

Single Point Load Cell XBL (XBL-Ex)

The robust digital single point load cell type XBL in stainless steel is hermetically sealed to IP68K. The load cell is developed for machine builders who have tasks within dynamic weighing, multihead weighers, factory automation, packaging machines, filling and dosing, flow measurement, bench and platform scales, conveyor scales, process weighing and check weighers. ATEX (Ex) and IECEx versions are available.

Do you need help?



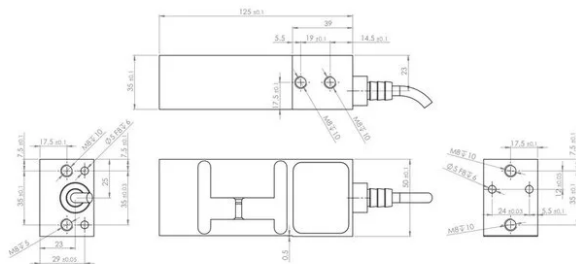
Type:	XBL (Non-ATEX) XBL-Ex (ATEX)
Capacity (Emax):	3, 5, 10, 15, 20, 30, 50, 100 kg
Accuracy:	Industrial 0.025%, Precision 0.015%, High Precision 0.010%
Overload Tolerance:	Up to 1000% of rated capacity



Special Features

Made in Denmark	Capacity (Emax): 3, 5, 10, 20, 30, 50, 100 kg
Patented load cell design	Accuracy: Industrial 0.025%, Precision 0.015%, High Precision 0.010%
Electropolished stainless steel 1.4542 (17-4 PH)	Small deflection at rated capacity
Laser welded with Duplex 1.4462 stainless steel	High resonance frequency (spring rate) for rapid dynamic weighing
ATEX and IECEx certified (Zone 1, 2, 21, 22)	Easy mechanical and electrical installation
Robust capacitive technology	Digital filters
High tolerance of up to 1000% overload	Can be used in both ATEX / IECEx and non-ATEX installations
High accuracy, High resolution	
Laser welded (IP68)	
Replaceable load cell cable	

Dimensions (mm)



Specifications

Parameter	Unit	0.025%	0.015%
Rated capacity (E_{max})	kg	3, 5, 10, 15, 20, 30, 50, 100*	
Safe overload limit	% of E_{max}	300 to 1000	
Safe siderload limit	% of E_{max}	500 to 2000	
Minimum dead load	% of E_{max}	0	
Combined Accuracy	% of E_{max}	0.025	0.015
Repeatability	% of E_{max}	0.012	0.010
Hysteresis	% of E_{max}	0.013	0.008
Creep 30 min.	% of E_{max}	0.015	0.012
Temperature effect on zero	% / 10°C	0.050	0.035
Temperature effect on sensitivity	% / 10°C	0.050	0.050
Compensated temperature range	$^{\circ}\text{C}$	-10 to 50	
Operating temperature range	$^{\circ}\text{C}$	-40 to +70 (100***)	
Deflection at E_{max}	mm	max 0.10	
Measuring rate	Hz	500	
Supply	Vdc	24Vdc \pm 5%	
Internal resolution	Bit	24	
Material		Stainless steel 17-4PH and AISI316	
Protection		IP68	
Cable		6 meter standard coaxial RG-58 (\varnothing 6mm) with BNC connector	
Maximum cable length	m	100	
Weight	kg	1.5	
Output options		EtherNet/IP, PROFINET, EtherCat, Profibus DP, Modbus TCP/IP, RS485, 4-20mA, 0-10Vdc	

* available in other capacities upon request

** only for non-ATEX users and with Teflon load cell cable

Applications

Dynamic weighing
Multihead weighers
Factory Automation
Packaging machines
Filling and dosing
Flow measurement
Bench and platform scales
Conveyor scales
Process weighing
Check weighers

Options

ATEX and IECEx (Zone 1, 2, 21, 22) version type XBL-Ex
ATEX II 2G Ex ia IIC T6 / ATEX II 2D Ex iaD 21 T85°C
Customized versions available
Load cell cable length 10, 20, 50 or 100 meters
Special PE load cell cable available for freezing low temperature (can be used down to -50 degrees Celsius)
Special Teflon load cell cable available for very high temperature (can be used up to 100 degrees Celsius)