

Digital Compression Load Cell

FEATURES

- Capacities: 20, 25, 30, 35, 40 and 50 t
- Self-aligning, stainless steel single column
- Welded seal, IP66/IP68/IP69K
- Certified to OIML (25 t to 50 t)
- Built-in surge protection
- RS485/RS422 2-wire, half-duplex
- Built-in overload detection
- **Optional**
 - 4-wire, full-duplex

APPLICATIONS

- Weighbridges
- Silo hopper weighing

DESCRIPTION

The DSC2 is a stainless steel compression load cell with a digital output.

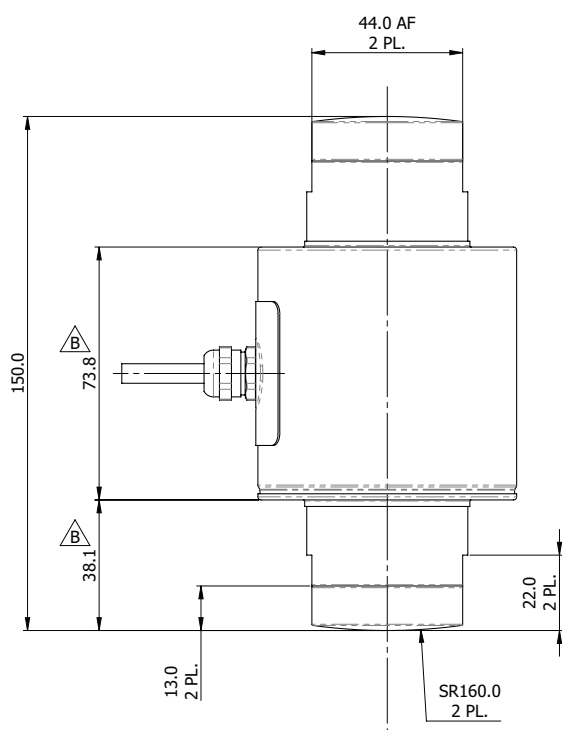
This digital output enables the user to communicate with each DSC2 independent of the others in the system, thus offering advantages in system setup, system control, corner correction, fault finding and load cell replacement.



This product is suitable for use in road and rail weighbridges and process weighing applications.

The welded construction and built-in surge protection ensure that this product can be used successfully in demanding environments.

OUTLINE DIMENSIONS in millimeters



Cable Specifications

Cable length: 15m

Standard Half Duplex:

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

Optional Full Duplex:

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

Braided shield
Shield is a bare twisted braid

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SPECIFICATIONS								
PARAMETER	VALUE							UNIT
VPG Accuracy class	I3 (NTEP) ¹	F3	G5	G3	G2	G1	H3 ²	
Minimum utilization	33	33	50	30	20	12	33	% of R.C.
NTEP Accuracy class/ n _{max}	IIIL/10000 Multiple							
OIML Accuracy class ³		C2	C3	C3MR10	C3MR15	C3MR25	C4MR12	
Maximum no. of intervals (n)		2000	3000	3000	3000	3000	4000	
Rated capacity—R.C. (E _{max})	20, 30, 40, 50	20 ³ , 25, 30, 35, 40, 50						t
Rated output—R.O.	200,000							Counts
Rated output tolerance	Standard: 160; Optional: 30							±Counts
Zero balance	1600							±Counts
Creep (30 min.)	0.050	0.025	0.025	0.025	0.025	0.025	0.018	±% of load
Zero return (30 min.)	0.015	0.025	0.017	0.017	0.017	0.017	0.0125	±% of load
Total Error	0.030	0.030	0.020	0.020	0.020	0.020	0.015	±% of R.O.
Temperature effect on output	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.00075	±% of load/°C
Temperature effect on zero	0.0016	0.0026	0.0026	0.0016	0.0010	0.00064	0.0013	±% of R.O./°C
Y = E _{max} /V _{min}	30000	6000	6000	10000	15000	25000	12000	
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	18							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	Standard: RS485/RS422 (2-wire, half-duplex) Optional: RS485/RS422 (4-wire, full-duplex)							
Cable length	Standard: 15 (49); Max: 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 (1m@100h)/IP69K							
Outline dimensions DWG.	294.000.00-3							

¹ Class I3 (NTEP) is NTEP class IIIL approved.

² Class H3 is not OIML approved.

³ Rated capacity 20 t is not OIML approved.

All specifications subject to change without notice.

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