



Parker BOP Umbilicals, Hotlines, and Electro Hydraulic Umbilicals

One source with faster response and longer lengths



ENGINEERING YOUR SUCCESS.

BOP Umbilicals



One Source for all Hydraulic BOP Connections

Parker's BOP umbilicals are used on offshore drilling rigs to control the subsea BOP stack. It is critical for the operators to have control over the BOP at all times, and Parker's BOP umbilicals with Velocity Hose allow for precise control and faster response times when activating subsea valves on the BOP pod.

Parker also manufactures hotline hoses for BOP control. Hotline hoses supply hydraulic fluid to the BOP control system while it is being deployed to, or retrieved from, the seabed. Parker's Hotline Hoses have a 1" internal diameter, working pressure of 5,000 psi, and are supplied in continuous lengths in excess of 13,000 feet. They feature a Thermoplastic Vulcanizate (TPV) outer jacket for superior abrasion resistance.

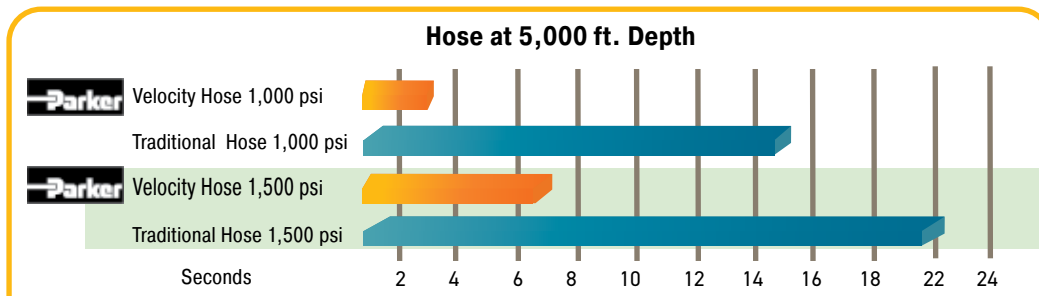
Parker's stack hoses have a flexible and compact design making them ideal for efficient plumbing of the BOP stack's hydraulic lines. Our stack hoses are available in blue, yellow and green for identification between primary and secondary systems.



3.3 mm additional polyurethane jacket extruded on the hose to improve the mechanical protection



Velocity hoses extend the life cycle of a BOP bundle. They are light weight, have a small O.D., and a faster response time than traditional hose.



✓ Superior Field Service Life/Drilling Time

Velocity hose also has a smaller O.D. which means Parker can produce BOP umbilicals with more pilot lines without increasing the O.D. of the umbilical. Customers can maintain their existing BOP clamping system for the umbilical and still get additional spares. Having additional spares means the umbilical can remain in service for longer, postponing the cost of the down time needed to replace it.

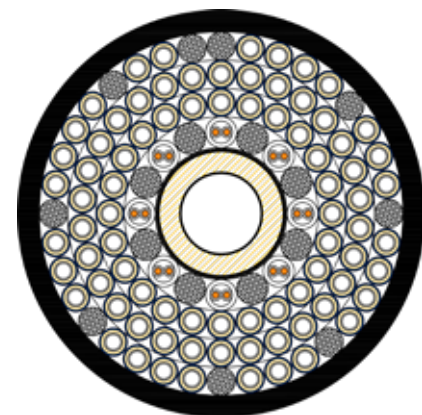
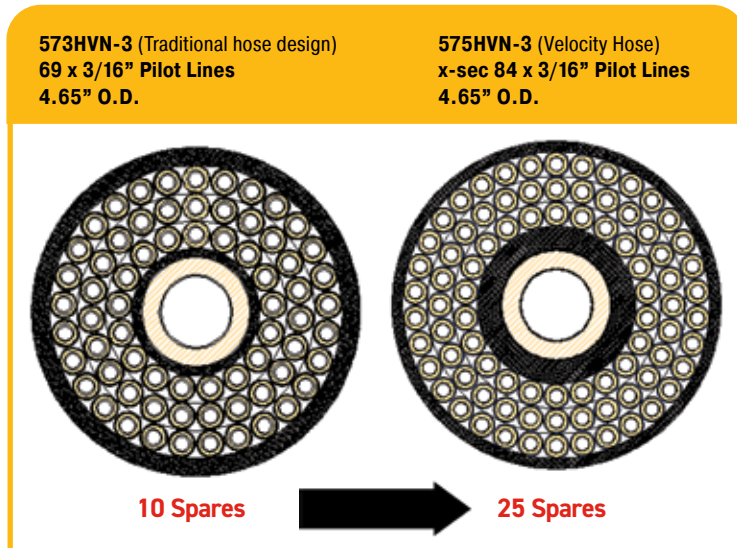
✓ Faster Response Times

With the use of new materials and design technology, Parker redesigned the hose to reduce volumetric expansion over long lengths, providing the rig operators faster valve actuation, even in deeper waters.

Parker BOP umbilicals can be customized to include both electrical power and signal lines.

✓ Reduced Weight

Velocity hose is lighter weight than a traditional 4-layer fiber braid hose. Each drilling rig is certified for a maximum weight capacity, therefore, lighter weight hoses allow the rig operator to redirect the weight savings to other critical components, or add more hoses to the umbilical allowing for more spares.



BOP umbilical with added electrical signal cables

BOP Umbilicals

Velocity Hose Highlight



573HVN-3 / 575HVN-3

- .200" I.D. with 3,000 or 5,000 psi.
- Temperature Range: -40°F (-40°C) to 131°F (55°C)
- Core tube: Polyamide
- Reinforcement: 2 spiral layers of aramid fiber
- Jacket: Polyurethane
- Core Identifiers: Blue (5,000 psi hose)
Green (3,000 psi hose)

Certifications

- SAE J343
- DNV 2.9 No. 5-791.70
- ISO 13628-5

Features

- Reduced weight
- Faster valve response time
- Extends life cycle of BOP bundle
- Higher burst pressure & impulse life
- 3,000 & 5,000 psi working pressure

Hotline Hose Highlight



575XN-16

- For applications requiring lighter weight and increased flexibility.
- Temperature Range:
 - -40°F (-40°C) to 150°F (65.5°C)
- Core tube: Polyamide
- Reinforcement: Braided aramid fiber
- Jacket: Polyamide, optional secondary jacket (Polyurethane or TPV)
- Color: Black

Certifications

- DNV-GL Type Approved
- MSHA compliant cover

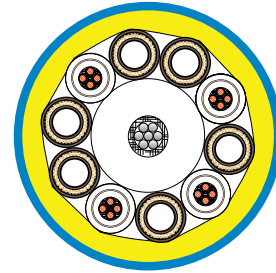
Features

- Max Hotlines Length: 4,300 m (14,000 ft)
- 3.3mm additional polyurethane jacket extruded on the hose to improve the mechanical protection
- Optional Thermoplastic Vulcanizate (TPV) outer jacket for superior abrasion resistance
- Impulse requirement: Minimum of 200,000 cycles at 150°F (65.5°C) and 6,650psi (45.9 MPa) per SAE J343.

Electro Hydraulic Umbilicals

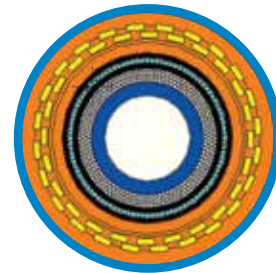
CALM Buoy Umbilicals

Located between PLEM and the buoy to control the regular opening and closing of PLEM Valves. A wire rope is included in the section to bear the loads acting on the umbilical. Short umbilical (maximum length 90 m (300 ft))



High Pressure Electro Hydraulic Umbilicals

Applications include Riser Control Manifold, Dual Lubrication Valve Assembly, and Nitrogen Injection Assemblies. Reinforced with aramid fiber to bear the longitudinal load and avoid overload of the functional elements. Maximum length 900 m (3,000 ft)



APPLICATIONS: BOP Stack, Velocity Hose

575XN-16



Part Number	Nominal I.D.				Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Permanent Fitting Series
	DN	Size	inch	mm	inch	mm	psi	bar	inch	mm	lbs./ft.	kg/mtr	
575XN-16	25	-16	1	25.4	1.51	38.3	5,000	345	10	254	0.37	0.55	CG

Construction

- Core Tube: Polyamide
- Pressure Reinforcement: Aramid Fiber
- Cover: Polyamide, optional secondary jacket (Polyurethane or TPV)

Temperatures

- Temperature Range: -40°F (-40°C) to 150°F (65.5°C)

Compliance

- DNV-GL Type Approved
- MSHA compliant cover

Notes

- Non-perforated cover
- Fittings CG Series – Catalog 4660

Design Factor

- 4

Fittings

- CG Series - Catalog 4660

APPLICATIONS: BOP Stack, Subsea Repairs - Welded Pipe Alternative, Well Stimulation, Cementing, ROV Vehicles

2340N-24V10



Part Number	Nominal I.D.				Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Permanent Fitting Series
	DN	Size	inch	mm	inch	mm	psi	bar	inch	mm	lbs./ft.	kg/mtr	
2340N-24V10	40	-24	1-1/2	38.1	2.19	55.5	5,000	345	17.7	450	2.4	3.5	8X

Construction

- Core Tube: Polyamide 11
- Pressure Reinforcement: Two spiral layers of high tensile steel wire
- Cover: Polyurethane
- Hose is ParKrimpable

Temperatures

- Temperature Range: -40°F (-40°C) to 212°F (100°C)**

Compliance

- ISO 13628-5

Design Factor

- 4

Fittings

- 8X Series - Catalog 4900

Notes

- Operating temperature will vary depending on the fluid. Consult Parker for more information.
- Assembly working pressure is dependent on the lowest rated component. Therefore, if fittings have a lower pressure rating than the hose, the working pressure of the fittings is the working pressure of the assembly.



APPLICATIONS: Subsea Control Lines, Hotlines, BOP Stack, Calm Buoy Umbilicals

5,510 psi Oil & Gas Hose 2380N-16Vx



Construction

- Core Tube: Polyamide
- Pressure Reinforcement: Two closed spiral layers and two open spiral layers of high tensile steel wire
- Cover: Sea water resistant polyurethane
- Standard Color: x3 - Green, x2 - Blue, x6 - Yellow

Temperatures

- Temperature Range:
-40°F (-40°C) to 212°F (100°C)

Compliance

- Meets/exceeds performance requirements of ISO 13628-5/API 17En

Design Factor

- 4

Fittings

- E4 Series - Catalog 4900

Notes

- Assembly working pressure is dependent on the lowest rated component. Therefore, if fittings have a lower pressure rating than the hose, the working pressure of the fittings is the working pressure of the assembly.
- Warning tags are required for all hose assemblies.
- Bend restrictors are required for all hand held applications. Parker Parflex suggests the use bend restrictors for all assemblies

Part Number	Nominal I.D.			Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Permanent Fitting Series	
	DN	Size	inch	mm	inch	mm	psi	bar	inch	mm	lbs./ft.		kg/mtr
2380N-16V12													
2380N-16V13	25	-16	1	25.4	1.45	36.8	5,510	380	11.4	290	1	1.49	E4
2380N-16V16													

APPLICATIONS: Subsea Control Lines, Hotlines, BOP Stack, Calm Buoy Umbilicals

4,000 to 7,500 psi Oil & Gas Hose 2390N



Construction

- Core Tube: Polyamide
- Pressure Reinforcement: Two closed spiral layers and two open spiral layers of high tensile steel wire
- Cover: Sea water resistant polyurethane
- Standard Color: x3 - Green, x2 - Blue, x6 - Yellow, x0 - Black

Temperatures

- Temperature Range: -40°F (-40°C) to 212°F (100°C)

Compliance

- Meets or exceeds the performance requirements of ISO 13628-5 except -025

Design Factor

- 4

Fittings

- 8X, E3 Series - Catalog 4900

Notes

- Assembly working pressure is dependent on the lowest rated component. Therefore, if fittings have a lower pressure rating than the hose, the working pressure of the fittings is the working pressure of the assembly.
- *Not rated to ISO 13628-5

Part Number	Nominal I.D.			Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Permanent Fitting Series	
	DN	Size	inch	mm	inch	mm	psi	bar	inch	mm	lbs./ft.		kg/mtr
2390N-025V10*	4	-25	5/32	4	0.38	9.7	7,500	517	2.16	55	0.11	0.16	8X
2390N-04V10	6	-4	1/4	6.4	0.52	13.3	7,107	490	2.76	70	0.17	0.25	E3
2390N-04V12	6	-4	1/4	6.4	0.52	13.3	7,107	490	2.76	70	0.17	0.25	E3
2390N-04V13	6	-4	1/4	6.4	0.52	13.3	7,107	490	2.76	70	0.17	0.25	E3
2390N-04V16	6	-4	1/4	6.4	0.52	13.3	7,107	490	2.76	70	0.17	0.25	E3
2390N-08V12	12	-8	1/2	12.7	0.83	21.2	6,017	415	5.91	150	0.36	0.54	E3
2390N-08V13	12	-8	1/2	12.7	0.83	21.2	6,017	415	5.91	150	0.36	0.54	E3
2390N-08V16	12	-8	1/2	12.7	0.83	21.2	6,017	415	5.91	150	0.36	0.54	E3
2390N-16V13*	25	-16	1	25.4	1.38	35	4,060	280	11	280	0.79	1.17	E4



APPLICATIONS: Electro-Hydraulic Umbilicals, Acidizing, Methanol Injection, Well Stimulation

8,120 psi Oil & Gas Hose 2440N-16V91



Construction

- Core Tube: Polyamide 11, methanol washed
- Pressure Reinforcement: Four spiral layers of maximum tensile steel wire
- Cover: Polyamide 12

Temperatures

- Temperature Range: -40°F (-40°C) to 212°F (100°C)

Compliance

- Meets or exceeds the performance requirements of ISO 13628-5

Design Factor

- 4

Fittings

- LX Series - Catalog 4900

Notes

- Assembly working pressure is dependent on the lowest rated component. Therefore, if fittings have a lower pressure rating than the hose, the working pressure of the fittings is the working pressure of the assembly.

Part Number	Nominal I.D.			Maximum O.D.		Max. Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Permanent Fitting Series	
	DN	Size	inch	mm	inch	mm	psi	bar	inch	mm	lbs./ft.		kg/mtr
2440N-16V91	25	-16	1	25.4	1.46	37.2	8,120	560	11.8	300	1.34	2	LX

5,000 psi Collapse Resistant Oil & Gas Hose HCRV



Construction

- Carcass: Flexible 316L Stainless Steel
- Core Tube: Polyamide 11
- Pressure Reinforcement: Aramid Fiber Braid
- Cover: Polyurethane
- Standard Color: x2 - Blue, x6 - Yellow

Temperatures

- Temperature Range: -40°F (-40°C) to 131°F (55°C)

Compliance

- ISO 13628-5

Design Factor

- 4*

Fittings

- Grayloc and HV Series - Catalog 4900

Notes

- Collapse resistant to 10,000 ft seawater at 1.5 design factor per API 17. Contact the Parflex Division for installation depths greater than 10,000 ft.
- Available in long continuous lengths
- 1.5 design factor for collapse pressure per API 17E
- For installation depths greater than 10,000 ft., please contact Parflex Division
- Easy to Color-code with different color hoses

Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure 73°F/ 23°C		Minimum Bend Radius		Weight		Minimum Collapse Pressure		Collapse Pressure Rating per ISO13628-51,2		Permanent Fitting Series		
	DN	Size	inch	mm	inch	mm	psi	bar	inch	mm	lbs./ft.	kg/mtr	psi	bar		psi	bar
HCRV-8-BLU	12	-8	1/2	12.7	1.04	26.4	5,000	345	4	102	0.45	0.67	6,600	456	4,400	303	HV
HCRV-8-YEL	12	-8	1/2	12.7	1.04	26.4	5,000	345	4	102	0.45	0.67	6,600	456	4,400	303	HV
HCRV-16-BLU	25	-16	1	25.4	1.83	46.4	5,000	345	11.8	300	1.44	2.15	6,600	456	4,400	303	HV
HCRV-16-YEL	25	-16	1	25.4	1.83	46.4	5,000	345	11.8	300	1.44	2.15	6,600	456	4,400	303	HV

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