

DIN 24041:2021-06 (E)

Perforated plates - Dimensions

Contents		Page
Foreword		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Symbols and abbreviations	5
5	Dimensions and designation	5
5.1	Type of perforations	5
5.2	Dimensions	9
5.3	Designation	9
6	Material	10
7	Weight	10
Annex A (normative) Technical delivery conditions for perforated plates and coils		24
A.1	Length and width	24
A.2	Plate thickness	25
A.3	Perpendicularity of perforated plates cut to size	25
A.4	Parallelism	26
A.5	Sabre edges	26
A.6	Flatness	28
A.6.1	Flatness tolerances	28
A.6.2	Measuring method	28
A.7	Wavy edges	29
A.8	Unperforated areas	29
A.9	Tapered perforation cross-section	30
A.10	Punching burr and shearing burr	30
A.11	Punch break	31
A.12	Start and end of perforated area	32
A.13	Lubricant residues	32
A.14	Surface finish	33
A.15	Further processing	33
Figures Figure 1 -- Round perforation in staggered rows -- Rv		6
Figure 2 -- Round perforations in diagonally staggered rows -- Rd		6
Figure 3 -- Round perforations in straight rows -- Rg		6
Figure 4 -- Square perforations in staggered rows -- Qv		7
Figure 5 -- Square perforations in diagonally staggered rows -- Qd		7
Figure 6 -- Square perforations in straight rows -- Qg		7
Figure 7 -- Slotted perforations in staggered rows -- Lv		8

Figure 8 -- Slotted perforations in straight rows -- Lg	8
Figure 9 -- Slotted perforations in straight rows, with corners -- Lge	8
Figure 10 -- Hexagonal perforations in staggered rows -- SKv	9
Figure A.1 -- Dimensions (example)	24
Figure A.2 -- Perpendicularity tolerance u of the perforated plate	26
Figure A.3 -- Parallelism	26
Figure A.4 -- Example of sabre edges	27
Figure A.5 -- Example of sabre edges after cutting	27
Figure A.6 -- Flatness tolerances	28
Figure A.7 -- Standard design	29
Figure A.8 -- Special design to avoid cumulative errors	29
Figure A.9 -- Tapered perforation cross-section	30
Figure A.10 -- Punching burr and shearing burr	31
Figure A.11 -- Normally staggered perforation rows (complete perforation pattern)	32
Figure A.12 -- Double staggered perforation rows (incomplete perforation pattern)	32
Tables Table 1 -- Round perforations, dimensions	11
Table 2 -- Square perforations, dimensions	15
Table 3 -- Slotted perforations, dimensions	18
Table 4 -- Hexagonal perforations, dimensions	21
Table A.1 -- Nominal length, nominal width and tolerances of a perforated coil material (face cut) or a sheet (not cut)	24
Table A.2 -- External dimensions of perforated plates (cut)	25
Table A.3 -- Width tolerances for unperforated margins for fixed dimensions	25
Table A.4 -- Perpendicularity tolerances	25
Table A.5 -- Limit values for sabre edges	27
Table A.6 -- Flatness tolerances for machine-straightened plates with no or narrow unperforated margin	28
Table A.7 -- Permissible burr height of standard perforation	31