

BA/S59 – Double Flange

TOP FLANGE

The top flange accommodates all types of levers, gear operators, electric, hydraulic or pneumatic actuators. The dimensions are according to ISO 5211.

BODY

The end flanges of the double flanged valve are cast integral with the body. Overall design in accordance to EN558, BS EN-593 and API 609. An external coating provides corrosion protection.

PRECISION STRAIGHT PINS

The precision straight pins ensure positive and vibration proof shaft to disc connection. From DN125 and up, two or more pins are used.

BONDED LINER

The elastomer liner is bonded integrally to body and bearings. It extends along the valve faces so flange gaskets are not necessary nor allowed. The liner is highly stable and eliminates potential leak paths and corrosion between liner and body. The vulcanisation principle provides excellent dimensional tolerances resulting in low torque, smooth flow, no maintenance and long life.

DISC

The precision profile disc ensures minimum torque and longer seat life. The disc provides bi-directional bubble tight shut-off and good flow characteristics.

COVER

The plug is sealed with a fiber ring and keeps out dust and dirt. From DN350 and up, a plate is used. From DN450 and up, a bronze bearing plate with O-ring sealing is used to center and support shaft.

SHAFT

The one piece shaft ensures dependability and positive disc positioning. The top dimensions are according to ISO 5211. The shaft configuration ensures positive attachment for levers and actuators. The shaft is completely isolated from the media. The square groove indicates the disc orientation.

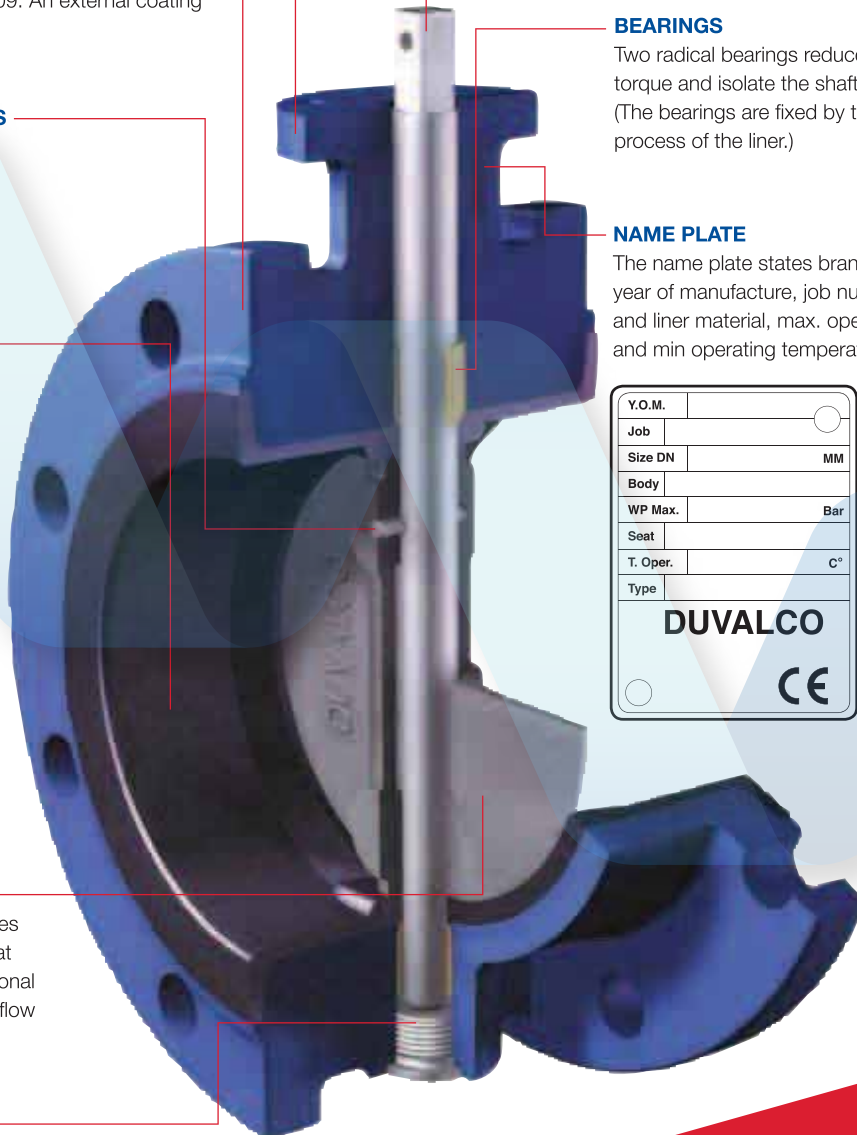
BEARINGS

Two radial bearings reduce the operating torque and isolate the shaft from the body. (The bearings are fixed by the vulcanization process of the liner.)

NAME PLATE

The name plate states brand name, valve type, year of manufacture, job number, size DN, body and liner material, max. operating pressure, max. and min operating temperature, CE markings.

Y.O.M.	
Job	
Size DN	MM
Body	
WP Max.	Bar
Seat	
T. Oper.	C°
Type	
DUVALCO	
CE	



Duvalco Butterfly Valves with Bonded Liner

Double flanged type butterfly valve with centric disc and bonded liner. 100% bi-directional bubble tight shut off. Applicable for all kinds of industries, especially **ship-building, off-shore, petrochemical, heavy industry, water treatment and civil engineering.**



- Overall design generally in accordance to BS EN-593
- Face to face dimension in accordance to EN558 table 1, series 13 (except DN2000)
- On request available as eccentric type BAL/S68 or centric type BAL, with face to face dimensions according to EN558 table 1, series 14
- Top flange and shaft end in accordance to ISO-5211
- Working pressure from 0.1 bar absolute up to 16 bar (test pressure 17.6 bar)
- Working pressure up to 25 bar (test pressure 27.5 bar) on request
- Suitable as end of line service valve
- DN50 to DN2200
- Mounting between flanges to DIN PN10, DIN PN 16 or ASME Class 150
- Other executions on request

HOW TO ORDER

TYPE	DN	FLANGE CONNECTION	WP	BODY	LINER	DISC	PINS	SHAFT	ACTUATOR	COATING
<ul style="list-style-type: none"> BA/S59 BAL/S68 BA BAL 	Nominal Diameter	<ul style="list-style-type: none"> DIN PN10, PN16 ASME B16.5 Class 150 Others 	Working Pressure			Material			<ul style="list-style-type: none"> Bare shaft Lever Gear operator Electric Hydraulic Pneumatic actuator 	<ul style="list-style-type: none"> C2/C3 C4/C5-1 C-5M LM-1/LM-2

MATERIALS

BODY

Cast Iron	EN 1561 EN-GJL-250
Ductile Iron	EN 1563 EN-GJS-400-15
Cast Steel	ASTM A216 WCB
Aluminium Bronze	EN 1982 Table 34
Aluminium	EN 1706 EN AC-AL Si 12(a)
<i>Other materials on request</i>	

LINER

NBR (Buna-N)	
EPDM	
FPM (Viton)	
CR (Chloroprene)	
VMQ (Silicone)	
<i>Other materials on request</i>	

DISC

Ductile Iron, Rilsan coated	EN 1563 EN-GJS-400-15
Aluminium Bronze	EN 1982 Table 34
Stainless Steel (316)	EN 10088-3 1.4401
Monel	ASTM A494 M35
<i>Other materials on request</i>	

PINS

Stainless steel	EN 10088 – 3 1.4122
Stainless Steel (316L)	EN 10088 – 3 1.4404
Monel	BS3076 NA18
<i>Other materials on request</i>	

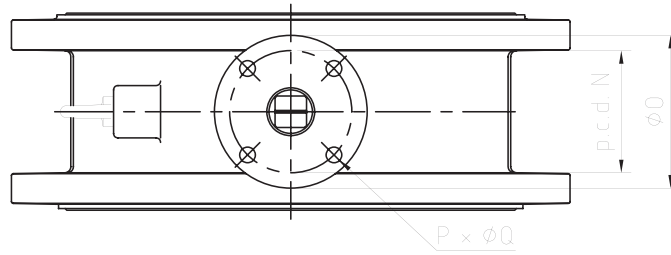
SHAFT

Stainless Steel	EN 10088 – 3 1.4122
Stainless Steel (316L)	EN 10088 – 3 1.4404
Monel	BS3076 NA18
Aluminium Bronze	EN1265
<i>Other materials on request</i>	

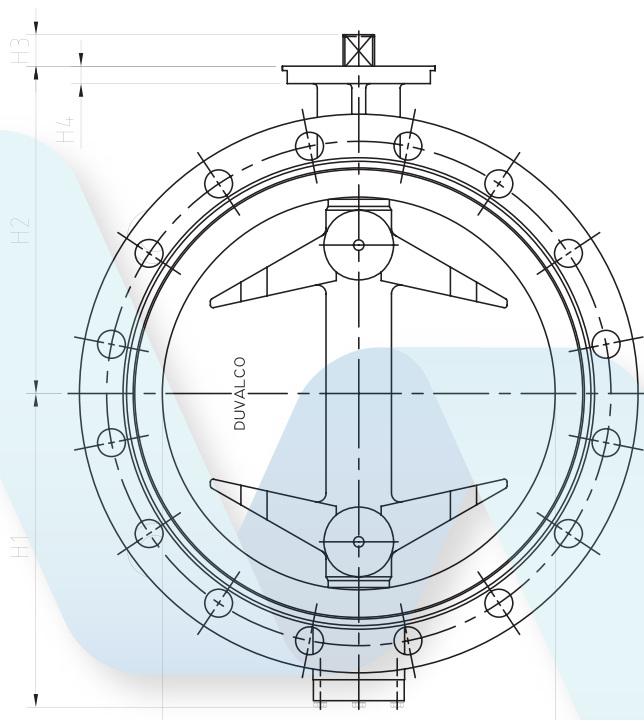
COATING EN593 Annex C Table C1

Standard shop paint	Alkyd primer 60 uM RAL 5009
C2/C3	1 layer High solid epoxy 80 - 100 uM
C4/C5-1	As C2/C3 + 1 layer High build polyurethane coating 60 uM
C-5M	As C2/C3 + 1 layer High build polyurethane coating 80 uM
LM-1/LM-2	2 Layers High solid epoxy (TAR replacement) 150 uM Black
<i>Other specifications on request</i>	

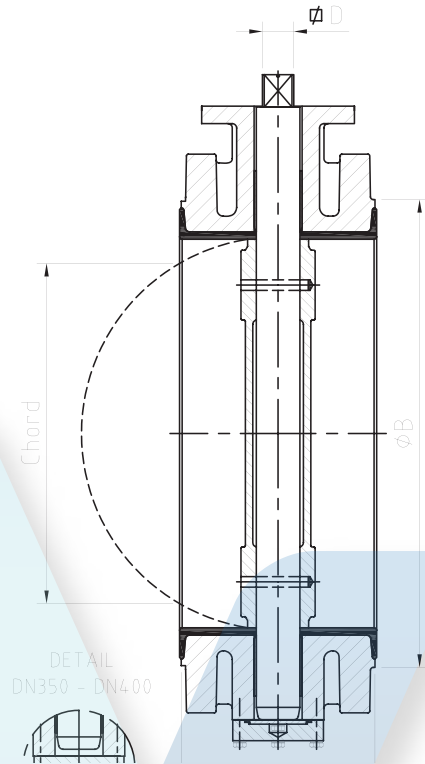
DIN PN 10, PN16
ASME CLASS 150
Flange Type



TOP VIEW



SIDE VIEW

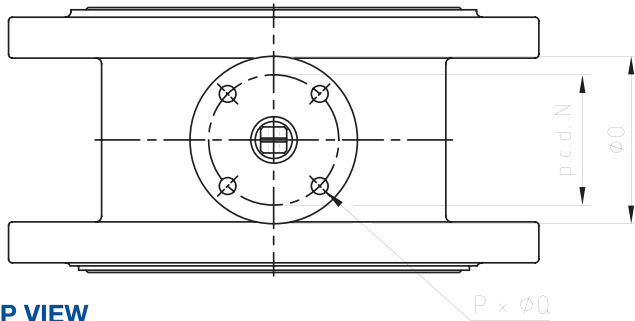


SECTIONAL VIEW

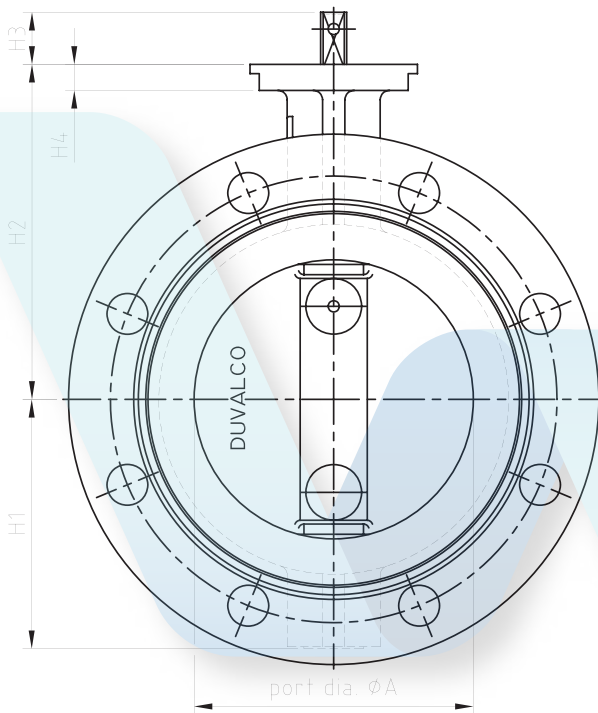
Nominal Size	ø A	ø B	ø D	H1	H2	H3	H4	M	N	ø O	P	ø Q	Chord	Weight Kg
350	350	438	27	282	315	29	20	190	125	150	4	14	294	71
400	400	488	27	307	350	29	20	216	125	150	4	14	337	98
450	450	536	36	352	375	38	20	222	140	175	4	18	392	119
500	500	590	36	387	415	38	20	229	140	175	4	18	445	162
600	600	692	46	452	465	48	25	267	165	210	4	22	538	258

All dimensions are in mm

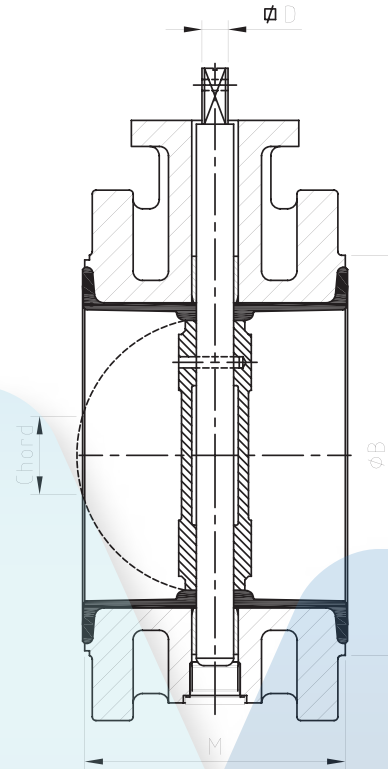
DIN PN 10, PN16
ASME CLASS 150
Flange Type



TOP VIEW



SIDE VIEW

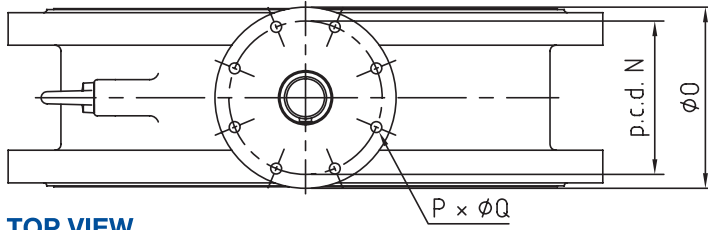


SECTIONAL VIEW

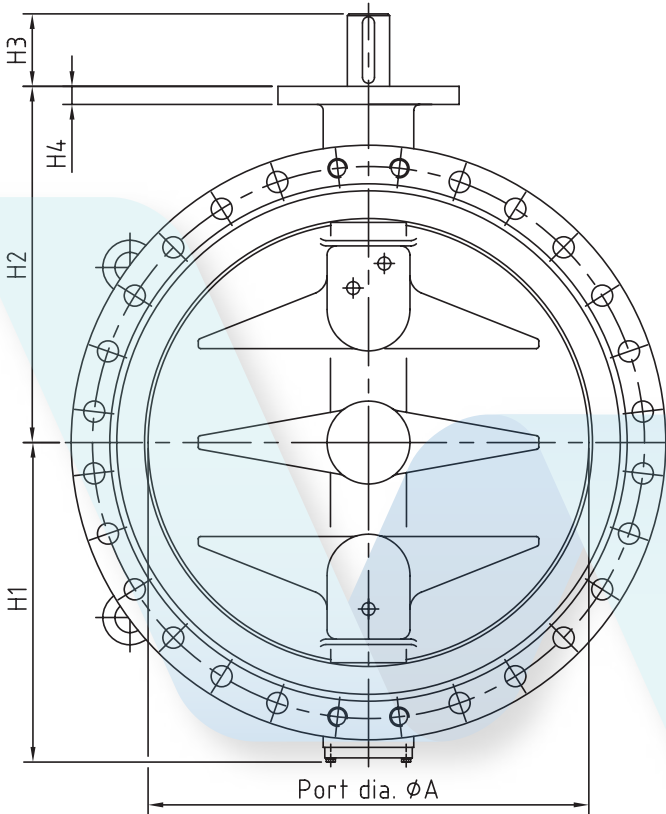
Nominal Size	Ø A	Ø B	Ø D	H1	H2	H3	H4	M	N	Ø O	P	Ø Q	Chord	Weight Kg
50	50	102	11	67	118	25	12	108	70	90	4	9	-	7.5
65	65	122	11	74	126	25	12	112	70	90	4	9	-	9
80	80	130	11	82	133	25	14	114	70	90	4	9	-	11
100	100	158	11	100	147	25	14	127	70	90	4	9	-	14
125	125	191	14	112	160	28	14	140	70	90	4	9	-	19
150	150	215	14	134	180	28	14	140	70	90	4	9	53	22
200	200	268	17	159	204	28	14	152	70	90	4	9	130	34
250	250	324	22	195	245	30	15	165	102	125	4	11	188	49
300	300	374	22	220	270	30	15	178	102	125	4	11	242	69

All dimensions are in mm

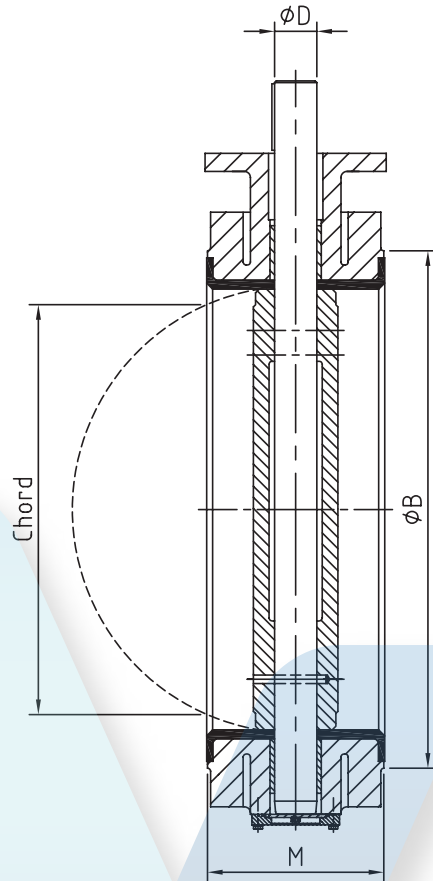
DIN PN 10, PN16
 ASME CLASS 150
 Flange Type



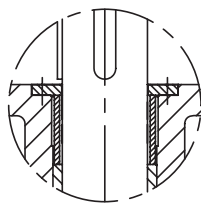
TOP VIEW



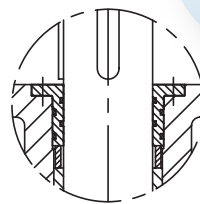
SIDE VIEW



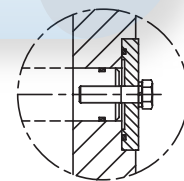
SECTIONAL VIEW



DETAIL COVERPLATE
 DN1300 - DN1400



DETAIL GLAND
 DN1450 - DN2000



DETAIL PIN
 DN1500 - DN2000

BA, DIN PN10, Double Flange Type

Nominal Size	ø A	ø B	ø D	Key No-Size	H1	H2	H3	H4	M	N	ø O	P	ø Q	Chord	Weight Kg
550	532	635	55	1-16 x 10 x 100	395	470	110	25	229	165	210	4	22	480	250
650	640	740	60	1-18 x 11 x 100	455	500	110	30	267	165	210	4	22	582	340
700	690	805	70	1-20 x 12 x 100	485	555	110	25	292	254	300	8	18	625	450
750	735	855	70	1-20 x 12 x 100	540	590	110	30	292	254	300	8	18	675	580
800	790	910	80	1-22 x 14 x 110	550	620	120	30	318	254	300	8	18	723	690
900	890	1005	90	2-25 x 14 x 110	650	660	120	30	330	254	300	8	18	816	790
1000	985	1110	90	2-25 x 14 x 110	680	740	120	30	410	254	300	8	18	896	1040
1100	1085	1220	105	2-28 x 16 x 110	767	800	120	40	410	298	350	8	22	1005	1460
1200	1185	1325	110	2-28 x 16 x 140	845	950	160	40	470	356	415	8	33	1088	1640
1300	1285	1430	110	2-28 x 16 x 140	870	950	160	50	470	356	415	8	33	1196	1800
1400	1385	1535	120	2-32 x 18 x 140	925	990	160	50	530	356	415	8	33	1280	2475
1500	1477	1645	135	2-36 x 20 x 140	1000	1050	160	50	600	406	475	8	39	1350	2710
1600	1568	1755	150	2-36 x 20 x 140	1085	1150	160	50	600	406	475	8	39	1449	2840
1800	1770	1965	165	2-40 x 22 x 160	1214	1265	180	55	670	406	475	8	39	1638	3980
2000	1970	2160	200	2-45 x 25 x 180	1437	1425	200	60	520	483	560	8	39	1900	6500

BA, DIN PN16, Double Flange Type

Nominal Size	ø A	ø B	ø D	Key No-Size	H1	H2	H3	H4	M	N	ø O	P	ø Q	Chord	Weight Kg
550	532	665	70	1-20 x 12 x 100	410	480	110	25	229	165	210	4	22	480	250
650	640	740	70	1-20 x 12 x 100	455	500	110	30	267	165	210	4	22	582	340
700	690	795	80	1-22 x 14 x 110	505	550	120	30	292	254	300	8	18	625	450
750	735	855	90	1-25 x 14 x 110	535	575	120	30	292	254	300	8	18	675	600
800	779	900	100	1-28 x 16 x 110	582	610	120	30	318	254	300	8	18	711	750
900	890	1005	110	2-32 x 18 x 140	650	660	160	30	330	254	300	8	18	827	840
1000	985	1110	120	2-32 x 18 x 140	680	740	160	30	410	298	350	8	22	896	1080
1100	1085	1220	125	2-32 x 18 x 140	767	800	160	40	410	298	350	8	22	1005	1490
1200	1185	1325	130	2-32 x 18 x 140	841	875	160	50	470	356	415	8	33	1088	1680
1300	1285	1430	130	2-32 x 18 x 140	870	950	160	50	470	356	415	8	33	1196	1865
1400	1385	1535	140	2-36 x 20 x 140	925	990	160	50	530	406	475	8	39	1280	2510
1500	1477	1640	155	2-40 x 22 x 160	1000	1050	180	50	600	406	475	8	39	1350	2760
1600	1568	1755	175	2-45 x 25 x 160	1085	1150	180	50	600	406	475	8	39	1449	2890
1800	1770	1965	195	2-45 x 25 x 180	1214	1265	200	55	670	406	475	8	39	1638	4100
2000	1970	2160	235	2-45 x 25 x 180	1437	1425	200	60	520	483	560	8	39	1900	6650

BA, ASME B16.47 Class 150 Series A, Double Flange Type

Nominal Size	ø A	ø B	ø D	Key No-Size	H1	H2	H3	H4	M	N	ø O	P	ø Q	Chord	Weight Kg
550	535	642	55	1-16 x 10 x 100	410	480	110	25	229	165	210	4	22	484	250
650	640	740	60	1-18 x 11 x 100	455	500	110	30	267	165	210	4	22	582	340
700	690	805	70	1-20 x 12 x 100	490	550	110	25	292	165	210	4	22	625	450
750	730	857	70	1-20 x 12 x 100	530	590	110	30	292	254	300	8	18	669	605
800	790	915	80	1-22 x 14 x 110	550	620	120	30	318	254	300	8	18	723	750
900	880	1022	90	2-25 x 14 x 110	625	675	120	30	330	254	300	8	18	816	880
1000	985	1110	90	2-25 x 14 x 110	680	740	120	30	410	254	300	8	18	896	1080
1050	1035	1194	100	2-28 x 16 x 110	727	800	120	30	410	254	300	8	18	950	1300
1100	1085	1245	110	2-28 x 16 x 140	765	830	160	30	410	254	300	8	18	1005	1480
1200	1185	1360	110	2-28 x 16 x 140	885	950	160	50	470	356	415	8	33	1088	1665
1300	1285	1430	120	2-32 x 18 x 140	870	950	160	50	470	356	415	8	33	1196	1830
1400	1385	1575	135	2-36 x 20 x 140	940	1050	160	50	530	356	415	8	33	1280	2850
1500	1477	1676	150	2-36 x 20 x 140	1000	1080	160	50	600	406	475	8	39	1350	2975

All dimensions are in mm

We reserve the rights to change any information without prior notice.

HEADQUARTERS

Singapore

Duvalco Valves & Fittings Pte Ltd
No. 2 Tractor Road, Singapore 627966

Netherlands

Duvalco B.V.
Planckstraat 43,
3316 GS Dordrecht

Distributed By :



HW BARAKAH SDN BHD

No.40, Jalan 18/2, 46000 Petaling Jaya, Selangor
T : 03-77833916/4788, 77829436/8201/9657
F : 03-7781 6288 (Showroom) : 03-77826622
E : Heapwah@yahoo.com, Sales@Heap-wah.com
www.heap-wah.com