

Accelerating Progress

MT Series Mechatronic Throttle Pedal with vSENSE™ Technology



AT A GLANCE

- Innovative modular design allows for ease of installation regardless of application or configuration
- vSENSE™ Hall effect non-contact sensor provides position sensing and switching accuracy and reliability
- Fully user customizable to fit a wide range of applications

The Kongsberg Automotive MT Series mechatronic pedal systems offer easy installation for either floor or suspended applications and provide unsurpassed reliability regardless of load.

The mechatronic pedal features the vSENSE™ non-contact sensor with patent-pending technology, configurable for analog output or electronic switches. Built to exceed all applicable industry standards and requirements, this rugged pedal and sensor system can withstand extreme off-road environments while ensuring precise control and superior performance.

The patented design of the Kongsberg Automotive vSENSE™ non-contact, programmable Hall effect sensor seals out contaminants to provide enhanced reliability in all environments. With no moving parts to wear over time, the vSENSE™ sensor sets a new standard for accuracy and durability, exceeding IP67 seal rating by performing under dynamic rather than static conditions.

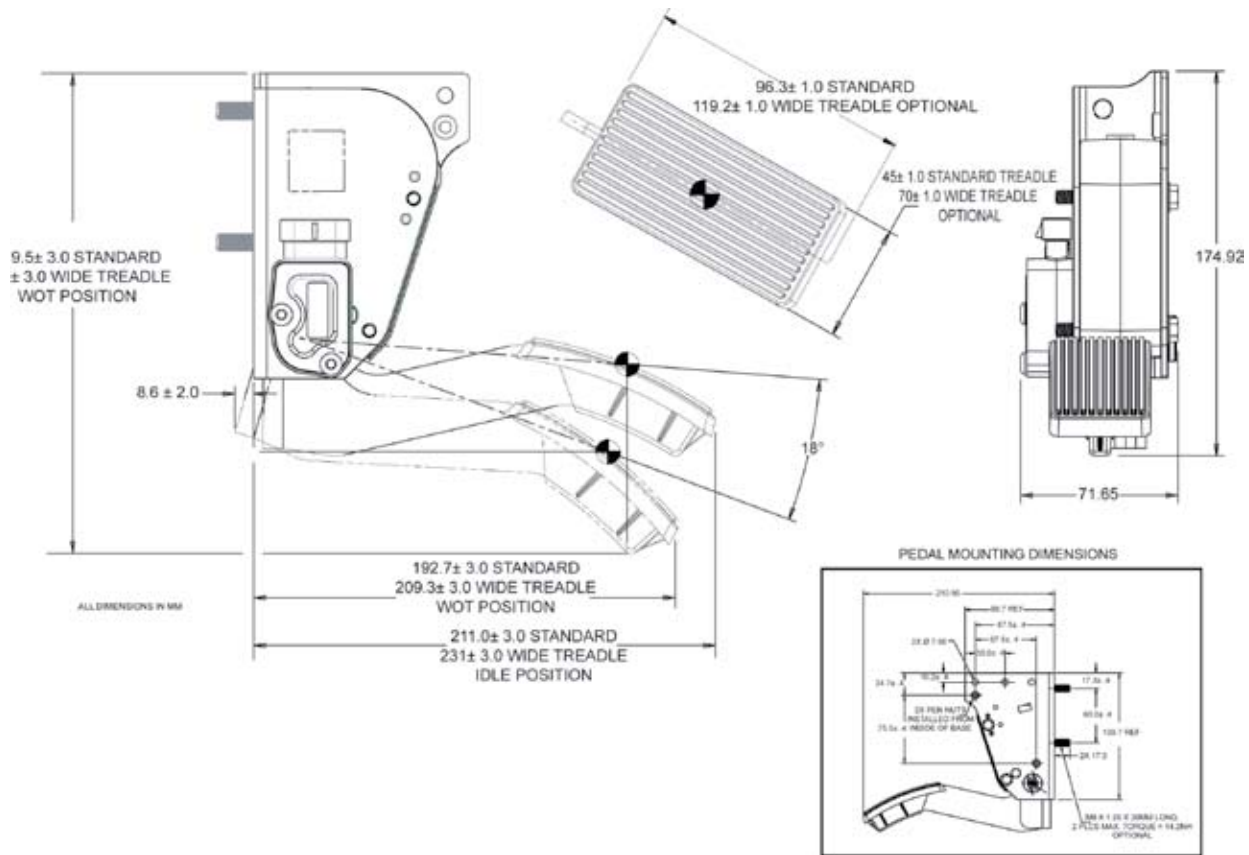
MT5000 SERIES SUSPENDED PEDAL

MT5000 FEATURES:

- Allows for "clean floor" access
- Integrated standard M6 side mounting nuts
- Exceeds 250lb download

MT5000 OPTIONS:

- Connector Type
- Kick Down
- Wide Treadle
- Sensor Output
 - Standard Integrated MetriPack Connector
 - Customized Connectors and Leads
- Integrated mounting studs for through-wall mounting



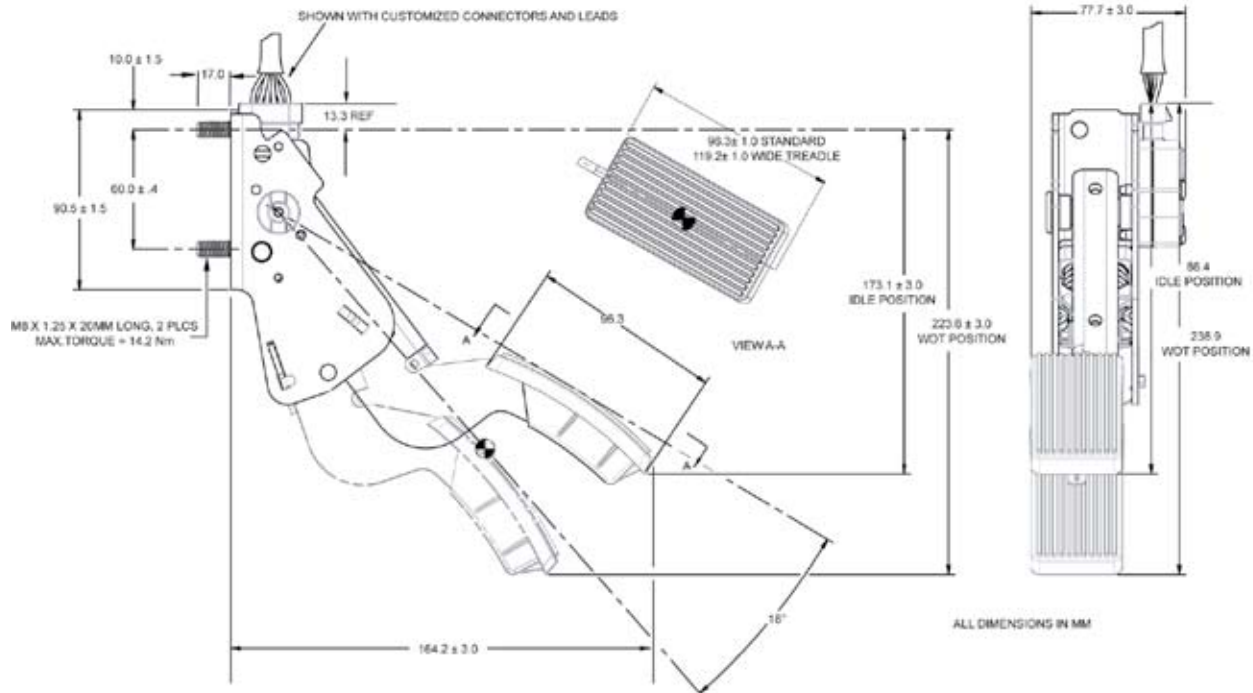
MT6000 SERIES SUSPENDED PEDAL

MT6000 FEATURES:

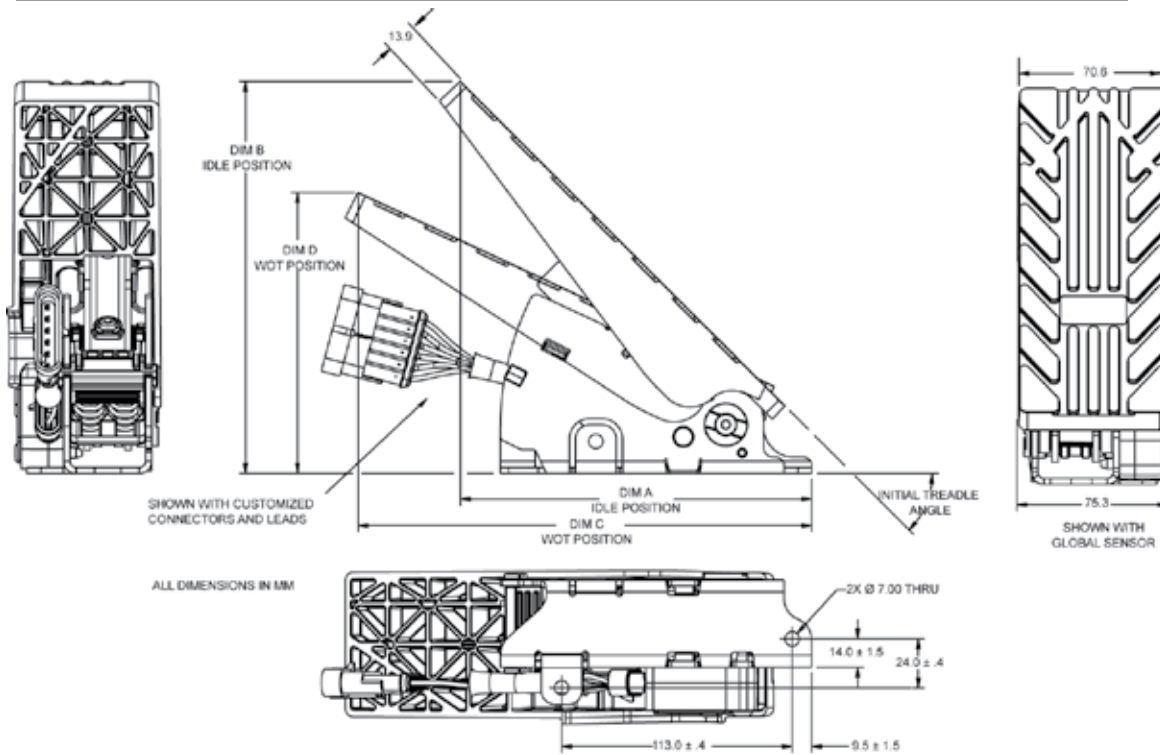
- Allows for "clean floor" access
- Integrated mounting studs for through-wall mounting
- Exceeds 250lb download

MT6000 OPTIONS:

- Connector Type
- Kick Down
- Wide Treadle
- Sensor Output
 - Standard Integrated MetriPack Connector
 - Customized Connectors and Leads



MT7000 SERIES FLOOR PEDAL

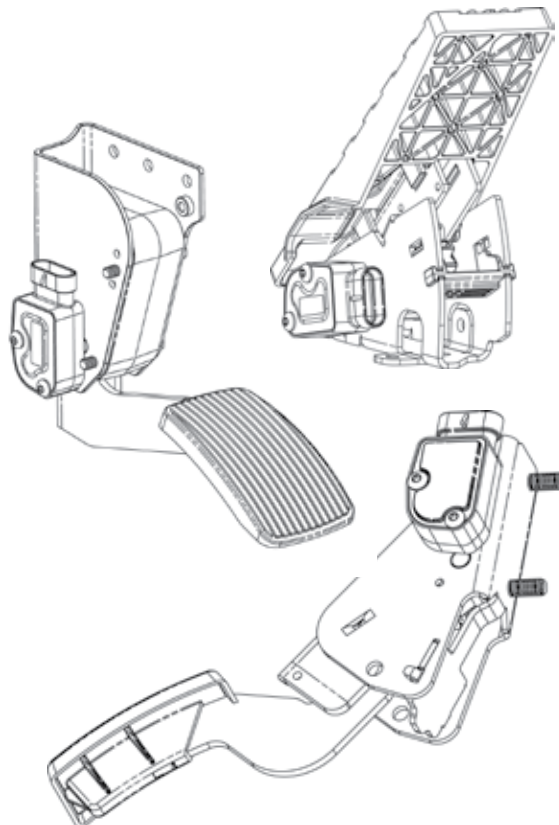


- MT7000 FEATURES:**
- Easy access mounting
 - Pinch free heel design prevents intrusion of debris that could interfere with pedal movement
 - Equipped with solid composite treadle with patterned surface to minimize foot slippage

- MT7000 OPTIONS:**
- Connector Type
 - Kick Down
 - Rubber Pedal Cover
 - Sensor Output
 - Standard Integrated MetriPack Connector
 - Customized Connectors and Leads

PEDAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
MECHANICAL	
Rated Life	10M cycles
Pedal Actuation Force:	
- MT5000	5.5lb (24.5N) Idle : 7.5lb (33.4N) WOT
- MT6000	5.5lb (24.5N) Idle : 7.5lb (33.4N) WOT
- MT7000	6.5lb (28.9N) Idle : 8.5lb (37.8N) WOT
Treadle	fixed
Load Rating	250lb (1100 N) download
Standard Mechanical Hysteresis	25%
Specification Compliances: FMVSS 124; ASTM B117-97, SAE J1455, KA PS-461, PS-462, PS-465	
Pedal Types:	
- MT5000	Suspended high pivot
- MT6000	Suspended low pivot
- MT7000	Floor
Operating Temperature	-40°C to +85°C



MT SERIES MECHATRONIC THROTTLE PEDAL WITH vSENSE™ TECHNOLOGY

SENSOR SPECIFICATIONS

PARAMETER	SPECIFICATIONS	PARAMETER	SPECIFICATIONS
Temperature Operating Range	-40°C to +85°C	Environmental Specification	
Functional Life (full rotation)	30M Cycles	EMC	150V/m
Supply Current Draw	max.10mA per Output	ESD	±15kV
Max. continuous voltage on switch	+50v	Seal Compliant	IP67
Max. continuous operating switch current	20mA	Chemical Resistance per.	SAE J1455
Output Range (programmable) within:		Configuration	
Minimum	>7% of supply voltage	Programmable for dual/single analog	
Maximum	<90% of supply voltage	Programmable for idle validation switch	
Electrical Specifications for Ratiometric Voltage Output			
Supply (Reference) Voltage	5V±0.5V		

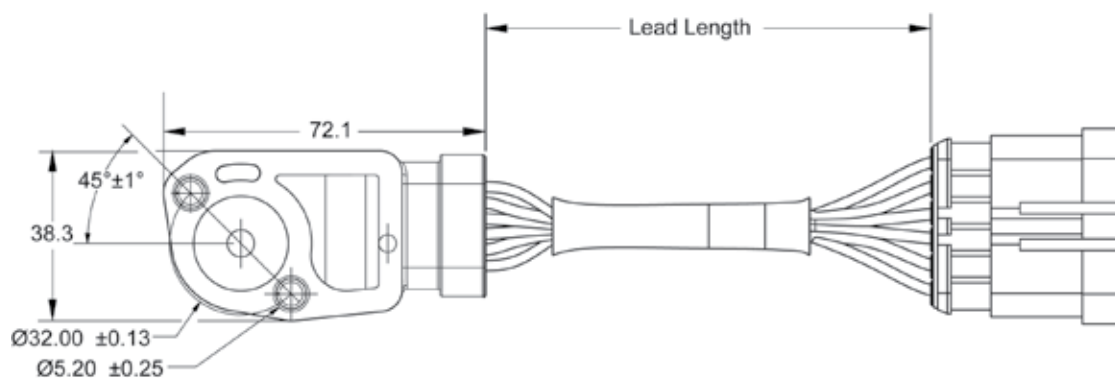
MODULAR OPTIONS:

FEATURES:

- Sealed external design:
 - no rotating shaft seal wear
 - no mechanical wear points
- Excellent EMI protection
- Integrated connector
- Fully programmable

OPTIONS:

- Single or dual outputs
 - analog
 - electronic idle validation switch
 - pulse width modulation
- Flying leads with all connector types



Shown with custom connector and electrical leads
All dimensions in mm

