HALL EFFECT FOOT PEDAL

9 MILLION LIFE CYCLE

The HJFC Hall Effect Foot Pedal is built to perform under the worst possible conditions. The unique design places Hall effect sensors and electronics behind a solid plastic diaphragm that separates the top and bottom halves of the front pedal, sealing the electronics in an IP68S rated enclosure. The bottom half of the pedal utilizes the same proven contactless analog output Hall effect technology used in OTTO joysticks and is available in J1939 and CANopen® formats. The CAN interface provides three analog input channels, 12 digital input channels and two digital output channels. It will withstand operating temperature extremes of -40°C to +85°C, is sealed to IP68S immersion requirements and passes EMI/RFI immunity testing to 100V/M.

The HJFC Hall Effect Foot Pedal provides a life of nine million cycles. The pedal's pivot point itself is also sealed against large debris. Customer specified features such as pretravel (dead band) and overtravel, along with a minimum and maximum output, are programmable. The sensor programming is completed in automated fixtures during assembly ensuring tight output tolerances. The HJFC Hall Effect Foot Pedal offers more performance features and a higher cycle and seal rating than any other foot pedal on the market.

Features:

- **Outstanding EMI/RFI immunity**
- Heavy gauge, corrosion-resistant metal
- Proven contactless analog output Hall effect technology
- J1939, CANopen® formats available
- Life expectancy of 9 million cycles
- Hall sensors & electronics are sealed against the elements, behind a solid plastic diaphragm that separates the top & bottom halves of the foot pedal
- **Electronics are sealed to IP68S**
- Pedal pivot point sealed against large debris
- Programmable pretravel (dead band) & overtravel along with minimum & maximum output
- Sensor programming is completed in automated fixtures during assembly ensuring tight output tolerances
- Reverse polarity protection available
- RoHS/WEEE/Reach compliant

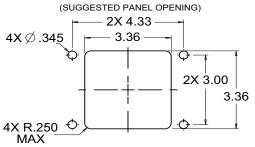


MECHANICAL:						
Mechanical Life:	9,000,000 cycles					
Vibration:	10g. 24Hz to 2KHz swept sinusoidal					
TRAVEL ANGLE:						
Degrees:	13° nomina	l dual directi	on, 15° non	ninal single d	lirection	
Operating Force (lbs.):	14.0 lbs. typical -40°C to +85°C at load reference point					
Electrical Life:	9,000,000 cycles					
ELECTRICAL RATINGS:	:					
Electrical		Units	Min	Тур	Max	
Supply Current Per Sensor		mA	N/A	N/A	10	
Output Resistance (lo ≤ -2mA)		Ω	N/A	100	N/A	
Analog Supply Voltage (Option 1)		VDC	4.5	5	5.5	
Analog Supply Voltage (Option 2)		VDC	8	12	18	
Analog Output Voltage Tolerance at Center (see graph for output values)		VDC @ 5Vcc	-0.15	N/A	+0.15	
Analog Output Voltage Tolerance at Full Travel (see graph for output values)		VDC @ 5Vcc	-0.15	N/A	+0.15	
Limit Switch Supply Voltage (if applicable)		Volts	5	N/A	30	
Limit Switch Actuation (if applicable)		Degrees	1°	2°	3°	
Analog Output Pretravel		Degrees	1°	2°	3°	
Analog Output Overtravel		Degrees	1°	2°	3°	
Note: Limit switch outputs w ELECTRONICS :	ill source limit :	switch supply	voltage wher	actuated.		
Seal:	Electronics IP68S					
RFI:	Withstand per SAE J1113					
EMI:	Withstand	per SAE J111	13			
ENVIRONMENTAL:						
Operating Temp Range:	-40°C to +8	5°C				
Humidity:	96% RH, 70°C, 96 hours					
0 1/0 /	Withstand p	er SAE J1455	i			
Sand/Dust:						
MATERIALS:			Zinc and high corrosion trivalent chromate			
•	Zinc and hi	gh corrosion	trivalent c	ili Olliate		
MATERIALS:	Zinc and hi	gh corrosion	trivalent c	momate		
MATERIALS: Foot Pedal Plate:	PPE/PA	strands of 34		PVC/Polyuret	hane blend	

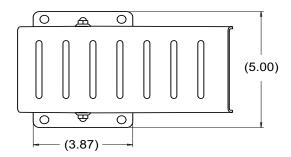
SINGLE DIRECTION & DUAL DIRECTION

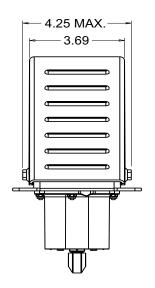
HJFC PART NUMBER CODE HJFC X X X X Pedal **Direction Travel** Output* Sealing Power **Termination** 1. Single 1. 15 Degrees 1. Single Direction Analog 1. Fully Sealed 1. Regulated 5VDC Clean Supply, 1.0.225" Dia., 12" Cable, 1. Narrow Mounting** Single Direction Output: (Rest/Full) 0.5/4.5VDC No Reverse Polarity Protection Unterminated 2. Unsealed 2. Wide Mounting **2.** Dual 2. Dual Direction Analog Output: (REV/CTR/FWD) 0.5/2.5/4.5VDC 2.12VDC Power Supply with **2.** 13 Degrees **Dual Direction Reverse Polarity Protection** 3. Dual Direction Analog Output: (REV/CTR/FWD) 0.5/2.5/4.5VDC & Dual Direction Position Indication 3.24VDC Power Supply with Reverse Polarity Protection 4. Dual Direction Dual Analog Output 1: (CTR/FWD) 0.5/4.5VDC Output 2: (REV/CTR) 4.5/0.5VDC * Additional configurations are available. Contact factory. 5. Single Direction Analog ** Single direction not available in narrow mounting. Output: (Rest/Full) 0.5/4.5VDC & Single Direction Position Indication 6. Single Direction Dual Analog Output 1: (Rest/Full) 0.5/4.5VDC Output 2: (Rest/Full) 4.5/0.5VDC 7. Dual Direction Dual Analog Output 1: (REV/CTR/FWD) 0.5/2.5/4.5VDC Output 2: (REV/CTR/FWD) 0.5/2.5/4.5VDC 8. Dual Direction Dual Analog Output 1: (REV/CTR/FWD) 0.5/2.5/4.5

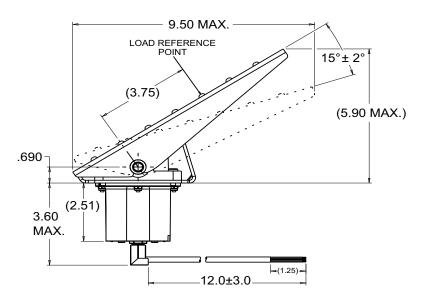
SINGLE DIRECTION WIDE MOUNTING



Output 2: (REV/CTR/FWD) 4.5/2.5/0.5



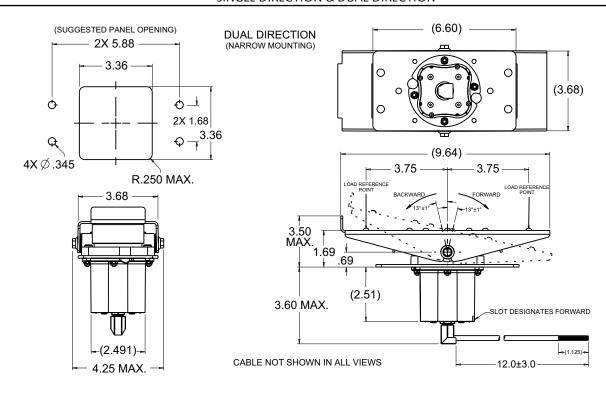




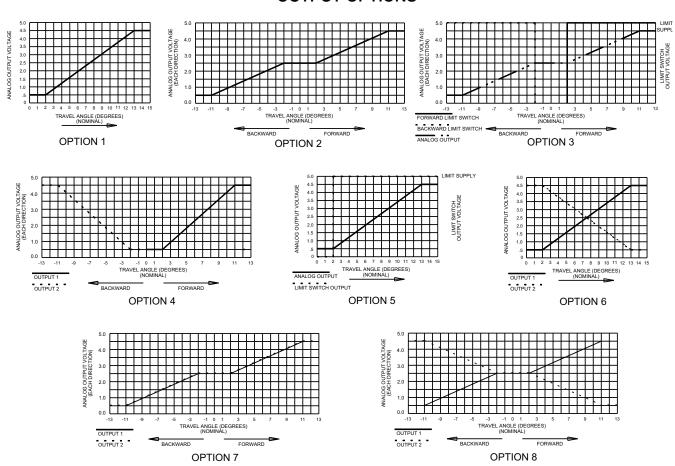
HALL EFFECT

HALL EFFECT FOOT PEDAL

SINGLE DIRECTION & DUAL DIRECTION



OUTPUT OPTIONS



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

OTTO:

<u>HJFC-1151212</u> <u>HJFC-1151112</u> <u>HJFC-1111112</u> <u>HJFC-2281112</u> <u>HJFC-2281111</u> <u>HJFC-2231111</u> <u>HJFC-2231111</u> <u>HJFC-2222111</u> <u>HJFC-2222111</u> <u>HJFC-2221111</u> <u>HJFC-2271112</u> <u>HJFC-2271112</u> <u>HJFC-1112112</u> <u>HJFC-2271111</u>