SAUER DANFOSS

Electronic Foot Pedal

Over Center Rocker Type / Bi-directional

Product Highlights

The rocker type Electronic Foot Pedal is used to drive offhighway vehicles equipped with hydrostatic transmissions and/or electronically controlled engines. The foot pedal typically provides speed commands to the electronic transmission or the engine controller, where the output signal of the foot pedal is proportional to the angle of the foot pedal actuation. The rocker type foot pedal is commonly used on vehicle applications that have a high duty cycle of direction changes (forward/neutral/reverse). For example: warehouse trucks, piggyback fork trucks, and other material handling equipment.

The electronic foot pedal features a specially designed sensor for heavy equipment applications which uses Hall effect technology. This special sensor offers two different types of redundant signals to fit a variety of control strategies. In addition, the redundant sensors have independent isolated circuits and protection against electrical misconnection.

Local Address:



Features

- Robust over-center rocker pedal
- 14 +/- 2 degrees angular rotation fore and aft
- 3 million full actuation cycle life
- Non-contact ratiometric Hall effect sensors
- Independent isolated redundant sensors
- Protected against electrical misconnection
- IP-66 sealed electronics
- Wide operating temperature
- Withstands high static loads



Electronic Foot Pedal Over Center Rocker Type / Bi-directional

Technical Data



Option 1, Signal Level

Signal 1 range nominal	Minimum (Uout/Ucc): 10% +4% and -2%
(APS1)	Maximum (Uout/Ucc): 90% +2% and -4%
Signal 2 range nominal	Minimum (Uout/Ucc): 90% +2% and -4%
(APS2)	Maximum (Uout/Ucc): 10% +4% and -2%
Neutral 1 range nominal	50% ± 4%
(APS1)	
Neutral 2 range nominal	50% ± 4%
(APS2)	

Specifications

Supply voltage	5 Vdc ± 0.5 Vdc	
(Ucc1, Ucc2)	Maximum: 10 mA (for both Hall elements 20 mA)	
Current consumption		
(each Hall element)		
Operating temperature	-40 to +85° C [-40 to +185° F]	
Sealing of electronics	IP 66	

Material

Casting	Irridited aluminum	
Hall element shaft	Stainless steel	
Base plate	Zinc plated steel	
Spring	Stainless steel	
Weight	Typical: 2.6 Kg [5.6 lbs]	

Mechanical Ratings

Pedal angle	Maximum: 14° ± 2°	
(toeboard angle)	Minimum Durillian	
Activations (full stroke)	Minimum: 3 million	
Static load limit	Maximum: 1500 N	
(forward or reverse)	(measured 150mm from pivot)	
Cide log d limit	Maximum: 500 N	
Side load limit	(measured 150mm from pivot)	
Vertical load limit	Maximum: 1000 N	
(neutral)	(measured center of treadle on pivot axis)	

Option 2, 20%-90% and 10%-80%



Option 2, Signal Level

Signal 1 range nominal	Minimum (Uout/Ucc): 20% +4% and -2%
(APS1)	Maximum (Uout/Ucc): 90% +2% and -4%
Signal 2 range nominal	Minimum (Uout/Ucc): 10% +4% and -2%
(APS2)	Maximum (Uout/Ucc): 80% +2% and -4%
Neutral 1 range nominal	(Uout/Ucc): 45% ± 4%
(APS1)	
Neutral 2 range nominal	(Uout/Ucc): 55% ± 4%
(APS2)	

Signal Output

- <u>-</u>		
Signal current (APS1, APS2)	Maximum: 0.5 mA	
Signal load	Maximum: 10 K Ohms	
Short circuit of signal (APS1, APS2)	Maximum: 20 minutes	

Sensor Connections

Pin	Function	Wire color	
A	Signal 1 = Us1	Black	
В	Ground 1 = GND1	White	ABCDEE
С	Supply 1 = Ucc1	Red	
D	Supply 2 = Ucc2	Green	
E	Ground 2 = GND2	Blue	
F	Signal 2 = Us2	Orange	

Ordering Information

Part number	Description	
11065877	Option 1	Bi-directional
11065874	Option 2	Bi-directional
11065878	100 cm	Cable

Comprehensive technical information: *Electronic Foot Pedal Technical Information*, **11044978** Sauer-Danfoss product literature on line at: www.sauer-danfoss.com