MN manual actuators



Worm wheel and screw kinematics

Output torques up to 800 Nm

Applications

- Building,
- · General circuits for Industry,
- Water and Industry in non-corrosive environments.

General information

- The range of MN manual actuators have been designed with worm wheel and screw kinematics and gear casing (zinc-aluminium alloy).
- The mounting plate is in accordance with ISO 5211 standard.
- Equipped with an interchangeable insert, they can be easily fitted on different 1/4 turn valve shaft (square end, flat end).
- These actuators are supplied with a handwheel and a visual pointer.
- Factory lubricated, they do not require any maintenance.
- These actuators are mounted directly or by means of an adaptator on 1/4 turn valves mounting plate.

Protection

• They are hose and fine dust proof, protection degree equivalent to IP 65.

External coating

• Polyurethane paint, colour black RAL 9011, 50 μm thickness.

Working temperature range

• De -20 °C to +80 °C.





Production range

| Туре | Nominal output torque (Nm) | Nominal input torque (Nm) | Number of turn handwheel | ISO 5211 | Maximal allowable dimensions for the shaft | | | | |
|-------|-------------------------------------|------------------------------------|--------------------------------|-----------------|--|------------|------|--|--|
| | | | | mounting plate* | Height | Driving by | | | |
| | | | | | rioigiit | square | flat | | |
| MN 12 | 125 | 13 | 10 | F05 – F07 | 35 | - | 14 | | |
| MN 25 | 250 | 25 | 10 | F05 – F07 | 40 | 19 | 19 | | |
| MN 40 | 400 | 40 | 9 | F07 – F10 | 45 | 27 | 22 | | |
| MN 80 | 800 | 70 | 11 | F10 – F12 | 60 | 27 | 22 | | |

^{*} Direct adaptation onto identical mounting plate.

Adaptation by intermediate flange onto different plate (different size or shape).

These actuators are equipped with interchangeable inserts manufactured to the size and the form on different valve shaft for motorized operation (square end, flat end).

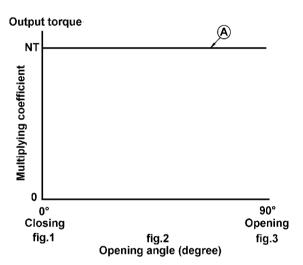
Operation

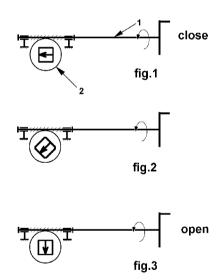
MN actuators are designed to ensure clockwise valve closure.

The worm wheel and screw kinematics allows to deliver a constant output torque.

Operation is achieved by handwheel, linked to the operating screw ① driving in rotation the worm wheel ② integral with the valve shaft.

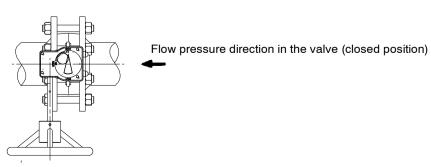
Graph A: constant output torque





Mounting on valves

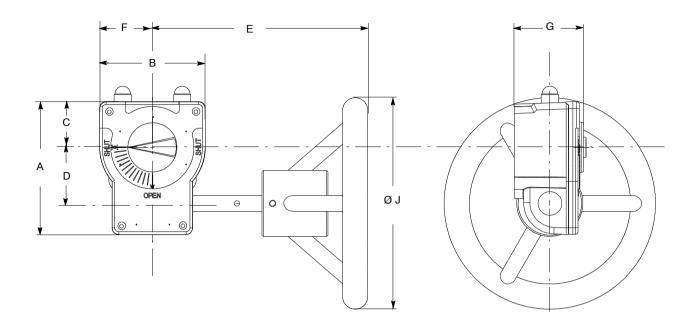
The actuator is fitted onto the valve in only one position **Arrangement N - Position 1**, according to drawing below. The connection bolting is in zinc coated treated steel.

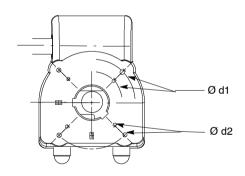




Dimensions (mm) and weight (kg)

Handwheel control





| | Handwheel control | | | | | | | | | | | | |
|--------|-------------------|--------|------|--------|-----|----|----|-----|--------------------|-----|-----|--------|------|
| Type | | | | | | | | | Interface ISO 5211 | | | Weight | |
| | Α | В | С | D | E | F | G | J | ref. | Ød1 | Ød2 | n | (kg) |
| MN 12 | 100,5 | 80 | 34,5 | 42,5 | 133 | 40 | 53 | 160 | F05 | 50 | M6 | 4 | 1,2 |
| | | | | | | | | | F07 | 70 | M8 | 4 | |
| MN 25 | 100,5 | 80 | 34,5 | 42.5 | 181 | 40 | 59 | 200 | F05 | 50 | M6 | 4 | 1,7 |
| WIN 25 | 100,5 | 80 | 54,5 | 42,3 | 101 | 40 | 39 | | F07 | 70 | M8 | 4 | |
| MN 40 | 117,5 | 100 42 | 42.5 | 2,5 50 | 196 | 50 | 68 | 200 | F07 | 70 | M8 | 4 | 2,6 |
| WIN 40 | | | 42,3 | | | | | | F10 | 102 | M10 | 4 | |
| MN 80 | 160,0 | 146 65 | 65.0 | 5,0 60 | 236 | 73 | 79 | 250 | F10 | 102 | M10 | 4 | 5,0 |
| | | | 03,0 | | | | | | F12 | 125 | M12 | 4 | |