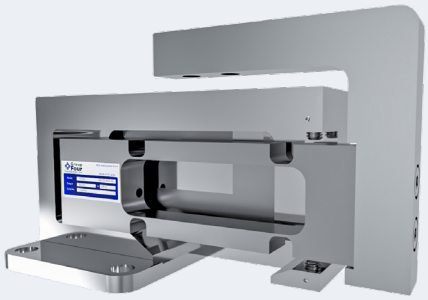
Group Four Transducers Inc

Pioneering Measured Solutions

digital single point

GVSD 4001D

The digital single point load cell GVSD is a special low capacity, low form factor single point load cell useful in force measurement and industrial applications. Special bracket and spacers provide ease of installation and accuracy.



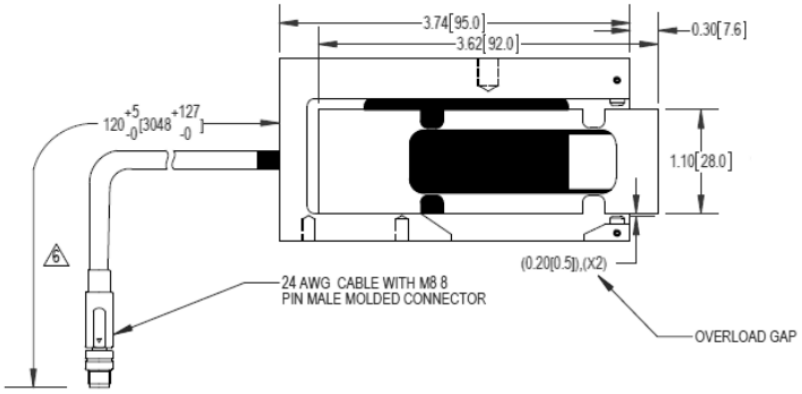
FEATURES

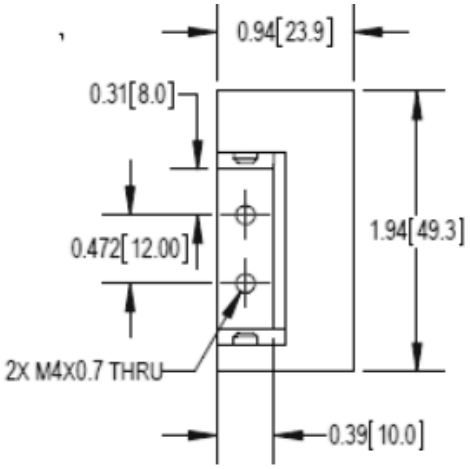
- Capacity: 200, 500 & 1000 grams
- Anodized aluminum construction
- Environmental protection IP67
- Low profile design
- Special bracket & spacers

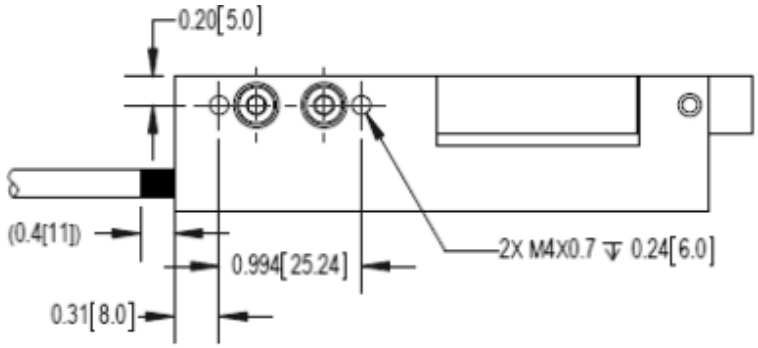
APPLICATIONS

- Low capacity force measurement
- Special applications in medical
- Jewelry scales

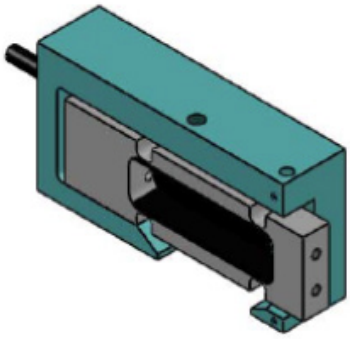
OUTLINE DIMENSIONS



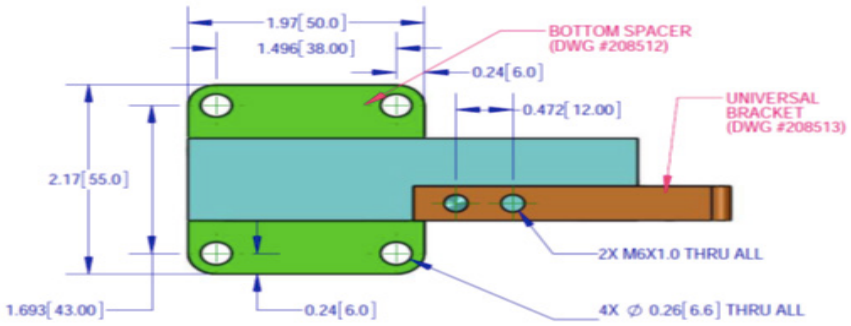


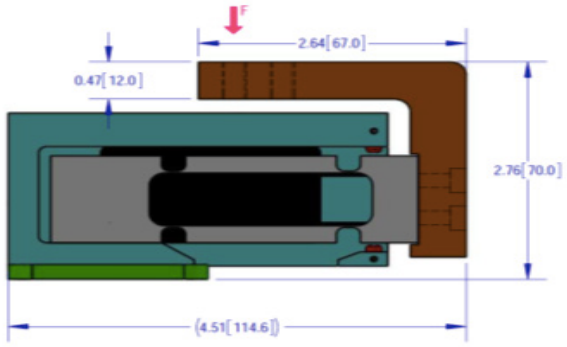


Load Cell Without Spacer and Universal Bracket



Load Cell With Spacer and Universal Bracket

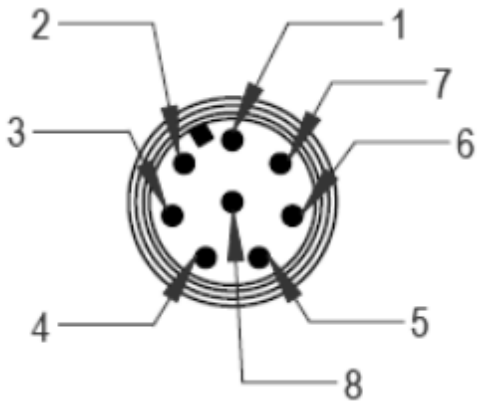




SPECIFICATIONS

Model	GVSD			
Capacity (E max)	g	200	500	1000
PERFORMANCES				
Combined Error	%FS	±0.01		
Creep Error (30 min)	%FS	±0.01		
Zero Balance, Raw Counts	Increments	See note 6		
Output resolution at full load, raw counts	Increments	256000	512000	512000
Internal AD conversion rate	upd./sec	1200		
Fix, digital low pas IIR filter, default	Hz	18 (Suppress 50Hz and 60 Hz influence)		
Adjustable, digital low pass IIR filter Adjustable, digital low pass FIR filter	Hz	18-0.25; selectable in 8 steps 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 Hardware interface, RS version		CAN and RS232 RS485 and RS422 (both 4 wire)		
Data transmission rate CAN Data transm, rates RS485/RS422/RS232	kb	125; 250; 500; 1000 9.6; 19.2; 38.4; 57.6; 115.2; 230.4; 460.8		
Protocol CAN Protocol RS485/RS422/RS232		CANopen 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	±0.02		
Max platform size	mm	200x200		
Temperature effect on zero	%FS/10°C	±0.04		
Temperature effect on span	%FS/10°C	±0.12		
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	>1		
Vibration		2.5G operational; 5G non-operational		
Environmental protection per IEC 529		IP67		
Corrosion resistance		Anodized Aluminum		

WIRING GRAPHIC



Pin No	RS-232+CAN	RS-485+RS422	Color Code
1	GND1	GND1	White
2	Program	Program	Brown
3	CANH	Rx+	Green
4	Trigger Input	Trigger Input	Yellow
5	CANL	Rx-	Grey
6	RxD	Tx-	Pink
7	TxD	Tx+	Blue
8	PWR+	PWR+	Red

PART NUMBER

Option	GEN			A		
Communication Interface	RS-232+CAN			RS-485+RS-422		
Capacity (g)	200	500	1000	200	500	1000
G4 Part Number	4001D-001-00	4001D-003-00	4001D-004-00	4001D-001-01	4001D-003-01	4001D-004-01

Notes:
1. Shown loading direction is for positive output
2. Refer 208504 control drawing for analog load cell manufacturing
3. Overload gap is engaged at 300g-325g for 200g version
4. Overload gap is engaged at 600g-625g for 500g version
5. Overload gap is engaged at 1200g-1500g to 1000g version
6. Zero balance, raw counts is within ±2000 and test after assembling universal bracket and assembly box

6.7.22V2

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