DATA SHEET

PW22i...
Single point load cell for dynamic weighing

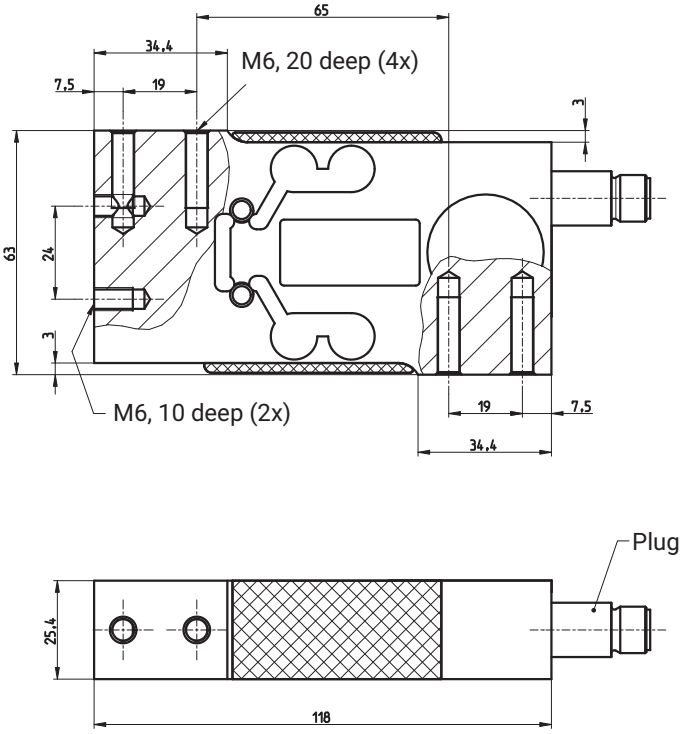
IO-Link

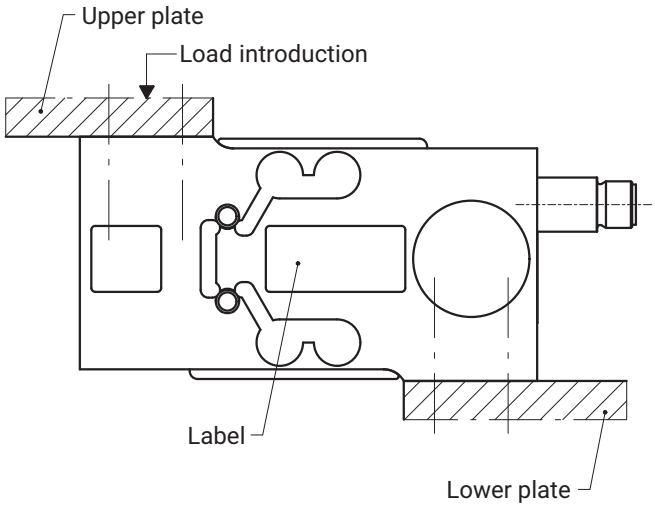
SPECIAL FEATURES

- Well known PW22 load cell with integrated IO-Link sensor communication
- IO-Link interface brings several advantages such as smart functions (preprocessing of data, self-monitoring and warnings), bidirectional sensor communication, and easy installation



DIMENSIONS





Dimensions in mm (1 mm = 0.03937 inches)

SPECIFICATIONS

Type			PW22i		
Accuracy class			C3 Multi Range (MR) with out OIML certificate		
Maximum number of load cell verification intervals	n_{LC}		3000		
Maximum capacity	E_{max}	kg	10	20	50
Minimum LC verification interval		g	1	2	5
Maximum platform size		mm	400 x 400		
Temperature coefficient of zero signal	TC_0	% of E_{max}/10 K	±0.0140	±0.0140	±0.0140
Temperature coefficient of sensitivity In the range +20 … +40˚C In the range -10 … +20˚C	TC_s	% of E_{max}/10 K	±0.0175 ±0.0117		
Relative reversibility error	d_{hy}	% of E_{max}	±0.0166 (typical 50 ppm)		
Linearity deviation	d_{lin}		±0.0166 (typical 70 ppm)		
Minimum dead load output return	DR		±0.0166		
Off-center load error			±0.0166		
Sensitivity tolerance			±0.0166		
Nominal (rated) range of the ambient temperature	B_T	˚C	-10 ... +40		
Operating temperature range	B_{tu}	˚C	-10 ... +50		
Storage temperature range	B_{tl}	˚C	-25 ... +75		
Limit load at 120 mm eccentricity	E_L	% of E_{max}	150		
Limit lateral loading, static	E_{lq}		300		
Service load at max. 100 mm eccentricity	E_U		150		
Breaking load at 20 mm eccentricity	E_d		1000		
Relative permissible oscillation stress at max. 50 mm eccentricity	F_{srel}		70		
Rated displacement at Emax, approx.	s_{nom}	mm	<0.2		
Weight, approx.	m	kg	0.5		
Degree of protection			IP67		
Material			Aluminum, silicone rubber		
Software identification			1201		
Digital filter					
Digital filters, up to 5 cascadable		Hz	IIR low pass: 0.1 … 30		
			FIR low pass: 3 … 30		
			Moving average filter		
			Notch filter		
Device functions					
Weighing functions			Checkweigher with pre- and post-trigger, trigger either level controlled or via external photoelectric sensor; Filing with coarse and fine flow control as well as automatic optimization of target weight		
Limit value switches			2 limit value switches. Invertible, freely adjustable hysteresis. Output via process data or 1 digital output		
Digital IO			According to IO-Link Smart Sensor Profile, 1 permanently available digital input/output		
Peak value memory			Yes		
Peak-to-peak memory			Yes		

Type		PW22i
Warning functions		Warning on exceeding limit load; nominal (rated) temperature
Output signal; interface		COM3, to IO-Link standard, class A
Min. cycle time (max. output rate)	ms	1.0
Signal bandwidth (-3 dB)	Hz	200
Resolution	Bit	24
Sample rate (internal)	S/s	2000
Reference supply voltage	V	24
Supply voltage range	V	20 - 30
Max. power consumption	mW	3200
Max. cable length	m	20
Maximum impact load as per IEC 60068-2-6		
Number		1000
Duration	ms	3

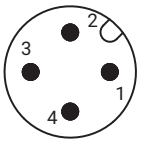
IO-Link firmware

All new products will always be produced with the latest version. See the release notes.
Spare parts for older versions can be purchased via the repair and calibration department.

Connector pinning

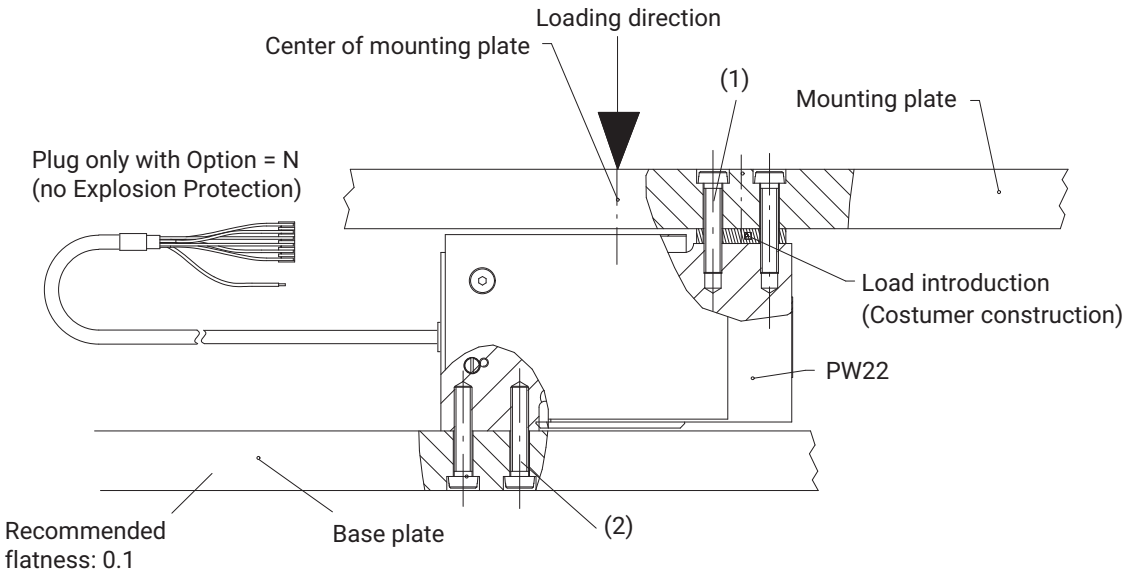
Pin	Assignment
1	Supply voltage +, 24 VDC
2	Digital output (DI/DO pin function)
3	Supply voltage/ reference potential, 0 V
4	IO-Links data (C/Q)

Class A



Connector plug M12, A coded

MOUNTING HINTS



1: Attachment PW22i at load introduction: 2 x M6; property class 10.9 tightening torque 10 N·m; max. thread reach 20 mm. Recommended flatness 0.1 mm on connection surface
2: Attachment PW22i with base plate: 2 x M6; property class 10.9: tightening torque 10 N·m; max. thread reach 20 mm

PRODUCT NUMBERS (OVERVIEW)

PW22i with integrated intelligent IO-Link

Type	PW22i
Maximum capacity [kg]	**Ordering number**
10	1-PW22IC3/10KG
20	1-PW22IC3/20KG
50	1-PW22IC3/50KG

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Hottinger Brüel & Kjaer GmbH
Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel. +49 6151 803-0 · Fax +49 6151 803-9100
www.hbkworld.com · info@hbkworld.com

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