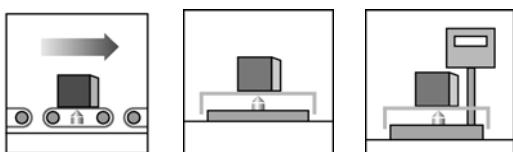


PW15AHi

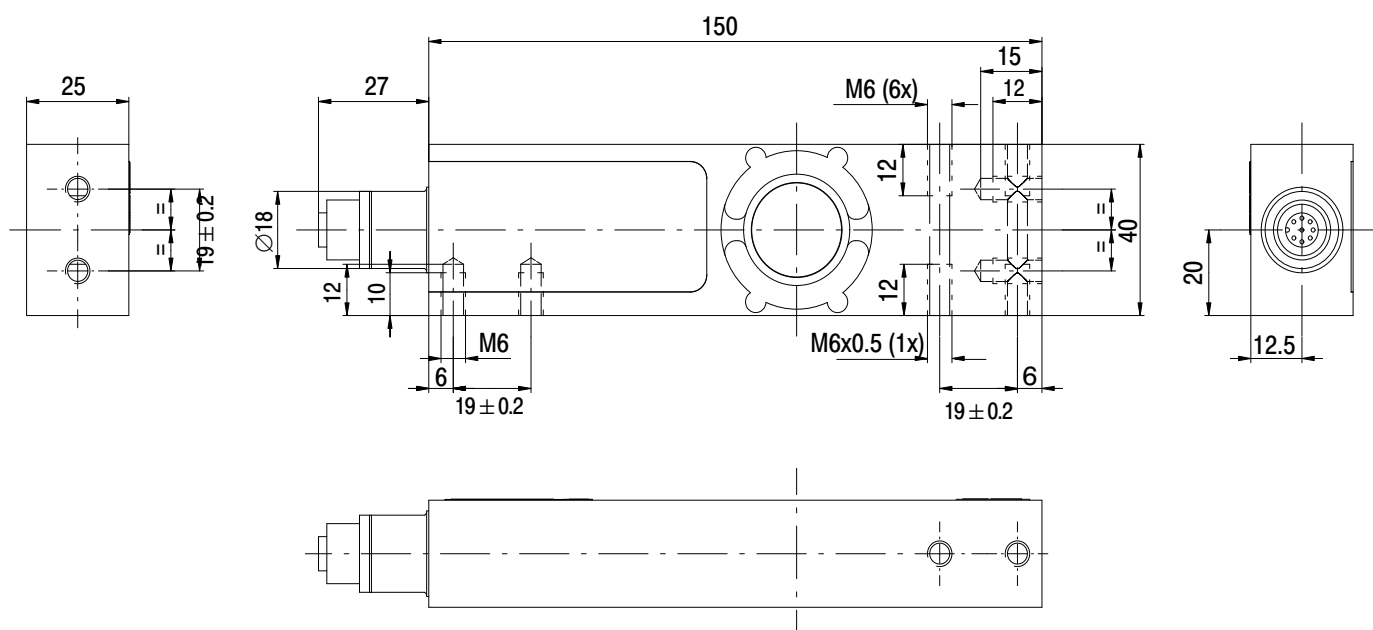
Digital load cell
optimized for dynam.
applications

Special features

- Accuracy class C3
- Off-center load compensated (OIML R 76)
- Interfaces:
RS-485 4-wire,
CANopen,
DeviceNet
- Rapid digital filtering and scaling of the measurement signal
- Trigger function (external or level triggering)
- PC software for parameter setup and dynamic analysis



Dimensions (in mm; 1 mm = 0.03937 inches)



Specifications

Type	PW15AHI			
Accuracy class per OIML R60		C3		
Maximum capacity ¹⁾ (E_{max})	kg	10	20	50
Minimum scale division (v_{min})	g	1	2	5
Minimum utilization range for 3000 d	kg	3	6	15
Max. platform size	mm	L500 x W400		
Number of load cell verification intervals (n_{LC})		3000		
Error fraction (p_{LC})		1		
Temperature coefficient of sensitivity (TK_C) ²⁾³⁾	% of C_n	± 0.0250		
Temperature coefficient of zero signal (TK_{SO}) ³⁾	/10 K	± 0.0200		
Relative reversibility error (d_{hy}) ²⁾³⁾		± 0.0166		
Non-linearity (d_{lin}) ²⁾³⁾		± 0.0166		
Creep upon loading (d_{CR}) over 30 min	% of C_n	± 0.0166		
Off-center load deviation per OIML R76		± 0.0233		
Service load (E_U) at max. 120 mm eccentricity		150		
Limit load (E_L) at max. 20 mm eccentricity		300		
Relative perm. vibrational stress (F_{srel}) at max. 50 mm eccentricity	% of E_{max}	70		
Nominal (rated) displacement (s_{nom})	mm	< 0.2		
Voltage supply:				
Operating voltage UB1 (DC)	V	+ 12 ... +30		
Power consumption	W	≤ 1.5		
Start-up current	A	0.15		
Measurement signal resolution (1 Hz filter)	Bit	20		
Data rate	1/s	4 ... 1200		
Adjustable digital filter cut-off frequency	Hz	80 ... 0.0625		
Baud rate (RS-485 interface)	Hz	1200; 2400; 4800; 9600; 19200; 38400; 57600; 115200		
Max. number of bus nodes	baud	32		
CANopen interface		Standard CiA DS301		
Baud rate	baud	10 000 ... 1 000 000		
DeviceNet interface		Release 2.0 ODVA		
Baud rate	baud	125 000 ... 500 000		
Max. cable length (CANopen, DeviceNet)	m	≤ 5000 (10 kbaud) ... ≤ 100 (500 kbaud), ≤ 25 (1 Mbaud)		
Asynchronous serial interface				
RS-485, 4-wire, max. cable length	m	500		
Trigger input				
Permissible input voltage	V	0 ... +12		
Low level	V	< 1		
High level	V	> 4		
Input resistance	k Ω	10		
Nominal (rated) ambient temperature range	$^{\circ}\text{C}$	- 10 ... + 40		
Operating temperature range	$^{\circ}\text{C}$	- 10 ... + 50		
Storage temperature range	$^{\circ}\text{C}$	- 25 ... + 75		
EMC requirements		EN 45501, OIML R76 EN 61326-1/Tab. 4, Class B equipment EN 61326/A1, Tab. A1, equipment in industrial sectors		
Degree of protection per EN 60529		IP 68		
Electrical connection		Device socket, made by Lumberg, 8 pin		
Material		Steel		
Weight, approx.	kg	1		

1) Max. eccentric loading as per OIML R76

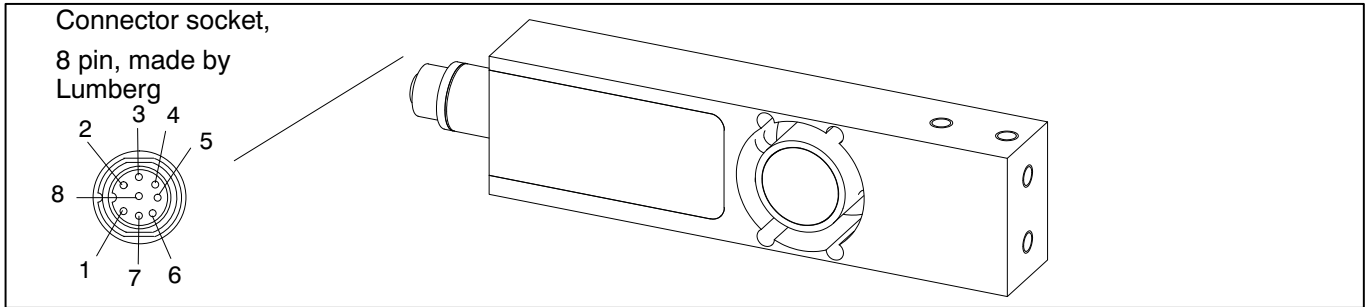
2) Values can be exceeded in individual cases. However, the resulting characteristic curve deviation from TK_C , non-linearity and relative reversibility error still lie within the error limits per OIML R 60 with $p_{LC}=1$.

3) All relative error data relate to the output signal at max. capacity.

Order No.

Maximum capacity	Interfaces		
	RS-485	CANopen	DeviceNet
10 kg	1-PW15AHi/3B0/10kg	1-PW15AHi/3C0/10kg	1-PW15AHi/3D0/10kg
20 kg	1-PW15AHi/3B0/20kg	1-PW15AHi/3C0/20kg	1-PW15AHi/3D0/20kg
50 kg	1-PW15AHi/3B0/50kg	1-PW15AHi/3C0/50kg	1-PW15AHi/3D0/50kg

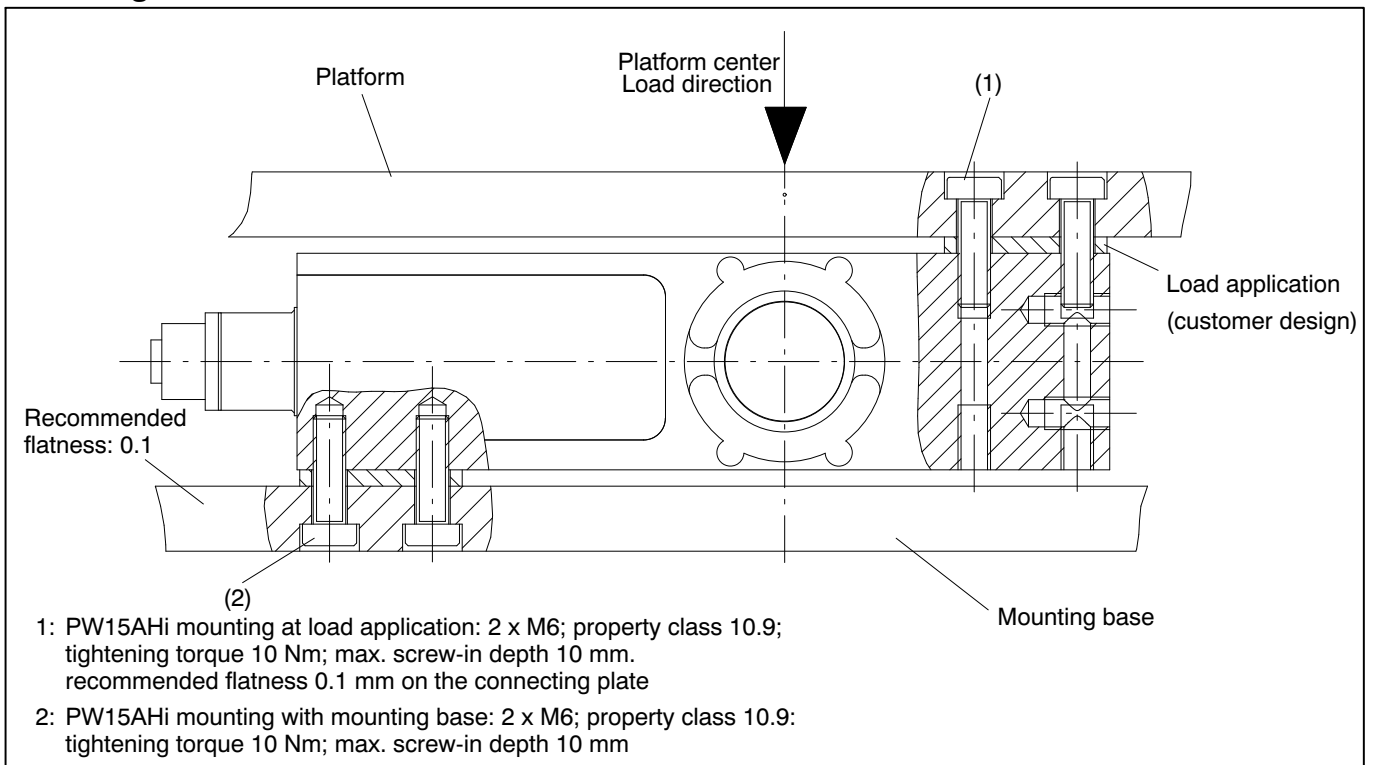
Electrical connection



Terminal	RS-485	CANopen	DeviceNet	Color code for 1-Kab165-3 ¹⁾
1	GND	GND	GND	white
2	unassigned	unassigned	unassigned	brown
3	RA	CanH in	CanH in	green
4	Trigger / Stop Dosing	Trigger / Stop Dosing	Trigger / Stop Dosing	yellow
5	RB	CanL in	CanL in	gray
6	TB	CanL out	CanL out	pink
7	TA	CanH out	CanH out	blue
8	12...30 V	12...30 V	12...30 V	red

¹⁾ Cable 1-KAB165-3 is available as an accessory.

Mounting instructions



Accessories, to be ordered separately

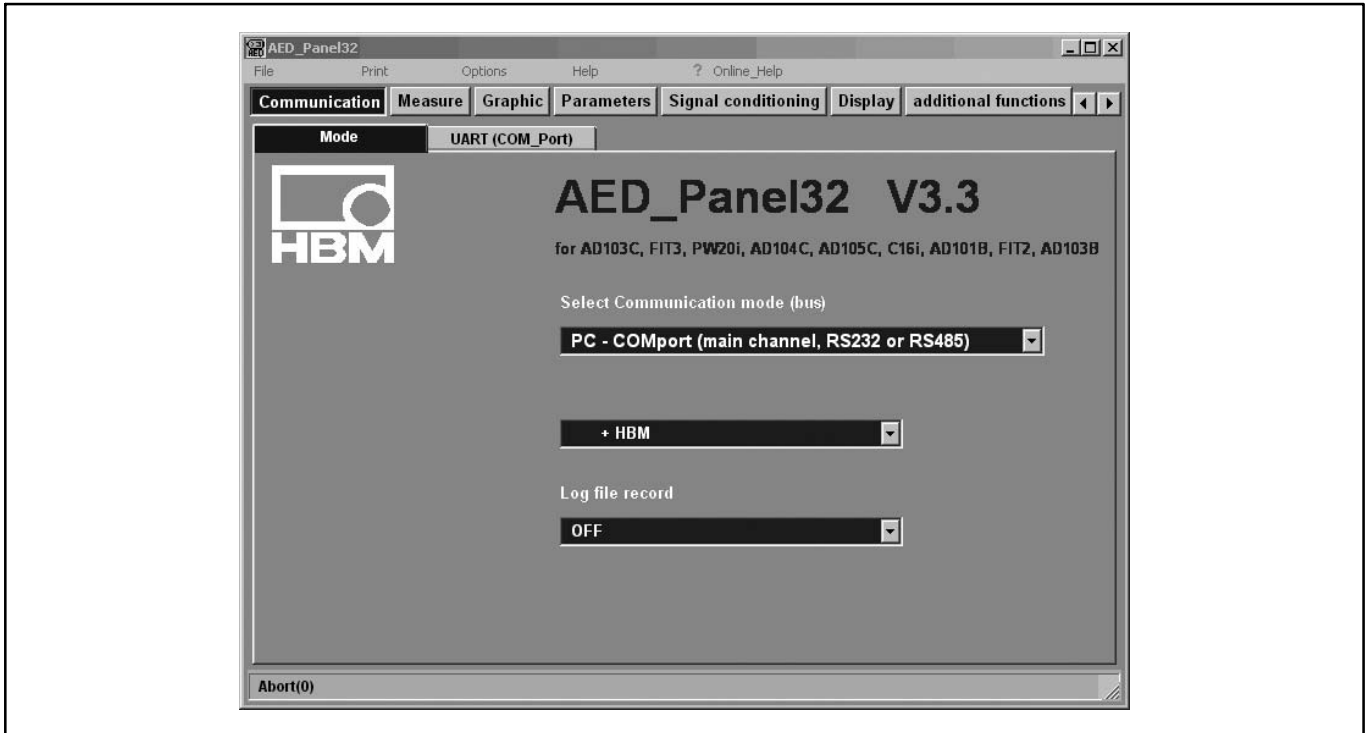
1-FIT-AED-DOC = Documentation (CD-ROM with operating manual and AED panel program AED_Panel32)

- Mechanical engineering and electronics documentation
- Command code documentation for communication with the PW15AHi load cell
- Software package for parameter settings and dynamic analysis of weighing system

Brief description of the AED_Panel PC software (typical screenshots, see below)

for Profibus connection to a PC: Adapter CP5511, CP5611 (Siemens)

for CANopen/DeviceNet connection to a PC: PCAN = USB adapter (PEAK-System Technik)



The program can also be found at www.hbm.com – *Weighing Technology – Products – Software*

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