

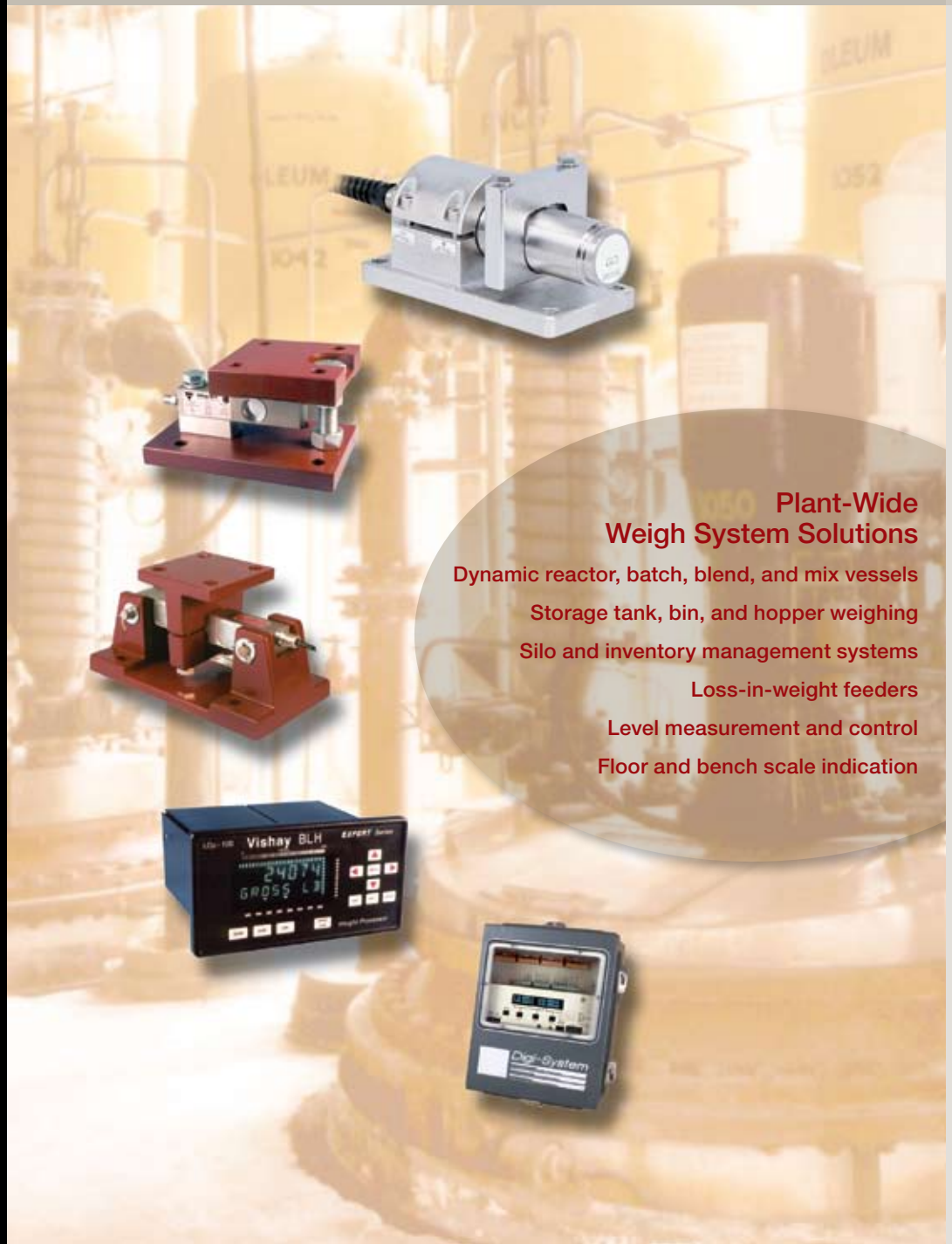


VISHAY INTERTECHNOLOGY, INC.

VISHAY SYSTEMS  
WEIGHING AND FORCE MEASUREMENT SOLUTIONS

## PROCESS WEIGHING TECHNOLOGIES

Vishay BLH



### Plant-Wide Weigh System Solutions

- Dynamic reactor, batch, blend, and mix vessels
- Storage tank, bin, and hopper weighing
- Silo and inventory management systems
- Loss-in-weight feeders
- Level measurement and control
- Floor and bench scale indication



# Process Weighing Technologies

## Plant-Wide Weigh System Solutions

**From the nearly impossible to the ordinary, we weigh every blender, tank, bin, and silo in your plant: precisely and cost-effectively**

From quality critical reactor vessels to ingredient storage bins; from clean-in-place batch tanks to shipping and receiving scales; from fractions of an ounce to thousands of tons; Vishay BLH precision weighing systems cover every imaginable weight processing need, plant-wide. Two complete lines, Expert and Professional, ensure quality, reliability, and cost satisfaction for every system. Expert series weighing systems measure quality critical, dynamic process vessels, they are insensitive to side, end, and torque loads introduced by extraneous process equipment or thermal expansion. Professional series weighing systems accurately measure all static vessels such as silos, bins, and hoppers.



## Applications

- Dynamic reactor, batch, blend, and mix vessels
- Storage tank, bin, and hopper weighing
- Silo and inventory management systems
- Loss-in-weight feeders
- Level measurement and control
- Floor and bench scale indication

### EXPERT Series

**High-Performance  
Dynamic Weighing and Processing**

- Reactor vessels
- Batching tanks
- Ribbon blenders
- Quality critical mixers
- Engine thrust stands

### PROFESSIONAL Series

**Economical/General-Purpose  
Static Weight Measurement**

- Ingredient storage tanks
- Outdoor silos
- Scrap bins
- Feeder tanks
- Shipping/receiving scales



# Expert Series

Precision Accuracy, High Performance

Product	Features	Capacities
<b>Weigh Modules</b>		
<p><b>KIS Series</b></p> 	<p><b>Double Cantilever Weigh Modules</b></p> <p>Exclusive, cylindrical, double-cantilever KIS design rejects process side loads (torque and torsion) introduced by mixers, blenders, agitators, and thermal expansion. When combined with Expert Series instrumentation, KIS-based systems provide the most accurate, reliable, and repeatable weight measurement available.</p> <ul style="list-style-type: none"> <li>• Rejects side loads up to 100% of rated capacity</li> <li>• Repeatability up to 0.01% full scale</li> <li>• 100% stainless steel construction for harsh environments</li> <li>• FM and CSA approved for hazardous locations</li> </ul> <p><i>Request product data sheet number 12160</i></p>	<p>113, 225, 450, 1.12 K, 2.25 K, 4.5 K, 11.25 K, 22.5 K, and 45 K lb</p>
<p><b>KDH Series</b></p> 	<p><b>High Capacity Weigh Modules</b></p> <p>Designed for large indoor and outdoor process or silo type vessels, KDH modules meet ANSI and UBC structural requirements for wind load and seismic applications. A floating top plate and yoke arrangement allows each module to accommodate vessel thermal expansion and contraction without measurement errors.</p> <ul style="list-style-type: none"> <li>• 100% stainless steel construction—KDH-3B</li> <li>• Seismic and wind resistant self-checking design</li> <li>• 0.02% repeatability full scale</li> <li>• FM and CSA approvals</li> </ul> <p><i>Request product data sheet number 12161 and 12162</i></p>	<p>22.5 K, 45 K, 111.5 K, 200 K, and 300 K lb</p>
<p><b>Z-BLOK</b></p> 	<p><b>Weigh Modules with Seismic and Wind Load Approvals</b></p> <ul style="list-style-type: none"> <li>• Inherent structural “overdesign” for ANSI and UBC</li> <li>• Double cantilever load beam improves accuracy</li> <li>• 0.01% repeatability full scale</li> <li>• FM and CSA approvals</li> </ul> <p><i>Request product data sheet number 12163</i></p>	<p>500, 1 K, 2 K, 5 K, 10 K, 20 K, and 50 K lb</p>
<b>Load Cells</b>		
<p><b>Alpha Beam</b></p> 	<p><b>Low Capacity, High Accuracy</b></p> <ul style="list-style-type: none"> <li>• Capacity range—5.5, 11, 22, 34, 56, and 112 lb</li> <li>• Environmentally sealed for washdown applications</li> <li>• Fast, easy two-bolt installation</li> <li>• FM and CSA approved, OIML certification (11 to 112 lb)</li> </ul> <p><i>Request product data sheet number 12167</i></p>	<p>5.5, 11, 22, 34, 56, and 112 lb</p>



# Expert Series

Precision Accuracy, High Performance

Product	Features
<b>Controllers/Indicators</b>	
<p><b>LCp-104</b></p> 	<p><b>Safe-Weigh® Systems for Quality Critical Applications</b></p> <ul style="list-style-type: none"> <li>• Display individual load cell data as weight or percent of load</li> <li>• Continual, proactive diagnostics assure system performance</li> <li>• Intuitive digital filtering and multiple analog outputs</li> <li>• Overload status monitoring of each system load cell</li> <li>• DeviceNet, Profibus, A-B Remote I/O, or Modbus Plus Interface</li> </ul> <p><i>Request product data sheet number 12179</i></p>
<p><b>LCp-100/200</b></p> 	<p><b>Weight Indicator/Controllers</b></p> <ul style="list-style-type: none"> <li>• Designed for precise high-speed process weighing applications</li> <li>• Interface with any PLC, DCS, or PC-based process control system</li> <li>• A-B Remote I/O, Modbus Plus, Profibus or DeviceNet protocol</li> <li>• Ultra efficient Plug-n-Weigh® set-up and calibration</li> <li>• Weight and mass flow measurement with setpoint control (200)</li> </ul> <p><i>Request product data sheet number 12180 and 12181</i></p>
<p><b>G4</b></p> 	<p><b>Multi-Vessel Weigh System Controller</b></p> <ul style="list-style-type: none"> <li>• Measure, monitor, and control up to 8 vessels simultaneously</li> <li>• Synchronization of measured channels (vessels)</li> <li>• Vibrant graphical user interface (GUI)</li> <li>• High speed performance (300 updates/second)</li> <li>• Expandable I/O capability</li> </ul> <p><i>Request product data sheet number 12207 (Panel Mount) and 12208 (Rail Mount)</i></p>
<b>Transmitters</b>	
<p><b>DXp-40</b></p> 	<p><b>High Resolution Weight Transmitter</b></p> <ul style="list-style-type: none"> <li>• Individually digitized load cell data for superior system accuracy</li> <li>• Continuous diagnostics of system performance</li> <li>• Keypad calibration eliminates expensive deadweight calibration</li> <li>• Optional dynamic digital filtering rejects process “noise”</li> <li>• Interfaces include Modbus RTU and A-B Remote I/O</li> <li>• Web tension measurement version available</li> </ul> <p><i>Request product data sheet number 12177</i></p>
<p><b>DXp-10/15</b></p> 	<p><b>Blind Weight Transmitters</b></p> <ul style="list-style-type: none"> <li>• Microprocessor-based “blind” weight transmitters</li> <li>• Integral summing junction circuit for multi-cell applications</li> <li>• 50,000 count (DXp-15) or 20,000 count (DXp-10) resolution</li> <li>• A-B Remote I/O or Modbus RTU interface available (DXp-15)</li> <li>• Standard NEMA 4/4X enclosure for harsh environments</li> </ul> <p><i>Request product data sheet number 12178</i></p>



# Expert Series

Precision Accuracy, High Performance

Product	Features
<b>Services</b>	
<b>Support</b> 	<b>Application Support and Field Service</b> Vishay BLH Application Engineers are the best in the business. With over 50 years of accumulated process industry knowledge and experience, our Application Engineers profile and model your system before you buy it. After installation, our Field Service Engineers fine tune it for maximum dynamic performance and repeatability to meet your expectations. The Field Engineering group provides on-site startup, calibration, and service 24 hours a day, 7 days a week, anywhere in the world. Our service engineers are equipped and trained to perform a wide range of calibration procedures. Available service contracts offer a turn-key calibration program that includes full computer generated documentation of results and traceability of methods and equipment.
<b>Calibrators</b>	
<b>FSk-40</b> 	<b>Complete Field Service Kit</b> Start-up, commissioning, routine servicing, and calibration of process weighing systems can be simplified significantly using the FSk-40 Service and Calibration Kit. This complete kit is equipped with a four-channel load cell instrument, an instrument calibrator, a serial communication module, operation and servicing manuals, and a set of 10-foot remote connection cables. The entire assembly is housed in a rugged, portable suitcase with shock mounting. <i>Request product data sheet number 12191</i>
<b>Model LCc-II</b> 	<b>Load Cell Calibrator</b> <ul style="list-style-type: none"><li>• For indication and calibration of up to 10 load cells</li><li>• Ten registers with 10-point linearization curves each</li><li>• Quick Cal, 10-point dead load, or data sheet calibration/each register</li><li>• Peak and valley storage capability for each register</li></ul> <i>Request product data sheet number 12185</i>
<b>Model 325</b> 	<b>Precision Calibrators</b> <ul style="list-style-type: none"><li>• Compact, rugged construction for cal lab or plant floor service</li><li>• Model 625: five ranges, 56 calibration points, 0.05% accuracy</li><li>• Model 325: eight ranges, three bridge impedance selections, vernier</li><li>• Model 125 Pocket Calibrator: palm sized, four selectable ranges</li></ul> <i>Request product data sheet number 12190</i>



# Professional Series


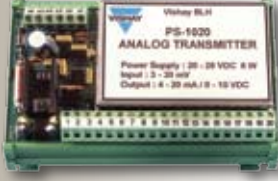
Economical, General Purpose

Product	Features	Capacities
<b>Weigh Modules</b>		
<b>EconoMount</b> 	<ul style="list-style-type: none"> <li>• High grade stainless steel load beams</li> <li>• Overload and uplift safety protection</li> <li>• Fixed, full-floating, semi-floating mounting</li> <li>• NTEP, OIML, FM, and CSA approvals</li> </ul> <p><i>Request product data sheet number 12165</i></p>	500, 1.25 K, 2.5 K, 5 K, and 10 K lb
<b>EZ-Mount</b> 	<ul style="list-style-type: none"> <li>• High grade stainless steel construction</li> <li>• Overload and uplift safety protection</li> <li>• Accommodates process thermal expansion</li> <li>• NTEP, OIML, and FM approvals</li> </ul> <p><i>Request product data sheet number 12154</i></p>	11 to 1.1 K lb (5, 10, 20, 50, 100, 200, 250, and 500 kg)
<b>PRO-Mount</b> 	<ul style="list-style-type: none"> <li>• Ideally suited for applications with high dead-load to high-load ratios</li> <li>• Self-checking design for thermal expansion</li> <li>• Load beam sealed to IP67 standards</li> <li>• NTEP, OIML, FM, and CSA approvals</li> </ul> <p><i>Request product data sheet number 12153</i></p>	10 K, 15 K, 25 K, 35 K, 50 K, and 75 K lb
<b>Load Cells</b>		
<b>U3SB "S" Type</b> 	<ul style="list-style-type: none"> <li>• Constructed with quality nickel plated, alloy tool steel for superior corrosion resistance</li> <li>• Stainless steel versions available</li> <li>• Sealed to IP67 standards</li> <li>• NTEP and FM Approvals</li> </ul> <p><i>Request product data sheet number 12152 and 12166</i></p>	50, 100, 150, 250, 300, 500, 750, 1 K, 1.5 K, 2 K, 2.5 K, 3 K, 5 K, 10 K, 15 K, and 20 K lb
<b>Canister</b> 	<ul style="list-style-type: none"> <li>• Compact, rugged with low deflection</li> <li>• Compression, tension, or universal service</li> <li>• Sealed to IP67 standards</li> <li>• FM and CSA approvals</li> </ul> <p><i>Request product data sheet numbers 12170, 12171, 12172, 12173, and 12174</i></p>	500 to 500 K lb
<b>Floor and Bench Scales</b> 	<ul style="list-style-type: none"> <li>• Platform sizes from 10 inches square to 5 x 7 feet</li> <li>• Stainless steel versions available</li> <li>• Compatible with all Vishay BLH indicators, transmitters, and network products</li> </ul> <p><i>Request product data sheet number 12175 and 12176</i></p>	5 to 10 K lb

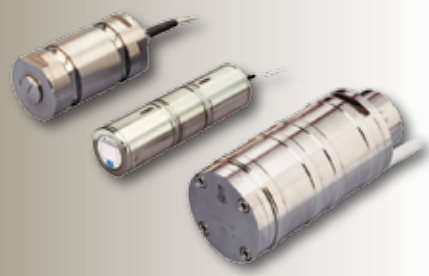


# Professional Series

Economical, General Purpose

Product	Features
<b>Instruments</b>	
<p><b>PS-1040/45/50</b></p> 	<p><b>Weight Transmitters</b></p> <ul style="list-style-type: none"> <li>• Panel or DIN rail mount configurations</li> <li>• Push button configuration and calibration</li> <li>• Ten-point load cell linearization</li> <li>• 0-10 Vdc or 4-20 mA isolated analog output</li> <li>• Peak hold measurement feature</li> <li>• Keypad entry or dead load calibration</li> <li>• Selectable/adjustable digital filtering</li> <li>• Serial communication with Modbus RTU protocol</li> </ul> <p><i>Request product data sheet number 12156 and 12157</i></p>
<p><b>PS-2010W</b></p> 	<p><b>Transmitter/Controller</b></p> <ul style="list-style-type: none"> <li>• Compact, full function weight indicator</li> <li>• DIN rail mount capability</li> <li>• 700,000 count resolution; 8 millisecond sample rate</li> <li>• Dynamic digital filtering with online diagnostics</li> <li>• Eight open collector setpoint outputs with main and dribble operation</li> <li>• High speed—120 updates-per-second</li> <li>• 4-20 mA current output</li> <li>• 24 Vdc version available</li> </ul> <p><i>Request product data sheet number 12186</i></p>
<p><b>PS-1020</b></p> 	<p><b>Analog Transmitter</b></p> <ul style="list-style-type: none"> <li>• Complete load cell signal conditioner</li> <li>• Precise 10 Vdc excitation supply for up to four load cells</li> <li>• Selectable 0-5 Vdc, 0-10 Vdc, or 4-20 mA analog output</li> <li>• Independent zero and span adjustments</li> <li>• DIN rail “Snap Track” mounting</li> <li>• Adjustable analog filtering</li> <li>• Integral load cell summing</li> </ul> <p><i>Request product data sheet number 12158</i></p>

## Load Beams that Serve as Pins, Shafts, and Axles

	<p>Vishay Systems offers a unique series of load beams for use as axles, pins, and shafts. These cells replace “dead” shafts in bogies, pulleys, and coupling devices, thereby providing live force measurement for crane scales, aircraft/ship wheel bogies, push-pull systems, and other onboard devices.</p> <table border="0"> <tr> <td data-bbox="624 1827 1021 1997"> <p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Crane scale pulley wheels</li> <li>• Axle replacements in multiple bogey systems</li> <li>• Load sensing sheave axle pins</li> </ul> </td> <td data-bbox="1021 1827 1463 1997"> <p><b>Beam Features</b></p> <ul style="list-style-type: none"> <li>• Stainless steel construction</li> <li>• Capacities from 10 kN to 2 MN</li> <li>• IP67 Protection with ATEX Certification available</li> </ul> </td> </tr> </table>	<p><b>Applications</b></p> <ul style="list-style-type: none"> <li>• Crane scale pulley wheels</li> <li>• Axle replacements in multiple bogey systems</li> <li>• Load sensing sheave axle pins</li> </ul>	<p><b>Beam Features</b></p> <ul style="list-style-type: none"> <li>• Stainless steel construction</li> <li>• Capacities from 10 kN to 2 MN</li> <li>• IP67 Protection with ATEX Certification available</li> </ul>
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**VISHAY MEASUREMENTS GROUP:**

Vishay Micro-Measurements  
Vishay Transducers  
Vishay Systems—Weighing and Force Measurements



The World's Largest  
**Manufacturer**  
of Weighing and Force Measurement Transducers

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