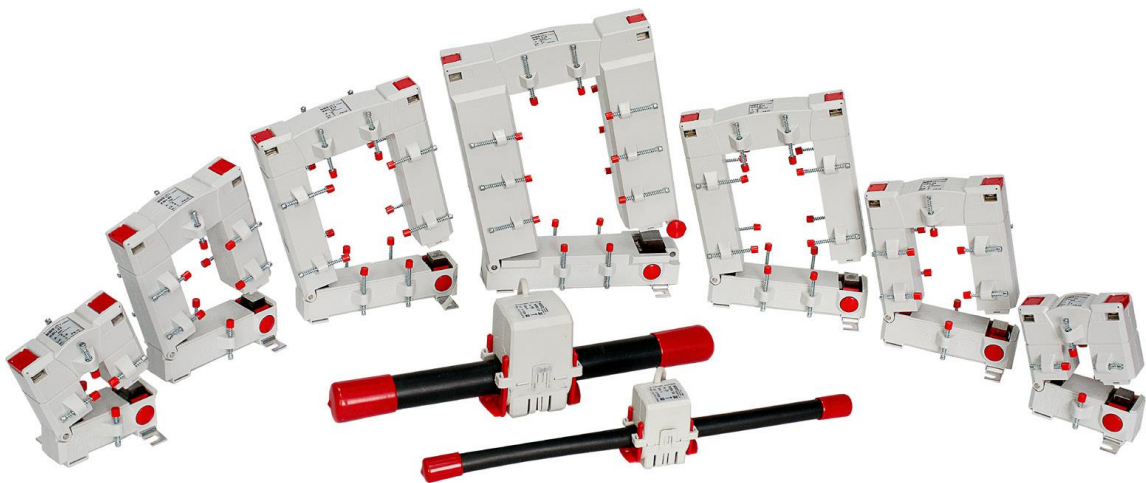


# Split-core current transformers

We make Energy measurable and secure your future





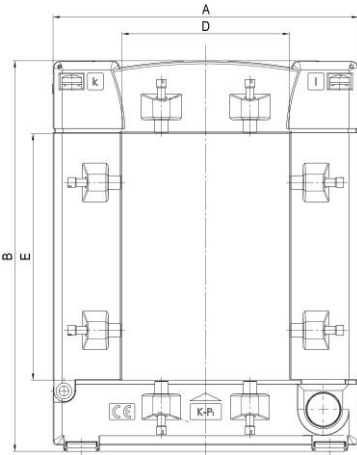
# Split-core current transformer, type KBU

## Features / benefits

- Perfect for subsequent assembly into already existing installations
- Easy and safe mounting, due to hearable locking system
- Deliverable with secondary current 5 A / 1 A
- Deliverable also in accuracy class 0.5
- Four different construction types

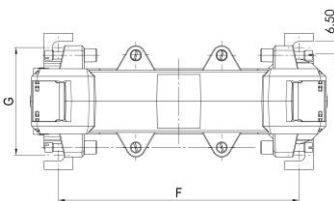
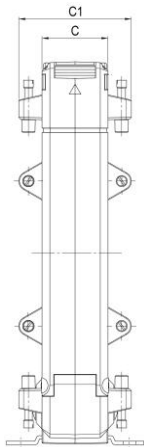
## General technical specifications

- Operating temperature:  $-5^{\circ}\text{C} < T < +40^{\circ}\text{C}$
- Storage temperature:  $-25^{\circ}\text{C} < T < +70^{\circ}\text{C}$
- Therm. nominal continuous rated current  $I_{cth}$ :  $1.0 \times I_N$
- Therm. nominal short-time current  $I_{th}$ :  $60 \times I_N$ , 1 sec.
- Max. operating voltage  $U_m$ : 0.72 kV
- Isolation test voltage: 3 kV,  $U_{eff}$ , 50 Hz, 1 min.
- Rated frequency: 50 Hz
- Isolation class: E
- Applicable technical standard: DIN EN 61869, part 1 + 2



## Dimensions

Type	A (width) [ mm ]	B (height) [ mm ]	C / C1 (depth) [ mm ]	D [ mm ]	E [ mm ]	F [ mm ]	G [ mm ]
KBU 23	93	106	34 / 58	23	33	64	56
KBU 58	125	158	34 / 58	55	85	96	56
KBU 812	155	198	34 / 58	85	125	126	56
KBU 816	195	243	64 / 79	85	165	156	62



**Gilgen, Müller & Weigert (GMW) GmbH & Co. KG**

Am Farrnbach 4A · 90556 Cadolzburg  
Germany

Phone: +49 9103 7129-0 · Fax: +49 9103 7129-207/ -205  
E-Mail: info@g-mw.de · Web: www.g-mw.de

**Order list KBU 23**

Secondary current		5 A			1 A		
Primary current [ A ]	Burden [ VA ]	Accuracy class			Accuracy class		
		3	1	0.5	3	1	0.5
		Art.-no.	Art.-no.	Art.-no.	Art.-no.	Art.-no.	
100	1.25	10080048			10080248		
150	1.5	10080030			10080230		
200	2.5	10080031			10080231		
250	1.5		10080044			10080244	
300	3.75		10080045			10080245	
400	1			10080037			10080237
	5		10080046			10080246	

**Order list KBU 58**

Secondary current		5 A		1 A	
Primary current [ A ]	Burden [ VA ]	Accuracy class		Accuracy class	
		1	0.5	1	0.5
		Art.-no.	Art.-no.	Art.-no.	Art.-no.
250	1.5	10080061		10080261	
300	2.5	10080062		10080262	
400	1		10080038		10080238
	2.5	10080063		10080263	
500	2.5		10080054		10080254
	5	10080064		10080264	
600	2.5		10080055		10080255
	5	10080065		10080265	
750	2.5		10080056		10080256
	5	10080066		10080266	
800	2.5		10080057		10080257
	7.5	10080067		10080267	
1000	5		10080058		10080258
	10	10080068		10080268	

**Order list KBU 812**

Secondary current		5A		1A	
Primary current [ A ]	Burden [ VA ]	Accuracy class		Accuracy class	
		1	0.5	1	0.5
		Art.-no.	Art.-no.	Art.-no.	Art.-no.
250	1.5	10080091		10080291	
300	2.5	10080092		10080292	
400	2.5	10080093		10080293	
500	2.5		10080074		10080274
	5	10080094		10080294	
600	2.5		10080075		10080275
	5	10080095		10080295	
750	2.5		10080076		10080276
	2	10080096		10080296	
800	2.5		10080077		10080277
	7.5	10080097		10080297	
1000	5		10080078		10080278
	10	10080098		10080298	
1200	5		10080079		10080279
	10	10080099		10080299	
1250	7.5		10080080		10080280
	15	10080100		10080300	
1500	7.5		10080081		10080281
	15	10080101		10080301	

**Order list KBU 816**

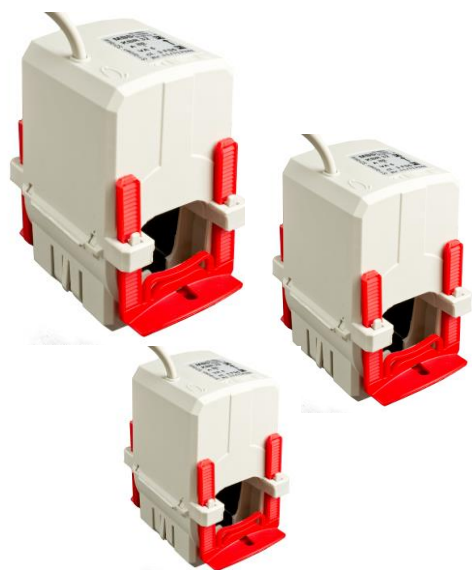
Secondary current		5A		1A	
Primary current [ A ]	Burden [ VA ]	Accuracy class		Accuracy class	
		1	0.5	1	0.5
		Art.-no.	Art.-no.	Art.-no.	Art.-no.
1000	10	10080140	10080110	10080340	10080310
	15	10080141		10080341	
1200	10	10080142	10080111	10080342	10080311
	15	10080143		10080343	
1500	10	10080144	10080112	10080344	10080312
	15	10080145	10080113	10080345	10080313
1600	10	10080146	10080114	10080346	10080314
	15	10080147	10080115	10080347	10080315
2000	10	10080148	10080116	10080348	10080316
	15	10080149	10080117	10080349	10080317
2500	10	10080150	10080119	10080350	10080319
	15	10080151	10080120	10080351	10080320
3000	15	10080152	10080122	10080352	10080322
	30	10080153		10080353	
4000	15	10080154	10080123	10080354	10080323
	30	10080155	10080124	10080355	10080324
5000	15	10080156	10080125	10080356	10080325
	30	10080157	10080126	10080357	10080326

**Gilgen, Müller & Weigert (GMW) GmbH & Co. KG**

Am Farrnbach 4A · 90556 Cadolzburg  
Germany

Phone: +49 9103 7129-0 · Fax: +49 9103 7129-207/ -205  
E-Mail: info@g-mw.de · Web: www.g-mw.de

# Split-core current transformer, type KBR



## Features / benefits

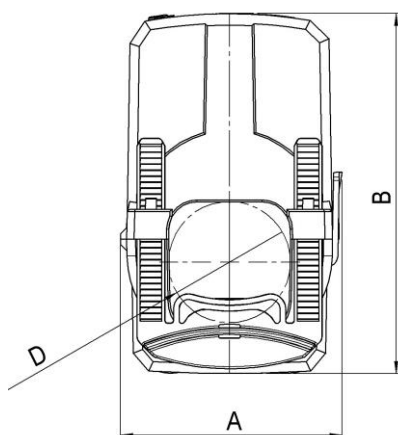
- Perfect for subsequent assembly into already existing installations
- Due to the „click“-system even a one-hand mounting is possible
- Deliverable with secondary 5 A / 1 A or as a current sensor (0...333 mV) or measuring transducer (4...20 mA DC).
- Three different construction types

## General technical specifications

- Length of connection cable:
 

Sec. 1A:	2.5 m, cross section 2x0.75 mm <sup>2</sup>
Sec. 5A:	0.5 m, cross section 2x1.5 mm <sup>2</sup>
0...333 mV:	2.5 m, cross section 2x0.75 mm <sup>2</sup>
4...20 mA:	2.5 m, cross section 2x0.75 mm <sup>2</sup>

 (Other lengths are possible on request)
- Operating temperature:  $-5^{\circ}\text{C} < T < +50^{\circ}\text{C}$
- Storage temperature:  $-25^{\circ}\text{C} < T < +70^{\circ}\text{C}$
- Therm. nominal continuous rated current  $I_{cth}$ :  $1.2 \times I_N$
- Therm. nominal short-time current  $I_{th}$ :  $60 \times I_N$ , 1 sec.
- Max. operating voltage  $U_m$ : 0.72 kV
- Isolation test voltage: 3 kV,  $U_{eff}$ , 50 Hz, 1 min.
- Rated frequency: 50 Hz
- Isolation class: E
- Applicable technical standard: DIN EN 61869, part 1 + 2



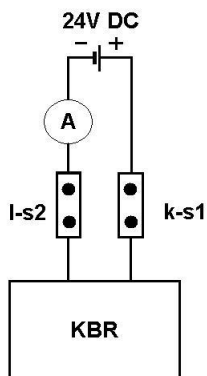
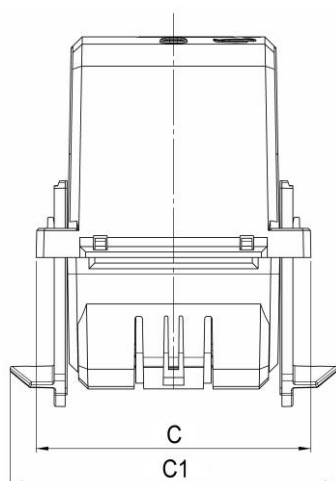
## Dimensions

Type	A (width) [ mm ]	B (height) [ mm ]	C / C1 (depth) [ mm ]	D (diameter) [ mm ]
KBR 18	41.6	64.5	55 / 67.3	18.5
KBR 32	59.2	96.4	75 / 89.2	32.5
KBR 44	72.2	120.6	85 / 98.1	44

## Technical characteristics for the KBR with output signal 4...20 mA:

- 2-wire connection, auxiliary power via output circuit
- Auxiliary power: 24 V DC  $\pm 15\%$ , PV = max. 1 VA
- Load-independent DC current: Live-zero, 4...20 mA
- External resistance: max. 300  $\Omega$
- Current limit under overload:  $< 30$  mA
- Residual ripple of the output current:  $\leq 1\%$  p.p.
- Response time:  $< 300$  ms

## Wiring diagram of the KBR 44 (4...20 mA):



**Order list KBR 18**

Secondary current		5 A		1 A		Output	0...333 mV AC	4...20 mA DC
Primary current [ A ]	Burden [ VA ]	Accuracy class		Accuracy class		Primary current [ A ]	Accuracy class	Accuracy class
		3FS5	1FS5	3FS5	1FS5		1	1
		Art.-no.	Art.-no.	Art.-no.	Art.-no.	Art.-no.		Art.-no.
50	1			10018-0001		50	10018-1001	
75	1			10018-0006		75	10018-1006	
100	1.25			10018-0011		100	10018-1011	
125	1.5			10018-0016		125	10018-1016	
150	2			10018-0021		150	10018-1021	
200	1				10018-0027	200	100181026	
	3			10018-0026				
250	1.5				10018-0032	250	10018-1031	
	4			10018-0031				

**Order list KBR 32**

Secondary current		5 A		1 A		Output	0...333 mV AC	4...20 mA DC
Primary current [ A ]	Burden [ VA ]	Accuracy class		Accuracy class		Primary current [ A ]	Accuracy class	Accuracy class
		3FS5	1FS5	3FS5	1FS5		1	1
		Art.-no.	Art.-no.	Art.-no.	Art.-no.	Art.-no.		Art.-no.
100	1.5	10032-5011				100	10032-1011	10032-2011
	2.5			10032-0011				
125	2.5	10032-5016				125	10032-1016	10032-2016
	3			10032-0016				
150	3	10032-5021		10032-0021		150	10032-1021	10032-2021
200	3	10032-5026				200	10032-1026	10032-2026
	5			10032-0026				
250	3	10032-5031				250	10032-1031	10032-2031
	5			10032-0031				
300	2.5		10032-5035			300	10032-1034	10032-2034
	5				10032-0035			
400	5		10032-5037		10032-0037	400	10032-1036	10032-2036
500	5		10032-5039		10032-0039	500	10032-1038	10032-2038
600	5		10032-5041		10032-0041	600	10032-1040	10032-2040

**Order list KBR 44**

Secondary current		5A		1A		Output	0...333 mV AC	4...20 mA DC
Primary current [ A ]	Burden [ VA ]	Accuracy class		Accuracy class		Primary current [ A ]	Accuracy class	Accuracy class
		1FS5		1FS5			1	1
		Art.-no.		Art.-no.		Art.-no.		Art.-no.
250	1.5	10044-5001				250	10044-1001	10044-2001
	2.5			10044-0001				
300	2.5	10044-5006		10044-0006		300	10044-1006	10044-2006
400	5	10044-5011		10044-0011		400	10044-1011	10044-2011
500	5	10044-5016		10044-0016		500	10044-1016	10044-2016
600	5	10044-5021		10044-0021		600	10044-1021	10044-2021
750	5	10044-5026		10044-0026		750	10044-1026	10044-2026
800	5	10044-5031		10044-0031		800	10044-1031	10044-2031
1000	5	10044-5036		10044-0036		1000	10044-1036	10044-2036

**Gilgen, Müller & Weigert (GMW) GmbH & Co. KG**

Am Farrnbach 4A · 90556 Cadolzburg  
Germany

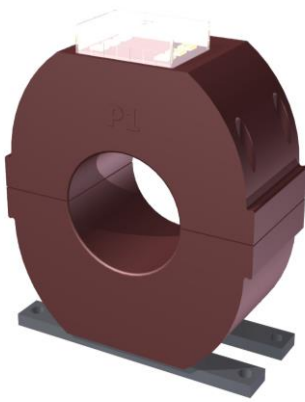
Phone: +49 9103 7129-0 · Fax: +49 9103 7129-207/ -205  
E-Mail: info@g-mw.de · Web: www.g-mw.de

# You haven't found the right split-core current transformer?

You are looking for a split-core current transformer...

- ...with a better accuracy class, f.e. class 0.2 ?
- ...as a protection CT, f.e. in protection class 5P20 ?
- ...with several measuring systems in only one device ?
- ...or a split-core CT with a bigger opening for your primary conductor ?

**Then our fully resin-hardened split-core current transformer type CTO is exactly the right decision!**



### Features / benefits

- Split-core current transformer suitable for measuring or protection purposes, depending on the design of the CT
- The modular design of this series allows a large number of varieties within the different CT sizes (f.e. two cores in one unit); please see next page for details about the different dimensions
- Max. operating voltage: 0.72/3/- kV or 1.2/6/- kV; if the primary conductor is suitably insulated the CT can also be used above 0.72 kV or 1.2 kV
- Primary current range: 50 A ... 5000 A
- Secondary currents: 1 A, 2 A or 5 A
- Rated burden: 2.5 VA ... 30 VA
- Accuracy classes: 0.2S; 0.2; 0.5S; 0.5; 1; 3
- Over-current rated limiting factor for measuring cores: FS5 or FS10
- Protection classes: 5P / 10P / PX
- Over-current rated limiting factor for protection cores: 5, 10, 15, 20, 30

### Dimensions

Inner diameter: max. 360 mm  
 Transformer width: 150 – 500 mm  
 Transformer depth: 60 – 300 mm

Please see next page for details about the different dimensions.

### General technical specifications

- Operating temperature:  $-5^{\circ}\text{C} < T < +40^{\circ}\text{C}$
- Storage temperature:  $-25^{\circ}\text{C} < T < +70^{\circ}\text{C}$
- Therm. nominal continuous current  $I_{\text{ctn}}$ :  $1.0 \times I_N$  or  $1.2 \times I_N$ , other values upon request
- Therm. nominal short-time current  $I_{\text{th}}$ : Min.  $100 \times I_N$ , 1 sec., other values upon request
- Isolation test voltage: 3 kV,  $U_{\text{eff}}$ , 50 Hz, 1 min. or 6 kV,  $U_{\text{eff}}$ , 50 Hz, 1 min.
- Rated frequency: 50 Hz or 60 Hz, other values upon request
- Isolation class: E
- Applicable technical standard: DIN EN 61869, part 1 + 2

### Further information

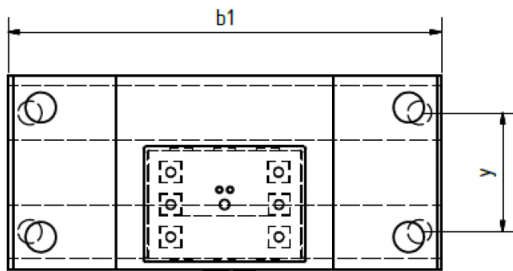
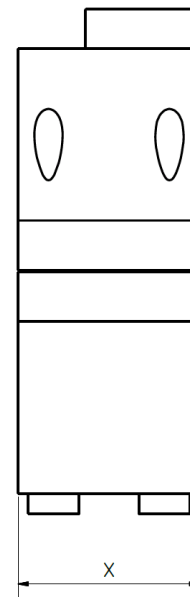
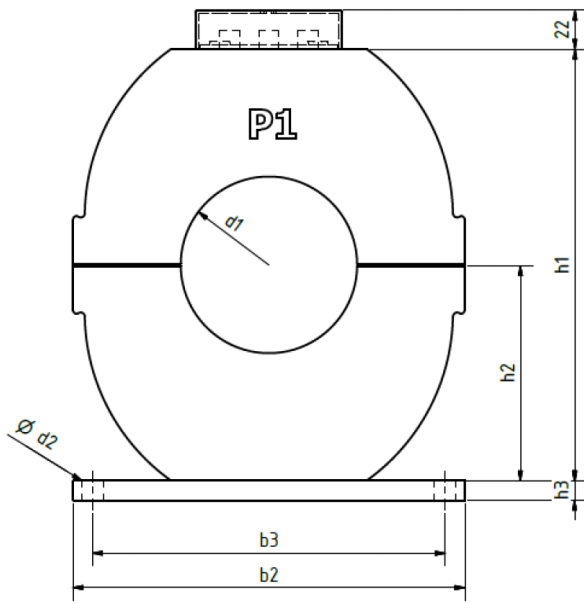
- Measuring systems fully hardened with Polyurethane resin
- The current transformers type CTO are intended for subsequent installation in existing low-voltage switchgear. In addition, there are customers who use these current transformers in medium-voltage switchgears, if the primary conductor is suitably insulated.
- The two parts of the current transformer are held together by four screws with springs or spring clips on the sides, which ensures a permanent contact pressure.
- The secondary connection terminals are factory-fitted with M5 screws. A clear plastic cover serves as an touch protection.
- Protection type: Housing: IP54, Terminal cover: IP20
- Mounting of CT by means of a baseboard attached to the resin body
- Packaging unit: 1 Stk.
- Customs tariff number: 85043129

**Gilgen, Müller & Weigert (GMW) GmbH & Co. KG**

Am Farrnbach 4A · 90556 Cadolzburg  
 Germany

Phone: +49 9103 7129-0 · Fax: +49 9103 7129-207/ -205  
 E-Mail: [info@g-mw.de](mailto:info@g-mw.de) · Web: [www.g-mw.de](http://www.g-mw.de)

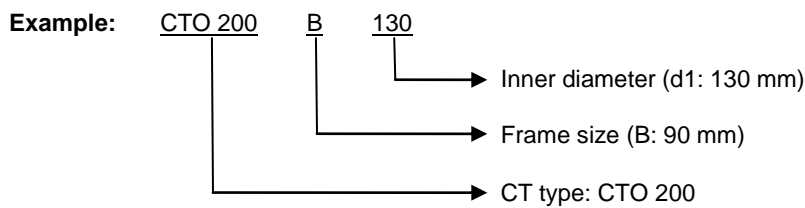
Dimension drawings



Frame size	x*	y*
A	60	25
B	90	55
C	120	85
D	150	115
E	200	165
F	250	215
G	300	265

\* Dimension x + y depends on the type and number of measuring systems installed.

Determination of current transformer type



CT type	b1	b2	b3	max. d1	d2	h1	h2	h3	max. frame size	Deliverable
CTO 135	135	150	130	90	9	150	75	10	C	Upon request
CTO 150	150	150	130	110	9	165	82,5	10	D	Upon request
CTO 170	170	170	150	110	11	185	97,5	10	D	Yes
CTO 200	200	200	180	140	11	220	110	10	E	Yes
CTO 250	250	250	230	150	11	270	135	10	E	Yes
CTO 300	300	300	280	210	11	330	165	10	F	Yes
CTO 350	350	350	330	250	11	380	190	10	F	Upon request
CTO 400	400	400	370	300	13	430	215	15	G	Upon request
CTO 500	500	500	440	360	13	530	265	15	G	Upon request

Gilgen, Müller & Weigert (GMW) GmbH & Co. KG

Am Farrnbach 4A · 90556 Cadolzburg  
Germany

Phone: +49 9103 7129-0 · Fax: +49 9103 7129-207/ -205  
E-Mail: info@g-mw.de · Web: www.g-mw.de



## GMW – Wir machen Energie messbar

GMW – We Make Energy Measurable



**Auf dem Energieübertragungsweg zwischen Kraftwerk und Verbraucher ist an einer Vielzahl von Messstellen die korrekte Erfassung der Stromstärken notwendig. Dies erfolgt mit Hilfe von Stromwandlern, sowie mit Analog- und Digitalanzeigern.**

**GMW liefert Ihnen ein umfangreiches Sortiment an Gerätetester, Analog- und Digitalanzeiger, Energiezähler, Strom- und Spannungswandler, Messumformer, Thermodrucker, Textanzeiger, Tastköpfe und Schaltschrank - Komponenten.**

*In the energy transfer from power station to consumer, it is essential to ensure the correct collection of amperages at a multiplicity of measuring points. This is done by means of current transformers, analogue and digital panel meters.*

*GMW supplies you an extensive assortment of safety appliance testers, analogue- and digital panel meters, energy meters, current- and voltage transformers, measuring transducers, thermal printers, text displays, probes and switchboard - components.*

## 10 Reasons for GMW

- ✓ Customer oriented solutions
- ✓ Individual consultancy
- ✓ Satisfied customers in all continents
- ✓ Large range of products
- ✓ Multiple of international licences and certificates
- ✓ Supreme technical quality
- ✓ Excellent service
- ✓ Reliability
- ✓ Fast deliveries
- ✓ Experience since 1950









**Gilgen, Müller & Weigert (GMW) GmbH & Co. KG**

Am Farrnbach 4A · 90556 Cadolzburg  
Germany

Phone: +49 9103 7129-0 · Fax: +49 9103 7129-207/ -205  
E-Mail: info@g-mw.de · Web: www.g-mw.de



We supply you an extensive range of products:

	Safety Appliance Testers
	Analog Panel Meters
	Digital Panel Meters
	Energy meters
	Current- and Voltage Transformers
	Measuring Transducers
	Thermal Printers, Text Displays, Probes
	Switchboard - Components

[www.g-mw.de](http://www.g-mw.de)