

## Digital Compression Load Cell

### FEATURES

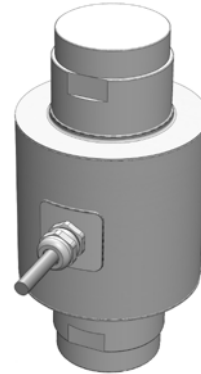
- Capacities: 20, 30, 35, 40 and 50T
- Self-aligning, stainless steel single column
- Welded seal, IP66/68 – 100 hr at 1 m
- Certified to OIML R60 6000d (20T to 50T)
- Built-in surge protection
- RS485/RS422 2-wire, half-duplex
- Built-in overload detection
- **Optional**
  - 4-wire, full-duplex with enhanced surge protection

### APPLICATIONS

- Weighbridges
- Process weighing

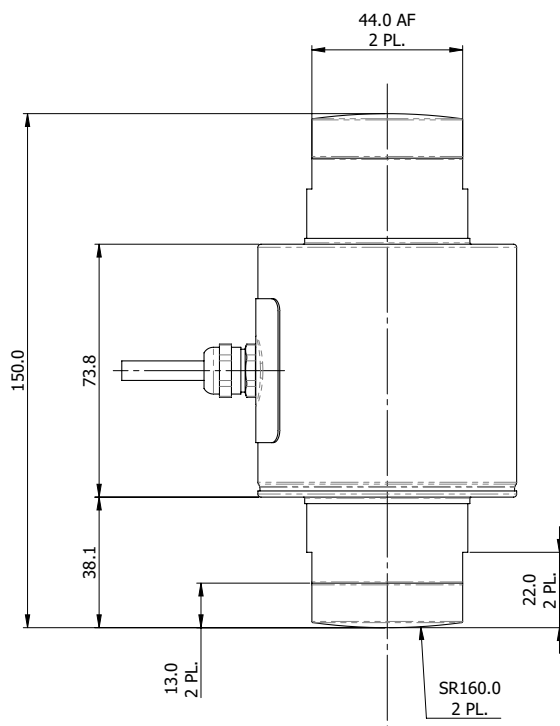
### KEY BENEFITS

- Weighing performance: up to OIML C6 with  $Y=20,000$
- High update rate: up to 200 Hz
- High resolution: 18 bit / 200,000 counts



- Protocol customization: to suit customer electronics
- PC utility: for system configuration
- Software updates: in situ – no need to remove from service
- Star topology: only one cable to connect
- Auto power supply: 8 to 24 VDC with fast warm-up time

### OUTLINE DIMENSIONS in millimeters



#### Cable Specifications

Cable length: 15m

#### Standard Half Duplex:

V In Pos	Red
V In Neg	Black
TX	Green
RX	White

#### Optional Full Duplex:

V In Pos	Red
V In Neg	Black
TX	Green
TX n	White
RX	Brown
RX n	Blue

Braided shield

Shield is a bare twisted braid

### Digital Compression Load Cell

SPECIFICATIONS								
PARAMETER	VALUE							UNIT
VPG Accuracy class	I3 (NTEP) <sup>1</sup>	F3	G5	G3	G2	H3	J4 <sup>2</sup>	
Minimum utilization	33	33	50	30	20	33	30	% of R.C.
NTEP Accuracy class/ n <sub>max</sub>	IIIL/10000 Multiple							
OIML Accuracy class		C2	C3	C3MR10	C3MR15	C4MR12	C6MR20	
Maximum no. of intervals (n)		2000	3000	3000	3000	4000	6000	
Rated capacity—R.C. (E <sub>max</sub> )	20, 30, 40, 50	20, 30, 35, 40, 50						T
Rated output—R.O.	200,000							Counts
Rated output tolerance	Standard: 160; Optional: 25							±Counts
Zero balance	1600							±Counts
Creep (30 min.)	0.050	0.025	0.025	0.025	0.025	0.018	0.013	±% of load
Zero return (30 min.)	0.015	0.025	0.017	0.017	0.017	0.0125	0.0083	±% of load
Total Error	0.030	0.030	0.020	0.020	0.020	0.015	0.010	±% of R.O.
Temperature effect on output	0.0012	0.0012	0.0012	0.0012	0.0012	0.00075	0.00058	±% of load/°C
Temperature effect on zero	0.0014	0.0023	0.0023	0.0014	0.0009	0.0009	0.0007	±% of R.O./°C
Y = E <sub>max</sub> /V <sub>min</sub>	30000	6000	6000	10000	15000	15000	20000	
Temp. range, compensated	-10 to +40							°C
Temp. range, safe	-40 to +70							°C
Temp. range, storage	-50 to +90							°C
Maximum safe static overload	150							% of R.C.
Ultimate static overload	300							% of R.C.
Supply, recommended	12							VDC
Supply, range	8–24							VDC
Current, max.	50							mA
Resolution	20							Bit (at 1 Hz)
Signal update per second	1   10   20   40   67   100   200							Samples/s
Baud rate	1200–115200							bits/s
Transmission type	Serial asynchronous data transmission							
Protocol type	Non-standard ASCII multi-drop							
Number of network address	32							
Data error detection	Odd/even parity, checksum							
Encryption	None/custom							
Data transmission interface	<b>Standard:</b> RS485/RS422 (2-wire, half-duplex) <b>Optional:</b> RS485/RS422 (4-wire, full-duplex)							
Termination	<b>Standard:</b> None; <b>Optional:</b> 120Ω, 5%, 200 ppm/°C							Ω
Surge protection	<b>Standard:</b> Industrial; <b>Optional:</b> Harsh							
Insulation resistance	>2000							MΩ
Cable length	<b>Standard:</b> 15 (49); <b>Max:</b> 100 (328)							m (ft)
Max. transmission cable length	1200							m
Cable type	Braided shield, 26 AWG, polyurethane jacket							
Construction	Stainless steel, welded seal							
Environmental protection	IP66/IP68 (100 hr at 1 m)							
Outline dimensions DWG.	294.000.00-3							

<sup>1</sup> Class I3 (NTEP) is NTEP class IIIL approved.

<sup>2</sup> Class J4 is not OIML approved.

All specifications subject to change without notice.