

# Benefits of POWERCELL® GDD® Higher Quality, Lower Cost

POWERCELL® GDD® digital load cells offer a vast improvement in weighing accuracy when compared to many other solutions, providing METTLER TOLEDO quality at an economical price.

#### **Improved Accuracy**

Advanced signal processing removes errors caused by temperature, loading cycle, loading time, and signal noise.

#### **Simple Connectivity**

Cables are securely attached to the load cells at the factory for easy installation.

#### **Outstanding Performance**

Digital signal processing enables premium weighing, especially when compared to traditional analog technology.

#### **Advanced Diagnostics**

Diagnostic capabilities make individual load cell outputs visible from the terminal, simplifying problem identification and repair.

#### **Multiple Applications**

GDD load cells provide reliable weighing for even the heaviest applications. The smart design enables performance in the most forbidding climates, from the tropics to the polar regions.

## **Technical Specifications**

Material	Stainless steel		
Metrology	OIML C3, NTEP IIIL 10,000		
Protection Rating	IP68/69k		
Lightning Protection	29,000 A		
Model	SLC720		
Load Cell Type	d Cell Type Column compression, Digital weight processor		









# Benefits of POWERCELL® GDD® Reliable Vehicle Weighing

POWERCELL load cells have a proven history of accurate and reliable performance. POWERCELL GDD takes this reliability to the next level, keeping you continually informed about your scale's performance.

#### **Lightning Protection**

Equipped with protection from lightning and other environmental threats to enable high uptime and reduce maintenance costs.

#### **Debris-Free Weighing**

A debris shield keeps the lower end of the rocker column free of debris and stones that can affect weighing accuracy.

#### **Durable Construction**

The stainless-steel construction is laser welded to provide IP68 and IP69K protection for survival in harsh environments.

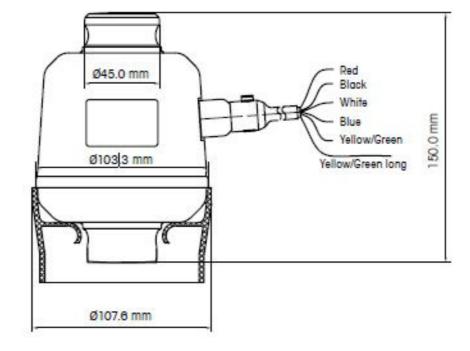
#### **Rocker-Column**

An integral rocker-column suspension automatically aligns the load cell for accurate weighing.

#### Simple Upgrade

Load cell conversion for existing scales gives easy access to all the benefits of POWERCELL GDD for most makes and models of truck scales.

### POWERCELL GDD Load Cell Dimensions: mm (in)



Cable Color	Code		
Red	VIN		
Black	GND		
White	CANH		
Blue	CANL		
Yellow/Green	CGND		
Yellow/Green long	SHIELD		



## POWERCELL® GDD®



Parameter		Unit of Measure   Specificat	ion			
Rated Capacity (R.C.)		t (klb, nominal)	20	30	50	
Sensitivity at R.C.		d @ R.C.	200,000	300,000	500,000	
Communication		Controller Area Network (CAN), Encrypted				
Communication Rate		kbit/sec 125				
Effective System Update I	Rate	Hz 15 with 12 cells				
Warm-up Time from Cold	l Start	Minutes 15				
Effect of Cable Length on	System Accuracy	kg 0				
Temperature Effect on Mil	nimum Dead Load Output	kg/°C <±0.8*V <sub>min</sub> (OIML)/5°C				
Temperature Range	Compensated	°C (°F) —10 to +40 (+14 to +104)				
	Operating	°C (°F)				
	Safe Storage	°C (°F) -40 to +80 (-40 to +176)				
Humidity Effect – Continuous 100% RH		kg 0				
Barometric Pressure Effect on Zero Load Output		kg/kPa <±1.2				
Metrology Class		C3				
	Linearity**	ppm R.C. <100				
	Hysteresis**	ppm R.C. <160				
Temperature Effect on	Span**	ppm R.C./°C <±13.3				
	Combined Error**	ppm R.C. <300				
Creep at R.C.	10 s to 30 m	ppm R.C. <±167				
Zero Return	After 30 min at R.C.	ppm R.C. <±167				
Nonrepeatability		ppm R.C. <±100				
Zero Balance at 20°C		% R.C. <±0.1				
Diagnostics (system) Individual load cell outputs visible from the terminal						

<sup>\*</sup>RC = Rated or full capacity as specified on the data plate.

\*\*The combined error of span, linearity error, and hysteresis will not exceed 80% of the error limits according to OIML R60.

## POWERCELL® GDD®



Parameter		Unit of Measure   Specifica	tion			
Rated Capacity (R.C.)		t (klb, nominal)	20	30	50	
European/OIML Approvals*	Standard	OIML R60				
	European Test Certificate	TC8298				
	OIML Certificate of Conformity	R60/2000-NL1-12.53				
	Class	C3				
	n <sub>max</sub> (OIML)	3,000				
	γ**	kg/kg	6,061	6,383	8,772	
	V <sub>min</sub> (OIML)	kg	3.3	4.7	5.7	
	PLC	0.8				
	Humidity Symbol	CH (Hermetic Seal)				
	Min. Dead Load	kg 50				
NTEP Approval*	Standard	NIST Handbook 44				
	Certificate Number	NTEP 13-010				
	Class	III L-M				
	n <sub>max</sub> (HB44)	10,000				
	V <sub>min</sub> (HB44)	kg	1.2 1.8 2.2			
	Min. Dead Load	kg 50				
Cable Length, Load Cell		m 13 (attached)				
Cable Length, Home Run		m 8 to 150 in selected pre-terminated lengths				
Cable Material	Cable, Load Cell	Double shield, 4 wires				
	Cable, Home Run	Double shield, 5 wires				
Supply Voltage Regulated	Typical	V DC 24				
in the Cell	Minimum / Maximum	V DC 10/26.4				

<sup>\*</sup>See certificate for complete information.

<sup>\*\*</sup>  $Y = E_{max}/V_{min}$ 

## POWERCELL® GDD®



Parameter		Unit of Measure   Specification	n			
Rated Capacity (R.C.)		t (klb, nominal)	20	30	50	
Lightning Protection*	Max (tested)	A 29,000				
Material	Spring Element	Stainless Steel (magnetic)				
	Enclosure	Electropolished 304 Stainless Steel				
	Low-Profile Receivers	Stainless Steel (magnetic)				
	Anti-Rotation	Integral, 6-Point Hexagonal Mount				
	Cable Entry Fittings	Stainless, Laser Welded, Glass-to-Metal Seal				
Protection Type		Hermetic (submersible)				
	IP Rating	IP68 & IP69k				
Load Limit	Safe	%R.C.	6R.C. 200			
Ultimate %R.C. 250				250		
Safe Dynamic Load	,	%R.C.		70		
Fatigue Life		cycles @R.C.		>1,000,000		
Direction of Loading				Compression (↓)		
Shipping Weight		kg	3.7	3.9	4.1	

<sup>\*</sup>Testing by Lightning Technologies (NTS, Inc.) with Lightning Protection Kit. Patents pending, POWERCELL® is a trademark of METTLER TOLEDO.

# **Weighbridge Service Solutions**

## Tailored to Fit Your Needs

METTLER TOLEDO Service delivers resources to enhance your efficiency, performance, and productivity. Explore our service offerings below or reach out to your local METTLER TOLEDO representative to find the best fit for you.



### **Warranty Coverage**

All warranties are not created equal. Coverage can vary greatly from one supplier to the next. It is critical to ask about parts, labor, travel, calibration, environmental protection, stipulations, and more when exploring various warranty offerings.



**Performance Upgrades** 

Load cells, indicators, peripherals, and software upgrades enhance the accuracy, reliability, and functionality of your truck scale beyond its current capabilities. With POWERCELL® upgrade and conversion kits, you can protect profitability and extend the life of your asset, all at a fraction of the cost of a new scale.



**Professional Installation** 

Establish full confidence in your equipment from day one. Our expert technicians execute installation and testing, full system setup and calibration, setup of standard operating parameters, and user and maintenance familiarization. Simplify compliance with site, regulatory, and quality requirements.



**Asset Maintenance** 

Regular maintenance enables reliable performance, compliance, and budget control. With insight into asset performance, you can minimize unplanned downtime and maintenance costs. Extend asset life with calibration, powerwashing, replacement of worn parts, and lubricating of the load cells and receivers.



**Care Packages** 

Care Packages keep your operation running like clockwork.
Crafted to cater to your specific needs, our packages provide preventive maintenance, replacement parts, and flexible support options.