

HLC F2 ...

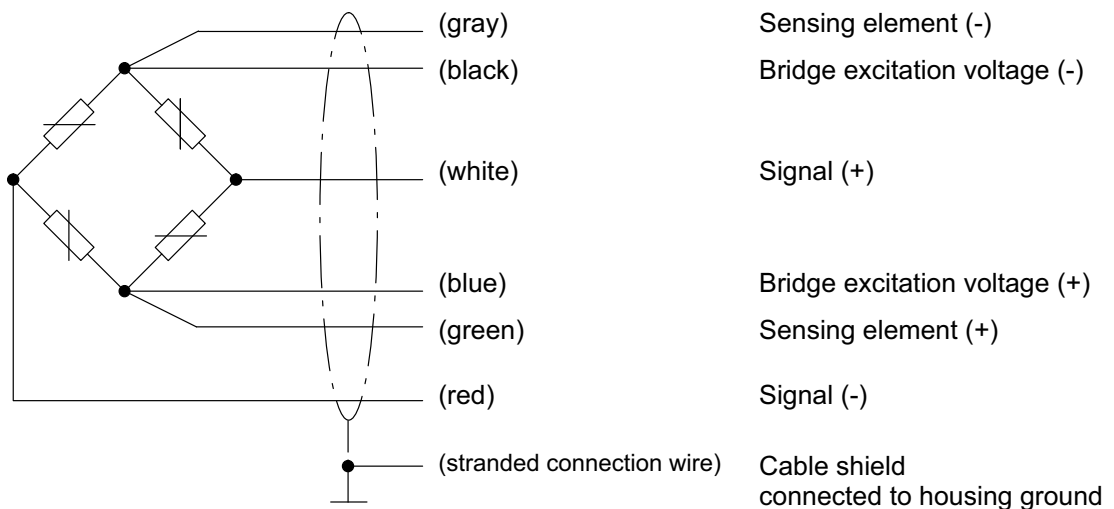
Load cells




Special features

- Hermetically encapsulated (IP68)
- Maximum capacities: 220 kg ... 1.76 t
- Rust-resistant materials
- Low height of construction
- Meets EMC requirements as per EN 45501:2015
- Legal for trade as per OIML R60 to 3000 divisions

Cable assignment (6-wire configuration)



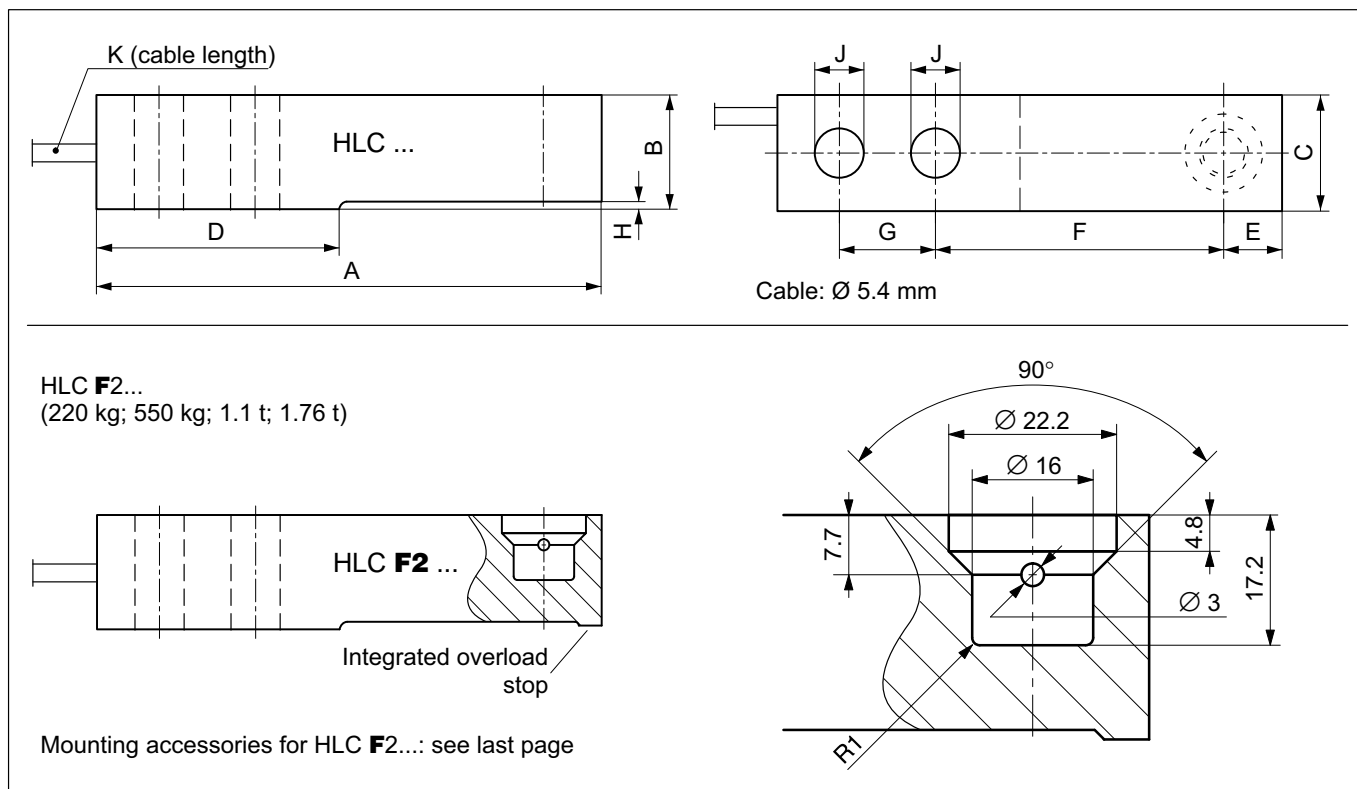
Specifications

Type HLC F2 ... Maximum capacity (E_{max})				HLC F2 C3 / ... 220 kg; 550 kg; 1.1 t; 1.76 t	
(Load application = blind hole + integrated overload stop)					
Accuracy class per OIML R60				C3	
Number of load cell verification intervals	n_{LC}			3000	
Minimum load cell verification interval	v_{min}	% of maximum capacity (E_{max})		0.0100 (220 kg; 1.76 t) 0.0090 (550 kg; 1.1 t)	
Ratio of minimum verification interval Y	Y			10,000 (220 kg; 1.76 t) 11,111 (550 kg; 1.1 t)	
General specifications					
Rated output (nominal)	C_N	mV/V		1.94	
Rated output tolerance		%		±0.1	
Temperature coefficient of zero signal	TC_0	% of $C_n/10\text{ K}$		±0.0140 (220 kg; 1.76 t;) ±0.0126 (550 kg; 1.1 t)	
Temperature coefficient of sensitivity¹⁾	TC_S			±0.0140	
Relative reversibility error¹⁾	d_{hy}	% of C_n		±0.0166	
Non-linearity¹⁾	d_{lin}			±0.0170	
Creep upon loading in 30 min.	d_{cr}			±0.0166	
Minimum dead load output return	MDLOR			±0.0166	
Input resistance	R_{LC}	Ω		350 ... 480	
Output resistance	R_0			350 ±2	
Reference voltage	U_{ref}	V		5	
Nominal (rated) range of the supply voltage	B_U			0.5 ... 15	
Insulation resistance	R_{is}	G Ω		> 5	
Nominal (rated) range of the ambient temperature	B_T	°C		-10 ... +40	
Operating temperature range	B_{tu}			-30 ... +70	
Storage temperature range	B_{tl}			-50 ... +85	
Limit load	E_L	% of maximum capacity (E_{max})		150	
Lateral loading limit	E_{lq}			100	
Breaking load	E_d			300	
Relative permissible vibrational stress (oscillation width as per DIN 50100)	F_{srel}			70	
Rated displacement at E_{max}, approx.	s_{nom}	mm		0.5 (1.76 t = 1.4 mm)	
Weight, approx.	m	kg		0.9 (220 kg ... 1.76 t)	
Degree of protection per EN 60 529 (IEC 529)				IP68	
Material				Stainless steel ²⁾ Stainless steel/seal: Viton [®] PVC	
Measuring body					
Cable entry					
Cable sheath					

¹⁾ The values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TC_S) are recommended values. The sum of these values is within the accumulated error limit specified by OIML R60.

²⁾ As per EN 10088-1

Dimensions (in mm)

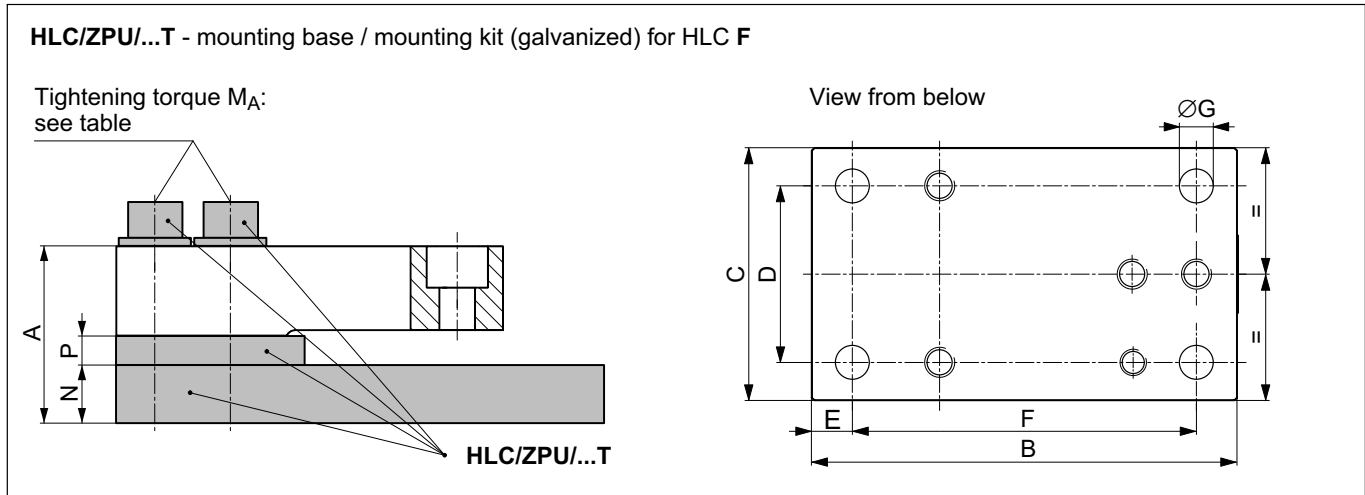


Maximum capacity	A	B	C	D	E	F	G	H	J	K	Ø L	M	N
220 kg; 550 kg; 1.1 t	133.4	30.2	30.7	57.7	15.4	76.2	25.4	1.7	13	3 m	20.6	M12	14.2
1.76 t	133.4	30.2	30.7	51.7	15.4	76.2	25.4	1.7	13	3 m	20.6	M12	14.2

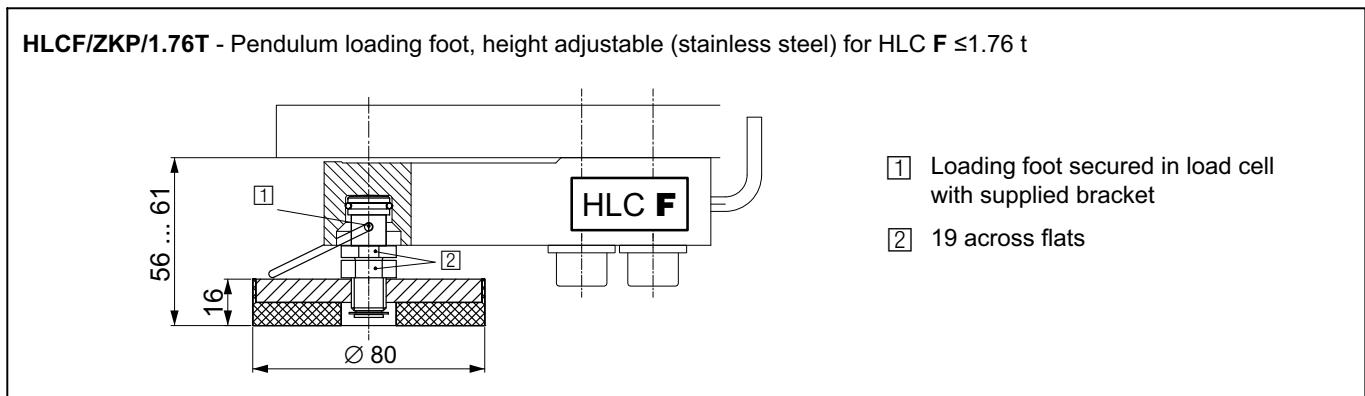
Mounting accessories (to be ordered separately)

To minimize error effects from load application, HBM offers different tried and tested load application elements for type HLC F2 ... load cells based on the mounting conditions.

Accessories for HLC F ... (to be ordered separately; dimensions in mm)



Type	Maximum capacity	Breaking load	A	B	C	D	E	F	G	N	P	M_A
HLC/ZPU/1.76 T	220 kg ... 1.76 t	3.52 t	60.5	168	100	70	16	136	13.5	20	10	130 N·m



Subject to modifications.
All product descriptions are for general information only. They are not to be understood as a guarantee of quality or durability.

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