

Gearbox Type:

M or MB

Speed Range: 28 – 970 r.p.m.

Single Reduction Worm Gear Units

Variable Speed A.C. – D.C. Series or D.C. Shunt Wound

Enclosures: Standard – SD 1 Ventilated Internal Fan Cooled (IP 20)

SD 11 – SD 12 Drip Proof Internal Fan Cooled (IP 23)

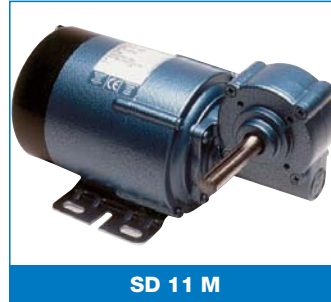
Alternative – Totally Enclosed (IP 50) with Terminal Box (IP 54)



SD 1 MF



SD 1 MB



SD 11 M



SD 12 MB

■ **Voltage, Construction, Connections, Motor Performance Specifications and Optional Extras** see pages 44 and 46 for full details.
Hollow shaft. Available on request maximum internal diameter 8mm.

(1 Nm = 8.85 lbs. ins.) (1 Nm = 10.2 cmkp)

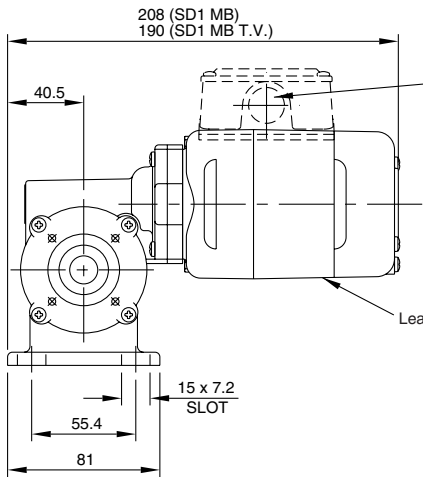
Gearbox Specification Motor Speed 2000 r.p.m.		SD 11 M/MB Shunt Motor Rating 50 watts	SD 12 M/MB Shunt Motor Rating 60 watts
FINAL R.P.M.	RATIO	OUTPUT TORQUE (Nm)	
		COMPOSITE	COMPOSITE
28	72:1	5.1	–
30	66:1	5.1	–
33	60:1	4.97	5.9
38	54:1	4.75	5.65
43	48:1	4.41	5.42
45	44:1	4.29	5.2
50	40:1	4.07	4.97
55	36:1	3.73	4.52
60	33:1	3.5	4.29
65	30:1	3.16	3.96
75	27:1	2.94	3.62
80	25:1	2.83	3.5
90	22 1/2:1	2.71	3.39
100	20 1/2:1	2.49	3.05
110	18 1/2:1	2.26	2.83
120	16 1/2:1	2.15	2.71
130	15 1/2:1	2.03	2.6
138	14 1/2:1	1.92	2.49
150	13 1/3:1	1.81	2.26
160	12 1/3:1	1.7	2.15
175	11 1/3:1	1.58	2.03
200	10 1/3:1	1.47	1.92
215	9 1/3:1	1.36	1.81
240	8 1/3:1	1.24	1.58
275	7 1/4:1	1.13	1.47
325	6 1/6:1	1.02	1.24
390	5 1/8:1	0.79	0.9
485	4 1/8:1	0.57	0.68

Gearbox Specification Motor Speed 3000 r.p.m.		SD 1 M/MB Series/Shunt Motor Rating 38 watts	SD 11 M/MB Series Motor Rating 75 watts	SD 11 M/MB Shunt Motor Rating 95 watts	SD 12 M/MB Series Motor Rating 95 watts	SD 12 M/MB Shunt Motor Rating 125 watts
FINAL R.P.M.	RATIO	OUTPUT TORQUE (Nm)				
		COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE
42	72:1	2.71	–	–	–	–
45	66:1	2.6	–	–	–	–
50	60:1	2.37	4.97	5.9	5.9	5.9
55	54:1	2.26	4.75	5.65	5.65	5.9
62	48:1	2.03	4.41	5.42	5.42	5.9
68	44:1	1.81	4.29	5.20	5.2	5.9
75	40:1	1.58	4.07	5.09	5.09	6.78
83	36:1	1.47	3.73	4.75	4.75	6.33
90	33:1	1.36	3.5	4.41	4.41	5.99
100	30:1	1.24	3.16	4.18	4.18	5.54
110	27:1	1.19	2.94	3.84	3.84	5.09
120	25:1	1.13	2.83	3.62	3.62	4.86
130	22 1/2:1	1.02	2.71	3.5	3.5	4.75
145	20 1/2:1	0.9	2.49	3.28	3.28	4.29
160	18 1/2:1	0.79	2.26	2.94	2.94	3.96
180	16 1/2:1	0.73	2.15	2.83	2.83	3.73
190	15 1/2:1	0.73	2.03	2.71	2.71	3.62
205	14 1/2:1	0.68	1.92	2.6	2.6	3.39
220	13 1/3:1	0.62	1.81	2.37	2.37	3.28
240	12 1/3:1	0.57	1.7	2.26	2.26	3.05
265	11 1/3:1	0.57	1.58	2.15	2.15	2.94
290	10 1/3:1	0.51	1.47	2.03	2.03	2.71
320	9 1/3:1	0.45	1.36	1.81	1.81	2.49
360	8 1/3:1	0.4	1.24	1.7	1.7	2.26
410	7 1/4:1	0.34	1.13	1.47	1.47	2.03
480	6 1/6:1	0.31	1.02	1.36	1.36	1.81
580	5 1/8:1	0.28	0.79	1.02	1.02	1.47
725	4 1/8:1	0.23	0.57	0.79	0.79	1.13

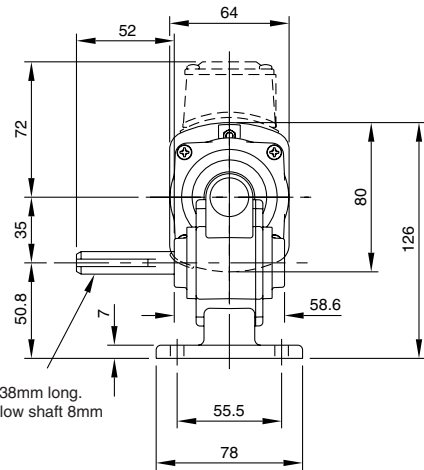
Gearbox Specification Motor Speed 4000 r.p.m.		SD 1 M/MB Series/Shunt Motor Rating 50 watts	SD 11 M/MB Series Motor Rating 95 watts		SD 11 M/MB Shunt Motor Rating 125 watts	SD 12 M/MB Series Motor Rating 150 watts		SD 12 M/MB Shunt Motor Rating 150 watts
FINAL R.P.M.	RATIO	OUTPUT TORQUE (Nm)						
		COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE
55	72:1	2.71	–	–	–	–	–	–
60	66:1	2.6	–	–	–	–	–	–
65	60:1	2.37	–	–	–	–	–	–
75	54:1	2.26	–	–	–	–	–	–
85	48:1	2.03	5.65	–	–	–	–	–
90	44:1	1.81	4.52	5.65	5.65	5.9	5.9	5.9
100	40:1	1.7	4.29	5.31	5.31	6.37	6.37	6.37
110	36:1	1.58	4.18	5.09	5.09	6.12	6.12	6.12
120	33:1	1.53	3.96	4.86	4.86	5.17	5.17	5.17
130	30:1	1.47	3.62	4.41	4.41	4.91	4.91	4.91
150	27:1	1.36	3.28	4.07	4.07	4.73	4.73	4.73
160	25:1	1.3	3.05	3.73	3.73	4.37	4.37	4.37
180	22 1/2:1	1.24	2.83	3.5	3.5	4.28	4.28	4.28
200	20 1/2:1	1.13	2.6	3.16	3.16	4.1	4.1	4.1
220	18 1/2:1	1.07	2.49	3.05	3.05	3.92	3.92	3.92
240	16 1/2:1	1.02	2.37	2.94	2.94	3.57	3.57	3.57
260	15 1/2:1	0.96	2.26	2.83	2.83	3.38	3.38	3.38
275	14 1/2:1	0.9	2.15	2.6	2.6	3.3	3.3	3.3
300	13 1/3:1	0.85	1.92	2.37	2.37	3.21	3.21	3.21
320	12 1/3:1	0.79	1.81	2.26	2.26	2.94	2.94	2.94
350	11 1/3:1	0.73	1.7	2.15	2.15	2.76	2.76	2.76
400	10 1/3:1	0.68	1.58	1.81	1.81	2.68	2.68	2.68
430	9 1/3:1	0.57	1.47	1.7	1.7	2.41	2.41	2.41
480	8 1/3:1	0.51	1.36	1.58	1.58	2.23	2.23	2.23
550	7 1/4:1	0.45	1.24	1.47	1.47	2.1	2.1	2.1
650	6 1/6:1	0.4	1.13	1.36	1.36	1.78	1.78	1.78
780	5 1/8:1	0.4	0.9	1.13	1.13	1.43	1.43	1.43
970	4 1/8:1	0.28	0.73	0.9	0.9	1.16	1.16	1.16

Dimensions in mm. Scale 1:4

SD 1 MB



Optional terminal box tapped 20mm conduit or PG 13.5 on request. Shown standard position entry R.H.S. (Not available on SD 1 T.V.).



12mm dia. h6. Keyway 4mm x 38mm long. **Alternative**, hollow shaft 8mm inside diameter.

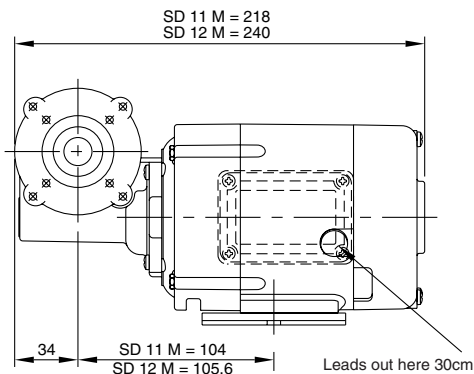
Optional shaft at motor speed (lead end only) 7.93mm dia. x 33mm long.

Approx. weight: SD 1 MB – 2.12 Kg

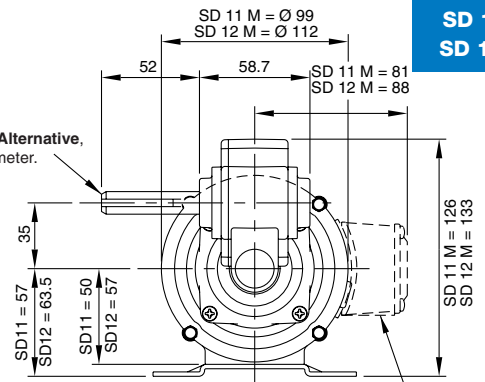
Dimensions in mm. Scale 1:4

NB: Unit drawn is SD 12 M

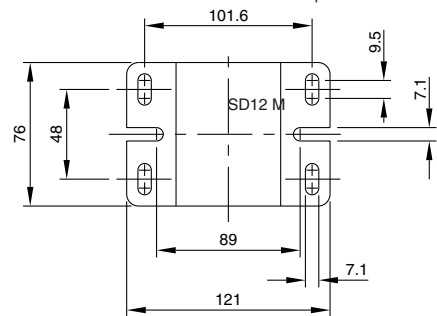
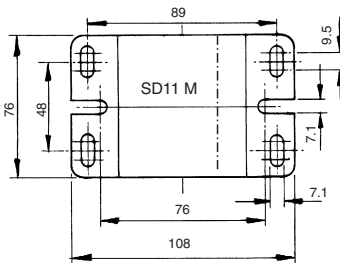
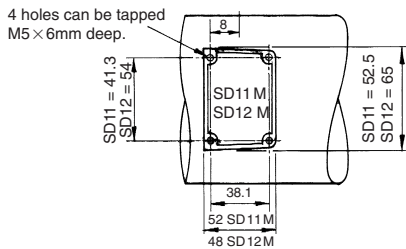
SD 11 M
SD 12 M



12mm dia. h6. Keyway 4mm x 38mm long. **Alternative**, hollow shaft 8mm inside diameter.



Optional terminal box tapped 20mm conduit or PG 13.5 on request. Shown standard position R.H.S. entry down.



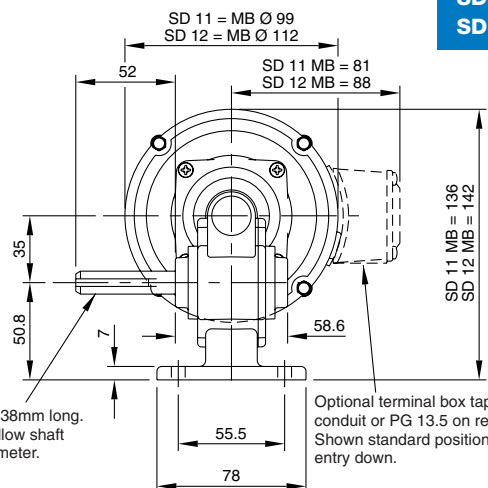
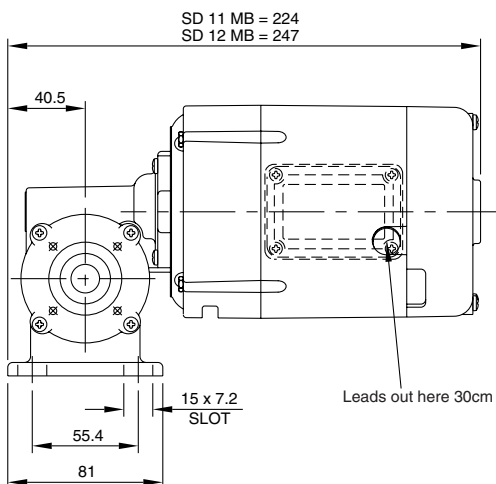
SD 11 M Optional shaft at motor speed (lead end only) 7.93mm dia. x 33mm long.
SD 12 M Optional shaft at motor speed (lead end only) 10mm dia. x 33mm long.

Approx. weight: SD 11 M – 3.21 Kg
SD 12 M – 4.28 Kg

Dimensions in mm. Scale 1:4

NB: Unit drawn is SD 12 MB

SD 11 MB
SD 12 MB



12mm dia. h6. Keyway 4mm x 38mm long. **Alternative**, hollow shaft 8mm inside diameter.

Optional terminal box tapped 20mm conduit or PG 13.5 on request. Shown standard position R.H.S. entry down.

SD 11 M Optional shaft at motor speed (lead end only) 7.93mm dia. x 33mm long.
SD 12 M Optional shaft at motor speed (lead end only) 10mm dia. x 33mm long.

Approx. weight: SD 11 MB – 3.40 Kg
SD 12 MB – 4.47 Kg