



## Injection Moulded Material Properties and Application Data

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<b>Material:</b>	Nickel-Silicon-Iron	
<b>Grade:</b>	<b>2% Ni-Si-Fe</b>	
<b>Nominal Composition, %:</b>	Ni	2.0
	Si	0.3
	C	0.01 max. as sintered
	Fe	Balance

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<b>Typical properties</b>	<b>as sintered</b>	<b>case hardened</b>
Density (g/cm <sup>3</sup> )	7.70-7.80	
Hardness, HV1	approx. 150	Core approx. 150
Surface Hardness, HV1		up to 750
Case Depth (mm)		0.05-0.50
Elastic Modulus (GPa)	197	
Elongation (%)	26	1
Tensile Strength (MPa, N/mm <sup>2</sup> )	325-365	400-435
Yield Strength (MPa, N/mm <sup>2</sup> )	180-220	380-415
As Sintered Surface Finish	R <sub>a</sub> < 1.6	R <sub>a</sub> < 1.6

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### Uses, remarks;

Mechanical components requiring good strength fatigue resistance, and/or high surface hardness for textile, business machines, computer and appliance applications.