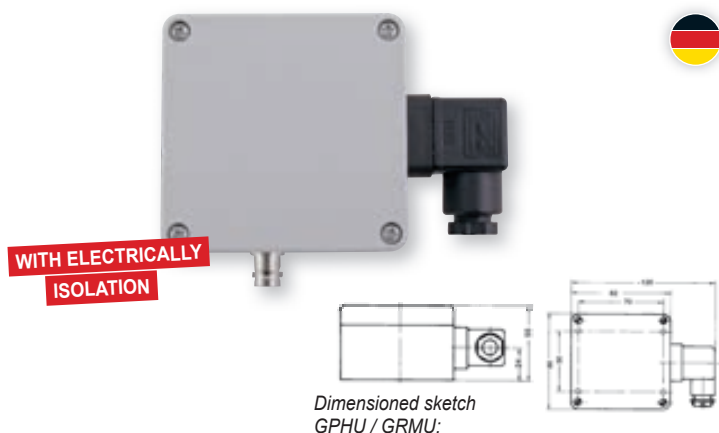


Redox-measuring transducer

**GRMU 2000 MP-BNC**

Art. no. 602019

Redox-measuring transducer without electrode, BNC-connection

GRMU 2000 MP-Cinch

Art. no. 602021

Redox-measuring transducer without electrode, Cinch-connection

Specifications:

Measuring range:	±2000 mV or special limited measuring ranges acc. to customer specification!
Accuracy:	0.2 % FS (at nominal temperature = 25 °C)
Output signal:	4 ... 20 mA (2-wire), standard 0 ... 10 V (3-wire), upon upcharge
Electric isolation:	input electrically isolated
Auxiliary energy:	12 ... 30 V DC (for option 0 ... 10 V: 18 ... 30 V DC)
Perm. impedance (at 4 ... 20 mA):	$R_A [\Omega] \leq (U_v [V] - 12 V) / 0.02 A$
Permissible load (at 0 ... 10 Volt):	$R_L > 3000 \Omega$
Input resistance:	$10^{12} \Omega$
Electrode socket:	BNC-socket or Cinch-socket
Option: on site display	approx. 10 mm high, 4-digit LCD-display
Working temperature:	0 ... +50 °C (electronic)
Storage temperature:	-20 ... +70 °C
Electric connection:	elbow-type plug acc. to EN 175301-803/A (IP65)
Housing:	ABS (IP65) with the exception of electrode connection sockets. (cpl. IP65 upon request)
Dimensions:	82 x 80 x 55 mm (H x W x D)
Mounting:	with fixing holes for wall mounting (accessible after removal of cover), Mounting distance: 70 x 50 mm (W x H) Fixing screws: max. shaft-Ø 4 mm

Option:

- VO:**
On site display
- V2:**
Output signal 0 ... 10 V
- MB...:**
Limited measuring range (please state the desired range)

Ordering example:

GRMU 2000 MP-BNC-VO:
GRMU2000MP with BNC electrode socket and on site display

Accessories and spare parts:

GR 105-Cinch
Art. no. 607797
Redox electrode with cinch-plug

GR 105-BNC
Art. no. 607798
Redox electrode with BNC-plug

GR 175-BNC
Art. no. 607801
Redox electrode with BNC-plug

PG 13,5
Art. no. 603205
Plug on thread adapter for pressureless use, with external thread PG 13.5 (suitable for any electrode with shank diameter 12 mm)
For additional electrodes and accessories p.r.t. page 55/56

Flow measuring transducer with hall-effect sensor

**VISION 2008**

Art. no. 603492

Flow measuring transducer with hall-Sensor incl. elbow-type plug

General:

- minimum size, maximum accuracy
- easy installation
- installation in any position possible
- optimum-quality due to high-quality materials used
- no maintenance

Application:

- manufacturing of oil and gas burners, flow heaters or cooling systems
- for dish washers and washing machines
- automotive technology (measuring of petro consumption, etc.)
- laboratories, chemical works, pharmaceutical industry
- agriculture and horticulture

Specifications:

Rotor-position scanning:	hall sensor
Measuring range:	1.5 ... 25 l/min
Resolution:	approx. 1000 pulses/l
Measuring agent:	clean liquids, we recommend filtering with approx. 20 ... 40 micron
Viscosity:	up to approx. 15 cSt.
Accuracy:	±3 % ranging from 10 - 10 %
Repeatability:	<0.5 %
Working temperature:	-20 ... +100 °C
Operating pressure:	25 bar
Electric connection:	elbow-type plug acc. to EN 175301-803/A, type C industrial
Auxiliary energy:	5 ... 24 V DC, approx. 8 mA
Multiplier (R):	1 ... 2.2 kOhm
Output signal:	frequency 5 ... 416 Hz, open collector NPN
Output current:	max. 20 mA
Material:	
Housing:	Grilamid TR55 (PA12)
Rotor:	Grilamid (PA12 Ferrit)
Bearings:	PTFE 15 % graphite
Delivery connection:	G 3/8" thread
DN:	8 mm
Dimensions:	approx. 55 x 17 x 30 mm
Weight:	approx. 15 g
Scope of supply:	Device, manual

