

500 kg...16 t L/LA/LE/LAC

global weighing technologies



PR 6251

- Easy mounting
- Only 25/35 mm installation height
- Hermetically welded seal IP68 equivalent to NEMA 6
- Stainless steel construction
- Direct 4...20 mA output (LA)
- CENELEC Ex-version available (LE)

APPLICATION

- Level control for liquid and bulk materials

Technical Data

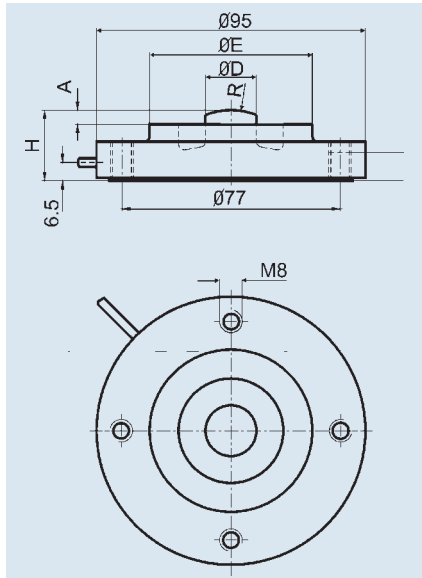
Accuracy class	
Minimum dead load	lowest limit of specified measuring range
Rated capacity	highest limit of specified measuring range
Safe overload	upper limit for measurements
Destructive load	danger of mechanical destruction
Rated output	relative output at nominal load
Tolerance on rated output	permissible deviation from rated output
Tolerance on zero signal	load cell output signal under unloaded condition
Repeatability error	max. change in load cell output for repeated loading
Creep, during 30 min	max. change in load cell output under nominal load
Non-Linearity	max. deviation from best straight line through zero
Hysteresis	max. difference in load cell output when loading from zero to nominal load and unloading back to zero
Temperature effect on zero	max. change of $S_{min}/10 K \Delta T$ over B_T referred to C_n
Temperature effect on output	max. change of $C/10 K \Delta T$ over B_T referred to C_n
Input impedance	between supply terminals
Output impedance	between measuring terminals
Insulation impedance	between measuring circuit and housing 100V _{DC}
Recommended supply voltage	to hold the specified performance
Max. supply voltage	permissible for continuous operation without damage
Nominal ambient temp. range	to hold the specified performance
Usable ambient temp. range	permissible for continuous operation without damage
Storage temperature range	Transportation and storage
Permissible eccentricity	permissible displacement from nominal load line
Vibration resistance	resistance against oscillation (IEC 68-2-6 Fc)
Air pressure effects	influence of ambient air pressure on S_{min}
Nominal deflection	max. elastic deformation under nominal load

	L	LA/LAC	LE	
E_{min}	0	5	0	% E_{max}
E_{max}	see table next page			
E_u	150	100	150	% E_{max}
E_d	300	300	300	% E_{max}
C_n	2.0	16 mA	2.0	mV/V
d_c	<4	<4	<4	% C_n
S_{min}	<4	4 mA	<4	% C_n
ϵ_R	<0.1	<0.1	<0.1	% C_n
d_{cr}	<0.1	<0.1	<0.1	% C_n
d_{Lin}	<0.25	<0.25	<0.25	% C_n
d_{hy}	<0.15	<0.15	<0.15	% C_n
TK_{Smin}	<0.15	<0.15	<0.15	% $C_n/10K$
T_{Kc}	<0.1	<0.1	<0.1	% $C_n/10K$
R_{LC}	645±60	-	645±60	Ω
R_o	635±15	-	635±15	Ω
R_{IS}	>5000 x 10 ⁶	-	>5000 x 10 ⁶	Ω
B_u	4...24	20...28	4...24	V
U_{max}	32	28	25	V
B_T	-10...+70	-10...+55	-10...+55	°C
B_{Tu}	-30...+95	-30...+70	-30...+95	°C
B_{Tl}	-40...+95	-40...+80	-40...+95	°C
S_{ex}	10	10	10	mm
-	20 g, 100 h, 10...150 Hz			
PK_{Smin}	≤20 g/kPa			
S_{nom}	up to 2 t <0.1/ 16 t <0.2 mm			

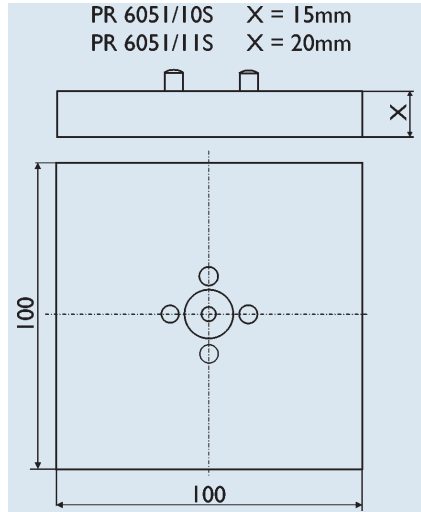
Definitions to VDI /VDE 2637



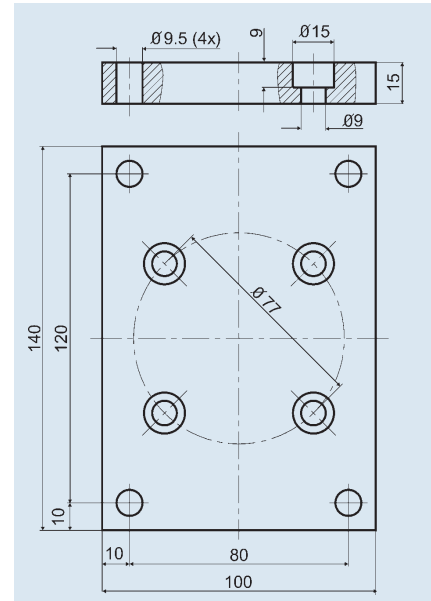
Nominal Load E _{max}	Order codes Type	Packing Size mm	Weight		Dimensions (mm)				
			net	shipping	A	D	E	H	R
500 kg	PR 6251/52 ..L/LA/LE/LAC	220 x 215 x 135	0.9 kg	1.2 kg	5	18	57.5	25	25
1 t	PR 6251/13 ..L/LA/LE/LAC	220 x 215 x 135	0.9 kg	1.2 kg	5	18	57.5	25	25
2 t	PR 6251/23 ..L/LA/LE/LAC	220 x 215 x 135	0.9 kg	1.2 kg	5	18	57.5	25	35
3 t	PR 6251/33 ..L/LA/LE/LAC	220 x 215 x 135	0.9 kg	1.2 kg	5	18	57.5	25	50
5 t	PR 6251/53 ..L/LA/LE/LAC	220 x 215 x 135	0.9 kg	1.2 kg	5	18	57.5	25	50
10 t	PR 6251/14 ..L/LA/LE/LAC	220 x 215 x 135	1.1 kg	1.4 kg	8	21.7	57.5	35	70
16 t	PR 6251/24 ..L/LA/LE/LAC	220 x 215 x 135	1.1 kg	1.4 kg	5	23	67	35	100



 PR 6251



Base plate
PR 6051/10S (500 kg...5 t)
PR 6051/11S (10 t...16 t)



Transition plate PR 6051/00S

Load cell construction

Hermetically sealed, welded stainless steel construction, filled with Polyurethane

Material: 500 kg... 10 t 1.4021 (DIN), 420 S 37 (B.S.)
16 t 1.4542 (DIN), S 604/ S 622 (B.S.), 17-4 PH (Int.)

Protection

IP68, IEC 529, equivalent to NEMA 6. The load cell can be submerged in water to a depth of 1.5 m for 10,000 hours.

Cable

robust, flexible, screened

sheath: Thermopl. Elastomer,
colour: grey (LE: blue, LA/LAC: green)
diameter: 5 mm, wires 4 x 0.35 mm²
length: 5 m
bending radius: ≥50 mm

Certificate of conformity

EEx ia IIC T6 (PTB Nr. Ex-00.E.2040)
II 2G EEx ia IIC T6 (PTB 00 ATEX 2039)

