

## Steel and Stainless Steel <sup>1)</sup>

		Steel		Spring Steel	Stainless Steel	
		C4D	C18D	Federstahl DH	1.4301	1.4404
<b>Material - No.</b>	DIN / EN	1.0300	1.0416	-	1.4301	1.4404
	UNS	G10060	G10180	-	304	316L
<b>Nominal Composition</b>	[%]	≤ 0,06 C	0,15 - 0,20 C	0,45 – 1,00 C	18 Cr 10 Ni Rest Fe	18 Cr 10 Ni 2 Mo Rest Fe
<b>Conductivity <sup>2</sup></b>	[m/(Ohm mm <sup>2</sup> )]	7,4	6,5	5	1,4	1,3
<b>Conductivity <sup>2</sup></b>	[% IACS]	13	11	8,5	2,4	2,3
<b>Thermal Conductivity <sup>2</sup></b>	[W/(mK)]	50	50	50	15	15
<b>Coefficient of Thermal Expansion <sup>3</sup></b>	[10 <sup>-6</sup> /K]	13	13	13	16,5	16,5
<b>Tensile Strength annealed</b>	[N/mm <sup>2</sup> ]	350	450	-	600	600
<b>Elongation annealed</b>	[%]	25	25	-	30	40
<b>Tensile Strength hard</b>	[N/mm <sup>2</sup> ]	600	800	2500	1500	1500
<b>Density</b>	[g/cm <sup>3</sup> ]	7,85	7,85	7,85	7,90	7,98

1) Nominal data for diameter 0,8 mm

2) At 20° C

3) Temperature range 20 - 200° C