



Heavy duty joystick J4F

With safety electronics, top mounted.

The robustly designed Heavy duty joystick J4F, with safety electronics, has been developed and certified in accordance with machinery directive DIN ISO 13849-1:2008 PL d and in accordance with DIN EN IEC 61508:2010 SIL 2.

Technical specifications

- SIL 2 / PL d compliance with latest machinery directive
- Eliminates the need for additional documentation by eliminating the risk and failure probability calculations
- IP67 protection class
- The robust joystick CAN module is ideal for use outside thanks to its IP67 protection class
- Direct mounting of electronics module onto joystick ensures minimum space requirement
- Simple installation and screw connection from above
- High reliability and long service life thanks to contactless reed and Hall-effect technology
- Handle available with micro push button switches for use outside of the cabin
- Modular construction of the handle enables application-specific modification
- Ergonomic handle shape ensures fatigue-free operation

Technical drawing

IMAGE 1/3: BILD 1

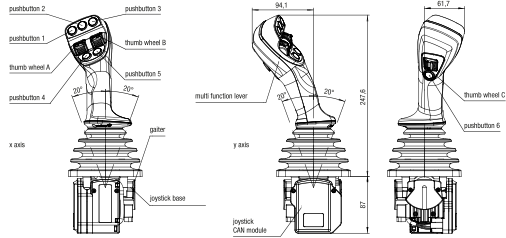


IMAGE 2/3: BILD 2

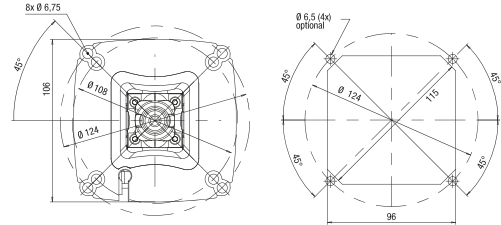
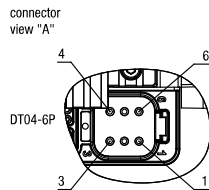


IMAGE 3/3: BILD 3



| PIN | function |
|-----|------------------|
| 1 | GND (KI.31) |
| 2 | U_BAT (KI.30) |
| 3 | IGNITION (KI.15) |
| 4 | - |
| 5 | CAN_L |
| 6 | CAN_H |

Electrical data

| Attribute | J4F... |
|------------------------|------------|
| Operating voltage min. | 9 V DC |
| Operating voltage max. | 32 V DC |
| Current consumption | 400 mA |
| Fieldbus system | CAN |
| Protocol | J1939 |
| Transmitting cycle | 15 ms |
| Baud rate | 250 kBit/s |

Mechanical data

| Attribute | J4F... |
|---|---------------------|
| Max. lever load with specified lever length | 2000 N bei 190 mm N |
| Deflection | $\pm 20^\circ$ |
| Service life, mechanical (Cycles) | 2000000 |

Material information

| Attribute | J4F... |
|------------------|--------------------|
| Housing material | Zinkdruckguss Z410 |
| Shaft material | Zinkdruckguss Z410 |
| Gaiter material | EPDM |

Environmental conditions

| Attribute | J4F... |
|----------------------------|--------|
| Operating temperature min. | -25 °C |
| Max. operating temperature | 85 °C |
| Min. storage temperature | -40 °C |
| Max. storage temperature | 85 °C |

Installation

| Attribute | J4F... |
|---------------|--------------------|
| Installation | from above |
| Mounting type | screwed from above |

Connection

| Attribute | J4F... |
|----------------|-----------------|
| Connector type | Deutsch DT04-6P |