

MKF-PJS02 Series

Mate Industrial Joystick, Hall / Potentiometer, Single/Dual Axis, Panel Mounted

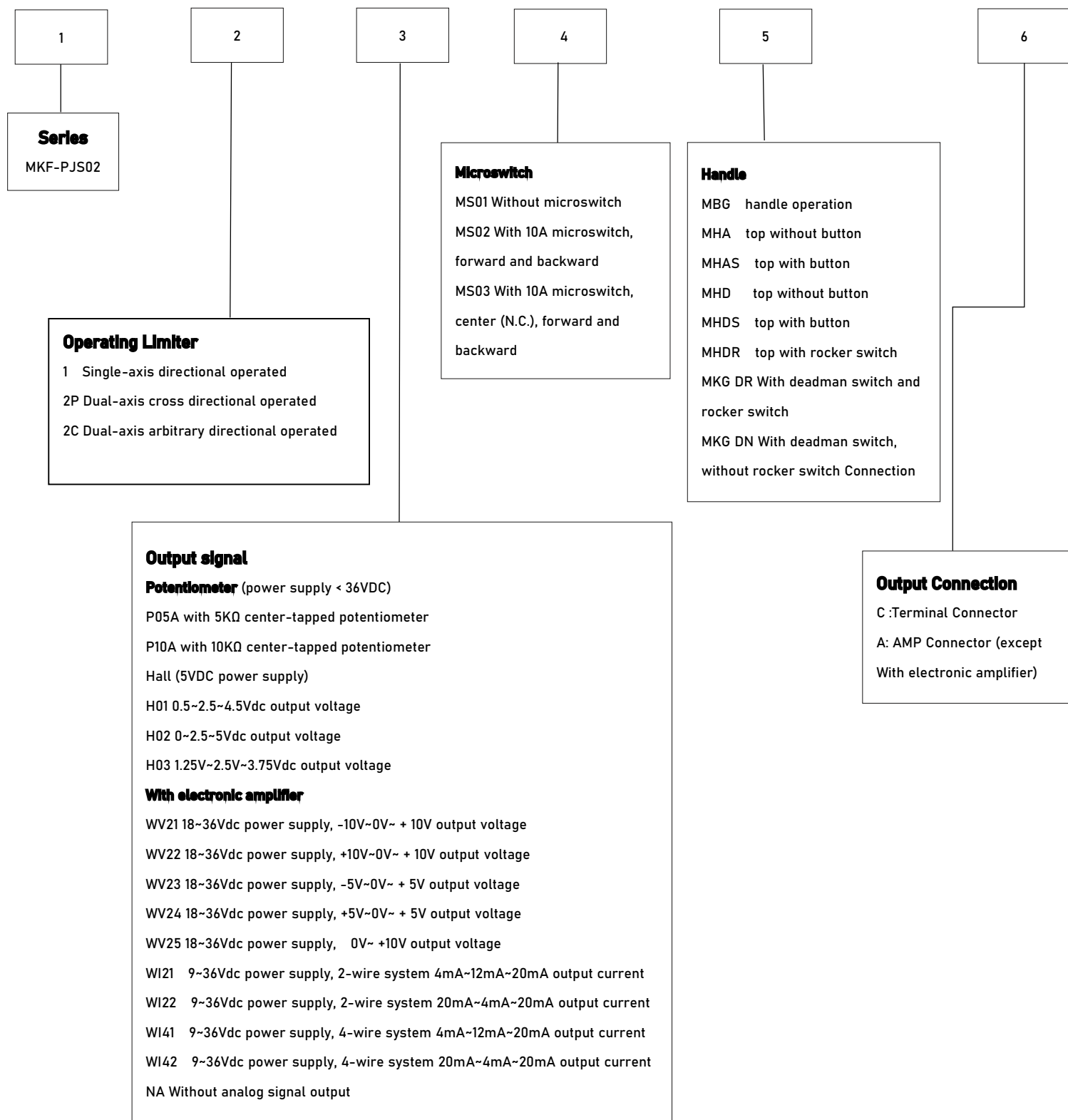


APPLICATION

Typical apply on rotary drilling rigs, aerial fire trucks, Cranes shield machine and other electrical and electro-hydraulic control system.

DESCRIPTION

- Spring return, single-axis or dual-axis operated
- Cross direction or arbitrary direction operated optional
- Potentiometer or hall effect angle detection, long life
- Large current microswitch optional (10A@30Vdc)
- Various output optional
- Various handle optional



Electrical Data

Potentiometer

| | |
|-------------------------|-----------|
| Power Supply Resistance | <36Vdc |
| Resistance | 5KΩ, 10KΩ |
| Center Angle | ±3° |
| Maximum Dissipation | 0.2W |

Hall

| | |
|------------------------------------|--|
| Power Supply | 5±0.5Vdc |
| Supply Current | <11mA (Single axis), <22mA (Dual-axis) |
| Maximum Allowable Overload Voltage | 20Vdc |
| Reverse Maximum Allowance Voltage | -10Vdc |
| Output Linearity Tolerance | <± 0.2V |

With electronic amplifier

| | |
|------------------------|-----------------------------------|
| Supply Voltage | 18~36Vdc |
| Current Consumption | <20mA |
| Maximum Output Current | 10mA with standard voltage output |

2-wire system current

| | |
|--------------|---------|
| Power Supply | 9~36Vdc |
|--------------|---------|

4-wire system current

| | |
|----------------|---------|
| Power Supply | 9~36Vdc |
| Breakout Angle | ±5° |

Microswitch

| | |
|-----------------------|--|
| Load Capacity | 1 0A@30Vdc (Resistance load) |
| Expecting Life | >30 million cycles (Mechanical) >200 thousand cycles (Electrical) |
| Insulation Resistance | >100MΩ 500Vdc Insulating-resistance meter |
| Breakout Angle | ±3° ~ ±5° |

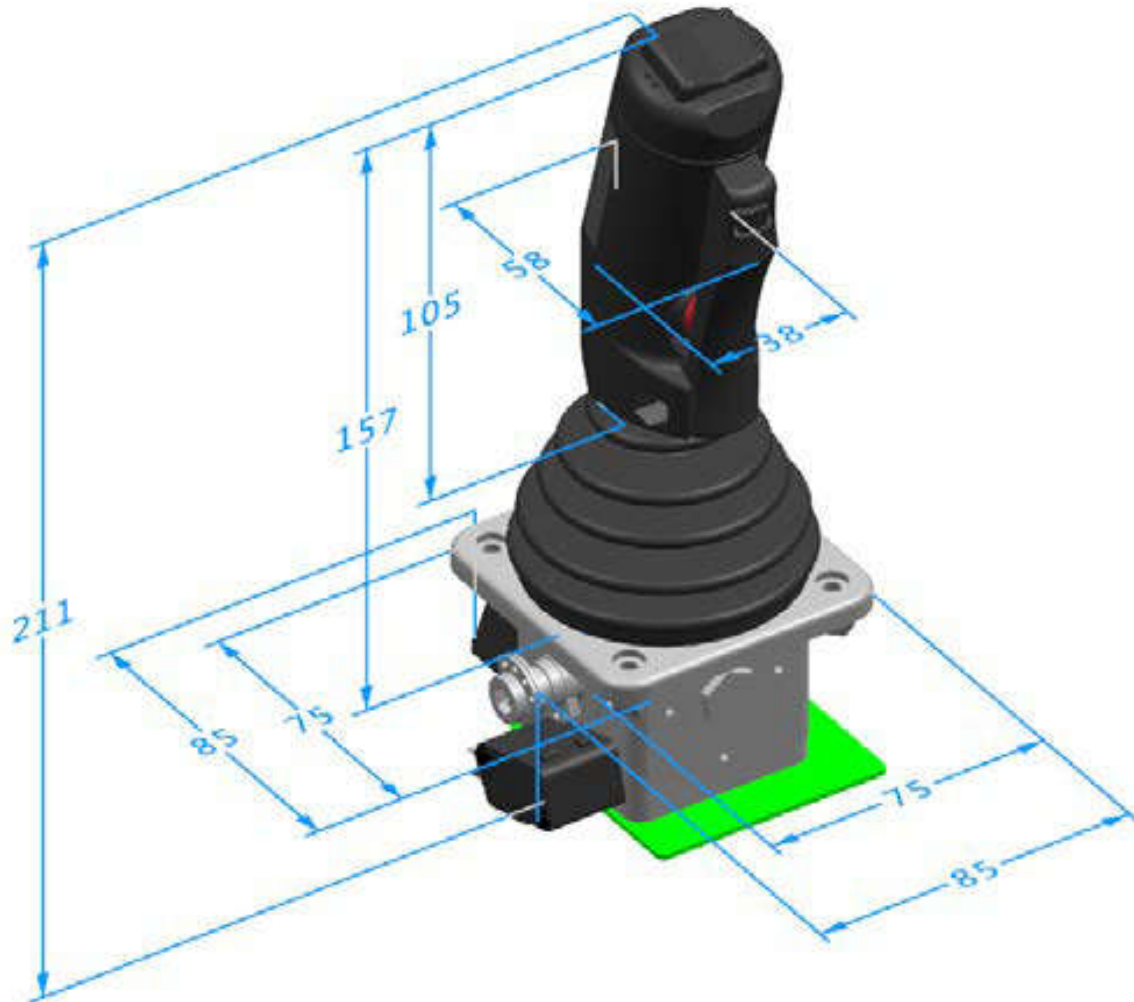
Environmental Data

| | |
|-----------------------|------------------------|
| Operating Temperature | -30℃~+70℃ |
| Storage Temperature | -40℃~+85℃ |
| Protection Level | IP65 (Above the Panel) |

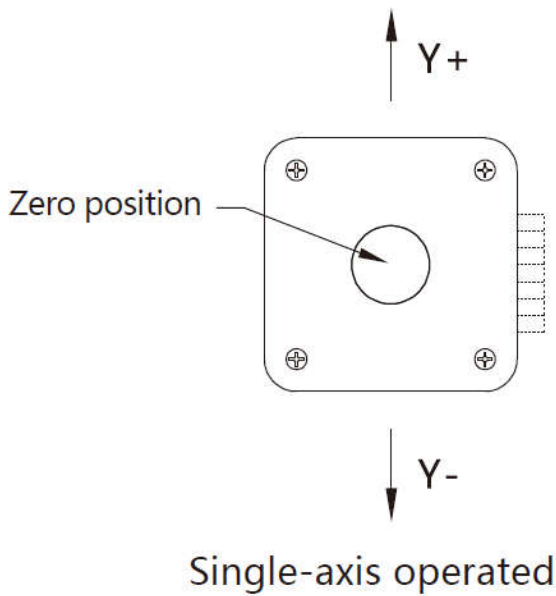
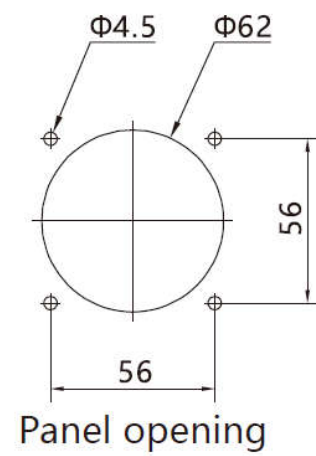
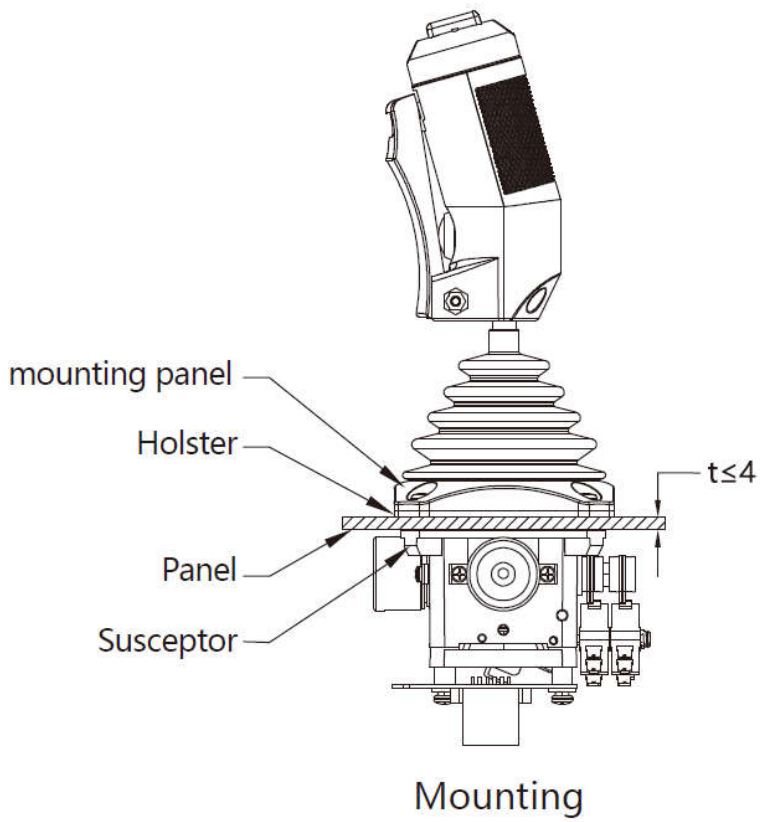
Mechanical Features

| | |
|-------------------------|---|
| Travel Angle | ±25° |
| Operating Type | Spring return |
| Breakout Force | 15N |
| Operating Force(max) | 30N |
| Maximum Allowable Force | >300N |
| Expecting Life | >2 million cycles(potentiometer), >5million cycles (hall) |
| Weight | 460g (without handle) |

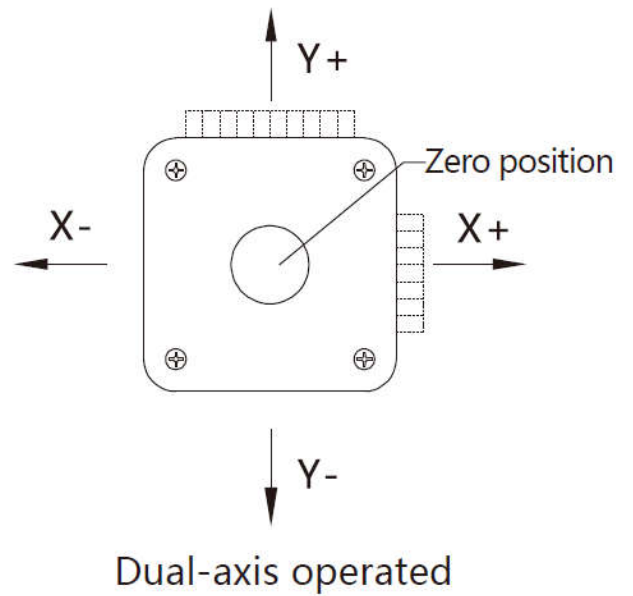
TECHNICAL DRAWINGS



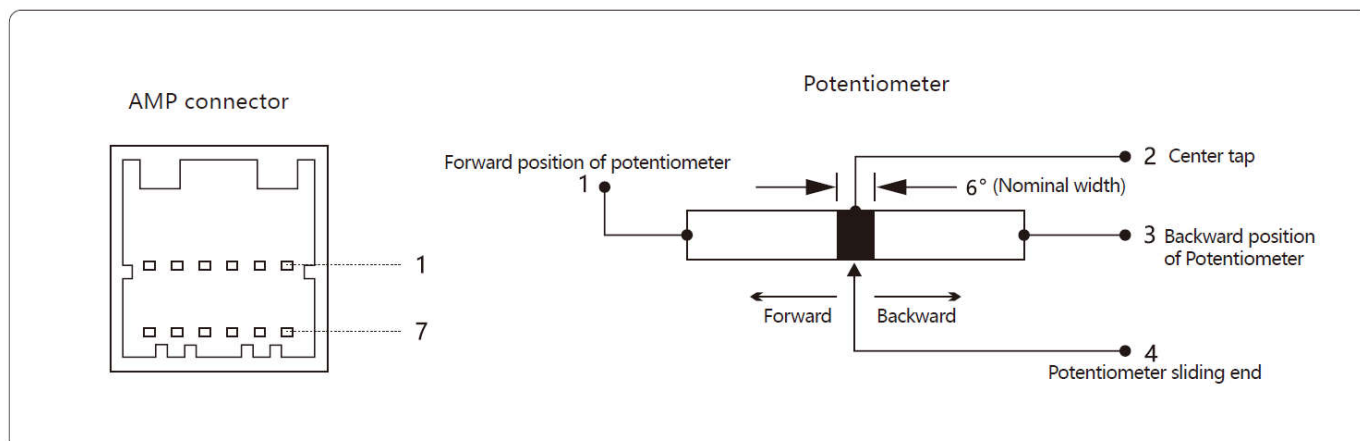
Product Installation



Top view

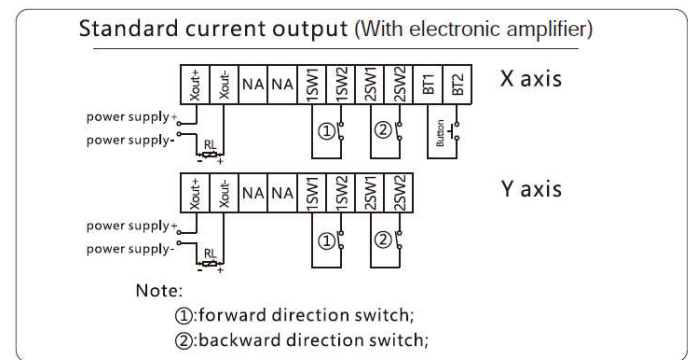
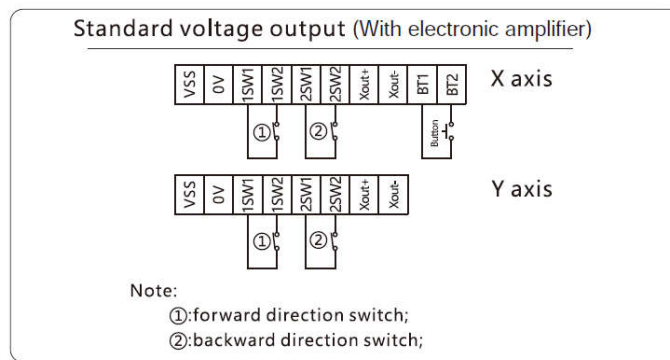
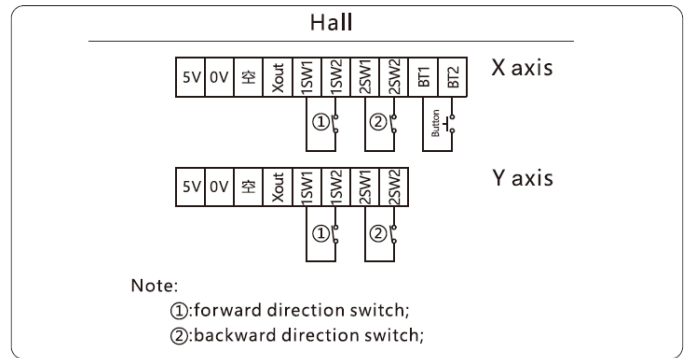
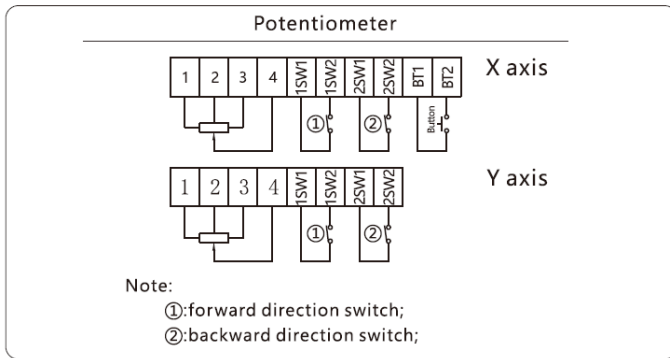


Electrical Connections



| Pin | Pontentiometer | Hall |
|-----|---|---|
| 1 | Potentiometer forward terminal | +5VDC |
| 2 | Potentiometer center tap Single direction(N/A) | NA |
| 3 | Potentiometer Backward Terminal | 0V |
| 4 | Pontentiometer wiper | Output |
| 5 | Directional switch forward(N.O) Start position switch of single direction(N.O) | Forward Directional switch (N.O) Start position switch of single direction (N.O) |
| 6 | Forward switch common terminal Common terminal of start position | Forward switch common terminal Common terminal of start position |
| 7 | Backward directional switch (N.O) Single direction(N/A) | Backward directional switch (N.O) Single direction(N/A) |
| 8 | Backward directional common terminal Single direction(N/A) | Backward directional common terminal Single direction(N/A) |
| 9 | Rocker left directional(N.O) | Rocker left directional(N.O) |
| 10 | Handle of top switch common terminal | Handle of top switch common terminal |
| 11 | Rocker right direction (N.O) | Rocker right direction (N.O) |
| 12 | Deadman switch | Deadman switch |

Connector



Handle Optional

