

# AVM234S: 2500N Actuator

(With analog SUT positioner) 2 point or 3 point control and analogue I/O signals

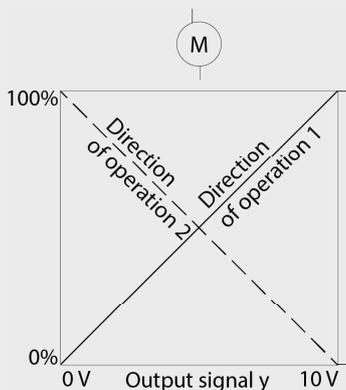
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## TECHNICAL DESCRIPTION

Power supply 230 V with modules or direct connection for 24 V~ or 24 V=; continuous activation also permissible at 230 V  
 Two-part housing made of fire-retardant yellow plastic and seals to IP66.  
 Maintenance-free gearbox of sintered steel, gearbox plate of steel.  
 Patented actuator-valve coupling.  
 Mounting column made of stainless steel; mounting bracket (for fitting the valve) of aluminium  
 Electrical connections (max. 2.5 mm<sup>2</sup>) with screw terminals.  
 Three pre-scored cable inlets for M20×1.5 (2×) and M16×1.5.  
 Installation position: vertically upright to horizontal, but not upside down unless protected from dripping water.



Subject to change without notice.

## AREAS OF USE

For use with two or three-way control valves. For controllers with continuous output (0...10 V or 4...20 mA) or switching output (2-point or 3-point control).

## HOW ENERGY EFFICIENCY IS IMPROVED

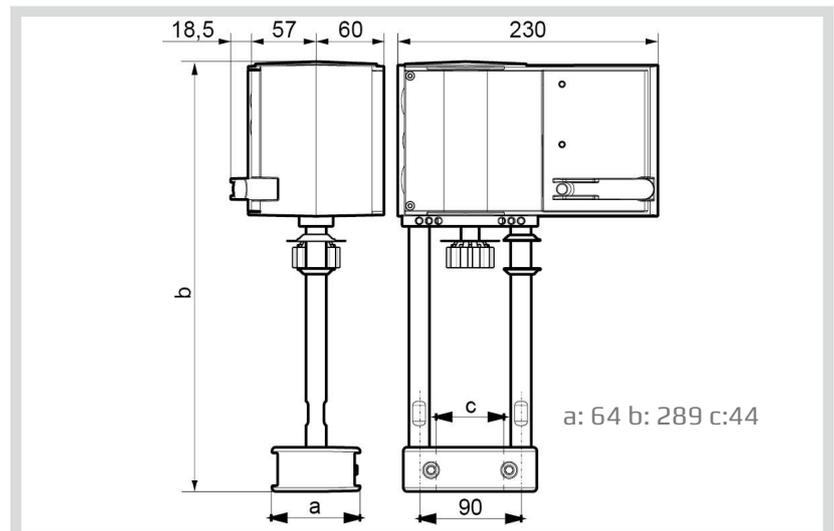
Automatic adaptation to valve, precision control and high energy efficiency with minimal operating noise.

## FEATURES

- Pushing force of at least 2500 N
- Stepping motor with SUT (Superior Universal Technology) electronic control unit and electronic load-dependent cut-off
- Automatic detection of control signal applied (continuous or switching), indicated by two LEDs
- The type of characteristic (linear, quadratic or equal-percentage) can be set on the actuator
- Automatically adapts to valve stroke between 8 and 49 mm; captive even in the event of a power failure
- Direction of travel can be selected via screw terminals when making electrical connection or remotely
- Coding switches for selecting the characteristic and the running time (2, 4 or 6 s/mm)
- Lever for external manual adjustment, with motor cut-off, and for triggering a re-initialisation
- Easy assembly with valve; spindle is connected automatically when control voltage is applied

Type	Positioning time (s/mm)	Nominal stroke (mm)
AVM234SK002	2/4/6	49

## DIMENSION DRAWING



## TECHNICAL DATA

Type	Run time s/mm	Stroke mm	Pushing force N	Power supply <sup>1)</sup>	Weight kg
<b>AVM 2345 K002</b>	<b>2/4/2006</b>	<b>8...40</b>	<b>2500</b>	<b>24 V~/=</b>	<b>4.1</b>
<b>Positioner: <sup>1)</sup></b>					
Control signal 1	0...10 V, R <sub>i</sub> > 100 kΩ		Starting point U <sub>0</sub>		0 or 10
Control signal 2	4...20 mA, R <sub>i</sub> = 50 kΩ		Control span ΔU		10 V
Position feedback signal	0...10 V, load > 2.5 kΩ		Switching range Xsh		300 mV
Power supply	24 V~ ±20 %, 50...60 Hz		Degree of protection		IP 66 (EN 60529)
with accessories	24 V= ±15% 230 V~ ±15% 50...60 Hz		Protection class		III (IEC 60730)
Power consumption	10 W 18 VA <sup>2)</sup>		Response time for 3-point		200 ms
Stroke	8...49 mm		Wiring diagram		A10357
Max temperature of medium	130 °C (option 240 °C) <sup>3)</sup>		Dimension drawing		M10356
Permitted ambient temperature	-10...55 °C		Fitting instructions		99.70.01
Permitted ambient humidity	< 95% rh without conversion		Material declaration		MD 51.377

1) Also for 2-point or 3-point depending on the connection for 24 V~

2) Design the transformers for this value, otherwise functional faults may occur.

3) If the temperature of the medium is higher (from 130 °C to 240 °C), an adaptor is required (see accessories)

### CE conformity

EMC Directive 2004/108/EC  
EN 61000-6-2  
EN 61000-6-4

Low-Voltage Directive 2006/95/EC  
EN 60730-1  
EN 60730-2-14

Over-voltage category III  
Degree of pollution III

### ACCESSORIES

Type	Description
<b>1-0152285</b>	<b>Temperature adaptor</b> for media temperature > 130 °C ... 240 °C
<b>1-0152287</b>	<b>Potentiometer 1000 Ω</b> , 1 W, 24 V; installation as per MV 505894
<b>1-0152289</b>	<b>Auxiliary change-over contacts</b> (2 pcs. each) 12...250 V Infinitely variable, min. 100 mA and 12 V, additional load 6(2) A, MV 505866
<b>1-0152281</b>	<b>230 V Module, plug-in type</b> , for 2-/3-point and continuous activation, additional power 2 VA 230 V 15% power supply, MV 505901, 50/60 Hz
<b>1-0152287</b>	<b>115 V Module, plug-in type</b> 50/60 Hz
<b>1-0152627</b>	<b>4-20 mA Position feedback signal</b> , for 24VAC/DC, output load resistor max. 600 ohm Accuracy +/- 5% of full range
<b>1-0147655</b>	<b>Cable gland</b> M20×1.5