



FIBER OPTIC CABLE BLOWING METHOD

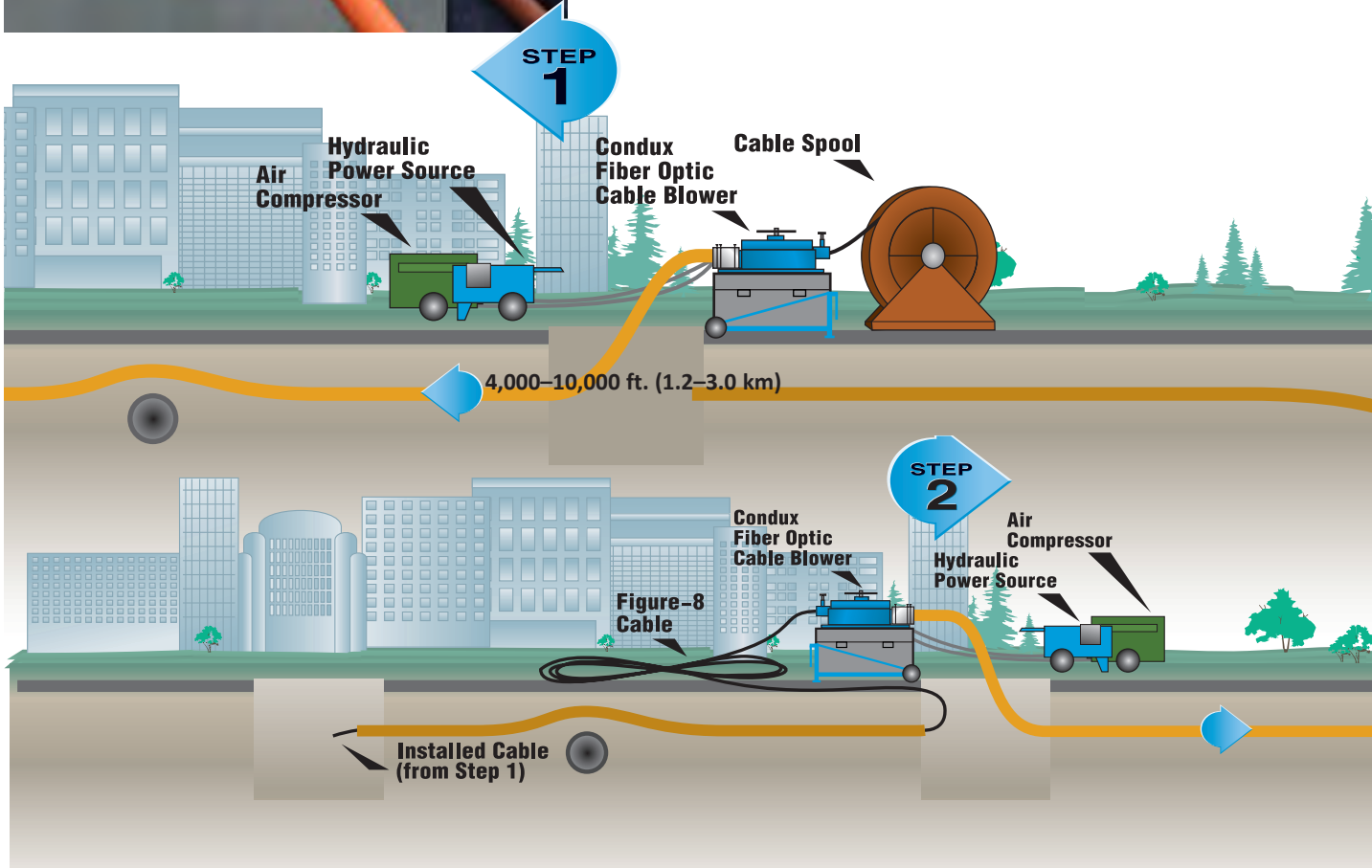


An Efficient Method

Fiber optic cable blowing is one of the most efficient and safe means of installing fiber optic cable. A pressurized blowing system uses two forces to install fiber optic cable. A pulling force combines with a pushing force to cause the cable to travel through the duct like air. Today's fiber optic cable installations benefit from the pressurized blowing system because it provides greater installation speeds with less stress than traditional cable pulling.

The cable blower unit utilizes a hydraulic power system and an air compressor to generate the desired push and pull forces. Working together, this dual power supply provides greater blowing power with lower air consumption. Controls and gauges on the cable blower allow the operator to monitor the forces being exerted on the cable. The operator can make adjustments to make sure the forces being exerted on the cable are working with one another, not against one another.

Blowing minimizes the stress placed on cable during installation. Because the cable blower provides both pulling and pushing force, stress is balanced. For example, at 135 psi (9.3 bar) in 2 inch (51 mm) duct only 430 lbs (1,913 N) of pulling force is generated.



Blowing vs. Pulling

Blowing cable is different from pulling cable in several ways. During cable pulling, the cable is kept taut and only pull force is applied. It travels in a straight line until a bend or curve changes its path. The cable ultimately rubs on each of the bends or curves, creating friction. As more pulling force is added to counteract the friction, additional stress is added to the cable.

Compared to a pulling application, blowing cable is faster and puts the cable under less stress.

Through cable blowing, contractors are able to install more cable per day with less manpower. This means increased productivity and decreased cost.

How To: The Typical Process

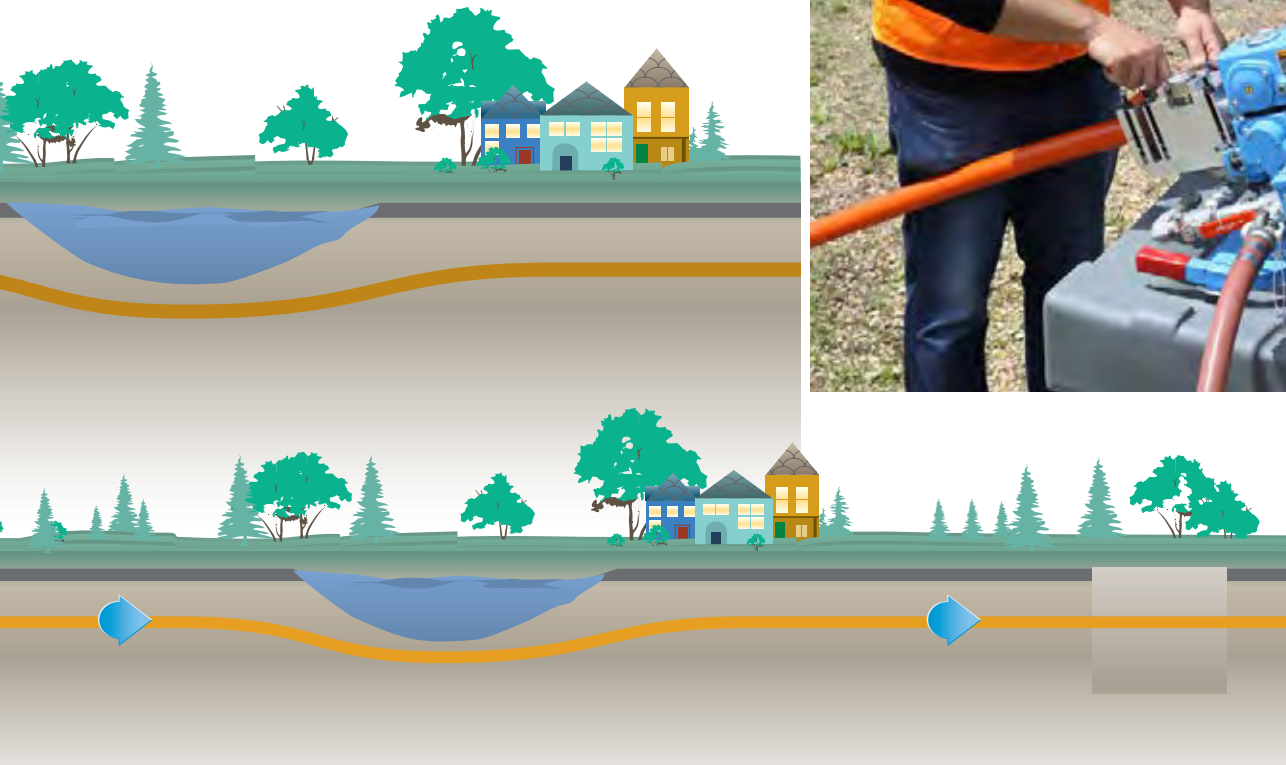
The typical cable blowing process consists of several steps. **First**, the duct integrity is checked. It is pressurized to check for leaks. In order to ensure a successful installation, the duct must be airtight and free of obstruction. Then a small amount of lubricant is poured in the duct and a foam carrier is blown through the run, confirming its integrity.

Second, the cable is prepared for installation. A cable carrier is attached to the end of the fiber optic cable. Corresponding size cable carriers are available to match the specific duct ID. The cable is fed through the cable blower and into the duct.

Third, the duct is lubricated. Lubricant is added in front of the cable carrier and behind the cable carrier.

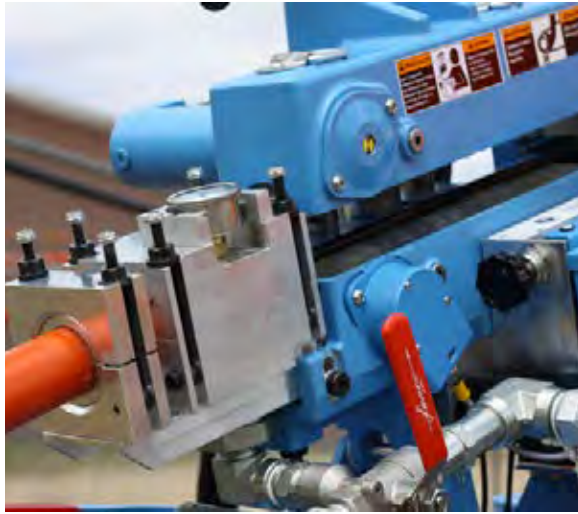
Fourth, the blowing process begins. Pressure (compressed air) is applied to the duct behind the cable carrier. As the pressure tries to equalize, it seeks out the path of least resistance and creates a pushing force on the cable carrier, causing forward motion. The moving cable carrier, in turn, exerts a pulling force on the cable and begins to move it through the duct.

Meanwhile, an additional pushing force is applied to the cable by a hydraulic powered tractor drive on the cable blower. Use of a hydraulic tractor drive reduces air consumption requirements from the air compressor. Plus, the push force from the tractor drive provides cable slack, reduces back tension and keeps the cable loose and flexible. Friction and resistance are then reduced and the cable can travel freely through the duct work.





GULFSTREAM™ 400



Fiber Optic Cable Blower

The Condux Gulfstream™ 400 Fiber Optic Cable Blower is ideal for Fiber Installations

As a leader in the manufacture of cable installation tools and equipment, Condux offers a superior Fiber Optic Cable Blower that is compact and lightweight, making it ideally suited for your most difficult job sites. An updated design has increased portability and made operation easier than ever.

Fast

Install fiber optic cable up to 300fpm (900mpm). The cable travels at the same speed as the air! A carrier is always attached to the front of the cable. Compressed air propels the carrier and cable through the air-tight sealed duct. And, because air flow and tractor drive speed can be adjusted, you can install fiber at the rate which best suits any application.

Total Control

The Condux Gulfstream 400 Fiber Optic Cable Blower features longer tractor feed grip area for less stress on the cable, and a manual cylinder on the tractor feed to better control down pressure. Condux's patented traction control system shuts down the blower when problems with cable slippage or duct blockage are detected, adding safety to every job and preventing costly cable damage.

A speed and distance counter with LCD read-out, as well as convenient hydraulic and pneumatic controls, come standard with the Condux Fiber Optic Cable Blower. Blowers equipped with the Advanced Electronic Control System will shut down if slippage, over-speed or cable stoppage is detected.

Versatility

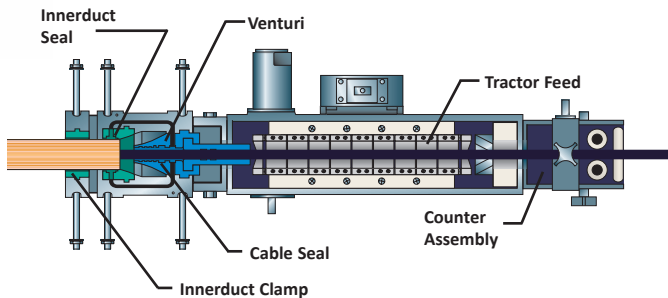
The Condux Gulfstream 400 Fiber Optic Cable Blower operates efficiently with most common combinations of cable and innerduct sizes. The Condux Gulfstream 400 Fiber Optic Cable Blower is designed for the installation of fiber optic cables with diameters from 0.23" (5.8 mm) to 1.13" (28.7 mm) into micro duct 10 mm to 18 mm and traditional innerduct ½" (13 mm) to 2" (51 mm) with metric sizes available.

The correct size cable seals and venturi must be determined for the cable being installed. Also necessary are the correct size innerduct seals, clamps and carrier for the innerduct being occupied.

Use the charts on page 112-113 to determine the correct size components for your specific cable and innerduct installation project.



! Ask for product literature!





GULFSTREAM™ 400



FIBER CABLE INSTALLATION

Superior Service & Support

The Condux Fiber Optic Cable Blower is precision manufactured in the USA by Condux International, Inc. Over four decades of technical experience and superior customer service is behind every product sold.



Smart Design, Easy to Operate

Convenient tilting of the Condux Gulfstream 400 Fiber Optic Cable Blower for ease of pouring in lubricant. Easily install cable into rollers, then close and you are ready to start.

Hydraulic & pneumatic controls are ergonomically designed and conveniently located. No special maintenance is required.



Lightweight & Portable, Everything's Inside

The Condux Gulfstream 400 Fiber Optic Cable Blower is extremely easy to handle and transport. The blower and all accessories including hydraulic hoses, cable and conduit packs and seal kits conveniently fit into a lightweight job box with wheels.





GULFSTREAM™ 400



Belt Tractor Drive

Single belt tractor drive provides for smooth and quiet operation. The belt can be easily removed and replaced making maintenance fast and simple.

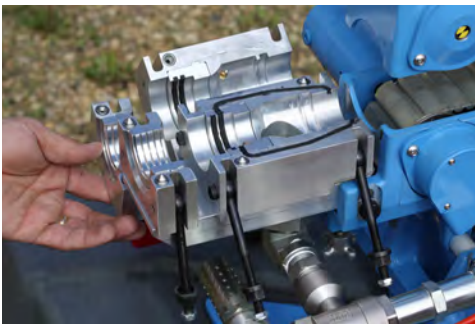


Advanced Electronic Controls

Standard system monitors and displays the cable and tractor drive speeds. Will automatically shut off the blower in these conditions:

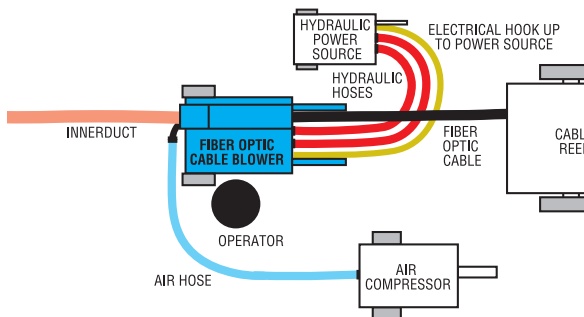
- Over pressure limit
- Slippage
- Over-speed
- Cable stoppage

Part No.	Description
08781020	Electronic Control Box
08781022	Electronic Control Box & Transducer Update
08781023	Transducer
02290843	ECB Fuse



Hinged Air Block & Conduit Clamp

The Condux Fiber Optic Cable Blower features a hinged air block and a hinged conduit clamp that are easily secured and opened with the use of a ratchet.



Dual Power System

Designed to operate with two power supplies that work in tandem in order to produce the most steady, efficient and reliable power to blow cable. A hydraulically-powered tractor drive supplements the pressurized air force, thus decreasing the CFM requirements of the air compressor. This means greater cable blowing efficiency using a much smaller air compressor.

The Condux Gulfstream™ 400 Fiber Optic Cable Blower is easy to order. The base unit comes complete with a job box, hydraulic hoses and everything listed below in the "Common Parts Package." Complete the order by specifying the cable pack(s) and duct pack(s) necessary to meet your exact job requirements. See pages 112-113 for full descriptions. You may order additional cable and duct packs at any time.

Part No.	Description
08782000	Fiber Optic Cable Blower
08782000INTL	Fiber Optic Cable Blower w/ Int'l Fittings
08782010	Fiber Optic Cable Blower Package 1A (includes Cable Packs #1-4 and Duct Packs #2-5)
08782008	Fiber Optic Cable Blower Package 1B (includes Cable Packs #1-4 and Duct Packs #4, 5, 6)

Mechanical Version (No Electronic Control Box or Sensors)

Part No.	Description
08782004	Fiber Optic Cable Blower
08782004INTL	Fiber Optic Cable Blower w/Int'l Fittings
08782046	Fiber Optic Cable Blower Package 2A (includes Cable Packs #1-4 and Duct Packs #2-5)
08782048	Fiber Optic Cable Blower Package 2B (includes Cable Packs #1-4 and Duct Packs #4, 5, 6)
08782054	Fiber Optic Cable Blower Package 2C (includes Cable Packs #1-4 and Duct Packs #9, 10, 14)
08782056	Fiber Optic Cable Blower Package 2D (includes Cable Packs #1-4 and Duct Packs #14, 15, 17)

Select your Cable Pack(s): (minimum one required)

Cable Packs include Cable Grips (for end of cable), Pneumatic Venturies and Cable Seals. See page 113 for ordering information.

Part No.	Description
08780393	Cable Pack #1 — 0.23-0.34 in (5.8-8.8 mm)
08780394	Cable Pack #2 — 0.35-0.48 in (8.9-12.2 mm)
08780512	Cable Pack #3 — 0.49-0.60 in (12.4-15.2mm)
08780395	Cable Pack #4 — 0.61-0.73 in (15.3-18.5 mm)
08780513	Cable Pack #5 — 0.74-0.85 in (18.8-21.6mm)
08780396	Cable Pack #6 — 0.86-0.97 in (22.0-24.5 mm)
08780514	Cable Pack #7 — 0.98-1.13 in (24.9-28.7 mm)
08781117	Cable Pack #8 — 10.4 x 5.5 mm (Nylatron Venturi for flat fiber cables)
08781118	Cable Pack #9 — 15.2 x 6.7 mm (Nylatron Venturi for flat fiber cables)

Select your Duct Pack(s): (minimum one required)

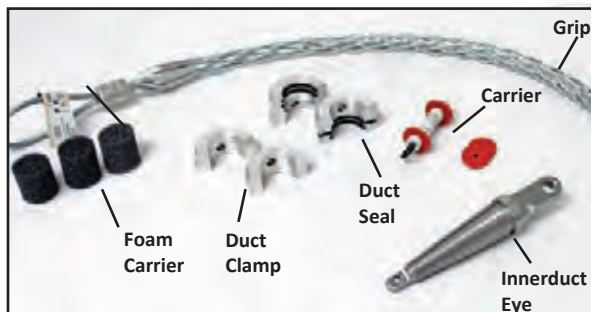
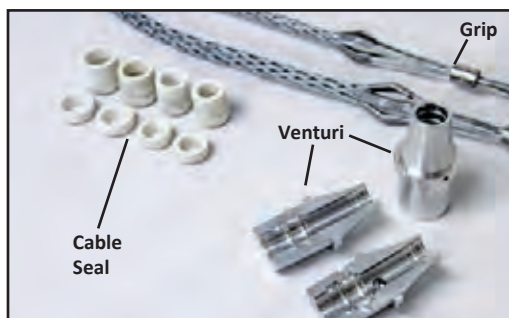
Duct Packs include Cable Grip (for end of innerduct), Cable Carrier, Innerduct Clamps, Innerduct Seals, Innerduct Pulling Eye & Foam Carriers. See page 112 for ordering information.

Part No.	Description
08780795	Duct Pack #1 — .5" SDR 11/13.5
08780680	Duct Pack #2 — .75" (27mm) SDR 11/13.5
08780386	Duct Pack #3 — 1" SDR 11/13.5
08780392	Duct Pack #4 — 1.25" SDR 11/13.5
08780397	Duct Pack #5 — 1.5" SDR 11/13.5
08780930	Duct Pack #6 — 2" SDR 11/13.5
08781120	Duct Pack #7 — 20 mm
08781153	Duct Pack #8 — 22 mm
08780240	Duct Pack #9 — 25 mm
08780385	Duct Pack #10 — 32 mm
08780387	Duct Pack #11 — 36 mm
08780388	Duct Pack #12 — 37 mm
08780389	Duct Pack #13 — 1.25" TRUE
08780390	Duct Pack #14 — 40 mm
08780391	Duct Pack #15 — 42 mm
08780545	Duct Pack #16 — 44 mm
08780575	Duct Pack #17 — 50 mm



Common Parts Package: (included with all blower units)

Part Number	Description
02290222	Small Case
08780506	Foam Insert for Small Case
02284600	Small Divided Case
02288774	Parts Label for Small Divided Case
08780126	O-Ring Seal Kit
02286416	2 Pin Extension Cord
08230800	Canvas Bag
08017000	5/8" x 600 lb Swivel (16 mm x 2,669 N)
08780424	Capscrew Set (12-M04-07)
08761248	Power Cord Assembly Lighter Plug
02289620	Wrench, 3/4"
02290168	Standard & Metric Hex Key Set
02283800	Hex Ball Driver 3/32"
02288787	Hex Ball-Point Driver 2.5mm
02291090	9/16" Comb-Ratchet Wrench
08780223	Venturi Air Plug (Seal Disk)





GULFSTREAM™ 400 DUCT PACKS

FIBER CABLE INSTALLATION

Gulfstream 400 & Mini-Blower Pusher Duct Packs

Pack	Duct Pack		Duct Clamp		Duct Seal		Carrier		Foam Carrier		Cable Grip		Innerduct Eye
	Duct Size	Part Number	Duct OD (mm)	Part Number	Duct OD (mm)	Part Number	Carrier OD (mm)	Part Number	Carrier OD (mm)	Part Number	Duct OD (mm)	Part Number	Part Number and ID Range (mm)
1	1/2" SDR 11-13.5	08780795 Pack #1	0.84" (21.30)	08780791	0.84" (21.30)	08780786	0.688" (17.50)	08780793	0.75" (19.0)	08078300	.75-.99" (19-25)	08643131 033-03-012	08913342 .71-.77" (18-20)
2	3/4" (27mm) SDR 11-13.5	08780680 Pack #2	1.050" (26.6)	08780682	1.050" (26.6)	08780685	0.75" (19.0)	08780690	0.75" (19.0)	08078300	1.00-1.24" (25.4-31.5)	08643137 033-03-013	08761840 .71-.87" (18-22)
3	1" SDR 11/13.5	08780386 Pack #3	1.315" (33.4)	08780369	1.315" (33.4)	08780307	1.121" (28.5)	08761250	1.25" (31.8)	08761439	1.25-1.49" (32-38)	08643143 033-03-015	08913343 .75-1.00" (19-25)
4	1.25" SDR 11/13.5	08780392 Pack #4	1.660" (42.2)	08780375	1.660" (42.2)	08780051	1.414" (35.9)	08761255	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
5	1.5" SDR 11/13.5	08780397 Pack #5	1.900" (48.3)	08780404	1.900" (48.3)	08780398	1.618" (41.1)	08761260	1.75" (44.5)	08761441	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761844 1.37-1.68" (35-43)
6	2" SDR 11/13.5	08780930 Pack #6	—	—	—	—	2.023" (51.4)	08761265	2.00" (50.8)	08761442	2.00-2.49" (50.8-63.2)	08643155 033-03-017	08761846 1.80-2.19" (46-56)
7	20mm	08781120 Pack #7	0.787" (20.0)	08781122	0.787" (20.0)	08781121	0.688" (17.5)	08780793	1.00" (25.4)	08761444	.75-.99" (19.0-25.1)	08643131 033-03-017	08914007 .551-.813" (14-20)
8	22mm	08781153 Pack #8	.866" (22.0)	08781154	.866" (22.0)	08781155	0.688" (17.5)	08780793	1.00" (25.4)	08761444	.75-.99" (19.0-25.1)	08643131 033-03-012	08914007 .551-.813" (14-20)
9	25mm	08780240 Pack #8	0.984" (25.0)	08780099	0.984" (25.0)	08780134	0.787" (20.0)	08780230	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643137 033-03-013	08761840 .71-.87" (18-22)
10	32mm	08780385 Pack #9	1.260" (32.0)	08780368	1.260" (32.0)	08780306	1.063" (27.0)	08761560	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
11	36mm	08780387 Pack #10	1.417" (36.0)	08780370	1.417" (36.0)	08780308	1.181" (30.0) 1.220" (31.0)	08761643 08761555	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
12	37mm	08780388 Pack #11	1.457" (37.0)	08780371	1.457" (37.0)	08780309	1.220" (31.0)	08761555	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
13	1.25" TRUE	08780389 Pack #12	1.500" (38.1)	08780372	1.500" (38.1)	08780333	1.250" (31.7)	08761670	1.50" (38.1)	08761440	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
14	40mm	08780390 Pack #13	1.575" (40.0)	08780373	1.575" (40.0)	08780334	1.299" (33.0)	08761525	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
15	42mm	08780391 Pack #14	1.653" (42.0)	08780374	1.653" (42.0)	08780335	1.378" (35.0)	08761660	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761844 1.37-1.68" (35-43)
16	44mm	08780545 Pack #15	1.732" (44.0)	08780546	1.732" (44.0)	08780547	1.496" (38.0)	08761786	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761844 1.37-1.68" (35-43)
17	50mm	08780575 Pack #16	1.969" (50.0)	08780435	1.969" (50.0)	08780431	1.606" (40.0)	08761579	2.00" (50.8)	08761442	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761844 1.37-1.68" (35-43)



GULFSTREAM™ 400 CABLE PACKS



FIBER CABLE INSTALLATION

Gulfstream 400 Cable Packs

Pack	Cable Pack		Venturi		Cable Seal		Cable Grip	
	Cable OD	Part Number	Cable OD	Part Number	Cable OD	Part Number	Cable OD	Part Number
1	0.23" - 0.34" (5.8 - 8.8mm)	08780393 (Pack #1)	0.23" - 0.34" (5.8 - 8.8mm)	08780281	0.23" - .028" (5.8 - 7.2mm)	08780406	0.21" - 0.35" (5.3 - 8.9mm)	08643754 033-29-1194
					0.29" - 0.34" (7.3mm - 8.8mm)	08780407		
2	0.35" - 0.48" (8.9 - 12.2mm)	08780394 (Pack #2)	0.35" - 0.48" (8.9 - 12.2mm)	08781115	0.35" - 0.42" (8.9 - 10.7mm)	08761424	0.32" - 0.48" (8.1 - 12.2mm)	08643755 033-29-1195
					0.43" - 0.48" (10.8 - 12.2mm)	08761425		
3	0.49" - 0.60" (12.3 - 15.2mm)	08780512 (Pack #3)	0.49" - 0.60" (12.3 - 15.2mm)	08781116	0.49" - 0.55" (12.3 - 14.0mm)	08761426	0.42" - 0.61" (10.7 - 15.5mm)	08643756 033-29-1196
					0.56" - 0.60" (14.1 - 15.2mm)	08761427		
4	0.61" - 0.73" (15.3 - 18.5mm)	08780395 (Pack #4)	0.61" - 0.73" (15.3 - 18.5mm)	08780284	0.61" - 0.67" (15.3 - 17.0mm)	08761428	0.53" - 0.74" (13.5 - 18.8mm)	08643757 033-29-1197
					0.68" - 0.73" (17.1 - 18.5mm)	08761429		
5	0.74" - 0.85" (18.6 - 21.6mm)	08780513 (Pack #5)	0.74" - 0.85" (18.6 - 21.6mm)	08780285	0.74" - 0.79" (18.6 - 20.1)	08761430	0.64" - 0.87" (16.3 - 22.1mm)	08643758 033-29-1198
					0.80" - 0.85" (20.2 - 21.8mm)	08761431		
6	0.86" - 0.97" (21.7 - 24.6mm)	08780396 (Pack #6)	0.86" - 0.97" (21.7 - 24.6mm)	08780286	0.86" - 0.92" (21.7 - 23.4mm)	08761432	0.75" - 1.00" (19.1 - 25.4mm)	08643759 033-29-1199
					0.93" - 0.97" (23.5 - 24.6mm)	08761433		
7	0.98" - 1.13" (24.7 - 28.7mm)	08780514 (Pack #7)	0.98" - 1.13" (24.7 - 28.7mm)	08780446	0.98" - 1.04" (24.7 - 26.4mm)	08761434	1.00" - 1.24" (25.4 - 31.5mm)	08643137 033-03-013
					1.05" - 1.13" (26.5 - 28.7mm)	08761435		
8	10.4 x 5.5mm	08781117	(Nylatron venturi for flat fiber cables)					
9	15.2 x 6.7mm	08781118	(Nylatron venturi for flat fiber cables)					

How Much Air?

Pressure

During pressurized blowing applications, as the duct size increases and the pressure remains constant, the pulling force increases geometrically. When used properly, the amount of pulling force placed on the cable by the Condux Fiber Optic Cable Blower cable carrier remains below the cable's recommended maximum pulling tension for two reasons. First, the blower is designed for use with a maximum 2 inch (51 mm) diameter duct. Second, the maximum amount of pressure applied by the blower during installation never exceeds 150 psi (10.3 bar).

At that pressure, with a 2 inch (51 mm) duct, a maximum pulling tension of 482 lbs. (2,145 N) can be generated on the cable by the cable carrier. This is well below the 600 lbs. (2,668 N) recommended maximum pulling tension for most cable types. Ducts smaller than 2 inches (51 mm) or pressures lower than 150 psi (10.3 bar) will result in lower maximum pulling tensions.

Flow

Duct size also determines the compressor flow needed for proper installation. For innerducts from 1-1/4 inches (25-31 mm) in diameter, a 175-275 SCFM (5-8 cu meters/min) compressor is recommended. For innerducts from 1-1/2-2 inches (28-51 mm) in diameter, a 275-375 SCFM (8-11 cu meters/min) compressor is recommended. Compressor flow should be doubled if the distance exceeds 6,000-8,000 feet (1.8-2.4 km).





GULFSTREAM™ 400 MICRODUCT ACCESSORIES



Multiple Micro Duct Installation Kits

Condux Multiple Micro Duct Installation Kits allow you to install up to 5 - 10/8 micro ducts, 4 - 12/10 micro ducts or 4 - 12.7 micro ducts into an existing innerduct, when used with the Condux Gulfstream™ 400 Fiber Optic Cable Blower.

Part Number	Description
08780710	10/8 Multiple Micro Duct Installation Kit
08780712	12/10 Multiple Micro Duct Installation Kit
08780770	12.7 Multiple Micro Duct Installation Kit
08780723	Flat Belt for Flat Fiber



10/8 Kit		
Part No.	Qty	Description
08645705	1	(1) Cable Grip
08780720	1	(1) Lower Belt
08780721	1	(1) Upper Belt
08780724	1	(1) Rear Guide Assembly
08780735	1	(1) 5-Hole Venturi
08780739	1	(3) Venturi Plugs
08780740	1	(5) Duct-Fill Plugs
08780741	1	(5) Duct-Cap Plugs
08780742	1	(1) Rear Guide
08780748	1	(5) Proofing Balls

12/10 Kit		
Part No.	Qty	Description
08645705	1	(1) Cable Grip
08780722	1	(1) Lower Belt
08780722	1	(1) Upper Belt
08780724	1	(1) Rear Guide Assembly
08780725	1	(1) 4-Hole Venturi
08780729	1	(3) Venturi Plugs
08780730	1	(4) Duct-Fill Plugs
08780731	1	(4) Duct-Cap Plugs
08780732	1	(1) Rear Guide
08780750	1	(5) Proofing Balls

12.7 Kit		
Part No.	Qty	Description
08645705	1	(1) Cable Grip
08780722	1	(1) Lower Belt
08780722	1	(1) Upper Belt
08780724	1	(1) Rear Guide Assembly
08780732	1	(1) Rear Guide
08780750	1	(5) Proofing Balls
08780771	1	(1) 4-Hole Venturi
08780772	1	(3) Venturi Plugs
08780774	1	(4) Duct-Cap Plugs
08780776	1	(4) Duct-Fill Plugs

NOTE: () Quantities included per set.



Kit Includes:
Pressure gauge
Universal claw adapter

Micro Duct Pressure Gauge Kit

Use the Micro Duct Pressure Gauge Kit in conjunction with Air Valve Plugs for pressurizing Micro Duct to prevent kinking and crushing during installation.

Part Number	Description
08780705	Micro Duct Pressure Gauge
08780705INTL	Micro Duct Pressure Gauge, international

Micro Duct Packs: Gulfstream™ 400 & Mini-Blower/Pusher

Duct Size OD (MM)	Part Number	Duct Clamp	Duct Seal	Innerduct Eye	
				ID Range	P/N
10	08764140	08764142	08764143	5 - 9mm	08913547
12	08764110	08764112	08764113	10 - 13mm	08913545
12.7	08764150	08764151	08764153	10 - 13mm	08913545
14	08764120	08764122	08764123	10 - 13mm	08913545
16	08764130	08764132	08764133	10 - 13mm	08913545
18	08781110	08781106	08781101	13 - 15mm	08913538
20	08781120	08781122	08781121	14 - 20.65mm	08914007





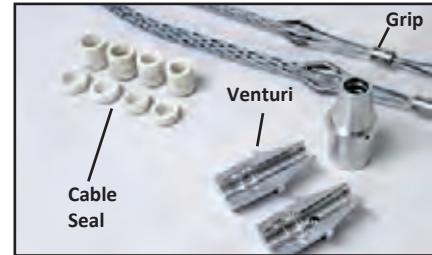
GULFSTREAM™ 400 MICRODUCT ACCESSORIES



FIBER CABLE INSTALLATION

Cable Packs for Micro Fiber: Gulfstream™ 400

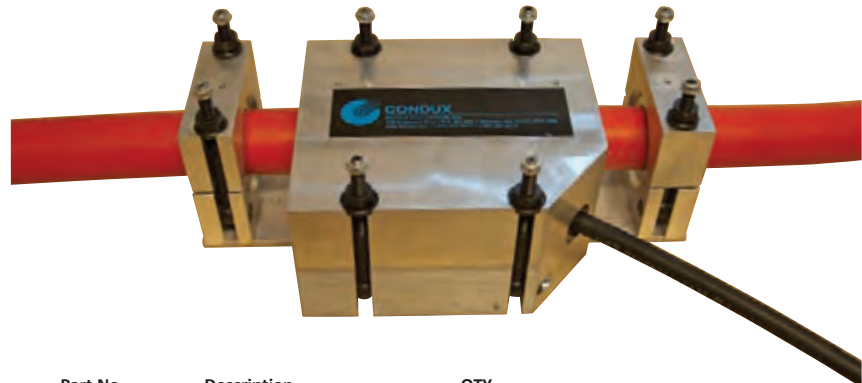
Pack	Cable Pack		Venturi		Cable Seal		Cable Grip
	Cable OD	P/N	Cable OD	P/N	Cable OD	P/N	Part Number
1	0.23" - 0.34" (5.8mm - 8.8mm)	08780393	0.23" - 0.34" (5.8 - 8.8)	08780281	0.23" - 0.28" (5.8 - 7.2)	08780406	08643754 033-29-1194
					0.29" - 0.34" (7.3 - 8.8)	08780407	
2	0.35" - 0.48" (8.9mm - 12.2mm)	08780394	0.35" - 0.48" (8.9 - 12.2)	08781115	0.35" - 0.42" (8.9 - 10.7)	08761424	08643755 033-29-1195
					0.43" - 0.48" (10.8 - 12.2)	08761425	
3	0.49" - 0.60" (12.3 - 15.2)	08780512	0.49" - 0.60" (12.3 - 15.2)	08781116	0.49" - 0.55" (12.3 - 14.0)	08761426	08643756 033-29-1196
					0.56" - 0.60" (14.1 - 15.2)	08761427	



Y-Block

The Condux "Y"-Block is designed for installing a micro duct or fiber cable into an existing occupied duct, when coupled to the Condux Fiber Optic Cable Blower.

Part No.	Description
08782300	Y-Block Kit



Y Block Kit Includes:

Part No.	Description	QTY	Part No.	Description	QTY
02288787	2.5mm Hex Ball Driver	1	08782316	Block, Cable Seal SM	1
02291090	3/16" Comb-Ratchet	1	08782317	Block, Cable Seal LG	1
08761868	Cable Shuttle 1 1/4"	1	08782319	Manual	1
08761869	Cable Shuttle 1 1/2"	1	08782318	Deluxe Y-block Case Foam	1
08780126	Seal Kit Replacement	1	02290222	Molded Storage Case	1
08780424	Machine Screws Kit	1			

Y-Block Duct Packs (sold separately)

(Each duct pack comes with 2-seals & 2-clamps).

Part Number	Description	Duct OD
08782302	Y Block Duct Pack - 1.00"	1.315"
08782304	Y Block Duct Pack - 1.25"	1.660"
08782306	Y Block Duct Pack - 1.50"	1.900"
08782308	Y Block Duct Pack - 2.00"	2.375"
08782324	Y Block Duct Pack - 25mm	25mm
08782326	Y Block Duct Pack - 32mm	32mm
08782328	Y Block Duct Pack - 40mm	40mm
08782330	Y Block Duct Pack - 50mm	50mm

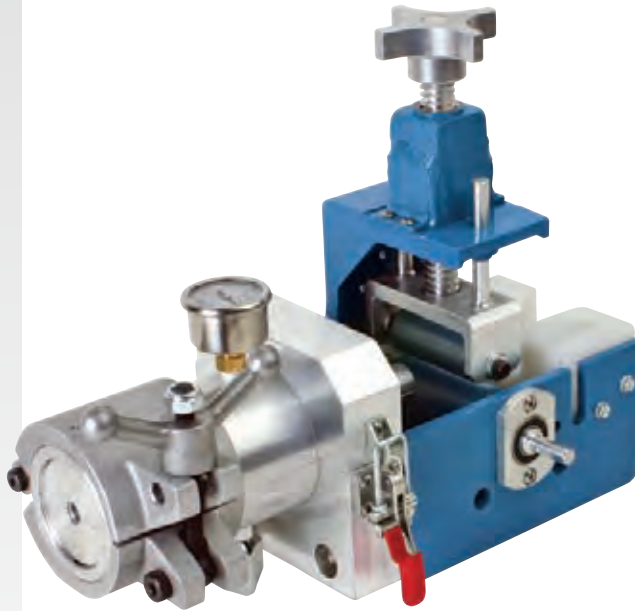
Features & Benefits

- Portable
- Easy to Use
- Duct Range 1.315" – 2.375" (33mm - 60mm) OD
- Cable Seal Range 0.35" – 0.90" (9mm - 23mm) OD
- Aluminum Construction
- Built-in Carrying Handles
- Canvas Storage Bag





MINI-BLOWER PUSHER



Mini-Blower/Pusher

The Mini-Blower/Pusher from Condux is the lightweight, portable solution for easy installation of micro fiber and traditional fiber optic cable. The compact unit is ideally suited for your most difficult job sites and "last mile" fiber installations. An updated design has made operation easier than ever.

Backed by years of fiber blowing experience, the Mini-Blower/Pusher is designed for the installation of fiber optic cables with diameters from 0.23" (5.8 mm) to 0.50" (12.7 mm) into micro duct 10 mm to 18 mm or traditional duct from 0.50" (12.7 mm) to 2" (50.8 mm).

Part Number	Description
08780800	Mini-Blower/Pusher
08780801	Mini-Blower/Pusher Job Box with Kit for 12 mm & 12.7 mm duct and includes cable packs 1 & 2 in the Mini-Blower/Pusher cable pack chart on page 117 (08780802, 08780804)
08780865	Mini-Blower/Pusher Job Box with Kit for 3/4" & 1 1/4" duct and includes cable packs 1, 2 & 3 in the Mini-Blower/Pusher cable pack chart on page 117 (08780802, 08780804, 08780806)
08780860	Job Box Only



Replacement Parts

Part Number	Description
08081320	Flat Roller for Flat Fiber
08081319	V-Grooved Roller Bottom
08081313	Top Roller Sleeve

! See pages 117-118 for Cable Packs and Duct Packs.



Heavy Duty Tripod

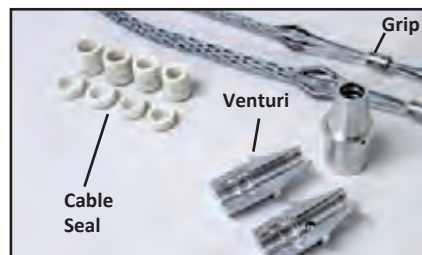
The Mini-Blower/Pusher mounts easily to the surveyor style tripod, which adds stability and versatility to fiber optic cable installations.

Part Number	Description
08780850	Heavy Duty Tripod



Cable Packs: Mini-Blower/Pusher

Pack	Cable Pack		Venturi		Cable Seal		Cable Grips
	Cable OD	Part Number	Cable OD	Part Number	Cable OD	Part Number	Part Number
1	0.23" - 0.34" (5.8mm - 8.8mm)	08780802	0.23" - 0.34" (5.8 - 8.8)	08780803	0.23" - 0.28" (5.8 - 7.2)	08780406	08643754 033-29-1194
					0.29" - 0.34" (7.3 - 8.8)	08780407	
2	0.35" - 0.48" (8.9mm - 12.2mm)	08780804	0.35" - 0.48" (8.9 - 12.2)	08780805	0.35" - 0.42" (8.9 - 10.7)	08761424	08643755 033-29-1195
					0.43" - 0.48" (10.8 - 12.2)	08761425	
3	0.49" - 0.60" (12.3mm - 15.2mm)	08780806	0.49" - 0.60" (12.3 - 15.2)	08780807	0.49" - 0.55" (12.3 - 14.0)	08761426	08643756 033-29-1196
					0.56" - 0.60" (14.1 - 15.2)	08761427	
4	(10.4mm x 5.5mm)	08781117	Nylatron Venturi for Flat Fiber Optic Cables				
5	(15.2mm x 6.7mm)	08781118	Nylatron Venturi for Flat Fiber Optic Cables				



Micro Duct Packs: Gulfstream 400 & Mini-Blower/Pusher

Duct Size OD (MM)	Part Number	Duct Clamp	Duct Seal	Innerduct Eye	
				ID Range	P/N
10	08764140	08764142	08764143	5 - 9mm	08913547
12	08764110	08764112	08764113	10 - 13mm	08913545
12.7	08764150	08764151	08764153	10 - 13mm	08913545
14	08764120	08764122	08764123	10 - 13mm	08913545
16	08764130	08764132	08764133	10 - 13mm	08913545
18	08781110	08781106	08781101	13 - 15mm	08913538
20	08781120	08781122	08781121	14 - 20.65mm	08914007





MINI-BLOWER/PUSHER DUCT PACKS

Gulfstream 400 & Mini-Blower Pusher Duct Packs

FIBER CABLE INSTALLATION

Pack	Duct Pack		Duct Clamp		Duct Seal		Carrier		Foam Carrier		Cable Grip		Innerduct Eye
	Duct Size	Part Number	Duct OD (mm)	Part Number	Duct OD (mm)	Part Number	Carrier OD (mm)	Part Number	Carrier OD (mm)	Part Number	Duct OD (mm)	Part Number	Part Number and ID Range (mm)
1	1/2" SDR 11-13.5	08780795 Pack #1	0.84" (21.30)	08780791	0.84" (21.30)	08780786	0.688" (17.50)	08780793	0.75" (19.0)	08078300	.75-.99" (19-25)	08643131 033-03-012	08913342 .71-.77" (18-20)
2	3/4" (27mm) SDR 11-13.5	08780680 Pack #2	1.050" (26.6)	08780682	1.050" (26.6)	08780685	0.75" (19.0)	08780690	0.75" (19.0)	08078300	1.00-1.24" (25.4-31.5)	08643137 033-03-013	08761840 .71-.87" (18-22)
3	1" SDR 11/13.5	08780386 Pack #3	1.315" (33.4)	08780369	1.315" (33.4)	08780307	1.121" (28.5)	08761250	1.25" (31.8)	08761439	1.25-1.49" (32-38)	08643143 033-03-015	08913343 .75-1.00" (19-25)
4	1.25" SDR 11/13.5	08780392 Pack #4	1.660" (42.2)	08780375	1.660" (42.2)	08780051	1.414" (35.9)	08761255	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
5	1.5" SDR 11/13.5	08780397 Pack #5	1.900" (48.3)	08780404	1.900" (48.3)	08780398	1.618" (41.1)	08761260	1.75" (44.5)	08761441	2.00-2.49" (50.8-63.2)	08643155 033-03-017	08761844 1.37-1.68" (35-43)
6	2" SDR 11/13.5	08780930 Pack #6	—	—	—	—	2.023" (51.4)	08761265	2.00" (50.8)	08761442	2.00-2.49" (50.8-63.2)	08643155 033-03-017	08761846 1.80-2.19" (46-56)
7	20mm	08781120 Pack #7	0.787" (20.0)	08781122	0.787" (20.0)	08781121	0.688" (17.5)	08780793	1.00" (25.4)	08761444	.75-.99" (19.0-25.1)	08643131 033-03-017	08914007 .551-.813" (14-20)
8	22mm	08781153 Pack #8	.866" (22.0)	08781122	.866" (22.0)	08781121	0.688" (17.5)	08780793	1.00" (25.4)	08761444	.75-.99" (19.0-25.1)	08643131 033-03-012	08914007 .551-.813" (14-20)
9	25mm	08780240 Pack #8	0.984" (25.0)	08780099	0.984" (25.0)	08780134	0.787" (20.0)	08780230	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761840 .71-.87" (18-22)
10	32mm	08780385 Pack #9	1.260" (32.0)	08780368	1.260" (32.0)	08780306	1.063" (27.0)	08761560	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
11	36mm	08780387 Pack #10	1.417" (36.0)	08780370	1.417" (36.0)	08780308	1.181" (30.0) 1.220" (31.0)	08761643 08761555	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
12	37mm	08780388 Pack #11	1.457" (37.0)	08780371	1.457" (37.0)	08780309	1.220" (31.0)	08761555	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
13	1.25" TRUE	08780389 Pack #12	1.500" (38.1)	08780372	1.500" (38.1)	08780333	1.250" (31.7)	08761670	1.50" (38.1)	08761440	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
14	40mm	08780390 Pack #13	1.575" (40.0)	08780373	1.575" (40.0)	08780334	1.299" (33.0)	08761525	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
15	42mm	08780391 Pack #14	1.653" (42.0)	08780374	1.653" (42.0)	08780335	1.378" (35.0)	08761660	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
16	44mm	08780545 Pack #15	1.732" (44.0)	08780546	1.732" (44.0)	08780547	1.496" (38.0)	08761786	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
17	50mm	08780575 Pack #16	1.969" (50.0)	08780435	1.969" (50.0)	08780431	1.606" (40.0)	08761579	2.00" (50.8)	08761442	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761844 1.37-1.68" (35-43)



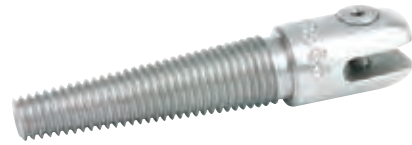
MICRO FIBER BLOWER ACCESSORIES



FIBER CABLE INSTALLATION

Innerduct Eyes for Micro Duct

Tapered buttress threads into the micro duct for maximum pulling strength.



Part Number	Description
08913547	Innerduct Eyes for Micro Duct (5-9 mm ID)
08913545	Innerduct Eyes for Micro Duct (10-13 mm ID)
08913538	Innerduct Eyes for Micro Duct (13-15 mm ID)

Multiple Pulling Harness for Micro Duct Installation

Six leg harness with 3-inch separation between legs for installing micro duct into existing innerduct.



Part Number	Description	Load Rating
08549350	Multiple Pulling Harness	550lbs (2,446 N)

Micro Fiber Carrier Kit

Designed to attach to the central strength member (CSM) of the cable. The seals are sized to accommodate the proper ID duct size for maximization of the blowing distances and create an airtight seal in the duct.



Part Number	Description
08764090	Micro Fiber Carrier Kit

PSI Shuttles

These unique, flexible shuttles are available in triple parachute configuration, making rope, pull tape and fiber optic cable installation in occupied duct a breeze. These shuttles can be used on their own or in series allowing for up to six parachutes to capture the air within the conduit, which can help increase installation distances. The parachutes collapse without constant air pressure allowing for easy pullback.



Part Number	Duct Size	
	(in)	(mm)
08761868	1.00-1.25	25-32
08761869	1.50-2.00	38-50

Polywater® Prelube 5000™

Polywater® Prelube 5000™ is more concentrated than the Prelube 2000™. It is intended for blowing microcable into small diameter microtubes. The improved chemistry allows this product to spread further and reduce friction levels. The lower viscosity allows practical application into the microtubes.



Part Number	Description	Case Lots
08230675	Polywater® Prelube 5000™	6/case

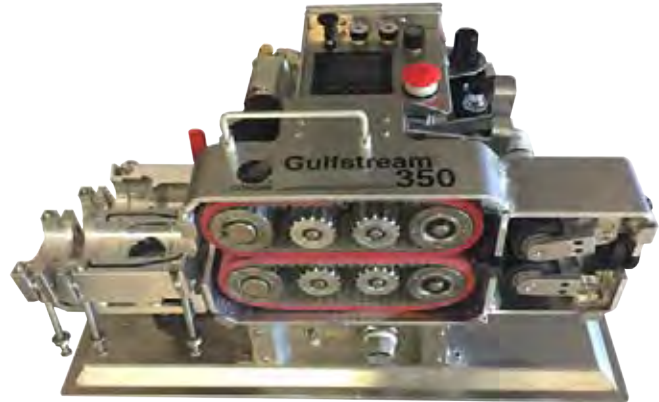




GULFSTREAM™ 350

NEW! Gulfstream™ 350 Blower

The new Condux Gulfstream 350 Fiber Optic Cable Blower is all pneumatic and comes complete with a convenient storage case. With the ability to install fiber from 0.16" - 0.62" (4 - 16mm) into duct ranging from 0.50" - 1.25" (8 - 42mm), the Gulfstream 350 provides a mechanical counter, speed indicator, and maximum belt visibility. Complete the order with cable packs and duct packs on page 120 and 121 to meet the exact job requirements.



Gulfstream™ 350 Micro Fiber Blower

Part Number	Description
08784601	Gulfstream 350™ Pneumatic Blower, US
08784602	Gulfstream 350™ Pneumatic Blower, Int'l

Gulfstream 350 Cable Packs

Pack	Cable Pack		Venturi		Cable Seal		Cable Grip	
	Cable OD	Part Number	Cable OD	Part Number	Cable OD	Part Number	Cable OD	Part Number
1	0.16" - 0.23" (4.0 - 5.8mm)	08780511	0.16" - 0.23" (4.0 - 5.8mm)	08780507	0.16" - 0.17" (4.1 - 4.3mm)	08780516	0.10 - 0.22 (3 - 6mm)	08643753 033-29-1193
					0.18" - 0.19" (4.6 - 4.8mm)	08780517		
					0.20" - 0.21" (5.1 - 5.3mm)	08780518		
					0.22" - 0.23" (5.6 - 5.8mm)	08780519		
2	0.23" - 0.34" (5.8 - 8.8mm)	08780393	0.23" - 0.34" (5.8 - 8.8mm)	08780281	0.23" - .028" (5.8 - 7.2mm)	08780406	0.21" - 0.35" (5.3 - 8.9mm)	08643754 033-29-1194
					0.29" - 0.34" (7.3mm - 8.8mm)	08780407		
3	0.35" - 0.48" (8.9 - 15.2mm)	08780394	0.35" - 0.48" (8.9 - 12.2mm)	08781115	0.35" - 0.42" (8.9 - 10.7mm)	08761424	0.32" - 0.48" (8.1 - 12.2mm)	08643755 033-29-1195
					0.43" - 0.48" (10.8 - 12.2mm)	08761425		
4	0.49" - 0.60" (12.3 - 15.2mm)	08780512	0.49" - 0.60" (12.3 - 15.2mm)	08781116	0.49" - 0.55" (12.3 - 14.0mm)	08761426	0.42" - 0.61" (10.7 - 15.5mm)	08643756 033-29-1196
					0.56" - 0.60" (14.1 - 15.2mm)	08761427		
5	0.61" - 0.73" (15.3 - 18.5mm)	08780395	0.61" - 0.73" (15.3 - 18.5mm)	08780284	0.61" - 0.67" (15.3 - 17.0mm)	08761428	0.53" - 0.74" (13.5 - 18.8mm)	08643757 033-29-1197
					0.68" - 0.73" (17.1 - 18.5mm)	08761429		
9	10.4 x 5.5mm	08781117	(Nylatron venturi for flat fiber cables)					
10	15.2 x 6.7mm	08781118	(Nylatron venturi for flat fiber cables)					

Gulfstream 350 Duct Packs

Duct Size OD (MM)	Part Number	Duct Clamp	Duct Seal	End Stop Connector
8	08764160	08764162	08764163	02291146
8.5	08764175	08764169	08764171	08566336

Duct Size OD (MM)	Part Number	Duct Clamp	Duct Seal	Innerduct Eye	
				ID Range	P/N
10	08764140	08764142	08764143	5 - 9mm	08913547
12	08764110	08764112	08764113	10 - 13mm	08913545
12.7	08764150	08764151	08764153	10 - 13mm	08913545
14	08764120	08764122	08764123	10 - 13mm	08913545
16	08764130	08764132	08764133	10 - 13mm	08913545
18	08781110	08781106	08781101	13 - 15mm	08913538



CONDEX

Gulfstream 350 Duct Packs (continued)

GULFSTREAM™ 350



FIBER CABLE INSTALLATION

Pack	Duct Pack		Duct Clamp		Duct Seal		Carrier		Foam Carrier		Cable Grip		Innerduct Eye
	Duct Size	Part Number	Duct OD (mm)	Part Number	Duct OD (mm)	Part Number	Carrier OD (mm)	Part Number	Carrier OD (mm)	Part Number	Duct OD (mm)	Part Number	Part Number and ID Range (mm)
1	1/2" SDR 11-13.5	08780795 Pack #1	0.84" (21.30)	08780791	0.84" (21.30)	08780786	0.688" (17.50)	08780793	0.75" (19.0)	08078300	.75-.99" (19-25)	08643131 033-03-012	08913342 .71-.77" (18-20)
2	3/4" (27mm) SDR 11-13.5	08780680 Pack #2	1.050" (26.6)	08780682	1.050" (26.6)	08780685	0.75" (19.0)	08780690	0.75" (19.0)	08078300	1.00-1.24" (25.4-31.5)	08643137 033-03-013	08761840 .71-.87" (18-22)
3	1" SDR 11/13.5	08780386 Pack #3	1.315" (33.4)	08780369	1.315" (33.4)	08780307	1.121" (28.5)	08761250	1.25" (31.8)	08761439	1.25-1.49" (32-38)	08643143 033-03-015	08913343 .75-1.00" (19-25)
4	1.25" SDR 11/13.5	08780392 Pack #4	1.660" (42.2)	08780375	1.660" (42.2)	08780051	1.414" (35.9)	08761255	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
7	20mm	08781120 Pack #7	0.787" (20.0)	08781122	0.787" (20.0)	08781121	0.688" (17.5)	08780793	1.00" (25.4)	08761444	.75-.99" (19.0-25.1)	08643131 033-03-017	08914007 .551-.813" (14-20)
8	22mm	08781153 Pack #8	.866" (22.0)	08781154	.866" (22.0)	08781155	0.688" (17.5)	08780793	1.00" (25.4)	08761444	.75-.99" (19.0-25.1)	08643131 033-03-012	08914007 .551-.813" (14-20)
9	25mm	08780240 Pack #8	0.984" (25.0)	08780099	0.984" (25.0)	08780134	0.787" (20.0)	08780230	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643137 033-03-013	08761840 .71-.87" (18-22)
10	32mm	08780385 Pack #9	1.260" (32.0)	08780368	1.260" (32.0)	08780306	1.063" (27.0)	08761560	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
11	36mm	08780387 Pack #10	1.417" (36.0)	08780370	1.417" (36.0)	08780308	1.181" (30.0) 1.220" (31.0)	08761643 08761555	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
12	37mm	08780388 Pack #11	1.457" (37.0)	08780371	1.457" (37.0)	08780309	1.220" (31.0)	08761555	1.25" (31.8)	08761439	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
13	1.25" TRUE	08780389 Pack #12	1.500" (38.1)	08780372	1.500" (38.1)	08780333	1.250" (31.7)	08761670	1.50" (38.1)	08761440	1.25-1.49" (31.8-37.8)	08643143 033-03-015	08761842 1.06-1.43" (27-37)
14	40mm	08780390 Pack #13	1.575" (40.0)	08780373	1.575" (40.0)	08780334	1.299" (33.0)	08761525	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761842 1.06-1.43" (27-37)
15	42mm	08780391 Pack #14	1.653" (42.0)	08780374	1.653" (42.0)	08780335	1.378" (35.0)	08761660	1.50" (38.1)	08761440	1.50-1.99" (38.1-50.5)	08643149 033-03-016	08761844 1.37-1.68" (35-43)

Size

- Dimensions: 520mm (l) x 372mm (w) x 293mm (h)
20" (l) x 14.6" (w) x 11.5" (h)
- Weight: 44lbs/20 kg

Microduct Range

- 8mm - 42mm (.50" - 1.25")

Fiber Cable Range

- 4mm - 16mm (.16" - .62")

Features

- Mechanical Counter/Real Time Distance (Meters and Feet)
- Speed Indicator (Meters and Feet)
- No Tools Required for Belt Replacement
- Maximum Belt Visibility, Transparent Covers for Easy Monitoring
- Emergency Stop Button
- Air Conditioning: Pressure Filter w/ Water Separator & Bleed Valve
- Lightweight Case

Drive

- Pneumatic Drive System
- Maximum push force of 400N (98lbs)
- Average Speed: 38 m/min @ 70N (90 ft/min @ 16lbs)

Force and Flow

Microduct:

- Air Pressure Requirements (BAR)*: 10-15 Bar
- Air Pressure Requirements (PSI)*: 150-205 PSI
- Flow Requirements (CMM)*: 0.5-1.5 CMM
- Flow Requirements (CFM)*: 10-35 CFM

Traditional Duct:

- Air Pressure Requirements (BAR)*: 7-10 Bar
- Air Pressure Requirements (PSI)*: 100-150 PSI
- Flow Requirements (CMM)*: 5-11 CMM
- Flow Requirements (CFM)*: 185-375 CFM

*Air pressure and flow requirements depend on the size of duct and the size of fiber being installed into that duct.



GULFSTREAM™ 300

Gulfstream™ 300 Micro Fiber Blower

The Gulfstream 300 is an effective and economical approach to middle mile fiber installations. Able to install fiber optic cable ranging in size from 2.5mm to 10mm into duct from 7mm to 18mm, the Gulfstream 300 offers the portability, convenience and power for standard middle mile projects in a cost effective package. Weighing just 10 lbs. (4.54 kg), the Gulfstream 300 is easily transported and can be mounted on a tripod for optimum productivity.

***The Gulfstream 300 no longer uses batteries for power. 48v power supply included with kits**

Gulfstream™ 300 Micro Fiber Blower Kits

Part Number	Description
08787001	Gulfstream 300™ Micro Fiber Blower Standard Kit, US*
08787002	Gulfstream 300™ Micro Fiber Blower Standard Kit, Int'l*
08787003	Gulfstream 300™ Micro Fiber Blower Base Kit, US
08787004	Gulfstream 300™ Micro Fiber Blower Base Kit, Int'l

Included in standard kits:

Part Number	QTY	Description
02290961	1	Plastic Case
02291020	1	Hex Key Set
08784011	1	132° V-Groove Belt, GS300 QC
08783076	1	Seal Kit
08783519	1	O-Ring Kit (qty 5)
08787018	1	Flat Belt, GS300 QC
08787021	1	Rear Insert Guide (3-4mm)
08787022	1	Rear Insert Guide (5-7mm)
08787023	1	Rear Insert Guide (8-10mm)
08787060	1	AC Power Supply, 48v - US
08783508	1	AC Power Supply, 48v - Int'l (must install appropriate plug)
08782212	1	Tripod Plate, 5/8" to 1/4" Adaptor
02290383	1	Adjustable HD Tripod, 42"- 65"

Cable Seals and Duct Packs noted with (*) on page 123 included in kits

Included in base kits:

Part Number	QTY	Description
02290961	1	Plastic Case
02291020	1	Hex Key Set
08784011	1	132° V-Groove Belt, GS300 QC
08783076	1	Seal Kit
08783519	1	O-Ring Kit (qty 5)
08787018	1	Flat Belt, GS300 QC
08787021	1	Rear Insert Guide (3-4mm)
08787022	1	Rear Insert Guide (5-7mm)
08787023	1	Rear Insert Guide (8-10mm)
08787060	1	AC Power Supply, 48v - US
08783508	1	AC Power Supply, 48v - Int'l (must install appropriate plug)

Cable Seals, Duct Packs, Tripod and Tripod Plate are sold individually



Rear Insert Guide



Blower Size

- Dimensions: 6" (h) x 8" (w) x 11" (l)
152mm (h) x 203mm (w) x 279mm(l)
- Weight: 10lbs/4.54kg

Microduct Range

- 7 – 18mm
- Built in clamping system with interchangeable seals

Fiber Cable Range

- 2.5 – 10mm

Power System

- Electric drive motor
- **48v AC Power Supply**
(Plugged into wall or 1000w Generator)

Drive

- Belt drive
- Maximum push force of 30lbs (134N)
- Speed: 0-150fpm (0 – 45mpm)

Controls

- Forward/reverse switch
- Speed control to regulate motor speed
- Emergency stop button for instant shutdown
- Screen that monitors speed, distance and life counter
- Push force adjustment (crash test kick out)

Force and Flow

- Air connections: 3/8" EU or US Coupling
- Air Pressure Requirements (BAR)*: 10-15 Bar
- Air Pressure Requirements (PSI)*: 150-205 PSI
- Flow Requirements (CMM)*: 0.5-1.5 CMM
- Flow Requirements (CFM)*: 10-35 CFM

*Air pressure and flow requirements depends on the size of duct and the size of fiber being installed into that duct.

Gulfstream™ 300 Micro Fiber Blower Replacement Parts

Replacement Cable Seals

Part Number	Description
08783792	2.5mm Cable Seal Kit (6pcs)*
08783644	3.0mm Cable Seal Kit (6pcs)*
08783737	3.25mm Cable Seal Kit (6pcs)
08783645	3.5mm Cable Seal Kit (6pcs)*
08783739	3.75mm Cable Seal Kit (6pcs)
08783646	4.0mm Cable Seal Kit (6pcs)*
08783741	4.25mm Cable Seal Kit (6pcs)
08783647	4.5mm Cable Seal Kit (6pcs)*
08783743	4.75mm Cable Seal Kit (6pcs)
08783648	5.0mm Cable Seal Kit (6pcs)*
08783649	5.5mm Cable Seal Kit (6pcs)*
08783650	6.0mm Cable Seal Kit (6pcs)*
08783651	6.5mm Cable Seal Kit (6pcs)*
08783652	7.0mm Cable Seal Kit (6pcs)*
08783653	7.5mm Cable Seal Kit (6pcs)*
08783654	8.0mm Cable Seal Kit (6pcs)*
08783655	8.5mm Cable Seal Kit (6pcs)*
08783656	9.0mm Cable Seal Kit (6pcs)*
08783657	9.5mm Cable Seal Kit (6pcs)*
08783658	10.0mm Cable Seal Kit (6pcs)*
08783659	10.5mm Cable Seal Kit (6pcs)*
08783660	Cable Seal Kit Blanks (6pcs)*
08783666	Flat Cable Seal Kit 8.1mm x 4.5mm (6pcs)

*Included in Gulstream 300 standard blower kit



Replacement Duct Packs

Part Number	Description
08787035	7.0mm Duct Pack Assembly (includes 10 O-Rings)*
08787055	8.0mm Duct Pack Assembly (includes 10 O-Rings)*
08787037	8.5mm Duct Pack Assembly (includes 10 O-Rings)*
08787038	10.0mm Duct Pack Assembly (includes 10 O-Rings)*
08787042	12.0mm Duct Pack Assembly (includes 10 O-Rings)*
08787043	12.7mm Duct Pack Assembly (includes 10 O-Rings)*
08787028	14.0mm Duct Pack Assembly (includes 10 O-Rings)*
08787029	16.0mm Duct Pack Assembly (includes 10 O-Rings)*
08787045	18.0mm Duct Pack Assembly (includes 10 O-Rings)*

*Included in Gulstream 300 standard blower kit



Replacement O-Rings

Part Number	Description
08783192	7.0mm Duct O-Ring Kit (12pcs)
08783193	8.0mm Duct O-Ring Kit (12pcs)
08783194	8.5mm Duct O-Ring Kit (12pcs)
08783195	10.0mm Duct O-Ring Kit (12pcs)
08783196	12.0mm Duct O-Ring Kit (12pcs)
08783197	12.7mm Duct O-Ring Kit (12pcs)
08783641	14.0mm Duct O-Ring Kit (12pcs)
08783642	16.0mm Duct O-Ring Kit (12pcs)
08783643	18.0mm Duct O-Ring Kit (12pcs)

Gulfstream™ 300 Micro Fiber Blower Optional Accessories

Part Number	Description
02290383	Adjustable HD Tripod, 42"- 65"
08787060	AC Power Supply, 48v - US
08783508	AC Power Supply, 48v - Int'l (must install appropriate plug)
08783392	GS250/300 Flow Regulator Kit
08783393	GS250/300 Flow Regulator Kit - Int'l Fittings
08783301	GS250/300 Proof/Pressure Test Kit
08782212	Tripod Plate, 5/8" to 1/4" Adaptor
08783878	Wet Fat Belt with Groove QC (qty 2 req'd)





GULFSTREAM™ 250

Gulfstream™ 250 Micro Fiber Blower

The Gulfstream 250 is an effective and economical approach to middle mile fiber installations. Able to install fiber optic cable ranging in size from 2.5mm - 8mm into duct from 5mm - 18mm, the Gulfstream 250 offers portability, convenience and power for standard middle projects in a cost effective package. The unit features user-friendly controls that help optimize the fiber optic cable installation process.

***The Gulfstream 250 no longer uses batteries for power. 48v power supply included with kits**

Gulfstream™ 250 Micro Fiber Blower Complete Kit

Part Number	Description
08783805-50	Gulfstream 250™ Micro Fiber Blower Standard Kit, US*
08783805-51	Gulfstream 250™ Micro Fiber Blower Standard Kit, Int'l*
08783805-53	Gulfstream 250™ Micro Fiber Blower Base Kit, US
08783805-54	Gulfstream 250™ Micro Fiber Blower Base Kit, Int'l

Included in standard kits:

Part Number	QTY	Description
02290961	1	Plastic Case
02291020	1	Hex Key Set
08783427	1	Large Groove Green Belt
08783076	1	Seal Kit
08783519	1	O-Ring Kit (qty 5)
08783425	1	Flat Orange Belt
08783770	1	Rear Insert Guide (3-4mm)
08787771	1	Rear Insert Guide (4-7mm)
08787772	1	Rear Insert Guide (7-10mm)
08787060	1	AC Power Supply, 48v - US
08783508	1	AC Power Supply, 48v - Int'l (must install appropriate plug)
08782212	1	Tripod Plate, 5/8" to 1/4" Adaptor
02290383	1	Adjustable HD Tripod, 42" - 65"

Cable Seals and Duct Packs noted with (*) on page 125 included in kits

Included in base kits:

Part Number	QTY	Description
02290961	1	Plastic Case
02291020	1	Hex Key Set
08783427	1	Large Groove Green Belt
08783076	1	Seal Kit
08783519	1	O-Ring Kit (qty 5)
08783425	1	Flat Orange Belt
08783770	1	Rear Insert Guide (3-4mm)
08787771	1	Rear Insert Guide (4-7mm)
08787772	1	Rear Insert Guide (7-10mm)
08787060	1	AC Power Supply, 48v - US
08783508	1	AC Power Supply, 48v - Int'l (must install appropriate plug)

Cable Seals, Duct Packs, Tripod and Tripod Plate are sold individually

Specialty Wheels

Fiber Cable Range

2.5 - 4mm

08783819 - Wheel, Specialty Fat, Groove Orange (2 req'd)

3.5 - 4.3mm

08783884 - Wet Wheel, Serrated (1 req'd)

4.4 - 5.5mm

08783885 - Wet Wheel, Serrated (1 req'd)

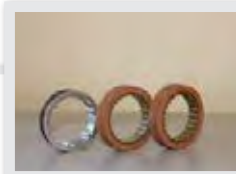
5.6 - 7.75mm

08783886 - Wet Wheel, Serrated (1 req'd)

7.75 - 9.75mm

08783887 - Wet Wheel, Serrated (1 req'd)

specialty wheels purchased separately



Blower Size

- Dimensions: 11" (l) x 8" (w) x 6" (h)
279mm (l) x 203mm (w) x 152mm (h)
- Weight: 5lbs/2.27kg

Microduct Range

- 5 – 18mm
- Built in clamping system with interchangeable seals

Fiber Cable Range

- 2.5 – 8mm
- 8.1 - 9.75mm (with specialty wheels, not included in kit)

Power System

- Electric drive motor
- **48v AC Power Supply**
(Plugged into wall or 1000w Generator)

Drive

- Wheel drive
- Maximum push force of 30lbs (134N)
- Speed: 0-150rpm (0 – 45mpm)

Controls

- Forward/reverse switch
- Speed control to regulate motor speed
- Screen that monitors speed, distance and life counter
- Emergency stop button for instant shut down
- Push force adjustment (crash test kick out)

Force and Flow

- Air connections: 3/8" EU or US Coupling
- Air Pressure Requirements (BAR)*: 10-15 Bar
- Air Pressure Requirements (PSI)*: 150-205 PSI
- Flow Requirements (CMM)*: 0.5-1.5 CMM
- Flow Requirements (CFM)*: 10-35 CFM

*Air pressure and flow requirements depends on the size of duct and the size of fiber being installed into that duct.

Gulfstream™ 250 Micro Fiber Blower Replacement Parts

Replacement Cable Seals

Part Number	Description
08783792	2.5mm Cable Seal Kit (6 pcs)*
08783644	3.0mm Cable Seal Kit (6 pcs)*
08783645	3.5mm Cable Seal Kit (6 pcs)*
08783646	4.0mm Cable Seal Kit (6 pcs)*
08783647	4.5mm Cable Seal Kit (6 pcs)*
08783648	5.0mm Cable Seal Kit (6 pcs)*
08783649	5.5mm Cable Seal Kit (6 pcs)*
08783650	6.0mm Cable Seal Kit (6 pcs)*
08783651	6.5mm Cable Seal Kit (6 pcs)*
08783652	7.0mm Cable Seal Kit (6 pcs)*
08783653	7.5mm Cable Seal Kit (6 pcs)*
08783654	8.0mm Cable Seal Kit (6 pcs)*
08783660	Cable Seal Blanks (6 pcs)*

*Included in Gulfstream 250 standard blower kit



Replacement Duct Packs

Part Number	Description
08783812	5.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783813	6.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783832	7.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783833	8.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783834	8.5mm Duct Pack Assembly (includes 10 O-Rings)*
08783634	10.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783635	12.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783636	12.7mm Duct Pack Assembly (includes 10 O-Rings)*
08783637	14.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783638	16.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783639	18.0mm Duct Pack Assembly (includes 10 O-Rings)*

*Included in Gulfstream 250 standard blower kit



Replacement O-Rings

Part Number	Description
08783190	5.0mm Duct O-Ring Kit (12pcs)
08783191	6.0mm Duct O-Ring Kit (12pcs)
08783192	7.0mm Duct O-Ring Kit (12pcs)
08783193	8.0mm Duct O-Ring Kit (12pcs)
08783194	8.5mm Duct O-Ring Kit (12pcs)
08783195	10.0mm Duct O-Ring Kit (12pcs)
08783196	12.0mm Duct O-Ring Kit (12pcs)
08783197	12.7mm Duct O-Ring Kit (12pcs)
08783641	14.0mm Duct O-Ring Kit (12pcs)
08783642	16.0mm Duct O-Ring Kit (12pcs)
08783643	18.0mm Duct O-Ring Kit (12pcs)

Gulfstream™ 250 Micro Fiber Blower Optional Accessories

Part Number	Description
02290383	Adjustable HD Tripod, 42" - 65"
08787060	AC Power Supply, 48v - US
08783508	AC Power Supply, 48v - Int'l (must install appropriate plug)
08783392	GS250/300 Flow Regulator Kit
08783393	GS250/300 Flow Regulator Kit - Int'l Fittings
08783301	GS250/300 Proof/Pressure Test Kit
08782212	Tripod Plate, 5/8" to 1/4" Adaptor

*For additional wheel options, see 'Specialty Wheels' on page 124





GULFSTREAM™ 150

FIBER CABLE INSTALLATION

Gulfstream™ 150 Micro Fiber Blower

The Gulfstream 150 micro fiber blower is designed for FTTx and Enterprise micro fiber cable installation projects. The self-contained Gulfstream 150 combines the push force of a small electric motor driven belt drive with compressed air to quickly and easily install microfiber cables from 1.0mm to 2.5mm in diameter into microduct ranging in size from 5mm to 8.0mm, at speeds up to 375 feet per minute!

The unit's machined aluminum construction provides a light-weight profile with long life and durability. The Gulfstream 150's compact size and convenient carrying case allow for easy transport between job sites.

*The Gulfstream 150 no longer includes a battery or charger.

Requirements listed below and must be sourced by installer.

Gulfstream™ 150 Micro Fiber Blower Complete Kit

Part Number	Description
08783400-50	Gulfstream 150™ Micro Fiber Blower Standard Kit, US*
08783400-51	Gulfstream 150™ Micro Fiber Blower Standard Kit, Int'l*
08783400-53	Gulfstream 150™ Micro Fiber Blower Base Kit, US
08783400-55	Gulfstream 150™ Micro Fiber Blower Base Kit, Int'l

Included in standard kits:

Part Number	QTY	Description
08783054	1	Plastic Case
02291020	1	Hex Key Set
08783426	2	Small Groove Wheel
08783076	1	Seal Kit
08783077	1	O-Ring Kit (qty 5)
02290882	1	Adjustable Tripod, 9lbs, 11" - 63"
02291088	1	3 Pin Cordset
08783026	1	Belt Battery Clip
08783259	1	Blank Seal Kit (qty 6)

Cable Seals and Duct Packs noted with (*) on page 127 included in kits

Included in base kits:

Part Number	QTY	Description
08783054	1	Plastic Case
02291020	1	Hex Key Set
08783426	2	Small Groove Wheel
08783076	1	Seal Kit
08783077	1	O-Ring Kit (qty 5)
02291088	1	3 Pin Cordset
08783026	1	Belt Battery Clip
08783259	1	Blank Seal Kit (qty 6)

Cable Seals, Duct Packs, Tripod and Tripod Plate are sold individually

Battery/Charger Requirements

Domestic	
DCB120	Li-Ion Battery -12.0v 1.5Ah
DCB101	Li-Ion Charger 12v/20V - 1.3A
International	
DCB127	Li-Ion Battery - 10.8v 2.0Ah
DCB112	Li-Ion Charger 10.8v - 2.0Ah



Blower Size

- Dimensions: 8" (h) x 6" (w) x 4"(l)
203mm (h) x 152mm (w) x 101mm(l)
- Weight: 5lbs/2.27kg

Microduct Range

- 5 – 8mm
- Built in clamping system with interchangeable seals

Fiber Cable Range

- 1 – 2.5mm

Power System

- Electric drive motor
- Rechargeable battery pack with belt clip
- 12v (US) or 10.8v (EU) Cordless Battery or AC Power Supply (optional)

Drive

- Roller Cover
- Maximum push force of 4.5lbs (20N)
- Speed: 0-375fpm (0 – 115mpm)

Controls

- Screen that monitors speed and distance - life counter
- Forward/Reverse switch
- Speed & torque control to regulate motor speed

Force and Flow

- Air connections: 1/4" EU or US Coupling
- Air Pressure Requirements (BAR)*: 10-15 Bar
- Air Pressure Requirements (PSI)*: 150-205 PSI
- Flow Requirements (CMM)*: 0.5-1.5 CMM
- Flow Requirements (CFM)*: 10-35 CFM

*Air pressure and flow requirements depends on the size of duct and the size of fiber being installed into that duct.

Gulfstream™ 150 Micro Fiber Blower Replacement Parts

Replacement Cable Seals

Part Number	Description
08783448	1.25mm Cable Seal Kit (6pcs)*
08783449	1.50mm Cable Seal Kit (6pcs)*
08783450	1.75mm Cable Seal Kit (6pcs)*
08783451	2.00mm Cable Seal Kit (6pcs)*
08783452	2.25mm Cable Seal Kit (6pcs)*
08783453	2.50mm Cable Seal Kit (6 pcs)*
08783259	Cable Seal Kit Blanks (6pcs)*

*Included in Gulfstream 150 standard blower kit



Duct Packs

Part Number	Description
08783170	5.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783171	6.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783172	7.0mm Duct Pack Assembly (includes 10 O-Rings)*
08783173	8.0mm Duct Pack Assembly (includes 10 O-Rings)*

*Included in Gulfstream 150 standard blower kit



Replacement O-Rings

Part Number	Description
08783190	5.0mm Duct O-Ring Kit (12pc)
08783191	6.0mm Duct O-Ring Kit (12pc)
08783192	7.0mm Duct O-Ring Kit (12pc)
08783193	8.0mm Duct O-Ring Kit (12pc)

Accessories for Gulfstream™ 150 Micro Fiber Blower

Part Number	Description
08783390	Gulfstream™ 150 Flow Regulator
08783391	Gulfstream™ 150 Flow Regulator - Intl Fittings
02290882	Tripod
08783090	AC Power Supply - Int'l (must install appropriate plug)
08783301	GS150 Proof/Pressure Test Kit
08783085	A/C Power Supply - US





CABLE BLOWING LUBRICANTS/AIR COOLER



Polywater® Prelube 2000™

Specially formulated for use with Fiber Optic Cable Blowing Systems, Polywater® Prelube 2000™ has been field proven with Condux Gulfstream Fiber Optic Cable Blowers. This lubricant is a special lubricant used to prelubricate the conduit system before installing the cable. Prelube 2000 is compatible with all types of cable jackets and conduit types.

Part Number	Description	Std. Pkg. Qty.
08230600	1 Quart (0.9 liter) Standard Grade	12/case
08230601	1 Gallon (3.8 liter) Standard Grade	4/case
08230605	5 Gallon (19 liter) Standard Grade	

Polywater® W-Prelube 2000™

Polywater® W-Prelube 2000™ Winter Grade is a non-freezing form of the standard Polywater Prelube 2000™

Part Number	Description	Std. Pkg. Qty.
08230900	1 Quart (0.9 liter) Winter Grade	12/case
08230901	1 Gallon (3.8 liter) Winter Grade	4/case
08230905	5 Gallon (19 liter) Winter Grade	

Polywater® Prelube 5000™

Is more concentrated than the Prelube 2000™. It is intended for blowing microcable into small diameter microtubes. The improved chemistry allows this product to spread further and lower friction at extremely low coating levels. The lower viscosity allows practical application into the microtubes.

Part Number	Description	Std. Pkg. Qty.
08230675	8-fl ounce (227 g) squeeze bottle	6/case



Compressed Air Cooler

Extreme heat can inhibit fiber optic cable installation and damage fiber optic cable and duct. When cable blowing, air is compressed and heat is generated. For example, air that enters a compressor at 100° F (37° C) exits the compressor at 350° F (176° C). At this temperature, fiber optic cable jacket and duct softening can occur. Heat problems can also occur if the duct run is exposed to direct sunlight. The Condux Compressed Air Cooler can help prevent heat damage to fiber optic cable and duct during cable blowing operations.

The Condux Compressed Air Cooler cools compressed air from a maximum temperature of 350° F (176° C), to within 20° F (11° C) of the ambient temperature. For example, if the ambient temperature is 100° F (37° C), air from the air compressor enters the air cooler at 350° F (176° C). That air will leave the cooler at approximately 120° F (49° C). Cooling the air reduces the chances of heat damage to the cable and duct. The Condux Compressed Air Cooler also removes moisture from the air. Water from humid air can dilute cable blowing lubricant and collect in the duct run.

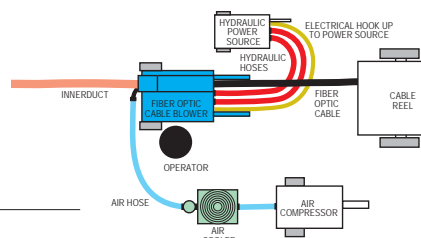
Use of the Condux Compressed Air Cooler is recommended when ambient air temperatures reach 90° F (32° C) or more and/or the duct is exposed to direct sunlight.

Minimum ambient operating temperature: 35° F (1° C)

Maximum inlet operating temperature: 350° F (176° C)

Maximum operating pressure: 250 psi (17 bar)

Part Number	Description
08761700	Air Cooler
02291174	1 Quart Air Oil





PRESSURE TEST KITS/ACCESSORIES



FIBER CABLE INSTALLATION

Micro Duct Pressure Test Kits

Use the Micro Duct Pressure Test Kit before setting up the Gulfstream™ 150/250/300 to pressure test, proof, and lubricate micro duct for optimum performance. For the cable blower to function properly, the microduct system must be able to withstand and hold 200psi (14 bar). Air leaks will reduce the compressors' ability to maintain the required pressure for cable installation. The duct system must also be passable by a proofing ball of roughly 80% fill ratio so that there are no obstructions prohibiting the installation of fiber optic cable. Lubrication may also be desired to reduce the friction involved when installing fiber optic cable. Achieve maximum performance and installation distances by pressure testing, proofing, and lubricating the microduct with the Condux Micro Duct Pressure Test Kit.



Part Number	Description	QTY	U/M
08783302*	Standard Pressure Test Kit (includes all of the following)		
02291159	Tool Box	1	ea
08783304	Pressure Test Gun	1	ea
08230676	Lubricant, 8oz Bottle	1	ea
08783315	Micro Duct Cutter	1	ea
08783354	Micro Duct Cable Grip Test Kit	1	ea

*Must select appropriately sized Micro Duct Kit from any kit listed below

Part Number	Description	QTY	U/M
08783303	GS150 Pressure Test Kit (Includes all of the following)		
08783316	5mm Micro Duct Proof/Press Test Kit	1	ea
08783317	6mm Micro Duct Proof/Press Test Kit	1	ea
08783318	7mm Micro Duct Proof/Press Test Kit	1	ea
08783319	8mm Micro Duct Proof/Press Test Kit	1	ea
08783304	Pressure Test Gun	1	ea
08783315	Micro Duct Cutter	1	ea
02291159	Tool Box	1	ea
08230676	Lubricant, 8oz Bottle	1	ea
08783354	Micro Duct Cable Grip Test Kit	1	ea

Part Number	Description	QTY	U/M
08783301	GS250/300 Pressure Test Kit (includes all of the following)		
08783319	8mm Micro Duct Proof/Press Test Kit	1	ea
08783320	8.5mm Micro Duct Proof/Press Test Kit	1	ea
08783315	Micro Duct Cutter	1	ea
08783318	7mm Micro Duct Proof/Press Test Kit	1	ea
08783321	10mm Micro Duct Proof/Press Test Kit	1	ea
08783324	14mm Micro Duct Proof/Press Test Kit	1	ea
08783325	16mm Micro Duct Proof/Press Test Kit	1	ea
08783322	12mm Micro Duct Proof/Press Test Kit	1	ea
08783323	12.7mm Micro Duct Proof/Press Test Kit	1	ea
08783326	18mm Micro Duct Proof/Press Test Kit	1	ea
02291159	Tool Box	1	ea
08783354	Micro Duct Cable Grip Test Kit	1	ea
08783304	Pressure Test Gun	1	ea
08230676	Lubricant, 8oz Bottle	1	ea

Cable Tips

These tips screw onto fiber optic cable to assist in guiding the fiber through sharp corners and couplings. Sizes range from 2 - 9mm in 1/2mm increments.

Part Number	Description
08783970	2.0mm Cable Tips (10pcs)
08783972	2.5mm Cable Tips (10pcs)
08783974	3.0mm Cable Tips (10pcs)
08783976	3.5mm Cable Tips (10pcs)
08783978	4.0mm Cable Tips (10pcs)
08783980	4.5mm Cable Tips (10pcs)
08783982	5.0mm Cable Tips (10pcs)
08783984	5.5mm Cable Tips (10pcs)
08783986	6.0mm Cable Tips (10pcs)
08783988	6.5mm Cable Tips (10pcs)
08783990	7.0mm Cable Tips (10pcs)
08783992	7.5mm Cable Tips (10pcs)
08783994	8.0mm Cable Tips (10pcs)
08783996	8.5mm Cable Tips (10pcs)
08783998	9.0mm Cable Tips (10pcs)



Why an Airtight Duct?

Duct integrity is essential for a successful cable blowing application. Leaks in the duct can lower pressure and greatly reduce installation distances. The duct system must be able to withstand and maintain 200 psi (14 bar) for the

cable blower to function properly. Duct integrity should always be tested before attempting cable installation with the cable blower. The duct can be tested with a pressure test kit available from Condux or with the cable blower itself. Either way, an airtight duct system is

an absolute necessity for cable blowing.

The main contributors to duct system leaks are the innerduct couplings. Condux recommends using one of the innerduct coupling methods shown on page 131.



INNERDUCT COUPLINGS

Speed Ball Split Coupling

Hinged aluminum split coupling for temporarily joining all types of innerduct during a cable blowing process.

Note: Inserts are sold separately.



Part Number	Description
08676844	Hinged Coupling Body

Inserts

Part Number	Nominal Duct Size		Duct Type	Mean Duct O.D.	
	(in)	(mm)		(in)	(mm)
08676859	1.00	25	1" SDR 11 & 13.5	1.315	33
08676860	1.25	32	1 1/4" SDR 11 & 13.5	1.660	42
08676861	1.50	38	1 1/2" SDR 11 & 13.5	1.900	48
08676862	2.00	51	2" SDR 11 & 13.5	2.375	60
08676863		40	40 mm	1.575	40

*Inserts include rubber seal.



Replacement Seals

Part Number	Size
08676853	1" Seal
08676854	1 1/4" Seal
08676855	1 1/2" Seal
08676856	2" Seal
08676857	40 mm



Reusable Micro Duct Couplers

The Condux® Reusable Micro Duct Coupler allows for the temporary joining of two pieces of microduct - essential when installing fiber optic cable.

These couplers are ideal for routing duct to the blowing machine or creating loops in downstream handholes. Unlike traditional plastic couplers, the hinged assembly can be removed mid-span and reused.

To be more cost effective, the innovative design utilizes a common body that accommodates a wide variety of inserts - making the Reusable Micro Duct Coupler the most versatile on the market.



Part Number	Description
08783900	Body
08783910	Micro Duct Coupler Insert Set - 5.0mm
08783911	Micro Duct Coupler Insert Set - 6.0mm
08783912	Micro Duct Coupler Insert Set - 7.0mm
08783913	Micro Duct Coupler Insert Set - 8.0mm
08783914	Micro Duct Coupler Insert Set - 8.5mm
08783915	Micro Duct Coupler Insert Set - 10.0mm
08783916	Micro Duct Coupler Insert Set - 12.0mm
08783917	Micro Duct Coupler Insert Set - 12.7mm
08783918	Micro Duct Coupler Insert Set - 14.0mm
08783919	Micro Duct Coupler Insert Set - 16.0mm
08783920	Micro Duct Coupler Insert Set - 18.0mm
08783921	Micro Duct Coupler Insert Set - 20.0mm



CONDUX

COUPLERS



FIBER CABLE INSTALLATION

Comfit Couplers

Comfit is a unique Hi-Tech coupler for HDPE cable ducts. Leak tested at 230 PSI and resistant to corrosion and most chemicals.

Comfit is designed in accordance with the special demands of the leading cable and duct manufacturers, as well as, top utility and contractors.

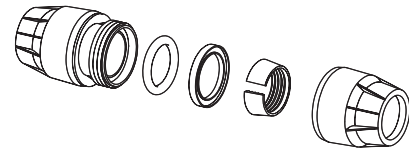
Comfit is excellent for both blowing and pulling applications.

Comfit has a compact profile reducing difficulties traditionally encountered in manholes, narrow trenches and plowing machines.

Comfit's push-fit method ensures fast and simple assembly and disassembly. Push the duct ends into the coupler for a locked and air sealed assembly. No special tools are needed.



Max Pressure: 230 PSI



Part Number	Nominal OD (mm/inches)	Duct OD (mm/inches)	Coupler OD (mm/inches)	Max Tension (PSI)	Units per box
08566109	26.6mm/ ³ / ₄ "	26.6mm/1.050"	43mm/1.69"	580	144
08566110	33.4mm/1"	33.4mm/1.315"	56mm/2.20"	580	70
08566112	42.2mm/1 ¹ / ₄ "	42.2mm/1.660"	72mm/2.83"	1130	56
08566115	48.3mm/1 ¹ / ₂ "	48.3mm/1.900"	82mm/3.23"	1470	36
08566120	60.3mm/2"	60.3mm/2.375"	109mm/4.29"	2400	13
08566123	32mm	32mm	56mm/2.20"	230	70
08566125	40mm	40mm	70mm/2.76"	230	60
08566130	50mm	50mm	85mm/3.35"	230	33

Microfit Couplers

Designed specifically for FTTx applications, the Condux® Microfit Couplers combine ease of use, chemical resistance and ability to accommodate the high pressures encountered when installing fiber with micro-blowing equipment.

The innovative transparent design ensures proper attachment by allowing the installer to visually verify that each end of the duct has been seated properly inside the coupler. Once connected, the air and water tight seal will hold pressure up to 232 PSI (16 Bar) in temperatures ranging from -4°F to 140°F (-20°C to 60°C).

These features incorporated into a push-on, no tools required design, make the Condux® Microfit Coupler an essential component of the professional installers toolbox.

Part Number	Description
08566310	Straight Connector - 5mm Microfit
08566320	Endstop Connector - 5mm Microfit
08566312	Straight Connector - 7mm Microfit
08566322	Endstop Connector - 7mm Microfit
08566335	Straight Connector - 8mm Microfit
08566336	Endstop Connector - 8mm Microfit
08566313	Straight Connector - 8.5mm Microfit
08566323	Endstop Connector - 8.5mm Microfit
08566315	Straight Connector - 10mm Microfit
08566325	Endstop Connector - 10mm Microfit
08566316	Straight Connector - 12mm Microfit
08566326	Endstop Connector - 12mm Microfit
08566337	Straight Connector - 12.7mm Microfit
08566338	Endstop Connector - 12.7mm Microfit
08566318	Straight Connector - 14mm Microfit
08566328	Endstop Connector - 14mm Microfit
08566319	Straight Connector - 16mm Microfit
08566329	Endstop Connector - 16mm Microfit
08566333	Straight Connector - 18mm Microfit
08566334	Endstop Connector - 18mm Microfit



Direct Bury Couplers

Designed specifically for FTTx applications, the Condux® Direct Bury Couplers feature a durable, shock resistant design that will hold up to virtually any terrain or soil condition.

The Direct Bury Coupler's metallic- free construction eliminates damage from oxidation or acidic soil conditions – guaranteeing it will maintain its seal over time. The translucent design ensures a proper connection by allowing the installer to visually verify that each end of the duct has been properly seated.

Once connected, the air and water tight seal will hold pressure up to 232 PSI (16 Bar) in temperatures ranging from -5°F to 113°F (-15°C to 45°C). These parameters will accommodate virtually any application situation encountered in the field - including the high pressures utilized when installing fiber with micro-blowing equipment.

These features incorporated into a push-on, no tools required design, make the Condux® Direct Bury Coupler an essential component of the professional installer's toolbox.



Part Number	Description
08566350	Direct Bury, Straight Connector - 7mm
08566351	Direct Bury, End Stop - 7mm
08566352	Direct Bury, Straight Connector - 8mm
08566353	Direct Bury, End Stop - 8mm
08566354	Direct Bury, Straight Connector - 10mm
08566355	Direct Bury, End Stop - 10mm
08566356	Direct Bury, Straight Connector - 12mm
08566357	Direct Bury, End Stop - 12mm
08566358	Direct Bury, Straight Connector - 14mm
08566359	Direct Bury, End Stop - 14mm
08566360	Direct Bury, Straight Connector - 16mm
08566361	Direct Bury, End Stop - 16mm
08566362	Direct Bury, Straight Connector - 20mm
08566363	Direct Bury, End Stop - 20mm





AIR COMPRESSORS

NEW! Gulfstream 35® Air Compressor

The Condux Gulfstream 35® Air Compressor with Integrated air cooler is ideal for the Condux Gulfstream micro blowers. Featuring a collapsible handle, the GS35 compressor is compact, lightweight and easily maneuvered through standard gates and doorways. This compressor provides constant air flow and pressure, regardless of the time it takes to complete the job, because of the 100% continuous duty cycle and rotary screw air end. Above all, the compressor is easy to use, with a stop/start switch, pressure control on/off levers and a user friendly control panel.



Not CE approved
*recommended for the Condux Gulfstream™ 150, 250 and 300

A **LIFETIME WARRANTY** is available on the Rotary Screw Air End if Condux Shield Works lubricant and filters are used at the recommended maintenance intervals. Lubricant and filter should be replaced after the first 50 hours and complete service once per year (or at 500 hours, whichever comes first). Must complete and return registration card to begin program. See online manual or contact Condux Customer Service for complete details.

Part Number	Description
08785150	Gulfstream® 35 Air Compressor, 35 cfm (15 bar)
02291801	Gulfstream® 35 50-Hour Maintenance Kit
02291802	Gulfstream® 35 One Year/500 Hours Maintenance Kit
08785050	3/8" 50ft (9.5mm 15m) Hose with QDS (Domestic)

COMPRESSOR		GASOLINE ENGINE		PACKAGE		DIMENSIONS
Model	Free Air Delivery at 217 psig (15 Bar)	Make	Power @ Full Load (hp)	Fuel Tank Capacity	Weight, dry	L x W x H
Gulfstream 35	35 cfm (1 m3/min)	Kohler	25 (18.64KW)	5 gal (18.93L)	425 lb. (193kg)	47 in x 30.5 in x 41.5 in (119cm x 77cm x 105cm)

M17 Air Compressor

The Mobilair™ M17 is a rugged and dependable unit that is perfect for a variety of applications. With a folding handle, oversized pneumatic tires, and compact design, this unit is easy to move around virtually any job site.

The M17 features Kaeser's power saving Sigma Profile™ airend. This efficient Kaeser design maintains steady pressure and puts out more air per hp, saving you gas. Driving these airends is a quiet but powerful Honda engine with modulation control which matches air output to the load demand. It has a simple electric starter with keyed ignition and an easy-to-read control panel.



*recommended for the Condux Gulfstream™ 150, 250 and 300

The scratch, dent, and impact resistant rotomolded polyethylene shell takes a beating and still protects the unit. Inside, the compressors are protected by 4 micron inlet filters rated at 99.9% efficiency, allowing this unit to operate in virtually any construction environment.

Part Number	Description
08785000	35CFM @ 205PSI (1 m3/min @ 14 bar) - Domestic Fittings
08785151	35CFM @ 205PSI (1 m3/min @ 14 bar) - International Fittings
08785050	3/8" 50ft (9.5mm 15m) Hose with QDS (Domestic)

COMPRESSOR		GASOLINE ENGINE			PACKAGE		DIMENSIONS	
Model	Free Air Delivery at 205 psig (14.13 Bar)	Make	Power @ Full Load (hp)	Full Load Speed (rpm)	Off Load Running Speed (rpm)	Fuel Tank Capacity	Weight, dry	L x W x H
M17	35 cfm (1 m3/min)	Honda GX630	20.8 (15.51KW)	3300	2200	5 gal (18.93L)	445 lb. (201.85kg)	42 in x 31 in x 31 in (108cm x 80cm x 78cm)



HYDRAULIC POWER PACKS



FIBER CABLE INSTALLATION

Portable Hydraulic Power Packs

These portable power sources are matched perfectly to the power requirements of the Condux Fiber Optic Cable Puller and the Fiber Optic Cable Blower. See the chart below for specifications of each machine.



13HP Power Pack

Part Number	Description
08675255	10 HP Hydraulic Power Pack, Electric
08675702	13HP Variable Flow Power Pack
08675252	16 HP Hydraulic Power Pack, Diesel
08675254	23 HP Hydraulic Power Pack, Diesel

*Battery and fluids included, packaged separately for shipping

SPECIFICATIONS																
Power Pack Size	10HP Power Pack*				13HP Power Pack (recommended)				16HP Power Pack*				23 HP Power Pack*			
Use Product	Fiber Optic Cable Blower				Fiber Optic Cable Puller Fiber Optic Cable Blower				Fiber Optic Cable Puller				Fiber Optic Cable Puller			
Part Number	08675255				08675702 08675702INTL				08675252				08675254			
Hyd. System					Open Center											
Frame Type	Two Wheel Mobile Unit				Two Wheel Mobile Unit				Two Wheeled Mobile Unit				Two Wheel Mobile Unit			
Length	27.5" (698mm)				26.5" (673mm)				39.0" (990mm)				39.0" (990mm)			
Width	24.5" (622.3mm)				20" (508mm)				29.0" (730mm)				28.8" (731mm)			
Height	31.5" (800.1mm)				27.5" (698 mm)				36.5" (930mm)				36.5" (927mm)			
Weight (Dry)	200lbs (90.72kg)				143lbs (65kg)				478lbs (217.8kg)				520lbs (236kg)			
Filtration	10 Micron Return Line Canister				10 Micron Return Line Canister				10 Micron Return Line Canister				10 Micron Return Line Canister			
Oil Cooler	Air to Oil with Ind. Fan				Air to Oil				Air to Oil				Air to Oil			
Engine	Baldor Electric				Gas				Diesel				Diesel			
	10 HP 220V 3 Phase Motor				13 HP Honda GX390				16 HP Kohler Tier 4 Compliant				23 HP Kohler Tier 4 Compliant			
Fuel	-				1.6 gallons/6.4 liters				4 gallons/15.1 liters				5 gallons/19 liters			
Hydraulic Oil (Useable)	4 gallons/15.4 liters				5 gallons/19 liters				5 gallons/19 liters				4 gallons/15.1 liters			
Hydraulic Rated Flow	GPM @ PSI		LPM @ BAR		GPM @ PSI		LPM @ BAR		GPM @ PSI		LPM @ BAR		GPM @ PSI		LPM @ BAR	
	8.8	0	33.3	0	6.8	0	25.8	0	8.0	0	30.2	0	12	0	45.4	0
	8.0	2,000	30.2	138	5.9	1,800	22.4	138	8.2	2,000	31	138	12	2,000	45.4	138
					8.8	0	33.3	0								
				8.0	2000	30.2	138									
Hydraulic Relief Valve Pressure	2,100 PSI (138 BAR)				2,150.0 PSI (148.3 BAR)				2150.0 PSI (148 BAR)				2150.0 PSI (148.3 BAR)			

*Special Order

Hydraulic Power Pack Accessories

Part Number	Description
08675858	Hydraulic Hose Kit, 20' (6 m) Hose with Couplings
08780384	Hydraulic Hose with flow control manifold
02260000	Hydraulic Coupling, Female Flat Face Faster 2FFN38-12NPT-F / Bruning FF371-8FP
02260100	Hydraulic Coupling, Male Flat Face Faster 2FFN38-12NPT-M / Bruning FF372-8FP
02260200	Dust Cap, Male Coupling
02260201	Dust Cap, Female Coupling
02286416	Power cord assembly extension, 2-pin straight, 20' (6 m)
08761248	Power cord with cigarette adapter



Dust Caps

Couplings



FIBER OPTIC CABLE PULLER

FIBER CABLE INSTALLATION

Fiber Optic Cable Puller

The Fiber Optic Cable Puller from Condux sets new standards for safe, accurate pulling of fiber optic cables. Only the Condux puller can offer load cell torque input for the most accurate tension measuring available. Unlike most hydraulic measuring systems, this system is not affected by changes in oil temperature, component age and power source. That means the Condux Fiber Optic Cable Puller does not need to be recalibrated under different weather conditions.

NOTE: The Hydraulic Power source is sold separately (see pg. 133).



12 inch (305 mm) capstan available
30 inch (762 mm) capstan available
42 inch (1067 mm) capstan available
50 inch (1270 mm) capstan available

Lightweight means easy set-up

U.S. Patent
#5,559,294

Post fits standard 2½ inch (64 mm)
mounting socket

Hydraulic motor

Standard Features

These pullers consist of a hydraulic motor, variable speed foot control, manual flow control valve for adjusting maximum speed and a manually adjustable pressure relief valve for adjusting the ultimate pull tension.

Optional Features

The Condux Fiber Optic Cable Puller features an optional electronic tension control system with adjustable digital load limits and a load cell tension measuring device with a paperless recorder and trend display, compact flash drive with 64MB flash card and USB interface (see page 136-137).

Components

Condux Fiber Optic Pullers are multi-component products. Order a puller to fit your requirements with combinations of these components (for ordering information, see page 138-139). Components include:

- Hydraulic puller mounted on a standard 2½" (64 mm) square tube
- Capstan
- Foot control / hydraulic control assembly
- Electronic control box with paperless recorder
- Hoses and cords to connect the puller to the foot control assembly and electronic control box

WARNING: The Fiber Optic Cable Puller is not to be used as a hoist or for lifting, supporting or transporting people or loads.





CONDEX

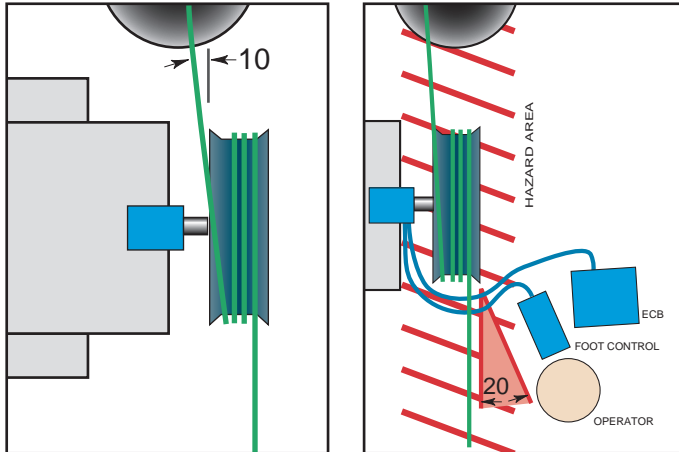
FIBER OPTIC CABLE PULLER



FIBER CABLE INSTALLATION

Easy to set up, Safe to use

Condux Fiber Optic Cable Pullers set up easily at a variety of jobsite layouts. Components are modular, adding to versatility and operator safety.

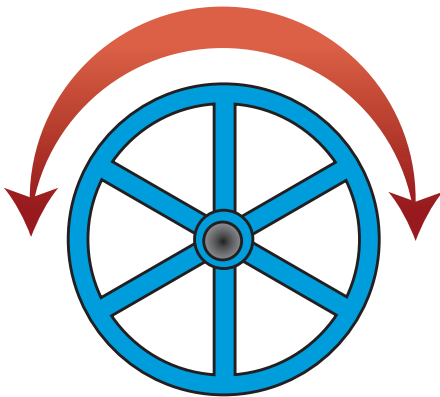


Variable Speed Foot Control

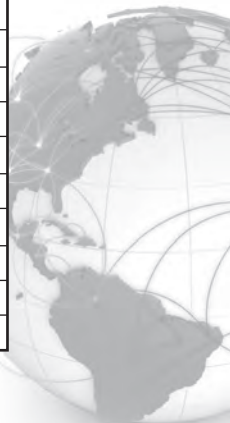
Like the accelerator pedal in your car or truck, the Variable Speed Foot Control allows the operator to easily manage the speed of the pull.

Bi-directional Pulling

Bi-directional pulling capabilities mean less set-up time and more productivity.



SPECIFICATIONS									
	12 in (305 mm) Diameter Capstan		30 in (762 mm) Diameter Capstan		42 in (1067 mm) Diameter Capstan		50 in (1270 mm) Diameter Capstan		
PULLING FORCE	lbs	kN	lbs	kN	lbs	kN	lbs	kN	
Maximum	2,000	8.9	1,000	4.4	600	2.7	600	2.7	
Continuous	2,000	8.9	1,000	4.4	600	2.7	600	2.7	
PULLING SPEED	ft/min	m/min	ft/min	m/min	ft/min	m/min	ft/min	m/min	
No Load	93.9	28.6	240.0	73.2	328.4	100.0	391.4	119.3	
At Maximum Force	93.9	28.6	240.0	73.2	328.4	100.0	391.4	119.3	
Power Requirements									
PRESSURE	2,000 to 2,500 psi (137 to 172 bar)								
FLOW	6 to 10 gpm (22.7 to 37.9 lpm)								
PEAK POWER	8 HP (5.97 kw)								





FIBER OPTIC CABLE PULLER



Electronic Control Box

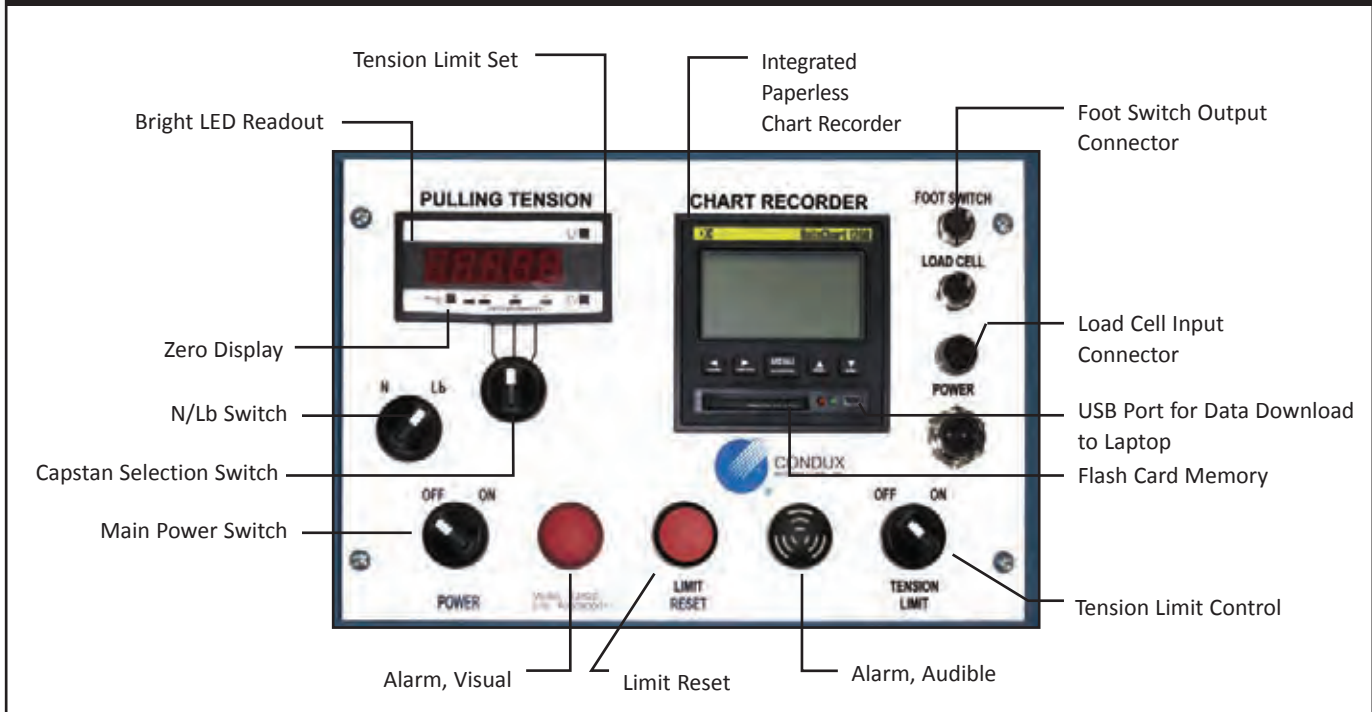
Optional Electronic Control System

Features large LED Display and Paperless Recorder with trend display. Paperless Recorder includes: Trend Display, CompactFlash™ card slot with 256MB Flash Card, and USB interface. A programmable overload set point has both an audible and visual indication of an overload condition. The Electronic Control Box also has the capability to disengage the cable puller if an overload occurs.



U.S. Patent # 5,559,294

Electronic Controls: Easy, Informational, Durable





FIBER OPTIC CABLE PULLER PACKAGES



FIBER CABLE INSTALLATION

- 1** Base Part No. **08690001** Description
Package contains: Fiber Optic Cable Puller, Foot Control and Hoses. Does not include a remote mounting stand, base mount or capstan. Please order separately (see pages 138-139).

Capstan Options

Part No.	Description
08675230	30" (762 mm) Capstan; 4" (102 mm) wide
08675430	30" (762 mm) Capstan; 8" (203 mm) wide
08675436	42" (1067 mm) Capstan
08675220	50" (1270 mm) Capstan



1 *Shown with Optional 30" Capstan.

- 3** Base Part No. **08690055** Description
Package contains: All items from package 1 plus monitoring components including an electronic control box with a paperless chart recorder for permanent documentation of your pull. Does not include a remote mounting stand, base mount or capstan. Please order separately (see pages 138-139).

Capstan Options

Part No.	Description
08675230	30" (762 mm) Capstan; 4" (102 mm) wide
08675430	30" (762 mm) Capstan; 8" (203 mm) wide
08675436	42" (1067 mm) Capstan
08675220	50" (1270 mm) Capstan



3 *Shown with Optional 30" Capstan.

Fiber Optic Cable Puller Package Upgrade Kits

Part Number	Description
08675920	Pkg 1 to Pkg 3 Upgrade Kit (Electronic Control Box with Chart Recorder and Load Cell)

ECB Replacement Parts

Part Number	Description
02286406	2 Pin Male Receptacle
02286416	Extension Cord 20"
02289665	On/Off Switch
02289666	Light, Red Pilot Indicator
02289668	Button, Alarm Reset - ECB
02290108	Cord, Footswitch
02290113	3 Pin Female Receptacle
02290114	5 Pin Female Receptacle
02290115	Alarm, Audible - DC
02290116	3 Way Selector Switch
02290117	Fuse, 250V 2A
08675926	Patch Cord, Footswitch Upgrade
08677372	Chart Recorder
08677375	Cord, Load Cell
08761248	Plug, Lighter Cord





FIBER OPTIC CABLE PULLER ACCESSORIES



Remote Mounting Stand

For fiber optic cable pulling applications that demand flexibility in set-up, the Remote Mounting Stand allows positioning of the cable puller well away from the power source. Easy to set up, the unit is both sturdy and compact. Features 2½" (64 mm) square mount.

Part Number	Description
08675115	Remote Mounting Stand



Fiber Optic Cable Puller Hitch Mount

Hitch Mounts are a fast, easy way to mount the Fiber Optic Cable Puller. The Hitch Mount attaches directly into a typical 2" (51 mm) square Reese-type receiver and the cable puller mounts in a 2½" (64 mm) square fixture. An adjustable jack is included for added stability and height adjustment. Pulling loads must not exceed 800 lbs. (3,559 N).

Part Number	Description
08675908	Fiber Optic Cable Puller Hitch Mount
08675930	Adjustable Fiber Optic Cable Puller Hitch Mount 22.5°



Pole Mounting Frame

When overhead fiber optic cable installation applications require the smooth hydraulic power and accurate tension measuring system of the Condux Fiber Optic Cable Puller, the Pole Mounting Frame is available. Install the cable puller on the frame with no modifications necessary to the puller. By design, the Pole Mounting Frame offers a secure hold on the cable puller both vertically and horizontally for a worry-free pull. A special plug drives into wood poles for added stability. Includes all mounting hardware.

Part Number	Description
08676000	Pole Mounting Frame and hardware



Capstans

To conform to the many specifications of fiber optic cable available, and to offer more cable pulling capabilities, Condux offers several sizes of capstans that fit the Condux Fiber Optic Cable Puller. These bayonet style capstans are offered in 12" (305 mm), 30" (762 mm), 42" (1,067) and 50" (1,270 mm) diameters for a standard 27/16" diameter bayonet style shaft.

Part Number	Diameter		Flat Width		Max. Cable O.D.	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
08675213*	12	305	9	229	-	-
08675230	30	762	4	102	.75	19
08675430	30	762	8	203	1.00	25
08675436	42	1,067	8	203	1.05	27
08675220	50	1,270	8	203	1.25	32

* Not to be used for fiber optic cable or steel rope. Intended for pulling innerduct, power, telephone or coaxial cables.



50" (1,270 mm) diameter capstan on Remote Mounting Stand.



Fiber Optic Cable Puller on Remote Mounting Stand with 42" (1,067 mm) diameter capstan.

Capstan Specifications	12 in (305 mm) Diameter Capstan		30 in (762 mm) Diameter Capstan		30 in (762 mm) Diameter Capstan		42 in (1,067 mm) Diameter Capstan		50 in (1,270 mm) Diameter Capstan	
	in	mm	in	mm	in	mm	in	mm	in	mm
Part Number	08675213		08675230		08675430		08675436		08675220	
FLAT SURFACE	in	mm	in	mm	in	mm	in	mm	in	mm
Width	9	229	4	102	8	203	8	203	8	203
PULLING FORCE	lbs	kN	lbs	kN	lbs	kN	lbs	kN	lbs	kN
Maximum/Continuous	2,000	8.9	1,000	4.4	600	2.7	600	2.7	600	2.7
PULLING SPEED	ft/min	m/min.	ft/min	m/min.	ft/min	m/min.	ft/min	m/min.	ft/min	m/min.
At Maximum Force	94	28.6	240.0	73.2	240.0	73.2	328.4	100.0	391.4	119.3
CABLE DIAMETER	Not for Fiber Optic Cable		in	mm	in	mm	in	mm	in	mm
Maximum			.75	19.0	.75	19.0	1.05	26.7	1.25	32.5



FIBER OPTIC CABLE PULLER ACCESSORIES

Mounting Sockets

The Condux Fiber Optic Cable Puller has a square mounting post 2½" (64 mm) x 2½" (64 mm). A female mounting socket is required for stability during cable pulling operations.



Part Number	Description
02260801	Floor Socket Mount, cast
08675130	Base Mount
08675138	Side Mount

Calibration Dynamometer

The Condux Fiber Optic Cable Puller is calibrated at the factory prior to shipment. The Calibration Dynamometer is used to check that the puller's calibration has not changed, especially if the relief valve has been adjusted in the field. On cable puller models equipped with an Electronic Control Box, the Calibration Dynamometer simply verifies the readings. Other load capacities available.



Number	Description
02261000	1,000 lb (454 kg) Calibration Dynamometer
02261040	4,000 lb (1814 kg) Calibration Dynamometer

Chart Recorder & Cord Replacement Parts for Old Style ECB



Part Number	Description
02273600	Chart Recorder Paper, 0-2,000 lbs.
02246001	Ink Cartridge, single (Jumo recorder)
08761248	Plug, Lighter Cord
02286416	Extension Cord 20'

Slip Clutch Capstan

Slip Clutch Capstans from Condux are designed to mount directly on a bayonet style winch drive shaft. A factory preset torque limiter prevents pulling tensions from exceeding 600 pounds (2,670 N) \pm 10% (60 lbs or 267 N). If the preset load is reached, the capstan will "slip" and discontinue rotating.

High strength aluminum and steel construction ensures product durability and cable protection.

The capstan is factory calibrated to 600 lbs (2,670 N) but can be calibrated to different loads from 200 to 1,000 lbs. (890 to 4,448 N).

The capstan is designed for use with a 2 $\frac{7}{16}$ " (62 mm) diameter, AT&T specification bayonet style power take-off (PTO) shaft.

Standard Ratings:

Part Number	Diameter		Flat Width		Max. Cable O.D.		Rating	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(lbs)	(N)
08760030-06	30	762	4	102	.75	19	600	2670
08760040-06	42	1,067	8	203	1.05	26.7	600	2670
08760050-06	50	1,270	8	203	1.25	32.5	600	2670

Special Ratings: 30-inch Capstan

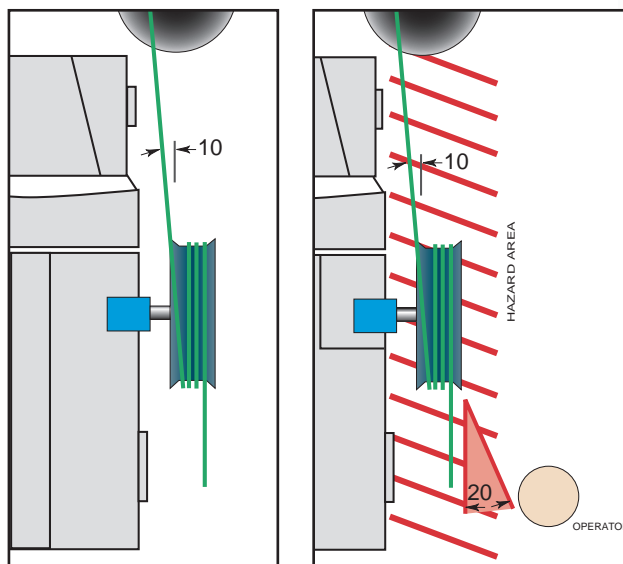
Part Number	Diameter		Flat Width		Max. Cable O.D.		Rating	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(lbs)	(N)
08760030-02	30	762	4	102	0.75	19	200	890
08760030-03	30	762	4	102	0.75	19	300	1335
08760030-04	30	762	4	102	0.75	19	400	1780
08760030-05	30	762	4	102	0.75	19	500	2225
08760030-07	30	762	4	102	0.75	19	700	3115
08760030-08	30	762	4	102	0.75	19	800	3560
08760030-09	30	762	4	102	0.75	19	900	4005
08760030-10	30	762	4	102	0.75	19	1000	4450

Special Ratings: 42-inch Capstan

Part Number	Diameter		Flat Width		Max. Cable O.D.		Rating	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(lbs)	(N)
08760040-02	42	1067	8	203	1.05	26.7	200	890
08760040-03	42	1067	8	203	1.05	26.7	300	1335
08760040-04	42	1067	8	203	1.05	26.7	400	1780
08760040-05	42	1067	8	203	1.05	26.7	500	2225

Special Ratings: 50-inch Capstan

Part Number	Diameter		Flat Width		Max. Cable O.D.		Rating	
	(in)	(mm)	(in)	(mm)	(in)	(mm)	(lbs)	(N)
08760050-02	50	1270	8	203	1.25	32.5	200	890
08760050-03	50	1270	8	203	1.25	32.5	300	1335
08760050-04	50	1270	8	203	1.25	32.5	400	1780
08760050-05	50	1270	8	203	1.25	32.5	500	2225





FIBER OPTIC CABLE PULLER TRAILER



! Not a fully assembled trailer. Fiber Puller, Stand, Power Pack and Capstan are sold separately.

Open Style Fiber Optic Cable Puller Trailer

Access job sites with ease using the Condux Open Style Fiber Optic Cable Puller Trailer. The open style has advantages in portability, accessibility and cost.

On the job, gain easy access to all components with the open face design. Small items can be stowed in a lockable storage compartment. Leveling and stabilizing hardware is included. The Open Face Fiber Optic Cable Puller Trailer comes standard with built-in cable puller mounts on the left and right rear corners.

Options include a choice of two Condux Fiber Optic Cable Puller packages, choice of five capstans, a 13 HP (9.7 kW) Power Pack and a Remote Mounting Stand. The trailer bed is designed to accommodate standard and optional equipment with built-in mounting systems for secure travel.

Build your own Open Style Fiber Optic Cable Puller Trailer Kit

Use the **Base Part Number** shown below and also choose accessory options by part number when placing your order. All items are priced individually.

Base Part No.	Description
08675675	Open Style Fiber Optic Cable Pulling Trailer (Includes: Trailer Flat Assembly, Wheel Chocks and Tool Box) *Some assembly required

Choose:

1 **Fiber Optic Cable Puller Options:**
(Includes Foot Control and Hoses)

Part No.	Description
08690001	Fiber Optic Cable Puller without Electronics
08690055	Fiber Optic Cable Puller with Electronic Control Box and Paperless Chart Recorder

2 **Capstan Options:**

Part No.	Description
08675213	12" (305 mm) Capstan; 9" (229mm) wide
08675230	30" (762 mm) Capstan; 4" (102 mm) wide
08675430	30" (762 mm) Capstan; 8" (203 mm) wide
08675436	42" (1,067 mm) Capstan; 8" (203 mm) wide
08675220	50" (1,270 mm) Capstan; 8" (203 mm) wide

3 **Power Pack Option:**

Part No.	Description
08675702	13HP (9.7kW) Power Pack, Gas

4 **Stand Option:**

Part No.	Description
08675115	Remote Mounting Stand





CONDEX

FIBER OPTIC CABLE PULLER TRAILER



FIBER CABLE INSTALLATION

Accessible storage; all components are easy to see and use

5 Capstan sizes available

Trailer weighs 950 lbs. (431 kg) (without options)

Remote Mounting Stand (detachable)

2 1/2 inch (64 mm) square mounting socket for use with any Fiber Optic Cable Puller

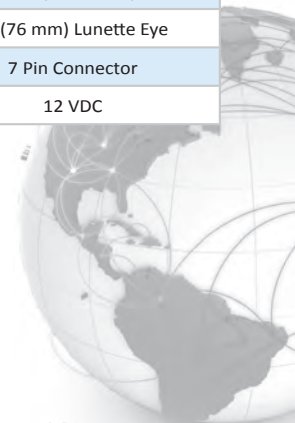
13 hp (9.7 kW) variable flow power pack



Power Supply	
Engine	HP Honda GX390
Horsepower	13hp @ 3600 rpm 11.9 kW @ 3600 rpm
Starting	Electric
Fuel	Unleaded Gas, 85 Octane Min, 10% or less ethanol blend
Fuel Capacity	1.6 gallons (6.4 L)
Speed Control	Variable

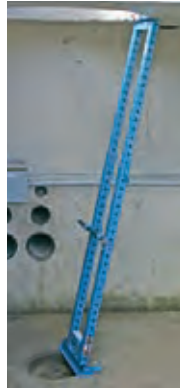
Hydraulics	
Capacity	8.0 gpm @ 2,000 psi (30.2 lpm @ 138 bar)
Reservoir	5.0 gallons (18.9 L)
Filtration	10 micron return line canister type
Hydraulic Oil Requirements	petro based, anti-wear, high viscosities over 140
Hydraulic Relief Valve Pressure	2,150 psi (148.3 bar)

Trailer Specifications	
Weight (without puller)	950 lbs (431 kg)
Axle	3,500 lbs (1,590 kg) Type II
Tire	P205/75R14 Steel Belted Radials
Rims	14" x 6" (356 mm x 152 mm)
Track	60" (1,254 mm)
Overall Width	80" (2,032 mm)
Overall Height	51" (1,295 mm)
Hitch	3" (76 mm) Lunette Eye
Lighting	7 Pin Connector
Electronics	12 VDC





FIBER OPTIC JAMB SKIDS AND CABLE GUIDES



Fiber Optic Jamb Skid

The Condux Fiber Optic Jamb Skid is a device for supporting fiber optic sheaves or quadrant blocks inside a manhole to pull fiber optic cable into underground conduit.

Constructed of steel tubing, the Fiber Optic Jamb Skid is both strong, 1,000 lbs. (4,480 N) load rated, and lightweight, can be installed by one person.

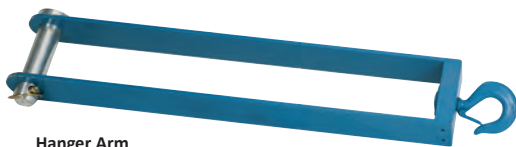
Part Number	Description	Manhole Height Range	
		(in)	(mm)
08097100	46" (1,168 mm) Base Section with locking pins		
08097200	43" (1,092 mm) Extension	49-80	1,244-2,032



Fiber Optic Quadrant Block

Protects fiber optic cable during installation. Pulling radius of 26" (660 mm); 13 aluminum rollers on bronze bearings allow cable to make a gradual 90° turn for easy pulling through manhole opening. Lightweight, corrosion-resistant aluminum side plates. Can be lowered into any manhole opening and chained in place for good alignment or used as a cable guide at street level. 2,600 lbs. (11,565 N) cable tension load capacity. 1½" (38 mm) maximum cable diameter (consult cable manufacturer for minimum bend radius). Support bar sold separately (see page 104). Replacement Sheaves available. See Specifications and Selection Charts on page 105.

Part Number	Description
08539350	Quadrant Block



Hanger Arm

Hanger Arms

Allows the hanging of the Fiber Optic Quadrant Block in a manhole for more flexible positioning.

Part Number	Description
08539320	Hanger Arm



Fiber Optic Hanger Block

Five aluminum rollers on bronze bearings allow cable to make a gradual 90° turn for easy pulling through manhole opening. Has a pulling radius of 12" (305 mm). Two non-metallic "keeper" rollers to hold the cable in place during the pull. Lightweight corrosion resistant aluminum side plates. Can be suspended in the manhole or hung on an overhead pole for easy pulls. ¾" (19 mm) maximum cable diameter (consult cable manufacturer for minimum bend radius). 800 lbs. (3,558 N) cable tension load capacity. Replacement Sheaves available. See Specifications and Selection Charts on page 105.

Part Number	Description
08539550	Hanger Block

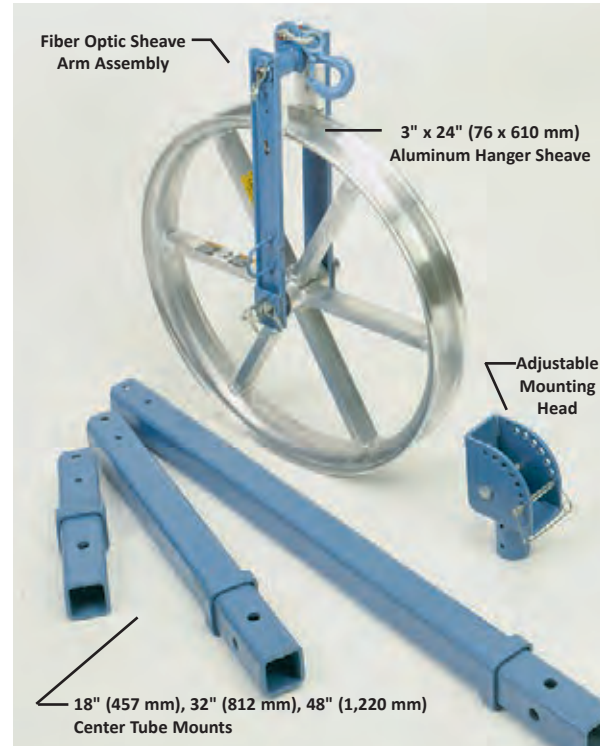
Fiber Optic Sheave Mount

Fiber Optic Sheave Mounts are an ideal solution to mid-point cable pulling situations. The adjustable sheave mount allows pinpoint adjustment from horizontal to vertical. Portable components set up quickly and adjust from job to job, offering maximum versatility with minimum equipment. Uses a standard 2½" (64 mm) square mounting post for use with FO Cable Puller Remote Mounting Stand (see page 138) or Mounting Sockets (page 140).

Fiber Optic Sheave Mount Components

Part Number	Description
08637900	Adjustable Sheave Mounting Head (includes sheave mounting shaft & pins)
08637909	18" (457 mm) Center Tube Mount
08637910	32" (812 mm) Center Tube Mount
08637911	48" (1,220 mm) Center Tube Mount
08637912	Fiber Optic Sheave Arm Assembly
08637743	Fiber Optic Aluminum Hanger Sheave 3" x 24" (76 x 610 mm)
08675115	Fiber Optic Puller Remote Mounting Stand Assembly (See page 104 for details)

Replacement Sheaves available. See Specifications and Selection Charts on page 105.



Fiber Optic Sheave Mount Packages

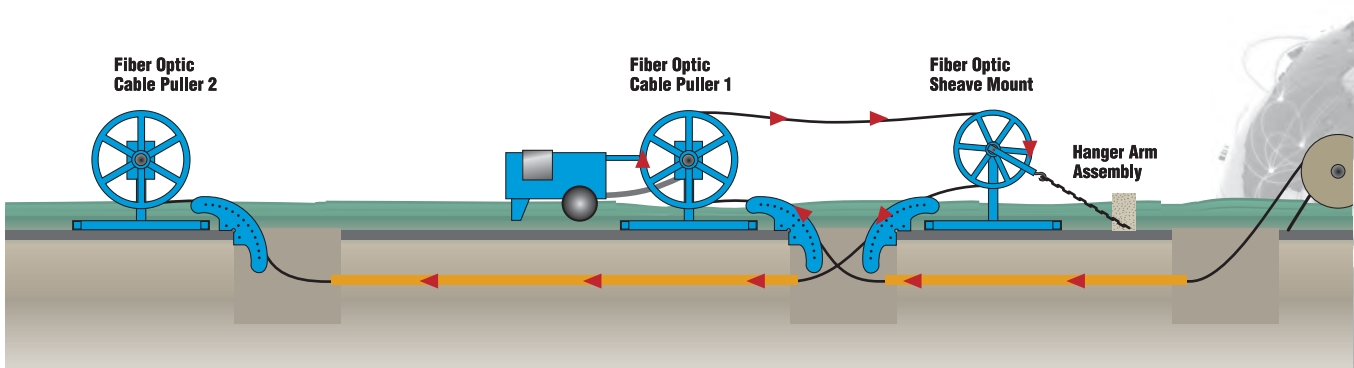
Part Number	Description
08637930	Adjustable Fiber Optic Sheave Mount, Pkg 1 Includes mounting head, all 3 mounting tubes, sheave and sheave arm assembly.
08637940	Adjustable Fiber Optic Sheave Mount, Pkg 2 Includes mounting head, all 3 mounting tubes, and sheave.



Fiber Optic Sheave Mount Package 1

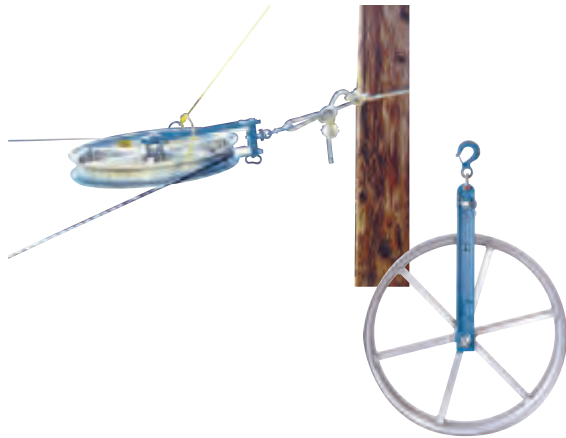


Fiber Optic Sheave Mount Package 2





FIBER OPTIC CABLE GUIDES & PULLING LUBRICANT



Overhead Fiber Optic Cable Sheave

Specially designed for guiding fiber optic or CATV cable safely and efficiently, Condux Cable Sheaves feature an innovative hanger arm that eliminates the possibility of cable coming off the sheave or binding against the support arm. With the removal of a pin, the hanger arm separates and allows cable to be slipped in easily, even at midpoints.

24-inch (610mm) sheave diameter allows for a gentle cable arc. Aluminum sheave construction means durability with less weight. Maximum capacity is 1,500 lbs. (6,672 N). Replacement Sheaves available. See Specifications and Selection Charts on page 105.

Part Number	Description
08637825	24" (610 mm) Overhead Fiber Optic Cable Sheave



Underground Fiber Optic Cable Sheave

The Underground Fiber Optic Sheave has all the features of the Overhead Sheave (above) but with an additional second arm for convenient tie-off. Replacement Sheaves available. See Specifications and Selection Charts on page 105.

Part Number	Description
08637800	Underground Fiber Optic Cable Sheave NOTE: Sheave Size 24" O.D.



Polywater® Lubricant F

Polywater® Lubricant F is a high performance, pourable liquid recommended for long and difficult fiber optic cable pulls. It is slow drying and leaves a lubricating film after its water base evaporates. Polywater F does not stress crack low density polyethylene and is compatible with all types of cable jackets.

Part Number	Description	Std. Pkg. Qty.
08230100	1 Quart (.9 liter) Squeeze Bottle	12/case
08230101	1 Gallon (3.8 liter) Jug	4/case
08230104	2½ Gallon (9.5 liter) Jug	2/case
08230105	5 Gallon (19 liter) Pourable Pail	1
08230155	55 Gallon (208 liter) Drum	1



Polywater® Lubricant WF

Lubricant WF is a non-freezing form of the standard Lubricant F.

Part Number	Description	Std. Pkg. Qty.
08230201	1 Gallon (3.8 liter) Jug	4/case
08230204	2½ Gallon (9.5 liter) Jug	2/case
08230205	5 Gallon (19 liter) Pourable Pail	1

For Cable Blowing Lubricants, see page 128.