ELECTRIC ACTUATORS 2500 N - 4000 N

DB-DA7x

APPLICATION AND USE

DB-DA71-72 series actuators are well-suited to drive 2F, 3F series valves from DN80 to DN200 diameter with selectable stroke 24, 36, 40 and 42 mm. The connection to the valve stem is done by a hexagonal nut and half washer. The mechanical fixing is done by a ring nut.
Actuators are available in floating (3-point) or modulating control signal mode. Jumpers allow the following setting:
a) control signal 0…10 Vdc or 4…20 mA
b) direct or reverse action
c) position of valve stem when power supply is off.

The modulating actuators have in addition a 0...10 Vdc feedback signal. The floating actuators can be supplied with an auxiliary adjustable microswitch for end stroke signalling.
All actuators are fitted with a manual command for changing position of the valve stem when power supply is off.

TYPE	FORCE N	POWER CONSUMPTION VA	STROKE TIME s/mm		STROKE mm	ACTION
			50 Hz	60 Hz		
DB-DA71F	2500	10	4.6	3.8	42	2-, 3- point (floating)
DB-DA71M	2500	12	4.6	3.8	42	modulating 0…10 Vdc - 4…20 mA
DB-DA72F	4000	10	8.3	6.9	42	2-, 3- point (floating)
DB-DA72M	4000	12	8.3	6.9	42	modulating 0…10 Vdc - 4…20 mA

TECHNICAL FEATURES

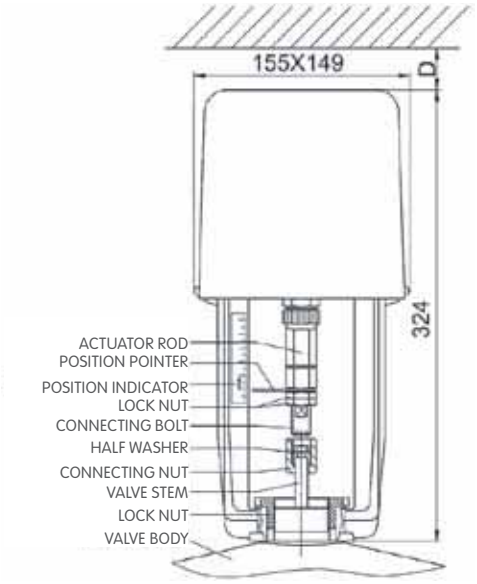
DB-DA7xF

Power supply: 24 Vac ± 10% 50/60 Hz
Action: 2-position or floating (3-point)
Motor type: bi-directional synchronous
Materials: gear: stainless steel, brass, reducer: zinc-plating steel, bracket: aluminum casting , frame: flameproof ABS plastic
Room temp. limit: +2...+55 °C,
Storage temp: -20...+65 °C
Weight: 4100 g

DB-DA7xM

Power supply: 24 Vac ± 10% 50/60 Hz
Action: proportional, direct or reverse action
Input signal: 0...10 Vdc or 4...20 mA
Feedback signal : 0...10 Vdc (5mA)
Input resistance: 100 kOhm
Motor type: bi-directional synchronous
Materials: gear: stainless steel, brass, reducer: zinc-plating steel, bracket: aluminum casting , frame: flameproof ABS plastic
Room temp. limit: +2...+55 °C,
Storage temp: -20...+65 °C
Factory setting: stroke 42 mm, 0...10 Vdc input signal, direct action (DA) position without signal: stem up
Weight: 4300 g

DIMENSIONS (mm)

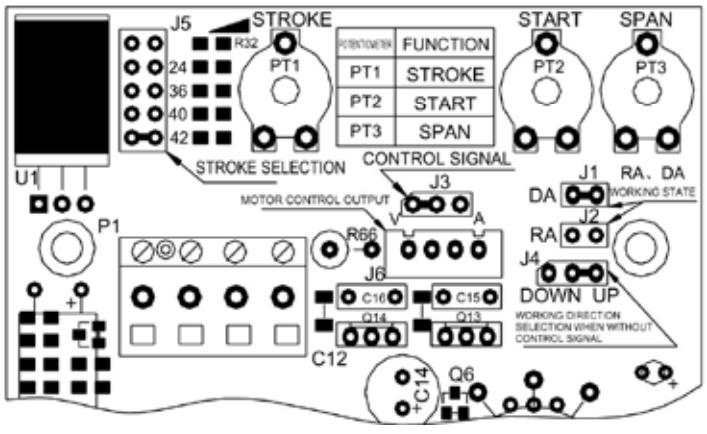


D >= 160 mm

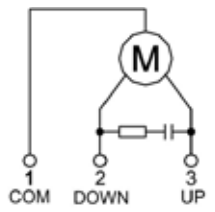
MOUNTING

- Mount the servomotor with bracket on the valve stem (be careful to the direction of it). Screw the lock nut into the valve stem.
  Mount the two half washers into valve stem and screw the actuator rod into the valve stem.
- The actuator must be mounted preferably vertically. Never mount it upside down.
- Do electrical connections according to wiring diagrams and standards.
- Power on the actuator to put stem on uppest / lowest position and verify the valve is completely closed / open. If necessary regulate position screwing or unscrewing the stem from shaft connector of the actuator and then tighten again the lock nut (that had been unlocked to do this operation).
- Position the scale indicator according to the stroke done.
- DB-DA7xM factory setting is direct action (DA), 0...10 Vdc input signal, 42 mm stroke and stem up.
  To set reverse action (RA) remove jumper from J1 and insert it in J2.
  To change the stroke remove jumper J5 from 42 and insert it in correct new position: 24, 36, 40 mm.
  To change input signal type from 0...10 Vdc to 4...20 mA remove jumper J3 from V and put it in A.

WIRING DIAGRAMS

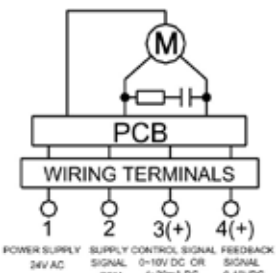


DB-DA7xF



TERMINAL	ACTUATOR ROD
1-2	DOWN EXTEND
1-3	UP CONTRACT

DB-DA7xM



INPUT CONTROL SIGNAL		ACTUATOR ROD
DA	RA	
INCREASE	DECREASE	DOWN
DECREASE	INCREASE	UP