

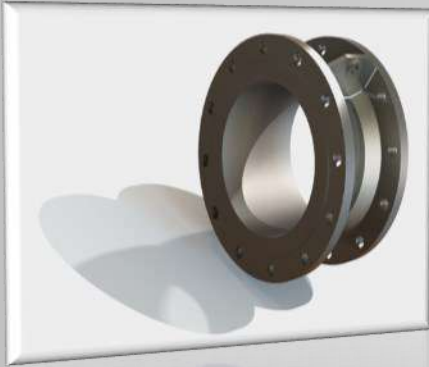
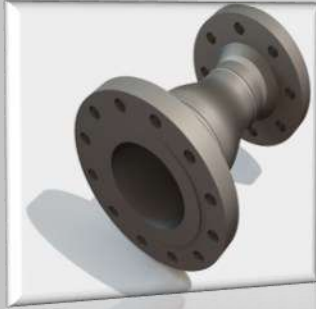


IOCS S.r.L.

Hoses & Ancillaries Equipment Supply for Oil & Gas Industry

SPOOL PIECES

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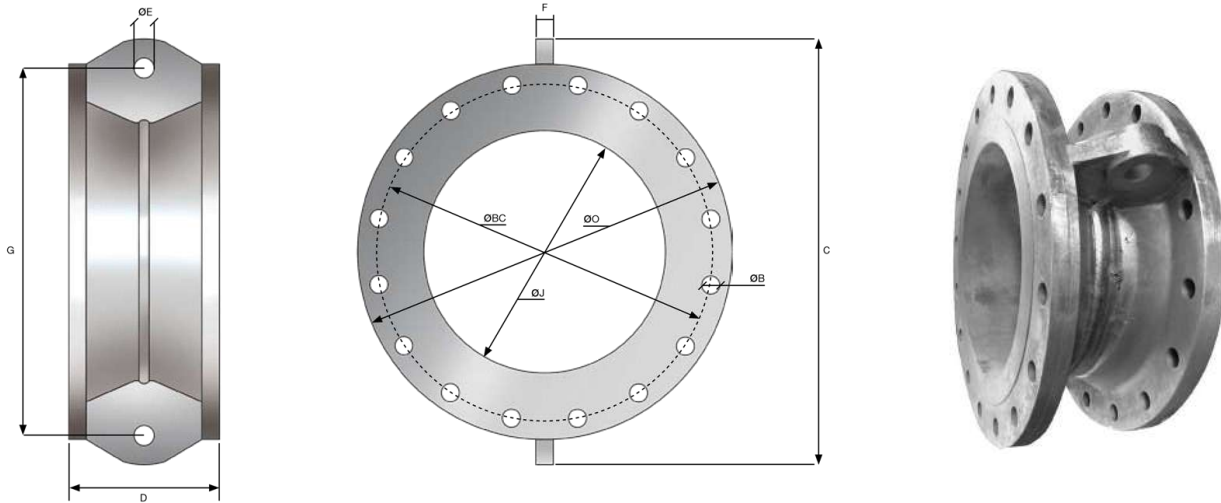
- Short Spool Pieces c/w 2 Lifting Lugs
- Short Spool Pieces c/w 4 Lifting Lugs
- Subsea Long Spool Pieces Reducer
- Floating Long Spool Pieces Reducer
- Short Spool Pieces c/w Rotative Lugs
- Floating "Y" Pieces





Short Spool Pieces c/w 2 Lifting Lugs

Flange ASME B 16.5 Class 150lb



ITEM DESCRIPTION	MATERIAL
LIFTING LUGS	ASTM A 516 GR 60 / 70 or equivalent
W.N. FLANGE ASME B 16.5 CLASS 150lb	ASTM A 105 N

FLANGE COATING

- Hot-Dip Galvanized according to BS 729 par.1 (600g/mq)
- Or Zinc-Sprayed according to BS 2569 par. 1, (100 micron).

GASKET CONTACT SURFACE

- Sarrated finish according to BS 1560 sez. 3 par. 3,3,1 over its complete area after welding.

WELDING PROCEDURE

- All weldings and welders to be qualified in accordance with ASME IX. The circumferential welds between nipple and flange will be 100% radiographed in accordance with BS 2600 with a density of 2 to 3 and a sensitivity of 1,5 % of wall thickness and evaluated according to ASME VIII par.Uw-51.
- Fillet welds to be wet magnetic particle inspected in accordance with ASME VIII app. 6., after lifting lugs proof load.

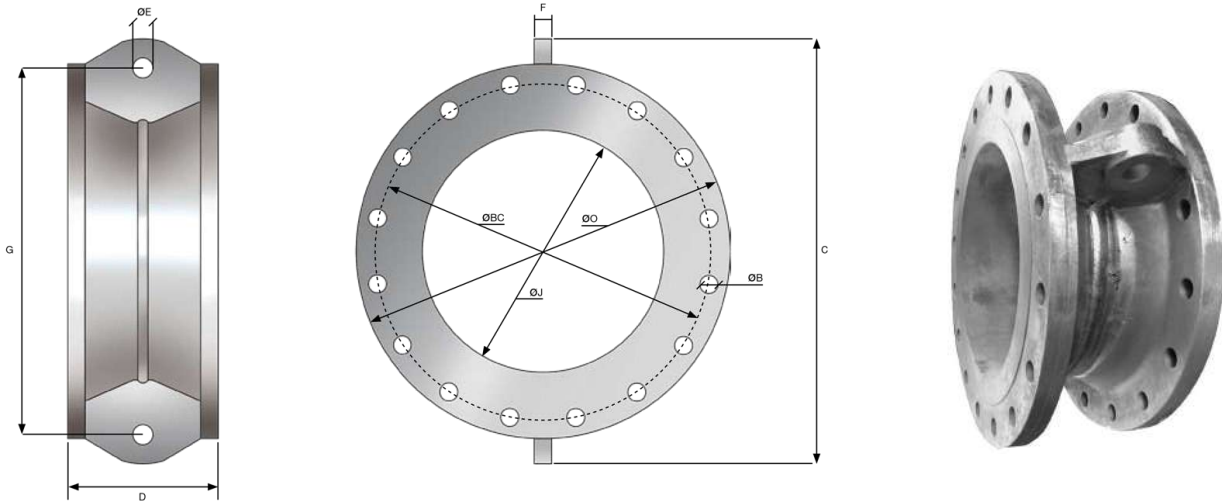
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb												LOADS (GMPHOM 2009)			
N.D. (Inch)	N.D. (mm)	Ø O (mm)	Ø J (mm)	Ø BC (mm)	Ø B (mm)	HOLES (N°)	C (mm)	F (mm)	D (mm)	Ø E (mm)	G (mm)	WEIGHT (Kg)	SWL (kN)	PROOF (kN)	BREAKING (kN)
4"	100	229,1	102,4	190,5	19,0	8	320	21	154,4	21	240	18	30	75	150
6"	150	278,9	154,2	241,3	22,2	8	380	24	179,8	24	300	28	40	100	200
8"	200	342,9	202,7	298,4	22,2	8	450	28	205,2	27	360	45	50	125	250
10"	250	406,4	254,4	361,9	22,2	12	526	33	205,2	30	420	65	70	175	350
12"	300	482,6	304,8	431,8	25,4	12	620	39	230,6	37	500	95	100	250	500
16"	400	596,9	387,5	539,7	28,6	16	770	46	256	44	620	140	150	375	750
20"	500	698,5	489,0	635,0	31,7	20	904	57	291	52	720	200	200	500	1000



Short Spool Pieces c/w 2 Lifting Lugs

Flange ASME B 16.5 Class 300lb

Prod. Code: 071



ITEM DESCRIPTION	MATERIAL
LIFTING LUGS	ASTM A 516 GR 60 / 70 or equivalent
W.N. FLANGE ASME B 16.5 CLASS 300lb	ASTM A 105 N

FLANGE COATING

- Hot-Dip Galvanized according to BS 729 par.1 (600g/mq)
- Or Zinc-Sprayed according to BS 2569 par. 1, (100 micron).

GASKET CONTACT SURFACE

- Sarrated finish according to BS 1560 sez. 3 par. 3,3,1 over its complete area after welding.

WELDING PROCEDURE

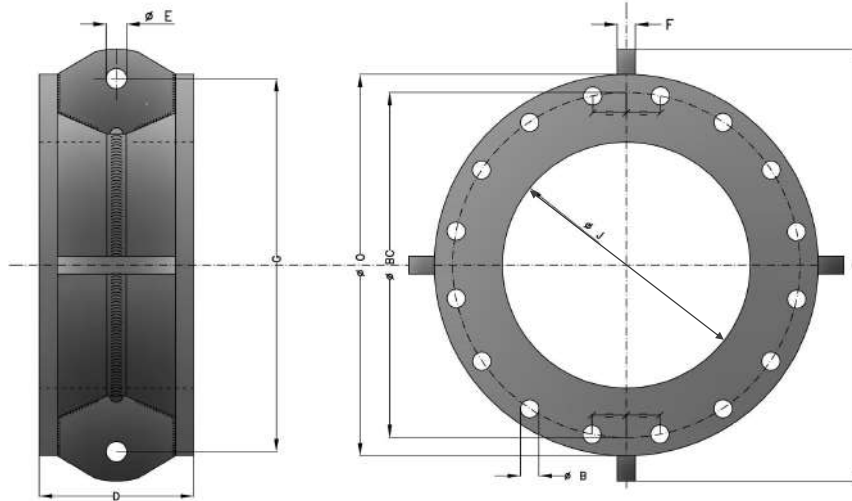
- All weldings and welders to be qualified in accordance with ASME IX. The circumferential welds between nipple and flange will be 100% radiographed in accordance with BS 2600 with a density of 2 to 3 and a sensitivity of 1,5 % of wall thickness and evaluated according to ASME VIII par.Uw-51.
- Fillet welds to be wet magnetic particle inspected in accordance with ASME VIII app. 6., after lifting lugs proof load.

DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb												LOADS (GMPHOM 2009)			
N.D. (Inch)	N.D. (mm)	Ø O (mm)	Ø J (mm)	Ø BC (mm)	Ø B (mm)	HOLES (N°)	C (mm)	F (mm)	D (mm)	Ø E (mm)	G (mm)	WEIGHT (Kg)	SWL (kN)	PROOF (kN)	BREAKING (kN)
8"	200	381,0	202,7	330,2	25,5	12	TBD	28	224,2	27	TBD	N.A.	50	125	250
10"	250	444,5	254,4	387,3	28,5	16	TBD	33	237	30	TBD	N.A.	70	175	350
12"	300	520,5	304,8	450,8	32,0	16	TBD	39	262,4	37	TBD	N.A.	100	250	500
16"	400	647,5	387,5	571,5	35,0	20	TBD	46	294,2	44	TBD	N.A.	150	375	750
20"	500	774,5	489,0	685,8	35,0	24	TBD	57	325,8	52	TBD	N.A.	200	500	1000



Short Spool Pieces c/w 4 Lifting Lugs

Flange ASME B 16.5 Class 150lb



ITEM DESCRIPTION	MATERIAL
LIFTING LUGS	ASTM A 516 GR 60 / 70 or equivalent
W.N. FLANGE ASME B 16.5 CLASS 150lb	ASTM A 105 N

FLANGE COATING

- Hot-Dip Galvanized according to BS 729 par.1 (600g/mq)
- Or Zinc-Sprayed according to BS 2569 par. 1, (100 micron).

GASKET CONTACT SURFACE

- Sarrated finish according to BS 1560 sez. 3 par. 3,3,1 over its complete area after welding.

WELDING PROCEDURE

- All weldings and welders to be qualified in accordance with ASME IX. The circumferential welds between nipple and flange will be 100% radiographed in accordance with BS 2600 with a density of 2 to 3 and a sensitivity of 1,5 % of wall thickness and evaluated according to ASME VIII par.Uw-51.
- Fillet welds to be wet magnetic particle inspected in accordance with ASME VIII app. 6., after lifting lugs proof load.

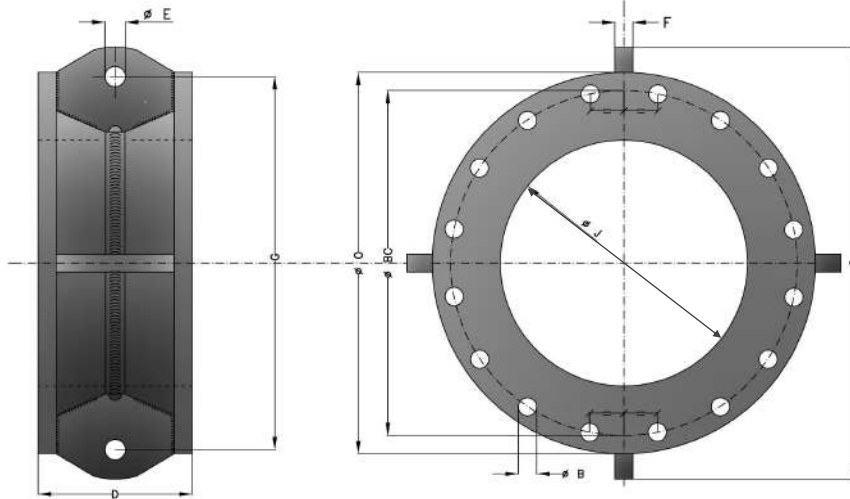
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb													LOADS (GMPHOM 2009)		
N.D. (Inch)	N.D. (mm)	Ø O (mm)	Ø J (mm)	Ø BC (mm)	Ø B (mm)	HOLES (N°)	C (mm)	F (mm)	D (mm)	Ø E (mm)	G (mm)	WEIGHT (Kg)	SWL (kN)	PROOF (kN)	BREAKING (kN)
8"	200	342,9	202,7	298,4	22,2	8	450	28	205,2	27	360	53	50	125	250
10"	250	406,4	254,4	361,9	22,2	12	526	33	205,2	30	420	81	70	175	350
12"	300	482,6	304,8	431,8	25,4	12	620	39	230,6	37	500	115	100	250	500
16"	400	596,9	387,5	539,7	28,6	16	770	46	256	44	620	165	150	375	750
20"	500	698,5	489,0	635,0	31,7	20	904	57	291	52	720	240	200	500	1000



Short Spool Pieces c/w 4 Lifting Lugs

Flange ASME B 16.5 Class 300lb

Prod. Code: 081



ITEM DESCRIPTION	MATERIAL
LIFTING LUGS	ASTM A 516 GR 60 / 70 or equivalent
W.N. FLANGE ASME B 16.5 CLASS 300lb	ASTM A 105 N

FLANGE COATING

- Hot-Dip Galvanized according to BS 729 par.1 (600g/mq)
- Or Zinc-Sprayed according to BS 2569 par. 1, (100 micron).

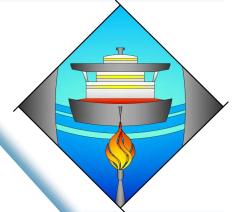
GASKET CONTACT SURFACE

- Sarrated finish according to BS 1560 sez. 3 par. 3,3,1 over its complete area after welding.

WELDING PROCEDURE

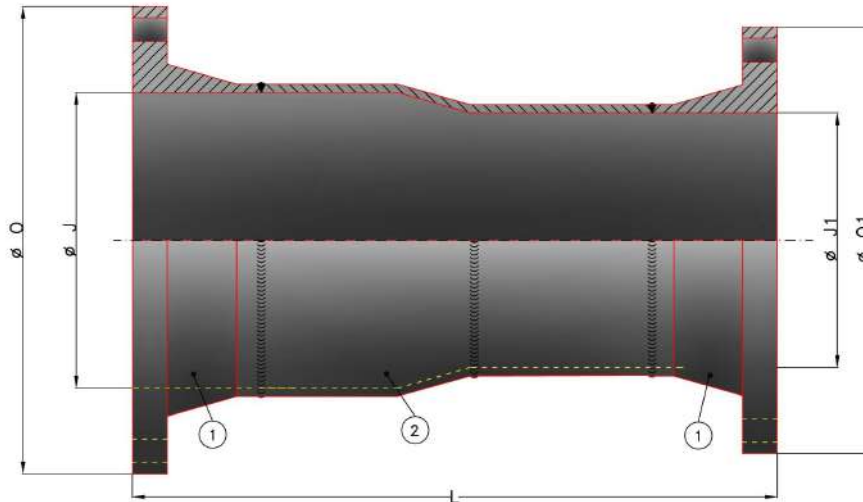
- All weldings and welders to be qualified in accordance with ASME IX. The circumferential welds between nipple and flange will be 100% radiographed in accordance with BS 2600 with a density of 2 to 3 and a sensitivity of 1,5 % of wall thickness and evaluated according to ASME VIII par.Uw-51.
- Fillet welds to be wet magnetic particle inspected in accordance with ASME VIII app. 6., after lifting lugs proof load.

DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb													LOADS (GMPHOM 2009)		
N.D. (Inch)	N.D. (mm)	Ø O (mm)	Ø J (mm)	Ø BC (mm)	Ø B (mm)	HOLES (N°)	C (mm)	F (mm)	D (mm)	Ø E (mm)	G (mm)	WEIGHT (Kg)	SWL (kN)	PROOF (kN)	BREAKING (kN)
200	8"	381,0	202,7	330,2	25,5	12	TBD	28	224,2	27	TBD	N.A.	50	125	250
250	10"	444,5	254,4	387,3	28,5	16	TBD	33	237	30	TBD	N.A.	70	175	350
300	12"	520,5	304,8	450,8	32,0	16	TBD	39	262,4	37	TBD	N.A.	100	250	500
400	16"	647,5	387,5	571,5	35,0	20	TBD	46	294,2	44	TBD	N.A.	150	375	750
500	20"	774,5	489,0	685,8	35,0	24	TBD	57	325,8	52	TBD	N.A.	200	500	1000



Subsea Long Spool Pieces Reducer

Flange ASME B 16.5 Class 150lb



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb						
N.D. (Inch)	N.D. (mm)	Ø J (mm)	Ø O (mm)	Ø J1 (mm)	Ø O1 (mm)	L ± 15 (mm)
8"/6"	200/150	202,7	342,9	154,2	279,4	1400
12"/8"	300/200	304,8	482,6	202,7	342,9	1500
16"/12"	400/300	387,35	596,9	304,8	482,6	1500
20"/16"	500/400	488,95	698,5	387,35	596,9	1500

Notes

Full penetration weld according to API 1104 and 100%

Wet magnetic inspection according to ASME VIII, 6

Radiographed in accordance with BS 2600

Welders and weldings qualification in accordance with ASME IX.

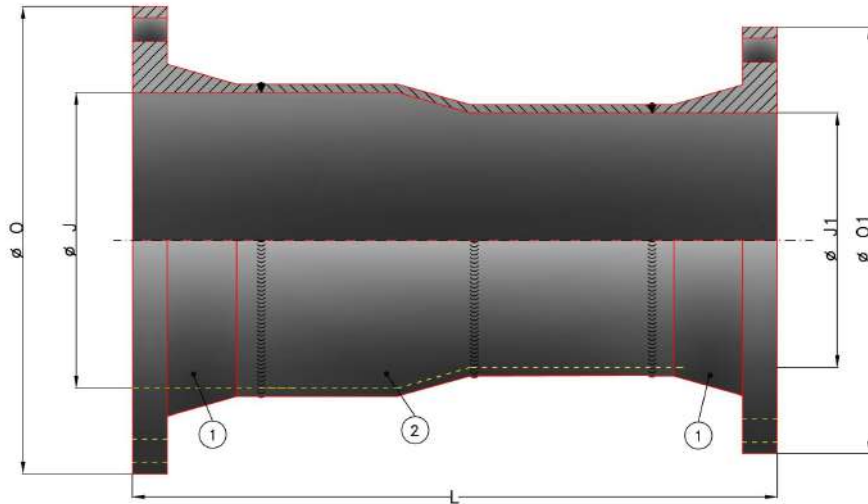
MATERIAL LIST				
ITEM	DESCRIPTION	MATERIAL	CARBON CONTENT	NOTE
1	FLANGES	ASTM A 105 N	<= 0,25%	
2	REDUCER	ASTM A 234 grade WPB / ASTM A 106 grade B	<= 0,23%	
3	PIPE	API 5L grade A or B / ASTM A 106 grade A or B PLATE ASTM A 285 C or equivalent	<= 0,23%	KILLED or SEMIKILLED



Subsea Long Spool Pieces Reducer

Flange ASME B 16.5 Class 300lb

Prod. Code: 093



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb						
N.D. (Inch)	N.D. (mm)	$\varnothing J$ (mm)	$\varnothing O$ (mm)	$\varnothing J1$ (mm)	$\varnothing O1$ (mm)	L ± 15 (mm)
8"/6"	200/150	202,7	381,0	154,2	317,5	1400
12"/8"	300/200	304,8	520,5	202,7	381,0	1500
16"/12"	400/300	387,35	647,5	304,8	520,5	1500
20"/16"	500/400	488,95	774,5	387,35	647,5	1500

Notes

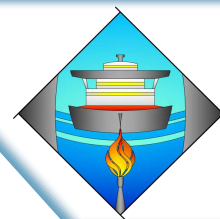
Full penetration weld according to API 1104 and 100%

Wet magnetic inspection according to ASME VIII, 6

Radiographed in accordance with BS 2600

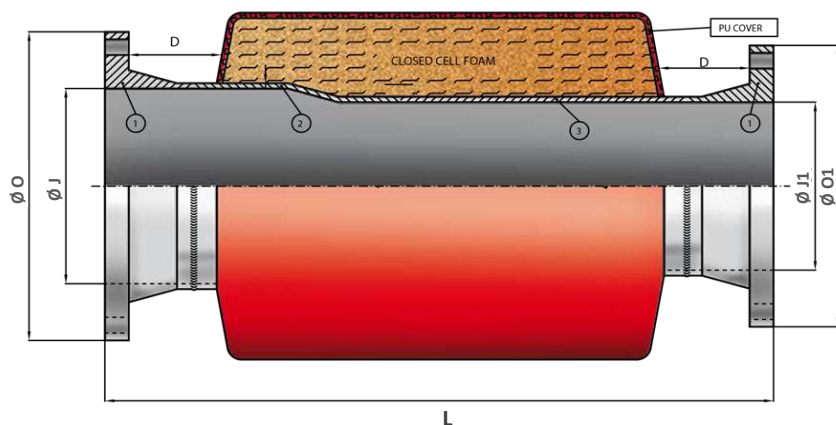
Welders and weldings qualification in accordance with ASME IX.

MATERIAL LIST				
ITEM	DESCRIPTION	MATERIAL	CARBON CONTENT	NOTE
1	FLANGES	ASTM A 105 N	$\leq 0,25\%$	
2	REDUCER	ASTM A 234 grade WPB / ASTM A 106 grade B	$\leq 0,23\%$	
3	PIPE	API 5L grade A or B / ASTM A 106 grade A or B PLATE ASTM A 285 C or equivalent	$\leq 0,23\%$	KILLED or SEMIKILLED



Floating Long Spool Pieces Reducer

Flange ASME B 16.5 Class 150lb



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb							
N.D.	N.D.	Ø J	Ø O	Ø J1	Ø O1	D	L
(Inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	± 15 (mm)
8"/6"	200/150	202,7	342,9	154,2	279,4	>=150	1400
12"/8"	300/200	304,8	482,6	202,7	342,9	>=160	1500
16"/12"	400/300	387,35	596,9	304,8	482,6	>=180	1500
20"/16"	500/400	488,95	698,5	387,35	596,9	>=200	1500

Notes

Full penetration weld according to API 1104 and 100%

Wet magnetic inspection according to ASME VIII, 6

Radiographed in accordance with BS 2600

Reserve buoyancy, filled with water, minimum 20%

Welders and weldings qualification in accordance with ASME IX.

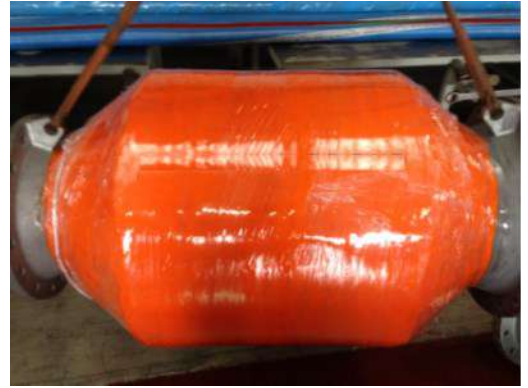
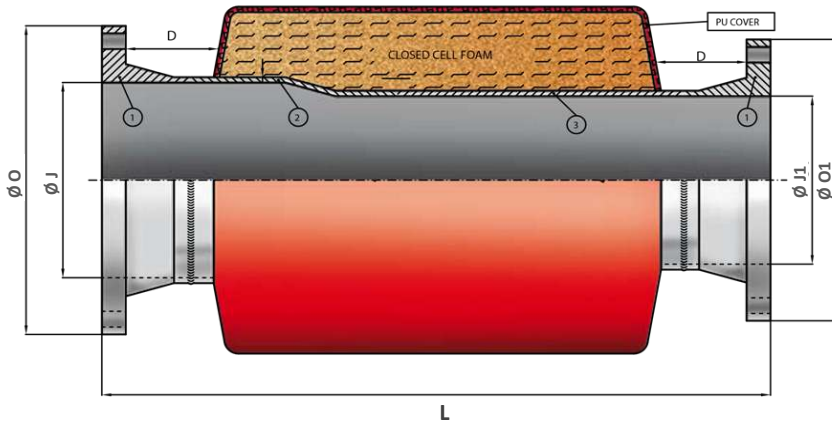
MATERIAL LIST				
ITEM	DESCRIPTION	MATERIAL	CARBON CONTENT	NOTE
1	FLANGES	ASTM A 105 N	<= 0,25%	
2	REDUCER	ASTM A 234 grade WPB / ASTM A 106 grade B	<= 0,23%	
3	PIPE	API 5L grade A or B / ASTM A 106 grade A or B PLATE ASTM A 285 C or equivalent	<= 0,23%	KILLED or SEMIKILLED



Floating Long Spool Pieces Reducer

Flange ASME B 16.5 Class 300lb

Prod. Code: 101



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb							
N.D.	N.D.	Ø J	Ø O	Ø J1	Ø O1	D	L
(Inch)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	± 15 (mm)
8"/6"	200/150	202,7	381,0	154,2	317,5	>=150	1400
12"/8"	300/200	304,8	520,5	202,7	381,0	>=160	1500
16"/12"	400/300	387,35	647,5	304,8	520,5	>=180	1500
20"/16"	500/400	488,95	774,5	387,35	647,5	>=200	1500

Notes

Full penetration weld according to API 1104 and 100%

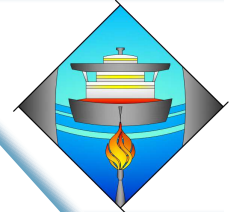
Wet magnetic inspection according to ASME VIII, 6

Radiographed in accordance with BS 2600

Reserve buoyancy, filled with water, minimum 20%

Welders and weldings qualification in accordance with ASME IX.

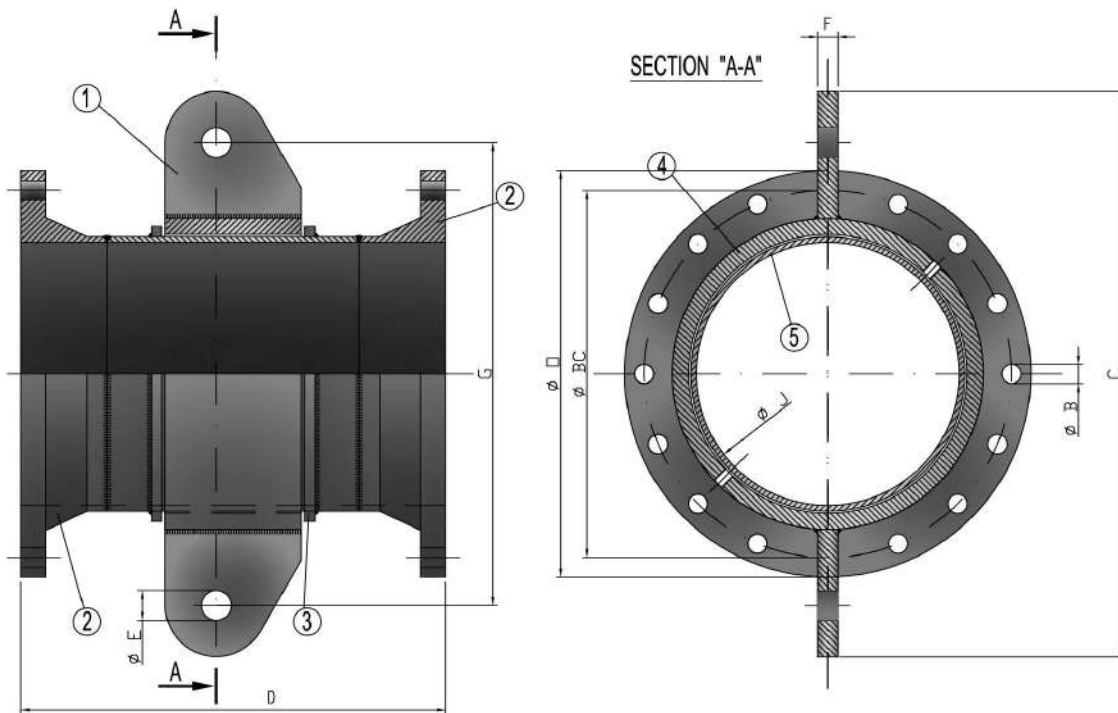
MATERIAL LIST				
ITEM	DESCRIPTION	MATERIAL	CARBON CONTENT	NOTE
1	FLANGES	ASTM A 105 N	<= 0,25%	
2	REDUCER	ASTM A 234 grade WPB / ASTM A 106 grade B	<= 0,23%	
3	PIPE	API 5L grade A or B / ASTM A 106 grade A or B PLATE ASTM A 285 C or equivalent	<= 0,23%	KILLED or SEMIKILLED



Short Spool Pieces c/w Rotative Lugs

Flange ASME B 16.5 Class 150lb

Prod. Code: 120



MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	LIFTING LUG	ASTM A 516 GR 60 or 70
2	FLANGE	ASTM A 105 N
3	RIB	ASTM A 285 C or equivalent KILLED or SEMIKILLED
4	NIPPLE	ASTM A 106 N or B API 5L Gr. A or B
5	NIPPLE	ASTM A 106 N or B API 5L Gr. A or B

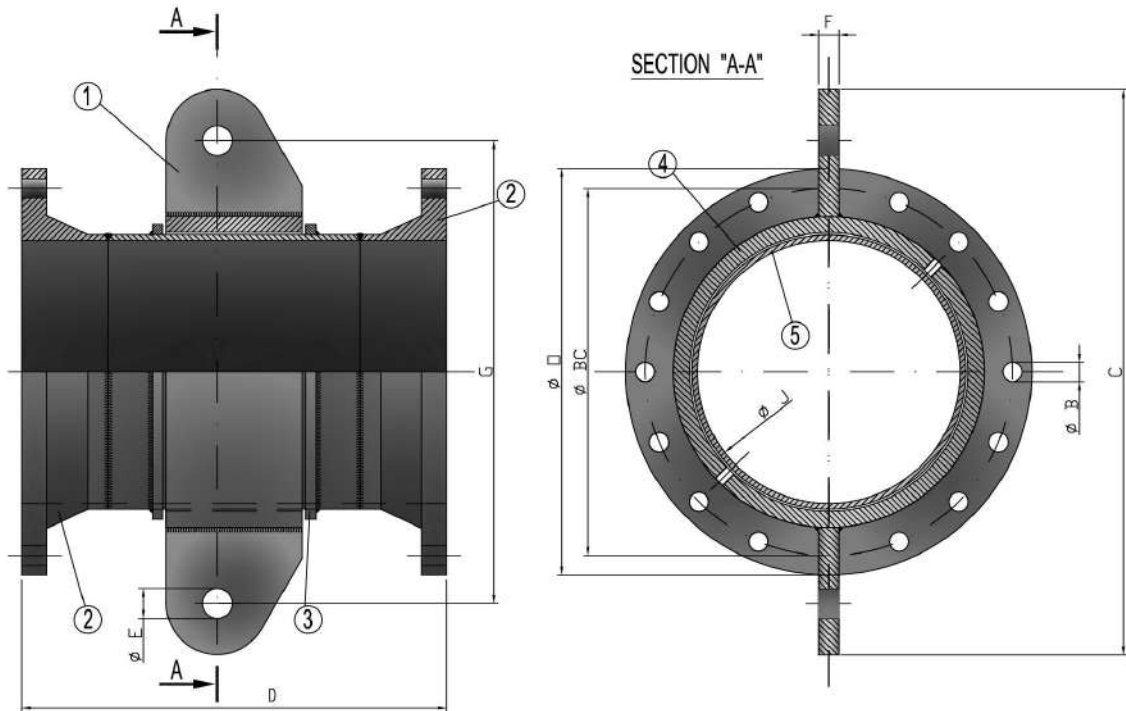
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb												LOADS			
N.D. (mm)	N.D. (Inch)	ø O (mm)	ø J (mm)	ø BC (mm)	ø B (mm)	HOLES (N°)	C (mm)	F (mm)	D (mm)	ø E (mm)	G (mm)	WEIGHT (Kg)	SWL (kN)	PROOF (kN)	BREAKING (kN)
8"	200	342,9	202,7	298,4	22,2	8	TBD	28	205,2	27	TBD	N.A.	50	125	250
10"	250	406,4	254,4	361,9	22,2	12	TBD	33	205,2	30	TBD	N.A.	70	175	350
12"	300	482,6	304,8	431,8	25,4	12	TBD	39	230,6	37	TBD	N.A.	100	250	500
16"	400	596,9	387,5	539,7	28,6	16	TBD	46	256	44	TBD	N.A.	150	375	750
20"	500	698,5	489,0	635,0	31,7	20	TBD	57	291	52	TBD	N.A.	200	500	1000



Short Spool Pieces c/w Rotative Lugs

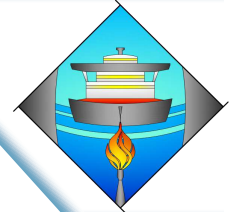
Flange ASME B 16.5 Class 300lb

Prod. Code: 121



MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	LIFTING LUG	ASTM A 516 GR 60 or 70
2	FLANGE	ASTM A 105 N
3	RIB	ASTM A 285 C or equivalent KILLED or SEMIKILLED
4	NIPPLE	ASTM A 106 N or B API 5L Gr. A or B
5	NIPPLE	ASTM A 106 N or B API 5L Gr. A or B

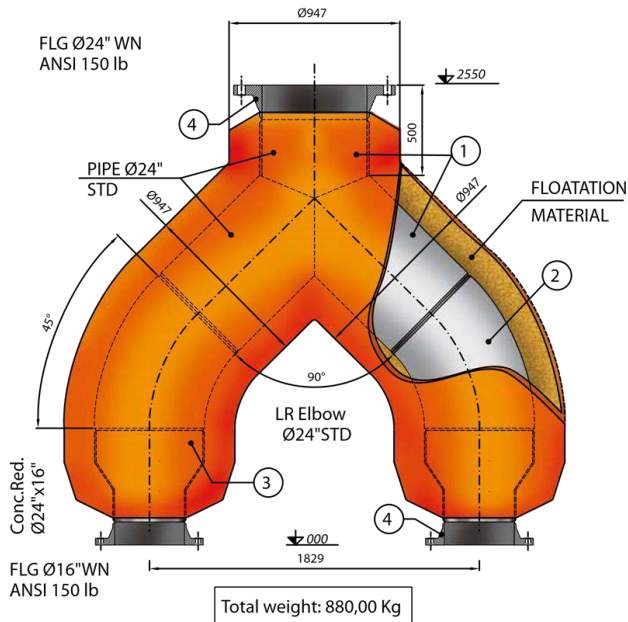
DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 300lb												LOADS			
N.D. (mm)	N.D. (Inch)	Ø O (mm)	Ø J (mm)	Ø BC (mm)	Ø B (mm)	HOLES (N°)	C (mm)	F (mm)	D (mm)	Ø E (mm)	G (mm)	WEIGHT (Kg)	SWL (kN)	PROOF (kN)	BREAKING (kN)
8"	200	381,0	202,7	330,2	25,5	12	TBD	28	224,2	27	TBD	N.A.	50	125	250
10"	250	444,5	254,4	387,3	28,5	16	TBD	33	237	30	TBD	N.A.	70	175	350
12"	300	520,5	304,8	450,8	32,0	16	TBD	39	262,4	37	TBD	N.A.	100	250	500
16"	400	647,5	387,5	571,5	35,0	20	TBD	46	294,2	44	TBD	N.A.	150	375	750
20"	500	774,5	489,0	685,8	35,0	24	TBD	57	325,8	52	TBD	N.A.	200	500	1000



Prod. Code: 280

Floating "Y" Pieces

Flange ASME B 16.5 Class 150lb



MATERIAL LIST					
ITEM	DESCRIPTION	MATERIAL		CARBON CONTENT	NOTE
1	PIPE	API 5L Gr. A or B	KILLED or SEMIKILLED	< = 0,23 %	SEAMLESS or WELDED
		PLATE ASTM A 285 C or equivalent	KILLED or SEMIKILLED		FULL PENETRATION WELD ACCORDING TO ASME IX
2	ELBOW	A 234 WPB			
3	REDUCER	ASTM A 106 grade B - ASTM A 234 grade WPR		< = 0,23 %	
4	FLANGE	ASTM A 105 N or equivalent		< = 0,25 %	

TYPE	DIAMETER (mm)	LENGTH (mm)	HEIGHT (mm)	WEIGHT (Kg)
16"/2x12"	850	2680	2400	800
20"/2x12"	950	2780	2500	950
20"/2x16"	950	2780	2500	1100
20"/2x20"	950	2780	2500	1150
24"/2x12"	1050	2880	2500	1250
24"/2x16"	1050	2880	2500	1350
24"/2x20"	1050	2880	2600	1400
24"/2x24"	1050	2880	2600	1450

NOTES:

- Full penetration weld according to API 1104 and 100%
- Welders and welding qualification in accordance with ASME IX.
- Wet magnetic inspection according to ASME VIII, 6
- Radiographed in accordance with BS 2600
- Reserve buoyancy, filled with water, minimum 20%