

Screw and nut systems can use multiple arrangements. Such systems could use mitre boxes to effectively position and equally distribute loads. As the mitre boxes are supplied with 1:1 gear ratios as standard, all motion is synchronous upon system actuation through the main drive shaft.

Features

- 98% average efficiency ratings
- Carburized and case hardened bevel gears
- Alloy steel input/output shafts for greater strength
- Anti-friction bearings on all shafts
- MB-4 and MB-8 models come with lifetime lubrication, stainless steel shafts and aluminum housings

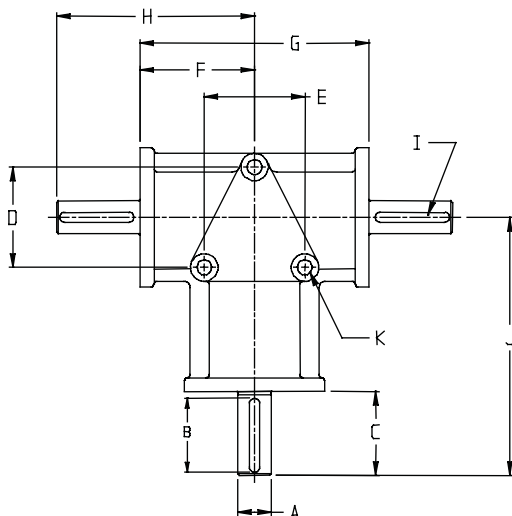
Mitre Box Performance Specifications

Part #	Type	Capacity (inch lbs)	Shaft Diameter
MB-4	3 Way	23	.375"
MB-8	3 Way	97	.75"
MB-16	3 Way	344	.625"
MB-19	3 Way	1400	1.0"
MB-19G	4 Way	1400	1.0"
MB-20	3 Way	3000	1.25"
MB-20G	4 Way	3000	1.25"
MB-22	3 Way	5000	1.375"
MB-22G	4 Way	5000	1.375"

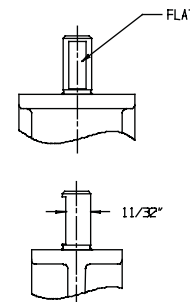
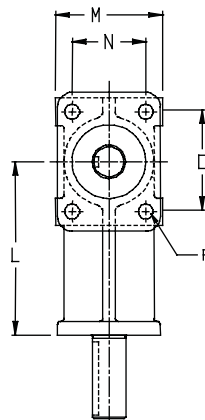
Our mitre boxes feature a compact design, which eliminates the need for an extended hub. With this design feature the bevel gear is supported by tapered roller bearings on both sides. The result is a higher horsepower rating, increased service-life, improved lubrication, and more flexible mounting compared to other brands.



Model	Torque	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
MB-4	23	0.375	0.625	0.781	1.938	1.938	1.375	2.75	2.156	FLAT	2.938	0.219	2.156	1.25	0.875	1.188	0.188
MB-8	97	0.75	1.375	1.563	3	3	3	6	4.563	3/16"	6.563	0.375	5	3	2.25	3	0.375



Mitre Box Dimensional Specifications



NOTE: Shaft extensions can be either keyed or flat

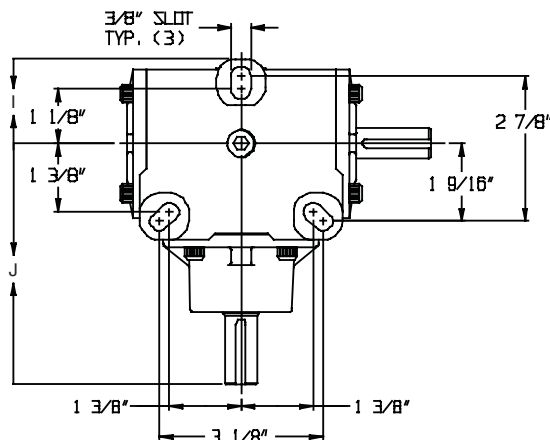
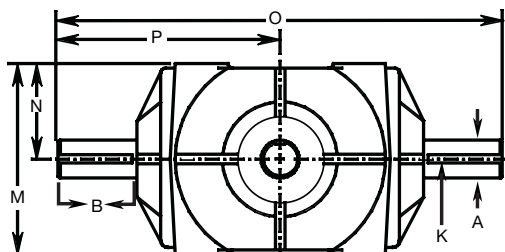
Mitre Box Dimensional Specifications

Linear Motion Components

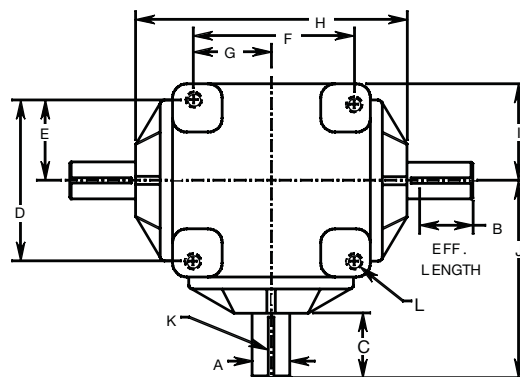
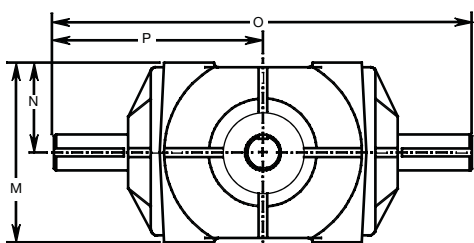
Model	Torque	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
MB-16	344	0.625	1.219	1.375						1.688	4.875	3/16"		3.188	1.594	7.25	3.625

Note: Standard model is a 3-way configuration

B: Effective keyway length



Model	Torque	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
MB-19 (G)	1400	1	1.396	2	4.25	2.125	4.25	2.125	7	2.75	5.5	1/4"	3/8"-16	4.125	2.062	11	5.5
MB-20 (G)	3000	1.25	1.84	2.5	4.5	2.25	4.5	2.25	8	2.875	6.5	1/4"	1/2"-13	5.625	2.813	13	6.5
MB-22 (G)	5000	1.375	2.17	2.938	6	3	6	3	10.625	4.125	8.25	5/16"	1/2"-13	7.5	3.75	16.5	8.25



Mitre Box Shaft Rotation

The direction of rotation of a connecting shaft can be controlled either by selecting clockwise or counter-clockwise mitre box rotation. The sketches above show how either a C.W. or C.C.W. rotation is obtained. Both the depicted 3-way boxes are identical except for the position of the mitre gear on the drive shaft.

The C.W. rotation is most common on both the 3-way and 4-way configurations and is the standard rotation for all Duff-Norton mitre boxes. For more information regarding mitre box shaft rotation please contact our customer service team.

