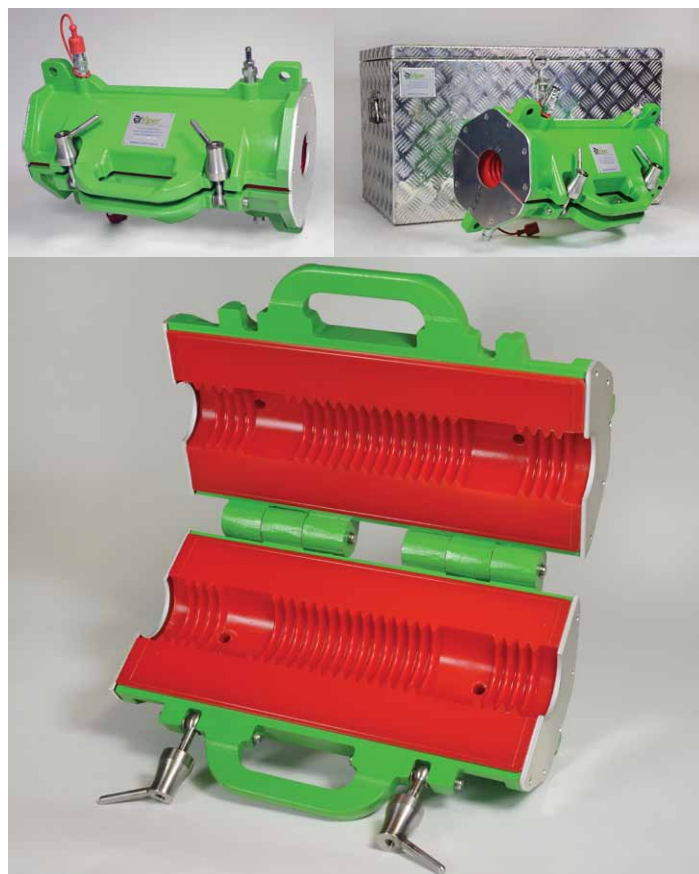


SUPERIOR PROTECTION for WIRE ROPES

FOR ROPE 50mm (2") TO 165mm (6-1/2") SMALLER SIZES ON REQUEST

FEATURES & BENEFITS

- o **Single Pass Wire Rope Lubrication**
Simplifies and speeds up the rope lubricating process
- o **Eliminates Manual Greasing**
Safer for staff, reduced lubricant usage, less leakage & mess
- o **High Pressure / High Flow Grease Pump**
Provides grease penetration, displaces moisture from rope core / total coverage, even for large ropes
- o **Fast & Efficient Rope Lubrication**
Reduced downtime associated with rope lubrication which improves equipment availability. Speeds up to 1,000mt/hour
- o **Able to lubricate all major rope sizes**
Viper Maxi Mk II can lubricate rope sizes 50mm (2") to 165mm (6-1/2").



APPLICATIONS

• ROV CABLES • VESSEL CRANE ROPES • UNDERWATER OFFSHORE WIRE ROPES • DRAG LINES



'Superior Protection for Wire Ropes'

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phone: +61 (2) 9636 5655

Viper Maxi MkII WRL Kit

The Viper Wire Rope Lubricator is supplied as a complete package, with all of the components required to get you started. Simply order the kit and then select and order the seals and scrapers to suit the rope size to be lubricated.

(note: refer to the viper seal, scraper & VRC selection guide pages 4-5)

Kit Components

- Viper Maxi MkII High Strength Aluminium Alloy Collar
- Choice of Two Pumps 4.5kg/min Output & 13kg/min Output in 190kg Drum Size.
- Twin Lubricant Inlets to Ensure Complete and Effective Coverage.
- Air Regulator with Gauge & Isolation Valve.
- 10m High Pressure Supply Hose Fitted with Coupling Both Ends.
- Clear Lube Drain Hose.
- 1200kg Rated Ratchet Retaining Straps & Bow Shackles.
- Heavy Duty Fully Welded Aluminium Storage Case.



Viper Collar

The new Maxi MkII Collar is the heart of the ViperWRL System. Constructed from high strength Aluminium Alloy, precision machined to tight specifications. Collar is completed with stainless steel hardware to provide maximum durability and corrosion protection.



The new Maxi MkII can now lubricate ropes up to 165mm (6-1/2"). Unit is designed for ease of use having handles located on each half of the collar.

Viper Grease Pump



The new Viper Mk II kit includes an upgraded lubricant pump, built specifically for the Viper WRL. Two pump options are available the standard unit delivers 4.5kg/min. while the optional high volume unit delivers 13kg/min for fast lubrication of large diameter ropes, for further reduced down time. Both pumps are supplied in 190kg drum size. Viper recommends the use of the high flow pump for ropes larger than 85mm.

WRL Lubricants

Specifically formulated for use with the Viper WRL

VCG-1 Coating Grease Penetrates & Protects Wire Ropes



WRL Coating Grease VCG-1, is a technologically advanced lubricant designed to withstand water washout, protect against corrosion, penetrate and also provide extreme pressure protection for winch drums and sheaves. The red tacky NLGI#1 grease will provide superior service life in marine and mining applications with non drip or fling tendencies.

VPG-0 Penetrating Grease Resists Water, Penetrates Wire Ropes



WRL Penetrating Grease VPG-0, is a soft, semifluid formulation designed to coat wire rope with a thin lubricant film as well as penetrate to the core. Its tacky, water-resistant characteristics enable it to adhere strongly and to seal out damaging moisture. Viper WRL Penetrating Grease contains a wear-reducing additive that protects against premature wear and shields metal against corrosive attack.



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Seals Selection

Viper WRL Seals are made from a specially formulated polyurethane material that provides excellent durability, wear resistance and flexibility. It is this flexibility that allows the seal to provide a more positive interface and hence seal with the rope. Each seal set comes as a pair, sized to suit the nominated rope diameter. Viper seals are designed to have some interference with the rope, depending on its size and type, with an interference of up to 3mm allowable for standard 6 & 8 strand ropes.

For compact, non-rotating or wireline type ropes which do not have valleys, a maximum interference of 1mm is recommended as these ropes do not allow for the same amount of seal deflection within the collar.



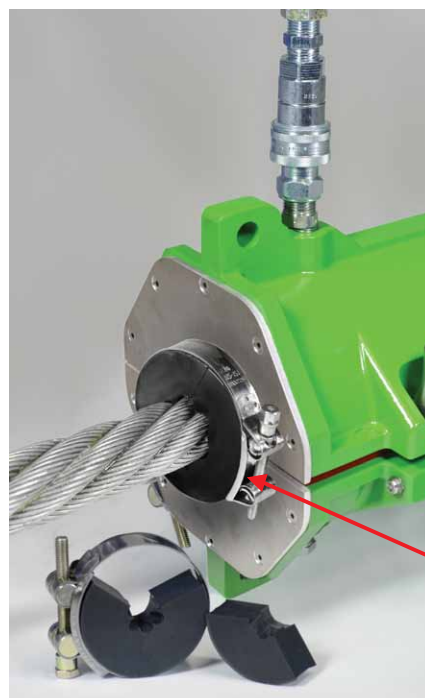
Scraper Selection

Aluminium Scrapers are attached to each end of the Viper collar to assist in pre-cleaning the rope and protect the seals from damage. Scrapers are supplied slightly larger than the actual wire rope size to allow for rope flexing.



Rope Cleaner (VRC) Selection

Viper Rope Cleaners enable the removal of contamination or built up old lubricant from the wire rope prior to lubrication, improving the effectiveness of the lubrication process via the Viper WRL. For certain types of wire ropes where the standard Viper Rope Cleaner is not suitable, the Viper 'Smooth Bore' rope cleaner is available. The Smooth Bore Rope Cleaner would typically be used on those ropes with a large number of outer strands, some non-rotational ropes, ROV cables, etc, where the valleys between the strands are minimal and do not readily facilitate a standard Viper Rope Cleaner.



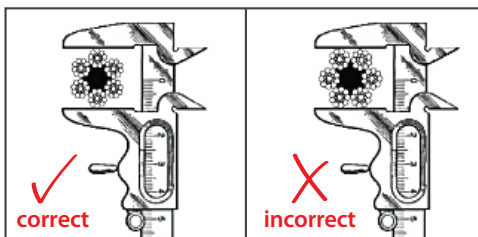
ABOVE: Smooth Bore Rope Cleaner

LEFT: The Viper Wire Rope Cleaner in place as the rope enters the Viper Maxi Mk II WRL.

Wire Rope Measurement Guide

It is recommended that wire ropes be physically measured prior to ordering seals and scrapers as ropes in service can stretch and sizes may vary.

Available for 6 and 8 strand ropes in a wide range of sizes, the table on the following pages allows for the quick and easy selection of the correct VRC to suit your specific requirements.



How to measure a wire rope correctly.



Right Lay - Clockwise Rotation



Left Lay - Counter Clockwise Rotation

Seals, Scrapers and Rope Cleaners should be selected using the Viper Seal - Scraper - VRC guide on pages 4-5



'Superior Protection for Wire Ropes'

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IMPORTANT
CHOOSE CORRECT
ROPE TYPE
PRIOR TO ORDERING



These Columns
for **6 or 8 Strand**
Ropes Only



These Columns
for **Armoured**
or **Multi Strand**
Ropes Only

Rope Sizes 49mm to 102mm

Actual Rope Size	Viper Seals/Scrapers for "6 & 8" Strand Ropes Only		Viper Seals/Scraper for "Armoured & Multi Strand" Ropes Only		Viper Smooth Bore Rope Cleaner	Viper Rope Cleaner "6 Strand Ropes"		Viper Rope Cleaner "8 Strand Ropes"	
	Seal Part No.	Scraper No.	Seal Part No.	Scraper No.		Right Lay	Left Lay	Right Lay	Left Lay
49mm to 50mm 1-15/16" to 1-31/32"	VMMSEAL48	VMMSC50	VMMSEAL50	VMMSC50	VRC-SB50	VRC50-6R	VRC50-6L	VRC50-8R	VRC50-8L
51mm to 53mm 2" to 2-3/32"	VMMSEAL50	VMMSC53	VMMSEAL53	VMMSC53	VRC-SB52	VRC52-6R	VRC52-6L	VRC52-8R	VRC52-8L
54mm to 55mm 2-1/8" to 2-5/32"	VMMSEAL53	VMMSC55	VMMSEAL55	VMMSC55	VRC-SB54	VRC54-6R	VRC54-6L	VRC54-8R	VRC54-8L
56mm to 58mm 2-3/16" to 2-3/32"	VMMSEAL55	VMMSC58	VMMSEAL58	VMMSC58	VMRC-SB57	VMRC58-6R	VMRC58-6L	VMRC58-8R	VMRC58-8L
59mm to 60mm 2-5/16" to 2-3/8"	VMMSEAL58	VMMSC60	VMMSEAL60	VMMSC60	VMRC-SB59	VMRC60-6R	VMRC60-6L	VMRC60-8R	VMRC60-8L
61mm to 63mm 2-13/32" to 2-3/4"	VMMSEAL60	VMMSC63	VMMSEAL63	VMMSC63	VMRC-SB62	VMRC62-6R	VMRC62-6L	VMRC62-8R	VMRC62-8L
64mm to 65mm 2-5/8" to 2-9/16"	VMMSEAL63	VMMSC65	VMMSEAL65	VMMSC65	VMRC-SB64	VMRC64-6R	VMRC64-6L	VMRC64-8R	VMRC64-8L
66mm to 67mm 2 19/32" to 2 5/8"	VMMSEAL65	VMMSC67	VMMSEAL68	VMMSC67	VMRC-SB66	VMRC66-6R	VMRC66-6L	VMRC66-8R	VMRC66-8L
68mm to 70mm 2-21/32" to 2-3/4"	VMMSEAL68	VMMSC70	VMMSEAL70	VMMSC70	VMRC-SB69	VMRC70-6R	VMRC70-6L	VMRC70-8R	VMRC70-8L
71mm to 73mm 2-13/16" to 2-7/8"	VMMSEAL70	VMMSC73	VMMSEAL74	VMMSC73	VMRC-SB72	VMRC72-6R	VMRC72-6L	VMRC72-8R	VMRC72-8L
74mm to 75mm 2 27/32" to 2 15/16"	VMMSEAL74	VMMSC75	VMMSEAL76	VMMSC75	VMRC-SB74	VMRC74-6R	VMRC74-6L	VMRC74-8R	VMRC74-8L
76mm to 77mm 2-31/32" to 3"	VMMSEAL76	VMMSC77	VMMSEAL78	VMMSC77	VMRC-SB76	VMRC76-6R	VMRC76-6L	VMRC76-8R	VMRC76-8L
78mm to 79mm 3 3/64" to 3 5/64"	VMMSEAL78	VMMSC79	VMMSEAL80	VMMSC79	VMRC-SB78	VMRC78-6R	VMRC78-6L	VMRC78-8R	VMRC78-8L
80mm to 82mm 3-1/8" to 3-13/64"	VMMSEAL80	VMMSC82	VMMSEAL83	VMMSC82	VMRC-SB80	VMRC82-6R	VMRC82-6L	VMRC82-8R	VMRC82-8L
83mm to 85mm 3-15/64" to 3-5/16"	VMMSEAL83	VMMSC85	VMMSEAL86	VMMSC85	VMRC-SB84	VMRC84-6R	VMRC84-6L	VMRC84-8R	VMRC84-8L
86mm to 88mm 3-23/64" to 3-7/16"	VMMSEAL86	VMMSC88	VMMSEAL90	VMMSC88	VMRC-SB87	VMRC88-6R	VMRC88-6L	VMRC88-8R	VMRC88-8L
89mm to 91mm 3-15/32" to 3-3/4"	VMMSEAL90	VMMSC91	VMMSEAL92	VMMSC91	VMRC-SB90	VMRC90-6R	VMRC90-6L	VMRC90-8R	VMRC90-8L
92mm to 94mm 3-21/32" to 3-5/8"	VMMSEAL92	VMMSC94	VMMSEAL94	VMMSC94	VMRC-SB93	VMRC92-6R	VMRC92-6L	VMRC92-8R	VMRC92-8L
94mm to 95mm 3-11/16" to 3-11/16"	VMMSEAL94	VMMSC94	VMMSEAL96	VMMSC94	VMRC-SB94	VMRC94-6R	VMRC94-6L	VMRC94-8R	VMRC94-8L
96mm to 97mm 3-3/4" to 3-13/16"	VMMSEAL96	VMMSC97	VMMSEAL98	VMMSC97	VMRC-SB96	VMRC96-6R	VMRC96-6L	VMRC96-8R	VMRC96-8L
98mm to 99mm 3-7/32" to 3-7/8"	VMMSEAL98	VMMSC99	VMMSEAL100	VMMSC99	VMRC-SB98	VMRC98-6R	VMRC98-6L	VMRC98-8R	VMRC98-8L
100mm to 102mm 3-29/32" to 3-15/16"	VMMSEAL100	VMMSC102	VMMSEAL103	VMMSC102	VMRC-SB101	VMRC102-6R	VMRC102-6L	VMRC102-8R	VMRC102-8L

Multi-Strand Rope Cleaners

For ropes over 65mm are available on request, eg: 18/21 Strand Ropes
minimum order quantities may be applicable



IMPORTANT
CHOOSE CORRECT
ROPE TYPE
PRIOR TO ORDERING



These Columns
for **6 or 8 Strand**
Ropes Only



These Columns
for **Armoured**
or **Multi Strand**
Ropes Only

Rope Sizes 103mm to 165mm

Actual Rope Size	Viper Seals/Scrapers for "6 & 8" Strand Ropes Only		Viper Seals/Scrapers for "Armoured & Multi Strand" Ropes Only		Viper Smooth Bore Rope Cleaner	Viper Rope Cleaner "6 Strand Ropes"		Viper Rope Cleaner "8 Strand Ropes"	
	Seal Part No.	Scraper No.	Seal Part No.	Scraper No.		Right Lay	Left Lay	Right Lay	Left Lay
103mm to 105mm 4" to 4-3/32"	VMMSEAL103	VMMSC105	VMMSEAL106	VMMSC105	VMMRC-SB104	VMMRC104-6R	VMMRC104-6L	VMMRC104-8R	VMMRC104-8L
106mm to 108mm 4-1/8" to 4-7/32"	VMMSEAL106	VMMSC108	VMMSEAL109	VMMSC108	VMMRC-SB107	VMMRC108-6R	VMMRC108-6L	VMMRC108-8R	VMMRC108-8L
109mm to 111mm 4-3/4" to 4-9/32"	VMMSEAL109	VMMSC111	VMMSEAL112	VMMSC111	VMMRC-SB110	VMMRC110-6R	VMMRC110-6L	VMMRC110-8L	VMMRC110-8L
112mm to 114mm 4 3/8" to 4 7/16"	VMMSEAL112	VMMSC111	VMMSEAL115	VMMSC111	VMMRC-SB113	VMMRC112-6R	VMMRC112-6L	VMMRC112-8L	VMMRC112-8L
115mm to 116mm 4-3/4" to 4-17/32"	VMMSEAL115	VMMSC116	VMMSEAL117	VMMSC116	VMMRC-SB115	VMMRC116-6R	VMMRC116-6L	VMMRC116-8R	VMMRC116-8L
117mm to 119mm 4-15/16" to 4-5/8"	VMMSEAL117	VMMSC119	VMMSEAL120	VMMSC119	VMMRC-SB118	VMMRC118-6R	VMMRC118-6L	VMMRC118-8R	VMMRC118-8L
120mm to 122mm 4-11/16" to 4-3/4"	VMMSEAL120	VMMSC122	VMMSEAL123	VMMSC122	VMMRC-SB121	VMMRC122-6R	VMMRC122-6L	VMMRC122-8R	VMMRC122-8L
123mm to 125mm 4-13/16" to 4-7/8"	VMMSEAL123	VMMSC125	VMMSEAL126	VMMSC125	VMMRC-SB124	VMMRC124-6R	VMMRC124-6L	VMMRC124-8R	VMMRC124-8L
126mm to 128mm 4-15/16" to 5"	VMMSEAL126	VMMSC128	VMMSEAL129	VMMSC128	VMMRC-SB127	VMMRC128-6R	VMMRC128-6L	VMMRC128-8R	VMMRC128-8L
129mm to 131mm 5-1/32" to 5-7/64"	VMMSEAL129	VMMSC131	VMMSEAL132	VMMSC131	VMMRC-SB130	VMMRC130-6R	VMMRC130-6L	VMMRC130-8R	VMMRC130-8L
132mm to 134mm 5-1/8" to 5-3/4"	VMMSEAL132	VMMSC134	VMMSEAL135	VMMSC134	VMMRC-SB133	VMMRC134-6R	VMMRC134-6L	VMMRC134-8R	VMMRC134-8L
135mm to 137mm 5-9/32" to 5-5/16"	VMMSEAL135	VMMSC137	VMMSEAL138	VMMSC137	VMMRC-SB136	VMMRC136-6R	VMMRC136-6L	VMMRC136-8R	VMMRC136-8L
138mm to 140mm 5-3/8" to 5-7/16"	VMMSEAL138	VMMSC140	VMMSEAL141	VMMSC140	VMMRC-SB139	VMMRC140-6R	VMMRC140-6L	VMMRC140-8R	VMMRC140-8L
141mm to 143mm 5-3/4" to 5-9/16"	VMMSEAL141	VMMSC143	VMMSEAL144	VMMSC143	VMMRC-SB142	VMMRC142-6R	VMMRC142-6L	VMMRC142-8R	VMMRC142-8L
144mm to 146mm 5-5/8" to 5-11/16"	VMMSEAL144	VMMSC146	VMMSEAL147	VMMSC146	VMMRC-SB145	VMMRC146-6R	VMMRC146-6L	VMMRC146-8R	VMMRC146-8L
147mm to 149mm 5-3/4" to 5-13/16"	VMMSEAL147	VMMSC149	VMMSEAL150	VMMSC149	VMMRC-SB148	VMMRC148-6R	VMMRC148-6L	VMMRC148-8R	VMMRC148-8L
150mm to 152mm 5-7/8" to 5-15/16"	VMMSEAL150	VMMSC152	VMMSEAL153	VMMSC152	VMMRC-SB151	VMMRC152-6R	VMMRC152-6L	VMMRC152-8R	VMMRC152-8L
153mm to 155mm 6" to 6-1/16"	VMMSEAL153	VMMSC155	VMMSEAL156	VMMSC155	VMMRC-SB154	VMMRC154-6R	VMMRC154-6L	VMMRC154-8R	VMMRC154-8L
156mm to 158mm 6-3/32" to 6-1/16"	VMMSEAL156	VMMSC158	VMMSEAL159	VMMSC158	VMMRC-SB157	VMMRC158-6R	VMMRC158-6L	VMMRC158-8R	VMMRC158-8L
159mm to 161mm 6-1/4" to 6-5/16"	VMMSEAL159	VMMSC161	VMMSEAL162	VMMSC161	VMMRC-SB160	VMMRC160-6R	VMMRC160-6L	VMMRC160-8R	VMMRC160-8L
162mm to 165mm 6-3/8" to 6-1/2"	VMMSEAL162	VMMSC165	VMMSEAL165	VMMSC165	VMMRC-SB163	VMMRC164-6R	VMMRC164-6L	VMMRC164-8R	VMMRC164-8L

Multi-Strand Rope Cleaners

For ropes over 65mm are available on request, eg: 18/21 Strand Ropes
minimum order quantities may be applicable



SUPERIOR PROTECTION for WIRE ROPES

FEATURES & BENEFITS

- o **Single Pass Wire Rope Lubrication**
Simplifies and speeds up the rope lubricating process
- o **Eliminates Manual Greasing**
Safer for staff, reduced lubricant usage, less leakage & mess
- o **High Pressure / High Flow Grease Pump**
Provides grease penetration, displaces moisture from rope core / total coverage, even for large ropes
- o **Fast & Efficient Rope Lubrication**
Reduced downtime associated with rope lubrication which improves equipment availability. Speeds up to 2,000mt/hour
- o **Able to lubricate all major rope sizes**
*Viper Mid Mk II can lubricate rope sizes 8mm (5/16") to 67mm (2-5/8")
Custom units also available*



APPLICATIONS

WHARF CRANES
SHIP CRANES
ROV CABLES
MINE WINDERS
MOBILE CRANES
OIL & GAS PLATFORMS
ANCHOR ROPES
DECK WINCHES
OVERHEAD CRANES
SHIP LOADERS



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VIPER Mid MkII WRL Kit

The Viper Mid MkII Kit is supplied as a complete package, with all of the components required to get you started. Simply order the kit and then select and order the seals and scrapers to suit the rope size to be lubricated.

(note refer to the seal and scraper selection guide page 4)

Kit Components

- Viper Mid Mk II High Strength Collar
- Viper High Volume Grease Pump
- Air Regulator With Gauge & Isolation Valve
- 4m High Pressure 1/2" Lube Delivery Hose
- High Pressure Lubricant Metering Valve
- Clear Lube Drain Hose
- Retaining Ratchet Straps & Shackles
- Robust Aluminium Storage Case
- Convenient Carry Strap for Collar



Viper Collar

The Mid Mk II Collar is the heart of the Viper Wire Rope Lubricating system. Constructed from high grade, cast aluminium with a robust protective coating. The collar is completed with stainless steel hardware to provide maximum corrosion protection.



The MKII collar is 32% lighter than the original Viper collar plus comes complete with inbuilt handles making it easily carried in one hand and fitted to the rope by one person.

Viper Grease Pump



The new Viper Mk II kit includes an upgraded lubricant pump, built specifically for the Viper WRL.

Flow rates of $\approx 5\text{kg}$ (11lb) / minute using an NLGI #0 grease at pressures of up to 385 bar (5,500 PSI) are achieved from the standard 20kg (35lb) pump with a 55kg (120lb) and 180kg (400lb) option also available.

WRL Lubricants

Specifically formulated for use with the Viper WRL

VCG-1 Coating Grease Penetrates & Protects Wire Ropes



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Scraper Selection

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Rope Cleaner (VRC) Selection

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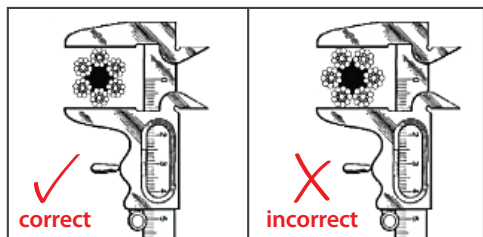
ABOVE: Smooth Bore Rope Cleaner

LEFT: The Viper Wire Rope Cleaner in place as the rope enters the Viper Mid Mk II WRL.

Wire Rope Measurement Guide

It is recommended that wire ropes be physically measured prior to ordering seals and scrapers as ropes in service can stretch and sizes may vary.

Available for 6 and 8 strand ropes in a wide range of sizes, the table on the following page allows for the quick and easy selection of the correct VRC to suit your specific requirements.



How to measure a wire rope correctly.



Right Lay - Clockwise Rotation



Left Lay - Counter Clockwise Rotation



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IMPORTANT
CHOOSE CORRECT
ROPE TYPE
PRIOR TO ORDERING



These Columns
for **6 or 8 Strand**
Ropes Only



These Columns
for **Armoured**
or **Multi Strand**
Ropes Only

Actual Rope Size	Viper Seals/Scrapers for "6 & 8" Stand Ropes Only		Viper Seals/Scrapers for "Armoured & Multi Stand Ropes		Viper Smooth Bore Rope Cleaner	Viper Rope Cleaner "6 Strand Ropes"		Viper Rope Cleaner "8 Strand Ropes"	
	Seal Part No.	Scraper No.	Seal Part No.	Scraper No.		Right Lay	Left Lay	Right Lay	Left Lay
8mm to 10mm 5/16" to 3/8"	VSEAL8	VSC10	VSEAL10	VSC10	VRC-SB9	n/a	n/a	n/a	n/a
11mm to 12mm 7/16" to 15/32"	VSEAL10	VSC12	VSEAL13	VSC12	VRC-SB11	n/a	n/a	n/a	n/a
13mm to 14mm 1/2" to 9/16"	VSEAL13	VSC14	VSEAL14	VSC14	VRC-SB13	n/a	n/a	n/a	n/a
15mm to 16mm 19/32" to 5/8"	VSEAL14	VSC16	VSEAL16	VSC16	VRC-SB15	VRC16-6R	VRC16-6L	n/a	n/a
17mm to 18mm 21/32" to 11/16"	VSEAL16	VSC18	VSEAL18	VSC18	VRC-SB17	VRC18-6R	VRC18-6L	n/a	n/a
19mm to 20mm 3/4" to 25/32"	VSEAL18	VSC20	VSEAL20	VSC20	VRC-SB19	VRC20-6R	VRC20-6L	n/a	n/a
21mm to 22mm 13/16" to 7/8"	VSEAL20	VSC22	VSEAL22	VSC22	VRC-SB21	VRC22-6R	VRC22-6L	n/a	n/a
23mm to 24mm 29/32" to 15/16"	VSEAL22	VSC24	VSEAL24	VSC24	VRC-SB23	VRC24-6R	VRC24-6L	VRC24-8R	VRC24-8L
25mm to 26mm 1" to 1-1/32"	VSEAL24	VSC26	VSEAL26	VSC26	VRC-SB25	VRC26-6R	VRC26-6L	VRC26-8R	VRC26-8L
27mm to 28mm 1-1/16" to 1-1/8"	VSEAL26	VSC28	VSEAL28	VSC28	VRC-SB27	VRC28-6R	VRC28-6L	VRC28-8R	VRC28-8L
29mm to 30mm 1 5/32" to 1 3/16"	VSEAL28	VSC30	VSEAL30	VSC30	VRC-SB29	VRC30-6R	VRC30-6L	VRC30-8R	VRC30-8L
31mm to 33mm 1-1/4" to 1-5/16"	VSEAL30	VSC34	VSEAL33	VSC34	VRC-SB32	VRC32-6R	VRC32-6L	VRC32-8R	VRC32-8L
34mm to 35mm 1-11/32" to 1-3/8"	VSEAL33	VSC36	VSEAL35	VSC36	VRC-SB34	VRC34-6R	VRC34-6L	VRC34-8R	VRC34-8L
36mm to 38mm 1-13/32" to 1-1/2"	VSEAL35	VSC38	VSEAL38	VSC38	VRC-SB37	VRC38-6R	VRC38-6L	VRC38-8R	VRC38-8L
39mm to 41mm 1-17/32" to 1-19/32"	VSEAL38	VSC41	VSEAL41	VSC41	VRC-SB39	VRC40-6R	VRC40-6L	VRC40-8R	VRC40-8L
42mm to 44mm 1-5/8" to 1-3/4"	VSEAL41	VSC44	VSEAL44	VSC44	VRC-SB43	VRC44-6R	VRC44-6L	VRC44-8R	VRC44-8L
45mm to 46mm 1-25/32" to 1-13/16"	VSEAL44	VSC46	VSEAL46	VSC46	VRC-SB45	VRC46-6R	VRC46-6L	VRC46-8R	VRC46-8L
47mm to 48mm 1-27/32" to 1-7/8"	VSEAL46	VSC48	VSEAL48	VSC48	VRC-SB47	VRC48-6R	VRC48-6L	VRC48-8R	VRC48-8L
49mm to 50mm 1-15/16" to 1-31/32"	VSEAL48	VSC50	VSEAL50	VSC50	VRC-SB49	VRC50-6R	VRC50-6L	VRC50-8R	VRC50-8L
51mm to 53mm 2" 2-3/32"	VSEAL50	VSC53	VSEAL53	VSC53	VRC-SB52	VRC52-6R	VRC52-6L	VRC52-8R	VRC52-8L
54mm to 55mm 2-1/8" to 2-5/32"	VSEAL53	VSC55	VSEAL55	VSC55	VRC-SB54	VRC54-6R	VRC54-6L	VRC54-8R	VRC54-8L
56mm 58mm 2-3/16" to 2-9/32"	VSEAL55	VSC58	VSEAL58	VSC58	VMRC-SB57	VMRC58-6R	VMRC58-6L	VMRC58-8R	VMRC58-8L
59mm to 60mm 2-5/16" to 2-3/8"	VSEAL58	VSC60	VSEAL60	VSC60	VMRC-SB59	VMRC60-6R	VMRC60-6L	VMRC60-8R	VMRC60-8L
61mm to 63mm 2-13/32" to 2-1/2"	VSEAL60	VSC63	VSEAL63	VSC63	VMRC-SB62	VMRC62-6R	VMRC62-6L	VMRC62-8R	VMRC62-8L
64mm to 65mm 2-1/4" to 2-9/16"	VSEAL63	VSC65	VSEAL65	VSC65	VMRC-SB64	VMRC64-6R	VMRC64-6L	VMRC64-8R	VMRC64-8L
66mm to 67mm 2-19/32" to 2-5/8"	VSEAL65	VSC67	n/a	n/a	VMRC-SB66	VMRC66-6R	VMRC66-6L	VMRC66-8R	VMRC66-8L



SUPERIOR PROTECTION for SMALLER WIRE ROPES



SAFE
Simple
Effective

FEATURES & BENEFITS

- o **Light Weight**
Mini MkII collar with seals weighs only 2.5 kg's making it one of the lightest and easiest to use in the world.
- o **Fast & Efficient Rope Lubrication**
*Set up and install only take minutes. No tools required
Clean and Lubricate ropes in one application at speeds of up to 1000mt/hour.*
- o **Eliminates Manual Greasing**
Safer for staff, reduced lubricant usage, less leakage & mess.
- o **Wide Size Range**
*Viper Mini MkII lubricates ropes from 6mm (15/64") to 36mm (1 13/32") in diameter.
No Scrapers Required.*
- o **Maximum Rope Protection**
*Unique seal design induces lubricant penetration into rope for added corrosion protection.
Direct increase in rope asset life.*

VIPER MINI MkII WRL Kit

The NEW Viper Mini MkII wire rope lubricator is supplied as a complete kit, ready for use with all of the components required to get started. Simply order the kit and required seals (sold separately) to match your ropes and start seeing the benefits of improved rope lubrication.

Optional Viper Mini MkII 180KG drum pump kit available for longer ropes or high volume lubricant requirements.



Kit Components

- Viper Mini MkII Collar
- Viper Mini MkII Lube Pump, Air Control & Lube Supply Hose
- Retaining Ratchet Straps & Shackles
- Robust Aluminium Storage Case



'Superior Protection for Wire Ropes'

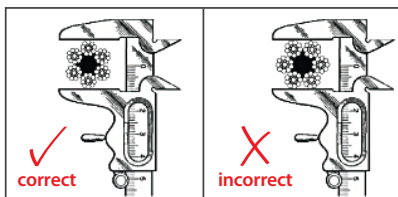
www.viperwrl.com

phone: +61 (2) 9636 5655

SEAL & ROPE CLEANER SELECTION GUIDE

Seals Selection

Viper Mini seals are designed to have some interference with the rope, depending on its size and type, with an interference of up to 3mm allowable for standard 6 & 8 strand ropes. For compact, non-rotating or wireline type ropes which do not have valleys, a maximum interference of 1mm is recommended as these ropes do not allow for the same amount of seal deflection within the collar.



The illustrations show how to measure a wire rope correctly.

It is recommended that wire ropes be physically measured prior to ordering seals as ropes in service can stretch and sizes may vary.

Rope Cleaner (VRC) Selection

Viper Rope Cleaners enable the removal of contamination or built up old lubricant from the wire rope prior to lubrication, improving the effectiveness of the lubrication process via the Viper Mini MkII WRL. For certain types of wire ropes where the standard Viper Rope Cleaner is not suitable, the Viper 'Smooth Bore' rope cleaner is available.

The Smooth Bore Rope Cleaner would typically be used on those ropes with a large number of outer strands, some non-rotational ropes, ROV cables, etc, where the valleys between the strands are minimal and do not readily facilitate a standard Viper Rope Cleaner.

Available for 6 and 8 strand ropes in a wide range of sizes, the following tables allow for the quick and easy selection of the correct VRC to suit your specific requirements.



Actual Rope Size	Seals for 6 or 8 Strand Ropes Only Viper Rope Seals for "6 & 8" Strand Ropes Seal Part No.	Seals for Armoured or Multi Strand Ropes Only Viper Rope Seals for Armoured & Multi Strand Ropes Seal Part No.	Viper Smooth Bore Rope Cleaner	Viper Rope Cleaner "6 Strand Ropes"		Viper Rope Cleaner "8 Strand Ropes"	
				Right Lay	Left Lay	Right Lay	Left Lay
6mm to 7mm 15/64" to 9/32"	VMISEAL6	VMISEAL8	N/A	N/A	N/A	N/A	NA
8mm to 10mm 5/16" to 3/8"	VMISEAL8	VMISEAL10	VRC-SB9	N/A	N/A	N/A	NA
11mm to 12mm 7/16" to 15/32"	VMISEAL10	VMISEAL13	VRC-SB11	N/A	N/A	N/A	NA
13mm to 14mm 1/2" to 9/16"	VMISEAL13	VMISEAL14	VRC-SB13	N/A	N/A	N/A	NA
15mm to 16mm 19/32" to 5/8"	VMISEAL14	VMISEAL16	VRC-SB15	VRC16-6R	VRC16-6L	N/A	NA
17mm to 18mm 21/32" to 11/16"	VMISEAL16	VMISEAL18	VRC-SB17	VRC18-6R	VRC18-6L	N/A	NA
19mm to 20mm 3/4" to 25/32"	VMISEAL18	VMISEAL20	VRC-SB19	VRC20-6R	VRC20-6L	N/A	NA
21mm to 22mm 13/16" to 7/8"	VMISEAL20	VMISEAL22	VRC-SB21	VRC22-6R	VRC22-6L	N/A	NA
23mm to 24mm 29/32" to 15/16"	VMISEAL22	VMISEAL24	VRC-SB23	VRC24-6R	VRC24-6L	VRC24-8R	VRC24-8L
25mm to 26mm 1" to 1 1/32"	VMISEAL24	VMISEAL26	VRC-SB25	VRC26-6R	VRC26-6L	VRC26-8R	VRC26-8L
27mm to 28mm 1 1/16" to 1 1/8"	VMISEAL26	VMISEAL28	VRC-SB27	VRC28-6R	VRC28-6L	VRC28-8R	VRC28-8L
29mm to 30mm 1 5/32" to 1 3/16"	VMISEAL28	VMISEAL30	VRC-SB29	VRC30-6R	VRC30-6L	VRC30-8R	VRC30-8L
31mm to 33mm 1 1/4" to 1 5/16"	VMISEAL30	VMISEAL33	VRC-SB32	VRC32-6R	VRC32-6L	VRC32-8R	VRC32-8L
34mm to 36mm 1 11/32" to 1 13/32"	VMISEAL33	VMISEAL35	VRC-SB34	VRC34-6R	VRC34-6L	VRC34-8R	VRC34-8L

