

941D SERIES 16mm PLANETRY (EPICYCLIC) SUB MINIATURE METAL GEARBOX

(RE941 Motor)



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

Fitted with RE941 (3v - 12v) Motor:

941D41	Ratio	4:1
941D191	Ratio	19:1
941D291	Ratio	29:1
941D621	Ratio	62:1
941D841	Ratio	84:1
941D1041	Ratio	104:1
941D1281	Ratio	128:1
941D2311	Ratio	231:1
941D4551	Ratio	455:1
941D5611	Ratio	561:1
941D10141	Ratio	1014:1

Designed for heavy-duty industrial and model applications this robust unit boasts a powerful high quality motor with sintered bronze bearings. The metal gearbox incorporates sleeved bearings, enabling the high torque transfer from the motor to be transmitted through the gearbox.

MOTOR DATA. (RE941)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY					STALL TORQUE		
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF	TORQUE	
			R.P.M.	A	R.P.M.	A	oz-in	g-cm	W	%	oz-in	g-cm
RE941	3 - 12	12v Constant	8000	0.035	5500	0.115	0.1	7.2	0.47	45.6	0.56	est 40

GEARBOX DATA.

PART NO	RATIO	REDUCTION TABLE RPM (No Load) ^o				WEIGHT	TORQUE RATING AT:	
		3v	6v	9v	12v		12v (g.cm) [^]	Gearbox Efficiency %
941D41	4:1	500	1000	1500	2000	34g	23	80
941D191	19:1	105	211	316	421	39g	96	70
941D291	29:1	69	138	207	276	39g	146	70
941D621	62:1	32	65	97	129	43g	268	60
941D841	84:1	24	48	71	95	42g	363	60
941D1041	104:1	19	38	58	77	42g	449	60
941D1281	128:1	16	31	47	63	43g	553	60
941D2311	231:1	9	17	26	35	47g	832	50
941D4551	455:1	4	9	13	18	46g	1638	50
941D5611	561:1	3	7	11	14	46g	2000	50
941D10141	1014:1	2	4	6	8	50g	2400	40

NOTES: It is not recommended to run the motor/gearbox combination at 1.5v

^o 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

941D SERIES	
No Load Backlash	Max 3 deg.
Max Radial Load (10mm from flange)	500gf.
Shaft Axial Load	500gf.

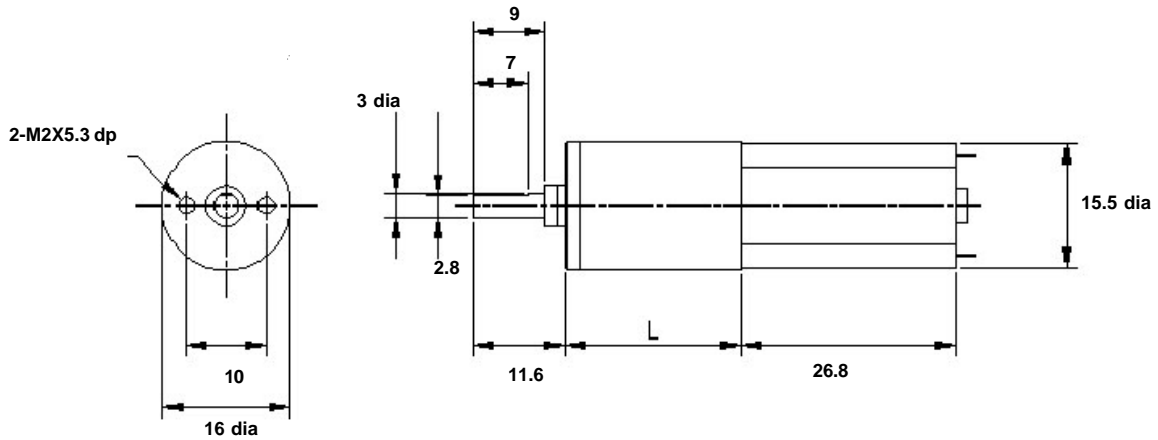
IMPORTANT NOTICES:

At very low ratios the torque produced by this geared motor combination may exceed the maximum permissible torque of the gearbox. 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).

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941D SERIES TECHNICAL DRAWING



RATIO	L
4:1	15.0
19:1	18.7
29:1	18.7
62:1	22.3
84:1	22.3
104:1	22.3
128:1	22.3
231:1	26.0
455:1	26.0
561:1	26.0
1014:1	29.7

NOTE: all diameters in mm

FOR ACCESSORIES TO FIT THIS SERIES GEARBOX, REFER TO 917D SERIES.

ADVANTAGES OF PLANETRY GEARBOXES

EFFICIENCY:	Efficiencies of planetary gearboxes can be above 90% while some other types of transmission can be 50% or less. This allows the use of smaller motors.
SIZE:	Planetary gearboxes can be half the size of conventional boxes.
WEIGHT:	Weight savings can be as high as 60%, allowing smaller, lighter support structures.
MAINTENANCE:	Other than routine oil changes, no maintenance is required, eliminating the need to hold spares.
REVERSIBLE:	Planetary gears can be equally efficient in either direction. This is an advantage for use in running machinery in both clockwise and anti-clockwise directions.
COAXIAL:	The coaxial configuration of input and output shafts allows planetary gears to be installed in line with a motor and a machine.

Subject to minimum order quantities of 100 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 14:1 with 941 motor
 GEARBOX 72:1 with 941 motor
 GEARBOX 157:1 with 941 motor

GEARBOX 316:1 with 941 motor
 GEARBOX 370:1 with 941 motor
 GEARBOX 690:1 with 941 motor

GEARBOX 1621:1 with 941 motor
 GEARBOX 1996:1 with 941 motor
 GEARBOX 3027:1 with 941 motor