

# DIN 509:2022-12 (E)

## Technical product documentation - Relief grooves - Types, dimensions and tolerances

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
Introduction .....		4
1 Scope .....		5
2 Normative references .....		5
3 Terms and definitions .....		5
4 Dimensions .....		5
4.1 General .....		5
4.2 Type E relief grooves .....		5
4.3 Type F relief grooves .....		6
4.4 Type G relief grooves .....		6
4.5 Type H relief grooves .....		7
4.6 Upper and lower tolerances for relief grooves .....		7
5 Design of the surface .....		8
6 Designation .....		8
7 Machining allowances .....		8
8 Presentation in drawings .....		9
Annex A (informative) Dimensioning in accordance with geometrical product specifications (ISO GPS) .....		11
A.1 General .....		11
A.2 Dimensioning type F according to valid ISO GPS rules .....		11
Bibliography .....		13
Figures Figure 1 -- Relief groove for cylindrical surfaces intended for subsequent machining with machining allowance .....		6
Figure 2 -- Relief groove for cylindrical and planar surfaces intended for subsequent machining with machining allowance .....		6
Figure 3 -- Relief groove with smaller included angle with machining allowance .....		7
Figure 4 -- Relief groove with greater included angle with machining allowance .....		7
Figure 5 -- Dimensions for machining allowances, type F relief grooves .....		9
Figure 6 -- Simplified presentation of a type F relief groove .....		10
Figure A.1 -- Dimensioning using ISO GPS rules for a type F relief groove with a linear profile and position specifiers .....		12

<b>Figure A.2 -- Dimensioning using ISO GPS rules for a type F relief groove with a surface profile .....</b>	<b>12</b>
<b>Tables Table 1 -- Dimensions for relief grooves .....</b>	<b>8</b>
<b>Table 2 -- Allocation of dimensions of relief grooves and machining allowances .....</b>	<b>9</b>