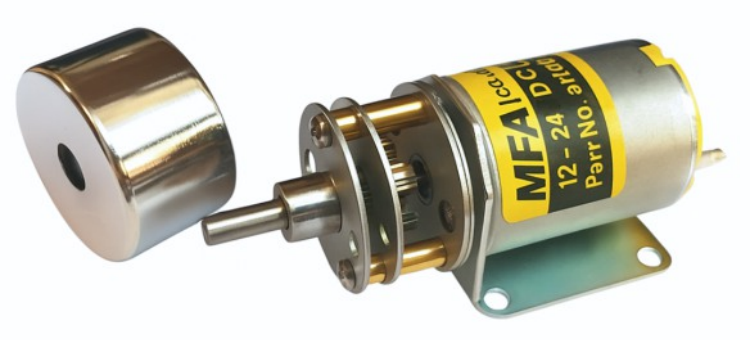
MFA/COMO DRILLS

918D SERIES 25mm SINGLE RATIO METAL GEARBOX (RE280, RE280/1 & RE280/5 Motor)



Metal gearbox cover & bracket Included with this series.

RATIOS NOW AVAILABLE AS EX-STOCK ITEMS. ALL RATIOS WITH 4mm SHAFTS:

Fitted with RE280 (1.5v - 3v) Motor:			Fitted with RE280/1 (12v - 24v) Motor:			Fitted with RE280/5 (3v - 6v) Motor:		
918D61/1	Ratio	6:1	918D6112/1	Ratio	6:1	918D616/1	Ratio	6:1
918D151/1	Ratio	15:1	918D15112/1	Ratio	15:1	918D1516/1	Ratio	15:1
918D301/1	Ratio	30:1	918D30112/1	Ratio	30:1	918D3016/1	Ratio	30:1
918D1001/1	Ratio	100:1	918D100112/1	Ratio	100:1	918D10016/1	Ratio	100:1
918D1501/1	Ratio	150:1	918D150112/1	Ratio	150:1	918D15016/1	Ratio	150:1
918D2501/1	Ratio	250:1	918D250112/1	Ratio	250:1	918D25016/1	Ratio	250:1
918D3601/1	Ratio	360:1	918D360112/1	Ratio	360:1	918D36016/1	Ratio	360:1
918D5001/1	Ratio	500:1	918D500112/1	Ratio	500:1	918D50016/1	Ratio	500:1
918D10241/1	Ratio	1024:1	918D1024112	Ratio	1024:1	918D102416/1	Ratio	1024:1

This miniature gearbox is of steel and brass construction with brass gears and is mounted on a 1mm thickness steel bracket. It incorporates a high quality three pole motor with sleeved bearings. The design and construction of the unit make it suitable for a host of model and light industrial applications.

MOTOR DATA. (RE280, RE280/1 & RE280/5)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY					STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED R.P.M.	CURRENT A	SPEED R.P.M.	CURRENT A	TORQUE oz-in	TORQUE g-cm	OUTPUT W	EFF %	oz-in	g-cm
RE280	1.5 - 3	3v Constant	8800	0.24	7200	1.06	0.32	23.2	1.71	53.8	1.75	126.0
RE280/1	12 - 24	12v Constant	8224	0.046	6636	0.194	0.27	19.2	1.31	56.1	1.389	99.3
RE280/5	3 - 6	6v Constant	9256	0.108	7703	0.534	0.33	23.7	1.87	58.4	2.648	141.2

Stall Current: RE280 at 3v = 4.8A. RE280/1 at 12v = 0.81A. RE280/5 at 6v = 2.65A

GEARBOX DATA.

PART NO	RATIO	REDUCTION TABLE RPM (No Load)°						WEIGHT	TORQUE RATING AT:		
		1.5v	3v	6v	12v	18v	24v		3v (g.cm)^	6v (g.cm)^	12v (g.cm)^
918D61/1	6:1	733	1467					75g	96	115	120
918D6112/1	6:1			685	1371	2056	2741	73g			
918D616/1	6:1		771	1543				74g			
918D151/1	15:1	293	587					75g	219	260	274
918D15112/1	15:1			274	548	822	1097	74g			
918D1516/1	15:1		309	617				75g			
918D301/1	30:1	147	293					75g	390	462	488
918D30112/1	30:1			137	274	411	548	78g			
918D3016/1	30:1		154	309				80g			
918D1001/1	100:1	44	88					76g	1000	1000	1000
918D100112/1	100:1			41	82	123	164	75g			
918D10016/1	100:1		46	93				75g			
918D1501/1	150:1	29	59					78g	1200	1200	1200
918D150112/1	150:1			27	55	82	110	76g			
918D15016/1	150:1		31	62				81g			
918D2501/1	250:1	18	35					76g	1200	1200	1200
918D250112/1	250:1			16	33	49	66	76g			
918D25016/1	250:1		19	37				77g			
918D3601/1	360:1	12	24					76g	1200	1200	1200
918D360112/1	360:1			11	23	34	46	76g			
918D36016/1	360:1		13	26				77g			
918D5001/1	500:1	9	18					89g	1500	1500	1500
918D500112/1	500:1			8	16	25	33	88g			
918D50016/1	500:1		9	19				89g			
918D10241/1	1024:1	4	9					88g	1500	1500	1500
918D1024112	1024:1			4	8	12	16	89g			
918D102416/1	1024:1		5	9				89g			

NOTES: ° Motor speeds may vary by + or - 12.5%

^ Geared Motor Torque Ratings at Maximum Efficiency. To establish Torque Rating in Nm, divide g.cm by 10197.0

IMPORTANT NOTICES:

At very low ratios the torque produced by this geared motor combination may exceed the maximum permissible torque of the gearbo x. In this situation the unit must not be allowed to stall as this may damage the gears. Due to the wide range of applications for this product it is the users responsibility to establish the products suitability for their individual purpose(s).

MFA/COMO DRILLS

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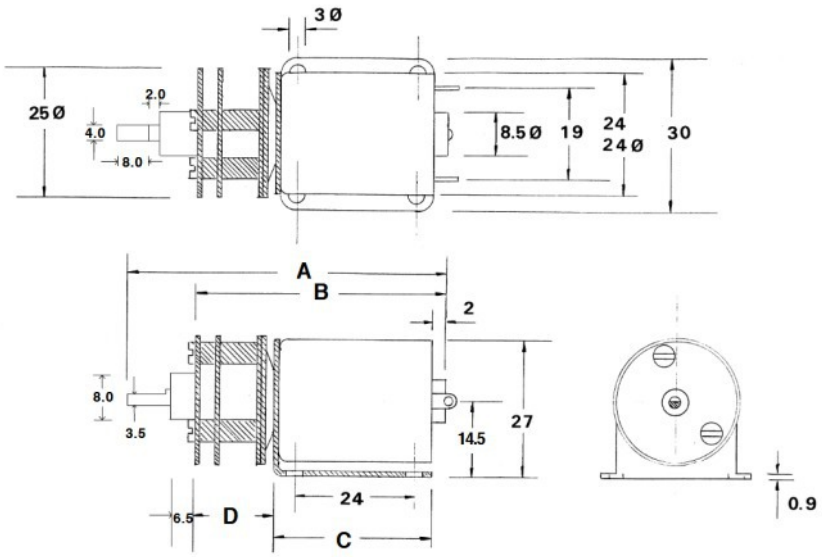
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MFA/COMO DRILLS

918D SERIES 25mm SINGLE RATIO METAL GEARBOX (RE280, RE280/1 & RE280/5 Motor)

918D SERIES TECHNICAL DRAWING

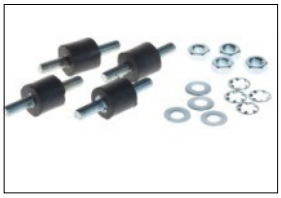


RATIO	A	B	C	D
6:1	67.5	51.3	33.5	17.8
15:1	67.5	51.3	33.5	17.8
30:1	67.5	51.3	33.5	17.8
100:1	67.5	51.3	33.5	17.8
150:1	67.5	51.3	33.5	17.8
250:1	67.5	51.3	33.5	17.8
360:1	67.5	51.3	33.5	17.8
500:1	69.5	53.3	33.5	19.3
1024:1	69.5	53.3	33.5	19.3

NOTE: All diameters in mm

918D SERIES	
No Load Backlash	Max 2 deg
Max Radial Load (10mm from flange)	300gf.
Shaft Axial Load	200gf.

ACCESSORIES FOR 918D SERIES GEARBOX



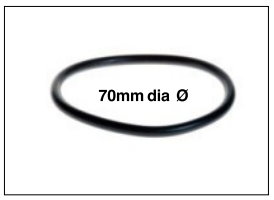
Anti vibration mount. M3. 9g
Part No: 1071



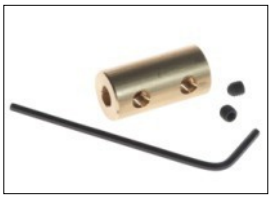
Universal Coupling. 4mm - 4mm. 10g
Part No: 1105/61
See Universal Couplings Page for full range of combinations



Pinions (Plastic) 12 tooth. 1.9mm I.D. 3g
Part No: 917D2458



'O' Ring 70mm x 5mm Dia. 5g
Part No: 917D2515



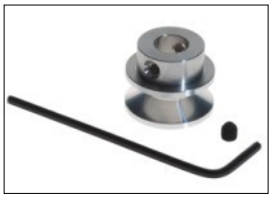
In-Line Coupling. 2mm - 3mm.
(Dia. 8mm x 20mm). 8g
Part No: 918D1

In-Line Coupling. 4mm - 4mm.
(Dia. 10mm x 20mm). 11g
Part No: 918D1/1



Pulley. 2mm I.D. (25mm dia. x 14.75mm)
(Aluminium). 12g
Part No: 918D2

Pulley. 4mm I.D. (25mm dia. x 14.75mm)
(Aluminium). 12g
Part No: 918D2/1



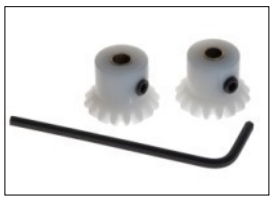
Pulley. 2mm I.D. (16mm dia. x 13.6mm)
(Aluminium). 6g
Part No: 918D3

Pulley. 4mm I.D. (16mm dia x 13.6mm)
(Aluminium). 6g
Part No: 918D3/1



Gear Adapter. 2mm I.D. Shaft Dia 6mm. 4g
Part No: 918D4

Gear Adapter. 4mm I.D. Shaft Dia 6mm. 4g
Part No: 918D4/1



Nylon Bevel Gears (1:1). O.D.
17.2mm. 4mm I.D. Module 1.0. 6g
Part No: 918D7



Stainless Steel Shaft.
4mm OD x 150mm. 15g
Part No: 918D8



Bearing Blocks. 4mm I.D.
(20 x 20 x 12.5mm) . 32g
Part No: 918D10

Subject to minimum order quantities of 250 units, the following ratios are also available with a six week lead-time. The physical dimensions of these other gearboxes may vary from the data as illustrated above. Details of individual gearboxes are available upon request.

GEARBOX 10:1 with 280 motor (1.5v - 3v)
GEARBOX 21:1 with 280 motor (1.5v - 3v)
GEARBOX 44:1 with 280 motor (1.5v - 3v)
GEARBOX 60:1 with 280 motor (1.5v - 3v)
GEARBOX 77:1 with 280 motor (1.5v - 3v)
GEARBOX 112:1 with 280 motor (1.5v - 3v)
GEARBOX 170:1 with 280 motor (1.5v - 3v)

GEARBOX 10:1 with 280/1 motor (12v - 24v)
GEARBOX 21:1 with 280/1 motor (12v - 24v)
GEARBOX 44:1 with 280/1 motor (12v - 24v)
GEARBOX 60:1 with 280/1 motor (12v - 24v)
GEARBOX 77:1 with 280/1 motor (12v - 24v)
GEARBOX 112:1 with 280/1 motor (12v - 24v)
GEARBOX 170:1 with 280/1 motor (12v - 24v)

GEARBOX 200:1 with 280 motor (1.5v - 3v)
GEARBOX 320:1 with 280 motor (1.5v - 3v)
GEARBOX 400:1 with 280 motor (1.5v - 3v)
GEARBOX 700:1 with 280 motor (1.5v - 3v)
GEARBOX 800:1 with 280 motor (1.5v - 3v)
GEARBOX 900:1 with 280 motor (1.5v - 3v)
GEARBOX 1153:1 with 280 motor (1.5v - 3v)

GEARBOX 200:1 with 280/1 motor (12v - 24v)
GEARBOX 320:1 with 280/1 motor (12v -24v)
GEARBOX 400:1 with 280/1 motor (12v - 24v)
GEARBOX 700:1 with 280/1 motor (12v - 24v)
GEARBOX 800:1 with 280/1 motor (12v - 24v)
GEARBOX 900:1 with 280/1 motor (12v - 24v)
GEARBOX 1153:1 with 280/1 motor (12v - 24v)

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