

## Conductivity measuring transducer

General:			
Cheap conductivity measurement in drinking water, sea water, process water and wastewater, operational.			
Specifications:	GLMU 400 MP	GLMU 200 MP	GLMU 200 MP-RW
Measuring ranges: (customer-selectable)			
<b>Conductivity:</b>	0.0 ... 200.0 $\mu\text{S/cm}$ 0 ... 2000 $\mu\text{S/cm}$ 0.00 ... 20.00 $\text{mS/cm}$ 0.0 ... 200.0 $\text{mS/cm}$ 0 ... 500 $\text{mS/cm}$	0.0 ... 200.0 $\mu\text{S/cm}$ 0 ... 2000 $\mu\text{S/cm}$ 0.00 ... 20.00 $\text{mS/cm}$ 0.0 ... 200.0 $\text{mS/cm}$	0.0 ... 200.0 $\mu\text{S/cm}$ 0.00 ... 20.00 $\mu\text{S/cm}$
<b>Specific resistance:</b>	0.0 ... 200.0 $\text{kOhm}^*\text{cm}$ 0.00 ... 20.00 $\text{kOhm}^*\text{cm}$ 1 ... 5000 $\text{Ohm}^*\text{cm}$ 1.0 ... 500.0 $\text{Ohm}^*\text{cm}$ 1.00 ... 50.00 $\text{Ohm}^*\text{cm}$	5.0 ... 100.0 $\text{kOhm}^*\text{cm}$ 0.50 ... 10.00 $\text{kOhm}^*\text{cm}$ 50 ... 1000 $\text{Ohm}^*\text{cm}$ 5.0 ... 100.0 $\text{Ohm}^*\text{cm}$	0 ... 200 $\text{kOhm}^*\text{cm}$ 0 ... 2000 $\text{kOhm}^*\text{cm}$
<b>TDS:</b>	0.0 ... 200.0 $\text{mg/l}$ 0 ... 500.0 $\text{mg/l}$ 0 ... 2000 $\text{mg/l}$ 0.0 ... 20.0 $\text{g/l}$ 0 ... 200 $\text{g/l}$	0.0 ... 200.0 $\text{mg/l}$ 0 ... 2000 $\text{mg/l}$	0.0 ... 200.0 $\text{mg/l}$ 0.00 ... 20.00 $\text{mg/l}$
<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 $\pm$ 0.3% FS (-RW: $\pm$ 1 % v. MW $\pm$ 0.3 % FS)		
<b>Temperature measurement:</b>	$\pm$ 0.2 °C $\pm$ 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 V: 18 ... 30 V DC)		
<b>Reverse polarity:</b>	50 V continuous		
<b>perm. burden (4-20 mA):</b>	$R_{\lambda} [\Omega] \leq (U_v [V] - 12 V) / 0.02 A$		
<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**

Art. no. 608006

**GLMU 400 MP-UNI-AV01**

Art. no. 608053

**GLMU 400 MP-UNI-AV420**

Art. no. 608052

Transmitter without measuring cell, suitable for 2- and 4-pole 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**

Art. no. 604344

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

**LFE 202-PG**

Art. no. 603594

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

**LFE 230**

Art. no. 607825

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

**LFE 400**

Art. no. 604635

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

**LFE 400-PG**

Art. no. 603565

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

**LFE 430**

Art. no. 607827

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

**LFE 240**

Art. no. 607828

2-pole replacement measuring cell (for GLMU 200 MP-RW)

**LFE 220**

Art. no. 607829

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

**LFE 210**

Art. no. 606991

2-pole replacement measuring cell (for GLMU 200 MP-LTG)

**PG 13.5**

Art. no. 603205

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

**GWA12**

Art. no. 602914

Thread adapter PG13.5 to G1", plastics

**GKL 100**

Art. no. 601396

Conductivity control solution

100 ml bottle with 1413  $\mu\text{S/cm}$ , according to DIN EN 27888**GKL 101**

Art. no. 601398

Conductivity control solution (250 ml bottle with 84  $\mu\text{S/cm}$ )**GKL 102**

Art. no. 601400

Conductivity control solution (100 ml bottle containing 50  $\text{mS/cm}$ )**VKMU-M12**

Art. no. 609306

Connection cable, 5 m long