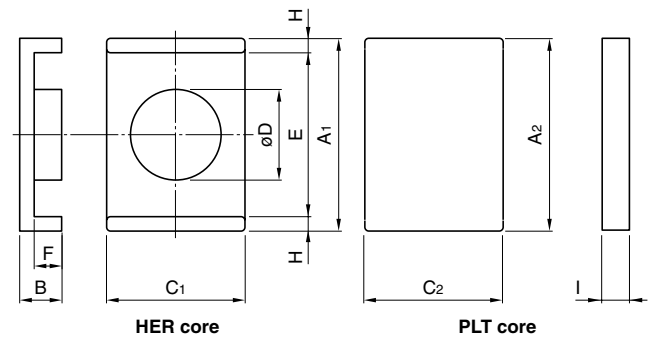
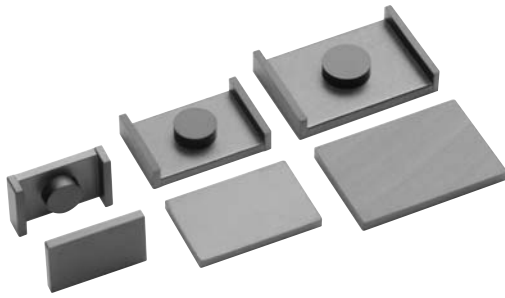


EIR CORES

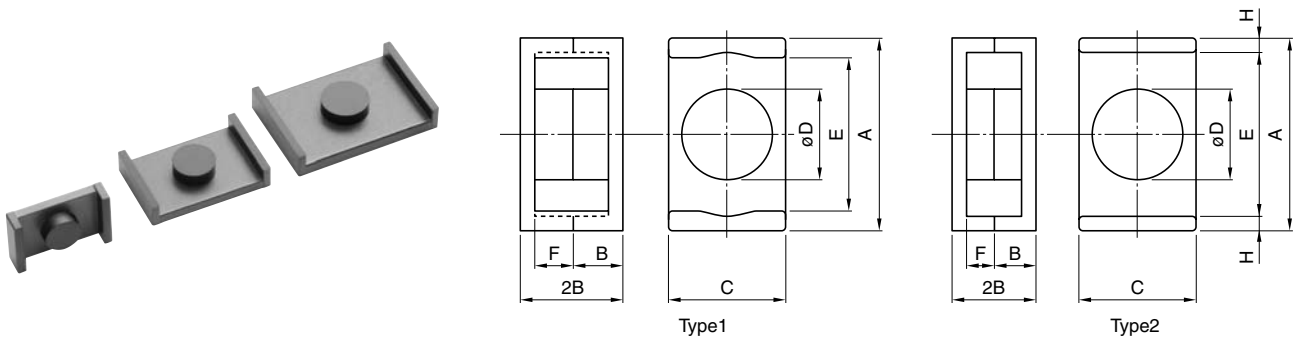


Part No.(HER+PLT)	Dimensions in mm										
	A ₁	B	C ₁	øD	E	F	H	A ₂	C ₂	I	
PC95EIR14/4.5/9-Z	13.85±0.25	3.20±0.10	9.00±0.20	5.20±0.10	11.35±0.15	1.90±0.10	1.25	14.00±0.20	9.20±0.20	1.30±0.10	
PC90EIR14/4.5/9-Z											
PC95EIR18/5/12-Z	18.15±0.30	3.50±0.10	12.00±0.20	6.00±0.10	15.75±0.25	2.00±0.10	1.20	18.20±0.25	12.20±0.20	1.50±0.10	
PC90EIR18/5/12-Z											
PC95EIR22/5.5/15-Z	22.10±0.35	3.75±0.10	15.25±0.25	6.80±0.10	19.70±0.30	2.00±0.10	1.20	22.20±0.30	15.50±0.20	1.75±0.10	
PC90EIR22/5.5/15-Z											

Part No. (HER+PLT)	Effective parameter							Electrical characteristics	
	C ₁ (mm ⁻¹)	l _e (mm)	A _e (mm ²)	V _e (mm ³)	A _{min.} (mm ²)	A _{cw} (mm ²)	Weight (g)	AL-value (nH/N ²) Without air gap	With air gap
PC95EIR14/4.5/9-Z	0.679	15.4	22.7	349	21.2	5.84	2.0	2800±25%	63±3%
PC90EIR14/4.5/9-Z								2050±25%	100±5% 160±7%
PC95EIR18/5/12-Z	0.601	19.7	32.8	645	28.3	9.75	3.8	3690±25%	80±3%
PC90EIR18/5/12-Z								2500±25%	125±5% 200±7%
PC95EIR22/5.5/15-Z	0.505	23.2	46.1	1070	36.3	12.9	6.5	4150±25%	80±3%
PC90EIR22/5.5/15-Z								3000±25%	125±5% 200±7%

* AL-value: 1kHz, 0.5mA, 100Ts

ER CORES

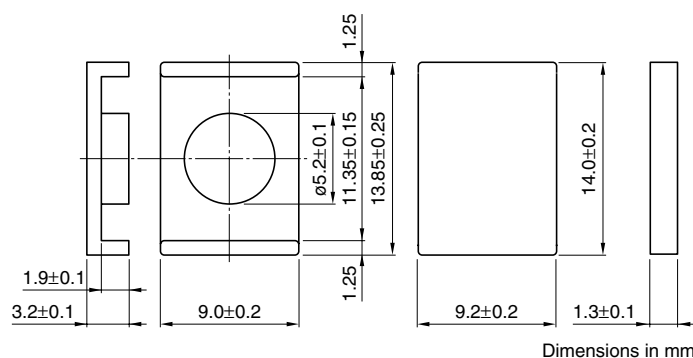


Part No.(HER+HER)	Type	Dimensions in mm						
		A	B	C	ϕD	E	F	H
PC95ER9.5/5-Z PC90ER9.5/5-Z	1	9.5 ⁺⁰ _{-0.3}	2.5 ⁺⁰ _{-0.1}	5.0 ⁺⁰ _{-0.2}	3.5 ⁺⁰ _{-0.2}	7.0min.	1.6 ^{+0.15} ₋₀	—
PC95ER11/5-Z PC90ER11/5-Z	1	11.0 ⁺⁰ _{-0.35}	2.5 ⁺⁰ _{-0.1}	6.0 ⁺⁰ _{-0.2}	4.25 ⁺⁰ _{-0.25}	7.9min.	1.5 ^{+0.15} ₋₀	—
PC95ER14/4.5/9-Z PC90ER14/4.5/9-Z	2	13.85±0.25	2.25±0.10	9.00±0.20	5.20±0.10	11.35±0.15	0.95±0.10	1.25
PC95ER14.5/6-Z PC90ER14.5/6-Z	2	14.5±0.2	3.0 ⁺⁰ _{-0.1}	6.7±0.1	4.7±0.1	11.8±0.2	1.65±0.1	1.35
PC95ER18/5/12-Z PC90ER18/5/12-Z	2	18.15±0.30	2.50±0.10	12.00±0.20	6.00±0.10	15.75±0.25	1.00±0.10	1.20
PC95ER22/5.5/15-Z PC90ER22/5.5/15-Z	2	22.10±0.35	2.75±0.10	15.25±0.25	6.80±0.10	19.70±0.30	1.00±0.10	1.20
PC95ER25/5.5/18-Z PC90ER25/5.5/18-Z	2	25.30±0.40	2.75±0.10	18.00±0.40	7.00±0.15	22.90±0.40	1.00±0.10	1.20

Part No. (HER+HER)	Effective parameter						Weight (g)	Electrical characteristics	
	C ₁ (mm ⁻¹)	ℓ_e (mm)	A _e (mm ²)	V _e (mm ³)	A _{min.} (mm ²)	A _{cw} (mm ²)		AL-value (nH/N ²)*	
							Without air gap	With air gap	
PC95ER9.5/5-Z PC90ER9.5/5-Z	1.67	14.2	8.47	120	7.6	7.07	0.7	1190±25% 610min.	63±5% 100±7%
PC95ER11/5-Z PC90ER11/5-Z	1.23	14.7	11.9	174	10.3	7.44	1.1	1680±25% 1300±25%	63±5% 100±7%
PC95ER14/4.5/9-Z PC90ER14/4.5/9-Z	0.679	15.4	22.7	349	21.2	5.84	2.0	2550±25% 2100±25%	63±3% 100±5% 160±7%
PC95ER14.5/6-Z PC90ER14.5/6-Z	1.08	19.0	17.6	333	17.3	8.42	2.0	1880±25% 1300±25%	100±5% 160±7%
PC95ER18/5/12-Z PC90ER18/5/12-Z	0.601	19.7	32.8	645	28.3	9.75	3.8	3500±25% 2900±25%	80±3% 125±5% 200±7%
PC95ER22/5.5/15-Z PC90ER22/5.5/15-Z	0.505	23.2	46.1	1070	36.3	12.9	6.5	4300±25% 3200±25%	80±3% 125±5% 200±7%
PC95ER25/5.5/18-Z PC90ER25/5.5/18-Z	0.486	26.1	53.7	1400	38.5	15.9	8.5	4400±25% 3400±25%	80±3% 125±3% 200±5%

* AL-value: 1kHz, 0.5mA, 100Ts

EIR Series EIR14/4.5/9 Cores



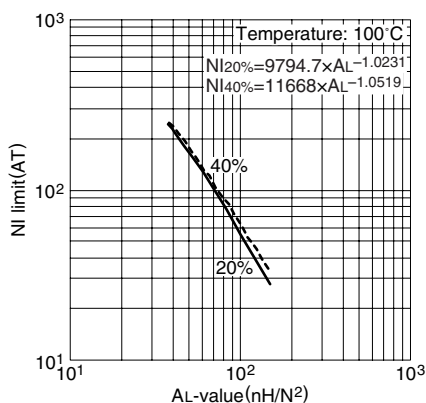
PARAMETER

Core factor	C1	mm ⁻¹	0.679
Effective magnetic path length	ℓ_e	mm	15.4
Effective cross-sectional area	Ae	mm ²	22.7
Effective core volume	Ve	mm ³	349
Cross-sectional winding area of core	Acw	mm ²	5.84
Weight (approx.)		g	2.0

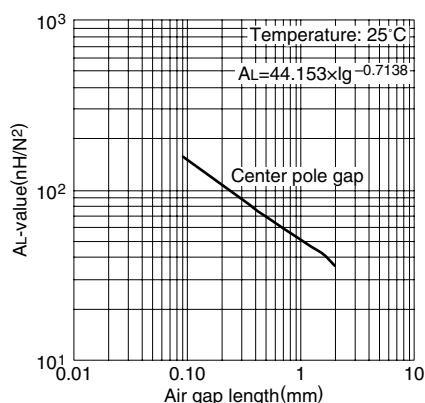
Part No.	AL-value (nH/N ²)*	Core loss (W) 100kHz, 200mT
PC90EIR14/4.5/9-Z	2050±25%	0.3(100°C)
PC95EIR14/4.5/9-Z	2800±25%	0.25/0.2/0.25(25°C/80°C/120°C)

* 1kHz, 0.5mA, 100Ts

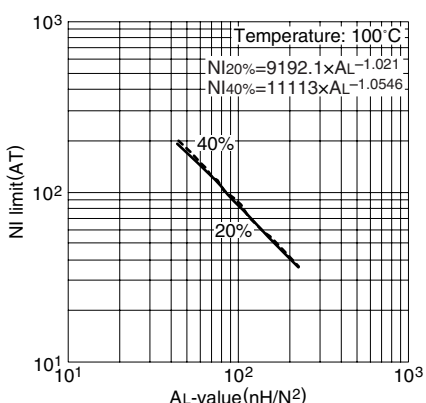
NI limit vs. AL-value for PC90EIR14/4.5/9 gapped core (Typical)



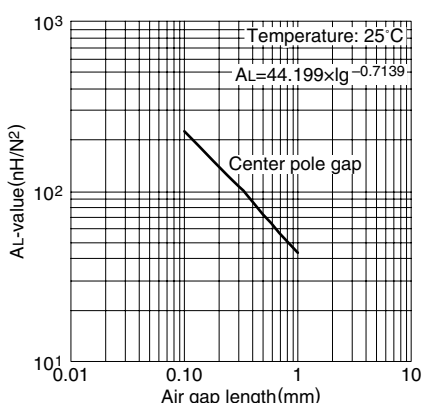
AL-value vs. Air gap length for PC90EIR14/4.5/9 core (Typical)



NI limit vs. AL-value for PC95EIR14/4.5/9 gapped core (Typical)



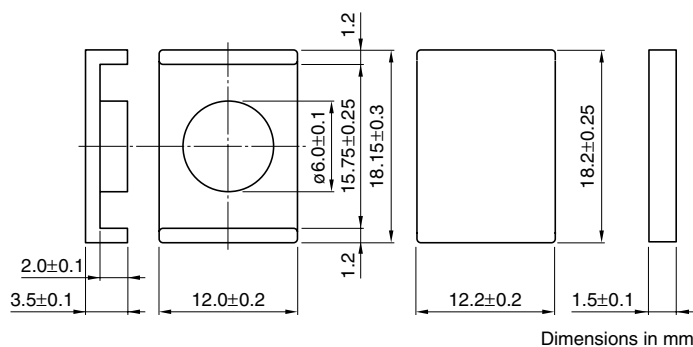
AL-value vs. Air gap length for PC95EIR14/4.5/9 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ϕ 0.18 2UEW 100Ts
 • Frequency: 1kHz
 • Level: 0.5mA

EIR Series EIR18/5/12 Cores



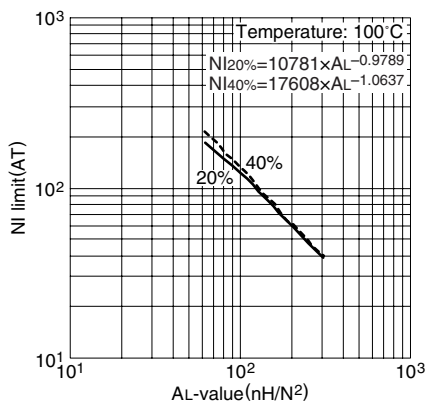
PARAMETER

Core factor	C1	mm ⁻¹	0.601
Effective magnetic path length	ℓ_e	mm	19.7
Effective cross-sectional area	Ae	mm ²	32.8
Effective core volume	Ve	mm ³	645
Cross-sectional winding area of core	Acw	mm ²	9.75
Weight (approx.)		g	3.8

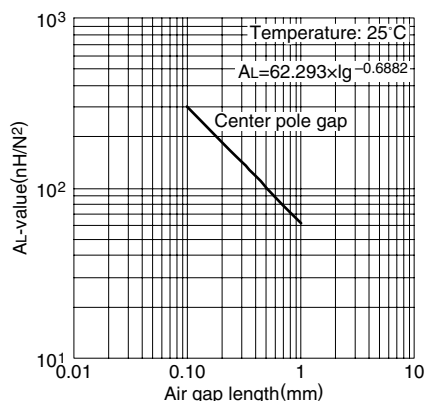
Part No.	AL-value (nH/N ²)*	Core loss (W) 100kHz, 200mT
PC90EIR18/5/12-Z	2500±25%	0.45(100°C)
PC95EIR18/5/12-Z	3690±25%	0.4/0.35/0.4(25°C/80°C/120°C)

* 1kHz, 0.5mA, 100Ts

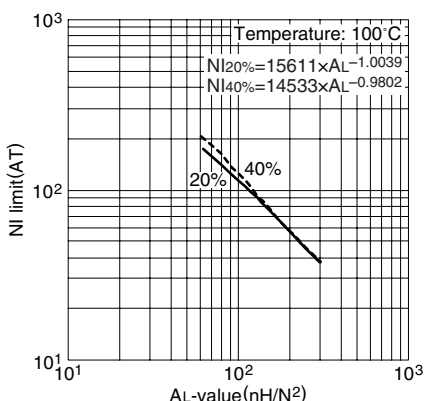
NI limit vs. AL-value for PC90EIR18/5/12 gapped core (Typical)



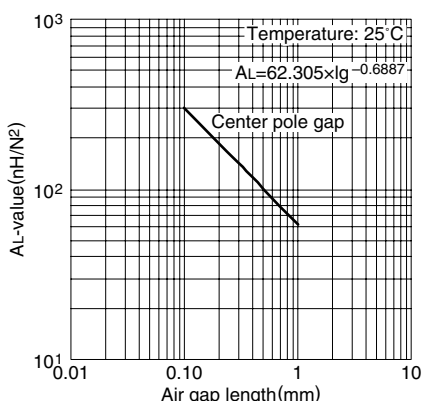
AL-value vs. Air gap length for PC90EIR18/5/12 core (Typical)



NI limit vs. AL-value for PC95EIR18/5/12 gapped core (Typical)



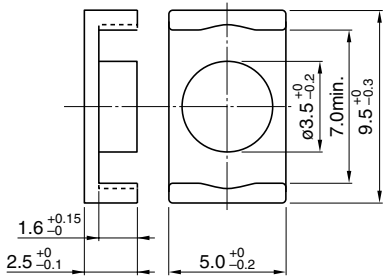
AL-value vs. Air gap length for PC95EIR18/5/12 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ø0.18 2UEW 100Ts
 • Frequency: 1kHz
 • Level: 0.5mA

ER Series ER9.5/5 Cores



Dimensions in mm

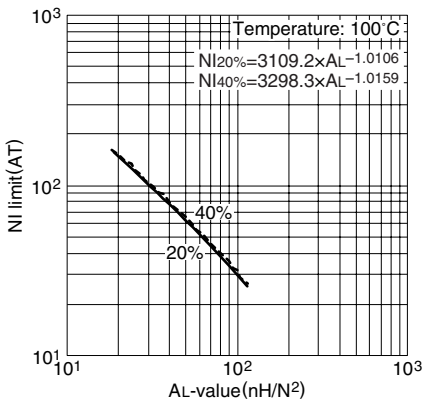
PARAMETER

Core factor	C1	mm ⁻¹	1.67
Effective magnetic path length	ℓ_e	mm	14.2
Effective cross-sectional area	Ae	mm ²	8.47
Effective core volume	Ve	mm ³	120
Cross-sectional winding area of core	Acw	mm ²	7.07
Weight (approx.)		g	0.7

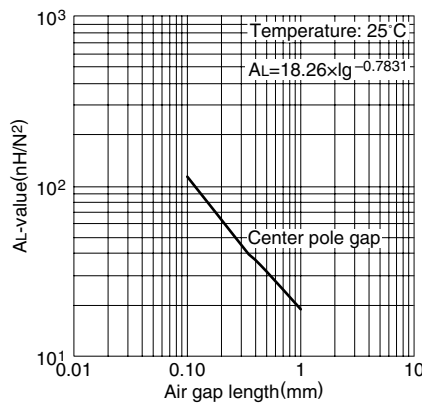
Part No.	AL-value (nH/N ²)*	Core loss (W) 100kHz, 200mT
PC90ER9.5/5-Z	610min.	0.1(100°C)
PC95ER9.5/5-Z	1190±25%	0.1/0.09/0.1(25°C/80°C/120°C)

* 1kHz, 0.5mA, 100Ts

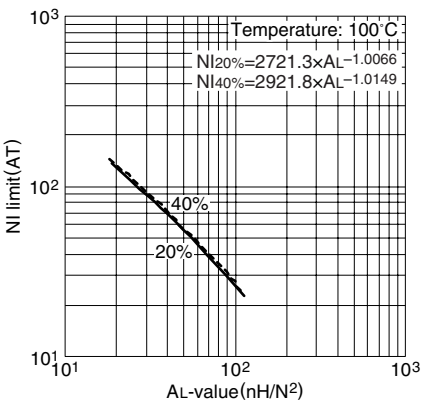
NI limit vs. AL-value for PC90ER9.5/5 gapped core (Typical)



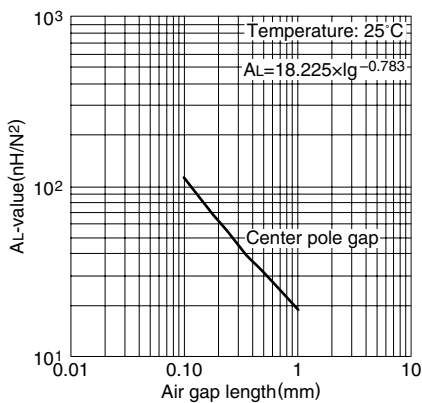
AL-value vs. Air gap length for PC90ER9.5/5 core (Typical)



NI limit vs. AL-value for PC95ER9.5/5 gapped core (Typical)



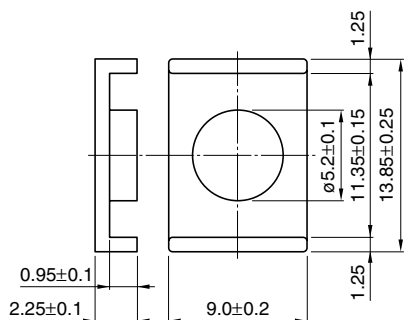
AL-value vs. Air gap length for PC95ER9.5/5 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ϕ 0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

ER Series ER14/4.5/9 Cores



Dimensions in mm

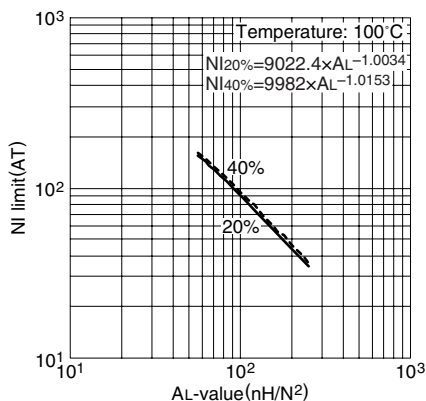
PARAMETER

Core factor	C1	mm ⁻¹	0.679
Effective magnetic path length	ℓ_e	mm	15.4
Effective cross-sectional area	Ae	mm ²	22.7
Effective core volume	Ve	mm ³	349
Cross-sectional winding area of core	Acw	mm ²	5.84
Weight (approx.)		g	2.0

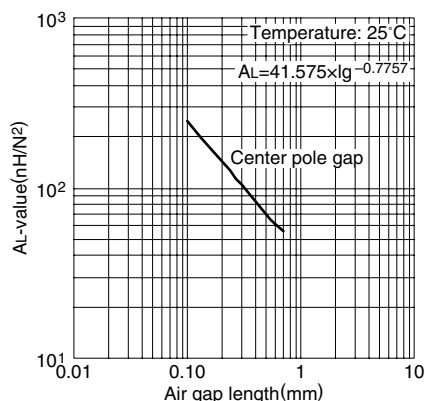
Part No.	AL-value (nH/N ²)*	Core loss (W) 100kHz, 200mT
PC90ER14/4.5/9-Z	2100±25%	0.3(100°C)
PC95ER14/4.5/9-Z	2550±25%	0.25/0.2/0.25(25°C/80°C/120°C)

* 1kHz, 0.5mA, 100Ts

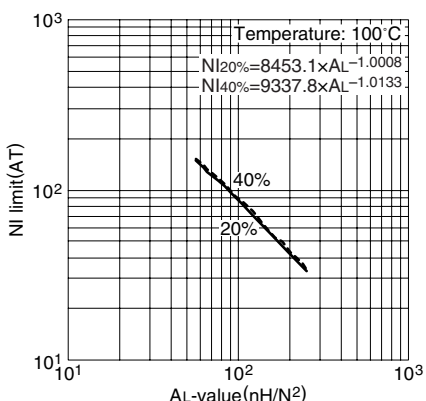
NI limit vs. AL-value for PC90ER14/4.5/9 gapped core (Typical)



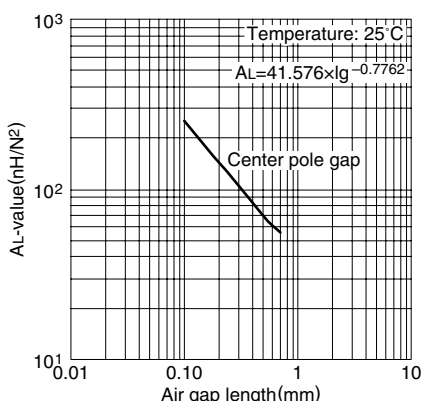
AL-value vs. Air gap length for PC90ER14/4.5/9 core (Typical)



NI limit vs. AL-value for PC95ER14/4.5/9 gapped core (Typical)



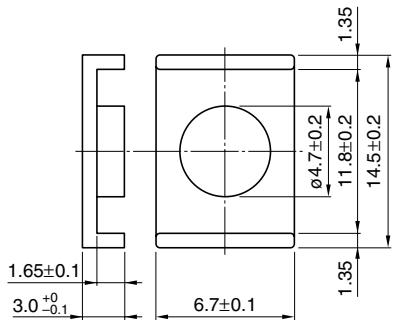
AL-value vs. Air gap length for PC95ER14/4.5/9 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ϕ 0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

ER Series ER14.5/6 Cores



Dimensions in mm

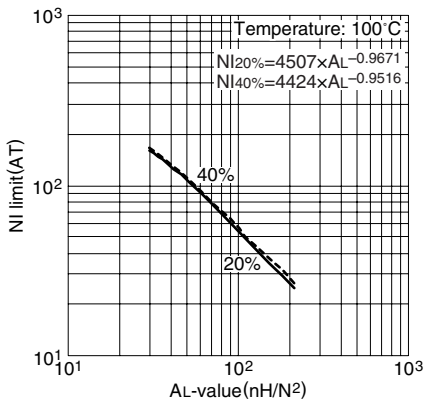
PARAMETER

Core factor	C1	mm ⁻¹	1.08
Effective magnetic path length	ℓ_e	mm	19.0
Effective cross-sectional area	Ae	mm ²	17.6
Effective core volume	Ve	mm ³	333
Cross-sectional winding area of core	Acw	mm ²	8.42
Weight (approx.)	g		2.0

Part No.	AL-value (nH/N ²)*	Core loss (W) at 25/80/120°C 100kHz, 200mT
PC95ER14.5/6-Z	3500±25%	0.3/0.28/0.3

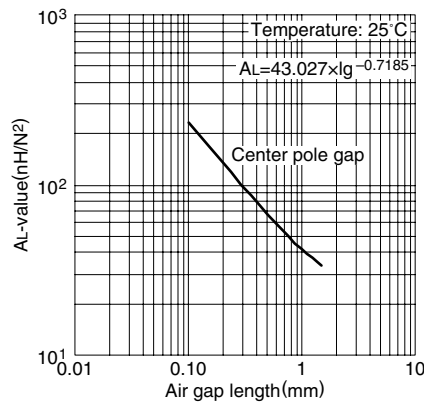
* 1kHz, 0.5mA, 100Ts

NI limit vs. AL-value for PC95ER14.5/6 gapped core (Typical)



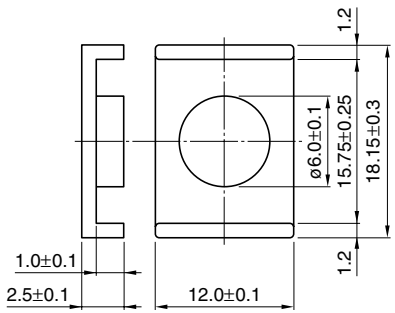
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC95ER14.5/6 core (Typical)



Measuring conditions • Coil: ø0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

ER Series ER18/5/12 Cores



Dimensions in mm

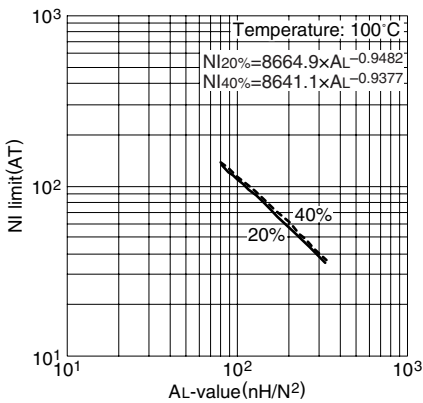
PARAMETER

Core factor	C1	mm ⁻¹	0.601
Effective magnetic path length	ℓ_e	mm	19.7
Effective cross-sectional area	Ae	mm ²	32.8
Effective core volume	Ve	mm ³	645
Cross-sectional winding area of core	Acw	mm ²	9.75
Weight (approx.)		g	3.8

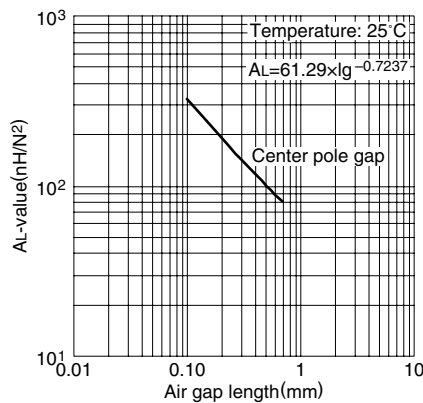
Part No.	AL-value (nH/N ²)*	Core loss (W) 100kHz, 200mT
PC90ER18/5/12-Z	2900±25%	0.5(100°C)
PC95ER18/5/12-Z	3500±25%	0.45/0.4/0.45(25°C/80°C/120°C)

* 1kHz, 0.5mA, 100Ts

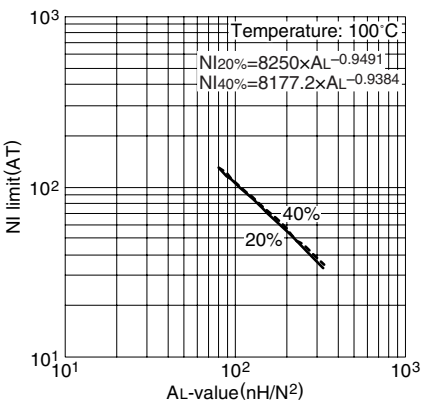
NI limit vs. AL-value for PC90ER18/5/12 gapped core (Typical)



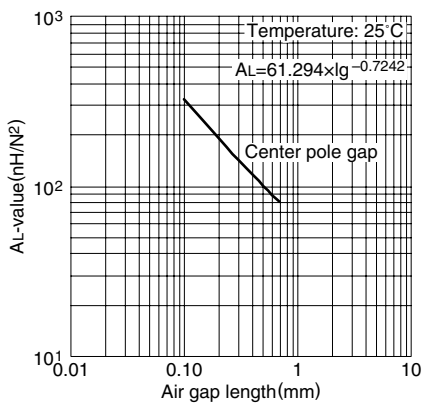
AL-value vs. Air gap length for PC90ER18/5/12 core (Typical)



NI limit vs. AL-value for PC95ER18/5/12 gapped core (Typical)



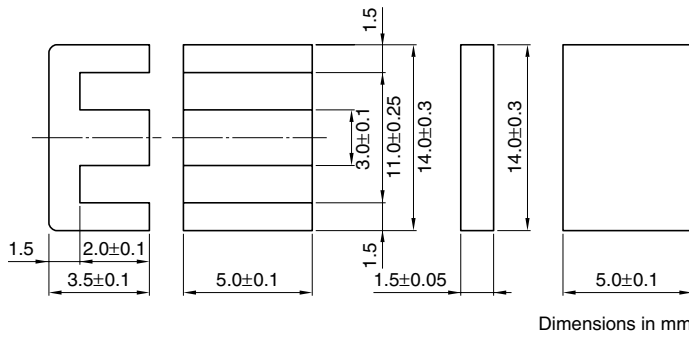
AL-value vs. Air gap length for PC95ER18/5/12 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ϕ 0.18 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

EI Series EI14/5/5 Cores



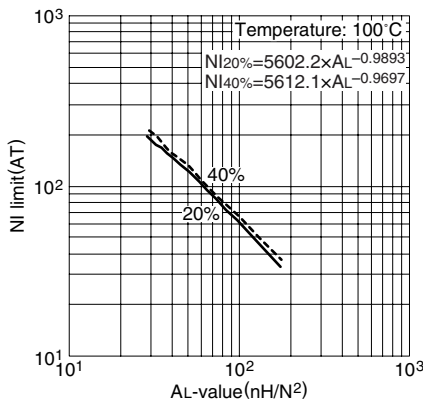
PARAMETER

Core factor	C1	mm ⁻¹	1.11
Effective magnetic path length	ℓ_e	mm	16.7
Effective cross-sectional area	Ae	mm ²	15.0
Effective core volume	Ve	mm ³	251
Cross-sectional winding area of core	Acw	mm ²	8.0
Weight (approx.)	g		1.3

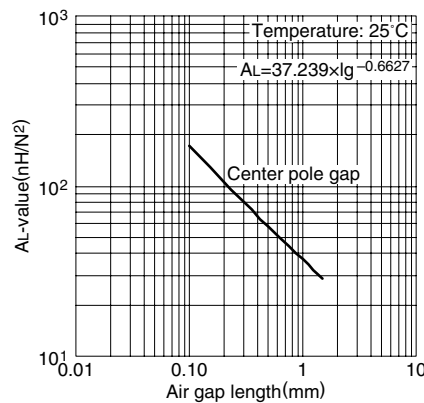
Part No.	AL-value (nH/N ²)*	Core loss (W) 100kHz, 200mT
PC90EI14/5/5-Z	1200±25%	0.3(100°C)
PC95EI14/5/5-Z	1550±25%	0.3/0.25/0.3(25°C/80°C/120°C)

* 1kHz, 0.5mA, 100Ts

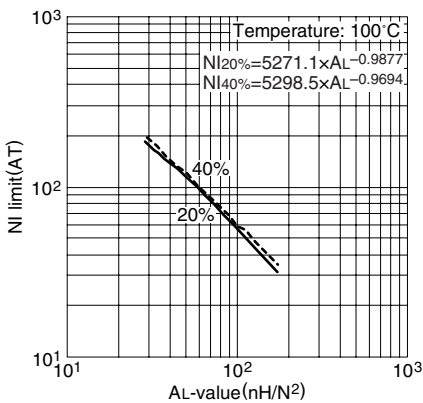
NI limit vs. AL-value for PC90EI14/5/5 gapped core (Typical)



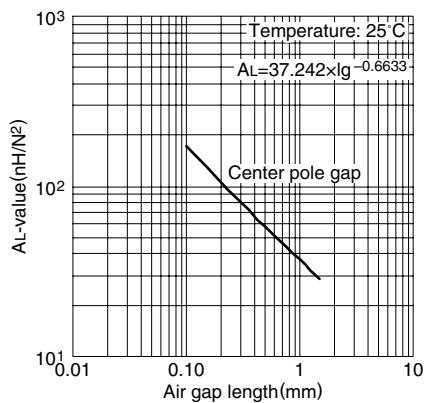
AL-value vs. Air gap length for PC90EI14/5/5 core (Typical)



NI limit vs. AL-value for PC95EI14/5/5 gapped core (Typical)



AL-value vs. Air gap length for PC95EI14/5/5 core (Typical)



Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

Measuring conditions • Coil: ϕ 0.18 2UEW 100Ts
 • Frequency: 1kHz
 • Level: 0.5mA