

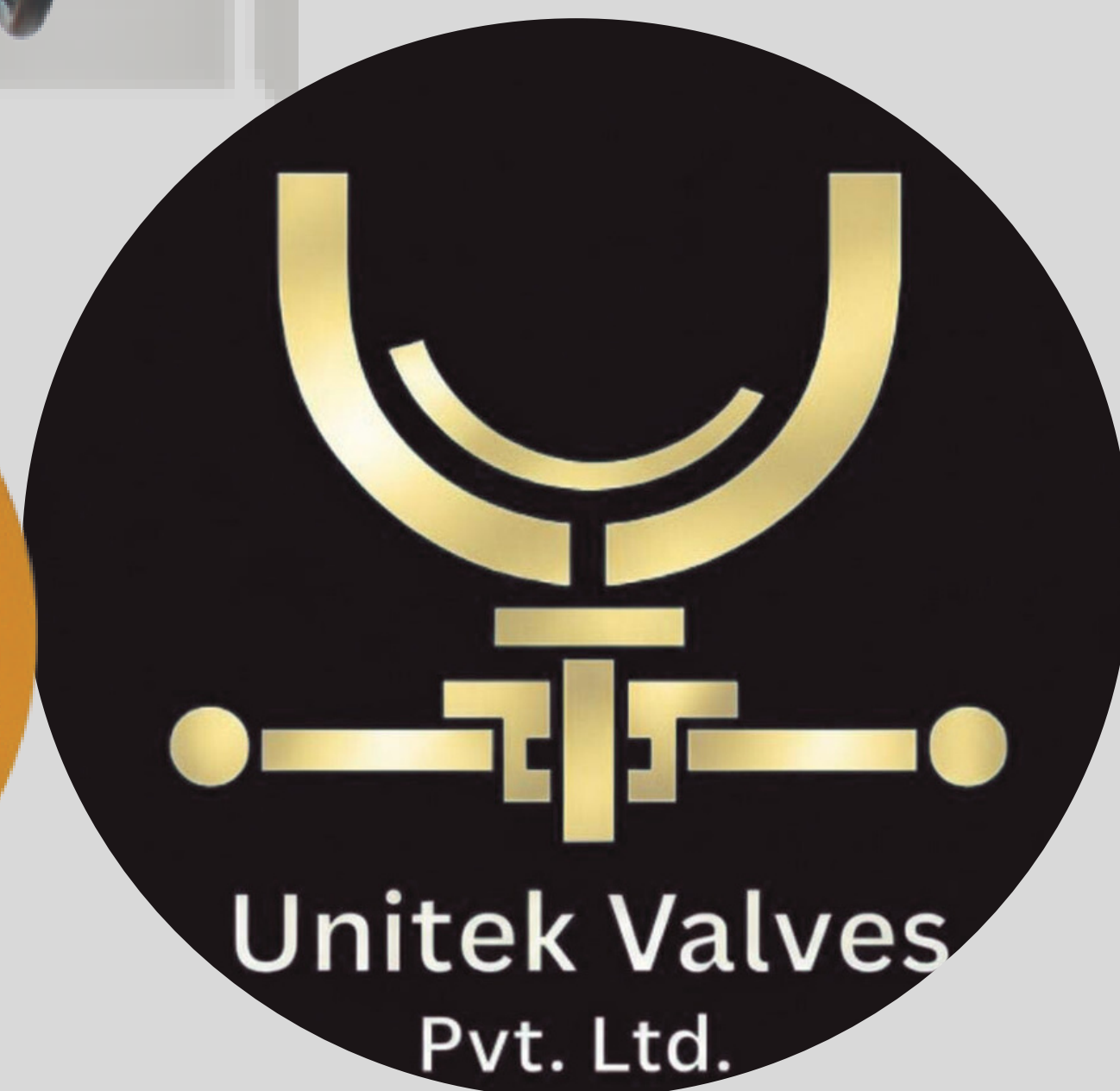


UNITEK VALVES PVT LTD®
MANUFACTURER OF INDUSTRIAL VALVES



UNITEK VALVES PVT LTD CATALOGUE

DOUBLE FLANGED TYPE BUTTERFLY VALVE



DOUBLE FLANGED TYPE BUTTERFLY VALVE

The valve design guarantees maintenance free operation over time. Light weight and compact construction. The centered disc configuration allows complete tightness in both directions of flow, hydrodynamic design of the disc, thus reducing load losses and with this electricity consumption.

Rubber seat to provide total bidirectional tightness.

Corrosions Protection:

1. The external surfaces of the valve body and the disc will be coated with spray applied liquid 2-pack epoxy paint system – primer plus 2 finish coats.
2. Epoxy coating is WRAS listed for potable water applications and meet the requirements of BS 6920 for water quality testing.

Direction to close:

Clockwise To Close (CTC)

Testing:

MATERIAL SPECIFICATION		
Body	16 bar	24 bar
Seat	16 bar	17.6 bar

Note: Please refer to General Arrangement Drawing for full details of valves.

TECHNICAL FEATURES

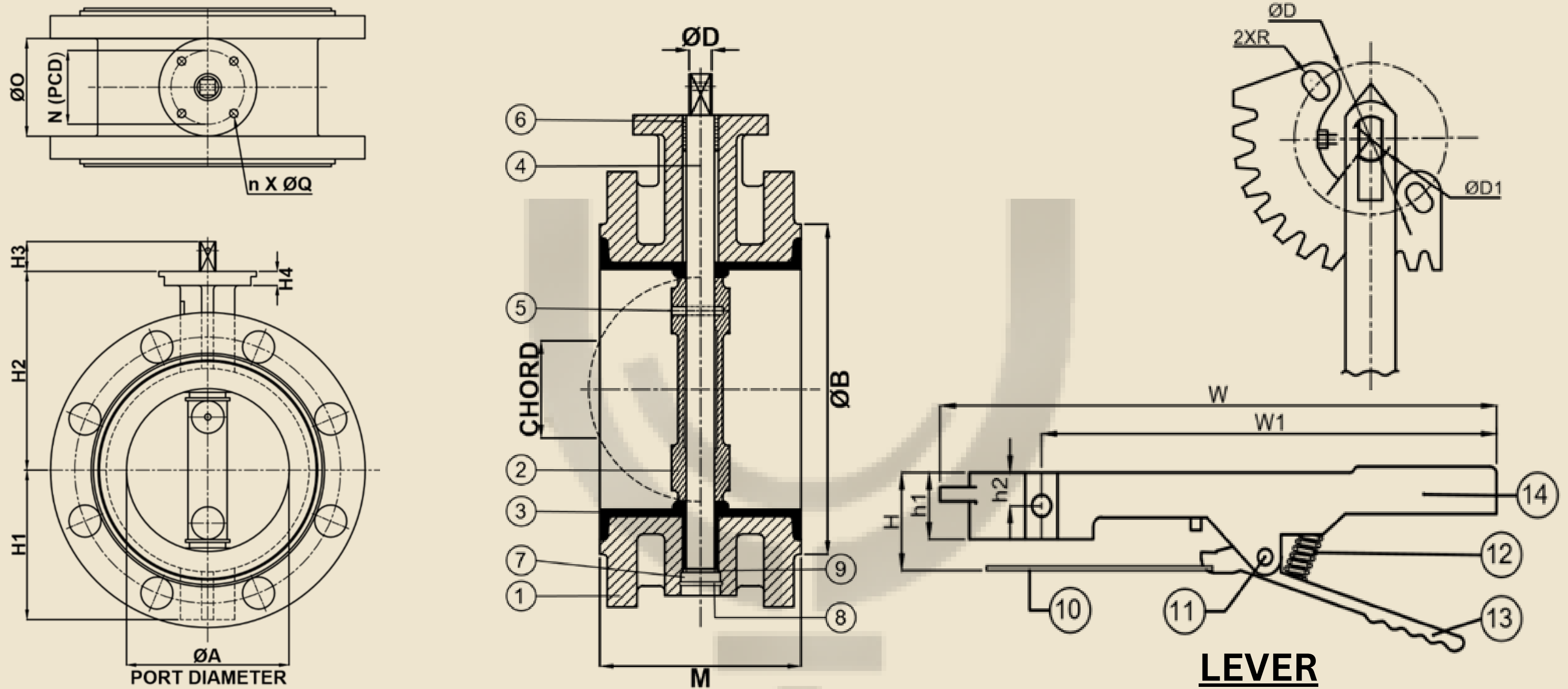
- **TYPE:** double flange
- **working pressure:** pn16
(PN10 also available as standard, plus BS10 Table E)
- **dimensions:** DN50 to DN2200
- **WORKING TEMPERATURE:** -10°C to 120°C for EPDM,
-10°C to 85°C for NBR.
- **COATING:** 250µm epoxy RAL 5005.
- **SEAT:** vulcanised.
- **optional:** SUITABLE FOR DRINKING WATER

STANDARDS

- **DESIGN:** EN 593.
- **FLANGES:** EN 1092-2
- **FACE TO FACE LENGTH:** EN 558 SERIES 13.
(OPTIONAL: ISO 5752-13)
- **COUPLING FLANGE:** ISO 5211.
- **TESTS :** EN 12266-1 / EN 1074 / ISO 5208 /
API 598.
- **COATING:** ISO 12944.



DOUBLE FLANGED TYPE BUTTERFLY VALVE



MATERIAL SPECIFICATION

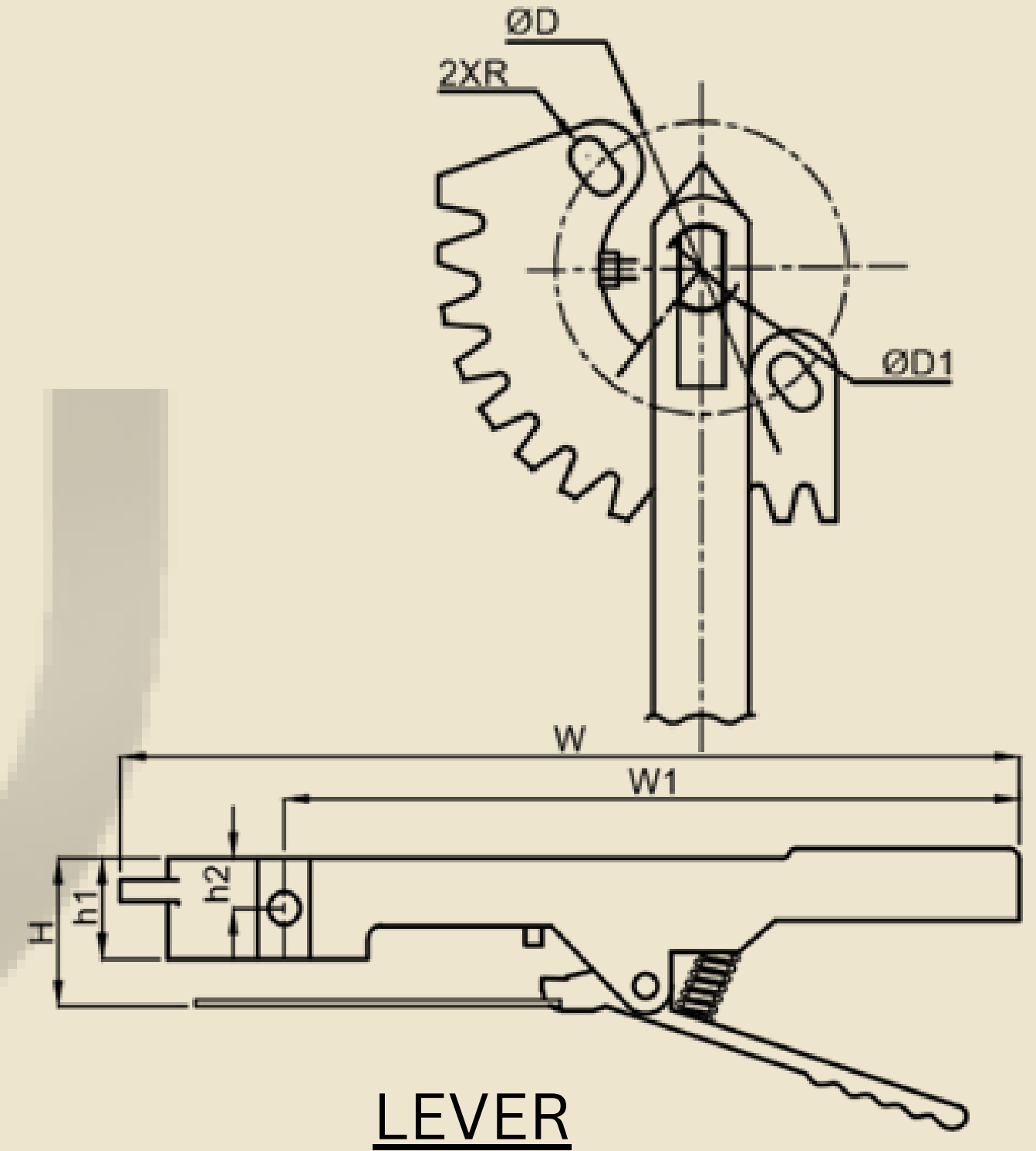
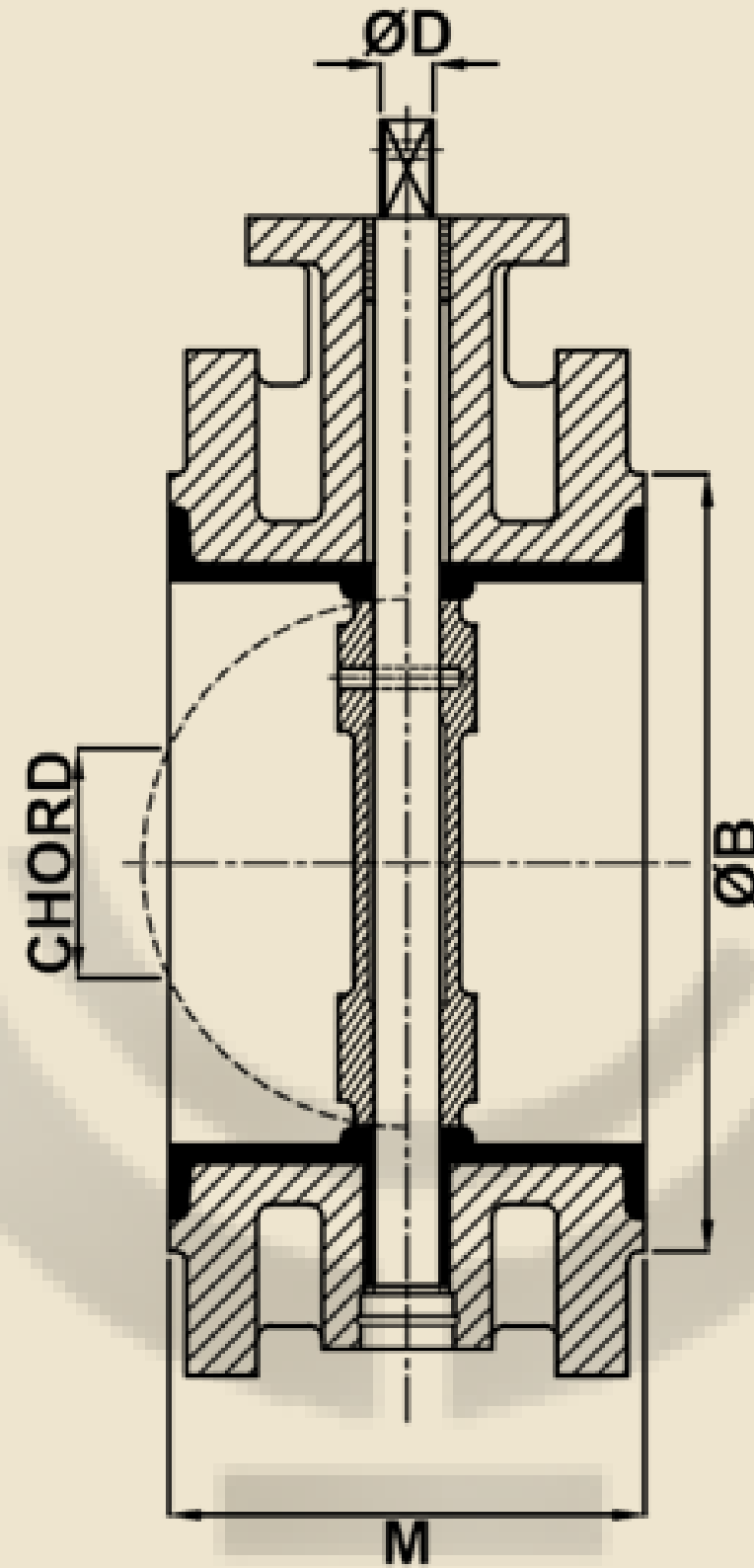
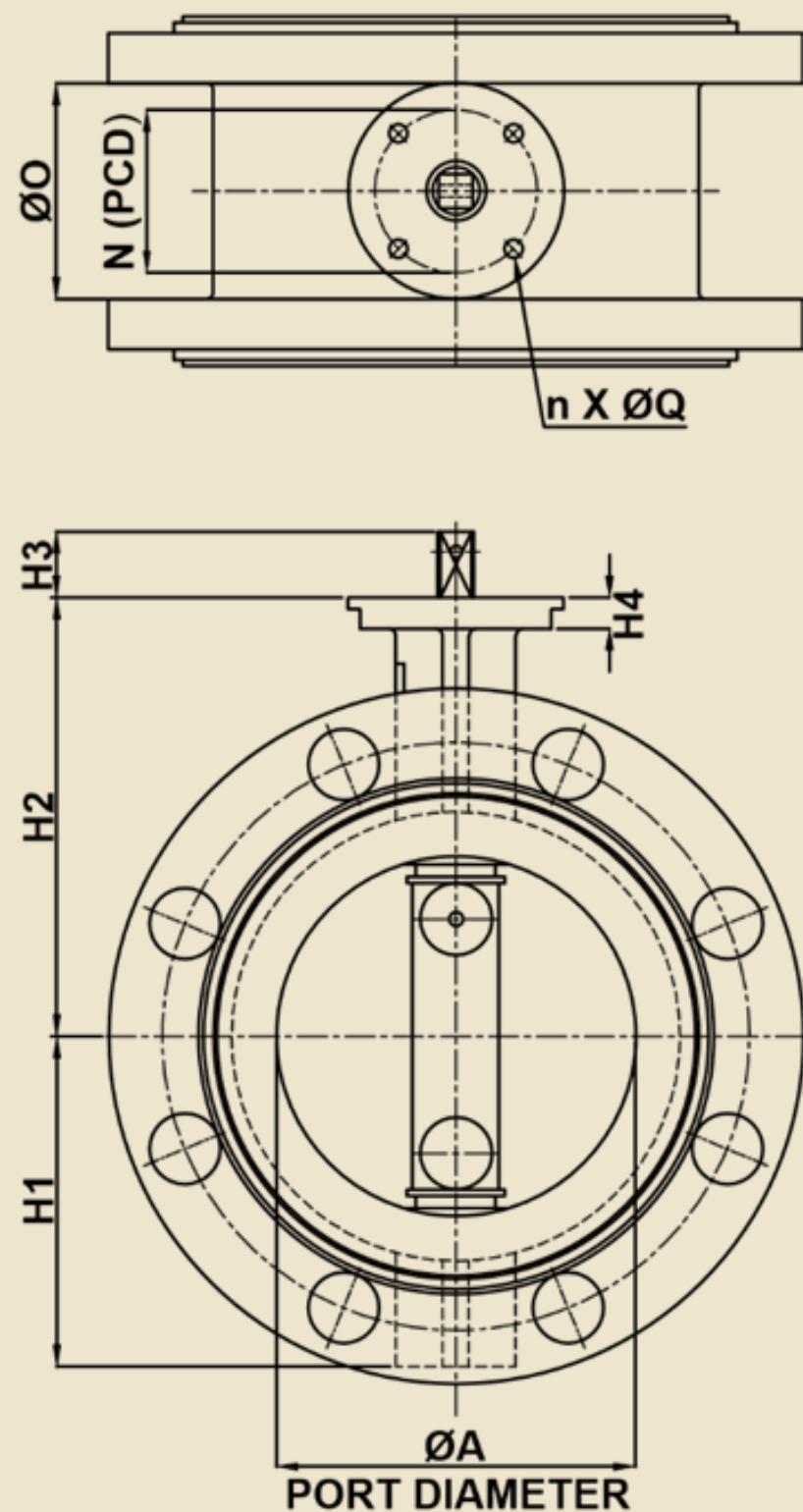
P. NO.	PART DESCRIPTION	MATERIALS
1	BODY	IS 210 Gr. FG 200 / 220 / CS ASTM A216 Gr. WCB / SG IRON / SS 304 / SS 316
2	DISC	IS 210 Gr. FG 200 / 220 / CS ASTM A216 Gr. WCB / SG IRON / SS 304 / SS 316
3	SEAT	MOULDED / REPLACEABLE NITRILE / EPDM / SILICON / VITON / HYPOLON / PFA / PTFE
4	SHAFT	AISI 410 / AISI 304 / AISI 316
5	DISC PIN	STAINLESS STEEL
6	BUSHING	POLYACETAL / PTFE
7	PLUG	CARBON STEEL
8	CIRCLIP	SPRING STEEL
9	O-RING	NBR / EPDM
10	INDICATOR	CARBON STEEL
11	SPRING PIN	SPRING STEEL (65Mn)
12	SPRING	SPRING STEEL (65Mn)
13	SIDE LEVER	CARBON STEEL
14	MAIN LEVER	CARBON STEEL

Note: Other materials and specifications can be provided on request.

Valves can be supplied in other MOC's on request :-

SS (ASTM A 351 Gr.CF3MN / CF8C / CN7M), DSS (ASTM A 995 Gr. 4A / 5A / 3A / 6A)

DOUBLE FLANGED TYPE BUTTERFLY VALVE DN50 - DN300



DIMENSIONAL DATA									
DN	50	65	80	100	125	150	200	250	300
ØA	50	65	80	100	125	150	200	250	300
ØB	102	122	130	158	191	215	268	324	374
ØD	11	11	11	11	14	14	17	22	22
H1	67	74	82	100	112	134	159	195	220
H2	118	126	133	147	160	180	204	245	270
H3	25	25	25	25	28	28	28	30	30
H4	12	12	14	14	14	14	14	15	15
M	108	112	114	127	140	140	152	165	178
N	70	70	70	70	70	70	70	102	102
ØO	90	90	90	90	90	90	90	125	125
n X ØQ	4 X 9	4 X 9	4 X 9	4 X 9	4 X 9	4 X 9	4 X 9	4 X 11	4 X 11
CHORD	-	-	-	-	-	53	130	188	242
Wt.kg	7.5	9	11	14	19	22	34	49	69

NOTE: The above data is subject to change without any notice due to our continuing product improvement program.

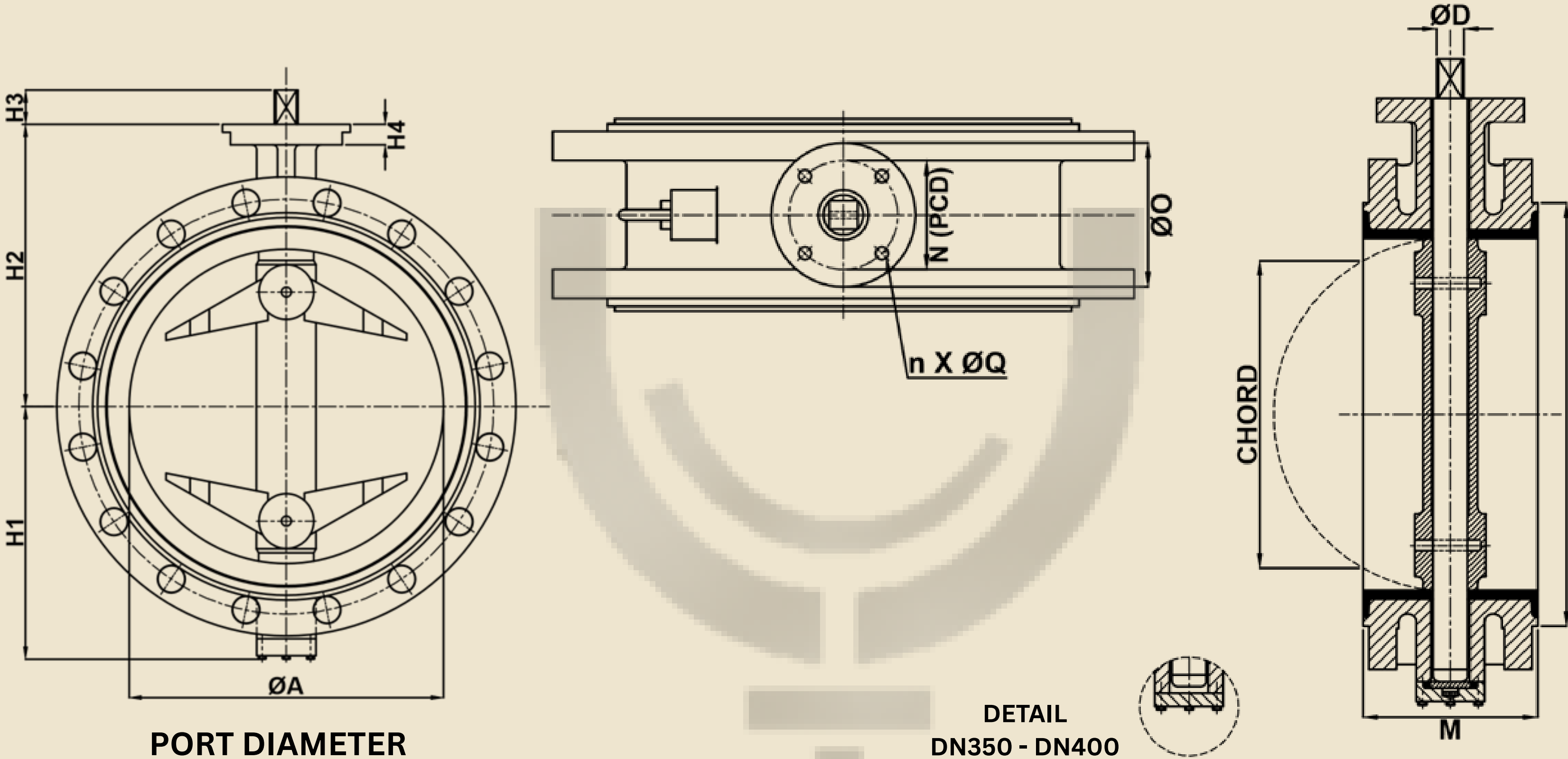
LEVER DIMENSIONS				
DN	50-80	100	125-150	200
NPS (in)	2 to 3	4	5 to 6	8
W	234	290	290	400
W1	216	265	265	374
H	32	32	32	32
h1	22	25	25	29
h2	9	10	10	14
S	3	3	3	3
ØD	50	70	70	70
ØD1	12.6	15.77	18.92	22.1
2XR	2XR3.5	2XR5	2XR5	2XR5
Wt.kg approx.	0.4	0.59	0.59	0.93

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SS (ASTM A 351 Gr.CF3MN / CF8C / CN7M), DSS (ASTM A 995 Gr. 4A / 5A / 3A / 6A)

All dimensions in mm (unless specified) & Weight given in kg.

DOUBLE FLANGED TYPE BUTTERFLY VALVE DN350 – DN600



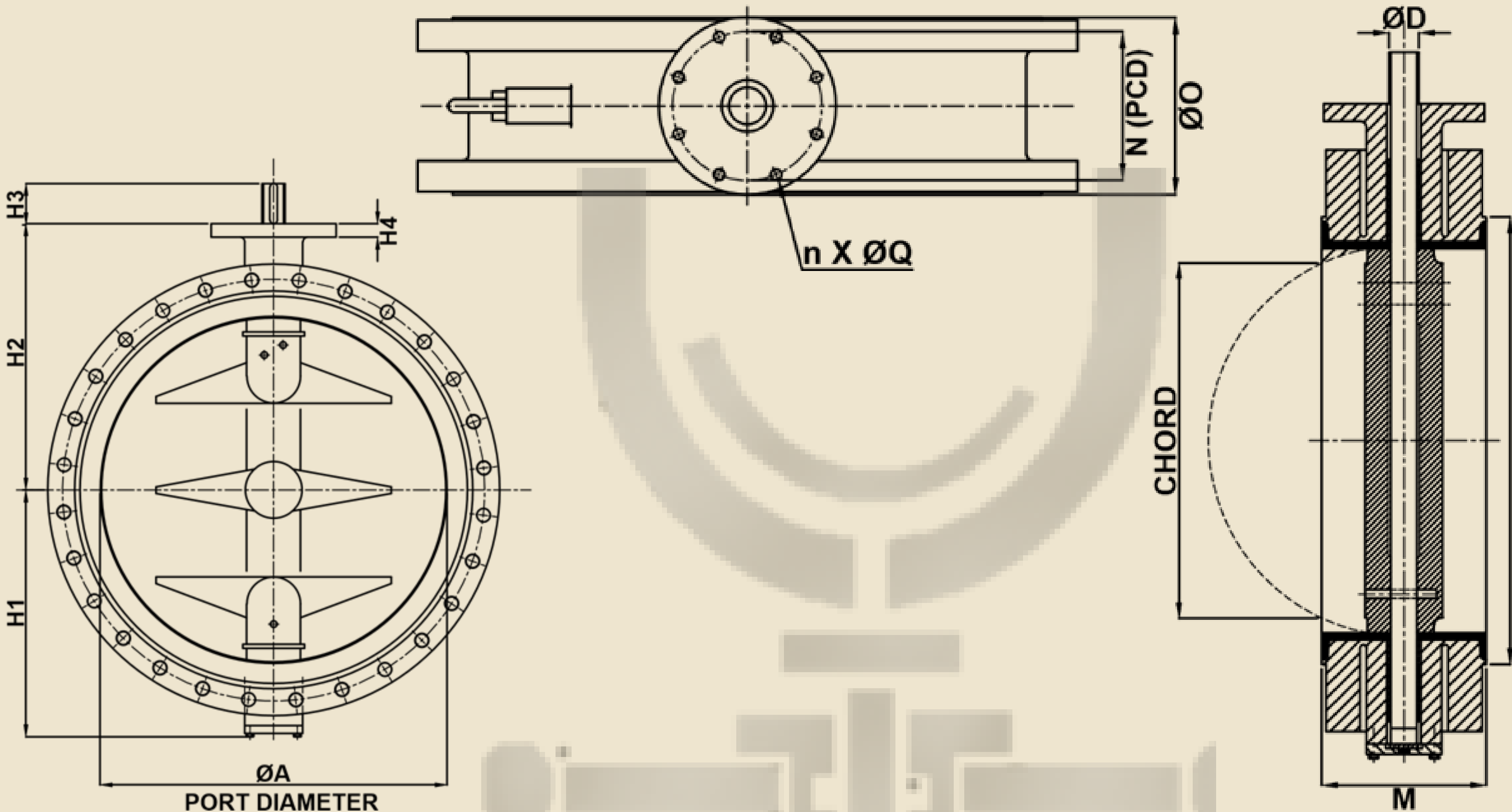
DIMENSIONAL DATA					
DN	350	400	450	500	600
ØA	350	400	450	500	600
ØB	438	488	536	590	692
ØD	27	27	36	36	46
H1	282	307	352	387	452
H2	315	350	375	415	465
H3	29	29	38	38	48
H4	20	20	20	20	25
M	190	216	222	229	267
N	125	125	140	140	165
ØO	150	150	175	175	210
n X ØQ	4 X 14	4 X 14	4 X 18	4 X 18	4 X 22
CHORD	294	337	392	445	538
Wt.kg approx.	71	98	119	162	258
NOTE: The above data is subject to change without any notice due to our continuing product improvement program.					

Valves can be supplied in other MOC's on request :-
 SS (ASTM A 351 Gr.CF3MN / CF8C / CN7M), DSS (ASTM A 995 Gr. 4A / 5A / 3A / 6A)

All dimensions in mm (unless specified) & Weight given in kg.



DOUBLE FLANGED TYPE BUTTERFLY VALVE DN550 – DN2000



DIMENSIONAL DATA

DN	550	650	700	750	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000
ØA	532	640	690	735	790	890	985	1085	1185	1285	1385	1477	1568	1770	1970
ØB	635	740	805	855	910	1005	1110	1220	1325	1430	1535	1645	1755	1965	2160
ØD	55	60	70	70	80	90	90	105	110	110	120	135	150	165	200
H1	395	455	485	540	550	650	680	767	845	870	925	1000	1085	1214	1437
H2	470	500	555	590	620	660	740	800	950	950	990	1050	1150	1265	1425
H3	110	110	110	110	120	120	120	120	160	160	160	160	160	180	200
H4	25	30	25	30	30	30	30	40	40	50	50	50	50	55	60
M	229	267	292	292	318	330	410	410	470	470	530	600	600	670	520
N	165	165	254	254	254	254	254	298	356	356	356	406	406	406	483
ØO	210	210	300	300	300	300	300	350	415	415	415	475	475	475	560
n X ØQ	4 X 22	4 X 22	8 X 18	8 X 18	8 X 18	8 X 18	8 X 18	8 X 22	8 X 33	8 X 33	8 X 33	8 X 39	8 X 39	8 X 39	8 X 39
CHORD	480	582	625	675	723	816	896	1005	1088	1196	1280	1350	1449	1638	1900
Wt.kg. Approx.	250	340	450	580	690	790	1040	1460	1640	1800	2475	2710	2840	3980	6500

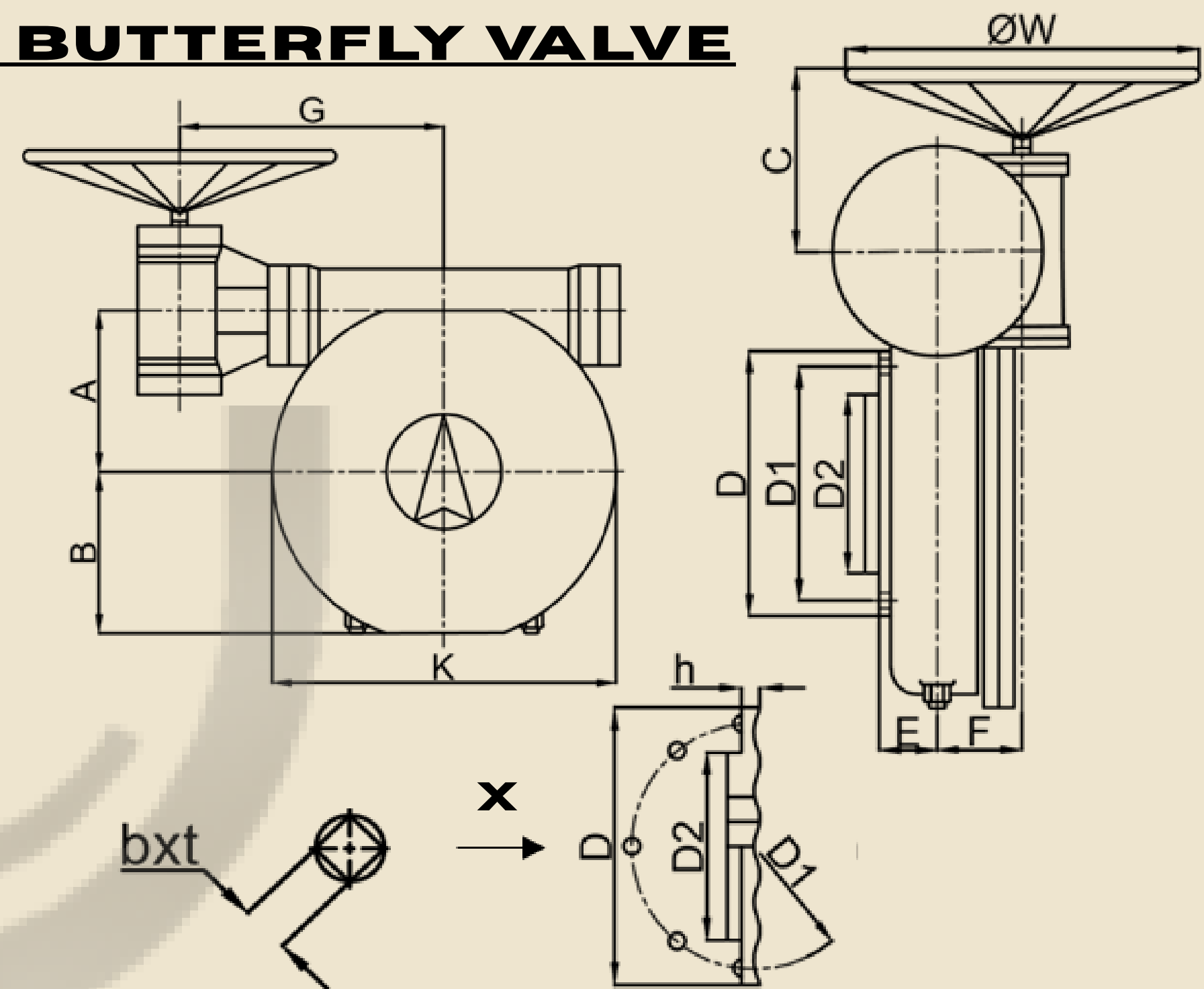
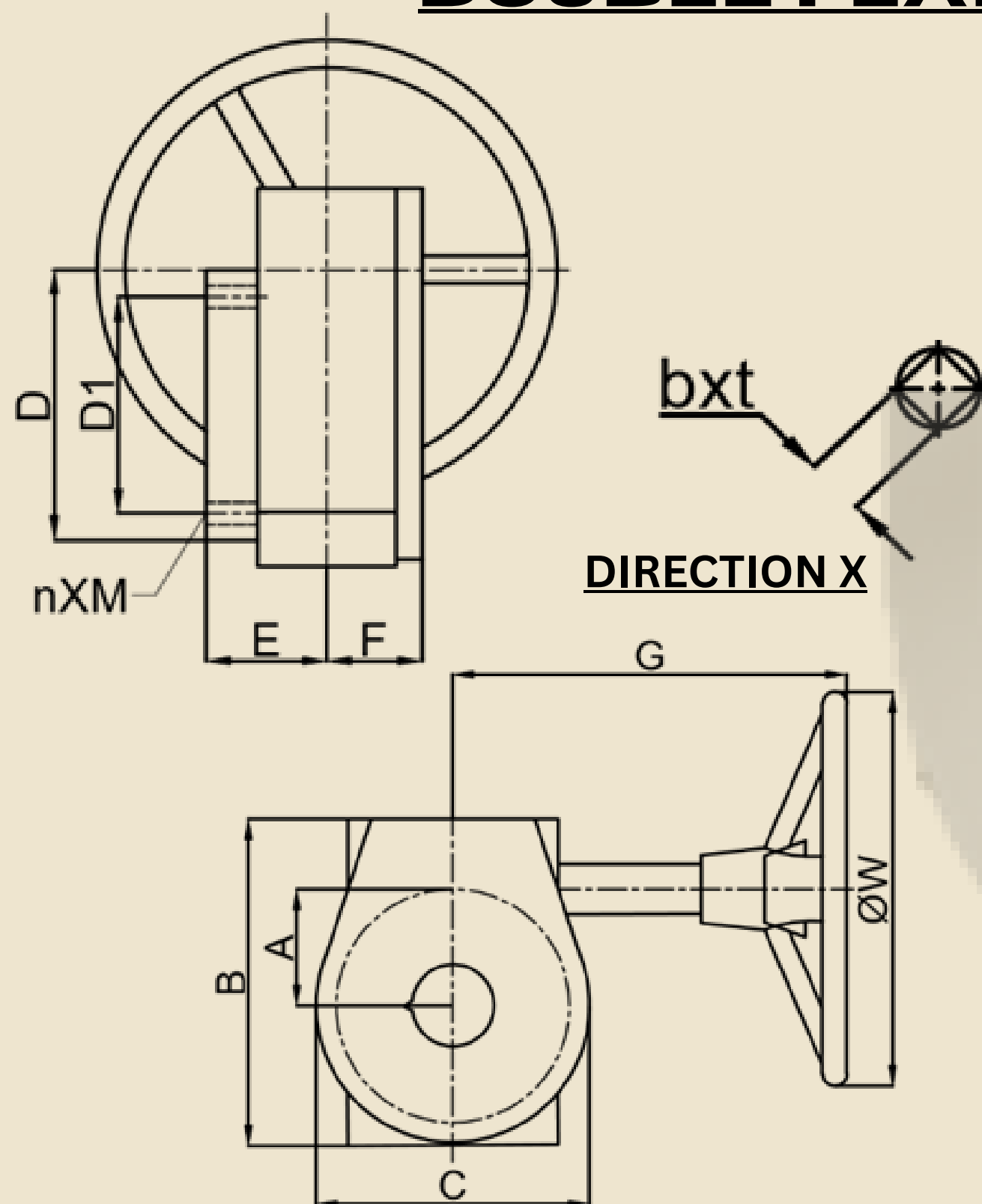
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DN	KEY No-size	DN	KEY No-size
550	1-16x10x100	1200	2-28x16x140
650	1-18x11x100	1300	2-28x16x140
700	1-20x12x100	1400	2-32x18x140
750	1-20x12x100	1500	2-36x20x140
800	1-22x14x110	1600	2-36x20x140
900	2-25x14x110	1800	2-40x22x160
1000	2-25x14x110	2000	2-45x25x180
1100	2-28x16x110		

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All dimensions in mm (unless specified) & Weight given in kg.

DOUBLE FLANGED TYPE BUTTERFLY VALVE



MANUAL REDUCER WITH HANDWHEEL

DIMENSIONS							
DN	100	150	200	250	300	350	400
NPS (in)	4	6	8	10	12	14	16
A	45	45	63	63	78	78	120
B	128	128	179	179	200	200	287.5
C	105	105	152	152	164	164	287
D	90	90	125	125	125/140	125/140	175
D1	70	70	102	102	102	102	140
E	36	36	46	46	46	46	59
F	28	28	34	34	36	36	54
G	226	226	313	313	307	307	373
ØW	150	150	300	300	300	300	400
nXM	4XM8	4XM8	4XM10	4XM10	4XM10	4XM10	4XM16
bXt	11X11	14X14	17X17	17X17	22X22	22X22	27X27

MANUAL REDUCER WITH HANDWHEEL

MANUAL REDUCER WITH HANDWHEEL

DIMENSIONS				
DN	450	500	600	800
NPS (in)	18	20	24	32
A	94	94	125	140
B	103.5	103.5	131	146
C	160	160	176	215
D	175	175	210	300
D1	140	140	165	254
D2	130	130	130	200
E	53	53	62	69
F	57	57	66	88
G	181	181	199.5	228
K	214	214	276	300
h	4	4	4	4
ØW	300	300	400	400
nXM	4XM16	4XM16	4XM20	8XM16
bXt	27X27	32X32	36X36	-
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ADDITIONAL TECHNICAL INFORMATION:

OPERATING TORQUE OF BUTTERFLY VALVES (Nm)															
DN		50	65	80	100	125	150	200	250	300	350	400	450	500	600
PN10	Wet	13.9	15.4	21.7	37.1	57.9	93.9	173	286	429	550	755	1012	1350	2111
	Dry	21.1	29.2	41.1	67.8	101	165	297	486	699	825	1133	1518	2025	3166
PN16	Wet	15.1	17.2	23.1	39.8	61.9	102	192	323	490	625	846	1131	1431	2301
	Dry	24.2	32.7	43.7	72.8	108	174	330	549	799	969	1307	1787	2288	3711

OPERATING TORQUE OF BUTTERFLY VALVES (Nm)											
DN		700	800	900	1000	1200	1400	1600	1800	2000	2200
PN10	Wet	3272	4308	5257	8926	12555	18463	24115	30520	37680	45593
	Dry	4908	6462	7886	13389	18833	27695	36173	45780	56520	68390
PN16	Wet	3599	4739	5783	9819	13811	30772	40192	50868	62800	75988
	Dry	5399	7108	8675	14728	20716	46158	60288	76302	94200	113982

VALUES Cv									
DN	Values Cv								
	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	0.06	3	7	15	27	44	70	105	115
65	0.1	6	12	25	45	75	119	178	196
80	0.2	9	18	39	70	116	183	275	302
100	0.3	17	36	78	139	230	364	546	600
125	0.5	29	61	133	237	392	620	930	1022
150	8	45	95	205	366	605	958	1437	1579
200	25	89	188	408	727	1202	1903	2854	3136
250	39	151	320	694	1237	2047	3240	4859	5340
300	57	234	495	1072	1911	3162	5005	7507	8250
350	128	338	715	1549	2761	4568	7230	10844	11917
400	179	464	983	2130	3797	6282	9942	14913	16388
450	201	615	1302	2822	5028	8320	13168	19752	21705
500	230	791	1647	3628	6465	10698	16931	25396	27908
600	259	1222	2587	5605	9989	16528	26157	39236	43116
700	295	1813	3639	6636	10000	14949	22769	34898	49500
800	550	2.387	4.791	8.736	13.788	20.619	31.395	48.117	68.25
900	740	3021	6063	11055	17449	26086	39731	60895	86375
1000	757	4183	8395	15307	24159	36166	55084	84425	119750
1200	1023	5781	11001	18890	30548	51718	78770	120728	151243
1400	1.299	5.904	13.158	21.594	34.583	55.671	89.411	138.334	168700
1600	1.65	7.11	16.1	27.3	43.8	70.2	113	171	211000
1800	1.9	8.22	18.6	31.5	50.7	81.2	131	198	244000
2000	2.29	9.91	22.4	38	61	97.8	158	238	294000
2200	-	-	-	-	-	-	-	-	-

OUTPUT TORQUE OF ACTUATOR (Nm)											
DN	100	150	200	250	300	350	400	450	500	600	800
NPS (in)	4	6	8	10	12	14	16	18	20	24	32
Output Torque	150	150	500	500	1200	1200	2500	2500	2500	4000	8000
No. Winds	6	6	8	8	12.5	12.5	20	133	133	160	176

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