

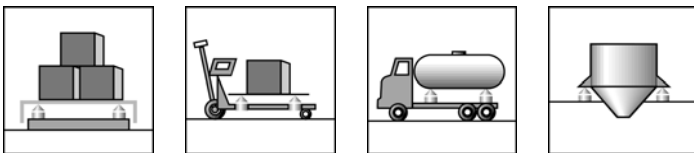
HLCB2...

Load cells

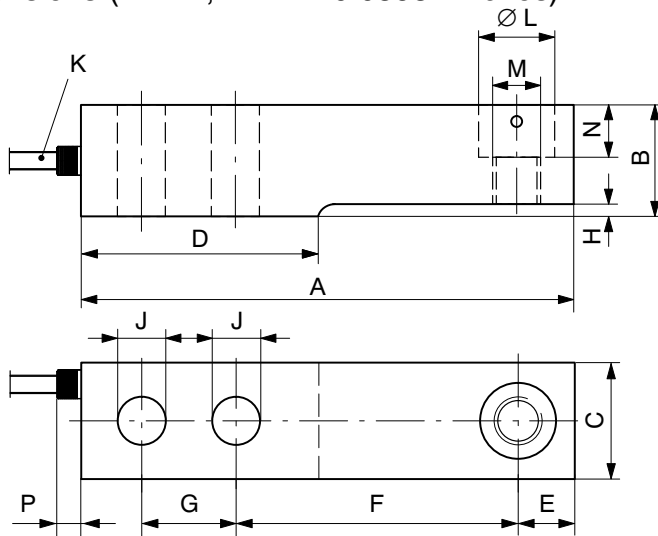
Special features



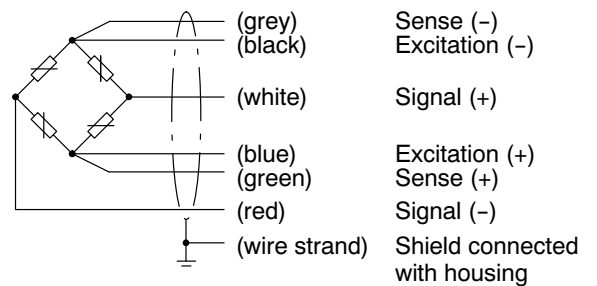
- Hermetically sealed (IP68, IP69K)
- Max. capacities: 220 kg ... 4,4 t
- Stainless steel
- Low overall height
- Meets EMC/ESD requirements according to EN 45 501
- Complies with OIML R60 regulations up to 3000d for scales according to EN 45 501
- Explosion-proof versions according to ATEX 95 optional



Dimensions (in mm; 1 mm= 0.03937 inches)



Wiring code (6-wire circuit)



Max. capacity (E_{max})	A	B	C	D	E	F	G	H	J	K	$\varnothing L$	M	N	P
220 kg; 550 kg; 1.1 t	133.4	30.2	30.7	57.7	15.4	76.2	25.4	1.7	13	3 m	20.6	M12	14.2	12
1.76 t	133.4	30.2	30.7	51.7	15.4	76.2	25.4	1.7	13	3 m	20.6	M12	14.2	12
2.2 t	171.5	36.5	36.8	76.2	19.1	95.3	38.1	2.5	20.5	6 m	30.2	M20	17.0	12
4.4 t	171.5	42.9	42.9	76.2	19.1	95.3	38.1	2.5	20.5	6 m	30.2	M20	20.1	12

Technical Data

Type		HLCB2
Maximum capacity (E_{max})		220 kg; 550 kg; 1.1 t; 1.76 t, 2.2 t, 4.4 t
Accuracy class according to OIML R60		C3
Maximum number of load cell intervals (n_{LC})		3000
Minimum LC verification interval (v_{min})	% of E_{max}	0.0100 (220 kg; 1.76 t; 2.2 t; 4.4 t) 0.0090 (550 kg; + 1.1 t)
Sensitivity (C_n)	mV/V	1.94
Sensitivity tolerance	%	± 0.1
Temperature effect on zero balance (TK_0) ¹⁾	% of C_n / 10 K	± 0.0140 (220 kg; 1.76 t; 2.2 t; 4.4 t) ± 0.0127 (550 kg; + 1.1 t)
Temperature effect on sensitivity (TK_C) ¹⁾		
Hysteresis error (d_{hy}) ¹⁾	% of C_n	± 0.0170
Non-linearity (d_{lin})		± 0.0170
Creep (d_{cr}) over 30 min.		± 0.0166
Input resistance (R_{LC})		> 350
Output resistance (R_0)	Ω	350 ± 2
Reference excitation voltage (U_{ref})	V	5
Nominal range of excitation voltage (B_U)		0.5 ... 15 (Ex-Versionen max. 12 V !!!)
Insulation resistance (R_{is})	GΩ	> 5
Nominal temperature range (B_T)	°C	-10 ... +40
Service temperature range (B_{tu})		-30 ... +70
Storage temperature range (B_{tl})		-50 ... +85
Safe load limit (E_L)	% of E_{max}	150
Lateral load limit (E_{lq})		100
Breaking load (E_d)		300
Permissible dynamic load (F_{srel}) (vibration amplitude according to DIN 50100)		70
Deflection at E_{max} (s_{nom}), approx.	mm	0.5 (1.76 t = 1.4 mm)
Weight (G), approx.	kg	0.9 (220 kg ... 1.76 t); 1.6 (2.2 t); 2.2 (4.4 t)
Protection class to EN 60 529 (IEC 529)		IP 68 / IP 69K
Material: Measuring element		Stainless steel
Cable fitting		Stainless steel (Gasket: Viton®)
Cable-sheath		TPE
Application protection (sealing)		hermetically welded

¹⁾ The data for Non-linearity (d_{lin}), Hysteresis error (d_{hy}) and Temperature effect on sensitivity (TK_C) are typical values. The sum of these data meets the requirements according to OIML R60.



Accessories (see Data sheet "HLC... - Load Cells"):

In order to minimize error interferences due to load introduction, HBM offers various proven load introductions for this load cell type, depending on the mounting situation:

HLCB/ZFP/...T	Swivel load foot
HLCB/ZAK/1.76T	Swivel load foot (height adjustable)
HLCB/...T/ZEL	Elastomer bearing
HLCB/ZDP/...T	Elastomer bearing Easy Top
HLC/ZPU/...T	Base plate / Mounting kit

Options

HLCB2 Load cells, optional versions [!!!] ¹⁾

Order no.							
K-HLCB2 ¹⁾							
Code		Option 1: Design					
S		Standard (= IP69K protection class; connection cable free of halogen and silicone)					
Code		Option 2: Accuracy					
C3		C3 (OIML)					
Code		Option 3: Capacity		EUR	Code	Option 3: Capacity	
220		220kg		326	1760		1.76t
550		550kg		315	2200		2.2t
1100		1.1t		315	4400		4.4t
Code		Option 4: Ex protection (accord. to ATEX 95)					
N		non ATEX					
1		ATEX Zone 1 + 21 and FM					
2		ATEX Zone 2 + 22 (non-conductive dust)					
Code		Option 5: Cable length					
S3		3m (Standard) [only with Option 3 = 220 / 550 / 1100 / 1760]					
S6		6m (Standard) [only with Option 3 = 2200 / 4400]					
6		6m [only with Option 3 = 220 / 550 / 1100 / 1760]					
12		12m					
20		20m					
K-HLCB2 - S - C3 - [] - [] - []							

[!!!]: Not all codes can be combined with each other. Please take heed of the terms in the square brackets!

¹⁾ Available for delivery expected from 2nd Quarter 2008 - availability on request!

Options for HLC...:

- **Explosion-proof versions according to ATEX:** Ex II 2G EEx ia IIC T4 resp. T6 (Zone 1) ^{**)}
Ex II 2D Ex tD A21 IP68 T 80°C (Zone 21) ^{**)}
^{**)} with EC-Type Examination Certificate

Ex II 3G EEx nA II T6 (Zone 2)

Ex II 3D IP68 T 80°C (Zone 22 for non-conductive dust)

Modifications reserved.

All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

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