

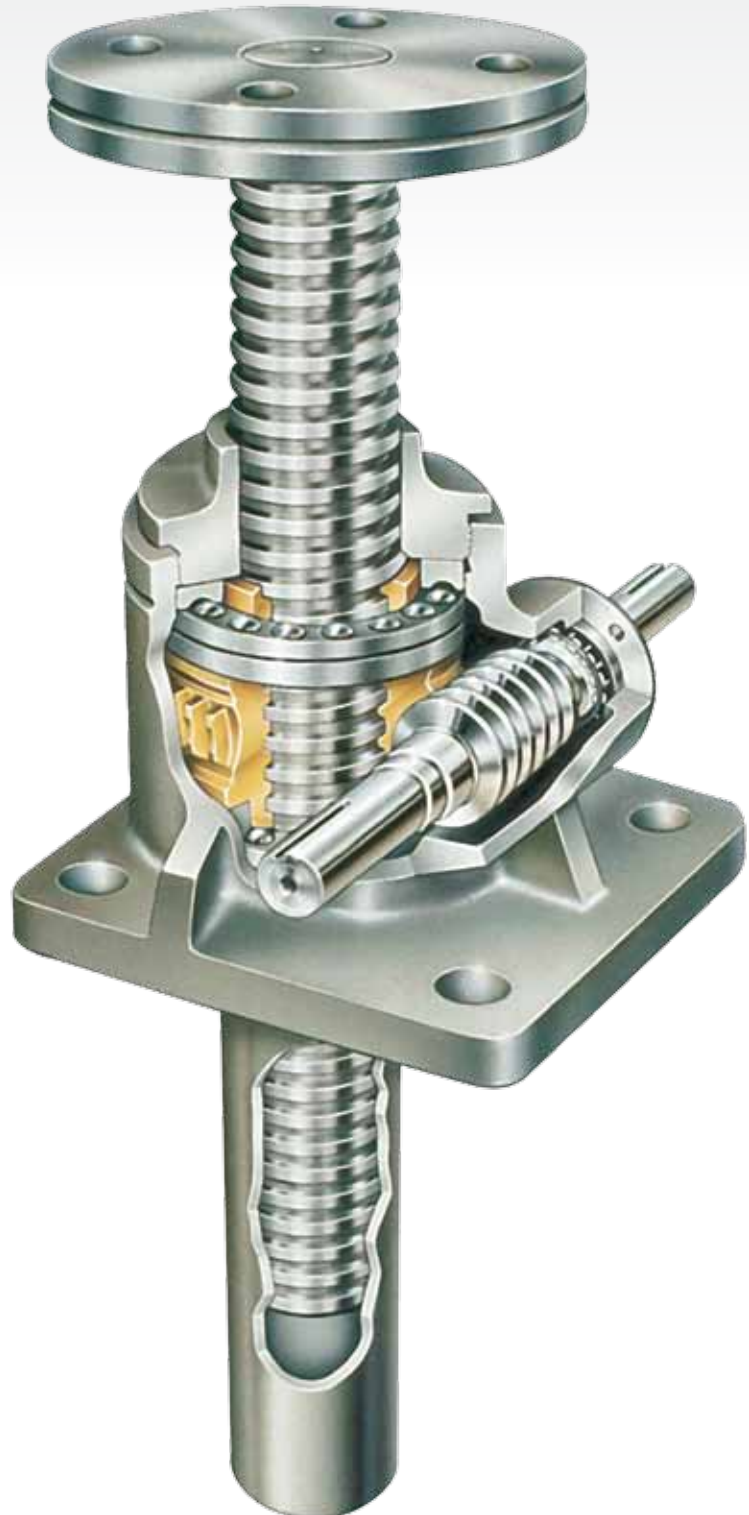
G SERIES METRIC MACHINE SCREW ACTUATORS

5 kN TO 500 kN

Duff-Norton metric actuators are manufactured to the same high quality standards and include all the same features and benefits as the standard line of actuators while incorporating the following features.

FEATURES

- Load Capacities in Tonnes.
- Mounting dimensions in millimeters.
- Metric screw diameters with trapezoidal threads. (Machine screw actuators)
- Metric shaft and keyway sizes per ISO recommended standards.
- All metric fasteners on machine screw units.
- Metric bolt centers.
- Other sizes and models available, contact Duff-Norton for more information.



METRIC MACHINE SCREW

ACTUATORS

MODEL NUMBERING SYSTEM

G - 9002 - MV - 120 - 1R

G - Metric Base Model

Series & Capacity No.

Series:

50kN - 500kN
Machine Screw (90xx)
Special MS (100xx)

5kN - 25kN
Machine Screw (9225, 2501, 9002)
Special MS (3625, 3501, 10002)

Capacities:

Last two digits of model number indicate capacity

Travel

1 mm increment travels are always represented using the exact travel amount.

Serialized digits in this position may also be used for other models containing special features

Model Suffix

B - Boot
L - Single End Worm Ext. Left
R - Single End Worm Ext. Right
1 - Optional Ratio #1
2 - Optional Ratio #2
X - Supplied without cover pipe, but with guide bushing.

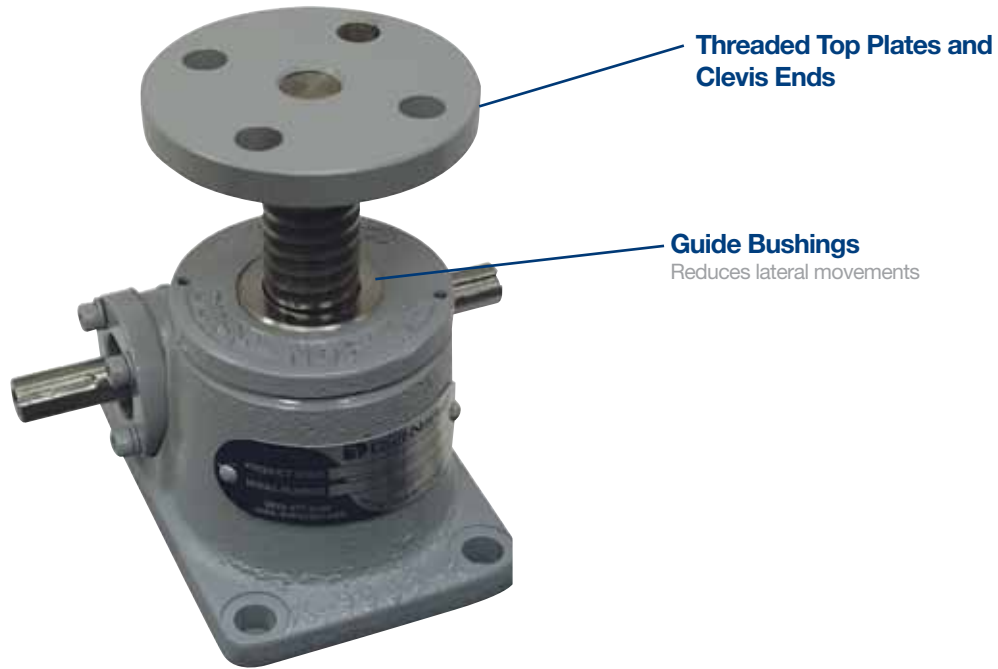
Screw End, Configuration, and Options. All that apply.

(none) - Upright translating
A - Anti-backlash
C - Clevis
CC - Double clevis
D - Inverted rotating
F - Flange for motor
K - Keyed screw
L - Limit switch
M - Top plate
P - Plain end
R - Gear reducer
S - Stainless
T - Threaded end
U - Upright rotating
V - Inverted

METRIC MACHINE SCREW

ACTUATORS

PERFORMANCE SPECIFICATIONS



Specifications - Metric Machine Screw Actuator										
Capacity (kN)		5	10	25	50	100	150	200	300	500
Lifting Screw	Diameter (mm)	16	20	30	38	52	58	65	95	115
	Lead (mm)	3	5	6	9	12	12	12	16	16
	Type	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal	Metric Trapezoidal
Worm Gear Ratios	Standard	5:1	5:1	6:1	6:1	8:1	8:1	8:1	10-2/3:1	10-2/3:1
	Optional No. 1	—	20:1	24:1	24:1	24:1	24:1	24:1	32:1	32:1
	Optional No. 2	—	—	12:1	12:1	—	—	—	—	—
Travel per Worm Turn (mm)	Standard	0.60	1.00	1.00	1.50	1.50	1.50	1.50	1.50	1.50
	Optional No. 1	—	0.25	0.25	0.38	0.50	0.50	0.50	0.50	0.50
	Optional No. 2	—	—	0.50	0.75	—	—	—	—	—
Worm Torque at No Load (N-m)	Standard	0.23	0.56	0.56	1.13	2.26	2.26	3.39	5.65	11.3
	Optional No. 1	—	0.56	0.56	1.13	2.26	2.26	3.39	5.65	11.3
	Optional No. 2	—	—	0.56	1.13	—	—	—	—	—
Maximum Input Power (kW)	Standard	0.25	0.37	1.49	2.98	3.73	3.73	3.73	6.00	11.2
	Optional No. 1	—	0.19	0.37	0.56	1.12	1.12	1.12	1.86	4.50
	Optional No. 2	—	—	0.56	1.49	—	—	—	—	—
Worm Torque at Full Load (N-m)	Standard	2.83	7.53	20.10	56.78	117.1	189.2	275.4	505.7	915.5
	Optional No. 1	—	3.69	9.34	27.06	63.2	101.4	147.7	305.3	520.5
	Optional No. 2	—	—	12.8	36.65	—	—	—	—	—
Efficiency Rating (%)	Standard	16.9	21.1	19.8	21.0	20.4	18.9	17.3	14.2	13.0
	Optional No. 1	—	10.8	10.7	11.0	12.6	11.8	10.8	7.8	7.6
	Optional No. 2	—	—	15.5	16.3	—	—	—	—	—
Weight with 25mm Raise (kg)		1.04	2.27	7.71	15.88	23.59	29.94	42.18	100	173
Weight per Additional 25mm Raise (kg)		0.04	0.13	0.13	0.40	0.63	0.67	1.16	1.65	2.46
Key Torque (N-m)		8.48	22.80	76.61	213.37	579.94	943.98	1374.01	2954.25	5746.55
Max Worm Speed at Full Load (rpm)	Standard	844	469	708	501	304	188	129	113	117
	Optional No. 1	—	491	378	198	169	105	72	58	83
	Optional No. 2	—	—	418	388	—	—	—	—	—
Maximum Load at Maximum Power and 1450 rpm (kN)	Standard	2.73	2.69	11.84	16.62	19.42	17.90	15.57	20.32	34.54
	Optional No. 1	—	—	5.34	4.93	8.40	7.74	5.52	6.61	18.01
	Optional No. 2	—	—	6.39	12.22	—	—	—	—	—

*For loads from 25% to 100% of actuator capacity, torque requirements are approximately proportional to the load. Raises, measured in increments of 25mm, are available up to 6.1 meters, depending on lifting screw diameter and available bar stock length.

Note: Contact customer service for motorized performance.