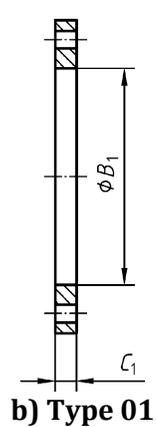
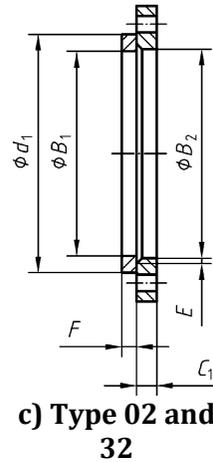


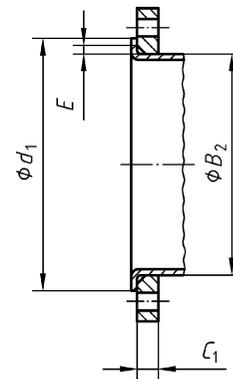
This diagram illustrates the arrangement but not necessarily the correct number of bolt holes. Refer to the column "Bolting Number" in Table 12 for the actual number.



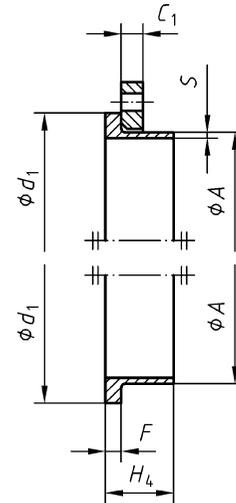
b) Type 01



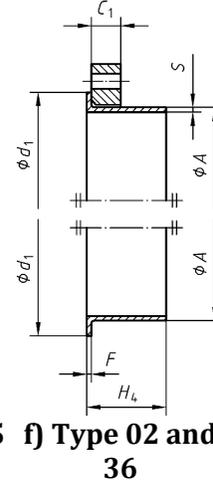
c) Type 02 and 32



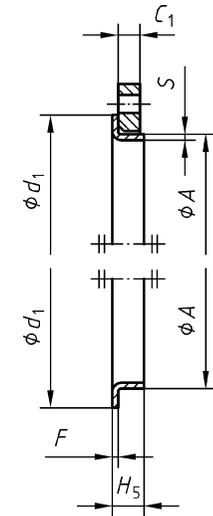
d) Type 02 and 33



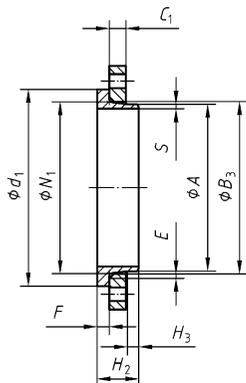
e) Type 02 and 35



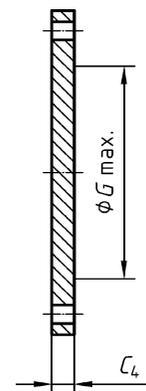
f) Type 02 and 36



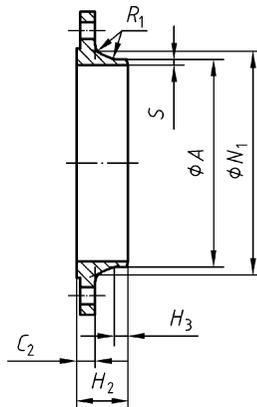
g) Type 02 and 37



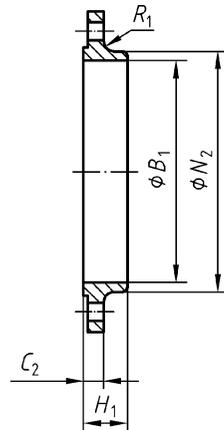
h) Type 04 and 34



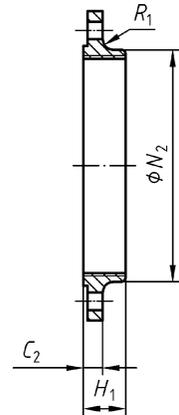
i) Type 05



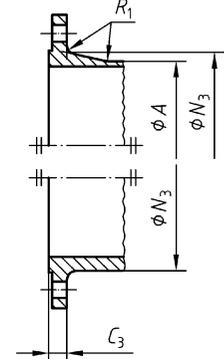
j) Type 11



k) Type 12



l) Type 13



m) Type 21

- NOTE 1 Dimensions N_1 , N_2 and N_3 are measured at the intersection of the hub draft angle and the back face of the flange.
- NOTE 2 For dimension d_1 , see Table 8.
- NOTE 3 For dimensions G_{max} refer to NOTE 1 of 5.6.1.
- NOTE 4 Type 33; lapped pipe end without determination of thickness and height.

Figure 7 — Dimensions of PN 10 flanges

Table 12 — Dimensions of PN 10 flanges

Dimensions in millimetres

DN	Mating dimensions					Outside diameter of neck A	Bore diameters			Flange thickness				Chamfer E	Collar thickness F			Centre portion G _{max}	Length					Neck diameters			Corner radii R ₁	Wall thickness (see 5.6.1) S		
	Outside diameter D	Diameter of bolt circle K	Diameter of bolt hole L	Bolting			B ₁	B ₂	B ₃	C ₁	C ₂	C ₃	C ₄		F	F	F		G _{max}	H ₁	H ₂	H ₃	H ₄	H ₅	N ₁	N ₂			N ₃	
				Number	Size																									
	Flange type																													
01, 02, 04, 05, 11, 12, 13, 21					11 21 ^a 34 ^c 35 - 37	01 12 32	02	04	01 02 04	11 12 13	21	05	02 04	32 34	35	36	37	05	12 13	11 34 ^c	11 34 ^c	35	36	37	11 34 ^c	12 13	21	11 12 13 21, 34	34	11, 35 to 37
10	90	60	14	4	M12	17,2	18,0	21	31	14	16	16	16	3	12	5	2	2,5	—	22	35	6	35	35	7	28	30	28	4	1,8
15	95	65	14	4	M12	21,3	22,0	25	35	14	16	16	16	3	12	5	2	2,5	—	22	38	6	38	38	7	32	35	32	4	2,0
20	105	75	14	4	M12	26,9	27,5	31	42	16	18	18	18	4	14	6	2,5	3	—	26	40	6	40	40	8	40	45	40	4	2,3
25	115	85	14	4	M12	33,7	34,5	38	49	16	18	18	18	4	14	7	2,5	3	—	28	40	6	40	40	10	46	52	50	4	2,6
32	140	100	18	4	M16	42,4	43,5	47	59	18	18	18	18	5	14	8	3	3	—	30	42	6	42	42	12	56	60	60	6	2,6
40	150	110	18	4	M16	48,3	49,5	53	67	18	18	18	18	5	14	8	3	3	—	32	45	7	45	45	15	64	70	70	6	2,6
50	165	125	18	4	M16	60,3	61,5	65	77	20	18	18	18	5	16	8	3	3	—	28	45	8	45	45	20	74	84	84	6	2,9
65	185	145	18	8 ^d	M16	76,1	77,5	81	96	20	18	18	18	6	16	8	3	3	55	32	45	10	45	45	20	92	104	104	6	2,9
80	200	160	18	8	M16	88,9	90,5	94	108	20	20	20	20	6	16	10	3	3	70	34	50	10	50	50	25	105	118	120	6	3,2
100	220	180	18	8	M16	114,3	116,0	120	134	22	20	20	20	6	18	10	4	4	90	40	52	12	52	52	25	131	140	140	8	3,6
125	250	210	18	8	M16	139,7	141,5	145	162	22	22	22	22	6	18	10	4	4	115	44	55	12	55	55	25	156	168	170	8	4,0
150	285	240	22	8	M20	168,3	170,5	174	188	24	22	22	22	6	20	10	5	4	140	44	55	12	55	55	25	184	195	190	10	4,5
200	340	295	22	8	M20	219,1	221,5	226	240	24	24	24	24	6	20	11	5	5	190	44	62	16	62	62	30	234	246	246	10	6,3
250	395	350	22	12	M20	273,0	276,5	281	294	26	26	26	26	8	22	12	8	—	235	46	68	16	68	68	—	292	298	298	12	6,3
300	445	400	22	12	M20	323,9	327,5	333	348	26	26	26	26	8	22	12	8	—	285	46	68	16	68	68	—	342	350	348	12	7,1
350	505	460	22	16	M20	355,6	359,5	365	400	30	26	26	26	8	22	13	8	—	330	53	68	16	68	68	—	385	400	408	12	7,1
400	565	515	26	16	M24	406,4	411,0	416	450	32	26	26	26	8	24	14	8	—	380	57	72	16	72	72	—	440	456	456	12	7,1
450	615	565	26	20	M24	457,0	462,0	467	498	36	28	28	28	8	24	15	—	—	425	63	72	16	72	—	—	488	502	502	12	7,1
500	670	620	26	20	M24	508,0	513,5	519	550	38	28	28	28	8	26	16	—	—	475	67	75	16	75	—	—	542	559	559	12	7,1

See Annex A

DN	Mating dimensions					Outside diameter of neck A	Bore diameters			Flange thickness				Chamfer E	Collar thickness F			Centre portion G _{max}	Length					Neck diameters			Corner radii R ₁	Wall thickness (see 5.6.1) S						
	Outside diameter D	Diameter of bolt circle K	Diameter of bolt hole L	Bolting			B ₁	B ₂	B ₃	C ₁	C ₂	C ₃	C ₄		F	G _{max}	H ₁		H ₂	H ₃	H ₄	H ₅	N ₁	N ₂	N ₃									
				Number	Size																													
Flange type																																		
01, 02, 04, 05, 11, 12, 13, 21						11 21 ^a 34 ^c 35 - 37	01 12 32	02	04	01 02 04	11 12 13	21	05	02 04	32 34	35	36	37	05	12 13	11 34 ^c	11 34 ^c	35	36	37	11 34 ^c	12 13	21	11 12 13 21, 34	34	11, 35 to 37			
600	780	725	30	20	M27	610,0	616,5	622	650	42	30	34	34	8	26	18	—	—	575	75	82	18	80	—	—	642	658	658	12	8,0	See Annex A			
700	895	840	30	24	M27	711,0	b	721	—	50	35	b	38	8	—	20	—	—	670	—	85	18	80	—	—	746	—	772	12	—				
800	1 015	950	33	24	M30	813,0		824	—	56	38		b	48	8	—	20	—	—	770	—	96	18	90	—	—	850	—	876	12		—		
900	1 115	1 050	33	28	M30	914,0		926	—	62	38			b	50	8	—	22	—	—	860	—	99	20	95	—	—	950	—	976		12	—	
1 000	1 230	1 160	36	28	M33	1 016,0		1 028	—	70	44				b	54	8	—	24	—	—	960	—	105	20	95	—	—	1 052	—		1 080	16	—
1 200	1 455	1 380	39	32	M36	1 219,0		1 234	—	83	55					b	66	8	—	26	—	—	1 160	—	132	25	115	—	—	1 256		—	1 292	16
1 400	1 675	1 590	42	36	M39	1 422,0	—	—	—	65	b	—					—	—	—	—	—	—	—	143	25	—	—	—	1 460	—		1 496	16	—
1 600	1 915	1 820	48	40	M45	1 626,0	—	—	—	75		b	—				—	—	—	—	—	—	—	159	25	—	—	—	1 666	—		1 712	16	—
1 800	2 115	2 020	48	44	M45	1 829,0	—	—	—	85			b	—			—	—	—	—	—	—	—	175	30	—	—	—	1 868	—		1 910	16	—
2 000	2 325	2 230	48	48	M45	2 032,0	—	—	—	90				b	—		—	—	—	—	—	—	—	186	30	—	—	—	2 072	—		2 120	16	—
2 200	2 550	2 440	56	52	M52	2 235,0	—	—	—	100					b	—	—	—	—	—	—	—	—	202	35	—	—	—	2 275	—		—	18	—
2 400	2 760	2 650	56	56	M52	2 438,0	—	—	—	110	b					—	—	—	—	—	—	—	—	218	35	—	—	—	2 478	—		—	18	—
2 600	2 960	2 850	56	60	M52	2 620,0	—	—	—	110		b				—	—	—	—	—	—	—	—	224	40	—	—	—	2 680	—		—	18	—
2 800	3 180	3 070	56	64	M52	2 820,0	—	—	—	124			b			—	—	—	—	—	—	—	—	244	40	—	—	—	2 882	—		—	18	—
3 000	3 405	3 290	62	68	M56	3 020,0	—	—	—	132				b		—	—	—	—	—	—	—	—	257	45	—	—	—	3 085	—		—	18	—

^a For flanges type 21 the outside hub diameter approximately corresponds to the outside pipe diameter and the nominal value dimensions A, N3 and R1 and their tolerances are included for guidance only.

^b To be specified by the purchaser.

^c Use is limited up to DN 600.

^d According to EN 1092-2 (Cast iron flanges) and EN 1092-3 (Copper alloy flanges), the flanges in this DN and PN may be supplied with 4 holes. Where steel flanges are required with 4 holes, these may be supplied by agreement between flange manufacturer and purchaser.