

PW15B... Platform load cell

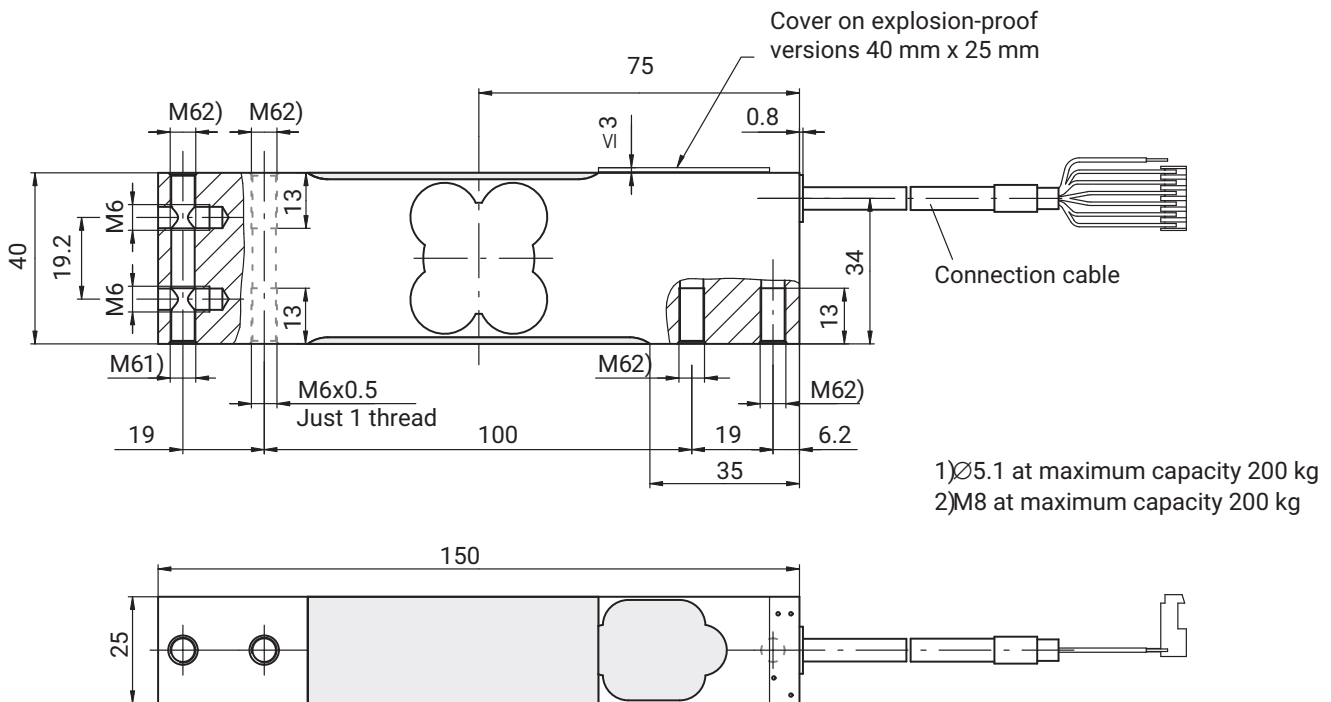
with
 **IO-Link**
option

SPECIAL FEATURES

- Maximum capacities 7.5 kg ... 200 kg
- Stainless steel
- High ratio of minimum verification interval Y
- Meets EMC guidelines
- Explosion-proof versions and other options available
- Available as LCMC measurement chain with smart option (IO-Link), with digital option (CANopen or RS-485), with analog option (4 ... 20 mA or 0 ... 10 V)



DIMENSIONS



Dimensions in mm (1 mm = 0.03937 inches)

SPECIFICATIONS PW15B (C3 MR)

Type			PW15B (C3 MR)								
Accuracy class ¹⁾			C3 Multi Range (MR)								
Number of scale intervals	n_{LC}		3000								
Nominal (rated) load	E_{max}	kg	7.5	15	20	30	50	75	100	150	200
Minimum load cell verification interval	v_{min}	g	0.5	1	2	2	5	5	10	10	20
Ratio of minimum verification interval	Y		15000		10000	15000	10000	15000	10000	15000	10000
Temperature coefficient of zero signal per 10K	TK_0	% of C_n	± 0.0093	± 0.0093	± 0.0140	± 0.0093	± 0.0140	± 0.0093	± 0.0140	± 0.0093	± 0.0140
Maximum platform size		mm	500 x 400								
Nominal (rated) sensitivity	C_n	mV/V	2.0 \pm 0.2 (Option 6: 2.0 mV/V \pm 0.1%)								
Zero signal			0 \pm 0.1								
Temperature coefficient of the sensitivity per 10 K ²⁾ in the temperature range +20 ... +40 °C -10 ... +20 °C	TK_C	% of C_n	± 0.0175								
Linearity error ²⁾	d_{lin}		± 0.0117								
Relative reversibility error ²⁾	d_{hy}		± 0.0166								
Minimum dead load output return	MDLOR		± 0.0166								
Off-center load error ³⁾		ppm	≤ 233								
Input resistance	R_{LC}	Ω	300 ... 500								
Output resistance	R_0		300 ... 500 (Option 6: 359 \pm 0.2)								
Reference excitation voltage	U_{ref}	V	5								
Nominal (rated) range of the excitation voltage	B_U		1 ... 12								
Maximum excitation voltage			15								
Insulation resistance at 100 V _{DC}	R_{is}	G Ω	> 1								
Nominal (rated) temperature range	B_T	°C	-10 ... +40								
Operating temperature range	B_{tu}		-10 ... +50								
Storage temperature range	B_{tl}		-25 ... +70								
Limit load at maximum 160 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 max. 20 mm eccentricity	E_d		300								
Relative permissible oscillation stress at max. 20 mm eccentricity	F_{srel}		70								
Nominal (rated) displacement ⁴⁾ , approx.	s_{nom}	mm	0.21	0.2	0.2	0.2	0.18	0.17	0.17	0.17	0.17
Weight, approx.	m	kg	1								
Degree of protection ⁵⁾			IP67								
Cable length (standard)		m	3								
Material			Steel 1.4545 ⁶⁾ Silicone rubber PVC								

1) As per OIML R60, with $P_{LC} = 0.7$.

2) The values for non-linearity (d_{lin}), relative reversibility error (d_{hy}) and temperature coefficient of sensitivity (TK_C) are recommended values. The sum of these values is within the cumulative error limits laid down by OIML R60.

3) As per OIML R76.

4) Loading with E_{max} and center of gravity in center of load cell.

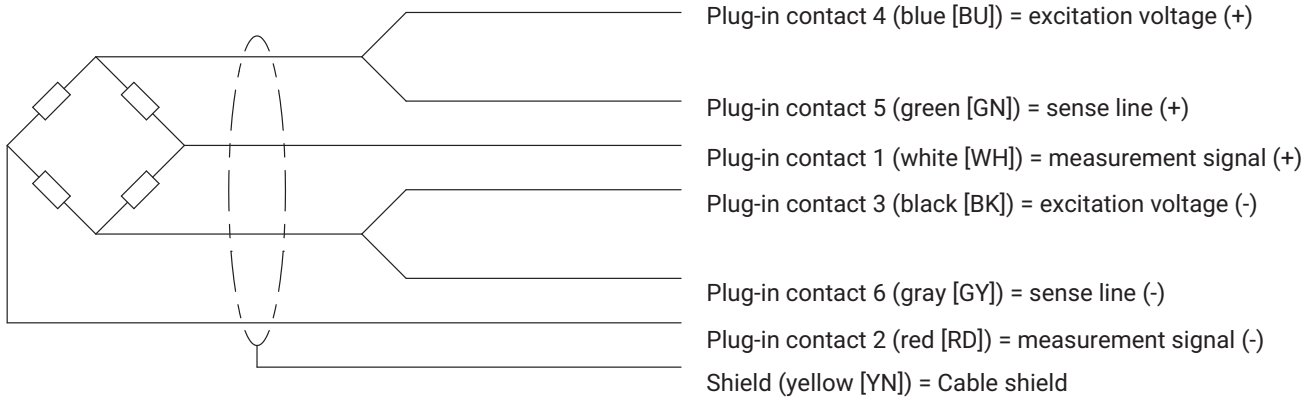
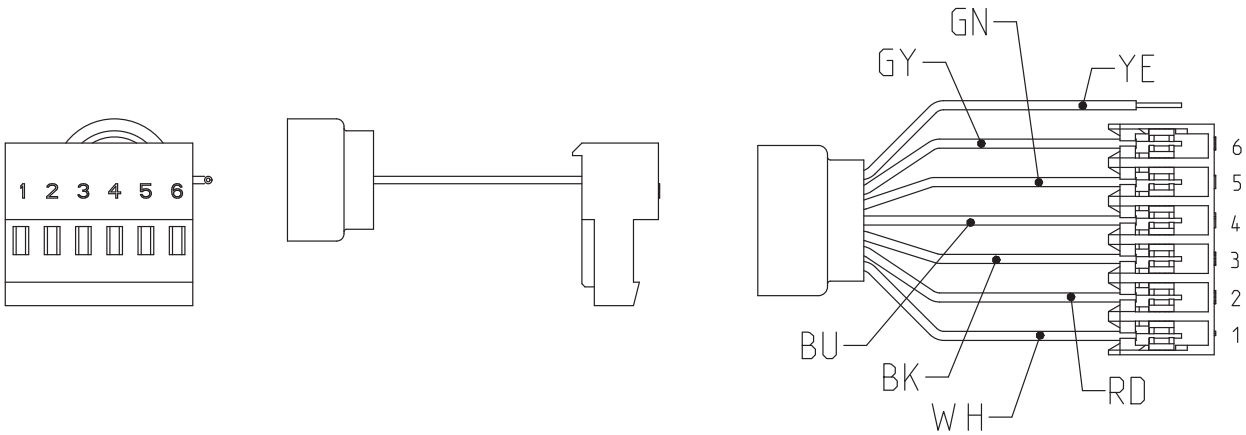
5) As per EN 60529 (IEC 529).

6) As per EN 10088-1.

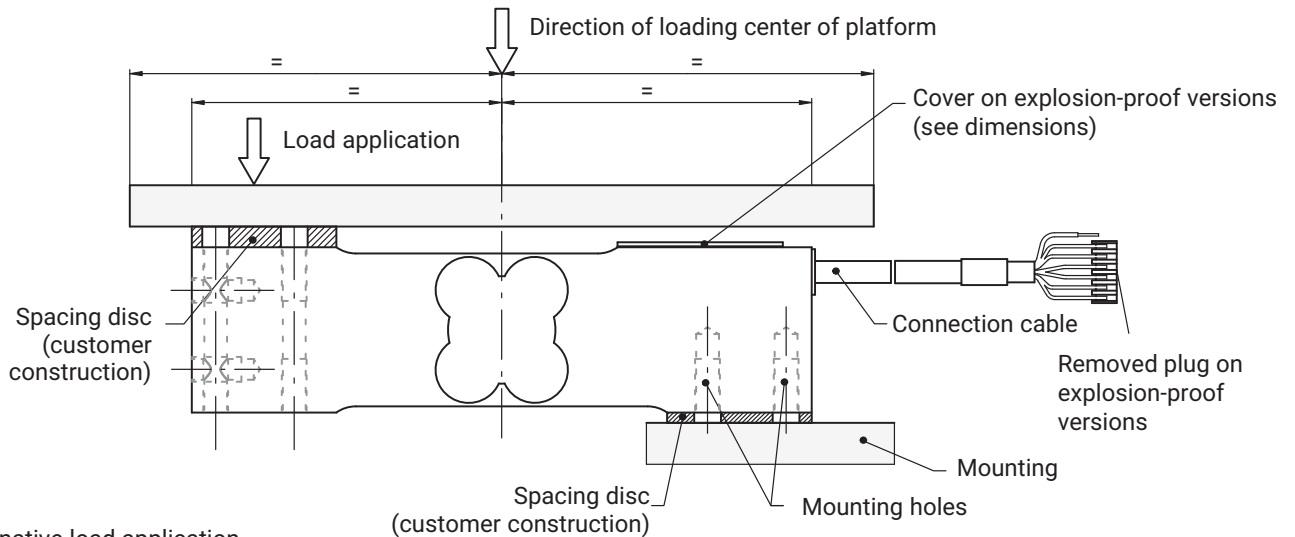
CABLE ASSIGNMENT

6-wire cable connection, 6 x 0.14 mm²/AWG 26 (available cable lengths: 1.5 m; 3 m; 6 m, 12 m)

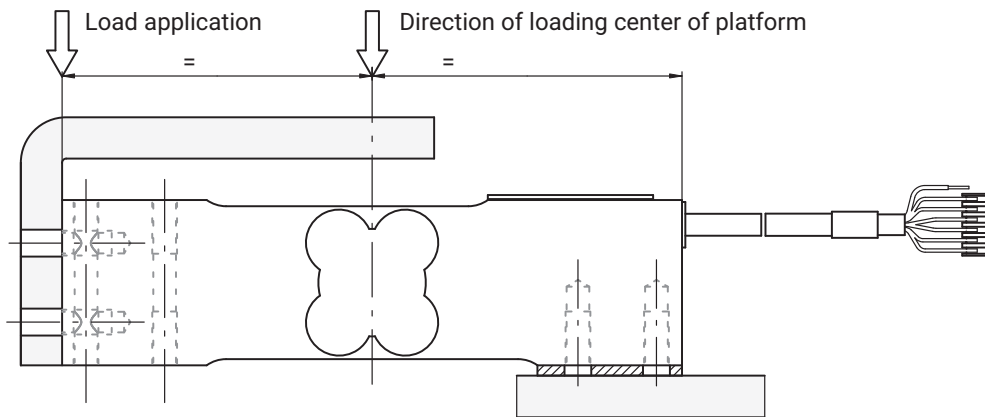
Schematic diagram of a TE connector (TE 3-640442-6), 6-pin



MOUNTING INSTRUCTIONS



Alternative load application



Maximum capacity	Socket head cap screw	Maximum tightening torque
7.5 kg ... 150 kg	M6 10.9	14 N·m
200 kg	M8 10.9	33 N·m

PRODUCT NUMBERS (OVERVIEW)

Type	PW15B
Accuracy class	C3-MR (OIML)
Comments	Cable length 3 m (six-wire config.)

Nominal (rated) load	Order number
7.5 kg	1-PW15BC3/7.5KG-1
15 kg	1-PW15BC3/15KG-1
20 kg	1-PW15BC3/20KG-1
30 kg	1-PW15BC3/30KG-1
50 kg	1-PW15BC3/50KG-1
75 kg	1-PW15BC3/75KG-1
100 kg	1-PW15BC3/100KG-1
150 kg	1-PW15BC3/150KG-1
200 kg	1-PW15BC3/200KG-1

K-PW15B... (STAINLESS STEEL), OPTIONAL VERSIONS

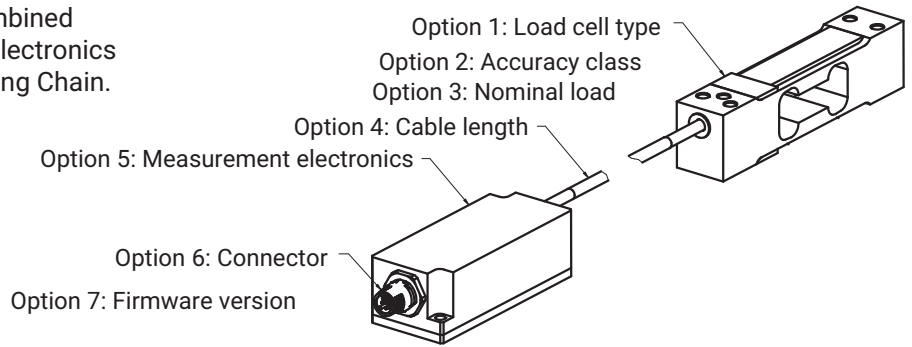
K-PW15B		
1	Code	Option 1: Mechanical design
	N	Standard
2	Code	Option 2: Accuracy class
	MR	C3-MR (OIML) (Multi Range)
3	Code	Option 3: Nominal load
	7.5	7.5 kg
	15	15 kg
	20	20 kg
	30	30 kg
	50	50 kg
	75	75 kg
	100	100 kg
	150	150 kg
4	Code	Option 4: Explosion protection
	N	No explosion protection
	AI1/21	ATEX+IECEX+FM Zone 1/21, intrinsically safe; ATEX/IECEX: II 2G Ex ia IIC T6/T4 Gb + II 2D Ex ia IIIC T125°C Db; FM(US/CA): Class I Zone 1 AEx/Ex ia IIC T4 Gb + Zone 21 AEx/Ex ia IIIC T125°C Db; FM(US): Class I, II, III Division 1, Groups A, B, C, D, E, F, G T4
AI2/22	ATEX+IECEX Zone 2/22, not intrinsically safe; ATEX/IECEX: II 3G Ex ec IIC T6/T4 Gc + II 3D Ex tc IIIC T125°C Dc	
5	Code	Option 5: Cable length
	1.5	1.5 m
	3	3 m (Standard)
	6	6 m
	12	12 m
6	Code	Option 6: Other
	N	Without
	A	2mV/V ±0.1% / 359 Ω ± 0.2 Ω (adjusted output, suitable for parallel connection)

K-PW15B - - - - - -

1 2 3 4 5 6

LCMC - LOAD CELL MEASURING CHAIN

A wide range of famous load cells combined with a choice of excellent measuring electronics makes your tailored Load Cell Measuring Chain.



K-LCMC-PW15B ordering options

K-LCMC		
1	Code	Option 1: Load cell type
	PW15B	PW15B
2	Code	Option 2: Accuracy class
	MR	C3 MR (OIML)
3	Code	Option 3: Nominal load
	7K50	7.5 kg
	15K0	15 kg
	20K0	20 kg
	30K0	30 kg
	50K0	50 kg
	75K0	75 kg
	100K	100 kg
	150K	150 kg
200K	200 kg	
4	Code	Option 4: Cable length
	0M3	0.3 m
	0M5	0.5 m
	1M0	1.0 m
	3M0	3.0 m
5	Code	Option 5: Measurement electronics
	105C	CAN (200 S/s)
	105R	RS485 (200 S/s) 2-wire
	112C	CAN (1,200 S/s)
	112R	RS485 (1,200 S/s) 4-wire
	RM42	Analog 4 ... 20 mA
	RM43	Analog 0 .. 10 V
RMIO	IO-link	
6	Code	Option 6: Connector
	M12A8	M12 A-coded, male, 8-pin [only with option 5 = 105C, 105R, 112C, 112R, RM42, RM43]
	M12A4	M12 A-coded, male, 4-pin [only with option 5 = RMIO]
7	Code	Option 7: Firmware version
	N	NA [only with option 5 = 105C, 105R, 112C, 112R, RM42, RM43]
	01	WTIO 1.07 [only with option 5 = RMIO]

K-LCMC -

P	W	1	5	B
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M	R
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