

# MT SERIES

MECHATRONIC THROTTLE PEDAL SYSTEMS

## 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.



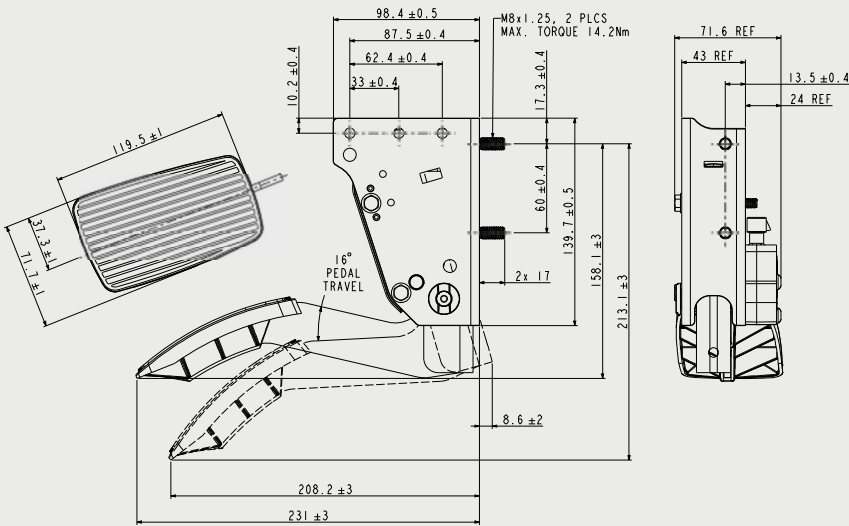
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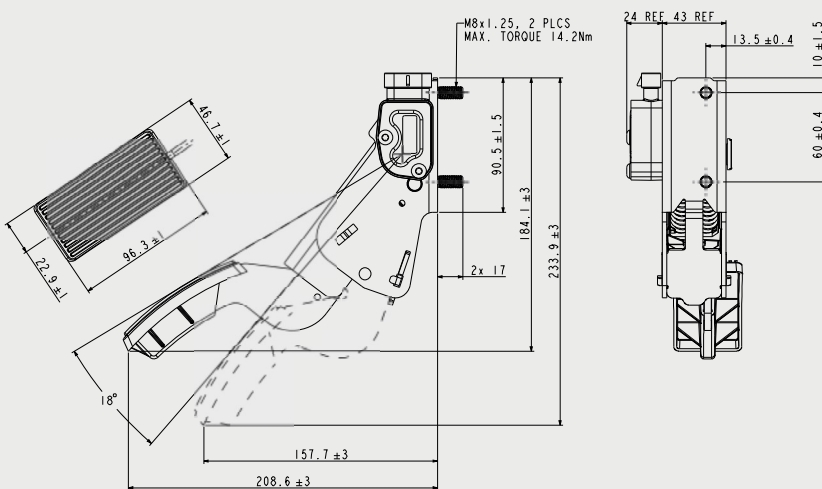


## PRODUCT SPECIFICATIONS

### MT5000 SERIES SUSPENDED PEDAL



### MT6000 SERIES SUSPENDED PEDAL



## MT5000 / MT 6000 FEATURES

- > ALLOWS FOR "CLEAN FLOOR" ACCESS
- > INTEGRATED STANDARD M6 SIDE MOUNTING NUTS
- > EXCEEDS 350LB DOWNLOAD

## MT5000 / MT6000 OPTIONS

- > CONNECTOR TYPE
  - » STANDARD INTEGRATED METRIPACK CONNECTOR
  - » CUSTOMIZED CONNECTORS AND LEADS
- > KICK DOWN
- > WIDE OR NARROW TREADLE
- > SENSOR OUTPUT
  - » STANDARD INTEGRATED METRIPACK CONNECTOR
  - » CUSTOMIZED CONNECTORS AND LEADS
- > INTEGRATED MOUNTING STUDS FOR THROUGH-WALL MOUNTING (MT6000)

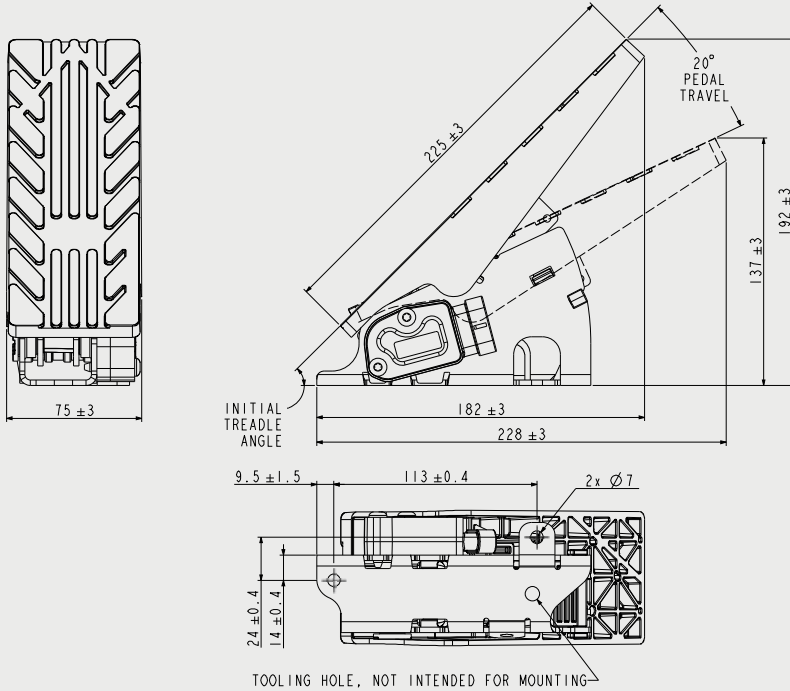
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## PRODUCT SPECIFICATIONS

### 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

PARAMETERS	SPECIFICATIONS
<b>RATED LIFE</b>	<b>1,000,000 CYCLES</b>
<b>PEDAL ACTUATION FORCE:</b> - MT5000 - MT6000 - MT7000	<b>5.5LB (24.5N) IDLE : 7.5LB (33.4N) WOT</b> <b>5.5LB (24.5N) IDLE : 7.5LB (33.4N) WOT</b> <b>6.5LB (28.9N) IDLE : 8.5LB (37.8N) WOT</b>
<b>TREADLE</b>	<b>FIXED</b>
<b>LOAD RATING 3</b>	<b>350LB (1557 N) DOWNLOAD</b>
<b>STANDARD MECHANICAL HYSTERESIS</b>	<b>25%</b>
<b>SPECIFICATION COMPLIANCES</b>	<b>FMVSS 124; ASTM B 117-97, SAE J1843, SAE J1455, KA PS-461, PS-462, PS-465</b>
<b>PEDAL TYPES:</b> - MT5000 - MT6000 - MT7000	<b>SUSPENDED HIGH PIVOT</b> <b>SUSPENDED LOW PIVOT</b> <b>FLOOR</b>
<b>OPERATING TEMPERATURE</b>	<b>-40°C TO +85°C</b>



## 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 - MAXIMUM	>7% OF SUPPLY VOLTAGE <90% OF SUPPLY VOLTAGE

### ELECTRICAL SPECIFICATIONS FOR RATIO-METRIC VOLTAGE OUTPUT

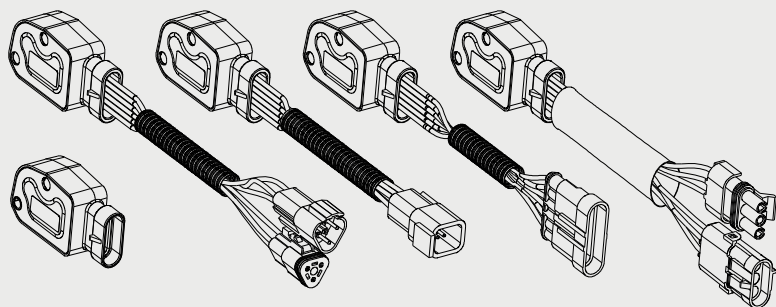
SUPPLY (REFERENCE) VOLTAGE	5V ± 0.5 V
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### ENVIRONMENTAL SPECIFICATION

EMC	150V/M
ESD	±15KV
SEAL COMPLIANT	IP67
CHEMICAL RESISTANCE PER.	SAEJ1455

### CONFIGURATION

- PROGRAMMABLE FOR DUAL/SINGLE ANALOG
- PROGRAMMABLE FOR IDLE VALIDATION SWITCH



## SENSOR FEATURES

- > SEALED EXTERNAL DESIGN:
  - » NO ROTATING SHAFT SEAL WEAR
  - » NO MECHANICAL WEAR POINTS
- > EXCELLENT EMI PROTECTION
- > INTEGRATED CONNECTOR
- > FULLY PROGRAMMABLE

## SENSOR OPTIONS

- > SINGLE OR DUAL OUTPUTS
  - » ANALOG
  - » ELECTRONIC IDLE VALIDATION SWITCH
  - » PULSE WIDTH MODULATION
- > FLYING LEADS WITH ALL CONNECTOR TYPES