

SENSORES E INSTRUMENTACION
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Signal Conditioners for Position Measurement

Series MUP080



Special features

- analog signal conditioner for potentiometric linear and rotary sensors
- basic version with fixed amplification
- reduced to supply and high ohmic pickup of the potentiometer
- normalized outputs 0..10 V or 4..20 mA
- good linearity
- very low temperature coefficient approx. 20 ppm/K
- mounted on DIN rail according to DIN EN 50022

Applications

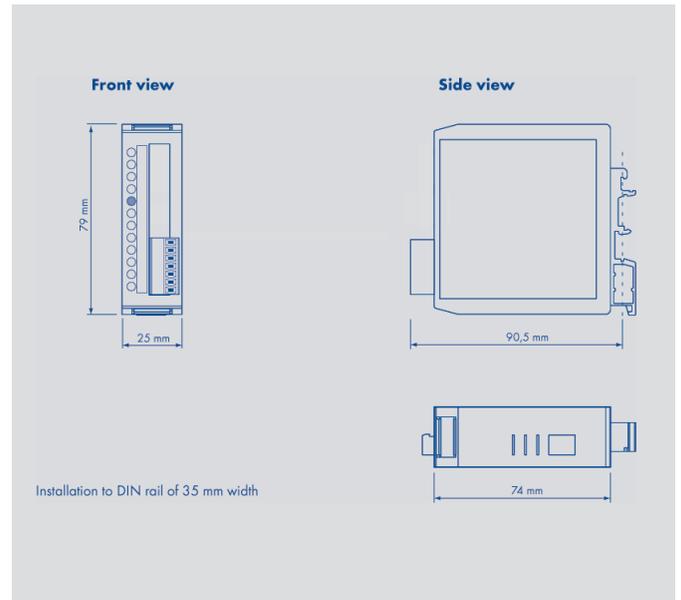
Suitable for use with almost any novotechnik potentiometer

The wiper signal of the connected potentiometer is picked up almost loadless by an high impedant input circuit. After this it is transformed into a proportional standardized output signal (current or voltage).

The electronics is built in an isolated housing. It can be snapped directly on hat rails according to DIN EN 50022.

The wide supply range allows to be supplied from an unsta-bilized power supply.

The very good linearity and temperature drift enable full use of the excellent properties of conductive plastic potentiometers. The potentiometric input can be transmitted across long distances with minimum disturbances, particularly when mounted close to the sensor.



Mechanical data

Dimensions	90,5 x 79 x 25	mm
Terminals	connector terminal board, 1,5 (AWG 14)	mm ²
Rail mounting	35 (DIN EN 50022)	mm
Housing material	PA66, incombustible UL94V-0, green	

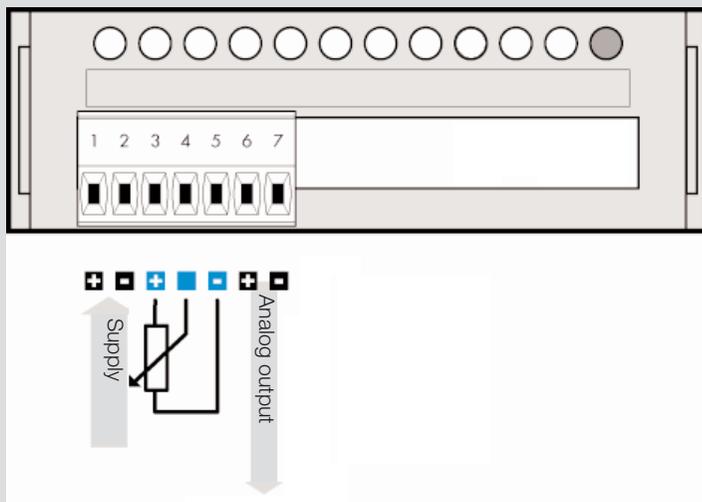
Electrical data

Supply voltage	18...30	VDC
Internal reference voltage for potentiometer	10	VDC
Allowed potentiometer resistance	≥ 500	Ω
Current consumption max.	30	mA
Linearity	typ. 0,1	%
Amplification tolerance (gain)	1	%
Offset tolerance	1	%
Temperature coefficient	typ. 20...25	ppm
Response time	1	ms
Outputs	0...10 V or 4...20 mA	
Burden resistor current output	≤ 500	Ω
Stabilisation period	15	min.
Reverse voltage protection	yes, for supply lines	

Environmental data

Protection class	housing IP20	
Temperature range	working 0...60 storage 10...+85	°C
EMC	EN 61326-1	
Electrical safety	EN 61010-1, A2	

Connection diagram



Order designation

M U P - 0 8 0 - 1 1 1

Series

Type

Output
1: 0 ... 10 V
3: 4...20 mA

Input
1: 0 % ... 100 %

Supply
1: not isolated

Other configurations on request

- galvanic isolation supply to output
- alternative configurations amplification/offset

Order designations

Type	Art.-No.
MUP-080-111	054220
MUP-080-113	054221