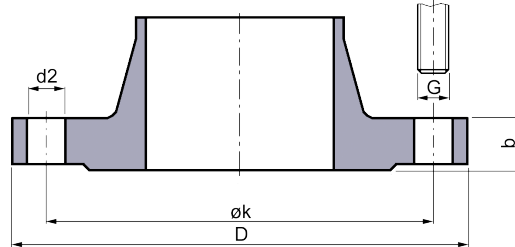


Flanges

EN1092-1:2007 (Type 11,12,13) welding neck flanges:



DN	PN 6					PN 10					PN 16					PN 25					PN 40					DN
	D	b	k	n x G	d2	D	b	k	n x G	d2	D	b	k	n x G	d2	D	b	k	n x G	d2	D	b	k	n x G	d2	
25	100	14	75	4x M10	11	115	18	85	4x M12	14	115	18	85	4x M12	14	115	18	85	4x M12	14	115	18	85	4x M12	14	25
32	120	14	90	4x M12	14	140	18	100	4x M16	18	140	18	100	4x M16	18	140	18	100	4x M16	18	140	18	100	4x M16	18	32
40	130	14	100	4x M12	14	150	18	110	4x M16	18	150	18	110	4x M16	18	150	18	110	4x M16	18	150	18	110	4x M16	18	40
50	140	14	110	4x M12	14	165	18	125	4x M16	18	165	18	125	4x M16	18	165	20	125	4x M16	18	165	20	125	4x M16	18	50
65	160	14	130	4x M12	14	185	18	145	4(8)x M16	18	185	18	145	4(8)x M16	18	185	22	145	8x M16	18	185	22	145	8x M16	18	65
80	190	16	150	4x M16	18	200	20	160	8x M16	18	200	20	160	8x M16	18	200	24	160	8x M16	18	200	24	160	8x M16	18	80
100	210	16	170	4x M16	18	220	20	180	8x M16	18	220	20	180	8x M16	18	235	24	190	8x M20	22	235	24	190	8x M20	22	100
125	240	18	200	8x M16	18	250	22	210	8x M16	18	250	22	210	8x M16	18	270	26	220	8x M24	26	270	26	220	8x M24	26	125
150	265	18	225	8x M16	18	285	22	240	8x M20	22	285	22	240	8x M20	22	300	28	250	8x M24	26	300	28	250	8x M24	26	150
200	320	20	280	8x M16	18	340	24	295	8x M20	22	340	24	295	12x M20	22	360	30	310	12x M24	26	375	34	320	12x M27	30	200
250	375	22	335	12x M16	18	395	26	350	12x M20	22	405	26	355	12x M24	26	425	32	370	12x M27	30	450	38	385	12x M30	33	250
300	440	22	395	12x M20	22	445	26	400	12x M20	22	460	28	410	12x M24	26	485	34	430	16x M27	30	515	42	450	16x M30	33	300
350	490	22	445	12x M20	22	505	26	460	16x M20	22	520	30	470	16x M24	26	555	38	490	16x M30	33	580	46	510	16x M33	36	350
400	540	22	495	16x M20	22	565	26	515	16x M24	26	580	32	525	16x M27	30	620	40	550	16x M33	36	660	50	585	16x M36	39	400
450	595	22	550	16x M20	22	615	28	565	20x M24	26	640	34	585	20x M27	30	670	46	600	20x M33	36	685	57	610	20x M36	39	450
500	645	24	600	20x M20	22	670	28	620	20x M24	26	715	36	650	20x M30	33	730	48	660	20x M33	36	755	57	670	20x M39	42	500
600	755	30	705	20x M24	26	780	30	725	20x M27	30	840	40	770	20x M33	36	845	48	770	20x M36	39	890	72	795	20x M45	48	600
700	860	30	810	24x M24	26	895	35	840	24x M27	30	910	40	840	24x M33	36	960	50	875	24x M39	42						700
800	975	30	920	24x M27	30	1015	38	950	24x M30	33	1025	41	950	24x M36	39	1085	53	990	24x M45	48						800
900	1075	34	1020	24x M27	30	1115	38	1050	28x M30	33	1125	48	1050	28x M36	39	1185	57	1090	28x M45	48						900
1000	1175	38	1120	28x M27	30	1230	44	1160	28x M33	36	1255	59	1170	28x M39	42	1320	63	1210	28x M52	56						1000
1100*						1340	43	1270	32x M33	37	1355	54	1270	32x M39	44	1420	65	1310	32x M52	57						1100*
1200	1405	42	1340	32x M30	33	1455	55	1380	32x M36	39	1485	78	1390	32x M45	48											1200
1300																										1300
1400	1630	56	1560	36x M33	36	1675	65	1590	36x M39	42	1685	84	1590	36x M45	48											1400
1500*						1785	48	1700	36x M39	44	1820	63	1710	36x M52	57	1865	78	1750	36x M56	62						1500
1600	1830	63	1760	40x M33	36	1915	75	1820	40x M45	48	1930	102	1820	40x M52	56											1600

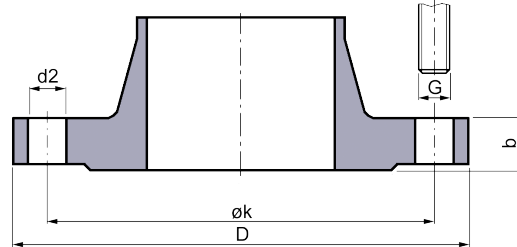
n = number of bores/bolts

According to EN 1092-1:2007, DN65 can have 4 or 8 holes.
InterApp standard is 4 holes.

* According to EN 1092-2:1997

Flanges

ANSI - welding neck flanges:



ASME B16.5 Class 150, series A								
DN"	mm	D"	b"	k"	n	G*		d2"
						UNC	metric	
1	25	4,25	0,56	3,12	4	1/2"	M12	5/8"
1 1/4	32	4,62	0,62	3,50	4	1/2"	M12	5/8"
1 1/2	40	5,00	0,69	3,88	4	1/2"	M12	5/8"
2	50	6,00	0,75	4,75	4	5/8"	M16	3/4"
2 1/2	65	7,00	0,88	5,50	4	5/8"	M16	3/4"
3	80	7,50	0,94	6,00	4	5/8"	M16	3/4"
4	100	9,00	0,94	7,50	8	5/8"	M16	3/4"
5	125	10,0	0,94	8,50	8	3/4"	M20	7/8"
6	150	11,0	1,00	9,50	8	3/4"	M20	7/8"
8	200	13,5	1,12	11,75	8	3/4"	M20	7/8"
10	250	16,0	1,19	14,25	12	7/8"	M22	1"
12	300	19,0	1,25	17,00	12	7/8"	M22	1"
14	350	21,0	1,38	18,75	12	1"	M24	1 1/8"
16	400	23,5	1,44	21,25	16	1"	M24	1 1/8"
18	450	25,0	1,56	22,75	16	1 1/8"	M27	1 1/4"
20	500	27,5	1,69	25,00	20	1 1/8"	M27	1 1/4"
24	600	32,0	1,88	29,50	20	1 1/4"	M30	1 3/8"

ASME B16.5 Class 300, series A								
DN"	mm	D"	b"	k"	n	G*		d2"
						UNC	metric	
1	25	4,88	0,69	3,50	4	5/8"	M16	3/4"
1 1/4	32	5,25	0,75	3,88	4	5/8"	M16	3/4"
1 1/2	40	6,13	0,81	4,50	4	3/4"	M20	7/8"
2	50	6,50	0,88	5,00	8	5/8"	M16	3/4"
2 1/2	65	7,50	1,00	5,88	8	3/4"	M20	7/8"
3	80	8,25	1,12	6,62	8	3/4"	M20	7/8"
4	100	10,0	1,25	7,88	8	3/4"	M20	7/8"
5	125	11,0	1,38	9,25	8	3/4"	M20	7/8"
6	150	12,5	1,44	10,62	12	3/4"	M20	7/8"
8	200	15,0	1,62	13,00	12	7/8"	M22	1"
10	250	17,5	1,88	15,25	16	1"	M24	1 1/8"
12	300	20,5	2,00	17,75	16	1 1/8"	M27	1 1/4"
14	350	23,0	2,12	20,25	20	1 1/8"	M27	1 1/4"
16	400	25,5	2,25	22,50	20	1 1/4"	M30	1 3/8"
18	450	28,0	2,38	24,75	24	1 1/4"	M30	1 3/8"
20	500	30,5	2,50	27,00	24	1 1/4"	M30	1 3/8"
24	600	36,0	2,75	32,00	24	1 1/2"	M36	1 3/8"

ASME B16.47 Class 150, series A								
DN"	mm	D"	b"	k"	n	G*		d2"
						UNC	metric	
26	650	34,25	2,69	31,75	24	1 1/4"	M30	1 3/8"
28	700	36,50	2,81	34,00	28	1 1/4"	M30	1 3/8"
30	750	38,75	2,94	36,00	28	1 1/4"	M30	1 3/8"
32	800	41,75	3,19	38,50	28	1 1/2"	M36	1 5/8"
34	850	43,75	3,25	40,50	32	1 1/2"	M36	1 5/8"
36	900	46,00	3,56	42,75	32	1 1/2"	M36	1 5/8"
38	950	48,75	3,44	45,25	32	1 1/2"	M36	1 5/8"
40	1000	50,75	3,56	47,25	36	1 1/2"	M36	1 5/8"
42	1050	53,00	3,81	49,50	36	1 1/2"	M36	1 5/8"
44	1100	55,25	4,00	51,75	40	1 1/2"	M36	1 5/8"
46	1150	57,25	4,06	53,75	40	1 1/2"	M36	1 5/8"
48	1200	59,50	4,25	56,00	44	1 1/2"	M36	1 5/8"
52	1300	64	4,56	60,5	44	1 3/4"	M45	1 7/8"
56	1400	68,75	4,88	65,00	48	1 3/4"	M45	1 7/8"
60	1500	73	5,19	69,25	52	1 3/4"	M45	1 7/8"

ASME B16.47 Class 300, series A								
DN"	mm	D"	b"	k"	n	G*		d2"
						UNC	metric	
26	650	38,25	3,13	34,50	28	1 1/8"		1 3/4"
28	700	40,75	3,38	37,00	28	1 5/8"		1 3/4"
30	750	43,00	3,62	39,25	28	1 3/4"		1 7/8"
32	800	45,25	3,88	41,50	28	1 7/8"		2"
34	850	47,50	4,00	43,50	28	1 7/8"		2"
36	900	50,00	4,12	46,00	32	2"		2 1/8"
38	950	46,00	4,25	43,00	32	1 1/2"		1 5/8"
40	1000	48,75	4,50	45,50	32	1 5/8"		1 3/4"
42	1050	50,75	4,69	47,50	32	1 5/8"		1 3/4"
44	1100	53,25	4,88	49,75	32	1 3/4"		1 5/8"
46	1150	55,75	5,06	52,00	28	1 5/8"		2"
48	1200	57,75	5,25	54,00	32	1 7/8"		2"
52	1300	62,25	5,69	55,50	32	2		2 1/8"
56	1400	67,25	6,06	63,00	28	2 1/4"		2 3/8"
60	1500	71,25	6,44	64,00	32	2 1/4"		2 3/8"

n = number of bores/bolts

* Recommendation: must be specified on order