



**LAHTI**  
PRECISION



# Lahti Precision Load Cells

## RC2 compression load cells 1 t ... 470 t

- Wide capacity range, 14 sizes between 1 t ... 470 t
- Low profile, robust stainless steel construction
- EU-tested, OIML R60, up to class C5
- Hermetically sealed construction (IP68)
- Ex versions also available
- Guarantee 2 years

Series RC2 compression load cell is ideally suited for verifiable scales as well as for various process weighing applications. It can be used with mounting kits for hopper scales, vehicle scales and silos.

The load cell is robust and designed for use in demanding industrial environments. The body is made of stainless steel and hermetically sealed by laser welding.

# RC2

## Technical specifications and dimensions

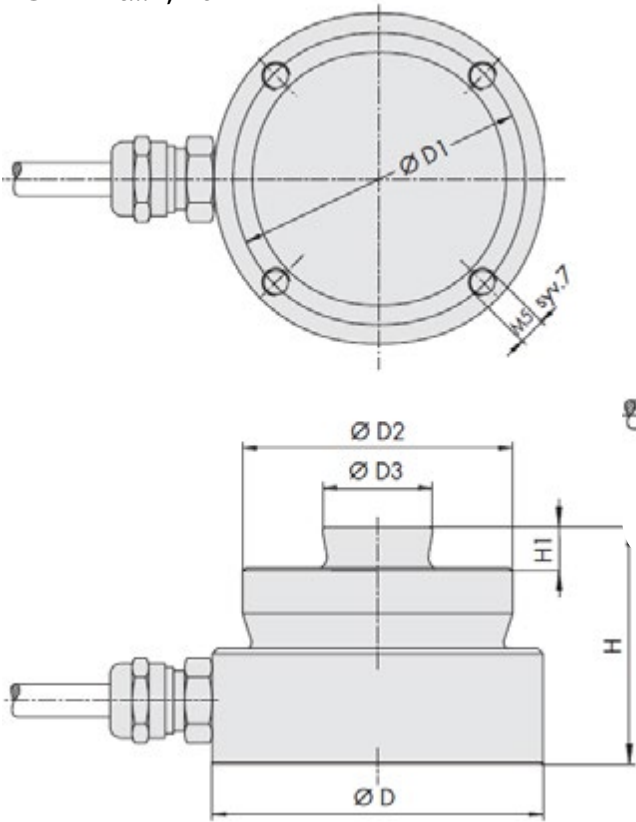
Nominal load $E_{max}$ t	Limit load $L_l$ t	Break load $L_d$ t	Nom. meas. displacement $h_n$ mm	Load Cell Weight kg
1	1.7	4	0.13	0.6
2.2	4	9	0.12	0.6
4.7	8	19	0.12	0.7
10	17	40	0.17	1.2
15	25	60	0.18	1.3
22	38	90	0.21	1.3
33	58	130	0.25	2.1
47	80	190	0.33	4.3
68	120	270	0.35	4.8
100	170	400	0.45	7.0
150	250	600	0.57	8.6
220	380	900	0.67	22.0
330	580	1200	0.85	29.0
470	700	1500	1.00	50.0

Admissible static side load  
 $L_q = 0.5 (E_{max} - 0.8 L_z)$   
but not higher than  
 $L_{qmax} = 0.3 E_{max}$ ;  
 $E_{max}$  = nominal load;  
 $L_z$  = load in measuring direction

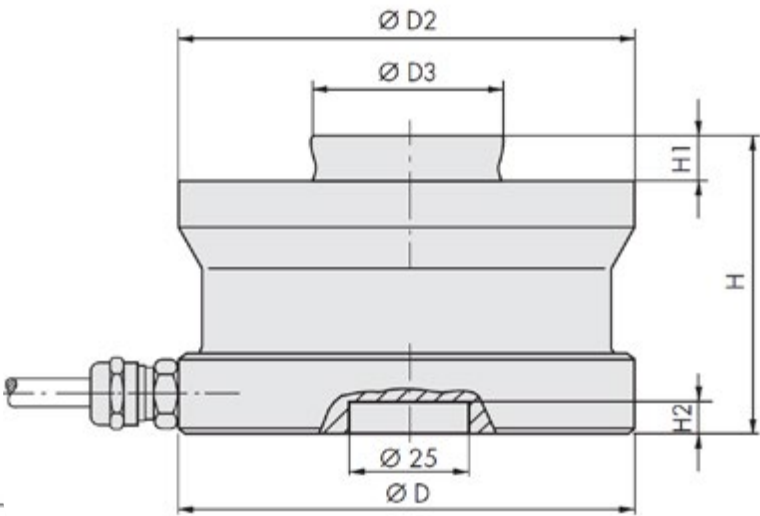
Type RC2	Dimensions mm						
	D	D1	D2	D3	H	H1	H2
1 t	60	53	49	20	43	7,5	-
2,2 t	60	53	49	20	43	7,5	-
4,7 t	60	53	49	20	43	7,5	-
10 t	75	-	75	30	50	6,5	7
15 t	75	-	75	30	50	6,5	7
22 t	75	-	75	30	50	6,5	7
33 t	95	-	95	40	65	10	7
47 t	130	-	130	60	75	14	7
68 t	130	-	130	60	85	14	7
100 t	150	-	150	70	90	16	7
150 t	150	-	150	70	100	16	7
220 t	225	-	225	100	130	24	10
330 t	225	-	225	100	145	24	10
470 t	270	-	270	120	170	28	10

Length of cable:  
5 m RC2 – 1 t...15 t  
5 m RC2 – 150 t...470 t  
12 m RC2 – 22 t...100 t

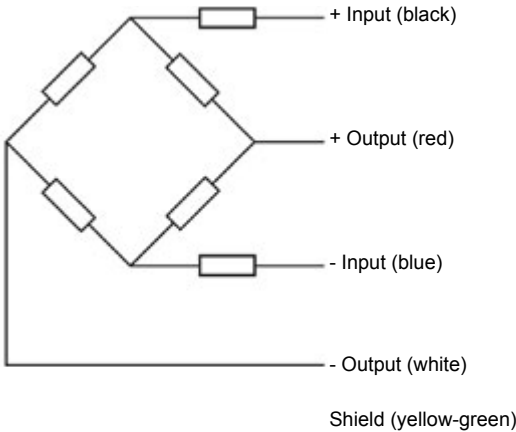
RC2 – 1 t...4,7 t



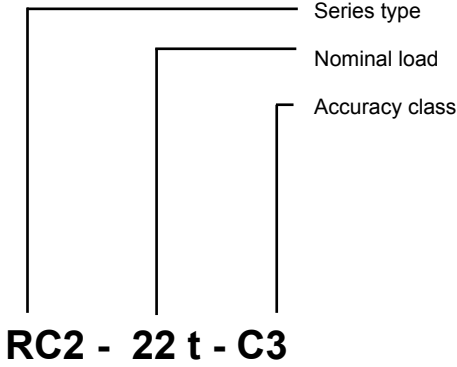
RC2 – 10 t...470 t



Wiring Schematic Diagram



Markings



# RC2

## Technical specifications

Accuracy class	Symbol	F	C3	C4	C5
Nominal load	E <sub>max</sub>	10 t - 470 t	1 t – 470 t	1t – 100 t	
Nominal sensitivity	C <sub>n</sub>	2,85 mV/V	2,85 mV/V		
Sensitivity tolerance	D <sub>c</sub>	±0,3 %	±0,1 %		
Combined error*	F <sub>comb</sub>	0,1 %	0,02 %	0,015 %	0,01%
Minimum dead load output return	F <sub>dr</sub>	±0,05 %	±0,016 %	±0,012 %	±0,01 %
Creep 30 min	F <sub>cr</sub>	±0,06 %	±0,024 %	±0,018 %	±0,014 %
Temperature coefficient of zero point /10 K <ul style="list-style-type: none"><li>Nominal temperature range</li><li>Temperature range</li></ul>	TK <sub>0</sub>	±0,1 % ±0,1 %	±0,007 % ±0,02 %	±0,0058 % ±0,02 %	±0,0058 % ±0,02 %
Temperature coefficient of sensitivity /10 K <ul style="list-style-type: none"><li>Nominal temperature range</li><li>Temperature range</li></ul>	TK <sub>c</sub>	±0,1 % ±0,1 %	±0,008 % ±0,02 %	±0,007 % ±0,02 %	±0,0062 % ±0,02 %
Minimum verification interval	v <sub>min</sub>		E <sub>max</sub> /20000	E <sub>max</sub> /24000	
Minimum service range	B <sub>amin</sub>		15 %	16,7 %	20,8 %
Max utilisation range	B <sub>amax</sub>		B <sub>amax</sub> = E <sub>max</sub>		
Input resistance	R <sub>e</sub>	4480 Ω ± 50 Ω			
Output resistance	R <sub>a</sub>	4010 Ω ± 10 Ω	4010 Ω ± 0,5 Ω		
Zero signal	S <sub>0</sub>	±2 %	±1 %		
Maximum voltage supply	U <sub>s max</sub>	100 V	60 V		
Nominal temperature range	B <sub>tn</sub>	- 10°C ... + 40°C			
Temperature range	B <sub>tu</sub>	- 40°C ... + 80°C			
Reference temperature	T <sub>r</sub>	+ 22°C			
Storage temperature range	B <sub>ts</sub>	- 50°C ... + 85°C			
Protection class	IP 68				

\*Combined error includes non linearity and hysteresis