

SWD Series 16 and 32 Amp Switches

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Applications

- Designed to prevent operation in explosive atmospheres during connect and disconnect operation of lighting and light power loads.
- For use in hazardous areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in chemical and petrochemical plants, refineries and other process industries.

Features

- Available up to 690 Volts, and up to 32 Amps
- Two threaded entries (one top and one bottom) M20 or M25.
- Switch mechanism fixed at the bottom of the box.
- Padlockable handle.
- Termination:
 - 16 Amp 4 mm² terminals
 - 32 Amp 6 mm² terminals
- Internal earth:
 - 2 x 4 mm² terminals
- External earth:
 - M5 for 16 Amps
 - M6 for 32 Amps

Standard Materials

- Gray painted marine grade aluminum alloy box.
- A2 stainless steel captive screws.

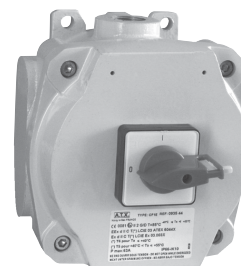
Certifications and Compliances

◆ATEX Certification

- **16 Amp Version. Certification Type: BR1d (16A)**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex d IIC
 - Temperature class: T6 for Ta = +40 °C, T5 for Ta = +55 °C
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50230
 - ATEX Certificate: LCIE 02 ATEX 6056
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10
- **32 Amp Version. Certification Type: CF1E (32A)**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
 - Type of Protection: Ex d IIC
 - Temperature class: T6 for Ta ≤ +40 °C, T5 for +40 °C < Ta ≤ +55 °C
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓢ II2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50257
 - ATEX Certificate: LCIE 03 ATEX 6044X
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10



16 Amp Version



32 Amp Version

◆EURASEC Certification

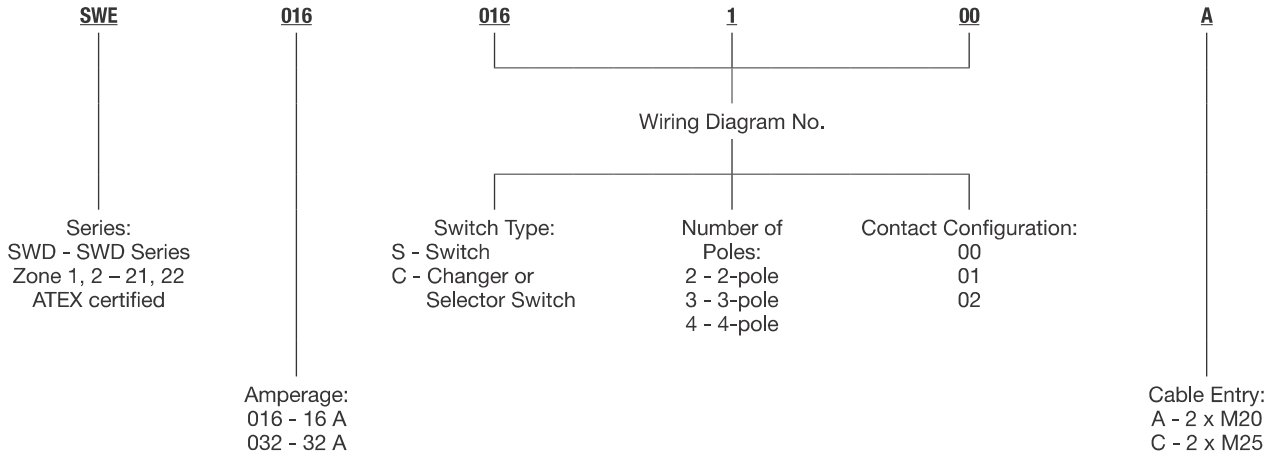
- **16 Amp Version. Certification Type: BR1d (16A)**
 - EURASEC RU C-FR. ГБ 05.В.00911
- **32 Amp Version. Certification Type: CF1E (32A)**
 - EURASEC RU C-FR. ГБ 05.В.00911

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Catalog Numbering Guide



Switch Type	Wiring Diagram No.	Entries	Weight kg	Volume dm ³	Catalog Number
16 Amp Switch					
1-pole changeover	C100	2 x M20	1.1	3.8	SWD016C100A
		2 x M25			SWD016C100C
2-pole switch	S200	2 x M20	1.1	3.8	SWD016S200A
		2 x M25			SWD016S200C
3-pole switch	S300	2 x M20	1.1	3.8	SWD016S300A
		2 x M25			SWD016S300C
4-pole switch	S400	2 x M20	1.1	3.8	SWD016S400A
		2 x M25			SWD016S400C
32 Amp Switch					
2-pole switch	S200	2 x M20	2.7	8.0	SWD032S200A
		2 x M25			SWD032S200C
3-pole switch	S300	2 x M20	2.7	8.0	SWD032S300A
		2 x M25			SWD032S300C
4-pole switch	S400	2 x M20	2.7	8.0	SWD032S400A
		2 x M25			SWD032S400C

Switching Arrangement – X Denotes "Closed Contact"

C100			C200			S300				S400				
Positions	Contacts		Positions	Contacts		Positions	Contacts			Positions	Contacts			
	1-2	3-4		1-2	3-4		1-2	3-4	5-6		1-2	3-4	5-6	7-8
0	X		0			0				0				
1		X	1	X	X	1	X	X	X	1	X	X	X	X

Shaded catalog numbers are normally stocked items. All other items are made to order.

CALL POINTS STATIONS AND AUDIO SIGNALING DEVICES - INCREASED SAFETY

Controls

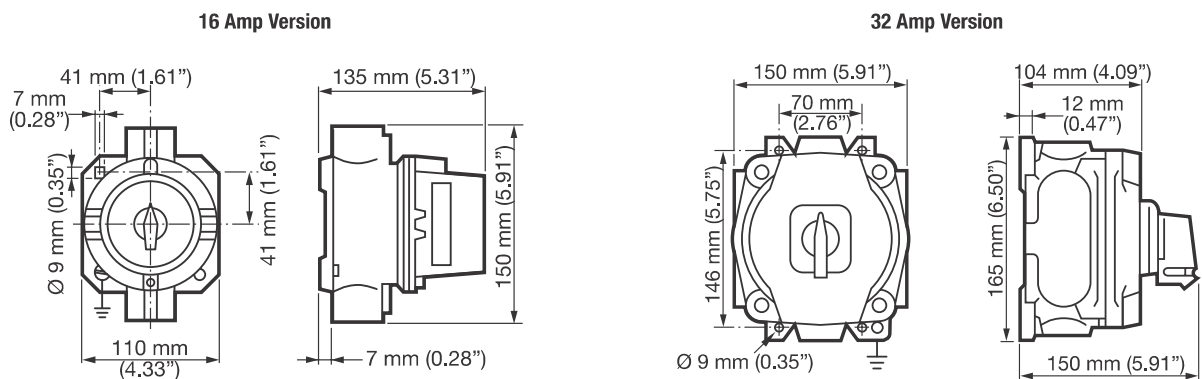
SWD Series 16 and 32 Amp Switches

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Main Contacts		16 Amps	32 Amps
Rated insulation voltage (Ui)		690 V	690 V
Rated Operating Current (Ie)		20 A	40 A
AC 21 A		16 A	32 A
AC 15		6 A	12 A
AC 23 A	3 x 230 V	4 KW	11 KW
	3 x 400 V	7.5 KW	11 KW
	3 x 500 V	5.5 KW	11 KW
	3 x 690 V	4 KW	11 KW
AC 3 A	3 x 230 V	3 KW	5.5 KW
	3 x 400 V	4 KW	11 KW
	3 x 500 V	5.5 KW	11 KW
	3 x 690 V	3 KW	11 KW
Flexible Termination		2.5 mm ²	6 mm ²
Solid Termination		4 mm ²	6 mm ²

Dimensions in Millimeters



SWD Series 20, 32, 63, 100, 125, 160 and 250 Amp Isolator Switches

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Applications

- Designed to prevent operation in explosive atmospheres during connect and disconnect operation of power loads.
- For use in hazardous areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in chemical and petrochemical plants, refineries and other process industries.

Features

- Available up to 690 Volts, and up to 250 Amps
- Padlockable handle in position “O”.
- 3 or 4-pole switch mechanism.
- “NO-NC” early break auxiliary contact.
- Main contact termination:
Up to 85 mm².
- Auxiliary contact termination: 2.5 mm².
- Threaded cable entries:
two at bottom and one at top – M20 to M63
- Supplied with:
1 x M20 blanking plug
1 x M8 earth stud

Standard Materials

- Box: marine grade aluminum alloy
- Captive screws: A2 stainless steel

Standard Finishes

- Box: gray paint RAL 7038

Options

- Visible break assembly including a window to view power connection (only for 32 A to 160 A versions).

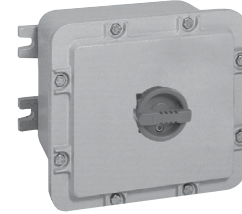
Certifications and Compliances

◆ATEX or ATEX/IECEx Certification

- **Certification Type: CF2D**
 - Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓜ II 2 G
 - Type of Protection: Ex d IIB
 - Temperature class: T6 for Ta ≤ +40 °C; T5 for +40 °C < Ta ≤ +55 °C.
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓜ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T95 °C.
 - Ambient Temperature: -40 °C to +55 °C.
 - CE Declaration of Conformity: 50254
 - ATEX Certificate: LCIE 02 ATEX 6061X
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10
 - Internal Volume: >2 dm³ (2 liters)



63Amp with visible breaking



63 Amp Version

• Certification Type: CF

- Gas: Zone 1 and 2
 - Conforming to ATEX 94/9/CE: Ⓜ II 2 G
 - ATEX/IEC Protection: Ex d IIB
 - Temperature class: T6
- Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: Ⓜ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C.
- Ambient Temperature: -40 °C to +55 °C;
CF10B is -20 °C to +55 °C.
- CE Declaration of Conformity: 50229
- ATEX Certificate: LCIE 02 ATEX 6057X
- IECEx Certificate: LCI.08 0023X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK10
- Internal Volume: >2 dm³ (2 liters)

◆EURASEC Certification

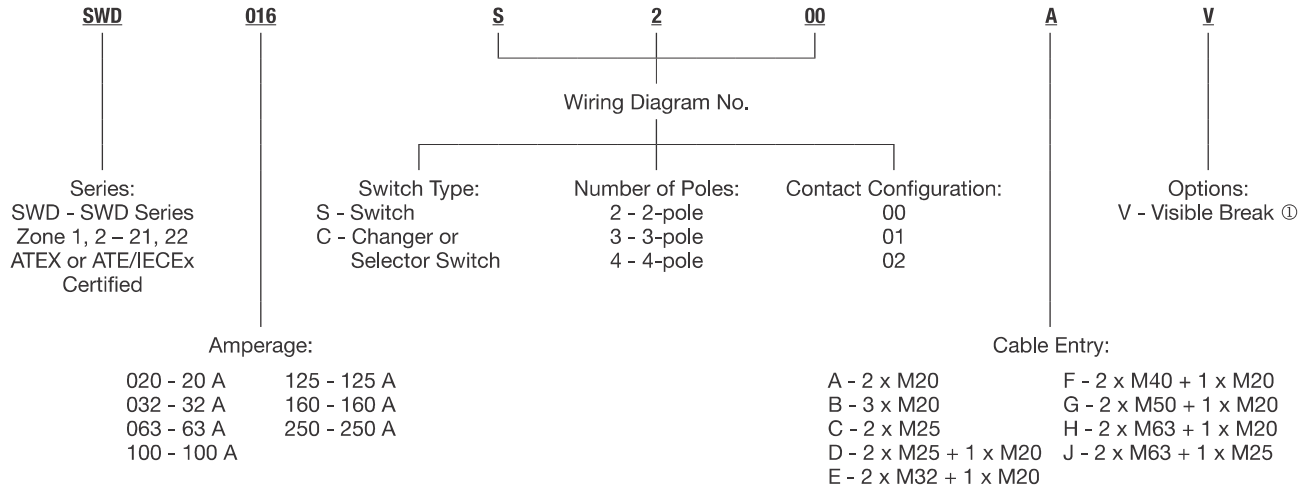
- **Certification Type: CF2D**
 - EURASEC RU C-FR. ГБ 05.B.00911
- **Certification Type: CF**
 - EURASEC RU C-FR. ГБ 05.B.00911

SWD Series 20, 32, 63, 100, 125, 160 and 250 Amp Isolator Switches

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Catalog Numbering Guide



Switching Arrangement – X Denotes "Closed Contact"

S300

Positions	Contacts		
	1-2	3-4	5-6
0			
1	X	X	X

S400

Positions	Contacts			
	1-2	3-4	5-6	7-8
0				
1	X	X	X	X

① For 32 to 160 Amp versions only.

SWD Series 20, 32, 63, 100, 125, 160 and 250 Amp Isolator Switches

Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Switch Type	Wiring Diagram No.	Certified Type	Weight kg	Volume dm ³	Catalog Number
20 A – 3 x M20 threaded entries (1 Top and 2 Bottom)					
3-pole switch	S300	CF2D	3.8	11	SWD020S300B
4-pole switch	S400	CF2D	3.8	11	SWD020S400B
32 A – Bottom entries: 1 x M25 + 1 x M20 – Top entries: 1 x M25					
3-pole switch	S300	CF2D	3.8	11	SWD032S300D
3-pole switch + visible breaking	S300	CF20B	15	24.5	SWD032S300DV
4-pole switch	S400	CF10B	11	19.6	SWD032S400D
4-pole switch + visible breaking	S400	CF20B	15	24.5	SWD032S400DV
63 A – Bottom entries: 1 x M32 + 1 x M20 – Top entries: 1 x M32					
3-pole switch	S300	CF10B	11	19.6	SWD063S300E
3-pole switch + visible breaking	S300	CF20B	15	24.5	SWD063S300EV
4-pole switch	S400	CF10B	11	19.6	SWD063S400E
4-pole switch + visible breaking	S400	CF20B	15	24.5	SWD063S400EV
100 A – Bottom entries: 1 x M40 + 1 x M20 – Top entries: 1 x M40					
3-pole switch	S300	CF20B	13	24.5	SWD100S300F
4-pole switch	S400	CF20B	13	24.5	SWD100S400F
125 A – Bottom entries: 1 x M50 + 1 x M20 – Top entries: 1 x M50					
3-pole switch	S300	CF20B	13	24.5	SWD125S300G
3-pole switch + visible breaking	S300	CF40B	52	235.2	SWD125S300GV
4-pole switch	S400	CF20B	13	24.5	SWD125S400G
4-pole switch + visible breaking	S400	CF40B	52	235.2	SWD125S400GV
160 A – Bottom entries: 1 x M50 + 1 x M20 – Top entries: 1 x M50					
3-pole switch	S300	CF40B	50.5	235.2	SWD160S300G
3-pole switch + visible breaking	S300	CF40B	52	235.2	SWD160S300GV
4-pole switch	S400	CF40B	50.5	235.2	SWD160S400G
4-pole switch + visible breaking	S400	CF40B	52	235.2	SWD160S400GV
250 A – Bottom entries: 1 x M63 + 1 x M20 – Top entries: 1 x M63					
3-pole switch	S300	CF60B	112	646.6	SWD250S300H
4-pole switch	S400	CF60B	112	646.6	SWD250S400H

Controls

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SWD Series 20, 32, 63, 100, 125, 160 and 250 Amp Isolator Switches, Flameproof

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Technical Data								
Main Contacts		20 Amps	32 Amps	63 Amps	100 Amps	125 Amps	160 Amps	250 Amps
Rated Insulation Voltage (Ui)		800 V	800 V	800 V	800 V	800 V	800 V	800 V
Rated Operating Voltage (Ue)		415 V/500 V/ 690 V	415 V/500 V/ 690 V	415 V/500 V/ 690 V	415 V/500 V/ 690 V	415 V/500 V/ 690 V	415 V/500 V/ 690 V	415 V/500 V/ 690 V
Rated Operating Current (Ie)		25 A	32 A/32 A/ 25 A	63 A/63 A/ 40 A	100 A	125 A	160 A/160 A/ 125 A	250 A/250 A/ 200 A
Rated Surge Voltage (Uimp)		8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV
Short Circuit Resistance		50 kA (with fuse)	50 kA (with fuse)	50 kA (with fuse)	100 kA (with fuse)	63 kA (with fuse)	80 kA (with fuse)	50 kA (with fuse)
Switching Capacity								
AC 21 A	415 V	25 A	32 A	63 A	100 A	125 A	160 A	250 A
	500 V	25 A	32 A	63 A	100 A	125 A	160 A	250 A
	690 V	25 A	32 A	63 A	100 A	125 A	160 A	200 A
AC 22 A	415 V	25 A	32 A	63 A	100 A	125 A	160 A	250 A
	500 V	25 A	32 A	63 A	100 A	125 A	125 A	250 A
	690 V	25 A	32 A	63 A	63 A	80 A	100 A	125 A
AC 23 A	230 V	25 A	–	–	–	–	–	–
	415 V	25 A	32 A	63 A	100 A	125 A	125 A	250 A
	500 V	25 A	25 A	63 A	80 A	100 A	100 A	200 A
	690 V	25 A	25 A	40 A	63 A	80 A	80 A	100 A
AC 23 A Motor Power (kW)	230 V	–	–	–	–	–	–	–
	415 V	11 kW	15 kW	30 kW	45 kW	55 kW	75 kW	132 kW
	500 V	11 kW	15 kW	30 kW	45 kW	55 kW	75 kW	140 kW
	690 V	15 kW	18.5 kW	30 kW	45 kW	75 kW	75 kW	90 kW
DC 21	24/48 V, 25 A ①	–	–	–	–	–	–	220 V, 250 A ①
	–	–	–	–	–	800 V, 125 A ①	800 V, 125 A ①	440 V, 200 A ①
	–	–	–	–	–	–	–	500 V, 200 A ①
DC 22	–	–	–	–	–	–	–	220 V, 250 A ①
	–	–	–	–	–	–	–	440 V, 200 A ①
	–	–	–	–	–	–	–	500 V, 200 A ①
DC 23	–	–	–	–	–	–	–	220 V, 250 A ①
	–	–	–	–	–	–	–	440 V, 200 A ①
	–	–	–	–	–	–	–	500 V, 200 A ①
Flexible Termination		0.75 to 6 mm ²	16 mm ²	4 to 35 mm ²	4 to 50 mm ²	4 to 50 mm ²	4 to 50 mm ²	95 mm ²
Solid Termination		10 mm ²	16 mm ²	50 mm ²	70 mm ²	70 mm ²	70 mm ²	150 mm ²
Auxiliary Contacts								
Rated Operating Voltage (Ue)		230 V/400 V	250 V	250 V	250 V	250 V	250 V	230 V/400 V
Rated Operating Current (Ie)		6 A/4 A	5 A	5 A	5 A	5 A	5 A	4 A/3 A
Switching Capacity								
AC 15		6 A/230 V	5 A/250 V	5 A/250 V	5 A/250 V	5 A/250 V	5 A/250 V	4 A/230 V - 3 A/400 V
DC 14		–	–	–	–	–	–	1 A/24 V - 0.2 A/48 V
Flexible Termination		2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²	2.5 mm ²

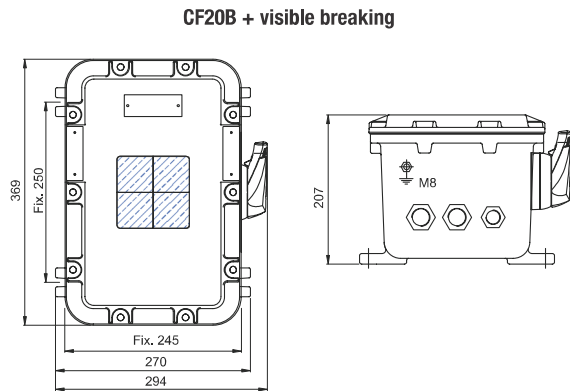
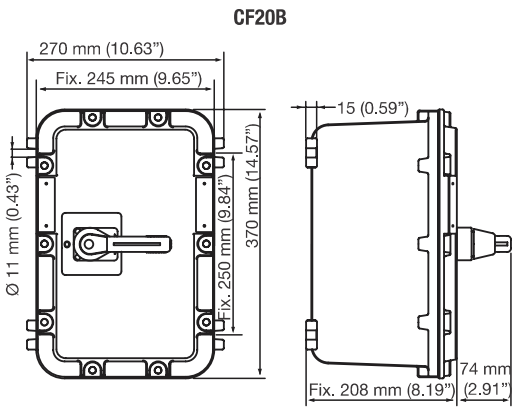
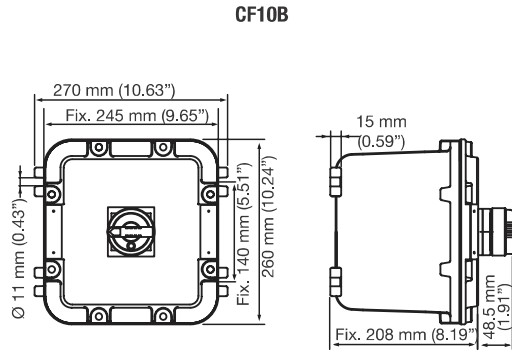
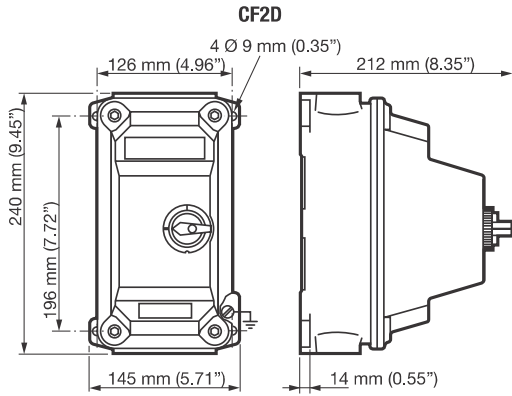
① Two contacts connected in series.

SWD Series 20, 32, 63, 100, 125, 160 and 250 Amp Isolator Switches

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Zone 1 and 2 - 21 and 22
Gas (G) and Dust (D)

Dimensions in Millimeters



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