

Data Sheet

Electronic Foot Pedal

Over Center Rocker Type/Bi-directional



The rocker type Electronic Foot Pedal is used to drive off-highway 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, piggy-back 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.



Features

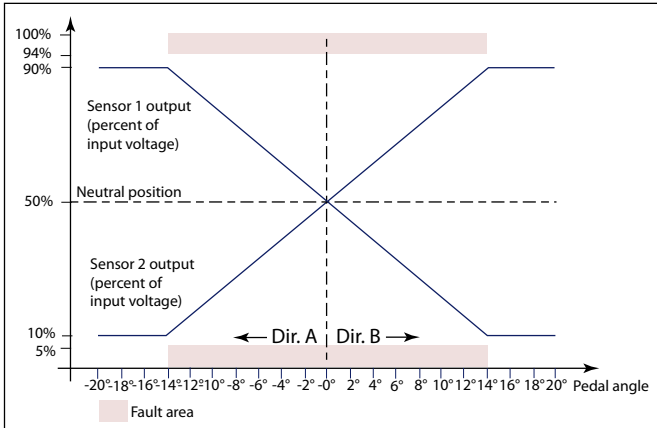
- Robust over-center rocker pedal
- 14 +/- 2 degrees angular rotation fore and aft
- 3 million full actuation cycle life
- Non-contact ratiometric Hall effect sensors
- Independent isolated redundant sensors
- Protected against electrical misconnection
- IP 66 sealed electronics
- Wide operating temperature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

Comprehensive technical literature online
at powersolutions.danfoss.com

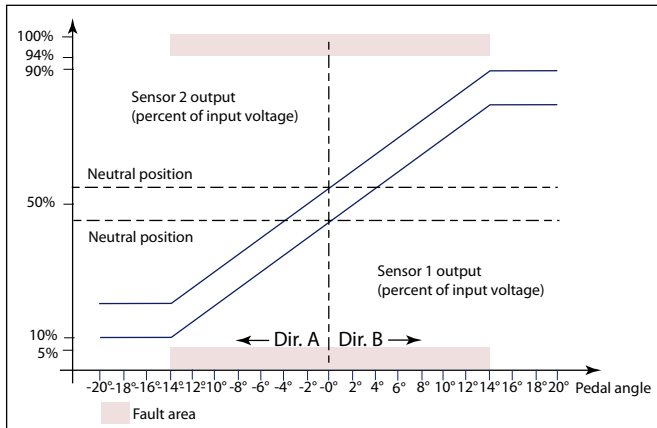
Electronic Foot Pedal Bi-directional

Technical Data

Option 1: 10%-90% and 90%-10%



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



Option 1: Signal Level

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

Option 2: Signal Level

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

Specifications

Supply voltage (Ucc1, Ucc2) Current consumption (each Hall element)	5 Vdc ± 0.5 Vdc
	Maximum: 10 mA (for both Hall elements 20 mA)
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

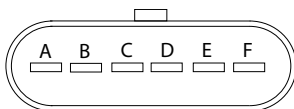
Pedal angle (toeboard angle)	Maximum: 14° ± 2°
Activations (full stroke)	Minimum: 3 million
Static load limit (forward or reverse)	Maximum: 1500 N (measured 150mm from pivot)
Side load limit	Maximum: 500 N (measured 150mm from pivot)
Vertical load limit (neutral)	Maximum: 1000 N (measured center of treadle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

Signal Output

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

Electronic Foot Pedal Bi-directional

Sensor Connections



Pin	Function	Color
A	Signal 1 = Us1	Black
B	Ground 1 = GND1	White
C	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

ENGINEERING
TOMORROW



Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without changes being necessary in specifications already agreed.
All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.
