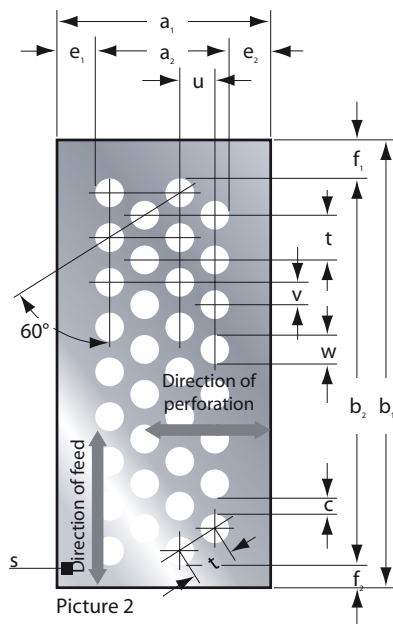


Rv DIN 24041



Perforation pattern: Round holes in staggered rows

Material:

- Sheet steel, cold-rolled, hot-rolled, hot-dip galvanized and electrolytically galvanized
- Aluminium (grade by arrangement)
- Stainless steel

General information

Specification:
Rv - round holes staggered
w - hole width
t - spacing

Relative open area:

$$A_0 = 90.7 \frac{w^2}{t^2} [\%]$$

No. of holes per m²:

$$N = \frac{1\,154\,700}{t \times t}$$

results in

$$t = \sqrt{\frac{1\,154\,700}{N}}$$

Dimensions in perforation field (see also p. 16)

Distance between rows:

$$u = \frac{\sqrt{3}}{2} \times t = 0.866 \times t$$

Hole misalignment measurement:

$$v = 0.5 \times t$$

No. of spacings between rows:

$$x = \frac{a_2 - w}{u} = \frac{a_2 - w}{0.866 \times t}$$

No. of hole misalignment measurements:

$$y = \frac{b_2 - w}{v} = \frac{b_2 - w}{0.5 \times t}$$

Perforation field width:

$$a_2 = (x \times 0.866 \times t) + w$$

Perforation field length:

$$b_2 = (y \times 0.5 \times t) + w$$

No. of perforation rows:

$$m = x + 1$$

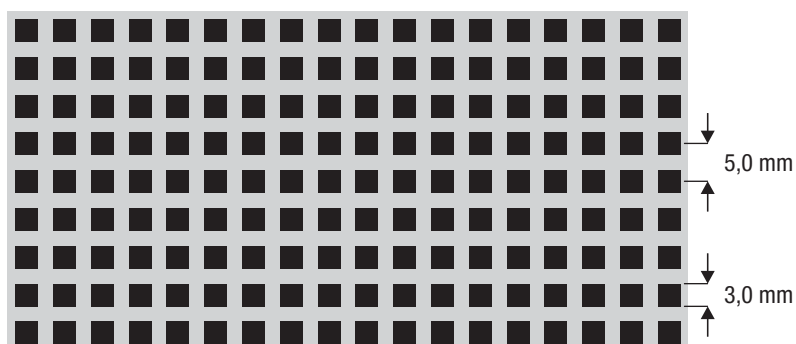
No. of holes per row:

$$n = \frac{y + 1}{2}$$

Perforation pattern				Thickness (s) in mm / up to width (a ₁) 1000 mm								Thickness (s) in mm / up to width (a ₁) 1250 mm								Thickness (s) in mm / up to width (a ₁) 1500 mm							
DIN specification	w	t	A ₀ %	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
Rv 1.60 - 3.00	1.60	3.00	25.8	●	●	○	○					●	●	○	○					○	○	○	○				
Rv 1.60 - 5.20	1.60	5.20	8.6	●	○	○						●	○	○						○	○						
Rv 1.60 - 9.00	1.60	9.00	2.9	●	○	○						●	○	○						○	○						
Rv 2.00 - 3.00	2.00	3.00	40.3	○	○	○	○					○	○	○	○												
Rv 2.00 - 3.50	2.00	3.50	29.6	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.00 - 4.00	2.00	4.00	22.7	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.00 - 5.00	2.00	5.00	14.5					○	○							○	○							○	○		
Rv 2.00 - 5.20	2.00	5.20	13.4	○	○	○	○					○	○	○	○												
Rv 2.00 - 6.06	2.00	6.06	9.9	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.00 - 6.93	2.00	6.93	7.6	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.00 - 9.00	2.00	9.00	4.5	○	○	○	○					○	○	○	○												
Rv 2.00 - 10.50	2.00	10.50	3.1	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.00 - 12.00	2.00	12.00	2.5	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.00 - 12.12	2.00	12.12	2.5	○	○	○	○	○				○	○	○	○	○				○	○	○	○	○			
Rv 2.50 - 4.00	2.50	4.00	35.4	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 2.50 - 6.93	2.50	6.93	11.8	●	●	●	○	○	○			●	●	●	○	○	○			○	○	○	○	○			
Rv 2.50 - 12.00	2.50	12.00	3.9	●	●	●	○	○	○			●	●	●	○	○	○			○	○	○	○	○			
Rv 3.00 - 4.00	3.00	4.00	51.0	●	●	○	○					●	●	○	○					○	○	○	○	○			
Rv 3.00 - 5.00	3.00	5.00	32.7	●	●	●	○	○	○	○		●	●	●	○	○	○			○	○	○	○	○	○	○	
Rv 3.00 - 6.00	3.00	6.00	22.6	●	●	●	○	○	○			●	●	●	○	○	○			○	○	○	○	○			
Rv 3.00 - 6.93	3.00	6.93	17.0	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 3.00 - 8.66	3.00	8.66	11.0	●	●	●	○	○	○	○		●	●	●	○	○	○			○	○	○	○	○	○	○	
Rv 3.00 - 10.40	3.00	10.40	7.5	●	●	●	○	○	○			●	●	●	○	○	○			○	○	○	○	○			
Rv 3.00 - 12.00	3.00	12.00	5.7	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 3.00 - 15.00	3.00	15.00	3.6	●	●	●	○	○	○	○		●	●	●	○	○	○			○	○	○	○	○	○	○	
Rv 3.00 - 18.00	3.00	18.00	2.5	●	●	●	○	○	○			●	●	●	○	○	○			○	○	○	○	○			
Rv 3.20 - 5.00	3.20	5.00	37.2	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 3.20 - 8.66	3.20	8.66	12.4	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 3.20 - 15.00	3.20	15.00	4.1	●	●	●	○	○				●	●	●	○	○				○	○	○	○	○			
Rv 3.50 - 5.00	3.50	5.00	44.4	○	○	○	○					○	○	○	○					○	○	○	○				

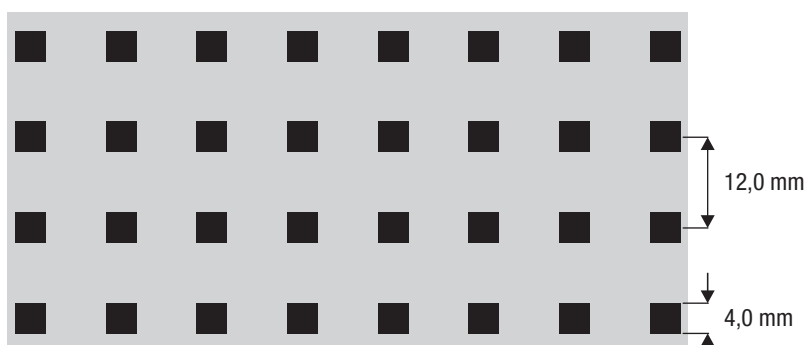
Perforation pattern				Thickness (s) in mm / up to width (a ₁) 1000 mm								Thickness (s) in mm / up to width (a ₁) 1250 mm								Thickness (s) in mm / up to width (a ₁) 1500 mm							
DIN specification	w	t	A ₀ %	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
Rv 3.50 - 6.00	3.50	6.00	30.9	●	●	●	○	○	○			●	●	●	○	○	○			●	●	●	○	○	○		
Rv 3.50 - 8.66	3.50	8.66	14.8	○	○	○	○	○				○	○	○	○					○	○	○	○	○			
Rv 3.50 - 10.40	3.50	10.40	10.3	●	●	●	●	●	○			●	●	●	●	●	○			●	●	●	●	●	○		
Rv 3.50 - 15.00	3.50	15.00	4.9	○	○	○	○	○				○	○	○	○	○				○	○	○	○	○			
Rv 3.80 - 4.50	3.80	4.50	64.7	○	○	○	○					○	○	○	○					○	○	○	○				
Rv 3.80 - 7.78	3.80	7.78	21.6	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 3.80 - 13.50	3.80	13.50	7.2	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 4.00 - 6.00	4.00	6.00	40.0	●	●	●	●	●	●	○		●	●	●	●	●	●	○		●	●	●	●	●	○	○	
Rv 4.00 - 7.00	4.00	7.00	29.6	●	●	●	●	○	○			●	●	●	●	○	○			●	●	●	●	○	○		
Rv 4.00 - 8.00	4.00	8.00	22.7	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 4.00 - 10.40	4.00	10.40	13.4	●	●	●	●	●	●	○		●	●	●	●	●	○			●	●	●	●	○	○		
Rv 4.00 - 12.12	4.00	12.12	9.9	●	●	●	●	○	○			●	●	●	●	○	○			●	●	●	●	○	○		
Rv 4.00 - 13.86	4.00	13.86	7.6	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 4.00 - 18.00	4.00	18.00	4.5	●	●	●	●	●	●	○		●	●	●	●	●	○			●	●	●	●	○	○	○	
Rv 4.00 - 21.00	4.00	21.00	3.3	●	●	●	●	○	○			●	●	●	●	○	○			●	●	●	●	○	○		
Rv 4.00 - 24.00	4.00	24.00	2.5	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 4.50 - 6.00	4.50	6.00	51.0	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 5.00 - 7.00	5.00	7.00	46.1	●	●	●	●	●	●			●	●	●	●	●	●			●	●	●	●	○	○		
Rv 5.00 - 8.00	5.00	8.00	35.4	●	●	●	●	●	●	○	○	●	●	●	●	●	●	○	○	○	●	●	●	●	○	○	○
Rv 5.00 - 8.40	5.00	8.40	32.1	●	●	●	●	●	●	○	○	●	●	●	●	●	●	○	○	○							
Rv 5.00 - 9.00	5.00	9.00	28.0	●	●	●	●	●				●	●	●	●	●	○			●	●	●	●				
Rv 5.00 - 10.00	5.00	10.00	22.7	●	●	●	●	●	○			●	●	●	●	●	○			●	●	●	●	○	○		
Rv 5.00 - 12.00	5.00	12.00	15.8	●	●	●	○	○				●	●	●	○	○				●	●	●	○	○			
Rv 5.00 - 12.12	5.00	12.12	15.5	●	●	●	●	●	●	○		●	●	●	●	●	○	○		○	●	●	●	○	○		
Rv 5.00 - 13.86	5.00	13.86	11.8	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 5.00 - 14.00	5.00	14.00	11.6	○	●	●	●	●				○	●	●	●	●					○	●	●	●	○		
Rv 5.00 - 15.60	5.00	15.60	9.3	○	○	●	○	○	○			○	○	●	○	○	○			○	○	●	○	○	○		
Rv 5.00 - 16.00	5.00	16.00	8.8			●	○	○						●	○	○											
Rv 5.00 - 17.32	5.00	17.32	7.5	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 5.00 - 20.78	5.00	20.78	5.3	●	●	●	○	○				●	●	●	○	○				●	●	●	○	○			
Rv 5.00 - 21.00	5.00	21.00	5.1	●	●	●	●	●	●	○		●	●	●	●	●	○			●	●	●	●	○	○	○	
Rv 5.00 - 24.00	5.00	24.00	3.9	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 5.00 - 27.00	5.00	27.00	3.1	○	○	●	○	○	○			○	○	●	○	○	○			○	○	●	○	○	○		
Rv 5.00 - 30.00	5.00	30.00	2.5	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 5.00 - 36.00	5.00	36.00	1.7	●	●	●	○	○				●	●	●	○	○				●	●	●	○	○			
Rv 6.00 - 8.00	6.00	8.00	51.0	○	○	●	●	●	●	○	○	○	○	●	○	○	○	○	○	○	○	●	○	○	○	○	○
Rv 6.00 - 9.00	6.00	9.00	40.3	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 6.00 - 13.86	6.00	13.86	17.0	○	○	●	●	●	●	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○
Rv 6.00 - 15.60	6.00	15.60	13.5	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 6.00 - 24.00	6.00	24.00	5.7	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 6.00 - 27.00	6.00	27.00	4.5	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○	○	●	●	●	●	○	○	○
Rv 6.50 - 12.00	6.50	12.00	26.6	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Rv 6.50 - 20.80	6.50	20.80	8.9	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Rv 7.00 - 9.00	7.00	9.00	54.9			●	●	●	●					●	●	●	○				○	●	●	○			
Rv 7.00 - 10.00	7.00	10.00	44.4	○	○	○	○	○				○	○	○	○	○				○	○	○	○	○			
Rv 7.00 - 15.60	7.00	15.60	18.7			●	●	●	●	○				●	●	●	○	○				○	●	○	○	○	
Rv 7.00 - 17.32	7.00	17.32	14.8	○	○	○	○	○				○	○	○	○	○				○	○	○	○	○			
Rv 7.00 - 27.00	7.00	27.00	6.1		○	●	●	●	●					●	●	●	○	○				○	○	○	○	○	
Rv 7.00 - 30.00	7.00	30.00	4.9	○	○	○	○	○				○	○	○	○	○				○	○	○	○	○			
Rv 8.00 - 10.00	8.00	10.00	58.0	●	●	○	○	○	○			●	●	○	○	○	○			●	●	○	○	○	○		

Perforation pattern				Thickness (s) in mm / up to width (a ₁) 1000 mm								Thickness (s) in mm / up to width (a ₁) 1250 mm								Thickness (s) in mm / up to width (a ₁) 1500 mm							
DIN specification	w	t	A ₀ %	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
Rv 8.00 - 11.00	8.00	11.00	48.0	●	●	●	○	○	○			●	●	●	○	○	○			●	●	●	○	○	○		
Rv 8.00 - 12.00	8.00	12.00	40.3	○	●	●	●	●	●			○	●	●	●	●	○			○	●	●	●	●	○	○	
Rv 8.00 - 17.32	8.00	17.32	19.4	●	●	○	○	○	○			●	●	○	○	○	○			●	●	○	○	○	○	○	
Rv 8.00 - 19.06	8.00	19.06	16.0	●	●	●	○	○	○			●	●	●	○	○	○			●	●	●	○	○	○	○	
Rv 8.00 - 20.80	8.00	20.80	13.4	○	●	●	●	●	●			○	●	●	●	●	○			○	●	●	●	●	○	○	
Rv 8.00 - 30.00	8.00	30.00	6.4	●	●	○	○	○	○			●	●	○	○	○	○			●	●	○	○	○	○	○	
Rv 8.00 - 33.00	8.00	33.00	5.3	●	●	●	○	○	○			●	●	●	○	○	○			●	●	●	○	○	○	○	
Rv 8.00 - 36.00	8.00	36.00	4.5	○	●	●	●	●	●			○	●	●	●	●	○			○	●	●	●	●	○	○	
Rv 10.00 - 12.00	10.00	12.00	63.0		●	●	●	●	○	○				●	●	●	○	○	○				●	●	○	○	○
Rv 10.00 - 13.00	10.00	13.00	53.7			●	●	○	○	○				●	●	○	○	○					●	○	○	○	
Rv 10.00 - 14.00	10.00	14.00	46.3	●	●	●	●	●	●			●	●	●	●	●	○			●	●	●	●	○	○	○	
Rv 10.00 - 15.00	10.00	15.00	40.3	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○		●	●	●	●	○	○	○
Rv 10.00 - 20.78	10.00	20.78	21.0			●	●	●	●	○	○			●	●	○	○	○	○				●	○	○	○	
Rv 10.00 - 22.52	10.00	22.52	17.9			●	●	○	○	○				●	●	○	○	○					●	○	○	○	
Rv 10.00 - 24.24	10.00	24.24	15.4	●	●	●	●	●	●			●	●	●	●	●	○			●	●	●	●	○	○	○	
Rv 10.00 - 25.98	10.00	25.98	13.4	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○		●	●	●	●	○	○	○
Rv 10.00 - 36.00	10.00	36.00	7.0		○	○	○	○	○	○				○	○	○	○	○	○				○	○	○	○	
Rv 10.00 - 42.00	10.00	42.00	5.1	●	●	●	●	●	●			●	●	●	●	●	○			●	●	●	●	○	○	○	
Rv 10.00 - 45.00	10.00	45.00	4.5	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○		●	●	●	●	○	○	○
Rv 12.00 - 16.00	12.00	16.00	51.0	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 12.00 - 25.00	12.00	25.00	20.9			○	●	●	●						●	●	○						○	○	○		
Rv 12.00 - 27.72	12.00	27.72	17.0	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 12.00 - 48.00	12.00	48.00	5.7	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 15.00 - 20.00	15.00	20.00	51.0	○	○	○	○	○	○			○	○	○	○	○	○			○	○	○	○	○	○		
Rv 20.00 - 25.00	20.00	25.00	58.0	●	●	●	●	●	●	○		●	●	●	●	●	○	○			●	●	●	●	○	○	
Rv 20.00 - 43.30	20.00	43.30	19.4	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○		●	●	●	●	○	○	○
Rv 20.00 - 75.00	20.00	75.00	6.4	●	●	●	●	●	●	○	○	●	●	●	●	●	○	○	○		●	●	●	●	○	○	○



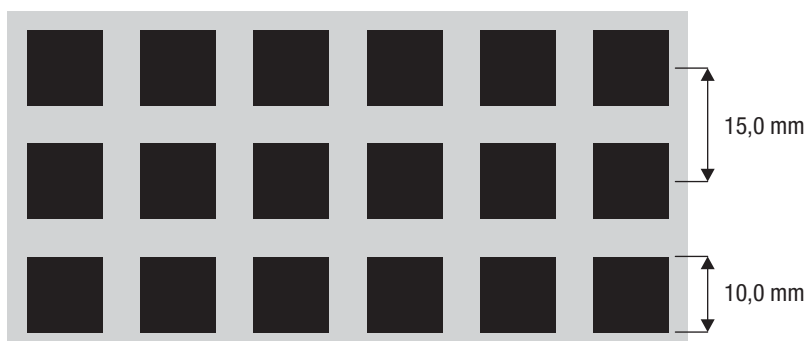
Lochbild nach DIN 24041 **Qg 3,00-5,00**
relativ freie Lochfläche $A_o = 36,0$

perforation pattern to DIN 24041 **Qg 3,00-5,00**
relatively open area $A_o = 36,0 \%$



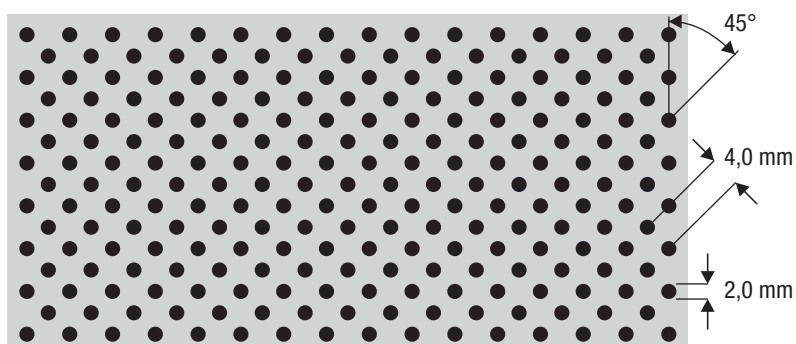
Lochbild nach DIN 24041 **Qg 4,00-12,00**
relativ freie Lochfläche $A_o = 11,1 \%$

perforation pattern to DIN 24041 **Qg 4,00-12,00**
relatively open area $A_o = 11,1 \%$



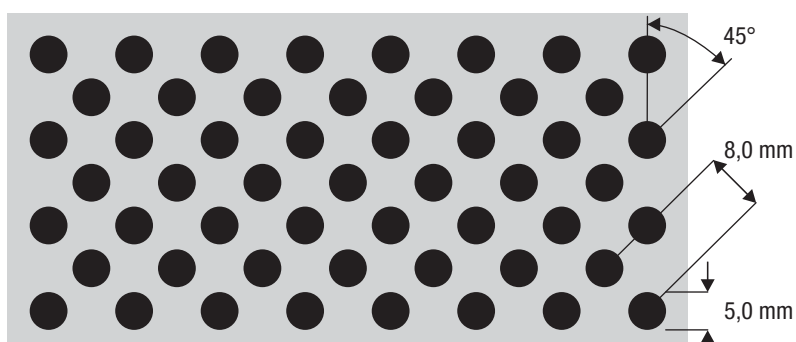
Lochbild nach DIN 24041 **Qg 10,00-15,00**
relativ freie Lochfläche $A_o = 44,4 \%$

perforation pattern to DIN 24041 **Qg 10,00-15,00**
relatively open area $A_o = 44,4 \%$



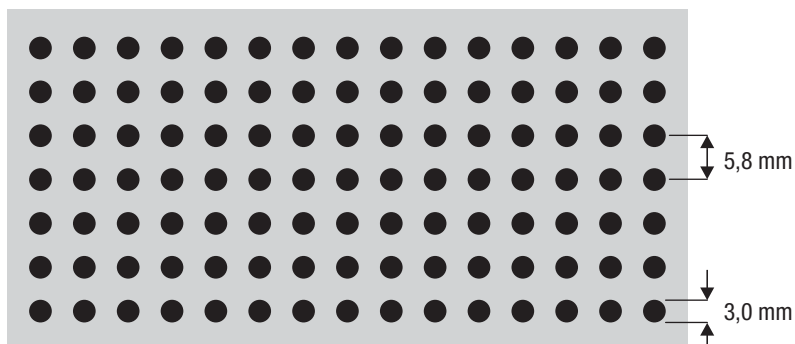
Lochbild nach DIN 24041 **Rd 2,00-4,00**
relativ freie Lochfläche $A_o = 19,6 \%$

perforation pattern to DIN 24041 **Rd 2,00-4,00**
relatively open area $A_o = 19,6 \%$



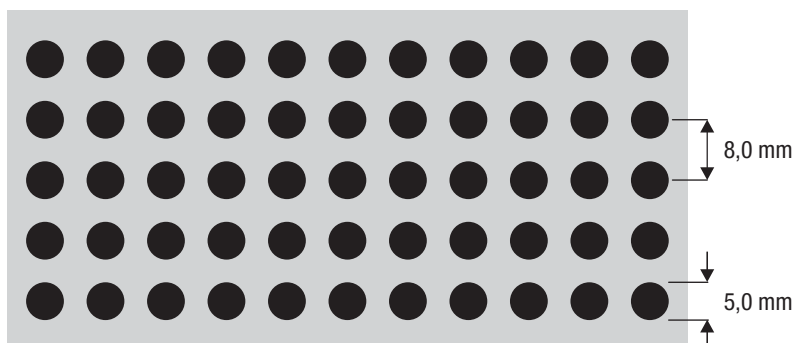
Lochbild nach DIN 24041 **Rd 5,00-8,00**
relativ freie Lochfläche $A_o = 30,7 \%$

perforation pattern to DIN 24041 **Rd 5,00-8,00**
relatively open area $A_o = 30,7 \%$



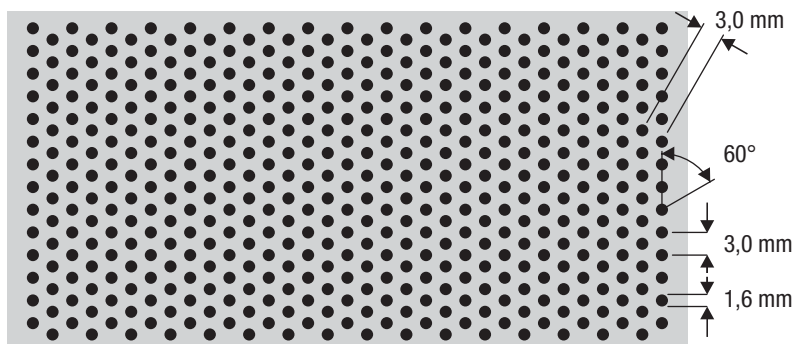
Lochbild nach DIN 24041 **Rg 3,00-5,80**
relativ freie Lochfläche $A_o = 21,0 \%$

perforation pattern to DIN 24041 **Rg 3,00-5,80**
relatively open area $A_o = 21,0 \%$



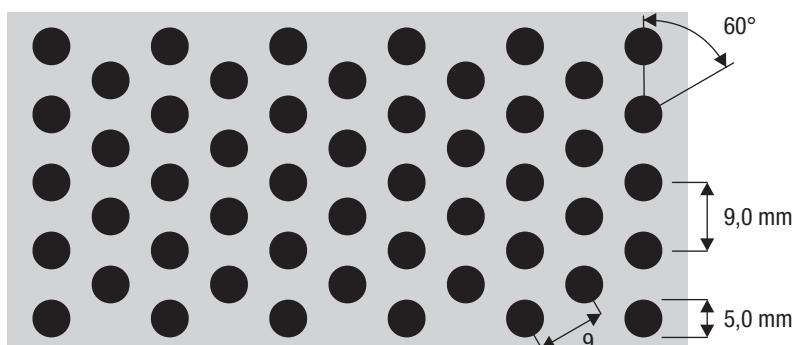
Lochbild nach DIN 24041 **Rg 5,00-8,00**
relativ freie Lochfläche $A_o = 30,7 \%$

perforation pattern to DIN 24041 **Rg 5,00-8,00**
relatively open area $A_o = 30,7 \%$



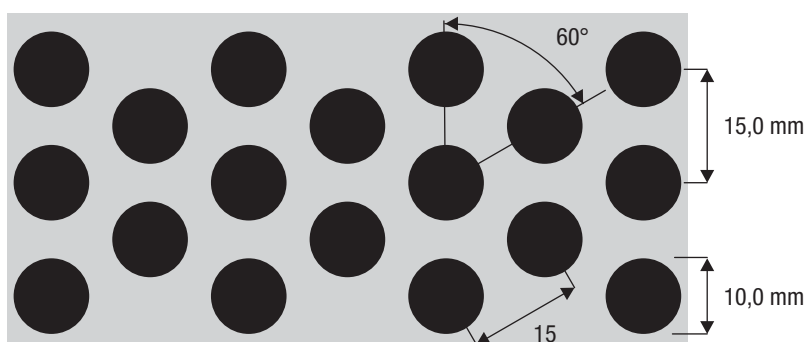
Lochbild nach DIN 24041 **Rv 1,60-3,00**
relativ freie Lochfläche $A_o = 25,8 \%$

perforation pattern to DIN 24041 **Rv 1,60-3,00**
relatively open area $A_o = 25,8 \%$



Lochbild nach DIN 24041 **Rv 5,00-9,00**
relativ freie Lochfläche $A_o = 28,0 \%$

perforation pattern to DIN 24041 **Rv 5,00-9,00**
relatively open area $A_o = 28,0 \%$



Lochbild nach DIN 24041 **Rv 10,00-15,00**
relativ freie Lochfläche $A_o = 40,3 \%$

perforation pattern to DIN 24041 **Rv 10,00-15,00**
relatively open area $A_o = 40,3 \%$