

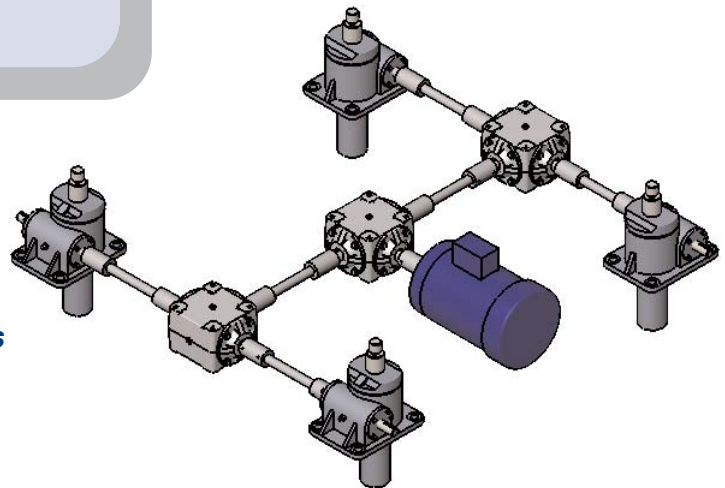
## Mitre Boxes

NEW

Power transmission systems frequently use multiple actuator arrangements. Such systems commonly 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-7 models come with lifetime lubrication, stainless steel shafts and aluminum housings



### Mitre Box Performance Specifications

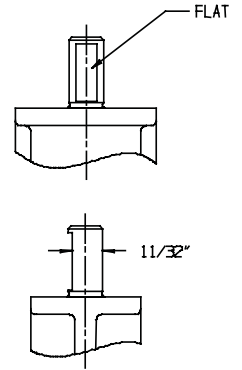
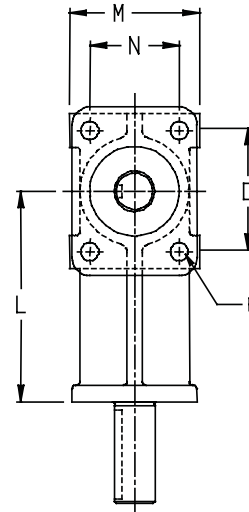
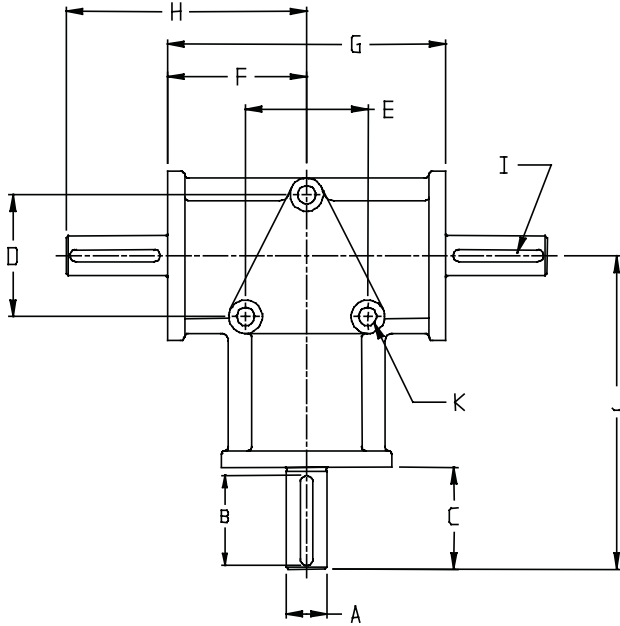
Part #	Type	Capacity (inch lbs)	Shaft Diameter
MB-4	3 Way	23	.375"
MB-16	3 Way	344	.625"
MB-19	3 Way	1400	1.0"
MB-19G	4 Way	1400	1.0"
MB-20	3 Way	3000	1.25"
MB-20G	4 Way	3000	1.25"
MB-22	3 Way	5000	1.375"
MB-22G	4 Way	5000	1.375"

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.



## Mitre Box Dimensional Specifications

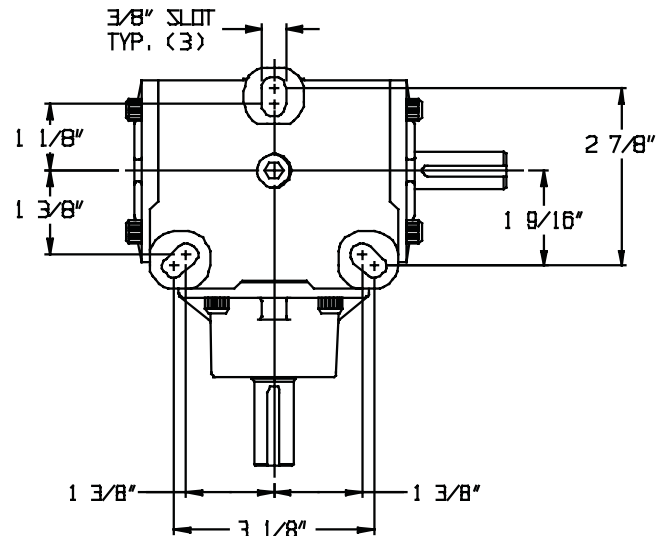
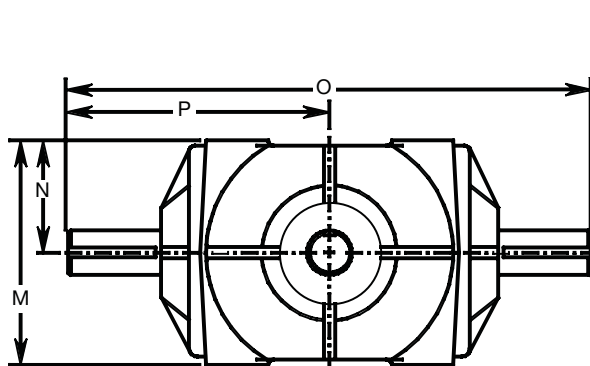
Model	Torque	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
MB-4	23	0.375	0.625	0.781	1.938	1.938	1.375	2.75	2.156	FLAT	2.938	0.219	2.156	1.25	0.875	1.188	0.188
MB-7	97	0.75	1.375	1.563	3	3	3	6	4.563	3/16"	6.563	0.375	5	3	2.25	3	0.375

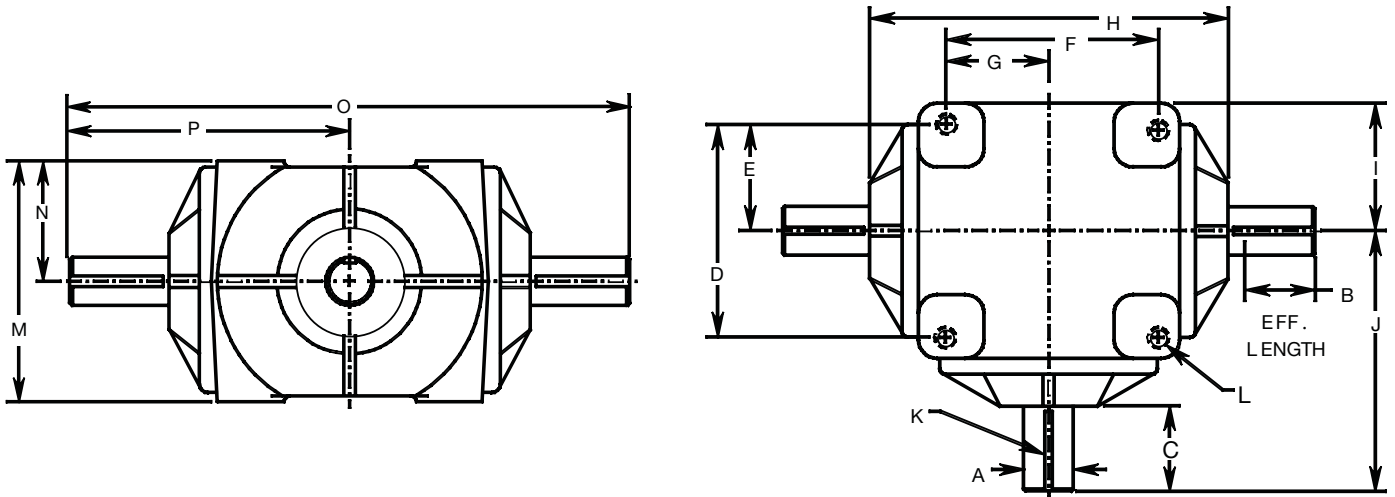


NOTE: Shaft extensions can be either keyed or flat

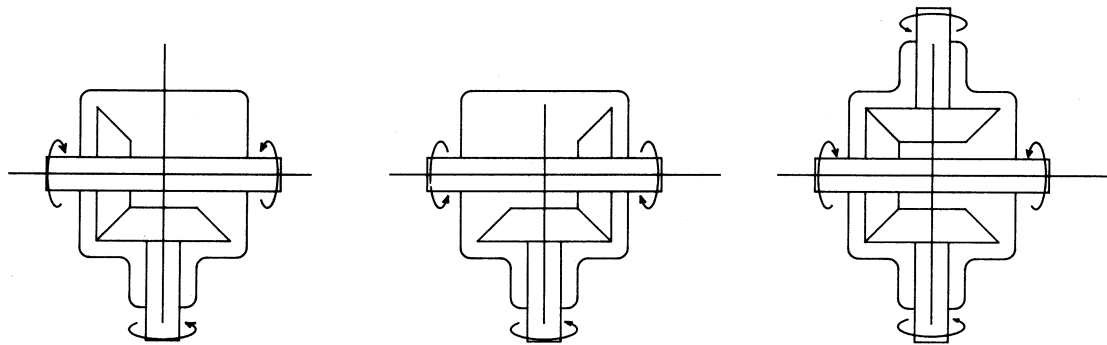
Model	Torque	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
MB-16	344	0.625	1.219	1.375					4.375	1.688	4.875	3/16"		3.188	1.594	7.25	3.625

Note: Standard model is a 3-way configuration





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	¼"	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	¼"	½"-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"	½"-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.