

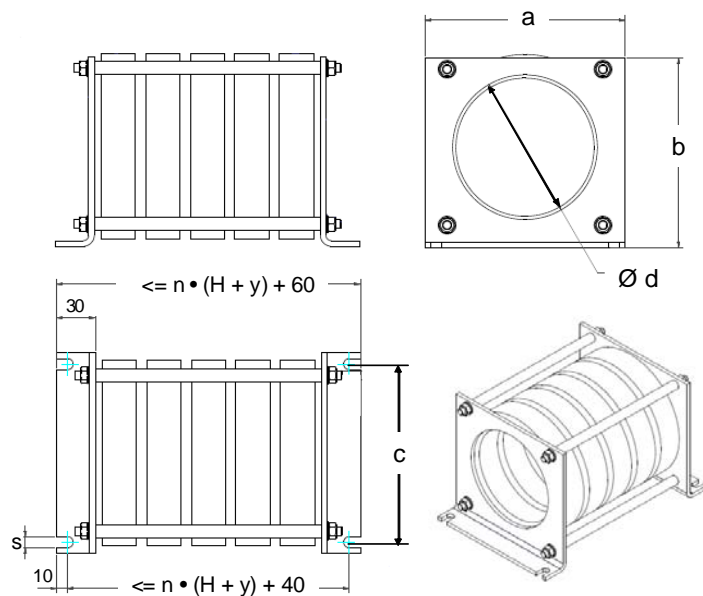


CORE STACK ASSEMBLIES OF NANOCRYSTALLINE VITROPERM FOR EMI NOISE SUPPRESSION

Single turn Chokes consisting of stacked nanocrystalline cores are the preferred solution for effective suppression of conducted Common Mode Noise in large Variable Speed Drives, in Wind Generators and many other applications.

VAC offers assembled core stacks which can be easily and securely integrated into existing applications with the minimum of effort. The assemblies are available in 2 different sizes with different through hole diameters. The stacks are usually custom designed, enabling core types and the number of individual cores (up to 7 pieces) to be freely selected according the required inductance and the amplitude of the appearing unbalanced or common mode currents.

Dimensions of the core stacks (in mm, nominal values):



	Size 1	Size 2
a (mm)	120	180
b (mm)	130	190
c (mm)	70	130
d (mm)	~ 70	> 118
s (mm)	7	10

n = number of stacked cores

H = max. height of the cased/coated single core

y = 9.5 for epoxy coated cores, T60004...

y = 10.2 for cased cores, T60006...

The inductance L at a given frequency of a core stack can be calculated by multiplying the number of stacked cores with the A_L -value of the single core.

A_L : single turn inductance of one core.

I_{bias} : maximum permissible bias current (unbalance or common mode current) through one winding at the given frequency. I_{bias} is independent of the number of stacked cores.

data of single core						data of core stacks					
part number core	Core size Od x Id x h mm x mm x mm	Limit dimensions (incl. Case/coating)			A_L (10 kHz) nominal μH	A_L (100 kHz) nominal μH	size	5 stacked cores			
		OD mm	ID mm	H mm				I_{bias} (10 kHz) typical A	I_{bias} (100 kHz) typical A	L (10 kHz) nominal μH	L (100 kHz) nominal μH
T60004-L2100-W629	100 x 80 x 20	104	75	23	17.3	11.2	1	7	11	86.5	56
T60004-L2100-W723	100 x 80 x 20	104	75	23	11.2	10	1	10.5	13.5	56	50
T60006-L2100-V082	100 x 80 x 25	105.5	75	29.6	56.3	16.9	1	2.5	5	281.5	84.5
T60006-L2100-V081	100 x 80 x 25	105.5	75	29.6	14.5	13.1	1	10.5	13.5	72.5	65.5
T60006-L2102-W468	102 x 76 x 25	108.1	70	30.3	68.8	-	1	3.5	6.5	344	-
T60006-L2102-V080	102 x 76 x 25	108.1	70	30.3	19.1	17.2	1	10.5	13.5	95.5	86
T60006-L2102-W947	102 x 76 x 25	108.1	70	30.3	-	4.2	1	45	47	-	21
T60006-L2160-V074	160 x 130 x 25	166.9	123.9	30.5	26.8	13.7	2	8	13.5	134	68.5
T60004-L2160-W631	160 x 130 x 25	165	125	28.5	20.1	13.1	2	11	17	100.5	65.5
T60006-L2160-V088	160 x 130 x 25	166.9	123.9	30.5	20.1	13.1	2	11	17	100.5	65.5
T60004-L2160-W720	160 x 130 x 25	165	125	28.5	13	11.7	2	17	22	65	58.5
T60006-L2160-V066	160 x 130 x 25	166.9	123.9	30.5	12.9	11.7	2	17	22	64.5	58.5
T60006-L2160-W982	160 x 130 x 25	166.9	123.9	30.6	-	2.86	2	75	80	-	14.3
T60004-L2160-V062	160 x 130 x 30	165	125	33.5	16	14	2	11	17	80	70

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