

# Foot Switches

## Technical Data

Electrical data		
<b>Rated insulation voltage</b>	$U_i$	400 V AC 250 V AC (in type designation „ZS“, „EX“)
<b>Rated impulse strength</b>		4 kV * 2,5 kV (in type designation „C“, „ZS“, „EX“) *
<b>Conventional thermal current</b>		10 A 5 A (in type designation „ZS“, „EX“)
<b>Utilisation category</b>		AC-15, $U_e / I_e$ 240 V / 3 A AC-15, $U_e / I_e$ 240 V / 1,5 A (in type designation „ZS“)
<b>Positive opening</b>		according to IEC/EN 60947-5-1, Addendum K (when reaching the pedal stop)
<b>Overvoltage category (switch-in contact with enabling function)</b>		III (according to IEC 60664-1)
<b>Protection class</b>		I

\* does not apply to "MI" and "MI RG" in article designation

Mechanical data		
<b>Enclosure</b>		Cast aluminium (powder-coated)
<b>Cover, Protective shroud UN</b>		Cast aluminium (powder-coated)
<b>Foot pedal</b>		Thermoplastic
<b>Operating temperature (with no icing / no condensation)</b>		-30°C to +80°C (-20°C to +65°C in type designation "EX")
<b>Storage temperature</b>		-30°C bis +80°C (-20°C to +65°C in type designation "EX")
<b>Mechanical service life</b>		> $1 \times 10^6$ switching cycles when using switches with potentiometer $5 \times 10^4$
<b>Switching frequency</b>		50 min <sup>-1</sup> when using switches with potentiometer 20 min <sup>-1</sup>
<b>Type of connection</b>		Screw connections (M3,5)
<b>Conductor cross sections</b>		Single-wire 0,5 – 1,5 mm <sup>2</sup> or stranded wire with ferrule 0,5 – 1,5 mm <sup>2</sup>
<b>Cable entry</b>		M20 x 1,5
<b>Weight with cover</b>		F1 ≈ 0,6 kg, F2 ≈ 1,7 kg, F3 ≈ 3,0 kg
<b>Weight with protective shroud UN</b>		F1 ≈ 1,5 kg, F2 ≈ 2,6 kg, F3 ≈ 5,4 kg
<b>Protection class</b>		Protection class depends on type. Standard is IP65.

Standard values for safety technology	
<b>B10d</b>	$20 \times 10^6$ $6 \times 10^6$ Restrictions in article designation "C" * $2 \times 10^6$ Restrictions in article designation "D" * $4 \times 10^6$ Restrictions in article designation "EX" * $1 \times 10^5$ Restrictions in article designation "ZS" *

\* Once a restriction exists, the lowest value needs to be applied.

This technical data is generic to our standard foot switch range, please refer to individual technical data sheets for exact product information as the technical data above may vary.

Standards
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1

Approvals*
CCSAUS A300, Q300 (same polarity)
cUL <sub>US</sub> B300 (in type designation "ZS")
DGUV (Only switches that have an appropriate label)

\* Approvals depend on type.  
More information can be found in the data sheet.