

## MOS- SERIES (DE-CLUTCHABLE / MANUAL OVER-RIDE WORM GEAR BOXES)

The 'MOS' series are De-clutchable Quarter Turn Worm Gear Boxes are used to operate Pneumatically Actuated Valves.

### PRODUCT DESCRIPTION:

- ◆ High Performance Gear Boxes by Robust Construction & Compact Design.
- ◆ Meeting QUALITY, PERFORMANCE and DELIVERY.
- ◆ Torque range from 250 Nm to 9800 Nm.
- ◆ Output Travel - 0° to 90° ( $\pm 5^\circ$ ).
- ◆ Self-locking Mechanism (Worm & Worm Wheel).
- ◆ Standard Version : Clockwise Input = Clockwise Output to Close.
- ◆ IP-54 Enclosure.
- ◆ Working Temperature -20°C to +120°C.
- ◆ Graded Cast Iron Housing and Worm Wheel in Ductile Iron.
- ◆ High Tensile Fasteners.
- ◆ High performance Bearings.
- ◆ Sturdy Hand wheel with Black Powder coating for Easy and Smooth Operation.
- ◆ Semi-Glossy Black Epoxy Paint as Standard.
- ◆ Gear Boxes lubricated with Multi-purpose Grease.
- ◆ Gear Box Mounting as per ISO 5211 Std.
- ◆ Types of Stem Cavity processed: Round with keyway, Square 90 deg / 45 deg Orientation, Double Dee .

### FEATURES:

- ◆ Housing, Cover and Worm Wheel material also available in Ductile Iron/Carbon Steel/Stainless Steel/Nickel Aluminium Bronze material or as required as optional.
- ◆ Worm and Shaft are also available in Stainless Steel as material as optional.
- ◆ Fasteners and Hand wheel also available in Stainless Steel as optional.
- ◆ Gear Boxes for Low Temperature and High Temperature applications also available against requirement.
- ◆ IP-65/ IP-67 Enclosure Optional.
- ◆ RL - Version Optional

### TESTING FACILITIES:

- ◆ Test Rig to measure the Performance Factor (P.F)

## PERFECT ACTUATORS & CONTROLS PVT. LTD.

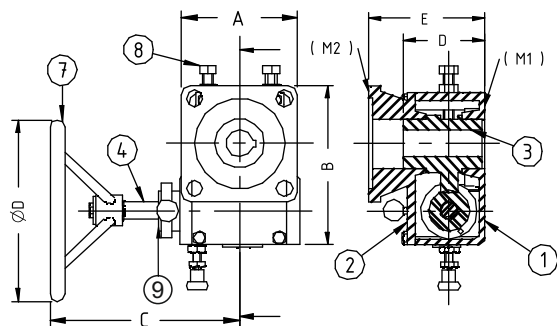
(An ISO 9001 : 2015 Certified Company)

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## a) Standard Gear Box



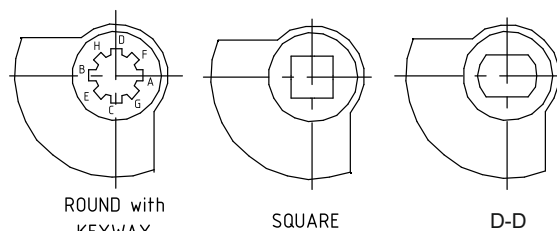
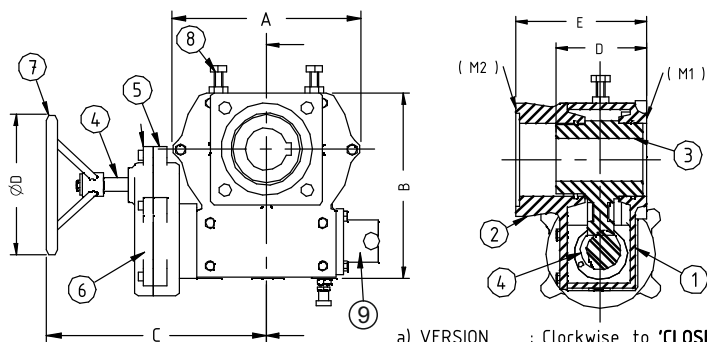
Sl.	Description	Material *
1	Housing	CI FG-220
2	Cover	CI FG-220
3	Worm wheel	SGI 600/3
4	Worm / Shaft	EN-8
5	SG Casing	CI FG-220
6	SG Gears	EN-8
7	Handwheel	MS Fab.
8	Fasteners	8.8 Gr.
9	Cams	EN - 8
10	Grease	Multipurpose

## b) Gear Box with Secondary Gear Attachment

Note - a) \*Material optional as required

b) Performance Factor achieved after 10 cycles.

c) All dimension are in mm & indicative



View Seen From Top at 'Close' Position

a) VERSION : Clockwise to 'CLOSE'  
Anticlockwise to 'OPEN'

b) IP enclosure : IP-54

MODEL	RATIO	TURNS TO CLOSE 90 °	PERFORMANCE FACTOR ±10%	MAXIMUM OUTPUT TORQUE	DIAMETER OF DRIVE BORE	GEAR BOX BASE AS PER ISO:5211 (M1)		PNEUMATIC ACTUATOR BASE AS PER ISO:5211 (M2)		HANDWHEEL Ø D	Aprx. Wgt.	A	B	C	D	E
				Nm	Max.	Min.	Max.	Min.	Max.	mm	( Kg. )					
MOS-01	40 : 1	10	10	250	25*	F05	F07	F05	F07	200	5.0	92	117	252	60	93
MOS-02	35 : 1	8.75	8	450	28	F07	F10	F07	F10	200	8.0	125	148	256	92	110
MOS-03	40 : 1	10	10	600	36	F10	F12	F10	F12	250	11.0	153	163	309	98	115
MOS-04	40 : 1			890	40	F10	F12	F10	F12	450	11.0	128	173	331	89	129
MOS-04A	45 : 1	11.25	11	1610	52	F12	F14	F12	F14	500	16.0	156	187	390	97	153
MOS-05	48 : 1	12	11.5	1900	52	F12	F16	F12	F16	500	30.0	166	205	370	104	160
MOS-06	48 : 1			3600	70	F14	F16	F14	F16	600	30.0	202	236	480	121	176
MOS-06A	54 : 1	13.5	13	5000	70	F14	F16	F14	F16	700	48.0	270	266	500	127	182
MOS-07	54 : 1			7600	90	F16	F25	F16	F25	700	90.0	290	299	523	146	205
MOS-08	64 : 1	16	16	9800	115	F25	F30	F25	F25	700	133.0	330	346	538	154	214
MOS-05SGM	110.4 : 1	27.6	23	1900	52	F12	F16	F12	F14	600	45.0	166	205	480	104	160
MOS-06SGM	110.4 : 1			3600	70	F14	F16	F14	F16	600	85.0	202	236	510	121	176
MOS-06ASGM	216 : 1	54	44	5000	70	F14	F16	F14	F16	700	85.0	270	266	530	127	182
MOS-07SGM	216 : 1			7600	90	F16	F25	F16	F25	700	130.0	290	299	560	146	205
MOS-08SGM	256 : 1	64	62	9800	115	F25	F30	F25	F30	700	165.0	330	346	580	154	214
	384 : 1	96	81		115	F25	F30	F25	F30	700	165.0	330		580	154	214

\* - Max. Stem size for F05 Mounting Base - ( M2 ) is Ø19.0mm

\* - Max. Stem size for F07 Mounting Base - ( M2 ) is Ø25.0mm