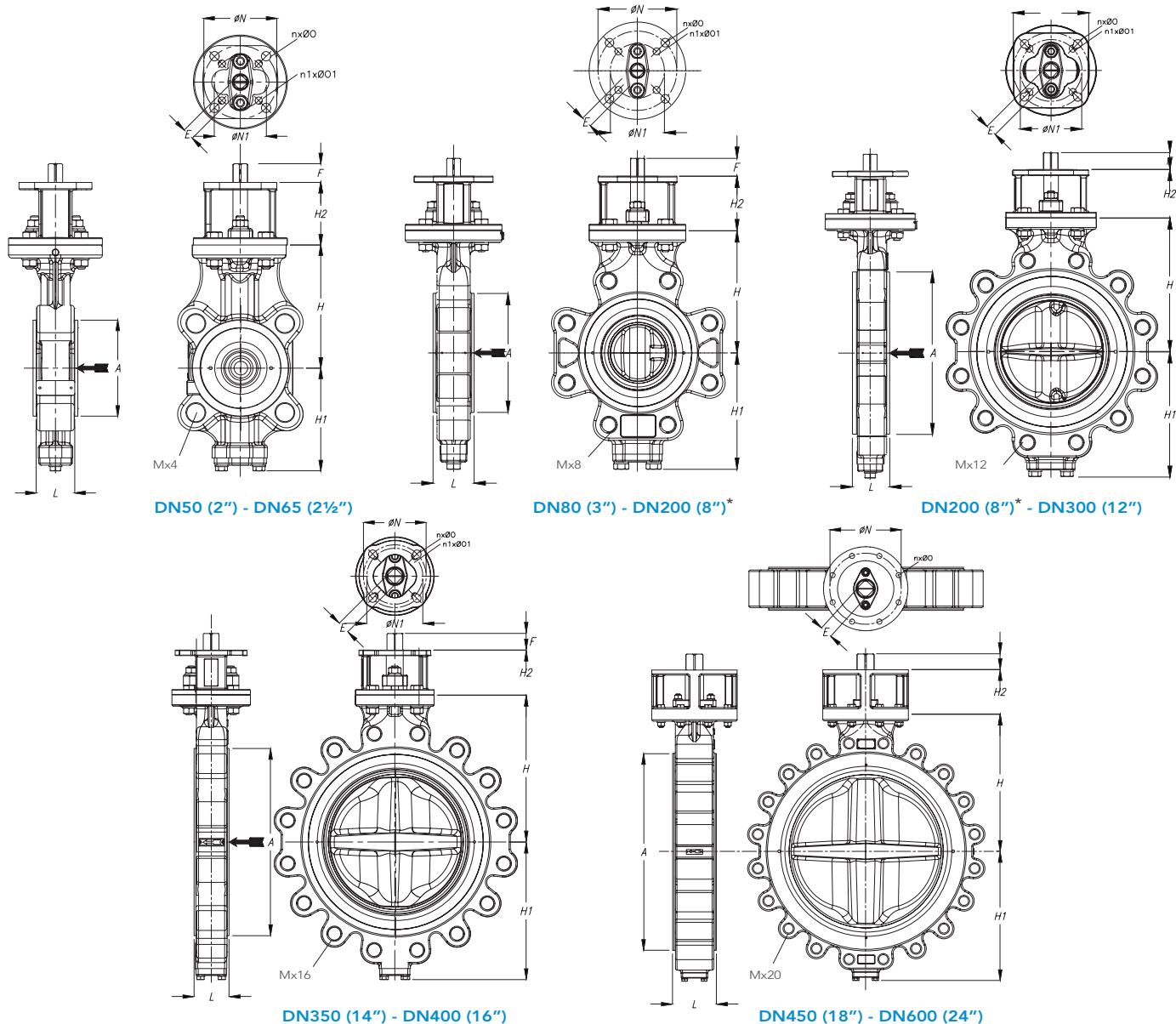
Consult your distributor for specific applications.

Dimensions Serie 91 | DN50 (2")-600 (24")



DN	ØA	□E	F	H	H1	H2	L	ØN	n	ØO	ØN1	n1	ØO1	m(kg)
50	92	11	18	118	99	60	43	70	4	10	50	4	8	3.9
65	108	11	18	125	110	60	46	70	4	10	50	4	8	4.5
80	126	14	23	140	128	70	47	102	4	12	70	4	10	7
100	153	14	23	157	150	70	53	102	4	12	70	4	10	9
125	184	17	23	170	163	70	57	102	4	12	70	4	10	12
150	212	17	23	185	176	70	56	102	4	12	70	4	10	13.5
200	268	19	28	220	206	80	62	125	4	14	102	4	12	22
250	326	22	28	260	238	80	68	125	4	14	102	4	12	32
300	375	27	37	290	269	100	78	140	4	18	125	4	14	48
350	416	27	37	326	306	100	78/92	140	4	18	125	4	14	66
400	476	36	47	370	342	120	102	165	4	22	140	4	18	107
450	534	36	47	395	370	120	114	165	4	22	140	4	18	130
500	588	46	56	430	399	120	127	165	4	22	140	4	18	163
600	692	46	56	490	455	150	154	165	4	22	-	-	-	278
600	692	46	56	490	455	150	154	254	8	18	-	-	-	278

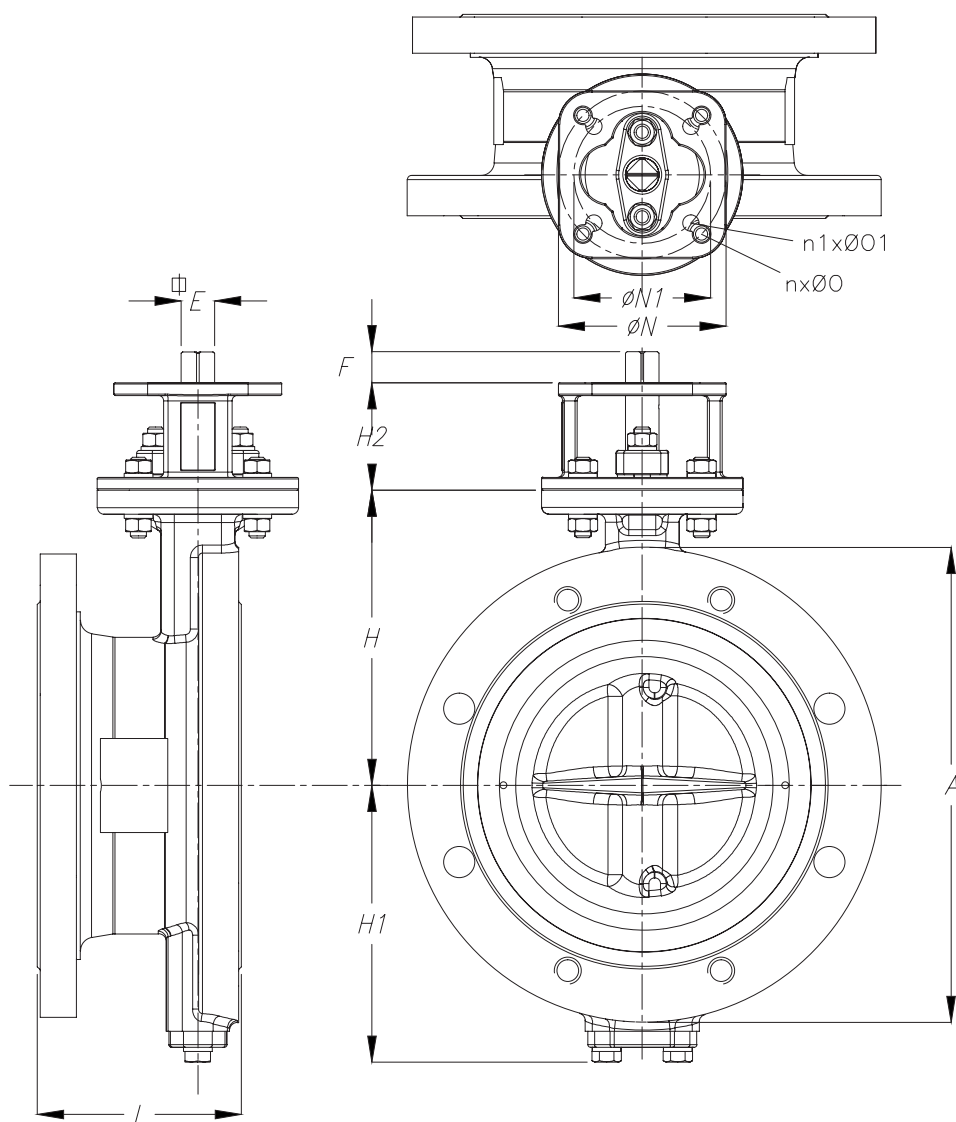
Dimensions Serie 93 | DN50 (2") - DN600 (24")



DN	ØA	□ E	F	H	H1	H2	L	ØN	n	ØO	ØN1	n1	ØO1	m(kg)
50	92	11	18	118	99	60	43	70	4	10	50	4	8	4,9
65	108	11	18	125	110	60	46	70	4	10	50	4	8	5,5
80	126	14	23	140	128	70	47	102	4	12	70	4	10	8,5
100	153	14	23	157	150	70	53	102	4	12	70	4	10	14
125	184	17	23	170	163	70	57	102	4	12	70	4	10	18
150	212	17	23	185	176	70	56	102	4	12	70	4	10	19,5
200	268	19	28	220	206	80	62	125	4	14	102	4	12	31
250	326	22	28	260	238	80	68	125	4	14	102	4	12	47
300	375	27	37	290	269	100	78	140	4	18	125	4	14	67
350	416	27	37	326	306	100	78/9	140	4	18	125	4	14	81
400	476	36	47	370	342	120	102	165	4	22	140	4	18	143
450	534	36	47	395	370	120	114	165	4	22	140	4	18	163
500	588	46	56	430	399	120	127	165	4	22	140	4	18	230
600	692	46	56	490	455	150	154	165	4	22	-	-	-	377
600	692	46	56	490	455	150	154	254	8	18	-	-	-	377

* Class 150 in 8" has 8 bolt holes. DIN PN16 and PN25 have 12 bolt holes.

Dimensions Serie 94 | DN80 (3") - DN600 (24")



DN	ØA	□ E	F	H	H1	H2	L	ØN	n	ØO	ØN1	n1	ØO1	m(kg)
80	204	14	23	140	120,5	70	114	102	4	12	70	4	10	10,4
100	230	14	23	157	150	70	127	102	4	12	70	4	10	16,3
125	256	17	23	170	163	70	140	102	4	12	70	4	10	21,1
150	280	17	23	185	176	70	140	102	4	12	70	4	10	21,3
200	350	19	28	220	206	80	152	125	4	14	102	4	12	43,1
250	406	22	28	260	238	80	165	125	4	14	102	4	12	67,7
300	465	27	28	290	269	100	178	140	4	18	125	4	14	105,6
350	535	27	37	326	306	100	190	140	4	18	125	4	14	135,9
400	590	36	47	370	342	120	216	165	4	22	140	4	18	191,7
450	635	36	47	395	370	120	222	165	4	22	140	4	18	224,1
500	700	46	56	430	399	120	229	165	4	22	140	4	18	265,8
600	815	46	56	490	455	150	267	254	8	18	-	-	-	421,8

Valve operation

Lever

- Robust heavy duty lever (Fig. 4001G)
- Suitable for size 2" / DN50 up to 6" / DN150
- Lockable in every intermediate position
- Closed position is adjustable

Gear box

- Robust ductile iron gear box
- Protection class IP65 (Fig. 4023) or IP68 (Fig. 4025)
- Visual position indicator
- Open and closed positions are adjustable

Double acting or single acting pneumatic actuator

- Compact
- Suitable for high duty cycles
- Fast opening and closing times
- Few moving parts: Increases operational safety
- Modular design for easy mounting of accessories like limit switches, (NAMUR) solenoid valves and bus communication systems
- Can be combined with emergency operation (manual gearbox)
- Single acting actuators can be supplied with a spring opening or spring closing configuration for a fail safe function

Electric actuator

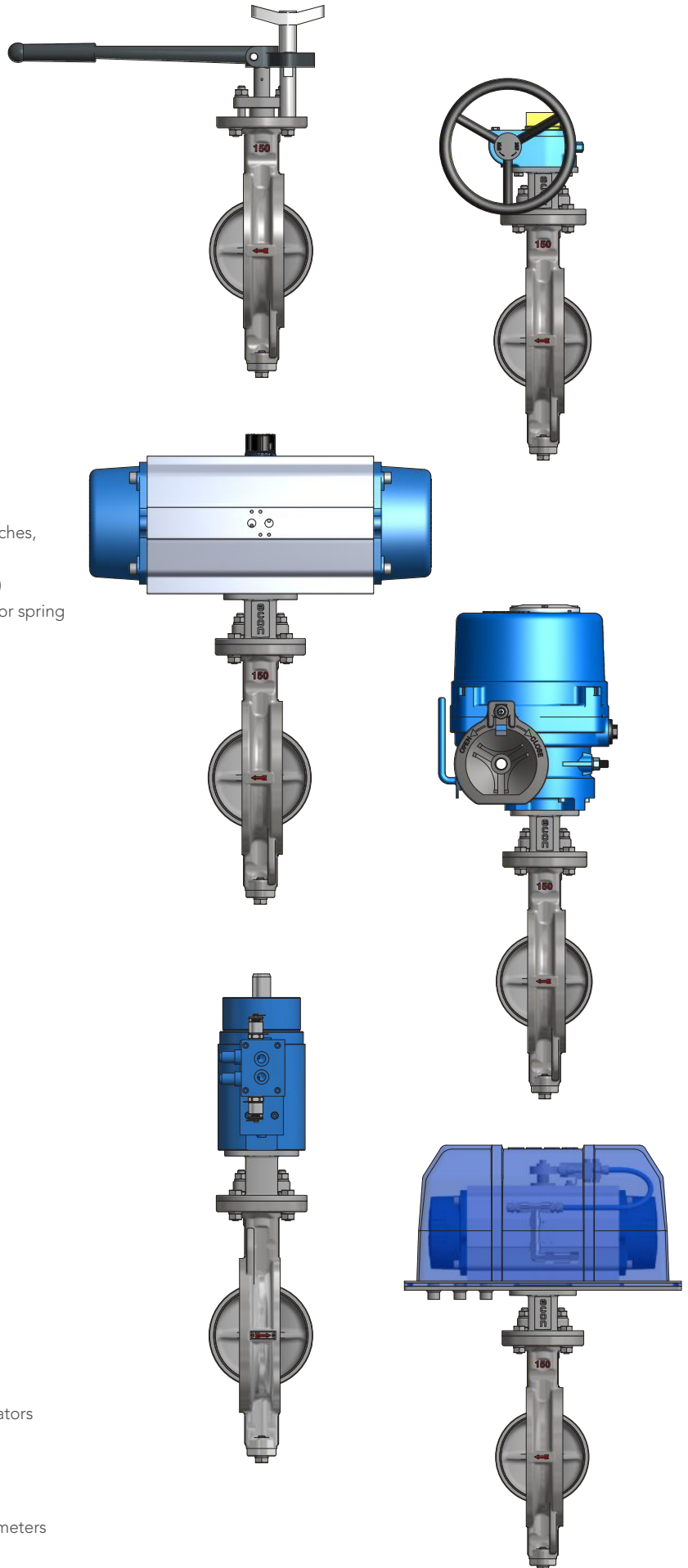
- Compact
- Wide range of voltage options
- Slow opening and closing times prevent water hammering
- Noiseless
- Self-locking reduction gear
- Integrated limit switches for feedback signals
- Emergency handwheel operator
- ISO 5211 mounting flange
- Modulating actuator available (4-20mA or 0-10VDC)
- IP68 version as an option
- EExd version as an option
- CAN-open fieldbus as an option

Hydraulic actuator

- Extremely compact
- High output torque up to 16.200Nm
- Single and double acting versions
- Heavy duty
- High operational safety
- Modular design for easy mounting of accessories, like limit switches or visual open/close indication
- Modular design for additional hydraulic functionality
- Water tight enclosure
- ISO 5211 mounting flange
- Submersible enclosure up to 20 meters as an option
- Electro-hydraulic version as an option
- CAN-open fieldbus as an option for the electric-hydraulic actuators

Actuator protector for pneumatic actuators

- Protects the actuator against highly corrosive environments
- Special version available for submerged applications up to 20 meters



Pneumatic Actuators

Fig. 7901 and 7902

Pneumatic Rack & Pinion actuators are most commonly used for valve automation. The simple design make these actuators very reliable and cost effective. Econ[®] double and single acting actuators are characterized by fast operating times and have a guaranteed service life of 500.000 cycles.

Features

- Torque output up to 6.500Nm
- Single acting (Fig. 7901) and double acting (Fig. 7902)
- Lightweight aluminium body
- Stroke adjustment of plus and minus 5°
- Namur pilot valve connection
- Suitable for use in potentially explosive atmospheres according to 94/9/EC (Ex II 2 G-D EX-c)
- VDI/VDE 3845 mounting connection for position feedback devices
- Multi-purpose valve position puck for P&F F25 and F31 dual sensors
- Hard anodized body and epoxy coated end-caps (EN-ISO 12944-2-C3)
- Ambient temperature: -30°C to +100°C

Options

- Complete SS316 version
- Limit switches for position feedback
- Stroke adjustment locking device
- Pilot solenoid valve in 24VAC or DC, 110VAC and 230VAC
- 4-20mA or 0-10VDC valve positioner for modulating services
- Ambient temperature: -60 up to +150°C
- Imperial version for North-American markets
- Fast acting actuators
- 100% stroke adjustment
- Coatings:
 - Completely epoxy coated
 - Completely hard anodized + ENP
 - Completely PTFE coated



Econ[®] Rack & Pinion double acting
pneumatic actuator Fig. 7902



Econ[®] Rack & Pinion single acting
pneumatic actuator Fig. 7901



Epoxy coated
anticorrosive version



PTFE coated
anticorrosive version



Hard anodized + ENP
anticorrosive version



Fig. 79015 and 79025
completely made of SS316



Econ[®] switch boxes Fig. 79651 and 79653
for remote valve position feedback



Electric Actuators



Fig. 7907

In industrial and maritime environments electric actuators must be suitable to operate in the most challenging conditions. Therefore the Econ® Fig. 7907 electric actuator has a robust design and a hard anodized, polyester powder coated, enclosure. The Econ® electric actuators offer reliability, ease of use and good value for money.

Features

- Torque output up to 3000Nm
- Power supply: 24VDC, 24VAC, 110VAC and 230VAC (50/60Hz)
- Limit switches: Open/close, SPDT, 250VAC 16A
- Extra limit switches for position feedback: Open/close, SPDT, 250VAC 16A
- Torque switches: Open/close, SPDT, 250VAC 16A
- Water tight enclosure according to IP67
- Thermal motor protection
- Anti-condensation heater
- Manual override
- Ambient temperature: -20°C to +70°C

Options

- Power supply - 380VAC and 440VAC (50/60Hz)
- Explosion proof enclosure Eexd II B T4
- Water tight enclosure according to IP68 - 10m/72h
- Potentiometer unit (0~10kΩ)
- Position transmitter (output 4~20mA)
- Proportional control unit for modulating applications (input, output 0~10VDC, 4~20mA)
- CAN-open and Profibus fieldbus
- Fail safe battery
- Fire proof version 1.050 +/- 5°C / 50min
- Fire proof execution 250 +/- 5°C / 150min



Econ® butterfly valve
Fig. 9130 with electric
actuator Fig. 7901

Helical Hydraulic Actuators



Fig. 21201 and 21204

The Econ® helical hydraulic actuator is made for the most severe environments and can even be submersed into seawater continuously. This robust actuator is widely used in maritime applications. The actuator can be supplied both in single and double acting versions. With the Econ® powerpack these actuators can be converted into electro-hydraulic operated actuators. The modular system, including standardized connecting manifolds with built-in functionality, provides the possibility for advanced remote valve control in every application in every environment.

Features

- Torque output up to 16.200Nm
- Single acting (Fig. 21201) and double acting (Fig. 21204)
- Robust and compact helical design
- Water tight enclosure
- Hydraulic pilot pressure: 135bar
- Ambient temperature: -20°C to +70°C
- Modular design for easy mounting of accessories, like connecting manifolds, hand pumps, limit switches or visual open/ close indication

Options

- Hydraulic Positive Position Indication - HPPI (Fig. 21202)
- Constantly submersible enclosure up to 20m
- Electro-hydraulic version
- CAN-open fieldbus for the electro-hydraulic actuators



Econ® butterfly valve
Fig. 9130 with electro-hydraulic
helical actuator Fig. 21204+21302

Valve Automation Centre

The Valve Automation Centre has a state of the art workshop in which well trained technicians mount pneumatic, hydraulic and electric actuators on valves. Valves and actuators can be modified according to customer specifications and be equipped with options such as valve positioners, limit switches, pilot valves and more. Five pressure test benches allow testing of valves up to DN1200/48". The applicable standards are API 598 and EN 12266 and any other customer specified protocols can additionally be performed.

Engineering

- Working out customer-specific requirements.
- Product development support.
- Providing 2D and 3D assembly drawings.
- Supplying 3D CAD models.

Workshops

- Modern workshops of more than 5000 m².
- Facilitating of large and complex projects.
- Automating and modifying of valves.
- Mounting, adjusting and modifying according to customer-specific requirements.

Logistics

- More than 2 million products from stock
- Automated delivery of products
- International presence in 24 countries

Testing

- Large test facilities.
- Pressure testing of valves up to DN1200/48".
- Maximum test pressure 1200 bar.

