Compensated High Current Choke, 1-phase

new



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: 300 VAC
	CSA: 250 VAC
	max. 450 VDC
Rated Current	10 - 50 A @ Ta 40 °C
Rated inductance	0.15 - 8.2 mH, Tol. -30% +50%
Power Operating Frequency	0 - 400 Hz
Terminal Type	THT
Weight	25 - 140 g
Material	UL 94V-0

Test Voltage	2500 VDC, 2 sec, winding to winding
Climatic Category	40/100/21 acc. to IEC 60068-1
Allowable Operation Temp.	-40 °C to 100 °C

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

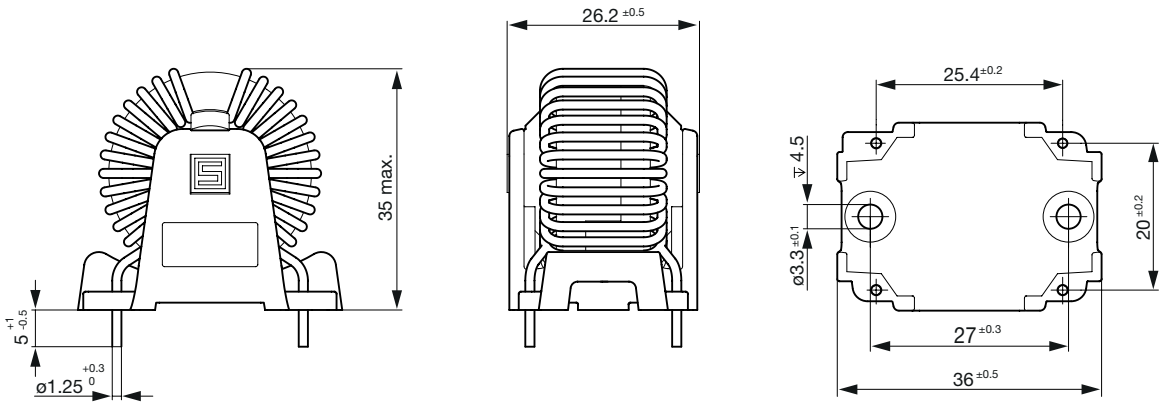
Compliances

The product complies with following Guide Lines

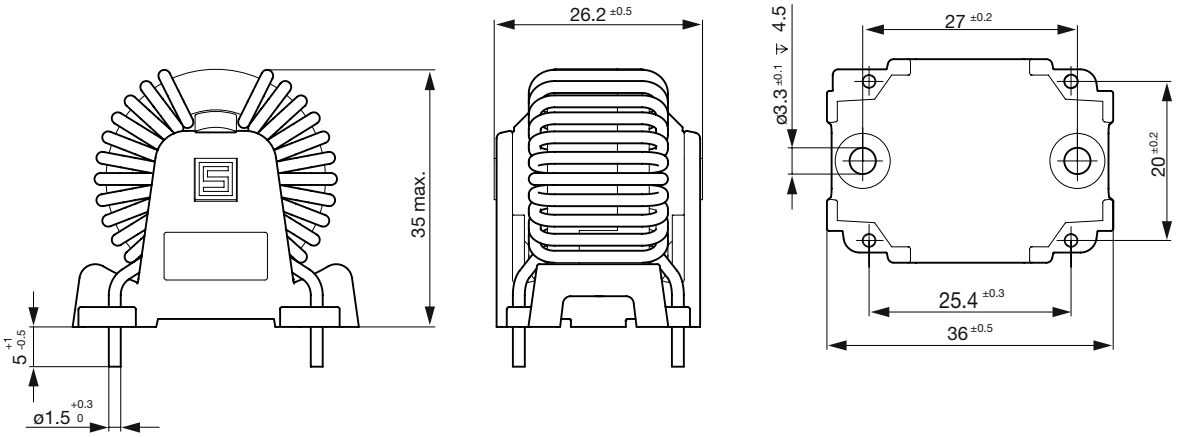
Identification	Details	Initiator	Description
CE	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
UKCA	UKCA declaration 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]

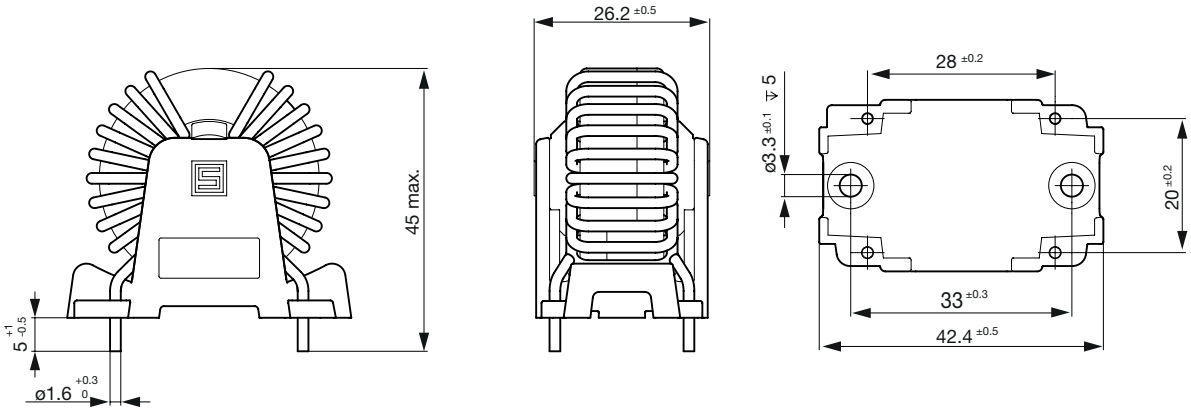
36-10



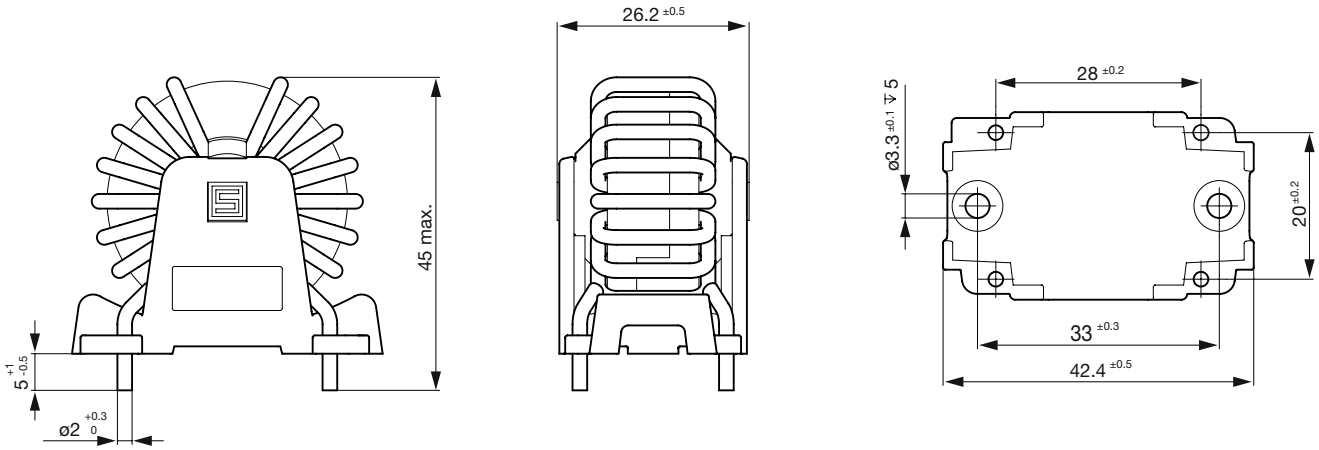
36-12


26.2 ±0.5
35 max.
5 +1 -0.5
ø1.5 +0.3 0
27 ±0.2
ø3.3 ±0.1 ↧ 4.5
20 ±0.2
25.4 ±0.3
36 ±0.5

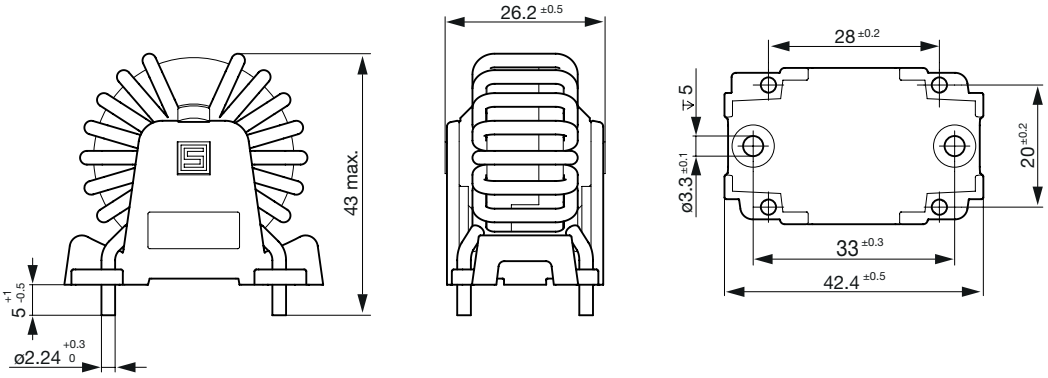
43-16


26.2 ±0.5
45 max.
5 +1 -0.5
ø1.6 +0.3 0
28 ±0.2
ø3.3 ±0.1 ↧ 5
20 ±0.2
33 ±0.3
42.4 ±0.5

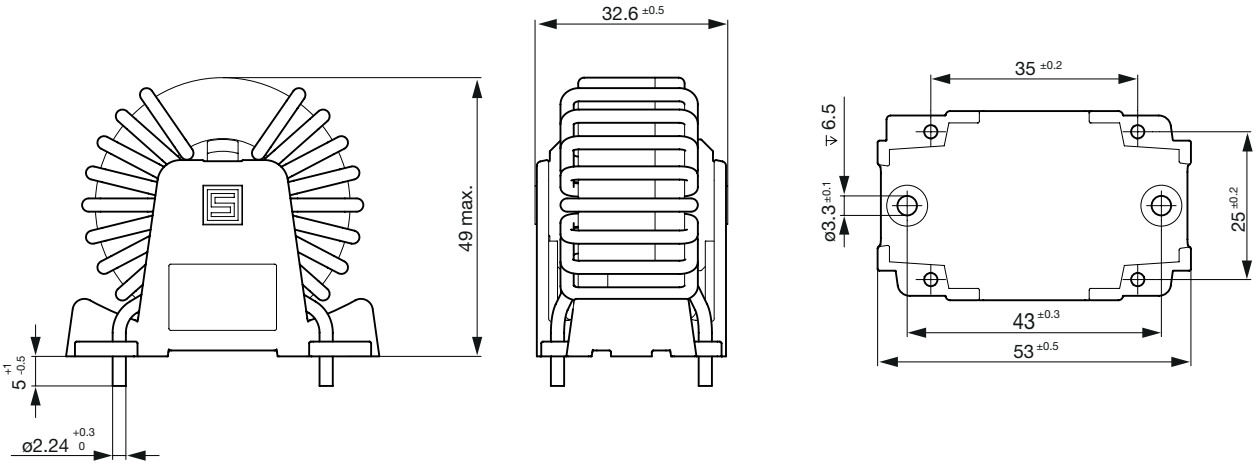
43-20


26.2 ±0.5
45 max.
28 ±0.2
ø3.3 ±0.1 ↧ 5
20 ±0.2
33 ±0.3
42.4 ±0.5
5 +1 -0.5
ø2 +0.3 0

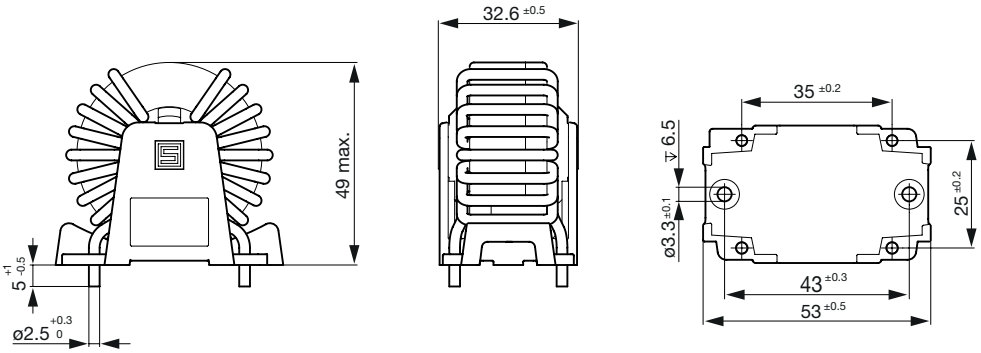
43-25


26.2 ±0.5
43 max.
28 ±0.2
↧ 5
ø3.3 ±0.1
20 ±0.2
33 ±0.3
42.4 ±0.5
5 +1 -0.5
ø2.24 +0.3 0

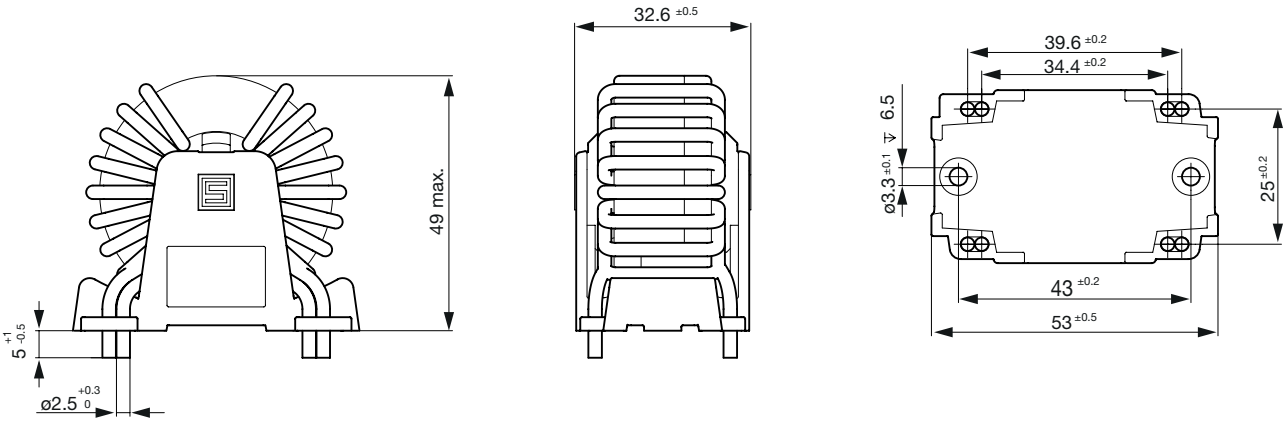
53-32


32.6 ±0.5
49 max.
35 ±0.2
⌀6.5
⌀3.3 ±0.1
25 ±0.2
43 ±0.3
53 ±0.5
5 +1 -0.5
⌀2.24 +0.3 0

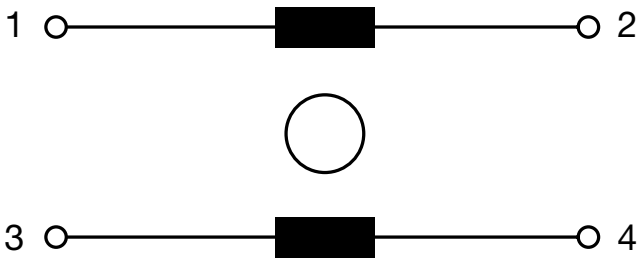
53-40


32.6 ±0.5
49 max.
35 ±0.2
⌀6.5
⌀3.3 ±0.1
25 ±0.2
43 ±0.3
53 ±0.5
5 +1 -0.5
⌀2.5 +0.3 0

53-50



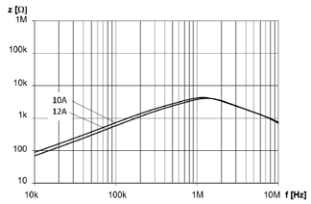
Diagrams



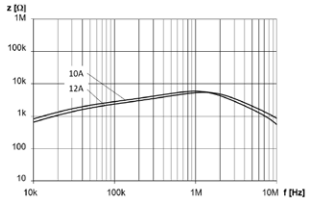
1 phase

Impedance curves

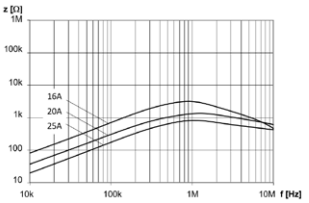
DKIV-1 10-12A



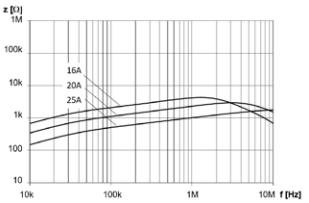
DKIV-1 10-12A NK



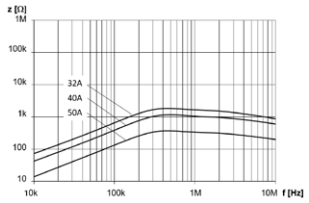
DKIV-1 16-25A



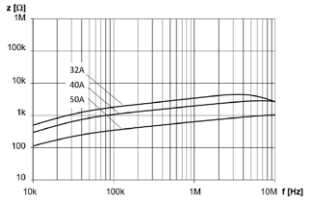
DKIV-1 16-25A NK



DKIV-1 32-50A



DKIV-1 32-50A NK



All Variants

I_n [A]	Nanocrystalline core [NK]	L_n [mH]	R_{cu} [mΩ]	Power Dissipation [W]	f_{RES} [MHz]	Copper ø [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	▮

▮ Most Popular.

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

19.08.2024

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.