

# DOUBLE EXCENTRIC BUTTERFLY VALVE TYPE TECWAT

TECHNICAL PASSPORT

**PN16 FLANGED DOUBLE EXCENTRIC  
BUTTERFLY VALVE WITH GEAR BOX**

**VP 4241-08**

## APPLICATION

Tecwat type butterfly valves are intended to be used for ON/OFF operations in fluid transfer circuits.

**Area of use:** water networks, production plants, pumping stations, fire circuits on industrial site, etc.



**Fluids:** water, drinking water

## GENERAL CHARACTERISTICS

**TECWAT model:** long pattern.

-Design according to NF EN 593.

**Range:** from DN100 to DN2000.

-Bi-directional sealing with a preferred mounting direction indicated by the arrow on the body.

-Pinned stem/disc connection.

-Double eccentric butterfly valve prevents wear due to the stainless steel seat attached to the body.

-Seal on disc retained by a stainless steel retaining ring.

-Optimized maneuvering torque.

-Low pressure drop.

-Operating by IP65 gear box.

-Clockwise closing.



**ACS**

## STANDARDS

<b>Design</b>	Complies with standard EN 593
<b>Face to face</b>	Face to face according to standard NF EN 558 serie 14.
<b>Connection</b>	Flange mounting ISO PN10/16 for DN100-150 and PN16 for DN200-2000 according to standard EN1092-2.
<b>Tests</b>	Hydraulic tests carried out according to the standard EN12266-1: -Body : 24 bar -Seat : 17.6 bar

## PRODUCT APPROVALS



WRAS certificate n° 1607394



**EN 1074**

Attestation of health conformity n° 19 ACC LY 582



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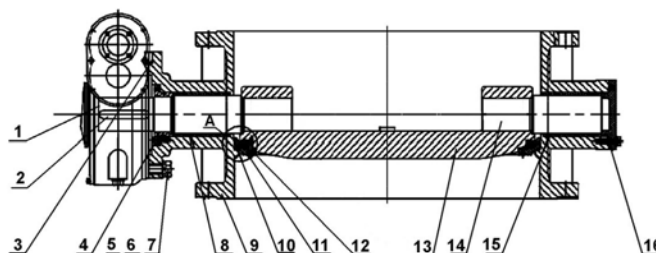
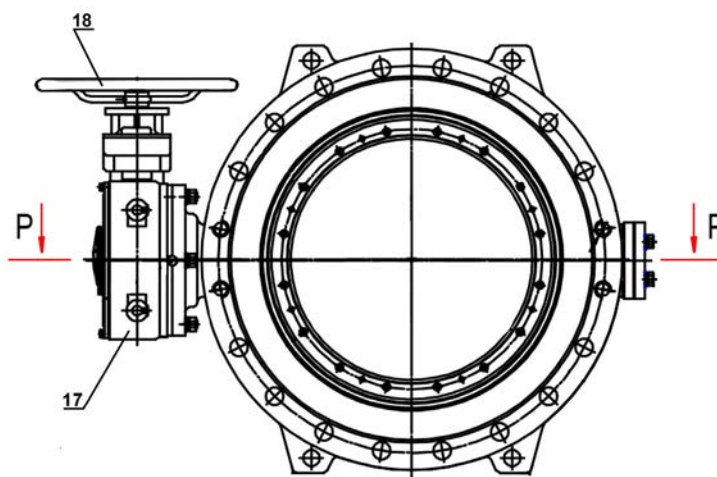
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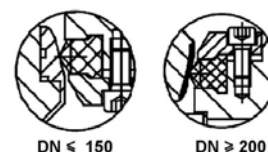
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## CONSTRUCTION

Component	Coating
Body	Epoxy powder RAL 5015 250 microns



VIEW A



SECTION P-P

Pos.	Description	Material	Equivalences		
			DIN	ASTM	BS
1	Upper shaft	Stainless steel X20Cr13	1.4021	AISI 420	420 S 37
2	Key	Stainless steel X20Cr13	1.4021	AISI 420	420 S 37
3	Locking pin	Stainless steel X20Cr13	1.4021	AISI 420	420 S 37
4	Packing gland	Ductile iron			
5	Screw	Stainless steel A2-70			
6	Gasket	Stainless steel A2			
7	Flexible gasket	Stainless steel 3 Cr13			
8	Shaft bush	Al-bronze			
9	Body	Fonte ductile EN-GJS-500-7	GGG 50	A536 70-50-05	1563 EN-JS1050
10	Sealing surface	Stainless steel 304			
11	Retainer	Stainless steel 304			
12	Sealing gasket	EPDM			
13	Disc	Fonte ductile EN-GJS-500-7	GGG 50	A536 70-50-05	1563 EN-JS1050
14	Lower shaft	Stainless steel X20Cr13	1.4021	AISI 420	420 S 37
15	O-ring	EPDM			
16	Cover	Ductile iron			
17	Gear box				
18	Handwheel	Cast iron	GG 25	35B	HT250

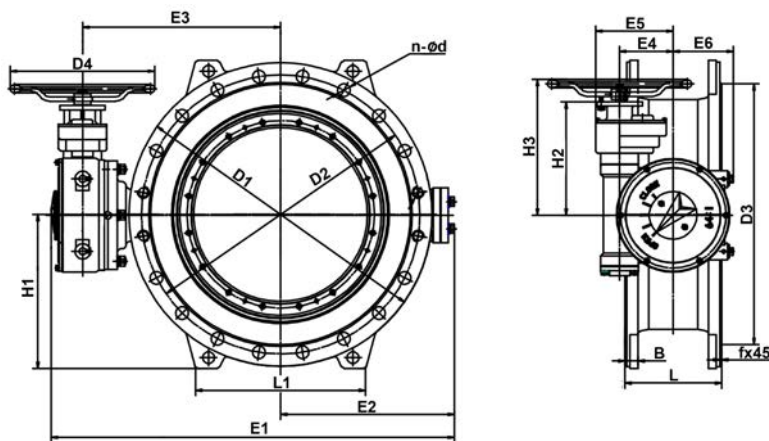
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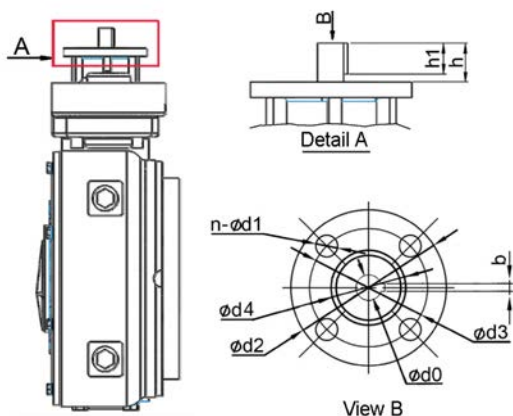
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## DIMENSIONS



DN	ØD1		ØD2	ØD3	B	f	L	n-Ød	H1	H2	H3	E1	E2	E3	E4	E5	E6	L1	D4	ISO 5210	Weight (kg)
	mm	inch																			
100	4"	220	180	156	19	3	190	8-Ø19	117		150	284	133	194	43.2	73.2	64	150	180	F10	31
150	6"	285	240	211	19	3	210	8-Ø23	147.5		150	315	164	225	43.2	73.2	64	180	180	F10	36
200	8"	340	295	266	20	3	230	12-Ø23	175	137	193	526	198	272	64	99	86	196	240	F10	50
250	10"	405	355	319	22	3	250	12-Ø28	207.5	178	233	623	230	328	93.4	135	115	240	320	F10	90
300	12"	460	410	370	24.5	4	270	12-Ø28	235	178	233	670	254	351	93.4	135	115	275	320	F10	103
350	14"	520	470	429	26.5	4	290	16-Ø28	265	192	283	784	295	407	120	169	138	290	400	F10	156
400	16"	580	525	480	28	4	310	16-Ø31	295	192	283	853	334	437	120	169	138	320	400	F10	178
450	18"	640	585	548	30	4	330	20-Ø31	325	317	378	938	368	488	120	186	138	360	240	F10	248
500	20"	715	650	609	31.5	4	350	20-Ø34	362.5	315	376	1019	400	530	148	214	166	395	400	F10	316
600	24"	840	770	720	36	5	390	20-Ø37	425	315	376	1117	480	548	148	214	166	470	400	F10	458
700	28"	910	840	794	39.5	5	430	24-Ø37	460	346	407	1308	563	640	185	265	196	480	400	F10	613
800	32"	1025	950	901	43	5	470	24-Ø41	517.5	346	407	1426	623	698	185	265	196	560	400	F10	808
900	36"	1125	1050	1001	46.5	5	510	28-Ø41	567.5	390	451	1612	698	789	230	333	232	618	400	F10	1100
1000	40"	1255	1170	1112	50	5	550	28-Ø44	635.5	451	512	1773	766	882	230	368	232	600	400	F10	1404
1200	48"	1485	1390	1328	57	5	630	32-Ø50	747.5	507	568	2112	810.5	1038	315	453	360	800	400	F10	2330
1400	56"	1685	1590	1530	60	5	710	36-Ø50	847.5	599	660	2529	1063	1253	412	613	440	920	400	F10	3670
1600	64"	1930	1820	1750	65	5	790	36-Ø57/4-M52	970	599	660	2754	1172	1369	412	613	440	1060	400	F10	4998
1800	72"	2130	2020	1950	73	5	870	36-Ø57/4-M52	1170	757	818	1902	1413	1602	495	725	485	1170	600	F10	8000
2000	80"	2345	2230	2150	75	5	950	48-Ø62	1177.5	757	818	1955	1583	1655	495	725	485	1290	600	F10	10000

## TOP FLANGE ISO 5210 DIMENSIONS



DN	ISO 5210									Number of turn	Torque * (Nm)
	mm	inch	ISO flange	Ød0	n-Ød1	Ød2	Ød3	Ød4	h		
100	4"	F07	15	4-Ø10	125	102	70	18	5X16	8	11
150	6"	F07	15	4-Ø10	125	102	70	18	5X16	8	20
200	8"	F10	15	4-Ø10	125	102	70	28	6X20	10	33
250	10"	F10	20	4-Ø10	125	102	70	28	6X20	12	49
300	12"	F10	20	4-Ø10	125	102	70	28	6X20	12	69
350	14"	F10	20	4-Ø10	125	102	70	30	6X25	20	63
400	16"	F10	20	4-Ø10	125	102	70	30	6X25	20	84
450	18"	F10	20	4-Ø10	125	102	70	30	6X25	80	32
500	20"	F10	20	4-Ø10	125	102	70	30	6X25	64	54
600	24"	F10	20	4-Ø10	125	102	70	30	6X25	64	83
700	28"	F10	20	4-Ø10	125	102	70	30	6X25	96	80
800	32"	F10	20	4-Ø10	125	102	70	30	6X25	96	118
900	36"	F10	20	4-Ø10	125	102	70	30	6X25	198.9	75
1000	40"	F10	20	4-Ø10	125	102	70	30	6X25	382.2	52
1200	48"	F10	20	4-Ø10	125	102	70	30	6X25	421.4	75
1400	56"	F10	20	4-Ø10	125	102	70	30	6X25	641.25	70
1600	60"	F10	20	4-Ø10	125	102	70	30	6X25	641.25	107
1800	72"	F10	20	4-Ø10	125	102	70	30	6X25	559	162
2000	80"	F14	30	4-Ø10	125	102	70	50	8X45	559	209

\* Values without safety coefficient

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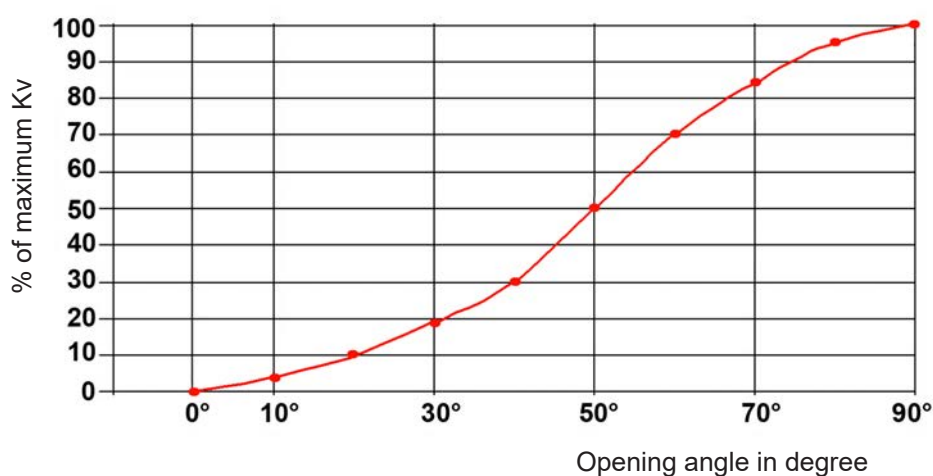


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## WORKING CONDITIONS

Maximum working pressure: 16 bar.  
Maximum working temperature : + 80 °C.

## FLOW FACTOR - Kv



DN	mm	200	250	300	350	400	450	500	600	700	800	900	1000	1100	1200	1400	1600
	inch	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	44"	48"	56"	64"
<b>Kvs</b>		1880	3800	4950	8000	10900	14200	18250	28000	40500	55100	74000	93338	116213	142516	167310	264433

Values given for information

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