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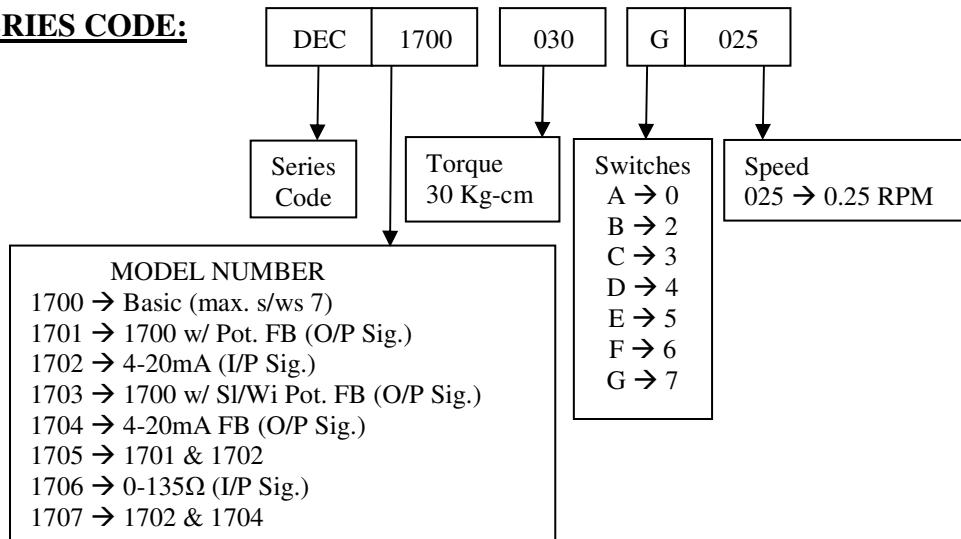
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ELECTRIC ACTUATOR (DEC SERIES)

DEC 1700 series are reversing proportional motors used to operate dampers or valves in Electric Modulating Circuits. Electric actuators are designed to meet the requirement of damper control, valve control applications where it is generally required to drive the load through less than one complete revolution either direction and to stop instantaneously at any point of the stroke. Such devices, sometimes also called as Modulating Motors are extensively used for Air-Conditioning, Boiler applications.

SERIES CODE:



Note: S/W → Switch; w/ → With; Pot. → Potentiometer; FB → Feed Back; O/P → Output; Sig. → Signal; I/P → Input; Sl/Wi → Slide Wire

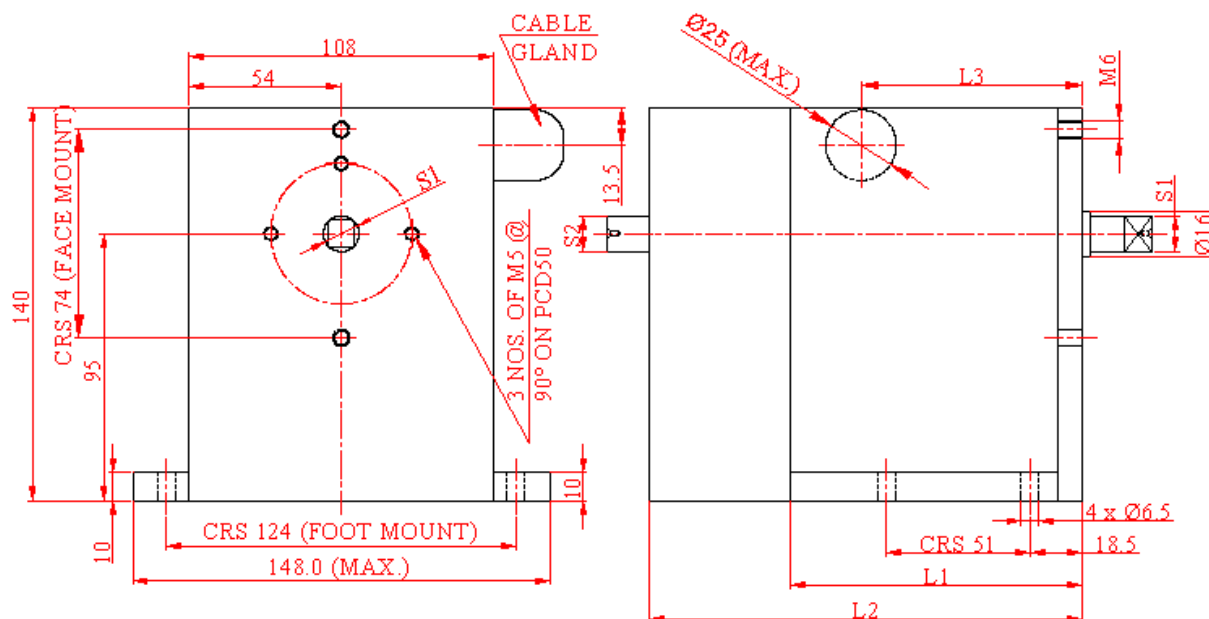
FEATURES:

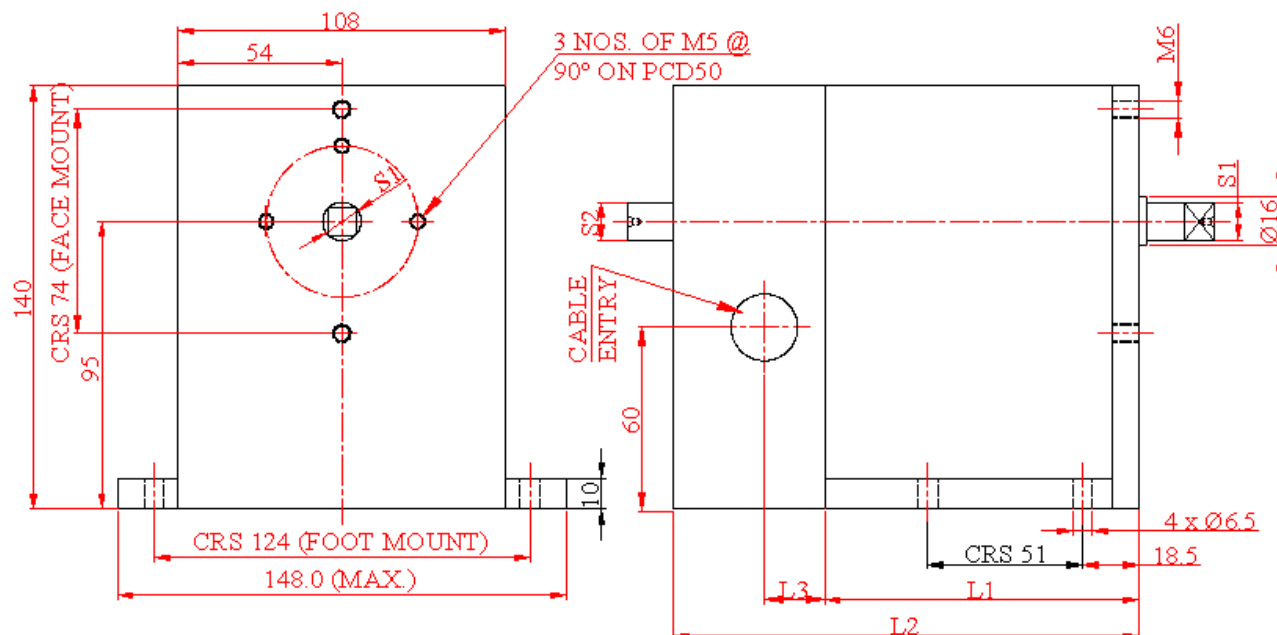
1. These are with line voltage or low voltage motors.
2. With single turn actuators, the stroke is fixed at 90° , 160° , or 270° and is also field adjustable.
3. Models for two-position (ON-OFF) control, fitted with feed back potentiometer and proportional controller with 4-20mA.
4. Rated for ambient -40°C to $+55^{\circ}\text{C}$.
5. Available with internal cam adjusted auxiliary switches.

CONSTRUCTION:

Actuator type DEC-1700 consists of a reversible servomotor connected to the output shaft of the device through a series of precision hobbled gears. The gear train is sealed with high grade and high temperature stable grease, thereby ensuring permanent lubrication. Cam operated limit switches stop rotation of the output shaft at predetermined CW and CCW limit of travel. The stroke angle is factory set but can also be altered in field. Thus, by supplying power at the proper terminals, the output shaft can be positioned anywhere within the set stroke angle.

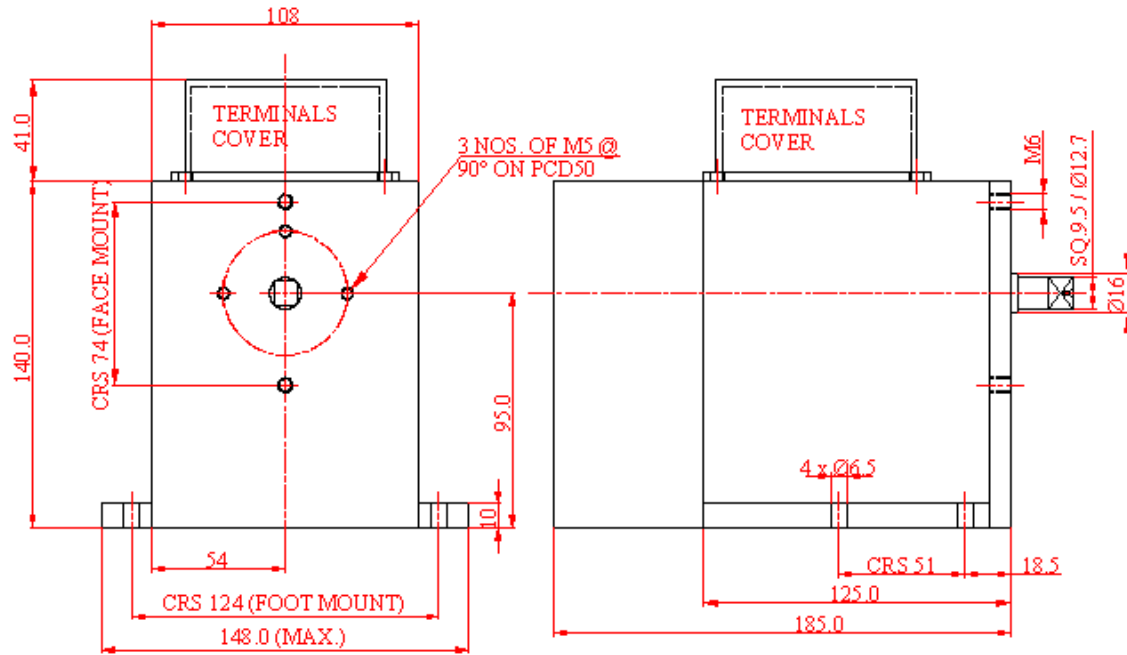
The actuator types DEC-1701 & 1703 are similar to DEC-1700 in all respect, but have additional in built feedback potentiometer. While DEC-1701 has a Wire Wound pot.; DEC-1703 has one or two nos. of Slide Wire pot. With DEC-1702, the actuator can be run with the Electronic Positioner of 4-20mA input signal; while DEC-1706, can position the actuator shaft with Potentiometric Control of 0 to 135Ω input signal. DEC-1704 model is fitted with a Position Transmitter generating 4-20 mA output signal. DEC-1705 accepts input signal of 4-20mA to position the O/P shaft and also sends feed back potentiometric output signal. DEC-1707 is a combination of two actuators → DEC-1702 & DEC-1704. Also auxiliary cam operated micro switches can be fitted internally in all the types, as an optional feature for ON-OFF control of pumps, solenoid valves, fans etc.



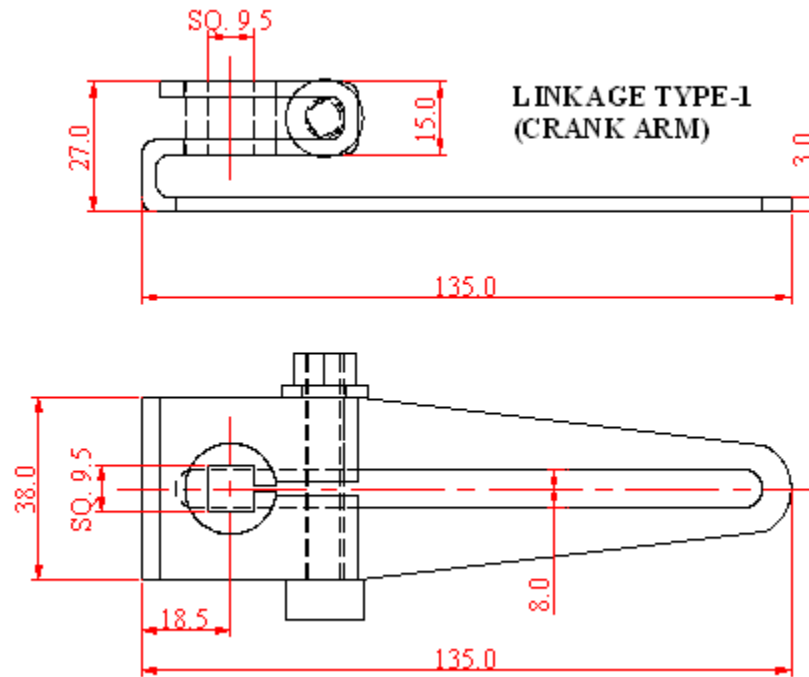
DEC1702 & 1704:

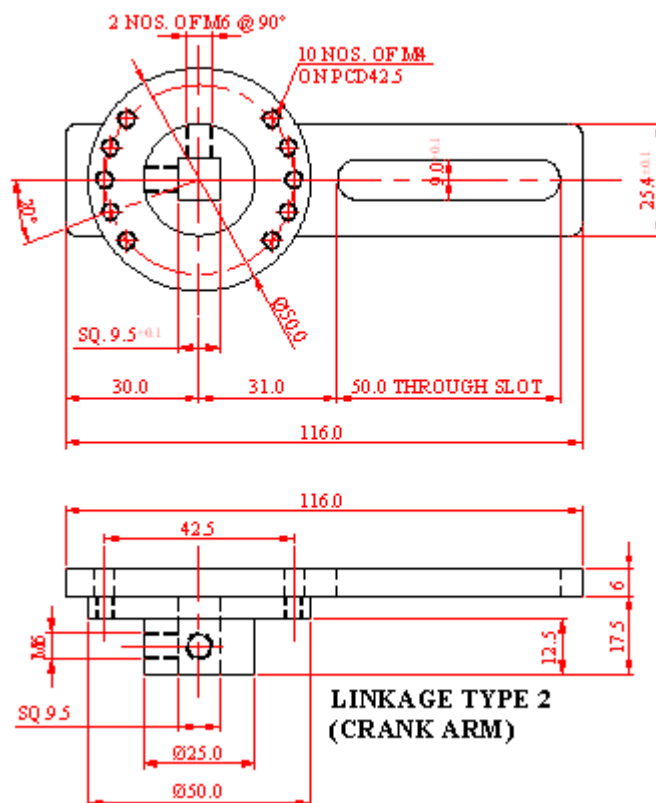
MODEL	TORQUE Kg-cm (MAX)	SPEED RPM	SWITCH (MAX)	L1 mm	L2 mm	L3 mm	S1 □ mm	S2 Φ mm
DEC-1700	170	0.2	4	95	155	80	9.5 / Φ12.7	8 / 10
DEC-1701	170	0.2	3	95	155	80	9.5 / Φ12.7	---
DEC-1700	350	0.2	4	116	175	90	9.5 / Φ12.7	8 / 10
DEC-1701	350	0.2	3	116	175	90	9.5 / Φ12.7	---
DEC-1702	350	0.2	3	116	175	90	9.5 / Φ12.7	---

1. For Torque ≤ 30 ; S1 (Shaft at Power / Load End) is $\Phi 8$ or $\Phi 12$.
2. S2 (Shaft at Rear / Auxiliary end) is optional for DEC-1700 to use degree pointer indication.
3. Lengths of S1 & S2 are 25.0 (max.)
4. Mounting: (a) Face: For torques ≤ 50 Kg-cm, 2 nos. of M6 are also provided at Power End.
5. For torques less than the rated maximum torque for the particular model number, the speeds will be proportionately higher than the rated speed.



LINKAGES (CRANK ARMS):





ORDERING DATA: Clearly indicate in your purchase order the following:

Model No. : DEC 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707

Operating Voltage : 24, 110, 230 VAC, 50/60 Hz, 1Φ.

Full Load Torque : In Kg-cm (Max. 350)

Stroke Angle : 90°, 160°, or 270° (can be customized).

Time for Stroke Angle : In secs.

No. of Switches : Max. 7 for DEC-1700 (please call for confirmation and other models).



