



POWERFLEX

Rotary and Vibrator Hose



ISO9001
Certified
Quality System

The meaning behind the **POWERFLEX: GOLD STRIPE**

Premium Hose for Land and Offshore Oil Drilling Rigs

Oil field and offshore oil drilling and exploration applications put extra demands upon hose products, yet the logistical challenges of supplying these sites demand maximum reliability and consistent top performance.

Powerflex® Rotary and Vibrator Hose from NRP-Jones is built of premium materials throughout, and assembled to yield the longest possible service life.

Consider these critically-important features:

Fittings:

- This critical connection between hose and fitting features a premolded end seal and leakproof design.
- Note that the inside diameter of the hose is carefully matched to the fitting to assure full-flow performance.
- Fittings are mechanically secured to the reinforcement layers of the hose so the fitting is truly an integral part of the hose.
- All fittings are supplied with API threaded ends as standard, but many optional configurations are available upon request.

Tube:

- This oil-resistant NBR tube is compounded with abrasion resistant properties to make it suitable for oil or water-based mud and H₂S.
- Tube is covered with a protective breaker fabric to improve material adhesion to body plies.

Inner-Carcass Reinforcement:

- Multiple plies of bias-laid textile cord add strength and support while preserving flexibility.

Longitudinal Reinforcement:

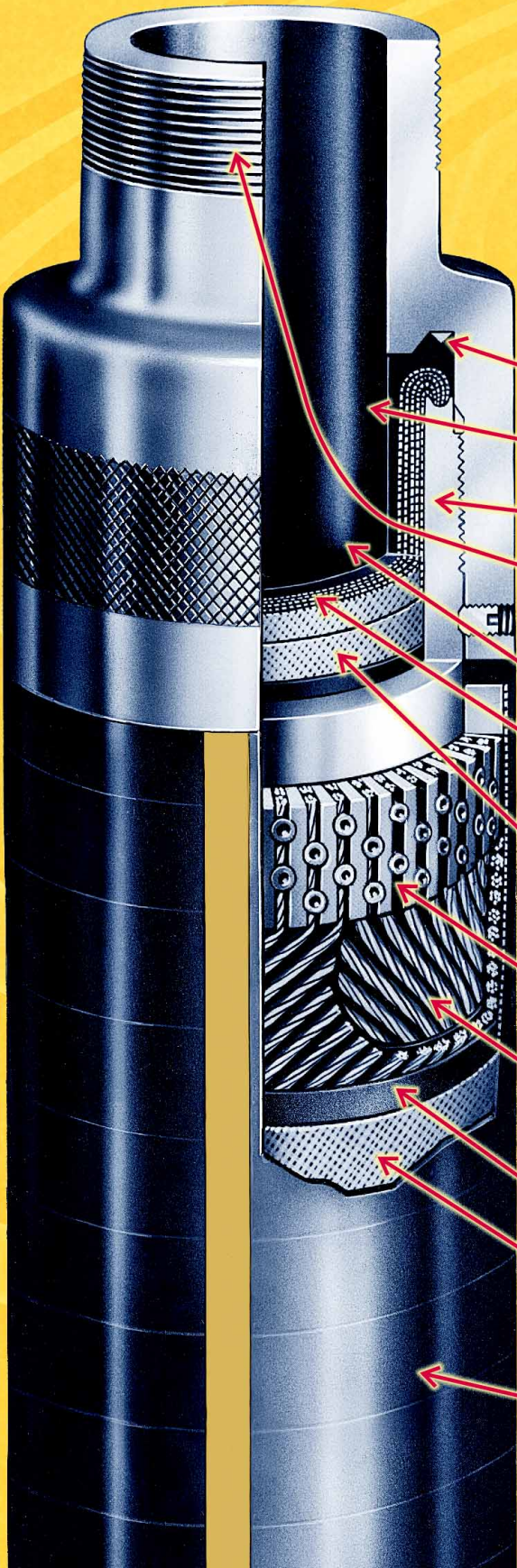
- Each reinforcement steel cable is individually set into grooves and mechanically attached to built-in nipples with double set screws to provide reliable fitting attachment.
- Two multiple strand high tensile steel cables are spirally-wound to yield high carcass strength and reliability.

Layered Construction:

- This insulation layer separates and surrounds each cable strand, preventing cable abrasion while preserving flexibility.
- A protective breaker fabric over the cable improves cover adhesion and protects the cable from damage.

Cover:

- Hose outer cover is a carefully compounded oil, weather and abrasion-resistant Neoprene.
- Temperature: -4 to 212°F (-20 to 100°C) API Range II.



POWERFLEX

GOLD STRIPE Rotary & Vibrator Hose



THE KEY to the unique **POWERFLEX** hose construction method is the way the couplings are mechanically attached to the steel reinforcement cables in the hose wall. The slots shown here are machined to provide a positive anchor point around the entire circumference of the coupling. Each reinforcement steel cable is then carefully inserted into one of the grooves and mechanically attached with double set screws.

The NRP-Jones method was developed over 40 years ago, and remains the most reliable method today. Despite cost-saving methods adopted by others, NRP-Jones retains the integrally secured coupling because field service experience has proven this method is the most reliable coupling retention method available today. **POWERFLEX** is the safest most reliable hose available in the world today.

Rotary Drilling Hose

NRP Part Numbers: **5001/5003/5015**

Recommended for: High pressure rotary service in drilling and exploration work.

Standard lengths: 30', 35', 40', 45', 50', 55', 60', 65', 70', 75'.
Is also available in any length from 5' to 90 feet.

Vibrator Hose

NRP Part Numbers: **5002/5004/5016**

Recommended for: High pressure vibration dampener between mud pump and stand pipe.

Standard lengths: 6', 8', 10', 12', 15', 20', 25', 30'.
Is also available in any length from 5' to 90 feet.

Specifications

NRP Rotary Number	NRP Vibrator Number	Hose ID (in)	Hose OD (in)	Grade	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)	Weight of 2 Cplgs (lbs)	Cplg Thread API (in)
5001-40	5002-40	2.50	4.45	C	4,000	8,000	36	12.9	74	3*
5001-48	5002-48	3.00	4.95	C	4,000	8,000	48	14.9	94	4*
5001-56	5002-56	3.50	5.45	C	4,000	8,000	54	16.6	100	4*
5001-64	5002-64	4.00	6.15	C	4,000	8,000	54	19.5	121	5*
5001-80	5002-80	5.00	8.90	C	4,000	8,000	72	43.6	175	6*
5003-40	5004-40	2.50	4.60	D	5,000	10,000	36	13.6	76	3*
5003-48	5004-48	3.00	5.10	D	5,000	10,000	48	15.5	97	4*
5003-56	5004-56	3.50	5.75	D	5,000	10,000	54	18.6	110	4*
5003-64	5004-64	4.00	6.25	D	5,000	10,000	54	19.8	121	5*
5003-80	5004-80	5.00	8.90	D	5,000	10,000	72	43.6	175	6
5015-40	5016-40	2.50	4.85	E	7,500	15,000	48	14.5	117	3
5015-48	5016-48	3.00	5.35	E	7,500	15,000	48	16.7	149	4
5015-56	5016-56	3.50	6.62	E	7,500	15,000	60	29.1	184	4
5015-64	5016-64	4.00	7.12	E	7,500	15,000	72	31.8	210	5

* Tested and Certified in Compliance with API 7K Addendum 2 FSL 1

Grade "C" 8,000psi

All **POWERFLEX** Hose marked Grade "C" has been hydrostatically tested to 8,000 psi and is available in 2½", 3", 3½" and 4" sizes. These sizes are designed to operate at 4,000 psi working pressures.

Grade "D" 10,000psi

All **POWERFLEX** hose marked Grade "D" has been hydrostatically tested to 10,000 psi and is available in 2½", 3", 3½" and 4" sizes. These sizes are designed to operate at 5,000 psi working pressures.

Grade "E" 15,000psi

All **POWERFLEX** hose marked Grade "E" has been hydrostatically tested to 15,000 psi and is available in 2½" and 3" sizes. These sizes are designed to operate at 7,500 psi working pressures.

POWERFLEX

GOLD STRIPE Choke & Kill Hose 5035/5040

GOLD STRIPE Super Choke & Kill Hose 5085



**Both Gold & Silver Stripe Hoses
are available with special tube suitable for H₂S service**

POWERFLEX

SILVER STRIPE Rotary & Vibrator Hose 5501/02 & 5603/04

Oil field drilling and exploration at API Grade "C" and "D" working pressures; where a heavy duty long service life hose is required.

Construction

Tube: Black, oil and abrasion resistant NBR. Suitable for oil or water based muds and H₂S service.

Reinforcement: Multiple plies of bias laid textile cord for extra strength and flexibility. Two spirally wound, high tensile, multiple strand cables, mechanically secured to built-in nipples provide unsurpassed ruggedness and reliability under severe service conditions.

Cover: Black, oil, weather and abrasion resistant Neoprene (CR).

Fittings: Swaged on with API threaded ends as standard, with many optional configurations available upon request.

Temperature: -4 to 212°F (-20 to 100°C)

Branding: NRP Silver Stripe Rotary/Vibrator Hose
3 inch I.D. Grade "C"
API Spec 7K-0043
8,000 PSI Test
4,000 PSI Max. W.P.
Manufactured in Nephi, Utah USA.

Lengths: 90 foot maximum

Premium Feature: Abrasion, oil and weather resistant. Swaged on fittings for longer service life. Continuous brand for easy identification.



Construction

Tube: Black, oil and abrasion resistant HNBR for H₂S service.

Reinforcement: Multiple plies of bias laid textile cord for extra strength and flexibility. Spirally wound, high tensile, multiple strand cables to provide unsurpassed ruggedness and reliability to withstand sudden high pressure.

Cover: Special flame resistant red Neoprene (CR) with optional stainless steel armor.

Fittings: Integral connection flanged or hubbed.

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

Branding: NRP Choke & Kill Hose. MADE IN USA.

Choke & Kill Specifications

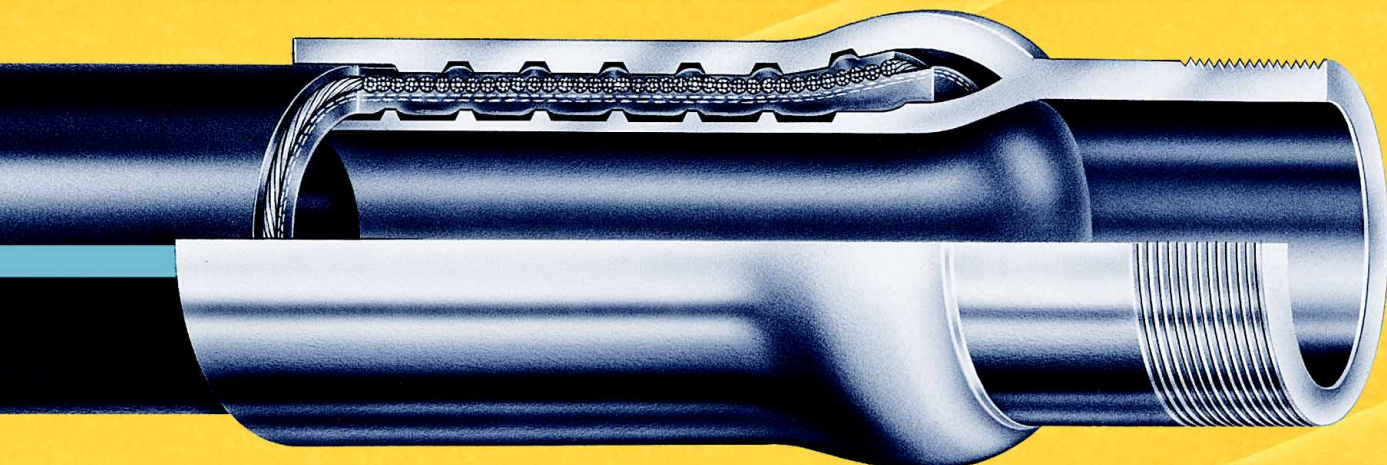
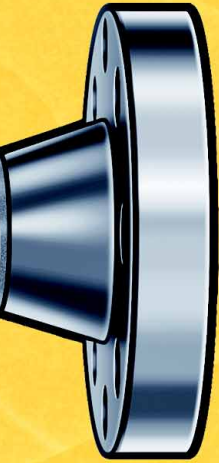
NRP Part Number	Hose ID (in)	Hose OD (in)	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)
5035-32	2.00	4.45	5,000	10,000	44	12.9
5035-40	2.50	4.60	5,000	10,000	48	13.9
5035-48	3.00	5.10	5,000	10,000	52	16.1
5040-32	2.00	4.68	10,000	15,000	48	22.4
5040-40	2.50	5.34	10,000	15,000	52	27.4
5040-48	3.00	5.84	10,000	15,000	56	28.8

Super Choke & Kill Specifications

5085-40	2.50	5.84	15,000	22,500	60	28.2
5085-48	3.00	6.34	15,000	22,500	60	34.1

Specifications

NRP Rotary Number	NRP Vibrator Number	Hose ID (in)	Hose OD (in)	Grade	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)	Weight of 2 Cplgs (lbs)	Cplg Thread API (in)
5501-40	5502-40	2.50	4.45	C	4,000	8,000	36	12.9	54	3
5501-48	5502-48	3.00	4.95	C	4,000	8,000	48	14.9	74	4
5501-56	5502-56	3.50	5.45	C	4,000	8,000	54	16.6	94	4
5603-40	5604-40	2.50	4.60	D	5,000	10,000	36	13.6	54	3
5603-48	5604-48	3.00	5.10	D	5,000	10,000	48	15.5	74	4
5603-56	5604-56	3.50	5.75	D	5,000	10,000	54	18.6	94	4
5603-64	5604-64	4.00	6.25	D	5,000	10,000	54	19.8	105	5



POWERFLEX

Motion Compensator Hose

5019

Construction

Tube: Black, oil and abrasion resistant NBR. Suitable for water glycol, air and oil.

Reinforcement: Multiple plies of bias laid textile cord for extra strength and flexibility. Spirally wound, high tensile, multiple strand cables to provide unsurpassed ruggedness and reliability under severe service conditions.

Cover: Black, oil weather and abrasion resistant Neoprene (CR).

Temperature: -40 to 200° F (-40 to 93°C)

Fittings: Swaged on male NPT.

Specifications

NRP Part Number	Hose ID (in)	Hose OD (in)	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)
5019-40	2.50	4.48	2,500	5,000	48	12.7
5019-48	3.00	4.98	2,500	5,000	48	14.7
5019-56	3.50	5.48	2,500	5,000	56	16.1

POWERFLEX

Blowout Preventor Hose (BOP)

1801

Construction

Inner Hose: Black, oil resistant, Neoprene (CR) tube; reinforced with multiple plies of spirally wrapped high tensile steel wire.

Insulation: Composed of various layers to protect the inner hose from external heat.

Metal Cover: Galvanized or stainless steel offers resistance to external abuse, kinking and reflects radiant heat.

Fittings: Male threaded or as required.

Specifications

NRP Part Number	Hose ID (in)	Hose OD (in)	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)
1801-12	.75	1.54	5,000	7,500	18	1.61
1801-16	1.0	1.79	5,000	7,500	24	2.21

TRIOFLEX Slim Hole Rotary Hose



NRP TrioFlex Hose was specially designed for applications on portable drilling rigs, work-over rigs, slim hole and seismograph rigs. It is an extremely flexible and durable hose.

Construction

Tube: Black, oil and abrasion resistant Neoprene (CR). Suitable for oil and water based muds.

Reinforcement: Three or four braids of high tensile, heavy gauge steel wire.

Cover: Black, oil, abrasion and weather resistant Neoprene (CR).

Fittings: Hose is supplied with Wildman male reusable couplings. Hose may also be supplied without couplings.

Specifications

NRP Part Number	Wire Braids	Hose ID (in)	Hose OD (in)	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)	Weight of 2 Cplgs (lbs)	Cplg Thread NPT (in)
5013-32	3	2.00	3.06	2,500	7,000	18	3.9	35	2
5014-40	4	2.50	3.65	2,500	6,000	24	5.3	44	2.5
5014-48	4	3.00	4.13	2,000	5,000	30	5.8	51	3

Mud Suction Hose



Construction

Tube: Black, heavy gauge, extremely abrasion resistant Neoprene (CR) for use with oil and water based muds.

Reinforcement: Multiple plies of bias laid, extra strong square woven polyester fabric gives hose strength with flexibility. Helically wound with heavy gauge wire to resist collapse under maximum vacuum and bend conditions.

NRP Mud Suction Hose is used as a flexible connection between the slush pump and mud pit to absorb vibration in rotary drilling

Cover: Black, oil, abrasion and weather resistant Neoprene (CR). Cover has capped ends to keep out moisture.

Fittings: Fittings are integrally built-in type with grooved, full-flow nipples, and NPT threads.

Length: Supplied in any overall specified length (including fittings) from 5 ft. to 60 ft.

Specifications

NRP Part Number	Hose ID (in)	Weight per Foot (lbs)	Weight of 2 Cplgs (lbs)	Nipple Extension each end (in)
4005-64	4.0	6.9	14.0	4.0
4005-80	5.0	8.8	19.5	4.0
4005-96	6.0	11.1	30.7	6.0
4005-08	8.0	15.3	40.9	7.0
4005-10	10.0	21.0	53.0	7.0
4005-12	12.0	33.3	117.2	7.0

Core Drill Hose



Construction

Tube: Black, oil and abrasion resistant Neoprene (CR). Suitable for oil and water based muds.

Reinforcement: Four braids of high tensile, heavy gauge steel wire providing the extra ruggedness required in core drilling service.

Cover: Black, oil, abrasion and weather resistant Neoprene (CR).

NRP Core Drill Hose is a strong, flexible, four wire braid hose built specially for core drilling, work-over, blast or shot hole and seismograph applications on portable drilling rigs.

Specifications

NRP Part Number	Hose ID (in)	Hose OD (in)	Rated WP (psi)	Test Pressure (psi)	Minimum Bend Radius	Weight per Foot (lbs)
5024-32	2.00	3.25	1,500	3,000	24	4.3
5024-40	2.50	3.78	1,500	3,000	30	5.8
5024-48	3.00	4.25	1,500	3,000	36	6.5