

CONDUCTIVITY MEASURING TRANSDUCER



HIGHLIGHTS:

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

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

**Laboratory measuring cells
best value
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
Art. no. 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
Art. no. 607815
Ø 12 mm 2-pole measuring cell LFE 202-PG;
Graphite, C=1.0; -5 ... +80 °C



PROFESSIONAL

GLMU 200 MP-TRP*)
Art. no. 607816
Ø 16 mm 2-pole measuring cell LFE 230
Graphite, C=0.9; 0 ... +60 °C
(higher available on request)

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
Art. no. 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
Art. no. 607820
Ø 12 mm 4-pole measuring cell LFE 400-PG
Graphite, C=0.55; -5 ... +80 °C



PROFESSIONAL

GLMU 400 MP-SWP*)
Art. no. 607821
Ø 16 mm 4-pole measuring cell LFE 430
Graphite, C=0.4; 0 ... +60 °C
(higher available on request)

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
2 measuring ranges: 0.01 ... 200.0 µS/cm



GLMU 200 MP-RW
Art. no. 607817
Ø 12 mm 2-pole measuring cell LFE 240
stainless steel/ PEEK; C=0.1, -5 ... +80 °C

PROFESSIONAL



GLMU 200 MP-RWP*)
Art. no. 607818
Ø 12 mm 2-pole measuring cell LFE 220
stainless steel/ PEEK; C=0.1; -10 ... +100 °C

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
Art. no. 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 wastewater, operational.

Specifications:	GLMU 400 MP	GLMU 200 MP	GLMU 200 MP-RW
Measuring ranges: (customer-selectable)			
Conductivity:	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	0.0 ... 200.0 µS/cm 0.00 ... 20.00 µS/cm
Specific resistance:	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
TDS:	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
Salinity:	0.0 ... 70.0 (PSU)	0.0 ... 70.0 (PSU)	
Temperature measurement:	-5.0 ... +140.0 °C (device) - permissible temperature of the measuring cell note!		
Measuring cell:	4-pole measuring cell	2-pole measuring cell	2-pole measuring cell
Standard measuring cell:	conductivity measuring cell with integrated temperature sensor. Cell constant determined from the factory and preset.		
Accuracy: (at nominal temperature = 25 °C)			
Conductivity:	0.5 % of m.v. ± 0.3 % FS (-RW: ±1 % of m.v. ±0.3 % FS)		
Temperature measurement:	±0.2 °C ±1 digit		
Cells connection:	7-pin DIN socket		
Cell constant:	K = 0.30 ... 1.20, adjustable (-RW: 0.03 ... 0.12)		
Temperature compensation:	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		
Display:	approx. 10 mm high, 4-digit LCD display		
Output signal:	4 ... 20 mA (2-wire), standard, 0 ... 1 V or 0 ... 10 V (3-wire), surcharge		
Galvanic isolation:	input electrically isolated		
Power supply:	12 ... 30 V DC (for option 0 ... 10 V: 18 ... 30 V DC)		
Reverse polarity:	50 V continuous		
perm. burden (at 4 ... 20 mA):	$R_N [\Omega] \leq (U_v [V] - 12 V) / 0.02 A$		
perm. load (at 0 ... 10 Volt):	$R_L > 3000 \Omega$		
Working temperature:	-25 ... +50 °C (transmitter), 0 ... +80 °C (measuring cell)		
Storage temperature:	-25 ... +70 °C		
Electrical connection:	Angle connector according to EN 175301-803/A (IP65)		
Housing:	ABS (IP65) except electrode connection sockets		
Dimensions:	82 x 80 x 55 mm, without angle plug and socket		
Warranty:	12 months		
Mounting:	with fixing holes for wall mounting, mounting distance: 70 x 50 mm (W x H)		
Scope of supply:	Device, measuring cell, manual		

Options:

AV010: Output signal 0 ... 10 V

AV01: Output signal 0 ... 1 V

KL=...:

longer measuring cell cable (recommended max. 5 m)

M12:

M12 connector, 4-pin

Accessories and spare parts:

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-TRP)

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 spare measuring cell (for GLMU 200 MP-RW)

LFE 220

Art. no. 607829

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

LFE 210

Art. no. 606991

2-pole spare 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

GWA1Z

Art. no. 602914

Thread adapter PG13.5 to G1", plastics

GKL 100

Art. no. 601396

Conductivity control solution
100 ml bottle with 1413 µS/cm, according to DIN EN 27888

GKL 101

Art. no. 601398

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

GKL 102

Art. no. 601400

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

VKMU-M12

Art. no. 609306

Connection cable, 5 m long

Universal measuring transducers for measuring cells of your choice:

GLMU 400 MP-UNI-AV010

Art. no. 608006

GLMU 400 MP-UNI-AV01

Art. no. 608053

GLMU 400 MP-UNI-A1

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

Option:

M12:

M12 connection socket, 8-pole,
e.g. for connecting cable A SK8M



HIGHLIGHTS:

- For the installation of up to 3 electrochemical transducers with an installation length of 120 mm and PG 13,5 process connection
- Side connections with G1/2 thread
- Flow direction reversible by reinserting the filling tube

DFG70

Art. no. 104095

Flow-Thru Vessel

General:

The flow vessel DFG70 is used for the installation of electrochemical transducers (e.g. pH and redox electrodes, glass conductivity sensors, compensation thermometers etc.) with PG13, 5-screw-in thread and an installation length of 120 mm. It protects the built-in sensors from breakage and ensures a correct flow of the sensor to prevent measurement errors. Up to 3 transducers can be installed. Unneeded openings are sealed with sealing plugs (2 pieces included). The flow vessel is mounted inline or in a bypass.

Specifications:

Container:	PC Polycarbonate, crystal clear, color less, 250 ml
Connector block:	PVC-U with mounting holes for 6 mm screw
O-Ring seals:	EPDM
Storage vessel hose connection:	PP polypropylene, outside/inside diameter 6/4 mm
Working temperature:	0 ... 60 °C
Operating pressure:	6 bar at 20°C; 0.2 bar at 60°C
Line connection:	2 x female G1/2 thread, sidewise
Sensor connection:	3 x female PG 13.5 thread, topwise (2 with sealing plugs)