

ACTUATOR FOR ROTARY MIXING VALVES

MV 120/210

for 3- and 4-way mixing valves



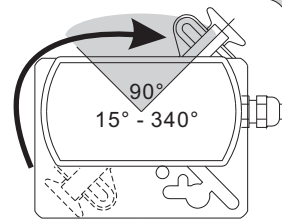
FIRST®

USER MANUAL

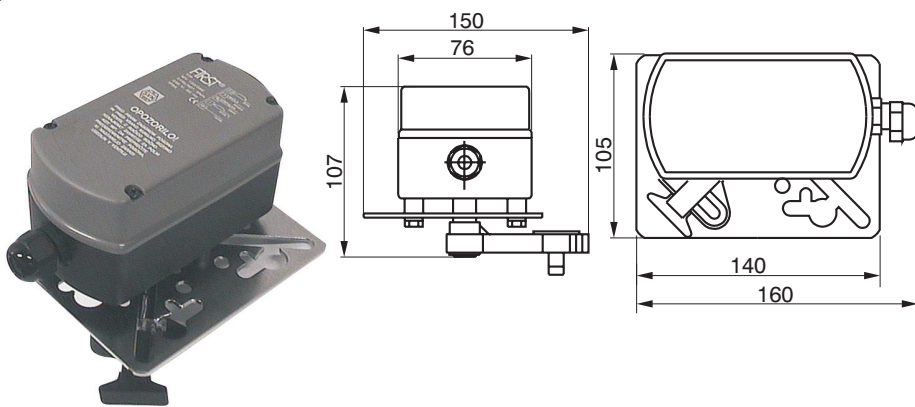
Montage and power connection should be done only by a trained person !

BEFORE FIRST TIME USE

Electric motor rotary actuator is supplied with handle as it is shown on the illustration. Before exploitation be sure that handle move in accurate sector, to void breaking plastic security part called lever, which is junction between handles of mixing valve and actuator. If it is necessary is possible to change moving and rotating angle of handle. Before every heating season it is advisable to move by hand a few times handle for 90° to avoid breaking because of high starting torque. Instead plastic security part which is in function of fuse and will break. If it happened many times it is necessary to open and clean the mixing valve.



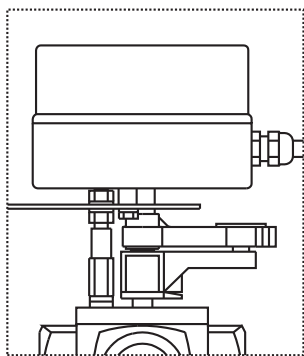
DIMENSIONS



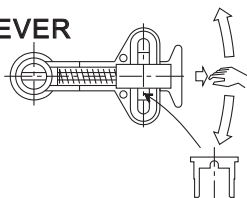
WARNING !

Actuator has no fuse inside, so it is necessary that fuse is included in electrical installation outside of actuator. Also be aware that connection is carried out crossing the switch which can be unplugged the actuator if necessary.

ASSEMBLY



SECURITY LEVER

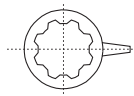


Coupling part with plastic security lever break down by overcharging to avoid damage on synchronous motor or gears.

REPLACEMENT:

- pull the handle and place the lever into the mid position
- remove broken plastic security element
- replace it with enclosed one, by pressing it into required gap
- return handle to previous position

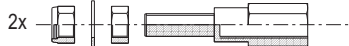
INDICATOR



Place it in position in which you can see actual position of valve.

Adapter kit

Support bolts



Valve handle adapters



FIRST Rotomix MS, IMP, ESBE, Ferrotherm, Besser, API, Termomix, Barberi



Landis&Gyr

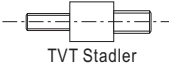


FIRST Rotomix F3 in F4, Honeywell LŽ, MS

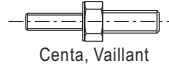
2x Vilice varnostne sponke

By special request:

Support bolts



TVT Stadler



Centa, Vaillant



Viessmann do 1" M6

Valve handle adapters



TVT STADLER



WITA, MEIBES, AEG



Viessmann



CENTRA DR, ZR <=1" Vaillant <=1", TVT Stadler □14

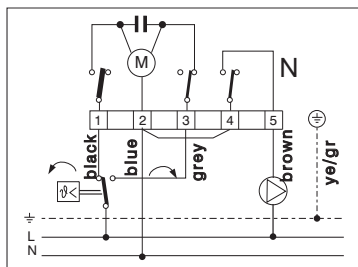


IKA, CALEFFI, MUT 1000



CENTRA ZRK <=1"

TEHNICAL DATA



Power supply.....	230 V, 50 Hz, 3.5 W
Rotation angle.....	preset to 90°, possible from 15° up to 340°
Rotation time for 90°.....	210s
Output torque.....	6 Nm
Protection degree.....	IP 55
Electric motor insulation class..	E 120
Ambient temperature.....	0°... 55°C
Microswitch rating.....	5(1)A, 250 VAC
Connection cable length.....	5x0.75 mm, L=1500 mm
Weight.....	0.95 kg

ELECTRIC CONNECTION execute according above shown wiring diagram. To change the rotating direction interchange terminals 1 and 3. Beside this do not forget to reposition also curve for pump for appropriate operating.

PRESSETTING THE CURVES

WARNING: BEFORE EVERY OPENING DISCONNECT THE ACTUATOR FROM LINE VOLTAGE!

Curves are factory pre set to enable rotation of actuator for 90°. In case of different desired rotation angle you can set the rotation angle from 15° up to 340°. **Presetting of curves should be done by a qualified person!**

NOTE: Rotating direction of curves is opposite from rotating direction of actuators output axis.

Turn the actuator into base position by electricity. Open the cover of actuator and manual preset the curves :

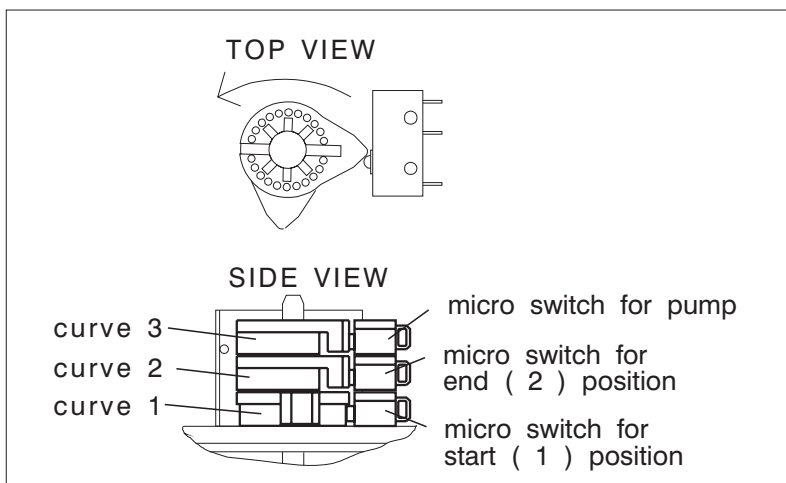
- With curve signed on drawing below with 1, starting position of mixing valve.
- With curve number 2 preset end position of mixing valve
- The curve signed on drawing with 3, act third micro switch, which in most of application turn on and off the pump.

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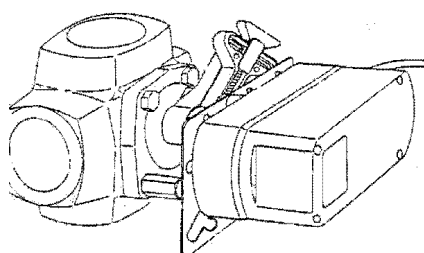
It is advisable to preset third curve to deactivate micro switch before curve for start position deactivate micro switch for basic position.

After setting the curves fit the cover.

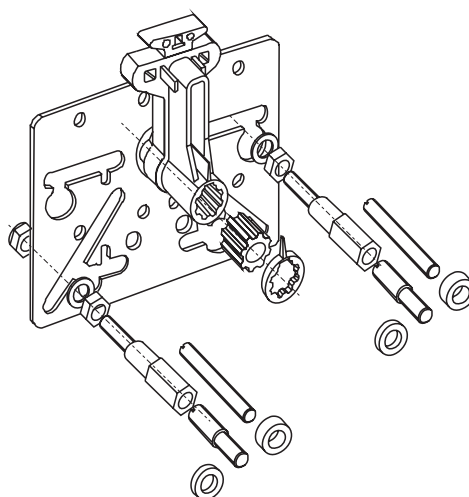
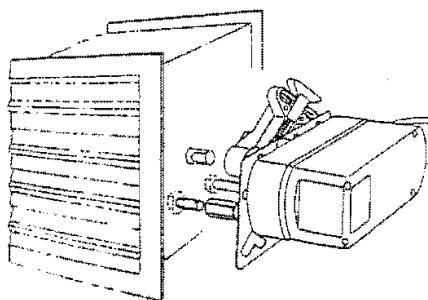
NOTE: Those position are valid by factory electrical wiring. When you electrically change the rotation, while signal for open is feed to terminal 1 and for close on terminal 3, the meaning of curves are opposite. Take care in this case for appropriate setting of curve 3 for pump switch!



ACTUATOR WITH MIXING VALVE



ACTUATOR WITH VENTILATION FLAP



Standard adapters for mounting on mixing valves:

FIRŠT Rotomix F3 in F4, ACASO, Landis&Gyr, Besser, IKA, V.I.L.B., Meibes, Termomix, Besser, MUT, FIRŠT Rotomix MSVA, MSVBA, Ferrotherm, ESBE, IMP, IMT, Honeywell LŽ, Sauter, Centra (ZRK), API, Danfoss, Tekmar, TEM, Barberi

By special orders we supply adapters for following mixing valves: Viessmann, Centra, V.I.L.B., TVT-STADLER, Honeywell (medeninasti), Vailant, VITA, Meibes, AEG, IKA, Caleffi, MUT 1000, ...

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