

Compensated High Current Choke, 1-phase



See below:

Approvals and Compliances

Description

- Current compensated choke
- 1-phase choke
- THT-terminals
- Flange for mounting onto printed circuit board

Unique Selling Proposition

- Compact size and light weight
- Small footprint on PCB
- Open design optimizes heat dissipation
- Nanocrystalline or ferrite ring cores

Applications

- Frequency converter
- Charge stations
- UPS-systems
- Switching power supplies

References

Alternative: Horizontal version [DKIH-1](#)

Weblinks

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

Technical Data

Rated voltage	IEC, UL: 300VAC	Test Voltage	2500VDC, 2 sec, winding to winding
	CSA: 250VAC		
	max. 450VDC		
Rated Current	10 - 50 A @ Ta 40 °C	Climatic Category	40/100/21 acc. to IEC 60068-1
Rated inductance	0.15 - 8.2 mH, Tol. -30% +50%	Allowable Operation Temp.	-40 °C to 100 °C
Power Operating Frequency	0 - 400 Hz		
Terminal Type	THT		
Weight	25 - 140 g		
Material	UL 94V-0		

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: DKIV-1

Approval Logo	Certificates	Certification Body	Description
	VDE Approvals	VDE	Certificate Number: 40052999
	UL Approvals	UL	UR File Number: E495089

Application standards

Application standards where the product can be used

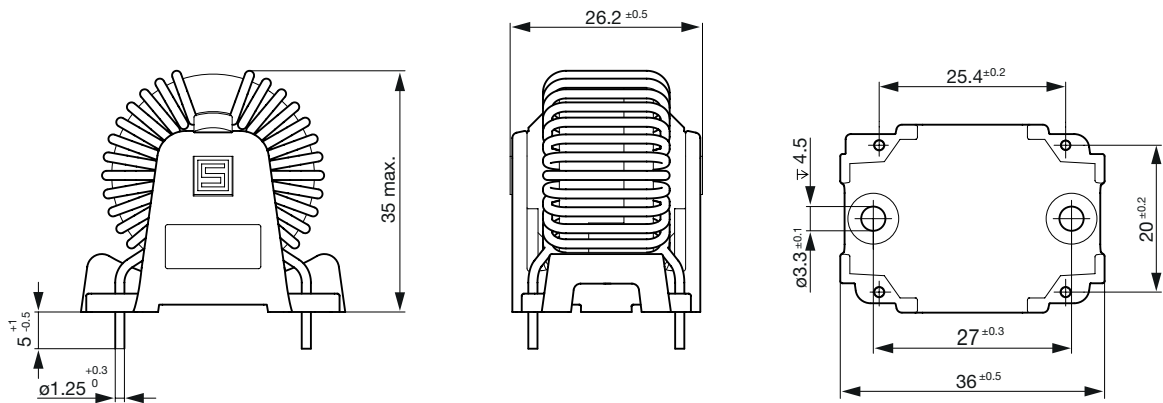
Organization	Design	Standard	Description
	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

Compliances

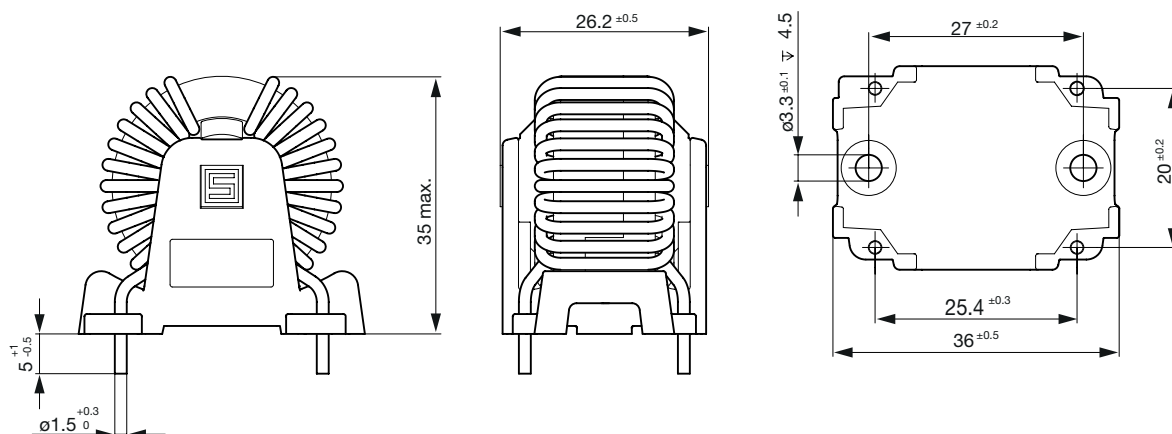
The product complies with following Guide Lines

Identification	Details	Initiator	Description
CE	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.
UKCA	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
China RoHS	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	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.

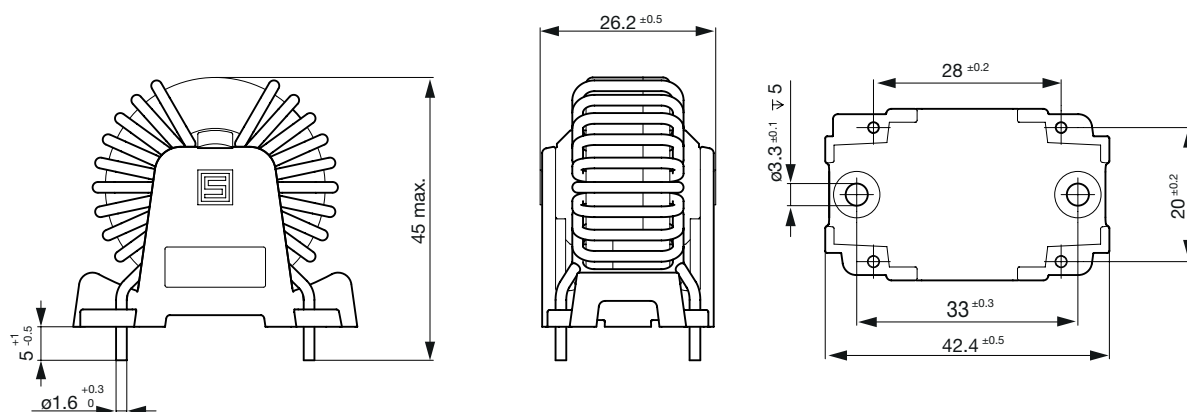
Dimension [mm]
36-10



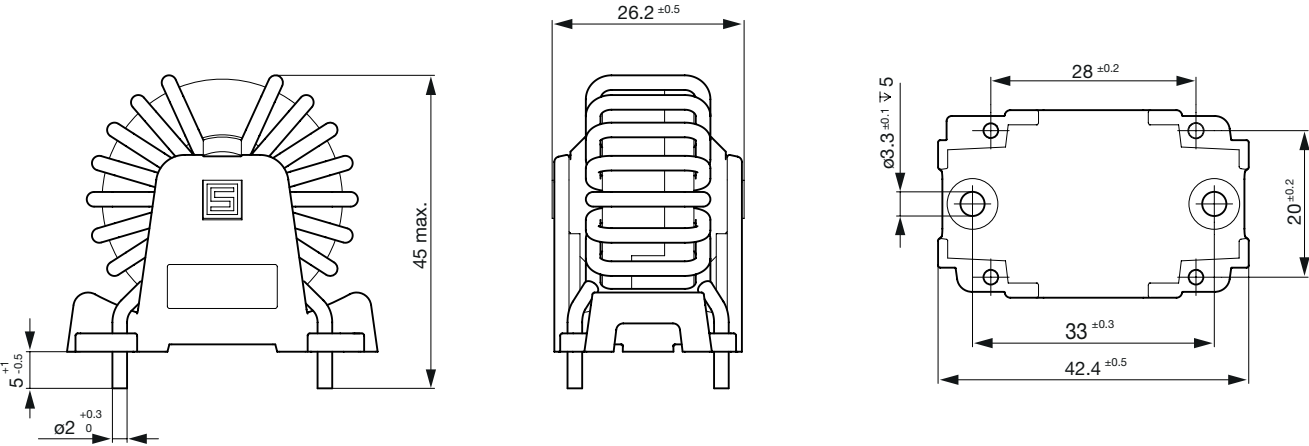
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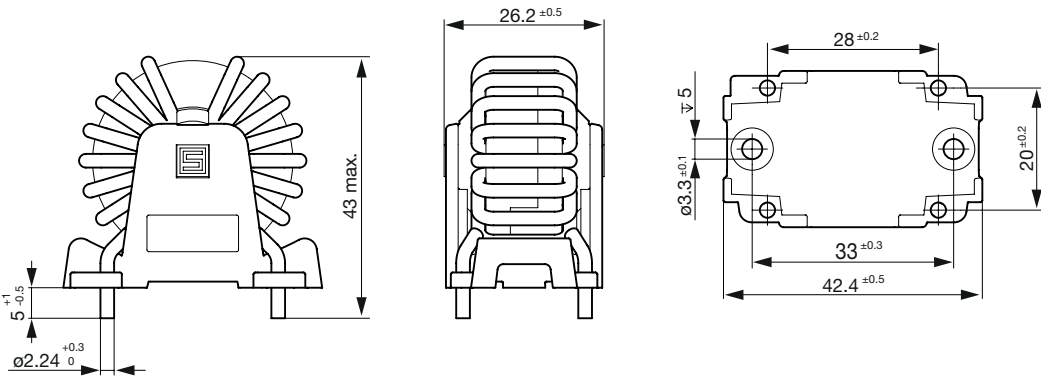
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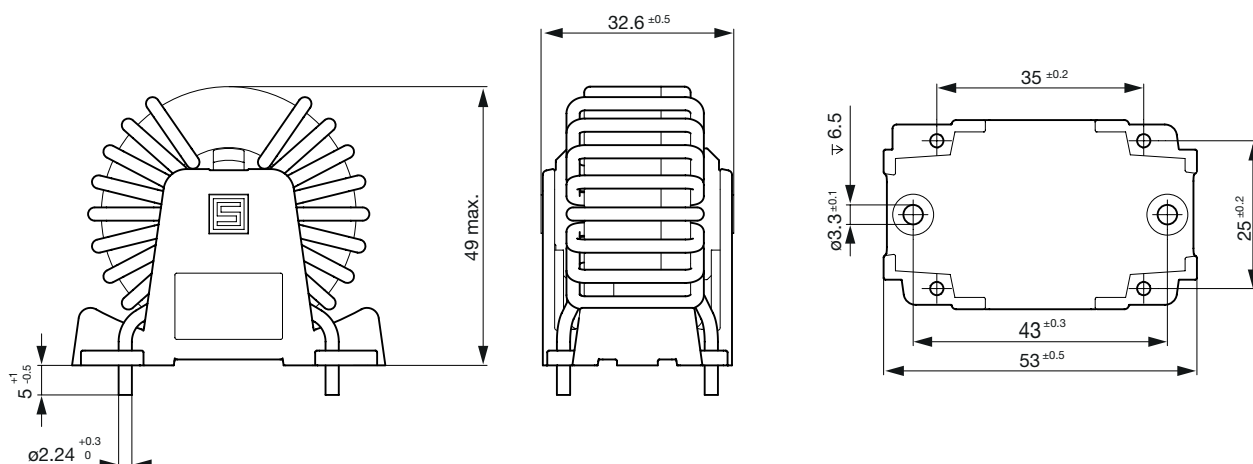
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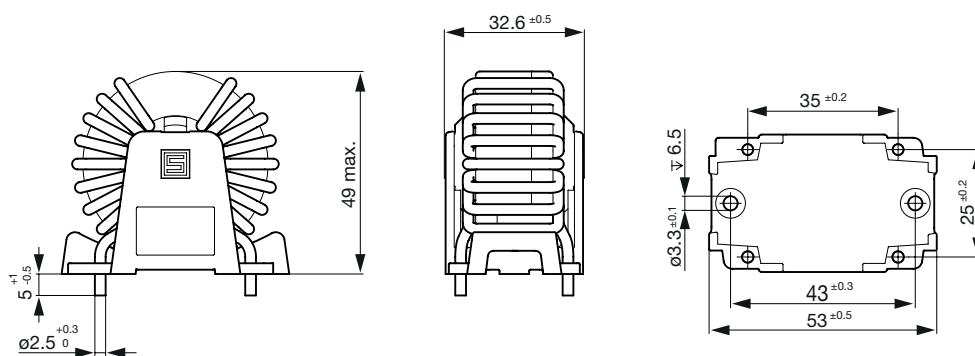
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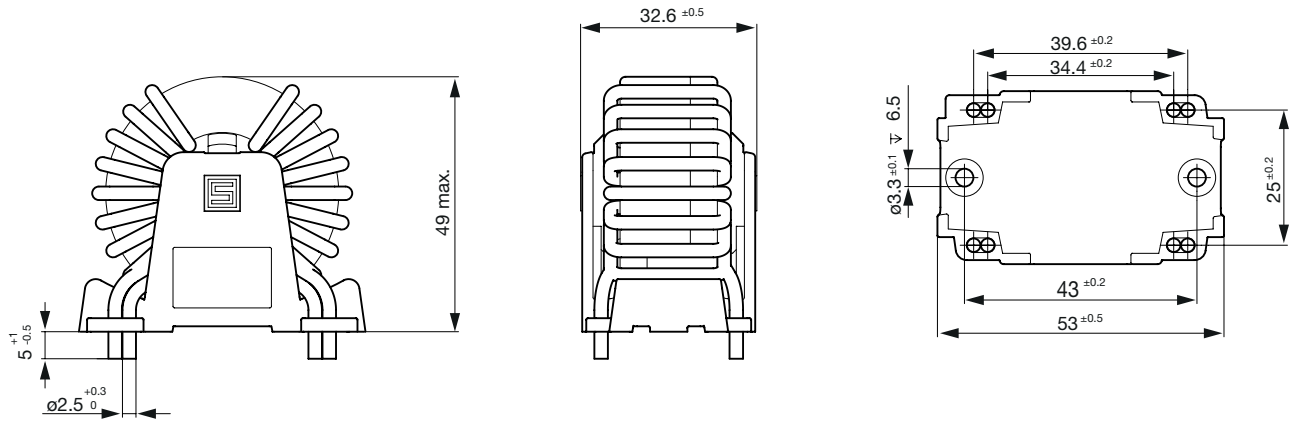
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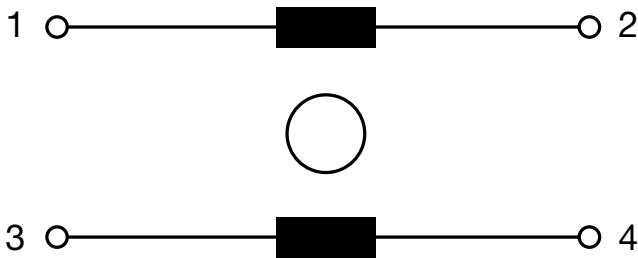
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53-50



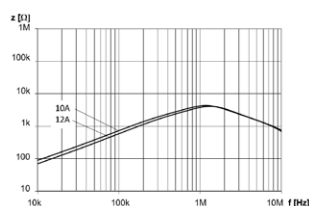
Diagrams



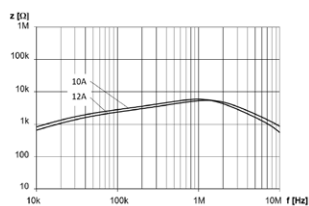
1 phase

Impedance curves

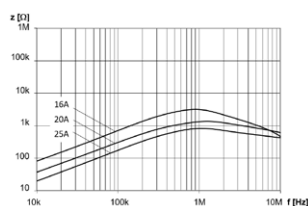
DKIV-1 10-12A



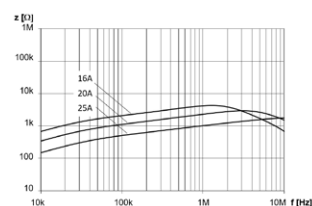
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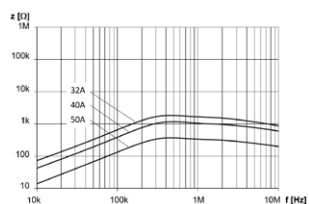
DKIV-1 16-25A



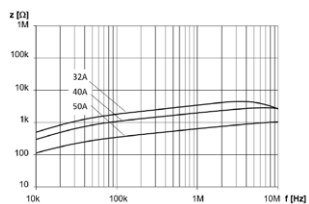
DKIV-1 16-25A NK



DKIV-1 32-50A



DKIV-1 32-50A NK



Variants

I_n [A]	Nanocrystalline core [NK]	L_n [mH]	R_{cu} [mΩ]	Power Dissipation [W]	f_{RES} [MHz]	Copper ϕ [mm]	Weight [g]	Housing	Packing unit [pcs.]	Order Number
10	-	1	10	2	1.19	1.25	25 g	36-10	40	3-127-596
10	NK	8.2	10	2	0.97	1.25	35 g	36-10	40	3-127-620
12	-	0.9	7	2.02	1.35	1.5	35 g	36-12	40	3-127-597
12	NK	7.2	7	2.02	1.26	1.5	40 g	36-12	40	3-127-621
16	-	0.9	5.7	2.92	0.91	1.6	50 g	43-16	40	3-127-598
16	NK	7.3	5.7	2.92	1.26	1.6	50 g	43-16	40	3-127-622
20	-	0.5	2.7	2.16	1.26	2	55 g	43-20	40	3-127-599
20	NK	3.7	2.7	2.16	3.17	2	55 g	43-20	40	3-127-623
25	-	0.23	1.7	2.13	1.04	2.24	55 g	43-25	40	3-127-600
25	NK	1.8	1.7	2.13	10.3	2.24	55 g	43-25	40	3-127-624
32	-	0.75	2.6	5.32	0.47	2.24	112 g	53-32	20	3-127-601
32	NK	7.2	2.6	5.32	3.62	2.24	125 g	53-32	20	3-127-625
40	-	0.45	1.7	5.44	0.5	2.5	112 g	53-40	20	3-127-614
40	NK	4.3	1.7	5.44	6.54	2.5	125 g	53-40	20	3-127-626
50	-	0.15	0.5	2.5	0.47	2 x 2.5	125 g	53-50	20	3-127-619
50	NK	1.4	0.5	2.5	13.46	2 x 2.5	140 g	53-50	20	3-127-627

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>