

## Description

Double eccentric butterfly valve in 3 variations of sealing

- **TG** with PTFE+25% glass fibre seat
- **TI** Fire Safe
- **IN** with metal seat

Application fields: industrial and petrochemical range

## Product features

- Body construction E1 Wafer, E3 Lug
- Face to face dimension according to ISO 5752/20, EN558-1/5, BS 5155/4
- Top flange according to EN ISO 5211
- Rating PN10/16/25/40, ANSI cl. 150  
ANSI cl. 300 (DN50-300)
- Tightness **TG/TI**: Gas tightness according to EN 12266-1/P12 leakage rate A / API 598  
**IN**: Gas tightness according to API 598
- ATEX option Execution according to ATEX 94/9/EC, Zone 1 and 21 – Gr II, Cat. 2 G/D



The butterfly valves ELARA meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.



E1

E3

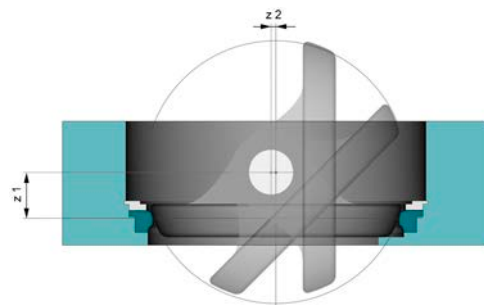


### Double eccentric function:

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).

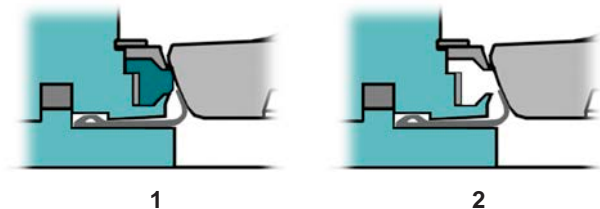
Consequently, when opening, the disc is immediately disengaged from the seat and thus, the friction and the torque remain very low.



### Fire Safe function:

According to BS 6755 part 2 (Bureau Veritas - approval no. AIX3P00.0620J.3A)

- 1 Under normal working conditions, the tightness is done by the **PTFE seat ring**.
- 2 In case of fire, the PTFE seat ring is destroyed and the tightness is ensured by the metal seat ring.



## Product features

### Torques [Nm]:

TG with PTFE seal

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800
16 bar	25	35	40	55	100	140	220	470	650	850	1000	1650	2100	3250	4700	6500
20 bar	30	40	50	65	125	160	260	650	900	1150	1400	2200	2800	4300	6100	
25 bar																
40 bar	35	45	60	85	150	225	376									
50 bar																

### Torques [Nm]:

TI Fire Safe IN with metal seat

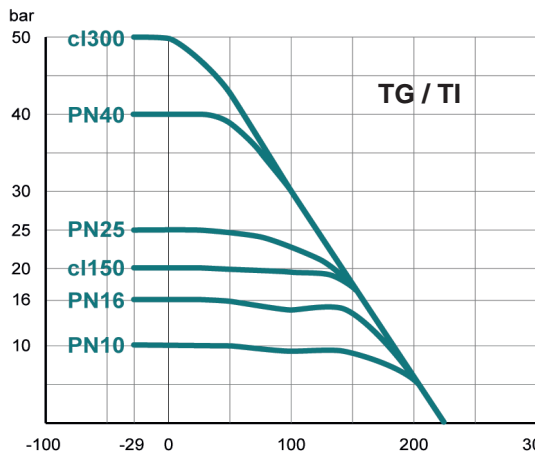
DN	50	65	80	100	125	150		200		250		300		350		400		450		500		600		700		800	
						OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE	OPEN	CLOSE
10 bar	50	70	100	150	220	111	235	336	568	770	1349	1618	2511	3889	6189	11277	8399										
16 bar						179	378	546	926	1275	2232	2684	4129	6391	4175	10131	6856	18502									
20 bar						225	474	686	1164	1612	2820	3395	5207	8058	12766												
25 bar						281	540	862	1462	2033	3555	4283	6555														
*40 bar	90	120	150	180	250	330	285	640	415																		
*50 bar																											

\*only TI Fire Safe

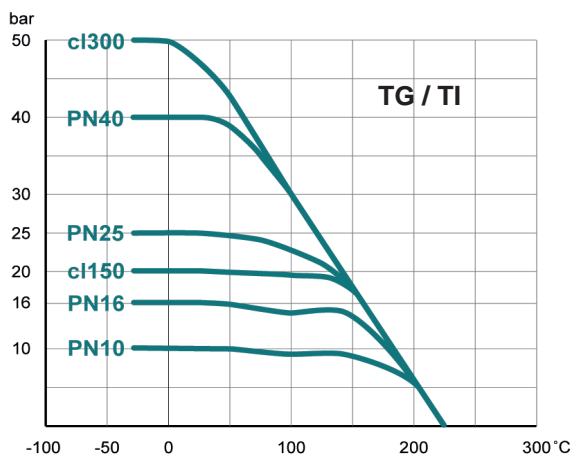
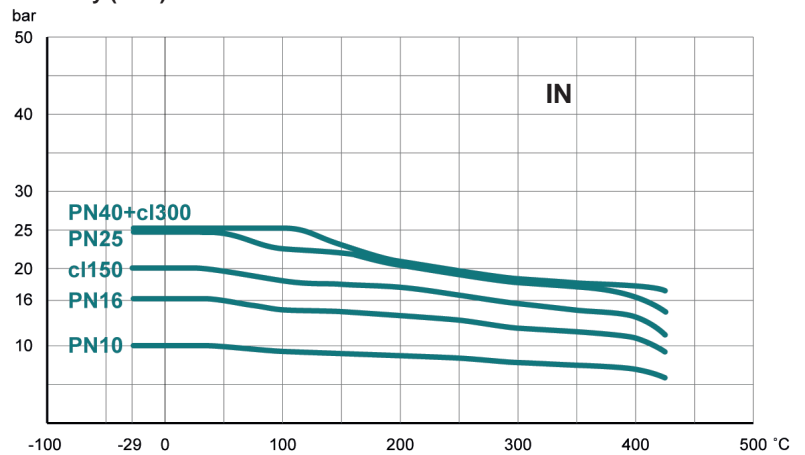
### Flow values $k_v$ [m³/h]:

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800
$k_v$	87	148	320	456	750	1125	1950	2940	4270	5550	7870	9419	11674	16914	23115	30283

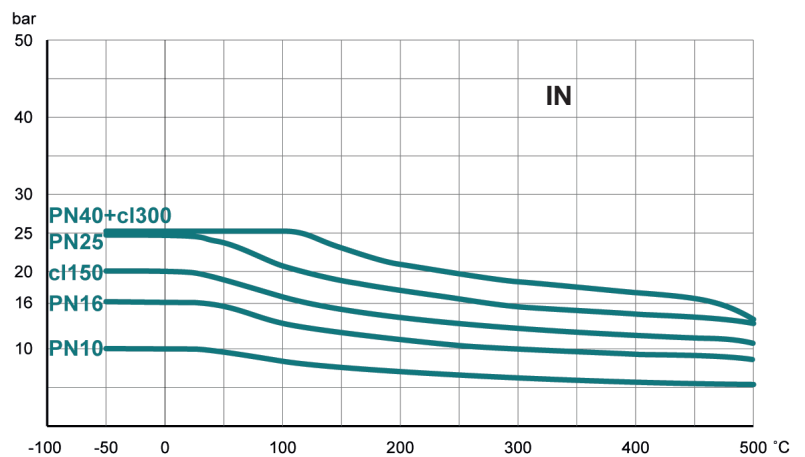
### Pressure / temperature:



### Steel body (3HD)



### Stainless steel body (4C0)



## Type code

E1C . 0150 . 6 B . 3HD . 4A . 4A0 . TG - ATEX

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

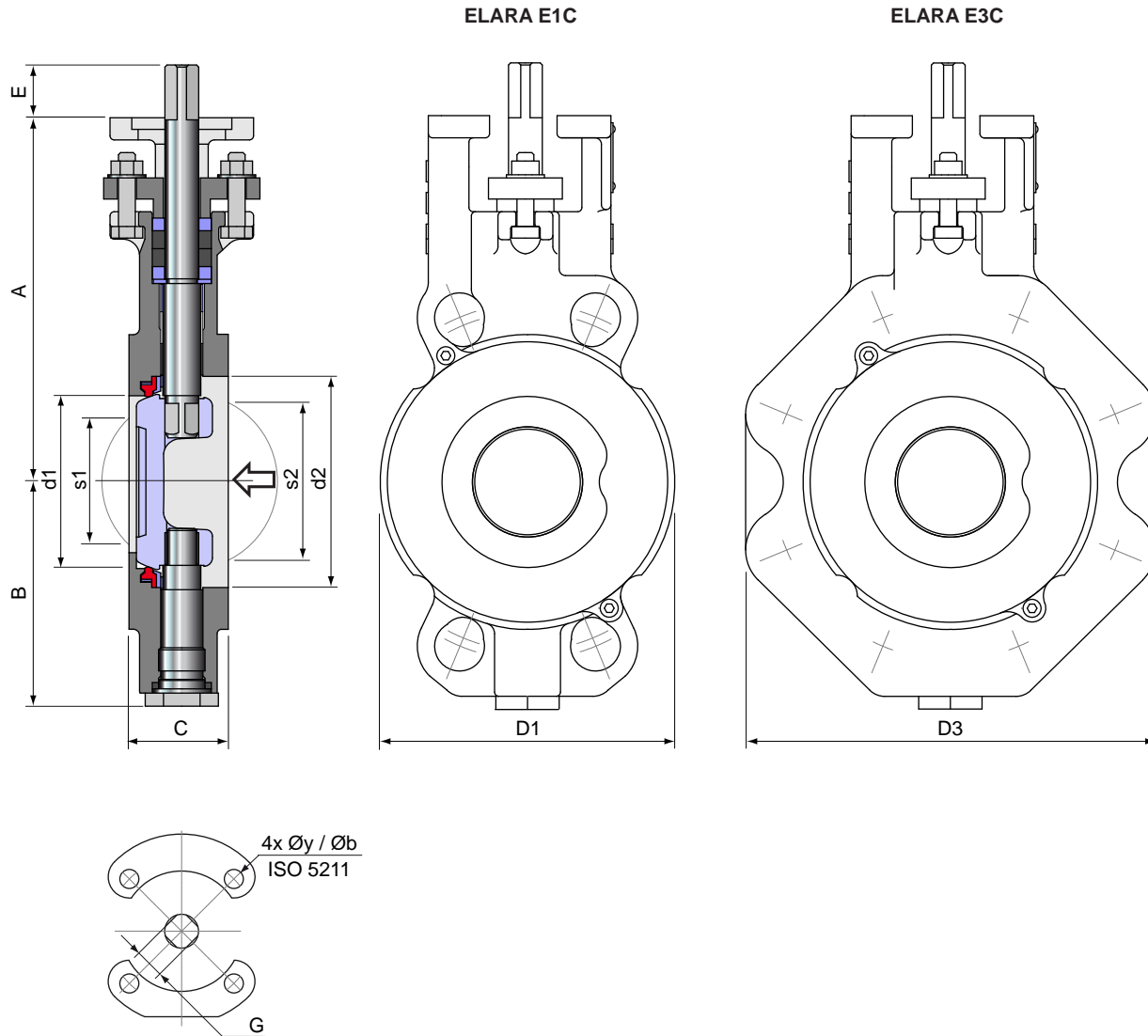
①	Body type	E1C	Wafer	DN50-800
		E3C	Lug	DN50-800
②	Nominal diameter	050-800	mm	
③	Working pressure	3	16 bar	DN50-800
		4	20 bar	DN50-700
		5	25 bar	DN50-500
		6	40 bar	DN50-200
		7	50 bar	DN50-100
④	Rating	for E1C (Wafer)		
		2	PN 10	DN 450-800
		3	PN 16	DN 450-800
		5	PN 25	DN 450-800
		6	PN 10 / 16 / 25 / 40 / ANSI cl.150	DN 350-400
		A	ANSI cl. 150	DN 450-800
		B	PN 10 / 16 / 25 / 40 / ANSI cl.150 / 300	DN 50-300
		for E3C (Lug)		
		2	PN 10	DN 200-800
		3	PN 10 / 16	DN 50-150
			PN 16	DN 200-800
		A	ANSI cl.150	DN 50-800
		5	PN 25	DN 200-800
		6	PN 25 / 40	DN 50-150
PN 40	DN 200-400			
B	ANSI cl.300 (~50bar)	DN 50-300		
⑤	Body	3HD	Cast steel, A216WCB, SODOX coated	
		4C0	Stainless steel 1.4408, A351CF8M	
⑥	Shaft	4A	Stainless steel 1.4021 (with cast steel body 3HD)	
		4T	Stainless steel 1.4462 (with stainless steel body 4C0)	
⑦	Disc	4C0	Stainless steel 1.4408, A351CF8M (with cast steel body 3HD)	DN 50-125
			Stainless steel 1.4408, A351CF8M (with stainless steel body 4C0)	DN 50-800
		4A0	Stainless steel 1.4021 (with cast steel body 3HD)	DN 150-800
⑧	Seat	TG	PTFE with 25% glass fibre	DN 50-800
		TI	Fire Safe	DN 50-800
		IN	Stainless steel (max. 25 bar)	DN 50-800
⑨	ATEX option	ATEX	Execution according to ATEX 94/9/EC, Zone 1 and 21 – Gr II, Cat. 2 G/D	

Mounting the valve at the end of a line on request

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

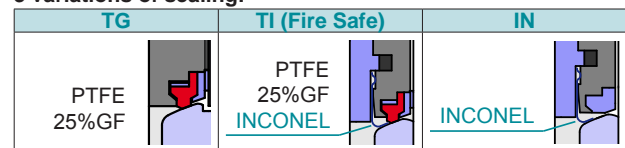
## Dimensions

### ELARA DN 50 - 125



Body	<b>3HD</b>	Cast steel 1.0625 / A216WCB	<b>4C0</b>	Stainless steel 1.4408 / A351CF8M
Shaft	<b>4A</b>	Stainless steel 1.4021	<b>4T</b>	Stainless steel 1.4462
Disc	<b>4C0</b>	Stainless steel 1.4408	<b>4C0</b>	Stainless steel 1.4408

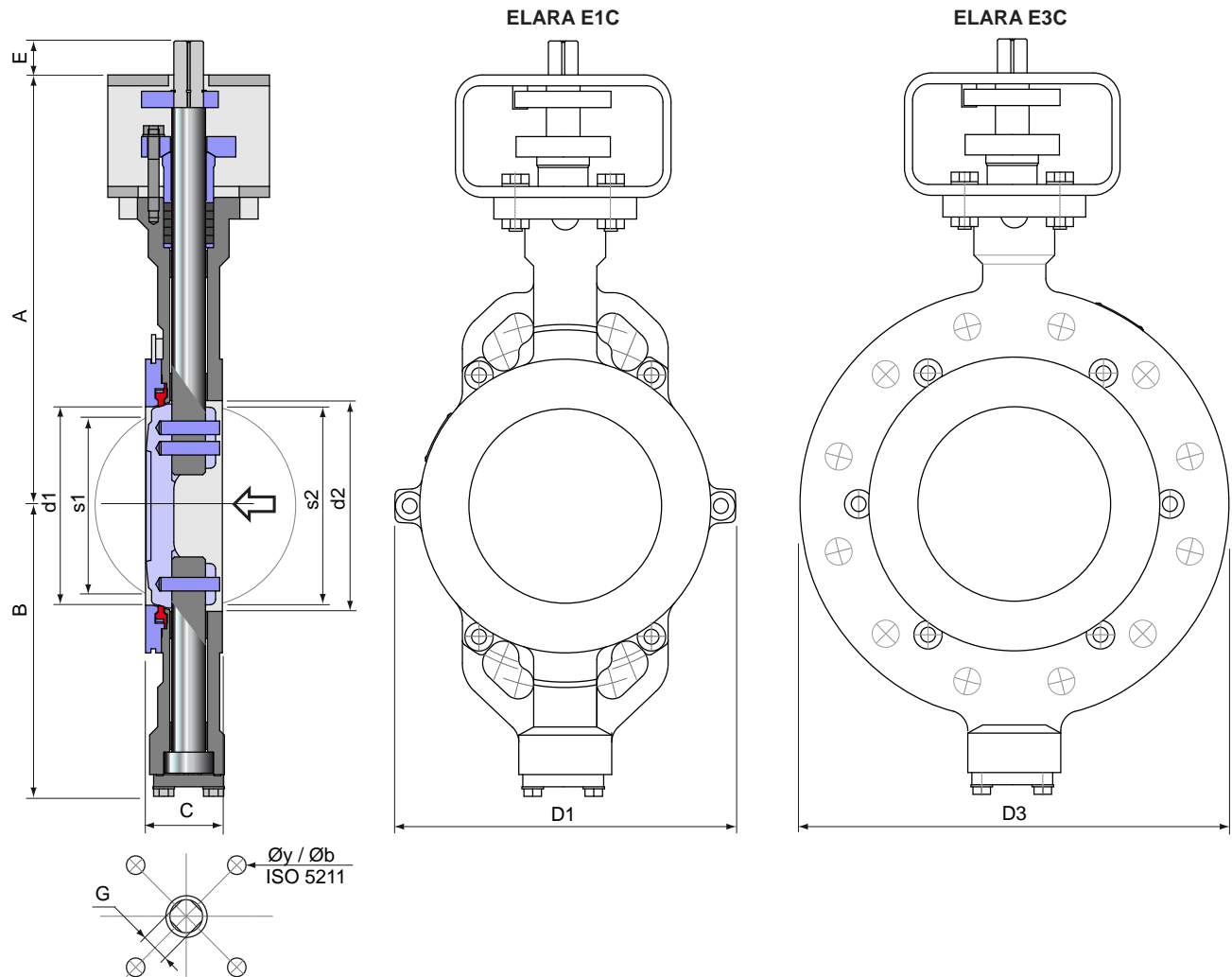
#### 3 variations of sealing:



DN	d1	d2	A	B	C	D1	D3	(TG)		(TI, IN)		E	G	ISO5211	y	b	E1C	E3C
								s1	s2	s1	s2						[kg]	[kg]
50	48	68	163	93	44	105	154	12	32	0	41	19	14	F07	9	70	5,3	7,5
65	64	82	170	100	47	125	178	47	58	38	63	19	14	F07	9	70	6,0	9,2
80	80	100	174	106	47	140	196	64	68	55	73	19	14	F07	9	70	7,0	10,3
100	101	123	206	123	53	163	225	84	88	77	93	19	14	F07	9	70	8,7	12,4
125	121	146	215	137	57	193	260	112	117	105	121	19	14	F07	9	70	12,0	16,7

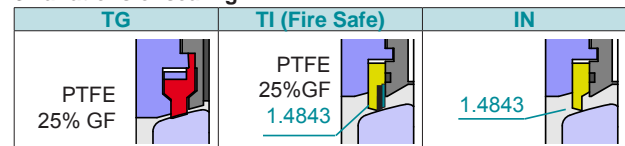
## Dimensions

### ELARA DN 150 - 800



Body	<b>3HD</b>	Cast steel 1.0625 / A216WCB	<b>4C0</b>	Stainless steel 1.4408 / A351CF8M
Shaft	<b>4A</b>	Stainless steel 1.4021	<b>4T</b>	Stainless steel 1.4462
Disc	<b>4A0</b>	Stainless steel 1.4021	<b>4C0</b>	Stainless steel 1.4408

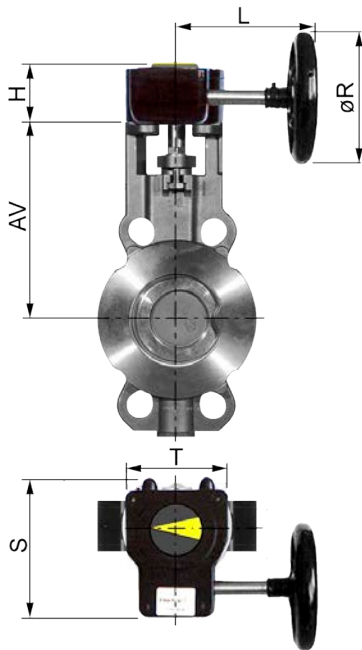
#### 3 variations of sealing:



DN	d1	d2	A	B	C	D1	D3	(TG)		(TI, IN)		E	G	ISO5211	y	b	E1C [kg]	E3C [kg]
								s1	s2	s1	s2							
150	146	155	307	214	56	253	318	137	143	134	146	25	17	F10	4x 11	102	21	28
200	194	204	339	246	60	307	381	189	194	186	196	25	17	F10	4x 11	102	29	41
250	241,5	258,5	375	275	69	348	450	222	235	217	234	28	22	F12	4x 13	125	46	70
300	289	309	430	313	79	393	521	268	284	262	282	28	27	F14	4x 17	140	67	105
350	323	342	508	355	92	448	577	290	308	292	313	28	27	F16	4x 21	165	91	140
400	385	405	556	402	103	542	657	341	360	353	377	37	36	F16	4x 21	165	132	211
450	414	436,5	594	411	114	594	670	375	396	378	405	37	36	F16	4x 21	165	183	275
500	464	487	625	449	127	658	730	418	441	423	451	47	46	F25	8x 17	254	241	356
600	553	581	698	527	154	760	845	495	529	499	541	100	Ø65	F30	8x 21	298	369	547
700	645	683	813	591	165	869	960	586	618	590	630	111	Ø75	F30	8x 21	298	501	756
800	769	796	869	647	190	976	1085	688	731	692	735	111	Ø75	F30	8x 21	298	653	1000

## Dimensions

### Gearbox:



### TG with PTFE seal

DN		pmax [bar]	AV	H	L	R	S	T	n**	[kg]*
50	GB232-05.F05-F0714.100	50	163	53	121	100	114	80	10	0,8
65	GB232-05.F05-F0714.100	50	170	53	121	100	114	80	10	0,8
80	GB232-05.F05-F0714.100	50	174	53	121	100	114	80	10	0,8
100	GB232-05.F05-F0714.100	50	206	53	121	100	114	80	10	0,8
125	GB232-06.F05-F0714.160	40	215	59	179	160	131	80	10	0,9
150	GB232-08.F07-F1017.250	40	317	67	209	250	131	100	9,25	1,55
200	GB232-08.F07-F1017.250	40	349	67	209	250	131	100	9,25	1,55
250	GB232-13.F10-F1222.300	25	395	84	361	300	209	175	10	5,4
300	GB232-13.F1427.400	25	460	84	376	400	209	175	10	5,4
350	GB880N-F1627.500	25	508	92	315	500	227	200	9,5	14
400	GB880N-F1636.600	25	556	92	315	600	227	200	9,5	14
450	GB1250N-F1636.600	25	594	101	356	600	258	220	13,75	22
500	GB1950N/HR-F2546.500	25	625	123	397	500	323	285	21	32
600	GB6800N-F3065-600	16	698	160	422	600	402	370	19,5	56
700	GBA250G/SP9-F3075-400	16	813	175	609	400	725	510	176	225
800	GBA250G/SP9-F3075-400	16	869	175	609	400	725	510	176	225

### TI Fire Safe

### IN with metal seat

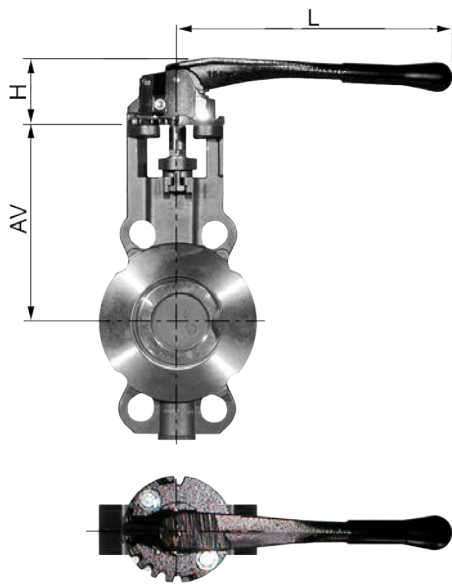
DN		pmax [bar]	AV	H	L	R	S	T	n**	[kg]*
50	GB150N.F05-F0714.160	25	163	52	134	160	124	80	10	2,2
65	GB150N.F05-F0714.160	25	170	52	134	160	124	80	10	2,2
80	GB150N.F05-F0714.160	25	174	52	134	160	124	80	10	2,2
100	GB215N.F07-F1014.160	25	206	64	193	160	143	125	9,25	3,5
125	GB215N.F07-F1014.160	25	215	64	193	160	143	125	9,25	3,5
150	GB215N.F07-F1017.160	25	317	64	193	160	143	125	9,25	3,5
200	GB215N.F07-F1017.250	25	349	64	208	250	143	125	9,25	3,5
250	GB880N.F1222.500	25	395	92	315	500	227	200	9,5	14
300	GB1250N.F1427.500	25	460	101	356	500	258	220	13,75	22
350	GB1950N/HR.F1627.500	25	508	123	397	500	323	285	21	32
400	GB1950N/SP4.F1636.400	25	556	155	437	400	403	285	52	45
450	GB1950N/SP4.F1636.400	25	594	155	437	400	403	285	52	45
500	GB1950N/SP4.F2546.600	25	625	155	457	600	403	285	79,25	45
600	GB6800N-F3065-700	16	698	160	422	700	402	370	19,5	56
700	GBA250G/SP9-F3075-400	16	813	175	609	400	725	510	176	225
800	GBA250G/SP9-F3075-400	16	869	175	609	400	725	510	176	225

\* [kg] weight without butterfly valve

\*\* n = Handwheel turns ON/OFF

## Dimensions

### Handlever:



DN		pmax[bar]	AV	H	L	[kg]*
50	HLG.F0714.260-E.C	50	162,5	66	260	1,2
65	HLG.F0714.260-E.C	50	169,5	66	260	1,2
80	HLG.F0714.260-E.C	25	173,5	66	260	1,2
100	HLG.F0714.260-E.C	25	205,5	66	260	1,2
125	HLG.F0714.350-E.C	20	215,0	66	350	1,6

\* [kg] weight without butterfly valve

## Further documentation

**Pneumatic actuators, Electric actuators, Accessories** according separate data sheets.

**Installation guide, Maintenance guide, Flanges:** Please consult these guides for the installation and maintenance of our butterfly valves.

