

## AV43 P: Pneumatic valve drive

For activating the valves of the V6R, B6R, VXN and BXN series in continuous or open/closed control systems. The valve drive is silicon-free and conforms with directive 97/23 EWG for pressure equipment.

Housing and fixing bracket of light alloy; rubber diaphragm with inlaid fabric; drive spindle of stainless steel with coupling piece and stroke indicator; direction of movement can be changed by fitting accordingly (factory setting: spindle normally retracted; fitting method E, valve closed); compressed-air connection Rp 1/8, female thread.



T03066



Y07550

Type	For valves with stroke [mm]	Air consumption for 100% stroke [l <sub>n</sub> ]	Control span <sup>1)</sup> [bar]	Effective drive area [cm <sup>2</sup> ]	Weight [kg]
<b>AV43 P15 F001</b> <sup>2)</sup>	14	1.2	0.6	250	5.2
Control pressure <sup>3)</sup>	0...1.2 bar		Dimension drawing	<a href="#">M274951</a>	
Max. pressure	1.5 bar		Fitting instructions		
Permissible ambient temp.	-15...50 °C		Assembly	<a href="#">MV 40.136</a>	
Temperature at the diaphragm	max. 70 °C		Valve/drive	<a href="#">MV 43190</a>	

### Accessories

- XSP 31 Positioner <sup>4)</sup> (see Section 79)
- XSP 31G Positioner <sup>4)</sup>, in protective housing (see Section 79)
- XAP 1 Aux. contact unit <sup>4)</sup> (see Section 79)
- XAP 2 Potentiometer unit <sup>4)</sup> (see Section 79)
- XEP Electro-pneumatic converter <sup>4)</sup> for continuous signals (see Section 69)
- 0274521 000** Manual-adjustment facility <sup>5)</sup> for AV43 weight 1.7 kg; [MV 505819](#)

<sup>1)</sup> Dimension drawing for accessory is available under the same number

### Assembly material for valve series V6R, B6R and VXN, BXN

Drive type	XSP 31	XSP 31 G	XAP	XEP
<b>AV43 P15</b>	0226506 002	0226532 002	0226513 003	0274700

- 1) Pressure–stroke curves: see valve data sheet, Section 78.
- 2) Only for valves with O-ring stuffing box.
- 3) Needed in order to attain the actuating power.  
See Section 60 on regulations concerning the quality of supply air, especially at low ambient temperatures.
- 4) Of the accessories, only a positioner (XSP 31 or 31 G), a feedback unit (XAP) and an electro-pneumatic transducer (XEP) can be fitted. When fitting XSP 31 and XAP, the XEP must be screwed sideways onto the fixing bracket.
- 5) Can be used for minimum or maximum limitation of the stroke. Removable hand wheel.

### Operation

Via a diaphragm, the control pressure acts against a pre-tensioned pressure spring. When the former force is greater than the latter, the spindle starts to move. The valve drive is reversible and can be fitted to the bracket in one of two ways:-

Function A: 'normally extended' (the spindle retracts as the control pressure rises).

Function E: 'normally retracted' (the spindle extends as the control pressure rises).

(The unit is set at function E at the factory.)

Used with the valves of the V6R, B6R and VXN, BXN series (vertical plug), the following applies:-

Function A: (valve) 'normally open' (NO).

Function E: 'normally closed' (NC).

### Engineering and fitting notes

The drive springs are pre-set for fitting to the valve (14 or 40 mm stroke). After fitting, the closing points should be checked as per [MV 40.136](#). If necessary, the spring pressure should be adjusted by turning the nut in the centre.

The unit can be fitted in any position except facing downwards and at temperatures (of the valve medium) of up to 240 °C.

Where the temperature of the medium exceeds 180 °C, the unit should be fitted horizontally.

This piece can also serve as an extension when the drive needs to extend beyond the pipe insulation.

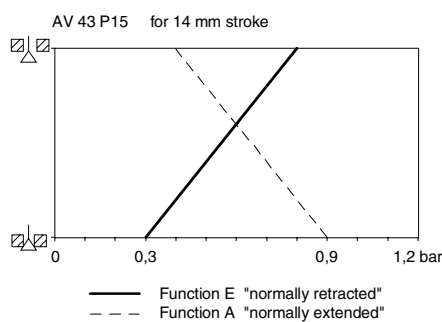
The ingress of condensate, dripping water etc., along the stem and into the drive should be prevented.

When fitting the drive to the valve, care must be taken not to turn the valve plug in the valve seat, thus damaging the seal.

### Pressure–stroke characteristics

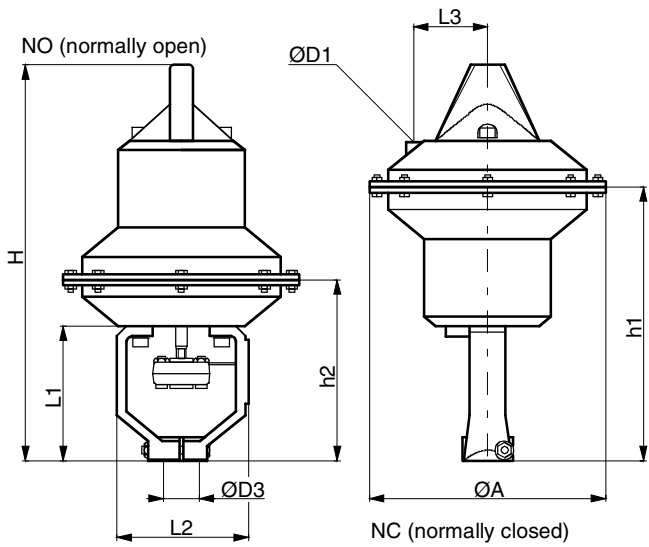
Pre-set for through valves of 14 or 40 mm stroke (see table of types).

Pressure–stroke characteristics, pre-set for through valves.



B03945b

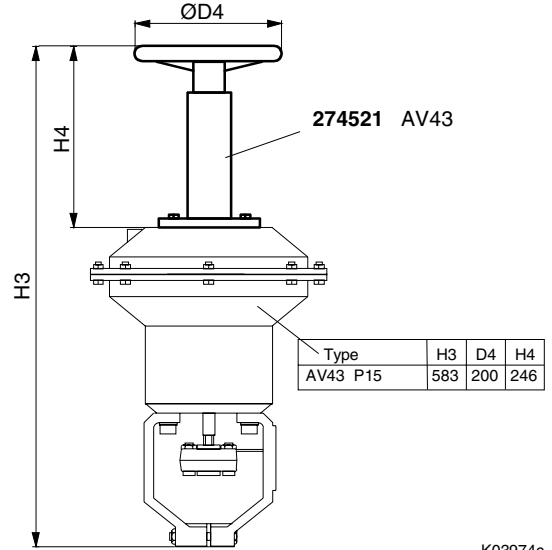
Dimension drawings



Type	A	D	D1	D3	H	h1	h2	L1	L2	L3
AV43 P15	250	M10	Rp 1/8	38	417	288	191	142	139	70

M274951c

Manual adjustment

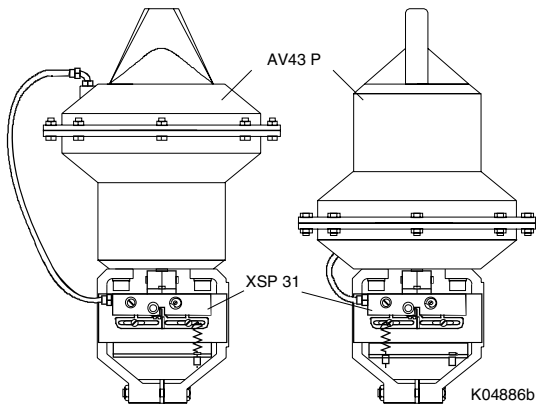


Type	H3	D4	H4
AV43 P15	583	200	246

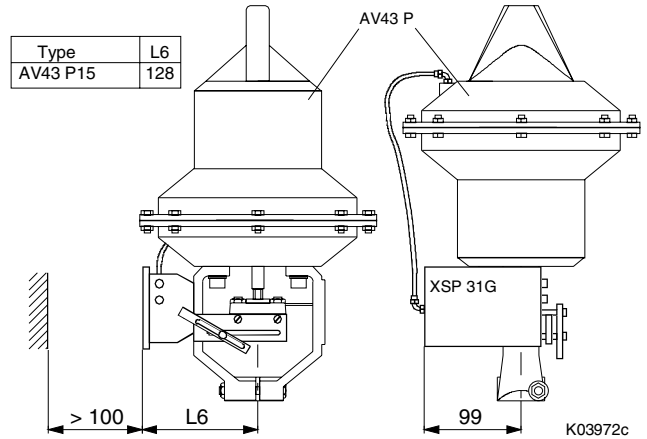
K03974c

Fitted with one ancillary

XSP 31

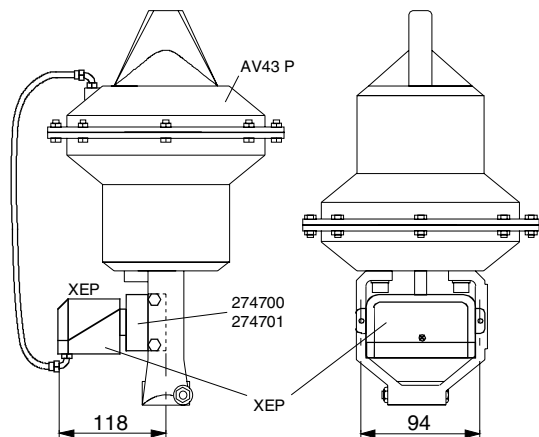


XSP 31 G



Type	L6
AV43 P15	128

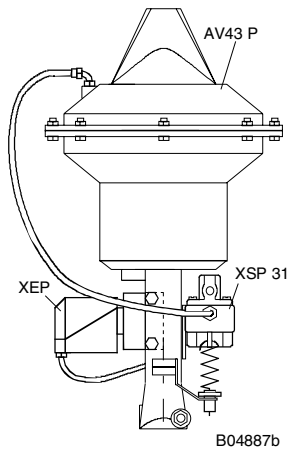
XEP



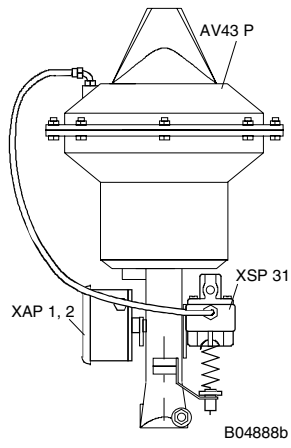
B00974c

**Fitted with two ancillaries**

XEP + XSP 31



XAP + XSP 31



XEP + XAP

