

Features

- Capacities 30tf – 500tf.
- Linearity $\pm 0.023\%$ RO.
- IP68 rating.
- Optional connector output.

Applications

- Heavy duty weighing.
- Rolling mills.
- Industrial platforms.
- Test rigs.



Description

The C-CLS is a heavy duty, column design compression load cell produced from laser welded stainless steel. The design includes a self-aligning load button to maximise the performance.

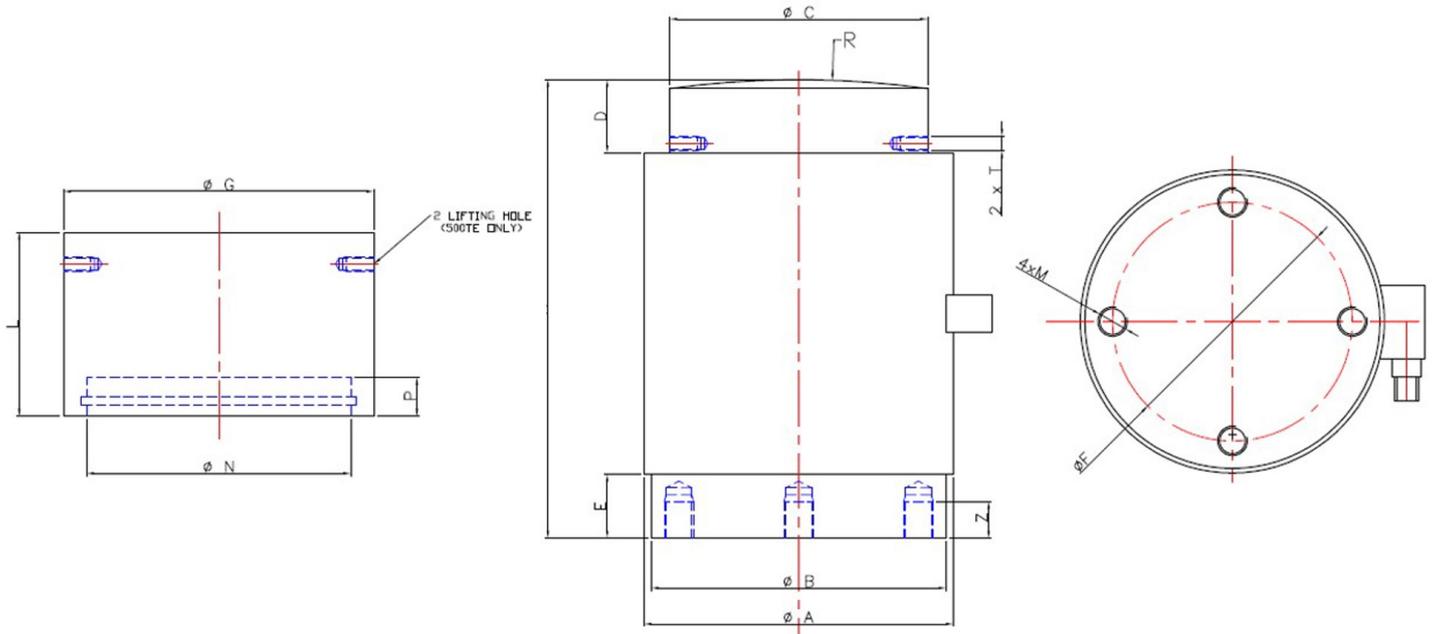
For optimum performance, PCM include the loading head for the C-CLS as standard for all quotations issued. If you would like the parts to be itemised on the quote, please let us know at the enquiry stage.

Typical Specification

PARAMETER	VALUE			UNITS
Capacities Range (E_{max})	30, 60, 100	200, 300	500	tf
Rated Output	2			mV/V
Nominal Sensitivity	$2 \pm 0.1\%$			$\pm\%$ of Rated Output
Minimum Verification Interval (V_{min})	$E_{max} / 10000$			-
Combined Error	0.023			$\pm\%$ of Rated Output
Non-Repeatability	0.010			$\pm\%$ of Rated Output
Zero Return AFTER 30 MINUTES	0.026			$\pm\%$ of Rated Output
Creep OVER 30 MINUTES	0.028			$\pm\%$ of Rated Output
Creep OVER 20 & 30 MINUTES	0.008			$\pm\%$ of Rated Output
Temperature Effect ON ZERO	0.024			$\pm\%$ of Rated Output/ $^{\circ}\text{C}$
Temperature Effect ON OUTPUT	0.017			$\pm\%$ of Rated Output/ $^{\circ}\text{C}$
Input Impedance	700 ± 2	350 ± 2		Ω
Output Impedance	700 ± 2	350 ± 2		Ω
Insulation Resistance	>5			G Ω
Zero Balance	1			$\pm\%$ of Rated Output
Excitation NOMINAL SUPPLY RANGE	1-15			Volts AC or DC
Excitation RECOMMENDED	10			Volts AC or DC
Excitation MAXIMUM	18			Volts AC or DC
Temperature Range NOMINAL	-10 to +40			$^{\circ}\text{C}$
Temperature Range COMPENSATED	-20 to +80			$^{\circ}\text{C}$
Temperature Range OPERATING	-20 to +70			$^{\circ}\text{C}$
Mechanical Limit SERVICE OVERLOAD	120			% of Rated Output
Mechanical Limit SAFE OVERLOAD	150			% of Rated Output
Mechanical Limit ULTIMATE OVERLOAD	300			% of Rated Output
Mechanical Limit MAXIMUM TRANSVERSE LOAD	50			% of Rated Output
Cable Length	5			m
Sensor Construction Material	Stainless Steel			-

PARAMETER	VALUE			UNITS
Environmental Protection	IP68			-
Weight	7	16	31	~KG

Outline Dimensions in millimetres



CAPACITY (tf)	ØA	ØB	ØC	D	E	F	ØG	H	L	M	ØN	P	R	T	Z
30	102	94	76	15	15	70	102	165	65	M8	79	12	200	-	16
60															
100															
200	129	122	106	20	14	90	129	215	80	M12	109	17	350	-	18
300															
500	168	160	140	35	35	130	168	250	100	M16	143	21	500	M8	20

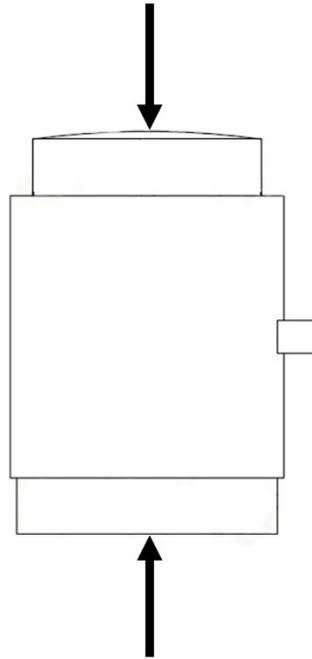
If the dimensions or specification do not suit, PCM has an in-house design team that should be able to satisfy your requirements.

Wiring Details

SCHEMATIC DIAGRAM	OUTPUT	CABLE ⁽¹⁾	MIL7M ^{OPTIONAL}	M12 ⁽²⁾ OPTIONAL
	EXCITATION +	RED	C	1
	SENSE +	ORANGE	F	5
	OUTPUT +	WHITE	A	3
	EXCITATION -	BLACK	B	2
	SENSE -	BLUE	G	6
	OUTPUT -	YELLOW	D	4
	-----	SHIELD	E	8

⁽¹⁾ PVC 105°C shielded cable, Ø5.2mm with 4 tinned Ø0.25mm² conductors. Shield connected to the body of the load cell. ⁽²⁾ **M12 OPTION:** Supplied with mating female 8 poles straight M12x1 connector, complete with 5m PVC 80°C shielded cable, Ø5.2mm with 6 tinned Ø0.25mm² conductors.

Loading Mode



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