# HERMETIC LOAD WASHER

Hermetic Load Washer is a stainless steel strain gauge based load washer with compensated temperature performance.

This type is fully laser welded and provides measurements up to 20,000 lbf with better than  $\pm 0.5\%$  (full scale) non-linearity.



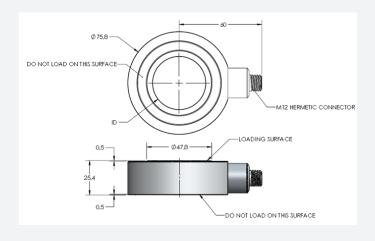
### **WIRING**



NOTE: Voltage, current loop or digital output versions are also available on request.

PIN	FUNCTION
1	Excitation +
2	Excitation -
3	Signal +
4	Signal -
5	No connection
6	No connection
7	No connection
8	No connection

### **DIMENSIONS**



MODEL	ID	SCREW SIZE	
	3.45mm [ .136" ]	1/8"	
	5.11mm [ .201" ]	3/16"	
	6.76mm [ .266" ]	1/4"	
	8.43mm [ .332" ]	5/16"	
	10.08mm [ .397" ]	3/8"	
	11.91mm [ .469" ]	7/16"	
AI W4-1	13.49mm [ .531" ]	1/2"	
ALVV4-1	15.09mm [ .594" ]	9/16"	
	16.66mm [ .656" ]	5/8"	
	19.84mm [ .781" ]	3/4"	
	23.01mm [ .906" ]	7/8"	
	26.19mm [ 1.031" ]	1"	
	32.54mm [ 1.281" ]	1 1/4"	
	38.89mm [ 1.531" ]	1 1/2"	

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## **SPECIFICATION**

PARAMETER	RANGE		
Capacity (lbf)	1k, 2k, 5k, 7.5k, 10k, 20k		
Rated Output (RO)	2mV/V nom.		
Safe Overload	150 % of RO		
Zero Balance	±5% of RO		
Excitation (VDC or VAC)	5v (recommended), 10v max.		
Bridge Resistance	$700 \Omega$ nom.		
Non-Linearity	±0.5% of RO		
Hysteresis	±0.5% of RO		
Non-Repeatability	±0.1% of RO		
Temp. Shift Zero	±0.01 of RO/°C		
Temp. Shift Span	±0.01 of load/°C		
Compensated Temp.	-15 to 71 °C		
Operating Temp.	-20 to 80 °C		
Material	Stainless Steel		
IP Rating	IP68		
Calibration Test Excitation	5V, 10V		
Calibration (std)	5 pt. compression		
Weight (nom.)	750g		
Deflection (nom.)	0.05mm [ .002"]		
Connector	8-pin M12 male		



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### **ORDER DETAILS**

To order a specific load washer required, compile and quote a unique part number from the example below.

			Screw Size (inch)			Capacity (lb)	
LW4	_	1	_	X/X	_	XXXXX	
				1/8		1,000	
				3/16		2,000	
				1/4		5,000	
				5/16		7,500	
				3/8		10,000	
				7/16		20,000	
				1/2			
				9/16			
				5/8			
				3/4			
				7/8			
				1			
				1 1/4			
				1 ½			

Example: **ALW4-1-3/4-10,000** 

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