

High-Speed Weighing

Market Solutions



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VPG Transducers

Celtron • Revere • Sensortronics • Tedea-Huntleigh

Build the VPG Transducers Advantage into Your High-Speed Weighing Applications

- Shorter settling time
- Faster weighing speeds
- Environmentally sealed and/or wash-down construction
- Stainless steel housing
- Ultra-fast response time
- High resistance to side loads
- Insensitivity to rotary dynamic force
- Ultra high-performance in dynamic weighing
- Multi-axis overload protection
- Mechanical tare load cancelling
- Extended load cell life
- Fluid damped load cell
- Fully calibrated and programmable
- filtered digital output from DHS
- Adjustable communication speed

High-speed in-motion system



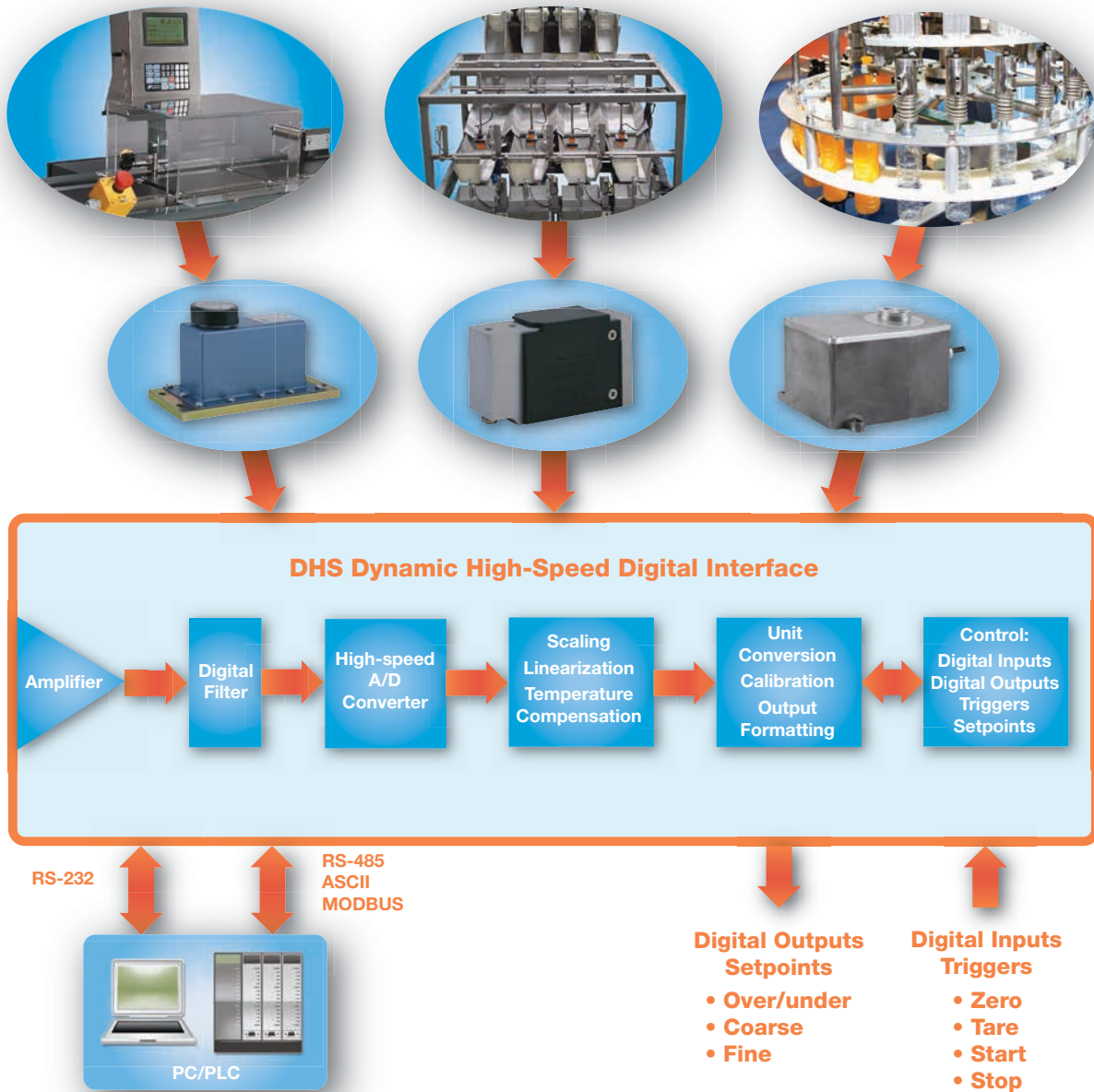
Rotary filling machine



Dynamic weighing

DHS—Dynamic Digital Interface

- Conversion of analog signal to digital data
- Full calibration and filtered digital output
- Link to any analog load cell and fluid-damped load cells
- Perfect solution to improve your weighing process
- Designed for easy installation and calibration in harsh process environments
- Cost-effective solution for your needs
- Guarantees high reliability and accurate production



Dynamic Solutions

VPG Transducers supplies the largest and most comprehensive product line for high-speed weighing

We offer the widest range of solutions for dynamic in-motion systems, and have 50 years of experience in producing load cells and fluid-damped load cells

Our products accommodate all your demands for filling, batching, and high-speed controlled processes

9010 Self-Contained Fluid-Damped Load Cell



- Fluid-damped load cell
- Unique and adjustable tare load-cancelling mechanism
- Highly effective viscous damping
- Built-in overload limit stops
- Fast weighing speed
- IP65 protection
- Aluminum housing, electroless nickel plating (optional stainless steel)

1410 Load Cell for Rotary Filling Machines



- Specially designed for use in rotary filling machines
- Short settling time
- High resistance to side loads
- Effective isolation of base vibrations
- Centrifugal forces do not affect accuracy
- Two mounting options

240 Fluid-Damped Load Cell



- Painted steel construction (optional stainless steel)
- OIML R60- and NTEP-approved
- Available in metric and UNC threads

1430 Damped Load Cell for Rotary Filling Machines



- Stainless steel construction
- Insensitive to rotary dynamic forces
- Single-point performance
- Rotary speed to 13 rpm at 1 m radius
- Sealed wash-down configuration

1010 / 1015 Aluminum Single-Point Load Cell



1033 Low-Profile Aluminum Single-Point Load Cell



1042 Single-Point Aluminum Load Cell with C6 OIML Approval



1510 Hermetically Sealed Single-Point Load Cell



1260 Aluminum High-Capacity Single-Point Load Cell



HPS Hermetically Sealed Single-Point Load Cell



Packaging Machine Solutions

VPG Transducers offers a wide range of load cells suitable for packaging machines with capacities between 5 and 500 kg

Rugged, stainless steel construction is designed for any area, from hazardous environments to the food industry

Robust, reliable, and designed to deliver high quality performance for years

Model 355—Capacities 5–500 kg



5, 10, 20, 30, 50, 100, 200, 250, 500 kg

Stainless steel construction

OIML R60 and NTEP approved

IP68 protection

Optional: EEx ia IIC T6 hazardous area approval; FM approval available

Model SHB—Capacities 5–500 kg



5, 10, 20, 30, 50, 100, 200, 350, 500 kg

Fully welded, stainless steel construction

Hermetically sealed, IP66 and IP68

Certified to OIML R-60, 4000d and NTEP class III L, 10000 divisions

Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells

Optional: ATEX and FM certified versions are available for use in potentially explosive atmospheres

Model HBB—Capacities 0–250 kg



10, 20, 30, 50, 75, 100, 200, 250 kg

Stainless steel and alloy steel construction

OIML C3 approved

IP68 protection for stainless version

DHS Dynamic High-Speed Digital Interface



Link to any load cell or analog fluid-damped load cell

Convert the signal to digital data

Four opto-isolated digital inputs and outputs

Advanced configurable digital filtering

Reading on request or continuous output

Graphic User Interface (GUI) PC application enables easy setup, calibration, and monitoring

VPG Transducers' Wide Range of Products Offers Solutions for Your Dynamic Weighing and Precision Control Applications

Fluid-damped load cell
 9010 / 240 for high-speed weighing
 1430 / 1410 for rotary filling machines

A wide range of load cells (1010, 1033, 1042, 1063, 1260, 1510, HPS) for dynamic applications
 Dynamic high-speed digital interface DHS

Transducer Type							
		Load Cells					
Model		1010	1042	1033	HPS	1260	1510
Capacities		3–90 kg	1–200 kg	10–30 kg	6–60 kg	50–660 kg	100–500 kg
Rated Output (mV/V)		2	2	2	2	2	2
Relative Stiffness		RFF. (1.0)	1042 – 0.8 1042S – 1.2	0.9	0.9	1.2	3.0
Environmental Protection		IP65 (optional IP67)	IP66	IP66	IP66 / IP68	IP66	IP66 / IP68
Safety Overload		150%	150%	150%	150%	150%	150%
External Construction Material		Aluminum	Aluminum	Aluminum	Stainless steel	Aluminum	Stainless steel
Optional Material		–	–	–	–	–	–
Settling Time							
Communication Interface		–	–	–	–	–	
Communication Protocol		–	–	–	–	–	
Applications	Batching	✓	✓	✓	✓	✓	✓
	Filling	✓	✓	✓	✓	✓	✓
	Rotary Filling						
	High Speed Weighing						

Typical Applications

- Check weighers
- Bottle rotary filling
- Multi-head packaging
- Dynamic batching and weighing
- Batching control

- Packaging, filling, sorting, controlling
- High-speed in-motion weighing
- Rotary filling
- Multi-head combination precise weighing

							
355	SHB	HBB	Fluid-Damped Load Cells for Rotary Filling Machines		Analog Fluid-Damped Load Cells		Digital Interface
5-500 kg	5-500 kg	10-250 kg	1430	1410	240	9010	DHS
5-500 kg	5-500 kg	10-250 kg	3 kg, 17 lb, 23 lb	10, 20, 30 kg	2-50 kg	3-90 kg	-4 mV/V to +4 mV/V
2	2	2	2	2	2	2	-
			-	-	-	-	-
IP68	IP66 and IP68	IP68 for stainless version	IP66	IP66	IP66	IP65 (optional IP66)	IP66
			Negative 120% Positive 160%	Negative 120% Positive 160%	150%	400%	
Stainless Steel	Stainless Steel	Alloy Steel and Stainless Steel	Stainless steel	Aluminum	Coated mild steel	Nickel plated aluminum	Stainless steel
-	-		-	-	Stainless steel	Stainless steel	
				300 milliseconds	40-300 milliseconds	40-300 milliseconds	
			-	-	-	-	RS232, RS485
			-	-	-	-	ASCII, Modbus
✓	✓	✓	✓	✓			✓
✓	✓	✓	✓	✓	✓	✓	✓
			✓	✓			✓
					✓	✓	✓

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