

Features

- 10kg
- Low profile design
- OIML approval to C3
- High-grade Aluminium
- Environmental protection to IP67

RS PRO Load Cells

RS Stock No.: 0129006



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

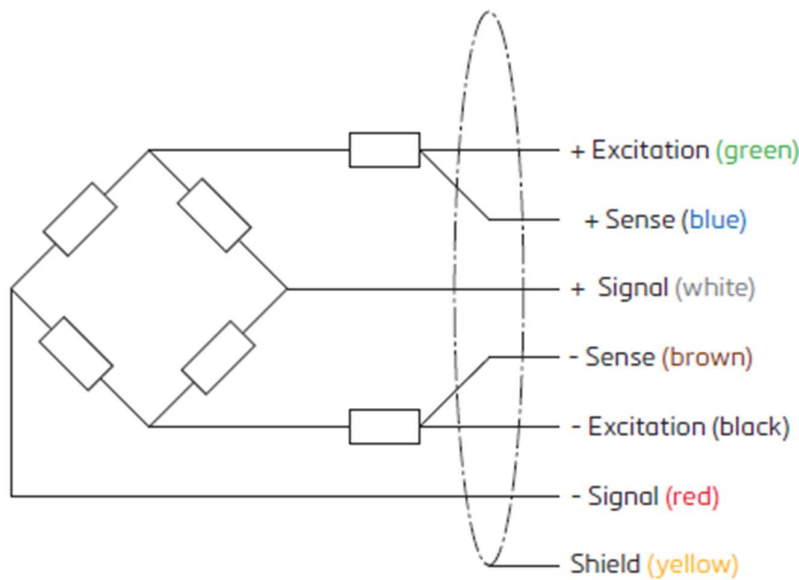
The RS PRO PC42 is a compact, low to medium capacity aluminium single point load cell, perfectly suited for an extensive array of weighing applications. These applications include retail scales, bench scales, small platform scales, medical scales, and multi-head weighers. Encased in an aluminium environmentally sealed housing with potting compound for enhanced durability, the RS PRO PC42 ensures reliable performance in various environments. This product meets industry standard size and mounting hole configuration making it ideal for both new equipment manufacturing and as a replacement fitting.

General Specifications

Maximum Capacity (E_{max})	10kg
Accuracy class, OIML R60	C3
Combined error (%RO)	± 0.0200
Creep error (30 minutes) / DR (%RO)	± 0.0166
Maximum number of verification intervals (n_{LC})	3,000
Minimum load cell verification interval (v_{min})	$E_{max} / 10,000$
Temperature effect on minimum dead load output (TC_0) (%RO/10°C)	± 0.0140
Temperature effect on sensitivity TC_{RO} (%RO/10°C)	± 0.0100
Non-linearity (%RO)	± 0.0166
Hysteresis (%RO)	± 0.0166
Rated Output (RO) (mV/V)	$2 \pm 10\%$
Zero balance (%RO)	$\leq \pm 5$
Excitation voltage (V)	5.....15
Input resistance (R_{LC}) (Ω)	413 ± 20
Output resistance (R_{out}) (Ω)	350 ± 25
Insulation resistance (100 V DC) (M Ω)	$\geq 5,000$
Safe load limit (E_{lim} (% E_{max}))	150
Ultimate load (% E_{max})	300
Safe side load (% E_{max})	100
Maximum platform size, loading acc. To OIML R76 (mm)	400x400
Maximum off centre distance at maximum capacity (mm)	135
Material	Aluminium
Applications	For Retail sales, bench scales, small platform scales, multi-head weighers, medical scales.

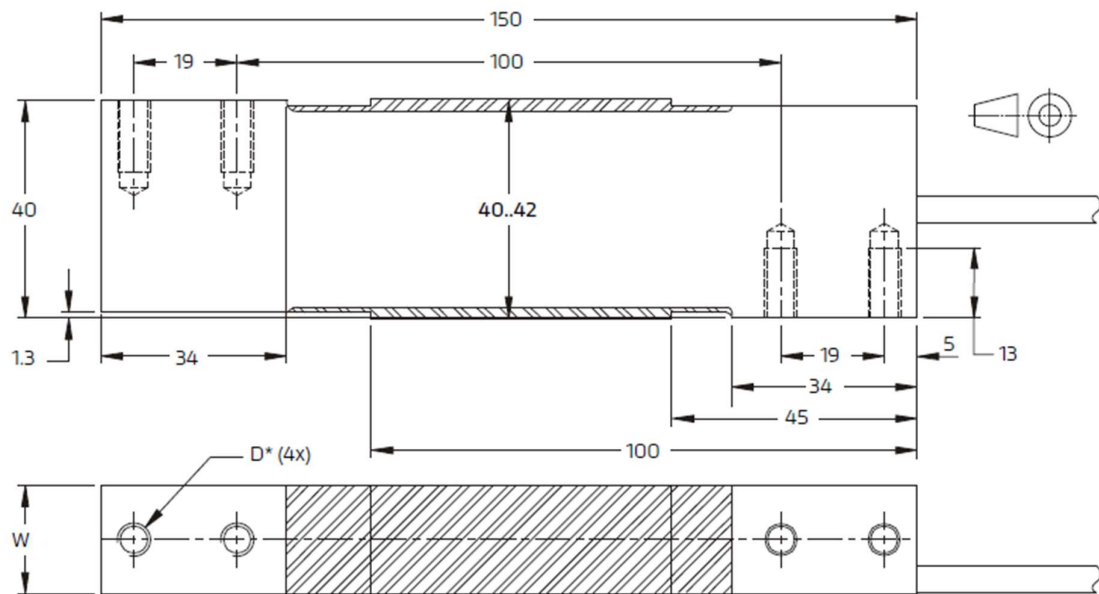
Electrical Specifications

Number of Conductors	6
Conductor Size	26AWG
Cable Length	3m
Cable Diameter	5.8mm
Note	Shield is connected to the load cell body



Mechanical Specifications

Length (mm)	150
Width (W) (mm)	20
Depth (mm)	40
Screw (D*)	M6 Class 8.8
Mounting Bolts Torque (Nm)	10



Operation Environment Specifications

Minimum Operating Temperature	-20°C
Maximum Operating Temperature	+65°C
Minimum Operating Temperature (ATEX)	-20°C
Maximum Operating Temperature (ATEX)	+60°C
Compensated temperature range	-10°C - +40°C

Protection Category

Sealing	Potted
IP Rating	IP67

Approvals

Compliance/Certifications	CE, UKCA
Approvals	OIML, ATEX Zones 0, 1, 2, 20, 21 and 22