MAS

Single axis joystick with signal output

FABER-COM

DESCRIPTION

MAS is a single axis electronic joystick with signal output.

Joystick movements are derived from the measurement of the magnetic field produced by permanent ferromagnets; the measurement is taken through Hall effect probes. This kind of probes are not subject to deterioration.

The main characteristics are:

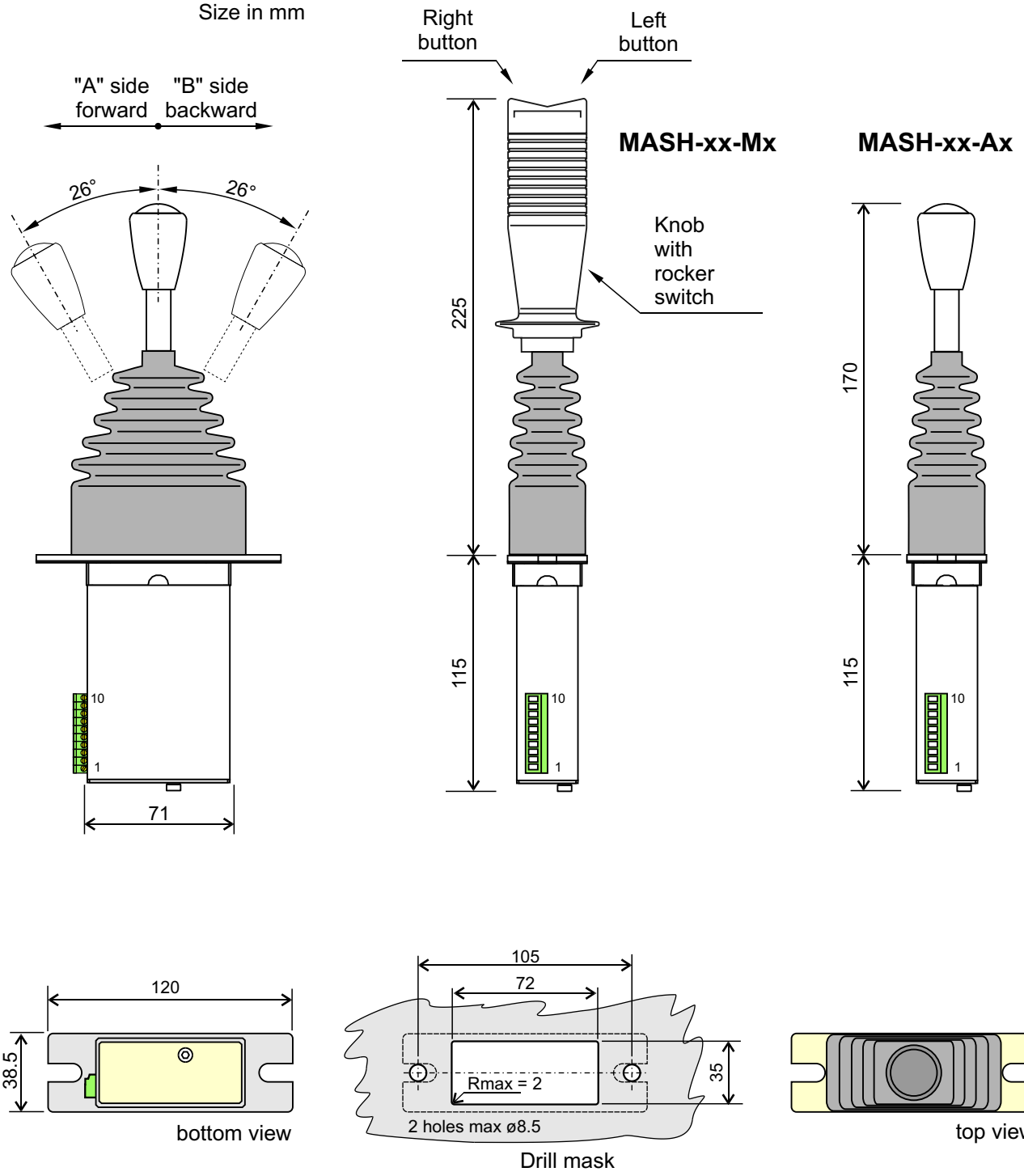
- robustness
- parabolic output signal for a better sensitivity
- adjustable output stroke
- available with unipolar output (5V-0-5V) or bipolar output (0-5V-10V) special versions with output centered to 2.5V
- available in frictioned version;
- available with rocker switch (instable);
- on/off directional outputs;
- provided with extractable screw connector
- version with two different outputs (0-5V) is also available

TECHNICAL SPECIFICATIONS

Supply voltage	10 ÷ 28 Vcc
Working temperature	-20 ÷ 50 °C
Proportional output (max output current 10 mA)	+5V÷0÷+5 Vcc o 0÷5V÷10V o 0.5V÷2.5V÷4.5V
Max output voltage	V_supply - 2.5V
ON-OFF directional signals	500 mA (max) positive outputs
Connections	Extractable screw connectors, 1.5 mm^2 max sect.
Mechanical stroke	± 26 degrees
Moving thrust at full travel	20 N
Under panel size	115 mm

SIZE

Size in mm



ELECTRICAL CONNECTIONS

Connector numbering

SUPPLY:

1 = Battery positive (10÷30Vcc)

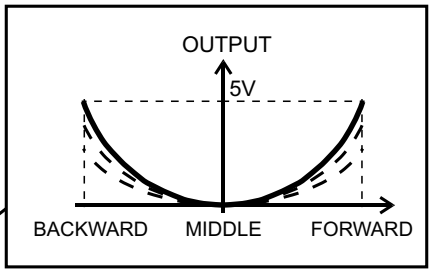
2 = Negative (connected to the ground)

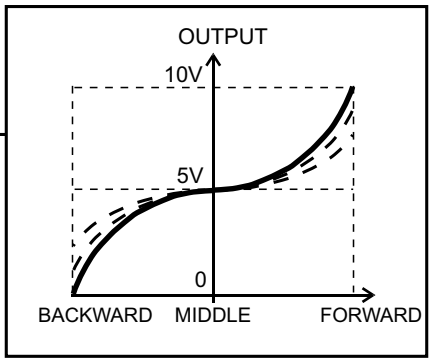
OUTPUT SIGNAL:

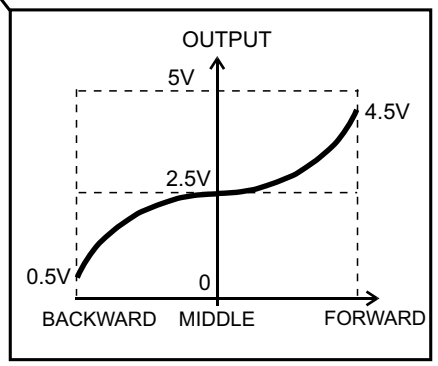
3 = Signal
- 5V ÷ 0V ÷ 5V (MASH-505-xx)
- 0V ÷ 5V ÷ 10V (MASH-010-xx) only if positive supply is above 15V
- 0.5V ÷ 2.5V ÷ 4.5V (MASH-010-xx-S9)

4 = Signal 0 ÷ 5V, "B" side (only version MASH-5F5-xx)

5 = Signal 0 ÷ 5V, "A" side (only version MASH-5F5-xx)







DIRECTIONAL SIGNALS (500 mA max) (not in MASH-5F5-xx):

4 = micro output "B" side (positive)

5 = micro output "A" side (positive)

KNOB BUTTONS (only MAS-xxx-Mx):

6 = Common

7 = N.O. Left Button

8 = N.O. Right Button

9, 10 = do not connect

CODING

MASH - xxx - xx [- Cxx]

- Signal stroke (in Volt tenth) towards the neutral position. If not specified, it is assumed C50 (5.0 Volt)
- R = Spring return; F = Frictioned
- A = Simple knob; M = Knob with rocker switch
- 505 = 0V output at neutral position; 5F5 = floating in neutral position - two 0-5V outputs on different wires; 010 = 5V output at neutral position

E.g.: MASH-010-AR-C35: simple knob, not frictioned, 5V at neutral position and 3.5V signal stroke