

**REVERSIBLE ROTARY ACTUATOR  
FOR HGM - HMM - VDM VALVES  
POWER SUPPLY 12 V~**

**CDK 062 - 032 Eng.**



- **EXTRACTABLE TERMINAL BLOCK**
- **RAPID MOUNTING ON VALVE**
- **3-wire electric control (common, opens, closes)**
- **Auxiliary SPDT miniature switch**
- **Power supply: 12 V~ ; IP 53 protection**

**1. APPLICATION**

CDK 062 - 032 actuators is designed to operate COSTER valves: HGM - HMM (ball) and VDM (with ceramic disk). The actuator is mounted directly on the valve so that no linkage kit is required.

**2. OPERATION**

CDK 062 - 032 actuators incorporate a reversible synchronous electric motor with three-wire electric control (common, opens, closes). It can be controlled by an On-Off or modulating device (thermostat, switch, modulating controller) provided with an SPDT output switch.

The electric motor transmits the rotary movement to the mechanical reducing gear which governs the rotation speed of the output shaft and, accordingly, the actuator run time.

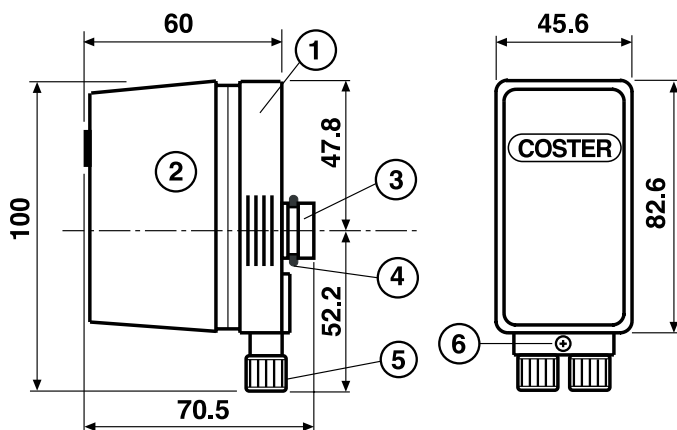
The actuator run is 90° and is limited by two miniature switches operated by an end-of-run cam.

It is fitted with a voltage-free SPDT auxiliary miniature switch (**switching takes place at approximately the half-run of the actuator**).

**3. MODELS**

Model	Power supply V~ (VA)	Run time seconds	Nominal torque kg/cm (Nm)	Starting torque kg/cm (Nm)	Valves (up to DN) HGM-HMM-VDM
<b>CDK 062</b>	12 (4)	60	15 (1,5)	30 (3)	1"
<b>CDK 032</b>	12 (4)	30	10 (1)	20 (2)	3/4"

**3. OVERALL DIMENSIONS**



- 1 – Base
- 2 – Protective cover
- 3 – Coupling for valve
- 4 – Actuator/ valve locking spring
- 5 – Unions for passage cables
- 6 – Securing screws for terminal block protective cover

**4. TECHNICAL DATA**

Power supply	12 V~ ± 10%
Frequency	50...60 Hz
Consumption	4 VA
Protection	IP 53
Rotation angle	fixed at a 90°
Run time	
CDK 062	60 seconds
CDK 032	30 seconds
Torque CDK 062:	
Nominal	15 kg/cm (1.5 Nm)
Starting	30 kg/cm (3 Nm)
Torque CDK 032:	
Nominal	10 kg/cm (1 Nm)
Starting	20 kg/cm (2 Nm)
For control valves :	
HGM - HMM	up to DN 1"
VDM	up to DN 1"
Auxiliary miniature switch :	
maximum switching voltage	250 V~
maximum switching current	5 (1) A
Materials :	
Base	ABS with glass fibre
Cover	ABS
Valve fluid temperature	5...95 °C
Ambient temperature:	
Operating	0...45 °C
Storage	- 20...+ 60 °C
Weight	0.210 kg

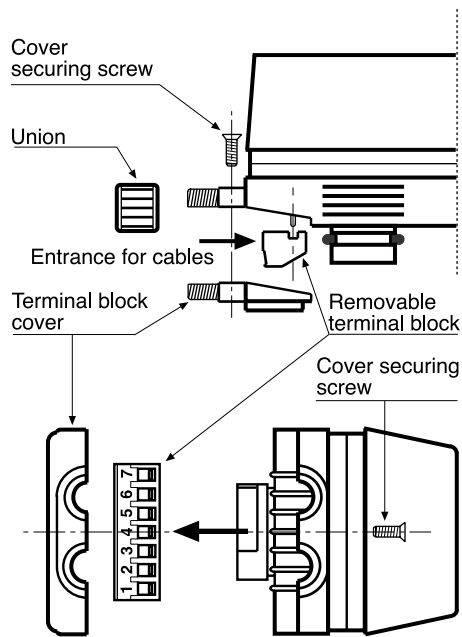
**5. CONSTRUCTION**

The actuator base is made of ABS reinforced with glass fibre; the cover is in ABS. Two openings, furnished with cable-strain relief bushing grips, permit the passage of the electric cables.  
The coupling device, at the rear of the base, permits rapid mounting of the actuator on the valve..

**6. ELECTRICAL CONNECTIONS**

- To ensure a good protection and seal, the outside diameter of the cables must be between 6.25 and 7 millimetres.
- To conform with regulation CEI 20-20 we suggest using the following cable types:
  - cable type H03VV-F with three wires x 0.75 mm<sup>2</sup> (2 + yellow/green),
  - cable type H03VV-F with four wires x 0.75 mm<sup>2</sup> (3 + yellow/green),
  - cable type FROR 300/500 V with three wires x 1 mm<sup>2</sup> (2 + yellow/green).
- Loosen the securing screw (3.6) and the two unions for the passage of the cables (3.5), and remove the protective cover from the terminal block.
- Slip the unions on to the cables.
- **To facilitate making the connections the terminal block can be removed.**
- Make the electrical connections following carefully the diagram in 9. WIRING DIAGRAM.
- Having made the connections, insert the terminal block (if it has been removed), replace the protective cover, tighten up the unions and then secure the whole with the securing screw.

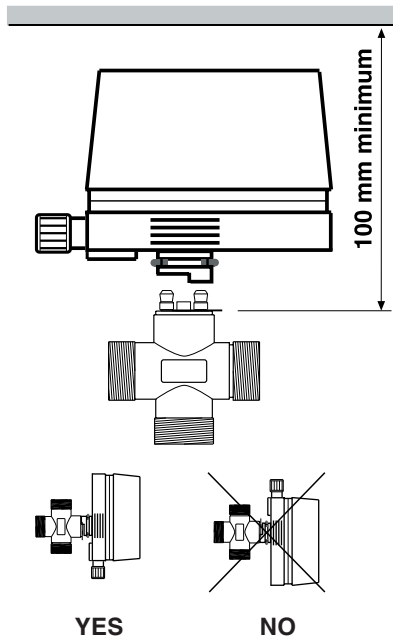
The union corresponding to the auxiliary switch connection terminals is closed so as to ensure the necessary protection for the actuator in the event that the auxiliary itself is not used.  
To connect it, it is necessary to open the union passage by breaking the internal protective membrane.



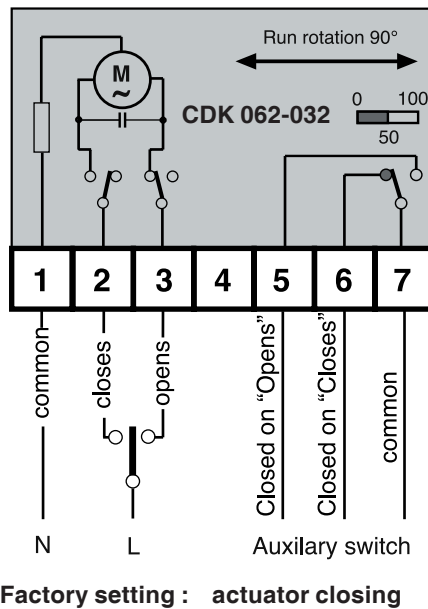
**7. MOUNTING THE ACTUATOR ON THE VALVE**

- Check the position of the milling on the actuator shaft..
- If necessary, rotate the valve spindle to make it coincide with the milling on the actuator shaft
- Position the actuator on the valve by inserting the two pivot pins on the latter into the two corresponding holes in the base; then press hard on the head of the actuator until you feel it snap into position on the valve.
- Power the actuator and have it make a couple of complete runs to ensure it works correctly.

**8. INSTALLATION IN PLANT**



**9. WIRING DIAGRAM**



**Amendments to data sheet**

Date	Revision No.	Page	Section	Amendment description	Firmware version	Software version
08.10.08 AM	01	1	3. MODELS and 5. TECHNICAL ADATA	Add CDK 032 model - power supply 12 V ~		



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