

# MT SERIES MECHATRONIC THROTTLE PEDAL SYSTEMS



# **AT A GLANCE**

- > NNOVATIVE 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<sup>TM</sup> 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<sup>TM</sup> 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<sup>TM</sup> sensor sets a new standard for accuracy and durability, exceeding IP67 seal rating by performing under dynamic rather than static conditions.

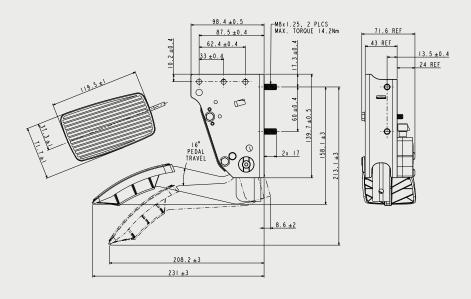




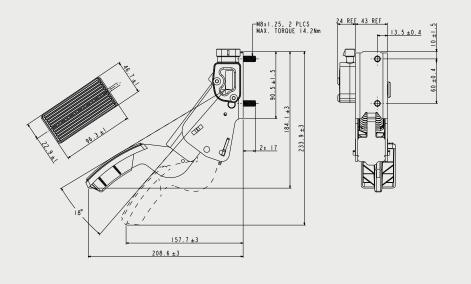


# **PRODUCT SPECIFICATIONS**

# **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

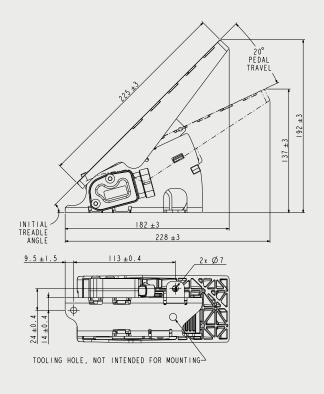
- > CONNECTOR TYPE
- > KICK DOWN
- > WIDE OR NARROW TREADLE
- > SENSOR OUTPUT
  - » STANDARD INTEGRATED METRIPACK CONNECTOR
  - » CUSTOMIZED CONNECTORS AND LEADS
- > INTEGRATED MOUNTING STUDS FOR THROUGH-WALL MOUNTING (MT6000)



# **PRODUCT SPECIFICATIONS**

# **MT7000 SERIES SUSPENDED PEDAL**





PARAMETERS	SPECIFICATIONS
RATED LIFE	1,000,000 CYCLES
PEDAL ACTUATION FORCE: - MT5000 - MT6000 - MT7000	5.5LB (24.5N) IDLE : 7.5LB (33.4N) WOT 5.5LB (24.5N) IDLE : 7.5LB (33.4N) WOT 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 - MT6000 - MT7000	SUSPENDED HIGH PIVOT SUSPENDED LOW PIVOT FLOOR
OPERATING TEMPERATURE	-40°C TO +85°C

# **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**

# **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. CONTINIUOUS 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 RATIOMETRIC VOLTAGE OUTPUT**

#### **ENVIRONMENTAL SPECIFICATION**

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

#### **CONFIGURATION**

- PROGRAMMABLE FOR DUAL/SINGLEANALOG
- 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

**CHINA:** 1288 KANGOIAO EAST ROAD, 201319 PUDONG, CHINA // T: +86 21 581 34411 **EUROPE:** HLAVNÁ 48, 952 01 VRÁBLE, SLOVAKIA // T: +42 1377 911 542 **NORTH AMERICA:** 300 SOUTH COCHRAN PO BOX 588 WILLIS, TX 77378, USA // T: +1936 856 2971