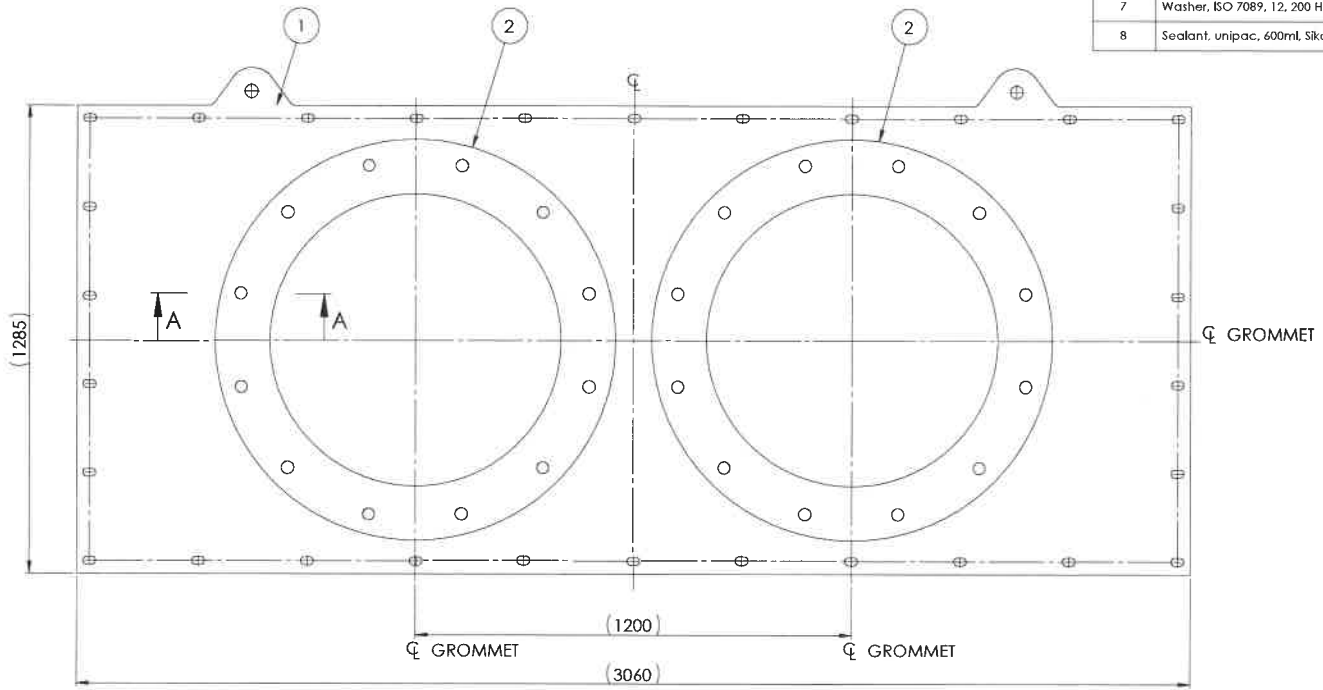
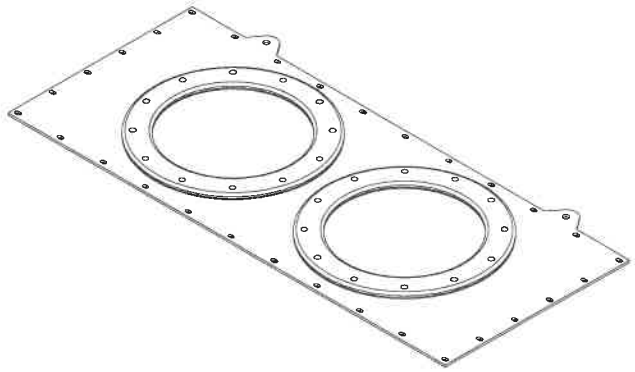
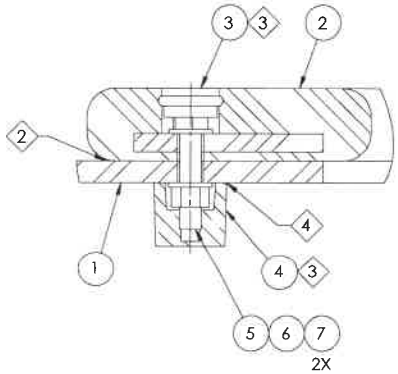
Find no.	Description	Part no.	Drawing no.	QTY	U.O.M.	Material	Total Weight (kg)
1	Plate, grommet, Ø800	1000438497	1000438497	1	EA		263.9
2	Grommet, Ø800	1000175088	1000175070	2	EA		73.8
3	Bolt cap, M12	1000021943	1000152527	24	EA		2.4
4	Cap nut, M12	1000157380	1000157386	24	EA		0.96
5	Screw, hexagon head, ISO 4017, M12x55, 8.8, electroplated	1000008542		24	EA	Plain Carbon Steel	1.44
6	Nut, hexagon, ISO 4032, M12, 8, electroplated	1000006024		24	EA	Plain Carbon Steel	0.3384
7	Washer, ISO 7089, 12, 200 HV, electroplated	1000004158		48	EA	Plain Carbon Steel	0.29904
8	Sealant, unipac, 600ml, Sikaflex-291	1000199250		1	EA		0.1





SECTION A-A



Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. Apply 3mm bead of sikaflex sealant (item 8) on seams of grommet (item 2) as shown.
3. Apply a bead of sikaflex sealant (item 8) to all bolt and nut caps (item 3 & 4) prior to installation.
4. Apply all around a continuous bead of sikaflex sealant (item 8) to all seams indicated.
5. Unless otherwise specified all bolts shall be torqued to their respective grade and size values listed in drawing 1000135380 - Metric, 75% of proof strength.

Rev.	Drawn	Appr.	Appr. Date	Specific Description of Change
1	HRS-IN	BSA-ZA	01-Feb-19	Initial Release

Scale: N/A | Assembly drawing | Language Rev.:

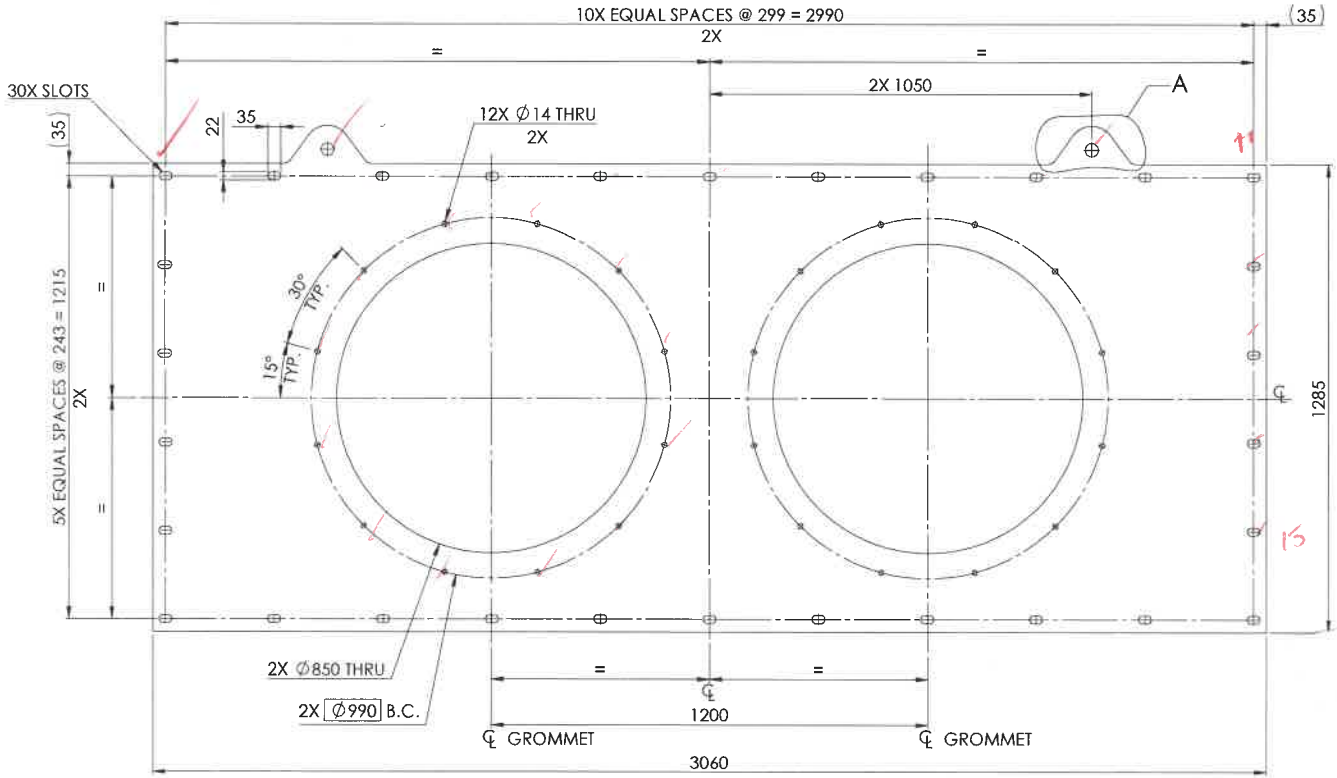
Assembly, plate, grommet, Ø800

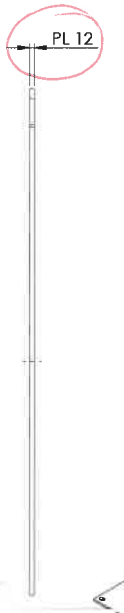
Flotation, Wemco, 250RT

Mat.: N/A | Weight: 343 kg | Welds: N/A | Based on: 654917 | ISO-A

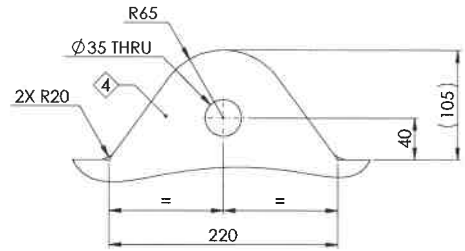
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420 | Replacing: N/A | Sheet 1 of 1

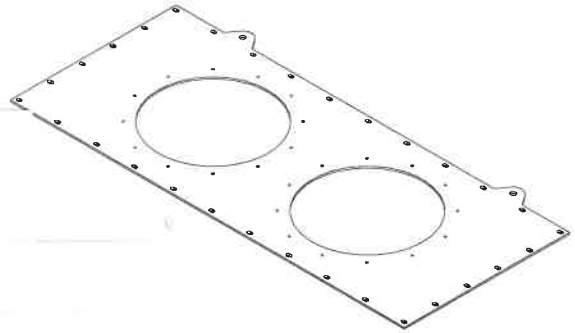
FLSmidth | No.: 1000438496 | Content Rev.: 1





DETAIL A
2X





Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For workmanship standards and requirements in reference to fabricated metal parts refer to FLSmidth document "WS-2, Fabricated Metal & Welded Parts Workmanship Standard 1000024422".
3. Material: Steel - Abrasion Resistant AR200/235 or equivalent as approved by FLSmidth engineering department.
4. Stamp lifting lug with "WLL 145 kgf", letter 10mm high, both sides. Lug to be painted safety yellow.

Rev.	Drawn	Appr.	Appr. Date	Specific Description of Change
2	HRS-IN	BSA-ZA	15-Feb-19	Updated note 3: material from ASTM A36 to Abrasion Resistant AR200/235.
1	HRS-IN	BSA-ZA	01-Feb-19	Initial Release

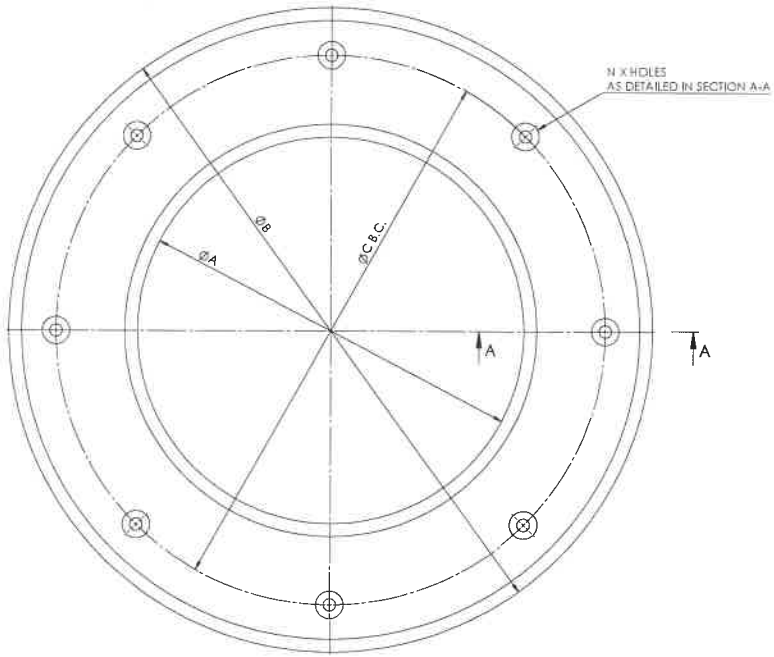
Scale: N/A | Detail drawing | Language Rev.:

Plate, grommet, Ø800

Flotation, Wemco, 250RT

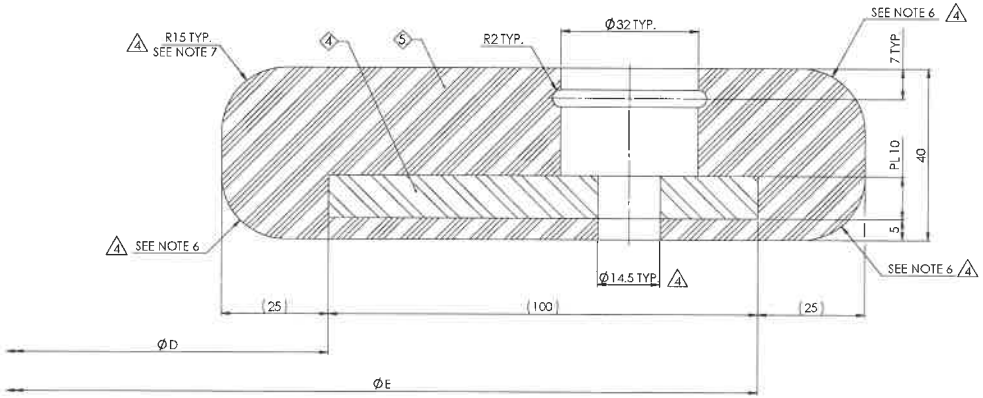
Mat.: See Notes	Weight: 263.9 kg	Welds: N/A	Based on: 654918	ISO-A
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420			Replacing: N/A	Sheet 1 of 1

FLSmidth | No.: 1000438497 | Content Rev.: 2



Part no.	Description	A	B	C	D	E	N	Total Weight (Kg)
1000175071	Grommet, Ø75	75	375	265	125	325	4	8.7
1000175072	Grommet, Ø100	100	400	290	150	350	4	9.7
1000175073	Grommet, Ø125	125	425	315	175	375	6	10.5
1000175074	Grommet, Ø150	150	450	340	200	400	6	11.5
1000175075	Grommet, Ø175	175	475	365	225	425	6	12.5
1000175076	Grommet, Ø200	200	500	390	250	450	6	13.5
1000175077	Grommet, Ø250	250	550	440	300	500	6	15.5
1000175078	Grommet, Ø300	300	600	490	350	550	6	17.4
1000175079	Grommet, Ø350	350	650	540	400	600	6	19.4
1000175080	Grommet, Ø400	400	700	590	450	650	8	21.3
1000175081	Grommet, Ø450	450	750	640	500	700	8	23.3
1000175082	Grommet, Ø500	500	800	690	550	750	8	25.2
1000175083	Grommet, Ø550	550	850	740	600	800	8	27.2
1000175084	Grommet, Ø600	600	900	790	650	850	10	29.1
1000175085	Grommet, Ø650	650	950	840	700	900	10	31.1
1000175086	Grommet, Ø700	700	1000	890	750	950	10	33.0
1000175087	Grommet, Ø750	750	1050	940	800	1000	12	34.9
1000175088	Grommet, Ø800	800	1100	990	850	1050	12	36.9
1000175089	Grommet, Ø850	850	1150	1040	900	1100	12	38.8
3 1000395955	Grommet, Ø900	900	1200	1090	950	1150	16	40.6

SECTION A-A



Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For general workmanship standards and requirements refer to FLSmidth document "WS-1, General Workshop Instruction 1000024420".
3. For workmanship standards and requirements in reference to fabricated metal parts refer to FLSmidth document "WS-2, Fabricated Metal & Welded Parts Workmanship Standard 1000024422".

4. Insert material: Plate Steel – ASTM A36 / GB 700 Type Q235B or equivalent as approved by FLSmidth engineering department.

2 5. Material: Elastomer - Polyurethane per FLSmidth specification 1000193480 or equivalent as approved by FLSmidth engineering department.

4 6. Radius is optional. Square edge is acceptable.

4 7. R10 radius is acceptable.

Rev.	Drawn	Appr.	Appr. Date	Zone/Revision Description
4	DCA-IN	VSAS-IN	16-Jan-18	Added note 6 & 7. Dim. Ø14.5 was Ø14.
3	HRS-IN	VSAS-IN	28-Sep-18	Added Ø900 Grommet.
2	DCA-IN	JAFO-US	21-Mar-16	Updated note 5.
1	VILSA	CSG	06-Mar-15	Initial Release

Scale: N/A | Detail drawing | Language Rev.:

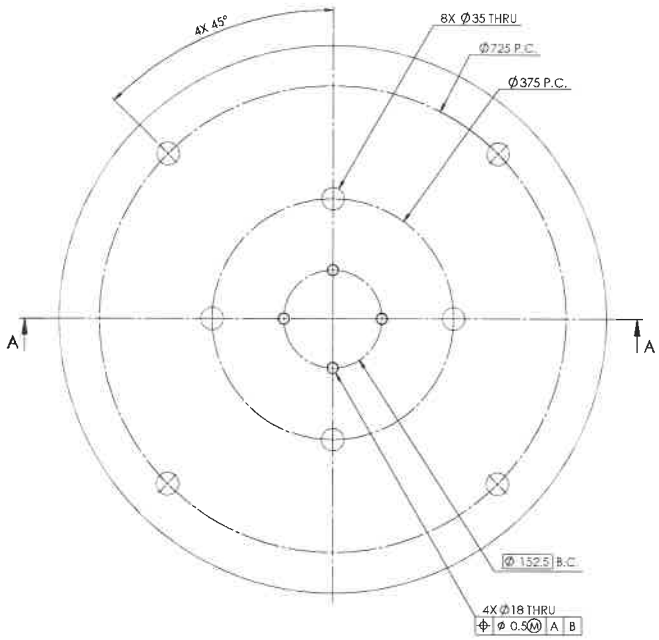
Grommet

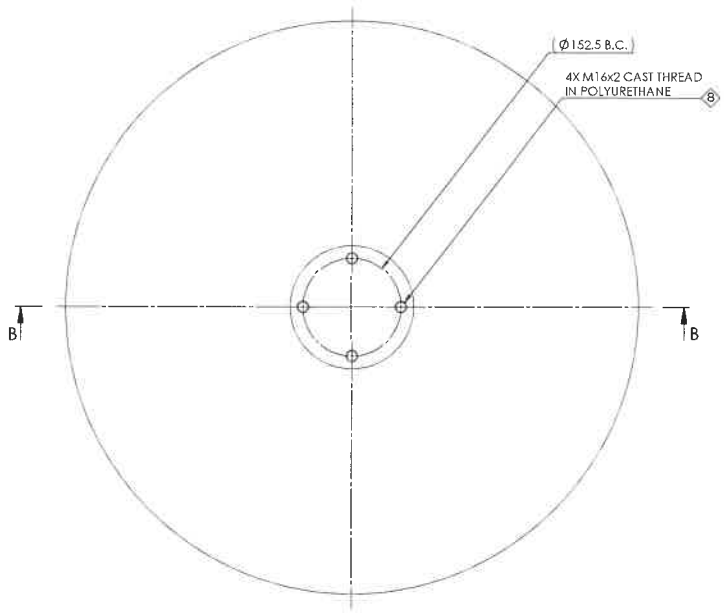
Flotation

Mat.: See Notes | Weight: N/A | Welds: N/A | Based on: N/A | ISO-A

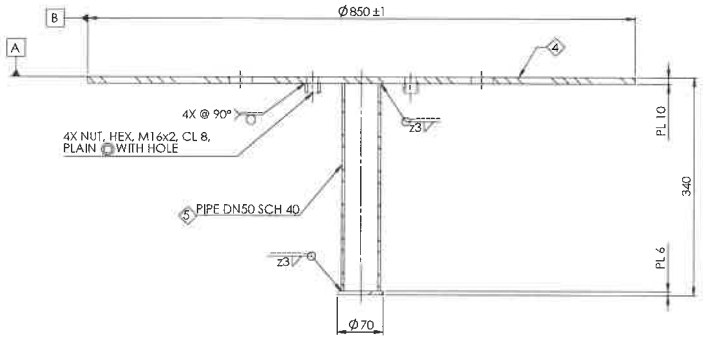
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420 | Replacing: 5976900 | Sheet 1 of 1

FLSmidth | No.: 1000175070 | Content Rev.: 5

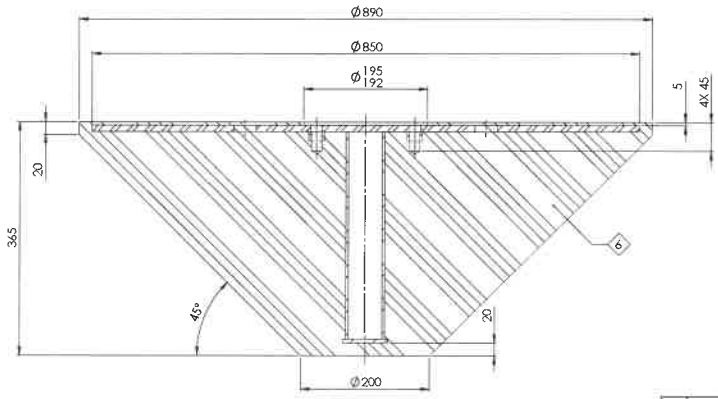


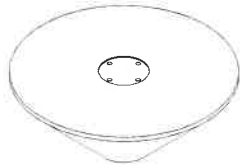


SECTION A-A



SECTION B-B





Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For general workmanship standards and requirements refer to FLSmidth document "WS-1, General workshop instruction 1000024420".
3. For workmanship standards and requirements in reference to fabricated metal parts refer to FLSmidth document "WS-2, Fabricated Metal &Welded Parts Workmanship Standard 1000024422".

(4) Material: Plate Steel - ASTM A36 / GB 700 Type Q235B or equivalent as approved by FLSmidth engineering department.

(5) Material: Pipe - ASTM A53 Grade B Type E / GB 8163 Grade 20# Seamless or equivalent as approved by FLSmidth engineering department.

(6) Material: Elastomer - Polyurethane per FLSmidth specification 1000193480 or equivalent as approved by FLSmidth engineering department.

7. Geometric dimensioning and tolerancing to be per ASME Y14.5M-1994.

(8) Plug hole thoroughly prior to molding (to protect threads).

9. Dart valve diameter designation refers to the inside diameter of largest grommet with which it is to be used.

Rev.	Drawn	Appr.	Appr. Date	Zone/Description
1	HRS-IN	VSAS-IN	13-Feb-15	Initial Release

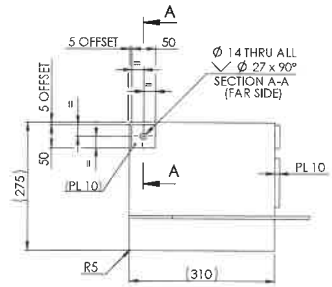
Scale: N/A | Detail drawing | Language Rev.:

Dart valve, 800mm dia.

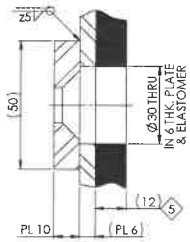
Flotation

Mat.: See Notes	Weight: 164.7 kg	Welds:	Based on: N/A	ISO-A
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420			Replacing: 596926	Sheet 1 of 1

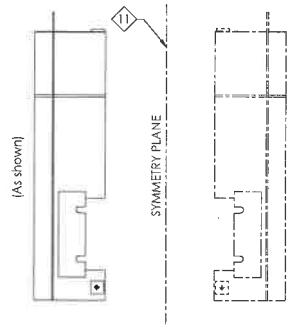
FLSmidth | No.: 1000172861 | Content Rev.: 1

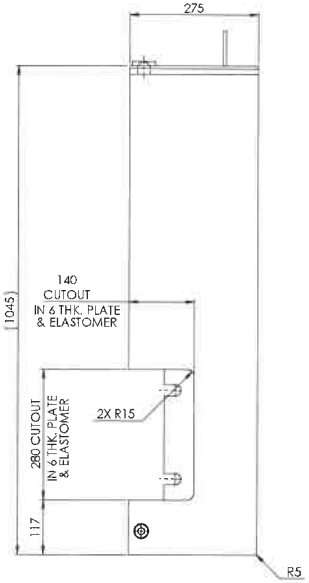


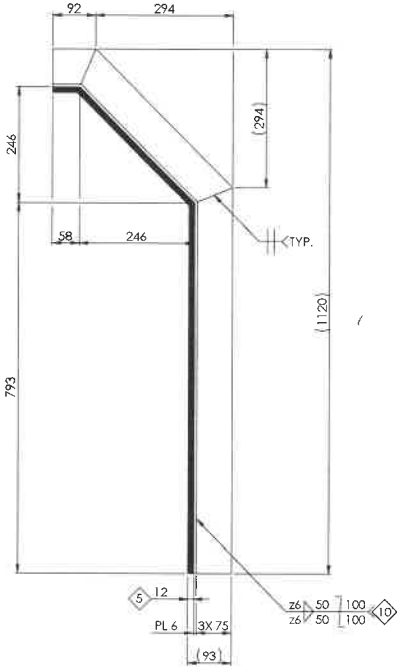
SECTION A-A

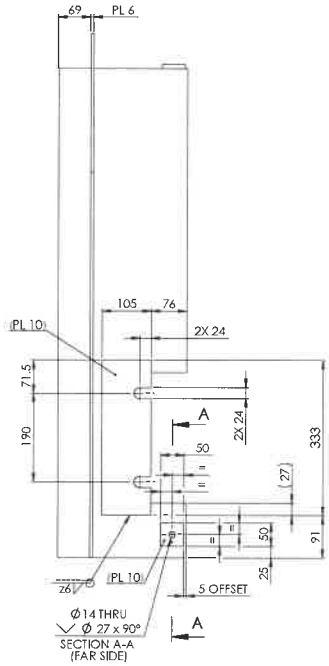


ORIENTATION FOR OPPOSITE-HANDED PARTS









(As shown)

Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For workmanship standards and requirements in reference to fabricated metal parts refer to FLSmidth document "WS-2. Fabricated Metal & Welded Parts Workmanship Standard 1000024422".
3. For lining instruction refer to FLSmidth document "WS-3, Work Instruction: Flotation cell lining with elastomer 1000246500".
4. Material: Plate Steel - ASTM A36 / GB 700 Type Q235B or equivalent as approved by FLSmidth engineering department.
5. Material: Elastomer - M.O.R Rubber per FLSmidth specification 1000150561 or equivalent as approved by FLSmidth engineering department.
6. No elastomer lining permitted on bolt holes. All overlaps must be ground flat.
7. Where compliance with 1000246500 elastomer lining details are not practicable, elastomer liner shall provide proposed alternative to FLSmidth for review.
8. All weld sizes shown are for structural integrity. Fabricator to add additional weld as required to meet the requirements of radii for BS6374 Part 5 and1000246500.
9. All bends are to be minimum radius.
10. Apply Sikaflex-291 to spaces between intermittent welds after application of prime coat but before application of final coat of paint.
11. Opposite-handed parts are to be created according to the indicated symmetry plane. Opposite-handed parts are described in a separate document.

Rev.	Drawn	Appr.	Appr. Date	Specific Description of Change
1	HRS-IN	BSA-ZA	01-Feb-19	Initial Release

Scale: N/A | Detail drawing | Language Rev.:

Wear plate, hinged dart (As shown)

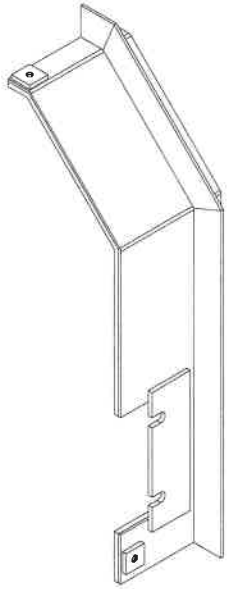
Flotation, Wemco, 250RT

Mat.: See Notes | Weight: 26.7 kg | Welds: N/A | Based on: 1000272170 | ISO-A

Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420 | Replacing: N/A | Sheet 1 of 1

FLSmidth | No.: 1000438500 | Content Rev.: 1

ISOMETRIC



Notes:

1. This part is an opposite-hand version of the part described in drawing 1000438500. All features are identical opposite-hand features, except as described in this document.

Rev.	Drawn	Appr.	Appr. Date	Specific Description of Change
1	SDAY-IN	BSA-ZA	01-Feb-19	Initial Release

Lang Rev.:

Scale: N/A | Detail drawing

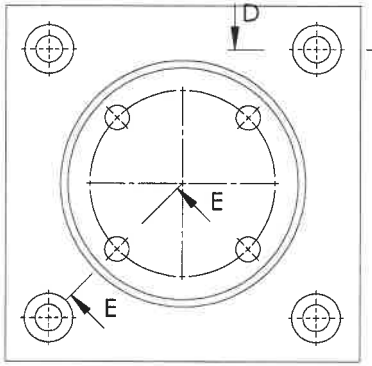
Wear plate, hinged dart (As opposite)

Flotation, Wemco, 250RT

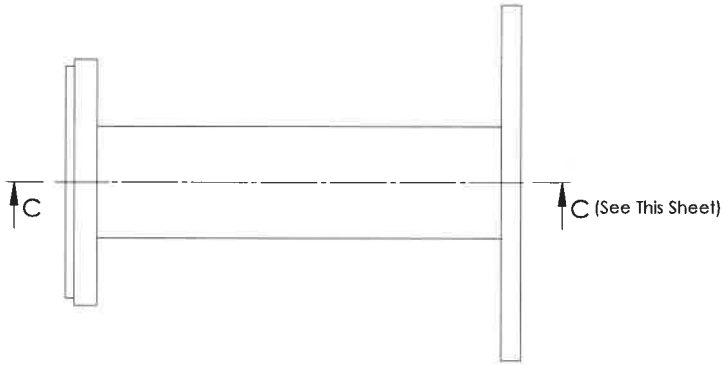
Mat.: See Notes	Weight: 26.7 kg	Welds: N/A	Based on: N/A	ISO-A
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420			Replacing: N/A	Sheet 1 of 1

FLSmidth | No.: 1000438501 | Content Rev.: 1.1

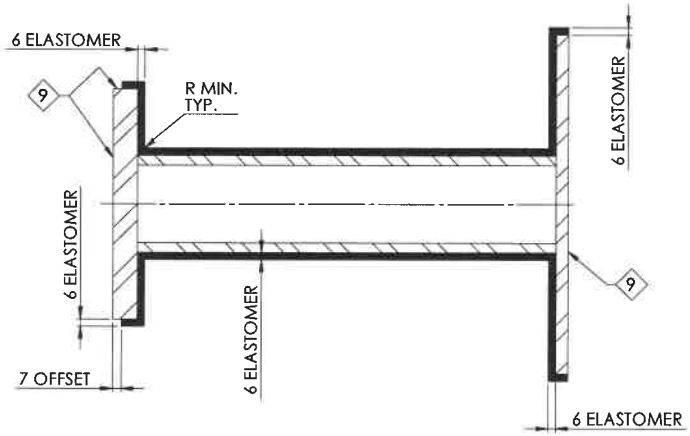
ELASTOMER LINING



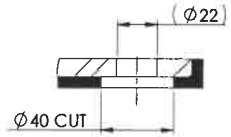
D (See This Sheet)



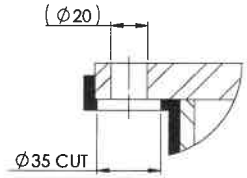
SECTION C-C
(From This Sheet)



SECTION D-D
(From This Sheet)
4X



SECTION E-E
(From This Sheet)
(Rotated Clockwise)
4X



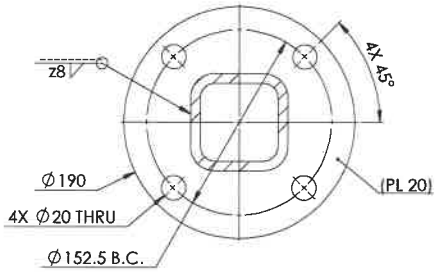
Mat.: See Notes	Weight: 17.2 kg	Welds: N/A	Based on: 1000178071	ISO-A
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420			Replacing: N/A	Sheet 2 of 2

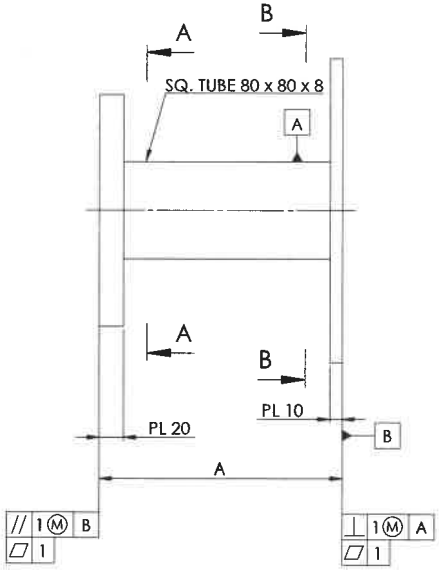
FLSmidth No.: 1000438499 Content Rev.:

REF: 1000229896

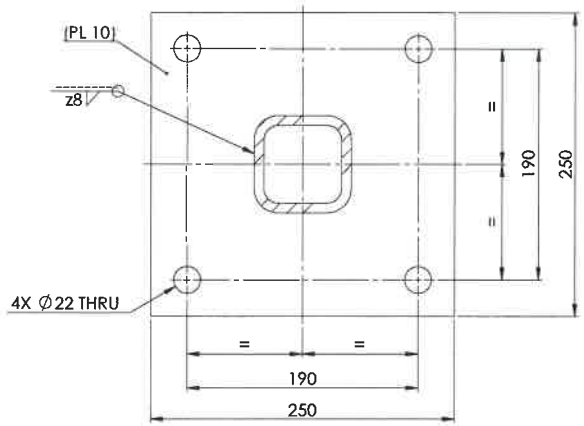
PART NO	A	Total Weight (kg)
1000438499	200	23.6
1000438503	175	22.8

SECTION A-A

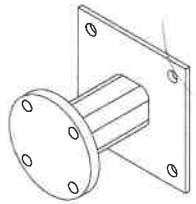




SECTION B-B



188
25
21c



Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For general workmanship standards and requirements refer to FLSmidth document "WS-1, General Workshop Instruction 1000024420".
3. For workmanship standards and requirements in reference to fabricated metal parts refer to FLSmidth document "WS-2, Fabricated Metal & Welded Parts Workmanship Standard 1000024422".
4. Geometric dimensioning and tolerancing to be per ASME Y14.5M-1994.
5. Material: Plate Steel – ASTM A36 / GB 700 Type Q235B or equivalent as approved by FLSmidth engineering department.
6. Material: Square Tubing – ASTM A513 / GB 6728 Type Q235B or equivalent as approved by FLSmidth engineering department.
7. Material: Elastomer - Neoprene per FLSmidth specification 1000150559 or equivalent as approved by FLSmidth engineering department.
8. No elastomer lining permitted on bolt holes. All overlaps should be ground flat.
9. All non lining surfaces to be coated with Cosmoline® or equivalent rust preventative during storage and shipping.

Rev.	Drawn	Appr.	Appr. Date	Specific Description of Change
1	HRS-IN	BSA-ZA	02-Feb-19	Initial Release

Scale: N/A | Detail drawing | Language Rev.:

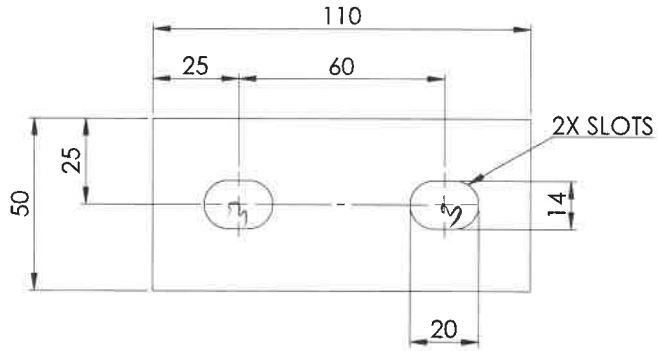
Connection spool

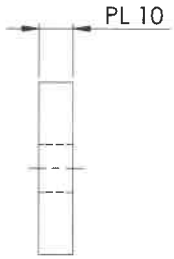
Flotation, Wemco, 250RT

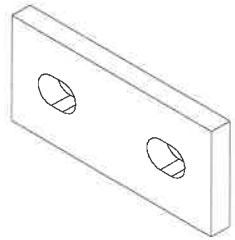
Mat.: See Notes | Weight: N/A | Welds: N/A | Based on: 654920/1000229896 | ISO-A

Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420 | Replacing: N/A | Sheet 1 of 1

FLSmidth | No.: 1000438499 | Content Rev.: 1 RL







Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For workmanship standards and requirements in reference to fabricated metal parts refer to FLSmidth document "WS-2, Fabricated Metal & Welded Parts Workmanship Standard 1000024422".
3. Material: Plate Steel - ASTM A36 / GB 700 Type Q235B or equivalent as approved by FLSmidth engineering department.
4. Use paint system 1C per 1000226026.

Rev.	Drawn	Appr.	Appr. Date	Specific Description of Change
1	STY-IN	MW-AU	21-Dec-17	Initial Release

Project No.: 2502708

Scale: N/A | Detail drawing | Language Rev.:

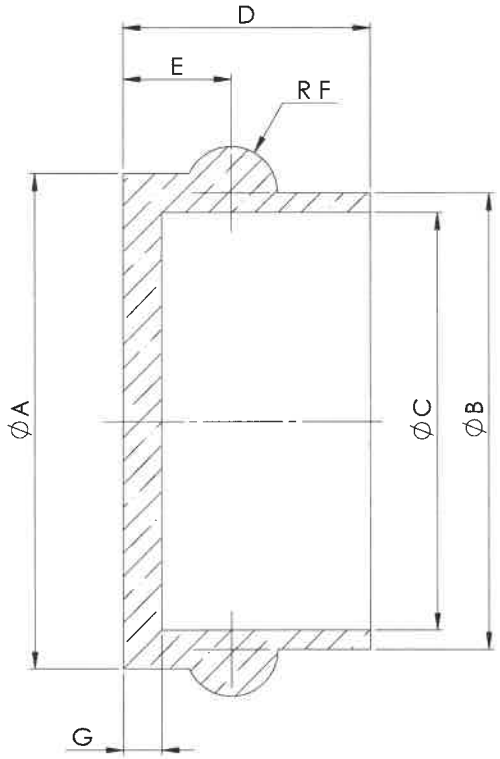
Spacer, wear plate

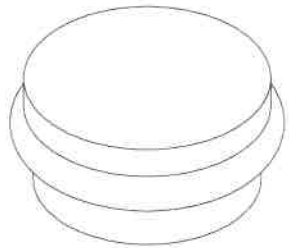
Flotation, D-O, Wemco, 130RT

Mat.: See Notes	Weight: 0.4 kg	Welds: N/A	Based on: N/A	ISO-A
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420			Replacing: N/A	Sheet 1 of 1

FLSmidth | No.: 1000278710 | Content Rev.: 1

PART NO.	BOLT SIZE	A	B	C	D	E	F	G
1000021943	Bolt cap, M12	32	29.5	27	16	7	3	2.5
1000156128	Bolt cap, M16	40	37.5	35	15	7	3	2.5
1000156129	Bolt cap, M20	47	44.5	42	20	10	3	2.5
1000156130	Bolt cap, M24	55	52.5	50	24	10	3	3
1000156131	Bolt cap, M30	70	67.5	62	24	10	3	3





Rev.	Drawn	Appr.	Appr. Date	Zone/Description
2	HRS-IN	VSAS-IN	19-Feb-19	Updated note 2.
1	VSAS	AL	02-Dec-14	Initial Release

Scale: N/A | Detail drawing | Language Rev.:

Bolt cap, M12

Flotation

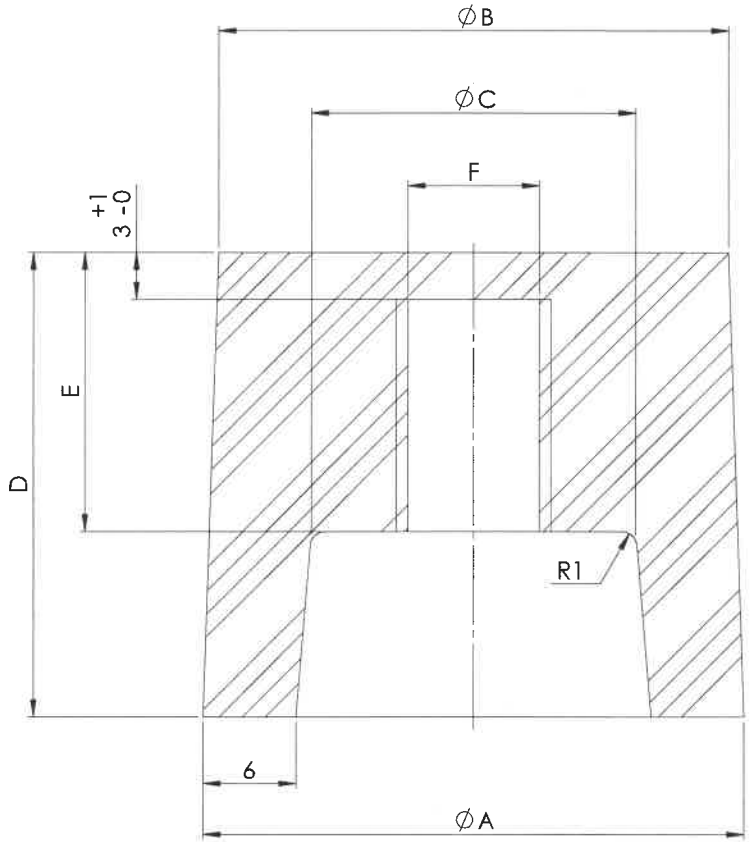
Mat.: See Notes	Weight: N/A	Welds:	Based on: N/A	ISO-A
Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420			Replacing: 598969	Sheet 1 of 1

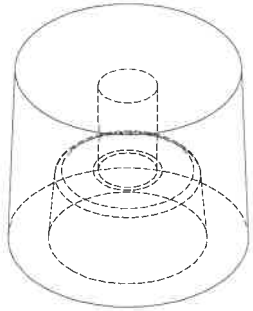
FLSmidth | No.: 1000152527 | Content Rev.: 2

Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. Material: Elastomer - Molded Polyurethane per FLSmidth specification 1000193480 or equivalent as approved by FLSmidth engineering department.

Part no.	Description	A	B	C	D	E	F	Total Weight (Kg)
1000157379	Cap nut, M10	35	33	21	30	18	M10 x 1.5	0.02
1000157380	Cap nut, M12	40	38	26	35	20	M12 x 1.75	0.04
1000157381	Cap nut, M16	50	48	36	45	26	M16 x 2	0.07
1000157382	Cap nut, M20	55	53	41	50	28	M20 x 2.5	0.09
1000157383	Cap nut, M24	65	63	51	60	33	M24 x 3	0.14
1000157384	Cap nut, M30	75	73	61	70	38	M30 x 3.5	0.21





Notes:

1. All dimensions are in millimeters unless noted otherwise.
2. For general workmanship standards and requirements refer to FLSmidth document "WS-1, General Workshop Instruction 1000024420".
3. Material: Elastomer per FLSmidth specification 1000193480 or equivalent as approved by FLSmidth engineering department.

Rev.	Drawn	Appr.	Appr. Date	Zone/Description
2	STY-IN	CHBR-US	29-Mar-16	CA-1772: Updated note 3.
1	VILSA	BEG	13-Jan-15	Initial Release

Scale: N/A | Detail drawing | Language Rev.:

Cap nut

Flotation

Mat.: See Notes | Weight: N/A | Welds: N/A | Based on: N/A | ISO-A

Unless otherwise specified, adhere to General Workshop Instruction No: 1000024420 | Replacing: 695594 | Sheet 1 of 1

FLSmidth | No.: 1000157386 | Content Rev.: 2