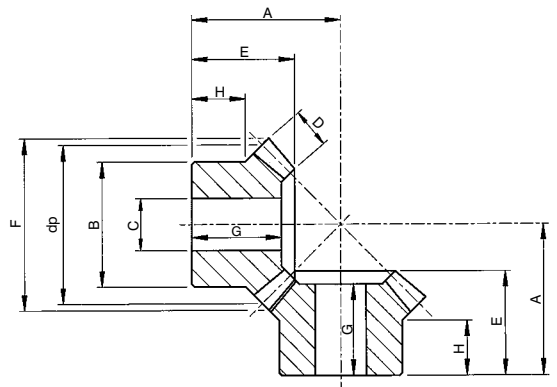


Standard Metric Mitre Gears



Standard Metric Mitre Gears
Manufactured in medium carbon steels for high strength and durability.
All gears cut 20 degree pressure angle.



Gear Type 'A' *

Gear Type 'B'

Cross+Morse standard stock metric mitre gears complement the existing range of diametral pitch gears to provide the designer a wider range of selection. The mitre gear sets are available in 7 tooth sizes in 9 pitches from 1.0 Mod to 5.0 Mod, providing the correct solution for right angle drives in applications from light instrumentation and office equipment to heavy manufacturing machinery.

All gears are manufactured in medium carbon steels for high strength and durability, and can be optionally induction/flame hardened for more arduous applications. The gears are cut to the Gleason System with 20 degree pressure angle, and supplied only in pairs to ensure correct matching.

For long life and efficient operation it is essential that mitre gears are correctly mounted on rigidly supported shafts with bearings able to support the axial and radial loads imposed. The shafts should be at a true right angle within the following tolerances:-

Shaft Axis to intersect within $\pm 0.025\text{mm}$. Shafts to be at right angles within $\pm 5'$ angle. The mounting distance (Dimension 'A') to be true within $+0.0/-0.05\text{mm}$

Cat. No.	Pitch Module	No. Teeth	Type	dp	A	B	Bore C		D	E	F	G	H	Approx Weight per Gear Kg
							min	max						
M1016	1	16	B	16.0	16.00	13.3	4	7.5	4.0	11.2	17.4	11.2	6.5	0.013
M1019		19	B	19.0	18.00	15.3	4	9.0	4.0	11.8	20.4	11.8	6.5	0.015
M1022		22	B	22.0	20.00	16.3	5	10.0	4.7	12.8	23.4	12.8	6.5	0.022
M1026		26	B	26.0	22.00	20.3	5	13.0	5.5	13.3	27.4	13.3	7.0	0.033
M1030		30	B	30.0	26.00	20.3	5	13.0	6.4	16.0	31.4	16.0	8.0	0.040
M1516	1.5	16	B	24.0	26.00	20.3	8	10.0	6.0	18.9	26.1	18.9	12.0	0.028
M1519		19	B	28.5	30.00	20.3	8	12.5	6.0	21.3	30.6	21.3	12.0	0.050
M1520		20	A	30.0	27.40	22.0	8	14.0	10.0	20.0	32.1	18.0	8.5	0.061
M1522		22	B	33.0	33.00	25.3	8	16.0	7.5	22.5	35.1	22.5	12.0	0.081
M1525		25	A	37.5	34.09	28.0	10	18.0	10.0	23.0	39.6	21.0	12.0	0.111
M1526		26	B	39.0	36.00	28.3	8	19.0	8.5	23.2	41.1	23.2	12.0	0.117
M1530		30	B	45.0	42.00	30.3	12	20.0	10.0	27.2	47.1	27.2	12.0	0.167
M2016	2	16	B	32.0	33.00	25.3	8	14.0	8.0	23.5	34.8	23.5	14.0	0.070
M2019		19	B	38.0	36.00	25.3	8	16.0	9.0	24.2	40.8	24.2	12.0	0.105
M2020		20	A	40.0	35.78	32.0	10	18.0	12.0	25.0	42.8	22.0	12.0	0.158
M2022		22	B	44.0	42.00	30.3	12	20.0	10.0	27.9	46.8	27.9	14.0	0.158
M2025		25	A	50.0	42.28	40.0	12	24.0	14.0	28.0	52.8	25.0	12.3	0.280
M2026		26	B	52.0	48.00	35.3	12	24.0	12.0	31.4	54.8	31.4	14.0	0.261
M2030		30	B	60.0	54.00	40.3	14	27.0	13.0	34.1	62.8	34.1	17.0	0.385
M2516		2.5	16	B	40.0	40.00	30.3	12	18.0	10.0	28.1	43.5	28.1	15.0
M2519	19		B	47.5	42.00	35.3	12	23.0	11.0	27.1	51.0	27.1	13.0	0.200
M2520	20		A	50.0	45.93	40.0	12	26.0	12.0	30.5	53.5	27.0	16.0	0.300
M2522	22		B	55.0	48.00	45.3	16	28.0	12.0	30.1	58.5	30.1	16.0	0.328
M2525	25		A	62.5	52.98	50.0	15	34.0	15.0	33.5	66.0	30.0	16.0	0.520
M2526	26		B	65.0	54.00	45.3	16	30.0	15.0	33.2	68.5	33.2	16.0	0.490
M2530	30		B	75.0	64.00	50.3	16	34.0	16.0	39.0	78.5	39.0	20.0	0.700
M3016	3	16	B	48.0	45.00	40.3	12	21.0	12.0	31.7	52.2	31.7	18.0	0.280
M3019		19	B	57.0	54.00	40.3	14	27.0	13.0	36.0	61.2	36.0	17.0	0.370
M3020		20	A	60.0	51.00	45.0	15	30.0	18.0	35.0	64.2	31.0	13.6	0.450
M3022		22	B	66.0	58.00	50.3	16	34.0	15.0	36.9	70.2	36.9	17.0	0.540
M3025		25	A	75.0	60.00	55.0	15	37.0	20.0	38.0	79.2	34.0	16.0	0.770
M3026		26	B	78.0	64.00	50.3	16	34.0	17.0	38.4	82.2	38.4	18.0	0.750
M3030		30	B	90.0	74.00	60.3	20	40.0	19.0	43.8	94.2	43.8	22.0	0.950
M3516	3.5	16	B	56.0	53.00	45.3	16	24.0	14.0	36.4	61.0	36.4	20.0	0.450
M3519		19	B	66.5	58.80	50.3	18	34.0	15.0	37.8	71.5	37.8	19.0	0.650
M3520		20	A	70.0	58.63	55.0	15	37.0	22.0	40.5	75.0	36.0	17.0	0.790
M3522		22	B	77.0	64.00	55.3	20	37.0	17.0	39.1	82.0	39.1	18.0	0.720
M3525		25	A	87.5	67.47	65.0	20	44.0	26.0	43.5	92.5	39.0	18.0	1.200
M3526		26	B	91.0	73.05	62.3	20	41.0	20.0	43.4	96.0	43.4	20.0	1.290
M3530		30	B	105.0	82.00	70.3	20	46.0	23.0	47.1	110.0	47.1	22.0	1.800
M4016	4	16	B	64.0	64.00	50.3	16	31.0	15.0	44.3	69.7	44.3	25.0	0.680
M4019		19	B	76.0	68.00	55.3	20	36.0	18.0	44.4	81.7	44.4	22.0	0.900
M4020		20	A	80.0	63.74	60.0	18	40.0	25.0	43.0	85.7	38.0	18.0	1.000
M4022		22	B	88.0	74.00	60.3	20	40.0	20.0	45.9	93.7	45.9	22.0	1.050
M4025		25	A	100.0	73.50	70.0	20	46.0	28.0	45.0	105.7	40.0	18.0	1.530
M4026		26	B	104.0	82.00	70.3	20	46.0	25.0	48.0	109.7	48.0	22.0	1.900
M4030		30	B	120.0	94.00	80.3	20	54.0	26.0	54.2	125.7	54.2	25.0	2.450
M4516	4.5	16	B	72.0	68.00	55.3	20	34.0	17.5	46.3	78.4	46.3	25.0	0.750
M4519		19	B	85.5	75.57	62.3	20	41.0	20.0	49.0	91.9	49.0	25.0	1.290
M4520		20	A	90.0	71.41	65.0	20	44.0	28.0	48.0	96.4	42.0	18.0	1.370
M4522		22	B	99.0	82.00	70.3	20	46.0	22.0	50.1	105.4	50.1	25.0	1.550
M4525		25	A	112.5	81.76	75.0	20	50.0	32.0	50.0	118.9	44.0	18.0	2.070
M4526		26	B	117.0	93.30	75.3	20	50.0	25.0	54.7	123.4	54.7	26.0	2.790
M4530		30	B	135.0	105.00	80.3	20	54.0	29.0	60.0	141.4	60.0	28.0	3.100
M5016	5	16	B	80.0	74.00	60.3	20	40.0	18.0	48.9	87.1	48.9	25.0	0.920
M5019		19	B	95.0	82.00	60.3	20	40.0	22.0	52.2	102.1	52.2	25.0	1.500
M5020		20	A	100.0	77.36	70.0	20	46.0	30.0	50.5	107.1	44.0	18.5	1.730
M5022		22	B	110.0	94.00	80.3	20	54.0	24.0	58.2	117.1	58.2	30.0	2.390
M5025		25	A	125.0	89.86	90.0	20	60.0	34.0	53.5	132.1	47.0	18.0	3.080
M5026		26	B	130.0	105.00	80.3	20	54.0	29.0	62.7	137.1	62.7	30.0	3.140
M5030		30	B	150.0	119.00	80.3	20	54.0	32.0	68.9	157.1	68.9	35.0	4.200

All gears stocked with standard plain bore. Rebore, keyway, setscrew and induction hardening services available.

Bevel and mitre gears with other D.P. and module can be supplied to order up to 375mm diameter. All dimensions in mm.

*Type A where 'G' less than 'E'