

Ucontrol Actuator SB750



Highlights

- Certified for use in ATEX & UKEX Zone 0 hazardous areas
- Certified for use with hydrogen
- IP68 rated for below ground installation
- Mechanical range limiter
- Simple retrofit to existing regulator equipment
- High precision control accuracy

Utonomy Ltd. reserves the right to modify these specifications without prior notice.



Ucontrol SB750 Actuator

The Ucontrol SB750 Actuator is a UtonomyOne component.

The Ucontrol SB750 Actuator is interfaced with pilot regulators to control the setpoint of pilot-operated regulators at pressure regulation sites. The linear motion of the Actuator is used to compress or extend the control spring located within the pilot regulator.

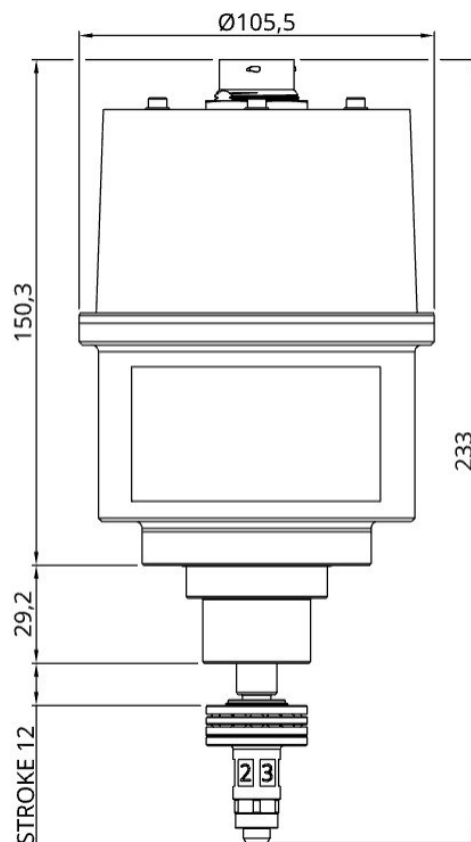
The Actuator concept has been specifically designed to retrofit to existing gas distribution equipment with almost no modification.

The Ucontrol SB750 Actuator is rated for submerged use at a depth of 1.5m for a duration of 30 days to allow installation into below ground environments.

The Actuator is equipped with one motor and is intrinsically safe, with ATEX & UKEX Zone 0 certification, for installation in hazardous gas environments, including hydrogen. The Actuator features a mechanical range limiter to accurately constrain the pressure control range for additional network security.

Used in conjunction with the Ucontrol Controller, and within the wider UtonomyOne system, the SB750 Actuator facilitates standalone set-point scheduling, remote pressure control, and autonomous set-point optimisation based on machine-learning predictive demand models.

Dimensions (mm)



SB750 Actuator
0800-000132



Technical Specifications

Linear Control	
Maximum Stroke	≥12.0 mm (Stroke can be limited to any value below maximum by a Range Limiter)
Hysteresis	± 0.5 %
Actuator Speed	1.5 mm/min
Position Accuracy	± 0.12 %
Environmental	
Operating Temperature ⁽¹⁾	-20 °C ≤ Ta ≤ 48/58 °C
Storage Temperature	-20 °C ≤ Ta ≤ 60 °C
Ingress Protection ⁽²⁾	IP68 (1.5 meters depth, 30 days duration) as per IEC 60529
Mechanical	
Weight	1.2 kg
Construction	Aluminium, Stainless Steel, Brass, Thermoplastic, Fluoroelastomer, Fluoropolymer
Approvals & Standards	
ATEX & UKEX ⁽¹⁾	II 1 G, Ex ia IIC T4 Ga, Ex h IIC T4 Ga, -20 °C ≤ Ta ≤ 48/58 °C
EMC	Emissions: EN 55011:2016 Immunity: EN 61326-1:2013
Safety	EN IEC 61010-1, EN ISO 12100
RoHS	EN IEC 63000, Compliant with exemptions 6 b, 6 c, 7 a, 7 c (I)

⁽¹⁾ The upper limit for the operating ambient temperature depends on the battery pack fitted in the Ucontrol Controller

⁽²⁾ When fitted to regulator using UtonomyOne BG Adaptor Kit, installed within 30° of vertical, with cable attached

Ordering Information

Actuator Part Number	Model	Description
0800-000132	SB750	Single drive, Below ground, 750N nominal force
Adaptor Kits		
0800-000022	Elster ZSC 100 BG Adaptor Kit (0.2 - 2.1 Bar)	
0800-000124	Elster ZSC 100 BG Adaptor Kit (1.7 - 7.1 Bar)	
0800-000125	Pietro Fiorentini 204/A BG Adaptor Kit (3 - 5 Bar)	
Ancillary Equipment		
0800-000067-WG	Ucontrol Installation Tool (UIT)	
0400-000022-xxx	Below Ground Actuator Cable	xxx (cable length): 018 — 1.8m 030 — 3.0m 050 — 5.0m 100 — 10.0m 150 — 15.0m
0400-000026-xxx	Controller to Actuator Cable	