

Tipos de Engrenagens

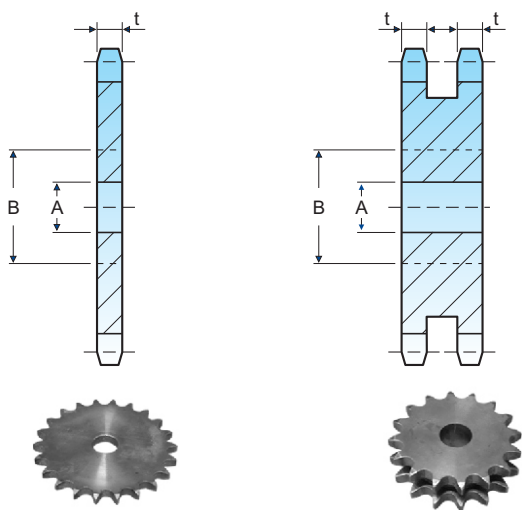


A = Furo Piloto
 B = Furo Máximo Recomendável
 D = Diâmetro do Cubo
 L = Comprimento
 t = Espessura do Dentado

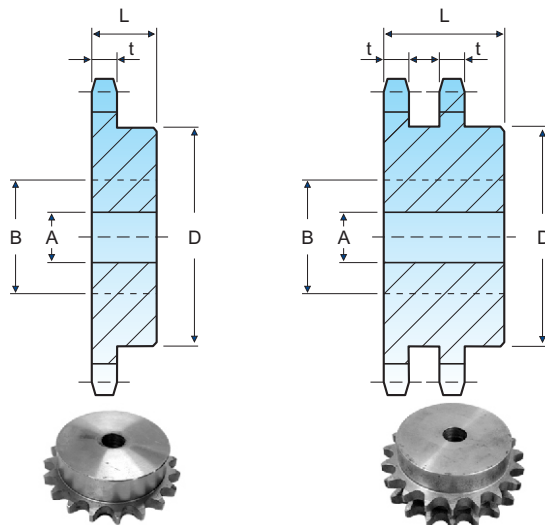
ASA = A
 DIN = B

Exemplo:
 Engrenagem → 2.60.35 BT5
 2 = duas carreiras
 60 = passo 19.05 (3/4")
 35 = nº de dentes
 B = Norma DIN
 T5 = tipo 5

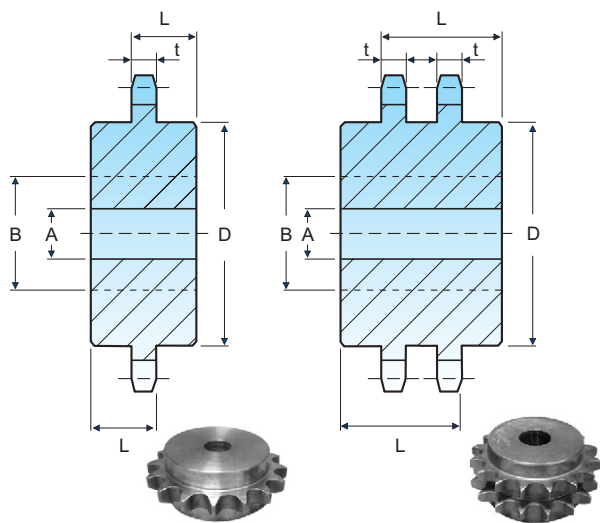
Tipo 1



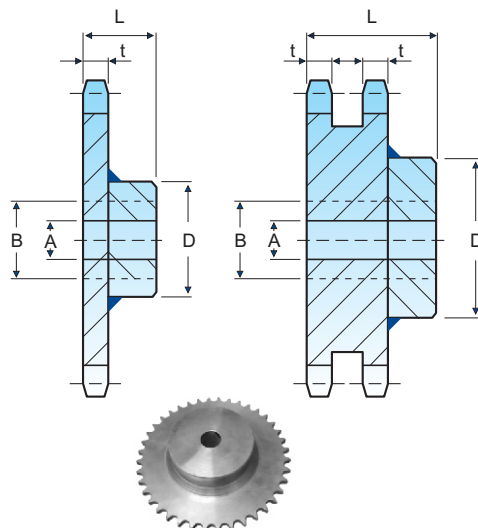
Tipo 2



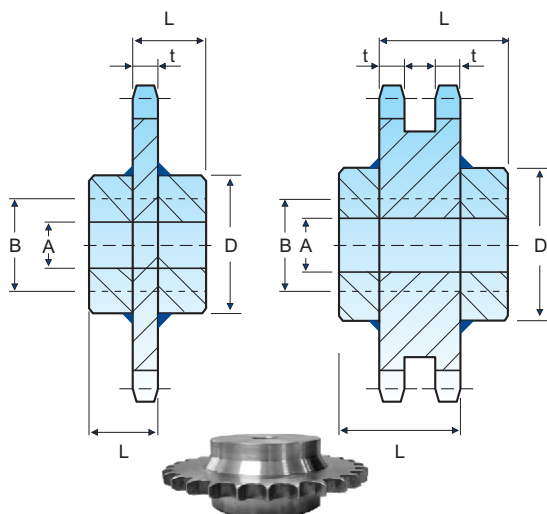
Tipo 3



Tipo 4



Tipo 5



NÚMERO DE CARREIRAS

- Simplex = 1
- Dupla = 2
- Tripla = 3
- Quádrupla = 4

PASSOS

- 9,525 = 35
- 12,700 = 40
- 15,875 = 50
- 19,050 = 60
- 25,400 = 80
- 31,750 = 100
- 38,100 = 120

Norma ASA 35

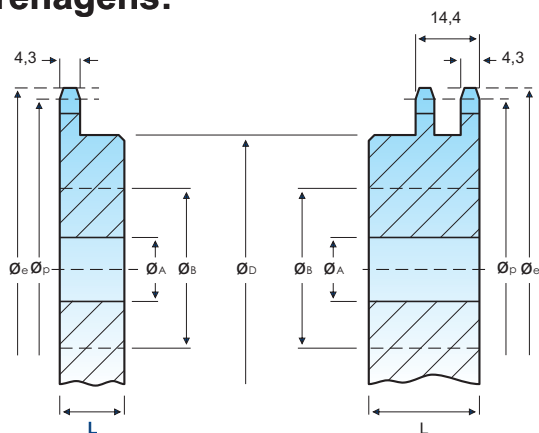
Norma DIN 35

Corrente:

Largura interna: 4,77

Diâmetro do rolo: 5,08

Engrenagens:

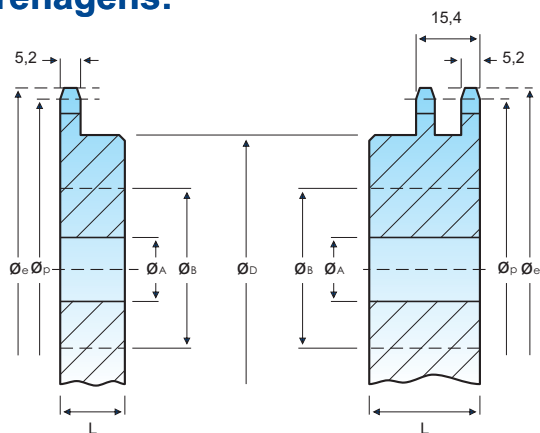


Corrente:

Largura interna: 5,72

Diâmetro do rolo: 6,35

Engrenagens:



N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simplex		Dupla		N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simplex		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
010	30,82	34,0	12	13	20	16	2-3	22	2-3	050	151,69	157,0	20	90	135	25	2-3	30	2-3
011	33,81	37,0	12	15	23	16	2-3	22	2-3	051	154,72	160,0	20	90	135	25	2-3	30	2-3
012	36,80	40,0	12	17	26	16	2-3	22	2-3	052	157,75	163,0	20	90	135	25	2-3	30	2-3
013	39,80	44,0	12	19	29	16	2-3	22	2-3	053	160,78	166,0	20	90	135	25	2-3	30	2-3
014	42,81	47,0	12	21	32	16	2-3	22	2-3	054	163,81	169,0	20	48	72	30	4-5	35	4-5
015	45,81	50,0	12	23	35	20	2-3	25	2-3	055	166,84	172,0	20	48	72	30	4-5	35	4-5
016	48,82	53,0	12	25	38	20	2-3	25	2-3	056	169,88	175,0	20	48	72	30	4-5	35	4-5
017	51,84	56,0	12	27	41	20	2-3	25	2-3	057	172,91	178,0	20	48	72	30	4-5	35	4-5
018	54,85	59,0	12	29	44	20	2-3	25	2-3	058	175,94	181,0	20	48	72	30	4-5	35	4-5
019	57,87	62,0	12	31	47	22	2-3	25	2-3	059	178,97	184,0	20	48	72	30	4-5	35	4-5
020	60,89	65,0	12	33	50	22	2-3	25	2-3	060	182,00	187,0	20	57	80	30	4-5	35	4-5
021	63,91	68,0	12	35	53	22	2-3	25	2-3	061	185,03	190,0	20	57	80	30	4-5	35	4-5
022	66,93	71,0	12	37	56	22	2-3	25	2-3	062	188,06	193,0	20	57	80	30	4-5	35	4-5
023	69,95	74,0	12	39	59	22	2-3	25	2-3	063	191,09	196,0	20	57	80	30	4-5	35	4-5
024	72,97	77,0	15	41	62	22	2-3	25	2-3	064	194,12	199,0	20	57	80	30	4-5	35	4-5
025	76,00	80,0	15	43	65	22	2-3	25	2-3	065	197,15	202,0	20	57	80	30	4-5	35	4-5
026	79,02	84,0	15	45	68	22	2-3	25	2-3	066	200,18	205,0	20	57	80	30	4-5	35	4-5
027	82,05	87,0	15	47	70	22	2-3	25	2-3	067	203,21	208,0	20	57	80	30	4-5	35	4-5
028	85,07	90,0	15	48	72	22	2-3	25	2-3	068	206,24	211,0	20	57	80	30	4-5	35	4-5
029	88,10	93,0	15	50	75	22	2-3	25	2-3	069	209,27	214,0	20	57	80	30	4-5	35	4-5
030	91,12	96,0	15	52	78	25	2-3	30	2-3	070	212,30	217,0	20	57	80	30	4-5	35	4-5
031	94,15	99,0	15	54	80	25	2-3	30	2-3	071	215,33	220,0	20	57	80	30	4-5	35	4-5
032	97,18	102,0	15	56	84	25	2-3	30	2-3	072	218,37	223,0	20	57	80	30	4-5	35	4-5
033	100,20	105,0	15	58	87	25	2-3	30	2-3	073	221,40	226,0	20	57	80	30	4-5	35	4-5
034	103,23	108,0	15	60	90	25	2-3	30	2-3	074	224,43	229,0	20	57	80	30	4-5	35	4-5
035	106,26	111,0	15	62	93	25	2-3	30	2-3	075	227,46	232,0	20	57	80	30	4-5	35	4-5
036	109,29	114,0	15	64	96	25	2-3	30	2-3	076	230,49	235,0	20	57	80	30	4-5	35	4-5
037	112,32	117,0	15	67	100	25	2-3	30	2-3	077	233,52	238,0	20	57	80	30	4-5	35	4-5
038	115,34	120,0	15	69	103	25	2-3	30	2-3	078	236,55	241,0	20	57	80	30	4-5	35	4-5
039	118,37	123,0	15	71	107	25	2-3	30	2-3	079	239,58	244,0	20	57	80	30	4-5	35	4-5
040	121,40	126,0	15	73	110	25	2-3	30	2-3	080	242,61	247,0	20	57	80	30	4-5	35	4-5
041	124,43	129,0	15	75	113	25	2-3	30	2-3	081	245,65	250,0	20	57	80	30	4-5	35	4-5
042	127,46	132,0	15	77	116	25	2-3	30	2-3	082	248,68	254,0	20	57	80	30	4-5	35	4-5
043	130,49	135,0	15	80	120	25	2-3	30	2-3	083	251,71	257,0	20	57	80	30	4-5	35	4-5
044	133,52	138,0	15	82	123	25	2-3	30	2-3	084	254,74	260,0	20	57	80	30	4-5	35	4-5
045	136,55	141,0	20	82	126	25	2-3	30	2-3	085	257,77	263,0	20	57	80	30	4-5	35	4-5
046	139,58	144,0	20	82	126	25	2-3	30	2-3	090	272,93	278,0	20	57	80	30	4-5	35	4-5
047	142,61	147,0	20	82	126	25	2-3	30	2-3	095	288,08	293,0	20	57	80	30	4-5	35	4-5
048	145,63	150,0	20	87	130	25	2-3	30	2-3	100	303,24	308,0	20	57	80	30	4-5	35	4-5
049	148,66	154,0	20	87	130	25	2-3	30	2-3	114	345,68	351,0	20	65	98	30	4-5	35	4-5

Engrenagens Passo 12,70mm - 1/ 2"



Norma ASA 40

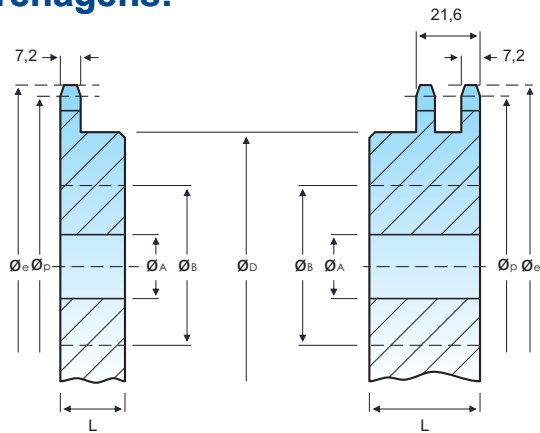
Norma DIN 40

Corrente:

Largura interna: 7,95

Diâmetro do rolo: 7,94

Engrenagens:

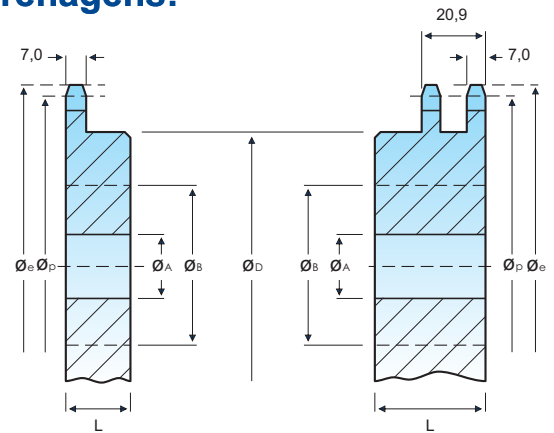


Corrente:

Largura interna: 7,75

Diâmetro do rolo: 8,51

Engrenagens:



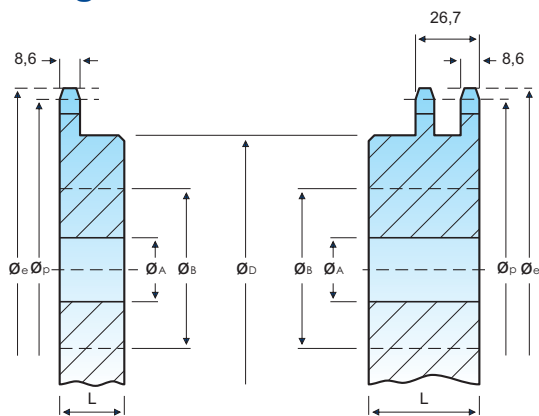
N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla		N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
009	37,13	42,0	12	15	22	25	2-3	30	2-3	048	194,18	200,0	25	57	86	36	4-5	46	4-5
010	41,10	46,0	12	17	26	25	2-3	30	2-3	049	198,22	204,0	25	57	86	36	4-5	46	4-5
011	45,08	50,0	12	20	30	25	2-3	30	2-3	050	202,26	208,0	25	57	86	36	4-5	46	4-5
012	49,07	54,0	12	23	34	25	2-3	30	2-3	051	206,30	213,0	25	57	86	36	4-5	46	4-5
013	53,07	58,0	12	26	39	25	2-3	30	2-3	052	210,34	217,0	25	57	86	36	4-5	46	4-5
014	57,07	62,0	12	29	43	25	2-3	30	2-3	053	214,38	221,0	25	57	86	36	4-5	46	4-5
015	61,08	66,0	12	31	47	25	2-3	30	2-3	054	218,42	225,0	25	57	86	36	4-5	46	4-5
016	65,10	71,0	17	34	51	25	2-3	30	2-3	055	222,46	229,0	25	57	86	36	4-5	46	4-5
017	69,12	75,0	17	37	55	25	2-3	30	2-3	056	226,50	233,0	25	57	86	36	4-5	46	4-5
018	73,14	79,0	17	39	59	25	2-3	30	2-3	057	230,54	237,0	25	65	98	36	4-5	46	4-5
019	77,16	83,0	17	42	63	25	2-3	30	2-3	058	234,58	241,0	25	65	98	36	4-5	46	4-5
020	81,18	87,0	17	45	67	25	2-3	30	2-3	059	238,62	245,0	25	65	98	36	4-5	46	4-5
021	85,21	91,0	17	47	71	25	2-3	30	2-3	060	242,66	249,0	25	65	98	36	4-5	50	4-5
022	89,24	95,0	17	50	75	30	2-3	36	2-3	061	246,70	253,0	25	65	98	36	4-5	50	4-5
023	93,27	99,0	17	53	79	30	2-3	36	2-3	062	250,74	257,0	25	65	98	36	4-5	50	4-5
024	97,30	103,0	17	55	83	30	2-3	36	2-3	063	254,78	261,0	25	65	98	36	4-5	50	4-5
025	101,33	107,0	17	58	87	30	2-3	36	2-3	064	258,83	265,0	25	65	98	36	4-5	50	4-5
026	105,36	112,0	17	61	92	30	2-3	36	2-3	065	262,87	269,0	25	65	98	36	4-5	50	4-5
027	109,40	116,0	17	63	95	30	2-3	36	2-3	066	266,91	273,0	25	65	98	36	4-5	50	4-5
028	113,43	120,0	17	63	95	30	2-3	36	2-3	067	270,95	277,0	25	65	98	36	4-5	50	4-5
029	117,46	124,0	17	63	95	30	2-3	36	2-3	068	274,99	281,0	25	65	98	36	4-5	50	4-5
030	121,50	128,0	17	67	100	30	2-3	36	2-3	069	279,03	285,0	25	65	98	36	4-5	50	4-5
031	125,53	132,0	20	67	100	30	2-3	36	2-3	070	283,07	289,0	25	65	98	36	4-5	50	4-5
032	129,57	136,0	20	67	100	30	2-3	36	2-3	071	287,11	293,0	25	65	98	36	4-5	50	4-5
033	133,61	140,0	20	67	100	30	2-3	36	2-3	072	291,15	297,0	25	65	98	36	4-5	50	4-5
034	137,64	144,0	20	67	100	30	2-3	36	2-3	073	295,20	301,0	25	65	98	36	4-5	50	4-5
035	141,68	148,0	20	57	86	32	4-5	-	-	074	299,24	305,0	25	65	98	36	4-5	50	4-5
035	141,68	148,0	20	67	100	-	-	36	2-3	075	303,28	310,0	25	65	98	36	4-5	50	4-5
036	145,72	152,0	20	57	86	32	4-5	41	4-5	076	307,32	314,0	25	65	98	36	4-5	50	4-5
037	149,75	156,0	20	57	86	32	4-5	41	4-5	077	311,36	318,0	25	65	98	36	4-5	50	4-5
038	153,79	160,0	20	57	86	32	4-5	41	4-5	078	315,40	322,0	25	65	98	36	4-5	50	4-5
039	157,83	164,0	20	57	86	32	4-5	41	4-5	079	319,40	326,0	25	65	98	36	4-5	50	4-5
040	161,87	168,0	20	57	86	36	4-5	46	4-5	080	323,49	330,0	25	65	98	36	4-5	50	4-5
041	165,91	172,0	20	57	86	36	4-5	46	4-5	081	327,53	334,0	25	65	98	36	4-5	50	4-5
042	169,94	176,0	20	57	86	36	4-5	46	4-5	082	331,57	338,0	25	65	98	36	4-5	50	4-5
043	173,98	180,0	20	57	86	36	4-5	46	4-5	085	343,69	350,0	25	65	98	36	4-5	50	4-5
044	178,02	184,0	20	57	86	36	4-5	46	4-5	090	363,90	370,0	25	65	98	36	4-5	50	4-5
045	182,06	188,0	20	57	86	36	4-5	46	4-5	095	384,11	390,0	25	65	98	36	4-5	50	4-5
046	186,10	192,0	20	57	86	36	4-5	46	4-5	100	404,32	411,0	25	65	98	36	4-5	50	4-5
047	190,14	196,0	20	57	86	36	4-5	46	4-5	114	460,91	467,0	25	73	110	36	4-5	50	4-5

Corrente:

Largura interna: 9,53

Diâmetro do rolo: 10,16

Engrenagens:

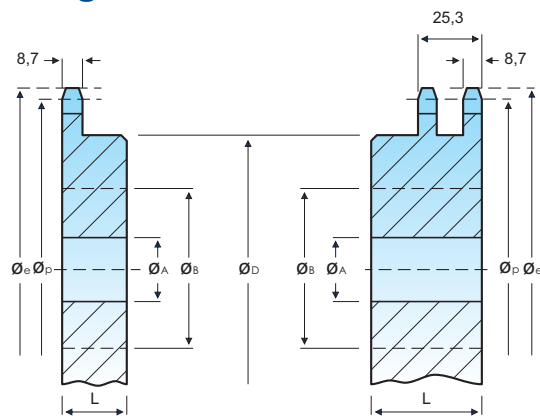


Corrente:

Largura interna: 9,65

Diâmetro do rolo: 10,16

Engrenagens:



N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla		N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
008	41,48	47,0	12	14	21	25	2-3	45	2-3	042	212,43	220,0	25	57	86	40	4-5	55	4-5
009	46,42	52,0	15	19	28	25	2-3	45	2-3	043	217,48	225,0	25	57	86	40	4-5	55	4-5
010	51,37	57,0	15	22	33	25	2-3	45	2-3	044	222,53	230,0	25	57	86	40	4-5	55	4-5
011	56,35	62,0	15	25	38	25	2-3	45	2-3	045	227,58	235,0	25	57	86	40	4-5	55	4-5
012	61,34	67,0	15	29	44	25	2-3	45	2-3	046	232,63	240,0	25	57	86	40	4-5	55	4-5
013	66,34	73,0	15	32	48	25	2-3	45	2-3	047	237,68	245,0	25	57	86	40	4-5	55	4-5
014	71,34	78,0	17	35	53	25	2-3	45	2-3	048	242,73	250,0	25	65	98	40	4-5	55	4-5
015	76,36	83,0	17	39	59	25	2-3	45	2-3	049	247,77	255,0	25	65	98	40	4-5	55	4-5
016	81,37	88,0	17	43	64	25	2-3	45	2-3	050	252,82	260,0	25	65	98	40	4-5	55	4-5
017	86,40	93,0	17	46	69	25	2-3	45	2-3	051	257,87	265,0	25	65	98	40	4-5	55	4-5
018	91,42	98,0	17	49	74	25	2-3	45	2-3	052	262,92	270,0	25	65	98	40	4-5	55	4-5
019	96,45	103,0	17	53	79	30	2-3	45	2-3	053	267,97	275,0	25	65	98	40	4-5	55	4-5
020	101,48	108,0	20	56	84	30	2-3	45	2-3	054	273,03	280,0	25	65	98	40	4-5	55	4-5
021	106,51	113,0	20	59	89	30	2-3	45	2-3	055	278,08	286,0	25	65	98	40	4-5	55	4-5
022	111,55	118,0	20	63	94	30	2-3	45	2-3	056	283,13	291,0	25	65	98	40	4-5	55	4-5
023	116,59	123,0	20	66	99	30	2-3	45	2-3	057	288,18	296,0	25	65	98	40	4-5	55	4-5
024	121,62	128,0	20	67	100	34	2-3	45	2-3	058	293,23	301,0	25	65	98	40	4-5	55	4-5
025	126,66	133,0	20	67	100	34	2-3	45	2-3	059	298,28	306,0	25	65	98	40	4-5	55	4-5
026	131,70	139,0	20	73	110	34	2-3	45	2-3	060	303,33	311,0	25	65	98	40	4-5	55	4-5
027	136,74	144,0	20	73	110	34	2-3	45	2-3	061	308,33	316,0	25	65	98	40	4-5	55	4-5
028	141,79	149,0	20	57	86	37	4-5	-	-	062	313,43	321,0	25	65	98	40	4-5	55	4-5
028	141,79	149,0	20	73	110	-	-	51	2-3	063	318,48	326,0	25	65	98	40	4-5	55	4-5
029	146,83	154,0	20	57	86	37	4-5	-	-	064	323,53	331,0	25	65	98	40	4-5	55	4-5
029	146,83	154,0	20	73	110	-	-	51	2-3	065	328,58	336,0	25	65	98	40	4-5	55	4-5
030	151,87	159,0	20	57	86	37	4-5	-	-	066	333,63	341,0	25	65	98	40	4-5	55	4-5
030	151,87	159,0	20	73	110	-	-	51	2-3	067	338,69	346,0	25	65	98	40	4-5	55	4-5
031	156,92	164,0	20	57	86	37	4-5	-	-	068	343,74	351,0	25	65	98	40	4-5	55	4-5
031	156,92	164,0	20	73	110	-	-	51	2-3	069	348,79	356,0	25	65	98	40	4-5	55	4-5
032	161,96	169,0	20	57	86	37	4-5	-	-	070	353,84	361,0	25	65	98	40	4-5	55	4-5
032	161,96	169,0	20	73	110	-	-	51	2-3	071	358,89	366,0	25	65	98	40	4-5	55	4-5
033	167,01	175,0	20	57	86	37	4-5	-	-	072	363,94	371,0	25	65	98	40	4-5	55	4-5
033	167,01	175,0	20	73	110	-	-	51	2-3	073	368,99	376,0	25	65	98	40	4-5	55	4-5
034	172,05	180,0	20	57	86	37	4-5	51	4-5	074	374,05	382,0	25	65	98	40	4-5	55	4-5
035	177,10	185,0	20	57	86	37	4-5	51	4-5	075	379,10	387,0	25	65	98	40	4-5	55	4-5
036	182,14	190,0	20	57	86	37	4-5	51	4-5	076	384,15	392,0	30	65	98	40	4-5	55	4-5
037	187,19	195,0	20	57	86	37	4-5	51	4-5	080	404,36	412,0	30	65	98	40	4-5	55	4-5
038	192,24	200,0	25	57	86	37	4-5	51	4-5	085	429,62	437,0	30	65	98	40	4-5	55	4-5
039	197,29	205,0	25	57	86	37	4-5	51	4-5	090	454,88	462,0	30	65	98	40	4-5	55	4-5
040	202,33	210,0	25	57	86	40	4-5	55	4-5	095	480,14	488,0	30	73	110	40	4-5	55	4-5
041	207,38	215,0	25	57	86	40	4-5	55	4-5	114	576,13	584,0	30	73	110	40	4-5	55	4-5

Engrenagens Passo 19,05mm - 3/4"



Norma ASA 60

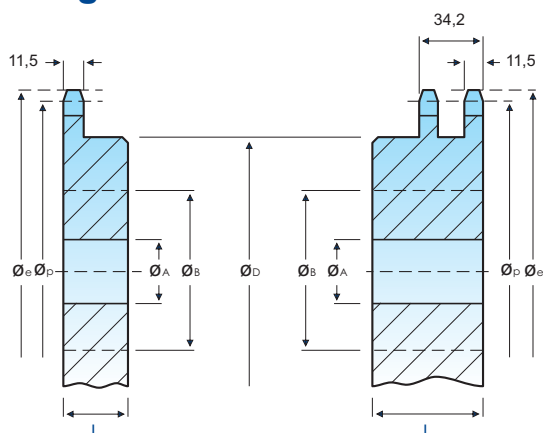
Norma DIN 60

Corrente:

Largura interna: 12,70

Diâmetro do rolo: 11,90

Engrenagens:

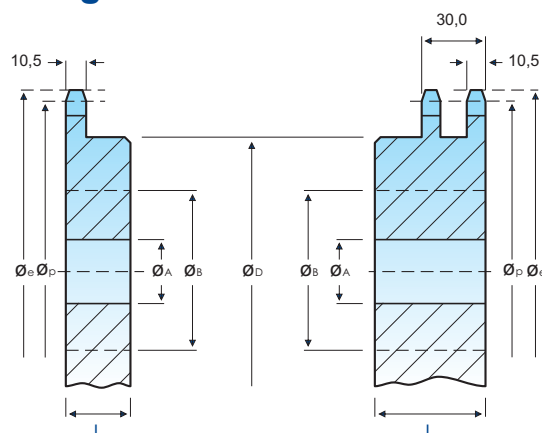


Corrente:

Largura interna: 11,68

Diâmetro do rolo: 12,07

Engrenagens:



N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla		N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
008	49,78	56,0	15	17	26	30	2-3	45	2-3	041	248,86	258,0	30	65	98	45	4-5	-	-
009	55,70	62,0	15	22	33	30	2-3	45	2-3	041	248,86	258,0	30	73	110	-	-	65	4-5
010	61,65	68,0	15	26	39	30	2-3	45	2-3	042	254,96	264,0	30	65	98	45	4-5	-	-
011	67,62	74,0	20	31	46	30	2-3	45	2-3	042	254,96	264,0	30	73	110	-	-	65	4-5
012	73,60	80,0	20	35	52	30	2-3	45	2-3	043	260,98	270,0	30	65	98	45	4-5	-	-
013	79,60	87,0	20	39	58	30	2-3	45	2-3	043	260,98	270,0	30	73	110	-	-	65	4-5
014	85,61	93,0	20	43	64	30	2-3	45	2-3	044	267,03	276,0	30	65	98	45	4-5	-	-
015	91,63	99,0	20	47	70	30	2-3	45	2-3	044	267,03	276,0	30	73	110	-	-	65	4-5
016	97,65	105,0	20	51	77	30	2-3	45	2-3	045	273,09	282,0	30	73	110	45	4-5	65	4-5
017	103,67	111,0	20	56	83	30	2-3	45	2-3	046	279,15	288,0	30	73	110	45	4-5	65	4-5
018	109,71	117,0	20	60	90	30	2-3	45	2-3	047	285,21	294,0	30	73	110	45	4-5	65	4-5
019	115,74	123,0	20	64	96	36	2-3	50	2-3	048	291,27	300,0	30	83	124	45	4-5	65	4-5
020	121,78	129,0	20	67	100	36	2-3	50	2-3	049	297,33	306,0	30	83	124	45	4-5	65	4-5
021	127,82	135,0	25	71	107	36	2-3	50	2-3	050	303,39	312,0	30	83	124	45	4-5	65	4-5
022	133,86	141,0	25	75	113	36	2-3	50	2-3	051	309,45	318,0	30	83	124	45	4-5	65	4-5
023	139,90	147,0	25	75	113	36	2-3	50	2-3	052	315,51	324,0	30	83	124	45	4-5	65	4-5
024	145,95	153,0	25	65	98	39	4-5	-	-	053	321,57	330,0	30	83	124	45	4-5	65	4-5
024	145,95	153,0	25	77	115	-	-	58	2-3	054	327,63	336,0	30	83	124	45	4-5	65	4-5
025	151,99	160,0	25	65	98	39	4-5	-	-	055	333,69	342,0	30	83	124	45	4-5	65	4-5
025	151,99	160,0	25	77	115	-	-	58	2-3	056	339,75	348,0	30	83	124	45	4-5	65	4-5
026	158,04	167,0	25	65	98	39	4-5	-	-	057	345,81	355,0	30	83	124	45	4-5	65	4-5
026	158,04	167,0	25	80	120	-	-	58	2-3	058	351,87	361,0	30	83	124	45	4-5	65	4-5
027	164,09	173,0	25	65	98	39	4-5	-	-	059	357,93	367,0	30	83	124	45	4-5	65	4-5
027	164,09	173,0	25	80	120	-	-	58	2-3	060	363,99	373,0	30	83	124	45	4-5	65	4-5
028	170,14	179,0	25	65	98	39	4-5	58	4-5	061	370,05	379,0	30	83	124	45	4-5	65	4-5
029	176,19	185,0	25	65	98	39	4-5	58	4-5	062	376,12	385,0	30	83	124	45	4-5	65	4-5
030	182,25	191,0	25	65	98	39	4-5	58	4-5	063	382,18	391,0	30	83	124	45	4-5	65	4-5
031	188,30	197,0	25	65	98	39	4-5	58	4-5	064	388,24	397,0	30	83	124	45	4-5	65	4-5
032	194,35	203,0	25	65	98	39	4-5	58	4-5	065	394,30	403,0	30	83	124	45	4-5	65	4-5
033	200,41	209,0	25	65	98	39	4-5	58	4-5	066	400,36	409,0	30	83	124	45	4-5	65	4-5
034	206,46	215,0	25	65	98	39	4-5	58	4-5	067	406,42	415,0	30	83	124	45	4-5	65	4-5
035	212,52	221,0	25	65	98	39	4-5	58	4-5	068	412,48	421,0	30	83	124	45	4-5	65	4-5
036	218,57	227,0	25	65	98	39	4-5	58	4-5	069	418,55	427,0	30	83	124	45	4-5	65	4-5
037	224,63	233,0	25	65	98	39	4-5	58	4-5	070	424,61	433,0	30	83	124	45	4-5	65	4-5
038	230,69	239,0	30	65	98	45	4-5	-	-	076	460,98	470,0	30	83	124	45	4-5	65	4-5
038	230,69	239,0	30	73	110	-	-	65	4-5	080	485,23	494,0	30	83	124	45	4-5	65	4-5
039	236,74	246,0	30	65	98	45	4-5	-	-	085	515,54	524,0	30	83	124	45	4-5	65	4-5
039	236,74	246,0	30	73	110	-	-	65	4-5	090	545,85	555,0	30	83	124	45	4-5	65	4-5
040	242,80	252,0	30	65	98	45	4-5	-	-	095	576,16	585,0	30	90	136	45	4-5	65	4-5
040	242,80	252,0	30	73	110	-	-	65	4-5	-	-	-	-	-	-	-	-	-	-

Norma ASA 80

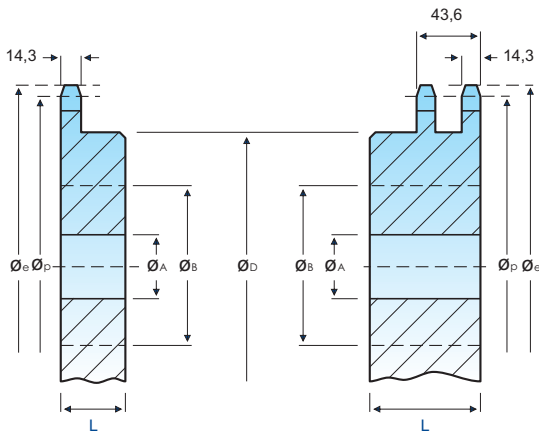
Norma DIN 80

Corrente:

Largura interna: 15,88

Diâmetro do rolo: 15,87

Engrenagens:

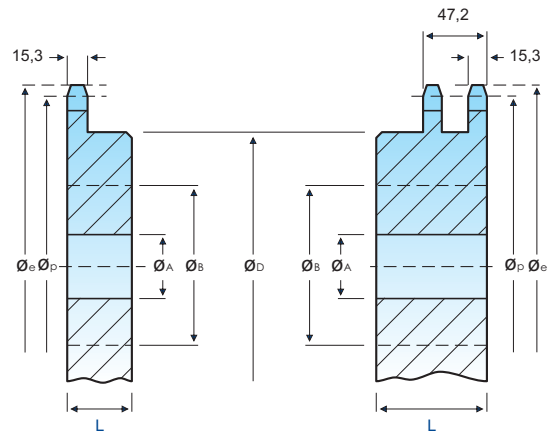


Corrente:

Largura interna: 17,02

Diâmetro do rolo: 15,88

Engrenagens:



N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla		N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
008	66,37	75,0	20	24	36	35	2-3	60	2-3	039	315,66	327,0	30	73	110	45	4-5	72	4-5
009	74,26	83,0	20	30	45	35	2-3	60	2-3	040	323,73	335,0	30	73	110	50	4-5	75	4-5
010	82,20	91,0	20	35	53	35	2-3	60	2-3	041	331,81	343,0	30	73	110	50	4-5	75	4-5
011	90,16	99,0	20	40	61	35	2-3	60	2-3	042	339,89	351,0	30	73	110	50	4-5	75	4-5
012	98,14	106,0	20	45	68	35	2-3	60	2-3	043	347,97	360,0	30	73	110	50	4-5	75	4-5
013	106,14	116,0	20	50	76	35	2-3	60	2-3	044	356,04	368,0	30	73	110	50	4-5	75	4-5
014	114,15	124,0	25	56	84	35	2-3	60	2-3	045	364,12	376,0	30	73	110	50	4-5	75	4-5
015	122,17	132,0	25	61	92	35	2-3	60	2-3	046	372,20	384,0	30	73	110	50	4-5	75	4-5
016	130,20	140,0	25	67	100	35	2-3	60	2-3	047	380,28	392,0	30	73	110	50	4-5	75	4-5
017	138,23	148,0	25	73	110	35	2-3	60	2-3	048	388,36	400,0	30	73	110	50	4-5	75	4-5
018	146,27	156,0	25	65	98	45	4-5	-	-	049	396,44	408,0	30	73	110	50	4-5	75	4-5
018	146,27	156,0	25	77	115	-	-	64	2-3	050	404,52	416,0	30	73	110	50	4-5	75	4-5
019	154,32	164,0	25	65	98	45	4-5	-	-	051	412,60	424,0	30	73	110	50	4-5	75	4-5
019	154,32	164,0	25	77	115	-	-	64	2-3	052	420,68	432,0	30	73	110	50	4-5	75	4-5
020	162,37	172,0	30	65	98	45	4-5	-	-	053	428,76	440,0	30	73	110	50	4-5	75	4-5
020	162,37	172,0	30	80	120	-	-	64	2-3	054	436,84	448,0	30	73	110	50	4-5	75	4-5
021	170,42	180,0	30	65	98	45	4-5	-	-	055	444,92	456,0	30	73	110	50	4-5	75	4-5
021	170,42	180,0	30	80	120	-	-	64	2-3	056	453,00	465,0	30	73	110	50	4-5	75	4-5
022	178,48	188,0	30	73	110	45	4-5	-	-	057	461,08	473,0	35	83	124	50	4-5	75	4-5
022	178,48	188,0	30	80	120	-	-	64	2-3	058	469,16	481,0	35	83	124	50	4-5	75	4-5
023	186,54	197,0	30	73	110	45	4-5	-	-	059	477,24	489,0	35	83	124	50	4-5	75	4-5
023	186,54	197,0	30	80	120	-	-	64	2-3	060	485,32	497,0	35	90	136	50	4-5	75	4-5
024	194,60	205,0	30	73	110	45	4-5	-	-	061	493,41	505,0	35	90	136	50	4-5	75	4-5
024	194,60	205,0	30	83	125	-	-	66	2-3	062	501,49	513,0	35	90	136	50	4-5	75	4-5
025	202,66	213,0	30	73	110	45	4-5	-	-	063	509,57	521,0	35	90	136	50	4-5	75	4-5
025	202,66	213,0	30	83	125	-	-	66	2-3	064	517,65	529,0	35	90	136	50	4-5	75	4-5
026	210,72	222,0	30	73	110	45	4-5	-	-	065	525,73	537,0	35	90	136	50	4-5	75	4-5
026	210,72	222,0	30	83	125	-	-	66	2-3	066	533,82	545,0	35	90	136	50	4-5	75	4-5
027	218,79	230,0	30	73	110	45	4-5	68	4-5	067	541,90	553,0	35	90	136	50	4-5	75	4-5
028	226,86	238,0	30	73	110	45	4-5	68	4-5	068	549,98	562,0	35	90	136	50	4-5	75	4-5
029	234,93	246,0	30	73	110	45	4-5	68	4-5	069	558,06	570,0	35	90	136	50	4-5	75	4-5
030	243,00	255,0	30	73	110	45	4-5	72	4-5	070	566,14	578,0	35	90	136	50	4-5	75	4-5
031	251,07	263,0	30	73	110	45	4-5	72	4-5	071	574,23	586,0	35	90	136	50	4-5	75	4-5
032	259,14	271,0	30	73	110	45	4-5	72	4-5	072	582,31	594,0	35	90	136	50	4-5	75	4-5
033	267,21	279,0	30	73	110	45	4-5	72	4-5	073	590,39	602,0	35	90	136	50	4-5	75	4-5
034	275,28	287,0	30	73	110	45	4-5	72	4-5	074	598,47	610,0	35	90	136	50	4-5	75	4-5
035	283,36	295,0	30	73	110	45	4-5	72	4-5	075	606,56	618,0	35	90	136	50	4-5	75	4-5
036	291,43	303,0	30	73	110	45	4-5	72	4-5	076	614,64	626,0	35	90	136	50	4-5	75	4-5
037	299,51	311,0	30	73	110	45	4-5	72	4-5	-	-	-	-	-	-	-	-	-	-
038	307,58	319,0	30	73	110	45	4-5	72	4-5	-	-	-	-	-	-	-	-	-	-

Engrenagens Passo 31,75mm - 1 1/4"



Norma ASA 100

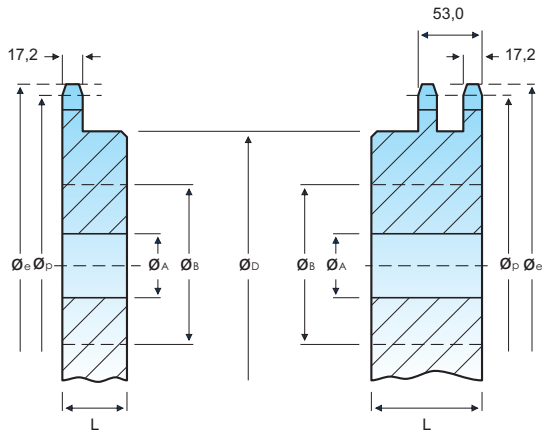
Norma DIN 100

Corrente:

Largura interna: 19,05

Diâmetro do rolo: 19,05

Engrenagens:

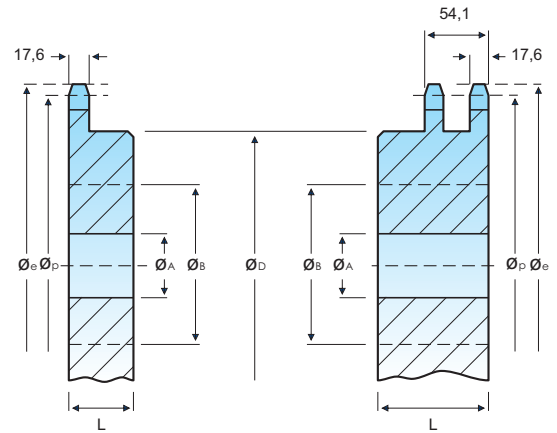


Corrente:

Largura interna: 19,56

Diâmetro do rolo: 19,05

Engrenagens:



N.º de dentes	Diâmetro Primitivo	Diâmetro Externo	Ø _A	Ø _B	Ø _D	Simplex		Dupla		N.º de dentes	Diâmetro Primitivo	Diâmetro Externo	Ø _A	Ø _B	Ø _D	Simplex		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
Z	Ø _p	Ø _e	Ø _A	Ø _B	Ø _D	L	Tipos	L	Tipos	Z	Ø _p	Ø _e	Ø _A	Ø _B	Ø _D	L	Tipos	L	Tipos
008	82,96	93,0	20	30	45	35	2-3	60	2-3	038	384,48	398,0	35	83	124	56	4-5	75	4-5
009	92,83	103,0	20	36	55	35	2-3	60	2-3	039	394,57	408,0	35	83	124	56	4-5	75	4-5
010	102,74	113,0	25	44	66	40	2-3	70	2-3	040	404,67	418,0	35	83	124	56	4-5	80	4-5
011	112,70	123,0	25	51	77	40	2-3	70	2-3	041	414,76	429,0	35	83	124	56	4-5	80	4-5
012	122,67	133,0	25	58	87	40	2-3	70	2-3	042	424,86	439,0	35	83	124	56	4-5	80	4-5
013	132,67	145,0	30	65	98	40	2-3	70	2-3	043	434,96	449,0	35	83	124	56	4-5	80	4-5
014	142,68	155,0	30	71	106	40	2-3	70	2-3	044	445,06	459,0	35	83	124	56	4-5	80	4-5
015	152,71	165,0	30	77	116	40	2-3	70	2-3	045	455,15	469,0	40	83	124	56	4-5	80	4-5
016	162,74	175,0	30	65	98	45	4-5	75	4-5	046	465,25	479,0	40	83	124	56	4-5	80	4-5
017	172,79	185,0	30	65	98	45	4-5	75	4-5	047	475,35	489,0	40	83	124	56	4-5	80	4-5
018	182,84	195,0	30	73	110	45	4-5	75	4-5	048	485,45	499,0	40	90	136	56	4-5	80	4-5
019	192,90	205,0	30	73	110	45	4-5	75	4-5	049	495,55	509,0	40	90	136	56	4-5	80	4-5
020	202,96	215,0	30	73	110	45	4-5	75	4-5	050	505,65	519,0	40	90	136	56	4-5	80	4-5
021	213,03	225,0	30	73	110	45	4-5	75	4-5	051	515,75	530,0	40	90	136	56	4-5	80	4-5
022	223,10	235,0	30	73	110	45	4-5	75	4-5	052	525,85	540,0	40	90	136	56	4-5	80	4-5
023	233,17	245,0	35	73	110	50	4-5	75	4-5	053	535,95	550,0	40	90	136	56	4-5	80	4-5
024	243,25	255,0	35	73	110	50	4-5	75	4-5	054	546,05	560,0	40	90	136	65	4-5	80	4-5
025	253,33	265,0	35	73	110	50	4-5	75	4-5	055	556,15	570,0	40	90	136	65	4-5	80	4-5
026	263,40	277,0	35	73	110	50	4-5	75	4-5	056	566,25	580,0	40	90	136	65	4-5	80	4-5
027	273,49	287,0	35	73	110	50	4-5	75	4-5	057	576,35	590,0	40	90	136	65	4-5	80	4-5
028	283,57	297,0	35	83	124	50	4-5	75	4-5	058	586,45	600,0	40	90	136	65	4-5	80	4-5
029	293,66	307,0	35	83	124	50	4-5	75	4-5	059	596,55	610,0	40	90	136	65	4-5	80	4-5
030	303,75	317,0	35	83	124	56	4-5	75	4-5	060	606,66	620,0	40	90	136	65	4-5	80	4-5
031	313,83	328,0	35	83	124	56	4-5	75	4-5	061	616,76	630,0	40	90	136	65	4-5	80	4-5
032	323,93	338,0	35	83	124	56	4-5	75	4-5	-	-	-	-	-	-	-	-	-	-
033	334,01	348,0	35	83	124	56	4-5	75	4-5	-	-	-	-	-	-	-	-	-	-
034	344,10	358,0	35	83	124	56	4-5	75	4-5	-	-	-	-	-	-	-	-	-	-
035	354,20	368,0	35	83	124	56	4-5	75	4-5	-	-	-	-	-	-	-	-	-	-
036	364,29	378,0	35	83	124	56	4-5	75	4-5	-	-	-	-	-	-	-	-	-	-
037	374,38	388,0	35	83	124	56	4-5	75	4-5	-	-	-	-	-	-	-	-	-	-

Norma ASA 120

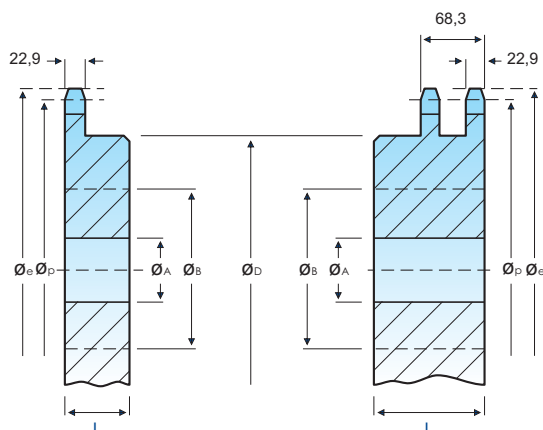
Norma DIN 120

Corrente:

Largura interna: 25,40

Diâmetro do rolo: 22,22

Engrenagens:

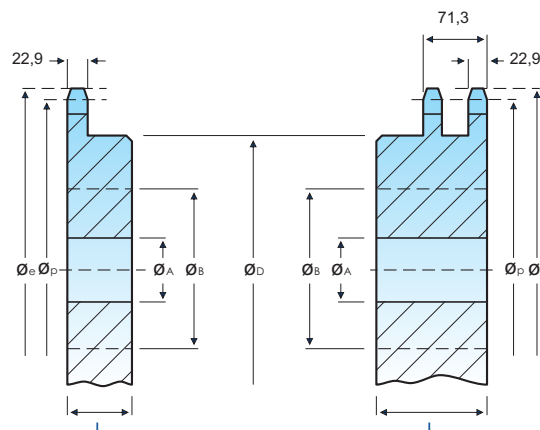


Corrente:

Largura interna: 25,40

Diâmetro do rolo: 25,40

Engrenagens:



N.º de dentes	Diâmetro Primitivo	Diâmetro Externo	Ø _A	Ø _B	Ø _D	Simplex		Dupla		N.º de dentes	Diâmetro Primitivo	Diâmetro Externo	Ø _A	Ø _B	Ø _D	Simplex		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
Z	Ø _p	Ø _e	Ø _A	Ø _B	Ø _D	L	Tipos	L	Tipos	Z	Ø _p	Ø _e	Ø _A	Ø _B	Ø _D	L	Tipos	L	Tipos
008	99,56	113,0	25	35	53	45	2-3	80	2-3	032	388,71	407,0	40	83	124	55	4-5	90	4-5
009	111,40	125,0	25	43	65	45	2-3	80	2-3	033	400,82	419,0	40	83	124	55	4-5	90	4-5
010	123,29	136,0	30	52	78	50	2-3	90	2-3	034	412,93	431,0	40	83	124	55	4-5	90	4-5
011	135,23	148,0	35	61	91	50	2-3	90	2-3	035	425,03	443,0	40	83	124	55	4-5	90	4-5
012	147,21	160,0	35	69	103	50	2-3	90	2-3	036	437,15	455,0	40	83	124	55	4-5	90	4-5
013	159,20	175,0	35	65	98	50	4-5	-	-	037	449,26	467,0	40	83	124	55	4-5	90	4-5
013	159,20	175,0	35	77	115	-	-	90	2-3	038	461,37	479,0	40	90	136	55	4-5	95	4-5
014	171,22	187,0	35	65	98	50	4-5	90	4-5	039	473,49	492,0	40	90	136	55	4-5	95	4-5
015	183,25	199,0	35	73	110	50	4-5	90	4-5	040	485,60	504,0	40	90	136	60	4-5	95	4-5
016	195,29	211,0	35	73	110	50	4-5	90	4-5	041	497,72	516,0	40	90	136	60	4-5	95	4-5
017	207,35	223,0	35	73	110	55	4-5	90	4-5	042	509,83	528,0	40	90	136	60	4-5	95	4-5
018	219,41	235,0	35	73	110	55	4-5	90	4-5	043	521,95	540,0	40	90	136	60	4-5	95	4-5
019	231,48	247,0	35	73	110	55	4-5	90	4-5	044	534,07	552,0	40	90	136	60	4-5	95	4-5
020	243,55	259,0	35	73	110	55	4-5	90	4-5	045	546,16	564,0	40	90	136	60	4-5	95	4-5
021	255,63	271,0	35	73	110	55	4-5	90	4-5	046	558,30	576,0	40	90	136	60	4-5	95	4-5
022	267,72	283,0	35	83	124	55	4-5	90	4-5	047	570,42	589,0	40	90	136	60	4-5	95	4-5
023	279,80	295,0	35	83	124	55	4-5	90	4-5	048	582,54	601,0	40	90	136	60	4-5	95	4-5
024	291,90	308,0	35	83	124	55	4-5	90	4-5	049	594,66	613,0	40	90	136	60	4-5	95	4-5
025	303,99	320,0	40	83	124	55	4-5	90	4-5	050	606,78	625,0	40	90	136	60	4-5	95	4-5
026	316,09	334,0	40	83	124	55	4-5	90	4-5	-	-	-	-	-	-	-	-	-	-
027	328,19	346,0	40	83	124	55	4-5	90	4-5	-	-	-	-	-	-	-	-	-	-
028	340,29	358,0	40	83	124	55	4-5	90	4-5	-	-	-	-	-	-	-	-	-	-
029	352,39	370,0	40	83	124	55	4-5	90	4-5	-	-	-	-	-	-	-	-	-	-
030	364,49	383,0	40	83	124	55	4-5	90	4-5	-	-	-	-	-	-	-	-	-	-
031	376,60	395,0	40	83	124	55	4-5	90	4-5	-	-	-	-	-	-	-	-	-	-

Engrenagens Passo 44,450 mm - 1 3/4"



Norma ASA 140

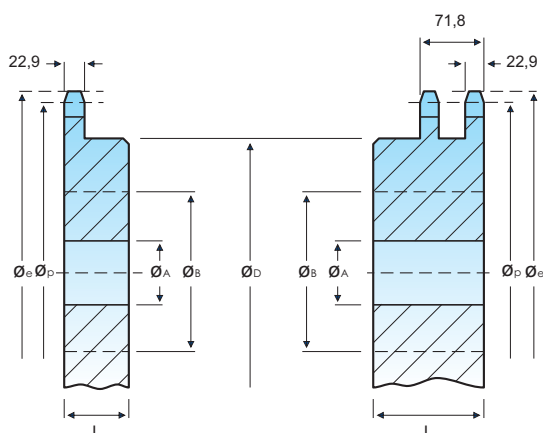
Norma DIN 140

Corrente:

Largura interna: 25,40

Diâmetro do rolo: 25,40

Engrenagens:

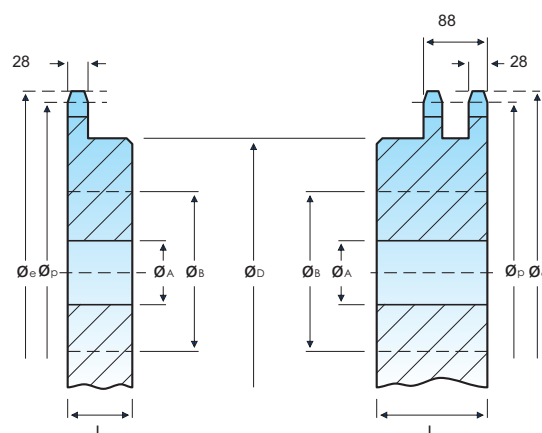


Corrente:

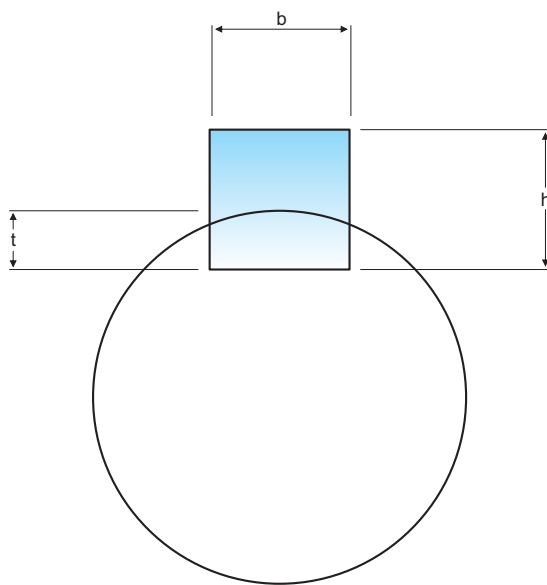
Largura interna: 30,99

Diâmetro do rolo: 27,94

Engrenagens:



N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla		N.º de dentes Z	Diâmetro Primitivo Ø _p	Diâmetro Externo Ø _e	Ø _A	Ø _B	Ø _D	Simples		Dupla	
						L	Tipos	L	Tipos							L	Tipos	L	Tipos
11	157,77	178,10	45	65	98	50	4-5	96	4-5	27	382,88	407,00	45	90	136	60	4-5	100	4-5
12	171,74	192,60	45	65	98	50	4-5	96	4-5	28	397,00	421,20	45	90	136	60	4-5	100	4-5
13	185,74	207,00	45	73	110	55	4-5	96	4-5	29	411,12	435,38	45	90	136	60	4-5	100	4-5
14	199,76	221,00	45	73	110	55	4-5	96	4-5	30	425,24	450,00	45	90	136	60	4-5	100	4-5
15	213,79	236,00	45	73	110	55	4-5	96	4-5	31	439,36	463,80	45	90	136	60	4-5	100	4-5
16	227,84	250,00	45	73	110	55	4-5	96	4-5	32	453,49	478,00	45	90	136	60	4-5	100	4-5
17	241,91	264,00	45	73	110	55	4-5	96	4-5	33	467,61	492,20	45	100	150	70	4-5	100	4-5
18	255,98	279,00	45	73	110	55	4-5	96	4-5	34	481,74	506,40	45	100	150	70	4-5	100	4-5
19	270,06	293,00	45	83	124	55	4-5	96	4-5	35	495,88	521,00	45	100	150	70	4-5	100	4-5
20	284,14	307,00	45	83	124	55	4-5	96	4-5	36	510,00	534,70	45	100	150	70	4-5	100	4-5
21	298,24	322,00	45	83	124	55	4-5	96	4-5	37	524,13	548,90	45	100	150	70	4-5	100	4-5
22	312,34	336,00	45	83	124	55	4-5	96	4-5	38	538,27	563,00	45	100	150	70	4-5	100	4-5
23	326,44	350,00	45	90	136	60	4-5	100	4-5	39	552,40	577,30	45	100	150	70	4-5	100	4-5
24	340,55	364,00	45	90	136	60	4-5	100	4-5	40	566,54	591,00	45	100	150	70	4-5	100	4-5
25	354,66	378,50	45	90	136	60	4-5	100	4-5	41	580,67	605,60	45	100	150	70	4-5	100	4-5
26	368,77	393,00	45	90	136	60	4-5	100	4-5	42	594,80	619,80	45	100	150	70	4-5	100	4-5



Diâmetro do Eixo	Largura	Altura	Profundidade no Eixo	Profundidade na Engrenagem
d	b	h	t	t
10 - 12	4	4	2,5	1,7
13 - 17	5	5	3	2,2
18 - 22	6	6	3,5	2,7
23 - 30	8	7	4	3,2
31 - 38	10	8	4,5	3,7
39 - 44	12	8	4,5	3,7
45 - 50	14	9	5	4,2
51 - 58	16	10	5	5,2
59 - 68	18	11	6	5,3
69 - 78	20	12	6	6,3
79 - 92	24	14	7	7,3
93 - 110	28	16	8	8,3
111 - 130	32	18	9	9,3
131 - 150	36	20	10	10,3