

### DESCRIPTION

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

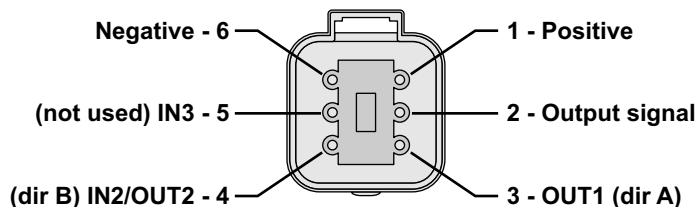
Joystick command is based on the measurement of the magnetic field of a permanent magnet through redundant Hall effect probes, not subject to wear and tear.

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);
- frictioned handle version available;
- 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, ratiometric (Danfoss® signal)
Max signal output current	10 mA
Digital outputs OUT1 and OUT2 maximum current	2000 mA
Connections	cable L=20 cm with Deutsch DT04-6 connector
Working Angle	± 26 degrees
Force for handle 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.

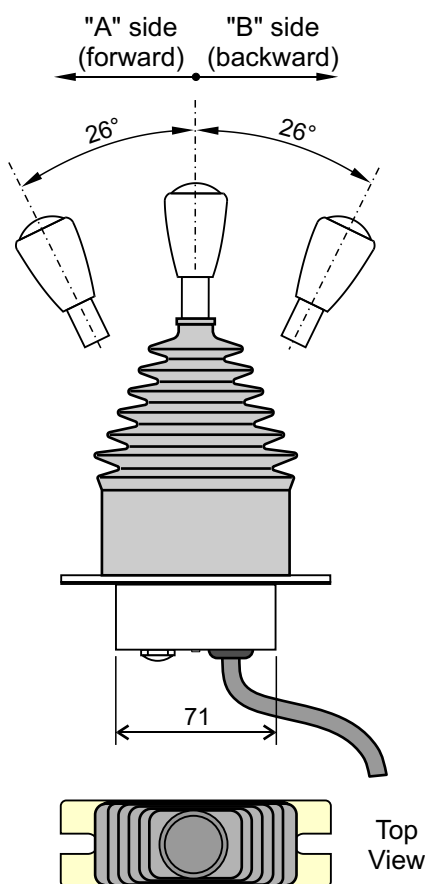
The MAS2 joystick can be ordered with different configuration of output signal, ready to use.

Ask for a special configuration.

### SIGNALLING

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.

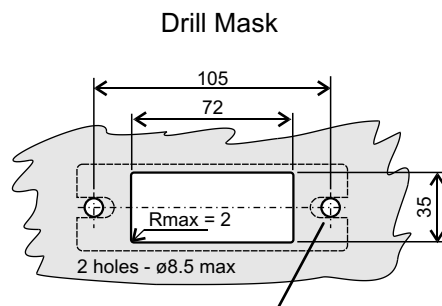
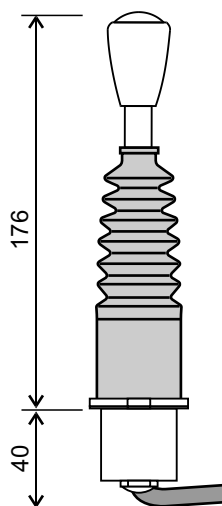
### DIMENSIONS (in millimeters)



Example of ordering codes:

PMAS2xSAy<sup>nnn</sup> — nnn (optional) = customized special version

- R: lever spring return
- F: lever with friction
- V: Output 5±0±5 V and directional
- Z: Output 0±5±10 V



Mounting screws must be sealed apart (rubber gasket does not seal them)

