

Data Sheet

Control Handle

MCHXXX Series

Mobile machine control handle

The MCHXXX Single Axis Control Handle provides remote electrical actuation of Danfoss pumps/motors, and or other electrically actuated pump strokers for open loop control systems. The MCHXXX can function as a setpoint for analog or microprocessor-controlled systems for controlling position, speed, pressure, horsepower, or other dynamic parameters.

User interface

Three mounting styles, with or without watertight case. Rugged components designed for the construction environment. High-torque handle actuation gives sure feel. Simple to install. Mechanical options include center-lock, spring-return, friction drag, bi-directional, uni-directional and optional wire harness with a variety of electrical connectors. Electrical characteristics are customized to the application.

Reliable performance

A center-off micro switch can be specified and in with most MCHXXX models the center-off switch is factory prewired.

Serviceability

The MCHXXX design allows for easy access to parts that require service.

Features

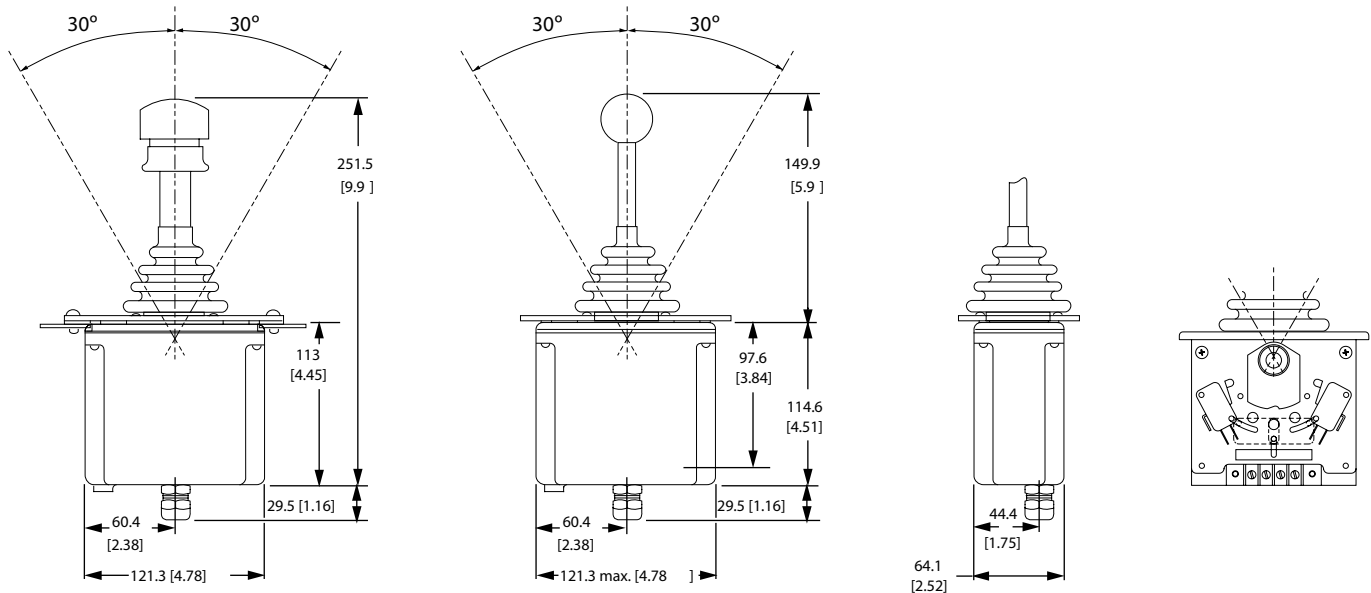
- One or two potentiometer sensors
- Single axis
- Shaft movement options:
 - Spring return, and with one spring force
 - Friction hold with adjustment
- Environmental protection:
 - Tested to NEMA 4 or equivalent to IP 65)
- Electrical connection:
 - Terminal strip (standard configuration)
 - Wiring harness (pigtail) with optional connector
- Grip options:
 - Ball
 - Center lock
 - Push-button
 - Rocker switch



Comprehensive technical literature is online at www.danfoss.com

Common mounting options

Dimensions in mm [in]



Specifications

Electrical characteristics

Sensor type	Potentiometer (Pot)
	Optional Dual Pot
Supply voltage (Vs)	11 to 15 Vdc (12 Volt models)
	22 to 30 Vdc (24 Volt models)
	0.5 to 4.5 Vdc (5.0 Volt models)
Output analog	0 to 3 Vdc (0 to 100 mA) typical EDC
	0.5 to 4.5 Vdc typical controller
Base neutral and direction microswitch current capability	3 Amps inductive at 28 Vdc

Mechanical characteristics

Lever mechanical angle	±30° (bi-directional models)
	+0 to 60° (uni-directional models)
Spring torque	1.2 ± 0.4 N·m [11 ± 4 lbf·in] at center breakaway
	2.0 ± 0.7 N·m [18 ± 6 lbf·in] at full stroke
Detent torque (over and above friction drag)	0.1 N·m [10 lbf·in]
Friction drag	1.5 ± 0.3 N·m [13.5 ± 3 lbf·in]
	Friction is adjusted at the brake with a 5/32 inch internal hex wrench and 3/8 inch open-end hex wrench

Environmental parameters

Operating temperature (ambient)	-34°C to +66°C [-30°F to +150°F]
Storage temperature	-40°C to +77°C [-40°F to +170°F]
Ingress protection (IP) rating	IP 65 for mounting models #2 and #4 with plastic cases only

Ordering information

Ordering information reference documentation

MCHXXX Control Handle	BC152886483765
Technical Information	

Additional replacement parts reference documentation

MCH Control Handle Addition or Replacement of Parts Installation Guide	AN152886481096
--	----------------

Related items part numbers

Cable assembly (16 inch) with 4-pin Packard Weather Pack Shroud connector	11028299
Cable assembly (12 inch) with 3-pin Packard Weather Pack Shroud connector	K31213
Mating connector	K03384