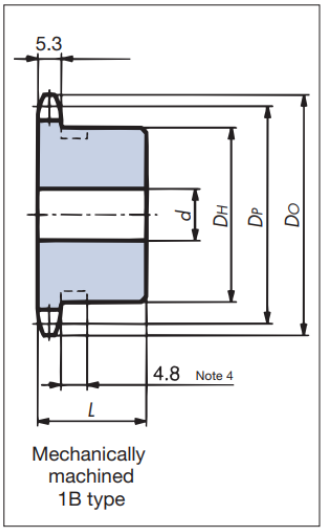
Pilot Bore Sprockets

RS Sprocket RF06B

No. of teeth	Outer dia. D_O	Pitch circle dia. D_P	1B type				Approx. mass kg	Construction/ material	No. of teeth
			Bore dia. d		Hub				
			Pilot bore	Max.	Dia. D_H	Length L			
9	30	27.85	8	11	21	20	0.06	*	**9**
10	33	30.82	8	12	24	20	0.08	*	**10**
11	36	33.81	8	13	26	20	0.09	*	**11**
12	39	36.80	8	16	30	20	0.12	*	**12**
13	42	39.80	9.53	18	32	20	0.12	* Note 4	**13**
14	45	42.80	9.53	16.5	30	20	0.12		**14**
15	48	45.81	9.53	19	35	20	0.16		**15**
16	51	48.82	9.53	20	37	20	0.19		**16**
17	54	51.84	9.53	24	41	20	0.22		**17**
18	57	54.85	9.53	24.5	44	20	0.25		**18**
19	60	57.87	9.53	28.5	47	20	0.28		**19**
20	63	60.89	9.53	30	50	20	0.32		**20**
21	66	63.91	9.53	32	53	20	0.36		**21**
22	69	66.93	9.53	32	53	20	0.37		**22**
23	72	69.95	9.53	32	53	20	0.40		**23**
24	75	72.97	9.53	32	53	22	0.43		**24**
25	78	76.00	12.7	32	53	22	0.44		**25**
26	81	79.02	12.7	32	53	22	0.45		**26**
27	84	82.05	12.7	32	53	22	0.46		**27**
28	87	85.07	12.7	32	53	22	0.48		**28**
30	93	91.12	12.7	32	53	22	0.51		**30**
32	99	97.18	12.7	32	53	22	0.54		**32**
34	105	103.23	12.7	32	53	22	0.57		**34**
35	108	106.26	12.7	32	53	22	0.59		**35**
36	111	109.29	12.7	32	53	22	0.61		**36**
38	117	115.34	13	42	63	25	0.82		**38**
40	123	121.40	13	42	63	25	0.85		**40**
42	129	127.46	13	42	63	25	0.91		**42**
45	138	136.55	13	42	63	25	0.95		**45**
48	148	145.64	13	42	63	25	1.0		**48**
50	154	151.69	13	42	63	25	1.1		**50**
54	167	163.82	13	42	63	25	1.2		**54**
60	185	182.00	13	42	63	25	1.3		**60**

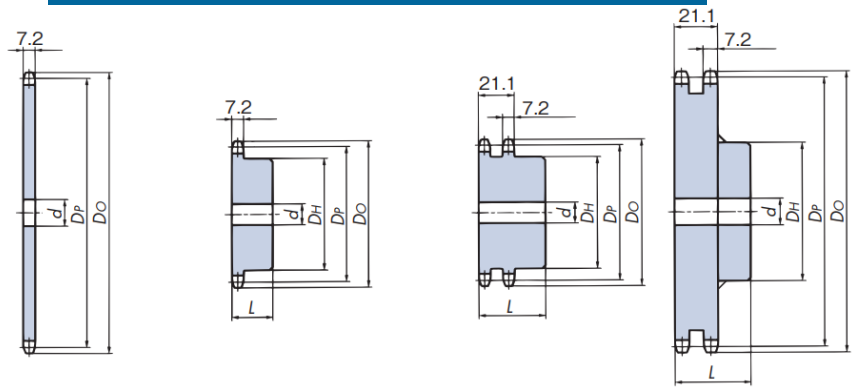
Mechanically machined: machine-structural carbon steel



Mechanically machined 1B type

Note: 1. Maximum bore diameters shown are standard figures. Determine bore diameter and key bearing pressure based on general mechanical design.
2. Models in shaded areas have hardened teeth.
3. Models with unhardened teeth as standard can be manufactured with hardened teeth.
4. Models marked with an * above have a groove around the periphery of the hub. Groove outer diameter is 16 for 9T, 18 for 10T, 22 for 11T, 24 for 12T, and 28 for 13T.
5. Made-to-order.

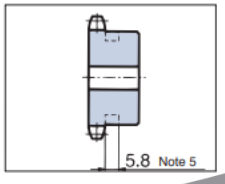
RS Sprocket RS08B



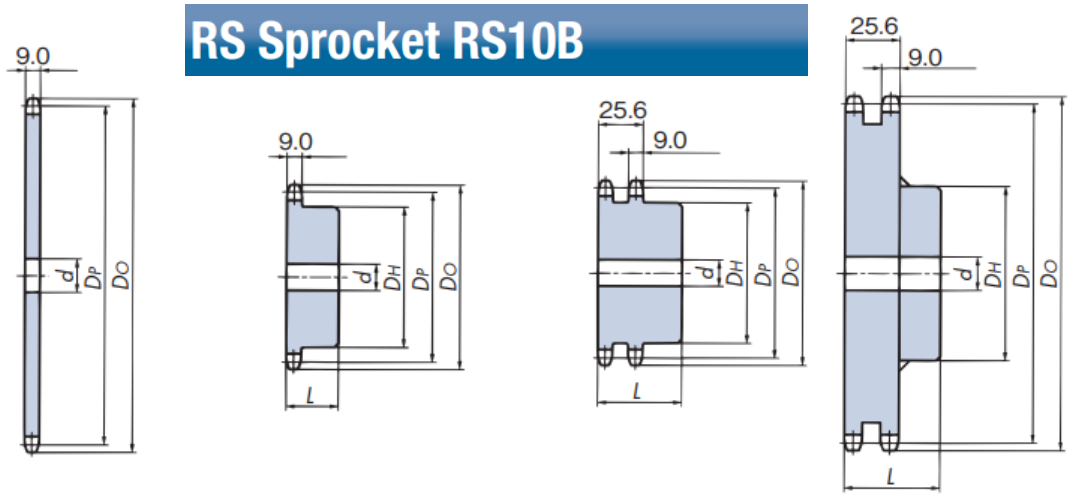
1A type | Mechanically machined 1B type | Mechanically machined 2B type | Welded construction 2B type

Number of teeth	Note 4 Outer dia. D_O	Pitch circle dia. D_P	1A type Pilot bore d	1A type Approx. mass kg	1A type Construction/ material	1B type Bore dia. d Pilot bore	1B type Bore dia. d Max.	1B type Hub Dia. D_H	1B type Hub Length L	1B type Approx. mass kg	1B type Construction/ material	2B type Bore dia. d Pilot bore	2B type Bore dia. d Max.	2B type Hub Dia. D_H	2B type Hub Length L	2B type Approx. mass kg	2B type Construction/ material	Number of teeth
9	41	37.13			Mechanically machined: structural carbon steel	9.53	15	28	22	0.12	*						Mechanically machined: machine-structural carbon steel	9
10	45	41.10				9.53	16.5	32	22	0.16	*							10
11	49	45.08				9.53	18	36	22	0.20	*							11
12	53	49.07	16	0.10		9.53	22	40	22	0.24	* Note 5	9.53	18	32	35	0.34		12
13	57	53.07	16	0.11		9.53	20	37	22	0.24		12.7	20	37	35	0.39		13
14	61	57.07	16	0.13		9.53	24	42	22	0.29		12.7	24	42	35	0.47		14
15	65	61.08	16	0.14		9.53	28.5	46	22	0.34		12.7	29	46	35	0.56		15
16	69	65.10	16	0.16		12.7	30	50	22	0.39		12.7	30	50	35	0.65		16
17	73	69.12	16	0.19		12.7	32	54	22	0.45		12.7	32	54	35	0.75		17
18	77	73.14	16	0.21		12.7	35	57	22	0.51		12.7	35	57	35	0.85		18
19	81	77.16	16	0.24		12.7	39.5	62	22	0.59		12.7	40	62	35	0.98		19
20	85	81.18	16	0.26		12.7	45.5	67	25	0.76		12.7	46	67	40	1.3		20
21	89	85.21	16	0.29		12.7	45.5	71	25	0.85		12.7	47	71	40	1.4		21
22	93	89.24	16	0.32		12.7	50	75	25	0.95		12.7	50	75	40	1.6		22
23	97	93.27	16	0.35		12.7	50	77	25	1.0		12.7	50	77	40	1.7		23
24	102	97.30	16	0.38		12.7	42	63	25	0.84		12.7	55	83	40	1.9		24
25	106	101.33	16	0.41		12.7	42	63	25	0.88		12.7	59	87	40	2.1		25
26	110	105.36	16	0.45		12.7	42	63	25	0.92		12.7	62	91	40	2.3		26
27	114	109.40	16	0.52		12.7	42	63	25	0.96		12.7	65	95	40	2.4		27
28	118	113.43	16	0.56		12.7	42	63	25	1.00		12.7	67	99	40	2.6		28
30	126	121.50	16	0.60		12.7	42	63	25	1.10		12.7	73	106	40	3.0		30
32	134	129.57	16	0.68		16	45	68	28	1.30		12.7	78	115	50	4.3		32
34	142	137.64	16	0.77		16	45	68	28	1.30		12.7	84	124	50	5.0		34
35	146	141.68	16	0.82		16	45	68	28	1.40		16	63	93	50	3.9		35
36	150	145.72	16	0.87		16	45	68	28	1.40		16	63	93	50	4.0		36
38	158	153.79	16	0.96		16	45	68	28	1.5		16	63	93	50	4.3		38
40	166	161.87	16	1.1		16	45	68	28	1.6		16	63	93	50	4.7		40
42	174	169.94	18	1.2		18	48	73	32	2.0		16	63	93	50	5.0		42
45	186	182.06	18	1.4		18	48	73	32	2.1		18	63	93	50	5.5		45
48	198	194.18	18	1.5		18	48	73	32	2.3		18	63	93	50	6.1	Welded construction Note 6	48
50	206	202.26	18	1.7		18	48	73	32	2.5		18	63	93	50	6.7		50
54	223	218.42	18	2.0		18	48	73	32	2.8		18	63	93	50	7.4		54
60	247	242.66	18	2.4		18	48	73	32	3.2		18	63	93	50	8.9		60

Note: 1. Maximum bore diameters shown are standard figures. Determine bore diameter and key bearing pressure based on general mechanical design.
2. Models in shaded areas have hardened teeth.
3. Models with unhardened teeth as standard can be manufactured with hardened teeth.
4. The outer diameters shown above are for 1B. The outer diameters for other models may differ.
5. Models marked with an * above have a groove around the periphery of the hub (shown in the diagram on the right). Groove outer diameter is 21 for 9T, 25 for 10T, 30 for 11T, and 32 for 12T.
6. Welded construction: Carbon steel for machine structural use (teeth and hub).
7. Made-to-order.



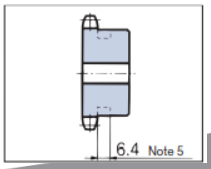
RS Sprocket RS10B



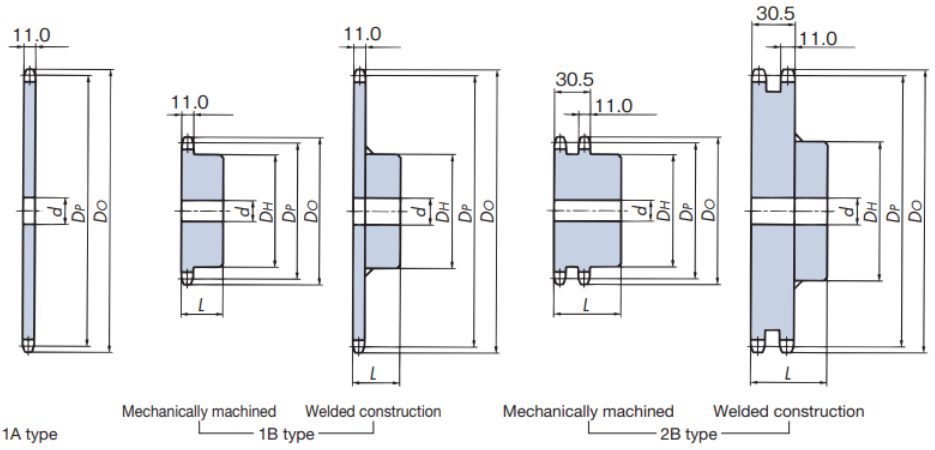
1A type | Mechanically machined 1B type | Mechanically machined 2B type | Welded construction 2B type

Number of teeth	Note 4 Outer dia. D_O	Pitch circle dia. D_P	1A type Pilot bore d	1A type Approx. mass kg	1A type Construction/ material	1B type Bore dia. d Pilot bore	1B type Bore dia. d Max.	1B type Hub Dia. D_H	1B type Hub Length L	1B type Approx. mass kg	1B type Construction/ material	2B type Bore dia. d Pilot bore	2B type Bore dia. d Max.	2B type Hub Dia. D_H	2B type Hub Length L	2B type Approx. mass kg	2B type Construction/ material	Number of teeth
9	52	46.42			Mechanically machined: structural carbon steel	9.53	19.22	34	25	0.20	*						Mechanically machined: machine-structural carbon steel	**9**
10	57	51.37				9.53	25	40	25	0.27	*							**10**
11	62	56.35				12.7	30	45	25	0.33	*							**11**
12	67	61.34	18	0.18		12.7	32	50	25	0.41	*	12.7	24	42	35	0.6		**12**
13	72	66.33	18	0.22		12.7	32	51	25	0.46	* Note 5	12.7	28.5	47	35	0.7		**13**
14	77	71.34	18	0.24		12.7	35	52	25	0.52		12.7	32	52	35	0.9		**14**
15	82	76.35	18	0.27		12.7	40	57	25	0.62		12.7	35	57	35	1.0		**15**
16	87	81.37	18	0.31		12.7	45.5	62	25	0.72		12.7	40	62	35	1.3		**16**
17	92	86.39	18	0.35		12.7	47.5	67	25	0.83		12.7	47.5	67	35	1.5		**17**
18	97	91.42	18	0.40		12.7	47.5	72	28	1.0		12.7	47.5	72	35	1.7		**18**
19	103	96.45	18	0.44		12.7	47.5	73	28	1.1		15.88	52	79	35	2.0		**19**
20	108	101.48	18	0.49		12.7	47.5	73	28	1.2		15.88	55	82	40	2.2		**20**
21	113	106.51	18	0.54		15.88	47.5	73	28	1.2		15.88	60	89	40	2.5		**21**
22	118	111.55	18	0.60		15.88	47.5	73	28	1.3		15.88	63	92	40	2.9		**22**
23	123	116.59	18	0.66		15.88	47.5	73	28	1.3		15.88	67	99	40	3.3		**23**
24	128	121.62	18	0.71		15.88	47.5	73	28	1.4		15.88	70	102	40	3.6		**24**
25	133	126.66	18	0.78		15.88	47.5	73	28	1.5		15.88	75	109	40	4.0		**25**
26	138	131.70	18	0.84		18	48	73	28	1.5		18	63	93	40	3.7		**26**
27	143	136.74	18	0.91		18	48	73	28	1.5		18	63	93	40	3.9		**27**
28	148	141.79	18	0.98		18	48	73	28	1.6		18	63	93	40	4.1		**28**
30	158	151.87	18	1.1		18	48	73	28	1.8		18	63	93	40	4.6		**30**
32	168	161.96	18	1.3		18	48	73	28	1.9		18	63	93	50	5.1		**32**
34	178	172.05	18	1.4		18	48	73	28	2.1		18	63	93	50	5.6		**34**
35	183	177.10	18	1.5		18	48	73	28	2.2		18	63	93	50	5.9		**35**
36	188	182.15	23	1.6		23	55	83	35	2.7		18	63	93	50	6.2		**36**
38	198	192.24	23	1.8		23	55	83	35	2.9		18	63	93	50	6.8	Welded construction Note 6	**38**
40	208	202.33	23	2.0		23	55	83	35	3.1		23	66	98	50	7.8		**40**
42	218	212.43	23	2.2		23	55	83	35	3.3		23	66	98	50	8.5		**42**
45	234	227.58	23	2.5		23	55	83	35	3.6		23	66	98	50	9.5		**45**
48	249	242.73	23	2.9		23	55	83	35	4.0		23	66	98	50	10.7		**48**
50	259	252.82	23	3.1		23	55	83	35	4.3		23	66	98	50	11.5		**50**
54	279	273.03	23	3.6		23	55	83	35	4.8		23	66	98	50	13.5		**54**
60	309	303.33	23	4.6		23	55	83	35	5.6		23	66	98	50	16.3		**60**

Note: 1. Maximum bore diameters shown are standard figures. Determine bore diameter and key bearing pressure based on general mechanical design.
2. Models in shaded areas have hardened teeth.
3. Models with unhardened teeth as standard can be manufactured with hardened teeth.
4. The outer diameters shown above are for 1B. The outer diameters for other models may differ.
5. Models marked with an * above have a groove around the periphery of the hub (shown in the diagram on the right). Groove outer diameter is 27 for 9T, 32 for 10T, 37 for 11T, 42 for 12T, and 47 for 13T.
6. Welded construction: Carbon steel for machine structural use (teeth and hub).
7. Made-to-order.



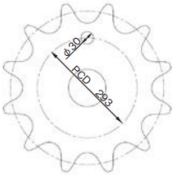
RS Sprocket RS12B

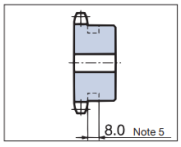


Number of teeth	Note 4 Outer dia. D_O	Pitch circle dia. D_P	1A type Pilot bore d	1A type Approx. mass kg	1A type Construction/ material	1B type Bore dia. d Pilot bore	1B type Bore dia. d Max.	1B type Hub Dia. D_H	1B type Hub Length L	1B type Approx. mass kg	1B type Construction/ material	2B type Bore dia. d Pilot bore	2B type Bore dia. d Max.	2B type Hub Dia. D_H	2B type Hub Length L	2B type Approx. mass kg	2B type Construction/ material	Number of teeth
9	63	55.70			Mechanically machined: structural carbon steel	9.53	24.5	43	32	0.40	*						Mechanically machined: machine-structural carbon steel	**9**
10	69	61.65				12.7	30	49	32	0.49	*							**10**
11	75	67.62				12.7	32	51	32	0.60	* Note 5							**11**
12	81	73.60	18	0.37		12.7	32	51	32	0.69		12.7	32	51	50	1.1		**12**
13	87	79.60	18	0.42		15.88	35	57	32	0.81		15.88	35	57	50	1.3		**13**
14	93	85.61	18	0.48		15.88	39.5	62	32	1.0		15.88	39.5	62	56	1.7		**14**
15	99	91.63	18	0.56		15.88	45.5	68	32	1.1		15.88	45.5	68	56	2.0		**15**
16	105	97.65	18	0.64		15.88	47.5	73	32	1.3		15.88	50	76	56	2.4		**16**
17	111	103.67	18	0.72		15.88	47.5	73	32	1.4		15.88	55	82	56	2.8		**17**
18	117	109.70	18	0.81		15.88	55	83	40	2.0		15.88	59	87	56	3.1		**18**
19	123	115.74	18	0.90		15.88	55	83	40	2.1		15.88	63	95	56	3.6		**19**
20	129	121.78	18	1.0		15.88	55	83	40	2.2		15.88	69	101	56	4.1		**20**
21	135	127.82	18	1.1		15.88	55	83	40	2.3		15.88	75	107	56	4.5		**21**
22	141	133.86	18	1.2		15.88	55	83	40	2.5		15.88	78	113	56	5.0		**22**
23	147	139.90	18	1.3		18	55	83	40	2.5		18	66	98	56	4.9		**23**
24	153	145.95	18	1.4		18	55	83	40	2.6		18	66	98	56	5.2		**24**
25	159	151.99	18	1.6		18	55	83	40	2.7		18	66	98	56	5.6		**25**
26	165	158.04	18	1.7		18	55	83	40	2.9		18	66	98	56	6.0		**26**
27	171	164.09	18	1.8		18	55	83	40	3.0		18	66	98	56	6.3		**27**
28	178	170.14	18	1.9		18	55	83	40	3.1		18	66	98	56	6.8		**28**
30	190	182.25	18	2.3		18	55	83	40	3.4		18	66	98	56	7.6		**30**
32	202	194.35	18	2.6		18	55	83	40	3.7		18	66	98	56	8.5		**32**
34	214	206.46	18	2.8		18	55	83	40	4.0		18	66	98	56	9.5		**34**
35	220	212.52	18	3.1		18	55	83	40	4.2		18	66	98	56	10.0		**35**
36	226	218.57	18	3.3		18	55	83	40	4.4		18	66	98	56	10.6		**36**
38	238	230.69	18	3.6		18	55	83	40	4.8		18	66	98	56	11.7		**38**
40	250	242.80	18	4.0		18	55	83	40	5.1		18	66	98	56	12.8		**40**
42	262	254.92	23	4.3		23	63	93	45	6.0	Welded construction	23	75	107	71	15.2		**42**
45	280	273.09	23	5.1		23	63	93	45	6.7		23	75	107	71	17.2		**45**
48	299	291.27	23	5.8		23	63	93	45	7.4		23	75	107	71	19.3	Welded construction	**48**
50	311	303.39	23	6.3		23	63	93	45	8.0		23	75	107	71	20.8		**50**
54	335	327.63	23	7.4		23	63	93	45	8.9		23	75	107	71	23.9		**54**
60	371	363.99	23	9.1		23	63	93	45	10.6	Note 6	23	75	107	71	29.1	Note 6	**60**

Note: 1. Maximum bore diameters shown are standard figures. Determine bore diameter and key bearing pressure based on general mechanical design.
2. Models in shaded areas have hardened teeth.
3. Models with unhardened teeth as standard can be manufactured with hardened teeth.
4. The outer diameters shown above are for 1B. The outer diameters for other models may differ.
5. Models marked with an * above have a groove around the periphery of the hub (shown in the diagram on the right). Groove outer diameter is 32 for 9T, 37 for 10T, and 45 for 11T.
6. Welded construction: Carbon steel for machine structural use (teeth and hub).
7. Models in the dimensional chart whose approximate mass is in bold font have one hanging hole. See the diagram on the right for more information.
8. Made-to-order.

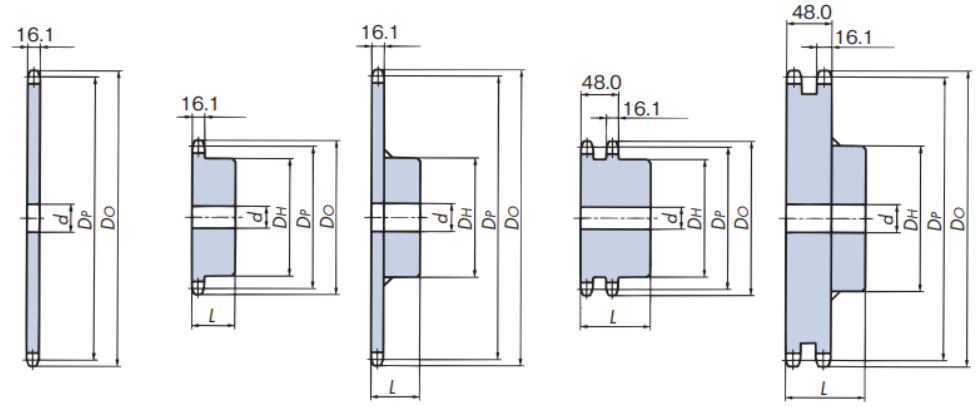
■ Hanging hole dimensions





The phase relationship between the hanging hole and teeth may vary.

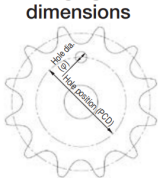
RS Sprocket RS16B



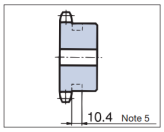
Number of teeth	Note 4 Outer dia. D_O	Pitch circle dia. D_P	1A type Pilot bore d	1A type Approx. mass kg	1A type Construction/material	1B type Bore dia. d Pilot bore	1B type Bore dia. d Max.	1B type Hub Dia. D_H	1B type Hub Length L	1B type Approx. mass kg	1B type Construction/material	2B type Bore dia. d Pilot bore	2B type Bore dia. d Max.	2B type Hub Dia. D_H	2B type Hub Length L	2B type Approx. mass kg	2B type Construction/material	Number of teeth
9	84	74.26			Mechanically machined: structural carbon steel	15.9	34	57	40	0.87	* Note 5						Mechanically machined: machine-structural carbon steel	**9**
10	92	82.20				15.9	32	52	40	0.97								**10**
11	100	90.16				15.9	38	60	40	1.2								**11**
12	108	98.14	23	0.82		19.05	45	67	40	1.5		19.05	46	67	63	2.5		**12**
13	116	106.14	23	0.93		19.05	50	77	40	1.9		19.05	50	77	63	3.1		**13**
14	124	114.15	23	1.1		19.05	50	77	40	2.0		19.05	58	86	63	3.7		**14**
15	132	122.17	23	1.2		19.05	63	93	40	2.6		19.05	64	94	63	4.3		**15**
16	140	130.20	23	1.4		19.05	63	93	40	2.8		19.05	70	102	71	5.5		**16**
17	148	138.23	23	1.6		19.05	63	93	40	3.0		19.05	76	110	71	6.4		**17**
18	156	146.27	23	1.8		19.05	63	93	40	3.2		23	66	98	71	6.4		**18**
19	164	154.32	23	2.0		23	63	93	40	3.4		23	66	98	71	7.0		**19**
20	172	162.37	23	2.2		23	63	93	40	3.6		23	75	107	71	7.9		**20**
21	180	170.42	23	2.5		23	63	93	40	3.8		23	75	107	71	8.6		**21**
22	188	178.48	28	2.7		28	75	107	45	4.8		28	80	117	71	9.6		**22**
23	196	186.54	28	2.9		28	75	107	45	5.1		28	80	117	71	10.3		**23**
24	205	194.60	28	3.2		28	75	107	45	5.4		28	80	117	80	11.8	Welded construction	**24**
25	213	202.66	28	3.5		28	75	107	45	5.6		28	80	117	80	12.6		**25**
26	221	210.72	28	3.8		28	75	107	45	5.9		28	80	117	80	13.5		**26**
27	229	218.79	28	4.0		28	75	107	45	6.1		28	80	117	80	14.4		**27**
28	237	226.86	28	4.3		28	75	107	45	6.5		28	80	117	80	15.3		**28**
30	253	243.00	28	5.0		28	75	107	45	7.1		28	80	117	80	17.2		**30**
32	269	259.14	28	5.8		28	75	107	45	7.8		28	80	117	80	19.3		**32**
34	285	275.28	28	6.4		28	75	107	45	8.5		28	80	117	80	21.5		**34**
35	293	283.36	28	6.9		28	75	107	45	8.9		28	80	117	80	22.7		**35**
36	301	291.43	33	7.3		33	80	117	50	10.1		28	80	117	80	23.9		**36**
38	318	307.58	33	8.0		33	80	117	50	10.9	Welded construction	28	80	117	80	26.4		**38**
40	334	323.74	33	9.0		33	80	117	50	11.8		33	89	127	90	30.4		**40**
42	350	339.89	33	9.8		33	80	117	50	12.7		33	89	127	90	33.2		**42**
45	374	364.12	33	11.0		33	80	117	50	14.2		33	89	127	90	37.6		**45**
48	398	388.36	33	13.0		33	80	117	50	15.8		33	89	127	90	42.3		**48**
50	414	404.52	33	14.0		33	80	117	50	16.8		33	89	127	90	45.7		**50**
54	447	436.84	33	16.0		33	80	117	50	19.2		33	89	127	90	52.8		**54**
60	495	485.33	33	20.0		33	80	117	50	23.1	Note 6	33	89	127	90	64.5	Note 6	**60**

Note: 1. Maximum bore diameters shown are standard figures. Determine bore diameter and key bearing pressure based on general mechanical design.
2. Models in shaded areas have hardened teeth.
3. Models with unhardened teeth as standard can be manufactured with hardened teeth.
4. The outer diameters shown above are for 1B. The outer diameters for other models may differ.
5. Models marked with an * above have a groove around the periphery of the hub (shown in the diagram on the right). Groove outer diameter is 44 for 9T.
6. Welded construction: Carbon steel for machine structural use (teeth and hub).
7. Models in the dimensional chart whose approximate mass is in bold font have one hanging hole. See the diagram on the right for more information.
8. Made-to-order.

■ Hanging hole dimensions



The phase relationship between the hanging hole and teeth may vary.



No. of teeth	2B/2C bore dia. (ϕ30) Hole position (PCD)
40	242
42	258
45	283
48	307
50	323
54	355
60	404