

# Material data sheet

Material Number	1.0718
Country	Germany
Designations	11SMnPb30; 9 SMnPb 28 †

## Data from *Stahlschlüssel* book

untreated (and bright turned)

### Tensile strength

<=10 mm	380 - 570 N/mm <sup>2</sup>
11 - 16 mm	380 - 570 N/mm <sup>2</sup>
17 - 40 mm	380 - 570 N/mm <sup>2</sup>
41 - 63 mm	380 - 570 N/mm <sup>2</sup>
64 - 100 mm	360 - 520 N/mm <sup>2</sup>

### Hardness [HB 30]

<=10 mm	<=170 HB 30
11 - 16 mm	<=170 HB 30
17 - 40 mm	<=159 HB 30
41 - 63 mm	<=159 HB 30
64 - 100 mm	<=156 HB 30

cold drawn and stress relieved

### Tensile strength

64 - 100 mm	<=550 N/mm <sup>2</sup>
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cold drawn

### Yield stress

<=10 mm	>=440 N/mm <sup>2</sup>
11 - 16 mm	>=410 N/mm <sup>2</sup>
17 - 40 mm	>=375 N/mm <sup>2</sup>
41 - 63 mm	>=305 N/mm <sup>2</sup>
64 - 100 mm	>=245 N/mm <sup>2</sup>

### Tensile strength

<=10 mm	560 - 810 N/mm <sup>2</sup>
11 - 16 mm	510 - 760 N/mm <sup>2</sup>
17 - 40 mm	460 - 710 N/mm <sup>2</sup>
41 - 63 mm	410 - 660 N/mm <sup>2</sup>
64 - 100 mm	380 - 630 N/mm <sup>2</sup>

### Elongation after fracture (A5)

<=10 mm	>=6 %
11 - 16 mm	>=7 %
17 - 40 mm	>=8 %
41 - 63 mm	>=9 %
64 - 100 mm	>=10 %