

## XAP: Position monitor/indicator

### How energy efficiency is improved

For accurate position indication on pneumatic valve drives. Enables the monitoring of energy consumption in ventilation systems.

### Areas of application

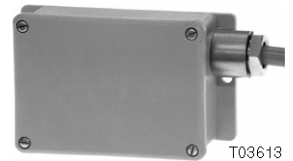
Auxiliary units for pneumatic actuators AK41 - 43 P and pneumatic valve actuators AV43, AVP 142 and AVP 242 - 244.

### Features

- Position feedback for monitoring tasks
- Housing made of glass-fibre-reinforced, self-extinguishing plastic
- Auxiliary contact unit with two contacts
- Switches the relevant contacts, depending on whether drive spindle is moved in or out
- Potentiometer unit, whose resistance changes depending on the particular drive stroke

### Technical description

- Permissible contact rating 10(2) A, 250 V~
- Pot. resistance 2000  $\Omega$



Y03241



Y03308

Type	Description	Output signal	Weight kg
<b>XAP 1 F001</b>	aux.-contact unit	2 contacts: open/closed	0,3
<b>XAP 2 F001</b>	potentiometer unit	10 - 1800 $\Omega$ approx.	0,3

#### XAP 1:

Contact rating	10 (2) A, 250 V~
Switching pt. for 'extended'	~ 5% before end position
Switching pt. for 'retracted'	~ 5% before end position
Switching difference	2,5% of stroke
Connecting cable	4 × 1 mm <sup>2</sup>

#### XAP 2:

Pot resistance	2000 $\Omega$
resistance when 'extended'	10...50 $\Omega$
resistance when 'retracted'	1,5...1,8 k $\Omega$
Resolution	2 $\Omega$
Max. load	4 W, 42 V
Connecting cable	3 × 0,5 mm <sup>2</sup>

Perm. ambient temp.	-15 to 50 °C	Dimension drawing	<a href="#">M274957</a>
Degree of protection	IP 54 (EN 60529)	Fitting instructions	
Connection diagram	XAP 1 <a href="#">A02446</a>	XAP to AV43 P, AVP 142	MV 4151
	XAP 2 <a href="#">A02445</a>	XAP to AK41...43	MV 4153
		AXP to AVP 242...244	MV506040.133

### Accessories

..... Assembly material <sup>1)</sup>: see drive data sheet, Section 71

<sup>1)</sup> Max. equipment on drive: one positioner and one XAP

### Operation

#### XAP 1

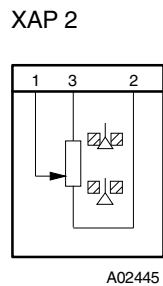
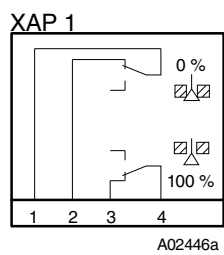
The contacts of terminal 3 - 4 switch over to 1 - 2 in accordance with the stroke (drive spindle either extended or retracted).

#### XAP 2

The position of the potentiometer's wiper arm (and, therefore, the resistance) changes in accordance with the stroke:-

- Drive spindle extended  
10 - 50  $\Omega$  (terminals 1 and 2) and 1,5 - 1,8 k $\Omega$  (terminals 1 and 3)
- Drive spindle retracted  
1,5 - 1,8 k $\Omega$  (terminals 1 and 2) and 10 - 50  $\Omega$  (terminals 1 and 3)

Connection diagram



Dimension drawing

