

## Analogue Load Cells Model CPR-M

High-precision compression load cell with stainless steel housing

Available load capacities 20t / 35t / 50t

Approved up to 4000 divisions (according to OIML R60)

Self-adjusting function

EMC-approved

Protection class IP 68  
(Load cell junction box – protection class IP 66)

Operating temperature range -30°C up to +70°C

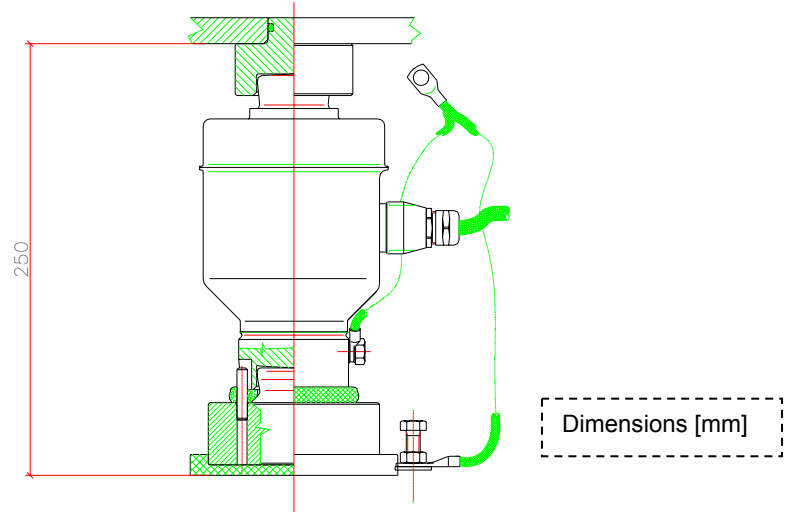
Optional available in **EX (i) version**



**Technical data**

**Load Cell CPR-M**  
 with accessories  
 \* (...) 50 t

**Cable**  
 Input: + green / - black  
 Output: + white / - red  
 Sense: + pink / - grey



Accuracy Class	C	C3/M	C1	C2	C3	C4
Maximum Capacity (E <sub>max</sub> )	(t)			20/35/50		
Max. N° divisions nLC		3000	1000	2000	3000	4000
Ratio $\gamma = E_{max} / V_{min}$		18000	5000	7000	12000	18000
Ratio $z = E_{max} / 2 DR$		8000				
Min. dead load E <sub>min</sub> /E <sub>max</sub>	%	0,5				
Safe overload	%	150				
Ultimate overload	% E <sub>max</sub>	300				
Safe sideload	% E <sub>max</sub>	50				
Excitation voltage	V(AC;DC)	5 ÷ 15				
Max. excitation voltage	V(AC;DC)	18				
Input resistance	$\Omega$	700 ± 5				
Output resistance	$\Omega$	705 ± 5				
Insulation resistance	M $\Omega$	≥ 5000				
Zero balance	% S	≤ 2				
Rated output	S (m V/V)	2 ± 0,1 %				
Combined error	% S	≤± 0,016	≤± 0,025	≤± 0,024	≤± 0,022	≤± 0,018
Non-repeatability	% S	≤± 0,010	≤± 0,015	≤± 0,015	≤± 0,010	≤± 0,010
Temp. effect on min. dead load	% S / 5°K	≤± 0,005	≤± 0,014	≤± 0,01	≤± 0,007	≤± 0,005
Temp. effect on sensitivity	% S / 5°K	≤± 0,005	≤± 0,0116	≤± 0,0058	≤± 0,005	≤± 0,004
Min. dead load (E <sub>min</sub> )	% S	≤± 0,006	≤± 0,05	≤± 0,025	≤± 0,016	≤± 0,0125
Creep in 30 min.	% S	≤± 0,0245	≤± 0,049	≤± 0,0245	≤± 0,0245	≤± 0,018
Creep from 20 to 30 min.	% S	≤± 0,0053	≤± 0,015	≤± 0,0075	≤± 0,0053	≤± 0,0037
Nominal temperature range	°C	-10 / +40				
Operating temperature range	°C	-30 / +70				
Storage temperature range	°C	-40 / +80				
Reference temperature	°C	+20				
Cable length	m	18 ± 0,2				
Weight	kg	ca. 3,5				
Effect of barometric variation		≤ val. Lim. OIML R60 ed 2000				
Protection class		IP 68				
Ex(i) version	-20°C ≤	⊕Ex II 1 G [Ex ia] IIC T5, T4; II 1 D [Ex ia] D 20 IP66 T85°C				
Z22 version	T <sub>amb</sub> ≤ +55°C	⊕Ex II 3 D IP6x T80°C				

**Notes:** Accuracy class (C1...C4) according to OIML R60. C3/M = special selection for multi-division or multiple range instruments. S = sensitivity at maximum capacity (kg) under gravitational acceleration (tested conditions:  $g = 9.805428 \text{ m/s}^2$ )

- Technical data subject to modification without notice -