

# Linear measurement made easy.



Absolute cable transducer BMMS K50  
with max. 5 m measuring length.

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# Cable transducers



## Easy attachment – reliable results.

Baumer cable transducers are the easiest and most reliable solution to acquire linear distance and position. Linear measurement covers virtually the entire range up to 50 meters. Particularly conceived for industrial applications, the high-quality cable-pulls are extremely durable. They always provide reliable measuring results and allow for both

system integration and retrofit. Cable-pulls go together with virtually any encoder. You have the choice – the cable-pull with optimum measuring length used in combination with the matching incremental encoder or absolute interface.

## Redundant variants

*MAGRES* BMMS redundant encoders utilize two robust magnetic sensing systems. Each provides an individual output signal to ensure ultimate signal availability. An integrated monitoring system compares these two values and will output an error message in the event of failure. The monitoring system will relieve the master control, simultaneously cutting down on cabling effort and cost.

# Cable transducers

## Absolute

Size up to 120 mm.

Measuring length up to 12 m.

- Cable-pulls with absolute multiturn encoder
- Analog, CANopen® and SSI
- Compact housing



New

Features	<ul style="list-style-type: none"> <li>■ Measuring length up to 5 m</li> <li>■ Non-contact magnetic sensing</li> </ul>	<ul style="list-style-type: none"> <li>■ Measuring length up to 7.5 m</li> <li>■ Non-contact magnetic sensing</li> </ul>	<ul style="list-style-type: none"> <li>■ Measuring length up to 4.7 m</li> <li>■ Non-contact magnetic sensing</li> <li>■ Dirt skimmer</li> <li>■ Three-chamber structure</li> </ul>	<ul style="list-style-type: none"> <li>■ Measuring length up to 12 m</li> <li>■ Absolute potentiometer sensing</li> <li>■ Dirt skimmer</li> <li>■ Three-chamber structure</li> </ul>
Product family	BMMS K34   BMMS K50	BMMS M75	GCA5	GCA8   GCA12

### Interface

- SSI	■	■	–	–
- Analog / redundant	■ / ■	■ / ■	■ / ■	■ / ■
- CANopen® / redundant	■ / ■	■ / ■	– / ■	– / ■
Sensing method	Magnetic			Potentiometric
Size	88 x 88 x 66 mm	120 x 120 x 70 mm	104 x 104 x 65 mm	104 x 110 x 80 mm   126 x 124 x 92 mm
Voltage supply	8...30 VDC		8...30 VDC (Analog) 10...30 VDC (CANopen®)	10...30 VDC

### Connection

- Flange connector M12	Radial				
- Cable	Radial				
Measuring length	3400 mm	5000 mm	7500 mm	4700 mm	8000 mm   12 000 mm

### Resolution

- SSI, CANopen®	0.1 mm/step				
- Analog	12 bit				
Linearity	±0.6 %	±0.5 %	±0.2 %	±1 %	±1 %

Operating temperature -40...+85 °C

Protection	IP 65 (encoder, except cable outlet)		IP 67 (housing) IP 54 (cable outlet)		IP 67 (housing) IP 54 (cable outlet)
Materials	Cable-pull housing: plastic Encoder: Aluminium Cable: Stainless steel with coating		Housing: plastic Cable: Stainless steel with coating		Housing: plastic Cable: Stainless steel with coating

# Cable transducers

## Absolute & incremental

Size up to 200 mm.

Measuring length up to 50 m.

- Utmost flexibility in the combination of encoder and cable-pull
- High operational reliability and longlife
- Highest resolution and linearity



Features	■ Measuring length 2.1 m ■ Absolute or incremental encoder		■ Measuring length 3 m ■ Absolute or incremental encoder		■ Measuring length 5...15 m ■ Absolute or incremental encoder		■ Measuring length 30...50 m ■ Absolute or incremental encoder	
Product family	GCI2	GCA2	GCI4	GCA4	GCI15	GCA15	GCI50	GCA50
<b>Interface</b>								
- SSI	–	■	–	■	–	■	–	■
- BiSS-C	–	■	–	■	–	■	–	■
- CANopen® / SAE J1939	–	■ / ■	–	■ / ■	–	■ / ■	–	■ / ■
- DeviceNet	–	■	–	■	–	■	–	■
- Profibus-DP	–	■	–	■	–	■	–	■
- EtherCAT	–	■	–	■	–	■	–	■
- EtherNet/IP	–	■	–	■	–	■	–	■
- Powerlink	–	■	–	■	–	■	–	■
- Profinet	–	■	–	■	–	■	–	■
<b>Function principle</b>	Incremental	Absolute	Incremental	Absolute	Incremental	Absolute	Incremental	Absolute
<b>Sensing method</b>	Optical							
<b>Size</b>	60 x 60 mm		96 x 96 x 56 mm		115 x 115 x 82.5 - 180.5 mm		200 x 200 x 268 - 333.5 mm	
<b>Voltage supply</b>	5 VDC 4.75...30 VDC	10...30 VDC	5 VDC 4.75...30 VDC	10...30 VDC	5 VDC 4.75...30 VDC	10...30 VDC	5 VDC 4.75...30 VDC	10...30 VDC
<b>Output stage</b>								
- TTL/RS422	■	–	■	–	■	–	■	–
- HTL/push-pull	■	–	■	–	■	–	■	–
<b>Connection</b>								
- Flange connector M12, M23	Radial, axial							
- Cable	Radial, axial							
- Bus cover	Radial							
<b>Measuring length</b>	2100 mm		3000 mm		5000...15 000 mm		30 000...50 000 mm	
<b>Pulses per revolution</b>	≤80 000	–	≤80 000	–	≤80 000	–	≤80 000	–
<b>Total resolution</b>	–	≤36 bit	–	≤36 bit	–	≤36 bit	–	≤36 bit
<b>Linearity</b>	±0.01 %		±0.02 % (3...7.5 m), ±0.01 % (10...50 m)					
<b>Operating temperature</b>	-20...+85 °C							
<b>Protection (encoder)</b>	IP 65							
<b>Materials</b>	Cable-pull housing: plastic Encoder: Aluminium Cable: Stainless steel with coating		Cable-pull housing: Aluminium Encoder: Aluminium Cable: Stainless steel with coating					
<b>Options</b>	Operating temperature -40...+85 °C							