BELIMO®

Signal converter voltage to current for actuators
- Nominal voltage AC/DC 24 V
- Control 0(2) ... 10 V > 0(4) ... 20 mA

Technical data

Electrical data	Nominal voltage	AC 24V, 50/60 Hz / DC 24V
	Power supply range	AC/DC 19.2...28.8 V
	Power consumption Own consumption	0.2 W
	Dimensioning	Dependent on the actuator (see Technical data sheet for the actuator)
	Connection	Spring terminals, max. 1.5 mm^2 Max. 1 lead per terminal opening (cable $\varnothing$ 5 ... 10 mm, 4-core) Use a screwdriver to install
	Cable gland clamping range	5 ... 10 mm
	Electrical isolation	No
Functional data	Input impedance (U5 input)	>100 kΩ
	Non-linearity	<1%
	Control by controller (controller signal)	Selectable with jumper: – Jumper set: 0 ... 20 mA → 0 ... 10 V (factory setting) – Jumper removed: 0 ... 20 mA → 0 ... 20 mA
	Load at 4…20 mA outlet	0 ... 600 Ohm (signal conductor resistance + input resistance controller)
Safety	Protection class	**III** Safety extra-low voltage
	Degree of protection	IP66
	EMC	CE according to 2004/108/EC
	Mode of operation	Type 1
	Ambient temperature	–30 … +50°C
	Non-operating temperature	–40 … +80°C
	Ambient humidity range	95% r.h., non-condensating
	Rated impulse voltage	0.8 kV
	Control pollution degree	3
	Maintenance	Maintenance-free
Dimension / Weight	Dimension	See «Dimensions» on page 2
	Weight	Approx. 200 g

Safety notes

⚠

- **The device is not allowed to be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.**
- **It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.**
- **It does not contain any parts that can be replaced or repaired by the user.**
- **The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.**
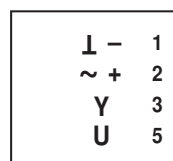- **The cable glands must be tightened to a torque of 2 to 3 Nm in order to guarantee the specified IP protection**
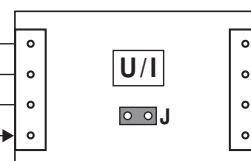
Electrical installation
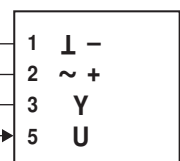
Signal flow

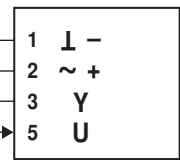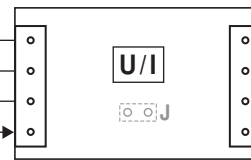Jumper set for actuators:
..-SR
..-MF
..-MP

Actuator			Z-UIC		Controller		
⊥ −	1			U/I		1	⊥ −
~ +	2					2	~ +
Y	3	0...10 V		▪ J	0...20 mA	3	Y
U	5	0...10 V			0...20 mA	5	U

Jumper removed for actuator SM24A-MA

Actuator			Z-UIC		Controller		
⊥ −	1			U/I		1	⊥ −
~ +	2					2	~ +
Y	3	0...20 mA		∘ ∘ J	0...20 mA	3	Y
U	5	0(2)...10 V			0(4)...20 mA	5	U

Wiring diagram

Z-UIC

Actuator   Controller

1	2	3	5		1	2	3	5		
⊥ −	~ +	Y	U		⊥ −	~ +	0-20 mA	0-20 mA		**Jumper**

Actuator

⊥ −	1
~ +	2
Y	3
U	5

Controller

1	⊥ −
2	~ +
3	Y
5	U
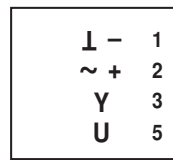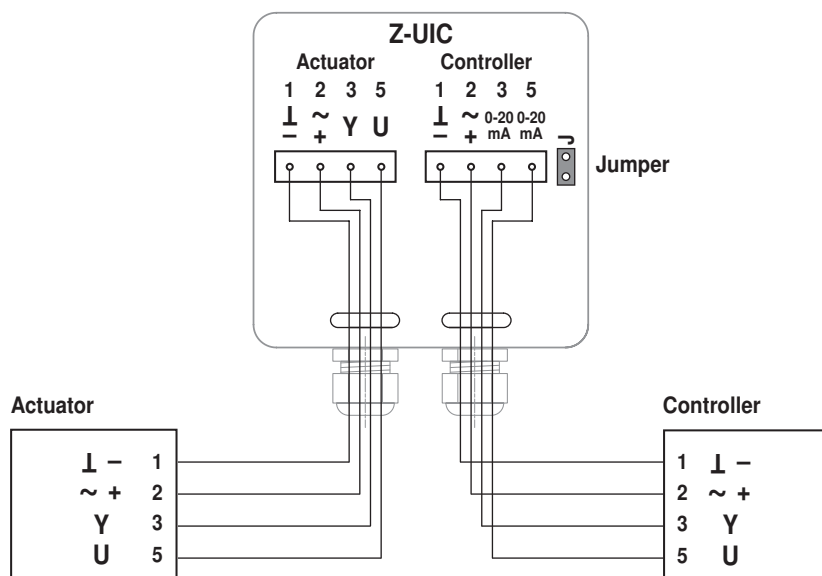
Note
For restrictions with respect to maximum signal conductor length, see Actuator data sheets

Dimensions [mm]

Dimensional drawings

58

22

94

6.5

35

5...10

29

37

94

29