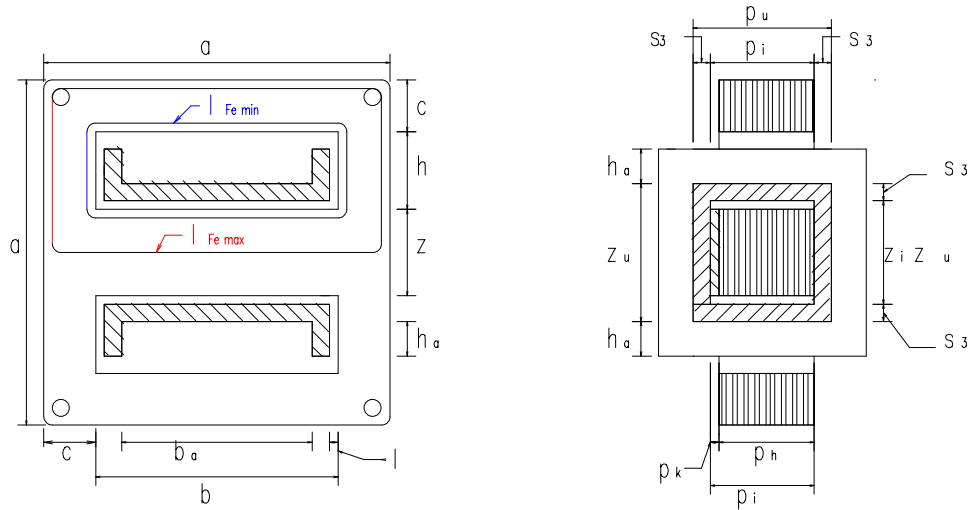


Schnitt - Arten

- 1. M - Schnitt (DIN)**
- 2. EI - Schnitt (abfallarm, DIN)**
- 3. EI - Schnitt (abfallos, DIN)**
- 4. UI - Schnitt (abfallos, DIN)**
- 5. 3 UI - Schnitt (DIN)**
- 6. K, 3K – Kernbleche**
- 7. K, 3K – Spulenkörper**
- 8. K – Schnitt**
- 9. 3 K – Schnitt**
- 10. Platzbedarf der Wickelgüter**

1. M - Schnitt (DIN)

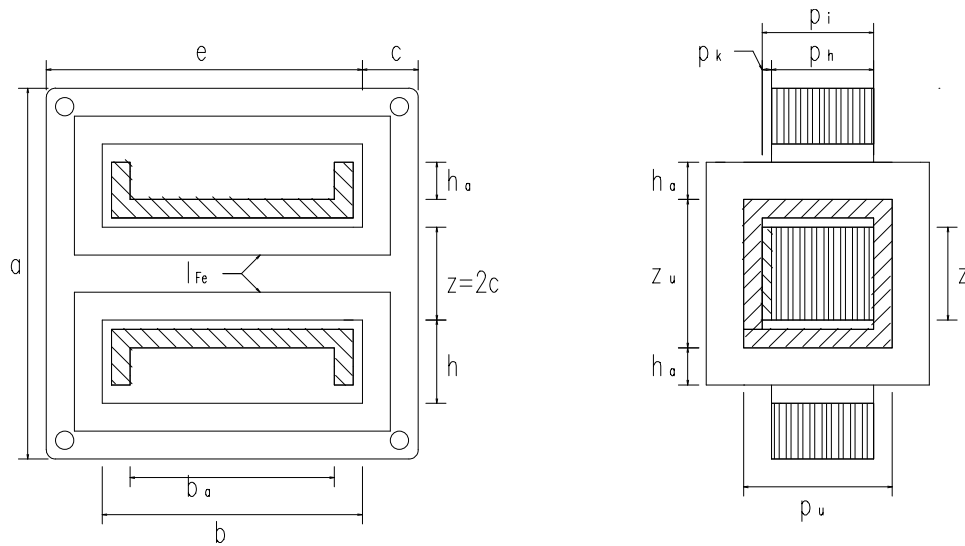


$$l_{Fe} = \frac{l_{Fe \max} + l_{Fe \min}}{2} = \frac{2a + 2(a/2) + 2b + 2h}{2} = 1,5a + b + h$$

$$F_{Fe} = a^2 - 2b \cdot h ; V_{Fe} = 0,94 F_{Fe} \cdot p_h ; G_{Fe} = 7,65 V_{Fe} ;$$

$$q_{Fe} = \frac{V_{Fe}}{l_{Fe}} ; p_k = p_i - p_h$$

2. EI - Schnitt (abfallarm, DIN)

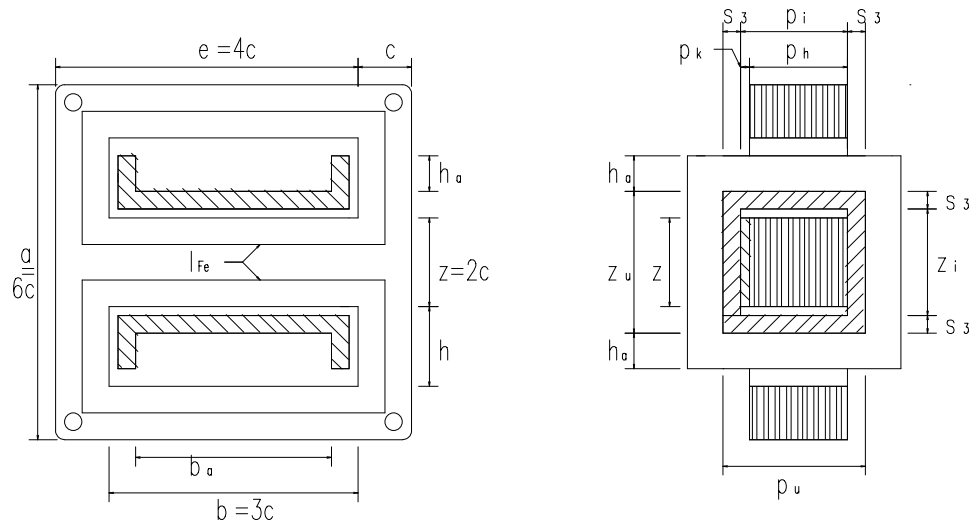


$$l_{Fe} = a + 2 \cdot b ; F_{Fe} = 2 \cdot a c + 4 \cdot b c = 2 c (a + 2 b) = 2 c l_{Fe} ;$$

$$z = 2 c ; V_{Fe} = 0,94 \cdot F_{Fe} \cdot p_h ; G_{Fe} = \frac{V_{Fe} \cdot 7,65}{1000} ; q_{Fe} = \frac{V_{Fe}}{l_{Fe}} ;$$

$$p_K = p_i - p_h$$

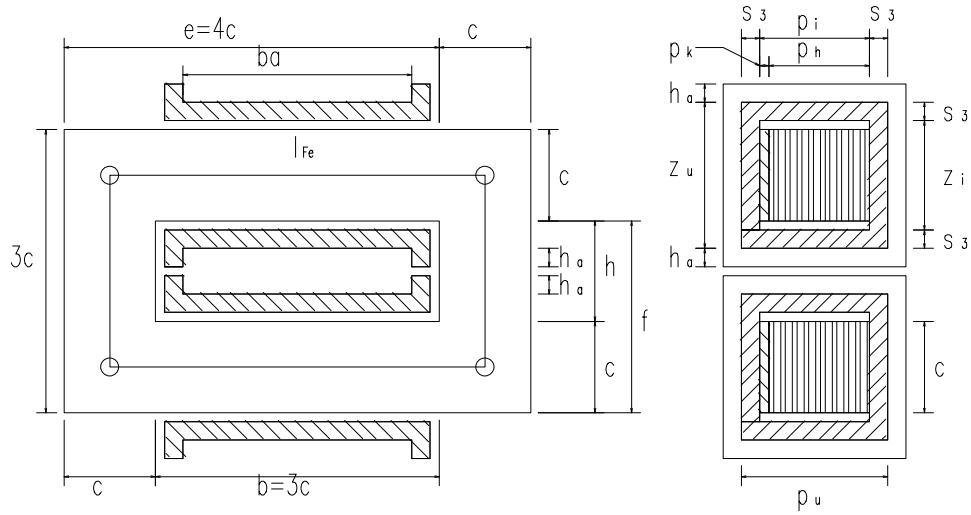
3. EI - Schnitt (abfallos, DIN)



$$l_{Fe} = a + 2 \cdot b ; F_{Fe} = 2 \cdot c \cdot l_{Fe} ; z = 2c ; p_h = p_i - p_k ;$$

$$a = 6 \cdot c ; b = 3 \cdot c ; V_{Fe} = 0,94 F_{Fe} \cdot p_h ; G_{Fe} = V_{Fe} \cdot 7,65 ; q_{Fe} = \frac{V_{Fe}}{l_{fe}}$$

4. UI - Schnitt (abfallos, DIN)



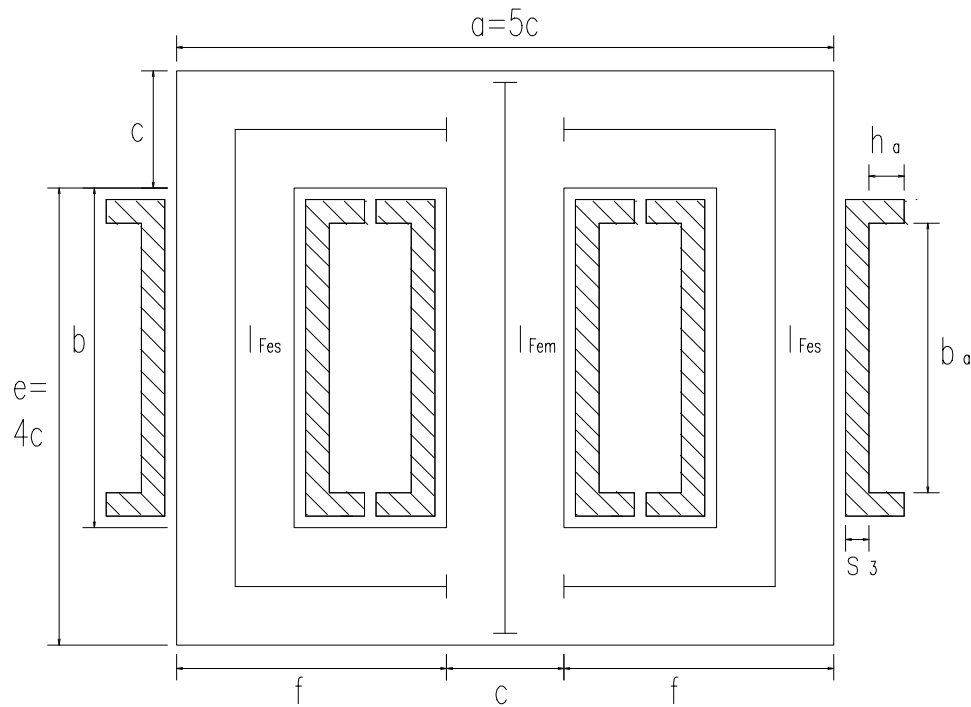
$$e = 4c ; f = 2c ; l_{Fe} = 2e + 2f = 8c + 4c = 12c ;$$

$$F_{Fe} = c l_{Fe} ; p_h = p_i - p_k ; V_{Fe} = 0,94 F_{Fe} \cdot p_h ;$$

$$G_{Fe} = \frac{V_{Fe} \cdot 7,65}{1000} ; q_{Fe} = \frac{V_{Fe}}{L_{Fe}} ; p_u = p_i + 2 \cdot s_3$$

5.3 UI - Schnitt (DIN)

Die Spulenkörper und Wicklungen mit b_a , h_a , p_u , z_u sowie q_{Fe} sind beim 3 UI - Schnitt die gleichen Werte wie beim UI - Schnitt.

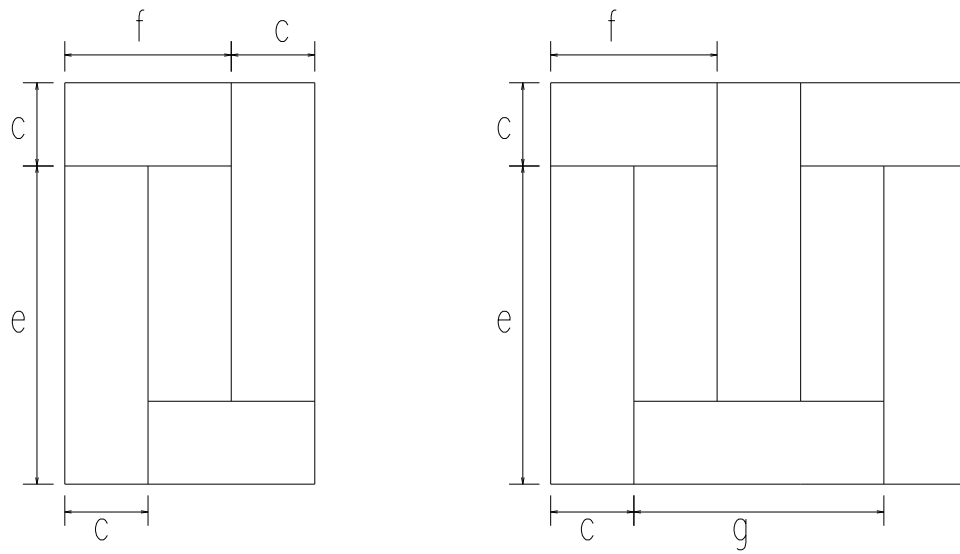


$$e = 4c ; f = 2c ; l_{Fem} = e + c = 5c ; l_{Fes} = e + 3c = 7c ;$$

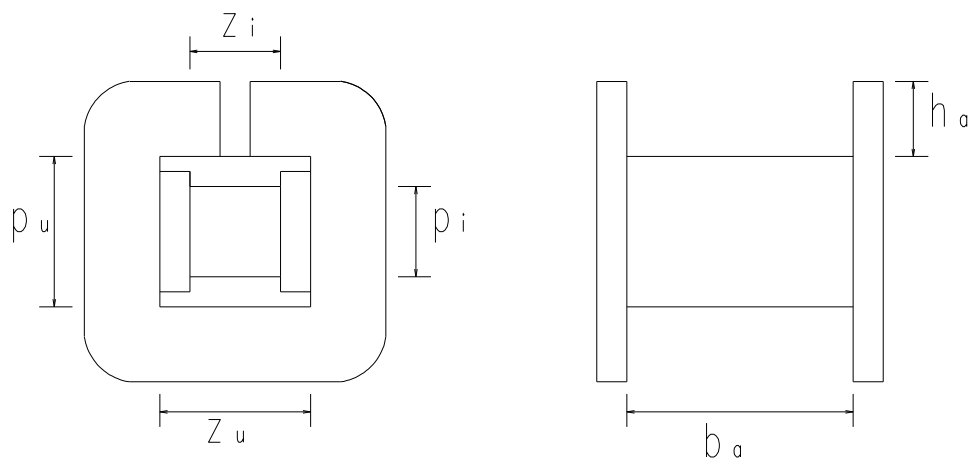
$$F_{Fe} = c (l_{Fem} + 2l_{Fes}) ; V_{Fe} = 0,94 F_{Fe} \cdot p_h ; G_{Fe} = \frac{V_{Fe} \cdot 7,65}{1000} ;$$

$$Q_{cu1} (UI) = Q_{cu1} (3UI) ; G_{cu3} = 1,5 G_{cu2} ;$$

6. K, 3K - Kernbleche

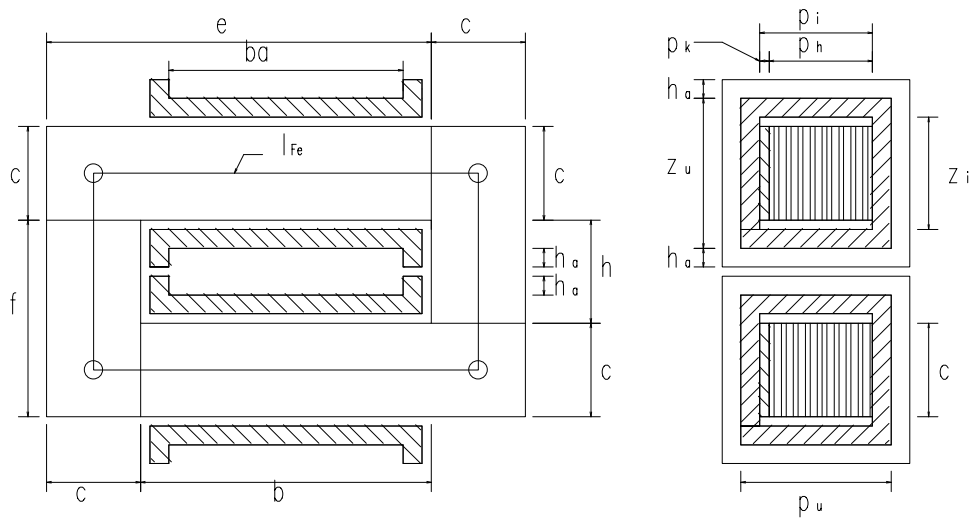


7. K, 3K - Spulenkörper



$$P_h = P_i - P_k$$

8. K - Schnitt

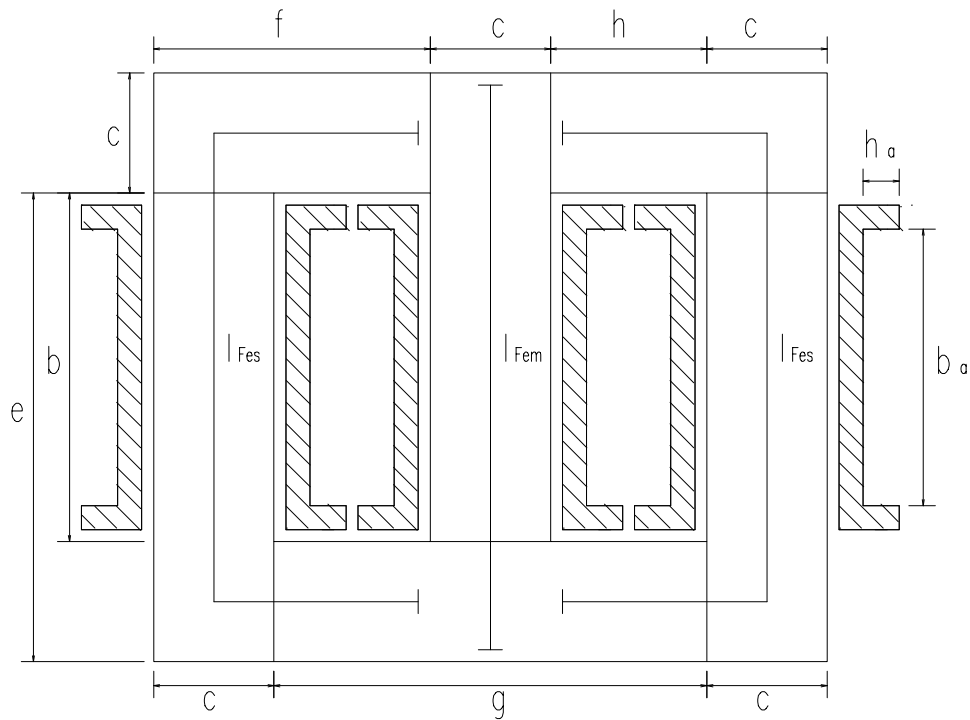


$$l_{Fe} = 2e + 2f ; F_{Fe} = c \cdot l_{Fe} ; V_{Fe} = 0,94 F_{fe} \cdot p_h ;$$

$$G_{Fe} = \frac{V_{Fe} \cdot 7,65}{1000} ; q_{Fe} = \frac{V_{Fe}}{l_{Fe}} ; l_k = 2 p_u + 2 z_u$$

9.3 K - Schnitt

Die Spulenkörper und Wicklungen auch b_a , h_a , p_u , z_u bzw f und q_{Fe} sind beim 3K - Schnitt die gleichen wie beim K - Schnitt.



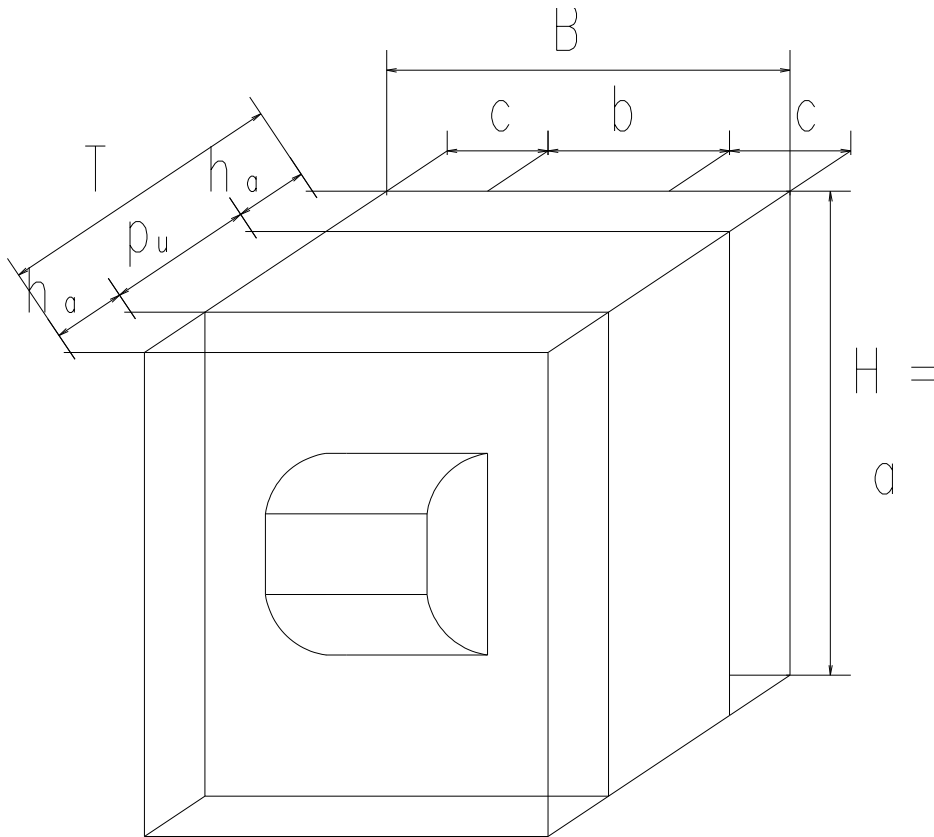
$$l_{Fem} = e + c ; l_{Fes} = e + c + 2h ; F_{Fe} = c(l_{Fem} + 2l_{Fes}) ;$$

$$V_{Fe} = 0,94 F_{Fe} \cdot p_h ; G_{Fe} = \frac{V_{Fe} \cdot 7,65}{1000} ; Q_{cu} = Q_{cu1} ; G_{cu3} = 1,5 G_{cu2} ;$$

10. Platzbedarf der Wickelgüter

M, EI

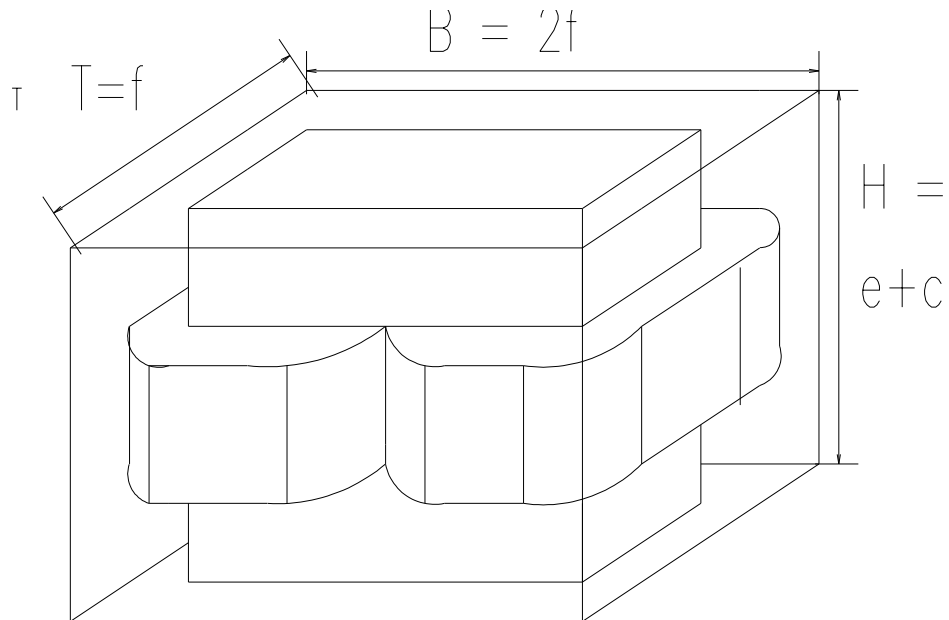
$$H = a; \quad B = b + 2c; \quad T = p_u + 2h_a; \quad G = B T; \quad V = G H;$$



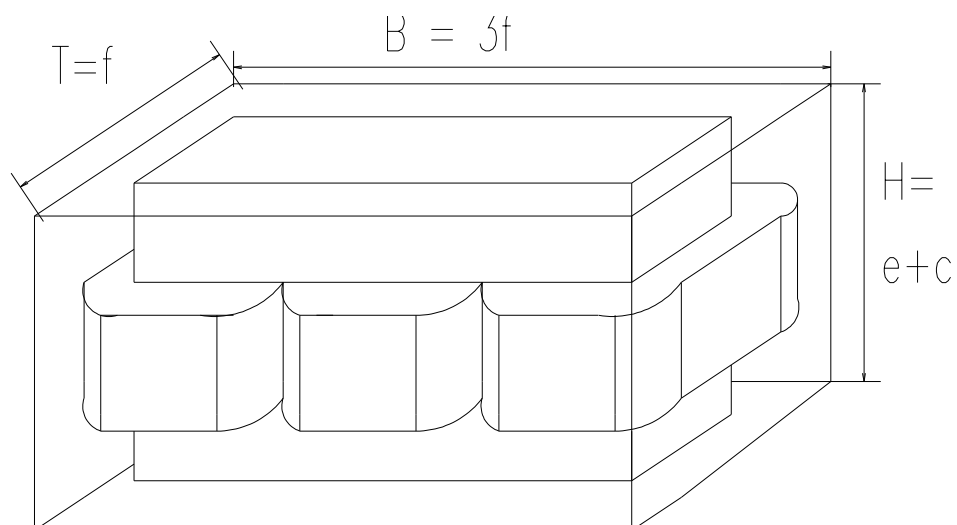
H (cm)	-	Höhe des Wickelgutes
B (cm)	-	Breite des Wickelgutes
T (cm)	-	Tiefe des Wickelgutes
G (cm ²)	-	Grundfläche des Wickelgutes
V (cm ³)	-	Volumen des Wickelgutes

UI, K

$$H = e + c; \quad B = 2f; \quad T = f; \quad G = BT; \quad V = GH;$$

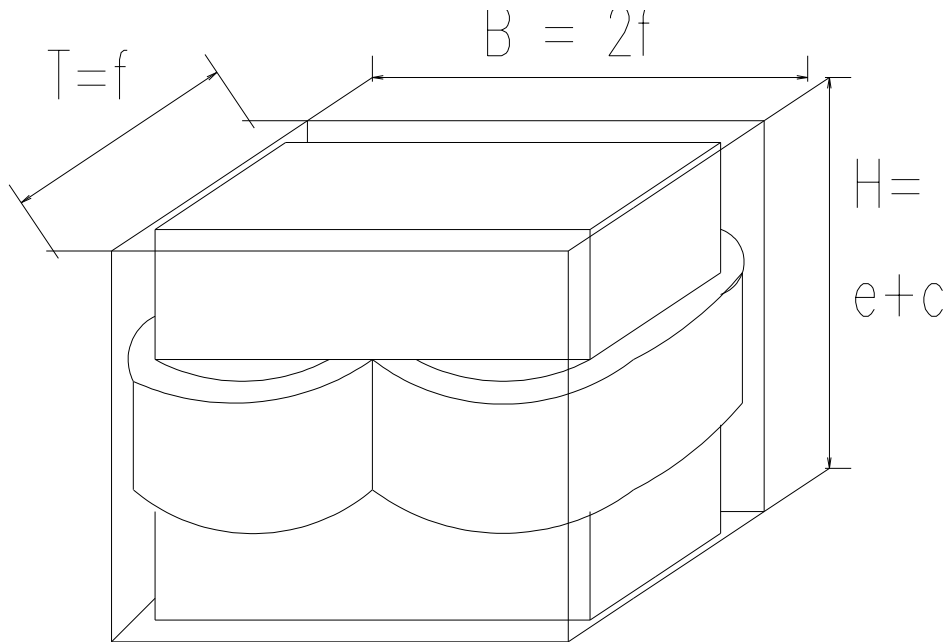
**3UI, 3K**

$$H = e + c; \quad B = 3f; \quad T = f; \quad G = BT; \quad V = GH;$$



K⁺, K^{*}; E

$$H = e + c; \quad B = 2f; \quad T = f; \quad G = BT; \quad V = GH;$$

**K⁺, 3K^{*}, D**

$$H = e + c; \quad B = 3f; \quad T = f; \quad G = BT; \quad V = GH;$$

