

**ACT20P BRIDGE****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Product image****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.	<a href="#">1067250000</a>
Type	ACT20P BRIDGE
GTIN (EAN)	4032248820856
Qty.	1 pc(s).

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**Technical data****Dimensions and weights**

Depth	113.6 mm	Depth (inches)	4.472 inch
Height	119.2 mm	Height (inches)	4.693 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	198 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
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**Input**

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

**Output**

Load impedance current	≤ 600 Ω	Output current	0...22 mA (adjustable)
Output voltage, note	0...11 V (adjustable)	Type	active, connected control must be passive
load impedance voltage	600 Ω		

**Output (digital)**

Max. switching voltage, AC	0 V	Rated switching current	0.1 A
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**General data**

Accuracy	<0.05 % of measuring range	Configuration	DIP switch and button
Linearity	Typically ± 0.05 % of signal range	Long-term drift	0.1 % / 10.000 h
Power consumption	3 W @ 24 V DC	Protection degree	IP20
Rail	TS 35	Step response time	<400 ms (10...90 %)
Temperature coefficient	typ. 0.005 % / °C	Voltage supply	10...60 V DC

**Insulation coordination**

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

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Type of connection	Screw connection	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Clamping range, rated connection	2.5 mm <sup>2</sup>
Clamping range, min.	0.5 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 12

**Classifications**

ETIM 6.0	EC002653	ETIM 7.0	EC002653
ETIM 8.0	EC002653	ETIM 9.0	EC002653
ECLASS 9.0	27-21-01-20	ECLASS 9.1	27-21-01-20
ECLASS 10.0	27-21-01-20	ECLASS 11.0	27-21-01-20
ECLASS 12.0	27-21-01-20	ECLASS 13.0	27-21-01-20

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Technical data

Tender specification sheets

Long specification

Bridge measuring trans-  
former with electrical  
3-way isolation, config-  
urable  
measurement isolat-  
ing transformer in 22.5  
mm width with exter-  
nal power supply, for  
recording,  
transforming and isolat-  
ing of measurements  
from industrial strain  
gauges.  
Standard DC cur-  
rent/voltage signals are  
available on the output  
side. Measuring bridges  
of up to  
3 x 350 Ohm can be  
supplied via the input  
circuit. Automatic tare  
calibration  
via external switch sig-  
nal, or manually with a  
press of a button.  
6-wire connection com-  
pensates for differ-  
ences in wire resis-  
tance. Bridge excitation  
voltage  
can be switched be-  
tween 5 v and 10 V .  
Load cells can be cali-  
brated using a button  
on the front side.  
I/O signals can be con-  
figured via DIP switch-  
es.  
Add-on housing for  
TS35 rail mounting  
Dimensions: L/W/H  
119.2/ 22.5/ 113.6 mm  
Screw connection /  
Nominal cross-section  
2.5 mm<sup>2</sup>  
Protection degree: IP  
20  
Input Resistance measuring  
bridge / 1 mV / V... 5  
mV / V  
Bridge sensitivity +/-  
10 mV / +/- 20 mV / +/-  
30 mV / +/- 50 mV (ad-  
justable)  
Input resistance > 1  
MOhm  
Bridge supply  
5 V or 10 V

Out-  
put  
0...11 V / 0...22  
mA config-  
urable  
Load resistance

1600 Ohm / Strom / 1  
kOhm/ voltage  
Temperature coeffi-  
cient typ. 50 ppm/K  
Transmission er-

Short specification

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## Technical data

## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	2f6dd957-421a-46db-a0c2-cf1609156924

## Important note

Product information	<p>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 <math>\Omega</math>. 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).</p> <p>Properties</p> <ul style="list-style-type: none"><li>• 4-wire and 6-wire measurement</li><li>• Supply of up to 4 parallel-connected measuring bridges each with 350 <math>\Omega</math></li><li>• Input and output ranges can be adjusted via DIP switches</li><li>• Tare compensation via external button or PLC signal</li><li>• Operating status display on a front panel LED</li><li>• Galvanic 3-way isolation between input, output and supply.</li></ul>
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## Approvals

Approvals



Approvals	CULUS;
ROHS	Conform

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Software	<a href="#">DIP switch configuration tool</a>
User Documentation	<a href="#">Quickstart guide german</a> <a href="#">Device description – Instruction sheet</a> <a href="#">Quickstart guide english</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

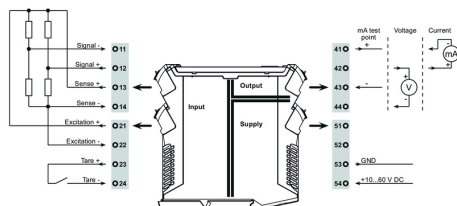
# ACT20P BRIDGE

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## Drawings

### Electric symbol

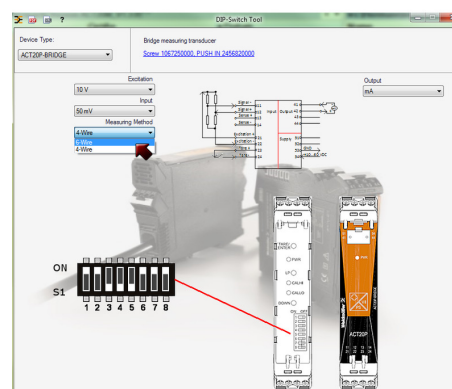
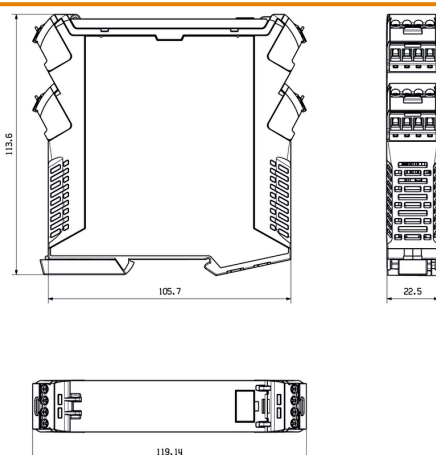


### DIP switch setting

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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ESG is the tried-and-tested marker in MultiCard format for use on many well-known electrical devices. The result is high-quality device marking with a high-contrast appearance.

Various types are available for devices from manufacturers like Siemens, ABB, Beckhoff etc.

Advantages at a glance:

- Tags for universal usage, self-adhesive or clip-on tags, depending on type
- For aligned equipment, e.g. circuit breakers, we supply ESG markers for clipping onto tag rails
- Individual laser-quality printing according to specifications

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

**General ordering data**

Type	ESG 6.6/20 BHZ 5.00/04	Version
Order No.	<a href="#">1082540000</a>	ESG, Device markers x 20 mm, PA 66, Colour: white
GTIN (EAN)	4032248845439	
Qty.	200 pc(s).	

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**General ordering data**

Type	ESG 8/13.5/43.3 SAI AU	Version
Order No.	<a href="#">1912130000</a>	ESG, Device markers x 13.5 mm, PA 66, Colour: Transparent
GTIN (EAN)	4032248541164	
Qty.	5 pc(s).	