

## Endurance Series Joystick

The award-winning Endurance Series joystick is our most advanced large handle and base combination. It's suitable for a range of applications including construction, drilling, agriculture, logging and municipal machinery.

### Advanced Features Improve Efficiency

- Ergonomic right and left hand grips reduce operator fatigue
- Status indicating ultra-bright, adjustable LED buttons

### Configurable to Your Needs

- Available in CAN J1939 or CANopen outputs
- Customizable faceplate and trigger functions, layouts and graphics

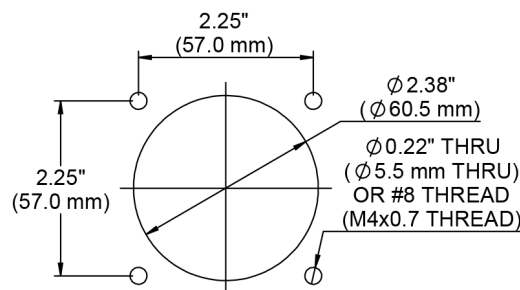
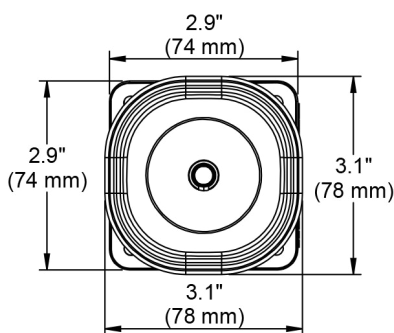
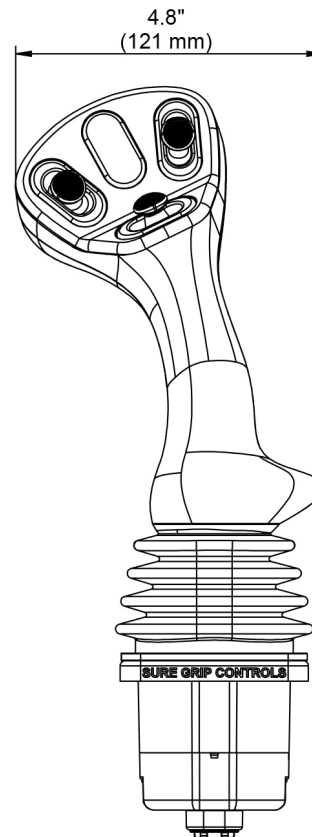
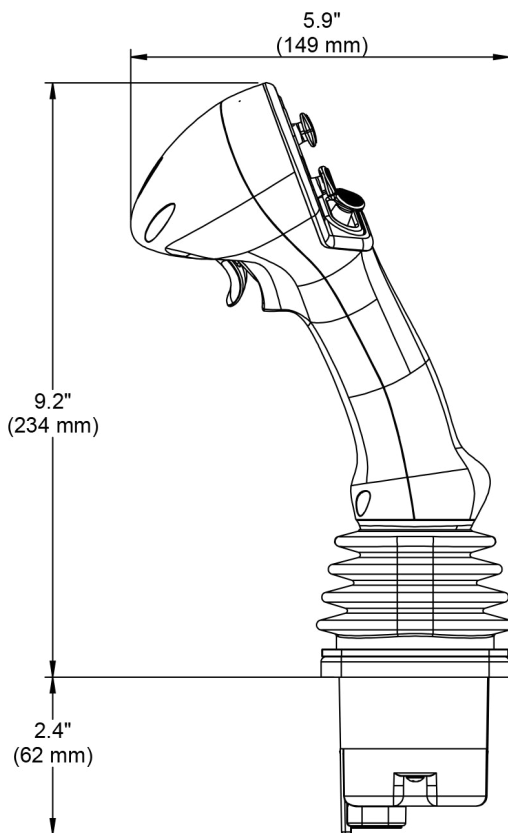
### Extreme Durability and Long Life

- IP-69K above and below panel
- Tested to over 20 million operations
- Chemical, salt and UV resistant
- EMC tested to 125 V/m

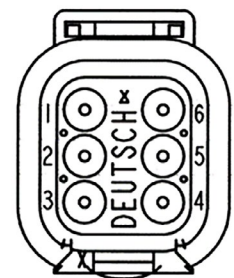


## Dimensions

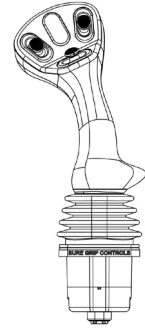
### CAN Mounting



ENDURANCE MOUNTING DETAIL



DEUSCH DTM04-6P  
CONNECTOR



## Specifications

### Electrical Specifications

Supply Voltage	10-36 VDC
Supply Current	30 mA
Source Address	0x00 to 0xFD

### Mechanical Specifications

Travel	± 20°
Life Expectancy	5 million cycles (20 million operations)
Operating Force	1.8 to 2.8 lbs.
Side Loading	110 Nm
Gate	Square

### Environmental Specifications

Operating Temperature	-40°C (-40°F) and +85°C (185°F)
Sealing	IP69K
Vibration	10Hz to 2KHz 1.26Grms (IEC 60068-2-4)
Shock	25G for 11 ms all directions (IEC 60068-2-27)
EMC Immunity	125V/m (ISO 11452-2)
EMC Emissions	CISPR 25 Class 2
ESD Immunity	ISO 10605: 2008 (+/- 8kV Operational, +/- 15kV Handling)

*Specifications are subject to change without notice*



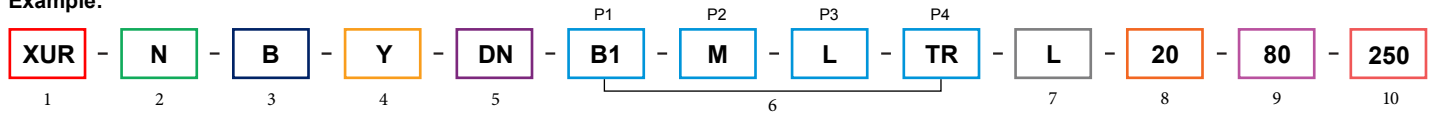
## Product Ordering Guide

### Instructions

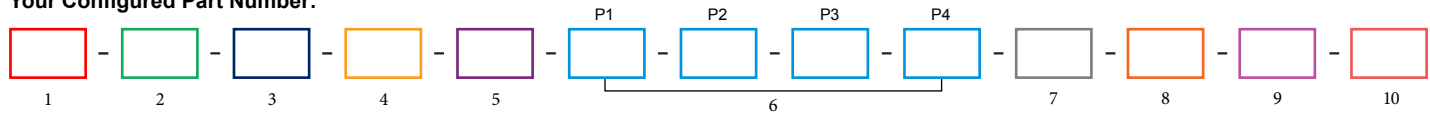
Configure your part number by selecting from the options below then contact us to place your order, ask questions or request an additional feature.

[CONTACT US](#)

Example:



Your Configured Part Number:



#### 1. Handle Type

XUL - Left Hand Handle  
XUR - Right Hand Handle

#### 2. Dual Redundancy

N - None  
P - Proportional Dual Redundancy

#### 3. Output Options

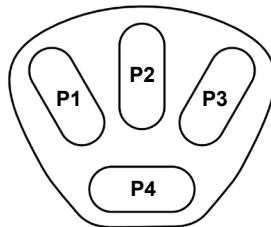
A - SAE J1939  
B - CANopen

#### 4. Operator Presence

N - None  
Y - Capacitive Operator Presence

#### 5. Trigger Options

NN - None  
AN - Trigger, Double, 2Ma, Switched  
BN - Trigger, Double, 3Ma, Switched  
DN - Trigger, Double, 3Mo, Switched  
PN - Trigger, Single, 2Mo, Proportional  
SN - Trigger, Single, 2Mo, Switched  
GN - Trigger, Double, 3Mo, Proportional



Faceplate Location Reference

#### 6. Function Types (P1-P4)

N - None  
Ax\* - Mo Switch, 1 Btn, RGB LED  
Bx\* - Mo Switch, 2 Btms, RGB LED  
P - Rocker Module, 2Ma, Switched  
Q - Rocker Module, 3Ma, Switched  
R - Rocker Module, 3MaMo, Switched  
S - Rocker Module, 3Mo, Proportional  
M - Rocker Module, 3Mo, Switched  
U - Slider Module, 1Mo, Proportional  
K - Slider Module, 3Ma, Proportional  
J - Slider Module, 3Mo, Proportional  
L - Slider Module, Friction, Proportional  
TA - Triangle Grip, 2Ma, Switched  
TQ - Triangle Grip, 3Ma, Switched  
TR - Triangle Grip, 3MaMo, Switched  
TS - Triangle Grip, 3Mo, Proportional  
TB - Triangle Grip, 3Mo, Switched

\*x refers to Button Graphic Options, below  
Mo-Momentary  
Ma-Maintained

#### 7. Spring Options

L - Light Force (1.1-1.7 lbs)  
M - Medium Force (1.8-2.8 lbs)

#### 8. Identification

Source Address (CAN J1939)  
Range: 20d - 250d, Default 51d  
Node ID (CANopen)  
Range: 1d - 127d, Default 17d

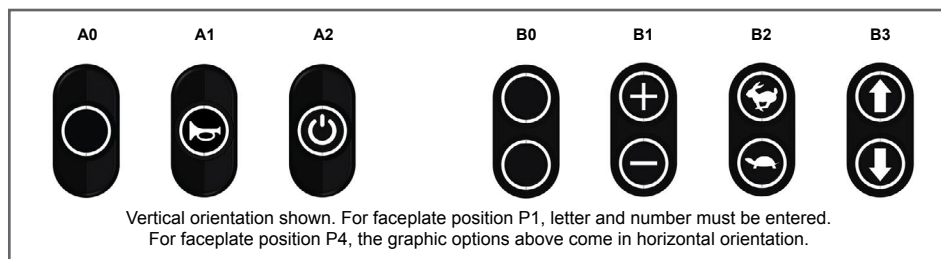
#### 9. Transmission (ms)

Message Rate (CAN J1939)  
Range: 20 - 80, Default 80 ms  
PDO Transmission (CANopen)  
20 - Default 20 ms

#### 10. Baud Rate

250 - 250 Kbps  
500 - 500 Kbps  
1000 - 1000 Kbps

#### Button Graphic Options



#### Lever Styles

