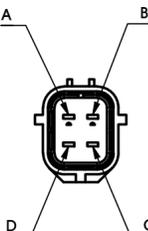
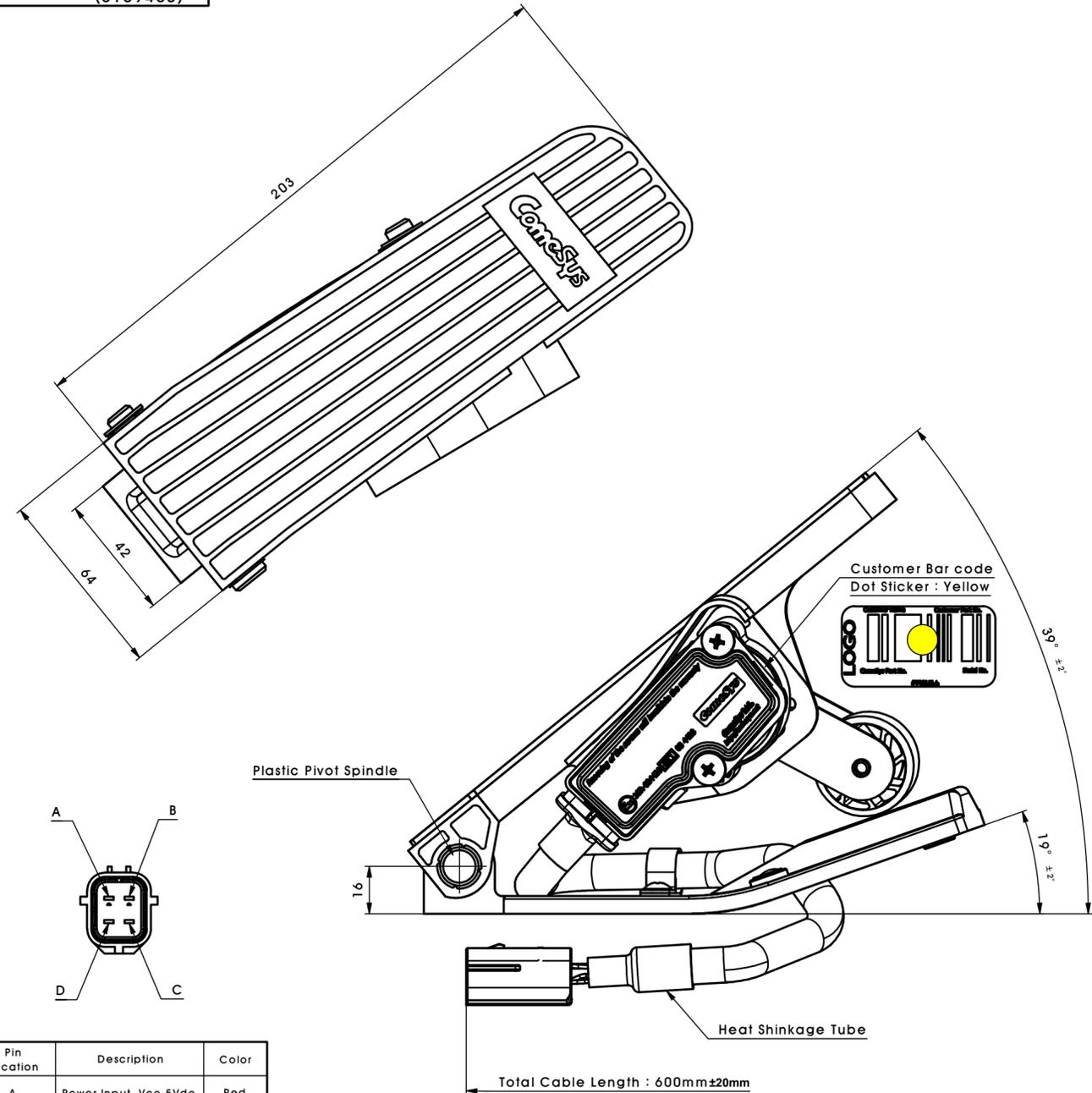


Part No. FZ3-113-471  
(8159405)

REVISION HISTORY					
REV	DESCRIPTION	DATE	DR	RE	AP
0	Issued	13.Jan.20	H.R.Lee	J.Kim	J.H.Lee



Pin Location	Description	Color
A	Power Input, Vcc 5Vdc	Red
B	Ground	Black
C	Pedal Sensor Signal Output	Green
D	Switch Signal (IVS3)	Pink

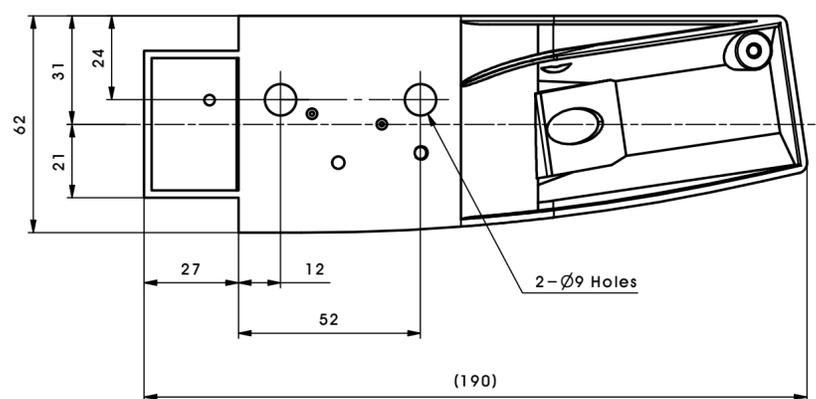


Fig. 1 Circuit Diagram

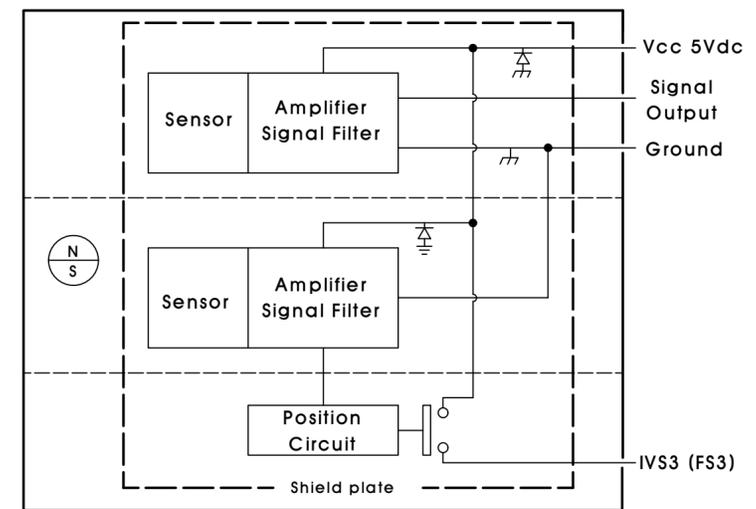


Fig. 2 Signal Output

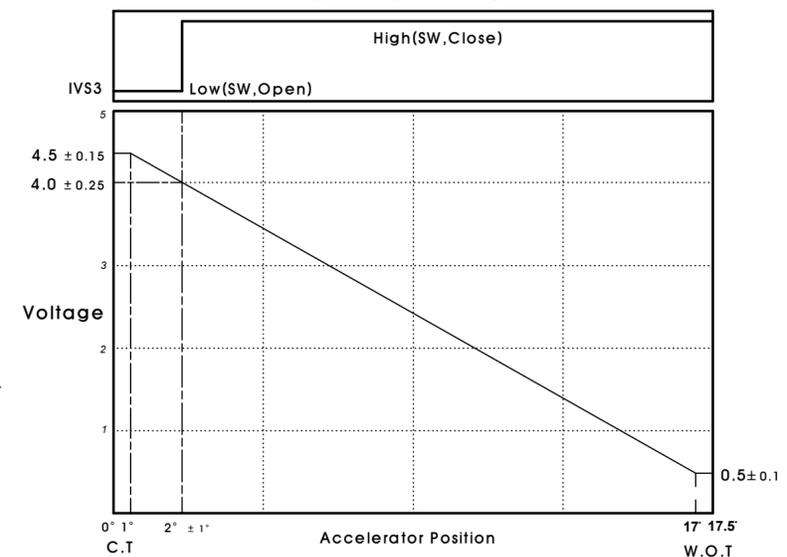
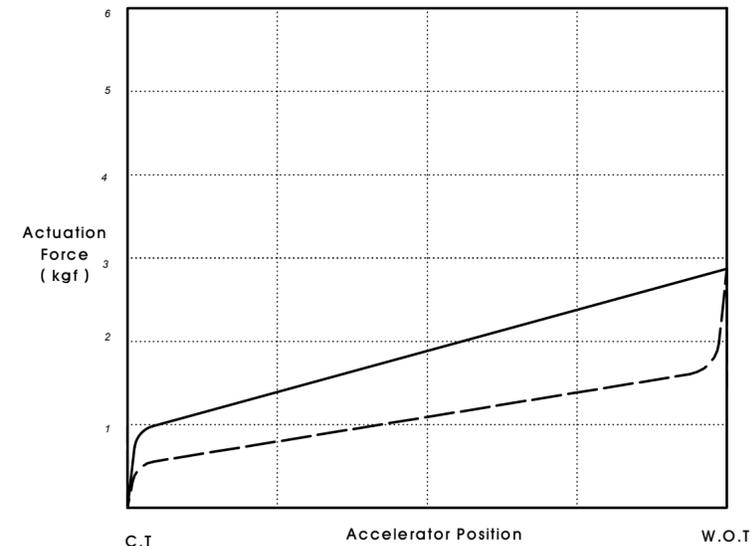


Fig. 3 Spring Force



- 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 : 2.7kgf(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 Operation Input Range : 4.5V~8V
      - Operation Current(Iop) : 20mA(Normal), 30mA(Max)
      - Reverse Polarity : Withstand 10min
      - Electrical Travel : See Fig 2.
      - Independent Linearity : ± 2%
    - Type of Switch : MOSFET Switch (CLARE : CPC1030)
      - Switch max Load Current(Io) : 100mA(400mW)
      - Switch Operation Load Current(IF) : 5mA@80V
      - Switch Resistance(Ron) : Max 30Ω at Switch On  
VL=350Vp, Current Leak Max 1μA at Switch Open (ILEAK)
      - Switch Polarity : No Polarity
      - Switch Voltage : Up to 80V
      - Switch Position  
Switch Position shall be discussed at PO and fixed at factory before delivery.
- Mechanical Specifications  
Mechanical Travel : 17.5± 2'
- Electrical Connection  
AMP J - Series Connector : for 4 wire 174259-2 (CAP)
- Material  
Pedal Foot Plate : PA66+GF30%+Anti Static  
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 10 million 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 to Acceleration 20g(ZERO to PEAK) for 11ms	Normal Operation
Impact Test	Subject to a drop test onto a smooth concrete floor from a height of one meter a total of 6 times	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 dipping in each of the Test 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

ComeSys Control & Measurement Systems Limited				Name	
General Tolerance For Machining (K18 & 0412)				Electronic Accelerator Pedal Assy	
Priority & Confidence				Application Model	
The information contained in this Drawing is the property of ComeSys Ltd. Any reproduction in part or a whole without the written permission of ComeSys Ltd is prohibited.				Clark Application CTX40/70, CPX15	
http://comesys.net				Material	Paint & Surface Treatment
DR	H.R.Lee	13.Jan.20	Do Not Scale	Weight	582 g
RE	J.H.Lee	13.Jan.20	Third Angle Injection	Customer Part No.	8159405
AP	J.H.Lee	13.Jan.20	Sheet 1 of 1	ComeSys Part No.	FZ3-113-471
				Issued	0