



Load Monitoring and Stress Analysis Specialists



Euroload Limited are load monitoring and stress analysis specialists across many industries.

With over 30 years of experience, Euroload have designed, applied and advanced technology in the load monitoring industry. Euroload specialise in the design and manufacture of bespoke solutions for load cells, load pins and integrated systems for the subsea, oil and gas, construction, food and beverage, and many other industries.

We have a vast selection of standard products available from stock along with our design team who will design a total system to meet your requirements. Bespoke solutions delivered on time is our specialty.

With a worldwide reach, Euroload is known for its high quality, reliability and extensive product range. All Euroload products are made in their purpose-built workshop and to the highest possible standard. Euroload are ATEX/ IEC approved to provide all hazardous areas with load monitoring throughout the world.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu



★ UK Manufacturer ★ European Brand ★ Worldwide Reach

Load shackles up to 2000 tonne

Load links up to 500 tonne

Compression load cells

Bespoke load pins

Running line monitors

Gantry crane load monitoring

Complete mooring systems

Sub-sea load cells

Calibration & repair

Strain gauging

Atex hazardous area available

Silo weighing

Complete mud plant monitoring system

Stress analysis

Load cells designed to customer specifications

Worldwide distributors with fully trained staff

Stock held in factory and agents

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu



TENSILE TELEMETRY LOAD LINK

Model ELTI



Ergonomically designed load cell.

Lightweight aluminium construction.

Batteries simply removed. No tools required.

50 hours continuous use on 3 AA batteries.

Can sleep for up to 18 months.

Link remote power down.

433 Mhz or 903 Mhz radio modules available.

IP67 ingress protection. Design Verified to 14 meters water depth.

Internal Aerial with 300 mtr range. No loss of range due to obstructions.

Overload monitoring built in to handset.

Dongle available to capture data direct to PC.



TENSILE TELEMETRY LOAD LINK continued..

Handset description.

The Euroload (ELT01) hand held weight display unit is available in cabled or wireless versions.

The tactile switch membrane is ergonomically designed to allow use with one hand. The environmentally sealed unit has an easily accessible battery compartment and uses three AA batteries.

All calibration and function settings are made through the keypad with prompts in clear text. The ELT01 also features 5 point linearization calibration and all units feature zero, tare and peak hold as standard.

The radio versions are available for 900 MHz, 433 MHz or 2.4 GHz and feature remote sleep command to the transmitter on power down. Up to 99 addresses id codes may be selected. All calibration data is held in the transmitted data.

Accessories include a rubber cover with lanyard eye, and serial communication package with data logging software or simple print out.

Display: 8 digits , 8mm high LCD backlit character displays.

Enclosure: 200mm x 95mm x 30mm

Operating Temperature: -10 to +40 degrees C

Input Range: Selectable 15 mV, 30mV or 2V

Update Speed: 7, 30 or lps-user selectable.

Internal resolution: 3000,000 counts for 10mV input (2mV per volt load cell)

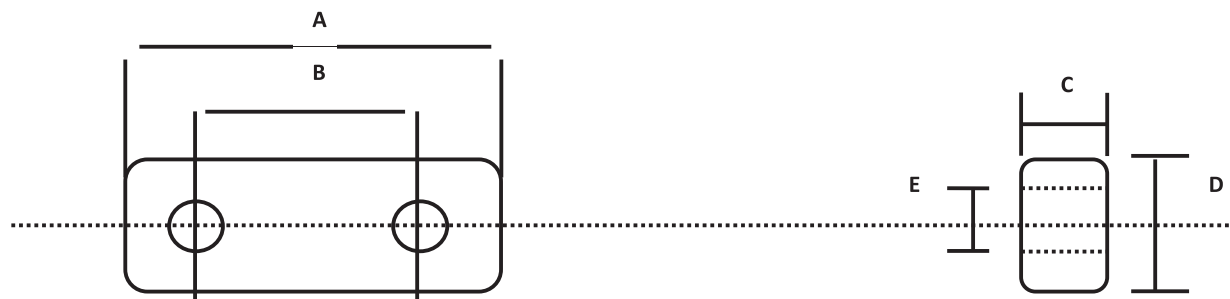
Calibration: Keyboard routine.

Power: 3 x AA type batteries

Power consumption: 50 hours continual, Handset sleep greater than 1 year.

Load link accuracy: +/- 1% of applied load.

Factor of safety: 5:1



TONNE	A	B	C	D	E	Weight (Kgs)
6.5	304	238	32	117	27	5
13.5	344	250	52	130	40	10
25	416	270	62	136	55	13
35	440	280	70	145	62	14
55	500	280	85	160	75	15
85	588	340	115	188	86	30
100	640	360	120	188	100	34
120	712	400	125	206	100	45
150	790	400	130	254	120	57
200	805	420	160	265	135	115
300	1000	550	180	325	155	220
400	1240	656	200	460	182	350

ALL SIZES IN MM



CABLED LOAD LINK

Model ELCI



Ergonomically designed load cell.

Lightweight aluminium construction.

Sealed to IP 67. IP 68 connector on load link and cable.

Cable length to suit customer.

Overload monitoring on handset.

RS 232 output (optional).

Four units of measurement.

Peak load monitoring.



CABLED LOAD LINK continued..

Handset description.

The Euroload (ELT01) hand held weight display unit is available in cabled or wireless versions.

The tactile switch membrane is ergonomically designed to allow use with one hand. The environmentally sealed unit has an easily accessible battery compartment and uses three AA batteries.

All calibration and function settings are made through the keypad with prompts in clear text. The ELT01 also features 5 point linearization calibration and all units feature zero, tare and peak hold as standard.

The radio versions are available for 900 MHz, 433 MHz or 2.4 GHz and feature remote sleep command to the transmitter on power down. Up to 99 addresses id codes may be selected. All calibration data is held in the transmitted data.

Accessories include a rubber cover with lanyard eye, and serial communication package with data logging software or simple print out.

Display: 8 digits , 8mm high LCD backlit character displays.

Enclosure: 200mm x 95mm x 30mm

Operating Temperature: -10 to +40 degrees C

Input Range: Selectable 15 mV, 30mV or 2V

Update Speed: 7, 30 or lps-user selectable.

Internal resolution: 3000,000 counts for 10mV input (2mV per volt load cell)

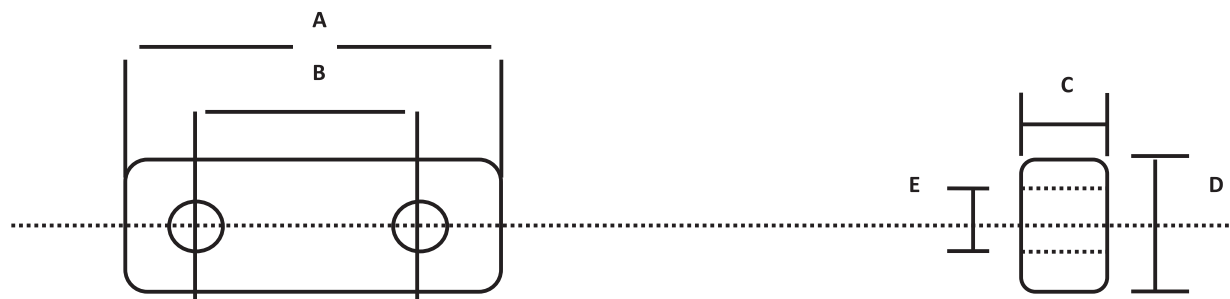
Calibration: Keyboard routine.

Power: 3 x AA type batteries

Power consumption: 50 hours continual, Handset sleep greater than 1 year.

Load link accuracy: +/- 1% of applied load.

Factor of safety: 5:1



TONNE	A	B	C	D	E	Weight (Kgs)
6.5	304	238	32	117	27	5
13.5	344	250	52	130	40	10
25	416	270	62	136	55	13
35	440	280	70	145	62	14
55	500	280	85	160	75	15
85	588	340	115	188	86	30
100	640	360	120	188	100	34
120	712	400	125	206	100	45
150	790	400	130	254	120	57
200	805	420	160	265	135	115
300	1000	550	180	325	155	220
400	1240	656	200	460	182	350

ALL SIZES IN MM



LARGE CAPACITY LOAD LINKS

Over 150 tonne



A brand new design of high capacity aluminium load links.

Key features: Large radius used on all corners to reduce injury's to staff, recessed battery compartment, screw off battery cover; internal Arial, design tested to over 10 meters water depth, 5:1 safety factor minimum, mechanical test cert and ultrasonic test cert with every link.

433 Mhz or 900 Mhz versions available.

Links designed up to 1000 tonne.

Dual outputs available. Redundancy can be built in.

Link shown in photographs is a 400 tonne capacity.

Customer LOGO on the case lid at no extra charge.

Two-year warranty on all Euroload manufactured products.

Links can be designed to your exact specifications.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu





TELEMETRY LOAD SHACKLES

Model G-4163



Standard range 12 to 85 tonne. As standard we use Van Beest G-4163 safety bow shackle. We can manufacture using any shackle manufacturer of your choosing.

Ergonomically designed load cell.

Stainless steel load pin. Down hole strain gauged

Batteries simply removed. No tools required.

50 hours continuous use on 3 AA batteries.

Can sleep for up to 18 months.

Shackle remote power down.

433 Mhz or 903 Mhz radio modules available.

IP67 ingress protection.

No loss of range due to obstructions. 300 mtr minimum.

Overload monitoring built in to handset.

Dongle available to capture data direct to PC.



TELEMETRY LOAD SHACKLES continued..



G-4163



Green Pin® Standard Shackles

bow shackles with safety bolt

- **Material** : bow and pin high tensile steel, Grade 6, quenched and tempered
- **Safety Factor** : MBL equals 6 x WLL
- **Standard** : EN 13889 and meets performance requirements of US Fed. Spec. RR-C-271 Type IVA Class 3, Grade A
- **Finish** : hot dipped galvanized
- **Temperature Range** : -20°C up to +200°C
- **Certification** : at no extra charges this product can be supplied with a works certificate, 3.1 material certificate, manufacturer test certificate, EC Declaration of Conformity and all shackles starting from 2 t can be supplied with DNV 2.7-1 certificate.
- **Note** : for details on dimensions and tolerances please consult our CAD drawings, these are available on request.

working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length bow	length bolt	width bolt	thickness nut	weight each
t	a	b	c	d	e	f	g	h	i	j	k	kg
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
0.5	7	8	16.5	7	12	29	20	48.5	42	34	4	0.06
0.75	9	10	20	9	13.5	32	22	56	50	40	5	0.11
1	10	11	22.5	10	17	36.5	26	63.5	60	46	8	0.16
1.5	11	13	26.5	11	19	43	29	74	67	51	11	0.22
2	13.5	16	34	13	22	51	32	89	82	58	13	0.42
3.25	16	19	40	16	27	64	43	110	98	75	17	0.74
4.75	19	22	46	19	31	76	51	129	114	89	19	1.18
6.5	22	25	52	22	36	83	58	144	130	102	22	1.77
8.5	25	28	59	25	43	95	66	164	150	118	25	2.58
9.5	28	32	66	28	47	108	75	185	166	131	27	3.66
12	32	35	72	32	51	115	83	201	178	147	30	4.91
13.5	35	39	80	35	57	133	92	227	197	162	33	6.54
17	38	42	88	38	60	146	99	249	202	175	39	8.19
25	45	50	103	45	74	178	126	300	249	216	43	14.22
35	50	57	111	50	83	197	138	331	269	238	49	19.85
42.5	57	65	130	57	95	222	160	377	301	274	54	28.33
55	65	70	145	65	105	260	180	433	330	310	62	39.59
85	75	83	162	73	127	329	190	527	380	340	71	62

In inch

working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length bow	length bolt	width bolt	thickness nut	weight each
t	a	b	c	d	e	f	g	h	i	j	k	lbs
	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	
0.5	1/4	5/16	5/8	1/2	1/2	1 1/4	3/4	1 7/8	1 3/4	1 1/4	1/4	0.13
0.75	3/8	1/2	3/4	3/4	3/4	1 1/4	1 1/4	2 1/4	1 3/4	1 1/2	5/16	0.25
1	1/2	5/8	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	2 1/2	2 1/4	1 3/4	3/8	0.34
1.5	3/4	1 1/8	1 3/4	1 1/2	1 3/4	1 3/4	1 3/4	2 3/4	2 1/2	2	1/2	0.48
2	1 1/4	1 1/2	1 3/4	1 1/2	1 3/4	2	1 3/4	3 1/4	3 1/4	2 1/2	1/2	0.92
3.25	1 1/2	1 3/4	1 3/4	1 1/2	1 3/4	2 1/4	1 3/4	4 1/4	3 3/4	2 3/4	3/4	1.62
4.75	1 3/4	2	1 3/4	1 1/2	1 3/4	3	2	5 1/4	4 1/2	3 1/2	1 1/4	2.59
6.5	1 3/4	2	1 3/4	1 1/2	1 3/4	3 1/4	2 1/4	5 3/4	5 1/4	4 1/4	1 1/4	3.9
8.5	2	2 1/4	2 1/4	1 3/4	1 3/4	3 1/4	2 1/4	6 1/4	5 3/4	4 3/4	1 1/2	5.69
9.5	2 1/4	2 3/4	2 3/4	1 3/4	1 3/4	4 1/4	2 1/4	7 1/4	6 1/4	5 1/4	1 1/4	8.06
12	2 1/4	2 3/4	2 3/4	1 3/4	2	4 1/4	3 1/4	7 3/4	7	5 3/4	1 1/4	10.81
13.5	2 1/4	2 3/4	3 1/4	1 3/4	2 1/4	5 1/4	3 1/4	8 1/4	7 1/4	6 1/4	1 1/4	14.42
17	2 1/4	2 3/4	3 1/4	1 3/4	2 1/4	5 1/4	3 1/4	9 1/4	7 3/4	6 1/4	1 1/4	18.06
25	2 3/4	3	4 1/4	1 3/4	2 1/4	7	4 1/4	11 1/4	9 1/4	8 1/4	1 1/2	31.34
35	3	3 1/4	4 1/4	1 3/4	2 1/4	7 1/4	5 1/4	13 1/4	10 1/4	9 1/4	1 1/2	43.77
42.5	3 1/4	3 3/4	5 1/4	2 1/4	2 1/4	8 1/4	6 1/4	14 1/4	11 1/4	10 1/4	1 1/2	62.46
55	3 1/4	3 3/4	5 1/4	2 1/4	2 1/4	10 1/4	7 1/4	17 1/4	13	12 1/4	1 1/2	87.27
85	3	3 1/4	6 1/4	2 1/4	2 1/4	12 1/4	7 1/4	20 1/4	14 1/4	13 1/4	1 1/2	136.69





LARGE CAPACITY LOAD SHACKLES

Model P-6036



Shackle range based on Van Beest P-6036. 120 to 1500 tonne.

Single or dual outputs available. Telemetry and cabled.

Ergonomically designed load cell.

Stainless steel load pin. Stainless steel end covers. Down hole strain gauged

Batteries simply removed. No tools required.

50 hours' continuous use on 3 AA batteries.

Can sleep for up to 18 months.

Shackle remote power down.

433 Mhz or 903 Mhz radio modules available.

IP67 ingress protection.

No loss of range due to obstructions. 300 meter minimum.

Overload monitoring built in to handset.

Dongle available to capture data direct to PC.



LARGE CAPACITY LOAD SHACKLES continued..



P-6036



Green Pin® Heavy Duty Shackles

bow shackles with safety bolt

- **Material** : bow and pin alloy steel, Grade 8 quenched and tempered
- **Safety Factor** : MBL equals 5 x WLL
- **Finish** : shackle bow painted silver, pin painted green (120 tons shackle is hot dipped galvanized)
- **Certification** : at no extra charges this product can be supplied with a works certificate, 3.1 material certificate, manufacturer test certificate, EC Declaration of Conformity and all shackles starting from 150 tons are supplied with a Lloyd's Register of Shipping Certificate on proof load
- **Note** : for details on dimensions and tolerances please consult our CAD drawings, these are available on request.

working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length bow	length bolt	width nut	thickness nut	weight each
t	a	b	c	d	e	f	g	h	i	j	k	kg
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
120	95	95	208	91	147	400	238	647	440	428	50	110
150	105	108	238	102	169	410	275	688	490	485	60	160
200	120	130	279	113	179	513	290	838	520	530	60	235
250	130	140	299	118	205	554	305	904	560	565	65	285
300	140	150	325	123	205	618	305	996	575	585	70	340
400	170	175	376	164	231	668	325	1114	690	665	70	560
500	180	185	398	164	256	718	350	1190	720	710	70	685
600	200	205	444	189	282	718	375	1243	810	775	70	880
700	210	215	454	204	308	718	400	1263	870	820	70	980
800	210	220	464	204	308	718	400	1270	870	820	70	1100
900	220	230	485	215	328	718	420	1296	920	860	70	1280
1000	240	240	515	215	349	718	420	1336	940	900	70	1480
1250	260	270	585	230	369	768	450	1456	1025	970	70	1990
1500	280	290	625	230	369	818	450	1566	1025	1010	70	2400

In inch

working load limit	diameter bow	diameter pin	diameter eye	width eye	width inside	length inside	width bow	length bow	length bolt	width nut	thickness nut	weight each
t	a	b	c	d	e	f	g	h	i	j	k	lbs
	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	
120	3 1/8	3 1/8	8 1/8	3 5/16	5 7/16	15 1/2	9 1/2	25 1/8	17 1/2	16 7/8	1 7/16	243
150	4 1/8	4 1/8	9 1/2	4 1/16	6 5/16	16 1/2	10 3/8	27 1/8	19 1/2	19 1/2	2 1/8	353
200	4 7/8	5 1/8	10 7/8	4 1/4	7 1/8	20 1/2	11 1/2	33	20 3/8	20 1/2	2 1/4	518
250	5 1/8	5 1/2	11 7/8	4 1/4	8 1/8	21 1/2	12	35 1/8	22 1/2	22 1/2	2 1/4	628
300	5 1/2	5 7/8	12 1/2	4 1/4	8 1/2	24 1/2	12	39 1/8	22 1/2	23 1/2	2 1/4	750
400	6 7/8	6 3/4	14 1/2	6 1/8	9 1/2	26 1/2	12 1/2	43 1/8	27 1/2	26 1/2	2 1/4	1235
500	7 1/2	7 1/2	15 1/2	6 1/8	10 1/2	28 1/2	13 1/2	46 1/8	28 1/2	27 1/2	2 1/4	1510
600	7 1/2	8 1/4	17 1/2	7 1/4	11 1/2	28 1/2	14 1/2	48 1/8	31 1/2	30 1/2	2 1/4	1940
700	8 1/2	8 1/2	17 1/2	8 1/2	12 1/2	28 1/2	15 1/2	49 1/8	34 1/2	32 1/2	2 1/4	2161
800	8 1/2	8 3/4	18 1/2	8 1/2	12 1/2	28 1/2	15 1/2	50	34 1/2	32 1/2	2 1/4	2425
900	8 3/4	9 1/2	19 1/2	8 1/2	12 1/2	28 1/2	16 1/2	51 1/2	36 1/2	33 1/2	2 1/4	2822
1000	9 1/2	9 1/2	20 1/2	8 1/2	13 1/2	28 1/2	16 1/2	52 1/8	37	35 1/2	2 1/4	3219
1250	10 1/2	10 1/2	23 1/2	9 1/2	14 1/2	30 1/2	17 1/2	57 1/8	40 1/2	38 1/2	2 1/4	4387
1500	11 1/2	11 3/4	24 1/2	9 1/2	14 1/2	32 1/2	17 1/2	61 1/2	40 1/2	39 1/2	2 1/4	5291



ECONOMIC RANGE ECO SHACKLE

Model ECO-T24



Design Range 6.5 to 55 tonne. Van Beest G-4163.

This range of load shackles has been designed to give a very economically priced, high accuracy, high function solution to load monitoring using small shackles.

T-24 new long range telemetry transmitter and receiver handset. Optional: handset to read multiple shackles, data logging up to 100 shackles in one area.

Contact us for full capability of the new T-24 range of electronics.

Standard features: 2 x AA bat powered transmitter, long battery life up to 5 years, remote on/off, up to 200 updates per second, IP67 ingress protection, minimum 5:1 safety factor, fully stainless steel load pin, down hole strain gauged, die-electric gel filled, optional load bobbin, supplied c/w Van-Beest G-4163 bow.

Sizes available, 6.5, 8.5, 9.5, 12, 13.5, 17, 25, 35 and 55 tonnes.

Most available ex-stock Aberdeen or at our Agents.



ATEX TELEMETRY LOAD SHACKLE

ATEX/IEC



Euroload Limited have developed a new range of Telemetry Load Shackles for hazardous areas.

Sizes are available from 6.5 to 2000 tonne. As standard we use Van Beest safety bow shackles but can quote using any quality manufactured bows.

The pin is replaced with a Euroload fully stainless steel, IP67, down hole strain gauged load pin fitted with a 2.4 Ghz zone I rated transmitter. The transmitter is powered from 2 off Energizer Lithium L91 AA batteries.

The handset receiver is also rated to zone I. The handset is also battery powered and uses 2 off AA L91 batteries. The handset can be configured to read in any unit of measurement to suit your application.

For options such as data logging, alarms, multiple shackle's working in one area, controls and further technical information regarding the hazardous certification please contact our sales team.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

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ALUMINIUM SHORT LINK

Model ELSL-01-XX



The new aluminium short link has been designed to work with our standard range of load shackles. This link increases the accuracy and repeatability of any load shackle.

The link reduces the head room required by placing the shackles as close as possible to each other.

Range available from 6.5 te to 1000 tonne. Special links built to order. Specials include reducing links for different size shackles. i.e. 6.5 to 8.5.

Manufactured from aerospace grade aluminium. Very light weight. 5:1 safety factor. Some sizes available from stock.

Will fit all Crosby/Van Beest/ Green pin safety bow shackles.

Data sheet with sizes will be available soon.



BESPOKE LOAD PINS

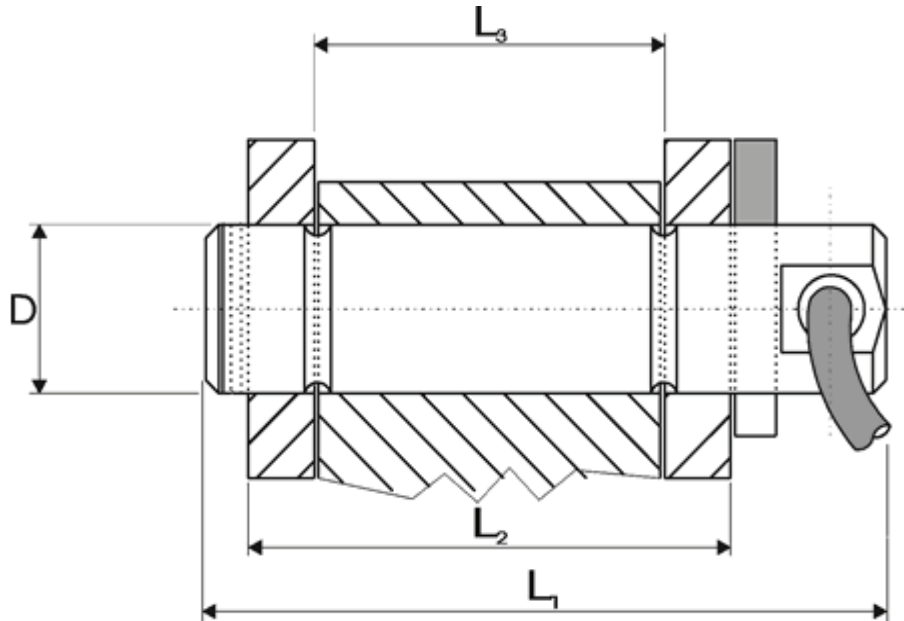
Model ELBP



- Load pin designed to customers specification
- Down hole strain gauging for ultimate sealing
- Standard sealing ip 68
- Fully stainless steel load pin
- Dual gauging available on most pins
- Output to suit customer requirements
- Minimum 5:1 safety factor
- Fast turnaround from design to delivery
- Stock holding of various size materials to reduce lead times
- Biggest pin supplied to date 2000 tonne



BESPOKE LOAD PINS continued..



PLEASE FILL IN CRITICAL DIMENSIONS FOR QUOTATION

LOAD PIN SPECIFICATIONS: TYPICAL VALUES

RATED LOAD	1.0 TO 2000 TONNE
PROOF LOAD	150 % OF RATED LOAD
SAFETY FACTOR	MIN 5:1 DEPENDING ON DESIGN UP TO 10:1
OUTPUT	1.0 TO 2.0 DEPENDING ON DESIGN. OPTIONAL 4-20MA OUTPUT AVAILABLE
EXCITATION VOLTAGE	5-15 VDC 10VDC RECOMENDED
BRIDGE RESISTANCE	700 OHM
INSULATION RESISTANCE	>2G OHM
OPERATING RANGE	-20 TO +80 DEG C
CABLE LENGTH	CUSTOMER TO SPECIFY
WIRING	RED + SUPPLY. BLUE – SUPPLY. GREEN + SIGNAL. YELLOW – SIGNAL.

Load measuring pins are the simplest and most reliable method of measuring loads. They can be used in a great number of situations, including the most severe environments – sub sea, mining offshore and heavy industry. They can be incorporated easily and economically into the load path by replacing any existing bearing pin.

Typical applications, rope sheaves, fairleads winches, cranes, mooring systems and many more.

Options available; various output types, millivolt, milliamp, volt, rs232, telemetry. Dual strain gauging. Dual outputs of different types, dual axis output, sub sea sealed, gland output or connectors, customer specifies connectors.



BESPOKE LOAD PINS

ATEX/IEC



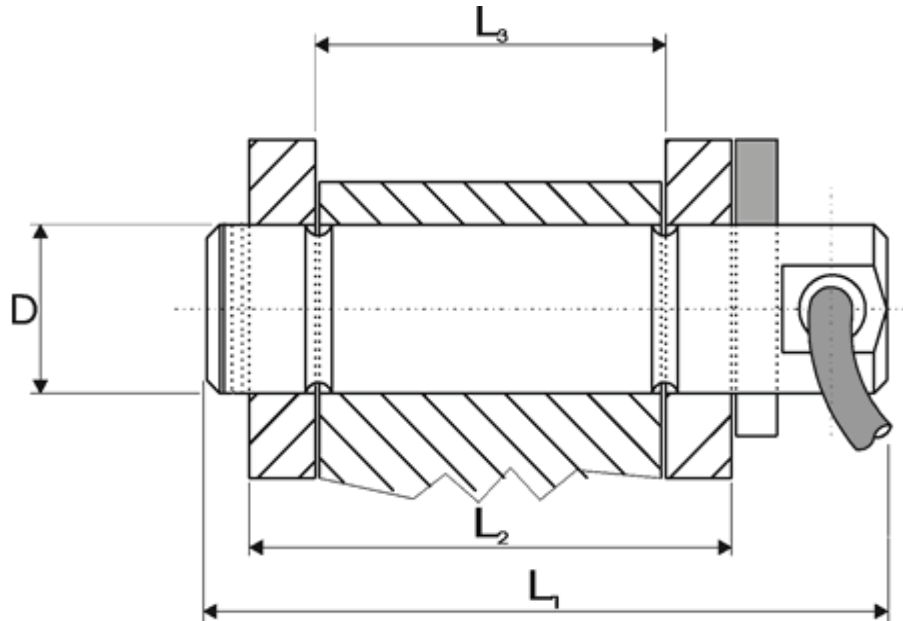
- ATEX/IEC approved load pins designed to your specifications.
- 2 wire 4-20ma output, Mv/v output or telemetry output available.
- Zone 0, I and 2 load pins available.
- Down hole strain gauged for ultimate sealing. IP67 as standard, Subsea spec on request.
- Fully stainless steel construction.
- Dual gauging available on request.
- Minimum 5:1 factor of safety.
- Fast turnaround from design to delivery.
- Stock holding of raw material to reduce lead times.
- Largest pin supplied to date is 2000 tonne WLL.
- Galvanic isolators and associated equipment available on request.
- Complete control systems design to meet your specifications.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu



BESPOKE LOAD PINS continued..



PLEASE FILL IN
CRITICAL
DIMENSIONS
FOR
QUOTATION

LOAD PIN

SPECIFICATIONS; TYPICAL VALUES. 2 wire 4-20 ma output.

RATED LOAD	1.0 TO 2000 TONNE
PROOF LOAD	150 % OF RATED LOAD
SAFETY FACTOR	MIN 5:1 DEPENDING ON DESIGN UP TO 10:1
OUTPUT	2 wire 4-20 ma. Optional Mv/v or telemetry
POWER SUPPLY	Max $U_i = 28VDC$, $I_o = 100ma$, $P_o = 0.7W$.
BARRIER BRIDGE IMPEDENCE	300 OHM Max
INSULATION RESISTANCE	>2G OHM
OPERATING RANGE	-40 TO +85 DEG C
CABLE LENGTH	CUSTOMER TO SPECIFY
WIRING	RED + SUPPLY. BLUE – SUPPLY.

The above spec is for our 2 wire 4-20 ma output option. The ATEX code for the above load pin is, Ex ia IIC T4
This design of load pin carries both ATEX and IEC approval.

Load measuring pins are the simplest and most reliable method of measuring loads. They can be used in a great number of situations, including the most severe environments – sub sea, mining offshore and heavy industry. They can be incorporated easily and economically into the load path by replacing any existing bearing pin.

Typical applications, rope sheaves, fairleads winches, cranes, mooring systems and many more.

Options available; various output types, millivolt, milliamp, telemetry. Dual strain gauging. Dual outputs of different types, dual axis output, sub sea sealed, gland output or connectors, customer specifies connectors.



LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu



BESPOKE EXD CONTROL PANELS

ATEX/IEC



At Euroload Limited we can supply complete Bespoke system for Hazardous areas including EXD panels.

The above EXD panel for a Norwegian client displays the load from four off Euroload zone I IS load pins and records all the data on a ABB SM500 video graphic recorder. Four channels show the individual load and channel 5 shows the total.

With no customer interaction, the system records all results to a SD card inside the recorder. There are 3 alarms on this panel controlling a traffic light system and a 6.25-amp DC shut down signal to stop the hydraulic power pack.

The above system was designed to meet the customers' requirements and supplied within five weeks of the order being placed.

For any enquiry regarding hazardous area products from EXD, IS, telemetry, load pins, load shackles, please contact our sales team.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu



COMPRESSION LOAD CELLS

Model ELCCLC-XX



Euroload Cylinder Compression Load Cells have been designed for the harshest of environments for multiple applications including, silo weighing, hydraulic ram verification and recording of loads, centre of gravity calculations, pile testing and many more.

Fully stainless steel load element and swivel top cap.

Optional loading base.

Output via cable gland (for fixed installations) or IP68 Amphenol connector with customer specified cable length.

Mv/v output as standard. Optional outputs available, 4-20 ma, voltage, RS485.

Standard range from 25 to 1000 tonne. Bespoke cells can be built to customer's specification.

Hollow bore versions available on request.



COMPRESSION LOAD CELLS continued..

Technical Data

Standard load ranges	Te	100,200,300,500,1000.
Full Load output	mV/V	1.5 +/-0.5%
Excitation voltage (recommended) dc or ac	V	10
Excitation voltage (maximum) dc or ac	V	20
Safe service load	%	150
Ultimate load	%	500
Safe side load	%	100
Combined error (non-linearity & hysteresis)	%	<+/- 0.2
Non-Repeatability	%	<+/- 0.02
Output at zero load	%	<+/- 1.0%
Input resistance	ohms	700 (500-1000te 1400)
Output resistance	ohms	700 +/-2
Creep after 30 minutes (20 deg C)	%	<+/- 0.05%
Operational temperature range	deg C	-20 to +80
Compensated temperature range	deg C	-10 to +40
Temperature coefficient of zero	%/C	<+/-0.005
Temperature coefficient of span	%/C	<+/-0.003
Environmental protection		IP67
Cable length standard	m	10
Insulation	M ohms	>2 G at 100V.dc

NOTE: All percentages related to Full Rated Load

Electrical Connections

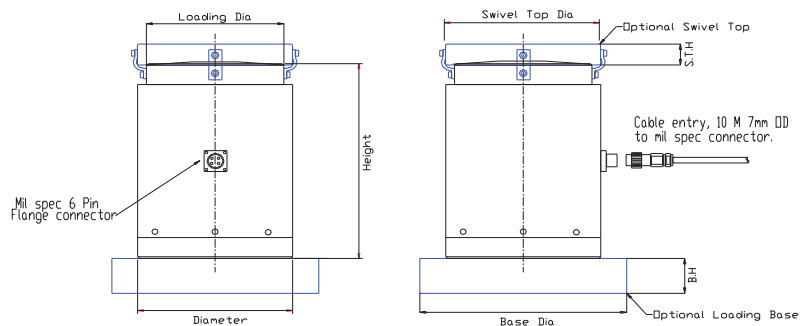
Red + input Green + output
Blue - input Yellow - output
Screen not connected to load cell

Connector Fitted (Option)

IP 68 6 Way Amphenol Connector
Pin A + input Pin C + output
Pin B - input Pin D - output

Construction

Load cell: Stainless Steel



Cell Type	Nominal Rated Load	Height	Diameter	Loading Dia	Base Diameter	B.H	Swivel Top Dia	S.T.H
Comp 50	50	110	76	60	130 Dia	40	65	10
Comp 100	100	150	100	80	150 Dia	50	100	20
Comp 200	200	180	127	110	150 Dia	50	127	30
Comp 300	300	180	150	130	200 Dia	50	150	30
Comp 400	400	240	162	162	230 Dia	50	170	40
Comp 500	500	300	203	170.5	265 Dia	50	203	50
Comp 1000	1000	425	290	250	400 Dia	75	290	50



TOTALISER DISPLAY PANEL

Model ELDI



Multi display readout panel. Any amount of indicators.

Total display reads total of all individual readouts.

Universal mains input. IP66 ingress protection.

Displays protected by IP67 viewing window.

Can fit any style of load cell.

Commonly used as weighing kit for centre of gravity calculations.

Full 5 digit display for high accuracy and resolution.

Alarms, relays and various outputs available on request.



HYCONTROL
LEVEL MEASUREMENT SOLUTIONS

Proudly announces new representation by:
EUROLOAD LTD.

Level measurement specialists **Hycontrol Ltd** are proud to announce that **Euroload Ltd** has been appointed as representative for Scotland, and will distribute and support Hycontrol products across the country.

Based in Redditch, Worcestershire, **Hycontrol Limited** have been at the forefront of level measurement technology for 35 years, providing solutions for diverse applications across a wide range of industries.

Hycontrol's product portfolio ranges from simple and effective level switches to highly accurate continuous monitoring gauges capable of withstanding the most hostile environmental conditions. Hycontrol has won industry awards for its innovative Protection Systems, which provides essential defence against over-pressurisation and overfilling in silos.

The recent launch of an innovative range of foam detection equipment now offers Hycontrol's customers the ability to monitor and effectively control foam in their processes for the first time, saving money on Antifoam chemicals and preventing messy, wasteful foam-over events.

Aberdeen-based **Euroload Limited** opened in 2014 to supply high-quality load instrumentation across Scotland, capitalising on Managing Director Mark Jones's 30 years of experience working with and designing load instrumentation for the Oil and Gas sector.

Euroload is a proudly independent company, whose products are designed and manufactured in-house in their purpose-built workshop facility. Euroload keeps abreast of the latest advances in measurement technology and utilises this expertise to provide their customers with a tailored service and precisely-engineered products for their individual applications. Their goal is to listen to customers needs and deliver solutions with a cost-effective, safe, reliable product.

Hycontrol MD Nigel Allen said: "Choosing Euroload to represent Hycontrol in Scotland makes sense, as we are both independent companies with a common philosophy of providing precisely-tailored contents measurement solutions. Both companies see plenty of opportunities arising from this collaboration. We look forward to working together in order to provide high-accuracy level measurement, improved silo pressure safety, and advanced foam control to customers across Scotland."



Please contact us to request a Hycontrol brochure.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

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SILO CONTENTS MONITORING

Model ELSW-01



At Euroload Limited we can supply complete silo contents monitoring. From our standard weighing of silos to level monitoring using ultrasonic/TDR radars.

Our standard weighing systems comprise load cells to suit the silo weight, bolt on silo cells to cylinder style. A standard display will show the contents and be fitted with a high level alarm. Options available, printer output, RS 485 output, 4-20 ma output, telemetry output to PC base station.

Euroload can take care of your silo from quotation to installation. All our systems are pre calibrated prior to installation on our 0.5% accurate 300 tonne compression test bed.

As there are so many styles of silo please give us a call to arrange a visit where we will specify a suitable system that will give you trouble free accurate weighing for decades.



SILO CONTENTS DISPLAY

Model ELTC-01



This display has been designed to monitor the contents in a silo tank.

Can be used with any style of compression load cell.

Built in high level alarm.

IP65 ABS enclosure, Crystal-clear lid, easy access terminals, external fuse, output for printer.

LCD display for ease of reading in direct sunlight.

Telemetry output available for remote logging.

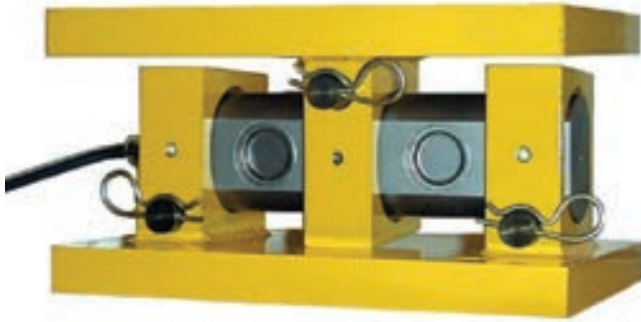
Multiple silos can be displayed on local PC.

Free software to monitor silos via PC.

Display can be supplied pre calibrated against selected load cells prior to installation.



SILO MOUNT VESSEL WEIGHING ASSEMBLY



The Silo Mount weighing system from Euroload Limited offers a complete vessel weighing solution incorporating lift off prevention and vessel expansion without compromising accuracy. It features a fully welded sensor and is manufactured from high tensile stainless steel type 17-4-PH for enhanced durability and corrosion resistance.

The sensor becomes an integral part of your assembly and eliminates the need for vessel restraints or check rods.

Intrinsically safe certification is also available to ATEX / IECEx Standards (certified for use in gas and dust zones).

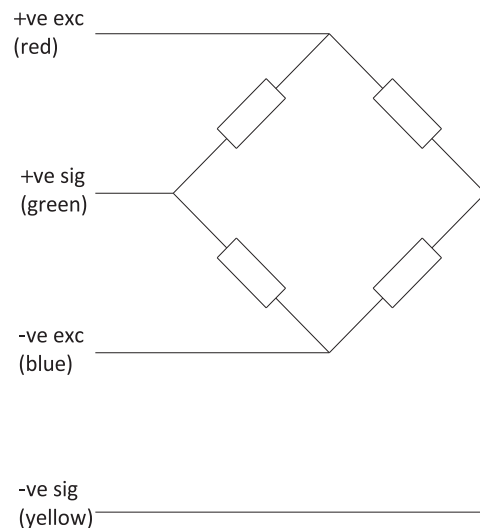
Our exacting build standards and test procedures ensure that all Euroload Limited Silo Mount systems can be offered with a three year warranty.

We can also offer customised designs suited to your exact specification as well as a selection of optional accessories including stainless steel brackets and a range of instrumentation.

- ☒ Low cost installation
- ☒ Stainless load cell
- ☒ Sealed to IP68
- ☒ Allows vessel expansion / contraction
- ☒ Five sizes
- ☒ High accuracy
- ☒ High resistance to off axis loads
- ☒ Integral lift off prevention

Capacities	0.5,1,2,5,7.5,10,15,20,30,50,75,100	tonne
Full Load Output	2.0 (±0.25%)	mV/V
Zero Load Output	<±2.0	%
Excitation (Max)	10 (15)	V
Accuracy (combined error)	<0.05	%
Repeatability	<0.01	%
Input Resistance	750 (±20)	Ω
Output Resistance	700 (±2)	Ω
Compensated Temp. Range	-10 to +40	°C
Operating Temp. Range	-20 to +60	°C
Temp. Coefficient on Zero	<0.005	% Capacity/°C
Temp Coefficient on Span	<0.003	% Capacity/°C
Safe Overload	150	%
Insulation	>500 @100Vdc	MΩ
Environmental Protection	IP68	
Cable Length	10	m

Specifications subject to change without notice



DELB
ATEX / IECEx Approved to
Ex ia IIC T6
Ex tD A20 IP68 T85C

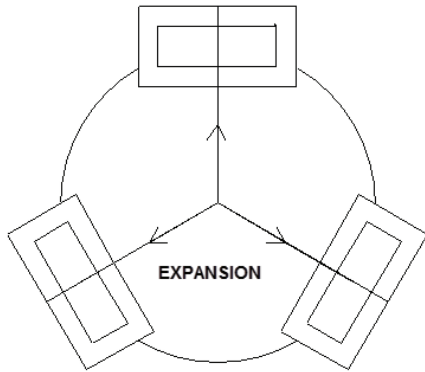


LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

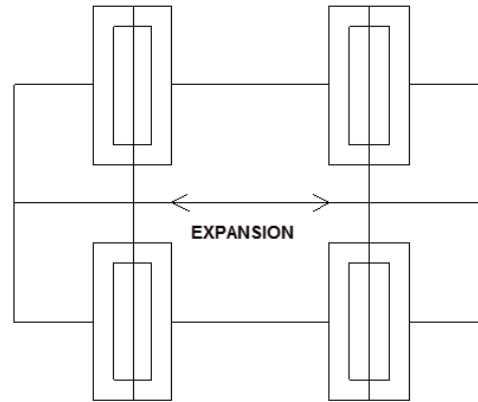
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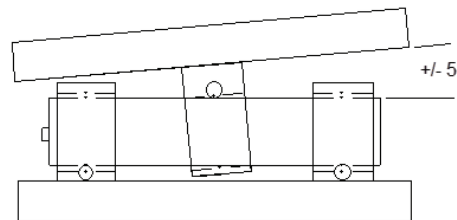
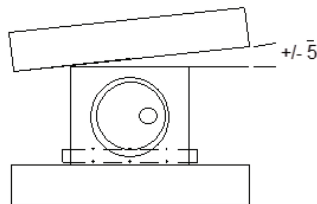
SILO MOUNT VESSEL WEIGHING ASSEMBLY contd..



SILO MOUNT 3 LOAD CELL INSTALLATION

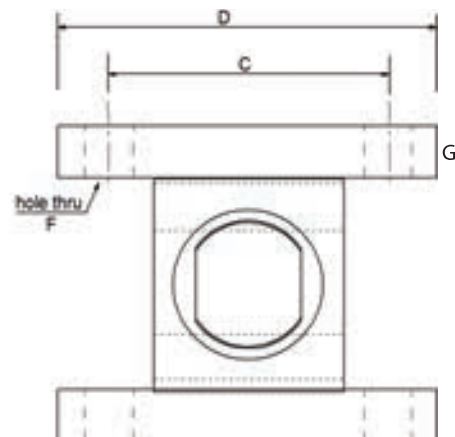
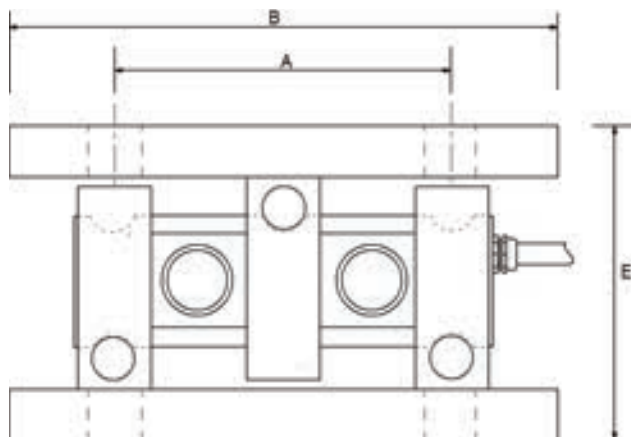


SILO MOUNT 4 LOAD CELL INSTALLATION



All dimensions in mm

	Capacity	A	B	C	D	E	ØF	No. F	G	Min Exsp
Size 1	1 – 5te	105	150	94	124	88	13	8	12.7	3mm
Size 2	2 – 20te	140	200	125	165	117	18	8	18	4mm
Size 3	10 – 50te	175	280	175	230	162	22	8	25	6mm
Size 4	75te	240	300	190	250	184	26	12	25	6mm
Size 5	100te	250	320	230	300	210	26	12	30	8mm



DELB
ATEX / IECEx Approved to
Ex ia IIC T6
Ex tD A20 IP68 T85C



LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

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SILO MOUNT BRACKET ASSEMBLY

Coating Options

Standard Finish

The Silo Mount weighing system from Euroload Limited has a standard finish applied to the mild steel support brackets. The first step is a zinc phosphate pre-treatment for rust prevention then a black E-Coat is applied. This electrophoretically applied finish ensures a uniform and durable appearance on the brackets.

Options

You can specify any RAL colour to be powder coated over the above finish to give your Silo Mount a stand out appearance.

Processes

Zinc Phosphate

The application of zinc phosphate by immersion provides a fine grained crystalline on the surface of the steel and is an excellent base providing parts with 'bare' rust protection so they do not require immediate painting.

Electrophoretic Paint

Electrophoretic paint (E-Coat) technology is ideal for the application of a uniform organic coating. The electrophoretic deposition of a finish provides a coating of uniform thickness on even the most complex shapes, significantly outperforming both sprayed or dipped finishes. Used widely in the automotive industry for its excellent corrosion resistance an E-Coat is the perfect finish where durability and longevity are key.

Polyester Powder Coat

An additional powder coat is recommended for any application where a high resistance to weathering is required, for example in exposed exterior fittings. This additional coating is well suited to environments where the installation is at temperatures elevated from the ambient as it has a high resistance to yellowing.

For further information about any of these processes or to receive a quotation to suit your specific application please contact us and our team will be happy to help.



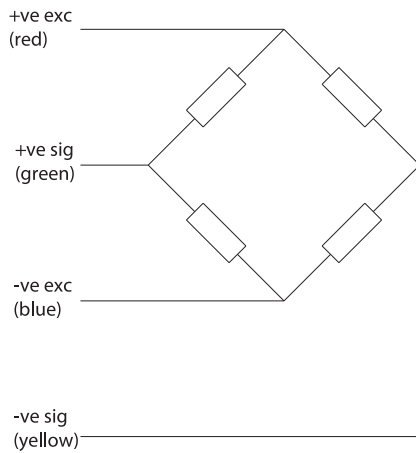
LOW PROFILE Stainless steel series



Low Profile

Stainless Steel Series

- ☑ Range 5kN to 1000kN
- ☑ Low profile design
- ☑ Low deflection
- ☑ Atex certification available
- ☑ High natural frequency
- ☑ Excellent rejection of extraneous forces
- ☑ Fatigue Rated to 10^9 full cycles

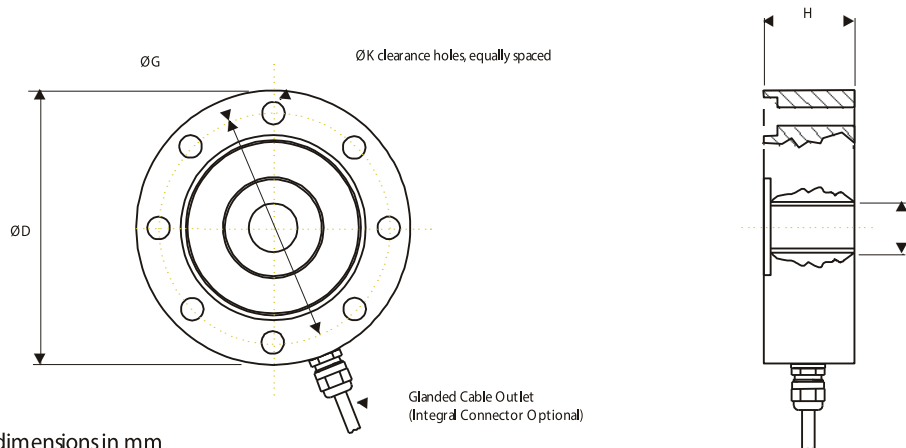


Options :
 Other ranges available on request
 Full range of mounting options
 Connector version
 Double bridge version
 Atex approved version

Capacities	±5, ±10, ±25, ±50 ±100, ±200, ±500, ±1000	kN
Full Load Output	2.0 (±0.25%)	mV/V
Zero Load Output	<±2.0	%
Excitation (Max)	10 (15)	V
Accuracy	<0.1	%
Repeatability	<0.03	%
Input Resistance	375(±20)	Ω
Output Resistance	350	Ω
Compensated Temp. Range	-10 to +40	°C
Operating Temp. Range	-20 to +60	°C
Temp. Coefficient on Zero	<0.0050	% Capacity/°C
Temp Coefficient on Span	<0.0050	% Capacity/°C
Safe Overload	150	%
Insulation	>500 @100Vdc	MΩ
Environmental Protection	IP65	
Cable Length	4	m

Specifications subject to change without notice

Range (kN)	D	H	G	K	T
5, 10, 25, 50	107	33	90	8 off Ø8.5	M20 x 2
100, 200	155	45	130	12 off Ø11	M36 x 2
500, 1000	280	78	230	16 off Ø17	M64 x 6



All dimensions in mm

LPMW
 ATEX / IECEx Approved to
 Ex ia IIC T6
 Ex tb IIIC Db T85°C
 (-20°C ≤ T_a ≤ +60°C)





SUB SEA COMPRESSION CELL

Model ELSSCI



At Euroload we have developed a range of sub sea compression load cells.

Fully stainless steel construction.

Swivel top cap for misaligned loads.

Down hole strain gauged and filled with die electric gel.

Output via Sub con sub sea connector. Customer can specify preferred sub sea connector.

High Accuracy. mV/V or 4-20 mA output. Other outputs available on request.

Standard range up to 1000 tonne. Higher capacity available on request.

Photograph of 750 tonne solid stainless sub sea compression cell.

Four off cells were supplied on a four point weighing system giving 3000 tonne total weighing capacity.



RLM LOCAL DISPLAY PANEL

Model ELRLM-01-SS



New Euroload RLM local display panel for the harshest of environment's.
Key Features: fully stainless steel IP66 enclosure, load display with high level visual/audible alarm, pay-out display showing distance and rate, IP67 viewing widows protect displays, 4-20ma output on load and distance, mil-spec connectors, universal mains input, wall mount or portable, can be used as local display in complete mooring system or individually on any Running Line Monitor. See Euroload RLM specification literature to choose suitable RLM.
Two-year warranty on all Euroload manufactured products.
Available from stock in our Aberdeen premises.



CABLED RUNNING LINE MONITOR

ATEX/IEC



The Euroload cabled based running line monitor is suitable for reading line tension and pay-out within a zone 1 or 2 environment.

The system comprises, 1 off running line monitor to suit your rope diameter c/w zone rated IP67 load pin with in head 4-20ma amplifier and 2 off IP67 NUMAR proximity sensors, 10 meters of detachable cable back to 2 off BEKA zone 1 indicators reading load and pay-out, 10 meters detachable cables back to the safe area, 1 off safe area power supply housing all safety barriers, 1 10VAC power input required in safe area. Cables can be made to any length to suit your application.

Various mounting options are available for the running line monitor. For options and RLM sizes please see Euroload's RLM specification literature.

A telemetry version of the above system is now available. A battery powered Zone 1 transmitter on the RLM with a mains powered zone 2 receiver handset.



TELEMETRY RUNNING LINE MONITOR



Euroload Limited in conjunction with Trimble Lifting Solutions have developed a new range running line monitor`s for use in Hazardous areas. The new system is telemetry based using Trimble`s excellent and well proven electronics and Euroload`s RLM body and load pin.

The RLM can be mounted within a zone 1 area and has a long life battery fitted. The display panel is rated for zone 2 and is mains powered. The display will show both load and pay-out.

For flexibility the unit has been certified to both ATEX and IEC regulations.

All the physical dimensions of the RLM`s are as per the standard range of Euroload Limited`s running line monitors.

For pricing or further information including a copy of the full certification package please contact Euroload`s sales team.

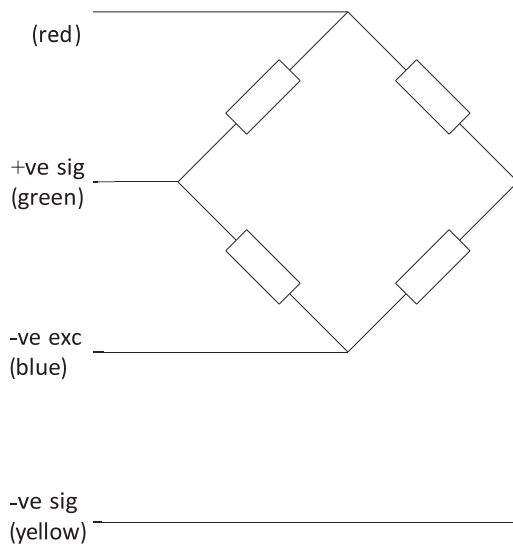


LOAD BEAM SERIES

250kg to 10,000kg



- Welded covers
- Two year warranty
- Stainless steel
- High accuracy
- Sealed to IP68



Capacities	250,500,1000, 2000,5000, 10000	kg
Full Load Output	2.0 (±0.25%)	mV/V
Zero Load Output	<±2.0	%
Excitation (Max)	10 (15)	V
Accuracy	<0.03	%
Repeatability	<0.01	%
Input Resistance	410 (±30)	Ω
Output Resistance	350 (±2)	Ω
Compensated Temp. Range	-10 to +40	°C
Operating Temp. Range	-20 to +60	°C
Temp. Coefficient on Zero	<0.0015	% Capacity/°C
Temp Coefficient on Span	<0.002	% Capacity/°C
Safe Overload	150	%
Insulation	>500 @100Vdc	MΩ
Environmental Protection	IP68	
Cable Length	4	m

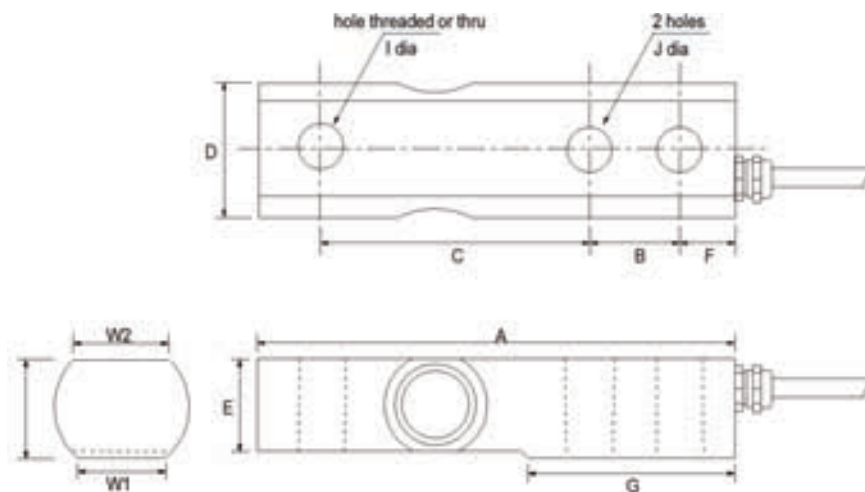


LOAD BEAM SERIES continued..

Capacity (kg)	A	B	C	D	E	F	G	H	ØJ	W1	W2	ØI
250 – 1000	135	25.4	76.2	38.1	26	16	58.5	28	13	22	27	M12x1.75
2000	135	25.4	76.2	38.1	26	16	58.5	28	13	22	27	M16x2.0
5000	170	38.1	95.3	50.8	36	20	76	39	21	28.5	36	Ø21
10000	220	50.8	120.7	68	46	26	105	52	26	35.5	50	Ø26

Options : Vessel mounting kit, load button and instrumentation

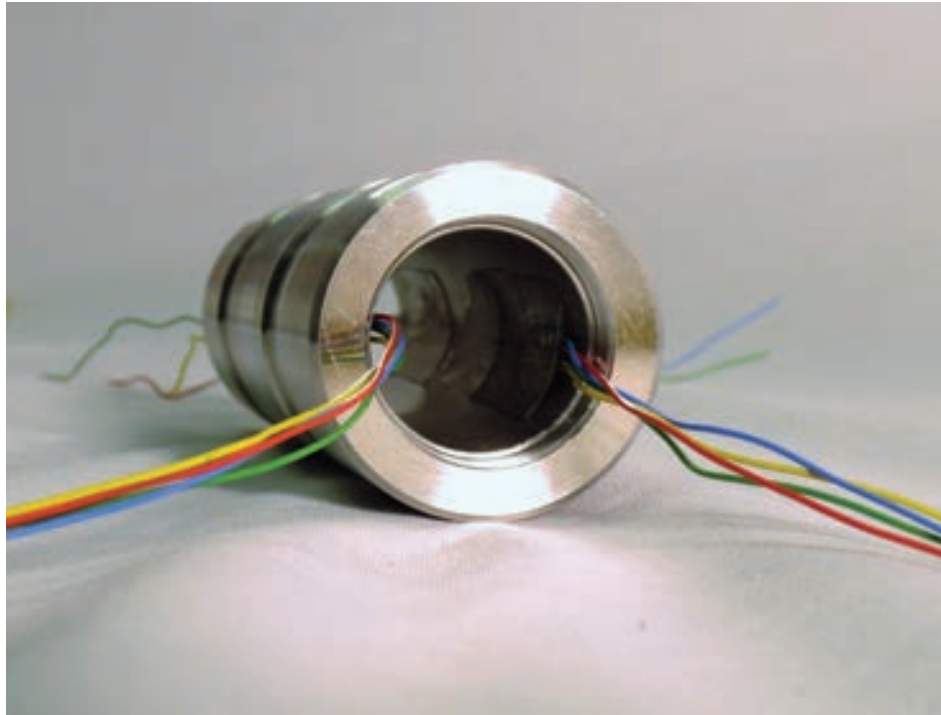
All dimensions in mm





STRAIN GAUGING

In-house or on site



At Euroload Limited we have built a dedicated workshop for strain gauging any style of load cell.

Surface or down hole strain gauging.

Any manufacture of load cell can be worked on.

Bridge resistance customer selectable.

Onsite strain gauging for repairs or stress analysis purposes.

Full stress analysis packages available.

Strict QMS system in place verifying all work carried out.

Call us for any strain gauging or stress analysis applications.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

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MUD PLANT LEVEL MONITORING

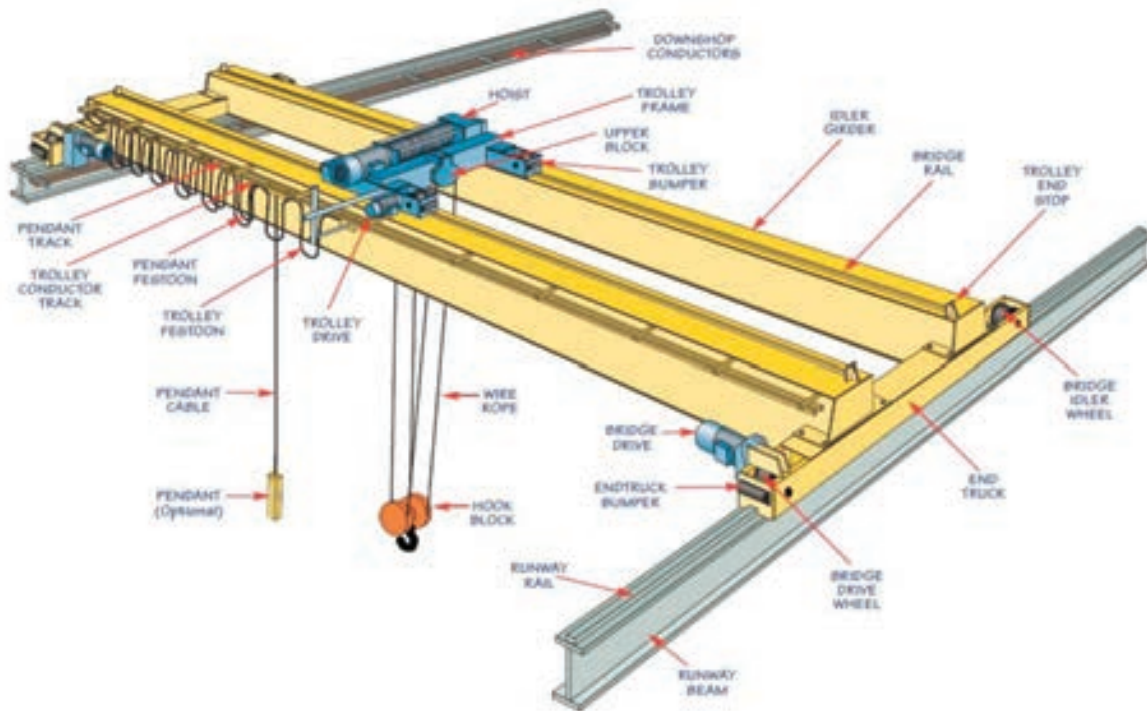


At Euroload Limited we can supply complete mud plant monitoring packages. We supply TDR radar level sensors to measure the mud level in the tank. The output from these sensors are connected to a control panel which reads the level in the tank and also has high level alarms and auto shut down. We take an output from the control panel to a ABB SM3000 video graphic recorder. This recorder records and stores all information regarding the plant. The recorder can be viewed anywhere via the ethernet connection. All information is stored on a removable hard drive for up to 6 months. Alarms conditions are automatically sent via text or e mail alerts. Euroload can take care of the entire installation worldwide including cable tray running, installation of the probes, calibration and commissioning of the entire system. Euroload employees have previously installed complete mud plant systems in Kazakhstan and Scotland. Send us your plant specification and we will produce a in depth proposal to suit your requirements.



GANTRY CRANE LOAD MONITORING

Model ELGCI



At Euroload we supply complete load monitoring solutions for all overhead gantry cranes. There are various ways of achieving this to suit all budgets.

The simplest solution is to fit a load pin in the compensation sheave, wedge socket or clamp on rope. A large digit display (4" or 8") is fitted to the Trolley frame. Simply connect the pin and calibrate.

Telemetry version is available. Fit the load pin to a 2.4 Ghz transmitter and mount the telemetry receiver display up to 300 meters from the load pin on the crane or workshop wall.

Your local agent can fill in the details of the pin on our be spoke pin literature and we will manufacture the pin to suit. Your local agent will install the system and calibrate onsite.

At Euroload we will come up with the best solution to match your budget. From very basic to complete control systems.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu



APEX JUNIOR DIGITAL DISPLAY

Model ELAJ-01



The unit features a stainless steel, splash proof sealed enclosure (165mm x 110mm x 60mm) complete with mounting brackets suitable for heavy industrial use. Loaded software includes full range zero, preset tare, weighcount, peak, freeze and silo modes as standard and special software writes are available on request.

The Junior can be supplied with the choice of 18mm x 6 L.E.D or LCD displays and is capable of handling up to 8 loadcells. The Junior also incorporates a 24 bit A-D, simple calibration routine and menu selections.

Versatile power options to suit all applications are also available. The Junior can be supplied with internal 110-250VAC SMPS, an internal 1000Mah NiMh battery pack and charger or basic DC power inputs from either a battery or adaptor. Each unit is hand built and tested to a very high standard and all parts are UK sourced and available from immediate stock. Additional factory fitted options include RS232C communications for interfaces to printers or computers, 16 bit. 4-20ma, 0-5VDC, 0-10Vdc analog outputs for data logging, 2 x optoisolated I/O ports, time and date, 8k x 8 from memory expansion capability and a second weighing input ideal for left and right axle vehicle applications.

The Junior is available as a non-trade or trade approved version (approved to 6000 divisions).



TELEMETRY CONVERSION KIT

Model ELTC-01



Convert any cabled load link to a telemetry. Plug existing cabled load cell into this transmitter to achieve up to 500 meter transmit range. USB dongle to record results available.

Strong IP67 aluminium housing, screw off battery cover, mounting holes for pole or wall mount.

433 Mhz or 900 Mhz versions available.

IP67 input connector.

Overload monitoring built into handset.

Linearization for un-linear load cells.

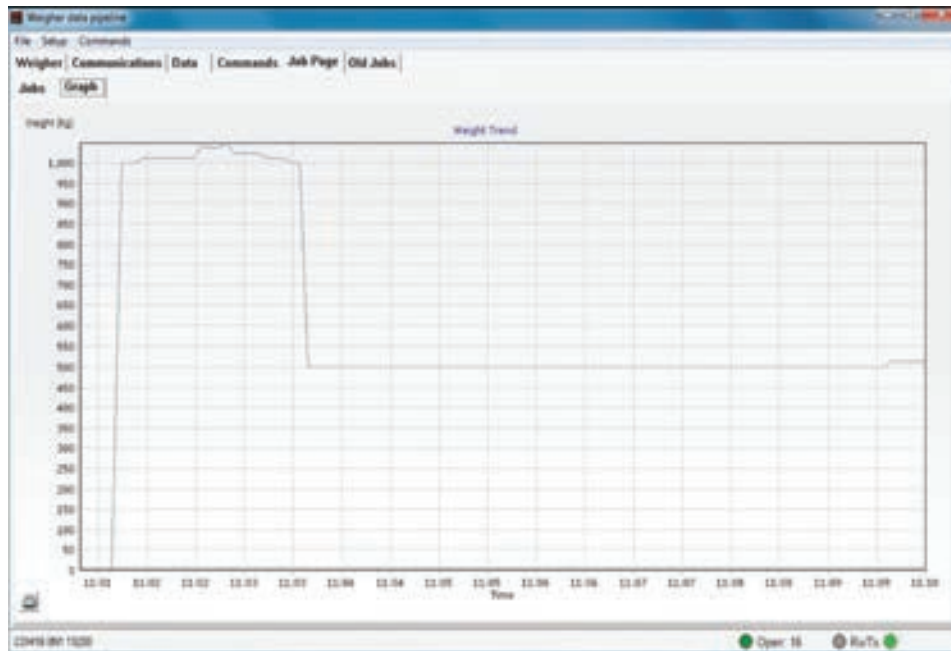
Long battery life. Depends on Load cell bridge resistance.

Available from stock in Aberdeen



MONITORING SOLUTIONS

Free Software



SOFTWARE DOWNLOADS Two downloads are available. The first is a package that allows the indicator to communicate with a data logging routine. The data transfer may be wired serial or direct from the units radio module. The second download is a multiscale application that allows the display of up to 20 virtual weighers on screen.

WEIGHER DATA PIPELINE The application routes data from the indicator into a pc host. Several modes of operation are possible. **DATA LOGGING** This allows you to use a job page to input data about the job to be done. You may also select the time interval that data is logged. You may then run the job and during the logging process you may switch between viewing the data page , graph or virtual scale indicator , The data will also be sent to an excel spread sheet this can be either the built in default spread sheet or a file of your choice. When you end the job the data will be stored under the job number , job data shows the start , stop interval and any over or under conditions that occurred. Weigher data lists the recorded weights.

MULTISCALE A dongle plugs into the host usb port and controls communication from the indicators , high and low limits may be set and a bar graph displays analogue data. **ZERO** and **TARE** functions can be sent from the host.



HIRE DEPARTMENT



All Euroload Limited products are available for hire.

The following products are available for hire now:

Telemetry load links, Cabled load links, Telemetry load shackles,
Cabled load shackles, Running line monitors, Compression load cells and
multi-point weighing systems.

All of Euroload Limited hire fleet is maintained to the highest standards and
calibrated within 6 months.

Hires available on customer specified bespoke products.

PC monitoring and PLC outputs available on request.

Hires available worldwide through our agent network.

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu





★ UK Manufacturer ★ European Brand ★ Worldwide Reach

Innovation by design

**Top quality material used,
beyond industry standard**

High level of traceability

In-house training available

Custom design cells available

Hazardous area load cells available

Dedication to safety standards

Continuous investment in QA and testing facilities

An ISO9001 company

ATEX and IEC approved

LOAD MONITORING AND STRESS ANALYSIS SPECIALISTS

www.euroload.eu

Worldwide coverage

Euroload Limited appoint official distributors worldwide to give customers confidence wherever they are located. This means our products are supported by local organisations and enables them to be serviced and repaired locally.

All the agents have fully qualified staff that have attended our in-house training program who will be more than happy to assist with your requirements.

Our worldwide agents are authorised to carry out warranty repairs on behalf of Euroload greatly reducing down time.

They all hold stock of our standard product range and can repair and calibrate most manufacturers products with our full support.

For a complete up to date list of official Euroload distributors please look at our website.

Authorised Distributor:





Load Monitoring and Stress Analysis Specialists

- ***Innovation in Design***
- ***Top quality material used beyond industry standard***
- ***High level of traceability***
- ***In-house Training available***
- ***Hazardous area load cells available***
- ***Dedication to Safety Standards***
- ***Continuous investment in QA and testing facilities***
- ***An ISO9001 company***

***Euroload Limited
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