Kormax Cast Iron
4E

Material Data Sheet

Kormax 4E Continuous Cast Iron bars consist of a uniform pearlitic structure fron surface to core. As a continuous cast iron bar it has a fine grain structure combined with the fine graphite flake size and dense homogeneous structure. The material is well suited for high speed machining and is suitable in applications that demand the ability to withstand high pressure without leaking.

Chemical Composition (%)

Element		4E Range %
Carbon	c	3.35
Manganese	Mn	0.45
Silicon	Si	2.60
Nickel	Ni	0.08
Chromium	Cr	0.08
Molybdenum	Mo	0.01
Phosphorus	P	0.10
Sulfur	S	0.08
Magnesium	Mg	0.01
Copper	Cu	0.30
Iron	Fe	Balance

Mechanical Properties

Material Specification	Material Section	Tensile Strength (N/mm² min)
Kormax 4E Cast Iron Bar (According to EN 16482:2014, subsequently EN 1561:2012)	20 mm - 50 mm	195
	>50 mm - 100 mm	180
	>100 mm - 200 mm	165
	>200 mm - 400 mm	155

Brinell Hardness Range: *(Informative)*	170-240 HB measured as an average of the center and the rim area of the bar (10 mm diameter ball).
Microstructure: *(Informative)*	A, D & E graphite flakes. The matrix is approx. 60% or more pearlitic. The rim is predominantly ferritic and may contain minor quantities of free carbides.
Heat Treat Response: *(treatment)*	Kormax 4E Cast Iron is not recommended for hardening applications and heat
Density:	7.25 g/cc + 3% for oversize and gross length of bar.

Notes for the user: The values given in this data sheet are based on a sheet with a 40mm thickness. Depending on the thickness the technical values may vary during processing.
The technical data given in this sheet correspond to our current state of knowledge and should not be construed as an agreement or guarantee regarding certain properties of our products. The decision on the suitability of a particular material for a specific application is up to the user. We reserve the right to modify the given data. Errors of the given data are reserved. The document was produced by machine and is valid without signature.