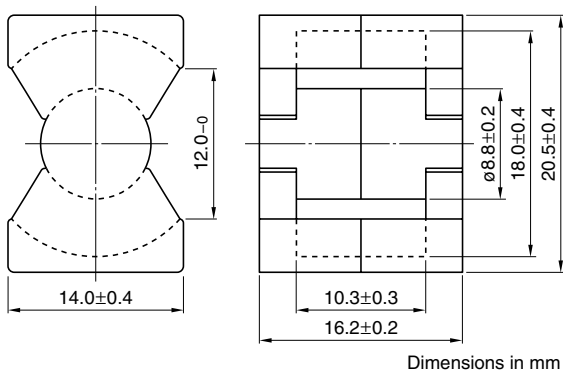


PQ Series PQ20/16 Cores



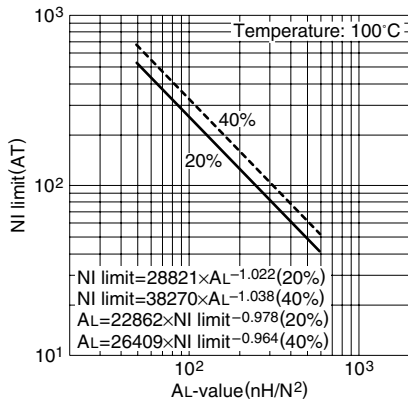
Parameter

Core factor	C1	mm ⁻¹	0.605
Effective magnetic path length	ℓ _e	mm	37.4
Effective cross-sectional area	A _e	mm ²	62
Effective core volume	V _e	mm ³	2310
Cross-sectional center pole area	A _{cp}	mm ²	60.8
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	58.1
Cross-sectional winding area of core	A _{cw}	mm ²	47.4
Weight (approx.)	g		13

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ20/16Z-12	3880±25% (1kHz, 0.5mA)* 5210 min. (100kHz, 200mT)	0.84 max.	70W (100kHz)

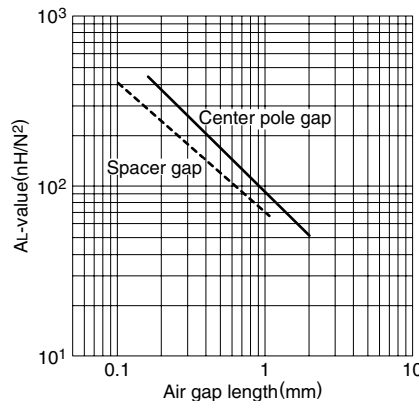
* Coil: ø0.35 2UEW 100Ts

NI limit vs. AL-value for PC44PQ20/16 gapped core (Typical)



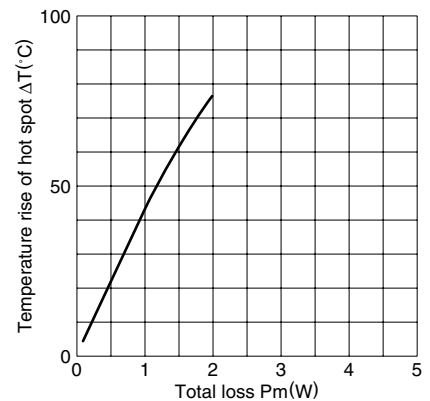
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ20/16 core (Typical)

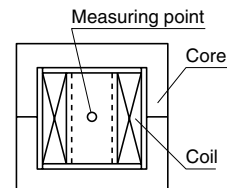


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

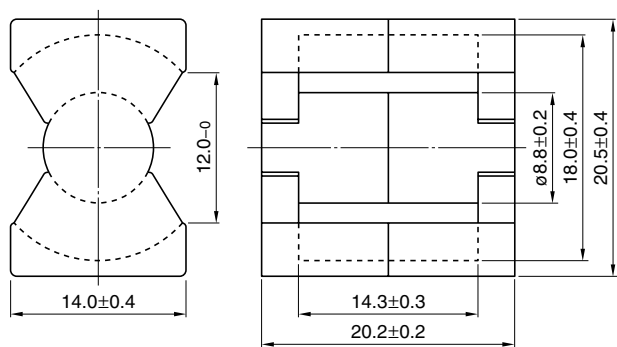
Temperature rise vs. Total loss for PQ20/16 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)



PQ Series PQ20/20 Cores



Dimensions in mm

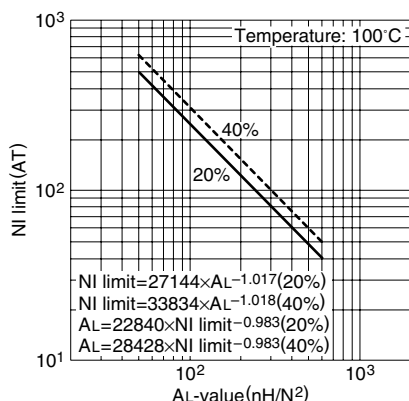
Parameter

Core factor	C1	mm ⁻¹	0.738
Effective magnetic path length	ℓ _e	mm	45.4
Effective cross-sectional area	A _e	mm ²	62
Effective core volume	V _e	mm ³	2790
Cross-sectional center pole area	A _{cp}	mm ²	60.8
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	58.1
Cross-sectional winding area of core	A _{cw}	mm ²	65.8
Weight (approx.)	g		15

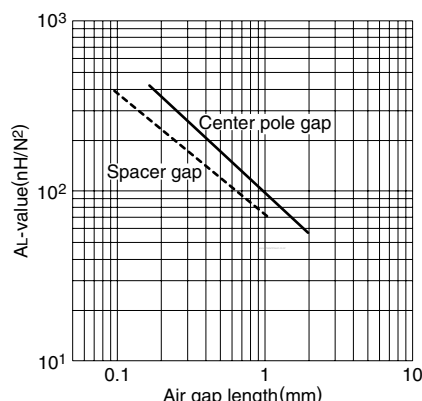
Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44PQ20/20Z-12	3150±25% (1kHz, 0.5mA)* 4290 min. (100kHz, 200mT)	1.02 max.		92W (100kHz)
PC50PQ20/20Z-12	2000±25% (1kHz, 0.5mA)*	0.33 max.		187W (500kHz)

* Coil: ø0.35 2UEW 100Ts

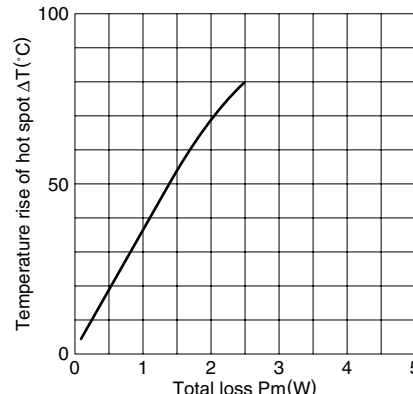
NI limit vs. AL-value for PC44PQ20/20 gapped core (Typical)



AL-value vs. Air gap length for PC44PQ20/20 core (Typical)

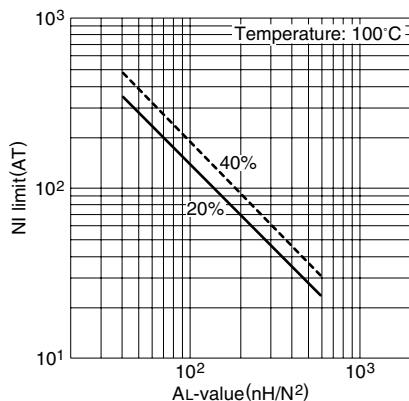


Temperature rise vs. Total loss for PQ20/20 core (Typical) (Ambient temperature: 25°C)



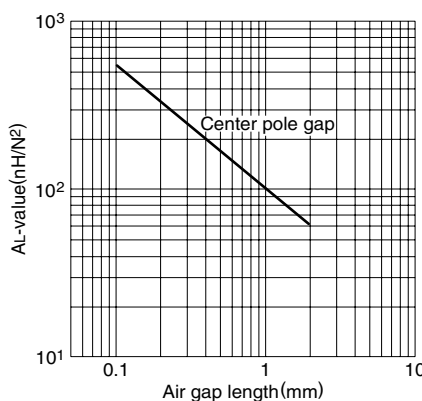
Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)

NI limit vs. AL-value for PC50PQ20/20 gapped core (Typical)

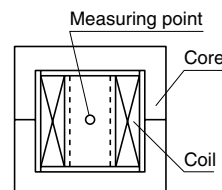


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

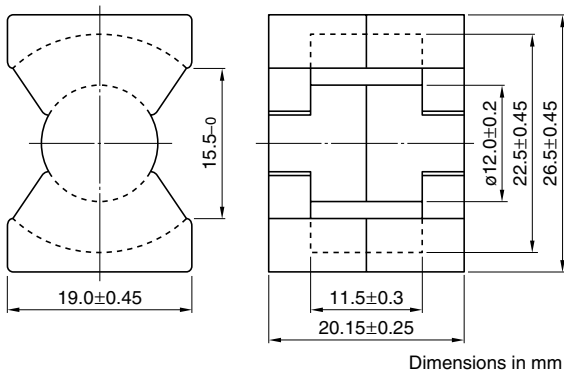
AL-value vs. Air gap length for PC50PQ20/20 core (Typical)



Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



PQ Series PQ26/20 Cores



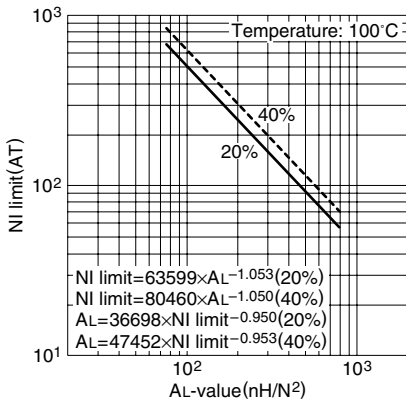
Parameter

Core factor	C1	mm ⁻¹	0.391
Effective magnetic path length	ℓ _e	mm	46.3
Effective cross-sectional area	A _e	mm ²	119
Effective core volume	V _e	mm ³	5490
Cross-sectional center pole area	A _{cp}	mm ²	113
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	109
Cross-sectional winding area of core	A _{cw}	mm ²	60.4
Weight (approx.)	g		31

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ26/20Z-12	6170±25% (1kHz, 0.5mA)* 8060 min. (100kHz, 200mT)	1.94 max.	170W (100kHz)

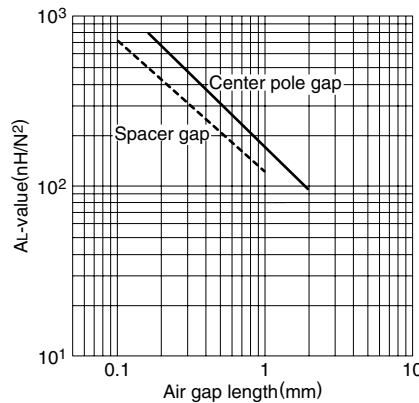
* Coil: ø0.35 2UEW 100Ts

NI limit vs. AL-value for PC44PQ26/20 gapped core (Typical)



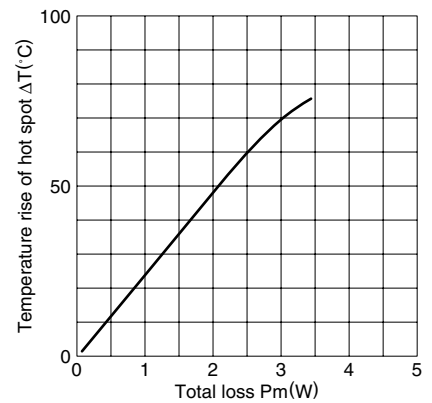
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ26/20 core (Typical)

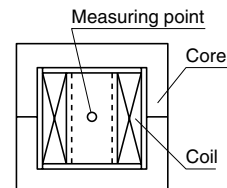


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

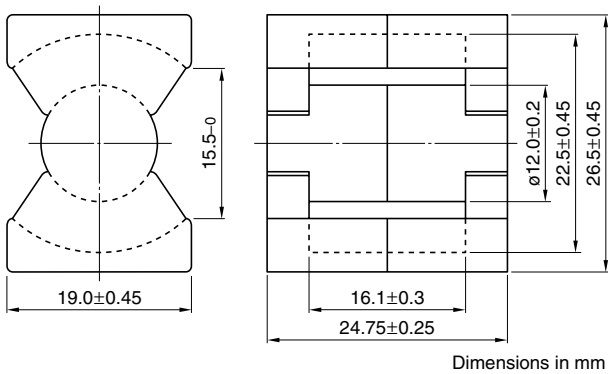
Temperature rise vs. Total loss for PQ26/20 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)



PQ Series PQ26/25 Cores



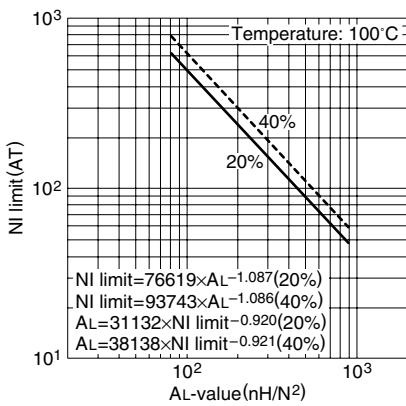
Parameter

Core factor	C1	mm ⁻¹	0.472
Effective magnetic path length	ℓ _e	mm	55.5
Effective cross-sectional area	A _e	mm ²	118
Effective core volume	V _e	mm ³	6530
Cross-sectional center pole area	A _{cp}	mm ²	113
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	109
Cross-sectional winding area of core	A _{cw}	mm ²	84.5
Weight (approx.)	g		36

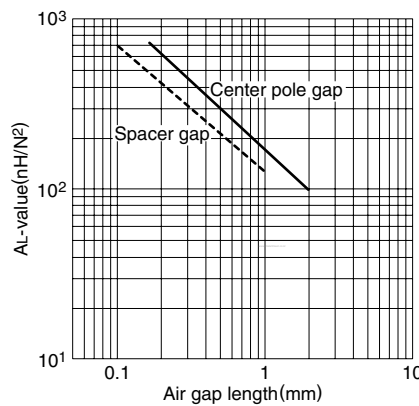
Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C		Calculated output power (forward converter mode)
		100kHz, 200mT	500kHz, 50mT	
PC44PQ26/25Z-12	5250±25% (1kHz, 0.5mA)* 6680 min. (100kHz, 200mT)	2.32 max.		195W (100kHz)
PC50PQ26/25Z-12	3200±25% (1kHz, 0.5mA)*	0.76 max.		366W (500kHz)

* Coil: ø0.35 2UEW 100Ts

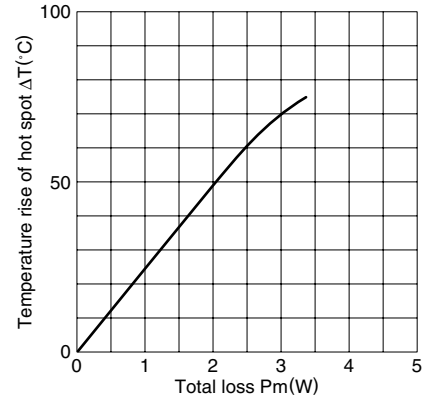
NI limit vs. AL-value for PC44PQ26/25 gapped core (Typical)



AL-value vs. Air gap length for PC44PQ26/25 core (Typical)

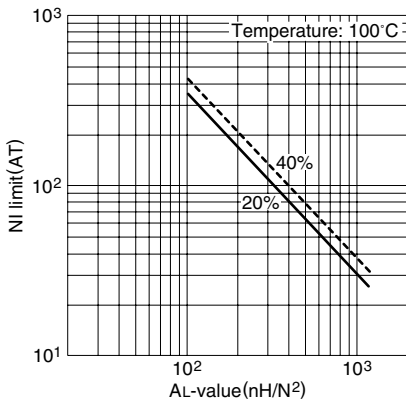


Temperature rise vs. Total loss for PQ26/25 core (Typical) (Ambient temperature: 25°C)



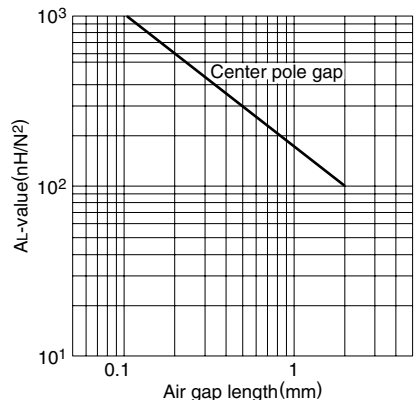
Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)

NI limit vs. AL-value for PC50PQ26/25 gapped core (Typical)

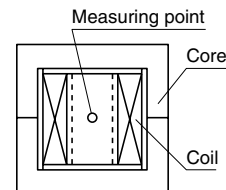


Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

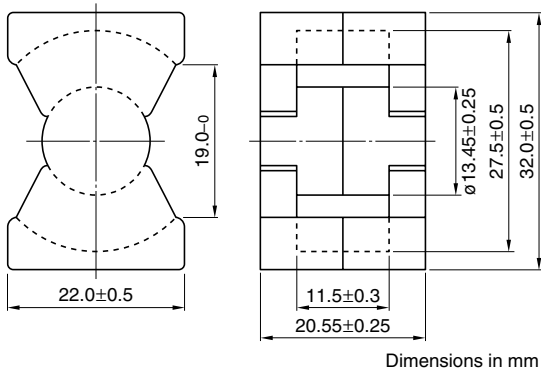
AL-value vs. Air gap length for PC50PQ26/25 core (Typical)



Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA



PQ Series PQ32/20 Cores



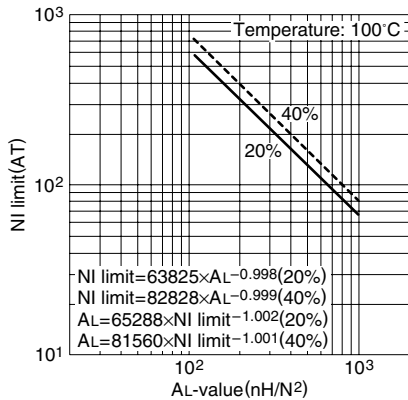
Parameter

Core factor	C1	mm ⁻¹	0.326
Effective magnetic path length	ℓ _e	mm	55.5
Effective cross-sectional area	A _e	mm ²	170
Effective core volume	V _e	mm ³	9420
Cross-sectional center pole area	A _{cp}	mm ²	142
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	137
Cross-sectional winding area of core	A _{cw}	mm ²	80.8
Weight (approx.)	g		42

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ32/20Z-12	7310±25% (1kHz, 0.5mA)* 9640 min. (100kHz, 200mT)	2.92 max.	232W (100kHz)

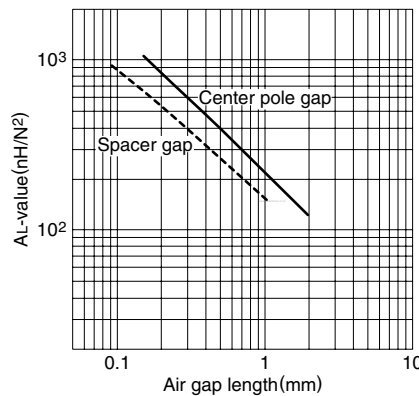
* Coil: ø0.35 2UEW 100Ts

NI limit vs. AL-value for PC44PQ32/20 gapped core (Typical)



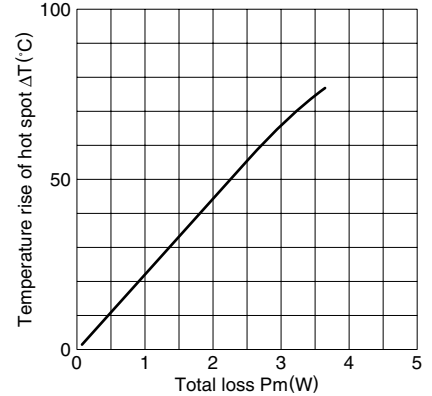
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ32/20 core (Typical)

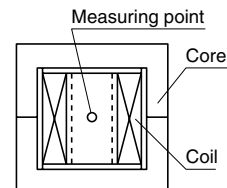


Measuring conditions • Coil: ø0.35 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

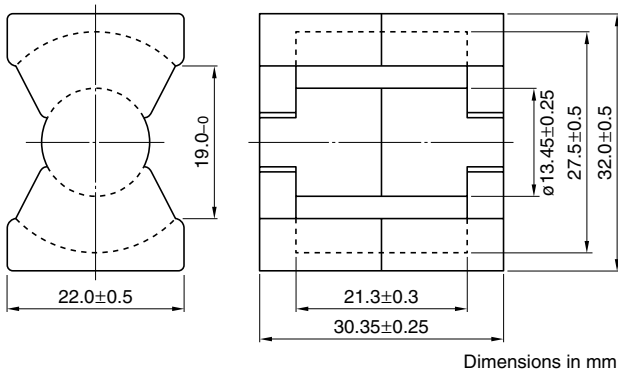
Temperature rise vs. Total loss for PQ32/20 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)



PQ Series PQ32/30 Cores



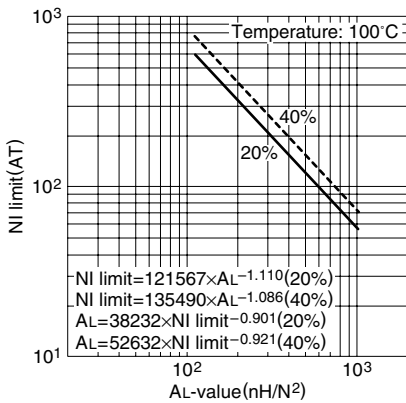
Parameter

Core factor	C1	mm ⁻¹	0.464
Effective magnetic path length	ℓ _e	mm	74.6
Effective cross-sectional area	A _e	mm ²	161
Effective core volume	V _e	mm ³	12000
Cross-sectional center pole area	A _{cp}	mm ²	142
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	137
Cross-sectional winding area of core	A _{cw}	mm ²	149.6
Weight (approx.)		g	55

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ32/30Z-12	5140±25% (1kHz, 0.5mA)* 6790 min. (100kHz, 200mT)	3.92 max.	331W (100kHz)

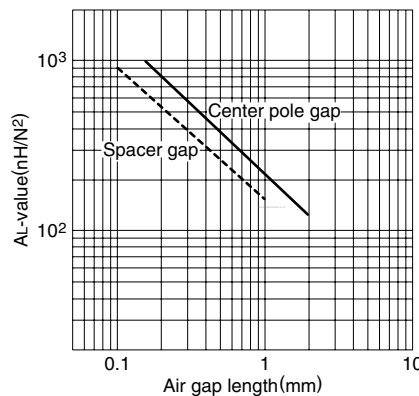
* Coil: ø0.4 2UEW 100Ts

NI limit vs. AL-value for PC44PQ32/30 gapped core (Typical)



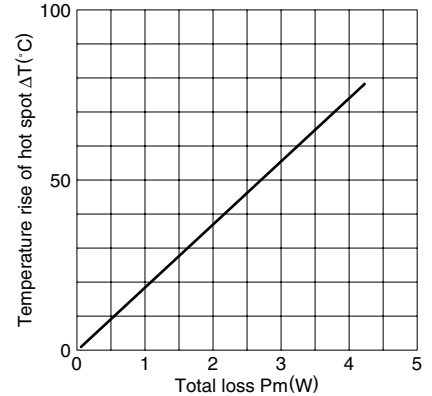
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ32/30 core (Typical)

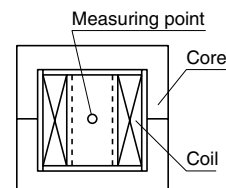


Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

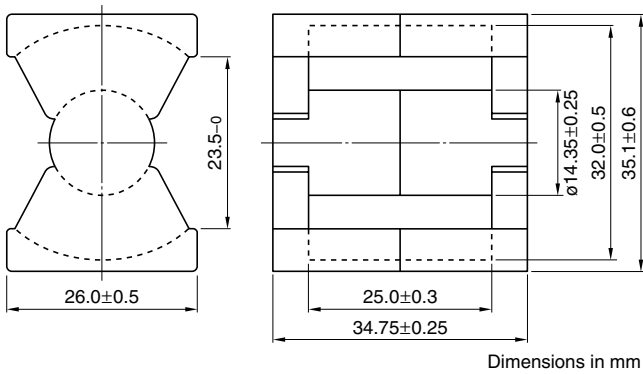
Temperature rise vs. Total loss for PQ32/30 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)



PQ Series PQ35/35 Cores



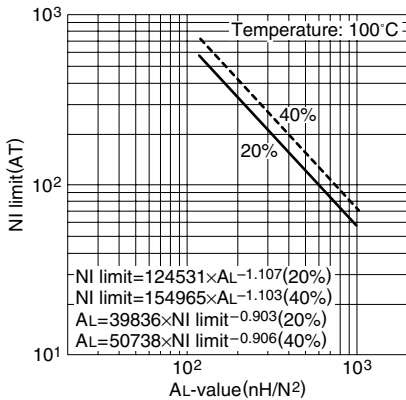
Parameter

Core factor	C1	mm ⁻¹	0.448
Effective magnetic path length	ℓ_e	mm	87.9
Effective cross-sectional area	A_e	mm ²	196
Effective core volume	V_e	mm ³	17300
Cross-sectional center pole area	A_{cp}	mm ²	162
Minimum cross-sectional center pole area	$A_{cp \text{ min.}}$	mm ²	156
Cross-sectional winding area of core	A_{cw}	mm ²	220.6
Weight (approx.)	g		73

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ35/35Z-12	4860±25% (1kHz, 0.5mA)* 7010 min. (100kHz, 200mT)	5.27 max.	452W (100kHz)

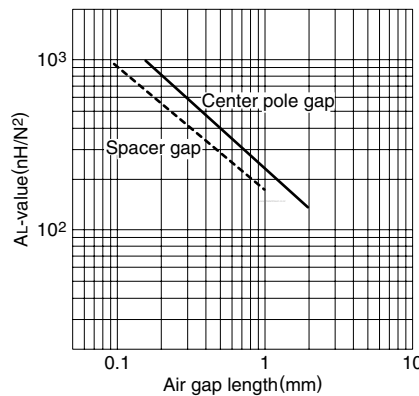
* Coil: $\phi 0.4$ 2UEW 100Ts

NI limit vs. AL-value for PC44PQ35/35 gapped core (Typical)



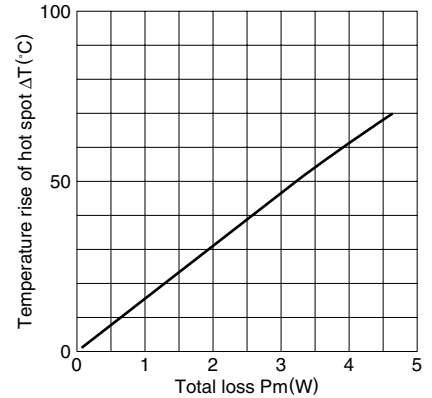
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ35/35 core (Typical)

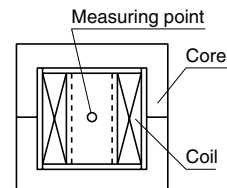


Measuring conditions • Coil: $\phi 0.4$ 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

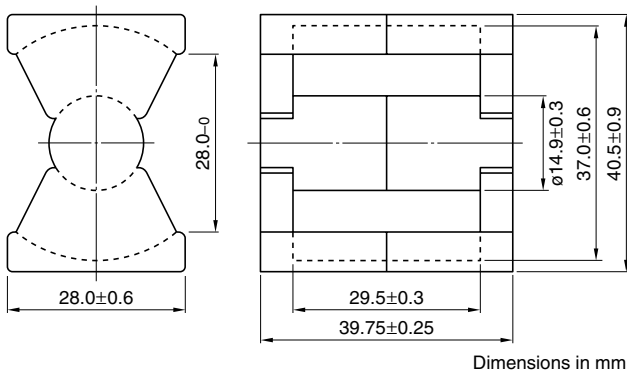
Temperature rise vs. Total loss for PQ35/35 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)



PQ Series PQ40/40 Cores



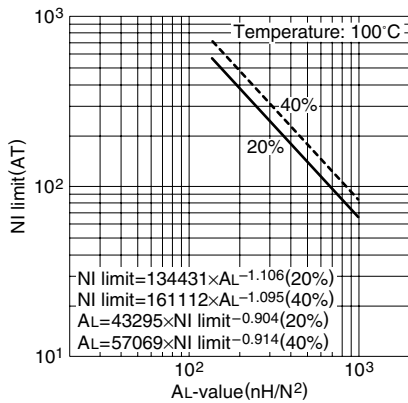
Parameter

Core factor	C1	mm ⁻¹	0.508
Effective magnetic path length	ℓ _e	mm	102
Effective cross-sectional area	A _e	mm ²	201
Effective core volume	V _e	mm ³	20500
Cross-sectional center pole area	A _{cp}	mm ²	174
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	167
Cross-sectional winding area of core	A _{cw}	mm ²	326
Weight (approx.)		g	95

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 200mT	Calculated output power (forward converter mode)
PC44PQ40/40Z-12	4300±25% (1kHz, 0.5mA)* 6200 min. (100kHz, 200mT)	6.56 max.	596W (100kHz)

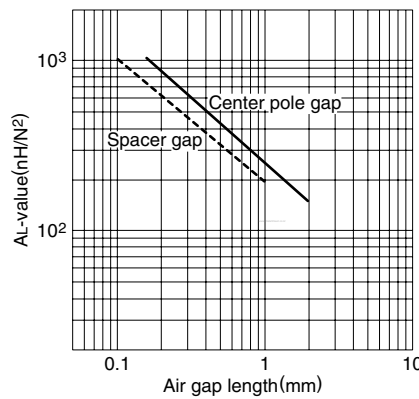
* Coil: ø0.4 2UEW 100Ts

NI limit vs. AL-value for PC44PQ40/40 gapped core (Typical)



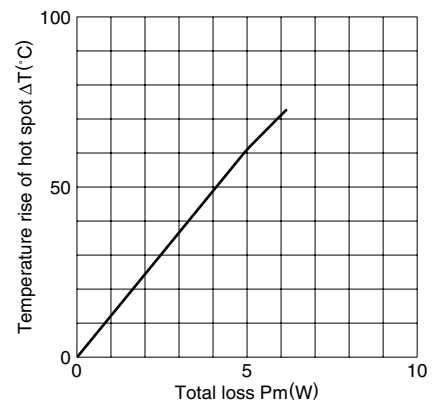
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ40/40 core (Typical)

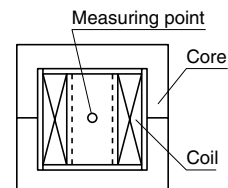


Measuring conditions • Coil: ø0.4 2UEW 100Ts
 • Frequency: 1kHz
 • Level: 0.5mA

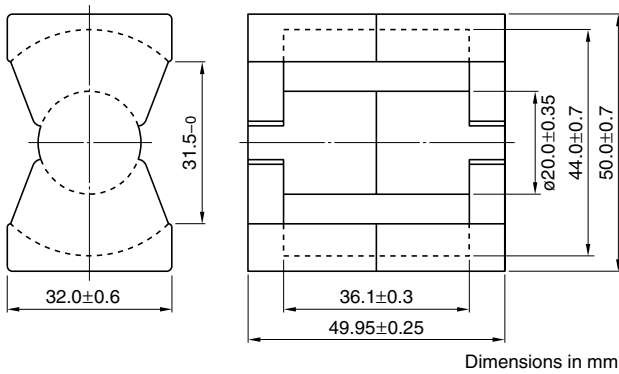
Temperature rise vs. Total loss for PQ40/40 core (Typical)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)



PQ Series PQ50/50 Cores



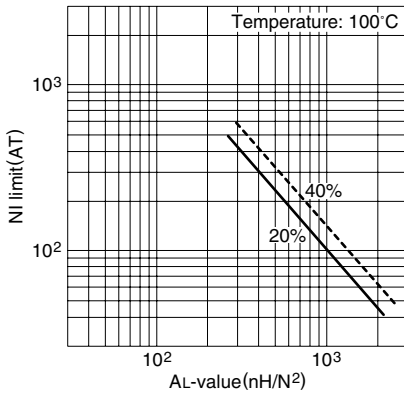
Parameter

Core factor	C1	mm ⁻¹	0.346
Effective magnetic path length	ℓ _e	mm	113
Effective cross-sectional area	A _e	mm ²	328
Effective core volume	V _e	mm ³	37200
Cross-sectional center pole area	A _{cp}	mm ²	314
Minimum cross-sectional center pole area	A _{cp min.}	mm ²	303
Cross-sectional winding area of core	A _{cw}	mm ²	433
Weight (approx.)	g		195

Part No.	AL-value (nH/N ²)	Core loss (W) at 100°C 100kHz, 150mT	Calculated output power (forward converter mode)
PC44PQ50/50Z-12	6720±25% (1kHz, 0.5mA)* 9810 min. (100kHz, 150mT)	6.1 max.	1045W (100kHz)

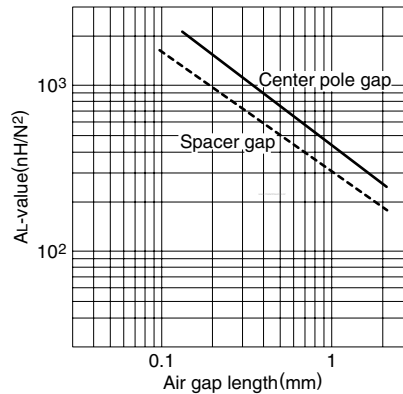
* Coil: ø0.4 2UEW 100Ts

NI limit vs. AL-value for PC44PQ50/50 gapped core (Typical)



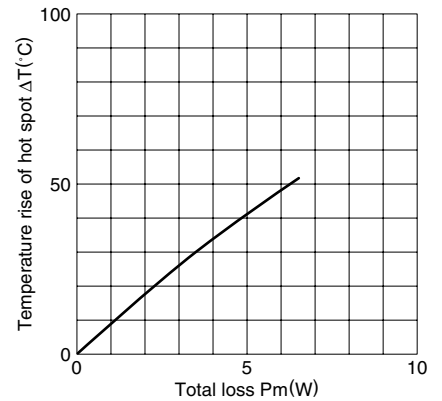
Note: NI limit shows the point where the exciting current is 20% and 40% away from its extended linear part.

AL-value vs. Air gap length for PC44PQ50/50 core (Typical)



Measuring conditions • Coil: ø0.4 2UEW 100Ts
• Frequency: 1kHz
• Level: 0.5mA

Temperature rise vs. Total loss for PQ50/50 core (Typical) (Ambient temperature: 25°C)



Note: The temperature rise is measured in the room whose temperature and humidity are fixed to 25°C and 45%RH, respectively. (approx. 400×300×300cm)

