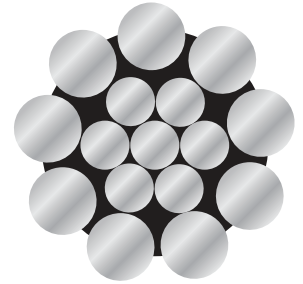


Swabline

WELL SERVICE LINES

PRODUCED PER API 9A SPECIFICATIONS



CABLE SPECIFICATIONS CONSTRUCTION 1X16 SEALE

Nominal Diameter	3/16"	7/32"	1/4"	5/16"
Construction	1x16 (9/6/1)	1x16 (9/6/1)	1x16 (9/6/1)	1x16 (9/6/1)

INNER ARMOR CHARACTERISTICS

Inner Lay Direction	Left	Left	Left	Left
Outer Lay Direction	Right	Right	Right	Right
Final Diameter	0.188" - 0 + 2%	0.219" - 0 + 2%	0.250" - 0 + 2%	0.316" - 0 + 2%
Inner Diameter	0.100"	0.118"	0.130"	0.160"
Lay Length	1.080"	1.274"	1.040"	1.28"
Central Wire Diameter	0.036" Drawn Galv. IPS	0.042" Drawn Galv. IPS	0.046" Drawn Galv. IPS	0.056" Drawn Galv. IPS
Internal Wires Diameter	0.032" Drawn Galv. IPS	0.038" Drawn Galv. IPS	0.042" Drawn Galv. IPS	0.052" Drawn Galv. IPS
External Wires Diameter	0.047" Drawn Galv. IPS	0.054" Drawn Galv. IPS	0.062" Drawn Galv. IPS	0.078" Drawn Galv. IPS

MECHANICAL CHARACTERISTICS

Breaking Strength (Klbs)	4.50	6.00	7.30	11.34
Max Suggested Working Tension (Klbs)	2.25	3.00	3.65	5.67
Weight (Kg/Mt)	0.112	0.146	0.198	0.311
Weight (Lb/Ft)	0.075	0.098	0.133	0.209
Stretch Coefficient ft/kft/klb	2.85	1.80	1.70	1.10