ABB

Foot switches





Description of Mini foot switches

- Reduced dimensions: 100 x 75 x 34 mm.
- Materials: cover and base made of selfextinguishing ABS.
- Color choice: black or grey base; black, grey, yellow or red cover.

Description of foot switches with covers

- Dimensions: 285 x 140 x 145.
- Materials: base, cover and pedal made of shock resistant Bayblend[®] FR 90 material (alloyed polycarbonate and ABS).
- Color choice: grey base; grey, yellow or red cover.
- Variations: grey base, half-red cover. Especially used for emergency stop function.

Note: this emergency stop function must never contain the «locked in neutral position» device.

UL Listed file #E191693

Application

Foot switch-operated machines such as: shearing machines, folding machines, spinning lathes, machine tools, wrapping machines, riveting presses, etc.

Foot switches with covers come in three operation formats:

- Free movement: contact position follows pedal movement: actuated when the pedal is pushed down, released when pedal is in a state of rest.
- Foot switch locked in neutral position: same operation as above, after unlocking the pedal with the end of the foot.
- Foot switch latched in low position: same operation as free movement, except that a state of rest is obtained only after having unlatched the pedal with the end of the foot.



General information IPM Mini foot switches, IPS Foot switches with covers Description

Application

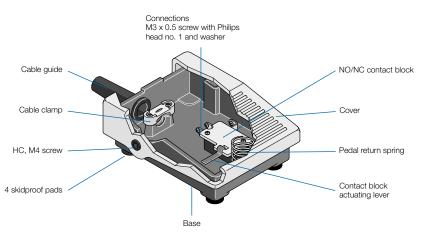
Foot switch-operated machines such as: shearing machines, folding machines, spinning lathes, machine tools, wrapping machines, riveting presses, etc.

Foot switches with covers come in three operation formats:

- Free movement (momentary): contact position follows pedal movement: actuated when the pedal is pushed down, released when pedal is in a state of rest.
- Foot switch locked in neutral position: same operation as above, after unlocking the pedal with the end of the foot.
- Foot switch latched in low position (maintained): same operation as free movement, except that a state of rest is obtained only after having unlatched the pedal with the end of the foot.

Description of Mini foot switches

- Reduced dimensions: 100 x 75 x 34 mm.
- Materials: cover and base made of self-extinguishing ABS.
- Color choice: black or grey base; black, grey, yellow or red cover.



Connecting terminals

Description of foot switches with covers

- Dimensions: 285 x 140 x 145.
- Materials: base, cover and pedal made of shock resistant Bayblend® FR 90 material (alloyed polycarbonate and ABS).
- · Color choice: grey base; grey, yellow or red cover.
- Variations: grey base, half-red cover. Especially used for emergency stop function.

Note: this emergency stop function must never contain the «locked in neutral position» device.

M 3.5 (+, -) Philips no. 1 screw
Screw head with captive cable clamp. Markings conform with IEC 947-1, IEC 947-5-1, EN 50 005 and 50 013 standards. 4 stainless steel 18/8. Philips no. 2 Cover screws æ Cable inlet with 1/2" NPT cable gland. Cable clamp Block(s) of two contacts: one block: 1 N.O. + 1 N.C. Pedal two blocks: 2 N.O. + 2 N.C.
Positive opening operation. Za snap action contacts orZb slow action contacts: the contacts are electrically separated. 35 1 pre-pressed Pg16 knockout on each side 4 skidproof pads Base

Comment: Foot switches with covers can be assembled on a plate and equipped with a transportation handle. Upon request, instead of the handle an emergency stop button can be installed above a tube that allows for connection cable passage.

Foot switches Mini foot switches, IP 40



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IPM Mini foot switches

NC N.O. + N.C.	Cover color	Unit weight in kg Packing 1 piece	Catalog number
Black base			
1	Yellow	0.130	IPM1Y
1	Grey	0.130	IPM1G
1	Black	0.130	IPM1B
1	Red	0.130	IPM1R
Grey base			
1	Yellow	0.130	IPM2Y
1	Grey	0.130	IPM2G
1	Black	0.130	IPM2B
1	Red	0.130	IPM2R

Catalog number explanation

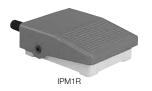


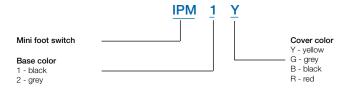
IPM1R

IPM1Y



IPM1B





Low Voltage Products & Systems



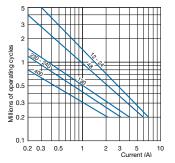
General technical data

		Mini foot switch	Foot switch with cover
Standards		IEC 1058-1	IEC 947-5-1
Certifications & Approvals		-	UL - CSA - BG
Air temperature near the device – during operation – for storage	℃ ℃	- 10 + 70 - 25 + 80	- 10 + 70 - 30 + 80
Climatic withstand		_	according to IEC 68-2-3 and salty mist according to IEC 68-2-11
Shock withstand (according to IEC 68-2-27 and EN 60 068-2-27)	g	_	50g (1/2 sinusoidal shock for 11 ms) no change in contact position
Degree of protection (according to IEC 529 and EN 60 529)	IP 40	IP 65
Actuation torque	N.m	1.2	0.25
Operating angle	Degree	2 to 4	15
Cable inlet		Cable guide ø min. 6mm; ø max. 8.5 mm	Pg 16

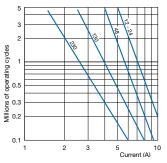
8 Electrical data

Rated insulation voltage U _i	V	250	500 (according to IEC 947-1 and EN 60-947-1) Degree of pollution 3
Rated impulse withstand voltage U _{imp} (according to IEC 947-1 and EN 60 §	947-1) kV	1	6
Conventional free air thermal current $(q < 40 \text{ °C})$	I _{th} A	15	10 (according to IEC 947-1)
Short-circuit protection U _e < 500 V a.c gG (gl) type fuses	A	10	10
Rated operational current	A A	3 (250 V a.c.) 0.06 (230 V d.c.)	A~600 (according to UL 508 and CSA C22-2 n° 14) $Q~600$ (according to UL 508 and CSA C22-2 n° 14)
AC-15 acc. to IEC 947-5-1 24 130 230 240 400	V A V A V A	- - - -	10 5.5 3.1 3 1.8
DC-13 acc. to IEC 947-5-1 24 110 250	V A		2.8 0.6 0.27
Resistance between contacts	mΩ	30	25
Connecting terminals		M3 x 0.5 screw with Philips head no. 1 and washer	M3.5 (+, -) screw with Philips head no. 1 with cable clamp
Positive opening operation (according to IEC 947-5-1)		_	\ominus
Connecting capacity	1 or 2 x mm ²	-	0.5 – 2.5
Terminal marking		-	According to EN 50 013
Mechanical durability	Millions of operations	10	30
Electrical durability	Operations	100,000	According to IEC 947-5-1, utilization categories AC-15 and DC-13 (Load factor of 0.5 according to curves below)

AC-15 - Snap action



AC-15 - Slow action



DC-13		Snap action	Slow action	
		Power breaking for a durability of 5 million operating cycles		
Voltage	24 V	9.5 W	12 W	
Voltage	48 V	6.8 W	9 W	
Voltage	110 V	3.6 W	6 W	

8.70

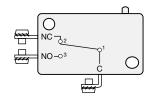
Technical data & approximate dimensions Mini-footswitches



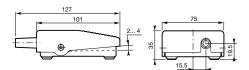
IPM Mini foot switches

Base co	olor	Yellow cover	Grey cover	Black cover	Red cover
Black base	Catalog number	IPM1Y	IPM1G	IPM1B	IPM1R
Grey base	Catalog number	IPM2Y	IPM2G	IPM2B	IPM2R
Weight (packing per unit)	kg	0.130	0.130	0.130	0.130

N.O. + N.C. Contact block



Dimensions (mm)



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