

Digital stainless steel single point load cell designed for high speed filling and check weighing applications. The hermetically sealed load cell is ideal for use in heavy washdown applications. Protection class IP69K.



FEATURES

- Capacity: 10 & 50kg
- Stainless Steel construction
- Overload stopping mechanism
- Environmental protection IP69K with complete hermetic sealing
- AD conversion rate up to 1200upd/sec
- Free professional software to set up digital load cell

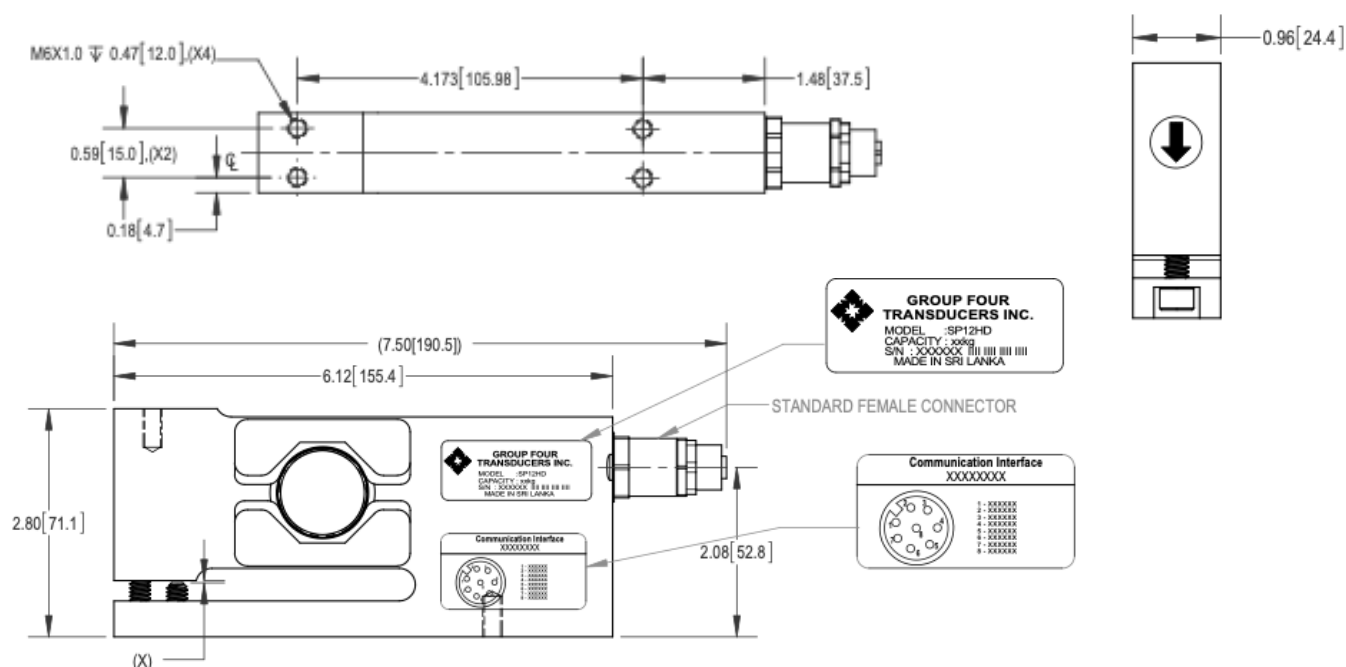
APPLICATIONS

- Bench scale
- Checkweighers
- Conveyor weighing systems
- Filling plants
- Packaging machines
- Industrial process control

OPTIONS

- Communication Interface
- Gen (CAN + RS232)
- A (RS485 + RS422)
- Load cells can be supplied with calibration certificate as per ASTM E74

OUTLINE DIMENSIONS



SPECIFICATIONS

Model	SP12HD		
Capacity (E max)	kg	10	50
PERFORMANCES			
Accuracy class	C3		
Minimum load cell verification interval (Vmin)	g	1	5
Combined error	%FS	≤±0.017	
Creep error (30 min)	%FS	≤±0.017	
Zero balance, raw counts	increments	±2000	
Output resolution at full load, raw counts	increments	512000	
Internal AD conversion rate	upd./sec	1200	
Fix, digital low pass IIR filter, default	Hz	18 (suppress 50Hz and 60Hz influence)	
Adjustable, digital low pass IIR filter	Hz	18-0.25; selectable in 8 steps	
Adjustable, digital low pass FIR filter		40-5, selectable in 8 steps	
Adjustable, external output update rate	upd./sec	1200-9; selectable in 8 steps	
GENERAL I/O's			
Hardware interface, CAN version		CAN and RS232	
Hardware interface, RS version		RS485 and RS422 (both 4 wire)	
Data transmission rate CAN	kb	125; 250; 500; 1000	
Data transm, rates RS485/RS422/RS232		9.6; 19.2; 38.4; 57.6; 115.2; 230.4; 460.8	
Protocol CAN		CANopen	
Protocol RS485/RS422/RS232		ASCII or Modbus RTU	
Logical input, programmable		Trigger level 2-30Vdc, <3mA, Ref to Gnd	
Power supply	VDC	+10 -+30<0.4 Watt	
INFLUENCES			
Safe load limit	%FS	150	
Ultimate load	%FS	300	
Eccentric loading error acc. to OIML R76	%FS	±0.023	
Max platform size	mm	450x450	
Temperature effect on zero	%FS/10°C	0.001	
Temperature effect on span	%FS/10°C	0.001	
Temperature range	°C	Operating: -10/+40	
EMC performance		MID Class E2 (industrial locations)	
I/O protection, all pins		Reversed polarity; excess voltage and surge	
Isolation body/electronics at 500VDC	G Ω	≥1	
Vibration		2.5G operational; 5G non-operational	
Environmental protection per IEC 529		Body IP69k, Connectors IP68	
Corrosion resistance		All Stainless Steel	

PIN CONFIGURATION

Standard Female Connector Signal Electronics M121F0008			
PIN No	RS232+CAN	RS485+RS422	Mating Cable Color Code
1	GND1	GND1	WHITE
2	PROGRAM	PROGRAM	BROWN
3	CANH	Rx+	GREEN
4	TRIGGER INPUT	TRIGGER INPUT	YELLOW
5	CANL	Rx-	GRAY
6	RxD	Tx-	PINK
7	TxD	Tx+	BLUE
8	PWR+	PWR+	RED

PART NUMBER

Option	GEN		A	
Description	LDB151 (RS232+CAN)		LDB152 (RS485+RS422)	
Capacity (kg)	10	50	10	50
Part Number	4033D-000-00	4033D-000-01	4033D-001-00	4033-001-01



Pioneering Measured Solutions

Group Four Transducers
22 Deer Park Drive
E. Longmeadow, MA 01028
www.groupfourtransducers.com

Phone: (800) 419-1444
Fax: (413) 525-6182
sales@group-4.com