STANDARD ACCESSORIES

HYDRALUBE® LUBRICANTS

Formulated to meet specific requirements, our lubricants are available in a wide range of polymer and silicone-modified formulations in gel, creamy gel, or pourable forms. We offer a lubricant to match the type and weight of cable to be placed. Many of our lubricants are UL Listed and available in Summer and Winter grades.

CABLE PULLING
Copper, Fiber Optic, Coax, Electrical & Duct

F-100i
Longer pulls, high speed

F-150i
Longest horizontal pulls

F-200i
Long difficult pulls with heavy cables & multiple bends

F-300i
Horizontal or vertical pulls with heavy cables and multiple bends

Lubaduk
Contains microspheres to aid with heavy cable placement and technical routes

JETTING
Fiber Optic or MicroCable

AT-500
Pre-lubricating conduit prior to air assisted blowing with heavy cables and multiple bends

HYDRALUBE® COMPARISON CHART

		FREE-FLOWING LIQUIDS		STIFF GELS		JETTING
		F-100i	F-150i	F-200i	Lubaduk/ F-300it	AT-500
Sidewall Load	> 200 lb/ft		•	•	•	
	< 200 lb/ft	•	•	•	•	•
Pull Speed	> 60 fpm	•	•			•
	< 60 fpm		•	•	•	
Pull Length	> 800 ft.	•	•		•	•
	< 800 ft.	•	•	•	•	•
Duct Conditions	Wet		•	•	•	
	Dry	•	•	•	•	•
Orientation	Vertical			•	•	•
	Horizontal	•	•	•	•	•
Cable Weight	Heavy		•	•	•	
	Light	•	•	•	•	•

STANDARD ACCESSORIES

HYDRALUBE® USAGE GUIDE

QUANTITY OF HYDRALUBE® PULLING LUBRICANT IN GALLONS*

CONDUIT SIZE	LENGTH OF PULL (FEET):					
	500'	1000'	2000'	3000'	4000'	5000'
1"	0.7	1.5	3.0	4.4	5.9	7.4
1 1/4"	0.9	1.9	3.7	5.6	7.5	9.4
1 1/2"	1.1	2.1	4.3	6.4	8.6	10.7
2"	1.3	2.7	5.4	8.1	10.7	13.4
2 1/2"	1.6	3.3	6.5	9.8	13.0	16.3
3"	2.0	4.0	7.9	11.9	15.8	19.8
4"	2.5	5.1	10.2	15.3	20.3	25.4
5"	3.1	6.3	12.6	18.9	25.1	31.4
6"	3.7	7.5	15.0	22.5	30.0	37.4

Q (quantity in gallons) = .0014 x L (length of pull) x D (inside diameter of conduit)

*Quantities will vary depending upon conduit conditions. These quantities are based upon maximum expected usage and were calculated using SDR 11 Average ID's. For information or assistance with your specific pull, please contact Customer Service.

MICRODUCT AT500 LUBE ESTIMATE TABLE

MICRODUCT SIZE	INSIDE DIAMETER (MM)	DISTANCE (FEET)	IN GAL	IN QT	IN OZ
12/10mm	10	1,000	0.06	0.25	8
		2,500	0.16	0.63	20
		5,000	0.31	1.26	40
16/12mm	12	1,000	0.08	0.30	10
		2,500	0.19	0.76	24
		5,000	0.38	1.51	48
18/14mm	14	1,000	0.09	0.35	11
		2,500	0.22	0.88	28
		5,000	0.44	1.76	56

Based on a theoretical 1 mil wet film thickness:

Qty = [12" * 0.001 *(3.1416/231)] * D * L = 0.00016 (D)(L) gal

D is in inches. Convert MicroDuct inside diameters to inches by dividing them by 25.4 for the table calculations.

Please note that the smallest micro duct listed is 12/10mm.
The effects of wet lubrication on smaller micro cables and air blown fiber in smaller ID MicroDucts is not known.

DURA-LINE LUBRICANTS - WORKING TEMPERATURE RANGES

PRODUCT	SUMMER	WINTER	CANADIAN WINTER
Hydralube F-100i	20 to 140F (-7 to 60C)	0 to 140F (-18 to 60C)	
Hydralube F-150i	20 to 140F (-7 to 60C)	0 to 140F (-18 to 60C)	-20 to 140F (-28 to 60C)
Hydralube F-200i	20 to 140F (-7 to 60C)	0 to 140F (-18 to 60C)	
Hydralube F-300i	20 to 140F (-7 to 60C)		
Hydralube AT-500	20 to 140F (-7 to 60C)	0 to 140F (-18 to 60C)	
Lubaduk	20 to 140F (-7 to 60C)	0 to 140F (-18 to 60C)	

HYDRALUBE® OVERVIEW

	PRODUCT	TYPES OF PULLS	CONDUIT	LUBRICANT CONSISTENCY	APPLICATION METHODS	RECOMMENDED APPLICATIONS
FREE FLOWING LIQUID POURABLE GEL	**F-100i**	Longer horizontal pulls. All fiber optic, copper & coaxial cables.	Plastic	Pourable Viscoelastic Liquid	Pour, Pump	For cable installation projects where pulling distances & higher pulling speeds are encountered. Fiber optic cable, Coaxial cable, Polyethylene innerduct into PVC conduit.
	F-150i	Premium silicone. For longest, horizontal pulls of all types of cable. Good for silicone-lined & pre-lubricated duct.	Plastic	Pourable Viscoelastic Liquid	Pour, Pump	Premium friction reducing cable lubricant for unusually difficult cable installations or where pulls of exceptionally long distances must be achieved. Fiber optic cable, electrical cable.
STIFF GELS	**F-200i**	Long, difficult, multi-bend pulls of heavy cable. Horizontal or vertical pulls. Lubrication of innerduct into conduit.	Plastic	Soft Creamy Gel	Pump, Gel Bags, Pour	For heavy cables that tend to displace liquid lubricants or for indoor cable & wire pulls where lubricant pooling or runback is undesirable. Conventional copper telecommuncations cables, transmission & distribution power cables, indoor wire & cable, semi-conducting jacketed cable, or overriding innerduct into conduit.
	F-300i	Polymer based for horizontal or vertical pulls.	Plastic	Pourable Gel	Pour, Pump	Pourable free-flowing liquid for fiber optic, copper, coaxial cable & polyethylene innerduct in long horizontal pulls. Viscoelastic liquid for cable installation projects where longer pulling distances & higher pulling speeds are encountered.
	Lubaduk	Silicone based. Will not dry out even during long pulls.	Plastic	Microspheres	Pour, Pump	Pourable shear sensitive carrying agent holds a dispersion of silicone oil and Microspheres in suspension. Available in Summer or Winter grade.
BLOWING LUBE	**AT-500**	Use to pre-lubricate conduit in the field prior to air-blowing or pushing.	Plastic	Liquid	Pour, Pump	A high-performance silicone lubricant used with air-assisted cable blowing & pushing systems.