

5-year warranty

**Type Overview**

 Type  
 P2050SU-055+LRX24-EP2-MOD

 DN  
 15

**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
<b>Functional data</b>	Operating range Y	2...10 V
	Operating range Y note	Hybrid via 2...10 V
	Input Impedance	100 k $\Omega$ (0.1 mA), 500 $\Omega$
	Options positioning signal	VDC variable
	Position feedback U	2...10 V
	Position feedback U variable	VDC variable
	Running Time (Motor)	90 s
	Control accuracy	$\pm 5\%$
	Fluid	chilled or hot water, up to 60% glycol max (open loop/steam not allowed)
	Close-off pressure $\Delta p_s$	200 kPa
Service	maintenance-free	
Manual override	external push button	
<b>Flow measurement</b>	Measuring accuracy flow	$\pm 2\%*$
<b>Safety data</b>	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
Quality Standard	ISO 9001	
Ambient temperature	-22...122°F [-30...50°C]	
Storage temperature	-40...176°F [-40...80°C]	
Ambient humidity	max. 95% r.H., non-condensing	
<b>Materials</b>	Flow measuring pipe	brass body nickel-plated

**Safety notes**


- Cable for ZIP-RS232 US and ZIP-USB-MP US to Belimo gateways.
- Battery Back Up System for SY(7-10)-110
- 120 to 24 VAC, 40 VA transformer.
- 50% voltage divider kit (resistors with wires).
- PC Tool computer programming interface, serial port.

**WARNING:** This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)



Accessories

Sähköiset lisävarusteet

Kuvaus

Tyyppi

Service Tool, with ZIP-USB function, for configurable and communicative Belimo actuators / VAV controller and HVAC performance devices

M2415-EP  
ZTH US

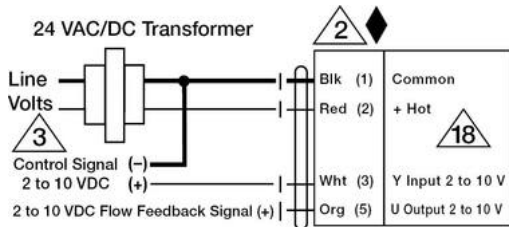
Electrical installation

**✂ INSTALLATION NOTES**

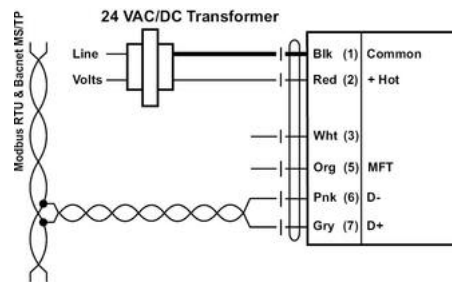
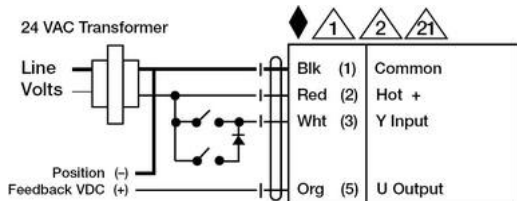
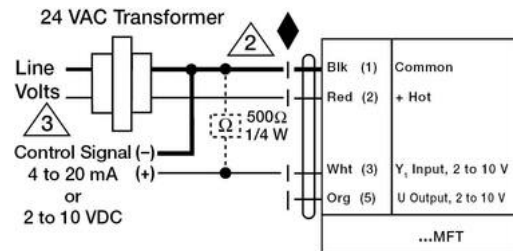
- ⚠ Provide overload protection and disconnect as required.
- ⚠ Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- ⚠ Actuators may also be powered by 24 VDC.
- ⚠ Actuators are provided with color coded wires. Wire numbers are provided for reference.
- ⚠ Actuators are provided with a numbered screw terminal strip instead of a cable.
- ⚠ IN4004 or IN4007 diode required
- ◆ Meets cULus requirements without the need of an electrical ground connection.

**⚠ Warning! Live Electrical Components!**

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



24 VAC/DC Transformer

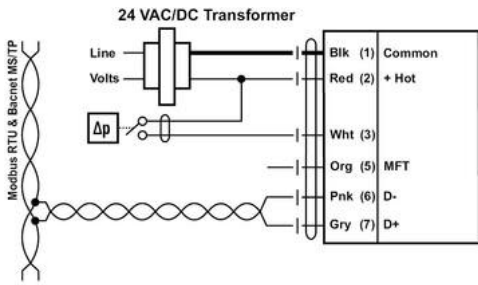


**Modbus & BACnet control for Non-Spring Return**

**Note:**

Modbus signal assignment:  
C1 = D- = A  
C2 = D+ = B

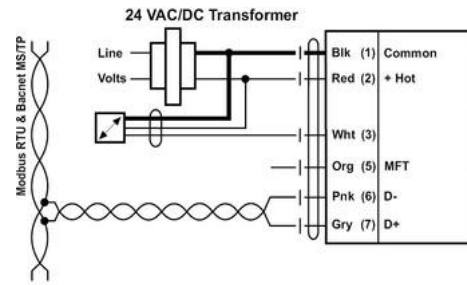
Power supply and communication are not galvanically isolated. Interconnect ground signal of the devices.



Modbus & BACnet control with switching contact for Non-Spring Return

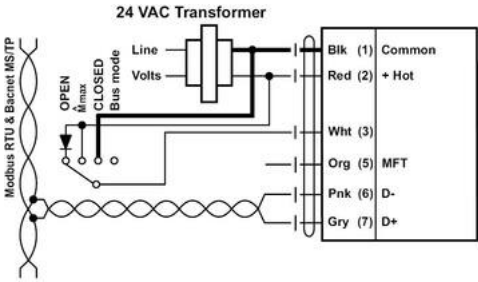
**Requirements for switching contact:**

The switching contact must be able to accurately switch a current of 16 mA at 24 V.



Modbus & BACnet control with active sensor for Non-Spring Return

**Possible input voltage range:**  
0...32 V (resolution 30 mV)



Modbus & BACnet control with local override (AC only, analog override) for Non-Spring Return

**Note:**

If no sensor is integrated, then connection 3 (Y) is available for the protective circuit of a local override control. Options: CLOSED, Vmax, OPEN

**Dimensions**

**Dimensional drawings**

