

No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Catalogue No.
12	3.50	3.00	1.0000	2.250	2.500	1.500	A4-12-S
14	4.00	3.50	1.0000	2.750	2.500	1.500	A4-14-S
15	4.25	3.75	1.0000	3.000	2.500	1.500	A4-15-S
16	4.50	4.00	1.2500	3.250	2.500	1.500	A4-16-S
18	5.00	4.50	1.2500	3.750	2.500	1.500	A4-18-S
20	5.50	5.00	1.2500	4.000	2.500	1.500	A4-20-S
24	6.50	6.00	1.2500	4.000	2.500	1.500	A4-24-S
28	7.50	7.00	1.2500	4.250	2.500	1.500	A4-28-S
32	8.50	8.00	1.2500	4.250	2.750	1.500	A4-32-S
36	9.50	9.00	1.2500	4.250	2.750	1.500	A4-36-S

No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Catalogue No.
12	2.333	2.000	1.0000	1.500	2.500	1.500	A6-12-S
14	2.667	2.333	1.0000	1.750	2.500	1.500	A6-14-S
15	2.833	2.500	1.0000	2.000	2.500	1.500	A6-15-S
16	3.000	2.667	1.0000	2.000	2.500	1.500	A6-16-S
18	3.333	3.000	1.0000	2.000	2.500	1.500	A6-18-S
20	3.667	3.333	1.0000	2.000	2.500	1.500	A6-20-S
21	3.833	3.500	1.0000	2.000	3.000	1.500	A6-21-S
24	4.333	4.000	1.2500	3.000	3.000	1.500	A6-24-S
27	4.833	4.500	1.2500	3.000	3.000	1.500	A6-27-S
28	5.000	4.667	1.2500	3.000	3.000	1.500	A6-28-S
32	5.667	5.333	1.2500	3.000	3.000	1.500	A6-32-S
36	6.333	6.000	1.2500	3.000	3.000	1.500	A6-36-S

Material

Steel BS 970 Pt.3 1991 080M40 (EN8) or equivalent

All dimensions in inches

Pressure angle 20°

Bore tolerances to BS 1916: 1953 Pt. 1, H8

Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8

General tolerance unless otherwise stated ±0.010"

These gears are NOT hardened

Material

Steel BS 970 Pt. 1 1991 080M15 (EN32) Or BS 970 Pt. 1 1991 230M07 (EN1A)

All dimensions in inches

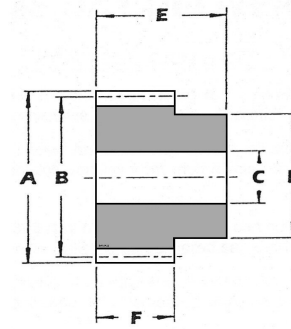
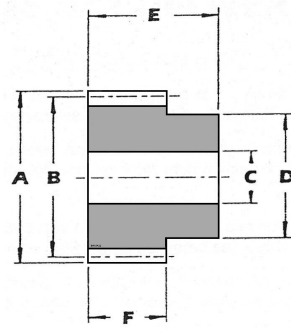
Pressure angle 20°

Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8

Bore tolerances to BS 1916: 1953 Pt. 1, H8

General tolerance unless otherwise stated ±0.010"

These gears are NOT hardened



No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Catalogue No.
12	1.750	1.500	0.750	1.125	2.00	1.25	A8-12-S
14	2.000	1.750	0.750	1.250	2.00	1.25	A8-14-S
15	2.125	1.875	0.875	1.375	2.00	1.25	A8-15-S
16	2.250	2.000	0.875	1.500	2.00	1.25	A8-16-S
18	2.500	2.250	0.875	1.750	2.00	1.25	A8-18-S
20	2.750	2.500	0.875	1.750	2.00	1.25	A8-20-S
22	3.000	2.750	0.875	1.750	2.00	1.25	A8-22-S
24	3.250	3.000	0.875	2.000	2.25	1.25	A8-24-S
28	3.750	3.500	0.875	2.000	2.25	1.25	A8-28-S
30	4.000	3.750	0.875	2.000	2.25	1.25	A8-30-S
32	4.250	4.000	1.000	2.500	2.25	1.25	A8-32-S
36	4.750	4.500	1.000	2.500	2.25	1.25	A8-36-S
40	5.250	5.000	1.000	2.500	2.25	1.25	A8-40-S
42	5.500	5.250	1.000	2.500	2.25	1.25	A8-42-S
44	5.750	5.500	1.000	2.500	2.25	1.25	A8-44-S
48	6.250	6.000	1.000	2.500	2.25	1.25	A8-48-S

No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Catalogue No.
12	1.400	1.200	0.625	0.875	1.625	1.000	A10-12-S
14	1.600	1.400	0.625	0.937	1.625	1.000	A10-14-S
15	1.700	1.500	0.750	1.125	1.625	1.000	A10-15-S
16	1.800	1.600	0.750	1.250	1.625	1.000	A10-16-S
18	2.000	1.800	0.750	1.375	1.625	1.000	A10-18-S
20	2.200	2.000	0.750	1.500	1.625	1.000	A10-20-S
24	2.600	2.400	0.750	1.500	1.625	1.000	A10-24-S
25	2.700	2.500	0.750	1.500	1.625	1.000	A10-25-S
28	3.000	2.800	0.750	1.500	1.875	1.000	A10-28-S
30	3.200	3.000	0.750	1.500	1.875	1.000	A10-30-S
32	3.400	3.200	0.750	1.500	1.875	1.000	A10-32-S
35	3.700	3.500	0.750	1.500	1.875	1.000	A10-35-S
36	3.800	3.600	0.750	1.500	1.875	1.000	A10-36-S
40	4.200	4.000	0.875	2.500	1.875	1.000	A10-40-S
42	4.400	4.200	0.875	2.500	1.875	1.000	A10-42-S
45	4.700	4.500	0.875	2.500	1.875	1.000	A10-45-S
48	5.000	4.800	0.875	2.500	1.875	1.000	A10-48-S
50	5.200	5.000	0.875	2.500	1.875	1.000	A10-50-S
54	5.600	5.400	0.875	2.500	1.875	1.000	A10-54-S
55	5.700	5.500	0.875	2.500	1.875	1.000	A10-55-S
60	6.200	6.000	0.875	2.500	1.875	1.000	A10-60-S

Material

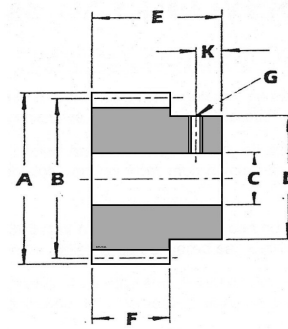
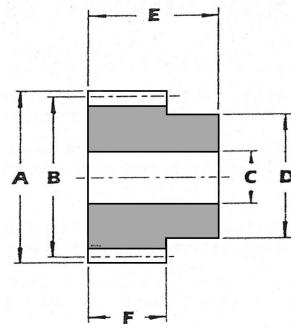
Steel BS 970 Pt.3 1991 080M40 (EN8) or equivalent

All dimensions in inches
Pressure angle 20°
Bore tolerances to BS 1916: 1953 Pt. 1, H8
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

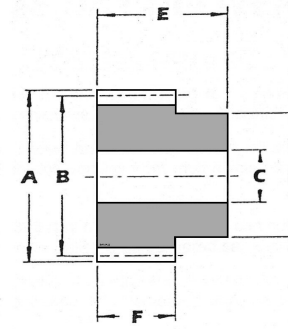
Material

Steel BS 970 Pt. 1 1991 080M15 (EN32) Or BS 970 Pt. 1 1991 230M07 (EN1A)

All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916: 1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened



Type A



Type B

No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Catalogue No.
12	1.167	1.0000	0.500	0.750	1.250	0.750	A12-12-S
13	1.250	1.0833	0.500	0.750	1.250	0.750	A12-13-S
14	1.334	1.1667	0.500	0.875	1.250	0.750	A12-14-S
15	1.417	1.2500	0.625	1.000	1.250	0.750	A12-15-S
16	1.500	1.3333	0.625	1.000	1.250	0.750	A12-16-S
18	1.667	1.5000	0.625	1.250	1.250	0.750	A12-18-S
20	1.834	1.6667	0.625	1.250	1.250	0.750	A12-20-S
21	1.917	1.7500	0.625	1.250	1.250	0.750	A12-21-S
22	2.000	1.8333	0.625	1.250	1.250	0.750	A12-22-S
24	2.167	2.0000	0.625	1.250	1.250	0.750	A12-24-S
30	2.667	2.5000	0.625	1.250	1.250	0.750	A12-30-S
32	2.834	2.6667	0.625	1.250	1.250	0.750	A12-32-S
36	3.167	3.0000	0.625	1.250	1.250	0.750	A12-36-S
40	3.500	3.3333	0.625	1.250	1.250	0.750	A12-40-S
48	4.167	4.0000	0.750	2.500	1.500	0.750	A12-48-S
54	4.667	4.5000	0.750	2.500	1.500	0.750	A12-54-S
60	5.167	5.0000	0.750	2.500	1.500	0.750	A12-60-S
64	5.500	5.3333	0.750	2.500	1.500	0.750	A12-64-S
72	6.167	6.0000	0.750	2.500	1.500	0.750	A12-72-S

No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew G	Pos'n K	Type	Catalogue No.
12	0.875	0.7500	0.375	0.562	0.937	0.500	M3	0.250	A	A16-12-S
13	0.938	0.8125	0.375	0.625	0.937	0.500	M3	0.250	A	A16-13-S
14	1.000	0.8750	0.375	0.687	0.937	0.500	M3	0.250	A	A16-14-S
15	1.063	0.9375	0.500	0.750	0.937	0.500	M3	0.250	A	A16-15-S
16	1.125	1.0000	0.500	0.812	0.937	0.500	M3	0.250	A	A16-16-S
18	1.250	1.1250	0.500	0.937	0.937	0.500	M5	0.250	A	A16-18-S
20	1.375	1.2500	0.500	1.000	0.937	0.500	M5	0.250	A	A16-20-S
22	1.500	1.3750	0.500	1.000	0.937	0.500	M5	0.250	A	A16-22-S
24	1.625	1.5000	0.500	1.000	0.937	0.500	M5	0.250	A	A16-24-S
26	1.750	1.6250	0.500	1.000	0.937	0.500	M5	0.250	A	A16-26-S
28	1.875	1.7500	0.625	1.250	1.000	0.500	M5	0.250	A	A16-28-S
30	2.000	1.8750	0.625	1.250	1.000	0.500	M5	0.250	A	A16-30-S
32	2.125	2.0000	0.625	1.250	1.000	0.500	M5	0.250	A	A16-32-S
36	2.375	2.2500	0.625	1.250	1.000	0.500	M5	0.250	A	A16-36-S
40	2.625	2.5000	0.625	1.250	1.000	0.500	M5	0.250	A	A16-40-S
48	3.125	3.0000	0.625	1.250	1.000	0.500	M5	0.250	A	A16-48-S
54	3.500	3.3750	0.625	1.250	1.000	0.500	-	-	B	A16-54-S
56	3.625	3.5000	0.625	1.250	1.000	0.500	-	-	B	A16-56-S
60	3.875	3.7500	0.625	1.250	1.125	0.500	-	-	B	A16-60-S
64	4.125	4.0000	0.625	1.250	1.125	0.500	-	-	B	A16-64-S

Material

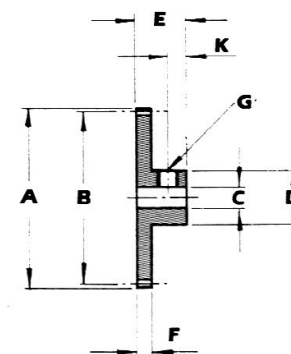
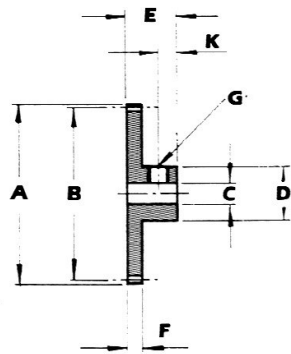
Steel BS 970 Pt.3 1991 080M40 (EN8) or equivalent

All dimensions in inches
Pressure angle 20°
Bore tolerances to BS 1916: 1953 Pt. 1, H8
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

Material

Steel BS 970 Pt. 1 1991 080M15 (EN32) Or BS 970 Pt. 1 1991 230M07 (EN1A)

All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916: 1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened



GEARS

GEARS

No. Teeth	Outside Dia.	Pitch Dia.	Bore Dia.	Boss Dia.	Overall Length	Face Width	Setscrew		Catalogue No.
	A	B	C	D	E	F	G	K	
12	0.700	0.600	0.3125	0.437	0.750	0.375	M3	0.218	A20-12-S
13	0.750	0.650	0.3125	0.468	0.750	0.375	M3	0.218	A20-13-S
14	0.800	0.700	0.3125	0.500	0.750	0.375	M3	0.218	A20-14-S
15	0.850	0.750	0.375	0.562	0.750	0.375	M3	0.218	A20-15-S
16	0.900	0.800	0.375	0.625	0.750	0.375	M3	0.218	A20-16-S
18	1.000	0.900	0.375	0.687	0.750	0.375	M4	0.218	A20-18-S
20	1.100	1.000	0.375	0.750	0.750	0.375	M4	0.218	A20-20-S
22	1.200	1.100	0.375	0.750	0.750	0.375	M4	0.218	A20-22-S
24	1.300	1.200	0.375	0.750	0.750	0.375	M4	0.218	A20-24-S
25	1.350	1.250	0.375	0.750	0.750	0.375	M4	0.218	A20-25-S
28	1.500	1.400	0.375	0.750	0.750	0.375	M4	0.218	A20-28-S
30	1.600	1.500	0.375	0.750	0.750	0.375	M4	0.218	A20-30-S
32	1.700	1.600	0.500	1.000	0.875	0.375	M4	0.218	A20-32-S
35	1.850	1.750	0.500	1.000	0.875	0.375	M4	0.218	A20-35-S
36	1.900	1.800	0.500	1.000	0.875	0.375	M4	0.218	A20-36-S
40	2.100	2.000	0.500	1.000	0.875	0.375	M4	0.218	A20-40-S
48	2.500	2.400	0.500	1.000	0.875	0.375	M4	0.218	A20-48-S
50	2.600	2.500	0.500	1.000	0.875	0.375	M4	0.218	A20-50-S
60	3.100	3.000	0.500	1.000	0.875	0.375	M4	0.218	A20-60-S
64	3.300	3.200	0.500	1.000	0.875	0.375	M4	0.218	A20-64-S

No. Teeth	Outside Dia.	Pitch Dia.	Bore Dia.	Boss Dia.	Overall Length	Face Width	Setscrew	Pos'n	Catalogue No.
	A	B	C	D	E	F	G	K	
15	0.708	0.6250	0.3125	0.484	0.625	0.312	M3	0.187	A24-15-S
20	0.917	0.8333	0.3125	0.625	0.625	0.312	M3	0.187	A24-20-S
24	1.083	1.0000	0.3125	0.625	0.625	0.312	M3	0.187	A24-24-S
25	1.125	1.0417	0.3125	0.625	0.625	0.312	M3	0.187	A24-25-S
30	1.333	1.2500	0.375	0.750	0.750	0.312	M4	0.187	A24-30-S
35	1.542	1.4583	0.375	0.750	0.750	0.312	M4	0.187	A24-35-S
40	1.750	1.6667	0.375	0.750	0.750	0.312	M4	0.187	A24-40-S
45	1.958	1.8750	0.375	0.750	0.750	0.312	M4	0.187	A24-45-S
48	2.083	2.0000	0.375	0.750	0.750	0.312	M4	0.187	A24-48-S
50	2.167	2.0833	0.375	0.750	0.750	0.312	M4	0.187	A24-50-S
55	2.375	2.2917	0.375	0.750	0.750	0.312	M4	0.187	A24-55-S
60	2.583	2.5000	0.500	1.000	0.812	0.312	M4	0.218	A24-60-S
63	2.708	2.6250	0.500	1.000	0.812	0.312	M4	0.218	A24-63-S
65	2.792	2.7083	0.500	1.000	0.812	0.312	M4	0.218	A24-65-S
70	3.000	2.9167	0.500	1.000	0.812	0.312	M4	0.218	A24-70-S
75	3.208	3.1250	0.500	1.000	0.812	0.312	M4	0.218	A24-75-S
80	3.417	3.3333	0.500	1.000	0.812	0.312	M4	0.218	A24-80-S
85	3.625	3.5417	0.500	1.250	0.937	0.312	M4	0.218	A24-85-S
90	3.833	3.7500	0.500	1.250	0.937	0.312	M4	0.218	A24-90-S
95	4.042	3.9583	0.500	1.250	0.937	0.312	M4	0.218	A24-95-S
96	4.083	4.0000	0.500	1.250	0.937	0.312	M4	0.218	A24-96-S
100	4.250	4.1667	0.500	1.250	0.937	0.312	M4	0.218	A24-100-S
120	5.083	5.0000	0.500	1.250	0.937	0.312	M4	0.218	A24-120-S

Material

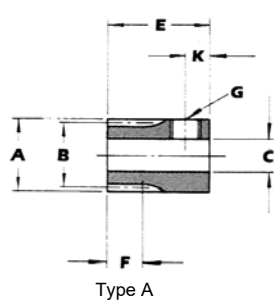
Steel BS 970 Pt.3 1991 080M40 (EN8) or equivalent

All dimensions in inches
Pressure angle 20°
Bore tolerances to BS 1916: 1953 Pt. 1, H8
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
General tolerance unless otherwise stated ±0.010"
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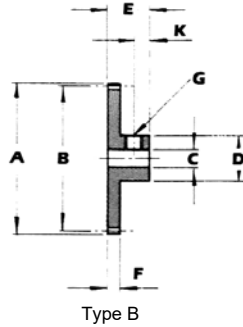
Material

Steel BS 970 Pt. 1 1991 080M15 (EN32) Or BS 970 Pt. 1 1991 230M07 (EN1A)

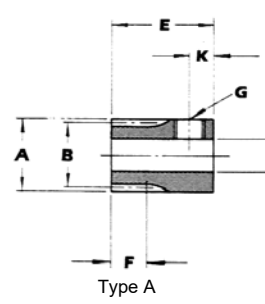
All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916: 1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened



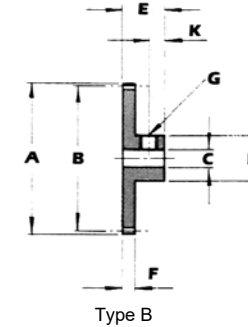
Type A



Type B



Type A



Type B

GEARS

No. Teeth	Type	Outside Dia.		Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew	Pos'n	Catalogue No.	
		A	B							Steel	Brass
10	A	0.375	0.3125	0.1562	-	0.625	0.250	M3	0.156	A32-10-S	A32-10-B
15	B	0.531	0.4688	0.1875	0.359	0.562	0.250	M3	0.156	A32-15-S	A32-15-B
16	B	0.563	0.5000	0.1875	0.359	0.562	0.250	M3	0.156	A32-16-S	A32-16-B
20	B	0.688	0.6250	0.2500	0.500	0.500	0.250	M3	0.156	A32-20-S	A32-20-B
25	B	0.844	0.7813	0.2500	0.500	0.500	0.250	M3	0.156	A32-25-S	A32-25-B
30	B	1.000	0.9375	0.2500	0.500	0.500	0.250	M3	0.156	A32-30-S	A32-30-B
32	B	1.063	1.0000	0.2500	0.500	0.500	0.250	M3	0.156	A32-32-S	A32-32-B
35	B	1.156	1.0938	0.3125	0.625	0.563	0.250	M3	0.156	A32-35-S	A32-35-B
40	B	1.313	1.2500	0.3125	0.625	0.563	0.250	M4	0.156	A32-40-S	A32-40-B
45	B	1.469	1.4063	0.3125	0.625	0.563	0.250	M4	0.156	A32-45-S	A32-45-B
50	B	1.625	1.5625	0.3125	0.625	0.563	0.250	M4	0.156	A32-50-S	A32-50-B
55	B	1.781	1.7188	0.3125	0.625	0.563	0.250	M4	0.156	A32-55-S	A32-55-B
60	B	1.938	1.8750	0.3750	0.750	0.625	0.250	M4	0.156	A32-60-S	A32-60-B
63	B	2.031	1.9688	0.3750	0.750	0.625	0.250	M4	0.156	A32-63-S	A32-63-B
64	B	2.063	2.0000	0.3750	0.750	0.625	0.250	M4	0.156	A32-64-S	A32-64-B
65	B	2.094	2.0313	0.3750	0.750	0.625	0.250	M4	0.156	A32-65-S	A32-65-B
70	B	2.250	2.1875	0.3750	0.750	0.625	0.250	M4	0.156	A32-70-S	A32-70-B
75	B	2.406	2.3438	0.3750	0.750	0.625	0.250	M4	0.156	A32-75-S	A32-75-B
80	B	2.563	2.5000	0.3750	0.750	0.625	0.250	M4	0.156	A32-80-S	A32-80-B
85	B	2.719	2.6563	0.3750	0.750	0.625	0.250	M4	0.156	A32-85-S	A32-85-B
90	B	2.875	2.8125	0.3750	0.750	0.625	0.250	M4	0.156	A32-90-S	A32-90-B
95	B	3.031	2.9688	0.3750	0.750	0.625	0.250	M4	0.156	A32-95-S	A32-95-B
96	B	3.063	3.0000	0.3750	0.750	0.625	0.250	M4	0.156	A32-96-S	A32-96-B
100	B	3.188	3.1250	0.3750	0.750	0.625	0.250	M4	0.156	A32-100-S	A32-100-B
120	B	3.813	3.7500	0.3750	0.750	0.625	0.250	M4	0.156	A32-120-S	A32-120-B

No. Teeth	Type	Outside Dia.		Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew	Pos'n	Catalogue No.		
		A	B							Steel	Brass	Delrin
12	A	0.350	0.300	0.1562	-	0.625	0.218	M3	0.156	A40-12-S	A40-12-B	-
16	B	0.450	0.400	0.1875	0.313	0.562	0.218	M3	0.156	A40-16-S	A40-16-B	-
20	B	0.550	0.500	0.2500	0.406	0.500	0.218	M3	0.156	A40-20-S	A40-20-B	-
24	B	0.650	0.600	0.2500	0.500	0.500	0.218	M3	0.156	A40-24-S	A40-24-B	-
30	B	0.800	0.750	0.2500	0.500	0.500	0.218	M3	0.156	A40-30-S	A40-30-B	-
32	B	0.850	0.800	0.2500	0.500	0.500	0.218	M3	0.156	A40-32-S	A40-32-B	-
36	B	0.950	0.900	0.2500	0.500	0.500	0.218	M3	0.156	A40-36-S	A40-36-B	A40-36-D
40	B	1.050	1.000	0.2500	0.625	0.500	0.218	M3	0.156	A40-40-S	A40-40-B	A40-40-D
48	B	1.250	1.200	0.2500	0.625	0.500	0.218	M3	0.156	A40-48-S	A40-48-B	A40-48-D
60	B	1.550	1.500	0.2500	0.625	0.500	0.218	M3	0.156	A40-60-S	A40-60-B	A40-60-D
64	B	1.650	1.600	0.2500	0.625	0.500	0.218	M3	0.156	A40-64-S	A40-64-B	A40-64-D
72	B	1.850	1.800	0.2500	0.625	0.500	0.218	M3	0.156	A40-72-S	A40-72-B	A40-72-D
80	B	2.050	2.000	0.2500	0.625	0.500	0.218	M3	0.156	A40-80-S	A40-80-B	A40-80-D
84	B	2.150	2.100	0.2500	0.625	0.500	0.218	M3	0.156	A40-84-S	A40-84-B	A40-84-D
90	B	2.300	2.250	0.2500	0.625	0.500	0.218	M3	0.156	A40-90-S	A40-90-B	A40-90-D
96	B	2.450	2.400	0.2500	0.625	0.500	0.218	M3	0.156	A40-96-S	A40-96-B	A40-96-D
100	B	2.550	2.500	0.2500	0.625	0.500	0.218	M3	0.156	A40-100-S	A40-100-B	A40-100-D
120	B	3.050	3.000	0.2500	0.750	0.500	0.218	M3	0.156	A40-120-S	A40-120-B	A40-120-D

Material

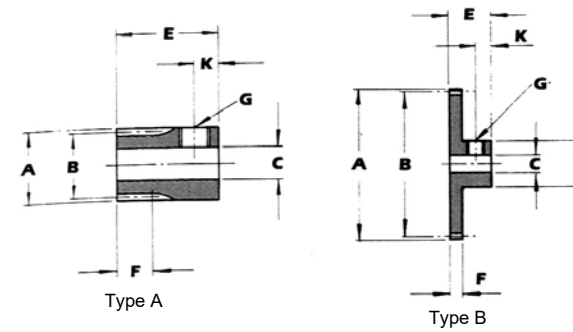
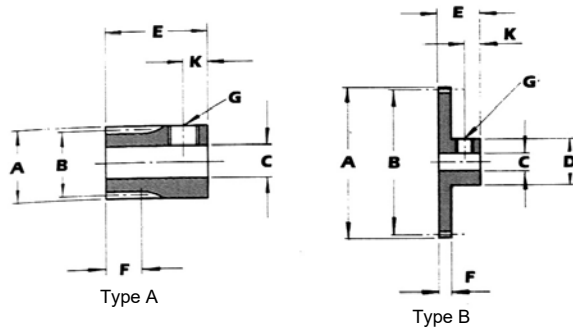
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

Material

Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121
Polyacetal

All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened



GEARS

GEARS

No. Teeth	Type	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew G	Pos'n K	Catalogue No.		
										Steel	Brass	Delrin
12	A	0.292	0.2500	0.1562	-	0.562	0.187	M3	0.125	A48-12-S	A48-12-B	-
16	A	0.375	0.3333	0.1562	-	0.562	0.187	M3	0.125	A48-16-S	A48-16-B	-
20	B	0.458	0.4167	0.1562	0.328	0.437	0.187	M3	0.125	A48-20-S	A48-20-B	-
24	B	0.542	0.5000	0.1875	0.375	0.375	0.187	M3	0.125	A48-24-S	A48-24-B	-
30	B	0.667	0.6250	0.1875	0.375	0.375	0.187	M3	0.125	A48-30-S	A48-30-B	-
32	B	0.708	0.6667	0.1875	0.375	0.375	0.187	M3	0.125	A48-32-S	A48-32-B	-
36	B	0.792	0.7500	0.1875	0.375	0.375	0.187	M3	0.125	A48-36-S	A48-36-B	A48-36-D
40	B	0.875	0.8333	0.1875	0.375	0.375	0.187	M3	0.125	A48-40-S	A48-40-B	A48-40-D
48	B	1.042	1.0000	0.2500	0.500	0.500	0.187	M3	0.125	A48-48-S	A48-48-B	A48-48-D
60	B	1.292	1.2500	0.2500	0.500	0.500	0.187	M3	0.125	A48-60-S	A48-60-B	A48-60-D
64	B	1.375	1.3333	0.2500	0.500	0.500	0.187	M3	0.125	A48-64-S	A48-64-B	A48-64-D
72	B	1.542	1.5000	0.2500	0.500	0.500	0.187	M3	0.125	A48-72-S	A48-72-B	A48-72-D
80	B	1.708	1.6667	0.2500	0.500	0.500	0.187	M3	0.125	A48-80-S	A48-80-B	A48-80-D
84	B	1.792	1.7500	0.2500	0.500	0.500	0.187	M3	0.125	A48-84-S	A48-84-B	A48-84-D
90	B	1.917	1.8750	0.2500	0.500	0.500	0.187	M3	0.125	A48-90-S	A48-90-B	A48-90-D
96	B	2.042	2.0000	0.2500	0.500	0.500	0.187	M3	0.125	A48-96-S	A48-96-B	A48-96-D
100	B	2.125	2.0833	0.2500	0.500	0.500	0.187	M3	0.125	A48-100-S	A48-100-B	A48-100-D
120	B	2.542	2.5000	0.2500	0.500	0.500	0.187	M3	0.125	A48-120-S	A48-120-B	A48-120-D

No. Teeth	Type	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew G	Pos'n K	Catalogue No.		
										Steel	Brass	Delrin
12	A	0.219	0.1875	0.1250	-	0.437	0.156	-	-	A64-12-S	A64-12-B	-
15	A	0.266	0.2344	0.1250	-	0.437	0.156	M3	0.093	A64-15-S	A64-15-B	-
16	A	0.281	0.2500	0.1250	-	0.437	0.156	M3	0.093	A64-16-S	A64-16-B	-
20	B	0.344	0.3125	0.1250	0.250	0.312	0.156	M3	0.093	A64-20-S	A64-20-B	-
24	B	0.406	0.3750	0.1250	0.312	0.312	0.156	M3	0.093	A64-24-S	A64-24-B	-
30	B	0.500	0.4688	0.1250	0.312	0.312	0.156	M3	0.093	A64-30-S	A64-30-B	-
32	B	0.531	0.5000	0.1875	0.375	0.312	0.125	M3	0.093	A64-32-S	A64-32-B	-
36	B	0.594	0.5625	0.1875	0.375	0.312	0.125	M3	0.093	A64-36-S	A64-36-B	A64-36-D
40	B	0.656	0.6250	0.1875	0.375	0.312	0.125	M3	0.093	A64-40-S	A64-40-B	A64-40-D
48	B	0.781	0.7500	0.1875	0.375	0.312	0.125	M3	0.093	A64-48-S	A64-48-B	A64-48-D
60	B	0.969	0.9375	0.1875	0.375	0.312	0.125	M3	0.093	A64-60-S	A64-60-B	A64-60-D
64	B	1.031	1.0000	0.1875	0.375	0.312	0.125	M3	0.093	A64-64-S	A64-64-B	A64-64-D
72	B	1.156	1.1250	0.1875	0.375	0.312	0.125	M3	0.093	A64-72-S	A64-72-B	A64-72-D
80	B	1.281	1.2500	0.1875	0.375	0.312	0.125	M3	0.093	A64-80-S	A64-80-B	A64-80-D
84	B	1.344	1.3125	0.1875	0.375	0.312	0.125	M3	0.093	A64-84-S	A64-84-B	A64-84-D
90	B	1.438	1.4063	0.1875	0.375	0.312	0.125	M3	0.093	A64-90-S	A64-90-B	A64-90-D
96	B	1.531	1.5000	0.1875	0.375	0.312	0.125	M3	0.093	A64-96-S	A64-96-B	A64-96-D
100	B	1.594	1.5625	0.1875	0.375	0.312	0.125	M3	0.093	A64-100-S	A64-100-B	A64-100-D
120	B	1.906	1.8750	0.1875	0.375	0.312	0.125	M3	0.093	A64-120-S	A64-120-B	A64-120-D

Material

Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

Material

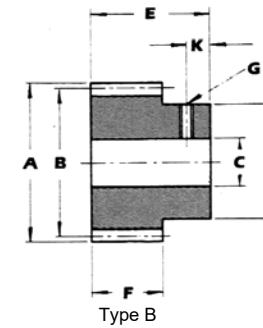
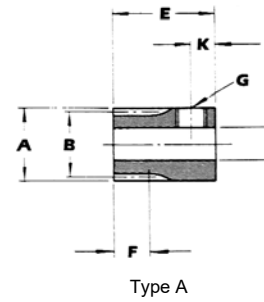
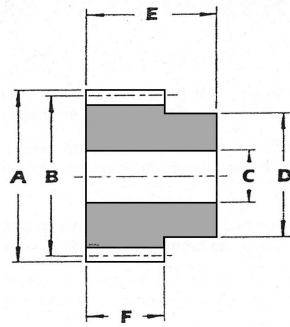
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121
Polyacetal

All dimensions in inches
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

Spur Gears

0.4 Module

Steel, Brass, Polyacetal



Spur Gears

0.5 module

Steel, Brass, Polyacetal

GEARS

GEARS

No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Steel	Brass	Polyacetal (Delrin)
12	5.6	4.8	3	5	12	5	✓	✓	✓
15	6.8	6.0	3	6	12	5	✓	✓	✓
16	7.2	6.4	3	6	12	5	✓	✓	✓
20	8.8	8.0	3	6	12	5	✓	✓	✓
24	10.4	9.6	4	8	12	5	✓	✓	✓
25	10.8	10.0	4	8	12	5	✓	✓	✓
30	12.8	12.0	4	8	12	5	✓	✓	✓
32	13.6	12.8	4	10	12	5	✓	✓	✓
35	14.8	14.0	4	10	12	5	✓	✓	✓
36	15.2	14.4	4	10	12	5	✓	✓	✓
40	16.8	16.0	4	10	12	5	✓	✓	✓
45	18.8	18.0	4	10	12	5	✓	✓	✓
48	20.0	19.2	4	10	12	5	✓	✓	✓
50	20.8	20.0	4	10	12	5	✓	✓	✓
55	22.8	22.0	4	10	12	5	✓	✓	✓
60	24.8	24.0	6	15	12	5	✓	✓	✓
64	26.4	25.6	6	15	12	5	✓	✓	✓
65	26.8	26.0	6	15	12	5	✓	✓	✓
72	29.6	28.8	6	15	12	5	✓	✓	✓
75	30.8	30.0	6	15	12	5	✓	✓	✓
80	32.8	32.0	6	15	12	5	✓	✓	✓
84	34.4	33.6	6	15	12	5	✓	✓	✓
85	34.8	34.0	6	15	12	5	✓	✓	✓
90	36.8	36.0	6	15	12	5	✓	✓	✓
95	38.8	38.0	6	15	12	5	✓	✓	✓
96	39.2	38.4	6	15	12	5	✓	✓	✓
100	40.8	40.0	6	15	12	5	✓	✓	✓
108	44.0	43.2	6	15	12	5	✓	✓	✓
120	48.8	48.0	6	15	12	5	✓	✓	✓

No. teeth	Type	Outside Dia. A	Pitch Dia. B	Bore Dia. (H8) C	Boss Dia. D	Overall length E	Face width F	Setscrew thread G	Position K	Catalogue No.		
										Steel	Brass	Delrin
12	A	7.00	6.00	4	-	14	4	M3	3	MA05-12-S	MA05-12-B	-
15	A	8.50	7.50	4	-	14	4	M3	3	MA05-15-S	MA05-15-B	-
16	A	9.00	8.00	4	-	14	4	M3	3	MA05-16-S	MA05-16-B	-
20	A	11.00	10.00	4	-	14	4	M3	3	MA05-20-S	MA05-20-B	-
24	B	13.00	12.00	5	10	10	4	M3	3	MA05-24-S	MA05-24-B	-
25	B	13.50	12.50	5	10	10	4	M3	3	MA05-25-S	MA05-25-B	-
30	B	16.00	15.00	5	10	10	4	M3	3	MA05-30-S	MA05-30-B	MA05-30-D
32	B	17.00	16.00	5	10	10	4	M3	3	MA05-32-S	MA05-32-B	MA05-32-D
35	B	18.50	17.50	5	10	10	4	M3	3	MA05-35-S	MA05-35-B	MA05-35-D
36	B	19.00	18.00	5	10	10	4	M3	3	MA05-36-S	MA05-36-B	MA05-36-D
40	B	21.00	20.00	5	10	10	4	M3	3	MA05-40-S	MA05-40-B	MA05-40-D
45	B	23.50	22.50	5	10	10	4	M3	3	MA05-45-S	MA05-45-B	MA05-45-D
48	B	25.00	24.00	5	10	10	4	M3	3	MA05-48-S	MA05-48-B	MA05-48-D
50	B	26.00	25.00	6	12	12	4	M3	3	MA05-50-S	MA05-50-B	MA05-50-D
55	B	28.50	27.50	6	12	12	4	M3	3	MA05-55-S	MA05-55-B	MA05-55-D
60	B	31.00	30.00	6	12	12	4	M3	3	MA05-60-S	MA05-60-B	MA05-60-D
64	B	33.00	32.00	6	12	12	4	M3	3	MA05-64-S	MA05-64-B	MA05-64-D
65	B	33.50	32.50	6	12	12	4	M3	3	MA05-65-S	MA05-65-B	MA05-65-D
70	B	36.00	35.00	6	12	12	4	M3	3	MA05-70-S	MA05-70-B	MA05-70-D
72	B	37.00	36.00	6	12	12	4	M3	3	MA05-72-S	MA05-72-B	MA05-72-D
75	B	38.50	37.50	6	12	12	4	M3	3	MA05-75-S	MA05-75-B	MA05-75-D
80	B	41.00	40.00	6	12	12	4	M3	3	MA05-80-S	MA05-80-B	MA05-80-D
84	B	43.00	42.00	6	12	12	4	M3	3	MA05-84-S	MA05-84-B	MA05-84-D
85	B	43.50	42.50	6	12	12	4	M3	3	MA05-85-S	MA05-85-B	MA05-85-D
90	B	46.00	45.00	6	12	12	4	M3	3	MA05-90-S	MA05-90-B	MA05-90-D
95	B	48.50	47.50	6	12	12	4	M3	3	MA05-95-S	MA05-95-B	MA05-95-D
96	B	49.00	48.00	6	12	12	4	M3	3	MA05-96-S	MA05-96-B	MA05-96-D
100	B	51.00	50.00	6	12	12	4	M3	3	MA05-100-S	MA05-100-B	MA05-100-D
108	B	55.00	54.00	6	12	12	4	M3	3	MA05-108-S	MA05-108-B	MA05-108-D
120	B	61.00	60.00	6	12	12	4	M3	3	MA05-120-S	MA05-120-B	MA05-120-D
127	B	64.5	63.50	6	12	12	4	M3	3	MA05-127-S	MA05-127-B	MA05-127-D

Material

Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres

Pressure angle 20°
Manufactured to DIN 867, quality 9gs"
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

Catalogue reference

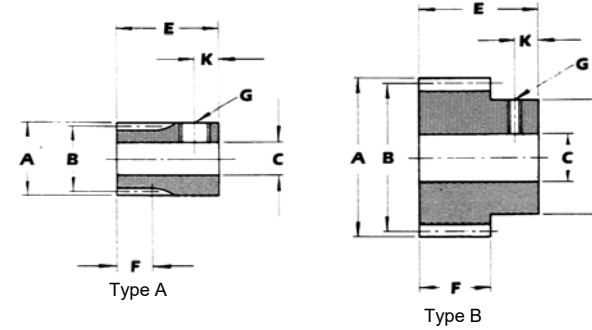
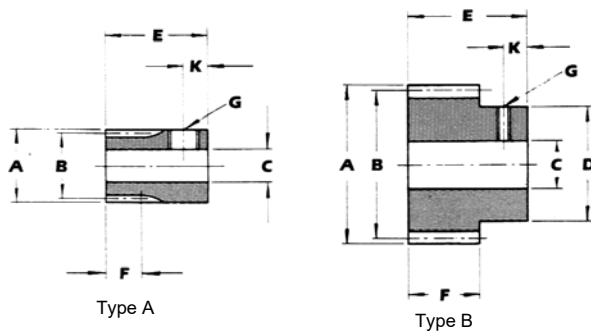
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Material

Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121
Polyacetal

All dimensions in millimetres

Pressure angle 20°
Manufactured to DIN 867, quality 9gs"
Bore tolerances to BS 1916:1953 Pt. 1, H8 General
tolerance unless otherwise stated ±0.010"
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GEARS

GEARS

No. teeth	Type	Outside Dia. A	Pitch Dia. B	Bore Dia. (H8) C	Boss Dia. D	Overall length E	Face width F	Setscrew thread G	Position K	Catalogue No.		
										Steel	Brass	Delrin
12	A	9.80	8.40	4	-	11	5	M3	3	MA07-12-S	MA07-12-B	-
15	A	11.90	10.50	4	-	11	5	M3	3	MA07-15-S	MA07-15-B	-
16	A	12.60	11.20	4	-	11	5	M3	3	MA07-16-S	MA07-16-B	-
18	B	14.00	12.60	4	10	11	5	M3	3	MA07-18-S	MA07-18-B	-
20	B	15.40	14.00	4	10	11	5	M3	3	MA07-20-S	MA07-20-B	-
22	B	16.80	15.40	4	12	11	5	M3	3	MA07-22-S	MA07-22-B	-
24	B	18.20	16.80	4	12	11	5	M3	3	MA07-24-S	MA07-24-B	-
25	B	18.90	17.50	4	15	11	5	M3	3	MA07-25-S	MA07-25-B	-
30	B	22.40	21.00	5	15	11	5	M3	3	MA07-30-S	MA07-30-B	MA07-30-D
35	B	25.90	24.50	5	15	11	5	M3	3	MA07-35-S	MA07-35-B	MA07-35-D
36	B	26.60	25.20	5	18	11	5	M3	3	MA07-36-S	MA07-36-B	MA07-36-D
40	B	29.40	28.00	5	18	11	5	M3	3	MA07-40-S	MA07-40-B	MA07-40-D
45	B	32.90	31.50	6	18	11	5	M3	3	MA07-45-S	MA07-45-B	MA07-45-D
50	B	36.40	35.00	6	18	11	5	M3	3	MA07-50-S	MA07-50-B	MA07-50-D
55	B	39.90	38.50	6	18	11	5	M3	3	MA07-55-S	MA07-55-B	MA07-55-D
60	B	43.40	42.00	6	18	11	5	M3	3	MA07-60-S	MA07-60-B	MA07-60-D
70	B	50.40	49.00	6	18	11	5	M3	3	MA07-70-S	MA07-70-B	MA07-70-D
72	B	51.80	50.40	6	20	11	5	M3	3	MA07-72-S	MA07-72-B	MA07-72-D
75	B	53.90	52.50	6	20	11	5	M3	3	MA07-75-S	MA07-75-B	MA07-75-D
80	B	57.40	56.00	6	20	11	5	M3	3	MA07-80-S	MA07-80-B	MA07-80-D
90	B	64.40	63.00	6	20	11	5	M3	3	MA07-90-S	MA07-90-B	MA07-90-D

No. of Teeth	Type	Outside Dia A	Pitch Dia B	Bore Dia C	Boss Dia D	Overall Length E	Face width F	Setscrew G	Pos'n K	Catalogue No.		
										Steel	Brass	Delrin
12	A	11.2	9.6	4	-	16	6	M3	4	MA08-12-S	MA08-12-B	-
15	A	13.6	12.0	4	-	16	6	M3	4	MA08-15-S	MA08-15-B	-
16	B	14.4	12.8	4	10	14	6	M3	4	MA08-16-S	MA08-16-B	-
20	B	17.6	16.0	6	12	14	6	M3	4	MA08-20-S	MA08-20-B	-
24	B	20.8	19.2	6	12	14	6	M3	4	MA08-24-S	MA08-24-B	-
25	B	21.6	20.0	6	12	14	6	M3	4	MA08-25-S	MA08-25-B	-
30	B	25.6	24.0	6	12	14	6	M3	4	MA08-30-S	MA08-30-B	MA08-30-D
32	B	27.2	25.6	6	12	14	6	M3	4	MA08-32-S	MA08-32-B	MA08-32-D
35	B	29.6	28.0	6	12	14	6	M3	4	MA08-35-S	MA08-35-B	MA08-35-D
36	B	30.4	28.8	8	12	14	6	M3	4	MA08-36-S	MA08-36-B	MA08-36-D
40	B	33.6	32.0	8	20	14	6	M4	4	MA08-40-S	MA08-40-B	MA08-40-D
45	B	37.6	36.0	8	20	14	6	M4	4	MA08-45-S	MA08-45-B	MA08-45-D
48	B	40.0	38.4	8	20	14	6	M4	4	MA08-48-S	MA08-48-B	MA08-48-D
50	B	41.6	40.0	8	20	14	6	M4	4	MA08-50-S	MA08-50-B	MA08-50-D
55	B	45.6	44.0	8	20	14	6	M4	4	MA08-55-S	MA08-55-B	MA08-55-D
60	B	49.6	48.0	8	20	14	6	M4	4	MA08-60-S	MA08-60-B	MA08-60-D
64	B	52.8	51.2	8	20	14	6	M4	4	MA08-64-S	MA08-64-B	MA08-64-D
65	B	53.6	52.0	8	20	14	6	M4	4	MA08-65-S	MA08-65-B	MA08-65-D
70	B	57.6	56.0	8	20	14	6	M4	4	MA08-70-S	MA08-70-B	MA08-70-D
72	B	59.2	57.6	8	20	14	6	M4	4	MA08-72-S	MA08-72-B	MA08-72-D
75	B	61.6	60.0	8	20	14	6	M4	4	MA08-75-S	MA08-75-B	MA08-75-D
80	B	65.6	64.0	8	30	14	6	M5	4	MA08-80-S	MA08-80-B	MA08-80-D
84	B	68.8	67.2	8	30	14	6	M5	4	MA08-84-S	MA08-84-B	MA08-84-D
85	B	69.6	68.0	8	30	14	6	M5	4	MA08-85-S	MA08-85-B	MA08-85-D
90	B	73.6	72.0	8	30	14	6	M5	4	MA08-90-S	MA08-90-B	MA08-90-D
95	B	77.6	76.0	8	30	14	6	M5	4	MA08-95-S	MA08-95-B	MA08-95-D
96	B	78.4	76.8	8	30	14	6	M5	4	MA08-96-S	MA08-96-B	MA08-96-D
100	B	81.6	80.0	8	30	14	6	M5	4	MA08-100-S	MA08-100-B	MA08-100-D
108	B	88.0	86.4	8	30	14	6	M5	4	MA08-108-S	MA08-108-B	MA08-108-D
120	B	97.6	96.0	8	30	14	6	M5	4	MA08-120-S	MA08-120-B	MA08-120-D
127	B	103.2	101.6	8	30	14	6	M5	4	MA08-127-S	MA08-127-B	MA08-127-D

Material

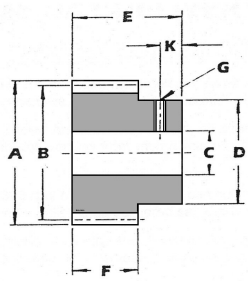
Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres
Pressure angle 20°
Manufactured to DIN 867, quality 9gs"
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010"
These gears are NOT hardened

Material

Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
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All dimensions in millimetres
Pressure angle 20°
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These gears are NOT hardened



Material

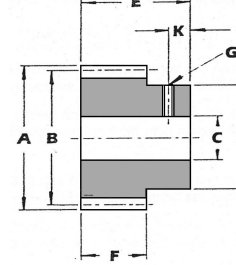
Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010°
These gears are NOT hardened

Material

Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

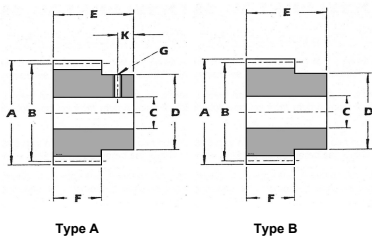
All dimensions in millimetres
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010°
These gears are NOT hardened



GEARS

No. of Teeth	Outside Dia A	Pitch Dia B	Bore Dia C	Boss Dia D	Overall Length E	Facewidth F	Setscrew G	Pos'n K	Catalogue Ref	
									Steel	Delrin
12	14.0	12.0	6	9	25	15	M3	5	MA10-12-S	-
13	15.0	13.0	6	10	25	15	M3	5	MA10-13-S	-
14	16.0	14.0	6	10	25	15	M3	5	MA10-14-S	-
15	17.0	15.0	6	13	25	15	M3	5	MA10-15-S	-
16	18.0	16.0	6	14	25	15	M3	5	MA10-16-S	-
17	19.0	17.0	8	15	25	15	M3	5	MA10-17-S	-
18	20.0	18.0	8	15	25	15	M3	5	MA10-18-S	-
19	21.0	19.0	8	16	25	15	M3	5	MA10-19-S	-
20	22.0	20.0	8	16	25	15	M3	5	MA10-20-S	-
21	23.0	21.0	8	16	25	15	M4	5	MA10-21-S	-
22	24.0	22.0	8	18	25	15	M4	5	MA10-22-S	-
23	25.0	23.0	8	18	25	15	M4	5	MA10-23-S	-
24	26.0	24.0	10	20	25	15	M4	5	MA10-24-S	-
25	27.0	25.0	10	20	25	15	M4	5	MA10-25-S	-
26	28.0	26.0	10	20	25	15	M4	5	MA10-26-S	-
27	29.0	27.0	10	20	25	15	M4	5	MA10-27-S	-
28	30.0	28.0	10	20	25	15	M4	5	MA10-28-S	-
29	31.0	29.0	10	20	25	15	M4	5	MA10-29-S	-
30	32.0	30.0	10	20	25	15	M4	5	MA10-30-S	MA10-30-D
31	33.0	31.0	10	25	25	15	M4	5	MA10-31-S	MA10-31-D
32	34.0	32.0	10	25	25	15	M4	5	MA10-32-S	MA10-32-D
33	35.0	33.0	10	25	25	15	M4	5	MA10-33-S	MA10-33-D
34	36.0	34.0	10	25	25	15	M4	5	MA10-34-S	MA10-34-D
35	37.0	35.0	10	25	25	15	M4	5	MA10-35-S	MA10-35-D
36	38.0	36.0	10	25	25	15	M4	5	MA10-36-S	MA10-36-D
37	39.0	37.0	10	25	25	15	M4	5	MA10-37-S	MA10-37-D
38	40.0	38.0	10	25	25	15	M4	5	MA10-38-S	MA10-38-D
39	41.0	39.0	10	25	25	15	M4	5	MA10-39-S	MA10-39-D
40	42.0	40.0	12	25	25	15	M4	5	MA10-40-S	MA10-40-D
41	43.0	41.0	12	35	25	15	M5	5	MA10-41-S	MA10-41-D
42	44.0	42.0	12	35	25	15	M5	5	MA10-42-S	MA10-42-D
43	45.0	43.0	12	35	25	15	M5	5	MA10-43-S	MA10-43-D
44	46.0	44.0	12	35	25	15	M5	5	MA10-44-S	MA10-44-D
45	47.0	45.0	12	35	25	15	M5	5	MA10-45-S	MA10-45-D
46	48.0	46.0	12	35	25	15	M5	5	MA10-46-S	MA10-46-D
47	49.0	47.0	12	35	25	15	M5	5	MA10-47-S	MA10-47-D
48	50.0	48.0	12	35	25	15	M5	5	MA10-48-S	MA10-48-D
49	51.0	49.0	12	35	25	15	M5	5	MA10-49-S	MA10-49-D
50	52.0	50.0	12	35	25	15	M5	5	MA10-50-S	MA10-50-D
51	53.0	51.0	12	35	25	15	M5	5	MA10-51-S	MA10-51-D
52	54.0	52.0	12	35	25	15	M5	5	MA10-52-S	MA10-52-D
53	55.0	53.0	12	35	25	15	M5	5	MA10-53-S	MA10-53-D
54	56.0	54.0	12	35	25	15	M5	5	MA10-54-S	MA10-54-D
55	57.0	55.0	12	35	25	15	M5	5	MA10-55-S	MA10-55-D
56	58.0	56.0	12	35	25	15	M5	5	MA10-56-S	MA10-56-D
57	59.0	57.0	12	35	25	15	M5	5	MA10-57-S	MA10-57-D
58	60.0	58.0	12	35	25	15	M5	5	MA10-58-S	MA10-58-D
59	61.0	59.0	12	35	25	15	M5	5	MA10-59-S	MA10-59-D
60	62.0	60.0	12	35	25	15	M5	5	MA10-60-S	MA10-60-D
61	63.0	61.0	12	35	25	15	M5	5	MA10-61-S	MA10-61-D
62	64.0	62.0	12	35	25	15	M5	5	MA10-62-S	MA10-62-D
63	65.0	63.0	12	35	25	15	M5	5	MA10-63-S	MA10-63-D
64	66.0	64.0	12	35	25	15	M5	5	MA10-64-S	MA10-64-D
65	67.0	65.0	12	35	25	15	M5	5	MA10-65-S	MA10-65-D
66	68.0	66.0	12	35	25	15	M5	5	MA10-66-S	MA10-66-D
67	69.0	67.0	12	35	25	15	M5	5	MA10-67-S	MA10-67-D
68	70.0	68.0	12	35	25	15	M5	5	MA10-68-S	MA10-68-D
69	71.0	69.0	12	35	25	15	M5	5	MA10-69-S	MA10-69-D
70	72.0	70.0	12	35	25	15	M5	5	MA10-70-S	MA10-70-D
72	74.0	72.0	12	35	25	15	M5	5	MA10-72-S	MA10-72-D
75	77.0	75.0	12	35	25	15	M5	5	MA10-75-S	MA10-75-D
76	78.0	76.0	12	45	25	15	M5	5	MA10-76-S	MA10-76-D
80	82.0	80.0	12	45	25	15	M5	5	MA10-80-S	MA10-80-D
82	84.0	82.0	12	45	25	15	M5	5	MA10-82-S	MA10-82-D
85	87.0	85.0	12	45	25	15	M5	5	MA10-85-S	MA10-85-D
90	92.0	90.0	12	45	25	15	M5	5	MA10-90-S	MA10-90-D
95	97.0	95.0	12	45	25	15	M5	5	MA10-95-S	MA10-95-D
100	102.0	100.0	12	45	25	15	M5	5	MA10-100-S	MA10-100-D
114	116.0	114.0	12	45	25	15	M5	5	MA10-114-S	MA10-114-D
120	122.0	120.0	12	45	25	15	M5	5	MA10-120-S	MA10-120-D
127	129.0	127.0	12	45	25	15	M5	5	MA10-127-S	MA10-127-D

No. of Teeth	Outside Dia A	Pitch Dia B	Bore Dia C	Boss Dia D	Overall Length E	Facewidth F	Setscrew G	Pos'n K	Catalogue Ref	
									Steel	Steel
12	17.50	15.00	5	9	25	15	M3	5	MA125-12-S	-
13	18.75	16.25	5	10	25	15	M3	5	MA125-13-S	-
14	20.00	17.50	5	10	25	15	M3	5	MA125-14-S	-
15	21.25	18.75	5	13	25	15	M3	5	MA125-15-S	-
16	22.50	20.00	5	14	25	15	M4	5	MA125-16-S	-
17	23.75	21.25	5	15	25	15	M4	5	MA125-17-S	-
18	25.00	22.50	5	15	25	15	M4	5	MA125-18-S	-
19	26.25	23.75	10	16	25	15	M4	5	MA125-19-S	-
20	27.50	25.00	10	16	25	15	M4	5	MA125-20-S	-
21	28.75	26.25	10	16	25	15	M4	5	MA125-21-S	-
22	30.00	27.50	10	18	25	15	M4	5	MA125-22-S	-
23	31.25	28.75	10	18	25	15	M4	5	MA125-23-S	-
24	32.50	30.00	10	20	25	15	M4	5	MA125-24-S	-
25	33.75	31.25	10	20	25	15	M4	5	MA125-25-S	-
26	35.00	32.50	10	20	25	15	M4	5	MA125-26-S	-
27	36.25	33.75	10	20	25	15	M4	5	MA125-27-S	-
28	37.50	35.00	10	20	25	15	M4	5	MA125-28-S	-
29	38.75	36.25	10	20	25	15	M4	5	MA125-29-S	-
30	40.00	37.50	10	20	25	15	M4	5	MA125-30-S	-
31	41.25	38.75	10	25	25	15	M4	5	MA125-31-S	-
32	42.50	40.00	10	25	25	15	M5	5	MA125-32-S	-
33	43.75	41.25	10	35	25	15	M5	5	MA125-33-S	-
34	45.00	42.50	10	35	25	15	M5	5	MA125-34-S	-
35	46.25	43.75	10	35	25	15	M5	5	MA125-35-S	-
36	47.50	45.00	10	35	25	15	M5	5	MA125-36-S	-
37	48.75	46.25	10	35	25	15	M5	5	MA125-37-S	-
38	50.00	47.50	10	35	25	15	M5	5	MA125-38-S	-
39	51.25	48.75	10	35	25	15	M5	5	MA125-39-S	-
40	52.50	50.00	12	35	25	15	M5	5	MA125-40-S	-
41	53.75	51.25	12	35	25	15	M5	5	MA125-41-S	-
42	55.00	52.50	12	35	25	15	M5	5	MA125-42-S	-
43	56.25	53.75	12	35	25	15	M5	5	MA125-43-S	-
44	57.50	55.00	12	35	25	15	M5	5	MA125-44-S	-
45	58.75	56.25	12	35	25	15	M5	5	MA125-45-S	-
46	60.00	57.50	12	35	25	15	M5	5	MA125-46-S	-
47	61.25	58.75	12	35	25	15	M5	5	MA125-47-S	-
48	62.50	60.00	12	35	25	15	M5	5	MA125-48-S	-
49	63.75	61.25	12	35	25	15	M5	5	MA125-49-S	-
50	65.00	62.50	12	35	25	15	M5	5	MA125-50-S	-
52	67.50	65.00	12	35	25	15	M5	5	MA125-52-S	-
55	71.25	68.75	12	35	25	15	M5	5	MA125-55-S	-
56	72.50	70.00	12	35	25	15	M5	5	MA125-56-S	-
60	77.50	75.00	12	45	25	15	M5	5	MA125-60-S	-
62	80.00	77.50	12	45	25	15	M5	5	MA125-62-S	-
65	83.75	81.25	12	45	25	15	M5	5	MA125-65-S	-
66	85.00	82.50	12	45	25	15	M5	5	MA125-66-S	-
70	90.00	87.50	12	45	25	15	M5	5	MA125-70-S	-
72	92.50	90.00	12	45						



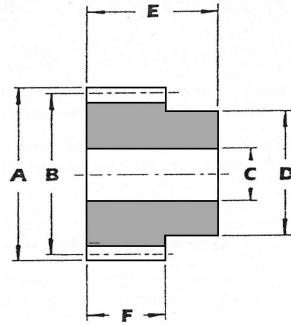
Type A

Type B

No. of Teeth	Outside Dia A	Pitch Dia B	Bore Dia C	Boss Dia D	Overall Length E	Facewidth F	Setscrew G	Pos'n K	Catalogue Ref			
									Steel	Type	Delrin	Type
12	21.0	18.0	8	13.5	30	18	M3	6	MA15-12-S	A	-	-
13	22.5	19.5	8	15	30	18	M3	6	MA15-13-S	A	-	-
14	24.0	21.0	8	16.5	30	18	M3	6	MA15-14-S	A	-	-
15	25.5	22.5	8	18	30	18	M4	6	MA15-15-S	A	-	-
16	27.0	24.0	12	20	30	18	M4	6	MA15-16-S	A	-	-
17	28.5	25.5	12	20	30	18	M4	6	MA15-17-S	A	-	-
18	30.0	27.0	12	20	30	18	M4	6	MA15-18-S	A	-	-
19	31.5	28.5	12	20	30	18	M4	6	MA15-19-S	A	-	-
20	33.0	30.0	17	26	30	18	M4	6	MA15-20-S	A	-	-
21	34.5	31.5	17	26	30	18	M4	6	MA15-21-S	A	-	-
22	36.0	33.0	17	26	30	18	M4	6	MA15-22-S	A	-	-
23	37.5	34.5	17	26	30	18	M4	6	MA15-23-S	A	-	-
24	39.0	36.0	17	26	30	18	M4	6	MA15-24-S	A	-	-
25	40.5	37.5	17	33	30	18	M4	6	MA15-25-S	A	-	-
26	42.0	39.0	17	33	30	18	M4	6	MA15-26-S	A	-	-
27	43.5	40.5	17	33	30	18	M4	6	MA15-27-S	A	-	-
28	45.0	42.0	17	33	30	18	M4	6	MA15-28-S	A	-	-
29	46.5	43.5	17	33	30	18	M4	6	MA15-29-S	A	-	-
30	48.0	45.0	17	38	30	18	M5	6	MA15-30-S	A	MA15-30-D	A
31	49.5	46.5	17	38	30	18	M5	6	MA15-31-S	A	MA15-31-D	A
32	51.0	48.0	17	38	30	18	M5	6	MA15-32-S	A	MA15-32-D	A
33	52.5	49.5	17	38	30	18	M5	6	MA15-33-S	A	MA15-33-D	A
34	54.0	51.0	17	38	30	18	M5	6	MA15-34-S	A	MA15-34-D	A
35	55.5	52.5	17	38	33	18	M5	6	MA15-35-S	A	MA15-35-D	A
36	57.0	54.0	17	38	33	18	M5	6	MA15-36-S	A	MA15-36-D	A
37	58.5	55.5	17	38	33	18	M5	6	MA15-37-S	A	MA15-37-D	A
38	60.0	57.0	17	38	33	18	M5	6	MA15-38-S	A	MA15-38-D	A
39	61.5	58.5	17	38	33	18	M5	6	MA15-39-S	A	MA15-39-D	A
40	63.0	60.0	17	38	33	18	M5	6	MA15-40-S	A	MA15-40-D	A
41	64.5	61.5	17	38	33	18	M5	6	MA15-41-S	A	MA15-41-D	A
42	66.0	63.0	17	38	33	18	M5	6	MA15-42-S	A	MA15-42-D	A
43	67.5	64.5	17	38	33	18	M5	6	MA15-43-S	A	MA15-43-D	A
44	69.0	66.0	17	38	33	18	M5	6	MA15-44-S	A	MA15-44-D	A
45	70.5	67.5	17	38	33	18	M5	6	MA15-45-S	A	MA15-45-D	A
46	72.0	69.0	17	38	33	18	M5	6	MA15-46-S	A	MA15-46-D	A
47	73.5	70.5	17	38	33	18	M5	6	MA15-47-S	A	MA15-47-D	A
48	75.0	72.0	17	38	33	18	M5	7.5	MA15-48-S	A	MA15-48-D	A
49	76.5	73.5	17	38	33	18	M5	7.5	MA15-49-S	A	MA15-49-D	A
50	78.0	75.0	17	38	33	18	M5	7.5	MA15-50-S	A	MA15-50-D	A
51	79.5	76.5	17	38	33	18	-	-	MA15-51-S	A	MA15-51-D	B
52	81.0	78.0	17	38	33	18	-	-	MA15-52-S	A	MA15-52-D	B
53	82.5	79.5	17	38	33	18	-	-	MA15-53-S	A	MA15-53-D	B
54	84.0	81.0	17	38	33	18	-	-	MA15-54-S	A	MA15-54-D	B
55	85.5	82.5	17	38	33	18	-	-	MA15-55-S	A	MA15-55-D	B
56	87.0	84.0	17	38	33	18	-	-	MA15-56-S	A	MA15-56-D	B
57	88.5	85.5	17	38	33	18	-	-	MA15-57-S	A	MA15-57-D	B
58	90.0	87.0	17	38	33	18	-	-	MA15-58-S	A	MA15-58-D	B
59	91.5	88.5	17	38	33	18	-	-	MA15-59-S	A	MA15-59-D	B
60	93.0	90.0	17	38	33	18	-	-	MA15-60-S	A	MA15-60-D	B
61	94.5	91.5	20	45	36	18	-	-	MA15-61-S	A	MA15-61-D	B
62	96.0	93.0	20	45	36	18	-	-	MA15-62-S	A	MA15-62-D	B
63	97.5	94.5	20	45	36	18	-	-	MA15-63-S	A	MA15-63-D	B
64	99.0	96.0	20	45	36	18	-	-	MA15-64-S	A	MA15-64-D	B
65	100.5	97.5	20	45	36	18	-	-	MA15-65-S	A	MA15-65-D	B
66	102.0	99.0	20	45	36	18	-	-	MA15-66-S	A	-	-
67	103.5	100.5	20	45	36	18	-	-	MA15-67-S	A	-	-
68	105.0	102.0	20	45	36	18	-	-	MA15-68-S	A	-	-
69	106.5	103.5	20	45	36	18	-	-	MA15-69-S	A	-	-
70	108.0	105.0	20	45	36	18	-	-	MA15-70-S	A	-	-
72	111.0	108.0	20	45	36	18	-	-	MA15-72-S	A	-	-
75	115.5	112.5	20	45	36	18	-	-	MA15-75-S	A	-	-
76	117.0	114.0	20	45	36	18	-	-	MA15-76-S	A	-	-
80	123.0	120.0	20	45	36	18	-	-	MA15-80-S	A	-	-
82	126.0	123.0	20	45	36	18	-	-	MA15-82-S	A	-	-
85	130.5	127.5	20	45	36	18	-	-	MA15-85-S	A	-	-
90	138.0	135.0	20	45	36	18	-	-	MA15-90-S	A	-	-
95	145.5	142.5	20	45	36	18	-	-	MA15-95-S	A	-	-
100	153.0	150.0	20	45	36	18	-	-	MA15-100-S	A	-	-
114	174.0	171.0	20	45	36	18	-	-	MA15-114-S	A	-	-
120	183.0	180.0	20	45	36	18	-	-	MA15-120-S	A	-	-
127	193.5	190.5	20	45	36	18	-	-	MA15-127-S	A	-	-

No. of Teeth	Outside Dia A	Pitch Dia B	Bore Dia C	Boss Dia D	Overall Length E	Facewidth F	Catalogue Ref	Steel	
								Steel	Steel
12	28	24	10	18	35	20	MA20-12-S	-	-
13	30	26	15	20	35	20	MA20-13-S	-	-
14	32	28	15	22	35	20	MA20-14-S	-	-
15	34	30	15	24	35	20	MA20-15-S	-	-
16	36	32	15	25	35	20	MA20-16-S	-	-
17	38	34	15	25	35	20	MA20-17-S	-	-
18	40	36	20	30	35	20	MA20-18-S	-	-
19	42	38	20	30	35	20	MA20-19-S	-	-
20	44	40	20	30	35	20	MA20-20-S	-	-
21	46	42	20	36	35	20	MA20-21-S	-	-
22	48	44	20	37	35	20	MA20-22-S	-	-
23	50	46	20	37	35	20	MA20-23-S	-	-
24	52	48	20	37	35	20	MA20-24-S	-	-
25	54	50	20	37	35	20	MA20-25-S	-	-
26	56	52	20	45	35	20	MA20-26-S	-	-
27	58	54	20	45	35	20	MA20-27-S	-	-
28	60	56	20	45	35	20	MA20-28-S	-	-
29	62	58	20	45	35	20	MA20-29-S	-	-
30	64	60	20	45	35	20	MA20-30-S	-	-
31	66	62	20	45	42	20	MA20-31-S	-	-
32	68	64	20	45	42	20	MA20-32-S	-	-
33	70	66	20	45	42	20	MA20-33-S	-	-
34	72	68	20	45	42	20	MA20-34-S	-	-
35	74	70	20	45	42	20	MA20-35-S	-	-
36	76	72	20	45	42	20	MA20-36-S	-	-
37	78	74	20	45	42	20	MA20-37-S	-	-
38	80	76	20	45	42	20	MA20-38-S	-	-
39	82	78	20	45	42	20	MA20-39-S	-	-
40	84	80	20	45	42	20	MA20-40-S	-	-
41	86	82	20	45	42	20	MA20-41-S	-	-
42	88	84	20	45	42	20	MA20-42-S	-	-
43	90	86	25	50	42	20	MA20-43-S	-	-
44	92	88	25	50	42	20	MA20-44-S	-	-
45	94	90	25	50	42	20	MA20-45-S	-	-
46	96	92	25	50	42	20	MA20-46-S	-	-
47	98	94	25	50	42	20	MA20-47-S	-	-
48	100	96	25	50	42	20	MA20-48-S	-	-
49	102	98	25	50	42	20	MA20-49-S	-	-
50	104	100	25	50	42	20	MA20-50-S	-	-
51	106	102	25	50	42	20	MA20-51-S	-	-
52	108	104	25	50	42	20	MA20-52-S	-	-
53	110	106	25	50	42	20	MA20-53-S	-	-
54	112	108	25	50	42	20	MA20-54-S	-	-
55	114	110	25	50	42	20	MA20-55-S	-	-
56	116	112	25	50	42	20	MA20-56-S	-	-
57	118	114	25	50	42	20	MA20-57-S	-	-
58	120	116	25	50	42	20	MA20-58-S	-	-
59	122	118	25	50	42	20	MA20-59-S	-	-
60	124	120	25	50	42	20	MA20-60-S	-	-
61	126	122	25	50	42	20	MA20-61-S	-	-
62	128	124	25	50	42	20	MA20-62-S	-	-
63	130	126	25	50	42	20	MA20-63-S	-	-
64	132	128	25	50	42	20	MA20-64-S	-	-
65	134	130	25	50	42	20	MA20-65-S	-	-
66	136	132	25	50	42	20	MA20-66-S	-	-
67	138	134	25	50	42	20	MA20-67-S	-	-
68	140	136	25	50	42	20	MA20-68-S	-	-
69	142	138	25	50	42	20	MA20-69-S	-	-
70	144	140	25	50	42	20	MA		

Facewidth	Catalogue Ref	Overall Length	Boss Dia	Outside Dia.	Pitch Dia	Outside Dia.	No. of Teeth
Steel	F	E	D	C	B	A	
MA25-12-S	25	41	23	16	30.0	35.0	12
MA25-13-S	25	41	24	16	32.5	37.5	13
MA25-14-S	25	41	28	16	35.0	40.0	14
MA25-15-S	25	41	30	19	37.5	42.5	15
MA25-16-S	25	41	33	19	40.0	45.0	16
MA25-17-S	25	41	33	19	42.5	47.5	17
MA25-18-S	25	41	38	19	45.0	50.0	18
MA25-19-S	25	41	39	19	47.5	52.5	19
MA25-20-S	25	41	43	19	50.0	55.0	20
MA25-21-S	25	41	44	19	52.5	57.5	21
MA25-22-S	25	41	44	19	55.0	60.0	22
MA25-23-S	25	41	44	19	57.5	62.5	23
MA25-24-S	25	41	44	19	60.0	65.0	24
MA25-25-S	25	41	44	19	62.5	67.5	25
MA25-26-S	25	41	44	19	65.0	70.0	26
MA25-27-S	25	41	44	19	67.5	72.5	27
MA25-28-S	25	47	44	19	70.0	75.0	28
MA25-29-S	25	47	44	19	72.5	77.5	29
MA25-30-S	25	47	44	19	75.0	80.0	30
MA25-31-S	25	47	44	19	77.5	82.5	31
MA25-32-S	25	47	44	19	80.0	85.0	32
MA25-33-S	25	47	44	19	82.5	87.5	33
MA25-34-S	25	47	44	19	85.0	90.0	34
MA25-35-S	25	47	44	19	87.5	92.5	35
MA25-36-S	25	47	54	19	90.0	95.0	36
MA25-37-S	25	47	54	19	92.5	97.5	37
MA25-38-S	25	47	54	19	95.0	100.0	38
MA25-39-S	25	47	54	19	97.5	102.5	39
MA25-40-S	25	47	54	22	100.0	105.0	40
MA25-41-S	25	47	54	22	102.5	107.5	41
MA25-42-S	25	47	54	22	105.0	110.0	42
MA25-43-S	25	47	54	22	107.5	112.5	43
MA25-44-S	25	47	54	22	110.0	115.0	44
MA25-45-S	25	47	54	22	112.5	117.5	45
MA25-46-S	25	47	54	22	115.0	120.0	46
MA25-47-S	25	47	54	22	117.5	122.5	47
MA25-48-S	25	47	54	22	120.0	125.0	48
MA25-49-S	25	47	54	22	122.5	127.5	49
MA25-50-S	25	47	54	22	125.0	130.0	50
MA25-51-S	25	47	54	22	127.5	132.5	51
MA25-52-S	25	47	54	22	130.0	135.0	52
MA25-53-S	25	47	54	22	132.5	137.5	53
MA25-54-S	25	47	54	22	135.0	140.0	54
MA25-55-S	25	47	54	22	137.5	142.5	55
MA25-56-S	25	47	54	22	140.0	145.0	56
MA25-57-S	25	47	70	22	142.5	147.5	57
MA25-58-S	25	47	70	22	145.0	150.0	58
MA25-59-S	25	47	70	22	147.5	152.5	59
MA25-60-S	25	47	70	22	150.0	155.0	60
MA25-61-S	25	47	70	22	152.5	157.5	61
MA25-62-S	25	47	70	22	155.0	160.0	62
MA25-63-S	25	47	70	22	157.5	162.5	63
MA25-64-S	25	47	70	22	160.0	165.0	64
MA25-65-S	25	47	70	22	162.5	167.5	65
MA25-66-S	25	47	70	22	165.0	170.0	66
MA25-67-S	25	47	70	22	167.5	172.5	67
MA25-68-S	25	47	70	22	170.0	175.0	68
MA25-69-S	25	47	70	22	172.5	177.5	69
MA25-70-S	25	47	70	22	175.0	180.0	70
MA25-72-S	25	47	70	22	180.0	185.0	72
MA25-75-S	25	47	70	22	187.5	192.5	75
MA25-76-S	25	47	90	25	190.0	195.0	76
MA25-80-S	25	47	90	25	200.0	205.0	80
MA25-82-S	25	47	90	25	205.0	210.0	82
MA25-85-S	25	47	90	25	212.5	217.5	85
MA25-90-S	25	47	90	25	225.0	230.0	90
MA25-95-S	25	47	90	25	237.5	242.5	95
MA25-100-S	25	47	90	25	250.0	255.0	100
MA25-114-S	25	50	90	25	285.0	290.0	114
MA25-120-S	25	50	90	25	300.0	305.0	120
MA25-127-S	25	50	90	25	317.5	322.5	127

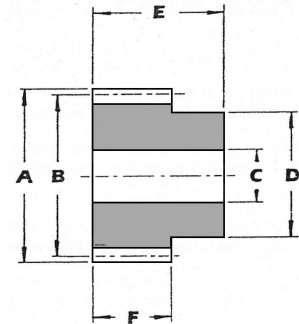


Material

Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010°
These gears are NOT hardened

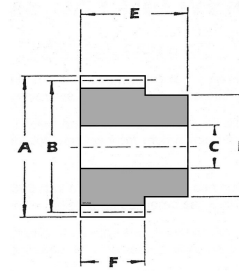
No. of Teeth	Outside Dia A	Pitch Dia B	Bore Dia C	Boss Dia D	Overall Length E	Facewidth F	Catalogue Ref Steel
12	42.0	36.0	20	28	50	30	MA30-12-S
13	38.5	32.5	20	30	50	30	MA30-13-S
14	41.0	35.0	20	33	50	30	MA30-14-S
15	43.5	37.5	25	33	50	30	MA30-15-S
16	46.0	40.0	25	40	52	30	MA30-16-S
17	48.5	42.5	25	40	52	30	MA30-17-S
18	51.0	45.0	25	49	52	30	MA30-18-S
19	53.5	47.5	25	50	52	30	MA30-19-S
20	56.0	50.0	25	50	52	30	MA30-20-S
21	58.5	52.5	25	50	52	30	MA30-21-S
22	61.0	55.0	25	50	52	30	MA30-22-S
23	63.5	57.5	25	50	52	30	MA30-23-S
24	66.0	60.0	25	50	52	30	MA30-24-S
25	68.5	62.5	25	65	52	30	MA30-25-S
26	71.0	65.0	25	65	52	30	MA30-26-S
27	73.5	67.5	25	65	52	30	MA30-27-S
28	76.0	70.0	25	65	52	30	MA30-28-S
29	78.5	72.5	25	65	55	30	MA30-29-S
30	81.0	75.0	25	65	55	30	MA30-30-S
31	83.5	77.5	25	65	55	30	MA30-31-S
32	86.0	80.0	25	65	55	30	MA30-32-S
33	88.5	82.5	25	65	55	30	MA30-33-S
34	91.0	85.0	25	65	55	30	MA30-34-S
35	93.5	87.5	25	65	55	30	MA30-35-S
36	96.0	90.0	25	65	55	30	MA30-36-S
37	98.5	92.5	25	65	55	30	MA30-37-S
38	101.0	95.0	25	65	55	30	MA30-38-S
39	103.5	97.5	25	65	55	30	MA30-39-S
40	106.0	100.0	25	65	55	30	MA30-40-S
41	108.5	102.5	25	65	55	30	MA30-41-S
42	111.0	105.0	25	65	55	30	MA30-42-S
43	113.5	107.5	25	65	55	30	MA30-43-S
44	116.0	110.0	25	65	55	30	MA30-44-S
45	118.5	112.5	25	80	55	30	MA30-45-S
46	121.0	115.0	25	80	55	30	MA30-46-S
47	123.5	117.5	25	80	55	30	MA30-47-S
48	126.0	120.0	25	80	55	30	MA30-48-S
49	128.5	122.5	25	80	55	30	MA30-49-S
50	131.0	125.0	25	80	55	30	MA30-50-S
51	133.5	127.5	25	80	55	30	MA30-51-S
52	136.0	130.0	25	80	55	30	MA30-52-S
53	138.5	132.5	25	80	55	30	MA30-53-S
54	141.0	135.0	25	80	55	30	MA30-54-S
55	143.5	137.5	25	80	55	30	MA30-55-S
56	146.0	140.0	25	80	55	30	MA30-56-S
57	148.5	142.5	25	80	55	30	MA30-57-S
58	151.0	145.0	25	80	55	30	MA30-58-S
59	153.5	147.5	25	80	55	30	MA30-59-S
60	156.0	150.0	25	80	55	30	MA30-60-S
61	158.5	152.5	25	80	55	30	MA30-61-S
62	161.0	155.0	25	80	55	30	MA30-62-S
63	163.5	157.5	25	80	55	30	MA30-63-S
64	166.0	160.0	25	80	55	30	MA30-64-S
65	168.5	162.5	25	80	55	30	MA30-65-S
66	171.0	165.0	25	80	55	30	MA30-66-S
67	173.5	167.5	25	80	55	30	MA30-67-S
68	176.0	170.0	25	80	55	30	MA30-68-S
69	178.5	172.5	25	80	55	30	MA30-69-S
70	181.0	175.0	25	80	55	30	MA30-70-S
72	186.0	180.0	25	80	55	30	MA30-72-S
75	193.5	187.5	30	100	60	30	MA30-75-S
76	196.0	190.0	30	100	60	30	MA30-76-S
80	206.0	200.0	30	100	60	30	MA30-80-S
82	211.0	205.0	30	100	60	30	MA30-82-S
85	218.5	212.5	30	100	60	30	MA30-85-S
90	231.0	225.0	30	100	60	30	MA30-90-S
95	243.5	237.5	30	100	60	30	MA30-95-S
100	256.0	250.0	30	100	60	30	MA30-100-S
114	291.0	285.0	30	100	60	30	MA30-114-S
120	306.0	300.0	30	100	60	30	MA30-120-S
127	323.5	317.5	30	100	60	30	MA30-127-S



Material

Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010°
These gears are NOT hardened

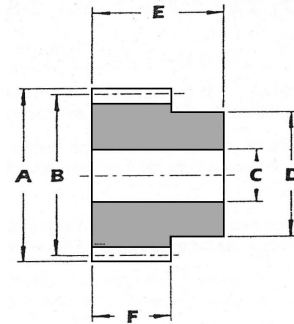


Material

Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010°
These gears are NOT hardened

Facewidth	Catalogue Ref	Overall Length	Boss Dia	Bore Dia	Pitch Dia	Outside Dia	No. of Teeth
Steel	F	E	D	C	B	A	
MA40-12-S	40	62	37	25	48.0	56.0	12
MA40-13-S	40	62	40	25	52.0	60.0	13
MA40-14-S	40	62	40	25	56.0	64.0	14
MA40-15-S	40	62	49	25	60.0	68.0	15
MA40-16-S	40	62	50	25	64.0	72.0	16
MA40-17-S	40	62	50	25	68.0	76.0	17
MA40-18-S	40	62	50	25	72.0	80.0	18
MA40-19-S	40	62	63	25	76.0	84.0	19
MA40-20-S	40	62	63	25	80.0	88.0	20
MA40-21-S	40	62	63	25	84.0	92.0	21
MA40-22-S	40	78	76	30	88.0	96.0	22
MA40-23-S	40	78	76	30	92.0	100.0	23
MA40-24-S	40	78	76	30	96.0	104.0	24
MA40-25-S	40	78	76	30	100.0	108.0	25
MA40-26-S	40	78	76	30	104.0	112.0	26
MA40-27-S	40	78	76	30	108.0	116.0	27
MA40-28-S	40	78	76	30	112.0	120.0	28
MA40-29-S	40	78	76	30	116.0	124.0	29
MA40-30-S	40	78	76	30	120.0	128.0	30
MA40-31-S	40	78	76	30	124.0	132.0	31
MA40-32-S	40	78	76	30	128.0	136.0	32
MA40-33-S	40	78	76	30	132.0	140.0	33
MA40-34-S	40	78	76	30	136.0	144.0	34
MA40-35-S	40	78	76	30	140.0	148.0	35
MA40-36-S	40	78	76	30	144.0	152.0	36
MA40-38-S	40	78	76	30	152.0	160.0	38
MA40-40-S	40	78	100	35	160.0	168.0	40
MA40-41-S	40	78	100	35	164.0	172.0	41
MA40-42-S	40	78	100	35	168.0	176.0	42
MA40-44-S	40	78	100	35	176.0	184.0	44
MA40-45-S	40	78	100	35	180.0	188.0	45
MA40-46-S	40	78	100	35	184.0	192.0	46
MA40-47-S	40	78	100	35	188.0	196.0	47
MA40-48-S	40	78	100	35	192.0	200.0	48
MA40-50-S	40	78	120	35	200.0	208.0	50
MA40-52-S	40	78	120	35	208.0	216.0	52
MA40-55-S	40	78	120	35	220.0	228.0	55
MA40-56-S	40	78	120	35	224.0	232.0	56
MA40-57-S	40	78	120	35	228.0	236.0	57
MA40-60-S	40	78	120	35	240.0	248.0	60
MA40-62-S	40	78	120	35	248.0	256.0	62
MA40-65-S	40	78	120	35	260.0	268.0	65
MA40-70-S	40	78	120	35	280.0	288.0	70
MA40-72-S	40	78	120	35	288.0	296.0	72
MA40-75-S	40	78	120	35	300.0	308.0	75
MA40-76-S	40	78	120	35	304.0	312.0	76
MA40-80-S	40	78	140	35	320.0	328.0	80
MA40-82-S	40	78	140	35	328.0	336.0	82
MA40-85-S	40	78	140	35	340.0	348.0	85
MA40-90-S	40	78	140	35	360.0	368.0	90
MA40-95-S	40	78	140	35	380.0	388.0	95
MA40-100-S	40	78	140	35	400.0	408.0	100



Material

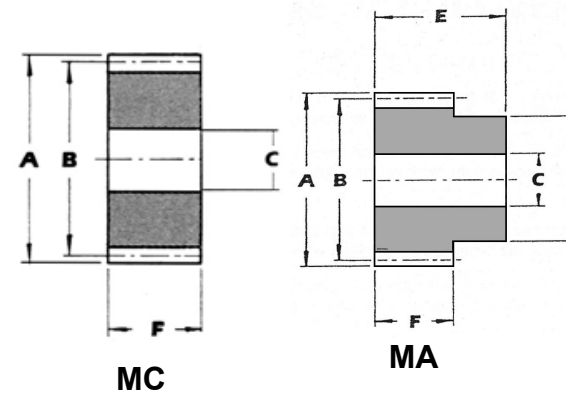
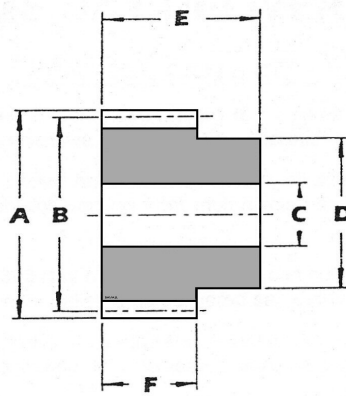
Polyacetal
Steel BS 970 Pt. 1 1991 080M15 (EN32)
Or BS 970 Pt. 3 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in millimetres
Pressure angle 20°
Manufactured to BS 436:1970 Pt. 1, Fig. 1, Grade 8
Bore tolerances to BS 1916:1953 Pt. 1, H8
General tolerance unless otherwise stated ±0.010°
These gears are NOT hardened

Overall Length	Facewidth	Catalogue Ref	Boss Dia	Bore Dia	Pitch Dia	Outside Dia	No. of Teeth
Steel	F	E	D	C	B	A	
MA50- 12 -S	50	62	40	20	60.0	70.0	12
MA50- 13 -S	50	62	40	20	65.0	75.0	13
MA50- 14 -S	50	62	40	20	70.0	80.0	14
MA50- 15 -S	50	62	40	20	75.0	85.0	15
MA50- 16 -S	50	62	40	20	80.0	90.0	16
MA50- 17 -S	50	62	40	20	85.0	95.0	17
MA50- 18 -S	50	62	60	20	90.0	100.0	18
MA50- 19 -S	50	62	60	20	95.0	105.0	19
MA50- 20 -S	50	62	60	20	100.0	110.0	20
MA50- 21 -S	50	70	60	25	105.0	115.0	21
MA50- 22 -S	50	70	60	25	110.0	120.0	22
MA50- 23 -S	50	70	60	25	115.0	125.0	23
MA50- 24 -S	50	70	60	25	120.0	130.0	24
MA50- 25 -S	50	70	80	25	125.0	135.0	25
MA50- 26 -S	50	70	80	25	130.0	140.0	26
MA50- 27 -S	50	70	80	25	135.0	145.0	27
MA50- 28 -S	50	70	80	25	140.0	150.0	28
MA50- 29 -S	50	70	80	25	145.0	155.0	29
MA50- 30 -S	50	70	80	25	150.0	160.0	30
MA50- 31 -S	50	70	80	25	155.0	165.0	31
MA50- 32 -S	50	70	80	25	160.0	170.0	32
MA50- 33 -S	50	70	80	25	165.0	175.0	33
MA50- 34 -S	50	70	80	25	170.0	180.0	34
MA50- 35 -S	50	70	100	25	175.0	185.0	35
MA50- 36 -S	50	70	100	25	180.0	190.0	36
MA50- 38 -S	50	70	100	30	190.0	200.0	38
MA50- 39 -S	50	70	100	30	195.0	205.0	39
MA50- 40 -S	50	70	100	30	200.0	210.0	40
MA50- 41 -S	50	70	100	30	205.0	215.0	41
MA50- 42 -S	50	70	100	30	210.0	220.0	42
MA50- 44 -S	50	70	100	30	220.0	230.0	44
MA50- 45 -S	50	70	140	30	225.0	235.0	45
MA50- 46 -S	50	70	140	30	230.0	240.0	46
MA50- 47 -S	50	70	140	30	235.0	245.0	47
MA50- 48 -S	50	70	140	30	240.0	250.0	48
MA50- 50 -S	50	70	140	30	250.0	260.0	50
MA50- 52 -S	50	70	140	30	260.0	270.0	52
MA50- 55 -S	50	70	140	30	275.0	285.0	55
MA50- 56 -S	50	70	140	30	280.0	290.0	56
MA50- 57 -S	50	70	140	30	285.0	295.0	57
MA50- 60 -S	50	70	140	30	300.0	310.0	60

GEARS

GEARS



Facewidth	Catalogue Ref	Overall Length	Boss Dia	Bore Dia.	Pitch Dia	Outside Dia	No. of Teeth
Steel	F	E	D	C	B	A	
MA60-12-S	60	76	54	25	72	84	12
MA60-15-S	60	76	72	25	90	102	15
MA60-16-S	60	76	72	25	96	108	16
MA60-18-S	60	76	72	25	108	120	18
MA60-20-S	60	76	100	25	120	132	20
MA60-24-S	60	76	100	25	144	156	24
MA60-30-S	60	80	150	40	180	192	30
MA60-32-S	60	84	150	40	192	204	32
MA60-36-S	60	88	150	40	216	228	36

Circular Pitch CP	equivalent Mod	type	No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C Ø	Boss Dia. D Ø	Overall Length E	Face Width F	Catalogue No.
2.5 mm	0.7958		20	17.51	15.92	6	13	20	10	MA2.5CP- 20 -S
2.5 mm	0.7958		25	21.49	19.89	8	17	20	10	MA2.5CP- 25 -S
2.5 mm	0.7958		30	25.46	23.87	8	21	20	10	MA2.5CP- 30 -S
2.5 mm	0.7958		40	33.42	31.83	10	28	20	10	MA2.5CP- 40 -S
5mm	1.591		12	22.3	19.1	6	14	25	12	MA5CP- 12 -S
5mm	1.591		15	27.0	23.9	6	18	25	12	MA5CP- 15 -S
5mm	1.591		18	31.8	28.6	8	20	25	12	MA5CP- 18 -S
5mm	1.591		20	35.0	31.8	8	20	25	12	MA5CP- 20 -S
5mm	1.591		24	41.4	38.2	8	25	25	12	MA5CP- 24 -S
5mm	1.591		25	43.0	39.8	8	25	25	12	MA5CP- 25 -S
5mm	1.591		30	50.9	47.7	10	30	25	12	MA5CP- 30 -S
5mm	1.591		36	60.5	57.3	10	40	25	12	MA5CP- 36 -S
5mm	1.591		40	66.8	63.6	10	40	25	12	MA5CP- 40 -S
5mm	1.591		45	74.8	71.6	10	45	25	12	MA5CP- 45 -S
5mm	1.591		50	82.7	79.6	12	50	25	12	MA5CP- 50 -S
5mm	1.591		60	98.6	95.5	12	60	25	12	MA5CP- 60 -S
10mm	3.183		12	44.6	38.2	10	25	40	25	MA10CP- 12 -S
10mm	3.183		15	54.1	47.7	12	30	40	25	MA10CP- 15 -S
10mm	3.183		18	63.7	57.3	15	40	40	25	MA10CP- 18 -S
10mm	3.183		20	70.0	63.7	15	40	40	25	MA10CP- 20 -S
10mm	3.183		24	82.8	76.4	15	50	40	25	MA10CP- 24 -S
10mm	3.183		25	85.9	79.6	15	50	40	25	MA10CP- 25 -S
10mm	3.183		30	101.9	95.5	20	60	40	25	MA10CP- 30 -S
10mm	3.183		36	121.0	114.6	20	70	40	25	MA10CP- 36 -S
10mm	3.183		40	133.7	127.3	20	80	40	25	MA10CP- 40 -S
10mm	3.183		45	149.6	143.2	20	-	25	25	MC10CP- 45 -S
10mm	3.183		50	165.5	159.2	20	-	25	25	MC10CP- 50 -S
10mm	3.183		60	197.3	191.0	25	-	25	25	MC10CP- 60 -S

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