



## ACCELERATING PROGRESS

### HEAVY DUTY PEDALS

The Kongsberg Automotive Heavy Duty Pedal series is designed for use in medium and heavy duty truck, bus, construction and agricultural machines. The CT4000 Cable Throttle pedal and the MT4000 Mechatronic Throttle pedal are both tough, proven designs in a range of vehicle applications across the globe.

Transitioning from mechanical to electronic throttles is simple with this heavy duty pedal series. The MT4000 mechatronic pedal has been designed as a 'drop-in' replacement eliminating any cab and/or floor changes. The mechatronic MT4000 heavy duty pedal features the vSENSE™ noncontact sensor, configurable for analog output or electronic switches. The patented design of the vSENSE™ 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 and static conditions.



### AT A GLANCE

- Tough, proven design allows easy, fast and economical installation
- Solid aluminum design for optimum durability
- Under floor design allows for a clean floor installation and no exposed wiring or linkages
- Adjustable characteristic to suit wide range of applications
- Configurable with or without the use of handle throttle controls
- Mechanical version available with our push-pull cables
- Electronic version uses the vSENSE™ Hall effect non-contact sensor series.

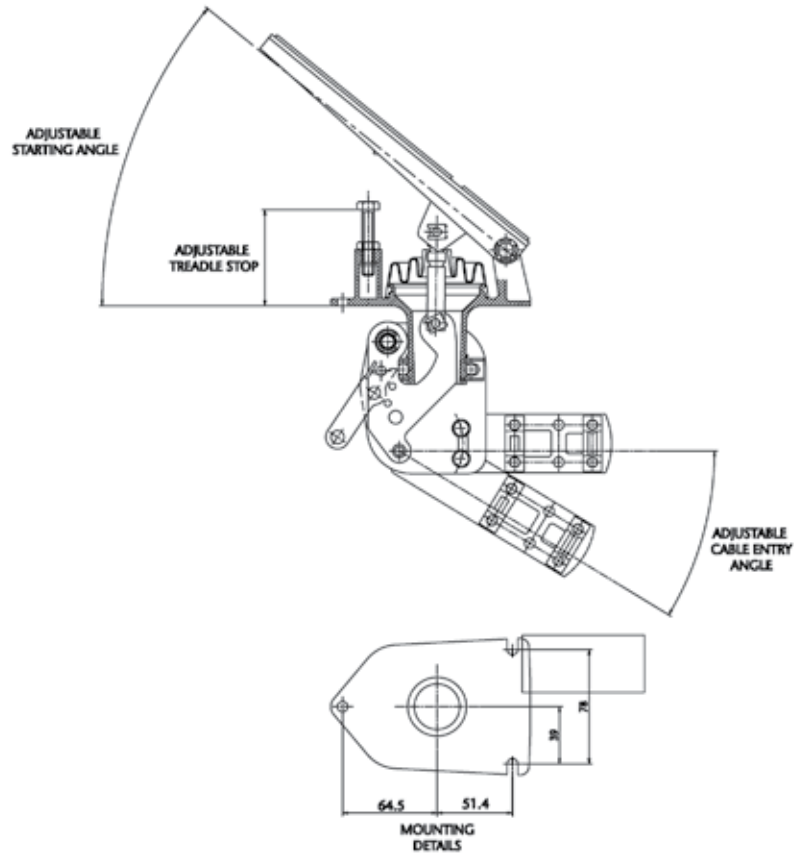
## CT4000 SERIES FLOOR PEDAL

### CT4000 FEATURES:

- Tough, proven design
- Quick, easy installation
- 50mm cable travel from 30° pedal rotation
- Cable entry up to 30° down from the floor plane
- Adjustable starting angle
- Adjustable positive stop
- Optional gasket allows full floor seal
- Quick, easy installation
- Integrated return spring
- Base can be fixed in any position through full 360° rotation

### CT4000 OPTIONS:

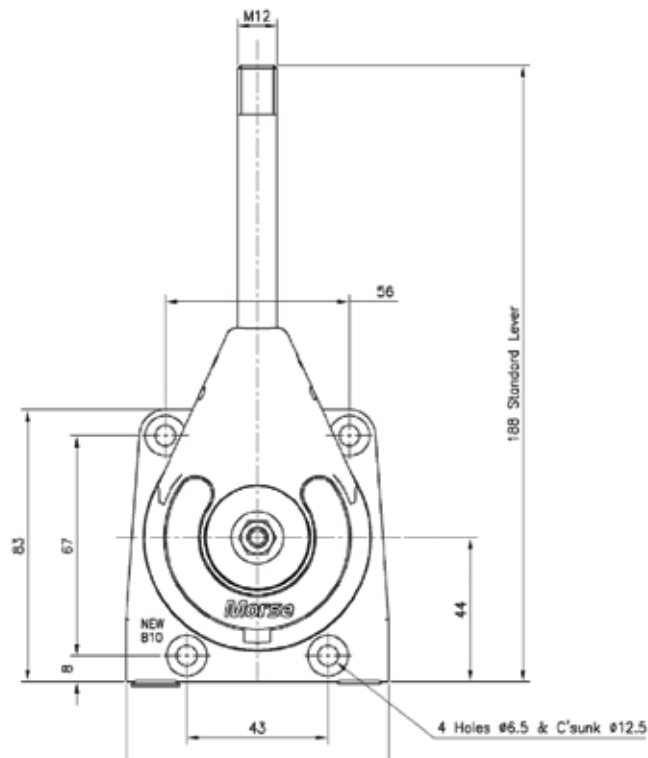
- With B10 hand control
- With Vernier hand control
- With Pull hand control
- With under floor protective boot



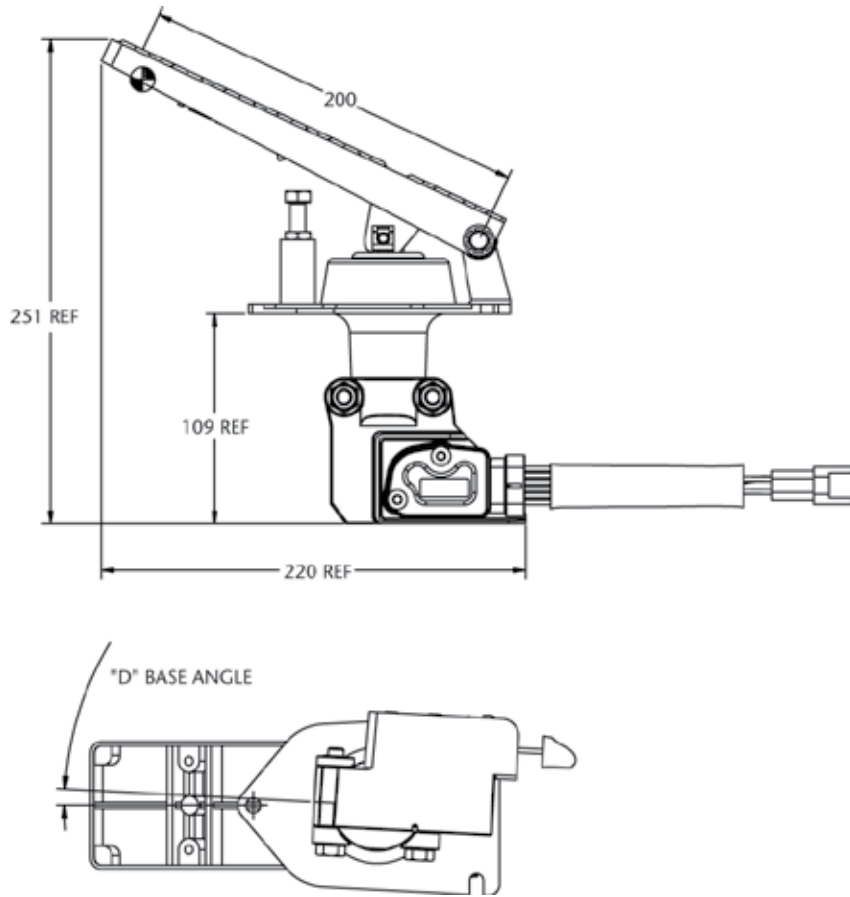
## OPTIONAL B10 HAND CONTROL

### B10 OPTIONS:

- Black or silver finish
- Adjustable stops for lever and cable travel
- Wide range of lever options available



## MT4000 SERIES FLOOR PEDAL



### MT4000 FEATURES:

- Tough, proven design
- Quick, easy installation
- Upper portion is common to mechanical pedal allowing 'drop-in' replacement
- Adjustable starting angle
- Adjustable positive stop
- Optional gasket allows full floor seal
- Quick, easy installation
- FMVSS 124 compliant
- Base can be fixed in any position through full 360° rotation

### MT4000 OPTIONS:

- Sensor Output
- Connector Type
  - Standard Integrated MetriPack Connector
  - Customized connectors and Leads
- With B10 hand control
- With Vernier hand control
- With Pull hand control

## PEDAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
<b>MECHANICAL</b>	
Rated Life	3M cycles
Pedal Actuation Force:	
- MT4000	4.3lb (19N) Idle : 11.5lb (51N) WOT
Treadle	Fixed
Load Rating	350lb (1550 N) download
Specification Compliances: FMVSS 124; ASTM B117-97, SAE J1843, SAE J1455, Teleflex PS-462, PS-465	
Pedal Types:	
- MT4000	Heavy duty mechatronic floor
- CT4000	Heavy duty cable floor
Operating Temperature	-40°C to +85°C

## 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		

## 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

