

FRD GEARBOX DATA SHEET

TEC Electric Motors Ltd, 291-296 Oak Drive, Hartlebury Trading Est, Kidderminster, Worcs, DY10 4JB
T: 01299 252 990 F: 01299 253 597 www.tecmotors.co.uk



TEC REFERENCE:

FRD12-B3-2.5-4

General Data

Size	FRD12-B3
Nominal Ratio	2.5
Exact Ratio	2.534
Input Power (kW)	1.50
Motor poles	4
Motor frame	90LB14
Final Output Speed (RPM)	564.0
Output Torque (Nm)	24
Service Factor	1.80
Construction	Aluminium
Weight (kg excluding motor)	4.8
Rated Torque (Nm)	45
Mounting position	H1
Lubrication	Synthetic long-life oil VG-320 (volume dependant on mounting position)

Installation Dimensions

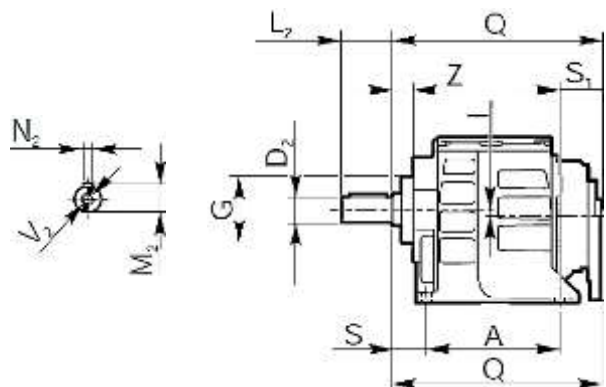
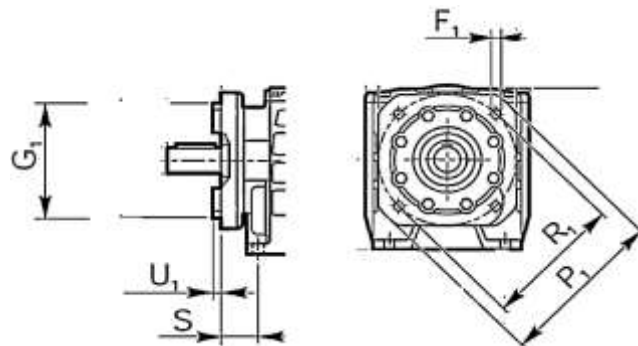
FRD12-B3

The figure contains two sets of technical drawings for actuators.

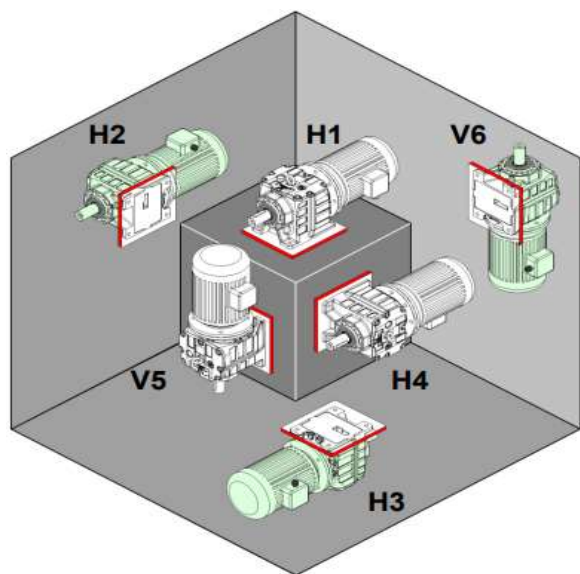
- FRD-B3:** Includes a front view with dimensions L₂, Q, L₁, Z, S₁, D₂, G, S, A, Q, D₁; a side view with C_x, E, V, CY, H, F, R, B, P; and two detail views of mounting holes labeled N₂/V₂/M₂ and N₁/V₁/M₁.
- FRD-B5:** Includes a front view with dimensions C_x, E₁, F₁, H, F, B, P₁, C_y, R₁; a side view with L₂, Q, D₂, G₁, U₁, S, A; and a detail view of a mounting hole labeled N₁/V₁/M₁.

		Motor Dimensions															
Ref	D	E	F	P	M	N	S	T	AC	L	A	B	AA	H	AD	TBW	TBH
56B5	9	20	3	120	100	80	7	3	110	195	90	71	112	56	151	83	83
63B14	11	23	4	90	75	60	M5	2.5	122	217	100	80	124	63	172	98	98
63B5	11	23	4	140	115	95	10	3	122	217	100	80	124	63	172	98	98
71B14	14	30	6	105	85	70	M6	2.5	138	245	112	90	140	71	189	98	98
71B5	14	30	6	160	130	110	10	3.5	138	245	112	90	140	71	189	98	98
80B14	19	40	8	120	100	80	M6	3	157	227/304*	125	100	160	80	214	109	109
80B5	19	40	8	200	165	130	12	3.5	157	227/304*	125	100	160	80	214	109	109
90B14	24	50	8	140	115	95	M8	3	177	315/340	140	100/125	176	90	235	109	109
90B5	24	50	8	200	165	130	12	3.5	177	315/340	140	100/125	176	90	235	109	109
100B14	28	60	8	160	130	110	M8	3.5	199	376/411*	160	140	200	100	260	118	118
100B5	28	60	8	250	215	180	15	4	199	376/411*	160	140	200	100	260	118	118
112B14	28	60	8	160	130	110	M8	3.5	220	398	190	140	224	112	283	118	118
112B5	28	60	8	250	215	180	15	4	220	398	190	140	224	112	283	118	118
132B14	38	80	10	200	165	130	M10	3.5	261	460/498	216	140/178	269	132	323	118	118
132B5	38	80	10	300	265	230	15	4	261	460/498	216	140/178	260	132	323	118	118
160B14	42	110	12	250	215	180	M12	5	313	605/650	254	210/254	316	160	404	162	187
160B5	42	110	12	350	300	250	19	5	313	605/650	254	210/254	316	160	404	162	187
180B5	48	110	14	350	300	250	19	5	360	687/725	279	241/279	354	180	445	162	187

*please check the available inputs for this model with the TEC team

Options dimensions
Output shaft

Output flange


Size	D2	F1	G1	L2	M2	N2	P1	R1	S	U1	V2
FRD12-B3	25	-	-	50	28	8	-	-	18	-	M6x16

Mounting positions

Quantity of oil in litres

Size	H1	H2	H3	H4	V5	V6
FRD02	0.20	0.20	0.20	0.20	0.28	0.28
FRD03	0.30	0.30	0.30	0.30	0.38	0.38
FRD12	0.50	0.50	0.50	0.50	0.70	0.70
FRD13	0.50	0.50	0.50	0.50	0.70	0.70
FRD22	0.80	0.80	0.80	0.80	1.00	1.00
FRD23	0.80	0.80	0.80	0.80	1.00	1.00
FRD32	1.30	1.30	1.30	1.30	1.80	1.80
FRD33	1.60	1.60	1.60	1.60	2.10	2.10
FRD42	2.20	2.20	2.20	2.20	3.00	3.00
FRD43	2.20	2.20	2.20	2.20	3.40	3.40
FRD52	4.50	4.50	4.50	4.50	5.50	5.50
FRD53	4.50	4.50	4.50	4.50	6.50	6.50
FRD62	7.00	7.00	7.00	7.00	9.00	9.00
FRD63	7.00	7.00	7.00	7.00	11.00	11.00

Main assembly codes

Input coupling F	Input flange A	Output flange D	Input 2 stage B	Input Gears 3 stage E	Output stage C	Input 3 stage G
KG5.XXX	K532.206.XXX	N/A	KRD12EG5-AL	KRD1I016	KRD1U01520(25)-AL	N/A

