

IPCD PRESSURE COMPENSATED DOWNHOLE LOAD CELL

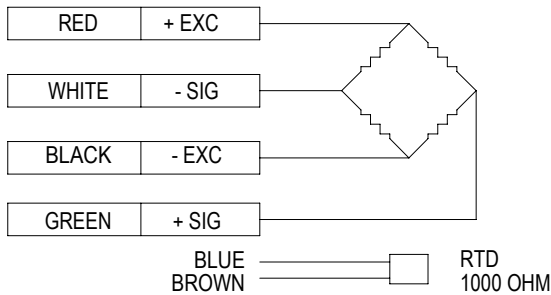
FEATURES & BENEFITS

- High accuracy
- Maintenance free
- Pressure compensated up to 20,000 PSI
- Temperature compensated up to 350°F
- Superior to hydraulically compensated wet load cells which have a short life expectancy and high operating costs

OPTIONS

- Custom mating adapters

ELECTRICAL



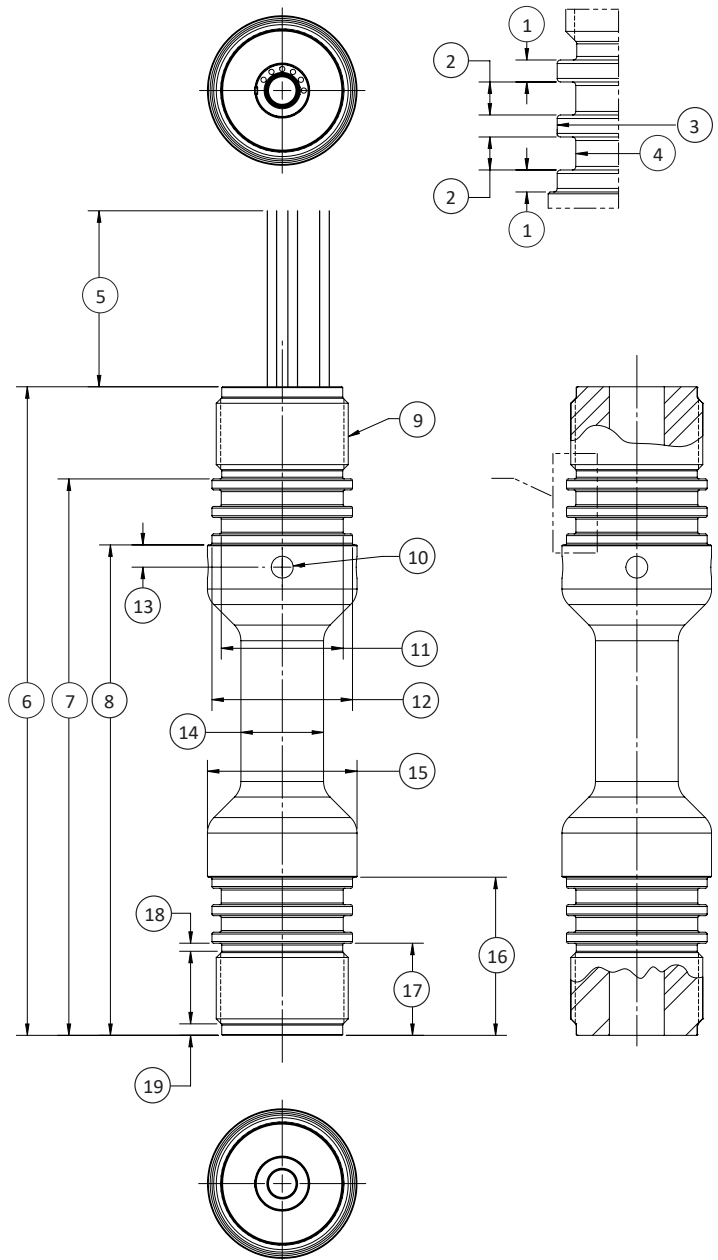
DIMENSIONS

	CAPACITY	
	U.S. (lbf)	Metric (kN)
	10K	44.5
	in	mm
(1)	0.13	3.3
(2)	0.19	4.83
(3)	Ø1.6	Ø 40.59
(4)	Ø1.4	Ø 35.2
(5)	24 AWG 18 in Lead Length (Minimum) Load Cell Connections	24 AWG 457.2 mm Lead Length (Minimum) Load Cell Connections
(6)	7.37	187.22
(7)	6.31	160.63
(8)	5.57	141.58
(9)	2X 1.50-12 UNF-2A	2X 1.50-12 UNF-2A
(10)	4X Ø0.25 ± 0.22	4X Ø6.35 ± 5.59
(11)	2X Ø1.39 Both Ends	2X Ø 35.2 Both Ends
(12)	3X Ø1.6 Both Ends	3X Ø 40.59 Both Ends
(13)	0.25	6.35
(14)	Ø0.940	Ø 23.88
(15)	Ø1.7 Both Ends	Ø 43.18 Both Ends
(16)	1.78 Both Ends	45.64 Both Ends
(17)	1.047 Both Ends	26.59 Both Ends
(18)	0.10 Both Ends	2.54 Both Ends
(19)	0.13 Both Ends	3.3 Both Ends

STANDARD CONFIGURATION



MODEL IPCD-10K (Shown)



International System of Units (SI) dimensions and capacities are provided for conversion only. Standard products have U.S. capacities and dimensions. SI capacities available upon special request and at an additional cost.

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SPECIFICATIONS

PARAMETERS			COMB
Force capacity	lbf	10K	
	kN	44.5	
Rated output	mV/V	1.0 ± 0.15	
Zero balance (offset)	mV/V	0 ± 0.065	
Operating pressure range	PSIG	0 to 20,000	
ELECTRICAL			
Input Resistance	Ohm	350 ± 15	
Output Resistance	Ohm	350 ± 10	
Insulation Resistance - Megohm MIN	VDC	1000 at 50	
RTD Resistance - Nom	Ohm	1000	
ACCURACY – (MAX ERROR)			
Nonlinearity - %FS MAX		± 0.25 at any constant compensated temperature	X
Hysteresis - %FS MAX		± 0.25 at any constant compensated temperature	X
Moment Sensitivity - % RO / MAX	in-lbf	0 .007	
	Nm	0.000790	
TEMPERATURE			
Operating Range	°F	-65 to 400	
	°C	-54 to 204	
Compensated Range	°F	40 to 350	
	°C	4 to 177	
Effect on Zero - %RO / deg	°F	0 ± 0.006 0 ± 0.6	X
	°C	0 ± 0.0011 0 ± 1.1	
Effect on Output - % / deg	°F	0 ± 0.003	X
	°C	0 ± 0.0055	
PRESSURE			
Pressure effect on zero - % RO / 20,000 PSIG MAX at room temperature or lbf / 20,000 PSIG	%	1.5	X
	lbf	150	
Creep due to pressure at 20,000 PSIG, 30 minutes - % RO MAX over compensated temperature range		0 ± 1.5	X
RSS combination of parameters checked in Comb column over compensated temperature range and 0 to 20,000 PSIG - (lbf) MAX		3.0 % RO (300)	
MECHANICAL			
Safe Axial Load - MAX	lbf	30K	
	kN	133.45	
Ultimate Axial Load - MAX	lbf	90K	
	kN	400.34	
Allowable Axial Moment - MAX	ft-lb	250	
	Nm	338.95	
Allowable Torsional Moment - MAX	ft-lb	850	
	Nm	1152.45	
Deflection at Capacity	in	0.003	
	mm	0.0762	
Excitation, Nominal	VDC/VAC	10	
Excitation, Maximum	VDC/VAC	15	
Weight	lbs	2.8	
	kg	1.27	
Flexure Material		High Strength Heat treated Stainless Steel	

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