

WS Position Sensors

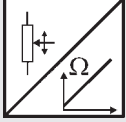
Output Specifications R1K and 10V



Automation
Sensors
Measurement

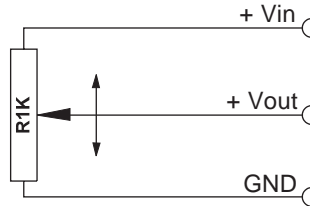
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Voltage divider R1K Potentiometer



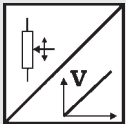
Excitation Voltage	32 VDC max. at 1 kΩ (Input Power 1 W max.)
Potentiometer Impedance	1 kΩ ±10%
Thermal coefficient	±0.0025% / K Full Scale
Sensitivity	Depends on measurement range, individual sensitivity of sensor specified on label
Voltage Divider Utilization Range	Approx. 3% ... 97% of Full Range
Operating Temperature	-20 ... +85 °C

Signal diagram



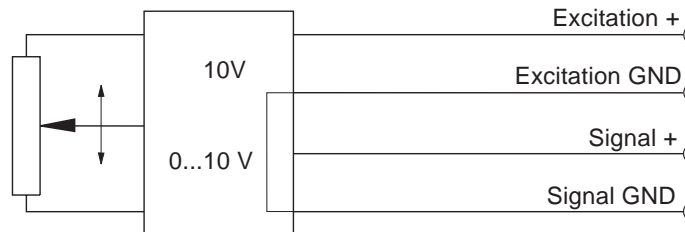
Note: The potentiometer must be connected as a voltage divider. The input impedance of the following processing circuit should be 10 MΩ min.

Signal conditioner 10V Voltage output



Excitation Voltage	+18 ... +27 V DC non stabilized
Excitation Current	20 mA max.
Output Voltage	0 ... +10 V DC
Output Current	2 mA max.
Output Load	> 5 kΩ
Stability (Temperature)	±0.005% / K Full Scale
Protection	Reverse Polarity, Permanent Short Circuit
Output Noise	0,5 mV _{RMS}
Operating Temperature	-20 ... +85 °C
Immunity to interference (EMC)	According to IEC 1000-4-2, -4, -5

Signal diagram



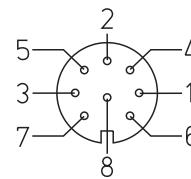
Signal Wiring

Output Signals	R1K	10V	Connector WS-CONN-D8	Connector WS-CONN-066S
+ Vin		Excitation +	1	A
GND		Excitation GND	2	B
+ Vout		Signal +	3	C
		Signal GND	4	D
			5	E
			6	F
			7	—
			8	—

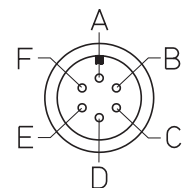
Connection

Mating Connector

View to solder terminals



WS-CONN-D8



WS-CONN-066S

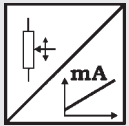
WS Position Sensors

Output Specifications 420A and 420T

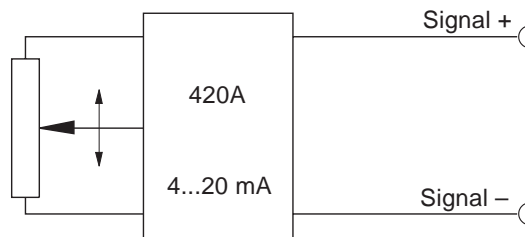


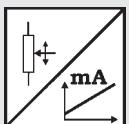
Automation
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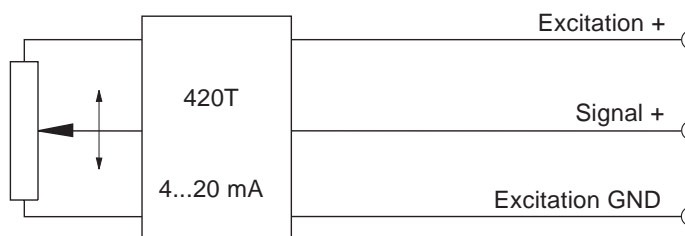
Signal conditioner 420A Current output (2 wire) 	Excitation Voltage	+12 ... 27 VDC non stabilized, measured at the sensor terminals
	Excitation Current	35 mA max.
	Output Current	4 ... 20 mA equivalent to 0 ... 100% Range
	Stability(Temperature)	±0.01% / K Full Scale
	Protection	Reverse Polarity, Permanent Short Circuit
	Output Noise	0.5 mV _{RMS}
	Operating Temperature	-20 ... +85 °C
	Immunity to Interference (EMC)	According to IEC 1000-4-2, -4, -5

Signal Diagram



Signal Conditioner 420T Current output (3 wire) 	Excitation Voltage	+18...+27 V DC non stabilized
	Excitation Current	40 mA max.
	Load Resistor	350 Ω max.
	Output Current	4 ... 20 mA equivalent to 0 ... 100% Range
	Stability (Temperature)	±0.005% / K Full Scale
	Protection	Reverse Polarity, Permanent Short Circuit
	Output Noise	0.5 mV _{RMS}
	Immunity to Interference	According to IEC 1000-4-2, -4, -5

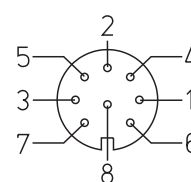
Signal diagram



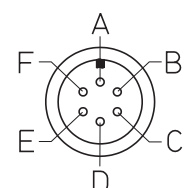
Signal Wiring	Output Signals		Connector WS-CONN-D8	Connector WS-CONN-066S
	420A	420T		
Signal +		Excitation +	1	A
Signal -		Excitation GND	2	B
		Signal +	3	C
			4	D
			5	E
			6	F
			7	—
			8	—

Connection Mating Connector

View to solder terminals



WS-CONN-D8



WS-CONN-066S