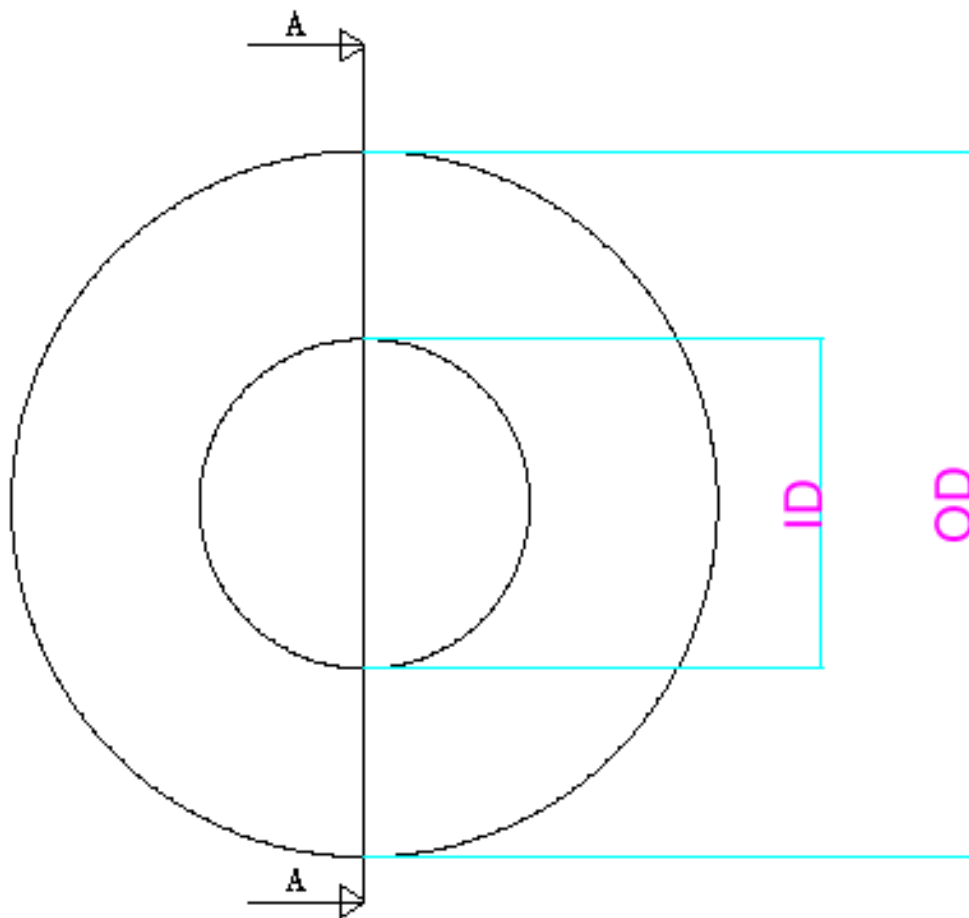
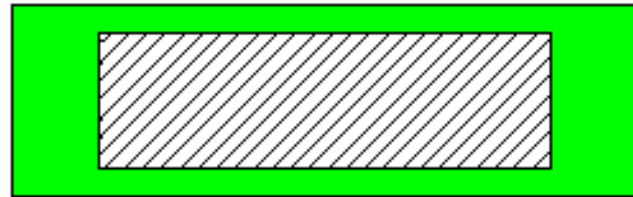


**IPX - 1  
RF FLAT**



**\*ANNEXURE IS ATTACHED**

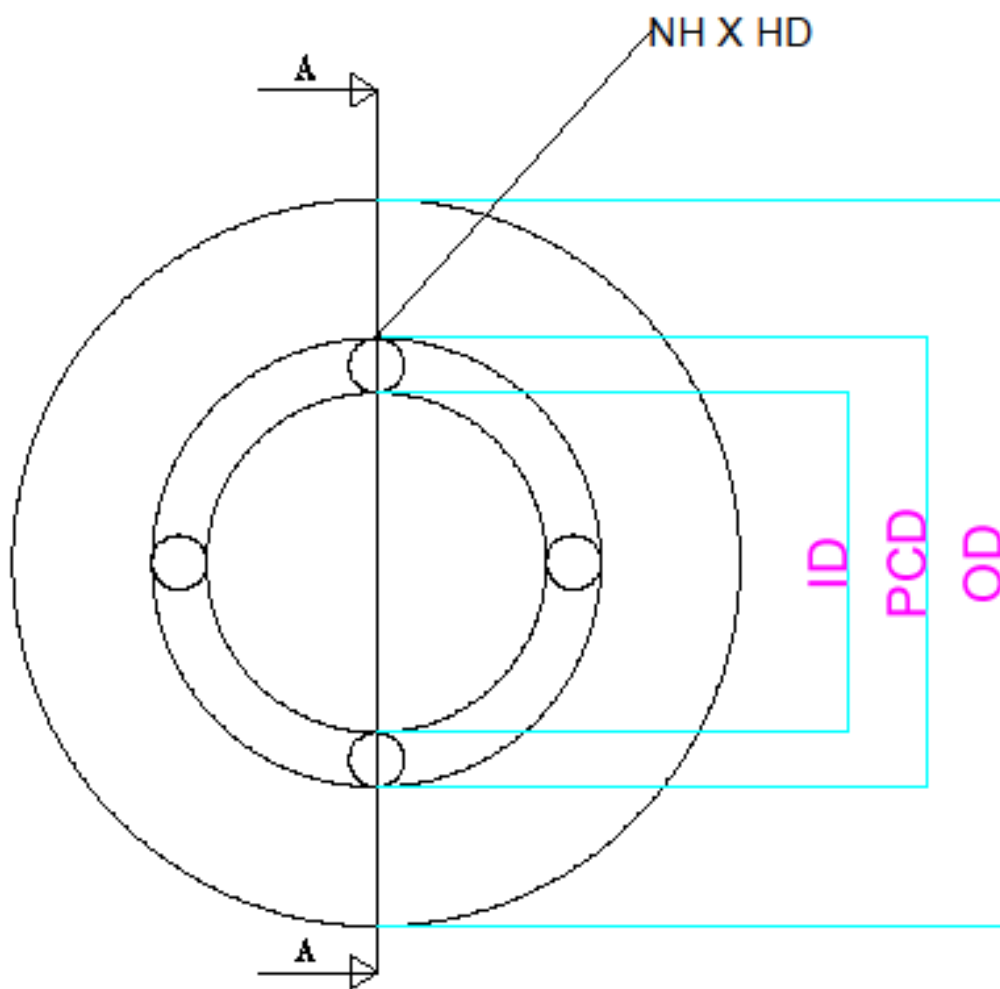
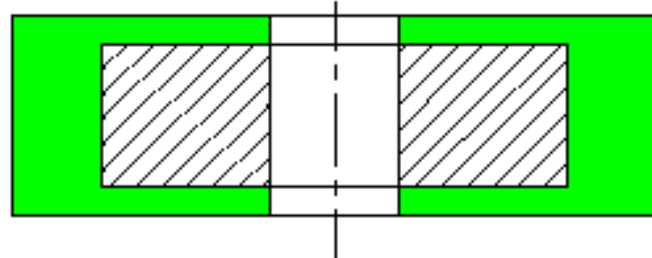
## IPX-1 ANNEXURE-1

Flange Size (Inch)	ANSI Class	RAISED FACE GASKET DIMENSIONS	
	(lbs)	ID	OD
1/2"	150	21.4	47.6
	300		54
	600		54
	900		63.5
	1500		63.5
	2500		70
3/4"	150	27	57.2
	300		66.7
	600		66.7
	900		69.9
	1500		69.9
	2500		76
1"	150	33.3	66.7
	300		73
	400 - 600		73
	900 - 1500		79.4
	2500		85.8
	150		76.2
1-1/4"	300	42.1	82.6
	400 - 600		82.6
	900 - 1500		88.9
	2500		104.8
	150		85.7
	300		95.3
1-1/2"	400 - 600	48.4	95.3
	900 - 1500		98.4
	2500		117.4
	150		104.8
	300		111.1
	600		111.1
2"	900	60.3	149.9
	1500		142.9
	2500		146
	150		123.8
	300		130.2
	400 - 600		130.2
2-1/2"	900 - 1500	73	165.1
	2500		168.2
	150		136.5
	300		149.2
	400 - 600		149.2
	900		168.3
3"	1500	88.9	174.6
	2500		196.9
	150		174.6
	300		181
	600		193.7
	900		206.4
4"	1500	114.3	209.6
	2500		234.9
	150		196.9
	300		215.9
	600		241.3
	900		247.7
5"	1500	141.3	254
	2500		279.4
	150		222.3
	300		250.8
	600		266.7
	900		288.9
6"	1500	168.3	282.6
	2500		317.5

## IPX - 1 ANNEXURE-2

Flange Size (Inch)	ANSI Class	RAISED FACE GASKET DIMENSIONS	
	(lbs)	ID	OD
8"	150	219.1	279.4
	300		308
	600		320.7
	900		358.8
	1500		352.4
	2500		387.3
10"	150	273.1	339.7
	300		361.9
	600		400
	900		435
	1500		435
	2500		476.2
12"	150	323.9	409.6
	300		422.3
	600		457.2
	900		498.5
	1500		520.7
	2500		549.3
14"	150	355.6	450.8
	300		485.8
	600		492.1
	900		520.7
	1500		577.8
16"	150	406.4	514.3
	300		539.7
	600		565.1
	900		574.7
	1500		641.3
18"	150	457.2	549.3
	300		596.9
	600		612.8
	900		638.2
	1500		704.8
20"	150	508	606.4
	300		654
	600		682.6
	900		698.5
	1500		755.6
24"	150	609.6	717.5
	300		774.7
	600		790.6
	900		838.2
	1500		901.7

**IPX - 1A  
FF FLAT**



**\*ANNEXURE IS ATTACHED**

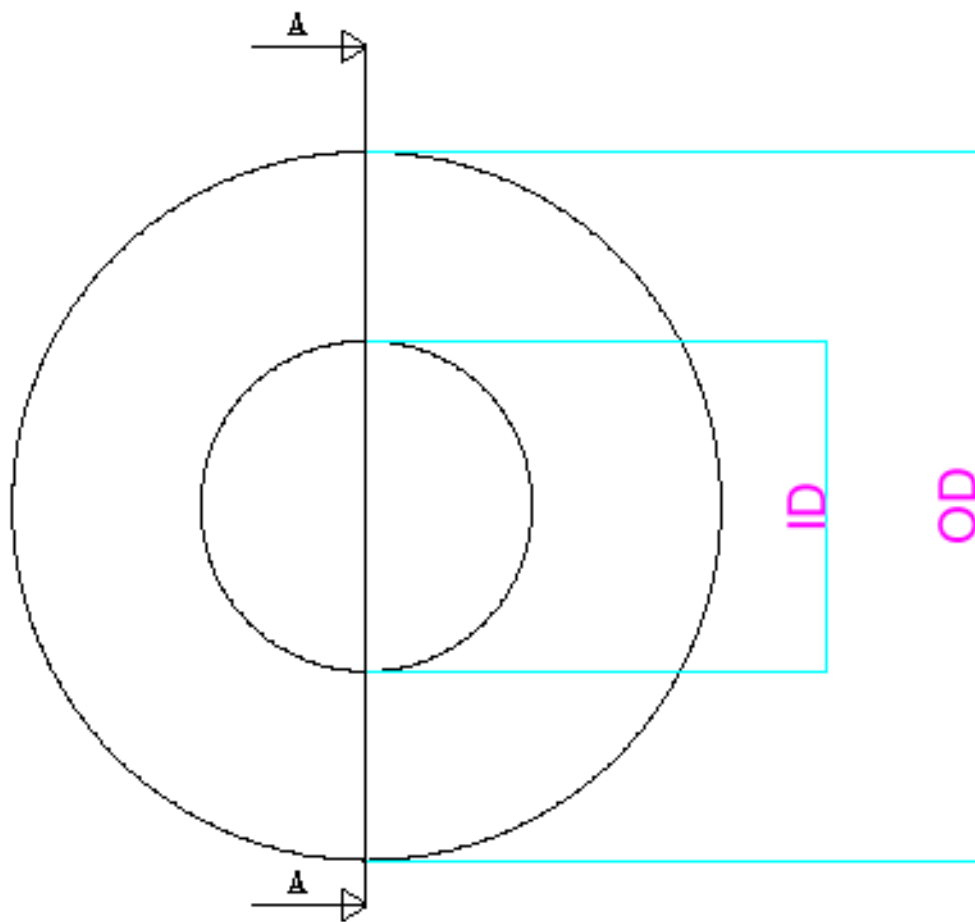
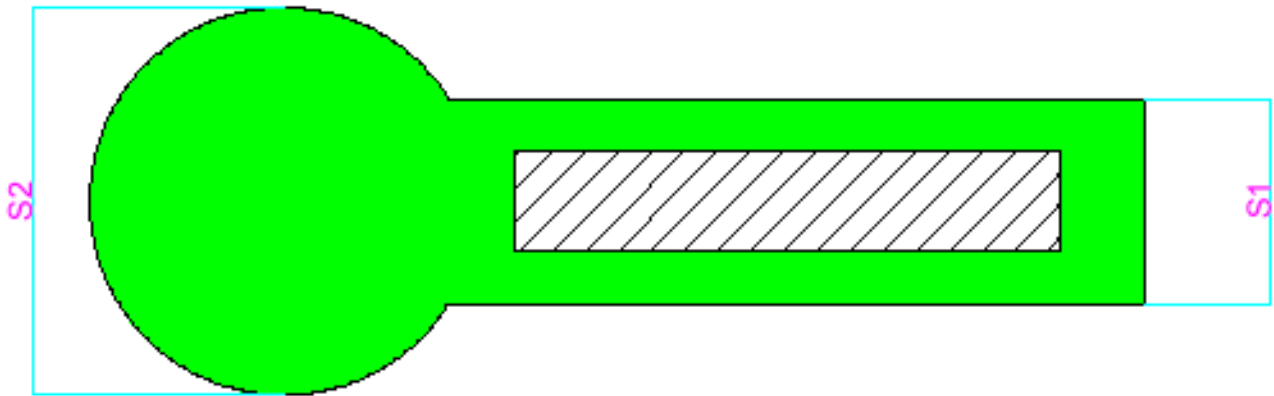
## IPX - 1A ANNEXURE-1

Flange Size (Inch)	ANSI Class (lbs)	FULL FACE GASKET DIMENSIONS				
		ID	OD	P.C.D	H D	NH
1/2"	150	21.4	89	60	15.9	4
	300		95	67	15.9	4
	600		95	67	15.9	4
	900		121	83	22.2	4
	1500		121	83	22.2	4
	2500		133	89	22.2	4
3/4"	150	27	98	70	15.9	4
	300		117	83	19	4
	600		117	83	19	4
	900		130	89	22.2	4
	1500		130	89	22.2	4
	2500		140	95	22.2	4
1"	150	33.3	108	79.4	15.9	4
	300		124	88.9	19	4
	400 - 600		124	88.9	19	4
	900 - 1500		149	102	25.4	4
	2500		159	108	25.4	4
1-1/4"	150	42.1	117	88.9	15.9	4
	300		133	98.4	19	4
	400 - 600		133	98.4	19	4
	900 - 1500		159	111.1	25.4	4
	2500		184	130.2	28.6	4
1-1/2"	150	48.4	127	98.4	15.9	4
	300		156	114.3	22.2	4
	400 - 600		156	114.3	22.2	4
	900 - 1500		178	123.8	28.6	4
	2500		203	146	31.8	4
2"	150	60.3	152	120.6	19	4
	300		165	127	19	8
	600		165	127	19	8
	900		216	165.1	25.4	8
	1500		216	165.1	25.4	8
	2500		235	171.4	28.6	8
2-1/2"	150	73	178	139.7	19	4
	300		190	149.2	22.2	8
	400 - 600		190	149.2	22.2	8
	900 - 1500		244	190.5	28.6	8
	2500		267	196.8	31.8	8
3"	150	88.9	190	152.4	19	4
	300		210	168.3	22.2	8
	400 - 600		210	168.3	22.2	8
	900		241	190.5	25.4	8
	1500		267	203.2	31.8	8
	2500		305	228.6	34.9	8
4"	150	114.3	229	190.5	19	8
	300		254	200	22.2	8
	600		273	215.9	25.4	8
	900		292	235	31.8	8
	1500		311	241.3	34.9	8
	2500		356	273	41.3	8
5"	150	141.3	254	215.9	22.2	8
	300		279	235	22.2	8
	600		330	266.7	28.6	8
	900		349	279.4	34.9	8
	1500		375	292.1	41.3	8
	2500		419	323.8	47.6	8
6"	150	168.3	279	241.3	22.2	8
	300		318	269.9	22.2	12
	600		356	292.1	28.6	12
	900		381	317.5	31.8	12
	1500		394	317.5	38.1	12
	2500		483	368.3	54	8

## IPX - 1A ANNEXURE-1

Flange Size (Inch)	ANSI Class (lbs)	FULL FACE GASKET DIMENSIONS				
		ID	OD	P.C.D	H D	NH
1/2"	150	21.4	89	60	15.9	4
	300		95	67	15.9	4
	600		95	67	15.9	4
	900		121	83	22.2	4
	1500		121	83	22.2	4
	2500		133	89	22.2	4
3/4"	150	27	98	70	15.9	4
	300		117	83	19	4
	600		117	83	19	4
	900		130	89	22.2	4
	1500		130	89	22.2	4
	2500		140	95	22.2	4
1"	150	33.3	108	79.4	15.9	4
	300		124	88.9	19	4
	400 - 600		124	88.9	19	4
	900 - 1500		149	102	25.4	4
	2500		159	108	25.4	4
	1-1/4"		150	42.1	117	88.9
300		133	98.4		19	4
400 - 600		133	98.4		19	4
900 - 1500		159	111.1		25.4	4
2500		184	130.2		28.6	4
1-1/2"		150	48.4		127	98.4
	300	156		114.3	22.2	4
	400 - 600	156		114.3	22.2	4
	900 - 1500	178		123.8	28.6	4
	2500	203		146	31.8	4
	2"	150		60.3	152	120.6
300		165	127		19	8
600		165	127		19	8
900		216	165.1		25.4	8
1500		216	165.1		25.4	8
2500		235	171.4		28.6	8
2-1/2"	150	73	178	139.7	19	4
	300		190	149.2	22.2	8
	400 - 600		190	149.2	22.2	8
	900 - 1500		244	190.5	28.6	8
	2500		267	196.8	31.8	8
	3"		150	88.9	190	152.4
300		210	168.3		22.2	8
400 - 600		210	168.3		22.2	8
900		241	190.5		25.4	8
1500		267	203.2		31.8	8
2500		305	228.6		34.9	8
4"	150	114.3	229	190.5	19	8
	300		254	200	22.2	8
	600		273	215.9	25.4	8
	900		292	235	31.8	8
	1500		311	241.3	34.9	8
	2500		356	273	41.3	8
5"	150	141.3	254	215.9	22.2	8
	300		279	235	22.2	8
	600		330	266.7	28.6	8
	900		349	279.4	34.9	8
	1500		375	292.1	41.3	8
	2500		419	323.8	47.6	8
6"	150	168.3	279	241.3	22.2	8
	300		318	269.9	22.2	12
	600		356	292.1	28.6	12
	900		381	317.5	31.8	12
	1500		394	317.5	38.1	12
	2500		483	368.3	54	8

**IPX - 2  
RF WITH O-RING**



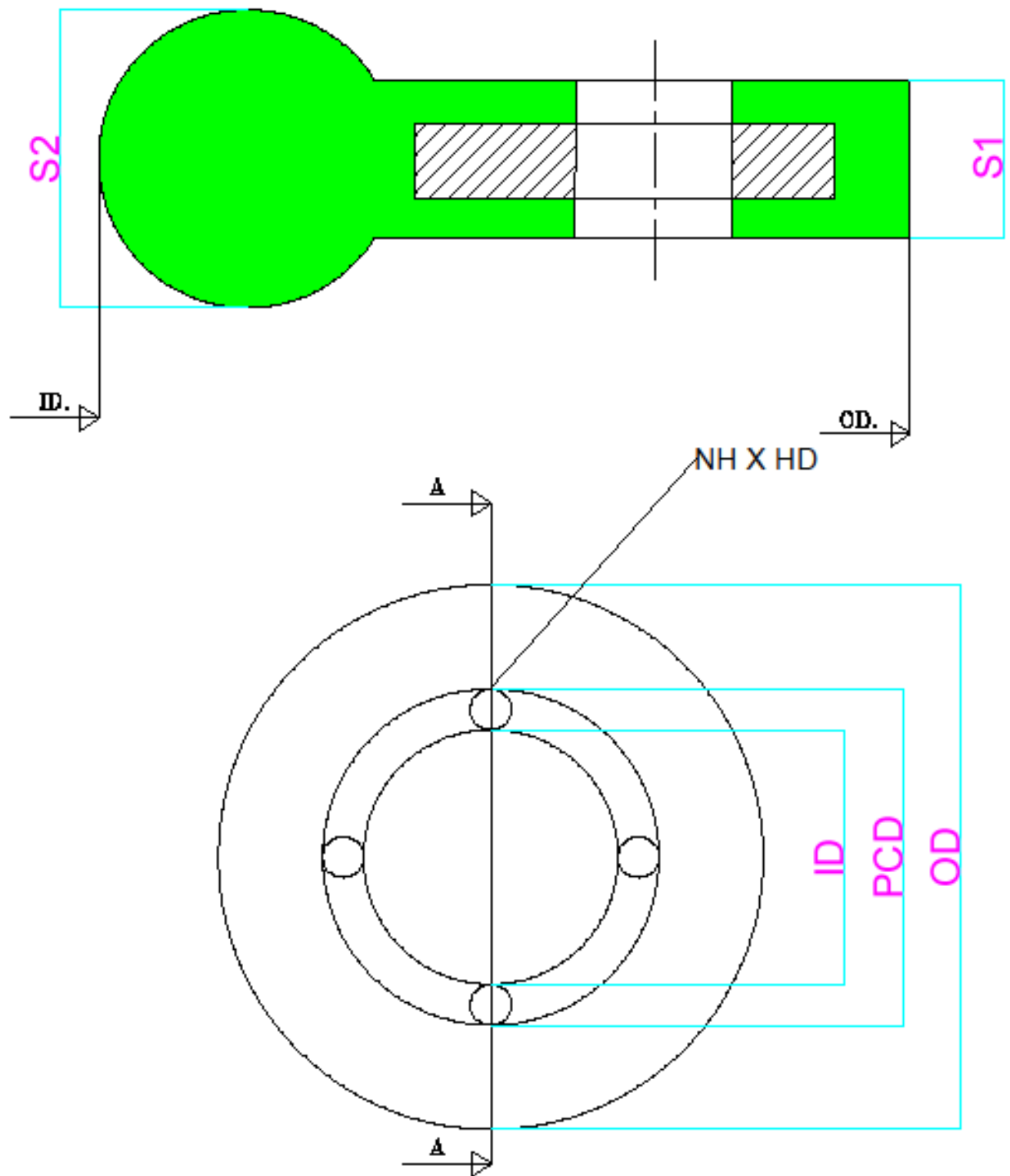
**\*ANNEXURE IS ATTACHED**

## IPX - 2 ANNEXURE-1

SL.NO	NORMAL PIPE NPS	ID	OD	S1	S2
01	1/2"	21.4	45	3	4
02	3/4"	27	54	3	4
03	1"	88.9	64	3	4
04	1 1/4"	42.1	73	3	4
05	1 1/2"	48.4	83	3	4
06	2"	60.3	102	4	5
07	2 1/2"	73	121	4	5
08	3"	89	133	4	5
09	3 1/2"	102	159	4	5
10	4"	114.3	171	5	6
11	5"	141.3	193	5	6
12	6"	168.3	219	6	8
13	8"	219.1	276	6	8
14	10"	273.1	337	6	8
15	12"	323.9	406	6	8
16	14"	356	448	7	10
17	16"	406.4	512	7	10
18	18"	457.2	547	7	10
19	20"	508	604	7	10
20	24"	610	715	7	10



**IPX-2A  
FF WITH O-RING**

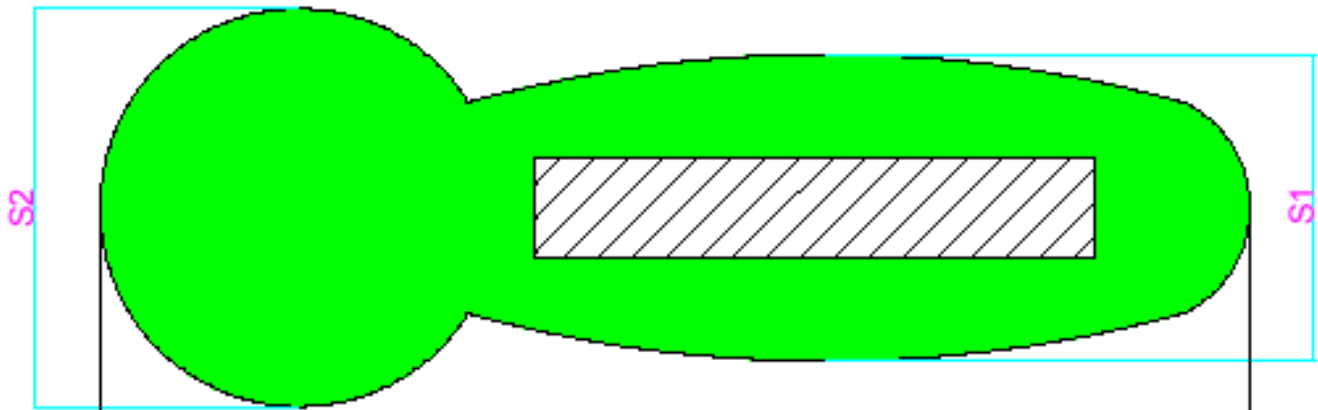


**\*ANNEXURE IS ATTACHED**

## IPX-2A ANNEXURE-1

S.NO	NOMINAL PIPE SIZE NPS	ANSI LBS CLASS	ID	OD	S1	S2	PCD	HD	NH
1	1"	150	33	108	3	4	79	15.9	4
		300	33	124	3	4	89	19	4
2	2"	150	60	152	4	5	121	19	4
		300	60	165	4	5	127	19	8
3	3"	150	89	190	4	5	152	19	4
		300	89	210	4	5	168	22.2	8
4	4"	150	114.3	229	5	6	191	19	8
		300	114.3	254	5	6	200	22.2	8
5	6"	150	168	279	6	8	241	22.2	8
		300	168	318	6	8	270	22.2	12
6	8"	150	219	343	6	8	298	22.2	8
		300	219	381	6	8	330	25.4	12
7	10"	150	273	406	6	8	362	25.4	12
		300	273	444	6	8	387	28.6	16
8	12"	150	323.9	483	6	8	432	25.4	12
		300	323.9	521	6	8	451	31.8	16
9	14"	150	356	533	7	10	476	28.6	12
		300	356	584	7	10	514	31.8	20
10	16"	150	406	597	7	10	540	28.6	16
		300	406	648	7	10	572	34.9	20
11	18"	150	457	635	7	10	578	31.8	16
		300	457	711	7	10	629	34.9	24
12	20"	150	508	698	7	10	635	31.8	20
		300	508	775	7	10	686	34.9	24
13	24"	150	609.6	813	7	10	749.3	34.9	20
		300	609.6	914	7	10	813	41.3	24

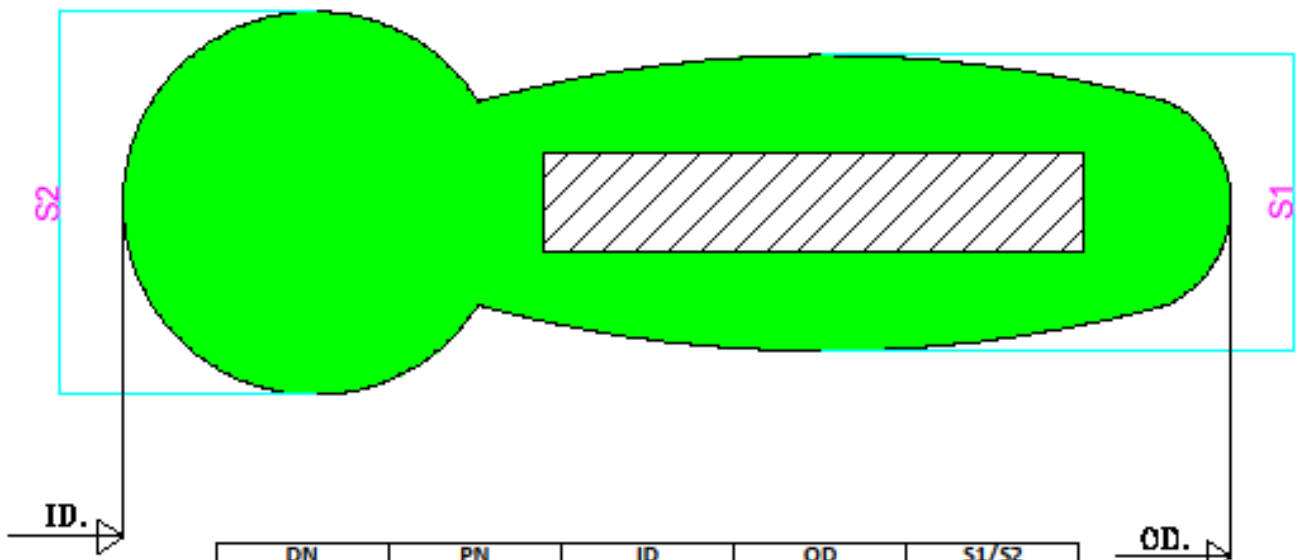
**IPX - 3**  
**G-ST-P/S WITH O-RING (ELIPSE)**  
 AS PER EN1514-1



DN	PN	LD	OD	S1/S2
*15	10-40	22	51	3/4
*20	6	27	54	3/4
*20	10-40	27	54	3/4
*25	10-40	34	61	3/4
*32	6	43	76	3/4
*32	10-40	43	82	3/4
*40	10-40	49	92	3/4
*50	6	61	98	4/5
*50	10-40	61	107	4/5
*65	6	77	116	4/5
*65	10-40	77	127	4/5
(*180)	10-40	89	142	4/5
100	6	115	152	5/6
100	10-16	115	162	5/6
100	25-40	115	168	5/6
125	6	141	182	5/6
125	10-16	141	192	5/6
125	25-40	141	194	5/6
150	6	169	207	6/8
(*1150)	10-16	169	218	6/8
150	25-40	169	224	6/8
200	6	220	262	6/8
200	10-16	220	273	6/8
200	25	220	284	6/8
200	40	220	290	6/8
250	6	273	317	6/8
250	10	273	328	6/8
250	16	273	329	6/8
250	25	273	340	6/8
250	40	273	352	6/8
300	6	324	373	6/8
300	10	324	378	6/8
300	16	324	384	6/8
300	25	324	400	6/8
300	40	324	417	6/8
350	10	356	438	7/10
350	16	356	444	7/10
400	10	407	489	7/10
400	16	407	495	7/10
450	10	458	539	7/10
450	16	458	555	7/10
500	10	508	594	7/10
500	16	508	617	7/10
600	10	610	695	7/10
600	16	610	734	7/10
700	10	712	810	8/11
700	16	712	804	8/11
800	10	813	917	8/11
800	16	813	911	8/11
900	10	915	1017	8/11
900	16	915	1011	8/11
1000	10	1016	1124	8/11
1000	16	1016	1128	8/11
1200	2.5	1220	1290	8/11
1200	6	1220	1307	8/11
1200	10	1220	1341	8/11
1200	16	1220	1342	8/11
1400	2.5	1420	1490	8/11

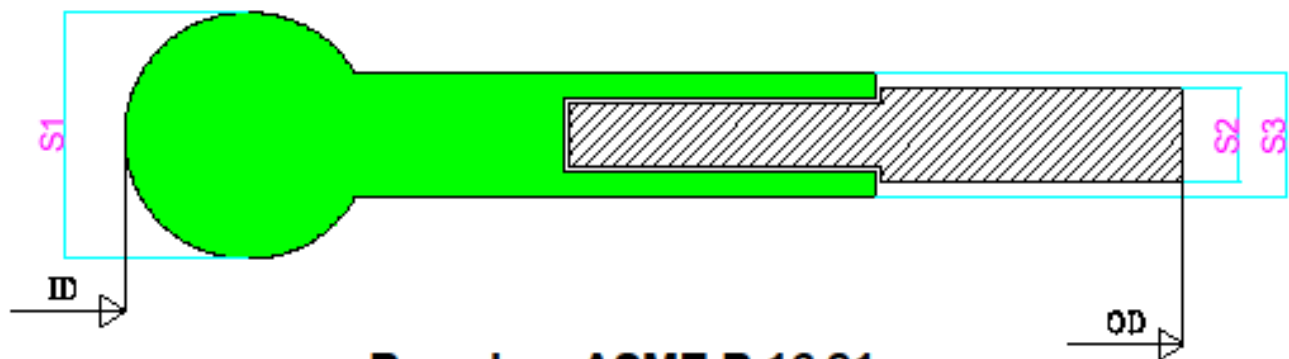
# IPX - 3 G-ST-P/S WITH O-RING (ELIPSE)

AS PER DIN 2690



DN	PN	ID	OD	S1/S2
350	6	368	423	07/10
350	10	368	438	07/10
350	16	368	445	07/10
350	25	368	458	07/10
350	40	368	475	07/10
400	6	420	473	07/10
400	10	420	490	07/10
400	16	420	497	07/10
400	25	420	515	07/10
400	40	420	547	07/10
450	6	470	528	07/10
450	10	470	540	07/10
450	16	470	557	07/10
450	25	470	565	07/10
450	40	470	572	07/10
500	6	520	578	07/10
500	10	520	595	07/10
500	16	520	618	07/10
500	25	520	625	07/10
500	40	520	628	07/10
600	6	620	680	07/10
600	10	620	695	07/10
600	16	620	735	07/10
600	25	620	730	07/10
600	40	620	745	07/10
700	6	720	785	8/11
700	10	720	810	8/11
700	16	720	805	8/11
700	25	720	830	8/11
700	40	720	850	8/11
800	6	820	890	8/11
800	10	820	915	8/11
800	16	820	910	8/11
800	25	820	940	8/11
800	40	820	970	8/11
900	6	920	990	8/11
900	10	920	1015	8/11
900	16	920	1010	8/11
900	25	920	1040	8/11
900	40	920	1080	8/11
1000	6	1020	1090	8/11
1000	10	1020	1120	8/11
1000	16	1020	1125	8/11
1000	40	1020	1190	8/11
1100	10	1120	1215	8/11
1200		1215	1285	8/11
1200	2,5	1220	1290	8/11
1200	6	1220	1307	8/11
1200	10	1220	1341	8/11
1200	16	1220	1342	8/11
1200	25	1220	1360	8/11
1200	40	1220	1395	8/11
1200		1280	1380	8/11
1400	2,5	1420	1490	8/11
1400	16	1454	1540	8/11

## IPX - 5 T-TYPE METAL OUTER RING



**Based on ASME B 16.21**

S.NO	NPS	CLASS	150	300	400	600	900	1500	S1	S2	S3
		ID	OD	OD	OD	OD	OD	OD			
1	1/2"	16	45	51	51	51	61	61	5	3	4
2	3/4"	22	54	64	64	64	67	67	5	3	4
3	1"	28	64	70	70	70	76	76	5	3	4
4	1 1/4"	35	73	80	80	80	86	86	5,5	3,5	4,6
5	1 1/2"	43	83	93	93	93	95	95	5,5	3,5	4,6
6	2"	61	102	108	108	108	140	140	5,5	3,5	4,6
7	2 1/2"	77	121	127	127	127	162	162	5,5	3,5	4,6
8	3"	90	134	146	146	146	165	165	5,5	3,5	4,6
9	3 1/2"	102	159	162	159	159	-	-	8	5	6
10	4"	115	172	178	175	191	203	203	8	5	6
11	5"	141	194	213	210	238	245	245	8	5	6
12	6"	169	220	248	245	264	286	286	8	5	6
13	8"	220	277	305	302	318	356	356	8	5	6
14	10"	274	337	359	356	397	432	432	8	5	6
15	12"	325	407	419	416	454	496	496	8	5	6
16	14"	368	448	483	480	489	518	518	8	5	6
17	16"	420	512	537	534	562	572	572	8	5	6
18	18"	470	547	594	591	610	635	635	10	6,5	7,5
19	20"	520	604	651	645	680	696	696	10	6,5	7,5
20	22"	560	650	702	-	733	-	-	9	6,0	7,0
21	24"	620	715	772	766	788	835	835	10	6,0	7,0