

Sag & Tension Tables (NESC: Heavy)

Self-Support All-Dielectric Outdoor Drop Cable

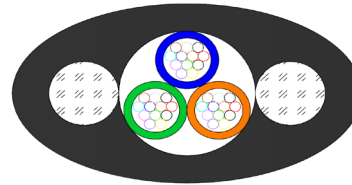
O-036-DF-XY-F12NS/15T

(800) 982-1708
 (828) 324-2200
 Fax: (828) 328-3400
 Int'l Fax: (828) 323-4989
 www.commscope.com



Loading Conditions:	NESC HEAVY	SI	US
Ice Thickness mm (in):		12.70	(0.5)
Wind Pressure N/m ² (lb/ft ²):		191.5	(4.0)
Temperature °C (°F):		-17.8	(0.0)
Safety Factor N/m (ft*lb):		4.38	(3.23)

Environmental Conditions			
Max. Environmental Load N (lbf):		1303	(293)
Max. Environmental Cable Strain (%):		0.60	(0.60)
Maximum Vertical Sag m (ft):		1.63	(5.3)



Design Specifications:		SI	US
Maximum Span m (ft):		39	(128)
Cable Weight kg/km (lb/mf):		31	(21)
Cable Diameter mm (in):		8.0	(0.31)
Cable Height mm (in):		4.5	(0.18)
Install Temp °C (°F):		20	(68.0)

Maximum Allowable Install Load and Strain			
Max. Install. Load N (lbf):		125	(28)
Max. Install. Cable Strain (%):		0.09	(0.09)

Install Location	Install Conditions at 20°C (68°F)					Loaded Conditions at -18°C (0°F)				
	Max Span	Sag	Install Sag	Tension	Cable Strain	Vertical Sag % of Span	Vertical Sag	Horizontal Sag	Tension	Cable Strain
	m (ft)	m (ft)	(%)	N (lbf)	(%)	(%)	m (ft)	m (ft)	N (lbf)	(%)

	28 (92)	0.28 (0.9)	1.00	107 (24)	0.08	3.30%	0.92 (3.0)	0.77 (2.5)	1174 (264)	0.54
	27 (89)	0.41 (1.3)	1.50	71 (16)	0.06	3.36%	0.91 (3.0)	0.76 (2.5)	1108 (249)	0.51
	26 (85)	0.52 (1.7)	2.00	49 (11)	0.05	3.44%	0.90 (2.9)	0.75 (2.4)	1041 (234)	0.48
	25 (82)	0.75 (2.5)	3.00	31 (7)	0.04	3.71%	0.93 (3.0)	0.77 (2.5)	930 (209)	0.42

	32 (105)	0.32 (1.0)	1.00	125 (28)	0.09	3.45%	1.10 (3.6)	0.92 (3.0)	1281 (288)	0.59
	34 (112)	0.51 (1.7)	1.50	89 (20)	0.07	3.62%	1.23 (4.0)	1.03 (3.4)	1294 (291)	0.60
	36 (118)	0.72 (2.4)	2.00	71 (16)	0.06	3.81%	1.37 (4.5)	1.14 (3.7)	1303 (293)	0.60
	39 (128)	1.17 (3.8)	3.00	49 (11)	0.05	4.18%	1.63 (5.3)	1.36 (4.5)	1286 (289)	0.60

	32 (105)	0.32 (1.0)	1.00	125 (28)	0.09	3.45%	1.10 (3.6)	0.92 (3.0)	1281 (288)	0.59
	34 (112)	0.51 (1.7)	1.50	89 (20)	0.07	3.62%	1.23 (4.0)	1.03 (3.4)	1294 (291)	0.60
	36 (118)	0.72 (2.4)	2.00	71 (16)	0.06	3.81%	1.37 (4.5)	1.14 (3.7)	1303 (293)	0.60
	39 (128)	1.17 (3.8)	3.00	49 (11)	0.05	4.18%	1.63 (5.3)	1.36 (4.5)	1286 (289)	0.60

Note: Assumptions made regarding Install Locations. Changes to these assumptions may change the Max Spans.

† Street crossing distances with 18.0 ft attachment height and a 3.0 ft maximum vertical sag.

‡ Pedestrian crossing distances with 18.0 ft attachment height and a 9.0 ft maximum vertical sag.

* Max span with no limits imposed on sag.

©2019 CommScope, Inc. All Rights Reserved.
 All trademarks identified by ® or ™ are registered trademarks or trademarks, respectively, of CommScope.
 All Specifications are subject to change. See www.commscope.com for the most current information.

Specifications Subject to Change
 Revision Date: 5/14/2024

These calculations are provided for guidance purposes only and should not be used or in any way relied upon without consultation with and supervision of experienced network design specialists. CommScope makes no representations or warranties of any kind, express or implied, including any representation or warranty regarding the quality, content, completeness, suitability, adequacy or accuracy of the data contained herein. CommScope is under no obligation to issue any upgrades or updates or notify customers/users of these calculations that changes have been made to the calculations. The user of these calculations assumes all risks associated with such use, and CommScope Hereby disclaims any and all liability for damages of any kind resulting from such use.