

POWERCELL® GDD®

Smart Digital Load Cell



METTLER TOLEDO

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	European/OIML Approval: C3 NTEP Approval: III-L-M 10,000 CPA Approval: C3(GB/T 7551)
Protection Rating	IP68 / 69k
Lightning Protection	29,000 A
Model	SLC720
Load 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.

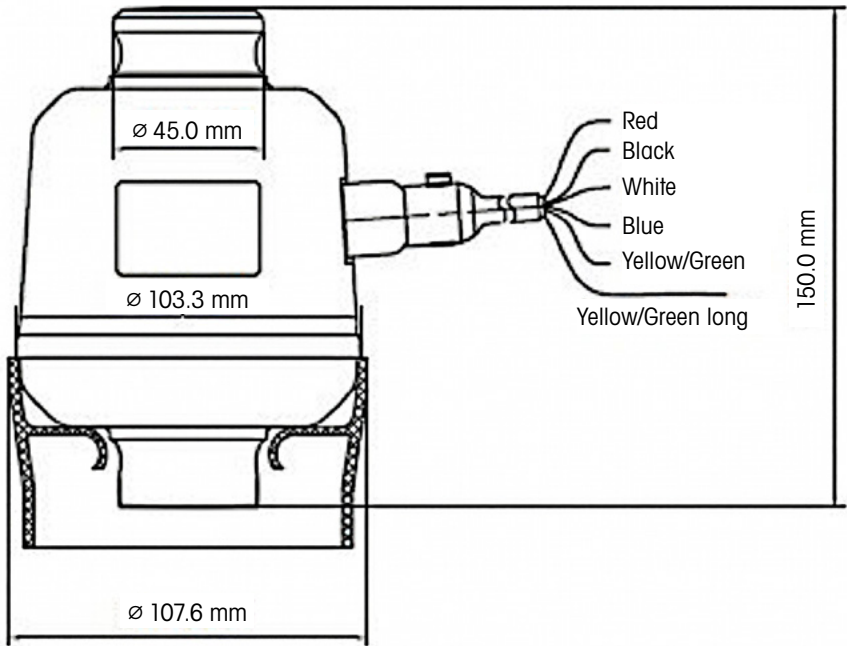
Rocker-Column

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





Parameter		Unit of Measure	Specification			
Rated Capacity (R.C.)		† (klb, nominal)	15	20	30	50
Sensitivity at R.C.		d @ R.C.	150,000	200,000	300,000	500,000
Communication		-	Controller Area Network (CAN), Encrypted			
Communication Rate		kbit/sec	125			
Effective System Update Rate		Hz	15 with 12 cells			
Warm-up Time from Cold Start		Minutes	15			
Effect of Cable Length on System Accuracy		kg	0			
Temperature Effect on Minimum Dead Load Output		kg/ °C	<±0.8*V _{min} (OIML)/5°C			
Temperature Range	Compensated	°C (°F)	-10 to +40 (+14 to +104)			
	Operating	°C (°F)	-40 to +60 (140 to +140)			
	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			

*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.



Parameter		Unit of Measure	Specification			
Rated Capacity (R.C.)		† (klb, nominal)	15	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 _{max} (OIML)	-	3,000			
	Y**	kg/kg	7,500	6,061	6,383	8,772
	V _{min} (OIML)	kg	2.5	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 _{max} (HB44)	-	10,000			
	V _{min} (HB44)	kg	1	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 in the Cell	Typical	V DC	24			
	Minimum / Maximum	V DC	10/26.4			

*See certificate for complete information.

** Y = E_{max} / V_{min}



Parameter		Unit of Measure	Specification			
Rated Capacity (R.C.)		† (klb, nominal)	15	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			
	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.	200			
	Ultimate	%R.C.	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	

*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.



► www.mt.com/veh-service

Subject to technical changes
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