

IT'S NOT TOUGH, UNLESS IT'S **RHINO TOUGH!**



THE TOUGHEST HOSE PROTECTION PRODUCTS ON THE PLANET... **PERIOD!**

RHINO Sleeve™ HT



RHINO Sleeve™ Dispenser



RHINO Blue Vinyl Wrap™



RHINO Wrap™



RHINO Spring Guard™



RHINO Guard™ HD



RHINO Bend Restrictor™



RHINO Pyrosil Tape



RHINO Cinch Strap™



RHINO Hanging Strap™



RHINO Grip™



RHINO Hide™



RHINO Orange Drip Proof Plugs™



RHINO Shield™



RHINO Color Coding Shrink Tubing™



RHINO Drip Proof Plugs™



RHINO Firesleeve™



RHINO FRAC Pad™





*The Toughest Hose Protection Products on the Planet...Period!*

## **INDUSTRIAL APPLICATIONS FOR BRENNAN PRODUCTS**

THE TOUGHEST HOSE PROTECTION PRODUCTS ON THE PLANET...

**PERIOD!**

[www.rhinosleeve.com](http://www.rhinosleeve.com)



**Agriculture**



**Chemical Plants**



**Coal Mining**



**Strip Mining**



**Railway**



**Robotics**



**Transportation**



**Waste Management**



**Welding**





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## **INDUSTRIAL APPLICATIONS FOR BRENNAN PRODUCTS**

**IT'S NOT TOUGH, UNLESS IT'S  
RHINO TOUGH!**



**Construction**



**Energy / Utilities**



**Fracking**



**Forestry / Logging**



**Manufacturing**



**Marinas**



**Oil / Gas Extraction**



**Petroleum**



**Quarrying**



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## RHINO SLEEVE™ HT

**Toughest Hose Protection...  
Anything Else is a Compromise**



PART #	Min. Inside Dia.		Max. Inside Dia.	
	In.	Mm.	In.	Mm.
RS-68HT	0.68	17	0.84	21
RS-79HT	0.79	20	0.95	24
RS-91HT	0.91	23	1.03	26
RS-98HT	0.98	25	1.10	28
RS-106HT	1.06	27	1.18	30
RS-122HT	1.22	31	1.34	34
RS-142HT	1.42	36	1.54	39
RS-157HT	1.57	40	1.73	44
RS-163HT	1.63	41	1.79	45
RS-173HT	1.73	44	1.89	48
RS-185HT	1.85	47	2.01	51
RS-209HT	2.09	53	2.25	57
RS-219HT	2.19	55	2.35	60
RS-238HT	2.38	60	2.54	65
RS-262HT	2.62	66	2.78	70
RS-288HT	2.88	73	3.04	77
RS-315HT	3.15	80	3.31	84
RS-366HT*	3.66	93	3.82	97
RS-394HT*	3.94	100	4.10	105
RS-441HT*	4.41	112	4.57	116
RS-494HT*	4.94	125	5.10	130
RS-550HT*	5.50	140	5.66	144

See Cross Reference Chart on page 5

Sold in 300FT (91.44 Meters) Rolls • Standard Roll is 3 pieces maximum

\* These sizes are available in cut lengths

### Chemical Compatibility

Meets RoHS • Meets California Prop 65

Gasoline	Very Good
Oil	Very Good
Mineral & Vegetable Oil	Very Good
Ionic Metallic Solutions	Very Good
Alcohols	Very Good
Diluted Bases	Very Good
Diluted Acids	Good
Benzene	Very Good
Acetone	Very Good
Ether	Very Good
Carbon Tetrachloride	Very Good
Chlorine Based Solvents	Very Good
Mold, Bacteria, Moths	Very Good
Strong & Concentrated Acids	May Have Some Corrosive Action

### MATERIAL SPECIFICATIONS

**Melting Point:** 480°F/248°C  
**Denier:** 1300  
**Material:** Proprietary Engineered Fabric  
**Dim. Stability:** Great resistance to sun, atmospheric agents and aging  
**Toxicity:** Non-Toxic

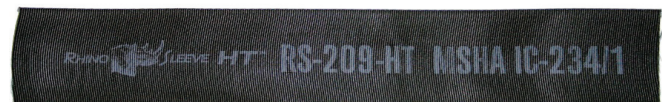
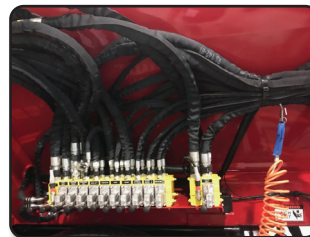
### FEATURES & BENEFITS

- Meets new line of sight operator specification EN982 ISO norm 833 EN414
- Meets Australian MDG41 specifications for mining applications
- Meets California Prop 65
- Meets RoHS
- Ultra tight construction contains oil spillage from pin hole leaks
- Tight, smooth surface to resist water
- 50% less bulky than Cordura
- Densely twisted proprietary engineered fabric offers optimum UV & abrasion protection
- MSHA# IC-234/1
- Meets abrasion standard ISO 6945
- Meets Fed-STD191-Test Method 5309 for abrasion
- Meets ASTM D6770 for abrasion resistance of textile webbing
- Meets conductivity requirements of ISO 8031
- Cut to length

Manufactured in the USA for Brennan Industries Inc.

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

*Proper use of product is the sole responsibility of the user.*





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## RHINO SLEEVE™ HT

### Protecting people and your product from the effects of hose failure.

Brennan's **RHINO SLEEVE™ HT SLEEVING** is designed to provide protection against hydraulic hose failure by containing pressure and fluids that may escape during a hose burst or pinhole leak. With this new line of sight sleeving which meets industry standards, both equipment operators and the environment are guarded from the effects of hose failures.

Benefits when sized properly through 1 inch I.D. hydraulic hose:

**BURST PRESSURE:** Capable to contain hose burst up to 20,000 p.s.i.

**PIN HOLE LEAK:** Handles a 1mm pin hole leak up to 4,000 p.s.i.

**ABRASION TESTING:** Tested to over 250,000 abrasion cycles using ISO Testing 6945



See Cross Reference Chart on page 5 for proper sizing

#### RHINO SLEEVE™ HT Sleeve Selection as per Hose Dash Size\*

1. Select the correct sleeve I.D. for the hose, refer to table for sleeve I.D. to Hose O.D.. ratio per hose dash size.  
**For example:**  
Selecting -8 hydraulic hose (1/2" I.D.)
2. The Sleeve I.D. to use from the chart on the right is: 1.50, then multiply your selected Hose O.D. times the number from the chart to equal (=) the Selected Sleeve I.D.
3. Then select the RHINOSLEEVE HT part number whose I.D. is closest to the calculated I.D.

\* Sleeve should be cut 2-3 inches longer than hose length.

\* Proper use of product is the sole responsibility of the user

Hose Dash Size	Sleeve I.D to Hose O.D. Ratio
-4	1.44
-6	1.45
-8	1.50
-10	1.55
-12	1.55
-16	1.55
-20	1.60
-24	1.63
-32	1.65



Actual picture of pin hole burst dispersion pattern at 4,000 P.S.I.



Close up of **RHINO SLEEVE™ HT** sleeving after pin hole burst



#### INDUSTRIES USING OUR PRODUCTS

- Agriculture
- Coal Mining and Processing
- Construction
- Energy / Utilities
- Forestry / Logging
- Fracking
- Machinery Manufacturing
- Manufacturing General
- Marinas
- Mining Quarrying
- Oil / Gas Extraction
- Petroleum
- Railway
- Transportation
- Waste Management





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## **RHINO SLEEVE™ DISPENSER**

### **FEATURES & BENEFITS**

**RHINO SLEEVE™ DISPENSER** will hold up to five 300FT (91.44 meter) rolls of RHINOSLEEVE HT  
RHINO SLEEVE Dispenser Part Number 102277

- Keep Tubular sleeve organized & tangle free
- Easily mounted to a wall or set on a shelf
- Cut sleeve to length without getting the spiral effect
- A must for hose assembly shops & parts departments
- Includes all hardware to adjust dividers

Manufactured in the USA for  
Brennan Industries Inc.



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## RHINO SLEEVE® HT

### CROSS REFERENCE CHART

Meets CA Prop 65  
↓ Meets RoHS ↓

RHINO SLEEVE P/N	RHINO SLEEVE RD I.D. In.	RHINO SLEEVE RD I.D. Mm.	Gates P/N	Gates RD I.D. Inches	Aeroquip P/N: FC-	Aeroquip RD I.D. Inches	Dixon P/N	Dixon RD I.D. Inches	WeatherHead P/N	WeatherHead RD I.D. Inches	Parker P/N	Parker RD I.D. Inches	Tompkins P/N	Tompkins RD I.D. Inches
RS-68HT	0.68	17	HG10	.68							AS-B-11	0.69	NHS-071	0.71
					425-12	0.71								
RS-79HT	0.79	20											NHS-077	0.77
											AS-B-13 & PS-B-13	0.86		
RS-91HT	0.91	23	HG14	.90	425-15	0.92	DHS90-300	0.90	A4900	0.90			NHS-090	0.90
RS-98HT	0.98	25			425-16	1.00	DHS-100-300	1.00					NHS-100	1.00
RS-106HT	1.06	27	HG16	1.06					A4901	1.06	AS-B-15 & PS-B-15	1.06		
					425-18	1.13	DHS-106-300	1.13					NHS-114	1.14
RS-122HT	1.22	31	HG20	1.22	425-20	1.25	DHS-122-300	1.25	A4902	1.22	AS-B-17 & PS-B-17	1.22	NHS-125	1.25
							DHS-138-300	1.38	A4903	1.35	AS-B-19	1.35	NHS-138	1.38
RS-142HT	1.42	36	HG24	1.42							AS-B-22 & PS-B-22	1.42		
													NHS-153	1.53
RS-157HT	1.57	40			425-24	1.59	DHS-159-300	1.58					NHS-159	1.59
RS-163HT	1.63	41							A4904	1.66	AS-B-27	1.63		
RS-173HT	1.73	44			425-28	1.75	DHS-175-300	1.78					NHS-175	1.75
RS-185HT	1.85	47	HG28	1.81			DHS-181-300	1.91	A4905	1.81	AS-B-33 & PS-B-33	1.81	NHS-185	1.85
RS-209HT	2.09	53			425-32	2.07							NHS-207	2.07
RS-219HT	2.19	55	HG32	2.19			DHS-219-300	2.18	A4906	2.19	PS-B-35	2.19		
													NHS-225	2.25
RS-238HT	2.38	60	HG38	2.38	425-38	2.38					AS-B-37 & PS-B-37	2.38	NHS-238	2.38
					425-40	2.54	DHS-238-300	2.38					NHS-254	2.54
RS-262HT	2.62	66	HG42	2.62					A4907	2.62	PS-B-39	2.63	NHS-264	2.64
							DHS-263-300	2.65	A4908	2.80				
RS-288HT	2.88	73	HG46	2.88	425-46	2.86	DHS-288-300	2.86			PS-B-45	2.88		
													NHS-296	2.96
RS-315HT	3.15	80									PS-B-47	3.13		
													NHS-334	3.34
RS-366HT	3.66	93			425-59	3.66	DHS-366-300	3.65			AS-B-58	3.63	NHS-366	3.66
RS-394HT	3.94	100									AS-B-64	4.00	NHS-400	4.00
RS-441HT	4.41	112	HG64	4.40								4.41	NHS-450	4.50
RS-494HT	4.94	125										4.94		
RS-550HT	5.50	140										5.50		





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## **RHINO SPIRAL GUARD™ HD**

### **MATERIAL**

- High Density Polyethylene

### **FEATURES**

- Easy to install on loose or mounted hose & cables
- Strong, Flexible, Light Weight
- UV Resistant
- Beveled Edges for Safety
- **Temperature Range:** -40°F to +280°F (-40°C to +137°C)
- Meets California Prop 65
- Meets RoHS

### **USES**

- Preventing hose wear due to friction & abrasion
- Protecting hoses from external forces & harsh environments
- Bundling hoses, cables
- Colors for providing "HIGH" visibility
- Tree Sapling Hose Cover Protection

### **INDUSTRIES USING OUR PRODUCTS**

- |                              |                        |
|------------------------------|------------------------|
| • Chemical Plants            | • Marinas              |
| • Coal Mining and Processing | • Mining / Quarrying   |
| • Construction               | • Oil / Gas Extraction |
| • Energy / Utilities         | • Petroleum            |
| • Forestry / Logging         | • Railway              |
| • Machinery Manufacturing    | • Robotics             |
| • Manufacturing General      | • Transportation       |
|                              | • Waste Management     |



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## RHINO SPIRAL GUARD™ HD

BRENNAN Part Number	I.D. Inches	Hose O.D. Range Opening	
		In.	Mm.
RSG-28HD	0.280	0.28 - 0.51	7 - 13
RSG-38HD	0.380	0.39 - 0.66	10 - 17
RSG-50HD	0.500	0.47 - 0.86	12 - 22
RSG-62HD	0.620	0.62 - 1.06	16 - 27
RSG-95HD	0.875	0.86 - 1.37	22 - 35
RSG-1.125HD	1.000	1.06 - 1.69	27 - 43
RSG-1.50HD	1.500	1.30 - 2.17	33 - 55
RSG-1.75HD	1.750	1.75 - 2.52	42 - 64
RSG-2.25HD	2.000	2.05 - 2.95	52 - 75
RSG-2.62HD	2.625	2.56 - 3.80	65 - 97
RSG-3.00HD	3.000	3.15 - 4.30	80 - 110
RSG-4.00HD	4.000	3.80 - 4.90	94 - 125
RSG-5.00HD	5.000	4.80 - 6.00	122 - 152
RSG-6.00HD	6.000	5.70 - 7.00+	145 - 178

Meets California  
Prop 65 & RoHS

See Cross Reference  
Chart on page 9

Add Color suffix after  
Part Number:  
Y=Yellow, R=Red,  
BL=Blue: i.e.:  
RSG-1.50HDBL is for  
Blue Spiral Wrap

Manufactured in the  
USA for Brennan  
Industries Inc.

**Formula for determining length of RHINO SPIRAL GUARD HD**  
 $HOSE\ OD \div SPIRAL\ ID \times HOSE\ LENGTH = Spiral\ Length$

### Measurement Example:

If you have a 33 feet hose with an OD of 1.57 inches, using the recommended **RSG-1.50HD**, which has an ID of 1.30 inches, you would require 40 (ft) of **RSG-1.50HD**

1.57 inches Hose  $\div$  1.30 inches ID of **RSG-1.50HD**  $\times$  33ft = 40 feet of **RHINO SPIRAL GUARD HD**

### Nominal Dimensions for RHINO SPIRAL GUARD HD:

BRENNAN Part Number	I.D.		Opening Range In.	Opening Range Mm.	Carton Size for Black Color		Yellow Length in Feet / Meters	Blue Length in Feet / Meters	Red Length in Feet / Meters
	In.	Mm.			Feet	Meter			
RSG-28HD	0.28	7.1	0.28 - 0.51	7 - 13	495	150.8			
RSG-38HD	0.38	10	0.39 - 0.66	10 - 17	165	50.3	165 / 50.3	165 / 50.3	165 / 50.3
RSG-50HD	0.50	11	0.47 - 0.86	12 - 27	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-62HD	0.62	14	0.62 - 1.06	16 - 30	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-95HD	0.875	20	0.86 - 1.37	22 - 35	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-1.125HD	1.00	25	1.06 - 1.69	27 - 43	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-1.50HD	1.50	32	1.30 - 2.17	33 - 55	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-1.75HD	1.75	38	1.75 - 2.52	42 - 64	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-2.25HD	2.00	50	2.05 - 2.95	52 - 75	66 & 100	20.1 & 30.48	66 / 20.1	66 / 20.1	66 / 20.1
RSG-2.62HD	2.63	60	2.56 - 3.80	65 - 97	66	20.1	66 / 20.1	66 / 20.1	66 / 20.1
RSG-3.00HD	3.00	72	3.15 - 4.30	50 - 110	66	20.1	66 / 20.1	66 / 20.1	66 / 20.1
RSG-4.00HD	4.00	102	3.80 - 4.90	97 - 125	40	12.19	40 / 12.9	40 / 12.9	40 / 12.9
RSG-5.00HD	5.00	127	4.80 - 6.00	122 - 152	27	8.23	27 / 8.23	27 / 8.23	27 / 8.23
RSG-6.00HD	6.00	152	5.70 - 7.00+	145 - 178	20	6.10	20 / 6.1	20 / 6.1	20 / 6.1





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## **RHINO SPIRAL GUARD™ LIGHT DUTY**

### **MATERIAL**

Made with virgin low density polyethylene

**Color:** Black

### **PACKAGING**

Available in 100 feet boxes

### **FEATURES**

- **RHINO SPIRAL GUARD LIGHT DUTY** is designed to wrap around bundles to make neat looms and protect the conductors
- **RHINO SPIRAL GUARD LIGHT DUTY** will accommodate a large range of diameters and allows break outs at any point
- Meets California Prop 65
- Meets RoHS



P/N:	Internal Dimensions		External Dimensions		Wall Thickness	
	ID in.	ID Mm.	OD in.	OD Mm.	In.	Mm.
RSG-38LD	0.40	11	0.50	12.70	0.04	1.02
RSG-50LD	0.55	14	0.63	16.02	0.04	1.02
RSG-62LD	0.69	17	0.79	20.07	0.05	1.27
RSG-95LD	0.95	24	1.00	25.40	0.07	1.78

Standard Box size: 100 feet



Manufactured in the USA for Brennan Industries Inc.

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## RHINO SPIRAL GUARD™ HD

Meets CA Prop 65  
↓ Meets RoHS ↓

### CROSS REFERENCE CHART

Meets CA Prop 65  
Meets RoHS ↓

BRENNAN P/N:	ID	Opening Range in Inches	Available Lengths in Feet	Aeroquip P/N:	I.D.	Dixon P/N:	I.D.	F & R P/N:	I.D.	Gates Global P/N:	Gates P/N:	I.D.	BRENNAN P/N:
RSG-28HD	0.28	.28-.51	495	900952-4	0.24								RSG-28HD
RSG-38HD	0.38	.38-.66	165	900952-6	0.37					G80901-0006	7277-1174	0.38	RSG-38HD
RSG-50HD	0.50	.47-.86	66/100	900952-8	0.49	NFSGX16	0.45	93050	0.50	G80901-0008	7277-1175	0.50	RSG-50HD
RSG-62HD	0.63	.62-1.06	66/100	900952-10	0.63	NFSGX20	0.55	93063	0.63	G80901-0012	7277-1176	0.63	RSG-62HD
RSG-95HD	0.75	.86-1.37	66/100	900952-12	0.83	NFSGX25	0.80	93075	0.75	G80901-0016	7277-1177	0.84	RSG-95HD
RSG-1.125HD	1.13	1.06-1.69	66/100	900952-27	1.06	NFSGX32	1.00	93100	1.00	G80901-0020	7277-1178	1.06	RSG-1.125HD
RSG-1.50HD	1.50	1.30-2.17	66/100	900952-22	1.34	NFSGX40	1.25	93125	1.25	G80901-0024	7277-1179	1.34	RSG-1.50HD
RSG-1.50HD	1.50	1.30-2.17	66/100	900952-30	1.58	NFSGX50	1.50	93150	1.50				RSG-1.50HD
RSG-1.75HD	1.75	1.65-2.52	66/100			NFSGX63	2.00	93200	2.00	G80901-0028	7277-1180	1.73	RSG-1.75HD
RSG-2.25HD	2.25	2.05-2.95	66			NFSGX75	2.40	93250	2.50	G80901-0036	7277-1181	2.17	RSG-2.25HD
RSG-2.62HD	2.63	2.56-3.80	66			NFSGX90	2.83	93300	3.00	G80901-0044	7277-1182	2.60	RSG-2.62HD
RSG-3.00HD	3.00	3.15-4.30	66			NFSGX110	3.43	93350	3.50	G80901-0048	7277-1183	3.10	RSG-3.00HD
RSG-4.00HD	3.90	3.80-4.90	40					93400	4.00	G80901-0056	7277-1184	3.90	RSG-4.00HD
RSG-4.50HD	4.50	4.50-5.50	40							G80901-0072	7277-0001	4.33	RSG-4.50HD
RSG-5.00HD	5.00	4.80-6.00	27					93500	5.00				RSG-5.00HD
RSG-6.00HD	6.00	5.70-7.00+	20					93600	6.00				RSG-6.00HD

Meets CA Prop 65  
↓ Meets RoHS ↓

Meets CA Prop 65  
Meets RoHS ↓

BRENNAN P/N:	ID	Opening Range in Inches	Available Lengths in Feet	Parker P/N:	ID.	Caplugs/Pigtail P/N:	I.D.	Safeplast P/N:	I.D.	Tompkins ProWrap Plus Extreme Duty P/N:	ID	Weather Head P/N:	I.D.	BRENNAN P/N:
RSG-28HD	0.28	.28-.51	495			R9SSG	0.28							RSG-28HD
RSG-38HD	0.38	.38-.66	165			R12SSG	0.40	012C100Bk	.4	PWP-12	0.375			RSG-38HD
RSG-50HD	0.50	.47-.86	66/100			R16SSG	0.45	016C100Bk	.5	PWP-16	0.500	A9900	0.492	RSG-50HD
RSG-62HD	0.63	.62-1.06	66/100	HG-075	0.75	R20SSG	0.55	020C100Bk	.65	PWP-20	0.625	A9901	0.668	RSG-62HD
RSG-95HD	0.75	.86-1.37	66/100	HG-100	1.00	R25SSG	0.80	025C100Bk	.8	PWP-25	0.830			RSG-95HD
RSG-1.125HD	1.13	1.06-1.69	66/100	HG-125	1.25	R32SSG	1.00	032C100Bk	1.1	PWP-32	1.060	A9902	1.014	RSG-1.125HD
RSG-1.50HD	1.50	1.30-2.17	66/100	HG-150	1.50	R40SSG	1.26	040C100Bk	1.4	PWP-40	1.340	A9903	1.600	RSG-1.50HD
RSG-1.75HD	1.75	1.65-2.52	66/100	HG-200	2.00	R50SSG	1.50	050C100Bk	1.7	PWP-50	1.730			RSG-1.75HD
RSG-2.25HD	2.25	2.05-2.95	66			R63SSG	2.00	063C100Bk	2.2	PWP-63	2.170			RSG-2.25HD
RSG-2.62HD	2.63	2.56-3.80	66			R75SSG	2.40	075C75Bk	2.6	PWP-75	2.600	A9904	2.457	RSG-2.62HD
RSG-3.00HD	3.00	3.15-4.30	66	HG-350	3.50	R90SSG	2.83	090C50Bk	3.2	PWP-90	3.110	A9905	3.065	RSG-3.00HD
RSG-4.00HD	3.90	3.80-4.90	40			R110SSG	3.43	110C50Bk	3.9	PWP-110	3.900			RSG-4.00HD
RSG-4.50HD	4.50	4.50-5.50	40					235C40Bk	4.5					RSG-4.50HD
RSG-5.00HD	5.00	4.80-6.00	27			R140SSG	5.07	125C40Bk	4.5	PWP-140	5.070			RSG-5.00HD
RSG-6.00HD	6.00	5.70-7.00+	20			R160SSG	5.87	140C30Bk	5.0	PWP-160	6.000			RSG-6.00HD





*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO GRIP™

## RHINO SPRING GUARD™



### FEATURES & BENEFITS

- Pre-cut **RHINO GRIP** shrink tubing with adhesive lining for permanent sleeve attachment
- Eliminate sharp edges from clamps & cable ties
- Meets California Prop 65
- Meets RoHS

P/N	Pre Shrunk I.D.		Stock Length	
	In.	Mm.	In.	Mm.
RG-11	1.10	28	6	152.4
RG-17	1.73	44	6	152.4
RG-27	2.70	69	6	152.4
RG-35	3.50	89	6	152.4
RG-11 X 4 FT	1.10"x4'	28 mm x 1.22 M	4ft	1.22 M
RG-17 X 4 FT	1.73"x4'	44 mm x 1.22 M	4ft	1.22 M
RG-27 X 4 FT	2.70"x4'	69 mm x 1.22 M	4ft	1.22 M
RG-35 X 4 FT	3.50"x4'	89 mm x 1.22 M	4ft	1.22 M

Shrink Ratio: 3:1  
Color: Black  
Available in cut lengths  
Available in longer lengths



Manufactured in the USA for Brennan Industries Inc.

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

*Proper use of product is the sole responsibility of the user.*

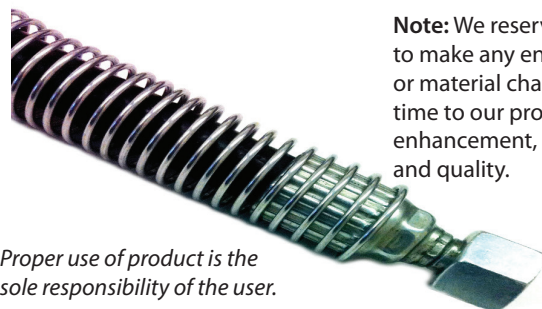
www.rhinosleeve.com



Meets California Prop 65 • Meets RoHS

P/N	Min. Inside Dia.		Stock Length	
	In.	Mm.	Ft.	M.
RSP-53	0.53	13	20	6.10
RSP-61	0.61	15	20	6.10
RSP-66	0.66	17	20	6.10
RSP-75	0.75	19	20	6.10
RSP-84	0.84	21	20	6.10
RSP-91	0.91	23	20	6.10
RSP-99	0.99	25	20	6.10
RSP-105	1.05	26	20	6.10
RSP-134	1.34	34	20	6.10
RSP-164	1.64	41	20	6.10
RSP-188	1.88	48	20	6.10
RSP-212	2.12	54	20	6.10
RSP-230	2.30	58	20	6.10

See Cross Reference Chart on page 11



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Manufactured in the USA for Brennan Industries Inc.



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## RHINO SPRING GUARD™

### CROSS REFERENCE CHART

Meets CA Prop 65  
↓ Meets RoHS ↓

Meets CA Prop 65  
↓ Meets RoHS ↓

BRENNAN RHINO COIL SPRING Part Number	BRENNAN I.D. in. mm.	Gates Product #	Gates I.D. Inches	Aeroquip Part Number: 900564 Dash-	Aeroquip Spring Guard I.D. Inches	DIXON Part Number	Dixon I.D. Inches	Weatherhead Part Number	Weatherhead Spring I.D. Inches	Parker Part Number	Parker ID Inches	BRENNAN RHINO COIL SPRING Part Number
RSP-53	0.53 13	7277-0521	0.550					A1900-20	0.53	SG-050	0.50	RSP-53
RSP-61	0.61 15			-1S	0.610			A1902-20	0.61	SG-060	0.60	RSP-61
RSP-66	0.66 17	7277-0510	0.676	-12S	0.670			A1903-20	0.66	SG-066	0.66	RSP-66
		7277-0535	0.682									
RSP-75	0.75 19	7277-0511	0.738	-2S	0.750	CWG-C-0.75-25	0.075	A1904-20	0.75	SG-072	0.72	RSP-75
				-15S	0.810							
RSP-84	0.84 21	7277-0512	0.852	-14S	0.850			A1905-20	0.84	SG-084	0.84	RSP-84
RSP-91	0.91 23	7277-0513	0.915	-3S	0.910			A1906-20	0.91			RSP-91
RSP-99	0.99 25	7277-0514	0.977			CWG-C-1.00-25	1.000	A1907-20	0.99			RSP-99
RSP-1.05	1.05 26	7277-0515	1.040	-4S	1.040			A1908-20	1.05	SG-106	1.06	RSP-1.05
		7277-0522	1.122	-5S	1.180	CWG-C-1.25-25	1.250			SG-113	1.13	
										SG-122	1.22	
		7277-0516	1.278									
RSP-1.34	1.34 34	7277-0517	1.340	-6S	1.340			A1912	1.34	SG-131	1.31	RSP-1.34
		7277-0518	1.578			CWG-C-1.50-25	1.500			SG-155	1.55	
RSP-1.64	1.64 41	7277-0519	1.625	-7S	1.660			A1913	1.64	SG-166	1.66	RSP-1.64
						CWG-C-1.75-25	1.750					
RSP-1.88	1.88 48	7277-0524	1.847	-9S	1.870			A1916	1.88	SG-182	1.82	RSP-1.88
		7277-0523	2.112									
RSP-2.12	2.12 54	7277-0548	2.120	-8S	2.130	CWG-C-2.00-25	2.000	A1917	2.12			RSP-2.12
RSP-2.30	2.30 58							A1919	2.30	SG-232	2.32	RSP-2.30
				-10S	2.380	CWG-C-2.50-25	2.500					
				-13S	2.750	CWG-C-3.00-25	3.000					



*The Toughest Hose Protection Products on the Planet...Period!*

## **RHINO WRAP™ 1050**



### **1050 Ballistic Nylon**

Size 1" – 16" I.D. (25.30 mm to 406.4 mm)

#### **FEATURES**

- Mil-Spec 1050 Ballistic Nylon, 1.7 mil, urethane coating
- **Temperature Range:** -60° F to +250° F (-51°C to +121°C)
- **Abrasion:** Very Good, meets ISO 6945 specifications
- Meets: Line of Sight Operator specification EN982 ISO norm 833 EN
- **Puncture and Tear resistance:** Good
- **UV Protection:** Very Good, meets EN13758-1
- **Chemicals:** Very good resistance to water and petroleum
- Meets California Prop 65
- Meets RoHS

#### **BENEFITS**

- Lightweight, tough, highly flexible
- Fast OEM & field service
- Easy to retrofit to existing applications
- Post assembly installation prevents hydraulic system contamination
- Provides Cylinder Rod Protection
- Installation: Fast and easy
- Wicking: Very good; sheds surface moisture
- Proprietary bonding process allows cutting without fraying
- Easy to cut to length

Manufactured in the USA for Brennan Industries Inc.

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

*Proper use of product is the sole responsibility of the user.*

*See Cross Reference Chart on page 15*







*The Toughest Hose Protection Products on the Planet...Period!*

## **RHINO WRAP™ 1050**

### **1050 Ballistic Nylon**

#### **Bundling of Hoses & Abrasion Protection**

**RHINO WRAP™ 1050** can be cut to length for bundling groups of hoses together in minutes for ease of assembly & for abrasion protection. When a hose breaks there is no need to take all the hoses out of a sleeve to remove a bad hose, just open it up, remove the bad hose, insert the new hose and you're back in business without any disassembly.



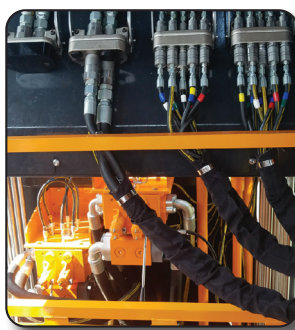
#### **Cylinder Rod Protection**

Damaged cylinder rods & seals are ongoing problems on hydraulic equipment. Dents & gouges on rods reduce seal & gland life and allow contaminants into the system. Research has shown that the cost of damaged cylinders is ten times the cost of prevention.



#### **Cylinder Rod Installation**

**RHINO WRAP™ 1050** can be cut to length & clamped & installed in minutes at a fraction of the cost of custom bellows.



### **INDUSTRIES USING OUR PRODUCTS**

- Chemical Plants
- Coal Mining and Processing
- Construction
- Energy / Utilities
- Forestry / Logging
- Fracking
- Machinery Manufacturing
- Manufacturing General
- Marinas
- Mining / Quarrying
- Oil / Gas Extraction
- Petroleum
- Railway
- Robotics
- Transportation
- Waste Management

Manufactured in the USA for Brennan Industries Inc.



*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO WRAP™ SIZING CHART

Meets California Prop 65 & RoHS

**RHINO WRAP™ 1050: THE STANDARD FOR YOUR BUNDLING AND ABRASION NEEDS**

BRENNAN Part Number	Bundle Outside Diameter		Bundle Circumference	
	In.	Mm.	In.	Mm.
RW-1.00	1.00	25.40	3.25	82
RW-1.50	1.50	38.10	4.71	120
RW-1.75	1.75	44.45	5.50	139
RW-2.00	2.00	50.80	6.20	157
RW-2.50	2.50	63.50	7.80	198
RW-3.00	3.00	76.20	9.40	239
RW-3.50	3.50	88.90	11.00	279
RW-4.00	4.00	101.60	12.50	317
RW-4.50	4.50	114.30	14.00	355
RW-5.00	5.99	127.00	15.75	400
RW-6.00	6.00	152.40	18.80	477
RW-7.00	7.00	177.80	22.00	558
RW-8.00	8.00	203.20	25.13	638
RW-9.00*	9.00	228.60	28.27	718
RW-10.00*	10.00	254.00	31.41	798
RW-11.00*	11.00	279.40	34.55	875
RW-12.00*	12.00	304.80	37.70	957
RW-13.00*	13.00	330.20	40.84	1037
RW-15.00*	15.00	381.00	47.12	1197
RW-16.00*	16.00	406.40	50.26	1276

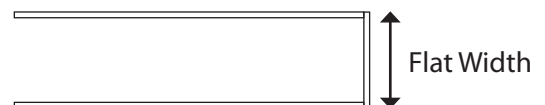
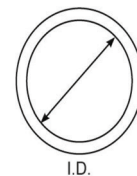
\* These sizes are Made to Order and require a Minimum of One (1) 150 Foot roll per size

See Cross Reference Chart on page 9

Standard Roll Length is 150 feet / 45.72 Meters Per Roll

### How to Determine Size

1. Extend cylinder
2. Measure rod length & cylinder Barrel O.D.
3. Use sleeve slightly larger than Barrel O.D.
4. Cut length 3"-4" (76.20mm-101.60mm) longer than extended length
5. Install sleeve over extended rod
6. Secure end on barrel with screw clamp
7. Fold sleeve around rod behind clevis, secure with clamp
8. Extend & retract cylinder to confirm fit





*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO WRAP™ 1050

### CROSS REFERENCE CHART

Meets CA Prop 65  
↓ Meets RoHS ↓

Meets CA Prop 65  
↓ Meets RoHS ↓

RHINO WRAP 1050 NYLON P/N:	Wrap I.D.	Wrap Flat Width	Aeroquip P/N: FC676 -	O.D.	Atlantex P/N:	O.D.	Parker P/N:	O.D.	Weather head P/N:	O.D.	RHINO WRAP 1050 NYLON P/N:	Wrap I.D.	Wrap Flat Width
RW-1.00	1.00	3.89			TFHLC16-30	1.00	PS-BV-100	1.00			RW-1.00	1.00	3.89
RW-1.50	1.50	5.46									RW-1.50	1.50	5.46
RW-1.75	1.75	7.00									RW-1.75	1.75	7.00
RW-2.00	2.00	7.78	2000	2.00	TFHLC32-30	2.00	PS-BV-200	2.00	A4926	2.00	RW-2.00	2.00	7.78
RW-2.50	2.50	9.35									RW-2.50	2.50	9.35
RW-3.00	3.00	10.92	3000	3.00	TFHLC48-30	3.00	PS-BV-300	3.00	A4927	3.00	RW-3.00	3.00	10.92
RW-3.50	3.50	12.49									RW-3.50	3.50	12.49
RW-4.00	4.00	14.06	4000	4.00	TFHLC64-30	4.00	PS-BV-400	4.00	A4928	4.00	RW-4.00	4.00	14.06
RW-4.50	4.50	15.63									RW-4.50	4.50	15.63
RW-5.00	5.00	17.20	5000	5.00	TFHLC80-30	5.00	PS-BV-500	5.00	A4929	5.00	RW-5.00	5.00	17.20
RW-6.00	6.00	20.34	6000	6.00	TFHLC96-30	6.00			A4930	6.00	RW-6.00	6.00	20.34
RW-7.00	7.00	23.48			TFHLC112-30	7.00	PS-BV-700	7.00			RW-7.00	7.00	23.48
RW-8.00	8.00	26.62			TFHLC128-30	8.00					RW-8.00	8.00	26.62
RW-9.00*	9.00	29.77									RW-9.00*	9.00	29.77
RW-10.00*	10.00	32.91									RW-10.00*	10.00	32.91
RW-11.00*	11.00	35.85									RW-11.00*	11.00	35.85
RW-12.00*	12.00	39.19									RW-12.00*	12.00	39.19
RW-13.00*	13.00	42.34									RW-13.00*	13.00	42.34
RW-15.00*	15.00	48.62									RW-15.00*	15.00	48.62
RW-16.00*	16.00	51.76									RW-16.00*	16.00	51.76

\* These sizes are Made to Order and require a Minimum of One (1) 150-foot roll per size.

Other Sizes available – minimum 1 – 150-foot roll required      Contact us for pricing





# BRENNAN



*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO BLUE VINYL WRAP™

### MATERIAL

- 35 oz. Vinyl Coated Polyester
- Coating: Poly Vinyl Chloride
- Construction: Woven
- Coating Distribution: 60% Front / 40% Back

### FEATURES

- Sealing Properties: Dielectric, Thermal
- Mildew and UV Resistant

### MECHANICAL PROPERTIES

- **Grab Tensile:** Meets ASTM D5034  
Results: 696-741 Lbs.
- **Strip Tensile:** Meets ASTM D5035  
Results: 356-530 Lbs.
- **Tongue Tear:** Meets ASTM D2261  
Results: 84-111 Lbs.
- **Adhesion:** Meets ASTM D751  
Results: 33 Lbs.
- **Temperature:** Meets ASTM D751
- **Temperature Range:** + 180°F  
Continuous to -41°F
- Meets RoHS
- This product can expose you to chemicals including di(2-ethylhexyl)phthalate (DEHP), which are known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

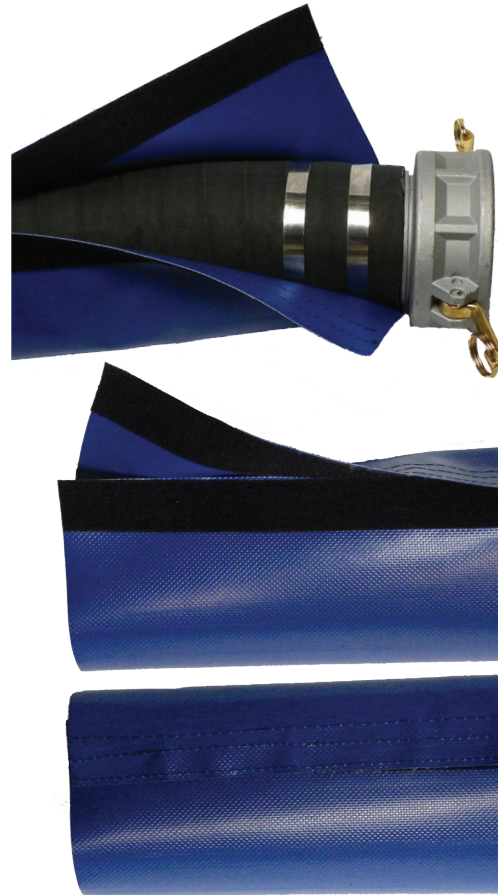
### BENEFITS

- Lightweight, tough, highly flexible
- Fast OEM & field service
- Easy to retrofit
- Fast and easy installation
- Proprietary bonding process allows cutting without fraying
- Easy to cut to length

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

*Proper use of product is the sole responsibility of the user.*

**NON STOCK – MADE TO ORDER –  
MINIMUM 1-150 FT. ROLL PER SIZE**



### MADE TO ORDER

Part #	Wrap I.D. (inches)	Wrap I.D. (mm)	Flat Width (inches)	Flat Width (mm)
RW-2.00-BLV	2.00"	50.80	7.75"	196
RW-3.00-BLV	3.00"	76.20	11.00"	279
RW-4.00-BLV	4.00"	101.60	14.00"	355
RW-5.00-BLV	5.00"	127.00	17.25"	438
RW-6.00-BLV	6.00"	152.40	20.38"	517
RW-7.00-BLV	7.00"	177.80	23.58"	598
RW-8.00-BLV	8.00"	203.20	26.62"	676

\* Other Sizes available – minimum 1 – 150 foot roll required  
Contact us for pricing

Manufactured in the USA for Brennan Industries Inc.



**The Toughest Hose Protection Products on the Planet...Period!**

## RHINO BLUE VINYL WRAP™

### INDUSTRIES USING OUR PRODUCTS

- Agriculture
- Chemical Plants
- Coal Mining and Processing
- Construction
- Energy / Utilities
- Forestry / Logging
- Fracking
- Machinery Manufacturing
- Manufacturing General
- Marinas
- Mining / Quarrying
- Oil / Gas Extraction
- Petroleum
- Railway
- Robotics
- Transportation
- Waste Management

**NON STOCK – MADE TO ORDER –  
MINIMUM 1-150 FT. ROLL PER SIZE**

**Also available in Green, Yellow or Black**



Meets RoHS

### CHEMICAL RESISTANCE CHART

Chemical	PVC	Chemical	PVC	Chemical	PVC
Acetaldehyde	G	Diethyl Benzene	N	Methoxyethyl Oleate	N
Acetamide	N	Diethyl Ether	F	Methyl Ethyl Ketone	N
Acetic Acid, 5%	E	Diethyl Ketone	N	Methyl Isobutyl Ketone	N
Acetic Acid, 50%	E	Diethyl Malonate	G	Methyl Propyl Ketone	N
Acetone	E	Dimethyl Formamide	F	Methylene Chloride	N
Aluminum Hydroxide	E	Ether	F	Nitric Acid, 50%	G
Ammonia	E	Ethyl Acetate	F	Nitric Acid, 70%	F
Ammonium Hydroxide	E	Ethyl Benzene	N	Nitrobenzene	N
Ammonium Oxalate	E	Ethyl Benzoate	N	n-Octane	F
n-Amyl Acetate	F	Ethyl Butyrate	N	Orange Oil	F
Amyl Chloride	N	Ethyl Chloride, Liquid	N	Perchloric Acid	G
Aniline	N	Ethyl Cyanoacetate	N	Perchloroethylene	N
Benzaldehyde	N	Ethyl Lactate	F	Phenol, Crystals	F
Benzene	N	Ethylene Chloride	N	Phosphoric Acid, 1-5%	E
Benzoic Acid, Sat.	E	Ethylene Glycol	E	Phosphoric Acid, 85%	E
Benzyl Acetate	F	Ethylene Oxide	F	Potassium Hydroxide	E
Boric Acid	E	Fluorine	N	Propane Gas	E
Bromine	G	Formic Acid, 50%	G	Propylene Glycol	F
Bromobenzene	F	Formic Acid, 90-100%	F	Propylene Oxide	F
n-Butyl Acetate	N	Fuel Oil	E	Resorcinol	F
sec-Butyl Alcohol	G	Gasoline	G	Salicylaldehyde	F
Butyric Acid	G	Glycerine	E	Sulfuric Acid, 1-6%	E
Calcium Hypochlorite	G	n-Heptane	F	Sulfuric Acid, 20%	E
Carbazole	N	Hexane	G	Sulfuric Acid, 60%	E
Carbon Disulfide	N	Hydrochloric Acid, 1-5%	E	Sulfuric Acid, 98%	N
Carbon Tetrachloride	G	Hydrochloric Acid, 35%	G	Sulfur Dioxide, Liq.	F
Chlorine	E	Hydrofluoric Acid, 4%	G	Sulfur Salts	N
Chloroacetic Acid	F	Hydrofluoric Acid, 48%	G	Tartaric Acid	E
Chloroform	N	Hydrogen	E	Tetrahydrofuran	N
Chromic Acid	E	Hydrogen Peroxide	E	Thionyl Chloride	N
Citric Acid	G	Isopropyl Acetate	N	Toluene	F
Cresol	N	Isopropyl Benzene	N	Trichloroethane	N
Cyclohexane	G	Kerosene	E	Trichloroethylene	N
Decalin	E	Lactic Acid, 3%	G	Turpentine	G
o-Dichlorobenzene	G	Lactic Acid, 85%	G	Vinylidene Chloride	N
p-Dichlorobenzene	N	Magnesium Salts	E	Xylene	N
				Zinc Salts/Stearate	E

#### Resistance

E = Excellent      G = Good      F = Fair      N = Not Recommended

*This information is based on experience to date and is believed to be reliable.*

*It is intended as a guide for use at your own discretion and risk. All indications refer to room temperature*



*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO HIDE™ HOSE PROTECTOR

**RHINO HIDE Hose Protectors** protect hoses against point of contact wear with abrasive services. It is a very durable material with a high wear factor and the molded grooves are designed to fit with cable ties. All of our Part Numbers work on hoses ½-inch diameter through 2-inch diameter.

Easy to assemble and remove, and is typically used on hydraulic hoses, fuel and oil lines, brake systems, wiring harnesses and battery cables.



- Meets RoHS
- According to the State of California's Prop 65, this product can expose you to chemicals including Poly Vinyl Chloride which the State of California has determined could cause cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Part #	Length	
	In.	Mm.
RHP04-X	4	101.6
RHP06-X	6"	152.3
RHP08-X	8"	203.2
RHP10-X	10"	254.0
RHP12-X	12"	304.8

Replace "X" with the following code to the end of the part number:

- B** – Black  
**O** – Orange  
**Y** – Yellow



**DIAMETER:** Covers hose sizes 1/2" to 2" diameter

**TEMPERATURE RANGE:** -20°F (-28°C) to +300°F (+149°C)

**MATERIAL:** PVC Blend

### RHINOHIDE ZIP TIE:

Part #	Size	
	In.	Mm.
RZT-11	11-7/8"	302

Color: Black, Length: 11-7/8", Tensile: 50Lbs.  
 Max bundle OD (inches) 3.35"

*Proper use of product is the sole responsibility of the user.*

Manufactured for Brennan Industries Inc.

## INDUSTRIES USING OUR PRODUCTS

- Agriculture
- Chemical Plants
- Coal Mining and Processing
- Construction
- Energy / Utilities
- Ground Maintenance
- Machinery Manufacturing
- Manufacturing General
- Marinas
- Mining / Quarrying
- Oil / Gas Extraction
- Petroleum
- Railway
- Transportation
- Waste Management





# BRENNAN



*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO BEND RESTRICTOR

### FEATURES & BENEFITS

**RHINO BEND RESTRICTORS** reduce bending stress near the hose-coupling junction.

- Meets RoHS
- Added protection prevents damage to the hose and extends its life cycle
- Upper lip firmly attaches to the coupling, holding the restrictor in place, eliminating the need for costly adhesives or clamps
- Tapered for easy installation
- Works with variety of hydraulic and pressure-wash hoses
- **RHINO BEND RESTRICTORS** preserve expensive equipment and extends hydraulic hose life.
- **RHINO BEND RESTRICTORS** feature UV resistant material additives for maximum performance without environmental degradation.
- Our easy-to-install hose guard will provide ample cushioning, full protection and complete flexibility, all while saving you valuable time and money

### INDUSTRIES USING OUR PRODUCTS

- Agriculture
- Chemical Plants
- Coal Mining and Processing
- Construction
- Energy / Utilities
- Machinery
- Manufacturing
- Manufacturing General
- Marinas
- Mining / Quarrying
- Oil / Gas Extraction
- Petroleum
- Railway
- Transportation
- Waste Management

**Standard Color:** Black,

*\*other colors require minimum production run*

**Material:** Vinyl

**Warning:** This product can expose you to diisononyl phthalate, which is known to the State of California to cause Cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



**Dimension A =**  
Lower (bottom) end Inside Diameter  
**Dimension B =**  
Upper (top) Inside Diameter  
**Dimension C =**  
Height  
**Dimension D =**  
Upper (top) Outside Diameter

Part #:	DIM A		DIM B		DIM C = Length		DIM D	
	In.	Mm.	In.	Mm.	In.	Mm.	In.	Mm.
<b>RBR-20</b>	0.616	15.65	0.699	17.75	5.29	134.37	0.625	15.88
<b>RBR-40</b>	0.668	16.97	0.758	19.25	5.74	145.80	0.678	17.22
<b>RBR-60</b>	0.750	19.05	0.852	21.64	6.43	163.32	0.761	19.33
<b>RBR-80</b>	0.815	20.70	0.926	23.52	6.98	177.29	0.827	21.01
<b>RBR-100</b>	0.871	22.12	0.995	25.27	7.76	197.10	0.885	22.48

\* Other Sizes Available, Call for Information

Manufactured in the USA for Brennan Industries Inc. Proper use of product is the sole responsibility of the user.



*The Toughest Hose Protection Products on the Planet...Period!*

## **NEW! RHINO SAFETY ORANGE DRIP PROOF PLUGS™**

### **MATERIAL SPECIFICATIONS**

Nitrile-NBR; does not contain silicone

### **FEATURES**

- **New Hex Head Design for "Better Grip"**
- High quality oil resistant rubber
- Strong, reusable
- Protects the environment
- Meets California Prop 65
- Meets RoHS

### **USES**

- Use **RHINO SAFETY ORANGE DRIP PROOF PLUGS** anywhere hydraulics are in use.
- **RHINO SAFETY ORANGE DRIP PROOF PLUGS** are a handy tool for emergency leaks. One plug covers many sizes.

### **MARKETS**

- Hydraulics
- Vehicle Repair and Maintenance
- Forestry
- Marine
- Agriculture
- Industrial
- Mining
- Rescue
- Construction
- Building Maintenance
- Lifting
- Displays
- Demolition

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.



**1 INSERT**



**2 PUSH**



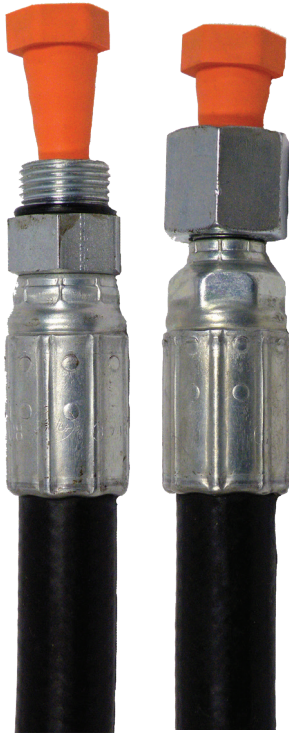
**3 PUSH & TWIST**

*Proper use of product is the sole responsibility of the user.*



The Toughest Hose Protection Products on the Planet...Period!

## NEW! RHINO SAFETY ORANGE DRIP PROOF PLUGS™



New Hex Head Design  
for "Better Grip"



RHINO ORANGE DRIP PROOF PLUGS™

BRENNAN Part #	Size	Package Quantity Ea	Size Range
ROPLUG-1	Mini	16	Fitting size -4 through -8
ROPLUG-2	Small	10	Fitting size -4 through -12
ROPLUG-3	Medium	6	Fitting size -16 through -20
ROPLUG-4	Large	4	Fitting size -24 through -32
ROPLUG-K	Mixed Kit	4-Mini, 4-Small, 2-Medium, 2-Large	

Manufactured for Brennan Industries Inc.





*The Toughest Hose Protection Products on the Planet...Period!*

## **NEW! RHINO SAFETY ORANGE DRIP PROOF PLUGS™**

### **INDUSTRIES USING OUR PRODUCTS**

- Agriculture
- Chemical Plants
- Coal Mining and Processing
- Construction
- Energy / Utilities
- Ground Maintenance – Airports
- Machinery Manufacturing
- Manufacturing General
- Marinas
- Mining / Quarrying
- Oil / Gas Extraction
- Petroleum
- Railway
- Transportation
- Waste Management

### **Meets California Prop 65 • Meets RoHS**

#### **Physical & Mechanical Properties**

Durometer	50
Tensile Strength Range	200–3,500 PSI
Elongation (Range %)	350 %–650 %
Abrasion Resistance	Good to Excellent
Adhesion to Metal	Excellent
Adhesion to Rigid Materials	Good to Excellent
Compression Set	Good to Excellent
Flex Cracking Resistance	Fair to Good
Impact Resistance	Fair to Good
Resilience/Rebound	Good
Tear Resistance	Good to Excellent
Vibration Dampening	Fair to Good

#### **Chemical Resistance**

Acids, Dilute	Good
Acids, Concentrated	Poor to Fair
Acids, Organic (Dilute)	Good
Acids, Organic (Concentrated)	Poor
Acids, Inorganic	Fair to Good
Alcohol's	Fair to Good
Aldehydes	Poor to Fair
Alkalies, Dilute	Good
Alkalies, Concentrated	Poor to Good
Amines	Poor
Animal & Vegetable Oils	Good to Excellent
Brake Fluids, Non-Petroleum Based	Poor
Diester Oils	Fair to Good
Esters, Alkyl Phosphate	Poor
Esters, Aryl Phosphate	Poor to Fair
Ethers	Poor
Fuel, Aliphatic Hydrocarbon	Good to Excellent
Fuel, Aromatic Hydrocarbon	Fair to Good
Fuel, Extended (Oxygenated)	Fair to Good

Fuel, Gasoline (all grades)	Good to Excellent
Fuel, Diesel	Good to Excellent
Halogenated Solvents	Poor
Hydrocarbon, Halogenated	Poor to Fair
Ketones	Poor
Lacquer Solvents	Fair
LP Gases & Fuel Oils	Excellent

#### **Chemical Resistance**

Mineral Oils	Excellent
Oil Resistance	Good to Excellent
Petroleum Aromatic	Good
Petroleum Non-Aromatic	Excellent
Refrigerant Ammonia	Good
Silicone Oil	Good
Solvent Resistance	Good to Excellent

#### **Thermal Properties**

Low Temperature Range	-70°F / -57°C
Minimum for Continuous Use (Static)	-40°F / -40°C
Brittle Point	-60°F / -51°C
High Temperature Range	250°F / 121°C
Maximum for Continuous Use (Static)	250°F / 121°C

#### **Environmental Performance**

Colorability	Excellent
Flame Resistance	Poor
Gas Permeability	Fair to Excellent
Ozone Resistance	Fair to Good
Oxidation Resistance	Good
Radiation Resistance	Fair to Good
Steam Resistance	Fair to Good
Sunlight Resistance	Poor to Good
Weather Resistance	Fair to Good
Water Resistance	Good to Excellent

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.



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## **NEW! RHINO PYROSIL TAPE**

### **FEATURES & BENEFITS:**

- Tape designed to provide a self-fusing inorganic rubber insulator to be used in conjunction with **RHINO FIRESLEEVE** as an end sealant to prevent moisture and hydraulic oils from wicking into the inner braid.
- Self-bonding silicone offers excellent resistance to radiant heat, corrosive atmosphere, moisture, chemicals, vibration, and electricity.
- **RHINO PYROSIL TAPE** is an excellent dielectric strength made suitable as an electrical insulator in a variety of applications.
- Cures within seconds

**Material:**

**Temperature Capabilities:**

**Size:**

**Material Thickness:**

**Roll length:**

Iron Oxide Red Silicone rubber tape with extreme elasticity. Self-Bonding. Rated for up to 475°F (246°C) continuous exposure. 1" (25mm) wide roll. \* Other size and thickness available... *call for information.* 0.020" (0.51mm) 36 feet (11m)



*Not recommended for exposure to molten splash or flame.*

*Proper use of product is the sole responsibility of the user.*

Manufactured for Brennan Industries Inc.

## **RHINO FIRESLEEVE**



### **FEATURES & BENEFITS**

**RHINO FIRESLEEVE** is designed to protect hoses, wire and cables from the hazards of high heat and occasional flame. Rated for 500°F (260°C) continuous exposure, up to 2000°F (1093°C) for 15-20 minutes and up to 3000°F (1650°C) for 15-30 seconds. Made of knitted construction fiberglass yarns in a flexible substrate, it is then coated with a high-grade silicone rubber.

Resistant to hydraulic fluids, lubricating oils, and fuels, **RHINO FIRESLEEVE** insulates against energy loss in piping and hosing, protects employees from burns and allows, "bundling" of wires, hoses and cables.

**Color:**

**Material:**

**Construction:**

**Maximum Continuous Temperature:**

**Size Range:**

**Molten splash resistance:**

**Flame resistance:**

**Flexibility:**

**Water and Oil resistance:**

Orange

Type E Fiberglass

Silicone Elastomer Coating

Knitted (Industrial)

500°F (260°C)

3/8" (9.6mm) - 3.5" (89mm)

Outstanding

Very Good

Outstanding

Outstanding

P/N:	In.	Mm.
RFS-038	3/8	9.6
RFS-050	1/2	12
RFS-062	5/8	15
RFS-075	3/4	19
RFS-100	1.00	25.4
RFS-125	1-1/4	32
RFS-150	1-1/2	38
RFS-175	1-3/4	44
RFS-200	2.00	51
RFS-250	2-1/2	64
RFS-275	2-3/4	70
RFS-300	3.00	76
RFS-350	3-1/2	89

\* Other sizes and pricing available upon request

Standard package is a 50-foot box

*Proper use of product is the sole responsibility of the user.*

Manufactured for Brennan Industries Inc.

### **AVAILABLE OPTIONS**

Other colors (Blue, Green, Yellow, Red, Black/Grey) may be available, call for availability

### **TYPICAL INDUSTRIES**

Hose Fabrication, Oil & Gas, OEM, Locomotive, Metals



# BRENNAN



*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO DRIP PROOF PLUGS™

### FEATURES & BENEFITS

- High quality oil resistant rubber
- Strong, reusable
- Protects the environment

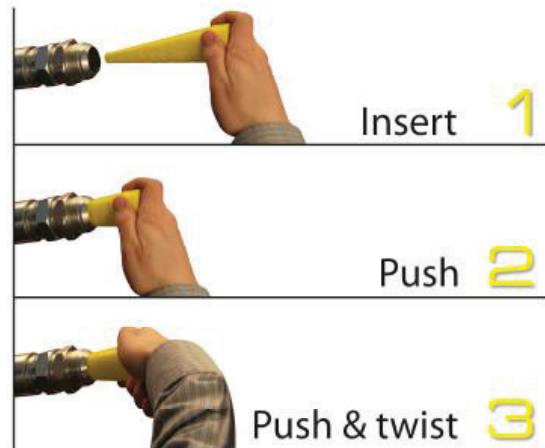


### USES

- Use RHINO DRIP PROOF PLUGS anywhere hydraulics are in use.
- RHINO DRIP PROOF PLUGS are a handy tool for emergency leaks. One plug covers many sizes.

### MARKETS

- Hydraulics
- Vehicle Repair and Maintenance
- Forestry
- Marine
- Agriculture
- Industrial
- Mining
- Rescue
- Construction
- Building Maintenance
- Lifting
- Displays
- Demolition



**RHINO DRIP PROOF PLUGS™ mixed kit:**  
Packaged in Plastic Bags

BRENNAN Part #	Size	Bag Quantity Ea	Size Range
RPLUG-S	Small	20	-4 thru -6
RPLUG-M	Medium	10	-8 thru -16 Male Pipe (MP)
RPLUG-L	Large	4	-16 Female JIC (FJX) thru -24
RPLUG-K	Mixed Kit	4 Sm, 4 Med, 2 Lg	

*Proper use of product is the sole responsibility of the user.*

Manufactured for Brennan Industries Inc.





*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO COLOR CODING SHRINK TUBING™



### FEATURES

- Color coding of hoses
- Non-Adhesive lined
- Operating temperature range is -57°F to +275°F (-55°C to +135°C)
- Is recommended for use in general purpose applications such as wire marking, color coding of hose assemblies.
- Meets CA Prop 65
- Meets RoHS
- Shrink Ratio: 2:1



### BENEFITS

- RCT is a very flexible.
- Flame Resistant
- Meets all of the material and functional requirements of Military Specification AMS-DTL- 23053/5, Class 1 and Class 3.
- Shrink temperature is +90°C / +194°F

**Note:** We reserve the right to make any engineering or material changes at any time to our products for enhancement, performance and quality.

*Proper use of product is the sole responsibility of the user.*

Manufactured for Brennan Industries Inc.

**RCT-1.00 – RCT-4.00 available in the following Colors:**  
Blue (BL), Green (GR), Orange (O), Red (R), White (W) & Yellow (Y)

P/N	Pre-Shrunk I.D.		Will Shrink Down to:		Available Length:*	
	In.	Mm.	In.	Mm.	Ft.	M.
<b>RCT-1.00-</b>	1.00	25.4	0.50	12.70	4	1.219
<b>RCT-1.50-</b>	1.50	38.1	0.75	19.05	4	1.219
<b>RCT-2.00-</b>	2.00	50.8	1.00	25.40	4	1.219
<b>RCT-3.00-</b>	3.00	76.2	1.50	38.10	4	1.219
<b>RCT-4.00-</b>	4.00	101.6	2.00	50.80	4	1.219

**RCT-5.00 & RCT-6.00 available only in Clear (CL) – 50 foot rolls**

P/N	Pre-Shrunk I.D.		Will Shrink Down to:		Roll Length:	
	In.	Mm.	In.	Mm.	Ft.	M.
<b>RCT-5.00-</b>	5.00	127.0	2.50	63.50	50	15.24
<b>RCT-6.00-</b>	6.00	152.4	3.00	76.20	50	15.24

Ordering Example: Order Qty: P/N: Color  
**4 pcs. RCT-1.50-BL**

\* Part Number RCT-1.00 – RCT-4.00 available in 100-foot Reels upon request.



*The Toughest Hose Protection Products on the Planet...Period!*

## **RHINO SHIELD™ BLOW OUT PROTECTIVE COVER**



### **RHINO SHIELD™ BLOW OUT PROTECTOR**

**Applications:** **RHINO SHIELD™** is designed to retain the burst pressure of a blown concrete elbow on the pumper line. This is a “must have” safety product for all jobsites.

**Material:** Industrial grade ballistic nylon and reinforced with heavy duty hook and loop nylon straps.

**RHINO SHIELD™** handles 1100 PSI concrete burst equalling over 3,800 PSI in hydraulic pressure caused by a casting failure.

- Meets RoHS
- **1050 Ballistic Nylon Material:** Meets California Prop 65 & RoHS
- **Heavy Duty Cinch Strap:** Material Meets California Prop 65 & RoHS.
- This product includes a buckle that is Nickel plated and that according to the State of California Prop 65, chemicals in the nickel-plating process may expose you to Cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).





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## RHINO SHIELD™ BLOW OUT PROTECTIVE COVER



**RHINO SHIELD™** Blow Out Protector



**RHINO SHIELD™** Coupling Cover



**RHINO SHIELD™** Pipe Cover

BRENNAN Part Number:	Description:	Dimensions:	
		In.	Mm.
RS-E-5	Blow Out Protector: Reducing Elbow 5" x 4"	5" x 4"	127 mm. x 101.60 mm
RS-E-4	Blow Out Protector: Reducing Elbow 4" x 3"	4" x 3"	102 mm x 76.20 mm
RS-CC	3 & 4 inch Coupling Cover	3" - 4"	102 mm
RS-S-325-33	Pipe Cover Straight: 3" x 2.5" x 33"	3" x 2.5" x 33"	76.2 mm x 63.5 mm x 832.2 mm
RS-S-43-33	Pipe Cover Straight: 4" x 3.0" x 33"	4" x 3.0" x 33"	102 mm x 76.2 mm x 832.2 mm

Manufactured in the USA for Brennan Industries Inc.

*Proper use of product is the sole responsibility of the user.*





**The Toughest Hose Protection Products on the Planet...Period!**

## RHINO CINCH STRAPS™

## RHINO SAFETY STRAP™



### RHINO CINCH STRAP HEAVY DUTY

- Material meets California Prop 65
- Meets RoHS
- This product includes a buckle that is Nickel plated and that according to the State of California Prop 65, chemicals in the nickel-plating process may expose you to Cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

- Allows natural hose expansion & application movement without damage
- Eliminates cable tie damage
- Fast, dependable containment
- Cuts install time by 50%
- Mil-Spec Hook & Loop
- Excellent U.V. & weather resistance
- Heavy Duty Buckle is Nickel Plated



HEAVY DUTY Part Number:	Circumference Of Bundle	
	In.	Mm.
RCS-404H	4	102
RCS-406H	6	152
RCS-408H	8	203
RCS-412H	12	305
RCS-416H	16	406
RCS-418H	18	457
RCS-420H	20	508
RCS-424H	24	610
RCS-430H	30	762

\* Special Sizes Available Upon Request.  
Min. production run required

\*\* Private Labeling available at  
additional cost

### ORANGE CAMLOCK SAFETY STRAP

**High strength hook and loop strap with excellent U.V. and weather resistance.**



BRENNAN Part #	Camlock Size	
	In.	Mm.
RSS-16	1-1/2 to 3	38.1 to 76.2
RSS-20	4 to 8	101.6 to 203.2

Manufactured in the USA for Brennan Industries Inc.

*Proper use of product is the sole responsibility of the user.*

- Meets RoHS
- Material meets California Prop 65
- This product includes a buckle that is Nickel Plated and that according to the State of California Prop 65, chemicals in the nickel-plating process may expose you to Cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)



Private Brand Label Available on Heavy Duty  
**RHINO CINCH STRAP™**

Manufactured in the USA for Brennan Industries Inc.

*Proper use of product is the sole responsibility of the user.*



*The Toughest Hose Protection Products on the Planet...Period!*

## RHINO HANGING STRAPS™

**RHINO HANGING STRAPS™** are held in place by the 3/8" (9.5mm) grommet. Mounting can be vertical or horizontal. The hook & loop used in our hanging straps are a special product designed for military and industrial applications.



### RHINO HANGING STRAP HEAVY DUTY

- Material meets California Prop 65
- This product includes a nickel-plated grommet and buckle and that according to the State of California Prop 65, chemicals in the nickel-plating process may expose you to Cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### FEATURES & BENEFITS

- Meets RoHS
- Allows for natural hose expansion & application movement without damage
- Eliminate rigid mounting damage
- Fast, dependable containment
- Installation time is drastically reduced
- Military Spec Hook & Loop
- Excellent UV & weather resistance
- Heavy Duty Buckel is Nickel Plated

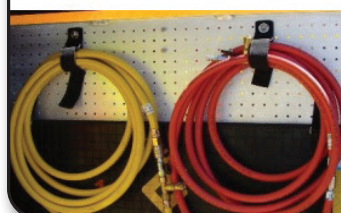
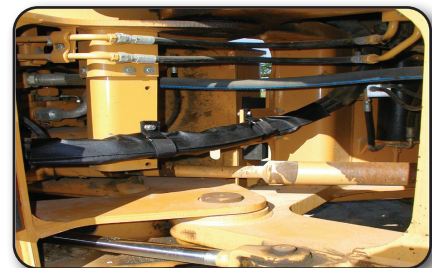
Manufactured in the USA for Brennan Industries Inc.

*Proper use of product is the sole responsibility of the user.*

BRENNAN Part Number	Circumference of Bundle	
	In.	Mm.
RHS-406H	6	152
RHS-408H	8	203
RHS-412H	12	305
RHS-416H	16	406
RHS-418H	18	457
RHS-420H	20	508
RHS-426H	26	660
RHS-436H	36	914

\* Special Sizes Available Upon Request.  
Minimum production run required

\*\* Private Labeling available at additional cost





*The Toughest Hose Protection Products on the Planet...Period!*

## **RHINO FRAC PAD™**



Extra heavy nylon abrasion pad for extra protection in high abrasion applications.

This product is designed for use on Frac Mud Pump hoses where it comes in contact with the pump unit.

**RFP4X3-HD** is a 1/4" abrasion pad with 4 heavy duty buckles.

Custom lengths are available upon request.

BRENNAN Part Number	Size	
	Length x Width x Thickness In.	Mm.
RFP4X3-HD	36 x 12 x 1/4	914.4 x 304.8 x 6.35

- Material meets California Prop 65
- Meets RoHS
- This product includes a buckle that is Nickel plated and that according to the State of California Prop 65, chemicals in the nickel-plating process may expose you to Cancer. For more information go to: [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Manufactured in the USA for Brennan Industries Inc.

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The Toughest Hose Protection Products on the Planet...Period!

## RHINO POINT OF SALE PRODUCTS



RHINO SPIRAL GUARD POINT OF PURCHASE DISPLAY



RHINO DRIP PROOF PLUG DISPLAY



RHINO SAMPLE PACKS

Authorized Distributor Of  
Products by SRM Industries, Inc:



RHINO WINDOW DECALS  
10"x12"



# **BRENNAN**

THE TOUGHEST HOSE PROTECTION PRODUCTS ON THE PLANET... **PERIOD!**



**IT'S NOT TOUGH, UNLESS IT'S RHINO TOUGH!**



MADE IN USA

**Sales & Distribution Office:**

14915 Stuebner Airline Road, Suite D  
Houston, Texas 77069-2120

**Phone: 1-877-744-6602 (1-877-RHINO 02)**

**Fax: 1-877-744-6680 (1-877-RHINO 80)**

**Email: RhinoSales@Brennaninc.com**



**West Coast Warehouse:**

14535 Valley View Avenue, Suite D  
Santa Fe Springs, CA 90670

**Phone: 1-562-926-7599**

**Fax: 1-562-926-8870**

**Email: Dale.Hughes5@hotmail.com**



MADE IN USA

**[www.rhinosleeve.com](http://www.rhinosleeve.com)**

