

FS-81-W Medical Foot Switches (IPX8)

Features

- Aluminum alloy die cast base
- Galvanically separated contacts (for -SP)
- Positive opening of NC contacts (for -SP)
- Comply with IEC60601-1 and YY1057 standards
- Wire and connector can be connected according to customer's requirements
- USB optional available
- Multiple Pedal colors available
- Wireless model is optional, only applicable with base

Specifications

Operating Frequency	60 ops/min
Insulation Resistance	>100MΩ @500V DC
Contact Resistance	<25mΩ (initial)
Rated Current/Voltage	Ith: 10A Ui: 300V AC UL Rating: A300/AC15 IEC60601-1: 5A/25VAC
Inrush Current	Complies with IEC947-5-1: AC15/DC13
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanically 1 x 10 ⁶ (operations) Electrically 1 x 10 ⁵ (operations)
Operating Temperature	-30~+80°C (-22~176°F)
Degree of Protection	IPX8

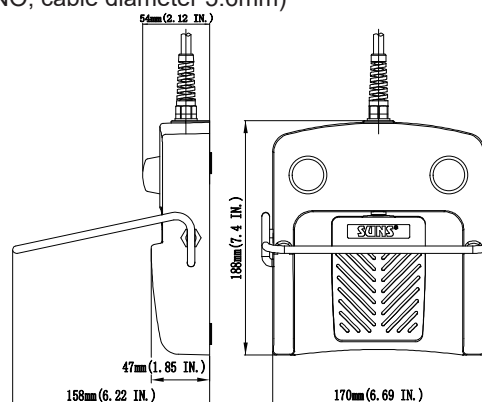
Selection Guide:

FS-81G	-	SP	-	W	-	T	-	M	-	B1	-	H	-	8	F	-	20/4S	-	(L)
Guard		Switch Type				Contact Type		Pedal Material		Options		Options		Cable Length		Additional Wiring Information			
						Blank: SPDT		Blank: Fiber reinforced plastic		Blank: No button		Blank: No handle				Blank: Meter(s)		Blank: Standard	
		SP: 10A snap action (IPx8)				T: DPDT (2NO/2NC)		M: Die cast zinc alloy		B1: 1 Button		H: Handle				F: Foot/Feet		(L): Large	
Blank: No guard		SL: 10A slow action (IPx8)				S: DPDT (2-stage)				B2: 2 Buttons									
G: With guard										B3: 3 Buttons									
										B4: 4 Buttons									
										B5: 5 Buttons									

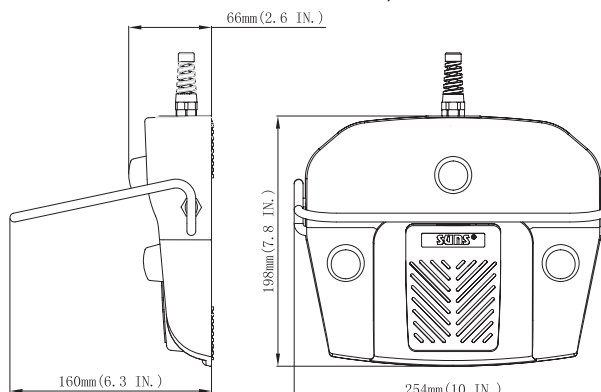
* Standard pedal color: Black

FS-81-SP-W-B2-H-2-20/4S (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)

FS-81-SP-W-B2-H-2-22/5S (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)



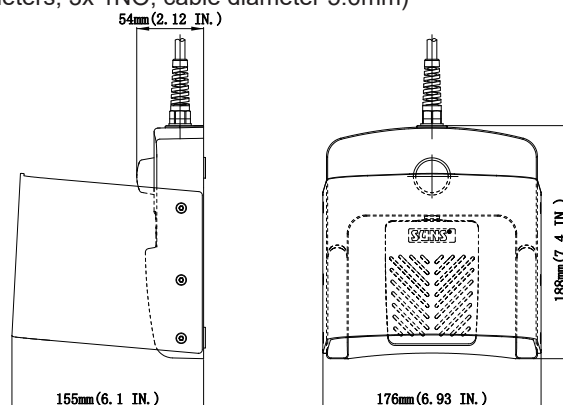
FS-81-SP-W-B3-H-2-22/5S-(L) (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)



FS-81-W Medical Foot Switches (IPX8)

FS-81G-SP-W-B2-2-20/4S (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)

FS-81G-SP-W-B2-2-22/5S (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)



FS-82-W Series Medical Foot Switches (IPX8)

Features

- Aluminum alloy die cast base
- Galvanically separated contacts (for -SP, -SL)
- Positive opening of NC contacts (for -SP, -SL)
- Comply with IEC60601-1 and YY1057 standards
- Wire and connector can be connected according to customer's requirements
- USB optional available
- Multiple Pedal colors available
- Wireless model is optional, only applicable with base

Specifications

Operating Frequency	60 ops/min
Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial)
Rated Current/Voltage	Ith: 10A UL Rating: A300/AC15 IEC60601-1: 5A/25VAC
Inrush Current	Complies with IEC947-5-1: AC15/DC13
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanically 1 x 10 ⁶ (operations) Electrically 1 x 10 ⁵ (operations)
Operating Temperature	-30~+80°C (-22~176°F)
Degree of Protection	IPX8

Selection Guide:

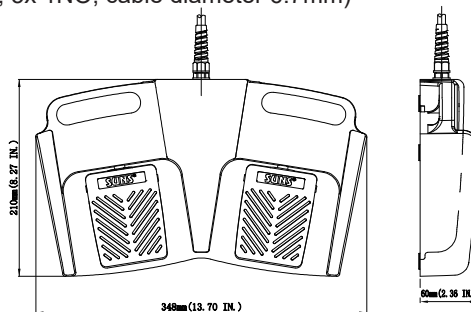
FS-82G - SP - W - T - M - B1 - H - 8 F - 20/4S - (S)							
Guard	Switch Type	Contact Type	Pedal Material	Options	Cable Length	Additional Wiring Information	
	SP : 10A snap action (IPx8)	Blank : SPDT		Blank : NO Button	Blank : No Handle	20AWGx4 Shielded	Blank : Large base
	SL : 10A slow action (IPx8)	T :DPDT (2NO/2NC)		B1 : Button in middle	H : With Handle	Blank : Meter(s)	(S) : Small base
Blank : No guard		S : DPDT (2-stage)		B2 : 2 Buttons on left and right		F : Foot/Feet	(SP) : Small Plastic base
G : With guard			Blank : Fiber reinforced plastic	B3 : 3 Buttons			
			M : Die cast aluminum				

* Standard pedal color: Black

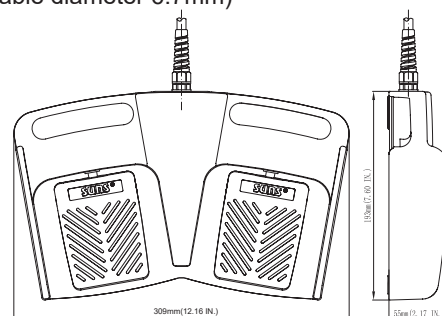
* Standard pedal color: Black

Dimensions:

- FS-82-SP-W-2-20/4S (20AWGx4, shielded, 2 meters, 2x 1NO, cable diameter 7.0mm)
 FS-82-SP-W-2-22/5S (22AWGx5, shielded, 2 meters, 2x 1NO, cable diameter 5.6mm)
 FS-82-SP-W-B1-2-20/4S (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
 FS-82-SP-W-B1-2-22/5S (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
 FS-82-SP-W-B2-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
 FS-82-SP-W-B3-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)

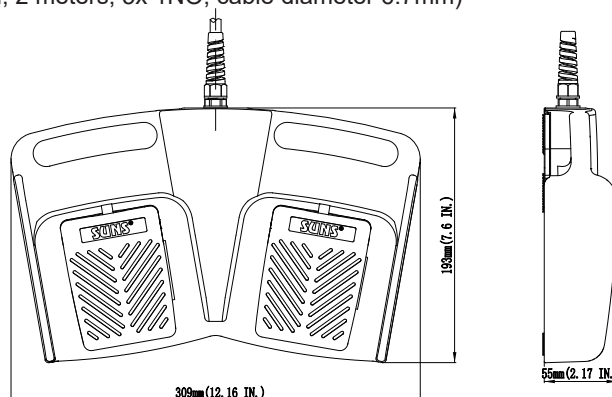


- FS-82-SP-W-2-20/4S-(S) (20AWGx4, shielded, 2 meters, 2x 1NO, cable diameter 7.0mm)
 FS-82-SP-W-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 2x 1NO, cable diameter 5.6mm)
 FS-82-SP-W-B1-2-20/4S-(S) (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
 FS-82-SP-W-B1-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
 FS-82-SP-W-B2-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
 FS-82-SP-W-B3-2-20/6S-(S) (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)

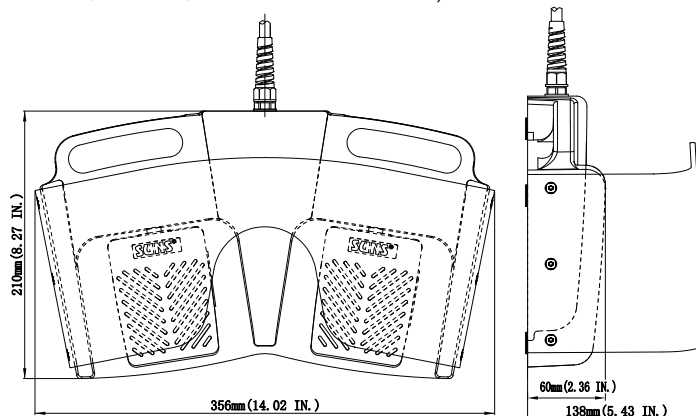


FS-82-W Series Medical Foot Switches (IPX8)

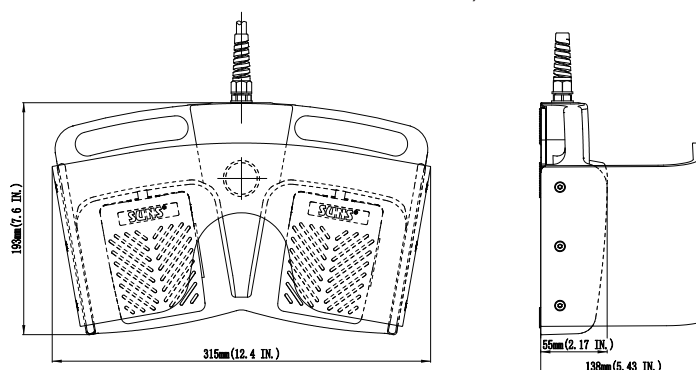
- FS-82-SP-WP-2-20/4S-(S)** (20AWGx4, shielded, 2 meters, 2x 1NO, cable diameter 7.0mm)
FS-82-SP-WP-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 2x 1NO, cable diameter 5.6mm)
FS-82-SP-WP-B1-2-20/4S-(S) (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
FS-82-SP-WP-B1-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
FS-82-SP-WP-B2-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
FS-82-SP-WP-B3-2-20/6S-(S) (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)



- FS-82G-SP-W-2-20/4S** (20AWGx4, shielded, 2 meters, 2x 1NO, cable diameter 7.0mm)
FS-82G-SP-W-2-22/5S (22AWGx5, shielded, 2 meters, 2x 1NO, cable diameter 5.6mm)
FS-82G-SP-W-B1-2-20/4S (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
FS-82G-SP-W-B1-2-22/5S (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
FS-82G-SP-W-B2-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
FS-82G-SP-W-B3-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)



- FS-82G-SP-W-2-20/4S-(S)** (20AWGx4, shielded, 2 meters, 2x 1NO, cable diameter 7.0mm)
FS-82G-SP-W-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 2x 1NO, cable diameter 5.6mm)
FS-82G-SP-W-B1-2-20/4S-(S) (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
FS-82G-SP-W-B1-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
FS-82G-SP-W-B2-2-22/5S-(S) (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
FS-82G-SP-W-B3-2-20/6S-(S) (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)



FS-83-W Series Medical Foot Switches (IPX8)

Features

- Aluminum alloy die cast base
- Galvanically separated contacts (for -SP, -SL)
- Positive opening of NC contacts (for -SP, -SL)
- Comply with IEC60601-1 and YY1057 standards
- Wire and connector can be connected according to customer's requirements
- USB optional available
- Multiple Pedal colors available
- Wireless model is optional, only applicable with base

Specifications

Operating Frequency	60 ops/min
Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial)
Rated Current/Voltage	Ith: 10A Ui: 300V AC UL Rating: A300/AC15 IEC60601-1: 5A/25VAC
Inrush Current	Complies with IEC947-5-1: AC15/DC13
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanically 1 x 10 ⁶ (operations) Electrically 1 x 10 ⁵ (operations)
Operating Temperature	-30~+80°C (-22~176°F)
Degree of Protection	IPX8

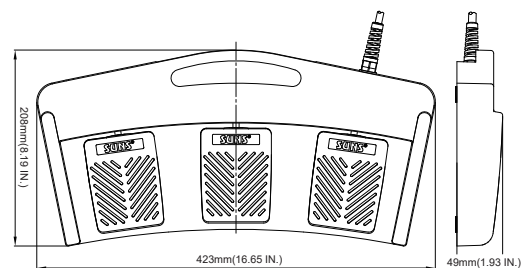
Selection Guide:

FS-83-SP	-	W	-	T	-	M	-	B1	-	H	-	8	F	-	20/4S	-	(P)
Switch Type		Base Material		Contact Type		Pedal Material		Options		Cable Length			Additional Wiring Information				
SP: 10A snap action (IPX8)				Blank: SPDT				Blank: No Button					Blank: Meter(s)				Blank: No Partition
SL: 10A slow action (IPX8)				T: DPDT (2NO/2NC)				B1: Button in middle					F: Foot/Feet				(P): With partition between pedals
				S: DPDT (2-stage)				B2: 2 Buttons on left and right					Blank: No Handle				
		W: Alloy base						B3: 3 Buttons									
		WP: Fiber reinforced plastics								H: With Handle							
						Blank: Fiber reinforced plastic											
						M: Die cast aluminum											

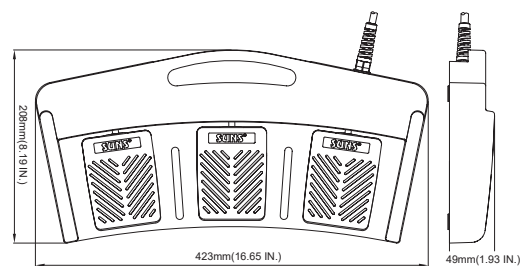
* Standard pedal color: Black

Dimensions:

- FS-83-SP-W-2-20/4S** (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
FS-83-SP-W-2-22/5S (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
FS-83-SP-W-B1-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
FS-83-SP-W-B2-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)



- FS-83-SP-W-2-20/4S-(P)** (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)
FS-83-SP-W-2-22/5S-(P) (22AWGx5, shielded, 2 meters, 3x 1NO, cable diameter 5.6mm)
FS-83-SP-W-B1-2-22/5S-(P) (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)
FS-83-SP-W-B2-2-20/6S-(P) (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)



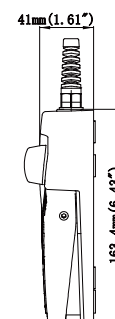
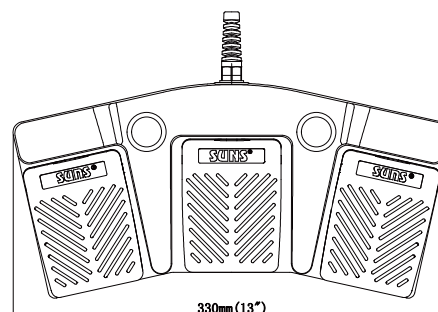
FS-83-W Series Medical Foot Switches (IPX8)

FS-83-SP-WP-2-20/4S (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)

FS-83-SP-WP-B1-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)

FS-83-SP-WP-B2-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)

FS-83-SP-WP-B3-26/7 (26AWGx7, PUR, coiled, 6 1NO, cable diameter 5.3mm)

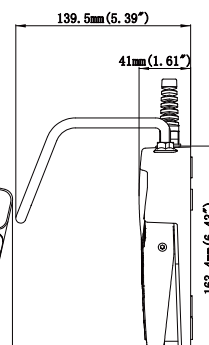
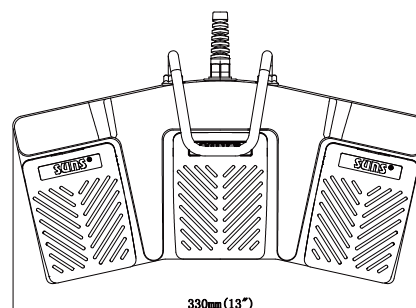


FS-83-SP-WP-H-2-20/4S (20AWGx4, shielded, 2 meters, 3x 1NO, cable diameter 7.0mm)

FS-83-SP-WP-B1-H-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)

FS-83-SP-WP-B2-H-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)

FS-83-SP-WP-B3-H-26/7 (26AWGx7, PUR, coiled, 6x 1NO, cable diameter 5.3mm)



FS-84-W Series Medical Foot Switches (IPX8)

Features

- Robust glass fiber reinforced plastic base
- Galvanically separated contacts (for -SP, -SL)
- Positive opening of NC contacts (for -SP, -SL)
- Comply with IEC60601-1 and YY1057 standards
- Wire and connector can be connected according to customer's requirements
- USB optional available
- Multiple Pedal colors available
- Wireless model is optional, only applicable with base

Specifications

Operating Frequency	60 ops/min
Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial)
Rated Current/Voltage	Ith: 10A UL Rating: A300/AC15 IEC60601-1: 5A/25VAC
Inrush Current	Complies with IEC947-5-1: AC15/DC13
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanically 1 x 10 ⁶ (operations) Electrically 1 x 10 ⁵ (operations)
Operating Temperature	-30~+80°C (-22~176°F)
Degree of Protection	IPX8

Selection Guide:

FS-84 - SP - W - T - M - B1 - H - 8 F - 20/4S

Switch Type

— **SP:** 10A snap action (IPx8)

— **SL:** 10A slow action (IPx8)

Contact Type

— **Blank:** SPDT

— **T:** DPDT (2NO/2NC)

— **S:** DPDT (2-stage)

Pedal Material

— **Blank:** Fiber reinforced plastic

— **M:** Die cast zinc

Options

— **Blank:** No Button

— **B1:** Button in middle

— **B2:** 2 Buttons on left and right

— **B3:** 3 Buttons

Cable Length

— **Blank:** No Handle

— **H:** With Handle

Additional Wiring Information

20AWGx4 Shielded

— **Blank:** Meter(s)

— **F:** Foot/Feet

Dimensions:

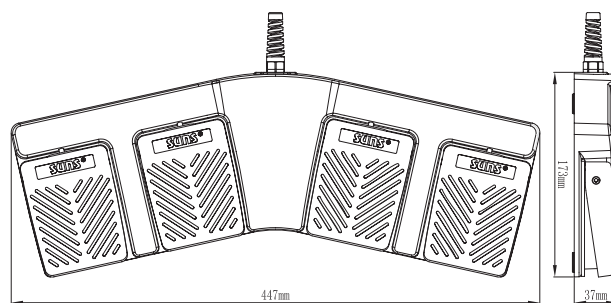
* Standard pedal color: Black

Dimensions:

FS-84-SP-W-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)

FS-84-SP-W-B1-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)

FS-84-SP-W-B2-26/7 (26AWGx7, PUR, coiled, 6x 1NO, cable diameter 5.3mm)



FS-84-SP-W-H-2-22/5S (22AWGx5, shielded, 2 meters, 4x 1NO, cable diameter 5.6mm)

FS-84-SP-W-H-B1-2-20/6S (20AWGx6, shielded, 2 meters, 5x 1NO, cable diameter 6.7mm)

FS-84-SP-W-H-B2-26/7 (26AWGx7, PUR, coiled, 6x 1NO, cable diameter 5.3mm)

