

### Chemical Composition

Element	C	Si	Mn	P	S	Cr	Mo	Cu	Ni	N
Weight %	0.02 Max	0.5 Max	2.0 Max	0.03 Max	0.005 Max	19.0 - 21.0	6.0 - 7.0	0.7 - 1.50	24.0 - 26.0	0.12 - 0.20

Wireline Diameter	Inches	0.092	0.108	0.125	0.140	0.160
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### Mechanical Properties

Wireline Diameter	Millimetres	2.34	2.74	3.18	3.56	4.06
	Inches	0.092	0.108	0.125	0.140	0.160
Minimum Breaking Load	lbf	1550	2100	2700	3250	4250
Typical Breaking Load	lbf	1670	2185	2760	3350	4350
Minimum UTS	N/mm <sup>2</sup>	1600	1530	1440	1455	1458
Typical UTS	N/mm <sup>2</sup>	1730	1650	1550	1500	1492
Yield Strength	(0.2% P.S.)	80-90% UTS	80-90% UTS	80-90% UTS	80-90% UTS	80-90% UTS
Elastic Limit		22 - 28% UTS	22 - 28% UTS	22 - 28% UTS	22 - 28% UTS	22 - 28% UTS
Modulus of Elasticity	N/mm <sup>2</sup>	16 X 10 <sup>4</sup>	16 X 10 <sup>4</sup>	16 X 10 <sup>4</sup>	16 X 10 <sup>4</sup>	16 X 10 <sup>4</sup>
Recommended Safe Load		75% EBL*	75% EBL*	75% EBL*	75% EBL*	75% EBL*
Sheave Diameter	Inches	11	13	15	17	20
Minimum Wraps		8	8	8	8	8

### Physical Properties

Wireline Diameter	Millimetres	2.34	2.74	3.18	3.56	4.06
	Inches	0.092	0.108	0.125	0.140	0.160
Density	g/cm <sup>3</sup>	8.1	8.1	8.1	8.1	8.1
Coefficient of Liner Expansion	Mm/m/°C	0.15	0.15	0.15	0.15	0.15
Wireline Weight	lb/1000ft	23.29	32.1	43.0	53.9	69.1
Minimum Wireline Stretch	Inch/100ft/100lb	0.79	0.58	0.43	0.34	0.26
Thermal Conductivity	W/m.K	12	12	12	12	12
Specific Heat	J/kg.K	415	415	415	415	415
Resistivity	μOhm Cm	96	96	96	96	96
Magnetic Permeability		1.01	1.01	1.01	1.01	1.01

### Corrosion Resistance

H <sub>2</sub> S + CO <sub>2</sub>	Excellent in all concentrations
Chloride (Brine, salt etc.)	Excellent
H <sub>2</sub> S + CO <sub>2</sub> + Chloride	Very Good

\*EBL (Effective Breaking Load) = Actual Certified Breaking Load minus the weight of tools and minus the weight of wire off the drum.

100% Non-destructive Tested

100% Weld Free

Every Wireline is individually numbered providing full traceability

Individually crated to protect during shipment.

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