



Product Guide

L Series
720.U.001.04

Digital Bargraph Indicators, programmable

72x24
96x24
144x48

- ✓ for DC Current and Voltage, Standard Signals
- ✓ 72x24, 96x24 or 144x48 mm Bezel
- ✓ Vertical or Horizontal Display
- ✓ 20, 30, 40 or 50 Segments
- ✓ Red or Green LEDs
- ✓ One or two Bargraphs
- ✓ With or without additional 7-Segment Display
- ✓ Auxiliary Supply 115/230 V AC, 50 Hz or 24 V DC



WEIGEL



General Data

Digital Bargraph Indicators, programmable

Application

for standard applications in switchboard-, control equipment-, process control-, and machine tool industry.

for mounting in switchboards, machine tools or mosaic grid panels (optional)

for measuring connection DC current or DC voltage, standard signals direct or for use on transducer, shunt

Mechanical Data

case details rectangular format
material of case glass-fibre reinforced thermoplastics, black
bezel black, mat or optionally gray varnished (similar to RAL 7037) or siliceous gray varnished (similar to RAL 7032)

terminals screw terminal barrier strip

enclosure code IP 50 front of case
IP 20 rear of case

panel fixing screw clamps

mask lettering 0 ... 100% standard, extra caption, custom logo or special lettering to special order
behind removable display lens

operating elements
climatic suitability
operating temperature range 0°C ... +23°C ... +50°C
storage temperature range -20°C ... +23°C ... +70°C
relative humidity ≤75% annual average, non-condensing

dimensions (in mm)

	LEA 20	LEA 23/30
bezel	72 x 24	96 x 24
panel cutout	68 ^{+0.7} x 22.2 ^{+0.3}	92 ^{+0.8} x 22.2 ^{+0.6}
panel thickness	≤5	≤5
mounting depth	120	120
bezel height	5.2	7.5
weight approx.	0.15 kg	0.25 kg

dimensions (in mm)

	LEA/LZA 43/50
bezel	144 x 48
panel cutout	138 ^{+1.0} x 45 ^{+0.6}
panel thickness	≤45
mounting depth	120
bezel height	8.5
weight approx.	0.6 kg

mounting in mosaic grid panels
please specify type / manufacturer of mosaic grid when ordering



Short Form Data

Bargraph Indicator for DC Current and DC Voltage, programmable

LEA 20

72 x 24 mm

Bargraph
20 20 Segments

Input
A DC Current / 200 mA and DC Voltage 2 / 10 / 40 / 200 V

Auxiliary Voltage
1 24 V DC electrically insulated

Options none

Display Colour

R red
G green

Appearance

H Vertical Display
Q Horizontal Display

Electrical Data

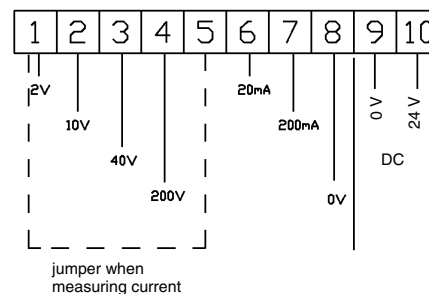
measuring ranges input resistance
DC current
±20 mA 100 Ω
±200 mA 10 Ω
DC voltage
±2 V 100 kΩ
±10 V 560 kΩ
±40 V 2.2 MΩ
±200 V 10 MΩ
measuring principle dual-slope, integrating
conversion rate approx. 1 read per second
error, max. ±0.01% of reading ±1 count/segment
auxiliary voltage 24 V DC (20 ... 30 V), electrically insulated
power consumption 2.5 VA max.

Display

scale length 50 mm, 20 segments
display colour red or green
appearance vertical or horizontal display
overrange indication each 2nd scale segment will flash
zero point/end value programmable
scaling 0 ... 100 %

Connection

plug-in terminal barrier strip





Short Form Data

Bargraph Indicators for DC Current and DC Voltage, programmable

LEA 23
LEA 30
96 x 24 mm

Bargraph	
23	20 Segments & 3-digit Display
30	30 Segments
Input	
A	DC Current 20 / 200 mA and DC Voltage 2 / 10 / 40 / 200 V
Auxiliary Voltage	
1	24 V DC electrically insulated
2	115/230 V AC, 50 Hz electr. insulated
Options refer to last page	
Display Colour	
R	red
G	green
Appearance	
H	Vertical Display
Q	Horizontal Display

Electrical Data

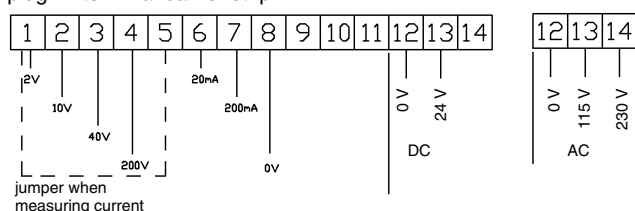
measuring ranges	input resistance
DC current	
±20 mA	100 Ω
±200 mA	10 Ω
DC voltage	
±2 V	100 kΩ
±10 V	560 kΩ
±40 V	2.2 MΩ
±200 V	10 MΩ
measuring principle	dual-slope, integrating
conversion rate	approx. 1 read per second
error, max.	±0.01% of reading, ±1 count/segment
auxiliary voltage	24 V DC (20 ... 30 V), electrically insulated or 115/230 V AC, 50 Hz, electrically insulated
power consumption	2.5 VA max.

Display

scale length	LEA 30	75 mm, 30 segments
	LEA 23	50 mm, 20 segments
Display	LEA 23	7-segment LED, digit height 7 mm, display span -99 ... 999
display colour		red or green
appearance		vertical or horizontal display
overrange indication		each 2 nd scale segment and center segments will flash
mean value set-up		adjustable from 1 to 500 reads
round-off last digit		adjustable: 2 nd , 5 th , 10 th step, none
zero point/end value		programmable
scaling		0 ... 100 %, caption on request

Connection

plug-in terminal barrier strip



ordering example **LEA 30 A 2 0 G H -M**



Short Form Data

Bargraph Indicator for DC Current and DC Voltage, programmable

LEA 43
LEA 50
144 x 48 mm

Bargraph	
43	40 Segments & 3-digit Display
50	50 Segments
Input	
A	DC Current 20 / 200 mA and DC Voltage 2 / 10 / 40 / 200 V
Auxiliary Voltage	
1	24 V DC electrically insulated
2	115/230 V AC, 50 Hz electr. insulated
Options refer to last page	
Display Colour	
R	red
G	green
Appearance	
H	Vertical Display
Q	Horizontal Display

Electrical Data

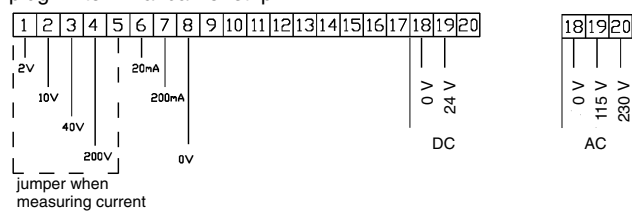
measuring ranges	input resistance
DC current	
±20 mA	100 Ω
±200 mA	10 Ω
DC voltage	
±2 V	100 kΩ
±10 V	560 kΩ
±40 V	2.2 MΩ
±200 V	10 MΩ
measuring principle	dual-slope, integrating
conversion rate	approx. 1 read per second
error, max.	±0.01% of reading, ±1 count/segment
auxiliary voltage	24 V DC (20 ... 30 V), electrically insulated or 115/230 V AC, 50 Hz, electrically insulated
power consumption	5 VA max.

Display

scale length	LEA 50	125 mm, 50 segments
	LEA 43	100 mm, 40 segments
Display	LEA 43	7-segment LED, digit height 7 mm, display span -99 ... 999
display colour		red or green
appearance		vertical or horizontal display
overrange indication		each 2 nd scale segment and center segments will flash
mean value set-up		adjustable from 1 to 500 reads
zero point/end value		programmable
scaling		0 ... 100 %, caption on request

Connection

plug-in terminal barrier strip



ordering example **LEA 43 A 2 0 G Q**



Short Form Data

Bargraph Indicator for DC Current, DC Voltage with 2 Inputs, programmable

LZA 43
LZA 50
144 x 48 mm

Bargraphs

43 2x 40 Segments &
2x 3-digit Display
50 2x 50 Segments

Inputs

A DC Current 20 / 200 mA and
DC Voltage 2 / 10 / 40 / 200 V

Auxiliary Voltage

1 24 V DC, electrically insulated
2 115/230 V AC, 50 Hz electr.
insulated

Options refer to right - side column

Display Colour

R red
G green

Appearance

H Vertical Display
Q Horizontal Display

Electrical Data

measuring ranges	input resistance	
DC current		
±20 mA	100 Ω	(input 1 & 2)
±200 mA	10 Ω	(input 1 only)
DC voltage		
±2 V	100 kΩ	(input 1 & 2)
±10 V	560 kΩ	(input 1 & 2)
±40 V	2.2 MΩ	(input 1 only)
±200 V	10 MΩ	(input 1 only)
measuring principle	dual - slope, integrating	
conversion rate	approx. 1 read per second	
error, max.	±0.01% of reading, ±1 count/segment	
auxiliary voltage	24 V DC (20 ... 30 V), electrically insulated or 115/230 V AC, 50 Hz, electrically insulated	
power consumption	5 VA max.	

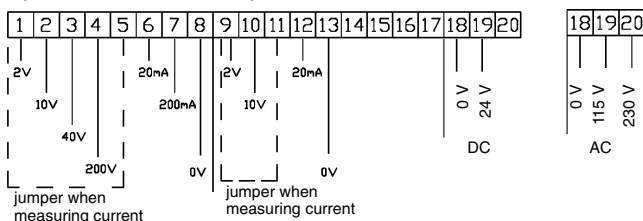
Display

same as LEA 43, LEA 50 (refer to preceding page)

Connection

plug-in terminal barrier strip

input 1 input 2



ordering example **LZA 50 A 2 0 R Q**



Options

Digital Bargraph Indicators, programmable

LEA 23
LEA 30
LEA 43
LEA 50
LZA 43
LZA 50

Options

0 none
1 * analog output 0 ... 10 V
(load ≥1000 Ω)
2 * analog output 0/4 ... 20 mA
(load ≤500 Ω)
7 * 1 control output open collector
30 V max., 0.5 A max., 12 W max.
8 2 control outputs open collector
30 V max., 0.5 A max., 12 W max.
D * display blanking input
active high, 24 V
H * display hold input
active high, 24 V
R 2 setpoints
relay N.O. / N.C.
S * serial output RS232
*LEA 23 / LEA 30 only

Additional Option

-M min./max. value storage (LEA 23/43,
LZA 43 with reference measurement)

Options

R option

setpoints

LEA 23/30 max. 200V/0.05A, max. 20V/0.5A, max. 10 W
LEA/LZA 43/50 max. 250V/0.8A, max. 50V/4A, max. 200 W

response time

approx. 1 ms

hysteresis

adjustable, internal adjustment

status indication

small, single - digit 7-segment LED

S option

RS232 serial output

baud rate (150 ... 19200 baud), parity,
data bits, device address, write direction
and protocol adjustable

Further options

scaling

non-standard (0 ... 100%)

extra lettering

please specify

custom logo

please specify

special measuring

on request

range

factory calibration

please specify

non-standard

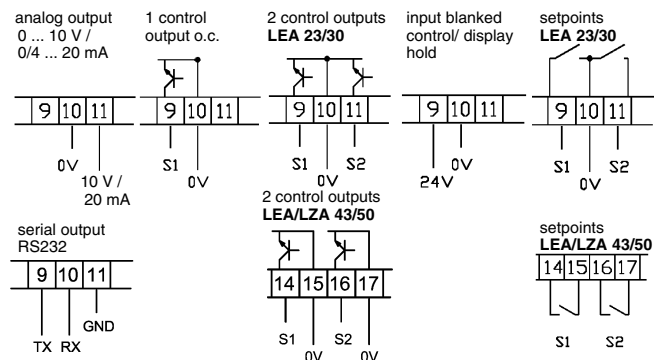
on request

auxiliary voltage

mosaic grid mounting

on request

Connection



- specifications subject to change without notice; date of issue 05/07 -

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