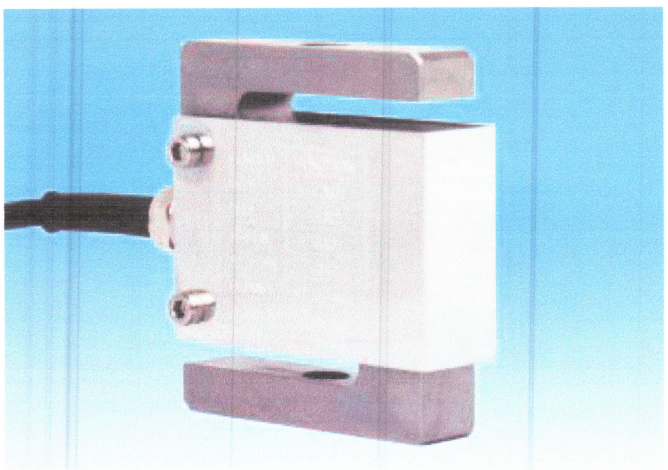
Sherborne Sensors
Clearly the first choice for precision .....

Series U4000

Universal tension/compression load cell for force & load measuring

capacities 50N-50kN (5kg-5000kg)



- high quality stainless steel load sensor
- precision machined mounting surfaces
- tension and compression operation
- 5 year warranty
- 6 wire system
- Dual bridge option
- very low deflection under load

The U4000 series is a range of high performance tension-compression load cells that provide unrivalled performance for a wide range of force and load measurement applications.

During manufacture, special attention is paid to control the parallel nature of the top and bottom mounting surfaces together with the alignment of the fixing threads, which makes the products ideal for direct mounting in material testing machines.

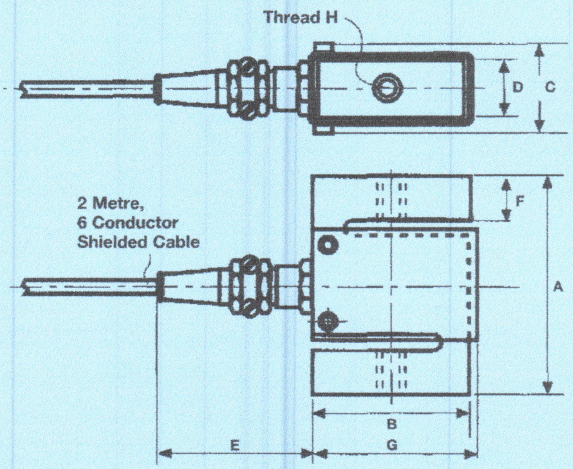
All versions benefit from very low deflection under load which is an important factor for many force measuring applications. Each and every load cell is fully compensated for thermal effects on zero and sensitivity and they all offer excellent linearity characteristics for both tension and compression use.

MECO MEASUREMENTS & CONTROLS
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technical specification sheet
Series U4000

	U4000	units
Standard Load Ranges	50, 250, 500N 2.5, 5, 10, 15, 25, 50kN	
Rated Output	2.7	mV/V ±0.25%
Combined Error	<±0.03	%*
Non-repeatability	<±0.015	%*
Creep (30 minutes)	<±0.03	%*
Temperature Effect on Zero Balance	<±0.002	%*/°C
Temperature Effect on Span	<±0.002	%*/°C
Compensated Temperature Range	0 to +60	°C
Operating Temperature Range	-20 to +80	°C
Safe Overload	150	%*
Ultimate Overload	300	%*
Zero Balance	<±0.015	%*
Input Resistance	375	Ω±30
Output Resistance	350	Ω±1.5
Insulation Resistance	>5000	MΩ @ 100V
Recommended Supply Voltage	10	V
Maximum Supply Voltage	15	V
Environmental Protection	IP65 option ≥ 500N	

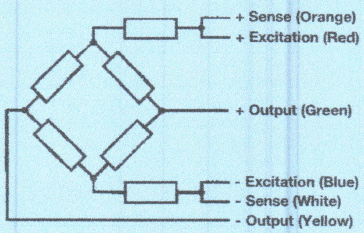
All percentages are related to Full Rated Load



Range	A	B	C	D	E	F	G	H
50-250N	60	50	23.5	12.7	52	8	35	M8 x 1.25
500-2500N	70	48	28.5	18	52	13	48	M8 x 1.25
5-10kN	75	48	38.5	30	53	13	48	M12 x 1.75
15kN	75	48	38.5	30	53	13	48	M16 x 2
25-50kN	90	63	47	38	66	22	48	M16 x 2

All dimensions in mm.

Electrical Connections
Via 6 core, 4m, 4mm dia., screened polyurethane cable.
Screen not connected electrically to load cell.



Shipping Weights: (kg)
U4000 50 - 250N = 0.30kg
U4000 500 - 2500N = 0.50kg
U4000 5 - 15KN = 1kg
U4000 25 - 50KN = 3kg

Construction
High quality stainless steel.

Options
Spherical rod end bearings.
Base plate with load button.

Our policy is one of continuous product enhancement. We therefore reserve the right to incorporate technical modifications without prior notification.

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