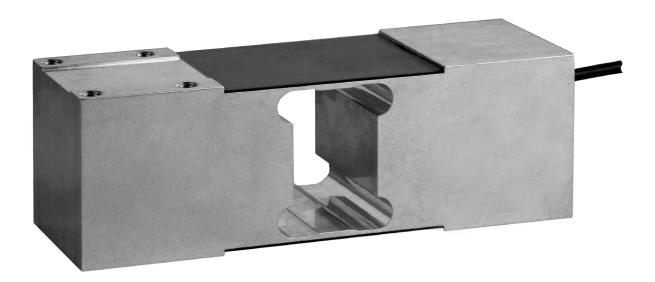
# PC60 single point load cell





#### **Product description**

The PC60 single point is a medium capacity load cell ideal for bench scales, platform scales and medical scales. Constructed from aluminium and environmentally sealed with potting compound to ensure durability. The PC60 is available in a wide range of capacities from 30kg thru to 750kg and is certified to 3000d OIML. Scales can be constructed with platform sizes of 600mm x 600mm.

#### **Applications**

Bench scales, platform scales, high speed checkweighers, medical scales.

#### Key features

Aluminium construction

Environmentally sealed by potting to IP67

Wide range of capacities from 30kg to 750kg

For platform sizes of up to 600 x 600mm

#### **Approvals**

OIML approval to C3 (Y = 7,500)

ATEX hazardous area approval for zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

#### **Accessories**

Compatible range of electronics

#### **Options**

Y = 15,000 for C3













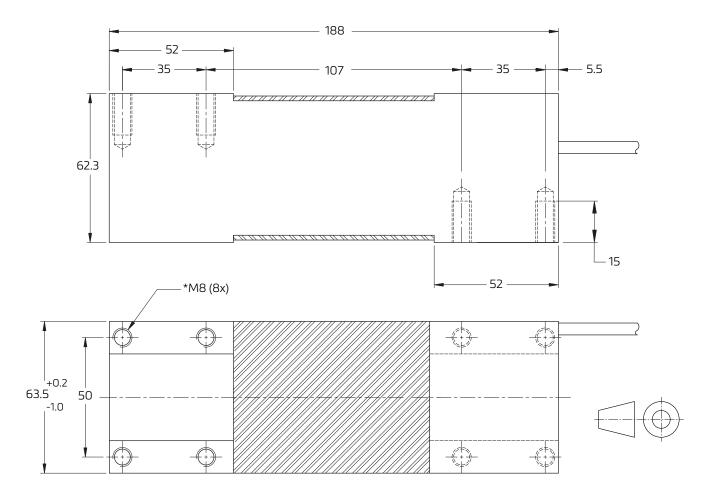


## **Specifications**

Accuracy class according to OIML R60  Maximum number of verification intervals (n <sub>-eco</sub> )  Maximum number of verification intervals (n <sub>-eco</sub> )  Minimum load cell verification intervals (v <sub>rain</sub> )  Temperature effect on minimum dead load output (TC <sub>o</sub> )  W*RO/10°C ± 0.0400 ± 0.0187  Temperature effect an sensitivity (TC <sub>vo</sub> )  W*RO/10°C ± 0.0200 ± 0.0100  Combined error  W*RO ± 0.0500 ± 0.0200  Non-linearity  W*RO ± 0.0400 ± 0.0166  Hysteresis  W*RO ± 0.0400 ± 0.0166  Greep error (30 minutes) / DR  W*RO ± 0.0600 ± 0.0166  Greep error (30 minutes) / DR  W*RO ± 0.0600 ± 0.0166  Optional: Min. load cell verification interval (v <sub>ron</sub> opt)  n.a. E <sub>roax</sub> /75,000  Optional: Temp. effect on min. dead load output (TC <sub>o</sub> opt)  W*RO/10°C  n.a. ± 0.0093  Rated Output (RO)  Zero balance  W*RO ± 5  Excitation voltage  V 515  Input resistance (R <sub>si</sub> )  Ω 413 ± 20  Output resistance (R <sub>si</sub> )  Ω 350 ± 25  Insulation resistance (100 V DC)  MΩ ≥ 5000  Safe load limit (E <sub>los</sub> )  Ultimate load  Safe side load  Maximum platform size; loading acc. to DIML R76  mm 600 x 600  Maximum platform size; loading acc. to DIML R76  mm 600 x 600  Moximum off centre distance at maximum capacity  mm 200  Compensated temperature range  °C -20+65 (ATEX -20+60)  oluminium, optional clear anodized  Sealing	Maximum sensity (F )	1	20 /50 /400 /450 /200 /200 /500 /500		
Maximum number of verification intervals ( $n_{max}$ ) n.a. 3,000  Minimum load cell verification intervals ( $n_{max}$ ) n.a. $E_{max}$ /7,500  Temperature effect on minimum dead load output ( $TC_n$ ) %*R0/10°C $\pm$ 0.0400 $\pm$ 0.0187  Temperature effect on sensitivity ( $TC_{wo}$ ) %*R0/10°C $\pm$ 0.0200 $\pm$ 0.0100  Combined error %*R0 $\pm$ 0.0500 $\pm$ 0.0200  Non-linearity %*R0 $\pm$ 0.0400 $\pm$ 0.0166  Hysteresis %*R0 $\pm$ 0.0400 $\pm$ 0.0166  Creep error (30 minutes) / DR %*R0 $\pm$ 0.0600 $\pm$ 0.0166  Optional: Min. load cell verification interval ( $v_{mo}$ opt) n.a. $E_{max}$ /15.000  Optional: Temp. effect an min. dead load output ( $TC_0$ opt) %*R0/10°C n.a. $\pm$ 0.093  Rated Output (R0) $mVV$ $2\pm 10\%$ Zero balance $mVV$ $2\pm 10\%$ Excitation voltage $mVV$ $mV$	Maximum capacity (E <sub>max</sub> )	kg	30 / 50 / 100 / 150 / 200 / 300 / 500 / 750		
Minimum load cell verification interval (V <sub>rimi</sub> )         n.a.         E <sub>max</sub> /7,500           Temperature effect on minimum dead load output (TCn)         %*RO/10°C         ± 0.0400         ± 0.0187           Temperature effect an sensitivity (TCmn)         %*RO/10°C         ± 0.0200         ± 0.0100           Combined error         %*RO         ± 0.0500         ± 0.0200           Non-linearity         %*RO         ± 0.0400         ± 0.0166           Hysteresis         %*RO         ± 0.0400         ± 0.0166           Creep error (30 minutes) / DR         %*RO         ± 0.0600         ± 0.0166           Optional: Min. load cell verification interval (v <sub>mn</sub> opt)         n.a.         E <sub>max</sub> /15,000           Optional: Temp. effect on min. dead load output (TC₀ opt)         %*RO/10°C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2 ± 10%         ± 5           Excitation voltage         V         515         Insulation resistance (R <sub>ic</sub> )         ± 5           Insulation resistance (R <sub>ic</sub> )         Ω         350 ± 25         Insulation resistance (100 V DC)         MΩ         ≥ 5000           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 300         Sofe load limit (E <sub>lim</sub> )         150           Maximum platform size; loading acc. to OIML R76         m			(GP)		
Temperature effect on minimum dead load output (TCn)         %*RO/10*C         ± 0.0400         ± 0.0107           Temperature effect on sensitivity (TCwo)         %*RO/10*C         ± 0.0200         ± 0.0100           Combined error         %*RO         ± 0.0500         ± 0.0200           Non-linearity         %*RO         ± 0.0400         ± 0.0166           Hysteresis         %*RO         ± 0.0400         ± 0.0166           Creep error (30 minutes) / DR         %*RO         ± 0.0600         ± 0.0166           Optional: Min. load cell verification interval (vmin opt)         n.a.         Emas /15,000           Optional: Temp. effect on min. dead load output (TCopt)         %*RO/10*C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2 ± 10%         ± 0.0093           Zero balance         %*RO         ± 5         ± 5           Excitation voltage         V         515         15           Input resistance (R <sub>0.0</sub> )         Ω         413 ± 20         413 ± 20           Output resistance (R <sub>0.0</sub> )         Ω         350 ± 25         15           Insulation resistance (100 V DC)         MΩ         ≥ 5000         25000           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 150         10	Maximum number of verification intervals (n <sub>max</sub> )		n.a.	3,000	
Temperature effect on sensitivity (TC <sub>RO</sub> )	Minimum load cell verification interval (v <sub>min</sub> )		n.a.	E <sub>max</sub> /7,500	
Combined error         %*RO         ± 0.0500         ± 0.0200           Non-linearity         %*RO         ± 0.0400         ± 0.0166           Hysteresis         %*RO         ± 0.0400         ± 0.0166           Creep error (30 minutes) / DR         %*RO         ± 0.0600         ± 0.0166           Optional: Min. load cell verification interval (v <sub>min</sub> opt)         n.a.         E <sub>max</sub> /15,000           Optional: Temp. effect on min. dead load output (TC <sub>0</sub> opt)         %*RO/10°C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2 ± 10%         2           Zero balance         %*RO         ± 5         4.0.0093           Excitation voltage         V         515         5           Input resistance (Ric)         Ω         413 ± 20         0           Output resistance (Ric)         Ω         350 ± 25         1           Insulation resistance (100 V DC)         MΩ         ≥ 5000         5           Safe load limit (E <sub>lin</sub> )         %*E <sub>max</sub> 150         1           Ultimate load         %*E <sub>max</sub> 300         5           Safe side load         %*E <sub>max</sub> 100         600 x 600           Maximum platform size; loading acc. to OIML R76         mm         600	Temperature effect on minimum dead load output (TC <sub>0</sub> )	%*RO/10°C	± 0.0400	± 0.0187	
Non-linearity         %*RO         ± 0.0400         ± 0.0166           Hysteresis         %*RO         ± 0.0400         ± 0.0166           Creep error (30 minutes) / DR         %*RO         ± 0.0600         ± 0.0166           Optional: Min. load cell verification interval (v <sub>min</sub> opt)         n.a.         E <sub>max</sub> /15,000           Optional: Temp. effect on min. dead load output (TC₀ opt)         %*RO/10°C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2 ± 10%         2           Zero balance         %*RO         ± 5         5           Excitation voltage         V         515         5           Input resistance (R <sub>loc</sub> )         Ω         413 ± 20         413 ± 20           Output resistance (R <sub>loc</sub> )         Ω         350 ± 25         1           Insulation resistance (100 V DC)         MΩ         ≥ 5000         2           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 150         1           Ultimate load         %*E <sub>max</sub> 300         300         2           Safe side load         %*E <sub>max</sub> 100         1         1           Maximum platform size; loading acc. to OIML R76         mm         600 x 600         600         1           Maximu	Temperature effect on sensitivity (TC <sub>RO</sub> )	%*RO/10°C	± 0.0200	± 0.0100	
Hysteresis         %*RO         ± 0.0400         ± 0.0166           Creep error (30 minutes) / DR         %*RO         ± 0.0600         ± 0.0166           Optional: Min. load cell verification interval (v <sub>min</sub> opt)         n.a.         E <sub>max</sub> /15,000           Optional: Temp. effect on min. dead load output (TC₀ opt)         %*RO/10°C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2 ± 10%           Zero balance         %*RO         ± 5           Excitation voltage         V         515           Input resistance (R <sub>LC</sub> )         Ω         413 ± 20           Output resistance (R <sub>out</sub> )         Ω         350 ± 25           Insulation resistance (100 V DC)         MΩ         ≥ 5000           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 150           Ultimate load         %*E <sub>max</sub> 300           Safe side load         %*E <sub>max</sub> 100           Maximum platform size; loading acc. to OIML R76         mm         600 × 600           Maximum platform size; loading acc. to OIML R76         mm         600 × 600           Maximum platform size; loading acc. to OIML R76         mm         600 × 600           Mozimum platform size; loading acc. to OIML R76         mm         600 × 600	Combined error	%*RO	± 0.0500	± 0.0200	
Creep error (30 minutes) / DR         %*RO         ± 0.0600         ± 0.0166           Optional: Min. load cell verification interval (V <sub>min</sub> opt)         n.a.         E <sub>max</sub> /15,000           Optional: Temp. effect on min. dead load output (TC₀ opt)         %*RO/10°C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2±10%         ± 5           Zero balance         ½*RO         ± 5         ± 5           Excitation voltage         V         515         15           Input resistance (R <sub>tC</sub> )         Ω         413 ± 20         350 ± 25           Insulation resistance (100 V DC)         MΩ         ≥ 5000         25000           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 150         150           Ultimate load         %*E <sub>max</sub> 300         300           Safe side load         %*E <sub>max</sub> 100         300           Maximum platform size; loading acc. to OIML R76         mm         600 x 600         600           Maximum off centre distance at maximum capacity         mm         200         -10+40           Compensated temperature range         °C         -20+65 (ATEX -20+60)         aluminium, optional clear anodized           Sealing         potted	Non-linearity	%*RO	± 0.0400	± 0.0166	
Optional: Min. load cell verification interval (v <sub>min</sub> opt)         n.a.         E <sub>max</sub> /15,000           Optional: Temp. effect on min. dead load output (TC₀ opt)         %*RO/10°C         n.a.         ± 0,0093           Rated Output (RO)         mV/V         2 ± 10%           Zero balance         %*RO         ± 5           Excitation voltage         V         515           Input resistance (R <sub>LC</sub> )         Ω         413 ± 20           Output resistance (R <sub>Dut</sub> )         Ω         350 ± 25           Insulation resistance (100 V DC)         MΩ         ≥ 5000           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 150           Ultimate load         %*E <sub>max</sub> 300           Safe side load         %*E <sub>max</sub> 100           Maximum platform size; loading acc. to OIML R76         mm         600 x 600           Maximum off centre distance at maximum capacity         mm         200           Compensated temperature range         °C         -10+40           Operating temperature range         °C         -20+65 (ATEX -20+60)           Load cell material         aluminium, optional clear anodized	Hysteresis	%*RO	± 0.0400	± 0.0166	
Optional: Temp. effect on min. dead load output (TC₀ opt)         %*RO/10°C         n.a.         ± 0.0093           Rated Output (RO)         mV/V         2 ± 10%           Zero balance         %*RO         ± 5           Excitation voltage         V         515           Input resistance (Rt₂)         Ω         413 ± 20           Output resistance (Roul)         Ω         350 ± 25           Insulation resistance (100 V DC)         MΩ         ≥ 5000           Safe load limit (Elim)         %*Emax         150           Ultimate load         %*Emax         300           Safe side load         %*Emax         100           Maximum platform size; loading acc. to OIML R76         mm         600 x 600           Maximum off centre distance at maximum capacity         mm         200           Compensated temperature range         °C         -10+40           Operating temperature range         °C         -20+65 (ATEX -20+60)           Load cell material         aluminium, optional clear anodized	Creep error (30 minutes) / DR	%*RO	± 0.0600	± 0.0166	
Rated Output (RO)         mV/V         2 ± 10%           Zero balance         %*RO         ± 5           Excitation voltage         V         515           Input resistance (R <sub>LC</sub> )         Ω         413 ± 20           Output resistance (R <sub>out</sub> )         Ω         350 ± 25           Insulation resistance (100 V DC)         MΩ         ≥ 5000           Safe load limit (E <sub>lim</sub> )         %*E <sub>max</sub> 150           Ultimate load         %*E <sub>max</sub> 300           Safe side load         %*E <sub>max</sub> 100           Maximum platform size; loading acc. to OIML R76         mm         600 x 600           Maximum off centre distance at maximum capacity         mm         200           Compensated temperature range         °C         -10+40           Operating temperature range         °C         -20+65 (ATEX -20+60)           Load cell material         aluminium, optional clear anodized           Sealing         potted	Optional: Min. load cell verification interval (v <sub>min</sub> opt)		n.a.	E <sub>max</sub> /15,000	
Zero balance       %*RO       ± 5         Excitation voltage       V       515         Input resistance (R <sub>cc</sub> )       Ω       413 ± 20         Output resistance (R <sub>out</sub> )       Ω       350 ± 25         Insulation resistance (100 V DC)       MΩ       ≥ 5000         Safe load limit (E <sub>lim</sub> )       %*E <sub>max</sub> 150         Ultimate load       %*E <sub>max</sub> 300         Safe side load       %*E <sub>max</sub> 100         Maximum platform size; loading acc. to OIML R76       mm       600 x 600         Maximum off centre distance at maximum capacity       mm       200         Compensated temperature range       °C       -10+40         Operating temperature range       °C       -20+65 (ATEX -20+60)         Load cell material       aluminium, optional clear anodized         Sealing       potted	Optional: Temp. effect on min. dead load output (TC <sub>0</sub> opt)	%*RO/10°C	n.a.	± 0.0093	
Excitation voltage $V$ 515  Input resistance (R <sub>tc</sub> ) $\Omega$ 413 ± 20  Output resistance (R <sub>out</sub> ) $\Omega$ 350 ± 25  Insulation resistance (100 V DC) $M\Omega$ ≥ 5000  Safe load limit (E <sub>lim</sub> ) $\%*E_{max}$ 150  Ultimate load $\%*E_{max}$ 300  Safe side load $\%*E_{max}$ 100  Maximum platform size; loading acc. to OIML R76 mm 600 x 600  Maximum off centre distance at maximum capacity mm 200  Compensated temperature range $\%*C$ $-10+40$ Operating temperature range $\%*C$ $-20+65$ (ATEX $-20+60$ )  Load cell material aluminium, optional clear anodized Sealing	Rated Output (RO)	mV/V	2 ± 10%		
Input resistance ( $R_{Lc}$ )  Q  413 ± 20  Output resistance ( $R_{out}$ ) $\Omega$ 350 ± 25  Insulation resistance (100 V DC) $M\Omega$ $\geq 5000$ Safe load limit ( $E_{lim}$ ) $W^*E_{max}$ 150  Ultimate load $W^*E_{max}$ 300  Safe side load $W^*E_{max}$ 100  Maximum platform size; loading acc. to OIML R76 $M$ $M$ $M$ $M$ $M$ $M$ $M$ $M$	Zero balance	%*RO	± 5		
Output resistance ( $R_{out}$ ) $\Omega$ $\Omega$ $\Omega$ $\Omega$ $\Omega$ $\Omega$ $\Omega$	Excitation voltage	V	515		
Insulation resistance (100 V DC) $M_Ω$ ≥ 5000 Safe load limit (E <sub>lim</sub> ) $%*E_{max}$ 150 Ultimate load $%*E_{max}$ 300 Safe side load $%*E_{max}$ 100 Maximum platform size; loading acc. to OIML R76 mm 600 x 600 Maximum off centre distance at maximum capacity mm 200 Compensated temperature range $°C$ −10+40 Operating temperature range $°C$ −20+65 (ATEX −20+60) Load cell material aluminium, optional clear anodized	Input resistance (R <sub>LC</sub> )	Ω	413 ± 20		
Safe load limit (E <sub>lim</sub> )  W*E <sub>max</sub> 150  Ultimate load  %*E <sub>max</sub> 300  Safe side load  %*E <sub>max</sub> 100  Maximum platform size; loading acc. to OIML R76  mm  600 x 600  Maximum off centre distance at maximum capacity  mm  200  Compensated temperature range  °C  -10+40  Operating temperature range  °C  -20+65 (ATEX -20+60)  Load cell material  Sealing  potted	Output resistance (R <sub>out</sub> )	Ω	350 ± 25		
Ultimate load %*E <sub>max</sub> 300  Safe side load %*E <sub>max</sub> 100  Maximum platform size; loading acc. to OIML R76 mm 600 x 600  Maximum off centre distance at maximum capacity mm 200  Compensated temperature range °C -10+40  Operating temperature range °C -20+65 (ATEX -20+60)  Load cell material aluminium, optional clear anodized  Sealing potted	Insulation resistance (100 V DC)	MΩ	≥ 5000		
Safe side load %*E <sub>max</sub> 100  Maximum platform size; loading acc. to OIML R76 mm 600 x 600  Maximum off centre distance at maximum capacity mm 200  Compensated temperature range °C -10+40  Operating temperature range °C -20+65 (ATEX -20+60)  Load cell material aluminium, optional clear anodized  Sealing potted	Safe load limit (E <sub>lim</sub> )	%*E <sub>max</sub>	150		
Maximum platform size; loading acc. to OIML R76 mm 600 x 600  Maximum off centre distance at maximum capacity mm 200  Compensated temperature range °C -10+40  Operating temperature range °C -20+65 (ATEX -20+60)  Load cell material aluminium, optional clear anodized  Sealing potted	Ultimate load	%*E <sub>max</sub>	300		
Maximum off centre distance at maximum capacity mm 200  Compensated temperature range °C -10+40  Operating temperature range °C -20+65 (ATEX -20+60)  Load cell material aluminium, optional clear anodized  Sealing potted	Safe side load	%*E <sub>max</sub>	100		
Compensated temperature range  °C  -10+40  Operating temperature range  °C  -20+65 (ATEX –20+60)  Load cell material  Sealing  potted	Maximum platform size; loading acc. to OIML R76	mm	600 x 600		
Operating temperature range  °C —20+65 (ATEX –20+60)  Load cell material aluminium, optional clear anodized  Sealing potted	Maximum off centre distance at maximum capacity	mm	200		
Load cell material aluminium, optional clear anodized  Sealing potted	Compensated temperature range	°C	-10+40		
Sealing potted	Operating temperature range	°C	-20+65 (ATEX -20+60)		
	Load cell material		aluminium, optional clear anodized		
	Sealing		potted		
Protection according EN 60 529	Protection according EN 60 529		IP67		
Packet weight kg 2	Packet weight	kg	2		

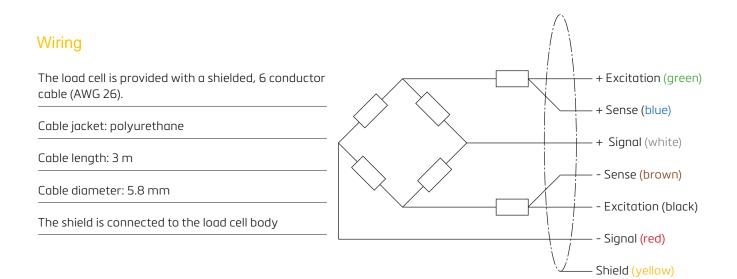
The limits for Non-Linearity, Hysteresis, and  $TC_{RO}$  are typical values. The sum of Non-linearity, Hysteresis and  $TC_{RO}$  meets the requirements according to OIML R60 with  $p_{LC}$ =0.7.

### Product dimensions (mm)



Mounting bolts M8 8.8; torque 25 Nm. Torque value assumes oiled threads.

<sup>\*</sup> Unified thread 5/16-18 UNC is available.



Specifications and dimensions are subject to change without notice.