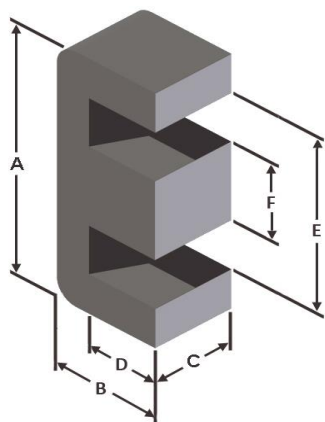


42.8 mm/1.685 in. E-Core



Typical Part Number: E MS - 043 21 20 - 090

Geometry → E
 Material Type → MS
 "A" Dimension in XXXmm → 043
 "B" Dimension in XXmm → 21
 "C" Dimension in XXmm → 20
 Reference Permeability → 090
 Standard Industrial Size: DIN 42/20 (E168A)

Physical Dimensions

A	42.8 ± 0.64 mm	1.685 ± 0.025 in
B	21.1 ± 0.33 mm	0.831 ± 0.013 in
C	20 ± 0.25 mm	0.787 ± 0.010 in
D	15 mm (min.)	0.591 in (min.)
E	30.4 mm (min.)	1.197 in (min.)
F	11.9 ± 0.25 mm	0.469 ± 0.010 in

Magnetic Dimensions

Ae	Effective Magnetic Cross Section	2.37 cm ²
Le	Effective Magnetic Path Length	9.84 cm
Ve	Effective Core Volume	23.3 cm ³
WA	Minimum Effective Window Area	2.74 cm ²
SA	Surface Area	81.3 cm ²
MLT	Mean Length Per Turn	10.1 cm

Permeability

Part Numbers

Reference Permeability	A _L Value (nH/N ²)	MS Sendust	FluxSan™ Silicon Iron
14μ	73	EMS-0432120-014	EFS-0432120-014
26μ	104	EMS-0432120-026	EFS-0432120-026
40μ	140	EMS-0432120-040	EFS-0432120-040
60μ	194	EMS-0432120-060	EFS-0432120-060
75μ	257	EMS-0432120-075	
90μ	281	EMS-0432120-090	
Approximate Unit Weight:		64 g/half	76 g/half

Test Conditions

Winding	N=100, #18 AWG
Frequency	10 kHz
Voltage	1.1 V
A_L Tolerance	±8%

Coating/Packaging Information

Coating Type	None
Voltage Breakdown	N/A
Limit	N/A
Package Quantity	140 Halves/Box

Winding Table

Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
	mm		3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400
Full Winding	Turns	15	23	35	55	85	131	203	314	486	752	1,164
	Rdc(Ω)	3.1 m	7.6 m	18.3 m	45.9 m	112.7 m	276.2 m	680.8 m	1.7	4.1	10.1	25.0