

**Auxiliary contact and potentiometer unit XAP 1 and XAP 2  
Assembly to AV 42...45 P**

MVE 4151

**APPLICATION**

For checking and indicating the end position.

**FUNCTION**

**XAP 1**

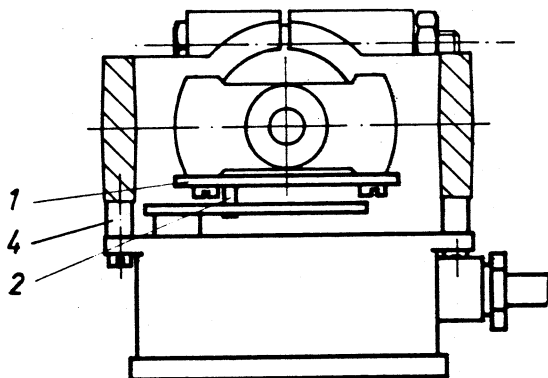
- Drive spindle retracted  
Circuit closed between wires 1 and 2
- Drive spindle extended  
Circuit closed between wires 3 and 4

**XAP 2**

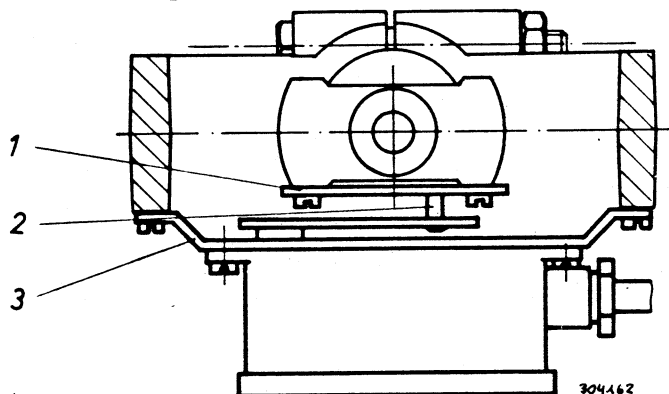
- Drive spindle extended  
10...50 Ω between wires 1 and 2  
1.5...1.8 kΩ between wires 1 and 3
- Drive spindle retracted  
1.5...1.8 kΩ between wires 1 and 2  
10...50 Ω between wires 1 and 3

**ASSEMBLY**

1. Mounting takes place on the yoke side opposite the clamping screw, see diagram.
2. Screw the threaded pin (2) into the pin bracket (1) according to the stroke. Up to size DN 50: stroke 14 mm, from size DN 50 up: stroke 40 mm.
3. Fix the pin bracket (1) onto the lower coupling half so that the figures are upright (the valve is down)



4. AV 42 P..  
Mount the auxiliary unit with the spacer tubes (4) onto the yoke so that the connection cable is to the right (see diagram). Ensure the threaded pin (2) engages in the slotted hole of the lever.



- AV 43...45 P..  
First screw the unit onto the bracket (3). When mounting onto the yoke see that the connection cable is to the right (see diagram) and that the threaded pin (2) engages in the slotted hole of the lever.

**NB**

When using positioners with protective casing XSP 31 G, XAP and pin bracket (1) must be mounted turned through 180° so that connection cable is to the left.

**Consequence for XAP 1:**

Wires 1-2 and 3-4 are to be interchanged for correct switching, ie. with the drive spindle extended the circuit made by wires 1 and 2 is closed and with drive spindle retracted the circuit made by wires 3 and 4 is closed. Note setting of the switch actuation (section "Connection cable to the left").

**Consequence for XAP 2:**

- Drive spindle extended  
10...50 Ω between wires 1 and 3  
1.5...1.8 kΩ between wires 1 and 2
- Drive spindle retracted  
1.5...1.8 kΩ between wires 1 and 3  
10...50 Ω between wires 1 and 2

**ADJUSTMENT**

**XAP 1**

- First switch: bring drive spindle to about centre position (apply pressure to drive). Turn the toothed segment anticlockwise until the lever (8) is in contact with the switch casing. By changing the pressure retract the drive spindle fully: with connection cable to the left extend drive spindle fully (the slipping clutch prevents damage).
- Second switch: loosen the screw (7), unscrew to farthest position (anticlockwise) and retighten slightly. By changing the pressure extend the drive spindle fully: with connection cable to the left retract drive spindle fully, then turn adjustable cam (6) until the lever (8) is in contact with the switch casing. Tighten screw (7).

**XAP 2**

- Check that the resistance between wires 1 and 2 is 10...50 Ω with the drive spindle extended (if necessary apply pressure of 1.2 bar to drive). The toothed segment stops should not come into contact with the casing. Turn toothed segment away about 1 mm (slipping clutch).
- Set ohmic value of 10...50 Ω by moving and turning the pinion.

