Data sheet

ACT20P BRIDGE

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com



ACT20P: The flexible solution
- Precise and highly functional signal converters
- Release levers simplify handling

General ordering data

Version	Measuring bridge converter, Input : Resistance measuring bridge, Output : 0(4)-20 mA, 0-10 V
Order No.	1067250000
Type	ACT20P BRIDGE
GTIN (EAN)	4032248820856
Qty.	1 items

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Technical data

Approvals

Approvals	CE
Approvals	CULUS;
Approvals	
ROHS	Conform

Dimensions and weights

Depth	113.6 mm	Depth (inches)	4.4724 inch
Height	119.2 mm	Height (inches)	4.6929 inch
Width	22.5 mm	Width (inches)	0.8858 inch
Net weight	255.59 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-40 °C...70 °C
Humidity	10...90 %, no condensation		

Probability of failure

SIL in compliance with IEC 61508	None	MTTF	543 a

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cI
REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924

Input

Bridge supply voltage	5 V or 10 V	Sensor	Strain gauge resistance, Resistance measurement, Total resistance of all parallel resistance measuring bridges: min. 87 Ω
Number inputs	1	Sensor supply	120 mA @ 10 V (= 4 x 350 Ω bridge resistors)
Bridge sensitivity	1.0 mV / V to 5.0 mV / V	Input signal	±10 mV / ±20 mV / ±30 mV / ±50 mV

General data

Accuracy	<0.05 % of measuring range	Protection degree	IP20
Supply voltage	10...60 V DC	Long-term drift	0.1 % / 10.000 h
Linearity	Typically ± 0.05 % of signal range	Step response time	<400 ms (10...90 %)
Mounting rail	TS 35	Power consumption	3 W @ 24 V DC
Temperature coefficient	typ. 0.005 % / °C	Nominal power consumption	4 VA
Configuration	DIP switch and button	Operating altitude	≤ 2000 m

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Insulation coordination

EMC standards	EN 61326	Surge voltage category	III
Pollution severity	2	Insulation voltage	5.7 kV (input / output, input / supply)
Rated voltage	300 V		

Connection data

Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 mm²
Clamping range, min.	0.5 mm²	Clamping range, max.	2.5 mm²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12

Part description

Product description	The ACT20P-BRIDGE-S bridge measuring transducer converts measuring bridge voltages into standard signals. Buttons are used for adjustment to the measuring bridge connected. The bridge measuring transducer can supply up to 4 parallel-connected measuring bridges each with 350 Ω. The device supports simple compensation of the tare weight with a separate input for an external button or an external PLC signal. The power supply is electrogalvanised and isolated from the input and output (3-way isolation). Properties • 4-wire and 6-wire measurement • Supply of up to 4 parallel-connected measuring bridges each with 350 Ω • Input and output ranges can be adjusted via DIP switches • Tara compensation via external button or PLC signal • Operating status display on a front panel LED • Galvanic 3-way isolation between input, output and supply.

Classifications

ETIM 8.0	EC002653	ETIM 9.0	EC002653
ETIM 10.0	EC002653	ECLASS 14.0	27-21-01-20
ECLASS 15.0	27-21-01-20		

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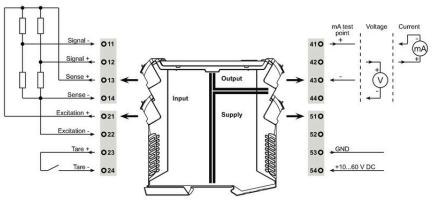
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Drawings

Electric symbol

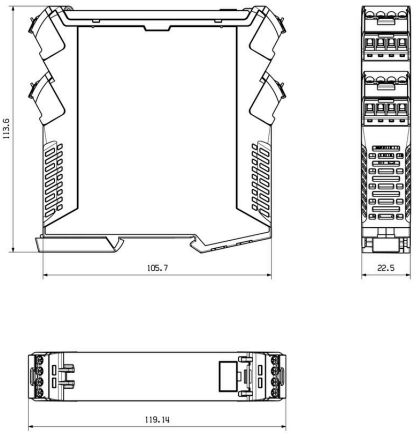


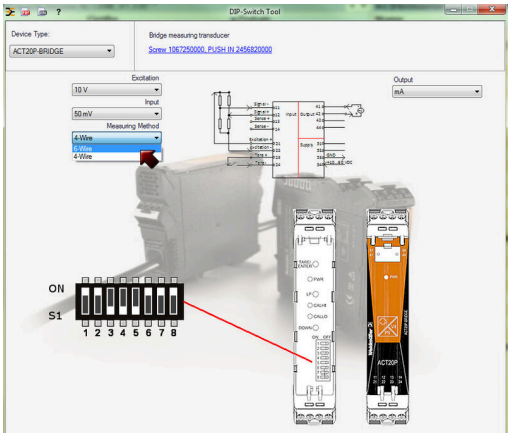
DIP switch setting

	DIP switch							
Excitation	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
10 V	■							
5 V								
Output	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
mA		■						
V								
Input span	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
10 mV			■					
20 mV				■				
30 mV					■			
50 mV						■		
Measuring method	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
4-wire							■	■
6-wire								

■ = ON

Dimensioned drawing





example for DIP switch setting (with ACT20 tool)

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