

Pin Location	Description	Color
A	Power Input, Vcc	Red
B	Pedal Signal Output, Vs	Green
C	Ground (Signal)	Black
D	Switch, No	Yellow
E	Switch, No	Blue
-	-	-

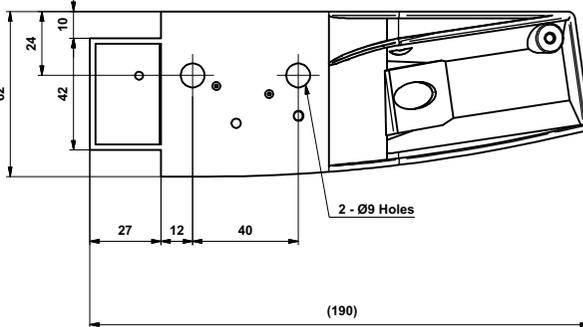


Fig. 1 Circuit Diagram

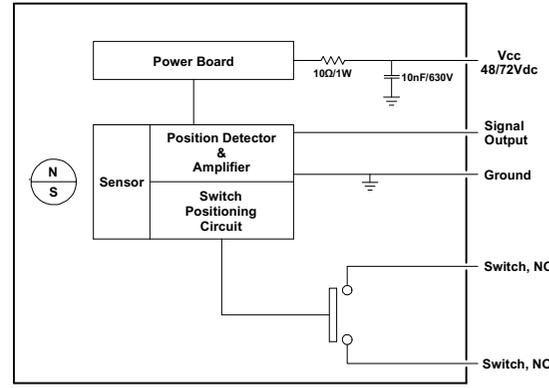


Fig. 2 Signal Output

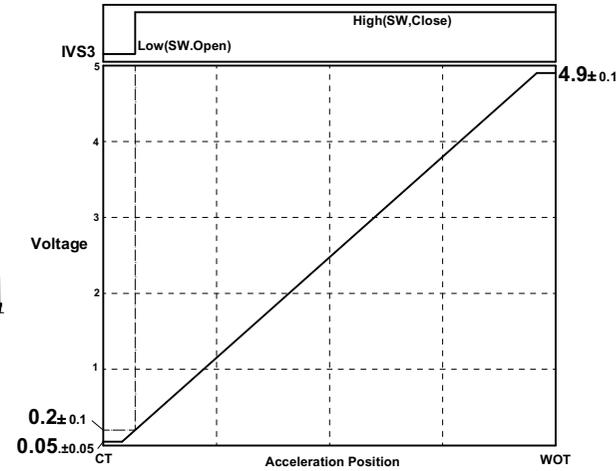
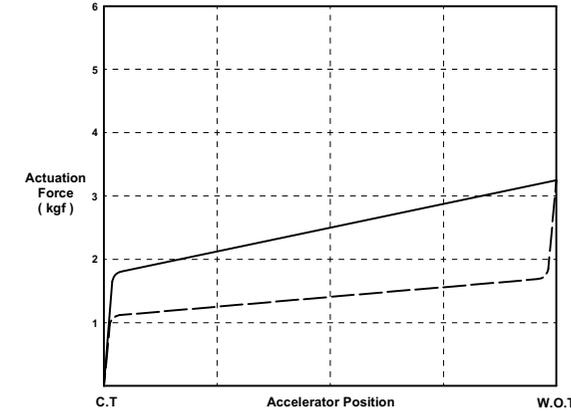


Fig. 3 Spring Force



- General Layout
 - Non - Contact Sensing Technology. This drawing is satisfied with SAE J1843. 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.
 - Two return spring, inner and outer sping, incorporated to return pedal to idle on release of actuation force.
- 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) : 24-96Vdc
 - Operation Current(Iop) : 5mA(Normal), 10mA(Max)
 - Reverse Polarity : Withstand 10min
 - Electrical Travel : See Fig 2
 - Independent Linearity : ±2%
 - Signal Load : 10kohms,C=4.7nF Tested.
 - Type of Switch(IVS) : MOSFET switch (Semiconductor Relay Switch)
 - Switch Continuous Load Current(Ic) : Max 100mA (400mW)
 - Switch Operation Current (I_r) : 2mA
 - Switch Resistance(Ron) : Max 30Ω at switch On
 - Current leak max 1μA at Switch Open (I_{LEAK})
 - Switch Polarity : No polarity
 - Switch Voltage : 5V, 12V, 24V, 48V, 96Vdc
 - Switch Position
 - Switch Position shall be discussed at PO and fixed at factory before delivery. See Fig.2
- 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%+Anti Static
 - Pedal Bottom Plate : Aluminum (ADC12)
 - Cable : AEXf or AVXf (0.50mm²)
- 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
Drop Test	Floor : Concrete, Height : 1 meter, Cycle : 6 Drops	Normal Operation
High voltage Test	APS Signal : After Exposed to 12Volts for 3min IVS Signal : After Exposed to 38Volts for 3min	Normal Operation
Temp. Test	After Exposed to -40°C ~ 85°C (100 cycles)	Normal Operation
Humidity Test	After Exposed to -32°C ~ 70°C (96%)	Normal Operation
Salt Fog Test	After Exposed to Salt Fog 96 Hours (JIS Z2371)	Normal Operation
Chemical Test	Exposed to 3 second dips on each of the following fluids, followed by a 3 minutes air dry	Normal Operation
ESD Test	Tested in accordance with IEC 61000-4-2 Spec	15KV(Air Discharge)
EMS Test	As per ISO 11452-2 (2004E)	100V/m

General Tolerance For Machining (AS B 6112)		Privacy & Confidentiality	Approval Model
±0.1mm	±0.05mm	±0.12mm	Approved Model
±0.2mm	±0.1mm	±0.2mm	Material
±0.3mm	±0.15mm	±0.3mm	Weight
±0.4mm	±0.2mm	±0.4mm	Heat Treatment
±0.5mm	±0.25mm	±0.5mm	Customer Part No.
±0.6mm	±0.3mm	±0.6mm	Sheet 1 of 1
±0.7mm	±0.35mm	±0.7mm	
±0.8mm	±0.4mm	±0.8mm	
±0.9mm	±0.45mm	±0.9mm	
±1.0mm	±0.5mm	±1.0mm	

DR	DR	DATE	DESCRIPTION	APPROVED
DR	S.H.Park	19.Jan.16	Do Not Scale	
DR	J.I.Kim	19.Jan.16	Third Angle Projection	
DR	M.M.Lee	19.Jan.16	Sheet 1 of 1	

ComeSys Control & Measurement Systems Limited		Part & Surface Treatment
Electronic Accelerator Pedal Assy (MTF3)		
Material		
Weight		
Heat Treatment		
Customer Part No.		
Sheet 1 of 1		
Part No.		FZ3-132-133
Revision		0