

## Joysticks

### HTL

- Two-way, four-way or omnidirectional finger joystick
- Designed for grip, armrest & panel mounting
- Programmable sensors with built-in temperature compensation
- Available up to IP68S sealed
- Variety of button styles
- 1,000,000 cycles



\* Castle style button shown

### JHT

- Miniature joystick
- Compact design excellent for armrest and panel mounting
- Available up to IP68S sealed
- Single axis or various omni-directional options
- Pushbutton switch available
- 5,000,000 cycles (joystick)



\* JHT with pushbutton shown

### JH

- Large joystick
- Available up to IP68S sealed
- Adapts to a wide variety of shaft styles
- 300 lbs. static load strength at grip reference point (GRP)
- CANopen®, CAN J1939, USB, serial and analog output configurations available
- EMI/RFI immunity up to 100V/M
- Single, dual and Z-axis available
- Variety of grip and switch options
- Redundant outputs available
- Up to 15,000,000 cycles



\* JH Joystick shown with small universal grip incorporating Hall effect pushbutton switches (HP7's) and a Hall effect thumbwheel switch (HTW).

### HTLT

- One/two axis gated or 360° finger joystick
- Pushbutton option
- Up to IP68S sealed
- 7 button styles
- Multiple output options
- Redundant outputs available
- 3,000,000 cycles



### JHT Z-Axis

- Miniature joystick with z-axis
- 60° rotational movement of the knob at the top of the joystick
- Z-Axis options include detent, friction hold or spring return to center
- Available up to IP68S sealed
- Optional pushbutton switch(es) available
- Various gating options available
- 1,000,000 cycles (joystick)



\* JHT Z-Axis with pushbuttons shown

### JHM

- Medium joystick
- Designed for armrest & panel mounting
- CANopen®, CAN J1939, USB, serial and analog output configurations available
- Variety of grip and switch options
- Available up to IP68S sealed
- Redundant outputs available
- Up to 10,000,000 cycles



\* JHM with Hall effect rocker shown

### JHS-F

- Single axis, friction hold joystick
- 500,000 cycles

### JHS-RC

- Single axis, smooth spring return to center joystick
- 4,000,000 cycles

### SHARED ATTRIBUTES

- Rugged compact design
- Available up to IP68S sealed
- Redundant output available



## Thumbwheels

### HTW

- Proportional output thumbwheel
- Spring return to center single axis actuator
- 3,000,000 cycles



### HTWF

- Friction hold thumbwheel
- Maintained position single axis actuator
- 250,000 cycles



### HTWM

- Mini proportional output thumbwheel
- Spring return to center single axis actuator
- Short behind panel depth
- 3,000,000 cycles



### HTWE

- Proportional output thumbwheel
- Spring return to end single axis actuator
- 8 output options
- 1,000,000 cycles



### HTWME

- Mini proportional output thumbwheel
- Return to end single axis actuator
- Short behind panel depth
- 6 output options
- Easy snap-in panel mounting
- 1,000,000 cycles



### SHARED ATTRIBUTES

- Electronics sealed to IP68S
- 8 output options
- Knurled or paddle wheel style actuator options
- Wire or pinned termination options
- Variety of bezel and thumbwheel colors

## Pushbuttons

### HP7

- Momentary action pushbutton
- IP64 or IP68S sealed
- Mechanical detent available for tactile feedback
- 9 button color choices
- For applications requiring high actuation rates
- 10,000,000 cycles (without detent option)



### HP7C

- Lower cost momentary action pushbutton
- IP68S sealed
- Thermoplastic case
- Nylon button
- 9 button color choices
- 10,000,000 cycles



### HPL

- Linear output pushbutton
- Choice of termination styles
- IP65 or IP68S sealed options
- Rocker version available
- Front or behind panel mounting
- 10,000,000 cycles



### OPERATOR CONTROL MODULE



with Hall effect controls

## Miscellaneous

### HFNR

- Forward/Neutral/Reverse rocker
- 2V to 24V LED backlighting options
- Electronics sealed to IP68S
- Easy snap-in panel mounting
- Variety of colors
- 3,000,000 cycles



### HJFC

- Unidirectional or Bidirectional foot pedal
- Heavy gauge, corrosion resistant metal
- Electronics sealed to IP68S
- Pedal pivot point sealed against large debris
- Programmable pretravel and overtravel
- Programmable minimum and maximum output
- Reverse polarity protection available
- CANopen®, CAN J1939, USB, serial and analog output configurations available
- 9,000,000 cycles



### HPW

- Single axis paddle
- Self-centering actuator
- Electronics watertight per IP68S
- For grip, armrest and panel mounting
- 8 output options
- Lever or paddle style actuator options
- 5,000,000 cycles (without detent option)



### U2-452

- Proportional output rocker
- For use in panels and in grips
- Electronics sealed to IP68S
- Black button and housing
- 2,500,000 cycles

