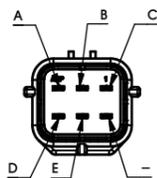
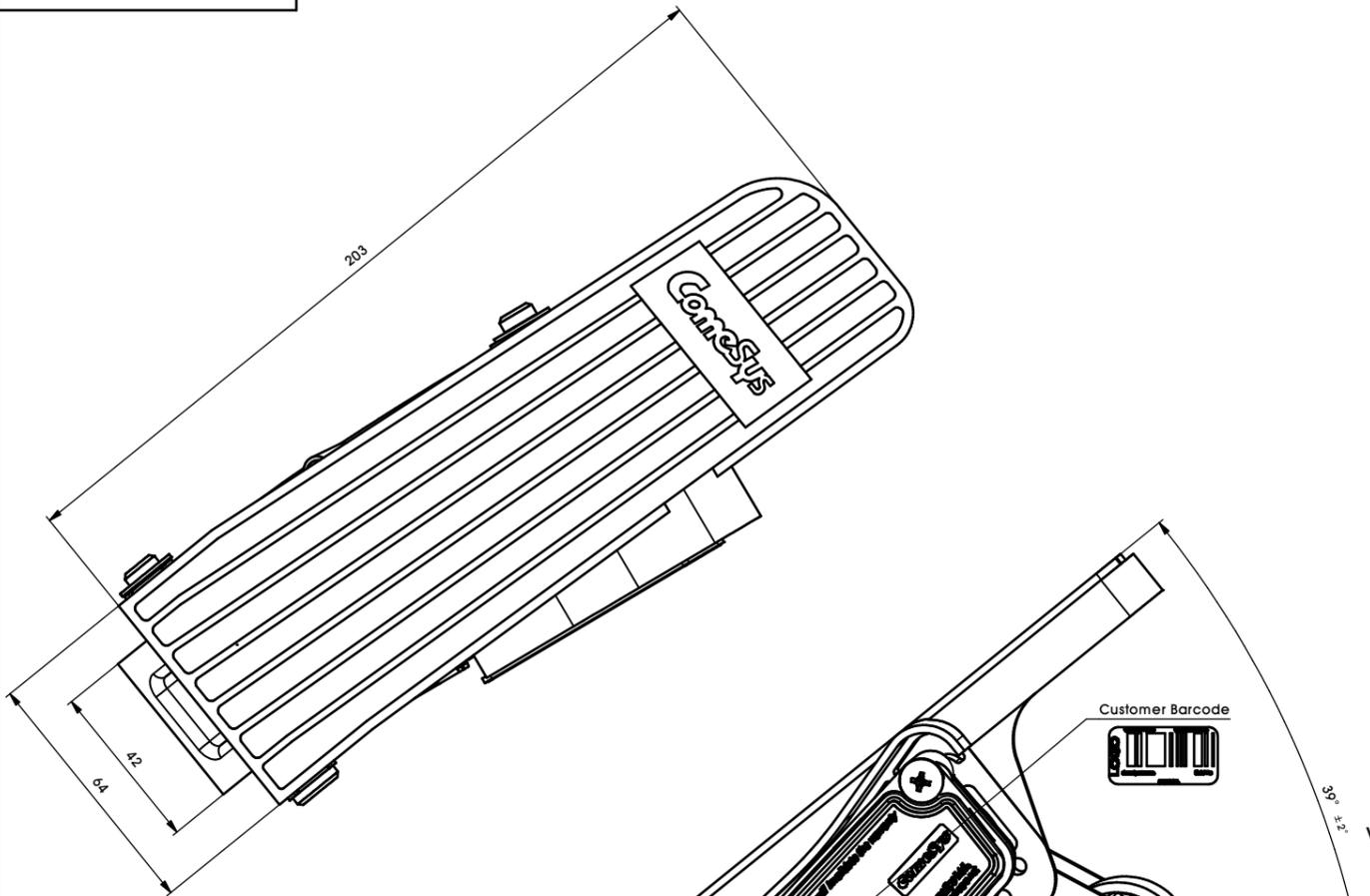
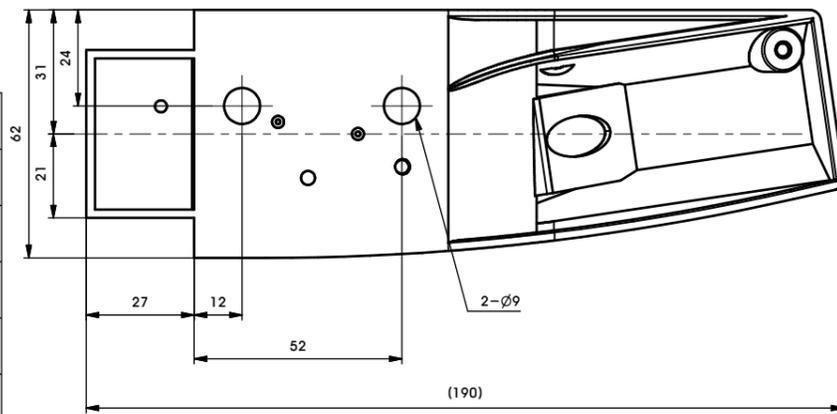


REVISION HISTORY					
REV	DESCRIPTION	DATE	DR	RE	AP
0	Issued	01.Aug.18	M.J.Kim	J.I.Kim	H.M.Lee



Pin Location	Description	Color
A	Power Input, Vcc	Red
B	Pedal Signal Output, Vs	Green
C	Ground ( Signal )	Black
D	Switch	Yellow
E	IVS3 (NO)	Blue
-	-	-

MODEL	60915205600	-
ECU	ZAPI AC	CURTIS AC
PEDAL	FZ3-152-341	
SIGNAL	in 13.5Vdc, out 0.1 - 9.1Vdc	
SWITCH	MOSFET	
SWITCH POSITION	"Off" to "On" at 0.3V	
SWITCH VOLTAGE	48Vdc	80Vdc
SWITCH CURRENT	2mA@48Vdc	2mA@80Vdc



\* The Figures described in his table obtained from the test truck of Chinese maker and may not be correctly applicable to specific truck models.

Fig. 1 Circuit Diagram

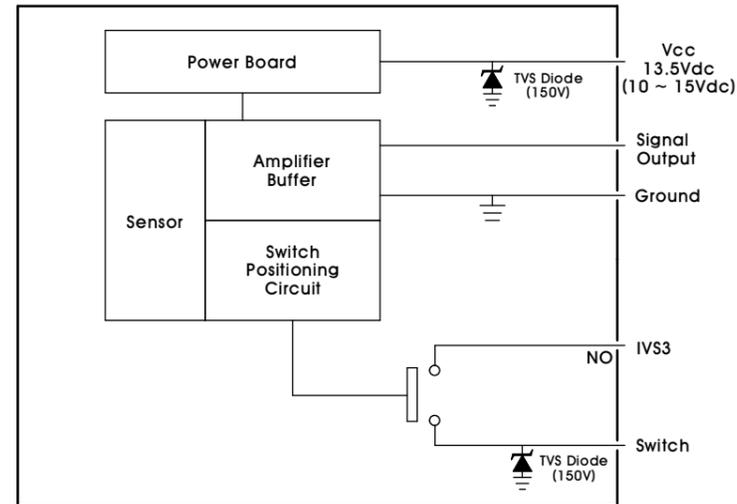


Fig. 2 Signal Output

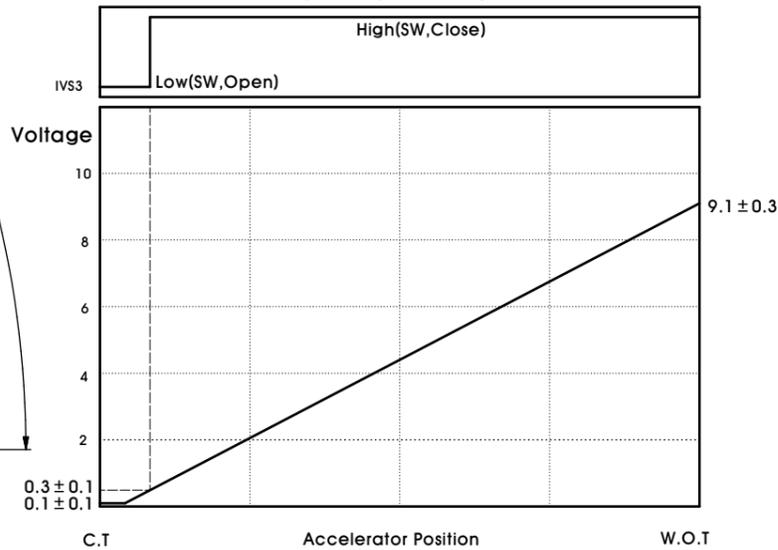
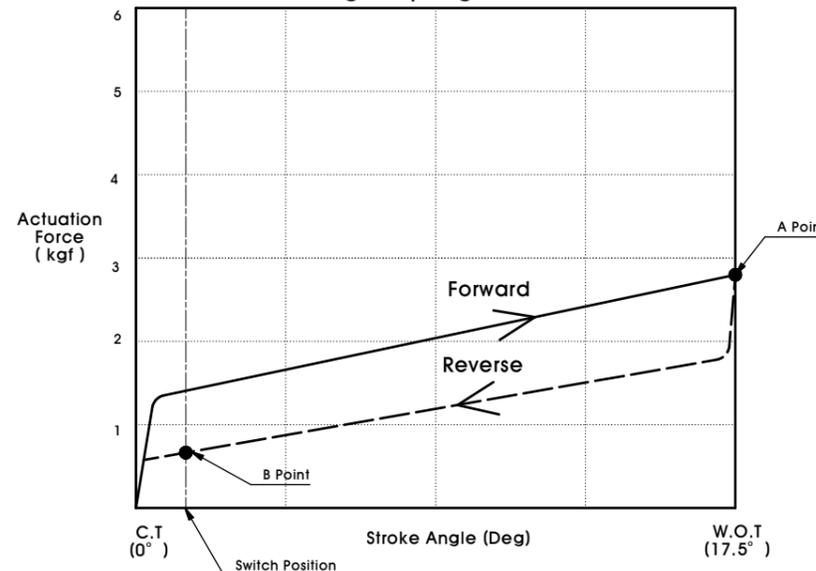


Fig. 3 Spring Force



- 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.  
( A point : max 2.7kgf, B Point : min 0.8kgf ) : See Fig. 3  
- End-Break force : 160kgf±5kgf will not damage any pedal parts.  
- One return spring, inner or outer spring, incorporated to return pedal to idle on release of actuation force.
- Electrical Conditions  
3.1 Environmental Conditions:  
Operating Temperature : -40° C ~ +85° C  
Storage Temperature : -40° C ~ +120° C  
3.2 Electrical Characteristics  
3.2-1 Type of sensing element  
3.2.1.1 Input Voltage(Vcc) : 10Vdc ~ 15Vdc  
3.2.1.2 Operation Current(Iop) : 20mA(Normal), 30mA(Max)  
3.2.1.3 Reverse Pararity : Withstand 10min  
3.2.1.4 Electrical Travel : See Fig. 2.  
3.2.1.5 Independent Linearity : ±2%  
3.2.1.6 Signal Load : 10kohms, C=4.7nF Tested.  
3.2-2 Type of Switch(IVS) : MOSFET switch (Semiconductor Relay Switch)  
3.2.2.1 Switch Continuous Load Current(Ic) : Max 100mA (400mW)  
3.2.2.2 Switch Operation Current (Ii) : 2mA  
3.2.2.3 Switch Resistance(Ron) : 5Ω at switch On  
Current leak max 1μA at Switch Open (Ileak)  
3.2.2.4 Switch Pararity : No pararity  
3.2.2.5 Switch Voltage : 5V, 12V, 24V, 48V, 80Vdc  
3.2.2.6 Switch Position  
Switch Position shall be discussed at PO and fixed at factory before delivery. See Fig.2
- Mechanical Specifications  
4-1 Mechanical Travel : 17.5° ± 2°
- Electrical Connection  
AMP 6wire 174264-2 (Cap)
- Material  
Pedal Foot Plate : PA66+GF33%  
Pedal Bottom Plate : Aluminum ( ADC12 )  
Cable : AEXf or AVXf ( 0.50mm<sup>2</sup> )
- 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 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 for 86 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	25KV (Air Discharge)
EMS Test	As per ISO 11452-2 (2004E)	100V/m
Surge Test	Industrial Equipment Standards : 61000-4-5 TEST Voltage(2KV), Current Impulse(8/20us) - Standard Voltage(1kv)	Normal Operation
Burst Test	Industrial Equipment Standards : 61000-4-5 TEST Voltage(2KV) - Standard Voltage(1kv)	Normal Operation

10. Environment protection : IP 65

General Tolerance For Machining (K3 B 8412)				Priority & Confidence		Name	
0.1-3mm	±0.1	0.1-0.3mm	±0.05	The information contained in this Drawing is the sole property of ComeSys Ltd. Any reproduction in part or in whole without the written permission of ComeSys Ltd is prohibited.		Electric Accelerator Pedal Ass'y ( MFZ3 )	
3-6mm	±0.2	0.3-0.5mm	±0.1	http://comesys.net		Application Model	
6-30mm	±0.3	0.5-1.0mm	±0.2			Material	
30-120mm	±0.5	1.0-3.0mm	±0.3			Booil	
DR	M.J.Kim	01.Aug.18	Do Not Scale	Weight		Heat Treatment	
SR	J.I.Kim	01.Aug.18	Third Angle Projection	Customer Part No.		ComeSys Part No.	
AP	H.M.Lee	01.Aug.18	Sheet 1 of 1	60915205600		FZ3-152-341	