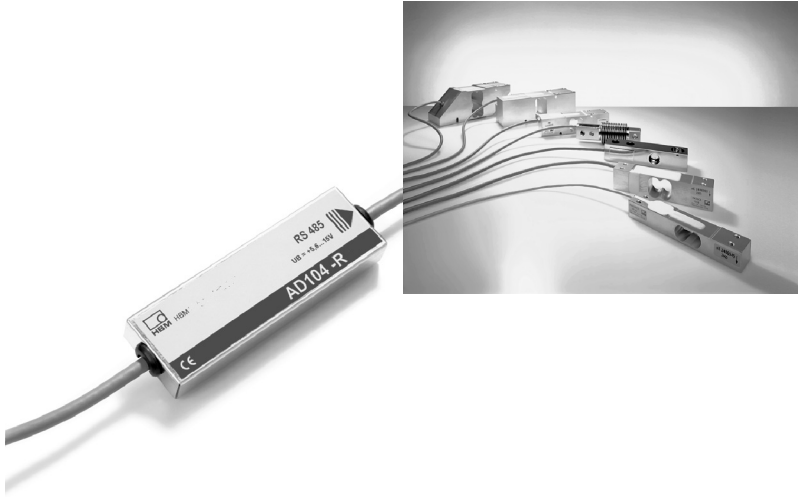


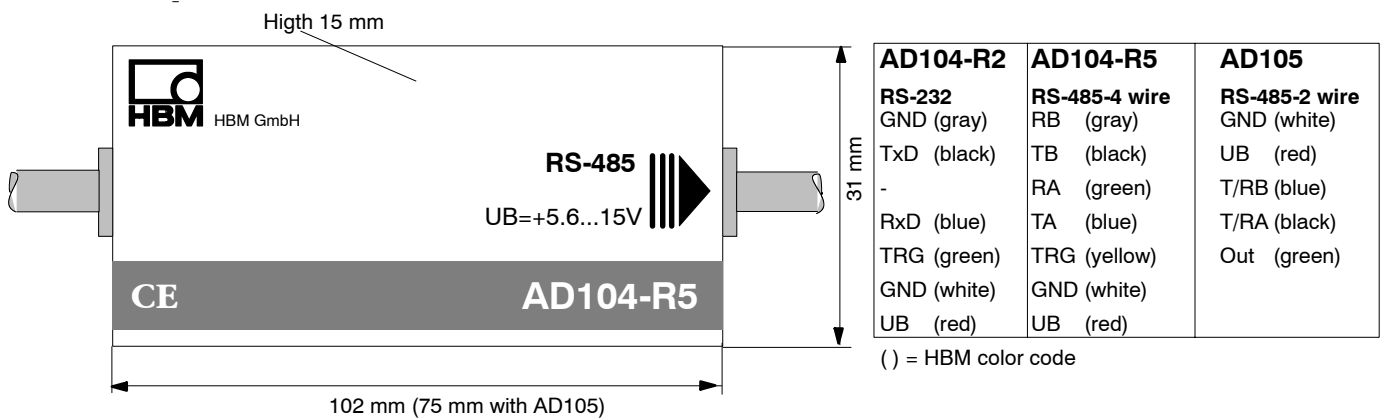
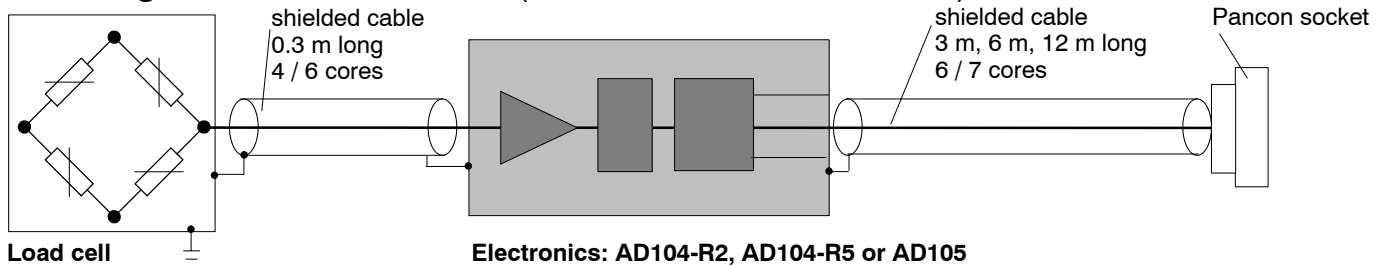
# Digital measuring chain



## Special features

- Communication via ASCII commands
- Digital filtering and scaling of the measured signal
- Serial interface (UART)
  - RS-232 (AD104-R2)
  - RS-485-4 wire (AD104-R5)
  - RS-485-2 wire (AD105)
- Panel program for parameter settings and measurement
- External, Internal trigger function
- AD105: limit switch with hysteresis
- Power fail-safe parameter storage

## Pin assignment and Dimensions (in mm; 1 mm = 0.03937 inches)



## Load cells that can be connected to the measuring chain

Typ	PW2AC3/xxK-MR-C	PW4KRC3/xxK-MR-C	PW6KRC3/xxK-MR-C	PW10C3/xxK-MR-C	PW12BC3/xxK-MR-C
	PW15C3/xxK-MR	PW16C3/xxK-MR-C	SP4C3/xxK-MR-C	SP10C3/xxK-MR-C	Z6FC3/xxK

The technical data of the measuring chain are in accordance to the technical data of the connected load cell, if not specified in the table bellow.

## Specifications of the digital measuring chain

Type		AD104-R2	AD104-R5	AD105
Serial interfaces		RS-232	RS-485-4 wire	RS-485-2 wire
Accuracy suitable for	d	3000		
Sensitivity (with max. (rated) capacity)	d	1 000 000		
Measuring signal resolution	Bit	20 (at 1 Hz)		
Measuring rate (depending on output format and baud rate)	Hz	100; 50; 25; 12; 6; 3; 2; 1		
Cut-off frequency of digital filters, adjust.; at -3 dB	Filter mode 0	8...0.05		
	Filter mode 1 (Setting time $\leq$ 240 ms)	8...3		
Connector, Type		Pancon (CE100F26-6)	Pancon (CE100F26-8)	Pancon (CE100F26-6)
Cable length between AD... and computer	m	$\leq$ 15	$\leq$ 500	$\leq$ 1000
Level of the interfaces	V	Low: -3...-12 V High: +3...12 V	Low: B-A < 0.35 High: B-A > 0.35	
Baud rate, adjustable	Baud	1200; 2400; 4800; 9600; 19200; 38400		
max. Voltage on control output (OUT)	V	-		15
Operating voltage	V <sub>DC</sub>	5.6...15		6...15
Current consumption of the measuring chain	mA	$\leq$ 30 (typ. $\leq$ 53 (max))		$\leq$ 40 (at 6 V) (typ. $\leq$ 45 (at 15 V))
Nominal temperature range	°C [°F]	-10...+40 [14...104]		
Service temperature range	°C [°F]	-10...+50 [14...122]		
Storage temperature range	°C [°F]	-25...+75 [-13...167]		
Housing dimensions of the electronic (L x B x H)	mm	102 x 31 x 15		75 x 31 x 15
Degree of protection EN 60529 (electronics)		IP40		
Housing material of the electronic		corrosion resistant sheet		

Within the shielded structure (AD104, AD105 housing and shielded load cell cable), the entire measuring chain including the AD 104 is insensitive against HF interference and conducted interference in accordance with OIML R76, EN45501 and EN61326.

### Ordering example:

Measuring chain

PW2AC3/xxxK-MR-C with AD10x-Rx (only for AD104)

Max. capacity

Interface

2 = RS-232

5 = RS-485-4 wire

Electronic

4 = AD104

5 = AD105

Further informations: see Operating manuals of AD104, AD105

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**Hottinger Baldwin Messtechnik GmbH**

Postfach 10 01 51, D-64201 Darmstadt  
Im Tiefen See 45, D-64293 Darmstadt  
Tel.: +49/61 51/ 8 03-0; Fax: +49/61 51/ 8039100  
E-mail: support@hbm.com www.hbm.com



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