

# CONDUCTIVITY MEASURING TRANSDUCER



## HIGHLIGHTS:

- Compact measuring cells
- Freely scalable
- Adjustable cell constant
- Local display
- Integrated temperature compensation
- Measuring cell included, pre-adjusted

Laboratory measuring cells  
best value  
Standard cable length: 1 m

Optional PG (with PG 13.5 thread)  
up to 6 bar (@ 22 °C)  
Standard cable length: 1 m

Professional, field installation M12,  
G 1/2 A fitting, max. 16 bar (@ 22 °C)  
Standard cable length: 5 m

## GLMU 200 MP-TR

Conductivity measuring transducer,  
incl. 2-pole measuring cell

### General:

2-pole measuring cells,  
suitable for use in clean / potable / fresh  
water  
Recommended usage range:  
up to 2000 µS/cm  
4 Measuring ranges:  
0.1 µS/cm ... 200.0 mS/cm



**GLMU 200 MP-TR**  
Product-ID: 607814

Ø 12 mm 2-pole measuring cell LFE 202  
Graphite, C=1.0; -5 ... +80 °C

### PG 13,5 THREAD



**GLMU 200 MP-TR-PG**  
Product-ID: 607815

Ø 12 mm 2-pole measuring cell LFE 202-PG  
Graphite, C=1.0; -5 ... +80 °C



**GLMU 200 MP-TRP\*)**  
Product-ID: 607816

Ø 16 mm 2-pole measuring cell LFE 230  
Graphite, C=0.9; 0 ... +60 °C (higher  
available on request)

PROFESSIONAL

## GLMU 400 MP-SW

Conductivity measuring transducer,  
incl. 4-pole measuring cell

### General:

4-pole measuring cells,  
especially well-suited for use above  
2000 µS/cm, applications susceptible to  
contamination, sea water, etc.  
5 Measuring ranges:  
0.1 µS/cm ... 500 mS/cm



**GLMU 400 MP-SW**  
Product-ID: 607819

Ø 12 mm 4-pole measuring cell LFE 400  
Graphite, C=0.55; -5 ... +80 °C

### PG 13,5 THREAD



**GLMU 400 MP-SW-PG**  
Product-ID: 607820

Ø 12 mm 4-pole measuring cell LFE 400-RW  
Graphite, C=0.55; -5 ... +80 °C



**GLMU 400 MP-SWP\*)**  
Product-ID: 607821

Ø 16 mm 4-pole measuring cell LFE 430  
Graphite, C=0.4; 0 ... +60 °C (higher  
available on request)

PROFESSIONAL

## GLMU 200 MP-RW

Clean/cleanest water measuring  
system

### General:

2-pole measuring cells,  
recommended usage range up to 200 µS/cm  
Usage range up to 200 µS/cm  
3 Measuring ranges: 0.01 ... 200.0 µS/cm



**GLMU 200 MP-RW**  
Product-ID: 607817

Ø 12 mm 2-pole measuring cell LFE 240  
stainless steel/ PEEK; C=0.1, -5 ... +80 °C



**GLMU 200 MP-RWP\*)**  
Product-ID: 607818

Ø 12 mm 2-pole measuring cell LFE 220  
stainless steel/ PEEK; C=0.1; -10 ... +100 °C

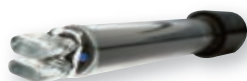
PROFESSIONAL

## GLMU 200 MP-LTG

Measuring transducer with 2-pin  
electrode

### General:

2-pole measuring cells,  
suitable for use in organic substances  
(alcohol, benzene, diesel)  
Usage range up to 1000 µS/cm  
2 Measuring ranges:  
0.1 µS/cm ... 2000 µS/cm



**GLMU 200 MP-LTG**  
Product-ID: 607641

Ø 12 mm 2-pole measuring cell LFE 210  
Platinum glass; C=1.0

### \*) Attention:

A special cable is supplied with the professional version.  
The measuring cell can be unscrewed locally without having to change the wiring!

## CONDUCTIVITY MEASURING TRANSDUCER

General:			
Cheap conductivity measurement in drinking water, sea water, process water and waste-water, operational.			
Specifications:	GLMU 400 MP	GLMU 200 MP	GLMU 200 MP-RW
Measuring ranges: (customer-selectable)			
<b>Conductivity:</b>	0.0 ... 200.0 µS/cm 0 ... 2000 µS/cm 0.00 ... 20.00 mS/cm 0.0 ... 200.0 mS/cm 0 ... 500 mS/cm	0.0 ... 200.0 µS/cm 0 ... 2000 µS/cm 0.00 ... 20.00 mS/cm 0.0 ... 200.0 mS/cm 0 ... 500 mS/cm	0.0 ... 200.0 µS/cm 0.00 ... 20.00 µS/cm
<b>specific Resistance:</b>	0.0 ... 200.0 kOhm*cm 0.00 ... 20.00 kOhm*cm 1 ... 5000 Ohm*cm 1.0 ... 500.0 Ohm*cm 1.00 ... 50.00 Ohm*cm	5.0 ... 100.0 kOhm*cm 0.50 ... 10.00 kOhm*cm 50 ... 1000 Ohm*cm 5.0 ... 100.0 Ohm*cm	0 ... 200 kOhm*cm 0 ... 2000 kOhm*cm
<b>TDS:</b>	0.0 ... 200.0 mg/l 0 ... 500.0 mg/l 0 ... 2000 mg/l 0.0 ... 20.0 g/l 0 ... 200 g/l	0.0 ... 200.0 mg/l 0 ... 2000 mg/l	0.0 ... 200.0 mg/l 0.00 ... 20.00 mg/l
<b>Salinity:</b>	0.0 ... 70.0 (PSU)	0.0 ... 70.0 (PSU)	
<b>Temperature measurement:</b>	5.0 ... +140.0 °C (device) permissible temperature of the measuring cell note!		
<b>Measuring cell:</b>	4-pole. measuring cell	2-pole. measuring cell	2-pole. measuring cell
<b>Standard measuring cell:</b>	conductivity measuring cell with integrated temperature sensor. Cell constant determined from the factory and preset.		
Accuracy: (at nominal temperature = 25 °C)			
<b>Conductivity:</b>	0.5% of reading ± 0.3% FS (-RW: ±1 % v. MW ±0.3 % FS)		
<b>Temperature measurement:</b>	±0.2 °C ±1 Digit		
<b>Cells Connection:</b>	7-pin DIN socket		
<b>Cell constant:</b>	K = 0.30 ... 1.20, adjustable (-RW: 0.03 ... 0.12)		
<b>Temperature compensation: (customer-selectable)</b>	off: no compensation Lin: linear compensation (of 0.3 ... 3.0 % / K) nLF: non-linear function of natural water according to EN27888 (ISO 7888) in salinity: automatically after IOT		
<b>Display:</b>	approx. 10 mm high, 4-digit LCD display		
<b>Output signal:</b>	4 - 20 mA (2-wire), standard 0 - 1 V or 0 - 10 V (3-wire), surcharge		
<b>Galvanic isolation:</b>	input electrically isolated		
<b>Power supply:</b>	12 ... 30 V DC (for option 0-10 Volt: 18 ... 30 V DC)		
<b>Reverse polarity:</b>	50 V continuous		
<b>perm. burden (4-20 mA):</b>	$R_A [\Omega] \leq (U_v [V] - 12 V) / 0.02 A$		
<b>perm. load (0-10 volts):</b>	$R_L > 3000 \Omega$		
<b>Working temperature:</b>	-25 ... +50 °C (transmitter), 0 ... +80 °C (measuring cell)		
<b>Storage temperature:</b>	-25 ... +70 °C		
<b>Electrical connection:</b>	Angle connector according to EN 175301-803 / A (IP65)		
<b>Housing:</b>	ABS (IP65) except electrode connection sockets		
<b>Dimensions:</b>	82 x 80 x 55 mm, without angle plug and socket		
<b>Warranty:</b>	12 months		
<b>Mounting:</b>	with fixing holes for wall mounting Mounting distance: 70 x 50 mm (W x H)		
<b>Scope of supply:</b>	Device, measuring cell, manual		
Options:			
<b>AV010:</b>	Output signal 0-10 V		
<b>AV01:</b>	Output signal 0-1 V		
<b>KL=..:</b>	longer measuring cell cable (recommended max. 5 m)		

## Accessories and spare parts:

**GLMU 400 MP-UNI-AV010**

Product-ID: 608006

**GLMU 400 MP-UNI-AV01**

Product-ID: 608053

**GLMU 400 MP-UNI-AV420**

Product-ID: 608052

Transmitter without measuring cell, suitable for 2- and 4-pol. measuring cells to create your own conductivity measuring system with special measuring cells. Different standard systems:

- Area selection of cell constant 0.01; 0.1; 1.0; 10, for example, 1.0 corresponds to 0.300 ... 1.200, 0.1 corresponds to 0.0300 ... 0.1200
- Depending on this measuring range selection without limitations (5 regions)
- selection of temperature input Pt1000 or NTC10 k



*Note: The measuring accuracy of the overall system strongly from the measuring cell used and the dependent on the area of application*

**LFE-202**

Product-ID: 604344

2-pole spare measuring cell (for GLMU 200 MP-TR)

**LFE-202-PG**

Product-ID: 603594

2-pole spare measuring cell (for GLMU 200 MP-TR-PG)

**LFE-230**

Product-ID: 607825

2-pole spare measuring cell (for GLMU 200 MP-RWP)

**LFE-400**

Product-ID: 604635

4-pole spare measuring cell (for GLMU 400 MP)

**LFE-400-PG**

Product-ID: 603565

4-pole spare measuring cell (for GLMU 400 MP-PG)

**LFE-430**

Product-ID: 607827

4-pole spare measuring cell (for GLMU 400 MP-Pro)

**LFE-240**

Product-ID: 607828

2-pol. Replacement measuring cell (for GLMU 200 MP-RW)

**LFE-220**

Product-ID: 607829

2-pol. Replacement measuring cell (for GLMU 200 MP-RW-Pro)

**LFE-210**

Product-ID: 606991

2-pol. Replacement measuring cell (for GLMU 200 MP-LTG)

**PG 13.5**

Product-ID: 603205

Plug on thread adapter for pressureless use, for electrodes with 12 mm shank diameter

**GWA12**

Product-ID: 602914

Thread adapter PG13.5 to G1", plastics

**GKL 100**

Product-ID: 601396

Conductivity control solution  
100 ml bottle with 1413 µs / cm, according to DIN EN 27888**GKL 101**

Product-ID: 601398

Conductivity control solution (250 ml bottle with 84 µs / cm)

**GKL 102**

Product-ID: 601400

Conductivity control solution (100 ml bottle containing 50 mS / cm)