



KONGSBERG
AUTOMOTIVE

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

Product Description

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 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.

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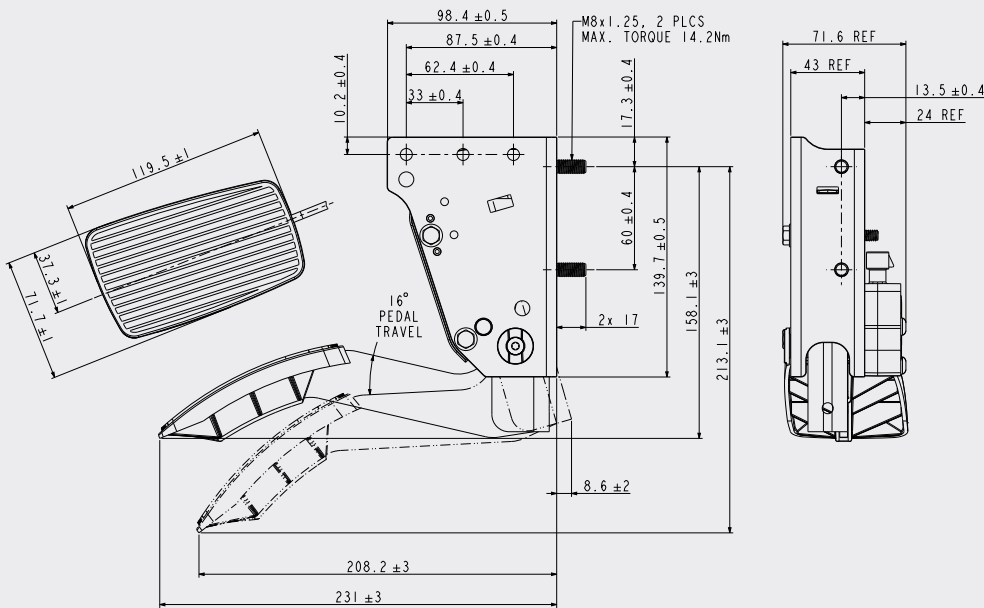
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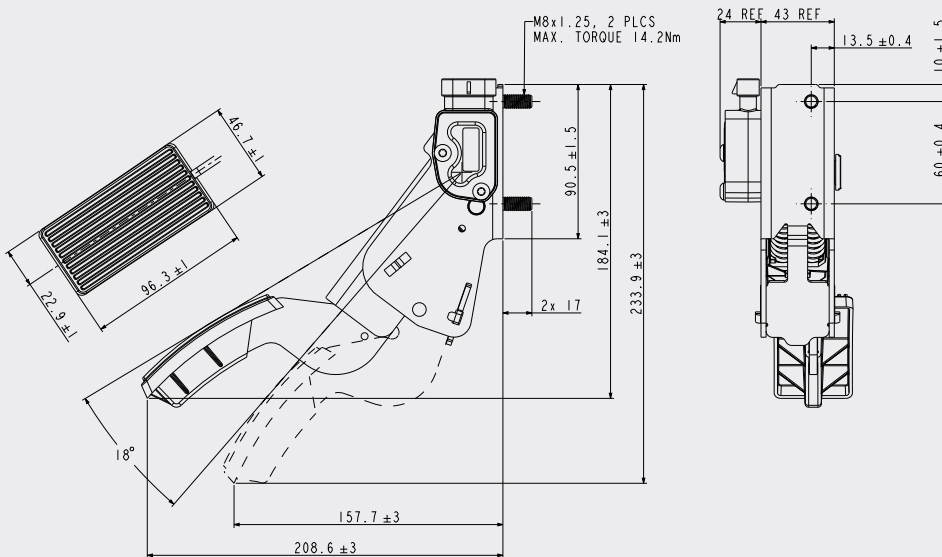
MT SERIES MECHATRONIC THROTTLE PEDAL WITH vSENSE™ TECHNOLOGY

Product Specifications

MT5000 SERIES SUSPENDED PEDAL



MT6000 SERIES SUSPENDED PEDAL



MT5000 features

- Allows for “clean floor” access
- Integrated standard M6 side mounting nuts
- Exceeds 350lb download

MT5000 options

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

MT6000 features

- Allows for “clean floor” access
- Integrated mounting studs for through-wall mounting
- Exceeds 350lb download

MT6000 options

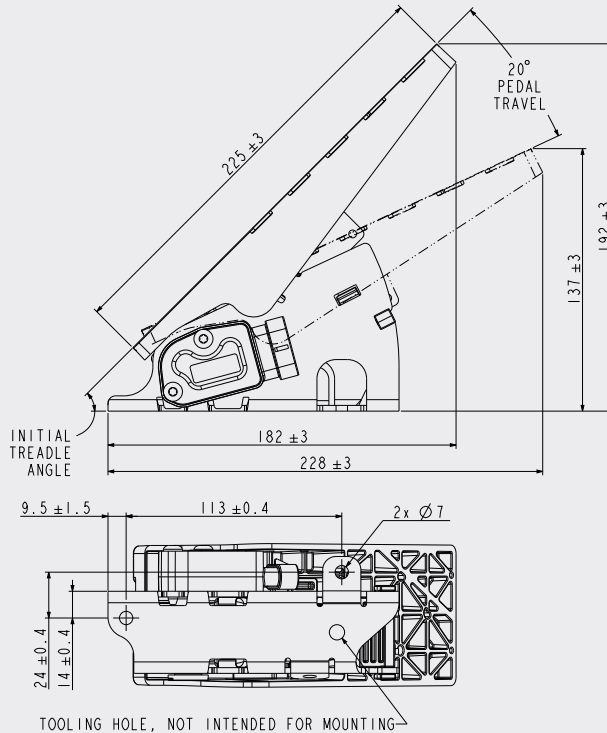
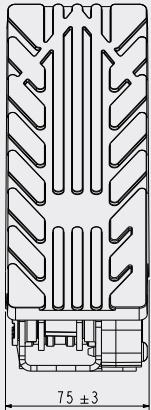
- Connector Type
- Kick Down
- Wide or narrow treadle
- Sensor Output
 - Standard Integrated MetriPack Connector
 - Customized Connectors and Leads

ACCELERATING PROGRESS

MT SERIES MECHATRONIC THROTTLE PEDAL WITH vSENSE™ TECHNOLOGY

Product Specifications

MT7000 SERIES SUSPENDED 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

Product Specifications - Pedal

Parameters

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 3	350lb (1557 N) download
Standard Mechanical Hysteresis	25%
Specification Compliances:	FMVSS 124; ASTM B 117-97, SAE J1843, 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

DRIVER CONTROL SYSTEM

MT SERIES MECHATRONIC THROTTLE PEDAL WITH vSENSE™ TECHNOLOGY

Product Specifications - Sensor

Parameters	Specifications
Temperature Operating Range	-40°C to +85°C
Functional Life (full rotation)	30M Cycles
Supply Current Draw	max. 10mA per Output
Max. continuous voltage on switch	+50v
Max. continuous operating switch current	20mA
Output Range (programmable) within:	
- Minimum	>7% of supply voltage
- Maximum	<90% of supply voltage

ELECTRICAL SPECIFICATIONS FOR RATIO-METRIC VOLTAGE OUTPUT

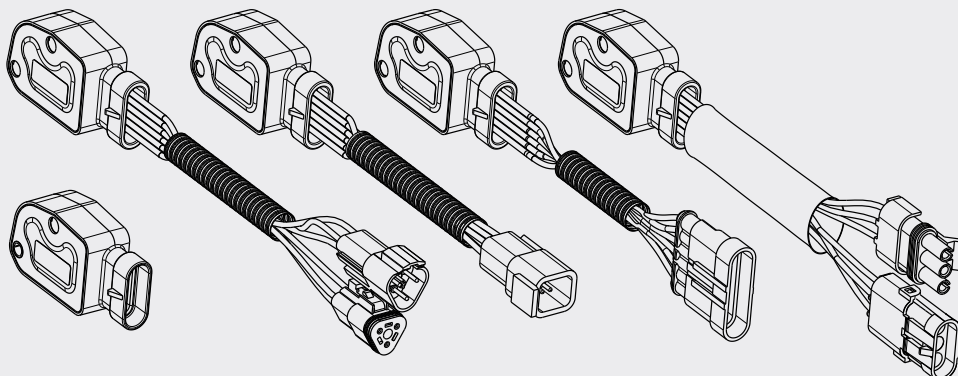
Supply (Reference) Voltage	5V ± 0.5 V
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ENVIRONMENTAL SPECIFICATION

EMC	150V/m
ESD	±15kV
Seal Compliant	IP67
Chemical Resistance per.	SAEJ1455

CONFIGURATION

- Programmable for dual/single analog
- Programmable for idle validation switch



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