

Measuring Transducers

General

Measuring transducers supply a linear output signal which is proportional to the measured value. ZIEHL delivers measuring-transducers for input signals DC voltage and AC/DC current, Pt100, Pt1000, KTY83/84, thermocouples and resistance (potentiometer). Output signals are: DC 0/4-20 mA, 0-10 V or frequencies. Frequency signals can be easily evaluated by digital inputs of PLC's.

Various measuring- and switching-devices are also available with analog output. Thus also measuring-transducers for AC voltage, frequency and speed are available.

To display the measured values digital panelmeters type MINIPAN are recommended.

For the evaluation of limits we recommend our limit-relays STW1000V2 and TR210.

In combination with our measuring point change-over switch MUM8 and MUM16 up to 16 signals can be connected to one input (i.e. display or PLC).

Measuring Transducers for Temperature

Type	Input	Output	Potential separation	Housing-Design	Remarks
TMU300	3 x Pt100	4-20 mA	no	420	Transducer for motor-protection Loop-supplied
TR210	2 x Pt100/ 1000 2/3-wire KTY83/84	0/4-20 mA 0-10 V	no	V4	Digital display, programmable 1 or 2 sensors, difference 2 alarms/relays
TMU100V	Pt100 3-wire	0/4-20 mA 0-10 V	no	V2	zero and full scale adjustable
MU1000K	Pt100 3-wire	0/4-20 mA und 0-10 V	yes	K	various zero and spans programmable

More devices with integrated measuring transducer (see according product-group in catalog):

TR122DA	Pt100 2-/3-wire	0/4-20 mA	no	S12	2 alarms/relays
TR400	4 x Pt100 2-/3-wire	2 x 0/4 mA or 0/2-10 V	no	V8	Max. values out of 3/4 sensors, programmable
TR600	6 x Pt100 2/ 3-wire	2 x 0/4-20 mA or 0/2-10 V	no	V8	Max. values out of 2/3/4/6 sensors, programmable
MINIPAN352P MINIPAN SE352 MINIPAN 352V	Pt100 2-/3-wire	4-20 mA	yes	350	potential-free output 4-20 mA, Loop-supplied

Measuring Transducers for Thermocouples

Type	Input	Output	Potential-separation	Housing-Design	Remarks
TR210	B, E, J, K, L, N, R, S, T	0/4-20 mA 0-10 V	no	V4	Digital display, programmable, 1 or 2 Sensors, difference, 2 alarms/relays

More devices with integrated measuring transducer (see according product-group in catalog):

MINIPAN 352P, 352V and SE352	B, E, J, K, L, N, R, S, T	4-20 mA	yes	350	potential free output 4-20 mA, Loop-supplied
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Measuring-Transducers for AC Current (see Electronic Current-Transformers)

Type	Input	Output	Potential-separation	Housing-Design	Remarks
STWA1FH	AC 0-20 A	0,5-20 Hz	yes	H	Electronic current-transmitter, Transistor-output
STWA1AH	AC 0-15 A	0-20 mA	yes	H	Electronic current-transmitter, No supply required
STWA2AH	AC 0-20 / 100 A	4-20 mA	yes	H	Electronic current-transmitter, Loop-powered 4-20 mA

More devices with integrated measuring transducer (see according product-group in catalog):

MINIPAN 352P MINIPAN 352V MINIPAN SE352	AC/DC current and voltage	4-20 mA	yes	350	Passiv analog output mit Loop-powered
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Measuring-Transducers for DC current/voltage

Type	Input	Output	Potential-separation	Housing-Design	Remarks
MU1000K	DC 0/4-20 mA und 0-10 V	0/4-20 mA 0-10 V	yes	K	Universal-supply-voltage all inputs and outputs in one device
MU1001K	DC 0/4...20 mA DC 0...300 mV DC 0...300 V	0/4-20 mA 0-10 V	yes	K	Universal-supply-voltage all inputs and outputs in one device Scaleable inputs
MU100U	DC 0/4-20 mA	0/4-20 mA und 0-10 V	yes 0-10 V	K	Universal-supply-voltage all inputs and outputs in one device
TR210	DC 0/4-20 mA 0-10 V	0/4-20 mA 0-10 V	no	V4	Digital display, programmable, 1 or 2 Sensors, difference, 2 alarms/relays

Measuring Transducers for Potentiometers

Type	Input	Output	Potential-separation	Housing-Design	Remarks
MU100W	Potentiometer 0-500 Ω/ 10 kΩ	0/4-20 mA and 0-10 V	no	V2	For remote potentiometers

More devices with integrated measuring transducer (see according product-group in catalog):

TR122DA	0 - 850 Ω	0/4 - 20 mA	no	S12	2 alarms/relays
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Measuring Transducers for Speed/Frequency

FRMU1000	AC-voltage 10-500 Hz	0/4-20 mA 0-10 V	yes	V4	Measuring voltage 80-440 V
FRMU1000	5-99999 IMP/min	0/4-20 mA 0-10 V	yes	V4	Input for proximity-sensor 2- or 3-wire, PNP oder NPN