

# HI SP4 Load Sensor Single-Point Load Cell

## PROCESS WEIGHING

### Applications

- Multi-head fillers
- Bench Scales/Floor Scales
- Batching/Blending
- Filling/Dispensing/Dosing



## THE HARDY PROCESS TOOLBOX

The Hardy Process Toolbox is a set of productivity tools that delivers value across process weighing functions. Each tool saves time, increases accuracy, improves efficiency or reduces risk in your process weighing applications.



Electronic calibration without test weights



Weighing system monitoring, diagnostics and troubleshooting



Hermetically Sealed up to IP68/IP69K

Class 1 Division 1 Hazardous Locations

Electropolished Surface Finish

*The Hardy HISP4 is a high-accuracy, single-point load cell ideal for a wide variety of weighing applications. Constructed entirely from stainless steel and hermetically sealed, it offers exceptional durability and environmental protection.*

The HISP4 comes in four different capacity models ranging from 10kg to 100kg (22 to 220 lbs).

The HISP4 comes with NTEP approval and is rated to Class III accuracy level, making it suitable for use in trade-approved applications. An electro-polished surface finish provides an added benefit for clean operations such as is found in the food and drug industries.

### IDEAL FOR FILLER APPLICATIONS

The HISP4 has mounting bolts on both the top and the front making it ideal for multi-head fillers. It is also designed for incorporation into bench scales, platform scales and floor scales.



Threaded mounting holes on both the top and the front of the beam make the HISP4 load cell versatile and easy to design into filling machines

### C2 CALIBRATION

HISP4 load cells are designed with Hardy's exclusive C2® Calibration for automatic system calibration to save hours in commissioning and routine maintenance. By reading the calibration with certificate data embedded electronically in the C2 sensor, the load cell can be calibrated the touch of a button, avoiding a time consuming traditional calibration procedure. This is essential for multi-head fillers where access to the load cell for traditional calibration requires taking the machine apart.

SPECIFICATIONS	Units	HISP4
Maximum Capacity (Emax)	kgs	10 / 20/ 50/ 100
Maximum Capacity (Emax)	lbs	22/44/110/220
Accuracy Class		III
Max number verification intervals	nmax	3000
Min load cell verification interval	vmin	Emax / 11000
Combined Error	%RO	± 0.0200
Non-Linearity	%RO	± 0.0166
Hysteresis	%RO	± 0.0166
Creep error (30 Minutes) / DR	%RO	± 0.0166
Temperature effect on min dead load ouput	%RO/10°C	± 0.0140
Temperature effect on sensitivity	%RO/10°C	± 0.0100
Rated Output (RO)	mV/V	2 ± 0.2%
Zero Balance	%RO	± 5
Excitation Voltage	V	5-15
Input Resistance	Ω	1100 ± 50
Output Resistance	Ω	960 ± 50
Insulation resistance (100VDC)	MΩ	≥ 5000
Load Cell Safe Load Limit	%Emax	200
Load Cell Ultimate Load Limit	%Emax	300
Load Cell Safe Side Load	%Emax	100
Maximum Platform Size	mm	500 x 400
Compensated Temperature Range	°C	-10 ... ±40
Operating Temperature Range	°C	-40 ... ±80
Load Cell Material		Stainless Steel 17-4PH (1.4548)
Sealing		Complete Hermetic Sealing - Glass to Metal Header
Protection according to EN 60 529		IP68/IP69K
Cable Length	ft	10 ft
Hazardous Certification		IS Class 1,2,3 Div 1
Manufacturer's Warranty		Two Years

MODEL NUMBER	CAPACITY LBS/KG
HISP4-22LB	22 LB/10KG
HISP4-44LB	44 LB/20KG
HISP4-110LB	110 LB/50KG
HISP4-220LB	220 LB/50KG

**Cable Length:** 10 ft. (3 Meters)

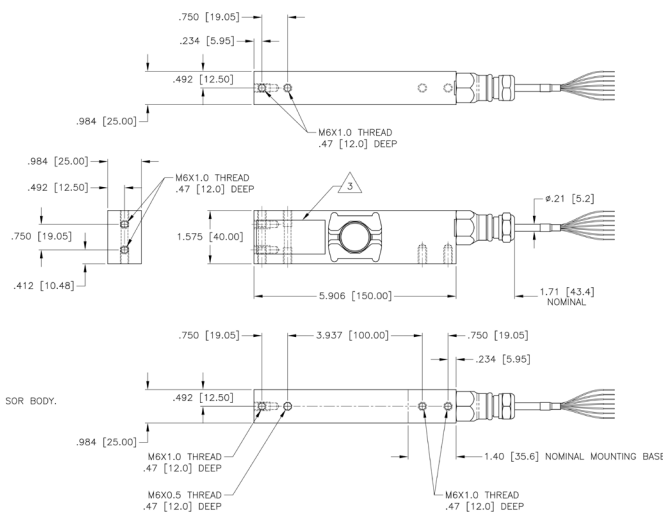
**Dimensions:** H 1.575 in (40 mm)  
x 5.906 in (150 mm) x W .984 in  
(25 mm)

**Mounting Bolts:** M6 x .5 Grade  
8.8 or M6 x 1.0 Grade 8.8

**Bolt Torque:** 7 ft-lbs or 10 [Nm]

C2 WIRE COLOR CODE FLAG LABEL IS FOUND APPROX. 10 IN. FROM END OF SENSOR'S CABLE	
EXCITATION +	RED
EXCITATION -	BLACK
SIGNAL +	GREEN
SIGNAL -	WHITE
C2+*	GRAY
C2-*	VIOLET
SHIELD	YELLOW

**WARNING:** NEVER cut load sensor cable



MODEL NUMBER	CAPACITY LBS (KG)	CABLE LENGTH FT (M)	MOUNTING BOLT AND GRADE	THREAD TORQUE FT-LBS (Nm)
HISP4-22LB	22 LB (10KG)	10FT [3M]	M6 X 1.0; GRADE 8.8 M6 X 0.5; GRADE 8.8	7 [10]
HISP4-44LB	44 LB (20KG)			
HISP4-110LB	110 LB (50KG)			
HISP4-220LB	220 LB (100KG)			

DIMENSIONS- INCHES & [mm]

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