

This page is mainly introduced the **F 593 304 L Datasheet**, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of **F 593 304 L**, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel **F 593 304 L**

### F 593 304 L Standard Number:

ITEM	Standard Number	Descriptions
5	F 593 (2008)	Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs

### F 593 304 L Chemical composition (mass fraction) (wt.%)

Chemical		Min.(%)		Max.(%)					
C				0.030					
Si				1.00					
Mn				2.00					
P				0.045					
S				0.03					
Cr		18.00		20.00					
Ni		8.00		12.0					
N				0.10					
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Standard Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs

### F 593 304 L Physical Properties

Tensile strength	115-234	$\sigma_b$ /MPa
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Yield Strength	23	$\sigma_{0.2} \geq / \text{MPa}$
Elongation	65	$\delta 5 \geq (\%)$
$\psi$	-	$\psi \geq (\%)$
Akv	-	$Akv \geq / \text{J}$
HBS	123-321	-
HRC	30	-

### F 593 304 L Mechanical Properties

Tensile strength	231-231	$\sigma_b / \text{MPa}$
Yield Strength	154	$\sigma_{0.2} \geq / \text{MPa}$
Elongation	56	$\delta 5 \geq (\%)$
$\psi$	-	$\psi \geq (\%)$
Akv	-	$Akv \geq / \text{J}$
HBS	235-268	-
HRC	30	-

### F 593 304 L Heat Treatment Regime

Annealing	Quenching	Tempering	Normalizing	Q & T
√	√	√	√	√

### F 593 304 L Range of products

Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	$\Phi 8$ -1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil / Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

**We can produce Specialsteel the specifications follows:**