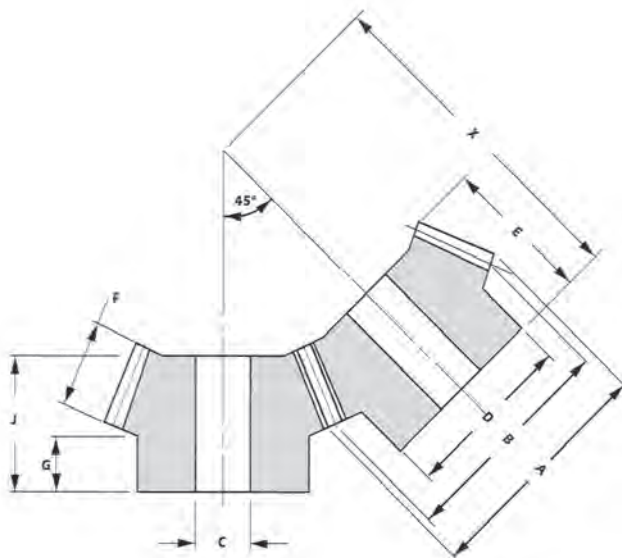


Angled shaft 45°

Steel 1.5 to 3.0 module

Ratio 1:1

GEARs



Pitch MOD	No. of Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C (H7)	Boss Dia. D	Overall Length E	Face Width F	Boss Proj G	Bore Length H	Mounting Length X	Catalogue No.
1.5	20	32.77	30	8	25	19.33	11	7.75	18	45	AMB15-20-S-45
2.0	20	43.69	40	10	30	26.08	15	9.65	24	60	AMB20-20-S-45
2.5	20	54.62	50	12	40	31.92	18	12.58	30	75	AMB25-20-S-45
3.0	20	65.54	60	14	50	38.66	22	15.51	36	90	AMB30-20-S-45

Material

Steel BS970 Pt. 3 1991 080M46

or equivalent

All dimensions in millimetres.

Pressure angle 20°.

These bevel gears are cut to the Gleason System.

Bore tolerances to BS. 4500: 1969, H7.

General tolerances unless otherwise stated ± 0.25 .

Angular accuracy between shafts $\pm 0^{\circ}-5'$.

Shaft axes should intersect within ± 0.025 .

Mounting distance tolerance (Dimn. x) $\begin{matrix} +NL \\ -0.05 \end{matrix}$

These gears are not hardened.

These gears cannot be run with any other series.

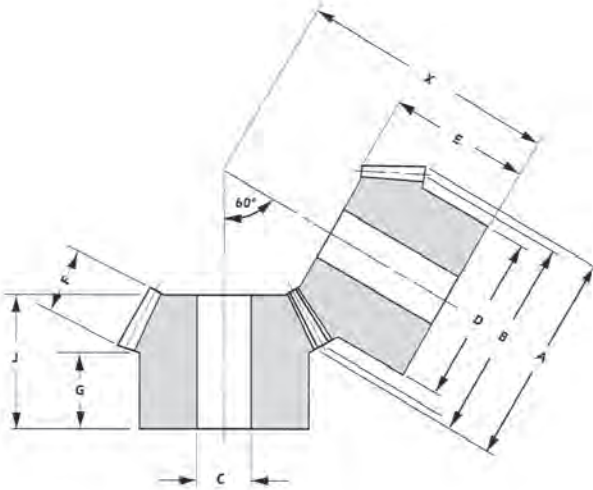
pitch line angle 22° 30'

Angled shaft 60°

Steel 1.5 to 3.0 module,

Ratio 1:1

GEARS



Pitch MOD	No. of Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C (H7)	Boss Dia. D	Overall Length E	Face Width F	Boss Proj G	Bore Length H	Mounting Length I	Mounting Length X	Catalogue No.
1.5	20	32.59	30	8	25	22.3	9	12.58	21	40		AMB15-20-S-60
2.0	20	43.46	40	12	32	26.39	12	13.05	24	50		AMB20-20-S-60
2.5	20	54.33	50	14	40	30.49	15	13.82	28	60		AMB25-20-S-60
3.0	20	65.19	60	16	50	34.59	18	15.16	32	70		AMB30-20-S-60

pitch line angle 30°

Material

Steel BS970 Pt. 3 1991 080M46

or equivalent

All dimensions in millimetres.

Pressure angle 20°.

These bevel gears are cut to the Gleason System.

Bore tolerances to BS. 4500; 1969, H7.

General tolerances unless otherwise stated ± 0.25 .

Angular accuracy between shafts $\pm 0^{\circ}-5'$.

Shaft axes should intersect within ± 0.025 .

Mounting distance tolerance

(Dimn. X) $\begin{matrix} +0.10 \\ -0.05 \end{matrix}$

These gears are not hardened.

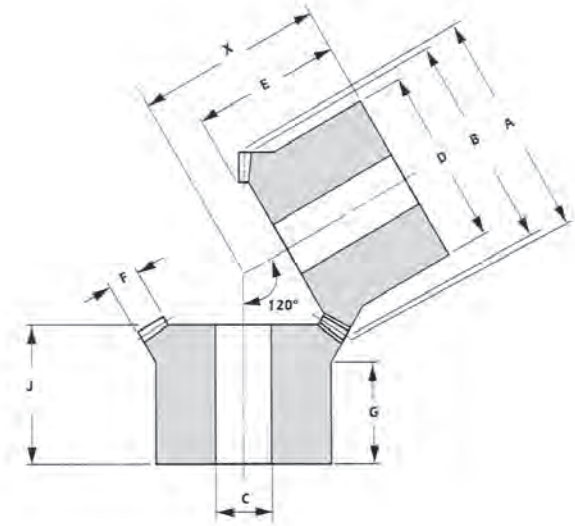
These gears cannot be run with any other series.

Angled shaft 120°

Steel 1.5 to 3.0 module

Ratio 1:1

GEARS



Pitch MOD	No. of Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C (H7)	Boss Dia. D	Overall Length E	Face Width F	Boss Proj G	Bore Length J	Mounting Length X	Catalogue No.
1.5	20	31.5	30	8	26	20.69	5	13.88	18	26	AMB15-20-S-120
2.0	20	42	40	12	34	26.89	6.5	17.26	24	34	AMB20-20-S-120
2.5	20	52.5	50	14	42	33.22	8.5	20.64	29	42	AMB25-20-S-120
3.0	20	63	60	16	50	39.39	10	24.02	35	50	AMB30-20-S-120

Material

Steel BS970 Pt. 3 1991 080M46

or equivalent

All dimensions in millimetres.

Pressure angle 20°.

pitch line angle 60°

These bevel gears are cut to the Gleason System.

Bore tolerances to BS. 4500: 1969, H7.

General tolerance unless otherwise stated ± 0.25 .

Angular accuracy between shafts $\pm 0^{\circ}5'$.

Shaft axes should intersect within ± 0.025 .

Mounting distance tolerance

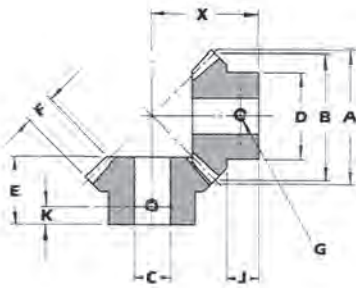
(Dimn. x) $\begin{matrix} = \text{NIL} \\ -0.05 \end{matrix}$

These gears are not hardened.

These gears cannot be run with any other series.

Straight – 1:1 ratio

Steel, 0.5 to 6.0 module



Pitch Mod.	No. Teeth	Outside dia. A	Pitch dia. B	Bore dia. C	Boss dia. D	Overall length E	Face width F	G	J	K	X	Catalogue No.
0.5	15	821	75	3	66	554	15	M25	380	20	80	MB05-15-S
	18	971	90	4	75	714	20	M25	477	25	100	MB05-18-S
	30	1571	150	6	130	886	30	M3	551	25	140	MB05-30-S
0.8	16	1393	128	6	100	958	30	M3	570	30	135	MB08-16-S
	24	2033	192	6	160	1110	40	M3	632	30	175	MB08-24-S
	32	2673	256	8	220	1245	55	M4	640	30	210	MB08-32-S
1.0	16	1741	160	6	125	1092	35	M25	625	30	160	MB10-16-S
	19	2041	190	6	150	1179	40	M3	651	30	180	MB10-19-S
	26	2741	260	8	220	1336	55	M4	700	35	220	MB10-26-S
30	3141	300	8	260	1555	65	M5	849	40	255	MB10-30-S	
1.5	16	2612	240	8	200	1623	50	M4	1000	50	240	MB15-16-S
	19	3062	285	8	250	1768	60	M5	1100	55	270	MB15-19-S
	26	4112	3910	10	320	2250	90	M6	1200	60	350	MB15-26-S
30	4712	450	12	380	2375	100	M6	1251	60	385	MB15-30-S	
2.0	16	3483	320	10	250	1885	70	—	952	—	290	MB20-16-S
	19	4083	380	10	300	2322	90	—	1202	—	350	MB20-19-S
	26	5483	520	12	440	2835	120	—	1500	—	450	MB20-26-S
30	6283	600	12	500	2875	140	—	1323	—	480	MB20-30-S	
2.5	16	4354	400	12	300	2497	90	—	1251	—	375	MB25-16-S
	19	5104	475	12	400	2812	110	—	1552	—	430	MB25-19-S
	26	6853	650	14	540	3320	150	—	1600	—	540	MB25-26-S
30	7853	750	16	640	3510	170	—	1651	—	595	MB25-30-S	
3.0	16	5224	480	15	400	2908	110	—	1600	—	440	MB30-16-S
	19	6124	570	16	500	3101	130	—	1702	—	490	MB30-19-S
	26	8224	780	18	640	4003	180	—	1903	—	650	MB30-26-S
30	9424	900	20	760	3965	210	—	1651	—	685	MB30-30-S	
4.0	16	6966	640	15	500	3581	150	—	1649	—	555	MB40-16-S
	19	8166	760	18	625	4143	180	—	2024	—	650	MB40-19-S
	26	10966	1040	22	850	4869	240	—	2050	—	820	MB40-26-S
30	12566	1200	25	1020	5151	280	—	2100	—	900	MB40-30-S	
5.0	16	8707	800	20	625	4293	180	—	1927	—	680	MB50-16-S
	19	10207	950	25	720	4923	220	—	2000	—	790	MB50-19-S
	26	13707	1300	30	10613	6137	300	—	2606	—	1030	MB50-26-S
30	15707	1500	30	1270	5890	350	—	2050	—	1070	MB50-30-S	
6.0	16	10450	960	30	700	6015	220	—	2898	—	900	MB60-16-S
	19	12248	1140	35	875	6899	260	—	3476	—	1050	MB60-19-S
	26	16449	1560	50	1280	9505	360	—	5280	—	1450	MB60-26-S
30	18849	1800	40	120	7320	40	—	3300	—	132	MB60-30-S	

Material

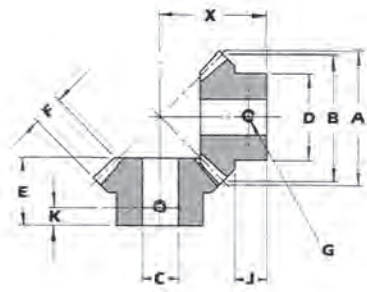
0.5 to 0.8 mod. Steel.
 BS970 Pt.1 1991 080M15 (EN32) or
 BS970 Pt.3 1991 230M07 (EN1A)
 1.0 to 6.0 mod. Steel.
 BS970 Pt.3 1991 080M40 (EN8) or
 equivalent

All dimensions in millimetres.
 Pressure angle 20°.
 These bevel gears are cut to the Gleason System.
 Bore tolerances to BS. 4500: 1969, H8.
 General tolerance unless otherwise stated ± 0.25 .

Angular accuracy between shafts $\pm 0^{\circ}5'$.
 Shaft axes should intersect within ± 0.025 .
 Mounting distance tolerance (Dimm. x) $\begin{matrix} +NEL \\ -0.05 \end{matrix}$.
 These gears are not hardened.
 Can only be run at a 90° shaft angle
 extra pinion or gear available

Straight – 1:1 ratio

Stainless steel & moulded polyacetal



mod	No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. +0.001-0.002 Ø C	Boss Dia. Ø D	Length thru bore E	Boss Proj'n J	Mounting Distance X	Catalogue Reference molded
0.5	16	8.70	8	3.00	7.0	8.0	6.0	10.5	MB 05 - 16 - MOLD-MTR
	20	10.70	10	3.00	8.0	8.0	4.0	11.0	MB 05 - 20 - MOLD-MTR
1	16	17.60	16	5.00	12.0	13.6	8.0	18.4	MB 10 - 16 - MOLD-MTR
	20	21.40	20	6.00	16.0	14.6	7.0	21.0	MB 10 - 20 - MOLD-MTR
1.5	16	26.40	24	8.00	18.5	18.4	10.0	25.8	MB 15 - 16 - MOLD-MTR
	20	21.40	20	6.00	16.0	14.6	7.0	21.0	MB 15 - 20 - MOLD-MTR
2	16	34.90	32	8.00	21.9	21.2	9.6	30.4	MB 20 - 16 - MOLD-MTR
2.5	16	43.50	40	8.00	25.2	25.5	11.5	37.0	MB 25 - 16 - MOLD-MTR
3	16	52.30	48	14.00	28.8	29.2	13.2	43.0	MB 30 - 16 - MOLD-MTR
3.5	16	61.40	56	18.00	33.3	33.1	14.4	49.5	MB 35 - 16 - MOLD-MTR

mod	No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. H7 Ø C	Boss Dia. Ø D	Length thru bore	Boss Proj'n J	Mounting Distance X	Catalogue Reference
0.6	20	12.8	12	4*	7	5.5	3	10	* MB 06 - 20 - SS - MITRE
1	20	21.4	20	6	16	12	8	20	MB 10 - 20 - SS - MITRE
	25	26.4	25	6	20	14	8	23	MB 10 - 25 - SS - MITRE
1.5	20	32.1	30	8	26	19	13	30	MB 15 - 20 - SS - MITRE
1.5	25	39.6	37.5	10	30	19	11.5	34	MB 15 - 25 - SS - MITRE
2	20	42.8	40	12	34	22	14	37	MB 20 - 20 - SS - MITRE
2	25	52.8	50	12	45	20	12.5	40	MB 20 - 25 - SS - MITRE
2.5	20	53.5	50	14	42	29	19	48	MB 25 - 20 - SS - MITRE
2.5	25	66.0	62.5	16	55	26	15	50	MB 25 - 25 - SS - MITRE
3	20	64.2	60	16	50	35	23	58	MB 30 - 20 - SS - MITRE
3	25	79.2	75	20	65	32	17.5	60	MB 30 - 25 - SS - MITRE

* +0.018

pitch angle

45°

* 431 stainless steel

Material

Moulded polyacetal
Stainless Steel 303

All dimensions in millimetres.

Pressure angle 20°.

These bevel gears are cut to the Gleason System.

Bore tolerances to BS. 4500: 1969, H7

General tolerance unless otherwise stated ± 0.25.

Angular accuracy between shafts

± 0°-5'

Shaft axes should intersect within ± 0.025.

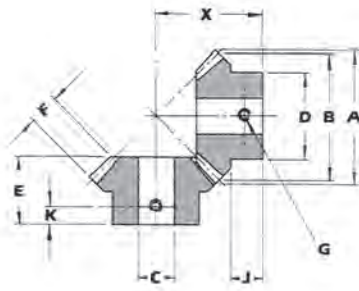
Mounting distance tolerance (Dimn. X) $\pm \begin{matrix} \text{NE} \\ 0.05 \end{matrix}$

These gears are not hardened.

Can only be run at a 90° shaft angle extra pinion or gear available

Straight – 1.5:1 ratio

Steel, 1.0 to 6.0 module



mod	Teeth No.	Outside Dia. A Ø	Pitch Dia. B Ø	Bore Dia. C Ø	Boss Dia. D Ø	Face Width F	Boss Projection J	Length through bore L	Mounting Distance X	Catalogue Ref (set) STEEL	(parts)
1.0	16	17.66	16	5	13.5	4.5	7.2	11.0	20	MB 10 - 1.5X - S	- PIN
	24	25.11	24	6	21		9.3	13.5	20		-GEAR
1.5	16	26.49	24	8	20	7	10.6	17.0	30	MB 15 - 1.5X - S	-PIN
	24	37.67	36	8	26		12.0	17.0	27		-GEAR
2.0	16	35.32	32	10	26	10	12.0	21.0	38	MB 20 - 1.5X - S	-PIN
	24	50.22	48	12	35		15.0	23.0	35		-GEAR
2.5	16	44.16	40	12	32	12.5	13.5	25.0	46	MB 25 - 1.5X - S	-PIN
	24	62.77	60	14	42		16.0	27.0	42		-GEAR
3.0	16	53.00	48	14	40	14.5	15.5	28.0	54	MB 30 - 1.5X - S	-PIN
	24	75.32	72	16	50		18.0	30.0	49		-GEAR
3.5	16	61.82	56	16	47	17	17.0	32.0	62	MB 35 - 1.5X - S	-PIN
	24	87.88	84	18	58		21.0	36.0	57		-GEAR
4.0	16	70.65	64	18	54	19	18.5	35.0	70	MB 40 - 1.5X - S	-PIN
	24	100.43	96	20	66		24.0	40.0	65		-GEAR
4.5	16	79.48	72	20	60	21.5	21.0	40.0	79	MB 45 - 1.5X - S	-PIN
	24	113.00	108	25	75		26.0	45.0	73		-GEAR
5.0	16	88.32	80	22	65	24	23.0	45.0	88	MB 50 - 1.5X - S	-PIN
	24	125.54	120	30	85		28.0	49.0	80		-GEAR
6.0	16	106.96	96	25	80	28.5	24.7	50.0	102	MB 60 - 1.5X - S	-PIN
	24	150.66	144	35	105		32.0	52.5	90		-GEAR

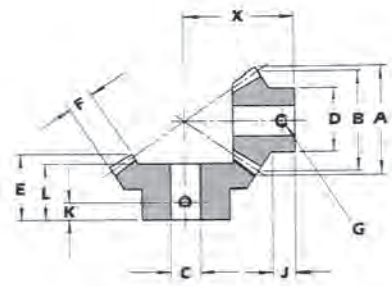
pinion pitch angle 33° 41'
gear pitch angle 56° 19'

All dimensions in millimetres.
Pressure angle 20°.
These bevel gears are cut to the Gleason System.
Bore tolerances to BS. 4500: 1969, H8.
General tolerance unless otherwise stated ± 0.25.

Angular accuracy between shafts ± 0°-5'.
Shaft axes should intersect within ± 0.025.
Mounting distance tolerance (Dimn. X) $\begin{matrix} + \text{NIL} \\ - 0.05 \end{matrix}$.
These gears are not hardened.
Can only be run at a 90° shaft angle extra pinion or gear available

Straight – 2:1 ratio

Steel, 1.0 to 6.0 module



GEARS

mod	No. Teeth	Outside Dia.	Pitch Dia.	Bore Dia. H8	Boss Dia.	Overall Length	Face Width	Boss Projection	Length through bore L	Mounting Distance	Catalogue Ref (set)	Catalogue Ref (parts)
		A Ø	B Ø	C Ø	D Ø	E	F	J	L	X	STEEL	
1.0	15	16.79	15	5	12.5	12.80	5	8.00	12.0	23	MB 10 - 2X - S	-PIN
	30	30.89	30	8	22.0	15.40		9.00	14.0	20		-GEAR
1.5	15	25.19	22.5	8	19.0	19.10	8	10.60	18.0	34	MB 15 - 2X - S	-PIN
	30	46.34	45	10	32.0	21.20		13.00	19.0	28		-GEAR
1.5	16	27.61	24	10	21.0 *	19.74	8	11.24		36	MB 15 - 2 - S	-PIN
	32	48.88	48	10	40.0*	22.12			19.9	30		-GEAR
2.0	15	33.58	30	10	25.0	23.80	11.5	12.00	22.0	43	MB 20 - 2X - S	-PIN
	30	61.80	60	14	40.0	26.30		15.00	23.0	35		-GEAR
2.0	16	36.81	32	12	28.5	23.99	10	13.35		45.5	MB 20 - 2 - S	-PIN
	32	65.17	64	14	40.0	28.24		16.36	25.5	39		-GEAR
2.5	15	41.98	37.5	12	31.0	29.20	14.5	14.00	27.0	53	MB 25 - 2X - S	-PIN
	30	77.25	75	18	50.0	30.90		17.00	27.0	42		-GEAR
2.5	16	46.01	40	12	36.0	27.76	12	15.00		56	MB 25 - 2 - S	-PIN
	32	81.47	80	16	50.0	36.32		21.69	32.8	50		-GEAR
3.0	15	50.37	45	14	38.0	34.00	17	16.00	32.0	63	MB 30 - 2X - S	-PIN
	30	92.70	90	20	60.0	35.80		19.00	31.0	49		-GEAR
3.0	16	55.22	48	15	43.0	28.65	15	12.74		62	MB 30 - 2 - S	-PIN
	32	97.76	96	20	62.5	40.84		23.01	36.8	57		-GEAR
3.5	15	58.77	53	16	44.0	38.90	19.5	18.50	36.0	63	MB 35 - 2X - S	-PIN
	30	108.15	105	22	70.0	41.50		22.00	36.0	49		-GEAR
3.5	16	64.42	56	16	50.0	33.50	18	14.49		72	MB 35 - 2 - S	-PIN
	32	114.05	112	22	62.5	43.33		22.35	38.6	62		-GEAR
4.0	15	67.16	60	18	50.0	43.80	22	20.50	41.0	83	MB 40 - 2X - S	-PIN
	30	123.60	120	25	80.0	47.10		25.00	42.0	65		-GEAR
4.0	16	73.62	64	20	57.5	36.53	20	15.37		81	MB 40 - 2 - S	-PIN
	32	130.34	128	25	70.0	48.44		24.69	43.0	70		-GEAR
4.5	15	75.56	67.5	20	55.0	49.20	25	22.50	46.0	93	MB 45 - 2X - S	-PIN
	30	139.02	135	30	90.0	53.00		28.00	47.0	73		-GEAR
4.5	16	82.83	72	22	62.5	40.54	22	16.62		91	MB 45 - 2 - S	-PIN
	32	146.64	144	28	87.5	57.56		31.00	51.4	82		-GEAR
5.0	15	83.95	75	22	60.0	54.50	28	24.00	51.0	103	MB 50 - 2X - S	-PIN
	30	154.46	150	35	100.0	57.90		30.00	51.0	80		-GEAR
5.0	16	92.03	80	22	70.0	50.39	25	23.50		106	MB 50 - 2 - S	-PIN
	32	162.93	160	30	100.0	63.04		33.35	56.2	90		-GEAR
6.0	15	100.74	90	25	75.0	60.80	32.5	26.20	56.0	120	MB 60 - 2X - S	-PIN
	30	185.34	180	40	120.0	63.20		33.00	54.0	90		-GEAR
6.0	16	110.44	96	35	86.5	67.61	35	31.62		130	MB 60 - 2 - S	-PIN
	32	195.52	192	45	112.5	89.71		52.02	82.1	120		-GEAR

* boss has 1 x M4 tapped hole into bore

pitch line angle of pinion (smaller)
pitch line angle of gear (larger)

26° 34'
63° 26'

Material

Steel **BS970 Pt. 3 1991 080M40(EN8)** or equivalent

All dimensions in millimetres. Pressure angle 20°. These bevel gears are cut to the Gleason System.

Bore tolerances to BS 4500: 1969, H8. General tolerance unless otherwise stated ± 0.25 . Angular accuracy between shafts $\pm 0^\circ-5'$. Shaft axes should intersect with ± 0.025 . Mounting distance tolerance (Dimn. X)

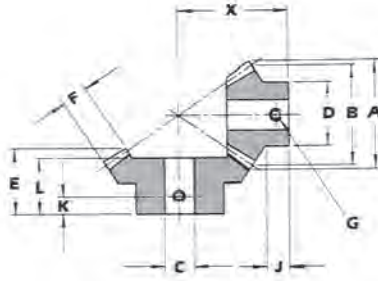
+ NIL
-0.05

These gears are not hardened.

Can only be run at a 90° shaft angle extra pinion or gear available.

Straight – 2.5:1 ratio

Steel, 1.0 to 6.0 module



mod	Teeth No.	Outside Dia. A Ø	Pitch Dia. B Ø	Bore Dia. C Ø	Boss Dia. D Ø	Face Width F	Boss Projection J	Length through bore L	Mounting Distance X	Catalogue Ref (set) STEEL	(parts)
1.0	16	17.86	16	5	13.5	6	7.5	13.0	28	MB 10 - 2.5X - S	-PIN
	40	40.74	40	8	25		9.0	14.0	21		-GEAR
1.5	16	26.79	24	8	20	9	11.2	19.5	42	MB 15 - 2.5X - S	-PIN
	40	61.11	60	12	38		13.5	20.0	30		-GEAR
2.0	16	35.71	32	12	26	13.5	14.0	26.0	55	MB 20 - 2.5X - S	-PIN
	40	81.48	80	18	50		18.0	26.0	39		-GEAR
2.5	16	44.64	40	14	32	17.0	15.5	32.0	67	MB 25 - 2.5X - S	-PIN
	40	101.85	100	20	60		20.0	30.0	46		-GEAR
3.0	16	53.56	48	16	40	20	17.5	36.0	79	MB 30 - 2.5X - S	-PIN
	40	122.22	120	22	70		23.0	36.0	55		-GEAR
3.5	16	62.49	56	18	45	23.5	19.0	41.0	91	MB 35 - 2.5X - S	-PIN
	40	142.59	140	25	80		26.0	40.0	62		-GEAR
4.0	16	71.42	64	20	52	27	21.5	47.0	104	MB 40 - 2.5X - S	-PIN
	40	162.97	160	30	90		30.0	46.0	72		-GEAR
4.5	16	80.35	72	22	60	30	23.5	52.0	116	MB 45 - 2.5X - S	-PIN
	40	183.34	180	35	100		34.0	52.0	81		-GEAR
5.0	16	89.28	80	25	65	33	26.0	58.0	129	MB 50 - 2.5X - S	-PIN
	40	203.71	200	40	110		36.0	56.0	88		-GEAR
6.0	16	107.16	96	25	80	36.5	26.8	62.0	150	MB 60 - 2.5X - S	-PIN
	40	244.44	240	40	125		34.0	55.0	95		-GEAR

pinion pitch angle 21° 48'
gear pitch angle 68° 12'

Material

Steel BS970 Pt.3 1991 080M40 (EN8)

or equivalent

All dimensions in millimetres.

Pressure angle 20°.

These bevel gears are cut to the Gleason System.

Bore tolerances to BS. 4500: 1969, H8.

General tolerance unless otherwise stated ± 0.25 .

Angular accuracy between shafts $\pm 0^{\circ}5'$.

Shaft axes should intersect within ± 0.025 .

Mounting distance tolerance

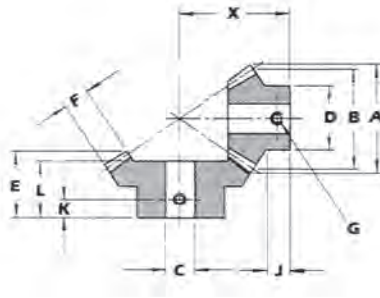
(Dimn. X) $\begin{matrix} +NIL \\ -0.05 \end{matrix}$

These gears are not hardened.

Can only be run at a 90° shaft angle
extra pinion or gear available

Straight - 3:1 ratio

Steel, 1.0 to 6.0 module



GEARS

mod	No. Teeth	Outside Dia.	Pitch Dia.	Bore Dia. H8	Boss Dia.	Overall Length	Face Width	Boss Projection	Length through bore	Mounting Distance	Catalogue Ref (set)	Steel	Parts
		A Ø	B Ø	C Ø	D Ø	E	F	J	L	X			
1.0	15	16.90	15	5	12.5	15.40	7	8.0	14.5	31.0	MB 10 - 3X - S	STEEL	-PIN
	45	45.63	45	10	28.0	17.40		10.0	15.5	22.0			-GEAR
1.5	15	25.35	22.5	8	19.0	22.10	10	11.6	21.0	46.0	MB 15 - 3X - S	STEEL	-PIN
	45	68.45	67.5	14	40.0	23.90		14.5	21.5	31.0			-GEAR
1.5	16	28.01	24	10	21.0	22.30	12	10.0 *	10.0 *	46.5	MB 15 - 3 - S	STEEL	-PIN
	48	72.56	72	12	40.0	25.27		15.6 *	23.2	33.0			-GEAR
2.0	15	33.79	30	12	25.0	28.70	14	14.0	27.0	60.0	MB 20 - 3X - S	STEEL	-PIN
	45	91.26	90	18	50.0	31.70		20.0	28.0	41.0			-GEAR
2.0	16	37.35	32	12	28.5	28.83	15	13.4	13.4	62.0	MB 20 - 3 - S	STEEL	-PIN
	48	96.75	96	16	53.0	32.44		19.8	29.6	43.0			-GEAR
2.5	15	42.24	37.5	14	31.0	33.80	17.5	15.5	32.0	73.0	MB 25 - 3X - S	STEEL	-PIN
	45	114.08	112.5	20	60.0	36.40		22.0	32.0	48.0			-GEAR
2.5	16	46.68	40	12	36.0	32.84	18	14.3	14.3	75.0	MB 25 - 3 - S	STEEL	-PIN
	48	120.93	120	20	65.0	39.57		24.0	36.0	53.0			-GEAR
3.0	15	50.68	45	16	38.0	39.00	21	17.5	37.0	86.0	MB 30 - 3X - S	STEEL	-PIN
	45	136.89	135	22	70.0	42.10		25.0	37.0	56.0			-GEAR
3.0	16	56.02	48	15	42.0	32.06	18	13.0	13.0	86.0	MB 30 - 3 - S	STEEL	-PIN
	48	145.12	144	22	70.0	43.85		26.2	39.2	61.0			-GEAR
3.5	15	59.13	52.5	18	44.0	45.20	24.5	20.0	43.0	100.0	MB 35 - 3X - S	STEEL	-PIN
	45	159.71	157.5	25	80.0	47.80		28.0	42.0	64.0			-GEAR
3.5	16	65.36	56	16	50.0	38.00	22	15.0	15.0	100.0	MB 35 - 3 - S	STEEL	-PIN
	48	169.31	168	25	87.5	48.29		27.4	43.0	68.0			-GEAR
4.0	15	67.58	60	20	50.0	51.40	28	22.5	49.0	114.0	MB 40 - 3X - S	STEEL	-PIN
	45	182.52	180	30	90.0	54.50		32.0	48.0	73.0			-GEAR
4.0	16	74.69	64	20	57.5	41.99	25	15.9	15.9	113.0	MB 40 - 3 - S	STEEL	-PIN
	48	193.49	192	28	100.0	58.42		15.9	52.3	81.0			-GEAR
4.5	15	76.03	67.5	22	55.0	57.10	31	24.5	54.0	128.0	MB 45 - 3X - S	STEEL	-PIN
	45	205.34	202.5	35	105.0	60.10		35.0	53.0	81.0			-GEAR
4.5	16	84.03	72	22	65.5	53.49	28	24.3	24.3	133.5	MB 45 - 3 - S	STEEL	-PIN
	48	217.68	216	32	112.5	65.56		38.8	58.7	91.0			-GEAR
5.0	15	84.48	75	25	60.0	62.80	34	27.0	60.0	142.0	MB 50 - 3X - S	STEEL	-PIN
	45	228.10	225	40	120.0	65.60		38.0	58.0	89.0			-GEAR
5.0	16	93.37	80	22	72.0	50.72	35	14.7	14.7	136.0	MB 50 - 3 - S	STEEL	-PIN
	48	241.87	240	32	125.0	65.86		35.0	58.6	93.0			-GEAR
6.0	15	101.40	90	25	75.0	70.20	41	27.5	66.0	165.0	MB 60 - 3X - S	STEEL	-PIN
	45	273.78	270	45	140.0	70.00		35.0	60.0	98.0			-GEAR
6.0	16	112.04	96	40	86.5	75.11	50	24.4	24.4	170.0	MB 60 - 3 - S	STEEL	-PIN
	48	290.25	288	55	137.5	114.73		75.5	106.7	145.0			-GEAR

* boss has 1 x M6 tapped hole into bore

pitch line angle of pinion (smaller)
pitch line angle of gear (larger)

18° 25'
71° 34'

Material

Steel BS970 Pt. 3 1991 080M40(EN8) or equivalent

All dimensions in millimetres. Pressure angle 20°. These bevel gears are cut to the Gleason System.

Bore tolerances to BS 4500: 1969, H8. General tolerance unless otherwise stated ± 0.25 . Angular accuracy between shafts $\pm 0^\circ-5'$. Shaft axes should intersect with ± 0.025 . Mounting distance tolerance (Dimn. X)

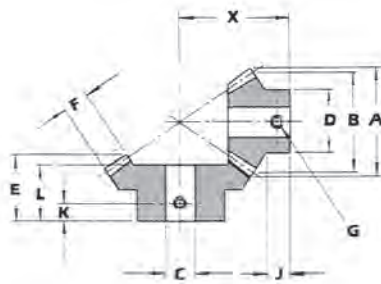
+ NIL
-0.05

These gears are not hardened.

Can only be run at a 90° shaft angle extra pinion or gear available.

Straight - 4:1 ratio

Steel, 1.5 to 6.0 module



mod	No. Teeth	Outside Dia.		Pitch Dia.		Bore Dia.		Boss Dia.	Overall Length	Face Width	Boss Projection	Length through bore L	Mounting Distance X	Catalogue Ref (set)	Parts (parts)
		A Ø	B Ø	C Ø	D Ø	E	F								
1.0	15	16.94	15	5	12.5	16.90				9	7.7	16.5	38.0	MB 15 - 4X - S	-PIN
	60	60.49	60	12	35.0	18.40					10.0	16.5	23.0		-GEAR
1.5	15	25.41	22.5	8	19.0	23.90				12	11.5	23.0	57.0	MB 15 - 4X - S	-PIN
	60	90.74	90	16	50.0	25.70					15.5	23.0	33.0		-GEAR
1.5	16	28.17	24	10	21.0	28.50				12	16.1 *		64.5	MB 15 - 4 - S	-PIN
	64	96.42	96	15	50.0	28.50					19.5 *	26.1	37.0		-GEAR
2.0	15	33.88	30	12	25.0	30.80				16	14.5	30.0	75.0	MB 20 - 4X - S	-PIN
	60	120.97	120	20	65.0	35.30					22.0	32.0	45.0		-GEAR
2.0	16	37.55	32	12	28.5	31.45				18	13.1		77.5	MB 20 - 4 - S	-PIN
	64	128.55	128	16	62.5	33.07					20.6	30.1	44.0		-GEAR
2.5	15	42.35	37.5	14	31.0	37.80				20	17.0	36.0	93.0	MB 25 - 4X - S	-PIN
	60	151.21	150	22	80.0	40.90					25.0	36.0	53.0		-GEAR
2.5	16	46.94	40	12	36.0	36.96				22	14.5		95.0	MB 25 - 4 - S	-PIN
	48	160.69	160	20	75.0	40.23					24.8	26.5	54.0		-GEAR
3.0	15	50.82	45	16	38.0	44.80				24	20.0	43.0	111.0	MB 30 - 4X - S	-PIN
	60	181.45	180	28	95.0	47.40					28.0	42.0	62.0		-GEAR
3.0	16	56.33	48	15	43.0	43.99				25	18.4		115.0	MB 30 - 4 - S	-PIN
	48	192.83	192	25	87.5	48.16					29.9	43.5	65.0		-GEAR
3.5	15	59.29	52.5	18	44.0	51.70				28	23.0	50.0	129.0	MB 35 - 4X - S	-PIN
	60	211.69	210	32	110.0	52.00					30.0	46.0	69.0		-GEAR
3.5	16	65.72	56	16	50.0	57.96				30	27.3		140.0	MB 35 - 4 - S	-PIN
	48	224.97	224	28	112.5	57.53					36.1	52.2	77.0		-GEAR
4.0	15	67.76	60	20	48.0	56.80				32	23.5	55.0	145.0	MB 40 - 4X - S	-PIN
	60	241.92	240	35	125.0	60.60					36.0	53.0	80.0		-GEAR
4.0	16	75.11	64	20	58.0	59.13				30	28.2		157.0	MB 40 - 4 - S	-PIN
	48	257.10	256	32	125.0	65.81					42.2	59.4	89.0		-GEAR
5.0	15	84.70	75	25	60.0	69.70				40	28.1	67.0	180.0	MB 50 - 4X - S	-PIN
	60	302.40	300	45	160.0	70.80					38.0	62.0	95.0		-GEAR
5.0	16	93.88	80	35	72.5	74.63				50	24.0		185.0	MB 50 - 4 - S	-PIN
	48	312.39	320	55	137.5	113.77					81.5	106.7	140.0		-GEAR
6.0	15	101.64	90	25	75.0	74.70				45	28.1	71.0	210.0	MB 60 - 4X - S	-PIN
	60	362.88	360	50	180.0	73.30					38.0	62.0	103.0		-GEAR

* boss has 1 x M6 tapped hole into bore

pitch line angle of pinion (smaller)
pitch line angle of gear (larger)

14° 02'
75° 58'

Material

Steel **BS970 Pt. 3 1991 080M40(EN8)** or equivalent

All dimensions in millimetres. Pressure angle 20°. These bevel gears are cut to the Gleason System.

Bore tolerances to BS 4500: 1969, H8. General tolerance unless otherwise stated ± 0.25 . Angular accuracy between shafts $\pm 0^\circ-5'$. Shaft axes should intersect with ± 0.025 . Mounting distance tolerance (Dimm. X)

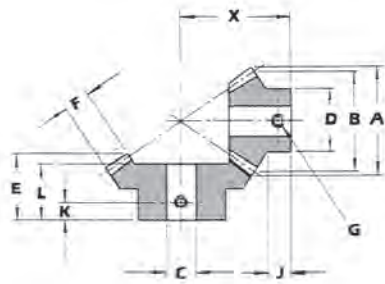
These gears are not hardened.

Can only be run at a 90° shaft angle extra pinion or gear available.

+ NIL
-0.05

Straight – moulded

Ratio, 1.5, 2, 3, 4 & 5



GEARS

mod	Teeth No.	Outside Dia.	Pitch Dia.	Bore Dia. <small>+0.001-0.002</small>	Boss Dia.	Overall Length	Boss Projection	Mounting Distance	Catalogue Ref moulded (set)	(parts)
		A	B	C	D	E	J	X		
1.5:1 ratio										
1.5	16	26.00	24.00	8.000	20.0	18.8	10.8	30.0	MB 15 - 1.5X - MOLD	-PIN
	24	37.00	36.00	10.000	24.0	19.6	11.3	26.6		-GR
2 : 1 ratio										
0.5	20	11.20	10.00	3.000	8.0	8.5	4.0	16.0	MB 05 - 2X - MOLD	-PIN
	40	20.30	20.00	4.000	12.0	8.3	4.0	12.0		-GR
0.8	20	17.90	16.00	4.000	12.0	11.5	5.0	24.0	MB 08 - 2X - MOLD	-PIN
	40	32.50	32.00	5.000	15.0	11.9	6.0	18.0		-GR
1	20	22.40	20.00	5.000	15.0	14.5	7.0	30.0	MB 10 - 2X - MOLD	-PIN
	40	40.00	40.60	6.000	18.0	14.5	7.0	22.0		-GR
1	15	16.80	15.00	5.000	12.2	17.0	10.6	26.4	MB 10 - 2Y - MOLD	-PIN
	30	31.10	30.00	8.000	18.0	16.2	9.1	20.9		-GR
1.5	15	25.40	22.50	8.000	17.0	22.8	11.5	35.8	MB 15 - 2X - MOLD	-PIN
	30	46.40	45.00	10.000	23.4	19.5	9.6	26.2		-GR
2	15	33.60	30.00	10.000	22.5	27.0	11.8	44.2	MB 20 - 2X - MOLD	-PIN
	30	62.20	60.00	10.000	30.2	24.2	11.8	32.6		-GR
2.5	15	42.00	37.50	12.000	26.5	31.2	13.0	53.3	MB 25 - 2X - MOLD	-PIN
	30	77.30	75.00	14.000	36.1	29.5	15.0	40.5		-GR
3	15	50.30	45.00	14.000	31.2	36.3	14.8	63.3	MB 30 - 2X - MOLD	-PIN
	30	93.00	90.00	18.000	45.0	37.0	19.0	49.5		-GR
3 : 1 ratio										
1	15	16.60	15.00	4.000	12.3	20.4	11.0	34.3	MB 10 - 3X - MOLD	-PIN
	45	46.10	45.00	10.000	23.4	18.2	9.6	22.7		-GR
1.5	15	25.10	22.50	8.000	17.2	26.8	12.5	47.9	MB 15 - 3X - MOLD	-PIN
	45	68.80	67.50	10.000	30.4	23.0	11.5	29.4		-GR
2	10	24.00	20.00	6.000	15.5	25.0	12.0	43.7	MB 20 - 3X - MOLD	-PIN
	30	61.70	60.00	12.000	30.3	22.5	11.5	28.0		-GR
2.5	10	29.70	25.00	8.000	18.8	28.8	13.0	52.4	MB 25 - 3X - MOLD	-PIN
	30	77.20	75.00	18.000	36.1	29.0	15.5	35.7		-GR
4 : 1 ratio										
1	10	12.00	10.00	4.000	7.8	17.7	9.3	30.1	MB 10 - 4X - MOLD	-PIN
	40	40.80	40.00	10.000	23.4	17.0	10.8	20.1		-GR
1.5	10	18.00	15.00	5.000	11.3	23.5	10.9	41.7	MB 15 - 4X - MOLD	-PIN
	40	61.20	60.00	12.000	30.4	21.7	12.8	26.2		-GR
2	10	23.80	20.00	6.000	14.3	28.9	12.8	54.0	MB 20 - 4X - MOLD	-PIN
	40	81.50	80.00	10.000	36.0	27.0	16.6	32.5		-GR
5 : 1 ratio										
1	12	13.70	12.00	4.000	9.5	20.3	10.0	21.0	MB 10 - 5X - MOLD	-PIN
	60	60.40	60.00	10.000	20.5	17.4	11.0	40.5		-GR