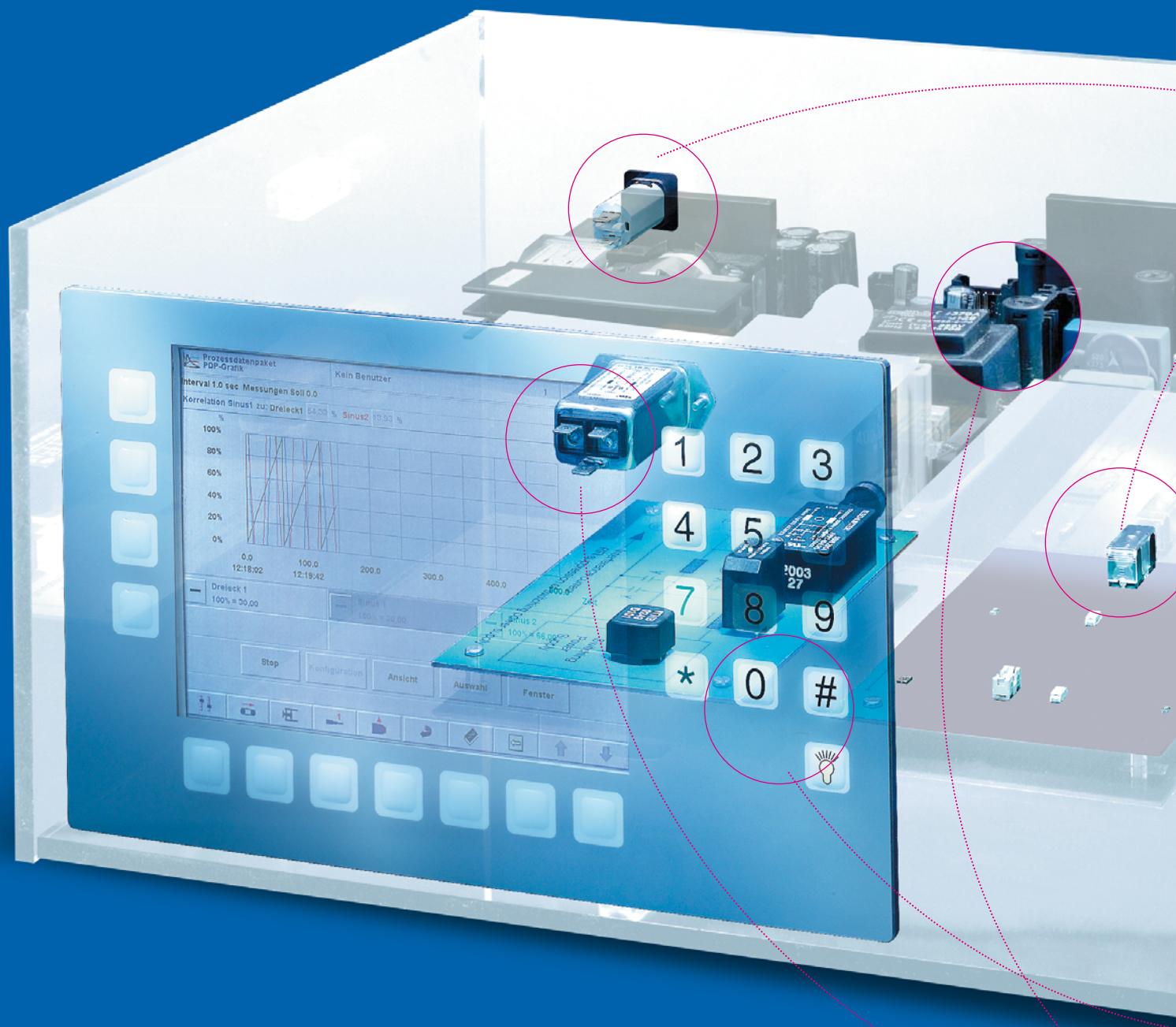


Fuseholders



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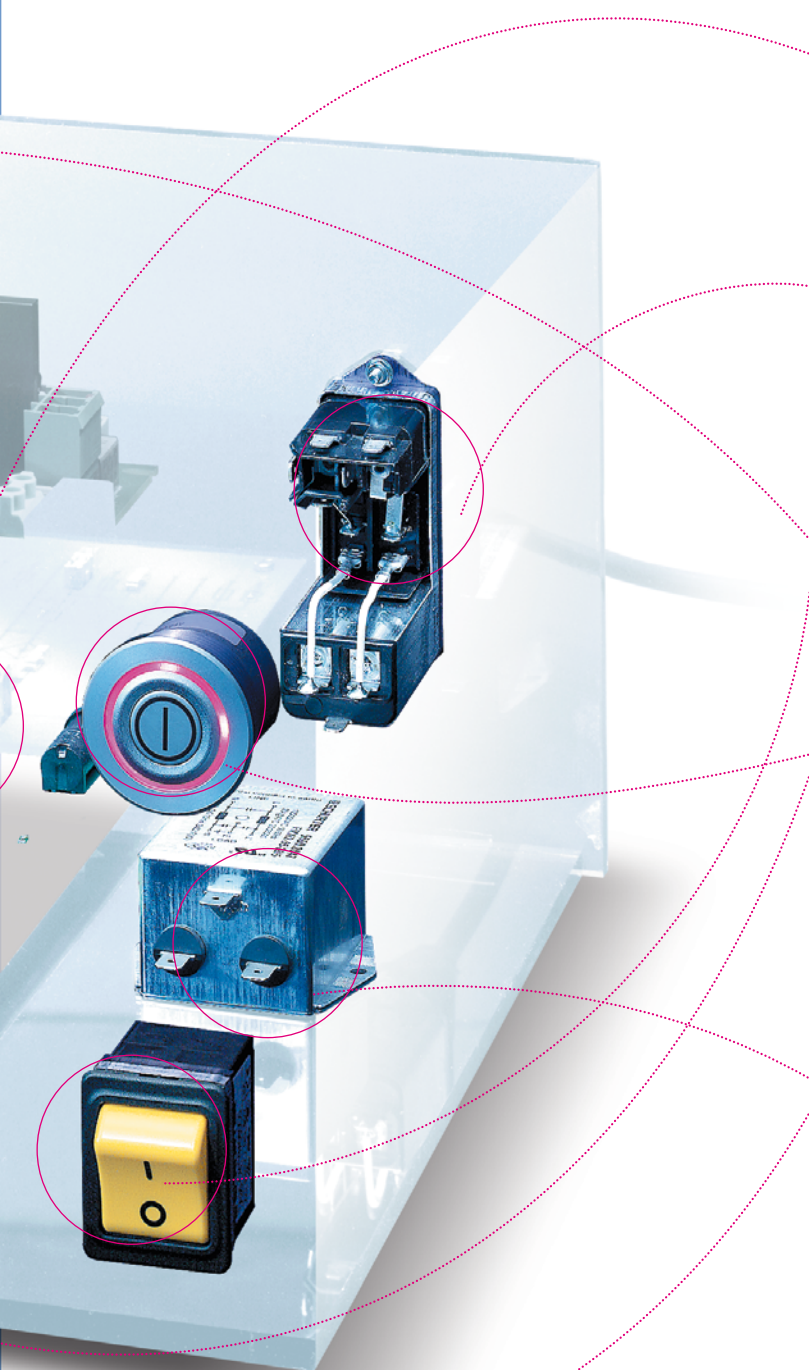


“We rely on reliability and flexibility; that is why we produce your products by our qualified and motivated employee.”

Battista Filippini, CEO Ticomel SA (a member of the SCHURTER Group)

> the Schurter Range at the Glance

SCHURTER is a progressive innovator and manufacturer of fuses, connectors, circuit breakers, input systems, EMC products and manufacturing services for the electronics industry. We focus on components that ensure safe supply of power and make the interface between human and machine easier.



■ fuses

- non resettable fuses
- telecom fuses
- resettable fuses
- fuseholders
- fuseholders blocks & clips

■ connectors

- power entry modules without line filter
- power entry modules with line filter
- appliance couplers
- cord connectors (rewireable)
- distribution units
- cord sets

■ circuit breakers

- thermal (t- and ta-line)
- thermal-magnetic (tm- and as-line)
- undervoltage protection
- power entry modules with CBE

■ input systems

- printmount switches
- frontpanel switches
- public transport switch
- metal line switches
- sensor switches
- membrane keypads
- sensor keypad
- metal line keypads
- touch panel / touch screen
- housing systems and front panels

■ EMC products

- power entry modules with line filter
- 1-phase line filters
- 3-phase line filters
- chokes
- pulse transformers
- power stage driver modules

■ other products

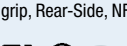
- voltage selector
- test jacks & probes
- indicators
- data & signal, audio, dc/ din connectors

■ EMS

- Electronic Manufacturing Services

Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
FUSE-LINK 5 X 20 MM					
 Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, IP 40 / IP 67, IEC 60335-1   	- Panel Mount - Front-Side	5x20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG1 12
 Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, Rear-Side, IP 40 / IP 67, IEC 60335-1   	- Panel Mount - Rear-Side	5x20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG2 15
 Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, IP 40 / IP 54   	- Panel Mount - Front-Side	5x20 mm	- 10A / 10A - 250VAC	4W / 10A	FEF 18
 Shock-Safe Fuseholder, 5 x 20 mm, Slot, IP 40 / IP 65   	- Panel Mount - Front-Side	5x20 mm	- 10A / 10A - 250VAC	2.5W / 10A	FIO 20
 Shock-Safe Fuseholder, 5 x 20 mm, Slot, IP 67   	- Panel Mount - Front-Side	5x20 mm	- 10A / 10A - 250VAC	2.5W / 10A	FIN 22
 Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, PC3, medical  	- Panel Mount - Front-Side	5x20 mm	- 10A / 10A - 250VAC	2.5W / 10A	FBS1 24
 Shock-Safe Fuseholder, 5 x 20 mm, Slot, 4 W / 16 A, IP 40 / IP 67  	- Panel Mount - Front-Side	5x20 mm	- 16A / 30A - 250VAC	4W / 16A	FIZ 26
 Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, Rear-Side, NF, IP 40 / IP 67 	- Panel Mount - Rear-Side	5x20 mm	- 6.3A - 250VAC	1.5W / 6.3A	23316P 28

	Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
	Shock-Safe Fuseholder, 5 x 20 mm, Fingergr. Solder	- Panel Mount - Front-Side	5 x 20 mm	- 6.3A - 250VAC	1.3W	231411 29
	Shock-Safe Fuseholder, 5 x 20 mm, Fingergr. NF 	- Panel Mount - Front-Side	5 x 20 mm	- 6.3A - 250VAC	3.4W / 6.3A	231529P 30
	Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergr. Snap stepless, 1.0 - 3.0 mm, IEC 60335-1 	- Panel Mount - Front-Side	5 x 20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG3 31
	Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergr. Snap Stepless, 0.75 - 3.0 mm 	- Panel Mount - Front-Side	5 x 20 mm	- 10A / 10A - 250VAC	4W / 10A	FEF (Snap) 33
	Shock-Safe Fuseholder, 5 x 20 mm, Slot, Press, IEC 60335-1 	- Panel Mount - Front-Side	5 x 20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG6 35
	Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergr. vertical, IEC 60335-1 	- PCB	5 x 20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG4 37
	Shock-Safe Fuseholder, 5 x 20 mm, Slot, vertical, IP 40 / IP 54 	- PCB	5 x 20 mm	- 6.3A / 12A - 250VAC	2W / 6.3A	FAF 39
	Shock-Safe Fuseholder, 5 x 20 mm, Fingergr. vertical, PC1 	- PCB	5 x 20 mm	- 6.3A - 250VAC	1.6W / 6.3A	FAP 41

Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
 Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, horizontal oder vertical 	- PCB	5x20 mm	- 10A - 250VAC/DC	1.3W / 10A	231409 43
 Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, horizontal, IEC 60335-1 	- PCB	5x20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG5 45
 Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, horizontal, PC3, medical 	- PCB	5x20 mm	- 10A / 10A - 250VAC	2.5W / 10A	FBS2 47
 Shock-Safe Fuseholder, 5 x 20 mm, Slot, horizontal 	- PCB	5x20 mm	- 10A / 12A - 250VAC	2W / 10A	FAB 49
 Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, horizontal, PC1 	- PCB	5x20 mm	- 6.3A - 250VAC	1.6W / 6.3A	FAS 51
 Shock-Safe Fuseholder, 5 x 20 mm, horizontal, Slot/Fingergrip, SMD, IEC 60335-1 	- PCB	5x20 mm	- 10A / 16A - 250VAC	2.5W / 10A	FPG7 53
FUSE-LINK 6.3 X 32 MM					
 Shock-Safe Fuseholder, 6.3 x 32 mm, Fingergrip, Rear-Side, NF 	- Panel Mount - Rear-Side	6.3x32 mm	- 10A / 10A - 250VAC	2.5W / 10A	23312P 55
 Shock-Safe Fuseholder, 6.3 x 32 mm, Fingergrip, Rear-Side, grau 	- Panel Mount - Rear-Side	6.3x32 mm	- 10A - 250VAC	2.5W / 10A	23463P 57

	Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
	Shock-Safe Fuseholder, 6.3 x 32 mm, NF, Fingergrasp, IP 68 	- Panel Mount - Front-Side	6.3 x 32 mm	- 16A - 250VAC	3.6W / 16A	231549P 58
FUSE-LINK 5 X 20 OR 6.3 X 32 MM						
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot 	- Panel Mount - Front-Side	5 x 20 or 6.3 x 32 mm	- 10A / 20A - 250VAC	4W / 10A	FEU 59
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot, Medical 	- Panel Mount - Front-Side	5 x 20 or 6.3 x 32 mm	- 10A / 20A - 250VAC	4W / 10A	FEU (Med) 62
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Fingergrasp 	- Panel Mount - Front-Side	5 x 20 or 6.3 x 32 mm	- 10A / 20A - 250VAC	4W / 10A	FEU (Grip) 64
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob/Fingergrasp, IEC: 500 VAC, UL/CSA: 250 VAC 	- Panel Mount - Front-Side	5 x 20 or 6.3 x 32 mm	- 10A / 20A - 500VAC / 250VAC	4W / 10A	FEC 66
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob, 4 W / 16 A, IEC: 500 VAC, UL/CSA: 250 VAC 	- Panel Mount - Front-Side	5 x 20 or 6.3 x 32 mm	- 16A / 30A - 500VAC / 250VAC	4W / 16A	FUL 68
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Fingergrasp, EMI/RFI	- Panel Mount - Front-Side	5 x 20 or 6.3 x 32 mm	- 16A / 6.3A - 250VAC	3.5W / 16A	231702 70
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot, vertical 	- PCB	5 x 20 or 6.3 x 32 mm	- 10A / 16A - 250VAC	3.2W / 10A	FAC 72

	Description Approvals	Mounting Style Mounting Side IP-Protection Class	Fuse-Link	Rated Current Rated Voltage IEC/ UL	Power Acceptance	Web Reference or Type
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob, vertical, 4 W / 16 A, IEC: 500 VAC, UL/CSA: 250 VAC 	- PCB	5x20 or 6.3x32 mm	- 16A / 30A - 500VAC / 250VAC	4W / 16A	FUA 74
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot, horizontal 	- PCB	5x20 or 6.3x32 mm	- 10A / 16A - 250VAC	3.2W / 10A	FAU 76
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Fingergrip, horizontal 	- PCB	5x20 or 6.3x32 mm	- 16A - 250VAC	-	231618 78
	Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob, horizontal, 4 W / 16 A, IEC: 500 VAC, UL/CSA: 250 VAC 	- PCB	5x20 or 6.3x32 mm	- 16A / 30A - 500VAC / 250VAC	4W / 16A	FUP 80
FUSE-LINK 4.7 X 16 MM						
	Shock-Safe Fuseholder, 4.7 x 16 mm, Finger- grip, Rear-Side	- Panel Mount - Rear-Side	4.7x16 mm	- 5A - 250VAC	1W / 5A	231600P 82
FUSE-LINK 10.3 X 38 MM						
	Shock-Safe Fuseholder, 10.3 x 38 mm, Fin- gerrgrip 	- Panel Mount - Front-Side	10.3x38 mm	- 25A - 600VAC	4.5W / 25A	23530P 83
For customer specific solutions, please contact us. www.schurter.com/contact General Product Information see Fuseholders page 88						



FUP: High Current Shock-Safe Fuseholder for Three Phase Applications

With the FUP/FUA fuseholder series offer Schurter a product with rated power acceptance from 4 W / 16 A and a rated voltage of 500 VAC according VDE. There is no other product on the market with a such outstanding electrical performance.



Compact collection of functions in one Product

“The customer was happy because he found a solution in just one small package including all the components he needed.”

Alex Kosman

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, IP 40 / IP 67, IEC 60335-1



Fingergrip

250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order numbers: xxxx.xxxx.15

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 127216
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

References

[General Product Information](#)

Weblinks

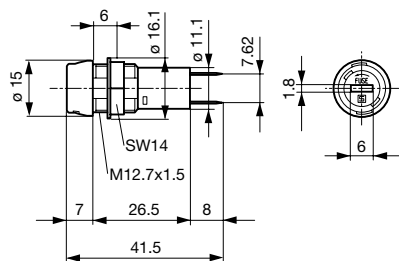
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

Technical Data

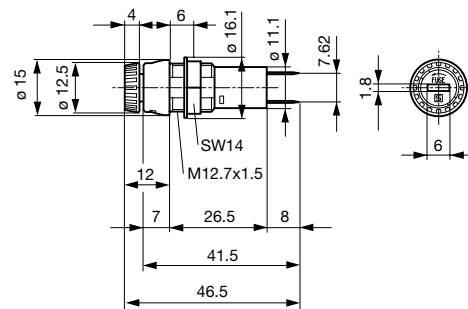
Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 4.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 6 mm

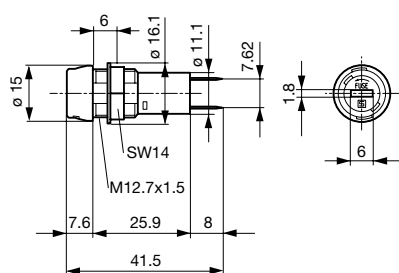
Dimensions

Length  41.5 mm

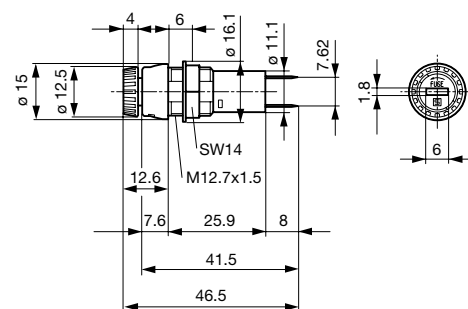
Variants 3101.0010 and 3101.0210



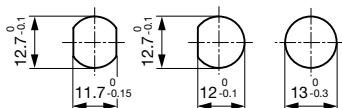
Variants Fingergrasp 3101.0015 and 3101.0215



Variants 3101.0110 and 3101.0310

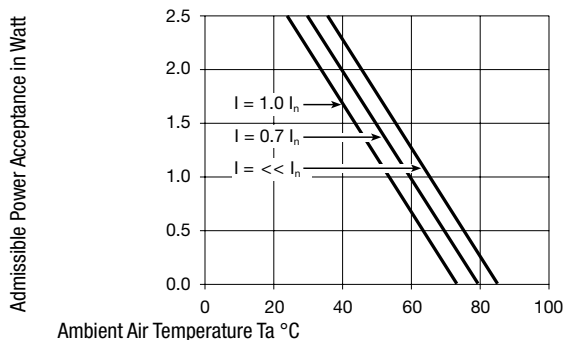


Variants Fingergrasp 3101.0115 and 3101.0315



Mounting holes

Derating Curves for Fuseholders



Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Material	Remark	Order Number
●	Slot Knob	Solder	IP 40	Thermoplastic	-	3101.0010
●	Slot Knob	Quick-Connect 4.8 x 0.5 mm	IP 40	Thermoplastic	-	3101.0210
●	Fingergrip	Solder	IP 40	Thermoplastic	-	3101.0015
●	Fingergrip	Quick-Connect 4.8 x 0.5 mm	IP 40	Thermoplastic	-	3101.0215
●	Slot Knob	Solder	IP 67	Thermoplastic	-	3101.0110
●	Slot Knob	Quick-Connect 4.8 x 0.5 mm	IP 67	Thermoplastic	-	3101.0310
●	Fingergrip	Solder	IP 67	Thermoplastic	-	3101.0115
●	Fingergrip	Quick-Connect 4.8 x 0.5 mm	IP 67	Thermoplastic	-	3101.0315

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

White and grey colours available on request

Packaging Unit

Bulk 186 x 91 x 91 mm (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, Rear-Side, IP 40 / IP 67, IEC 60335-1



Fingergrip

250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order numbers: xxxx.xxxx.15
- Mounting from rear-side

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 127216
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

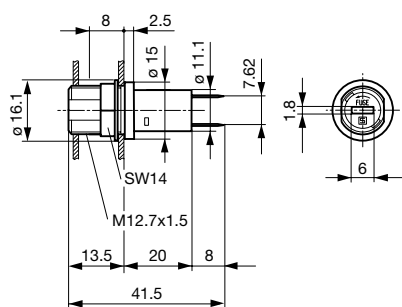
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20mm
Mounting	Panel Mount, Rear-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 4.8 x 0.5 mm
Rated Voltage	250VAC
Rated Current	10A (VDE), 16A (UL/CSA)
Rated Power Acceptance IEC	2.5W / 10A @ Ta 23°C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	6.01 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	 , Type, Voltage Rating, Power Acc./Current Rating, Approvals

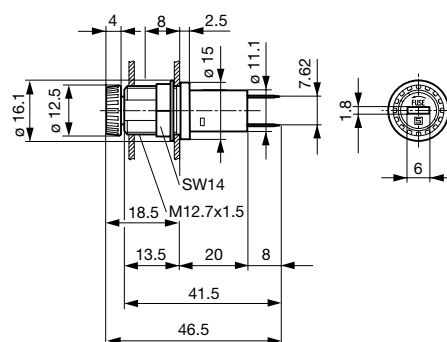
Soldering Methods	Iron
Solderability	350°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350°C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3kV between L-N > 4kV between L/N-PE (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N > 6kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 8 mm

Dimensions

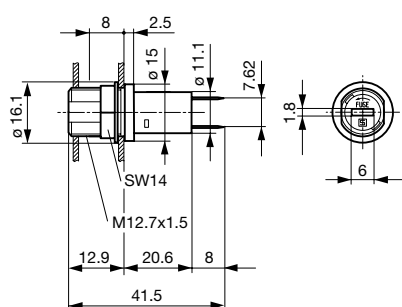
Length | 46.5 mm



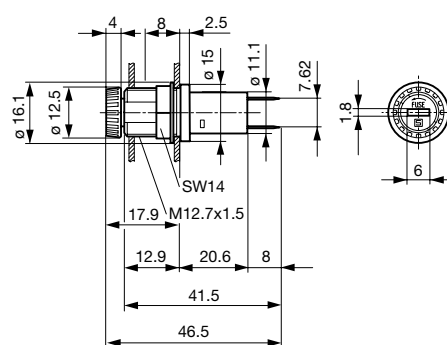
Variants 3101.0020 and 3101.0220



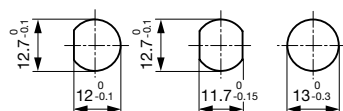
Variants Fingergrasp 3101.0025 and 3101.0225



Variants 3101.0120 and 3101.0320

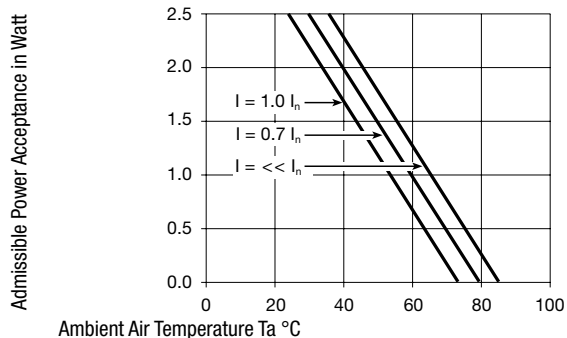


Variants Fingergrasp 3101.0125 and 3101.0325



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Material	Remark	Order Number
●	Slot Knob	Solder	IP 40	Thermoplastic	-	3101.0020
●	Slot Knob	Quick-Connect 4.8 x 0.5 mm	IP 40	Thermoplastic	-	3101.0220
●	Fingergrip	Solder	IP 40	Thermoplastic	-	3101.0025
●	Fingergrip	Quick-Connect 4.8 x 0.5 mm	IP 40	Thermoplastic	-	3101.0225
●	Slot Knob	Solder	IP 67	Thermoplastic	-	3101.0120
●	Slot Knob	Quick-Connect 4.8 x 0.5 mm	IP 67	Thermoplastic	-	3101.0320
●	Fingergrip	Solder	IP 67	Thermoplastic	-	3101.0125
●	Fingergrip	Quick-Connect 4.8 x 0.5 mm	IP 67	Thermoplastic	-	3101.0325

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

White and grey colours available on request

Packaging Unit	Bulk 186 x 91 x 110 mm (100 pcs.)
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Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, IP 40 / IP 54



Fingergrip

Variant 2

250 VAC · 4 W/10 A (VDE) · 10 A (UL/CSA)

**Standards**

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 131952
- UL File Number: E39328

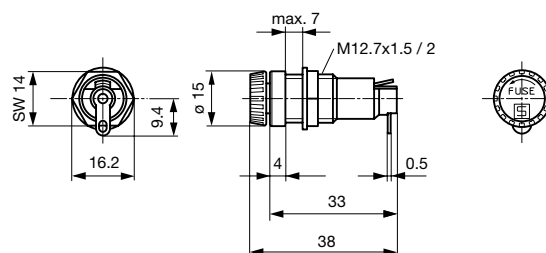
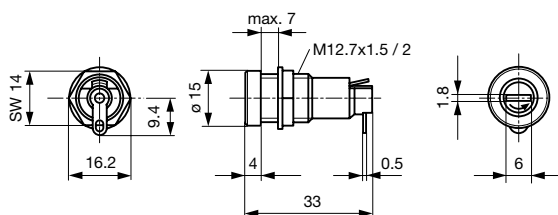
References
[General Product Information](#)
Weblinks
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 2.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C
	Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 54
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Cap	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.95 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 7 mm

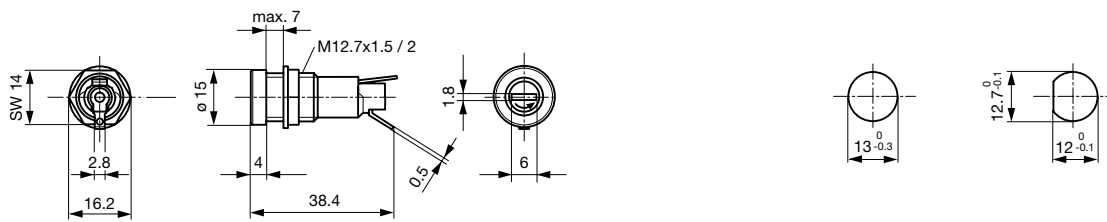
Dimensions

Length 38.4 mm



Variant 0031.1081

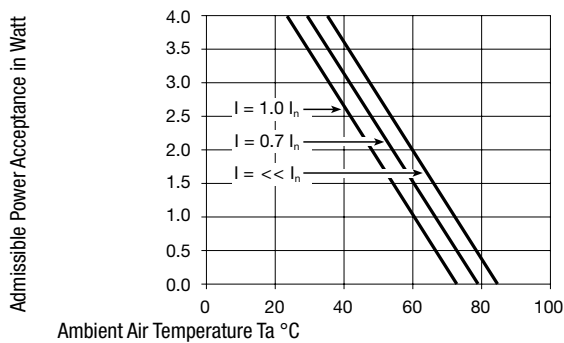
Variant Fingergrip 0031.1907



Variant 2 0031.1185

Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Solder	IP 40	0031.1081
●	Fingergrip	Solder	IP 40	0031.1907
●	Slot Knob	Solder	IP 54	0031.1185

Quick-Connect Terminals on Request

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot, IP 40 / IP 65



250 VAC · 2.5 W/10 A (VDE) · 10 A (UL/CSA)

**Description**

- IP 40 or IP 65 from frontside
- Screw type fuse carrier

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 133472
- UL File Number: E39328

References

[General Product Information](#)

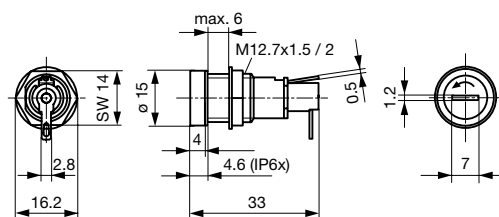
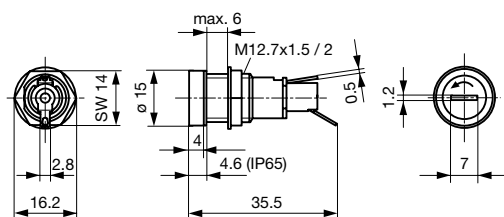
Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

Technical Data

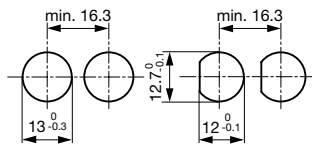
Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 2.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23°C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 65
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40°C to 85°C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.95 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Iron
Solderability	350°C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350°C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 6 mm

DimensionsLength  35.5 mm

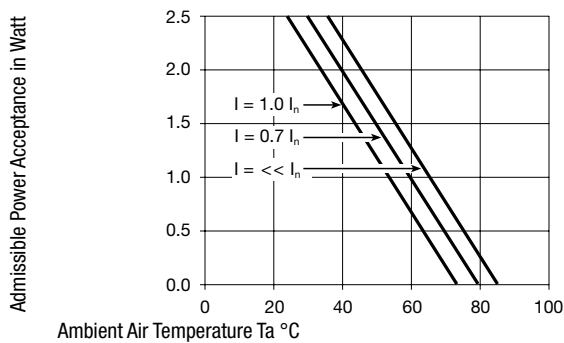
Variants 0031.1361 and 0031.1381

Variants 0031.1363 and 0031.1383



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Position End-Terminal	Degree of Protection	Order Number
●	Slot Knob	Solder	30° to Fuse Axis	IP 65	0031.1361
●	Slot Knob	Solder	90° to Fuse Axis	IP 65	0031.1363
●	Slot Knob	Solder	30° to Fuse Axis	IP 40	0031.1381
●	Slot Knob	Solder	90° to Fuse Axis	IP 40	0031.1383

Quick-Connect Terminals on Request

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot, IP 67



250 VAC · 2.5 W/10 A (VDE) · 10 A (UL/CSA)

**Description**

- IP 67 from Front and Rear-Side
- Screw type fuse carrier

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 133472
- UL File Number: E39328

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

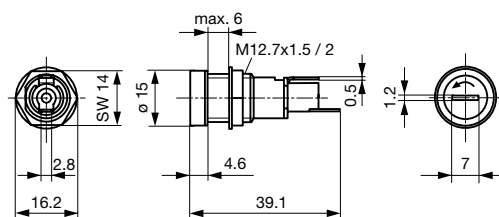
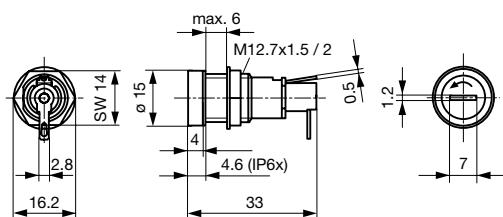
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 2.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.95 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 6 mm

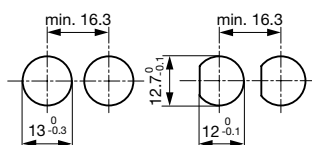
Dimensions

Length 39.1 mm



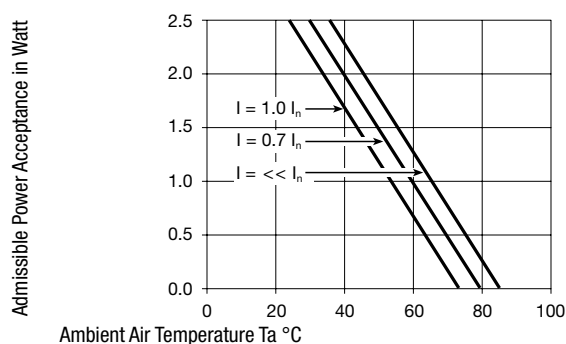
Variant 0031.1353

Variant 0031.1351



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Position End-Terminal	Degree of Protection	Order Number
●	Slot Knob	Solder	Straight to Fuse Axis	IP 67	0031.1351
●	Slot Knob	Solder	90° to Fuse Axis	IP 67	0031.1353

Quick-Connect Terminals on Request

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, PC3, medical



Fingergrip

captive fuse carrier

250 VAC · 2.5 W/10 A (VDE) · 10 A (UL/CSA)

**Description**

- Shocksafe category PC3
- Captive Fuse-Carrier, Slotted or Fingergrip

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 135561
- UL File Number: E39328

Applications

- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

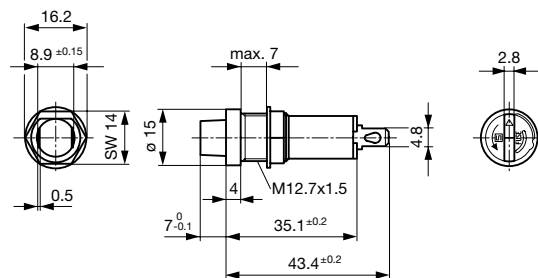
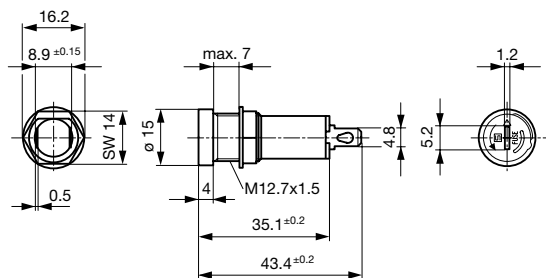
Technical Data

Shocksafe Category	PC3
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 4.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.62 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 7 mm

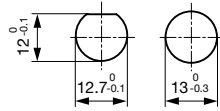
Dimensions

Length | 43.4 mm



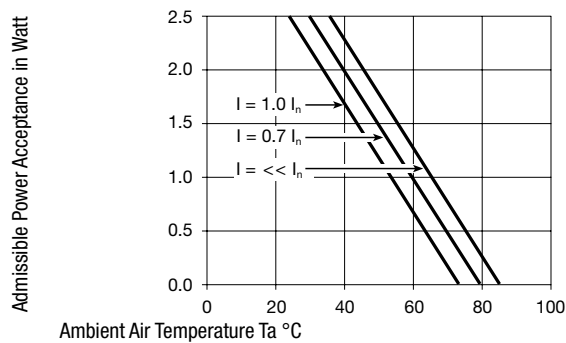
Variant 0031.3901

Variant Fingergrip 0031.3911



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Solder	IP 40	0031.3901
●	Slot Knob	Quick-Connect 4.8 x 0.5 mm	IP 40	0031.3903
●	Fingergrip	Solder	IP 40	0031.3911
●	Fingergrip	Quick-Connect 4.8 x 0.5 mm	IP 40	0031.3913

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot, 4 W / 16 A, IP 40 / IP 67



250 VAC · 4 W/16 A (VDE) · 30 A (UL/CSA)

**Description**

- Fuseholder with high rated power acceptance
- Screw type fuse carrier

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 127212
- UL File Number: E39328

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

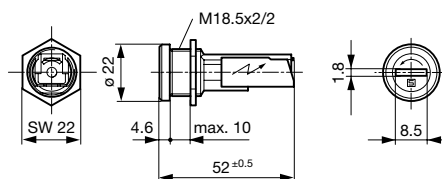
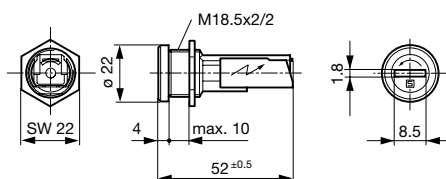
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 6.3 x 0.8 mm
Rated Voltage	250 VAC
Rated Current	16 A (VDE), 30 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 16 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper
Unit Weight (Socket/Cap)	30 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 3.5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 10 mm

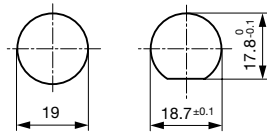
Dimensions

Length |-----| 52 mm



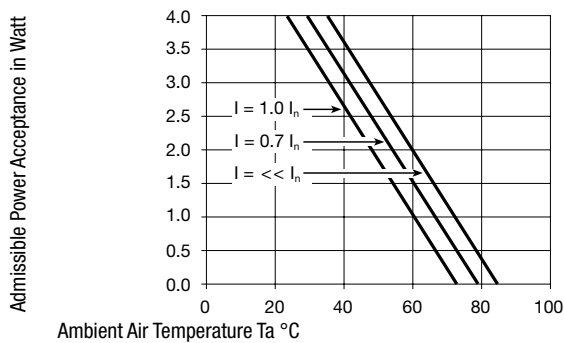
Variants 0031.2201 and 0031.2205

Variants 0031.2203 and 0031.2207



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Solder	IP 67	0031.2201
●	Slot Knob	Quick-Connect 6.3 x 0.8 mm	IP 67	0031.2205
●	Slot Knob	Solder	IP 40	0031.2203
●	Slot Knob	Quick-Connect 6.3 x 0.8 mm	IP 40	0031.2207

Packaging Unit Bulk (25 pcs.)

Accessory

Description



Cover for FIZ, FUL

Shock-Safe Fuseholder, 5 x 20 mm, Fingergrasp, Rear-Side, NF, IP 40 / IP 67



250 VAC · 1.5 W/6.3 A (NF)

**Description**

- Screw type fuse carrier

Standards

- NF C 93-436 - Model HB01
 - Contrôle de Conformité de Qualité (CCQ)

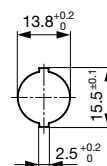
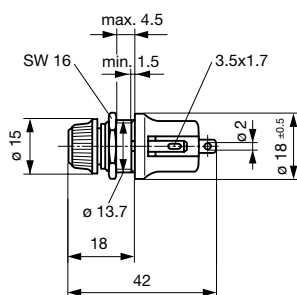
References[General Product Information](#)**Weblinks**
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Rear-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	6.3 A (NF)
Rated Power Acceptance IEC	1.5 W / 6.3 A @ Ta 23 °C
Degree of Protection	IP 40 / IP 67
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	16 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, HB1

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phases D and F
Admissible Torque on Fixing Nut	max 1.0 Nm
Panel Thickness s	max 4.5 mm

Dimensions

Length | 42 mm



Mounting holes

Variants
[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Degree of Protection	NF	GAM	T1	NNO	Reference	Order Number
•	Fingergrasp	IP 40	•	•	•	•	23316P	7091.1510
•	Fingergrasp	IP 67					23316ERJJP	7091.1520

Packaging Unit

Bulk (10 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, Solder



250 VAC · 1.3W

**Description**

- Screw type fuse carrier

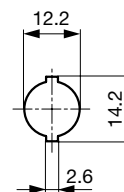
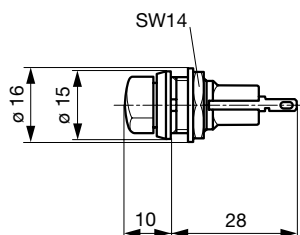
References[General Product Information](#)**Weblinks**[Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	6.3 A
Rated Power Acceptance IEC	1.3 W @ Ta 23 °C
Degree of Protection	IP 40
Material: Socket	Thermoset, black
Material: Cap	Thermoplastic, black
Unit Weight (Socket/Cap)	8 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Admissible Torque on Fixing Nut	max 1.0 Nm
Panel Thickness s	max 5 mm

Dimensions

Length 38 mm



Mounting holes

Variants

Holder	Cap	Degree of Protection	Order Number
●	Fingergrip	IP 40	7091.3120

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)**Packaging Unit**

Bulk (10 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, NF



250 VAC · 3.4 W/6.3 A (NF)

GAM
T1 NNO**Description**

- IP 68 from front-side
- Screw type fuse carrier

Standards

- NF C 93-436 - Model HB13
- Contrôle de Conformité de Qualité (CCQ)

References

General Product Information

Weblinks

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

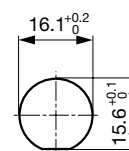
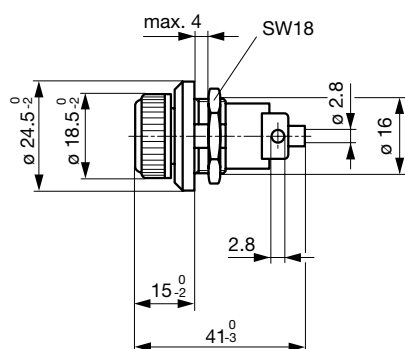
Technical Data

Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	6.3 A (NF)
Rated Power Acceptance IEC	3.4 W / 6.3 A @ Ta 23 °C
Degree of Protection	IP 68
Admissible Ambient Air Temp.	-40 °C to 125 °C
Climatic Category	40/125/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	25 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D
Admissible Torque on Fixing Nut	max 1.0 Nm
Panel Thickness s	max 4 mm

Dimensions

Length | 41 mm



Mounting holes

Variants

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

Holder	Cap	Degree of Protection	Order Number
●	Fingergrip	IP 68	7091.6110

Packaging Unit

Bulk (10 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, Snap stepless, 1.0 - 3.0 mm, IEC 60335-1



Fingergrip

250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order numbers: xxxx.xxxx.15
- Panel Thickness 1.0 - 3.0 mm, Snap stepless
- Fuseholder available in black, grey and white

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 127216
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

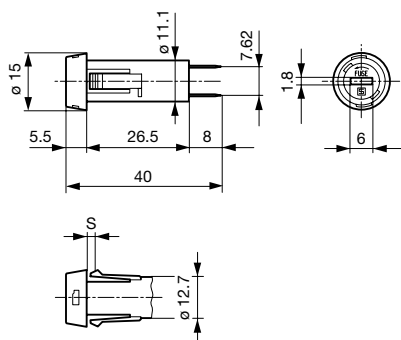
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Snap-in
Terminal	Solder or Quick-Connect 4.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C 2.5 W / 10 A for xxxx.xxxx.15 versions in horizontal position
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.3 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Panel thickness, Approvals

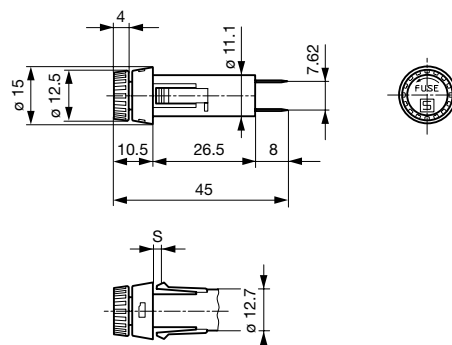
Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc
Panel Thickness s	1.0 - 3.0 mm

Dimensions

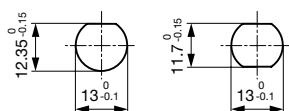
Length | 40 mm



Variants 3101.0030, 3101.0230, 3101.0031 and 3101.0331
s = Panel thickness (see variants)

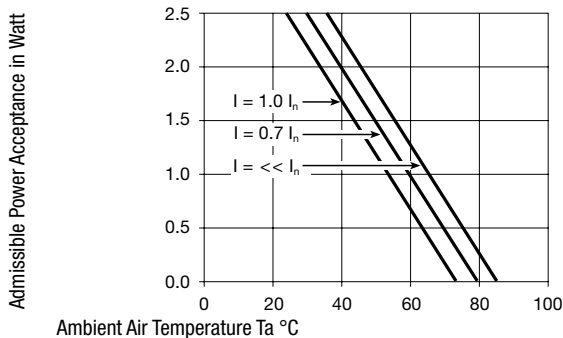


Variants Fingergrasp 3101.0035, 3101.0235, 3101.0036 and 3101.0336
s = Panel thickness (see variants)



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Panel Thickness s [mm]	Terminal	Colour Holder	Material	Order Number
●	Slot Knob	1.0 - 1.8	Solder	black	Thermoplastic	3101.0030
●	Slot Knob	1.0 - 1.8	Quick-Connect 4.8 x 0.5 mm	black	Thermoplastic	3101.0230
●	Slot Knob	2.0 - 3.0	Solder	black	Thermoplastic	3101.0031
●	Slot Knob	2.0 - 3.0	Quick-Connect 4.8 x 0.5 mm	black	Thermoplastic	3101.0331
●	Fingergrasp	1.0 - 1.8	Solder	black	Thermoplastic	3101.0035
●	Fingergrasp	1.0 - 1.8	Quick-Connect 4.8 x 0.5 mm	black	Thermoplastic	3101.0235
●	Fingergrasp	2.0 - 3.0	Solder	black	Thermoplastic	3101.0036
●	Fingergrasp	2.0 - 3.0	Quick-Connect 4.8 x 0.5 mm	black	Thermoplastic	3101.0336

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

White and grey colours available on request

Packaging Unit

Bulk 186 x 91 x 91 mm (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, Snap Stepless, 0.75 - 3.0 mm



Variant 2

250 VAC · 4 W/10 A (VDE) · 10 A (UL/CSA)

**Description**

- Panel Thickness 0.75 - 3.0 mm, Snap stepless

Standards

- IEC 60127-6
 - UL 512
 - CSA C22.2 no. 39

Approvals

- VDE License Number: 131952 UG
 - UL File Number: E39328

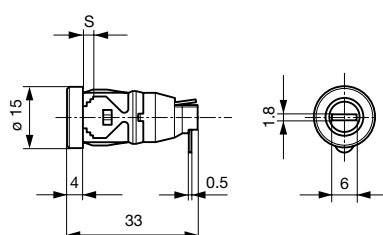
References[General Product Information](#)**Weblinks**

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

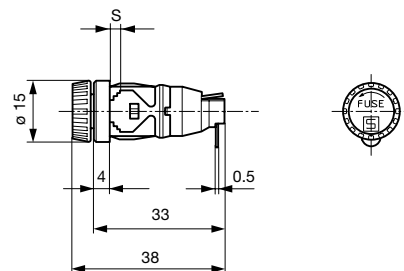
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	Panel Mount, Front-Side
Fastening	Snap-in
Terminal	Solder or Quick-Connect 2.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Cap	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	6.35 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating, Approvals

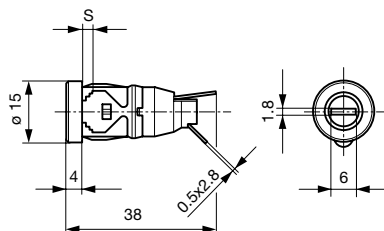
Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Panel Thickness s	0.75 - 3.0 mm

DimensionsLength  33 mm

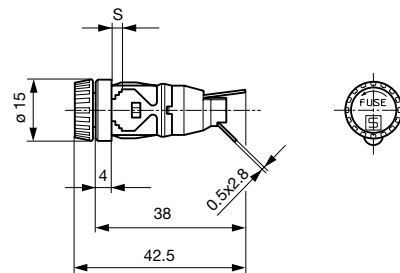
Variant 0031.1091 and 0031.1095
 s = Panel thickness (see variants)



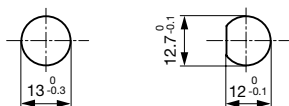
Variant Fingergrip 0031.1901 and 0031.1902
 s = Panel thickness (see variants)



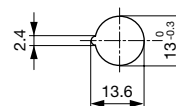
Variant 2 0031.1161 and 0031.1165
s = Panel thickness (see variants)



Variant 2 Fingergrasp 0031.1913 and 0031.1914
s = Panel thickness (see variants)

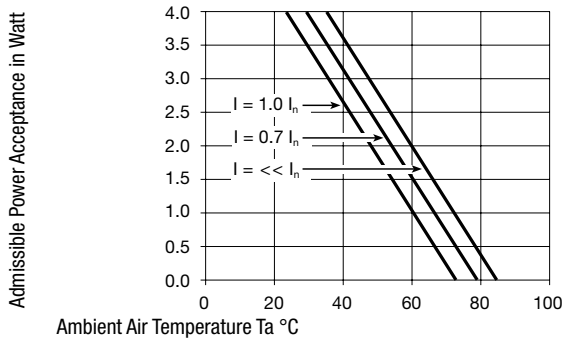


Mounting holes 0031.1161, 0031.1165, 0031.1913 and 0031.1914



Mounting holes 0031.1091, 0031.1095, 0031.1901 and 0031.1902

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Panel Thickness s [mm]	Terminal	Degree of Protection	Order Number
•	Slot Knob	0.75 - 1.5	Solder	IP 40	0031.1091
•	Slot Knob	1.8 - 3.0	Solder	IP 40	0031.1095
•	Fingergrasp	0.75 - 1.5	Solder	IP 40	0031.1901
•	Fingergrasp	1.8 - 3.0	Solder	IP 40	0031.1902
•	Slot Knob	0.75 - 1.5	Solder	IP 40	0031.1161
•	Slot Knob	1.8 - 3.0	Solder	IP 40	0031.1165
•	Fingergrasp	0.75 - 1.5	Solder	IP 40	0031.1913
•	Fingergrasp	1.8 - 3.0	Solder	IP 40	0031.1914

Quick-Connect Terminals on Request

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot, Press, IEC 60335-1



250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order numbers: xxxx.xxxx.15
- Press-fit mount, secured with potting compound on the rear side

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 127216
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

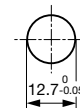
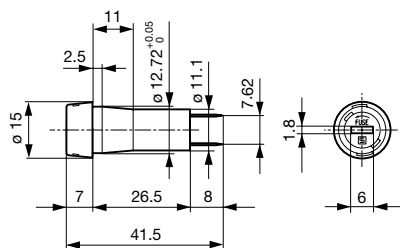
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20mm
Mounting	Panel Mount, Front-Side
Fastening	Press-Fit
Terminal	Solder or Quick-Connect 4.8 x 0.5 mm
Rated Voltage	250VAC
Rated Current	10A (VDE), 16A (UL/CSA)
Rated Power Acceptance IEC	2.5W / 10A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.3 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 , Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc
Panel Thickness s	max 2.5 mm

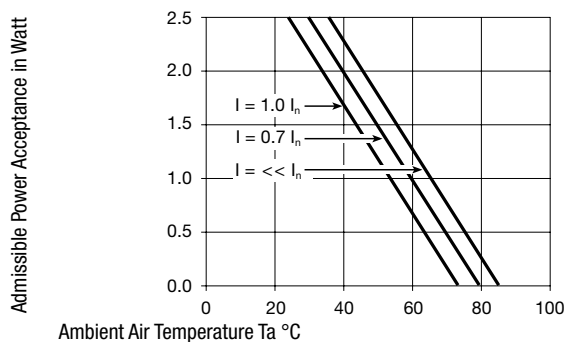
Dimensions

Length | 41.5 mm



Mounting holes

Derating Curves for Fuseholders



Variants

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

Holder	Cap	Terminal	Degree of Protection	Material	Remark	Order Number
●	Slot Knob	Solder	IP 40	Thermoplastic	-	3101.0060
●	Slot Knob	Quick-Connect 4.8 x 0.5 mm	IP 40	Thermoplastic	-	3101.0260
●	Slot Knob	Solder	IP 67	Thermoplastic	-	3101.0160

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

White and grey colours available on request

Packaging Unit

Bulk 186 x 91 x 91 mm (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, vertical, IEC 60335-1



Fingergrip

250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order numbers: xxxx.xxxx.15
- Vertical style

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 129098
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

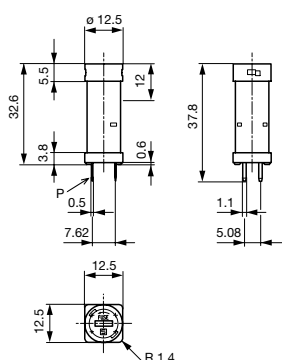
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	4.66 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

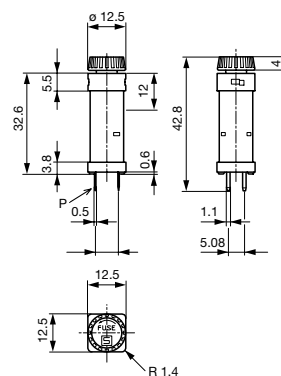
Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

Dimensions

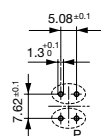
Length | 37.8 mm



Variant 3101.0040

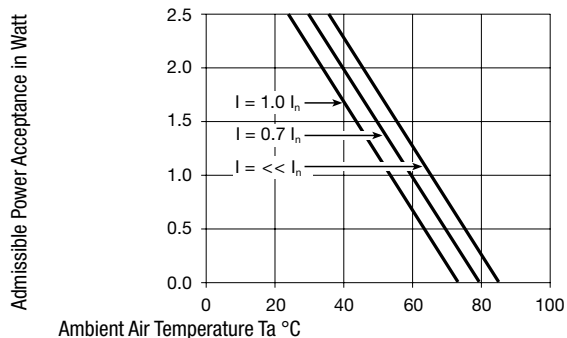


Variant Fingergrasp 3101.0045



Drilling diagram

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Material	Remark	Order Number
●	Slot Knob	Straight	Thermoplastic	-	3101.0040
●	Fingergrasp	Straight	Thermoplastic	-	3101.0045

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

White and grey colours available on request

Packaging Unit

Bulk 186 x 91 x 91 mm (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot, vertical, IP 40 / IP 54



Variant 2

250 VAC · 2 W/6.3 A (VDE) · 12 A (UL)

**Description**

- Vertical style
- IP 40 oder IP 54 from frontside

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 129370
- UL File Number: E39328

References

[General Product Information](#)

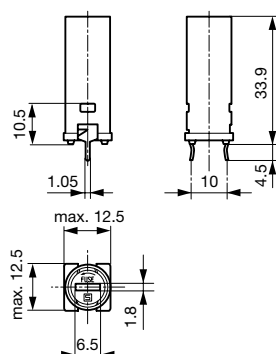
Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

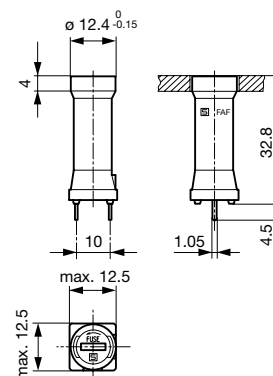
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3 A (VDE), 12 A (UL)
Rated Power Acceptance IEC	2 W / 6.3 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 54
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Cap	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.03 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating, Approvals

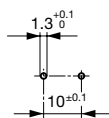
Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

DimensionsLength  38.4 mm

Variant 0031.3701 and 0031.3703

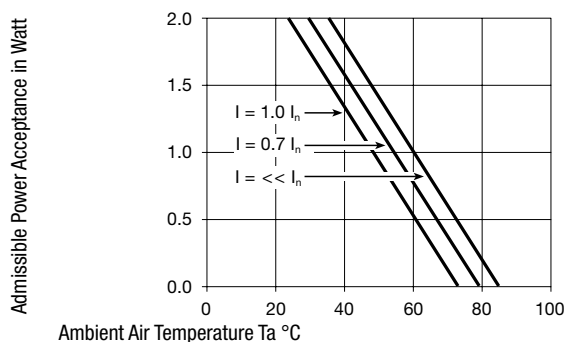


Variant 2 0031.3751 and 0031.3753



Drilling diagram

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Straight	IP 40	0031.3701
●	Slot Knob	Kicked	IP 40	0031.3703
●	Slot Knob	Straight	IP 40	0031.3751
●	Slot Knob	Straight	IP 54	0031.3753

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, vertical, PC1



250 VAC · 1.6 W/6.3 A (VDE)

**Description**

- Shocksafe Category PC1
- Vertical style

Standards

- IEC 60127-6

Approvals

- VDE License Number: 40013508

References

[General Product Information](#)

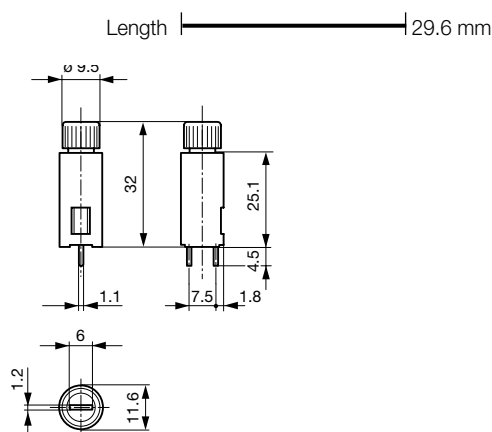
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[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

Technical Data

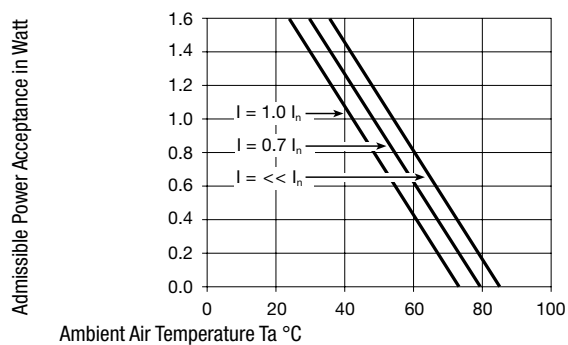
Shocksafe Category	PC1
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	6.3 A (VDE)
Rated Power Acceptance IEC	1.6 W / 6.3 A @ Ta 23 °C
	Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	4.8 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

Dimensions

Variant 0031.3601

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Straight	IP 40	0031.3601

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, horizontal oder vertical



250 VAC/DC · 1.3 W/10 A · 10 A (UL/CSA)

**Description**

- Screw type fuse carrier
- PCB mounting horizontal or vertical

Standards

- UL 512
- CSA C22.2 no. 39

Approvals

- UL File Number: E41738

References

General Product Information

Weblinks

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

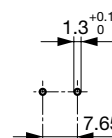
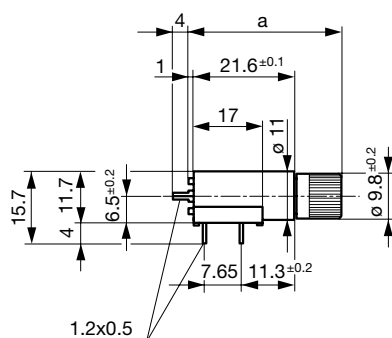
Technical Data

Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC/DC
Rated Current	10 A (UL/CSA)
Rated Power Acceptance IEC	1.3 W / 10 A @ Ta 23 °C
Degree of Protection	IP 00
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Material: Cap	Thermoplastic, black
Unit Weight (Socket/Cap)	6 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29

Dimensions

Length | 37.5 mm



a = 33.5 Variants 7091.4210, 7091.4240 and 7091.4270
a = 38.5 Variant 7091.4400

Drilling Diagram

Distributor-Stock-Check | SCHURTER-Stock-Check | e-Store

Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Mounting	Degree of Protection	   	Reference	Order Number
•	Fingergrip	horizontal / vertical	IP 40	• • • •	231409	7091.4210
•	Fingergrip	vertical	IP 40	•	231409L	7091.4240
•	Fingergrip	horizontal	IP 40	•	231409F	7091.4270
•	Fingergrip	vertical	IP 40		231632NL	7091.4400

Packaging Unit
Bulk (10 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, horizontal, IEC 60335-1



Fingergrip

250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order numbers: xxxx.xxxx.15
- Horizontal style

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 129098
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

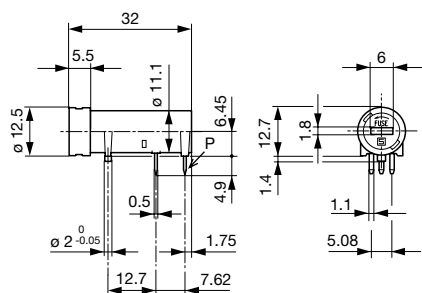
References
[General Product Information](#)
Weblinks
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	4.31 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

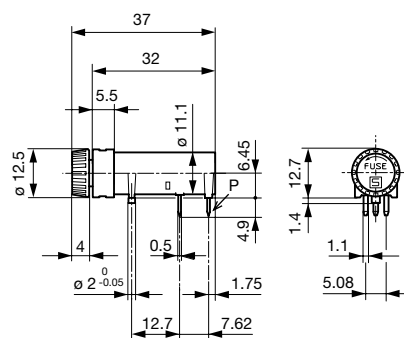
Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

Dimensions

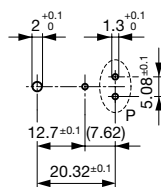
Length | 32 mm



Variant 3101.0050

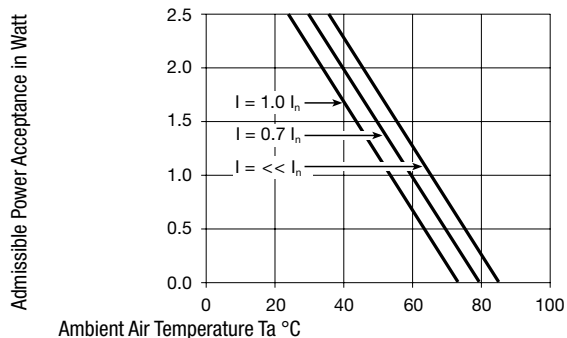


Variant Fingergrasp 3101.0055



Drilling diagram

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Material	Remark	Order Number
●	Slot Knob	Straight	Thermoplastic	-	3101.0050
●	Fingergrasp	Straight	Thermoplastic	-	3101.0055

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

White and grey colours available on request

Packaging Unit

Bulk 186 x 91 x 91 mm (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot/Fingergrip, horizontal, PC3, medical



Fingergrip

captive fuse carrier

250 VAC · 2.5 W/10 A (VDE) · 10 A (UL/CSA)

**Description**

- Shocksafe category PC3
- Captive Fuse-Carrier, Slotted or Fingergrip

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 135561
- UL File Number: E39328

Applications

- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

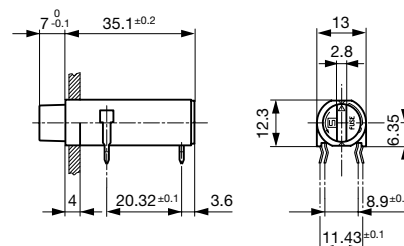
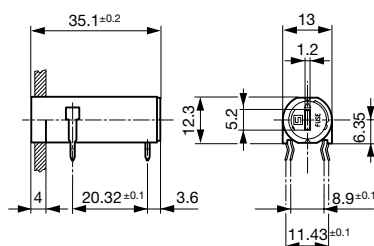
Technical Data

Shocksafe Category	PC3
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 10 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	6.84 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

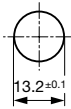
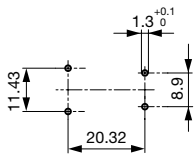
Dimensions

Length 35.1 mm



Variant 0031.3981

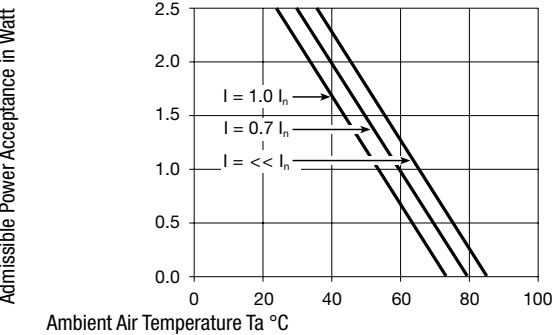
Variant Fingergrip 0031.3991



Drilling diagram

Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Kicked	IP 40	0031.3981
●	Fingergrip	Kicked	IP 40	0031.3991

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Slot, horizontal



250 VAC · 2 W/10 A (VDE) · 12 A (UL)

**Description**

- Kicked or straight PCB-terminals
- Horizontal style

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 133921
- UL File Number: E39328

References

[General Product Information](#)

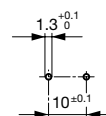
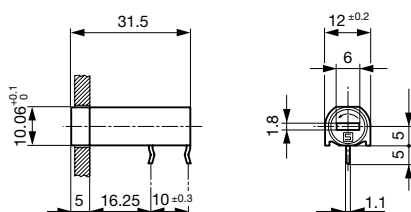
Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 12 A (UL)
Rated Power Acceptance IEC	2 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Cap	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating, Approvals

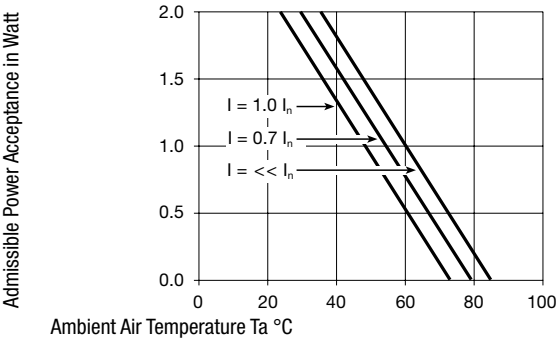
Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

DimensionsLength  31.5 mm

Variant 0031.3551 and 0031.3558

Drilling diagram

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Straight	IP 40	0031.3551
●	Slot Knob	Kicked	IP 40	0031.3558

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, Fingergrip, horizontal, PC1



250 VAC · 1.6W/6.3A

**Description**

- Shocksafe Category PC1

Standards

- IEC 60127-6

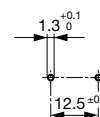
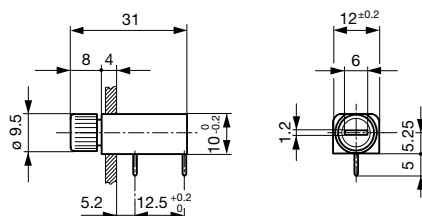
References[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Shocksafe Category	PC1
Fuse-Link	5 x 20mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250VAC
Rated Current	6.3A
Rated Power Acceptance IEC	1.6W / 6.3A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	4.7 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5mΩ at 20 mV
Dielectric Strength	> 3kV between L-N (50Hz; 1 min)
Impulse Withstand Voltage	> 4kV between L-N
Insulation Resistance	> 10MΩ between L-N (500VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

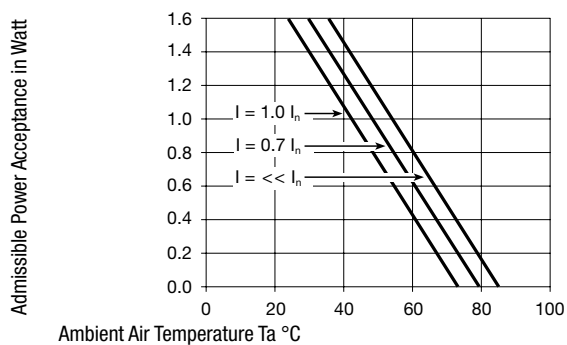
Dimensions

Length 31 mm



Drilling Diagram

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Terminal	Degree of Protection	Order Number
●	Slot Knob	Straight	IP 40	0031.3501

Packaging Unit Bulk (100 pcs.)

Shock-Safe Fuseholder, 5 x 20 mm, horizontal, Slot/Fingergrip, SMD, IEC 60335-1



Fingergrip

250 VAC · 2.5 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Surface Mount Device
- Meets the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13. Order number: 3101.0071 / 3101.0076
- Cap is available slotted or fingergrip

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 129098
- UL File Number: E39328

Applications

- Industrial electronic
- Household appliances
- Medical equipments

References

[General Product Information](#)
[Packaging Details](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

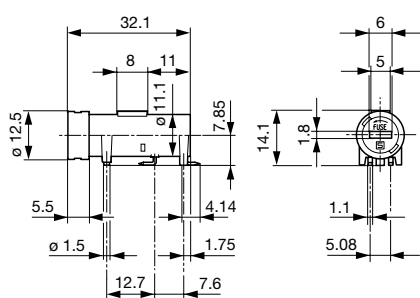
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 mm
Mounting	PCB
Terminal	Solder SMT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	4.4 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

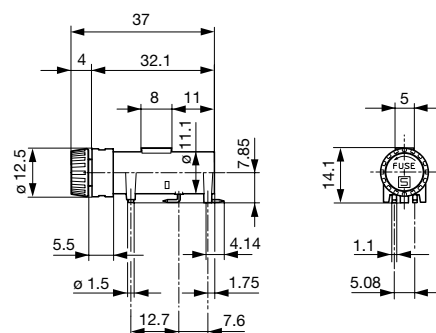
Soldering Methods	Reflow
Solderability	245 °C / 3 sec acc. to IEC 60068-2-58, Test Td
Resistance to Soldering Heat	260 °C / 20 - 40 sec acc. to IPC/JEDEC J-STD-020D
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Resistance to Vibration	acc. to IEC 60068-2-6, test Fc

Dimensions

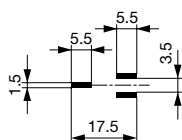
Length | 32 mm



Variant 3101.0070

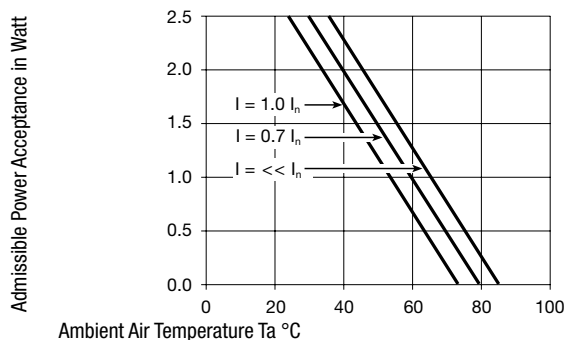


Variant 3101.0075



Solder pads

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Material	Reflow Condition	Remark	Order Number
●	Slot Knob	Thermoplastic	-	will be replaced by 3101.0071	3101.0070
●	Fingergrip	Thermoplastic	-	Will be replaced by 3101.0076	3101.0075

Spec. thermoplastic 1 and 2 meet the new requirements of IEC 60335-1 Ed. 4.0 for appliances in unattended use (clause 30.2.3). This includes the enhanced requirements of glow wire tests acc. to IEC 60695-2-11 to -13.

Packaging Unit

Bulk 186 x 91 x 91 mm (100 pcs.)
 xxxx.xxxx.D2 Blister Tape 38 cm Reel (250 pcs.)

Shock-Safe Fuseholder, 6.3 x 32 mm, Fingergrip, Rear-Side, NF



250 VAC · 2.5 W/10 A (NF) · 10 A (UL/CSA)

**Description**

- Screw type fuse carrier

Standards

- UL 512
- CSA C22.2 no. 39
- NF C 93-436 - Modell HB02
- Contrôle de Conformité de Qualité (CCQ)

Approvals

- UL File Number: E41738

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

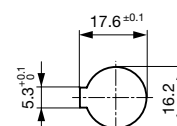
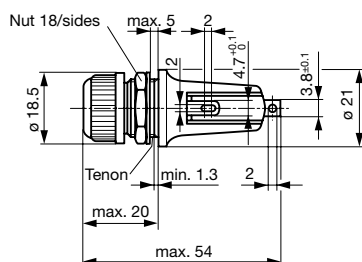
Technical Data

Fuse-Link	6.3 x 32 mm
Mounting	Panel Mount, Rear-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	10 A (NF), 10 A (UL/CSA)
Rated Power Acceptance IEC	2.5 W / 10 A @ Ta 23 °C
	Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	19 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals, HB2

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phases D and F
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 5 mm

Dimensions

Length | 54 mm



Mounting holes

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Degree of Protection	   GAM T1 NNO	Reference	Order Number
•	Fingergrip	6.3 x 32mm	IP 40	• • • • •	23312P	7092.2520
•	Fingergrip	6.3 x 32mm	IP 67		23312EJJP	7092.2550
•	Fingergrip	6.3 x 32mm	IP 67		23312ERJJP	7092.2630

Packaging Unit
Bulk (100 pcs.)

GAM_{T1} NNO

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D
Admissible Torque on Fixing Nut	max 1.2Nm
Panel Thickness s	max 4 mm

Technical drawing of a mechanical part showing dimensions and tolerances:

- Top horizontal dimension: $16.2^{+0.2}_0$
- Right vertical dimension: $16.3^{+0.1}_0$
- Bottom horizontal dimension: $10.2^{+0.1}_0$

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Shock-Safe Fuseholder, 6.3 x 32 mm, NF, Fingerrip, IP 68



250 VAC · 3.6W/16A (NF)

GAM
T1**Description**

- IP 68 from front-side
- Screw type fuse carrier

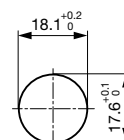
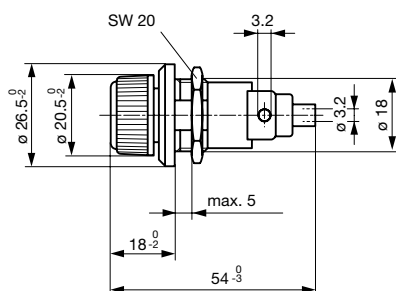
Standards

- NF C 93-436 - Modell HB14
- Contrôle de Conformité de Qualité (CCQ)

References[General Product Information](#)**Weblinks**
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Fuse-Link	6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	16A (NF)
Rated Power Acceptance IEC	3.6W / 16A @ Ta 23°C
Degree of Protection	IP 68
Admissible Ambient Air Temp.	-40°C to 125°C
Climatic Category	40/125/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	38 g
Storage Conditions	0°C to 60°C, max. 70% r.h.
Product Marking	 , Type, Voltage Rating, Current Rating

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D
Admissible Torque on Fixing Nut	max 1.2Nm
Panel Thickness s	max 5mm

DimensionsLength  54 mm

Mounting holes

Variants
[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Degree of Protection	Order Number
●	Fingerrip	IP 68	7093.0110

Packaging Unit

Bulk (10 pcs.)

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot



250 VAC · 4 W/10 A (VDE) · 20 A (UL)

**Description**

- Quick-connect or solder terminals

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 134125
- UL File Number: E39328

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

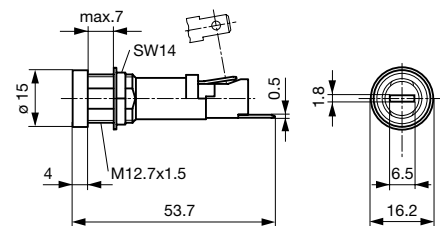
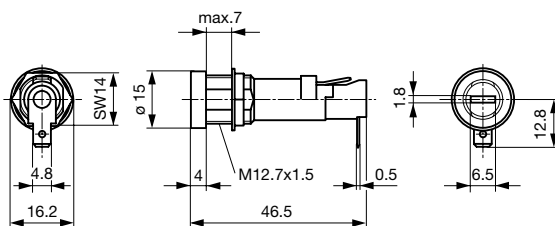
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 4.8 x 0.5 mm
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 20 A (UL)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.5 g / 3.22 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 7 mm

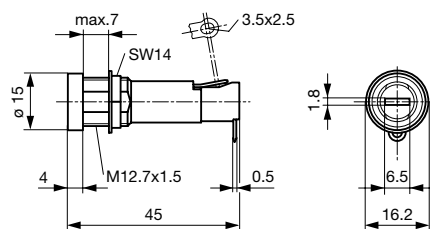
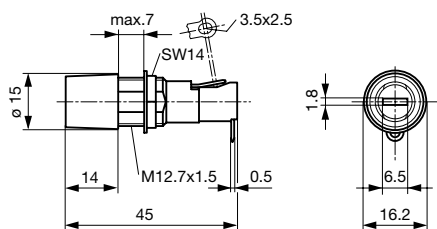
Dimensions

Length 46.5 mm



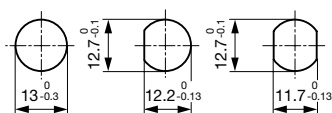
Variants: 0031.1693 and 0031.8822

Variant 0031.1694



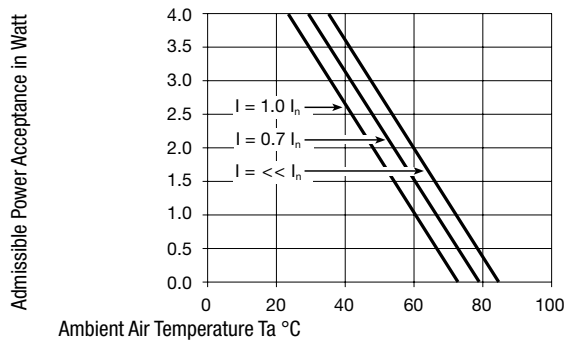
Variants 0031.1653, 0031.1695, 0031.1696

Variant 0031.1673



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Terminal	Position End-Terminal	Degree of Protection	Colour Cap	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	Quick-Connect 4.8 x 0.5	90° to Fuse Axis	IP 40	-	-	0031.1693
●	-	5 x 20 or 6.3 x 32mm	Quick-Connect 4.8 x 0.5	Straight to Fuse Axis	IP 40	-	-	0031.1694
●	-	5 x 20 or 6.3 x 32mm	Solder	90° to Fuse Axis	IP 40	-	-	0031.8822
●	-	5 x 20 or 6.3 x 32mm	Solder	90° to Fuse Axis	IP 40	-	-	0031.1653
●	-	5 x 20 or 6.3 x 32mm	Solder	90° to Fuse Axis	IP 40	-	-	0031.1673
	Slot Knob	6.3 x 32mm	-	-	IP 40	-	-	0031.1661
	Slot Knob	5 x 20mm	-	-	IP 40	-	-	0031.1663
	Slot Knob	6.3 x 32mm	-	-	IP 40	Grey	-	0031.1666
●	Slot Knob	6.3 x 32mm	Quick-Connect 4.8 x 0.5	90° to Fuse Axis	IP 40	Grey	0031.1693 + 0031.1666	0031.1699
●	Slot Knob	6.3 x 32mm	Quick-Connect 4.8 x 0.5	Straight to Fuse Axis	IP 40	Grey	0031.1694 + 0031.1666	0031.1764
●	Slot Knob	6.3 x 32mm	Solder	90° to Fuse Axis	IP 40	Grey	0031.1653 + 0031.1666	0031.1659
●	Slot Knob	6.3 x 32mm	Solder	90° to Fuse Axis	IP 40	Grey	0031.1673 + 0031.1666	0031.1680
●	Slot Knob	6.3 x 32mm	Solder	90° to Fuse Axis	IP 40	-	0031.1673 + 0031.1661	0031.1672
●	Slot Knob	5 x 20mm	Solder	90° to Fuse Axis	IP 40	-	0031.1673 + 0031.1663	0031.1753

Holder	Cap	Fuse-Link	Terminal	Position End-Terminal	Degree of Protection	Colour Cap	Remark	Order Number
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0031.1695 + 0031.1696 are made out of thermoset material.

Packaging Unit Bulk (100 pcs.)

Required Accessory

Description



Caps Fingergrip to FEU, FAU, FAC



Caps to FEU, FAU, FAC

Caps to Holder FEU, FEU (Med), FAU, FAC



Accessory



Cover for FEU, FEU (Med)

Insulation Cover for FEU, FEU (Med)

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot, Medical



250 VAC · 4 W/10 A (VDE) · 20 A (UL)

**Description**

- Quick-connect or solder terminals

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 134125
- UL File Number: E39328

Applications

- Medical equipments

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

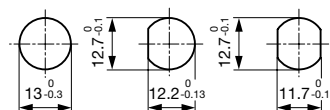
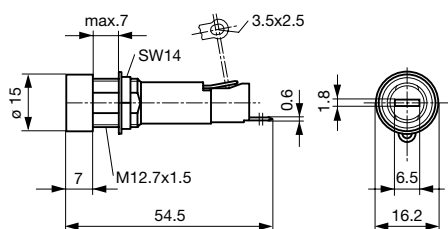
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 20 A (UL)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.5 g / 3.22 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 7 mm

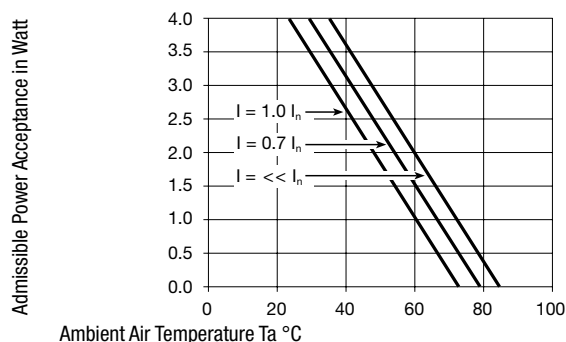
Dimensions

Length | 46.5 mm



Variant 0031.1681

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Degree of Protection	Colour Cap	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	IP 40	-	-	0031.1681
●	Slot Knob	6.3 x 32mm	IP 40	Grey	0031.1681 + 0031.1666	0031.1758
●	Slot Knob	5 x 20mm	IP 40	-	0031.1681 + 0031.1663	0031.1757
	Slot Knob	6.3 x 32mm	IP 40	-	-	0031.1661
	Slot Knob	5 x 20mm	IP 40	-	-	0031.1663
	Slot Knob	6.3 x 32mm	IP 40	Grey	-	0031.1666

Packaging Unit Bulk (100 pcs.)

Required Accessory

Description



Caps Fingergrasp to FEU, FAU, FAC


 Caps to FEU, FAU, FAC
 Caps to Holder FEU, FEU (Med), FAU, FAC


Accessory


 Cover for FEU, FEU (Med)
 Insulation Cover for FEU, FEU (Med)

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Fingergrip



250 VAC · 4 W/10 A (VDE) · 20 A (UL)

**Description**

- Screw type fuse carrier

Standards

- IEC 60127-6
 - UL 512
 - CSA C22.2 no. 39

Approvals

- VDE License Number: 134125
 - UL File Number: E39328

References

General Product Information

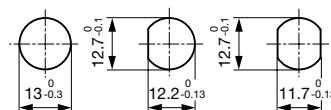
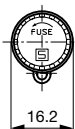
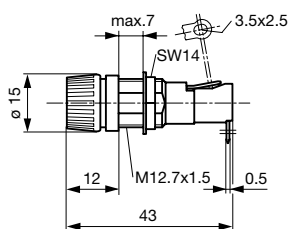
Weblinks

Approvals, RoHS, CHINA-RoHS, e-Store, SCHURTER-Stock-Check, Distributor-Stock-Check

Technical Data

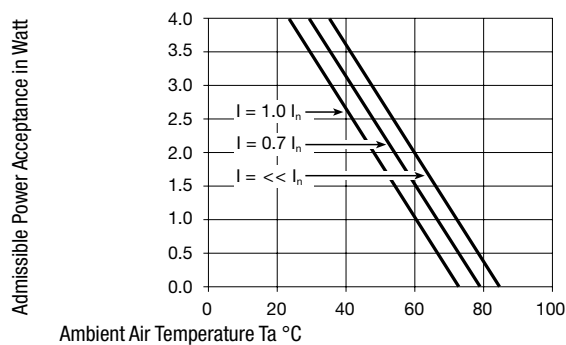
Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 20 A (UL)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.5 g / 3.22 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 7 mm

Dimensions

Variant Fingergrip 0031.1801

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Degree of Protection	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	IP 40	-	0031.1801
●	Fingergrip	6.3 x 32mm	IP 40	0031.1801 + 0031.1812	0031.1804
●	Fingergrip	5 x 20mm	IP 40	0031.1801 + 0031.1811	0031.1803
	Fingergrip	6.3 x 32mm	IP 40	-	0031.1812
	Fingergrip	5 x 20mm	IP 40	-	0031.1811

Packaging Unit Bulk (100 pcs.)

Required Accessory

Description



Cap to FEU (Grip)
Caps for Holder FEU (Grip)

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob/Fingergrip, IEC: 500 VAC, UL/CSA: 250 VAC



500 VAC · 4 W/10 A (VDE) · 250 VAC · 20 A (UL/

**Description**

- Fuseholder for 500 VAC applications
- Cap is available slotted or fingergrip

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 137910
- UL File Number: E39328

Applications

- Equipment with three-phase supply (400 VAC)
- Industrial electronic

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

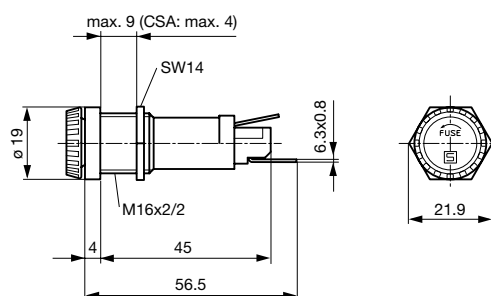
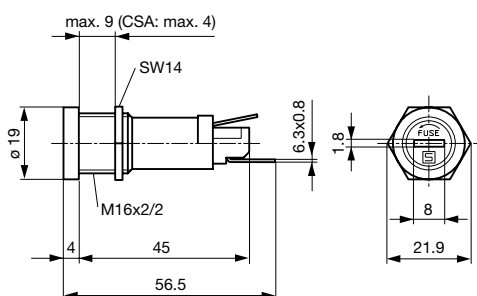
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 6.3 x 0.8 mm
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	10 A (VDE), 20 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 10 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	9 g / 5.36 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	2 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 9 mm

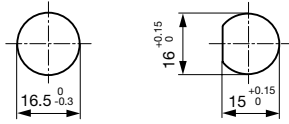
Dimensions

Length | 56.5 mm



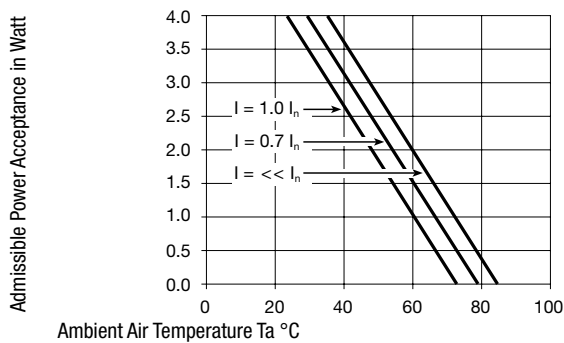
Variant 0031.1631

Variant Fingergrip 0031.1631 + 0031.1616



Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Terminal	Degree of Protection	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	Solder	IP 40	-	0031.1631
●	-	5 x 20 or 6.3 x 32mm	Quick-Connect 6.3 x 0.8 mm	IP 40	-	0031.1623
	Slot Knob	5 x 20mm	-	IP 40	-	0031.1611
	Slot Knob	6.3 x 32mm	-	IP 40	-	0031.1613
	Fingergrip	6.3 x 32mm	-	IP 40	-	0031.1616

Packaging Unit Bulk (50 pcs.)

Required Accessory

Description



Caps to FEC

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob, 4 W / 16 A, IEC: 500 VAC, UL/CSA: 250 VAC



Fuse carrier must be ordered separately
(see required accessory)

500 VAC · 4 W/16 A (VDE) · 250 VAC · 30 A (UL/

**Description**

- Fuseholder for 500 VAC applications
- Fuseholder with high rated power acceptance
- Screw type fuse carrier

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 127214
- UL File Number: E39328

Applications

- Equipment with three-phase supply (400 VAC)
- Applications with rated current up to 16 A (VDE)
- Industrial electronic

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

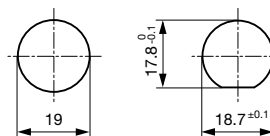
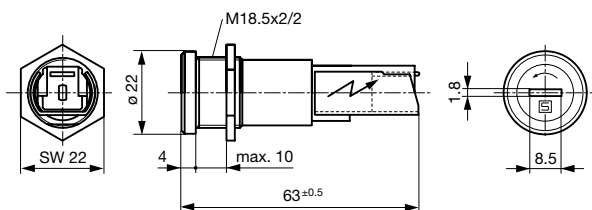
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder or Quick-Connect 6.3 x 0.8 mm
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	16 A (VDE), 30 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 16 A @ Ta 23 °C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40 / IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper
Unit Weight (Socket/Cap)	20.4 g / 15.2 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Iron
Solderability	350 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 2
Resistance to Soldering Heat	350 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 2
Contact Resistance	< 3.5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N > 4 kV between L/N-PE (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N > 6 kV between L/N-PE
Insulation Resistance	> 10 MΩ between L-N > 100 MΩ between L/N-PE (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	2 acc. to IEC 60664-1
Admissible Torque on Fixing Nut	max 1.2 Nm
Panel Thickness s	max 10 mm

Dimensions

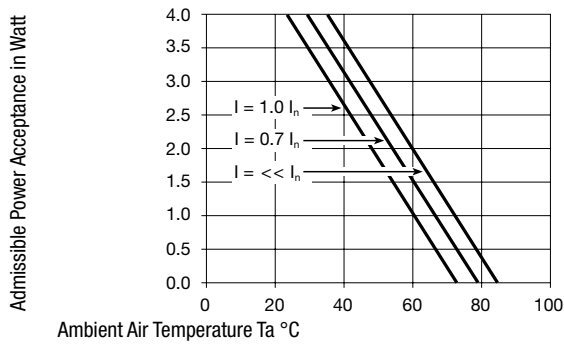
Length | 63 mm



Variant 0031.2307 and 0031.2308

Mounting holes

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Terminal	Degree of Protection	Order Number
●	-	5 x 20 or 6.3 x 32mm	Solder	IP 40	0031.2307
●	-	5 x 20 or 6.3 x 32mm	Quick-Connect 6.3	IP 40	0031.2308
	Slot Knob	6.3 x 32mm	-	IP 40	0031.2321
	Slot Knob	5 x 20mm	-	IP 40	0031.2323
●	-	5 x 20 or 6.3 x 32mm	Solder	IP 67	0031.2303
●	-	5 x 20 or 6.3 x 32mm	Quick-Connect 6.3	IP 67	0031.2304
	Slot Knob	6.3 x 32mm	-	IP 67	0031.2320
	Slot Knob	5 x 20mm	-	IP 67	0031.2322

Packaging Unit Bulk (25 pcs.)

Required Accessory

Description



Caps to FUL, FUP, FUA
Caps to Holder FUL, FUP, FUA



Caps to FUL (IP 67)
Caps to Holder FUL (IP 67)



Accessory



Cover for FIZ, FUL

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Fingergrip, EMI/RFI



250 VAC · 3.5 W / 16 A (6.3x32) · 6.3 A (5x20)



NNO

Description

- EMI / RFI shielding
- Screw type fuse carrier

References

[General Product Information](#)

Weblinks

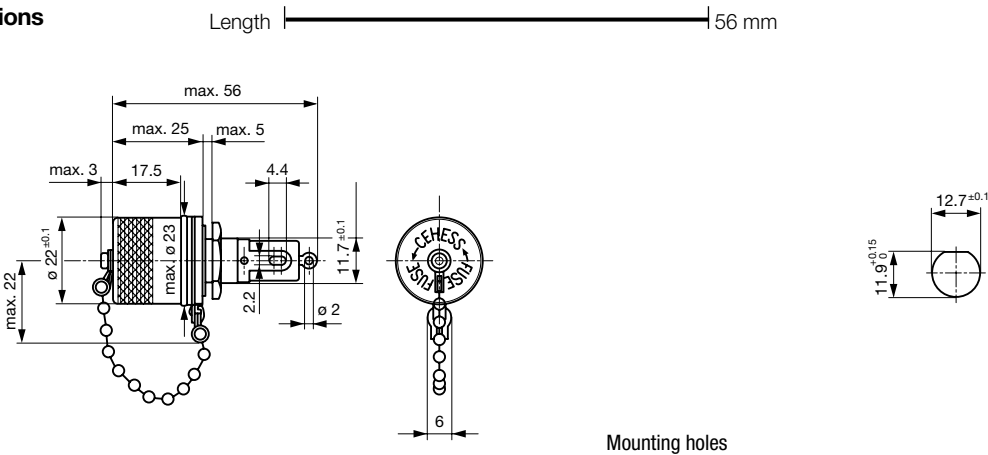
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	Panel Mount, Front-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	16 A (6.3x32), 6.3 A (5x20)
Rated Power Acceptance IEC	3.5 W / 16 A @ Ta 23 °C
Degree of Protection	IP 68
Admissible Ambient Air Temp.	-55 °C to 125 °C
Climatic Category	55/125/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	42 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phases D and F
Admissible Torque on Fixing Nut	max 1.0 Nm
Panel Thickness s	max 5 mm

Dimensions



Mounting holes

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Variants[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Protection EMI (Electromagnetic's Interferences) and RFI (Radio Frequency Interferences)

1. Attenuation: A > 100dB from 0.1 to 100 MHz
2. Transfer Impedance: Zt < 50 mΩ from 0.1 to 100 MHz
3. Protect the circuit and components against electromagnetics outside perturbations and magnetic fields induced by environmental equipment or occasional perturbations such as lightning
4. Protect against electromagnetic emissions induced by the circuit (secret)

High Temperature Electrical Endurance: 1000h @ 125 °C

Holder	Cap	Fuse-Link	Rated Current [A]	Degree of Protection	NNO	Reference	Order Number
●	Fingergrip	6.3 x 32mm	16	IP 68	●	231702	7092.2750
●	Fingergrip	5 x 20mm	6.3	IP 68		231702D1	7092.2760

Packaging Unit Bulk (10 pcs.)

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot, vertical



250 VAC · 3.2 W / 10 A (VDE) · 16 A (UL/CSA)

**Description**

- Kicked or straight PCB-terminals
- Vertical style

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 6945
- UL File Number: E39328

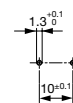
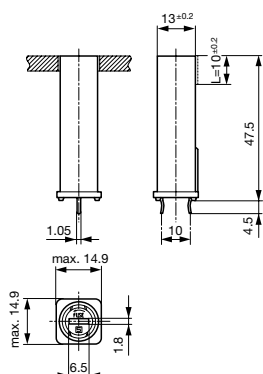
References
[General Product Information](#)
Weblinks
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	3.2 W / 10 A @ Ta 23 °C 2.5 W / 10 A for 5x20 mm fuse-link, see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	6.5 g / 2.3 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

Dimensions

Length | 47.5 mm

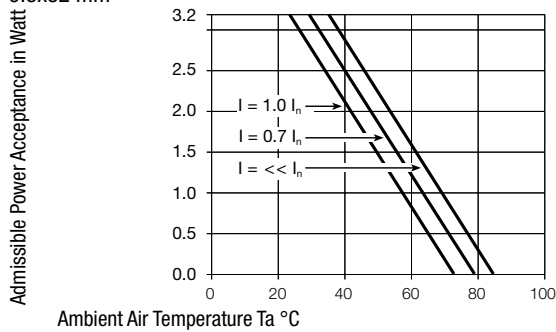


Variant 0031.3803 and 0031.3804

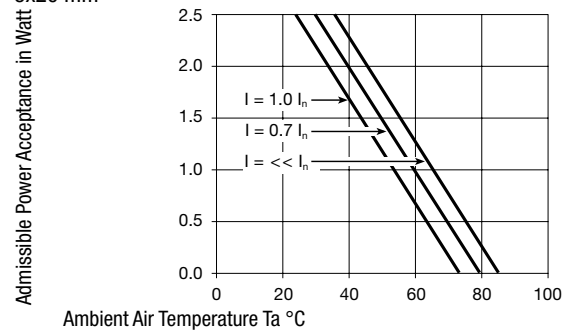
Drilling diagram

Derating Curves for Fuseholders

6.3x32 mm



5x20 mm



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Terminal	Degree of Protection	Colour Cap	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	Straight	IP 40	-	-	0031.3803
●	-	5 x 20 or 6.3 x 32mm	Kicked	IP 40	-	-	0031.3804
●	Slot Knob	6.3 x 32mm	Kicked	IP 40	Grey	0031.3804 + 0031.1666	0031.3822
●	Fingergrip	6.3 x 32mm	Kicked	IP 40	-	0031.3804 + 0031.1667	0031.3823
	Slot Knob	6.3 x 32mm	-	IP 40	-	-	0031.1661
	Slot Knob	5 x 20mm	-	IP 40	-	-	0031.1663
	Slot Knob	6.3 x 32mm	-	IP 40	Grey	-	0031.1666

Packaging Unit Bulk (100 pcs.)

Required Accessory

Description



Caps Fingergrip to FEU, FAU, FAC

 Caps to FEU, FAU, FAC
 Caps to Holder FEU, FEU (Med), FAU, FAC

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot Knob, vertical, 4 W / 16 A, IEC: 500 VAC, UL/CSA: 250

VAC

new



500 VAC · 4 W/16 A (VDE) · 250 VAC · 30 A (UL/

**Description**

- Fuseholder for 500 VAC applications
- Fuseholder with high rated power acceptance
- Same drilling diagram (FUP and FUA)
- Fits to type:

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 40022057
- UL File Number: E39328

Applications

- Equipment with three-phase supply (400 VAC)
- Applications with rated current up to 16 A (VDE)
- Industrial electronic

References

[General Product Information](#)

Weblinks

[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)

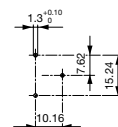
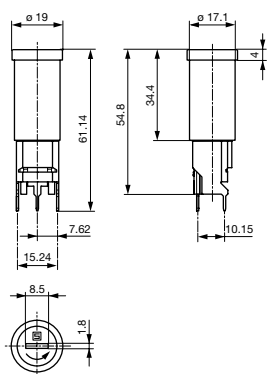
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	500 VAC (VDE), 250 VAC (UL/CSA)
Rated Current	16 A (VDE), 30 A (UL/CSA)
Rated Power Acceptance IEC	4 W / 16 A @ Ta 23°C Admissible power acceptance at higher ambient temperature see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Material: Socket	Thermoset, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	14 g / 14 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	 Type, Voltage Rating, Power Acc./Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Ta, method 1
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	2 acc. to IEC 60664-1

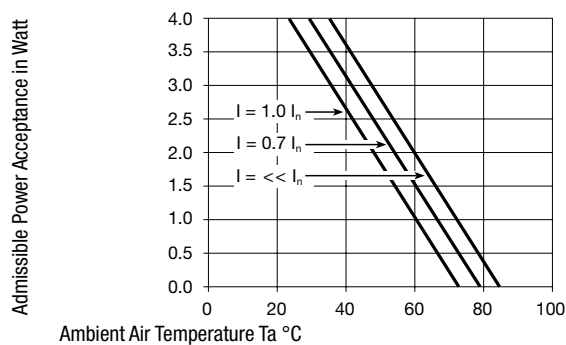
Dimensions

Length | 61.1 mm



Drilling Diagram

Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Degree of Protection	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	IP 40	-	0031.2550
●	Slot Knob	5 x 20mm	IP 40	0031.2550 + 0031.2323	0031.2560
●	Slot Knob	6.3 x 32mm	IP 40	0031.2550 + 0031.2321	0031.2570
	Slot Knob	6.3 x 32mm	IP 40	-	0031.2321
	Slot Knob	5 x 20mm	IP 40	-	0031.2323

Packaging Unit Bulk (25 pcs.)

Required Accessory

Description



Caps to FUL, FUP, FUA
Caps to Holder FUL, FUP, FUA

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Slot, horizontal



250 VAC · 3.2 W/10 A (VDE) · 16 A (UL/CSA)

**Description**

- Kicked or straight PCB-terminals
- Horizontal style

Standards

- IEC 60127-6
- UL 512
- CSA C22.2 no. 39

Approvals

- VDE License Number: 6946
- UL File Number: E39328

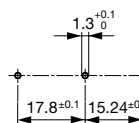
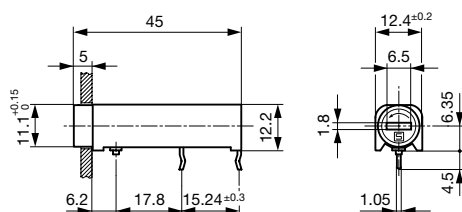
References
[General Product Information](#)
Weblinks
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Shocksafe Category	PC2
Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	10 A (VDE), 16 A (UL/CSA)
Rated Power Acceptance IEC	3.2 W / 10 A @ Ta 23 °C 2.5 W / 10 A for 5x20 mm fuse-link, see derating curves
Degree of Protection	IP 40
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoplastic, black, UL 94V-0
Material: Terminals	Tin-Plated Copper Alloy
Unit Weight (Socket/Cap)	5.1 g / 2.3 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Solderability	235 °C / 2 sec acc. to IEC 60068-2-20, Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20, Test Tb, method 1A
Contact Resistance	< 5 mΩ at 20 mV
Dielectric Strength	> 3 kV between L-N (50 Hz; 1 min)
Impulse Withstand Voltage	> 4 kV between L-N
Insulation Resistance	> 10 MΩ between L-N (500 VDC; 1 min)
Overvoltage Category	I - III acc. to IEC 60664-1
Pollution Degree	1 - 3 acc. to IEC 60664-1

Dimensions

Length |—————| 45 mm

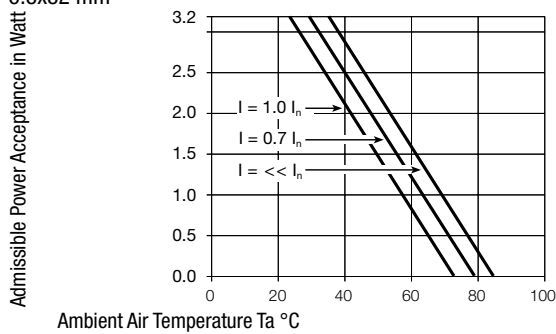


Variant 0031.3577

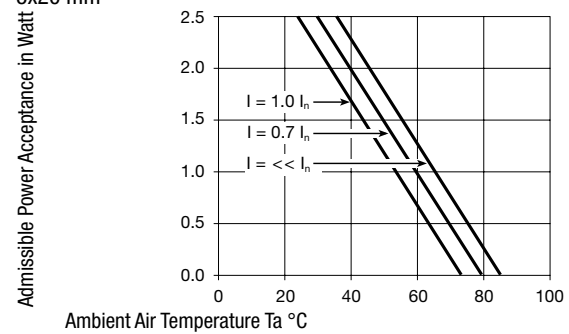
Drilling diagram

Derating Curves for Fuseholders

6.3x32 mm



5x20 mm



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Terminal	Degree of Protection	Colour Cap	Remark	Order Number
●	-	5 x 20 or 6.3 x 32mm	Straight	IP 40	-	-	0031.3573
●	-	5 x 20 or 6.3 x 32mm	Kicked	IP 40	-	-	0031.3577
●	Slot Knob	6.3 x 32mm	Kicked	IP 40	Grey	0031.3577 + 0031.1666	0031.3581
●	Fingergrip	6.3 x 32mm	Kicked	IP 40	-	0031.3577 + 0031.1667	0031.3583
	Slot Knob	6.3 x 32mm	-	IP 40	-	-	0031.1661
	Slot Knob	5 x 20mm	-	IP 40	-	-	0031.1663
	Slot Knob	6.3 x 32mm	-	IP 40	Grey	-	0031.1666

Packaging Unit Bulk (100 pcs.)

Required Accessory

Description



Caps Fingergrip to FEU, FAU, FAC



Caps to FEU, FAU, FAC



Caps to Holder FEU, FEU (Med), FAU, FAC

Shock-Safe Fuseholder, 5 x 20 / 6.3 x 32 mm, Fingergrasp, horizontal



250 VAC · 16 A (UL/CSA)

**Description**

- Screw type fuse carrier

Standards

- UL 512
- CSA C22.2 no. 39

Approvals

- UL File Number: E41738

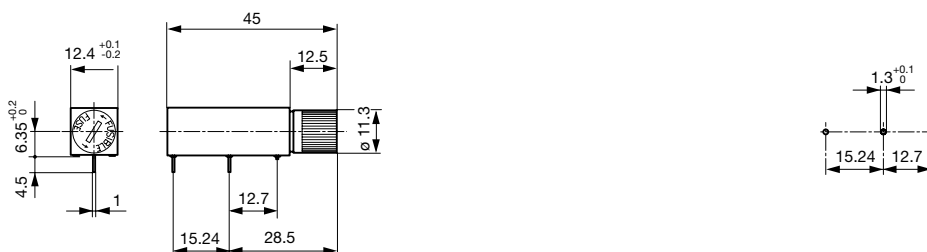
References[General Product Information](#)**Weblinks**
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Fuse-Link	5 x 20 or 6.3 x 32 mm
Mounting	PCB
Terminal	Solder THT
Rated Voltage	250 VAC
Rated Current	16 A (UL/CSA)
Degree of Protection	IP 40
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/56 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Material: Cap	Thermoplastic, black
Unit Weight (Socket/Cap)	13 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating, Approvals

Soldering Methods	Wave
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27

Dimensions

Length | 45 mm

**Drilling Diagram****Variants**
[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Reference	Order Number
•	Fingergrasp	5 x 20mm	231618PD1	7091.7100
•	Fingergrasp	6.3 x 32mm	231618PD8	7091.7090
•	-	5 x 20 or 6.3 x 32mm	231618	7091.7110

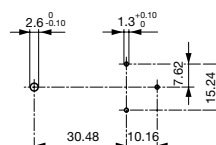
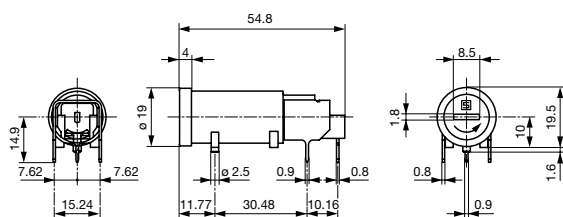
Packaging Unit Bulk (100 pcs.)

Required Accessory**Description**[Caps to 231618](#)

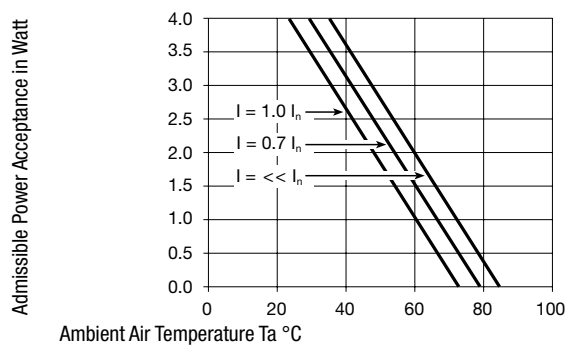
Caps to Holder 231618



Length 54.8 mm



Derating Curves for Fuseholders



Variants

[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Fuse-Link	Degree of Protection	Remark	Order Number
●	Slot Knob	5 x 20mm	IP 40	0031.2500 + 0031.2323	0031.2510
●	Slot Knob	6.3 x 32mm	IP 40	0031.2500 + 0031.2321	0031.2520
●	-	5 x 20 or 6.3 x 32mm	IP 40	-	0031.2500
	Slot Knob	6.3 x 32mm	IP 40	-	0031.2321
	Slot Knob	5 x 20mm	IP 40	-	0031.2323

Packaging Unit Bulk (25 pcs.)

Required Accessory

Description



Caps to FUL, FUP, FUA
Caps to Holder FUL, FUP, FUA

Shock-Safe Fuseholder, 4.7 x 16 mm, Fingergrip, Rear-Side



250 VAC · 1 W/5 A

GAM
T1 NNO**Description**

- Screw type fuse carrier

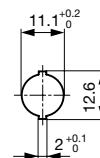
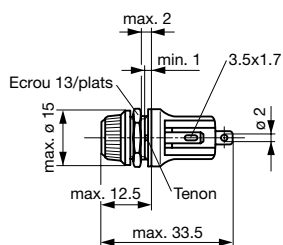
References[General Product Information](#)**Weblinks**[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)**Technical Data**

Fuse-Link	4.7 x 16 mm
Mounting	Panel Mount, Rear-Side
Fastening	Fixing Nut
Terminal	Solder
Rated Voltage	250 VAC
Rated Current	5 A
Rated Power Acceptance IEC	1 W / 5 A @ Ta 23 °C
Degree of Protection	IP 67
Protection Class	Suitable for appliances with protection class I or II acc. to IEC 61140
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	8.2 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type

Soldering Methods	Iron
Resistance to Vibration	acc. to NF C 20-706 / IEC 60068-2-6, test Fc
Shocks	acc. to NF C 20-706 / IEC 60068-2-27
Bumps	acc. to NF C 20-729 / IEC 60068-2-29
Salt Mist	acc. to NF C 20-711 / IEC 60068-2-11
Dump Heat	acc. to NF C 20-604
Climatic Composite	acc. to NF C 20-619 Phase D
Admissible Torque on Fixing Nut	max 0.7 Nm
Panel Thickness s	max 2 mm

Dimensions

Length | 33.5 mm



Mounting holes

Variants[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

	Cap	Degree of Protection	Order Number
●	Fingergrip	IP 67	7090.6020

Packaging Unit

Bulk (10 pcs.)

Shock-Safe Fuseholder, 10.3 x 38 mm, Fingergrip



600 VAC · 4.5 W/25 A · 25 A (UL/CSA)

**Description**

- Screw type fuse carrier

Standards

- UL 512
- CSA C22.2 no. 39

Approvals

- UL File Number: E41738

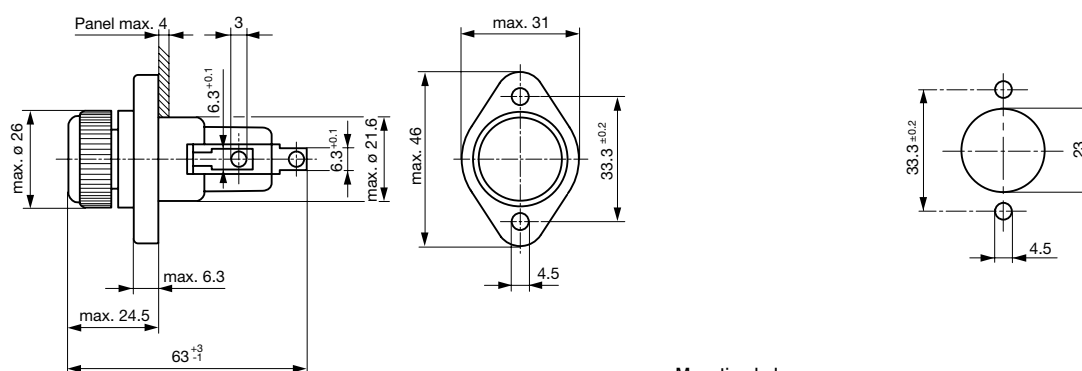
References[General Product Information](#)**Weblinks**
[Approvals](#), [RoHS](#), [CHINA-RoHS](#), [e-Store](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#)
Technical Data

Fuse-Link	10.3 x 38 mm
Mounting	Panel Mount, Front-Side
Terminal	Quick-Connect 6.3 x 0.8 mm
Rated Voltage	600 VAC
Rated Current	25 A (UL/CSA)
Rated Power Acceptance IEC	4.5 W / 25 A @ Ta 23 °C
Degree of Protection	IP 40 / IP 67
Admissible Ambient Air Temp.	-40 °C to 85 °C
Climatic Category	40/085/21 acc. to IEC 60068-1
Material: Socket	Thermoset, black
Unit Weight (Socket/Cap)	48 g
Storage Conditions	0 °C to 60 °C, max. 70% r.h.
Product Marking	Type, Voltage Rating, Current Rating

Soldering Methods	Iron
Panel Thickness s	max 4 mm

Dimensions

Length | 63 mm



Mounting holes

Variants
[Distributor-Stock-Check](#) | [SCHURTER-Stock-Check](#) | [e-Store](#)

Holder	Cap	Degree of Protection		Reference	Order Number
•	Fingergrip	IP 40	• • •	23530P	7093.2510
•	Fingergrip	IP 67	•	23530JJP	7093.2540

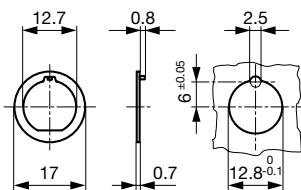
Packaging Unit

Bulk (10 pcs.)



Anti-Rotation Washer for
Fuseholders for Round Mounting
Holes

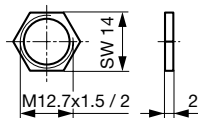
Order No. _____
0696.0033 *



0583.0007

Metal Nut

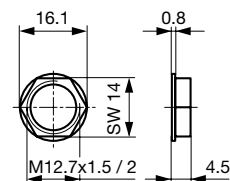
Order No. _____
0098.0026 *



0583.0016

Plastic-Nut
(max. Torque 1.2 Nm)

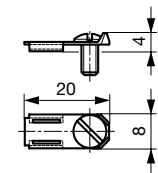
Order No. _____
0098.0093



straight

Screw-Adapter for Quick
Connect-Terminals 6.3 x 0.8 mm

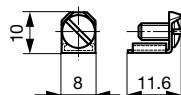
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0750.0141 *



angled

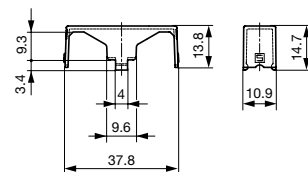
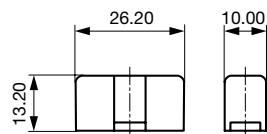
Screw-Adapter for Quick
Connect-Terminals 6.3 x 0.8 mm

Order No. _____
0750.0142 *



Cover for
Fuseholders
OG 0751.0052/62,
UHB 0031.5101, OG 0031.8001,
UH 0031.5001, 0031.5010

Order No. _____
0853.9561 * 1,6 W
0853.9562 * 2,5 W



Order No. _____ OGD/OGD-SMD Reflow Cover
0853.0917 *

* Packaging Unit 100 Pcs.

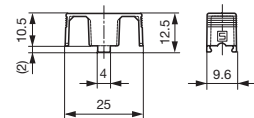


Transparent
Cover
0853.0551



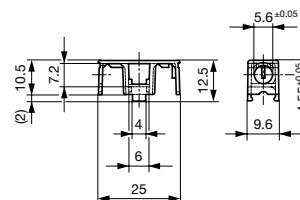
Reflow-
Cover
0853.0571

Order No. _____ OGN/OGN-SMD
0853.0551 * / 0853.0571 *



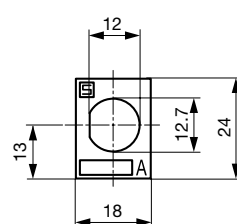
Reflow-Cover
with Clamp
0853.0576

Order No. _____ OGN/OGN-SMD
0853.0576 *



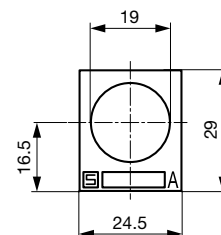
Marking Plate
Self-Adhesive

Order No. _____
0880.0001 *



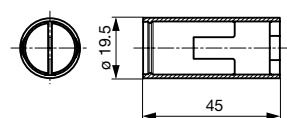
Marking Plate
Self Adhesive

Order No. _____
0880.0002 *

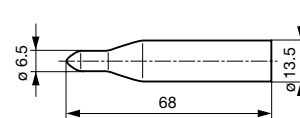


Insulating Covers

a) For Fuseholder Types FIZ/FUL



b) For Fuseholders with a Socket
Diameter of 13 mm



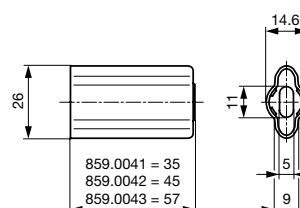
Order No. _____

a) 0859.0046 *
b) 0859.0080 *



Insulating Cover for
Fuseholders FEU

Order No. _____
0859.0041 for FEU 0031.1653 *
0859.0042 for FEU 0031.1673 *
0031.1681 *
0859.0043 for FEU 0031.1694 *



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general product information

Product standard equipment standard

The product standard only contains minimum requirements. Attention is drawn to the fact that appliance specifications might contain requirements additional to or deviating from those specified in the relevant product standards.

Comments on definitions used

Please be aware that the specifications nominal value used in the German part of the Schurter catalogue and the data sheets, is synonymous with rated value.
The difference between these two values is a pure matter of definition. In order to avoid any unnecessary complications we will continue to use the specifications nominal value.

CE marking acc. to EU-directives

CE marking is the only marking which indicates that a product conforms to the relevant EU-directive.
This means that the CE-mark is no quality or standard conformity mark but only an administration mark.
SCHURTER products are covered by the low voltage directives 72/23/EEC and 93/68/EEC. Those are valid for equipment and appliances with rated voltage values between AC 50 V to AC 1000 V as well as DC 75 V to DC 1500 V.
The CE marking of SCHURTER parts will be found on the label of the smallest packing unit. On request we will submit a CE conformity statement for each component. CE conformity statements and approvals can also be retrieved from the internet under www.schurter.com.

Conformity to component standards, national approvals

National testing institutions are testing according to national and international standards or other generally recognized rules of technology. Their certification/approval-marks confirm the observance of the safety requirements which electric appliances must fulfil.

National approvals

 (Mark)	European Norms Electrical Certification
 (Mark)	VDE Verband Deutscher Elektrotechniker

	(Certificate of conformity with factory surveillance)	
	UMF	Universal Modular Fuse meets the standard IEC 60127-4
	(Recognition)	UL Underwriters Laboratories (USA, Canada)
	(Listing)	UL Underwriters Laboratories (USA, Canada)
	(Recognition)	UL Underwriters Laboratories (USA)
	(Listing)	UL Underwriters Laboratories (USA, Canada)
	CSA	Canadian Standard Association, Component Acceptance Service
	CSA	Canadian Standard Association
	CCC	China Compulsory Certification
	PSE	Japan Electrical Safety & Environment technology Laboratories
	KTL	Korea Testing Laboratory
	TÜV	Technischer Überwachungs Verein
	NF	Norme française
	NNO	Numéro de nomenclature Otan (OTAN = NATO = North Atlantic Treaty Organisation)
	GAM T1	Liste interarmées AIR MER TERRE de composants électroniques

In addition to the combined UL/CSA approvals, most of the SCHURTER components are also approved by one of the European Certification Bodies like VDE (Germany), Electrosuisse (Switzerland) or SEMKO (Sweden). The safety testing of all these European Certification Bodies are based on the common European Safety Standards. With the harmonisation effort in Europe, the different National European Certification Bodies have lost their importance and SCHURTER has decided to maintain only one European approval (e.g. VDE, SEV or SEMKO) in future. The others will not be renewed once they have expired.

Because UL and CSA are not members of the CENELEC, the standards of UL and CSA are not harmonised yet with the European Standards. However, UL and CSA are trying to harmonize their standards with each other. Where possible, SCHURTER will apply for the combined cULus or cURus approval.

Further to development in Asia, SCHURTER has obtained national approvals from China, Japan and Korea.



general product information

IP degrees of protection provided by enclosures (IP code)

Standards IEC 60529; EN 60529

Scope

These standards apply to the classification of degrees of protection provided by enclosures for electrical equipment with a rated voltage not exceeding 72.5 kV.

Object

The object of these standards is to give:

- a) Definitions** for degrees of protection provided by enclosures of electrical equipment as regards:
 - 1. Protection of persons against access to hazardous parts inside the enclosure
 - 2. Protection of the equipment inside the enclosure against ingress of solid foreign objects
 - 3. Protection of the equipment inside the enclosure against harmful effects due to the ingress of water.
- b) Designations** for these degrees of protection.
- c) Requirements** for each designation.
- d) Tests** to be performed to verify that the enclosure meets the requirements of these standards.

Designations

The degree of protection provided by an enclosure is indicated by the IP Code.

Elements of the IP Code and their meanings

A brief description of the IP Code elements is given in the following table.

IP xy	Meaning for the protection of equipment	Meaning for the protection of persons
	Against ingress of solid foreign objectif	Against access to hazardous parts with
x = 0	(non-protected)	(non-protected)
x = 1	50 mm diameter	back of hand
x = 2	12.5 mm diameter	finger
x = 3	2.5 mm diameter	tool
x = 4	1.0 mm diameter	wire
x = 5	dust-protected	wire
x = 6	dust-tight	wire
	Against ingress of water with harmful effects	
y = 0	(non protected)	
y = 1	vertically dripping	
y = 2	dripping (15° tilted)	
y = 3	spraying	
y = 4	splashing	
y = 5	jetting	

y = 6	powerful jetting
y = 7	temporary immersion
y = 8	continuous immersion

Protection against electric shock

1. Protection against direct and indirect contact General terms

The protection against electric shock on electric equipment as well as their components are divided into the following parts:

- Protection against direct contact with live parts concerns all measures for the protection of human beings and animals against hazards which result from direct contact with live parts of electric equipment and their components.
- Protection against indirect contact is the protection of human beings and animals against hazards which result from contact of live parts of electric equipment as well as components thereof, which have become live due to an insulation failure.

¹⁾ Accessible, conductive part, which is not conductive normally but which may be conductive due to a failure.

2. Protection against direct contact with live parts e.g. of a fuseholder

The data sheets of the relevant components inform about the taken measures.

3. Protection against indirect contact

Measures for the protection against indirect contact on electrical equipment are defined according to IEC 61140 by the 4 protection classes 0, I, II, III. Each protection class includes two protection measures. Even if one of these measures should fail, no electric shocks will occur.

Protection class	Main protective measures
0	1. Basic insulation between live parts and accessible conductive parts. 2. Earth-free location, non-conducting environment.
I 	1. Basic insulation between live parts and accessible conductive parts. 2. Means are provided for the connection of accessible conductive parts of the equipment to the protective (earthing) conductor in the fixed wiring of the installation in such a way that accessible conductive parts cannot become live in the event of a failure of the basic insulation.
II 	1. Basic insulation between live parts and accessible conductive parts. 2. Additional insulation. Basic and supplementary insulation are summarised under the term "double insulation". Under certain circumstances also a "reinforced insulation" (single insulation system) may guarantee an equivalent protection against electric shock as a "double-insulation" does. No terminal for a protective conductor is allowable. A possibly existing protective conductor must not be connected and has to be insulated like any live part.
III 	1. Functional insulation. 2. Supply at safety extra-low voltage SELV (the circuit is isolated from the mains supply by such means as a safety isolating transformer). The protection against electric shock is in this case completely based on the supplying by SELV-circuits (U ≤ 42 V). Higher voltages are not generated in the equipment. No terminal for a protective conductor is allowable.



general product information

Fuseholders

Explanations, thermal requirements, selection criteria

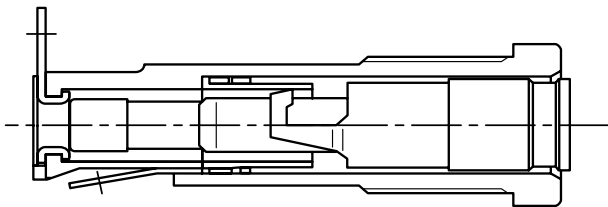
1. Protection against electric shock (against direct contact with live parts), for fuseholders

The assessment of the protection against electric shock assumes that the fuseholder is properly assembled, installed and operated as in normal use, e.g. on the front panel of the equipment.

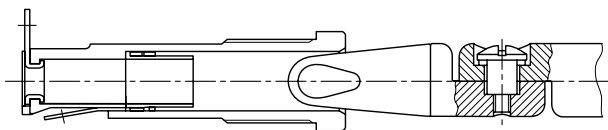
IEC 60127-6 and EN 60127-6 divides into three categories:

Category	Features
PC1	Fuseholders without integral protection against electric shock. They are only suitable for applications where corresponding additional means are provided to protect against electric shock.
PC2	Fuseholders with integral protection against electric shock live part is not accessible: - when the fuseholder is closed - after the fuse carrier (incl. fuse-link) has been removed - either during insertion or removal of the fuse carrier (incl. fuse-link) Compliance is checked by using the standard test finger specified in IEC 60529.
PC3	Fuseholder with enhanced integral protection against electric shock The requirements for this category are the same as those for category PC2, with the exception that the testing is carried out with a rigid test wire of 1 mm diameter according to IEC 60529, table VI, instead of the standard test finger.

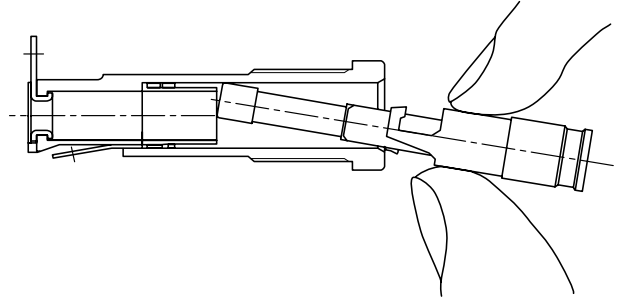
a) Closed fuseholder



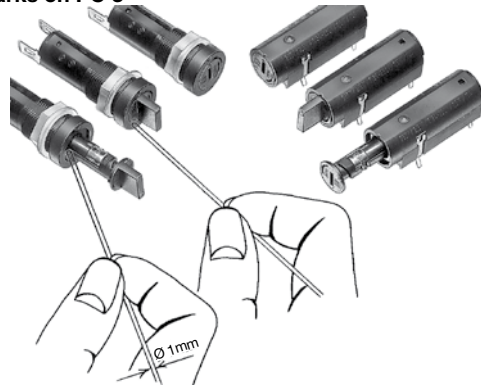
b) When the fuse carrier is removed, no live parts can be touched.



c) During insertion or removal of a fuse-link no live parts can be touched neither through the fuse-link nor the fuse carrier.



Remarks on PC 3



2. Thermal requirements of the fuseholder

2.1. Influencing factors

The design engineer of electrical equipment is responsible for its safety and functioning to humans, animals and real values. Above all, it is his task to make sure that the state of the art as well as the valid national and international standards and regulations be observed.

In view of the safety of electrical equipment the selection of the most suitable fuseholder is of great importance. Among other parameters, one has to make sure that the maximum admissible power acceptances and temperatures defined by the manufacturer are followed. Differing definitions and requirements in the most important standards for fuse-links and fuseholders are time and again origin for the incorrect selection of fuseholders.

To equate the rated current of a fuse-link with the rated current of the fuseholder, may, especially at higher currents, cause high, not admissible temperatures, when the influence of the power dissipation in the contacts of the fuseholder was not taken into consideration.

For a correct selection the following influence factors depending on the application and mounting method, have to be taken into consideration.

It is recommended testing the fuseholder with the chosen fuse-link in the worst case operating condition.

1. Rated power dissipation of the suitable fuse-link.
2. Admissible power acceptance, operating current and temperatures of the suitable fuseholder.
3. Differing ambient air temperature outside and inside of the equipment.
4. Electrical load alternation
5. Long time (> 500 h) operation with load > 0.7 I_n .
6. Heat dissipation/cooling and ventilation. Heat influence of adjacent components.
7. Length and cross section of the connecting wire.

2.2 Rated current of a fuseholder

The value of current assigned by the manufacturer of the fuseholder and to which the rated power acceptance is referred.

2.3 Rated power dissipation of the fuse-link

(power dissipation at rated current)

2.4 Rated power acceptance and admissible temperatures of a fuseholder.

The rated power acceptance of a fuseholder is determined by a standardised testing procedure according to IEC 60127-6. It is intended to be the power dissipation caused by the inserted dummy fuse-link at the rated current of the fuseholder and at an ambient air temperature of $T_{A1} = T_{A2} = 23^\circ\text{C}$ (over a long period). During this test the following temperatures must not be exceeded on the surface of the fuseholder:

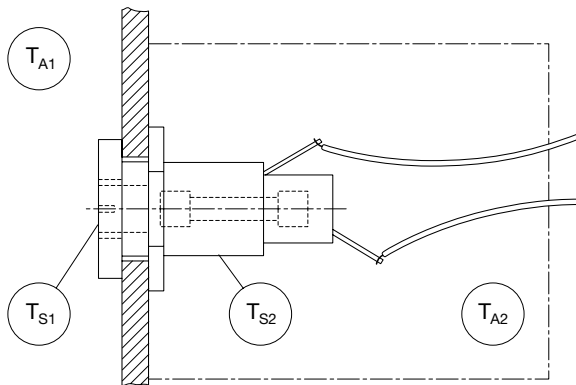
Fuseholder surface area	Maximum allowable temperature measuring points (see figure 1)	$^\circ\text{C}$
1. Accessible parts ¹⁾	T_{S1}	85
2. Inaccessible parts ¹⁾ Insulating parts	T_{S2}	2)

Notes:

¹⁾ When the fuse-holder is properly assembled, installed and operated as in normal use, e.g. on the front panel of equipment.

²⁾ The maximum allowable temperature of the used insulating materials corresponds to the Relative Temperature Index (RTI) according to IEC 60216-1 or UL 746 B.

Illustration of temperatures experienced in practice

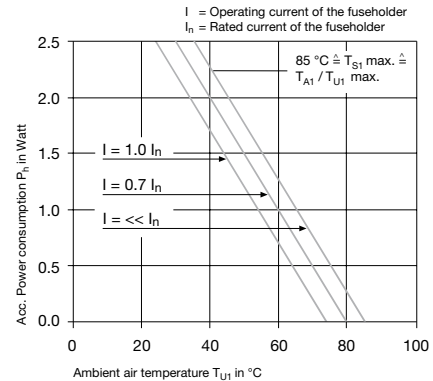


T_{A1} = ambient air temperature, surrounding the equipment
 T_{A2} = ambient air temperature in the equipment
 T_{S1} = temperature of accessible parts on fuseholder surface
 T_{S2} = temperature of inaccessible parts on fuseholder surface

2.5 Correlation between operating current I , ambient air temperature T_{A1} and the power acceptance P_h of the fuseholder.

This correlation is demonstrated by derating curves.

Example of a derating curve



I = operating current of the fuseholder
 I_n = rated current of the fuseholder

The derating curves demonstrate the admissible power acceptance of a fuseholder depending on the ambient air temperature T_{A1} for the following fuseholder operating currents: $I << I_n$, $I = 0.7 \cdot I_n$ and $I = 1.0 \cdot I_n$. This power acceptance corresponds to the max. admissible power dissipation of a fuse-link.

The corresponding values for other operating currents can be interpolated between the existing curves or calculated as follows:

$$P_h = P_o - P_c = P_o - (R_c \cdot I^2)$$

P_h = admissible power acceptance in watt of the fuseholder, depending on T_{A1} .

P_o = admissible power acceptance in watt of a fuseholder at $I << I_n$, depending on T_{A1} . The values can be taken from the derating curve $I << I_n$ of the corresponding fuseholder.

P_c = power dissipation in watt in the fuseholder contacts at the operating current in ampere.

I = operating current in ampere of the fuseholder.

R_c = contact resistance in ohm between the fuseholder terminals according to SCHURTER's catalogue.

3. Selection of a suitable fuseholder with respect to the power acceptance at the corresponding ambient air temperature.

Summary

The adherence to the limits, indicated by SCHURTER, in particular the power acceptance limits at the corresponding ambient air temperatures and mounting conditions of the fuseholder, is important for the safety of the product. It is therefore necessary to observe the following two steps:

Step 1

Selection of the fuseholder based on the power acceptance P_h at operating current I and maximum ambient air temperature T_{A1} .

$$P_f \leq P_h = P_o - P_c = P_o - (R_c \cdot I^2)$$

P_f = rated power dissipation in watt of the fuse-link, calculated from $(I_n \cdot U)$, whereas:

I_n = rated current in ampere of the fuse-link

ΔU = voltage drop in volt at I_n ; values according to SCHURTER's catalogue.

P_h , P_o , P_c , R_c = see pos. 2.5

Step 2

The reduction of the power acceptance of the fuseholder (from step 1) based on the different conditions at the mounting place etc. have to be determined by the design engineer responsible.

Examples:

- ambient air temperature is considerably higher inside of an equip-



general product information

ment than outside ($T_{A2} > T_{A1}$)

- cross-section of the conductor, unfavourable heat dissipation
- heat influence of adjacent components

Therefore, temperature measurements on the appliance under normal and faulty conditions are absolutely necessary.

4. Example

4.1 What's given?

- Fuse-link FSF 0034.1523, rated current $I_n = 5$ A. Voltage drop ΔU at $I_n = 80$ mV, typ. Rated power dissipation $P_f = (I_n \cdot \Delta U) = (5 \text{ A} \cdot 0.08 \text{ V}) = 0.4 \text{ W}$.
- Fuseholder FEF 0031.1081, rated current $I_n = 10$ A. Rated power acceptance at $T_{A1} 23^\circ\text{C} = 3.2 \text{ W}$.
- Ambient air temperature = 50°C .
Admissible power acceptance P_h at an ambient air temperature $T_{A1} 50^\circ\text{C}$ according to the derating curve:

$$P_h \text{ at } I \ll I_n = 2.5 \text{ W}$$

$$I = 0.7 \cdot I_n = 7 \text{ A} = 2.2 \text{ W}$$

$$I = 1.0 \cdot I_n = 10 \text{ A} = 2 \text{ W}$$

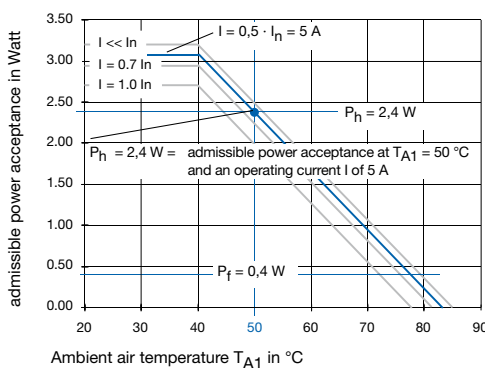
- Contact resistance $R_c = 5 \text{ m}\Omega$

4.2 What is the admissible power acceptance P_h of the fuseholder?

Solutions

- 4.2.1 The result of the interpolation for the rated current $I = 5$ A is a P_h of approx. 2.4 W.
- 4.2.2 The result of the calculation is
 $P_h = P_o (R_c \cdot I^2) = 2.5 (0.005 \cdot 5^2) = 2.37 \text{ W} \approx 2.4 \text{ W}$.

4.3 Derating curves of the fuseholder, type FEF, rated current $I_n = 10$ A



4.4 Verification of the thermal requirements

Step 1

The following condition must be fulfilled:

$P_f \leq P_h$ this means: the rated power dissipation P_f of the fuse-link must be less/equal than the admissible power acceptance P_h of the fuseholder.

$$P_f = 0.4 \text{ W}; P_h = 2.4 \text{ W at } T_{A1} = 50^\circ\text{C}$$

Step 2

To consider the different conditions at the mounting place

4.5 Conclusion (without consideration of step 2)

- The value P_f is less than P_h . The condition according to formula is fulfilled. It has been chosen a suitable fuseholder.
- If the value P_f were greater than P_h the condition wouldn't be fulfilled. In that case, do select another fuseholder with a higher power acceptance or change the thermal conditions at the fuseholder mounting place.

5. Standards for fuseholders

IEC 60127-6	Fuseholders for miniature fuse-links
NF C93-436	Fuseholders for professional purposes
UL 512	Fuseholders
CSA C22.2 no. 39	Fuseholder assemblies

IEC: International Electrotechnical Commission
 UL: Underwriters Laboratories Inc. USA
 CSA: Canadian Standards Association
 NF: French Standard

6. Explanation to the main fuseholder standards

As mentioned in section 2, the most relevant standards define rated current and rated power acceptance differently. This lead in the past often to confusion or even to a wrong fuseholder design-in.

For example the standard UL 512 does not define a maximum power acceptance value, but sets a certain value of temperature rise for the fuseholder. For this reason the marked amperage values on the fuseholder, defined by UL and CSA, are not suggested to be used except in special cases.

In order to eliminate such confusion, SCHURTER new decided to define the rated current and rated power acceptance values according to IEC 60127-6 and EN 60127-6.

The most important definitions are to be found in section 2.

Conclusion

- The high UL and CSA current ratings are replaced by more realistic rated currents defined by SCHURTER.
- Focused on the new fuseholder standard IEC 60127-6 and EN 60127-6, the power acceptance of several fuseholders had to be reduced.
- The design-in procedure and in particular to choose the correct fuseholder in terms of thermal requirements (refer to section 2-4) is now made much easier.

Your advantages:

- **More security for your equipment**
- **Faster and much easier selection of the correct fuseholder**

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2		
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231411	Fuses	29
231529P	Fuses	30
231549P	Fuses	58
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231702	Fuses	70
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23463P	Fuses	57
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FAP	Fuses	41
FAS	Fuses	51
FAU	Fuses	76
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0031.1631	0031.1616	FEC	66
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7090.6020		231600P	1)
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7091.3120		231411	1)
7091.4210	7091.4400	231409	1)
7091.6110		231529P	1)
7091.7100	7091.7110	231618	1)
7092.2520	7092.2630	23312P	1)
7092.2750	7092.2760	231702	1)
7092.6150	7092.6160	23463P	1)
7093.0110		231549P	58
7093.2510	7093.2540	23530P	83

1) NUR_AUF_WEB_FLAG_GS

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