

## GB Product Data Sheet

**AVM234S: 2500N Actuator with analog SUT positioner****Areas of use**

For use with two or three-way. 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**

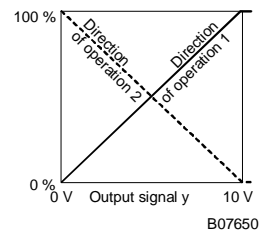
Automatic adaptation to valve, precision control and high energy efficiency with minimal operating noise.

**Features**

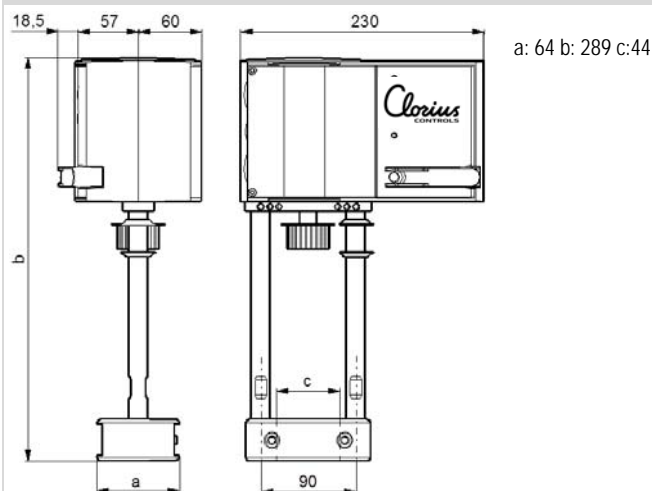
- Pushing force of at least 2500 N
- Stepping motor with SUT (Superior Universal Technology) electronic control unit and electronic load-dependent cut-off
- Automatic detection of control signal applied (continuous or switching), indicated by two LEDs
- The type of characteristic (linear, quadratic or 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
- The availability of numerous adaptors enables the actuator to be fitted to third-party valves

**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 cast light alloy
- Electrical connections (max. 2.5 mm<sup>2</sup>) with screw terminals
- Three pre-scored cable inlets for M20×1.5 (2x) and M16×1.5
- Installation position: vertically upright to horizontal, but not upside down



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 234S K002</b>	2 / 4 / 6	14...40	2500	24 V~/=	4.1

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

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 <sup>1)</sup>  
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>230V Module, plug-in type</b> , for 2-/3-point and continuous activation, additional power 2 VA 230 V ± 15% power supply, MV 505901
<b>1-0152282</b>	<b>115 V Module, plug in type</b> , 100V ±15%, supply voltage
<b>1-0152627</b>	<b>4-20mA Position feedback signal</b> , for 24VAC/DC, output load resistor max. 600 ohm
<b>1-0152666</b>	<b>Adjustable valve adaptor</b> Clorius Controls valves DN15-150 for AVM/AVF234
	<b>Cable gland M20×1.5</b>
	<b>Cable gland M16×1.5</b>

**Clorius**  
CONTROLS