

Data Sheet

PLUS+1[®] Mobile Machine Devices

HMR CAN Rotary

Mobile Machine Management

Danfoss HMR CAN Rotary input device, is an expansion of the PLUS+1[®] family of mobile machine management products.

HMR CAN Rotary brings screen navigation closer to the operator, allowing “blind operation” and minimizing the need to reach for buttons/dials/touch-screen on the display during operation. The back-lit buttons can be used as hot keys to quickly navigate to a screen or used for machine functions, while the indicator bars on each button provide optical feedback to the operator.

Modern, Ergonomic and Rugged Design

The HMR has been optimized for ergonomic, five finger control. The seven large buttons are available with standard icons, or customizable to meet application needs. Each button features RGB LEDs for backlight and light bars that are controllable via CAN messaging, with adjustable light intensity. The rotary knob encompasses an eighth push button and includes RGB LED lighting at the base.

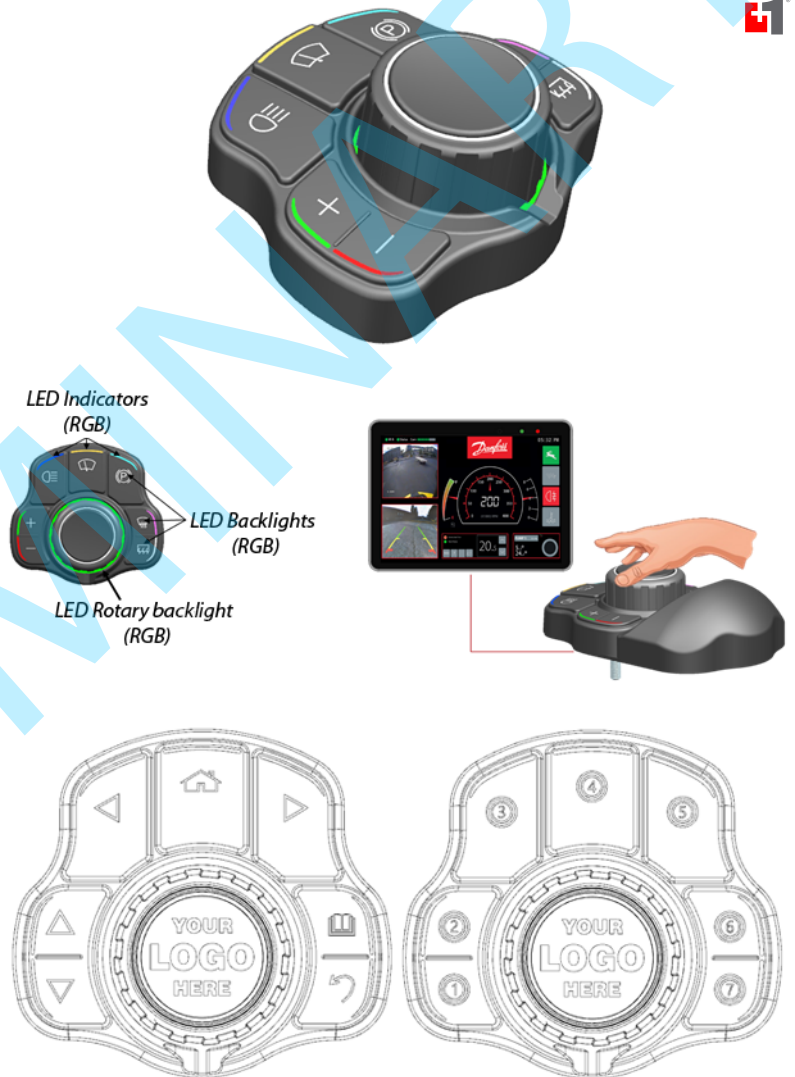
Modern Industrial Design

The HMR features robust mechanical, electrical, and Ingress Protection specifications that meet the demands of mobile machine operation. It is suitable for installation in open and enclosed cabs.

Features

- Seven large configurable push buttons
- Hall effect rotary dial, with 32 detents/revolution and additional push button inside
- Back-lit buttons with standard or customizable icons
- All LEDs are RGB: Buttons Backlights, Indicator Bar and Rotary Backlight
- PLUS+1[®] GUIDE configurable
- CAN J1939
- Rugged IP66 and IP67 ratings
- Integrated DEUTSCH connector
- CE compliant, E1 E-Mark (pending) and ROHS compliant
- Optional hand-rest (future development or customer-created for application needs)
- Button and Rotary Life: 1 Million Cycles

Comprehensive technical literature is online at powersolutions.danfoss.com



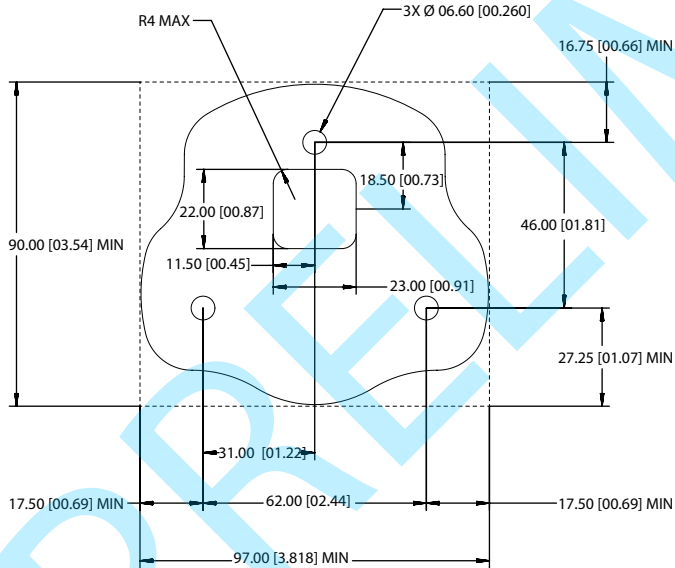
Specifications

Characteristics

Processor	ARM Cortex M3, 32 bit, 120 MHz
RAM	64 kB
EEPROM	32 kB
Supply voltage	9 to 36 V _{DC}
Connector	DEUTSCH DT-4
IP rating (with mating connector attached)	IP66 and IP67
Operating temperature	-40°C to +85°C [-40°F to 185°F]
Storage temperature	-40°C to +85°C [-40°F to 185°F]
Weight	0.159 kg [0.351 lb]
Vibration/Shock	IEC 60068-2-64 (7.67g) /2-27 (50g)
EMI/RFI rating	100 V/M
Humidity	IEC 60068-2-78, 60068-2-30
Transients	ISO 7637/1, 2, 3
Button Cycle Life	1 Million Cycles
Rotary Dial Cycle Life	1 Million Cycles

Mounting pattern

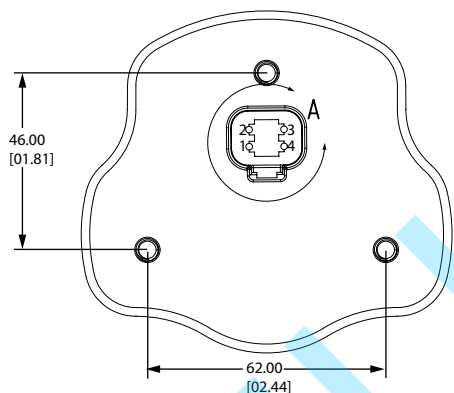
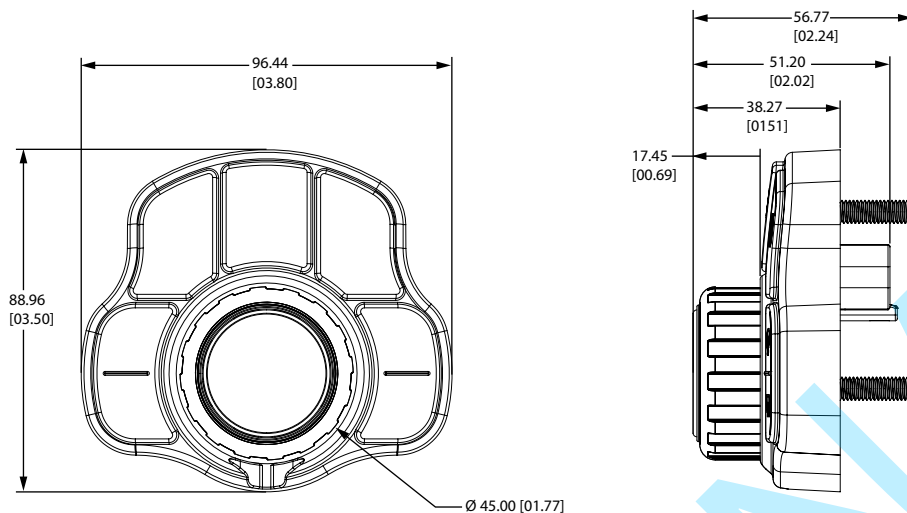
mm [in]



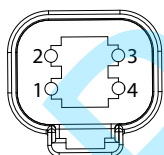
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Dimensions

mm [in]



Pin connector



Pin	Controller function
1	Power ground -
2	Power supply +
3	CAN Hi
4	CAN Lo

Models

HMR CAN Rotary models

Model	Part number
HMR-111-000-000-10-0	
HMR-111-000-001-10-0	
HMR-111-000-002-10-0	
HMR-111-000-002-11-0	

HMR CAN Rotary model code key

Model name	Description
HMR	HMR CAN Rotary, PLUS+1 [®] Device

LED lights	Description
111	Indicator, back-light and knob LEDs (RGB)

PCBA / Special features	Description
000	HMR, version 0

Button graphic configuration	Description
000	No graphics (blank)
001	Number graphics
002	Navigation graphics

Rotary knob configuration	Description
10	Standard ring-style knob, no graphics

Hand-rest option	Description
0	No hand-rest

Related products

DEUTSCH 4 PIN Connector Kit	11028348
Hand-rest	Future development