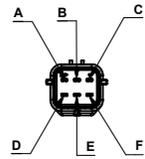
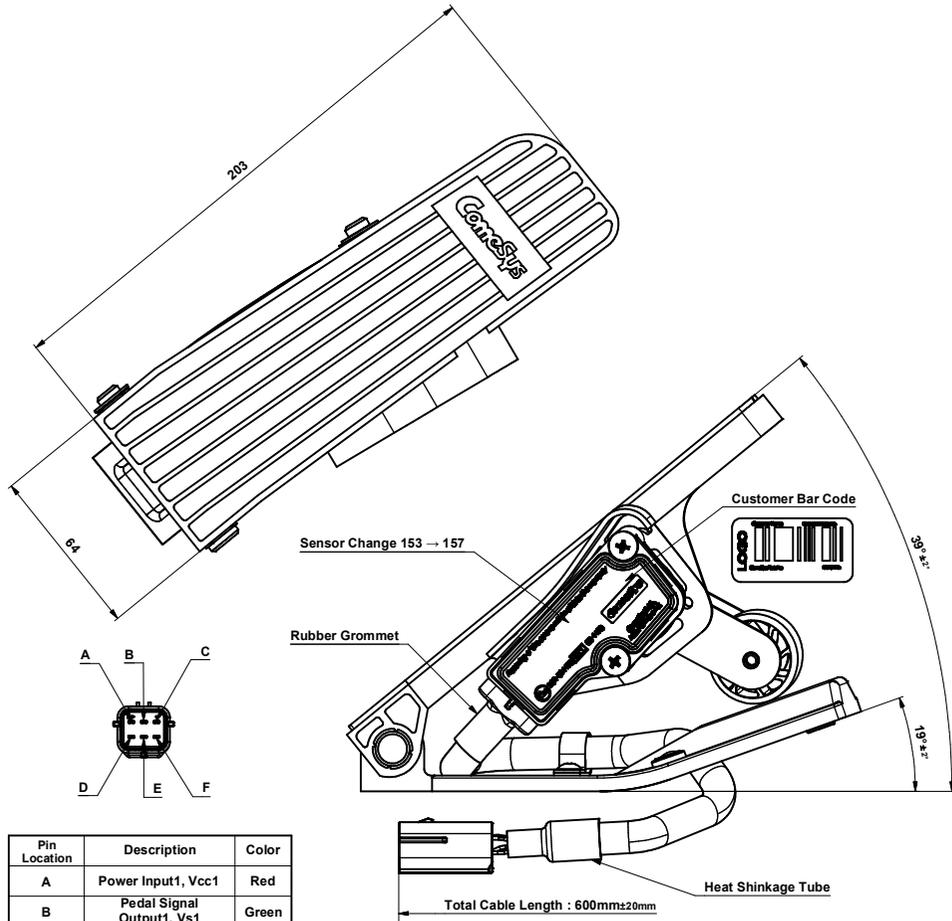


REV	DESCRIPTION	DATE	DR	RE	AP
0	Issued	25.Jan.06	H.T.Ko	J.I.Kim	H.M.Lee
1	153 Sensor → 157 Sensor Change	29.May.13	S.H.Sung	J.I.Kim	H.M.Lee



Pin Location	Description	Color
A	Power Input1, Vcc1	Red
B	Pedal Signal Output1, Vs1	Green
C	Ground1(Signal1)	Black
D	Power Input2, Vcc2	White
E	Pedal Signal Output2, Vs2	Orange
F	Ground2 (Signal2)	Violet

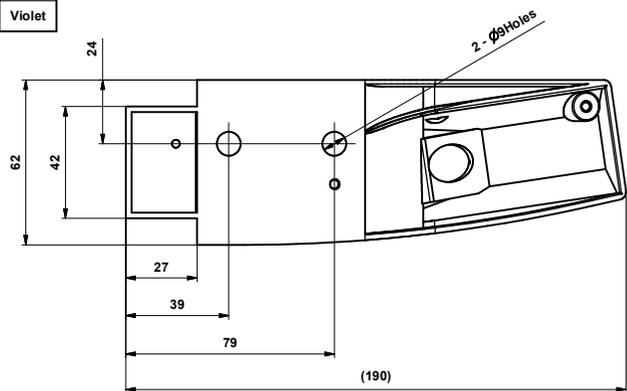


Fig. 1 Circuit Diagram

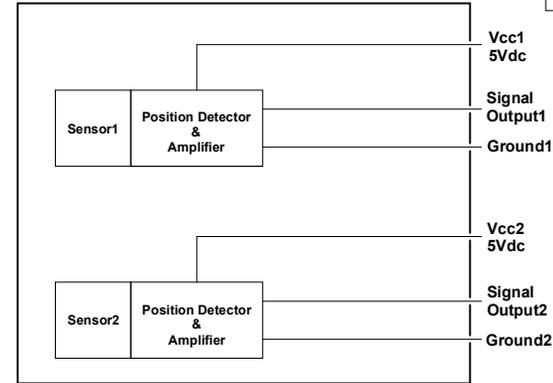


Fig. 2 Signal Output

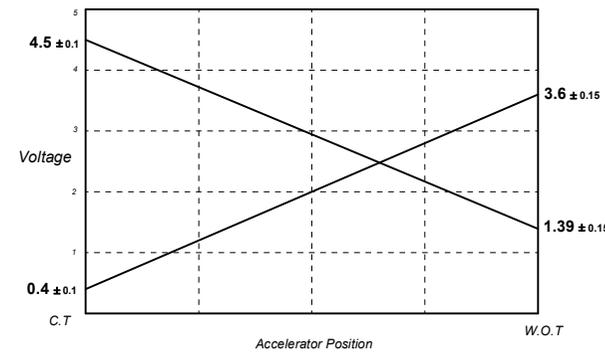
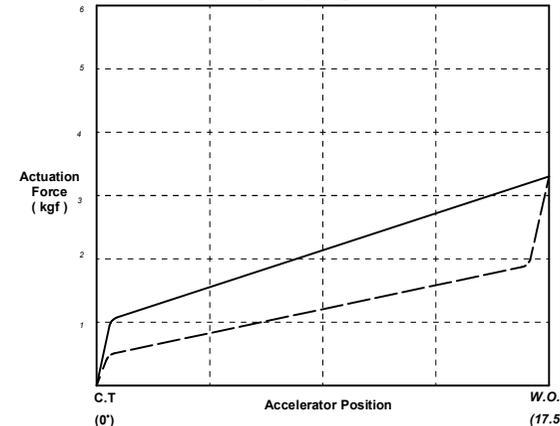


Fig. 3 Spring Force



- General Layout
 - Non - Contact Sensing Technology.
 - This drawing is satisfied with FMVSS124.
 - International Patent Pending.
- Mechanical Conditions
 - A static pedal force is applied at a point of 150mm from the pedal pivot axis and perpendicular to the pedal surface.
 - (Initial Load : 0.9kgf(MIN), Full Throttle : 3.3kgf(MAX))
 - End-Break force : 160kgf± 5kgf will not damage any pedal parts.
- Electrical Conditions
 - Environmental Conditions:
 - Operating Temperature : -40°C ~ +85°C
 - Storage Temperature : -40°C ~ +105°C
 - Electrical Characteristics
 - Type of sensing element
 - Input Voltage(Vcc) : 5Vdc ± 2%
 - Ratiometric Operational Input Range : 4.5 ~ 8V
 - Operation Current(Iop) : 10mA(Normal), 11mA(Max) / Channel
 - Reverse Pararity : Withstand 10min
 - Electrical Travel : See Fig 2.
 - Independent Linearity : ±2%
 - Signal Load : 10kohms, C=4.7nF Tested.
- Mechanical Specifications
 - Mechanical Travel : 17.5± 2°
- Electrical Connection
 - AMP J - Series Connector : for 6 wire 174264 - 2 (CAP)
- Material
 - Pedal Foot Plate : PA66+GF30%
 - Pedal Bottom Plate : Aluminum (ADC12)
 - Cable : AEXf or AVXf (0.50mm)
- Marking
 - Sensor serial number and pedal production number shall be indicated and recorded before despatch at factory.
- Durability
 - Subject to over 10million cycles between idle and full throttle position at a rate of approx. 100 cycles per minute.
 - Any wear observed, e.g., on the mechanical stops checked to be in compliance with the initial condition values.
- Environment Test

Item	Test Method	Decision Standard
Vibration Test	Subject to broadband random vibration between 20 and 2000Hz for 20hours in all 3 axis	Normal Operation
Shock Test	After Exposed 11ms at Acceleration 20g(ZERO to PEAK)	Normal Operation
Impact Test	Subject to a drop test onto a smooth concrete floor from a height of one meter a total of 6 time	Normal Operation
High voltage Test	APS Signal : After Exposed 3min. at 12Volts IVS Signal : After Exposed 3min. at 38Volts	Normal Operation
Temp. Test	After Exposed -40°C ~ 85°C (100 cycles)	Normal Operation
Humidity Test	After Exposed at -32°C ~ 70°C (96%)	Normal Operation
Salt Fog Test	After Exposed 96 Hours at Salt Fog (JIS Z2371)	Normal Operation
Chemical Test	Exposed to 3 second dips on each of the test fluids, followed by a 3 minutes air dry	Normal Operation

ComeSys Control & Measurement Systems Limited		Part No.	Electric Accelerator Pedal Assembly_MTF3
General Tolerance For Machining (KS B 0142)		Part No.	CLARK Application
±0.1mm	H12	Material	Paint & Surface Treatment
±0.2mm	H12	Weight	Heat Treatment
±0.3mm	H12	Customer Dev. No.	8033089
±0.5mm	H12	Sheet No.	FZ3-014-47
±1.0mm	H12	Sheet 1 of 1	1