

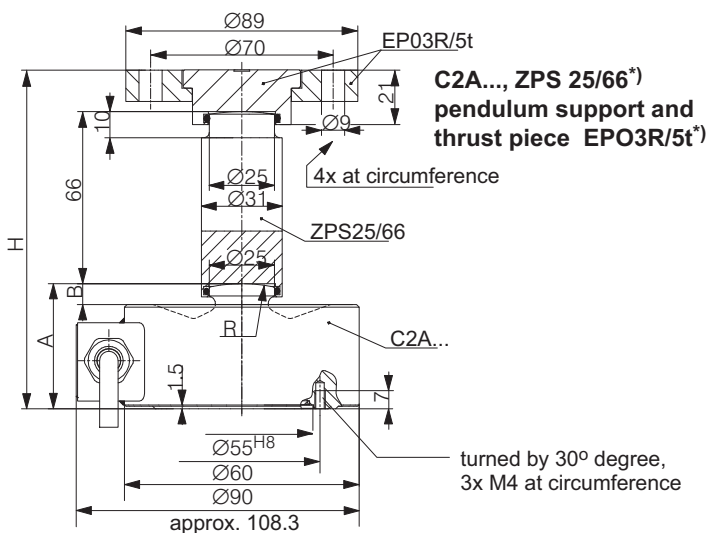
## C2A/... Load cells

### SPECIAL FEATURES

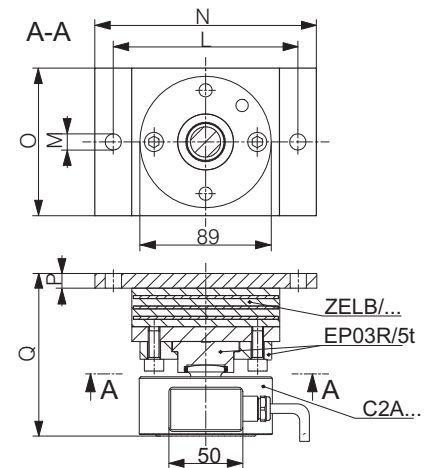
- Load cells and mounting aids made from stainless steel
- Max. capacities: 1 t ... 10 t
- Low profile
- Complies with OIML R60 regulations for up to 4000 verification intervals
- Meets EMC standards according to EN 45 501
- Explosion protection design as per ATEX, IECEx and FM



### DIMENSIONS



**C2A... with ZELB/...<sup>\*)</sup> rubber-metal bearing and EP03R/5t<sup>\*)</sup> thrust piece**



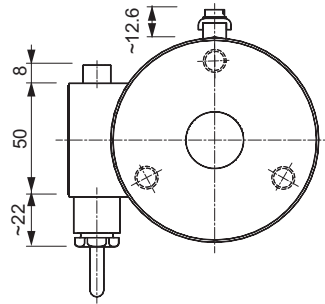
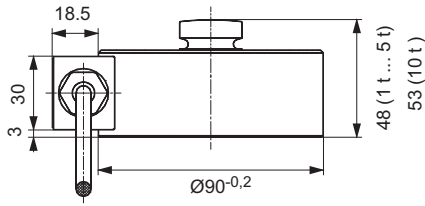
Dimensions (in mm; 1 mm= 0.03937 inches)

Max. capacity	A	B	R	H	S <sub>max</sub> (mm)	F <sub>R</sub> (% of load)	L	M	N	O	P	Q	S <sub>max</sub> (mm)	F <sub>R</sub> (N)
1 t; 2 t	48	10	30; 50	130	±5	1; 1.5	100	9	120	60	10	103	±4.5	400
5 t	48	8	60	130	±5	1.7	125	11	150	100	10	110	±8	620
10 t	53	8	80	135	±5	2.2	175	13	200	100	12	124	±9.5	810

S<sub>max</sub>: Max. sideways displacement at max. capacity F<sub>R</sub>: Restoring force for 1 mm sideways displacement

## DIMENSIONS C2A/... (CONTINUATION)

The dimensions of the cable terminal box and the housing connection of the load cells with **flameproof enclosure "d"** are not identical with those of the standard load cells.



Please note, when mounting; the fixed connection lead must have a mechanical securing.

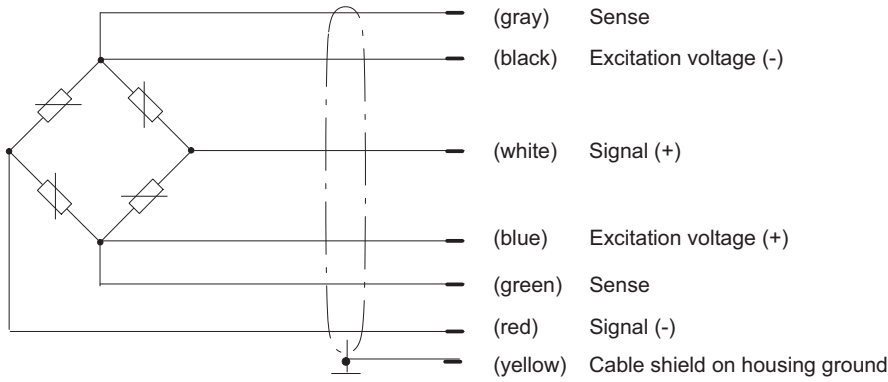
## SPECIFICATIONS

Type		C2A/...		
Max. capacity ( $E_{max}$ )		1t / 2t / 5t / 10t		
Accuracy class to OIML R60		D1	C3	C4
Max. number of load cell intervals ( $n_{LC}$ )		1000	3000	4000
Min. load cell verification interval ( $v_{min}$ )	% of $E_{max}$	0.0286	0.0100	0.0100
Sensitivity ( $C_n$ )	mV/V	2		
Tolerance on sensitivity	%	<±0.1000	<±0.0500	<±0.0500
Temperature effect on sensitivity ( $TK_C$ ) <sup>1)</sup>	% of $C_n/10K$	<±0.0420	<±0.0080	<±0.0070
Temperature effect on zero signal ( $TK_0$ )	% of $C_n/10K$	<±0.0400	<±0.0140	<±0.0140
Hysteresis <sup>1)</sup>	%	<±0.0500	<±0.0180	<±0.0140
Non-linearity ( $d_{lin}$ ) <sup>1)</sup>	%	<±0.0500	<±0.0170	<±0.0120
Creep ( $d_{DR}$ ) in 30 min	%	<±0.0500	<±0.0167	<±0.0125
Input resistance ( $R_{LC}$ )	Ω	340 ... 550		
Output resistance ( $R_0$ )	Ω	356 ±1.5 (for cable lengths <20 m) 359 ±1.5 (for cable length 20 m)	356 ±0.12 (for cable lengths <20 m) 359 ±0.12 (for cable length 20 m)	
Reference excitation volt. ( $U_{ref}$ )	V	5		
Nominal range of excitation voltage ( $B_U$ )	V	0.5 ... 12		
Max. permissible excitation voltage	V	18		
Isolation Resistance ( $R_{is}$ )	GΩ	>5		
Nominal temperature range ( $B_T$ )	°C [°F]	-10 ... +40 [+14 ... +104]		
Service temperature range ( $B_{tu}$ )	°C [°F]	-30 ... +70 [-22 ... +158]		
Storage temperature range ( $B_{tl}$ )	°C [°F]	-50 ... +85 [-58 ... 185]		
Save load limit ( $E_L$ )	% of $E_{max}$	150		
Breaking load ( $E_d$ )	% of $E_{max}$	300		
Side load limit ( $E_{lq}$ )	% of $E_{max}$	50		
Permissible dynamic load ( $F_{srel}$ ) <sup>2)</sup> (Vibration amplitude to DIN 50100)	% of $E_{max}$	100		
Deflection at max. capacity, ( $s_{nom}$ ) (±15 %)	mm	0.15 / 0.15 / 0.17 / 0.2		
Weight (G), approx.	kg	1.7 / 1.8 / 1.8 / 1.8		
Protection class (IP) to EN 60529 (IEC529)		IP67		
Material	Measuring body Cable gland Cable sheath	stainless steel nickel plated brass, silicone thermoplast. elastomer		

1) The data for Non-linearity ( $d_{lin}$ ), Hysteresis error ( $d_{hy}$ ) and Temperature effect on sensitivity ( $TK_C$ ) are typical values. The sum of these data meets the requirements according to OIML R60.

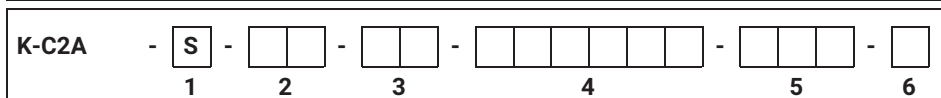
2) 70 % with C2A./10 t

## WIRING CODE



## C2A LOAD CELLS CONFIGURATION

Ordering number		
<b>K-C2A</b>		
<b>1</b>	Code	Option 1: Design
	<b>S</b>	Standard
<b>2</b>	Code	Option 2: Accuracy class
	<b>D1</b>	D1 (OIML)
	<b>C3</b>	C3 (OIML)
<b>3</b>	Code	Option 3: Maximum capacity
	<b>1</b>	1 t
	<b>2</b>	2 t
	<b>5</b>	5 t
<b>4</b>	Code	Option 4: Explosion protection
	<b>N</b>	No explosion protection
	<b>A11/21</b>	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 [only with option 6 = N]
	<b>A12/21</b>	ATEX+IECEX Zone 2/21, not intrinsically safe; ATEX/IECEX: II 3G Ex ec IIC T6/T4 Gc + II 2D Ex tb IIIC T125°C Db [only with option 6 = N]
<b>5</b>	Code	Option 5: Cable length
	<b>S6</b>	6 m (standard) [only with option 3 = 1 / 2 / 5]
	<b>S12</b>	12 m (standard) [only with option 3 = 10]
	<b>12</b>	12 m [only with option 3 = / 1 / 2 / 5]
<b>6</b>	Code	Option 6: Other
	<b>N</b>	Without



Not all codes can be combined with each other. Please take heed of the terms in the square brackets!

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