



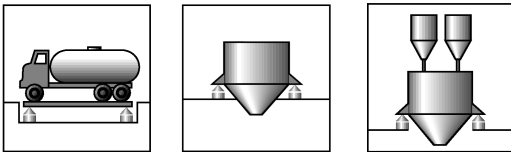
# C16AD1/100t C16A/200t

Self-restoring  
rockerpin load cell



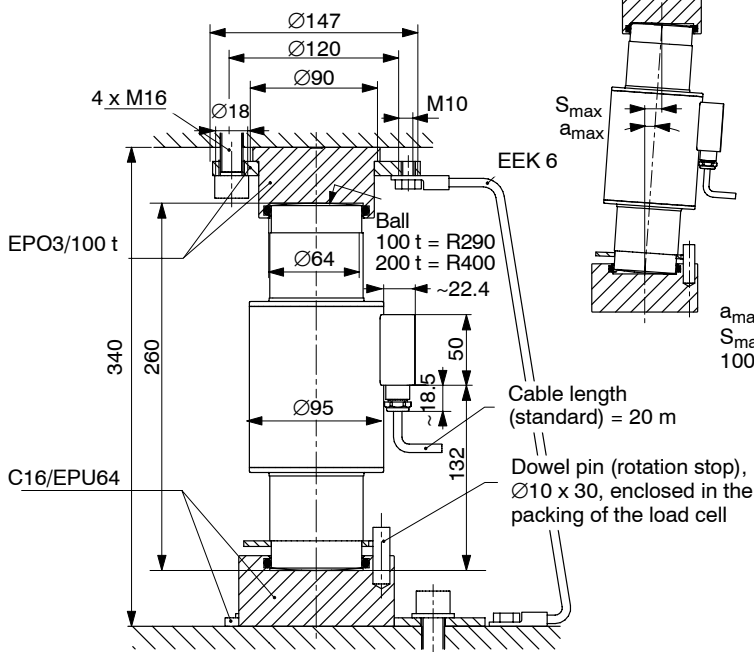
## Special features

- Self-restoring function
- Max. capacities: 100 t + 200 t
- Simple to install
- Stainless steel materials, laser welded, IP68
- Optimized for parallel connection by corner pre-adjustment
- Meets EMC / ESD requirements according to EN 45 501
- Explosion proof version acc. to ATEX 95 optional

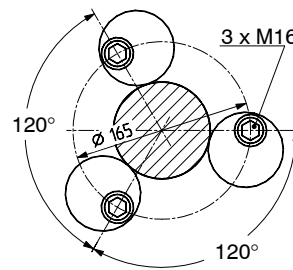


## Dimensions and Accessories (in mm; 1 mm= 0.03937 inches)

### C16A../100 t / 200 t+ EPO3/100 t + C16/EPU64

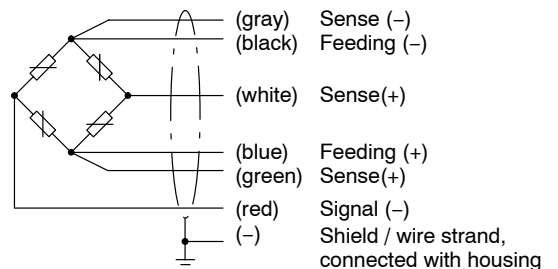


### Top view with C16/EPU64



$a_{max}$  (max. permissible skewing) 100 t = 4°; 200 t = 2°  
 $S_{max}$  (max. permissible lateral displacement of load introduction)  
 100 t = 18 mm°; 200 t = 9 mm

### Wiring code (6-wire circuit):



## Specifications

Type / Maximum capacity ( $E_{max}$ )		C16A D1 / 100 t	C16A / 200 t
Accuracy class according to OIML R60		D1 (0.0330 %)	0.1 %
Maximum number of load cell intervals ( $n_{LC}$ )		1000 (10000 NTEP III LM)	-
Minimum load cell verification interval ( $v_{min}$ )	% of $E_{max}$	0.0200 (0.0068 NTEP)	-
Sensitivity ( $C_n$ )	mV/V	2	
Sensitivity tolerance <sup>1)</sup>	%	±0.5 <sup>1)</sup>	
Temperature effect on sensitivity ( $TK_C$ )	% of $C_n$ / 10 K	±0.0250 <sup>2)</sup>	±0.0500
Temperature effect on zero signal ( $TK_0$ )		±0.0285	±0.0500
Hysteresis error ( $d_{hy}$ )	% of $C_n$	±0.0330 <sup>2)</sup>	±0.0500
Non-Linearity ( $d_{lin}$ )		±0.0300 <sup>2)</sup>	±0.1000
Creep ( $d_{cr}$ ), 30 min.		±0.0330	±0.0500
Input resistance ( $R_{LC}$ ) (black-blue)	$\Omega$	700 ±20	
Output resistance ( $R_0$ ) <sup>1)</sup> (red-white)		706 ±3.5 <sup>1)</sup>	
Reference excitation voltage ( $U_{ref}$ )	V	5	
Nominal range of excitation voltage ( $B_U$ )		0.5 ... 12	
Insulation resistance ( $R_{is}$ )	G $\Omega$	> 5	
Nominal range of ambient temperature ( $B_T$ )	°C [°F]	-10 ... +40 [15...105]	
Service temperature range ( $B_{tu}$ )		-30 ... +70 [-20...160]	
Storage temperature range ( $B_{tl}$ )		-50 ... +85 [-60...185]	
Limit load ( $E_L$ )	% of $E_{max}$	150	
Breaking load ( $E_d$ )		> 350	> 200
Permissible dynamic load ( $F_{srel}$ ) (vibration amplitude according to DIN 50100)		70	
Deflection at $E_{max}$ ( $s_{nom}$ ), approx.	mm	1.57	2.15
Weight (G) with cable, approx.	kg	8	9
Protection class according to EN60529 (IEC529)		IP68 (test conditions 100 h at 1 m water column) IP69 K (water at high pressure, steam jet cleaning)	
Material: Measuring body + housing Cable fitting Sealing Cable-sheath		stainless steel nickel-plated brass silicone thermoplastic elastomer	

<sup>1)</sup> Throughout corner pre-adjustment the Sensitivity and Output resistance are coordinated, so that the indicated value of the scale is within permissible limits when off-center load is applied.

<sup>2)</sup> 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 for  $p_{LC} = 0.7$  according to OIML R60 respectively NTEP.

## Options:

- **Lightning protection** (not possible with ATEX)
- **Explosion-proof versions according to ATEX 95:**
  - II 2 G EEx ia IIC T4 resp. T6 (Zone 1)<sup>\*</sup>
  - II 3 G EEx nA II T6 (Zone 2)
  - II 2 D IP68 T80°C (Zone 21)<sup>\*</sup>
  - II 3 D IP68 T80°C (Zone 22 for non-conductive dust)
  - II 2 G EExd IIC T6 (Zone 1)<sup>\*</sup> see separate datasheet
- **Cable 40 m long**

- Accessories** (to be ordered separately):
- **EPO3/100t** Thrust piece for above, incl. spanner
  - **C16/EPU64** Thrust piece for below, incl. 3 excentric washers
  - **EEK6** Earthing cable, 600 mm long

Modifications reserved.  
All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

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