

GA(S) Series – Submittal/Technical Data

Linear Valve Actuators — Force 450 lbs. & 562 lbs.

GA(S) Series - Technical Specifications



Technical Specifications - Actuator		
Non-Spring Return	GA24-562	On/Off, Floating and Modulating
Spring Return	GASRE24-450	On/Off, Floating and Modulating, Shaft Normally Retracted
	GASEX24-450	On/Off, Floating and Modulating, Shaft Normally Extended
Power Requirements	On/Off, Floating and Modulating	24 VAC (±20%) at 50/60 Hz or 24 VDC (±15%)
Positioner ¹	Control Signal 1	0 to 10 V, Ri > 100 kΩ
	Control Signal 2	4 to 20 mA, Ri = 50Ω
	Position Feedback Signal	0 to 10 V, Load >10 kΩ
Action	Direct or Reverse Acting	
Switching Range	300 mv	
Power Consumption ²	Non-Spring Return	10W, 18VA
	Spring Return	7.5W, 20VA
Force	Non-Spring Return	562 lbs. (2,500 N)
	Spring Return	450 lbs. (2,000 N) Power Stroke and Spring Stroke
Stroke	0" to 1.93" (0-49mm)	
Max. Temperature of Media ³	248°F (120°C)	
Ambient Conditions	Temperature	14°F to 131°F (-10° to 55°C)
	Humidity	0 to 95% RH without condensation
	Storage Temperature	-4°F to 158°F (-20° to 70°C)
Level of Protection	IP 66. Not intended for outdoor use without additional protection.	
Enclosure	Self-extinguishing plastic	
Gear Materials	Gears & Gearbox	Steel
	Mounting Column	Stainless Steel
	Mounting Bracket	Cast Light Alloy
Electrical Connection	13 AWG (2.5 mm ²) with screw terminals. Three knock-out cable entries for M20×1.5 (2×) and M16×1.5	
Motor Run Time sec. per in. (mm)	51 (2), 102 (4), 153 (6), DIP Switch Adjustable	
Spring Run Time ⁴	15... 30 seconds	
Number of Spring Returns	> 40,000	
Response Time - 3-Point	200 ms	
Weights	Non-Spring Return	9.1 lbs. (4.1 kg)
	Spring Return	12.3 lbs. (5.6 kg)
Agency Certifications	CE, UL Listed - Temperature-Indicating and Regulating Equipment, XAPX, XAPX7. File E366456	
Warranty	5 Years limited from time of shipment.	

¹ Also for On/Off (2-point) or Floating (3 point) depending on the connection for 24V-

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

³ An intermediate piece is required for media temperatures between 248°F (120°C) and 464°F (240°C)

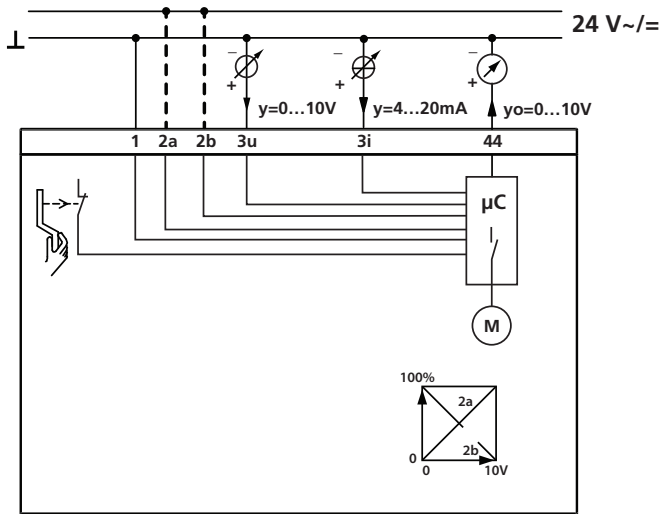
⁴ The return time corresponds to a stroke of 0.55 in. (14 mm) to 1.58 in. (40 mm) and does not depend on the set run time.

Disclaimer - The performance specifications are nominal and conform to acceptable industry standards.
For application at conditions beyond these specifications consult the local Bray office.
Bray, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

GA(S) Series - Wiring

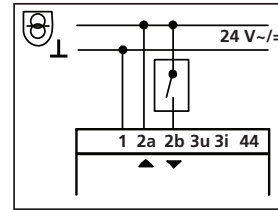
Non-Spring Return

Modulating

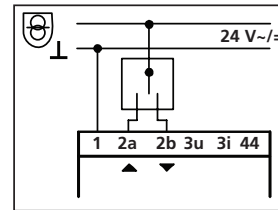


Y = modulating signal
 1= Neutral/Common for power and signal
 2a/2b- These terminals determine forward acting/reverse acting. Only one should be powered with 24V.
 Reverse Acting 2a = Extends. 0 volts = 100% retracted. 10V = 0% retracted.
 Forward Acting 2b = Retracts. 0 volts = 0% retracted. 10V = 100% retracted.
 3u = 0 .. 10 V, in case of control by voltage
 3i = 4 .. 20 mA, in case of control by current
 44 = 0 .. 10 V Feedback, independent from the use of 3u or 3i

On/Off (2 Point)



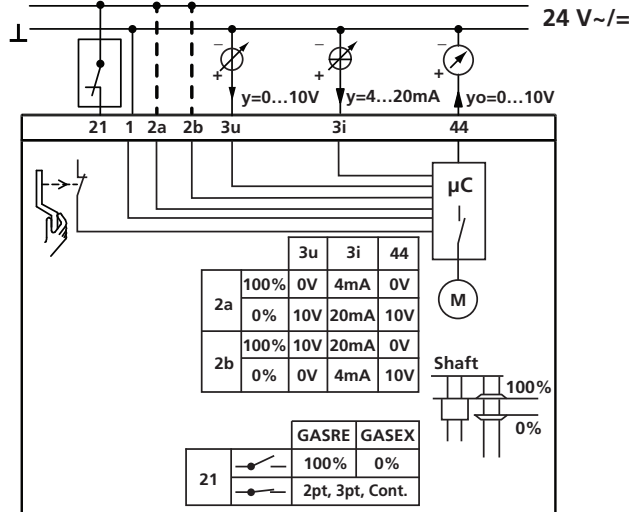
Floating (3 Point)



= Extra Low Voltage

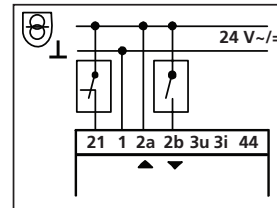
Spring Return

Modulating

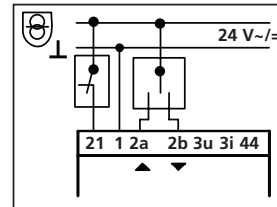


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On/Off (2 Point)



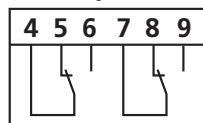
Floating (3 Point)



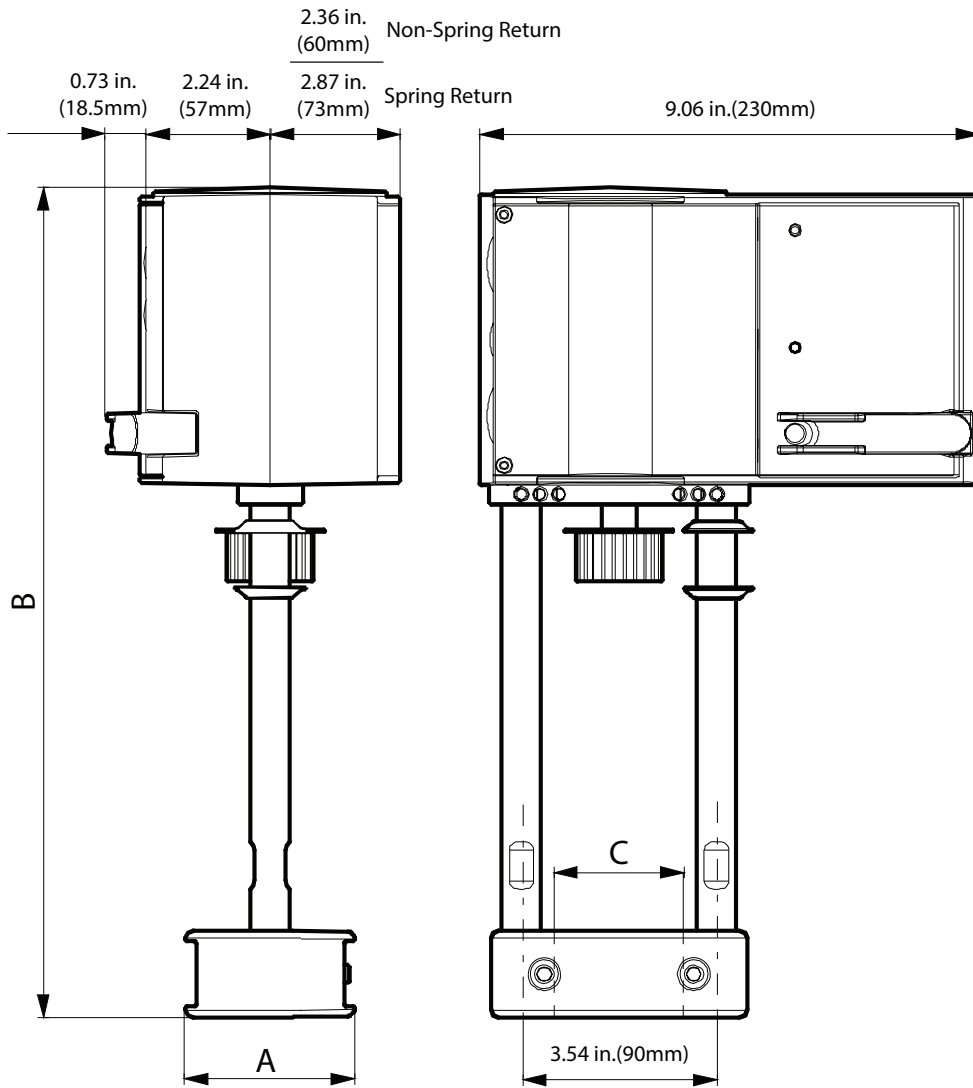
= Extra Low Voltage

Options

0372333 001
 0372333 002
 (Auxillary Switches)

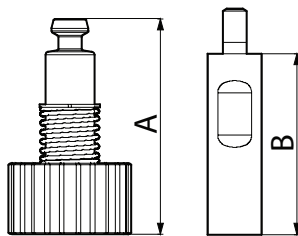


GA(S) Series - Dimensions



Description	A	B	C
GA(S) Series	2.52 in. (64mm)	11.38 in. (289mm)	1.73 in. (44mm)

Adaptor for media temperatures between
266°F (130°C) and 464°F (240°C)



Part Number	A	B
0372336 240	4.31 in. (109.4mm)	3.94 in. (100mm)