

Appliance Inlet DC Filter, ECO Design, Front- or Rear Side Mounting



Screw-on mounting, front or back side
PCB snap-in version
MOLEX HCS-125 connector



Screw-on mounting, front or back side
Quick connect terminals 6.3 x 0.8 mm
AMP Universal MATE-N-LOK or MOLEX MLX



Snap-in mounting
with wires (stranded)
AMP Universal MATE-N-LOK or MOLEX MLX

See below:

Approvals and Compliances

Description

- Panel mount :
Screw-on version from front or rear side, snap-in version from front side, PCB Version from rear side
- 2 Functions :
Appliance Inlet , DC line filter in standard version
- Solder, quick connect or wires (stranded)

Characteristics

- Compact high-performance DC-filter
- Optimal shielding due to completely closed filter case, unpotted
- Applications:
- Mission Critical Ethernet LAN Routers
- High uptime Ethernet LAN Switches
- Fiber Optic WAN Switches
- Fiber Optic WAN Multiplexer

Other versions on request

- Snap-in for panel thickness >2mm to 3mm
- flexible wire with various lengths
- Quick connect terminals 4.8 x 0.8 mm
- Capacity CY 5.5 nF
- with long earth pin in connector

References

PCB Mounting

Alternative: version 5120 for AC applications

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Approvals](#), [Distributor-Stock-Check](#), [Accessories](#), [Detailed request for product](#)

Technical Data

Ratings IEC	15A / 125VDC
Ratings UL/CSA	3 - 15A @ Ta 40 °C / 125VDC
Dielectric Strength	> 0.5 kVDC between (VAC 1 min., DIN EN 50155) > 1.1 kVDC between protective conductor and live parts Test voltage (2 sec)
Allowable Operation Temperature	-25 °C to 85 °C
Climatic Category	25/085/21 acc. to IEC 60068-1
Protection Class	Suitable for appliances with protection class I
Terminal	Quick connect terminals 6.3 x 0.8 mm Wire leads AWG 18 (10-15A AWG 16), 150 mm
Panel Thickness S	Screw: max 8 mm Mounting screw torque max 0.5 Nm Snap-in: 0.8mm to 2 mm (all steps with one variant)
Material: Housing	Thermoplast / steel tin-plated, black / metallic, UL 94V-0

Line Filter	DC Standard Version, UL 1283 Technical Details
MTBF	> 3'900'000 h acc. to MIL-HB-217 F

Approvals and Compliances



Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals






The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: 5003

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	Certificate Number: 40020642
	UL Approvals	UL	UL File Number: E72928


Product standards

Product standards that are referenced

Organization	Design	Standard	Description
	Designed according to	IEC 60320-1	Appliance couplers for household and similar general purposes
	Designed according to	IEC 61058-1	Switches for appliances. Part 1. General requirements
	Designed according to	UL 498	Standard for Attachment Plugs and Receptacles
	Designed according to	UL 1283	Electromagnetic interference filters
	Designed according to	CSA C22.2 no. 42	General Use Receptacles, Attachment Plugs, and Similar Wiring Devices





Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

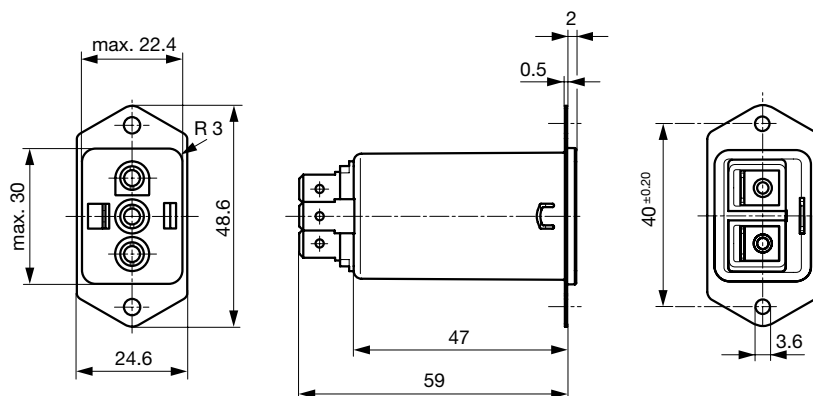
Compliances

The product complies with following Guide Lines

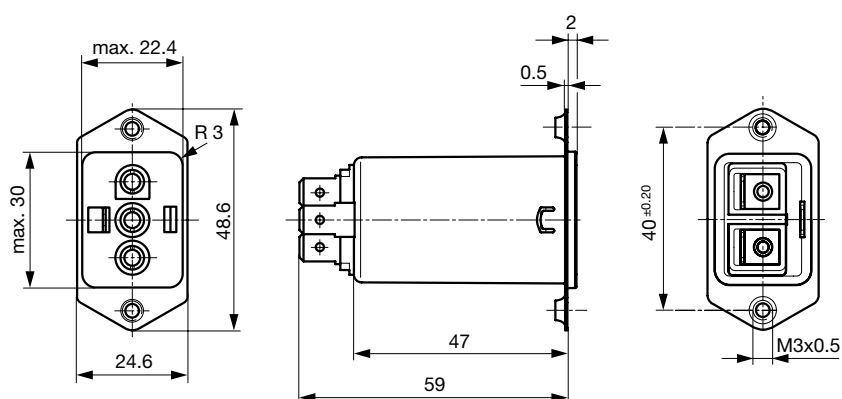
Identification	Details	Initiator	Description
	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

Dimension [mm]

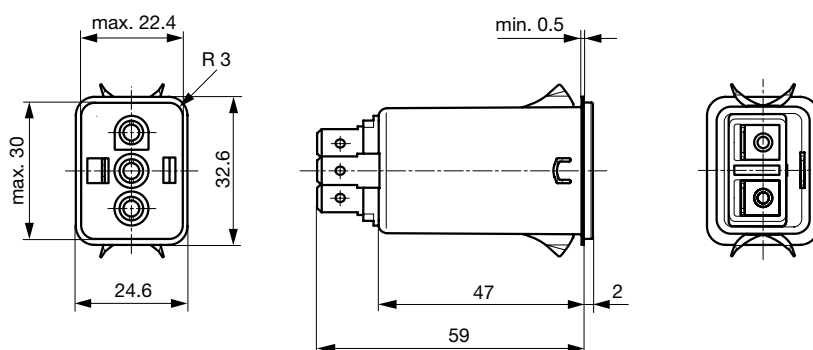
Front- or rear side mounting for screws with nuts or blind rivets, mating connector Molex HCS-125



Rear side mounting with pre-formed, threaded holes for M3 screws, mating connector Molex HCS-125



Snap-in mounting from front side, mating connector Molex HCS-125

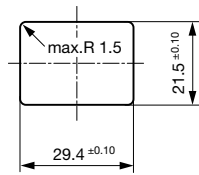


[illegible]

The technical drawings show the following dimensions:

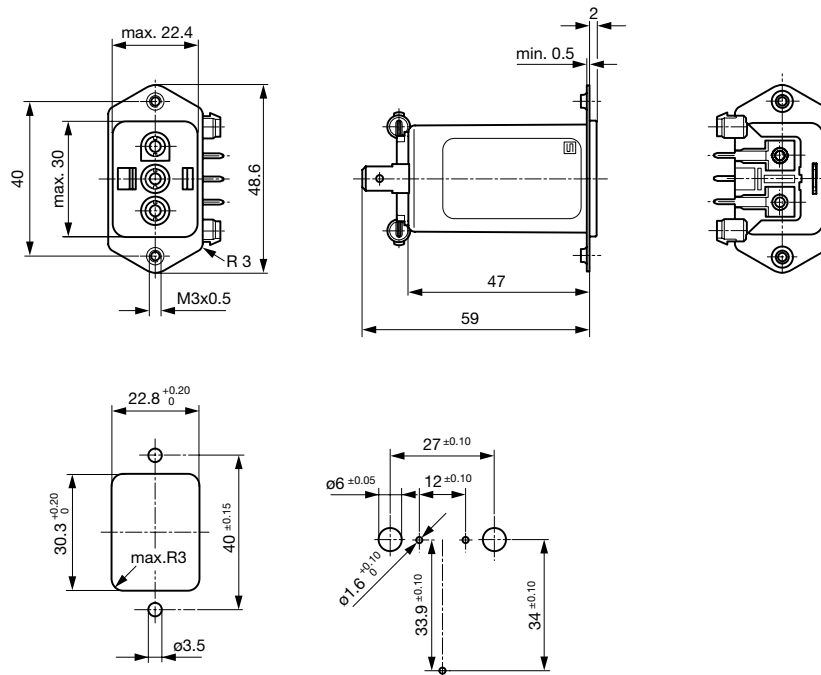
- Top View:** Overall width max. 22.4, overall height max. 30, mounting pad width 24.6, mounting pad height 32.6, and corner radius R3.
- Side View:** Total length 52, distance from mounting pads to center 40, minimum standoff min. 0.5, and maximum standoff 10.
- Bottom View:** Mounting pad width 29 ± 0.1, mounting pad height 21.5 ± 0.1, total width 40 ± 0.15, and corner radius max.R3.

Panel cutout for rear side mounting

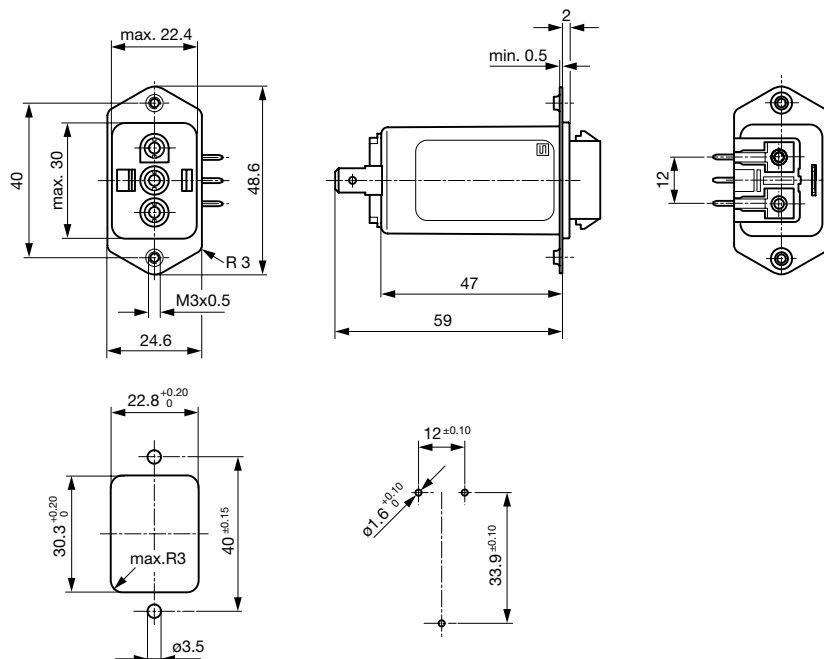


Panel cutout for snap-in mounting

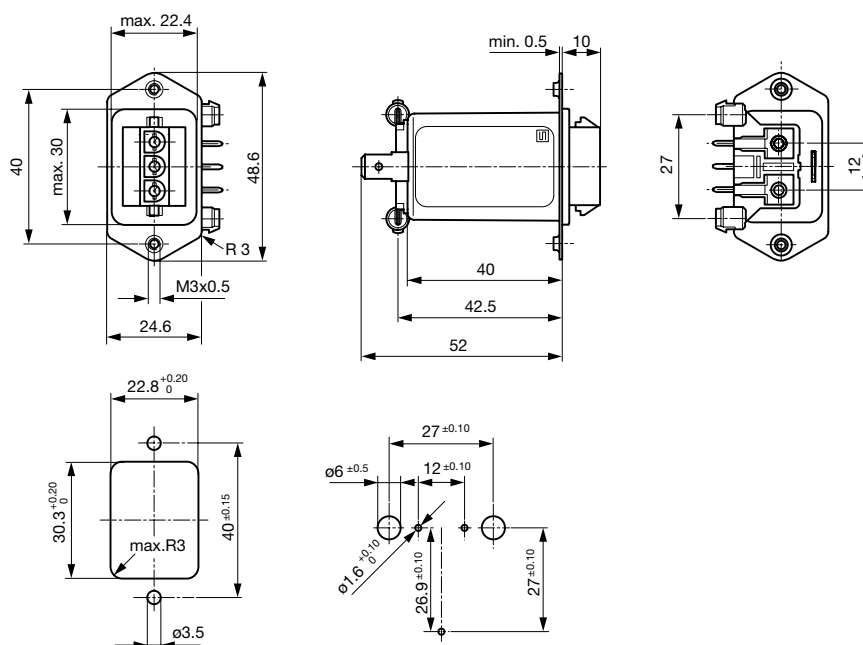
PCB snap-in rear-side mounting with pre-formed threaded holes for M3 screws, mating connector Molex HCS-125



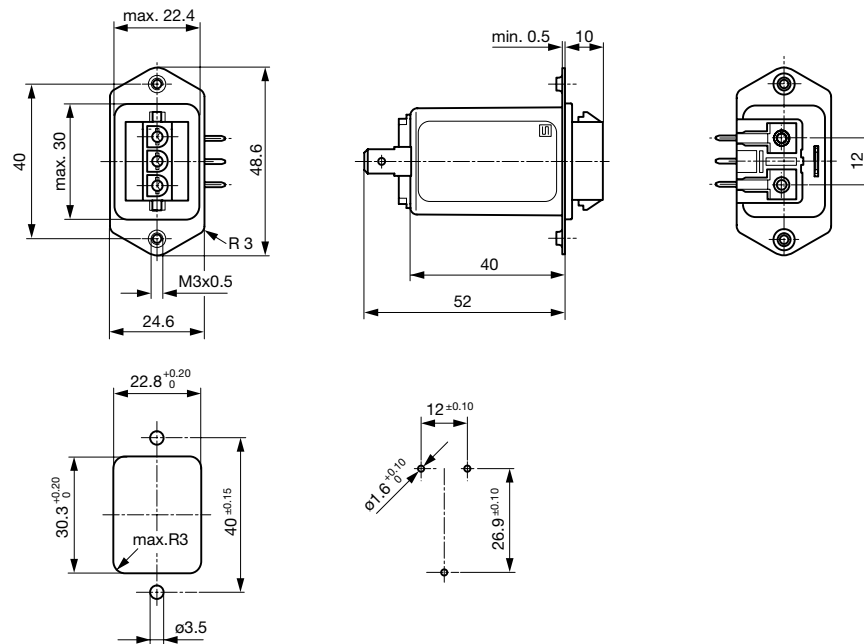
PCB rear-side mounting with pre-formed threaded holes for M3 screws, mating connector Molex HCS-125



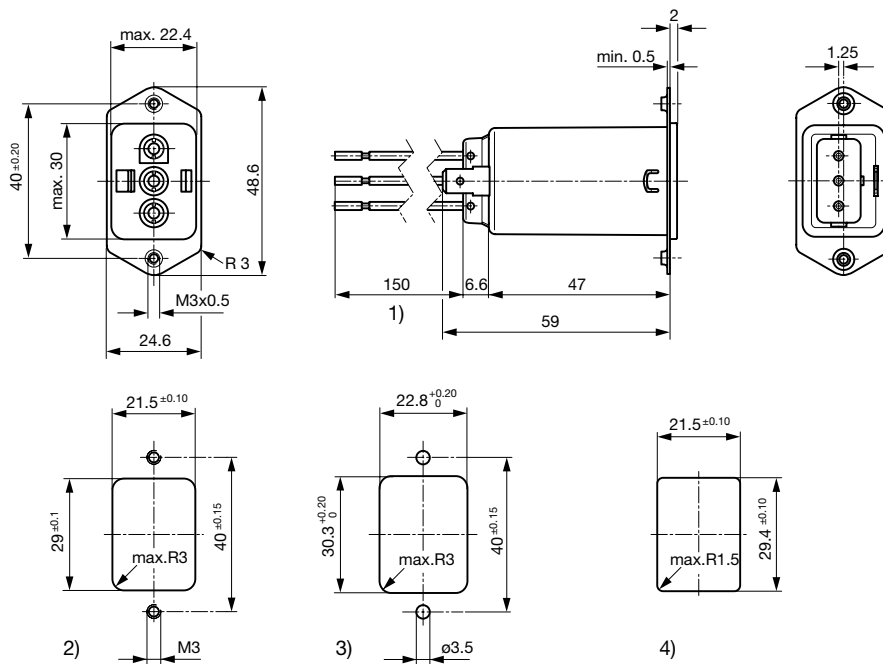
PCB snap-in rear-side mounting with pre-formed threaded holes for M3 screws, mating connector AMP Universal MATE-N-LOK or MOLEX MLX



PCB rear-side mounting with pre-formed threaded holes for M3 screws, mating connector AMP Universal MATE-N-LOK or Molex MLX



Screw and snap-in mounting with flexible wire, mating connector Molex HCS-125 or AMP Universal MATE-N-LOK



- 1) Flexible wire, standard length 150 mm or special length on request
- 2) Panel cut-out screw-on version, front-side mounting
- 3) Panel cut-out, screw-on version, back-side mounting
- 4) Panel cut-out snap-in version, front-side mounting

Plug Molex HCS-125



Molex HCS-125
Housing: Molex no. 03-12-1036
Female terminal (3 needed per housing): Molex no. 18-12-1222

Plug AMP / Molex MLX



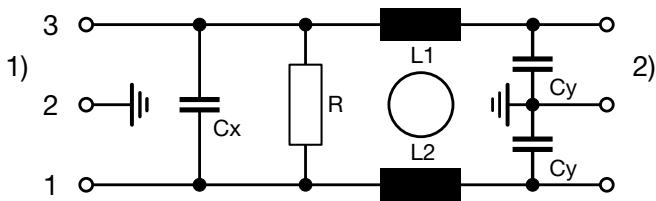
AMP Universal MATE-N-LOK
Housing: AMP no. 1-480700-0
Female terminal (3 needed per housing): AMP no. 926901-1
Molex MLXHousing: Molex no. 50-84-1030
Female terminal (3 needed per housing): Molex no. 02-08-1002

Technical Data of Filter-Components

Rated Current [A]	Filter-Type	Inductances L [mH]	Capacitance CX [nF]	Capacitance CY [nF]	R [MΩ]
3	DC Standard Version	2 x 4	100	4.7	1
6	DC Standard Version	2 x 0.8	100	4.7	1
10	DC Standard Version	2 x 0.4	100	4.7	1
15	DC Standard Version	2 x 0.1	100	4.7	1

Diagrams

5003

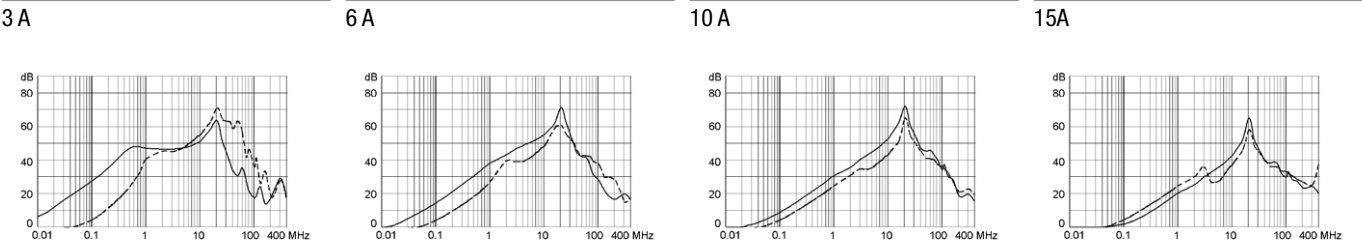


1) Line
2) Load

Attenuation Loss

Standard version

- - - 50Ω differential mode 50Ω common mode



All Variants

Rated Current [A]	Mounting	Mounting side	Terminal	Mating Connector	Order Number
3	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0121.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.015B.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.016B.1
3	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0111.1
6	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0231.1

Rated Current [A]	Mounting	Mounting side	Terminal	Mating Connector	Order Number
6	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0221.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.025B.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.026B.1
6	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0211.1
6	Screw-on/Rivet	Front-/Rear-Side	Solder terminal	Molex HCS-125	5003.0213.1
10	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0321.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.035B.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.036B.1
10	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0311.1
10	Screw-on/Rivet	Front-/Rear-Side	Flexible wire and Earth pin 6.3 x 0.8	Molex HCS-125	5003.0316.1
15	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0421.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.045B.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	Molex HCS-125	5003.046B.1
15	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	Molex HCS-125	5003.0411.1
3	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1131.1
3	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1121.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.115B.1
3	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.116B.1
3	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1111.1
6	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1221.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.125B.1
6	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.126B.1
6	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1211.1
10	Snap-in	Front Side	Flexible wire and Earth pin 6.3 x 0.8	AMP / Molex MLX	5003.1336.1
10	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1321.1
10	Screw	Rear Side	Solder terminal	AMP / Molex MLX	5003.1323.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.135B.1
10	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.136B.1
10	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1311.1
15	Snap-in	Front Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1431.1
15	Snap-in 2 - 3 mm	Front Side	Flexible wire and Earth solder terminal	AMP / Molex MLX	5003.1448.1
15	Screw	Rear Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1421.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.145B.1
15	Screw/Soldering and Snap-in on PCB	Rear Side	PCB pin and earth pin 6.3 x 0.8	AMP / Molex MLX	5003.146B.1
15	Screw-on/Rivet	Front-/Rear-Side	Quick connect terminals 6.3 x 0.8 mm	AMP / Molex MLX	5003.1411.1

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Type for screw on mounting from rear side has pre-threaded holes for M3 screws

Packaging unit 10 Pcs

Accessories

Description



Assorted Covers
Rear Cover

0859.0048



Cord retaining kits
Cord retaining strain relief

Flat head, E
Flat head, G

4700.0005
4700.0007