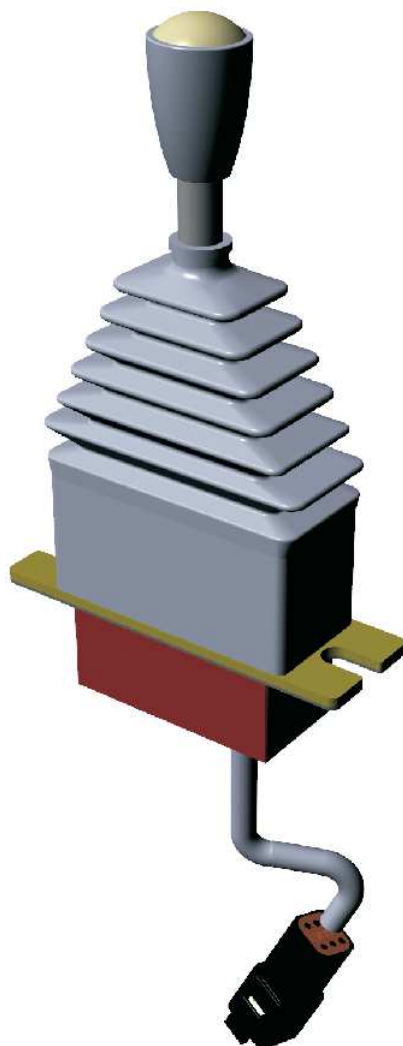


Single axis joystick with signal output



Description

MAS2 is a single axis electronic joystick with voltage signal output.

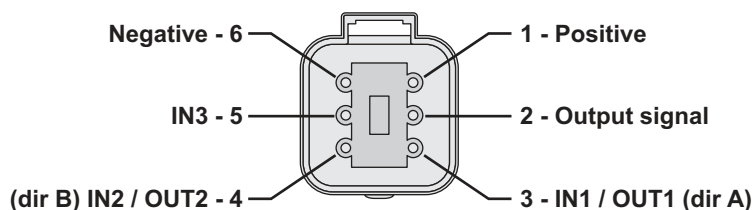
Joystick command is based on the measurement of the magnetic field of a permanent magnet through redundant Hall effect probes, not subject to wear and tear.

Main characteristics:

- single output voltage signal.
 - available ranges are: 0÷5V, 0÷10V, 5÷0÷5V, 0.5÷2.5÷4.5V or any other range within 0÷10V;
 - ratiometric (25%÷50%÷75% of supply voltage).
- output curve shape: linear or parabolic (selectable);
- ramps on signal adjustable from 0 to 25 s (step 0.1 s);
- input usable for:
 - speed reduction (calibration adjustable for each side);
 - block one or both sides of signal output;
 - deadman feature (to be activated before moving the lever);
- lever with friction version available (retained lever);
- high current digital directional outputs, usable as FAULT signal;
- all working parameters are programmable through a serial port and the Windows® SepSim program using a special serial port adapter (AISR).

For direct PWM outputs the version "MAP2" is available.

Connections



Technical specifications

Power supply voltage	10 ÷ 30 Vdc
Working temperature range	-40 ÷ +70 °C
Output signal range (programmable)	0÷5V, 0÷10V, (any value in 0÷10V), ratiometric (Danfoss® signal)
Max signal output current	10 mA
Digital outputs OUT1 and OUT2 maximum current	2000 mA
Input thresholds	Vt-(In1, In2, In3)~2V / Vt+(In1, In2)~3V / Vt+(In3)~80% Supply Voltage
Connections	cable L=20 cm with Deutsch DT04-6 connector
Working angle	± 26 degrees
Force for lever at full stroke	20 N
Ingress Protection rating	IP65
EMC compatibility	ISO EN 14982:2009

Working mode

MAS2 joystick can generate almost any output signal in a programmable range all contained within 0 and 10V. Ratiometric output (25%÷50%÷75% of supply voltage) is also available for Danfoss® devices.

Dead band, signal range, ramps, output shape (linear or parabolic) and other parameters are adjustable.

Setting can be changed using a PC with the SepSim Windows® program and a special serial port adapter with M8 connector (code: PISPR).

The electronic card is protected against short-circuits of the load.

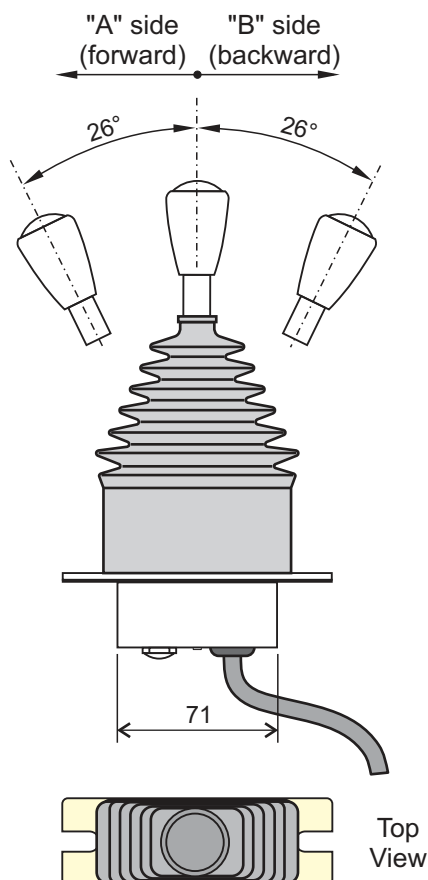
The MAS2 joystick can be ordered with different configuration of output signal, ready to use.

Ask for a special configuration.

Signaling

A multicolor LED under the mounting panel is lit when the joystick is supplied and gives information on the status of the device with a coded series of colored flashes.

DIMENSIONS (in millimeters)



Example of ordering codes:

PMAS2_A_nnn ← nnn (optional): customized special version

- R**: lever spring return
- F**: lever with friction
- S**: fixed
- R**: ratiometric (Danfoss® signal)
- V**: vertical symmetrical signal
- Z**: asymmetrical signal

