

Simplex Sprockets with Induction Hardened Teeth (45 to 55 Rc)



Power Transmission Solutions

Due to an increasing demand for items with hardened teeth Cross+Morse is extending its range of simplex pilot bore sprockets.

We offer a Standard Stock Range of Pilot Bore Sprocket in C45 with Induction Harden teeth which have the same dimensions as the Standard pilot bore range. These sprockets can be machined to suit a customer own requirements.



Why use Hardened tooth sprockets?

As the chain contacts the sprocket, frictional wear of the tooth and sprocket occurs. With each rotation, every sprocket tooth contacts the chain. The hardness of the tooth directly relates to sprocket life. A sprocket with a “hardened tooth” may last three times longer than a softer sprocket.

Induction hardening only hardens the area near the applicator coil which means that sprockets and gears will have hard teeth and not hard bores.

Standard Induction Hardened Sprockets for 3/8" and 1/2" Pitch British Standard Chains Type 06B1 and 08B1

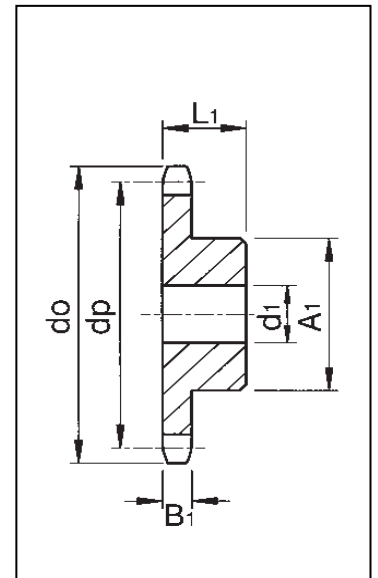
Material C45 E



Power Transmission Solutions

3/8" x 7/32" – 06B1

Cat No.	Z	Ø dp	Ø do	d1	Max Bore	L1	Ø A1
06B1-12H	12	36.80	40.00	8.00	16.00	25.00	25.00
06B1-13H	13	39.80	43.00	10.00	19.00	25.00	28.00
06B1-14H	14	42.80	46.30	10.00	20.00	25.00	31.00
06B1-15H	15	45.81	49.30	10.00	23.00	25.00	34.00
06B1-16H	16	48.82	52.30	10.00	25.00	28.00	37.00
06B1-17H	17	51.83	55.30	10.00	27.00	28.00	40.00
06B1-18H	18	54.85	58.30	10.00	29.00	28.00	43.00
06B1-19H	19	57.87	61.30	10.00	30.00	28.00	45.00
06B1-20H	20	60.89	64.30	10.00	31.00	28.00	46.00
06B1-21H	21	63.91	68.00	12.00	32.00	28.00	48.00
06B1-22H	22	66.93	71.00	12.00	34.00	28.00	50.00
06B1-23H	23	69.95	73.50	12.00	35.00	28.00	52.00
06B1-24H	24	72.97	77.00	12.00	36.00	28.00	54.00
06B1-25H	25	76.00	80.00	12.00	38.00	28.00	57.00
06B1-30H	30	91.12	94.70	12.00	40.00	28.00	60.00



1/2" x 5/16" – 08B1

Cat No.	Z	Ø dp	Ø do	d1	Max Bore	L1	Ø A1
08B1-12H	12	49.07	53.00	10.00	22.00	28.00	33.00
08B1-13H	13	53.06	57.40	10.00	25.00	28.00	37.00
08B1-14H	14	57.07	61.80	10.00	27.00	28.00	41.00
08B1-15H	15	61.09	65.50	10.00	30.00	28.00	45.00
08B1-16H	16	65.10	69.50	12.00	34.00	28.00	50.00
08B1-17H	17	69.11	73.60	12.00	35.00	28.00	52.00
08B1-18H	18	73.14	77.80	12.00	37.00	28.00	56.00
08B1-19H	19	77.16	81.70	12.00	40.00	28.00	60.00
08B1-20H	20	81.19	85.80	12.00	43.00	28.00	64.00
08B1-21H	21	85.22	89.70	14.00	45.00	28.00	68.00
08B1-22H	22	89.24	93.80	14.00	46.00	28.00	70.00
08B1-23H	23	93.27	98.20	14.00	46.00	28.00	70.00
08B1-24H	24	97.29	101.80	14.00	46.00	28.00	70.00
08B1-25H	25	101.33	105.80	14.00	46.00	28.00	70.00
08B1-30H	30	121.50	126.10	16.00	54.00	30.00	80.00

Standard Induction Hardened Sprockets for 5/8" and 3/4" Pitch British Standard Chains Type 10B1 and 12B1

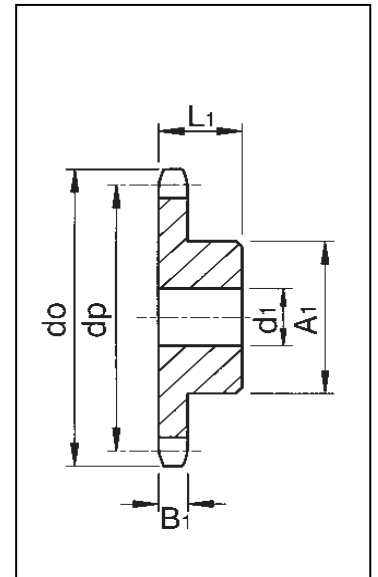
Material C45 E



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5/8" x 3/8" – 10B1

Cat No.	Z	ø dp	ø do	d1	Max Bore	L1	ø A1
10B1-12H	12	61.34	68.00	12.00	28.00	30.00	42.00
10B1-13H	13	66.32	73.00	12.00	31.00	30.00	47.00
10B1-14H	14	71.34	78.00	12.00	35.00	30.00	52.00
10B1-15H	15	76.36	83.00	12.00	38.00	30.00	57.00
10B1-16H	16	81.37	88.00	14.00	40.00	30.00	60.00
10B1-17H	17	86.39	93.00	14.00	40.00	30.00	60.00
10B1-18H	18	91.42	98.30	14.00	46.00	30.00	70.00
10B1-19H	19	96.45	103.30	14.00	46.00	30.00	70.00
10B1-20H	20	101.49	108.40	14.00	50.00	30.00	75.00
10B1-21H	21	106.52	113.40	16.00	50.00	30.00	75.00
10B1-22H	22	111.55	118.00	16.00	54.00	30.00	80.00
10B1-23H	23	116.58	123.50	16.00	54.00	30.00	80.00
10B1-24H	24	121.62	128.30	16.00	54.00	30.00	80.00
10B1-25H	25	126.66	134.00	16.00	54.00	30.00	80.00
10B1-30H	30	151.87	158.80	20.00	60.00	35.00	90.00



3/4" x 7/16" – 12B1

Cat No.	Z	ø dp	ø do	d1	Max Bore	L1	ø A1
12B1-12H	12	73.60	81.50	14.00	35.00	35.00	52.00
12B1-13H	13	79.59	87.50	14.00	38.00	35.00	58.00
12B1-14H	14	85.61	93.60	14.00	43.00	35.00	64.00
12B1-15H	15	91.63	99.80	14.00	46.00	35.00	70.00
12B1-16H	16	97.65	105.50	16.00	50.00	35.00	75.00
12B1-17H	17	103.67	111.50	16.00	54.00	35.00	80.00
12B1-18H	18	109.71	118.00	16.00	54.00	35.00	80.00
12B1-19H	19	115.75	124.20	16.00	54.00	35.00	80.00
12B1-20H	20	121.78	129.70	16.00	54.00	35.00	80.00
12B1-21H	21	127.82	136.00	20.00	60.00	40.00	90.00
12B1-22H	22	133.86	141.80	20.00	60.00	40.00	90.00
12B1-23H	23	139.90	149.00	20.00	60.00	40.00	90.00
12B1-24H	24	145.94	153.90	20.00	60.00	40.00	90.00
12B1-25H	25	152.00	160.00	20.00	60.00	40.00	90.00
12B1-30H	30	182.25	190.50	20.00	63.00	40.00	95.00

Standard Induction Hardened Sprockets for 1" Pitch British Standard Chains Type 16B1

Material C45 E



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1" x 17.02" – 16B1

Cat No.	Z	ø dp	ø do	d1	Max Bore	L1	ø A1
16B1-11H	11	90.14	99.50	16.00	40.00	40.00	61.00
16B1-12H	12	98.14	109.00	16.00	46.00	40.00	69.00
16B1-13H	13	116.12	117.00	16.00	52.00	40.00	78.00
16B1-14H	14	114.15	125.00	16.00	56.00	40.00	84.00
16B1-15H	15	122.17	133.00	16.00	61.00	40.00	92.00
16B1-16H	16	130.20	141.00	20.00	67.00	45.00	100.00
16B1-17H	17	138.22	149.00	20.00	67.00	45.00	100.00
16B1-18H	18	146.28	157.00	20.00	67.00	45.00	100.00
16B1-19H	19	154.33	165.20	20.00	67.00	45.00	100.00
16B1-20H	20	162.38	173.00	20.00	67.00	45.00	100.00
16B1-21H	21	170.43	181.20	20.00	74.00	50.00	110.00
16B1-22H	22	178.48	189.30	20.00	74.00	50.00	110.00
16B1-23H	23	186.53	197.50	20.00	74.00	50.00	110.00
16B1-24H	24	194.59	205.50	20.00	74.00	50.00	110.00
16B1-25H	25	202.60	213.50	20.00	74.00	50.00	110.00
16B1-30H	30	243.00	254.00	20.00	80.00	50.00	120.00

