


## Description

High performance double eccentric Lug butterfly valve with PTFE sealing for working pressures up to 50 bar ( ANSI Class 300) . With wrought materials and sealing options:

- TG with PTFE+25% glass fibre seat (RPTFE)
- TM with modified PTFE

## Product features

- Body construction EP3 Lug
- Face to face dimension according to ISO 5752/20, EN558-1/5, BS 5155/4, API 609
- Top flange according to EN ISO 5211
- Rating PN 25/40, ANSI cl. 300
- Tightness Gas tightness according to EN 12266-1/P12 leakage rate A / API 598
- ATEX Execution according to ATEX 2014/34/EU,  II 2 GD c Tx



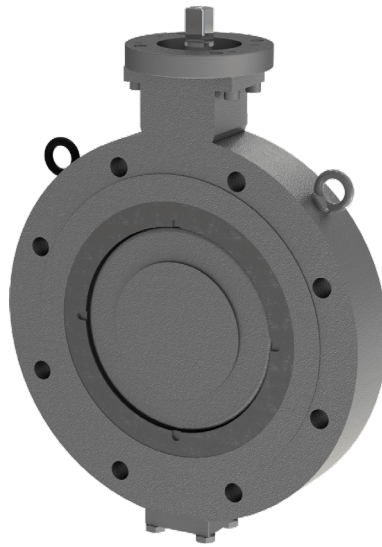
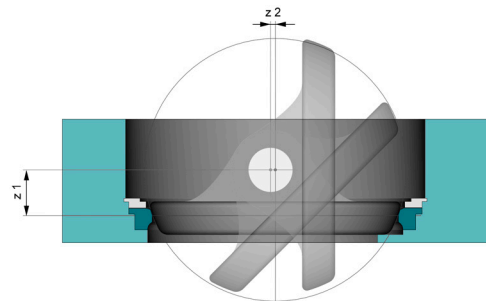
The butterfly valves ELARA meet the safety requirements of the pressure Equipment Directive 2014/68/UE (PED) appendix 1 for fluids of the groups 1 and 2.

### Double eccentric function:

The ELARA is a double eccentric butterfly valve. The double eccentricity results from:

- Offset of the disc to the shaft (z 1) and
- Offset of the disc centre to the shaft (z 2).

Consequently, when opening, the disc is immediately disengaged from the seat and thus, the friction and the torque remain very low.



## Torque at requested working pressure [Nm]

DN	80	100	125	150	200	250	300	350	400	500	600
25 bar	90	113	180	263	540	705	1485	2288	2693	5775	8925
40 bar	113	132	255	396	825	1356	2025	3375	5160	8280	12840
50 bar	128	165	420	495	900	1695	2550	4028	5925	10350	16050

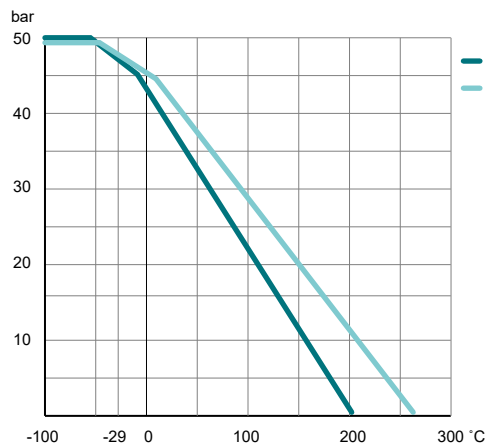
## Flow values kv [m³/h]

DN	80	100	125	150	200	250	300	350	400	500	600
kv	225	410	665	972	1823	2894	4147	5962	7776	12614	20325

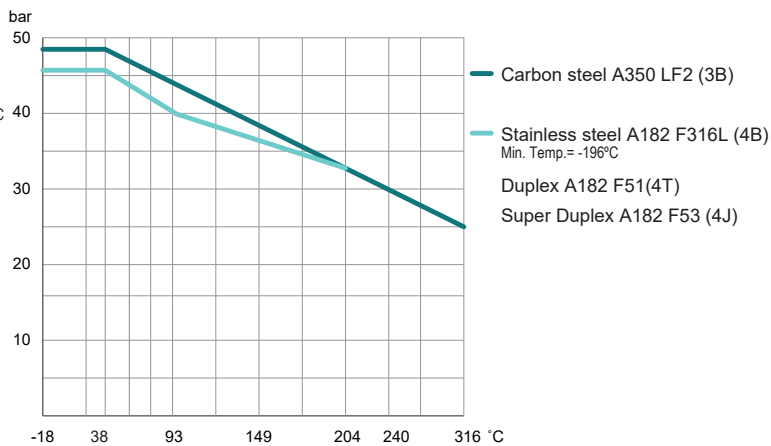


## Pressure / Temperature

Seat



Body



## Type code

EP3 0150 . 7 B - 4B0 . 4B . 4B0 . TG - FF

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

①	Body type	EP3	Lug	DN 80-600
②	Nominal diameter	080-600	mm	
③	Maximum working pressure	7	50 bar	DN 80-600
④	Flange connection	5	PN 25	DN 200-600
		6	PN 25/40	DN 80-150
			PN 40	DN 200-600
		B	ANSI cl. 300	DN 80-600
⑤	Body	3BI	Carbon steel (A350 LF2 / 1.0570) with Epoxy primer 80µm	
		4B0	Stainless steel (1.4404 / A182 F316L)	
		4T0	Duplex (1.4462 / A182 F51) stainless steel	
		4J0	Super Duplex (1.4410 / A182 F53) stainless steel	
⑥	Shaft	4B	Stainless steel (1.4404 / A182 F316)	
		4T	Duplex (1.4462 / A182 F51) stainless steel	
		4J	Super Duplex (1.4410 / A182 F53) stainless steel	
⑦	Disc	4B0	Stainless steel (1.4404 / A182 F316L)	
		4T0	Duplex (1.4462 / A182 F51) stainless steel	
		4J0	Super Duplex (1.4410 / A182 F53) stainless steel	
⑧	Seat	TG	PTFE with 25% glass fibre (Tmax 204°C)	DN 80-600
		TM	PTFE modified (Tmax 250°C)	DN 80-600 (on request)
⑨	Option	FF	Fat free execution	
		CR	Cryogenic applications (T ≤ -40°C)	Available for 4B0, 4T0 and 4J0 bodies

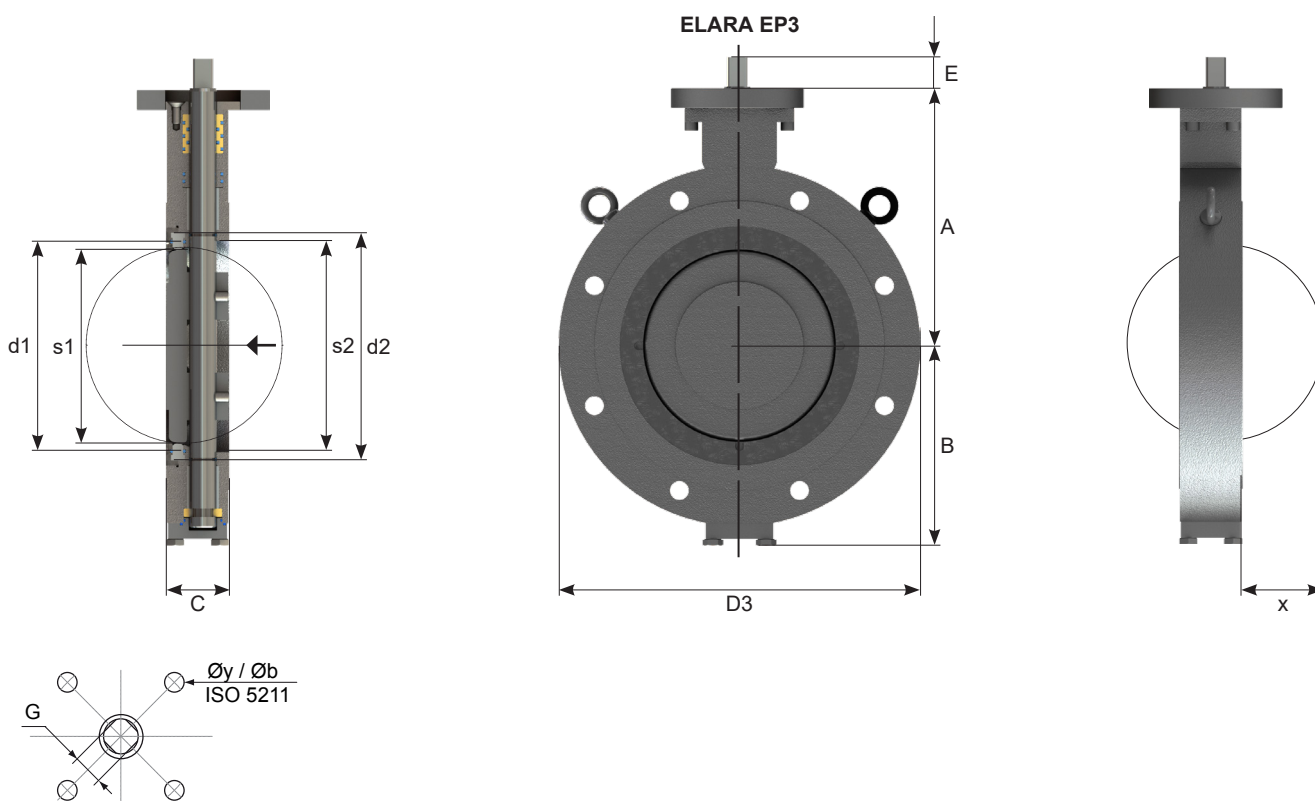
## Material configurations

	BODY	SHAFT	DISC
<b>3BI.4B.4B0</b>	Carbon steel (A350 LF2/1.0570)	Stainless steel (1.4404/A182 F 316L)	Stainless steel (1.4404/A182 F 316L)
<b>4B0.4B.4B0</b>	Stainless steel (1.4404/A182 F 316L)	Stainless steel (1.4404/A182 F 316L)	Stainless steel (1.4404/A182 F 316L)
<b>4J0.4J.4J0</b>	Duplex (1.4462/A182 F51) stainless steel	Duplex (1.4462/A182 F51) stainless steel	Duplex (1.4462/A182 F51) stainless steel
<b>4T0.4T.4T0</b>	Super Duplex (1.4410/A182 F53) stainless steel	Super Duplex (1.4410/A182 F53) stainless steel	Super Duplex (1.4410/A182 F53) stainless steel

Mounting the valve at the end of a line on request

Pressure and temperature limits of application are dependent of the working conditions

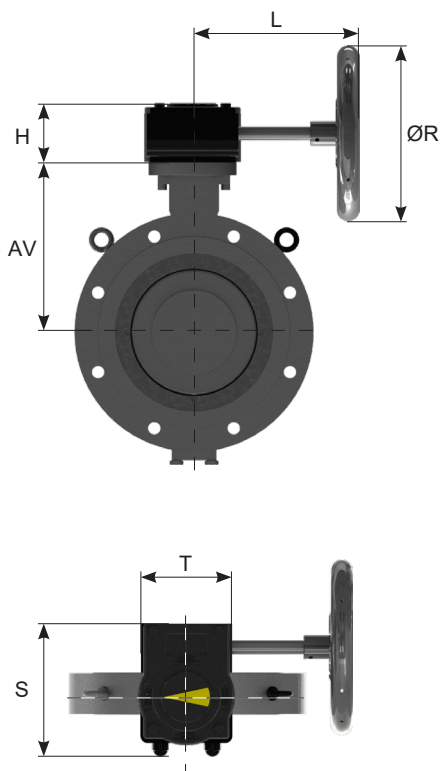
## Dimensions



DN	d1	d2	A	B	C	PN	ANSI	s1	s2	x	E	G	ISO 5211	y	b	PN	ANSI
						25/40	cl. 300									25/40	cl. 300
80	68	80	150	108	46	210	200	42	62	20	16	14	F05 / F07	4x 8/9,5	50/70	12	11
100	86	100	160	127	52	255	234	62	79	25	16	14	F05 / F07	4x 8/9,5	50/70	19	17
125	110	125	200	155	56	280	268	91	106	37	19	17	F07	4x 9,5	70	25	23
150	132,5	150	212	175	56	320	305	117	129	47	19	17	F10	4x 12	102	31	28
200	181	200	255	202	60	380	365	169	179	71	24	22	F10	4x 12	102	47	43
250	233	250	300	235	68	445	425	221	230	93	24	22	F12	4x 13	125	72	65
300	278	300	323	285	78	520	495	267	275	110	29	27	F12	4x 13	125	105	93
350	330	350	370	325	78	585	585	304	314	127	29	27	F12	4x 13	125	158	158
400	377	400	430	355	102	650	620	363	374	152	40	36	F14	4x 18	140	207	184
500	477	500	505	410	127	775	740	459	470	190	48	46	F16	4x22	165	348	315
600	577	600	587	472	154	915	875	558	570	227	110	Ø 55	F25	8x22	254	620	551

## Dimensions

### Gearbox:



### WP = 25 bar

DN	GBN	AV	H	L	R	S	T	n**	[kg]*
80	GB150N.F05-F0714.160	150	54,5	133,5	160	124	80	9,6	2
100	GB150N.F05-F0714.160	160	54,5	133,5	160	124	80	9,6	2
125	GB210N.F05-F07-F1017.160	200	63	193	160	127,5	102	11,6	4
150	GB210N.F05-F07-F1017.160	212	63	193	160	127,5	102	11,6	4
200	GB550N.F1022.250	255	88	240	250	174	138	12	9
250	GB550N.F1227.300	300	88	292	300	174	138	12	9
300	GB880N.F1222.600	323	92,5	315	600	226	200	13,2	14
350	GB1250N.F1227.700	370	102	356	700	258	220	13,8	22
400	GB2000N.F1436.500	430	121	358	500	255	214	27	24
500	GB1950N/PR4.F1646.500	505	126	427	500	322,5	285	54	39
600	GB3000N/PR4.F2555.600	587	153	440	600	337	293	61	51

### WP = 40 bar

DN	GBN	AV	H	L	R	S	T	n**	[kg]*
80	GB150N.F05-F0714.160	150	54,5	133,5	160	124	80	9,6	2
100	GB150N.F05-F0714.160	160	54,5	133,5	160	124	80	9,6	2
125	GB210N.F05-F07-F1017.160	200	63	193	160	127,5	102	11,6	4
150	GB215N.F05-F07-F1017.250	212	63	208	250	127,5	102	11,6	4
200	GB550N.F1022.400	255	88	307	400	174	138	12	9
250	GB880N.F1222.600	300	92,5	315	600	226	200	13,2	14
300	GB2000N.F1227.600	323	102	356	600	258	220	13,8	22
350	GB1950N.F1227.900	370	121	358	600	255	214	27	24
400	GB1950N/PR4.F1436.400	430	126	407	400	322,5	285	54	39
500	GB3000N/PR4.F1646.600	505	153	440	600	337	293	61	51
600	GB6800N/PR6.F2555.500	587	159	480	500	407	370	117	64,2

### WP = 50 bar

DN	GBN	AV	H	L	R	S	T	n**	[kg]*
80	GB150N.F05-F0714.160	150	54,5	133,5	160	124	80	9,6	2
100	GB210N.F05-F07-F1014.160	160	63	193	160	127,5	102	11,6	4
125	GB215N.F05-F07-F1017.250	200	63	208	250	127,5	102	11,6	4
150	GB215N.F05-F07-F1017.250	212	63	208	250	127,5	102	11,6	4
200	GB550N.F1022.400	255	88	307	400	174	138	12	9
250	GB880N.F1222.700	300	92,5	315	700	226	200	13,2	14
300	GB1250N.F1227.700	323	102	356	700	258	220	13,8	22
350	GB2000N.F1227.700	370	121	358	700	255	214	27	24
400	GB1950N/PR4.F1436.500	430	126	427	500	322,5	285	54	39
500	GB3000N/PR6.F1646.600	505	153	440	600	337	293	61	51
600	GB6800N/PR6.F2555.600	587	159	480	600	407	370	117	64,2

[kg]\* weight without butterfly valve  
 \*\*n = Handwheel turns ON/OFF