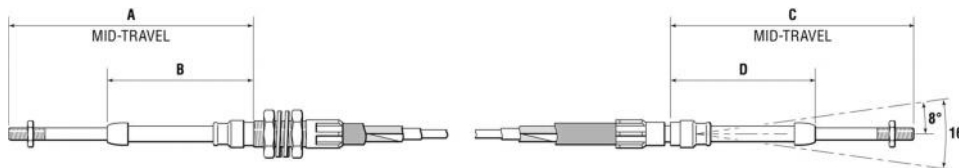




### PRIME LINE CONTROLS PUSH-PULL CABLES

- Easy to install with very smooth movement.
- Corrosion-resistant / corrosion-proof construction.
- Durable, Long-lasting.
- Many Fittings available.

Push-Pull cables are widely used in many applications. They are simple and easy to install. And the benefit of using an **Xtreme**<sup>®</sup> Push-Pull cable is that nearly all of the force the operator uses goes into actuating the device at the other end, not in trying to push the cable through the conduit (jacket), not to mention a much improved feel and control for the operator.



This is a graphic of our 30 series Xtreme cable. The core consists of a center wire wrapped with 12 other small gauge wires and with an extruded nylon, splined jacket. In heavier cables the core will have two or more layers of wrapped wires. The conduit, or outer three layers, starts with the liner wrapped with wires in a slow spiral (high pitch) and finally, the outer HDPE extruded jacket.

### 30Xtreme

The 30Xtreme series push-pull cables are for moderate to heavy duty applications. Chokes, brakes, valves, latches and longer runs are a few of the applications for the 30X cables.

Cable Type	Fittings	Push-Pull Cable Series P/N
30X	SAE Bulkhead	3005
30X	SAE Clamp	3009
30X	SAE Bulkhead / Clamp	3003

The dimensions of the cable above are shown below in the data table. Please note that dimensions "A" and "B" are for mid-travel (evenly split on both ends of the cable.)

30X Cables	Bulkhead	Bulkhead thread length	Sleeve Length	Clamp
Travel	"A" (mid-travel distance)	(2 washers, 2 nuts)	"B", "D"	"C" (mid-travel distance)
25 mm (1")	92.2 mm (3.63")	32 mm (1.26")	53.6 mm (2.11")	93.7 mm (3.69")
50 mm (2")	132 mm (5.18")	32 mm (1.26")	79.0 mm (3.11")	132 mm (5.19")
75 mm (3")	170 mm (6.68")	32 mm (1.26")	104 mm (4.11")	170 mm (6.69")
100 mm (4")	207 mm (8.18")	32 mm (1.26")	130 mm (5.11")	208 mm (8.19")
125 mm (5")	246 mm (9.68")	32 mm (1.26")	155 mm (6.11")	246 mm (9.69")
150 mm (6")	284 mm (11.2")	32 mm (1.26")	181 mm (7.11")	284 mm (11.2")
175 mm (7")	322 mm (12.7")	32 mm (1.26")	206 mm (8.11")	322 mm (12.7")

### **40Xtreme Hi-Load**

The **40Xtreme** Hi-Load push-pull cables are ideal for heavy loads requiring more force to actuate the device. Large valves, brake cables on heavy equipment, even process control cables are some of the uses for the sturdy, reliable and smooth operating 40XHL cables. The **40Xtreme** Hi-Load cables are listed in the table below. The dimensions are farther below. These 40XHL cables are used when heavier devices need to be actuated compared to 30X cables. (For heavier loads still, consider the 60 series.)

Cable Type	Fittings	Push-Pull Cable Series P/N
40XHL	SAE Bulkhead	4039
40XHL	SAE Clamp	4035
40XHL	SAE Bulkhead / Clamp	4037

The dimensions of the cable above are shown below in the data table. Please note that dimensions "A" and "B" are for mid-travel (evenly split on both ends of the cable.)

40XHL Cables	Bulkhead	Bulkhead thread length	Sleeve Length	Clamp
Travel	"A" (mid-travel distance)	(2 washers, 2 nuts)	"B", "D"	"C" (mid-travel distance)
25 mm (1")	92.2 mm (3.63")	32 mm (1.26")	53.6 mm (2.11")	93.7 mm (3.69")
50 mm (2")	132 mm (5.18")	32 mm (1.26")	79.0 mm (3.11")	132 mm (5.19")
75 mm (3")	170 mm (6.68")	32 mm (1.26")	104 mm (4.11")	170 mm (6.69")
100 mm (4")	207 mm (8.18")	32 mm (1.26")	130 mm (5.11")	208 mm (8.19")
125 mm (5")	246 mm (9.68")	32 mm (1.26")	155 mm (6.11")	246 mm (9.69")
150 mm (6")	284 mm (11.2")	32 mm (1.26")	181 mm (7.11")	284 mm (11.2")
175 mm (7")	322 mm (12.7")	32 mm (1.26")	206 mm (8.11")	322 mm (12.7")

### **60Xtreme**

The **60Xtreme** push-pull cables are ideal for heavy duty loads requiring more force to actuate the device. Large valves, brake cables on heavy duty equipment such as off-road construction and mining, even process control cables are some of the uses for the robust, reliable and smooth operating 60X cables. The **60Xtreme** cables are listed in the table below. The dimensions are farther below. These 60X cables are used when heavier devices need to be actuated or for longer runs compared to the 40XHL cables.

Cable Type	Fittings	Push-Pull Cable Series P/N
60X	SAE Bulkhead	6005
60X	SAE Clamp	6001
60X	SAE Bulkhead / Clamp	6003

The dimensions of the cable above are shown below in the data table. Please note that dimensions "A" and "B" are for mid-travel (evenly split on both ends of the cable.)

60X Cables	Bulkhead	Bulkhead thread length	Sleeve Length	Clamp
Travel	"A" (mid-travel distance)	(2 washers, 2 nuts)	"B", "D"	"C" (mid-travel distance)
25 mm (1")	129 mm ( 5.06")	46 mm (1.6")		111 mm (4.38")
50 mm (2")	167 mm (6.56")	46 mm (1.6")		149 mm (5.88")
75 mm (3")	205 mm (8.06")	46 mm (1.6")		187 mm (7.38")
100 mm (4")	243 mm (9.56")	46 mm (1.6")		225mm (8.88")
125 mm (5")	281 mm (11.06")	46 mm (1.6")		263 mm ( 10.38")
150 mm (6")	319 mm (12.56")	46 mm (1.6")		301 mm (11.88")
175 mm (7")	357 mm (14.06")	46 mm (1.6")		339 mm (13.38")
200 mm (8")	395 mm ( 15.56")	46 mm (1.6")		377 mm (14.88")

## Related Information

### Load Data

Cable Series	Pull Loads (same for all travels)	PUSH Loads (by travel length, at Long Life Bend Radii)				
		25 mm (1")	50 mm (2")	75 mm (3")	100 mm (4")	125 mm (5")
30L	222 N (50 lbs.)	222 N (50 lbs.)	222 N (50 lbs.)	180 N (40 lbs.)	135 N (30 lbs.)	90 N (20 lbs.)
30X	222 N (50 lbs.)	222 N (50 lbs.)	222 N (50 lbs.)	180 N (40 lbs.)	135 N (30 lbs.)	90 N (20 lbs.)
40XHL	755 N (170 lbs.)	665 N (150 lbs.)	665 N (150 lbs.)	580 N (130 lbs.)	490 N (110 lbs.)	400 N (90 lbs.)
60X	890 N (200 lbs.)	890 N (200 lbs.)	890 N (200lbs.)	800 N (180 lbs.)	665 N (150 lbs.)	535 N (120 lbs.)

### Bend Radii

Cable Series	Long Life Minimum Bend Radius	50,000 Cycle Life Minimum Bend Radius
30X	200 mm (8")	100 mm (4")
40X Hi-Load	200 mm (8")	125 mm (5")
60X	250 mm (10")	125 mm (5")

Cable length is measured from tip to tip. For a complete list of standard cable lengths, please refer to the Technical section of the Prime Line Industrial Controls web site, [www.primelinecontrols.com](http://www.primelinecontrols.com).