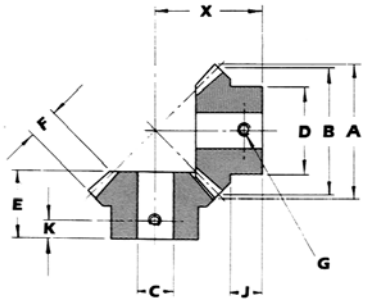
DAVALL GEARS
An MTI Company

Bevel Gears

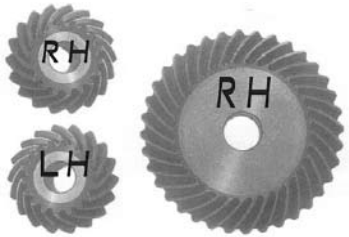
Spiral 1:1 ratio

Steel & Brass 10 DP to 48 DP



GEARS

D.P.	No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew G	Boss Projection J	Setscrew pos'n K	Mounting Distance X	Catalogue Reference Steel set	Brass set	Parts
10	30	3.127	3.000	0.750	2.343	1.344	0.625	-	0.658	-	2.375	SB10-1-S	-	-LH -RH
12	30	2.61	2.500	0.688	1.875	1.167	0.563	M6	0.563	0.281	2.000	SB12-1-S	-	-LH -RH
14	28	2.090	2.000	0.562	1.562	0.828	0.437	M4	0.347	0.200	1.500	SB14-1-S	-	-LH -RH
	24	1.581	1.500	0.438	1.170	0.674	0.312	M4	0.272	0.156	1.187	SB16-1-S	-	-LH
16	24	1.581	1.500	0.438	1.170	0.674	0.312	M4	0.272	0.156	1.187	SB0-1-S	-	-RH
24	24	1.052	1.000	0.312	0.780	0.537	0.218	M3	0.265	0.156	0.875	SB24-1-S	SB-24-1-B	-LH
24	24	1.052	1.000	0.312	0.780	0.537	0.218	M3	0.265	0.156	0.875	SB24-1-S	SB-24-1-B	-RH
32	17	0.569	0.531	0.188	0.390	0.329	0.125	M3	0.166	0.094	0.500	SB32-1-S	SB-32-1-B	-LH
32	17	0.569	0.531	0.188	0.390	0.329	0.125	M3	0.166	0.094	0.500	SB32-1-S	SB-32-1-B	-RH
48	48	1.023	1.000	0.250	0.79	0.465	0.187	M3	0.286	0.156	0.827	SB481-S	SB-48-1-B	-LH
48	48	1.023	1.000	0.250	0.79	0.465	0.187	M3	0.286	0.156	0.827	SB481-S	SB-48-1-B	-RH



Material

Polyacetal
Steel BS970 Pt.1 1991 080M15 (EN32)
or BS970 Pt.3 1991 230M07 (EN1A)
Brass BS2874:1986 CZ121

All dimensions in inches
Pressure angle 20°
These bevel gears are cut to the Gleason System.
Bore tolerance to BS.1916:1953, Pt 1, H8
General tolerance unless otherwise stated ±0.010".
Angular accuracy between shafts ±0°-5'.
Shaft axes should intersect within ±0.001".
Mounting distance tolerance (Dimn. X)+NIL, -.002".

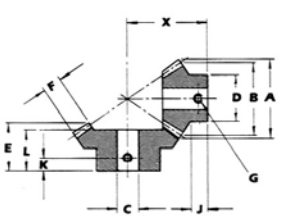
These gears are NOT hardened.
Can only be run at a 90º shaft angle
Extra pinion or gear available

DAVALL GEARS
An MTI Company

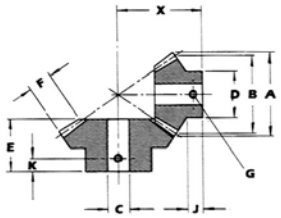
Bevel Gears

Spiral 2:1 ratio

Steel 10 DP to 48 DP



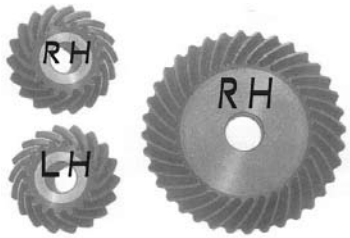
Type A



Type B

GEARS

D.P.	No. Teeth	Type	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Face Width F	Setscrew G	Boss Projection J	Setscrew pos'n K	Length through bore L	Mounting Distance X	Catalogue Reference Steel
10	16	A	1.817	1.600	0.625	1.440	1.177	0.563	-	0.572	-	-	2.250	SB10-2-S
	32		3.258	3.200	0.812	2.030	1.464	0.563	-	0.891	-	1.393	2.000	
16	16	A	1.136	1.000	0.312	0.900	0.849	0.375	M5	0.471	0.25	-	1.500	SB16-2-S
	32		2.036	2.000	0.562	1.406	0.675	0.375	M5	0.306	0.156	0.632	1.000	
24	16	B	0.756	0.667	0.250	0.600	0.564	0.250	M3	0.317	0.156	-	1.000	SB24-2-S
	32		1.357	1.333	0.312	0.780	0.529	0.250	M4	0.286	0.156	-	0.750	
48	40	B	0.870	0.833	0.250	0.780	0.361	0.200	M3	0.163	0.080	-	1.009	SB48-2-S
	80		1.675	1.667	0.250	0.937	0.461	0.200	M5	0.312	0.250	-	0.783	



Material

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or BS970 Pt.3 1991 230M07 (EN1A)
Brass BS2874:1986 CZ121

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General tolerance unless otherwise stated ±0.010".
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Mounting distance tolerance (Dimn. X)+NIL, -.002".

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Extra pinion or gear available

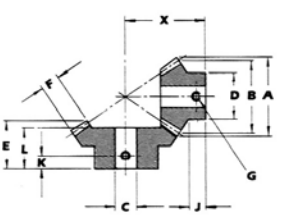
DAVALL GEARS
An MTI Company

Bevel Gears

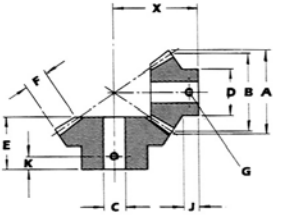
Spiral 3:1 ratio

Steel 10 DP to 48 DP

GEARS

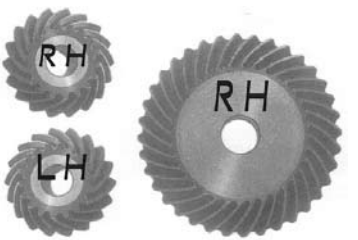


Type A



Type B

D.P.	No. Teeth	Type	Outside Dia.	Pitch Dia.	Bore Dia.	Boss Dia.	Overall Length	Face Width	Setscrew	Boss Projection	Setscrew pos'n	Length through bore	Mounting Distance	Catalogue Reference	
			A	B	C	D	E	F	G	J	K	L	X	Steel set	Parts
10	16	A	1.808	1.600	0.688	1.450	1.269	0.813	-	0.450	-	-	2.875	SB10-3-S	-PIN
10	48		4.827	4.800	1.000	2.500	1.482	0.813	-	0.881	-	1.37	2.000		-GEAR
16	16	A	1.143	1.000	0.438	0.910	0.862	0.500	M4	0.361	0.218	-	1.875	SB16-3-S	-PIN
16	48		3.021	3.000	0.625	1.562	0.918	0.500	M6	0.553	0.281	0.861	1.250		-GEAR
24	16	B	0.763	0.667	0.250	0.600	0.650	0.350	M3	0.301	0.156	-	1.312	SB24-3-S	-PIN
24	48		2.014	2.000	0.406	1.015	0.653	0.350	M5	0.404	0.218	-	0.875		-GEAR
48	30	B	0.666	0.625	0.250	0.590	0.463	0.200	M3	0.262	0.156	-	1.205	SB48-3-S	-PIN
48	90		1.880	1.875	0.250	0.937	0.436	0.200	M5	0.309	0.156	-	0.680		-GEAR



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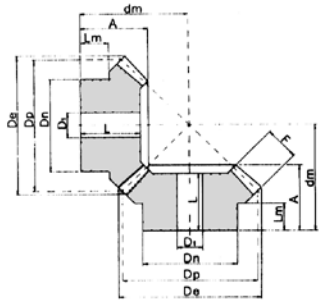
DAVALL GEARS
An MTI Company

Bevel Gears

Spiral 1:1 Mitre

Steel 2.0 to 5.0 module

GEARS



LH

RH

Mod	No. Teeth	Outside Dia. A	Pitch Dia. B	Bore Dia. C	Boss Dia. D	Overall Length E	Length through bore L	Face Width F	Boss Projection J	Mounting Distance X	Catalogue No Steel
2	16	34.6	32	10	25	19.9	16.9	9	9.5	29	MSB20-16-S
2	20	42.6	40	10	32	24.9	21.7	12	12	36	MSB20-20-S
2	25	52.6	50	12	40	27.4	24.8	14	12	42	MSB20-25-S
2	30	62.6	60	12	50	29.9	26.9	16	13	48	MSB20-30-S
2.5	16	43.2	40	12	32	24.8	21.8	12	13	37	MSB25-16-S
2.5	20	53.3	50	12	40	30.2	26.7	18	16	46	MSB25-20-S
2.5	25	65.8	62.5	15	50	33.2	29.9	20	16	53	MSB25-25-S
2.5	30	78.3	75	15	55	35	31.8	22	16	59	MSB25-30-S
3	16	51.9	48	15	40	29.4	25.8	12	16	44	MSB30-16-S
3	20	63.9	60	15	45	34.5	30.7	18	13.5	51	MSB30-20-S
3	25	78.9	75	15	55	37.5	33.7	20	16	60	MSB30-25-S
3	30	93.9	90	20	60	39.5	35.8	22	19	68	MSB30-30-S
3.5	16	60.2	56	15	45	34.1	29.5	14	17.5	51	MSB35-16-S
3.5	20	74.2	70	15	55	35.9	31.2	15	19	59	MSB35-20-S
3.5	25	91.7	87.5	20	65	43.6	38.7	26	18	68	MSB35-25-S
3.5	30	109.2	105	20	70	45.8	40.9	30	17	76	MSB35-30-S
4	16	68.8	64	15	50	36	30.8	15	17	56	MSB40-16-S
4	20	84.8	80	18	60	37.5	32.5	17	18	64	MSB40-20-S
4	25	104.8	100	20	70	40.4	35.2	21	18	74	MSB40-25-S
4	30	124.8	120	25	80	43.2	38.1	25	16	84	MSB40-30-S
4.5	16	77.4	72	18	55	39.3	33.5	15	18.5	63	MSB45-16-S
4.5	20	95.4	90	20	65	42.8	36.5	20	18	72	MSB45-20-S
4.5	25	117.9	112.5	20	75	45	39	25	18	72	MSB45-25-S
4.5	30	140.4	135	25	90	48	42	28	17	94	MSB45-30-S
5	16	86	80	20	60	41.9	35.5	17	18	68	MSB50-16-S
5	20	106	100	20	70	44.7	37.7	21	18.5	78	MSB50-20-S
5	25	131	125	20	90	47.8	41.8	26	18.5	90	MSB50-25-S
5	30	156	150	30	110	52.5	45.7	32	18	103	MSB50-30-S

Specification

Material: EN8 or similar

All dimension in millimetres
Pressure angle 20º
Helix Angle 35º
General tolerance +0.25
Angular accuracy between shafts +0º-5'
Shafts axes should intersect within +0.025.
Mounting distance tolerance[+ nil / - 0.05]

These gears are not hardened
Can only be run as a set (extra gear can b e supplied- specify handling)
Set comprises of 1 left hand and pinion &1 right hand gear

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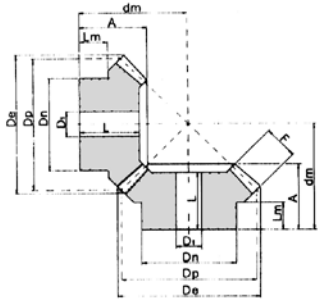
An MTI Company

Bevel Gears

Spiral 2:1 Mitre

Steel 2.0 to 5.0 module

GEARS



LH

RH

Mod	No of teeth	Handling	Outside Dia De	Pitch Dia Dp	Bore Dia D1	Boss Dia Dn	Overall Length A	Length through bore L	Face Width F	Boss Projection Lm	Mounting Distance dm	Catalogue ref Steel
2	16	left	36.6	32	10	27	22.5	45	10	11.7	45	MSB20-2-S-PIN-LH
2	32	right	65	64	12	40	24.1	35	10	10	35	MSB20-2-S-GEAR-RH
2.5	16	left	45.7	40	12	34	27.5	56	12	14.5	56	MSB25-2-S-PIN-LH
2.5	32	right	81.3	80	15	50	29.2	43	12	15	43	MSB25-2-S-GEAR-RH
3	16	left	54.1	48	15	40	28.4	62	15	12	62	MSB30-2-S-PIN-LH
3	32	right	97.5	96	15	60	34.6	51	15	15	51	MSB30-2-S-GEAR-RH
3.5	16	left	63.2	56	15	48	33.3	72	18	14	72	MSB35-2-S-PIN-LH
3.5	32	right	113.8	112	20	70	39.1	58	18	19	58	MSB35-2-S-GEAR-RH
4	16	left	72.2	64	20	50	36.2	81	20	13.5	81	MSB40-2-S-PIN-LH
4	32	right	130	128	20	80	44.2	66	20	23	66	MSB40-2-S-GEAR-RH
4.5	16	left	81.2	72	20	60	40.2	91	22	16	91	MSB45-2-S- PIN-LH
4.5	32	right	146.2	144	25	80	49.2	74	22	24	74	MSB45-2-S-GEAR-RH
5	16	left	90.2	80	20	60	50	106	25	21	106	MSB50-2-S-PIN-LH
5	32	right	162.5	160	25	85	53.7	81	25	27	81	MSB50-2-S-GEAR-RH

Specification

Material: EN8 or similar

All dimension in millimetres
Pressure angle 20º
Helix Angle 35º
General tolerance +0.25
Angular accuracy between shafts +0º-5'
Shafts axes should intersect within +0.025.
Mounting distance tolerance[+ nil / - 0.05]

These gears are not hardened
Can only be run as a set (extra gear can b e supplied- specify handling)
Set comprises of 1 left hand and pinion &1 right hand gear

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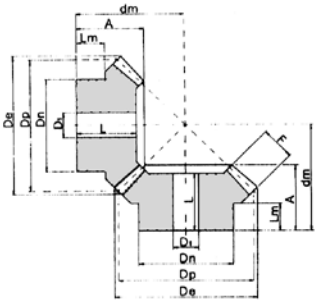
Bevel Gears

Spiral 3:1 and 4:1 ratio

Steel 2.0 to 5.0 module



LH

RH

GEARS

Mod	No. Teeth	Handing	Outside Dia.	Pitch Dia.	Bore Dia.	Boss Dia.	Overall Length	Length through bore	Face Width	Boss Projection	Mounting Distance	Catalogue Reference
			A	B	C	D	E	L	F	J	X	Steel
2	16	left	37.1	32	12	25	25.6	24.0	15	9.7	59	MSB20-3-S-PIN-LH
2	48	right	96.6	96	15	50	25.2	21.4	15	13	36	MSB20-3-S-GEAR-RH
2.5	16	left	46.4	40	14	33	27.7	26.2	18	8.9	70	MSB25-3-S-PIN-LH
2.5	48	right	120.8	120	20	60	31.4	26.3	18	16	45	MSB25-3-S-GEAR-RH
3	16	left	54.8	48	15	42	29.8	28.1	18	11	84	MSB30-3-S-PIN-LH
3	48	right	145.0	144	20	65	36.6	31.1	18	19	54	MSB30-3-S-GEAR-RH
3.5	16	left	64.0	56	15	48	36.8	33.9	22	13.6	99	MSB35-3-S-PIN-LH
3.5	48	right	169.1	168	20	75	43.1	36.0	22	23	63	MSB35-3-S-GEAR-RH
4	16	left	73.1	64	20	55	41.7	39.2	25	15.5	113	MSB40-3-S-PIN-LH
4	48	right	193.3	192	22	85	49.2	40.9	25	27	72	MSB40-3-S-GEAR-RH
4.5	16	left	82.2	72	20	60	53.7	50.2	28	24	134	MSB45-3-S-PIN-LH
4.5	48	right	217.4	216	25	90	56.2	47.6	28	27	82	MSB45-3-S-GEAR-RH
5	16	left	91.4	80	20	60	60.4	57.2	35	22.7	146	MSB50-3-S-PIN-LH
5	48	right	241.6	240	28	100	63.6	53.6	35	35	91	MSB50-3-S-GEAR-RH

Mod	No. Teeth	Handing	Outside Dia.	Pitch Dia.	Bore Dia.	Boss Dia.	Overall Length	Length through bore	Face Width	Boss Projection	Mounting Distance	Catalogue Reference
			A	B	C	D	E	L	F	J	X	Steel
2	16	left	37.3	32	12	25	24.0	23.1	15	8.2	73	MSB20-4-S-PIN-LH
2	64	right	128.5	128	20	70	27.2	23.3	15	14	39	MSB20-4-S-GEAR-RH
2.5	16	left	46.7	40	15	34	31.0	29.1	18	12.2	93	MSB25-4-S-PIN-LH
2.5	64	right	160.6	160	20	80	34.2	29.2	18	16	49	MSB25-4-S-GEAR-RH
3	16	left	55.1	48	15	40	32.1	30.2	20	11	108	MSB30-4-S-PIN-LH
3	64	right	192.7	192	20	90	40.9	35.1	20	22	59	MSB30-4-S-GEAR-RH

Specification

Material: EN8 or similar
All dimension in millimetres
Pressure angle 20º
Helix Angle 35º
General tolerance +0.25
Angular accuracy between shafts +0º-5'
Shafts axes should intersect within +0.025.
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