

Data Sheet for Joysticks

Hand Joystick

Series 891



- Cobra head ergonomic multifunction handle
- 1 to 4 Axes
- Optional up to six micro switches, plus four pushbuttons and two switches

The 891 series offers an outstanding ergonomic handle and high quality mechanism. The Cobra head-like handle can be configured with pushbuttons, switches and a trigger enabling many different deflection-dependent operations according to your needs.

Technical Data Joystick

Angle of Movement X-, Y-Axis	±22..±26° from center
Angle of Movement Z1-, Z2-Axis	15° ±4 °
Vibration	10 G
Shock	30 G
Length of Wires	300 mm
Return to Center Accuracy X / Y	±3%
Operating Force	2..12 N
Expected Life	10 million cycles
Operating Temperature	-20..+60°C
Weight (depending on configuration)	ca. 950 g

Technical Data Pushbuttons

Pushbuttons SW1, SW2, SW3, SW6

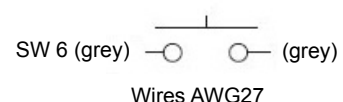
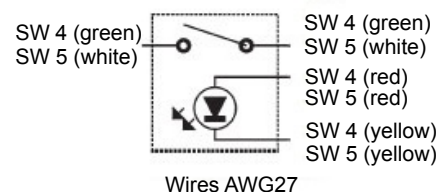
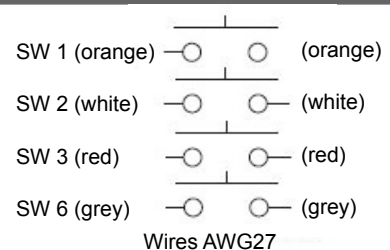
Operating Characteristics	ON when pushed (momentary)
Insulation Resistance	> 1.000 MOhm at 500 VDC
Expected Life	approx. 500.000 operations
Rating	50 VDC / 0,1 A
Dielectric Strength	1 minute at 1.000 VAC

Pushbuttons SW4, SW5, illuminated

Operating Characteristics	Alternate type
Insulation Resistance	> 200 MOhm at 500 VDC
Expected Life	approx. 10.000 operations
Rating	30 VDC / 5 A
Rating LED	1,85 VDC / 20 mA

Trigger SW7

Operating Characteristics	ON when pushed (momentary)
Insulation Resistance	> 100 MOhm at 500 VDC
Expected Life	approx. 100.000 operations
Rating	30 VDC / 100 mA
Dielectric Strength	1 minute at 600 VAC



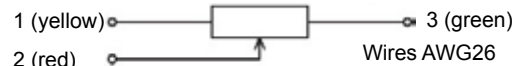
Data Sheet for Joysticks

Hand Joystick

Series 891

Technical Data Potentiometers X- / Y-Axis

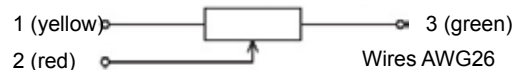
Total Resistance Value	10 kOhm $\pm 15\%$
Electrical Rotating Angle	44° $\pm 5^\circ$
Expected Life	approx. 5 million cycles
Power Rating	max. 0,2 W
Independent Linearity	$\pm 3\%$
Return to Center Accuracy	$\pm 1,5\%$



Only for joysticks 891 with bottom housing wires will be attached and fed to the outside.

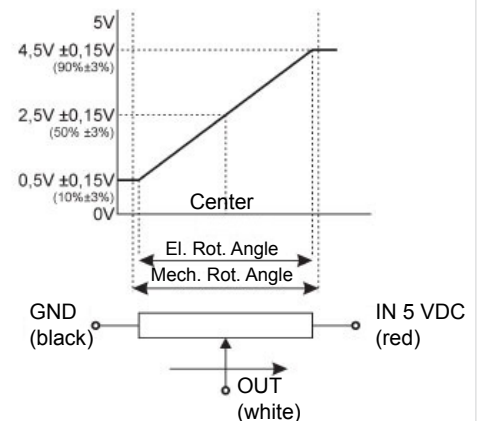
Technical Data Potentiometers Z1, Z2

Total Resistance Value	10 kOhm $\pm 15\%$
Electrical Rotating Angle	30° $\pm 5^\circ$
Expected Life	approx. 2 million cycles
Power Rating	max. 0,2 W
Independent Linearity	$\pm 3\%$
Return to Center Accuracy	$\pm 3\%$



Technical Data Hall Sensor Type H

Supply Voltage	5 VDC $\pm 10\%$
Current Consumption	approx. 6 mA
Output Voltage	0,5 .. 4,5 VDC
Impedance	> 100 kOhm
Independent Linearity	$\pm 3\%$
Temperature Drift Out	< $\pm 2,5\% U_{Out} FS$
Temperature Drift Center	< $\pm 0,5\% U_{Out} FS$
Dielectric Strength	1 minute at 250 VAC
Insulation Resistance	> 100 MOhm at 250 VDC
Operating Temperature	-20..+65 °C
Expected Life	approx. 5 million cycles



Technical Data Micro Switches (Activated with Handle Deflection)

Joysticks of Series 891 can be optionally supplied with micro switches. For each axis, up to 3 angles for activation of these switches are possible. The specification of suitable angles can be given by the customer. E.g. one variant could be: One switch for the detection of center position (Joystick at rest) plus additional positions at +10° and -10° on each axis.

	Angle Position (without / with housing)	Center Detection
Voltage, Current	125 VAC, 5 A / 30 VDC, 100 mA	125 VAC, 5 A
Expected Life approx.	200.000 / 100.000	200.000

Data Sheet for Joysticks

Hand Joystick

Series 891

For higher quantities or on-going demand, additional options are available

For example:

- Customer-specific wiring

Available options for small quantity orders can be found on our stock types list on:

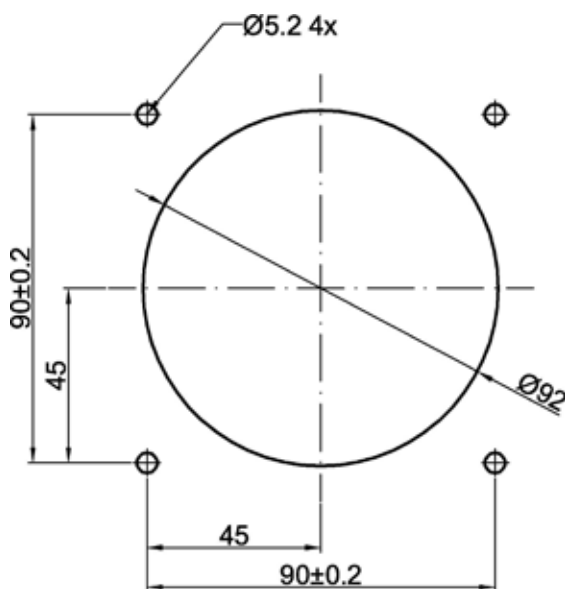
<http://www.megatron.de/en/stocklists/joysticks/lagerliste.html>

In addition, we have an extensive stock of samples for project needs.

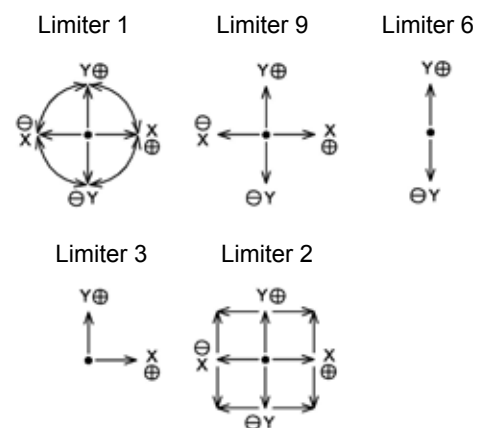
For technical advice, projects, samples, questions about pricing, delivery times and availability please contact us

Tel.: +49 89 46094-500
export@megatron.de

Mounting Cut-Out and Orientation of Limiters

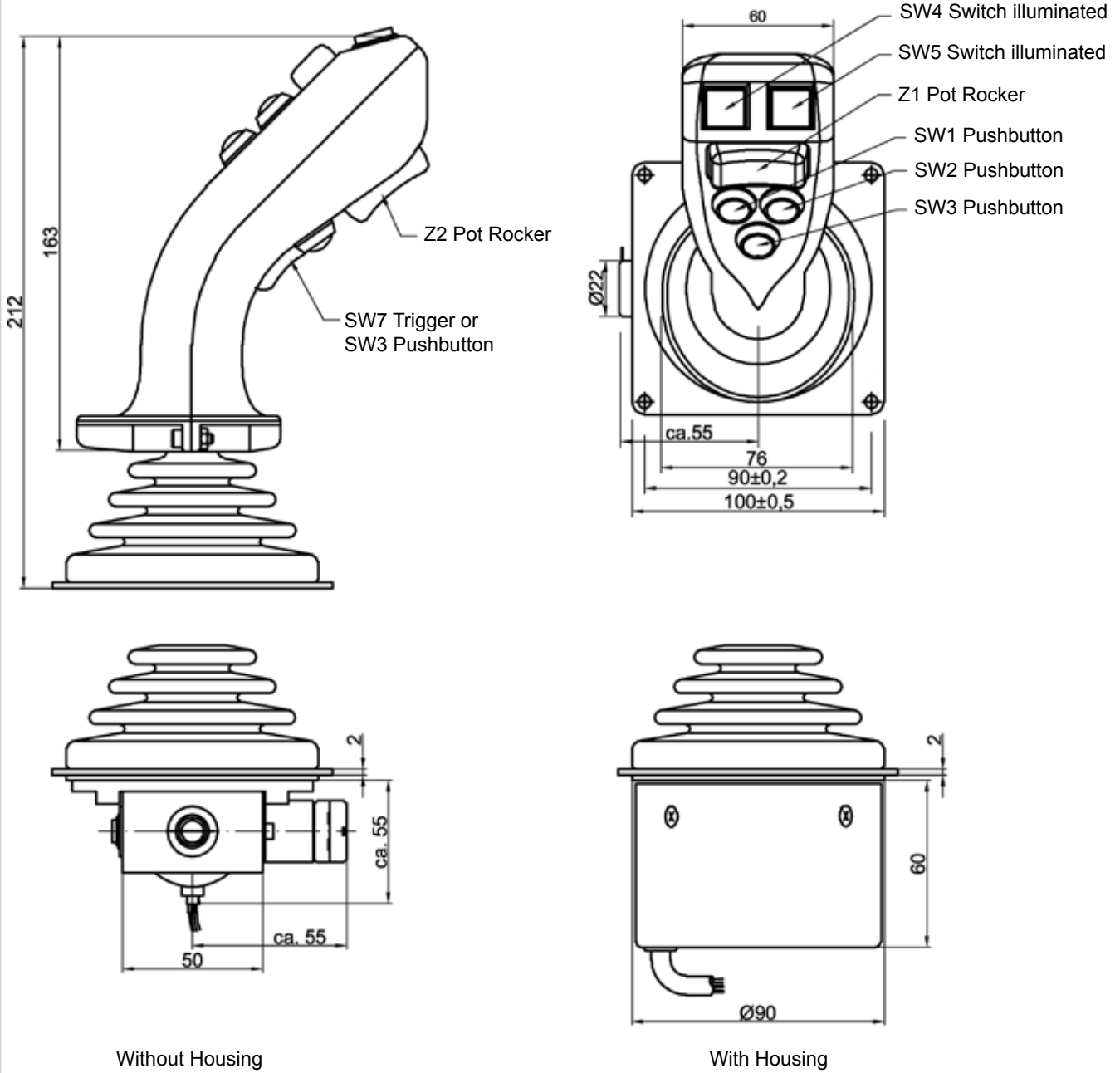


Orientation of Limiters



All Dimensions in mm

Technical Drawings



All Dimensions in mm