

Section 16. Wire Management



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Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com



SKINTOP® SLN/SLRN

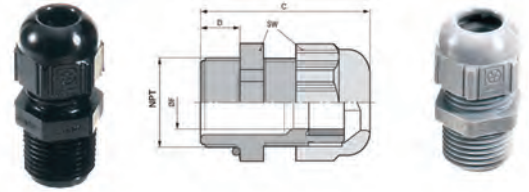
Construction: Liquid Tight, Non-Metallic Strain Relief Cable Gland with NPT Threads. **Body:** Polyamide. **Bushing:** CR.

Features:

Universally suited for all types of machinery & equipment, including automation, motion control, process control and robotics.

Applications:

Provides great pullout strength and very reliable strain relief. Superior integrated locking mechanism includes an internal ratchet for vibration proof protection. Multi-trapezoidal thread requires just one twist to tighten. Generous high quality neoprene bushing provides a liquid tight and dust proof, hermetic seal.



Technical Data:

Protection: 70 PSI. Seal: IP 68, 5 Bar (Exceeds NEMA 6/6P Pressure rating)

Temperature:
 • Static: -40°C to +80°C
 • Dynamic: -20°C to +80°C

Rated Voltage:
 N/A

Color Code:
 • Black (RAL 9005)
 UV Resistant
 • Gray: (RAL 7001)

Approvals:



SKINTOP® SLN: Liquid Tight, Non-Metallic Strain Relief Cable Gland with NPT Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
	S2138	S1138	NPT-3/8"	R	.138 - 0.315	0.748	1.693	.591	100	2.00
	S2112	S1112	NPT-1/2"	L	.197 - 0.472	0.945	1.772	.591	100	2.50
	S2134	S1134	NPT-3/4"	L	.512 - 0.709	1.299	2.087	.591	50	5.50
	S2101	S1101	NPT-1"	L	.748 - 1.000	1.654	2.362	.591	25	9.00

SKINTOP® SLRN: Liquid Tight, Non-Metallic Strain Relief Cable Gland with Reducer Bushing

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
	S2238	S1238	NPT-3/8"	R	.079 - .236	0.748	1.693	.591	100	2.00
	S2212	S1212	NPT-1/2"	L	.157 - .354	0.945	1.772	.591	100	2.50
	S2234	S1234	NPT-3/4"	L	.354 - .630	1.299	2.087	.591	50	5.50
	S2201	S1201	NPT-1"	L	.551 - .827	1.654	2.362	.591	25	9.00

NOTES:

1. Locknuts may be ordered separately.
2. UL Status: R = Recognized; L = Listed

Please contact your sales representative for detailed information at sales@lapptannehill.com

SKINTOP® SL/SLR

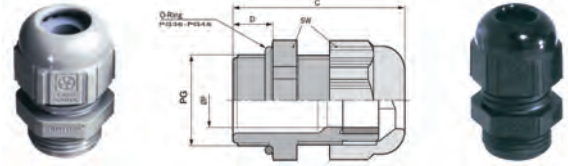
Construction: Liquid Tight, Non-Metallic Strain Relief Cable Gland with PG Threads. **Body:** Polyamide. **Bushing:** CR. **Locknuts:** included.

Features:

Locknuts included. Universally suited for all types of machinery & equipment, including automation, motion control, process control and robotics.

Applications:

The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief. Superior integrated locking mechanism includes an internal ratchet for vibration proof protection. Multi-trapezoidal thread requires just one twist to tighten. Generous high quality neoprene bushing provides a liquid tight and dust proof, hermetic seal.



Technical Data:

Protection: 70 PSI. Seal: IP 68, 5 Bar (Exceeds NEMA 6/6P Pressure rating)

- Temperature:**
 - Static: -40°C to +80°C
 - Dynamic: -20°C to +80°C
- Rated Voltage:** N/A
- Color Code:**
 - Black (RAL 9005)
 - UV Resistant
 - Gray: (RAL 7001)



SKINTOP® SL: Liquid Tight, Non-Metallic Strain Relief Cable Gland with PG Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2107	S1107	PG-7	R	0.098 - 0.256	0.591	1.260	.315	100	1.00	
S2109	S1109	PG-9	R	0.138 - 0.315	0.748	1.417	.315	100	1.50	
S2111	S1111	PG-11	R	0.157 - 0.394	0.866	1.496	.315	100	2.00	
S2113	S1113	PG-13	L	0.236 - 0.472	0.945	1.614	.354	100	2.50	
S2116	S1116	PG-16	L	0.354 - 0.551	1.063	1.732	.394	50	3.00	
S2121	S1121	PG-21	L	0.512 - 0.709	1.299	1.929	.433	50	5.00	
S2129	S1129	PG-29	R	0.551 - 0.984	1.654	2.205	.433	25	8.50	
S2136	S1136	PG-36	L	0.945 - 1.260	2.087	2.598	.512	10	17.50	
S2142	S1142	PG-42	R	1.378 - 1.496	2.362	2.677	.512	5	24.00	
S2148	S1148	PG-48	L	1.535 - 1.732	2.559	2.717	.551	5	29.00	

SKINTOP® SLR: Liquid Tight, Non-Metallic Strain Relief Cable Gland with Reducer Bushing

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2207	S1207	PG-7	R	0.059 - 0.197	0.591	1.260	.315	100	1.00	
S2209	S1209	PG-9	R	0.079 - 0.236	0.748	1.417	.315	100	1.50	
S2211	S1211	PG-11	R	0.079 - 0.276	0.866	1.496	.315	100	2.00	
S2213	S1213	PG-13	L	0.157 - 0.354	0.945	1.614	.354	100	2.50	
S2216	S1216	PG-16	L	0.236 - 0.472	1.063	1.732	.394	50	3.00	
S2221	S1221	PG-21	L	0.354 - 0.630	1.299	1.929	.433	50	5.00	
S2229	S1229	PG-29	R	0.433 - 0.787	1.654	2.205	.433	25	8.50	
S2236	S1236	PG-36	L	0.669 - 1.024	2.087	2.598	.512	10	17.50	
S2242	S1242	PG-42	R	0.866 - 1.220	2.362	2.677	.512	5	24.00	
S2248	S1248	PG-48	L	1.024 - 1.378	2.559	2.717	.551	5	29.00	

NOTES:
UL Status: R = Recognized; L = Listed

Check out our complete inventory of products at www.lapptannehill.com



SKINTOP® SLM/SLRM

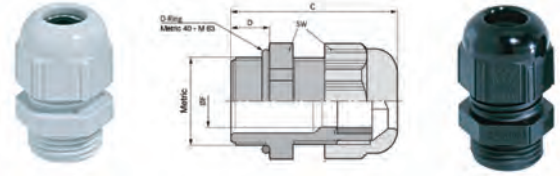
Construction: Liquid Tight, Non-Metallic Strain Relief Cable Gland with Metric Threads. **Body:** Polyamide. **Bushing:** CR. **Locknuts:** included.

Features:

SKINTOP® SLM/SLRM is a durable, liquid tight, easy to assemble strain relief cable gland with Metric threads that is universally suited for all types of machinery & equipment, including automation, motion control, process control and robotics.

Applications:

The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief. Superior integrated locking mechanism includes an internal ratchet for vibration proof protection. Multi-trapezoidal thread requires just one twist to tighten. Generous high quality neoprene bushing provides a liquid tight and dust proof, hermetic seal. Economical solution that covers a large clamping range with only 8 sizes.



Technical Data:

Protection: 70 PSI. Seal: IP 68, 5 Bar (Exceeds NEMA 6/6P Pressure rating), IP 69K

Temperature:

- Static: -40°C to +100°C
- Dynamic: -20°C to +100°C

Rated Voltage:

N/A

Color Code:

- Black (RAL 9005)
- UV Resistant
- Gray: (RAL 7001)

Approvals:



SKINTOP® SLM: Liquid Tight, Non-Metallic Strain Relief Cable Gland with Metric Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
	S2507	S1507	M-12X1.5	R	0.138 - 0.276	0.591	1.181	.315	100	1.00
	S2509	S1509	M-16X1.5	R	0.177 - 0.394	0.748	1.339	.315	100	1.50
	S2513	S1513	M-20X1.5	L	0.276 - 0.512	0.984	1.457	.354	100	2.50
	S2516	S1516	M-25X1.5	L	0.354 - 0.669	1.181	1.575	.394	50	3.50
	S2521	S1521	M-32X1.5	L	0.433 - 0.827	1.417	1.850	.394	25	6.00
	S2529	S1529	M-40X1.5	L	0.748 - 1.102	1.811	2.047	.394	10	10.50
	S2536	S1536	M-50X1.5	L	1.063 - 1.378	2.165	2.441	.472	5	17.50
	S2542	S1542	M-63X1.5	L	1.339 - 1.772	2.598	2.795	.472	5	25.50

SKINTOP® SLRM: Liquid Tight, Non-Metallic Strain Relief Cable Gland with Reducer Bushing

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
	S2607	S1607	M-12X1.5	R	0.039 - 0.197	0.591	1.181	.315	100	1.00
	S2609	S1609	M-16X1.5	R	0.079 - 0.276	0.748	1.339	.315	100	1.50
	S2613	S1613	M-20X1.5	L	0.197 - 0.394	0.984	1.457	.354	100	2.50
	S2616	S1616	M-25X1.5	L	0.236 - 0.512	1.181	1.575	.394	50	3.50
	S2621	S1621	M-32X1.5	L	0.276 - 0.591	1.417	1.850	.394	25	6.00
	S2629	S1629	M-40X1.5	L	0.591 - 0.906	1.811	2.047	.394	10	10.50
	S2636	S1636	M-50X1.5	L	0.866 - 1.142	2.165	2.441	.472	5	17.50
	S2642	S1642	M-63X1.5	L	1.102 - 1.535	2.598	2.795	.472	5	25.50

NOTES:

UL Status: R = Recognized; L = Listed

Complete catalog available online at: www.lapptannehill.com



SKINTOP® CLICK/CLICK-R

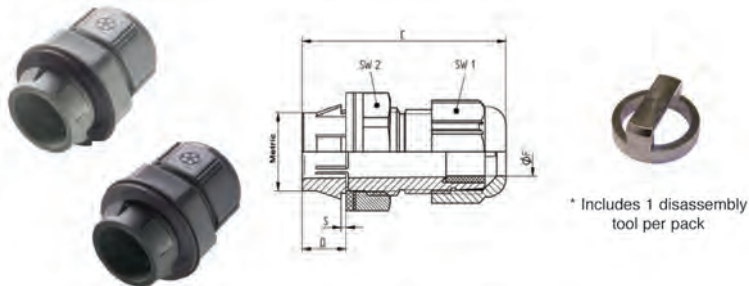
Construction: Liquid-Tight, Non-Metallic Strain Relief with Quick “Click” Insertion System. **Body:** Special Polyamide. **Seal:** Special Elastomer.

Features:

SKINTOP® CLICK/CLICK-R is an innovative cable insertion system that provides fast, highly flexible assembly. Easy snap in place installation results in fixed, centered, strain relief with maximum protection in seconds.

Applications:

Applications where locknut installation is difficult to reach or secure, such as dual wall enclosures and temperature controlled assemblies where insulation is used.



* Includes 1 disassembly tool per pack

Technical Data:

Protection: IP 68, 5 Bar

Temperature:
-20°C to +100°C

Rated Voltage:
N/A

Color Code:
• Black (RAL 9005)
UV Resistant
• Gray: (RAL 7001)

Approvals:



SKINTOP® CLICK: Liquid Tight, Non-Metallic Strain Relief with Metric Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW1/ SW2 Wrenching Flats inches	C Overall Length inches	D Thread Length inches	M Hole inches	S Wall Thickness inches	Standard Pack Size
	53112923	53112921	M-12	R	.138 - .276	0.591/ 0.709	1.575	0.315	0.484 (-.008)	.039 - .157	50
	53112882	53112876	M-16	R	.197 - .354	0.748/ 0.866	1.654	0.315	0.642 (-.008)	.039 - .157	50
	53112883	53112877	M-20	L	.276 - .512	0.984/ 1.063	1.791	0.315	0.799 (-.008)	.039 - .157	25
	53112884	53112878	M-25	L	.354 - .669	1.181/ 1.339	1.909	0.315	0.996 (-.008)	.039 - .157	25
	53112924	53112922	M-32	L	.433 - .827	1.417/ 1.575	2.165	0.315	1.272 (-.008)	.039 - .157	25

SKINTOP® CLICK-R: Liquid Tight, Non-Metallic Strain Relief with Reducer Bushing & Metric Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW1/ SW2 Wrenching Flats inches	C Overall Length inches	D Thread Length inches	M Hole inches	S Wall Thickness inches	Standard Pack Size
	53112929	53112927	M-12	R	.039 - .197	0.591/ 0.709	1.575	0.315	0.484 (-.008)	.039 - .157	50
	53112885	53112879	M-16	R	.157 - .276	0.748/ 0.866	1.654	0.315	0.642 (-.008)	.039 - .157	50
	53112886	53112880	M-20	L	.197 - .394	0.984/ 1.063	1.791	0.315	0.799 (-.008)	.039 - .157	25
	53112887	53112881	M-25	L	.236 - .512	1.181/ 1.339	1.909	0.315	0.996 (-.008)	.039 - .157	25
	53112931	53112928	M-32	L	.276 - .591	1.417/ 1.575	2.165	0.315	1.272 (-.008)	.039 - .157	25

UL Status: R = Recognized; L = Listed

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SKINTOP® FLEX

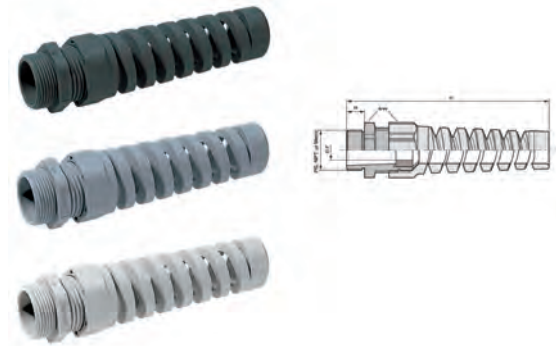
Construction: Liquid Tight, Non-Metallic Spiral Strain Relief Cable Gland in NPT, PG & Metric Threads. **Body:** Polyamide. **Bushing:** CR.

Features:

Offers additional safety against overstress and conductor breakage. Ideally suited for hand held equipment, moving machinery and robotics.

Applications:

Superior bending protection for cable conservation and functional reliability. The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief. Superior integrated locking mechanism includes an internal ratchet for vibration proof protection. Multi-trapezoidal thread requires just one twist to tighten.



Technical Data:

Protection: 70 PSI. Seal: IP 68, 5 Bar (Exceeds NEMA 6/6P Pressure rating)

Temperature:
 • NPT & PG: -20°C to +80°C
 • Metric: -20°C to +100°C

Rated Voltage:
 N/A

Color Code:
 • Black (RAL 9005)
 UV Resistant
 • Gray: (RAL 7001)

Approvals:
 PG & NPT



NPT THREADS

SKINTOP® SLN FLEX: Liquid Tight, Non-Metallic Spiral Strain Relief Cable Gland with NPT Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2338	S1338	NPT-3/8"	R	.138 - .315	0.748	3.228	.591	100	3.00	
S2312	S1312	NPT-1/2"	L	.197 - .472	0.945	4.094	.591	100	5.50	
S2334	S1334	NPT-3/4"	L	.512 - .709	1.299	5.236	.591	50	12.00	

SKINTOP® SLRN FLEX: NPT Liquid Tight, Non-Metallic Strain Relief Cable Gland with Reducer Bushing

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2438	S1438	NPT-3/8"	R	.079 - .236	0.748	3.228	.591	100	3.00	
S2412	S1412	NPT-1/2"	L	.157 - .354	0.945	4.094	.591	50	5.50	
S2434	S1434	NPT-3/4"	L	.354 - .630	1.299	5.236	.591	25	12.00	

PG THREADS

SKINTOP® SL FLEX: Liquid Tight, Non-Metallic Spiral Strain Relief Cable Gland with PG Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2307	S1307	PG-7	R	.098 - .256	0.591	2.441	.315	100	1.50	
S2309	S1309	PG-9	R	.138 - .315	0.748	2.894	.315	100	2.50	
S2311	S1311	PG-11	R	.157 - .394	0.866	3.386	.315	100	3.25	
S2313	S1313	PG-13	L	.236 - .472	0.945	3.858	.354	50	4.00	
S2316	S1316	PG-16	L	.354 - .551	1.063	4.399	.394	25	5.50	
S2321	S1321	PG-21	L	.512 - .709	1.299	5.079	.433	25	10.00	

SKINTOP® SLR FLEX: PG Liquid Tight, Non-Metallic Spiral Strain Relief Cable Gland with Reducer Bushing

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2407	S1407	PG-7	R	.059 - .197	0.591	2.441	.315	100	1.50	
S2409	S1409	PG-9	R	.079 - .236	0.748	2.894	.315	100	2.50	
S2411	S1411	PG-11	R	.079 - .276	0.866	3.386	.315	100	3.25	
S2413	S1413	PG-13	L	.157 - .354	0.945	3.858	.354	50	4.00	
S2416	S1416	PG-16	L	.236 - .472	1.063	4.399	.394	25	5.50	
S2421	S1421	PG-21	L	.354 - .630	1.299	5.079	.433	25	10.00	

METRIC THREADS

SKINTOP® SL-M FLEX: Liquid Tight, Non-Metallic Spiral Strain Relief Cable Gland with Metric Threads

Black	Part Number	Gray	Thread Type & Size	UL Status	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size	Weight 100 pcs. lbs.
S2707	S1707	M-12X1.5	R	.138 - .276	0.591	2.520	.315	100	1.25	
S2709	S1709	M-16X1.5	R	.177 - .394	0.748	3.386	.315	100	2.50	
S2713	S1713	M-20X1.5	L	.276 - .512	0.984	3.976	.315	50	4.50	
S2716	S1716	M-25X1.5	L	.354 - .669	1.181	4.921	.354	25	8.00	
S2721	S1721	M-32X1.5	L	.433 - .827	1.417	5.866	.394	25	12.00	

NOTES: UL Status: R = Recognized; L = Listed



SKINTOP® CLICK FLEX

Construction: Liquid Tight, Non-Metallic Spiral Strain Relief with Quick “Click” Insertion System for Additional Bending Protection;

Body: Special Polyamide. **Seal:** Special Elastomer.

Features:

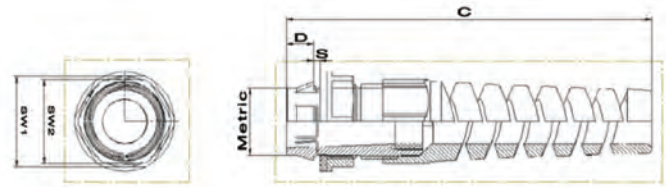
SKINTOP® CLICK FLEX is an innovative cable insertion system that provides fast, highly flexible assembly. Easy snap in place installation results in fixed, centered, strain relief with maximum protection in seconds.

Applications:

Up to 70% installation time savings due to innovative CLICK system. Ideal for hard to reach dual wall enclosures and limited access spaces. Reduced inventory as no locknuts are required. The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief. Superior integrated locking mechanism includes an internal ratchet for vibration proof protection.

Additional Information:

Liquid tight, spiral strain relief offers additional safety against over-stress and conductor breakage for applications such as hand held equipment, moving machinery and robotics.



* Includes 1 disassembly tool per pack

Technical Data:

Protection: IP 68, 5 Bar

Temperature:
-20°C to +100°C

Rated Voltage:
N/A

Color Code:
• Black (RAL 9005)
• UV Resistant
• Gray: (RAL 7001)

Approvals:



SKINTOP® CLICK FLEX: Liquid Tight, Non-Metallic Spiral Strain Relief with Metric Threads

Part Number Black	Part Number Gray	Thread Type & Size	UL Status	Clamping Range of F inches	SW1/ SW2 Wrenching Flats inches	C Overall Length inches	D Thread Length inches	M Hole inches	S Wall Thickness inches	Standard Pack Size
53112936	53112934	M-12	R	.138 - .276	0.591/ 0.709	2.913	0.315	0.484 (-.008)	.039 - .157	50
53112909	53112906	M-16	R	.197 - .354	0.748/ 0.866	3.701	0.315	0.642 (-.008)	.039 - .157	50
53112911	53112907	M-20	L	.276 - .512	0.984/ 1.063	4.252	0.315	0.799 (-.008)	.039 - .157	25
53112912	53112908	M-25	L	.354 - .669	1.181/ 1.339	5.000	0.315	0.996 (-.008)	.039 - .157	25
53112937	53112935	M-32	L	.433 - .827	1.417/ 1.575	6.102	0.315	1.272 (-.008)	.039 - .157	25

UL Status: R = Recognized; L = Listed

Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com

SKINTOP® GMP-GL

Construction: Hexagonal Locknuts for NPT, PG & Metric Connectors.

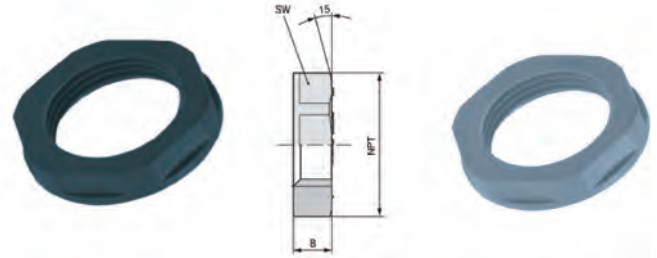
Body: Polyamide, glass fiber reinforced. Halogen-Free: Polyamide, UL 94 VO.

Features:

Designed for use with SKINTOP® cable glands with NPT, PG and Metric Threads.

Additional Information:

Halogen-free metric locknuts are also available.



Technical Data:

Temperature:
-20°C to +100°C

Rated Voltage:
N/A

Color Code:

- Black (RAL 9005)
UV Resistant
- Gray: (RAL 7001)
- Light Gray (RAL 7035)
Halogen-Free

Approvals:

SKINTOP® GMP-GL: NPT Nylon Locknuts

Part Number	Thread Type & Size	SW Wrenching Flats inches	B Nut Thickness inches	Standard Pack Size	Weight 100 pcs. lbs.
911370	NPT-3/8"	0.866	.198"	100	0.05
911371	NPT-1/2"	1.063	.236"	100	0.05
911372	NPT-3/4"	1.417	.276"	50	1.00
911373	NPT-1"	1.654	.276"	50	1.50

* NPT Locknuts- Black only

SKINTOP® GMP-GL: PG Nylon Locknuts

Part Number		Thread Type & Size	SW Wrenching Flats inches	B Nut Thickness	Standard Pack Size	Weight 100 pcs. lbs.
Black	Gray					
53019200	53019000	PG-7	0.748	.197	100	0.25
53019210	53019010	PG-9	0.866	.197	100	0.50
53019220	53019020	PG-11	0.945	.197	100	0.50
53019230	53019030	PG-13	1.063	.236	100	0.50
53019240	53019040	PG-16	1.181	.236	100	0.75
53019250	53019050	PG-21	1.417	.276	50	1.00
53019260	53019060	PG-29	1.811	.276	50	1.50
53019270	53019070	PG-36	2.362	.315	25	3.25
53019280	53019080	PG-42	2.559	.315	25	3.25
53019290	53019090	PG-48	2.756	.315	25	3.50

SKINTOP® GMP-GL: Metric Nylon Locknuts

Part Number			Thread Type & Size	SW Wrenching Flats inches	B Nut Thickness	Standard Pack Size	Weight 100 pcs. lbs.
Black	Gray	Light Gray Halogen Free					
53119100	53119000	53119200	M-12X1.5	0.669	.197	100	0.25
53119110	53119010	53119210	M-16X1.5	0.866	.197	100	0.50
53119120	53119020	53119220	M-20X1.5	1.063	.236	100	0.50
53119130	53119030	53119230	M-25X1.5	1.339	.236	100	0.75
53119140	53119040	53119240	M-32X1.5	1.614	.276	100	1.25
53119150	53119050	-	M-40X1.5	1.969	.276	25	1.75
53119160	53119060	-	M-50X1.5	2.362	.315	25	2.00
53119170	53119070	-	M-63X1.5	2.953	.315	25	3.00

Complete catalog available online at: www.lapptannehill.com



SKINTOP® CUBE

Construction: Frame: Glass fiber reinforced polyamide. **Frame seal:** CR.

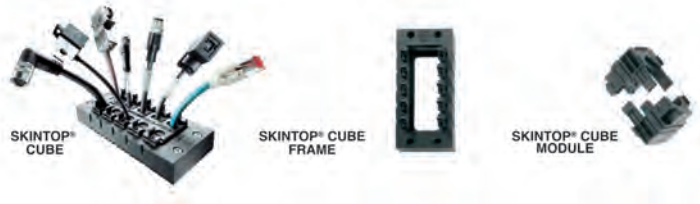
Clip Module: Special polyamide. **Clip Module Seal:** LSE 2.

Features:

The simple design of the SKINTOP® CUBE multi-cable bushing system is made up of a SKINTOP® CUBE FRAME and flexible SKINTOP® CUBE MODULE options (clip sealing modules). The CUBE modules can effortlessly be attached to the appropriate assembled cable. The cable is then clicked into the frame and perfectly fixed in place, protected against vibrations, strain relieved and sealed in accordance with IP 64.

Additional Information:

Product Advantages: Easy assembly and disassembly, installation and repair savings, excellent strain relief and sealing protection, reduced parts inventory, durable industrial cable protection.



Technical Data:

Protection: IP 64

Temperature:
-20°C to +80°C

Rated Voltage:
N/A

Color Code:
Black

Approvals:

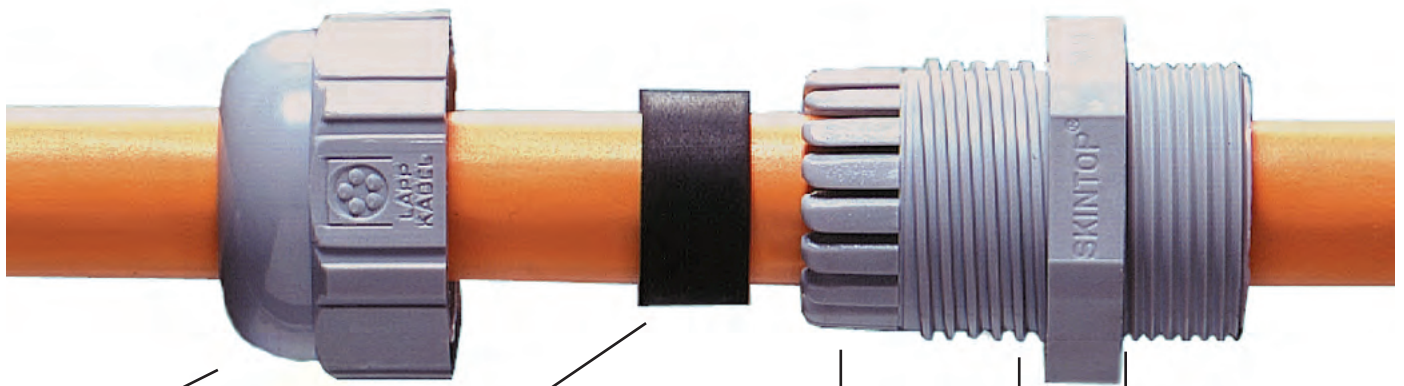


Part Number Black	Size	Clamping Range		Max # of Inserts	Standard Pack Size
		inches	mm		
SKINTOP® CUBE Frame					
52220000	16 Panel Cut-Out: (36 x 86 mm)			8	1
52220001	24 Panel Cut-Out: (36 x 112 mm)			10	1
SKINTOP® CUBE Clip Module					
52220004	20x20 Blank Module	.039 - .118	1 - 3		5
52220002	20x20 Small Module	.157 - .236	4 - 6		5
52220003	20x20 Large Module	.236 - .354	6 - 9		5
52220040	20x20 AS-I BUS	AS-I BUS Cable			5
52220005	40x40 Small Module	.354 - .472	9 - 12		5
52220006	40x40 Large Module	.472 - .629	12 - 16		5
52220007	40x40 Blank Module				5

Please contact your sales representative for detailed information at sales@lapptannehill.com

THREADING DIMENSIONS & TIGHTENING VALUES FOR SKINTOP® CABLE GLANDS

SKINTOP® Liquid Tight, Non-Metallic Strain Relief Cable Glands



Cap nut with ergonomically designed gripping grooves. The gripping surfaces are generously dimensioned for spanners. Integral locking feature for vibration-resistant assembly.

Neoprene sealing for a hermetic seal (IP68)*. Every SKINTOP® version is available with reducing seal insert for smaller cable diameters.

Lamellar design for optimum strain relief and protection of the cable. Widely variable clamping range, therefore only a few gland sizes are necessary.

Integral sealing ridges for a water tight junction with the housing.

Multiple trapezoidal thread for secure and instant assembly.

Shown here are the carefully matched components of the SKINTOP® screw-type cable glands. It is precisely these parts which guarantee optimum reliability.

Even more:

With SKINTOP® you can install the cable in an instant. Just feed it in, turn nut until tight - ready. Your cable is centered, hermetically sealed and completely strain relieved with a turn of the hand. If you do not wish to use your hands, you can work with a spanner wrench or SKINMATIC® RZ tool. Either way, with SKINTOP® you can achieve maximum reliability. SKINTOP® quality is continuously monitored to ensure a level of reliability that has resulted in many international approvals.

Resistance properties:

Rated Temperature: SKINTOP® NPT & PG
-20°C to +80°C
SKINTOP® Metric
static: -40°C to +100°C
dynamic: -20°C to +100°C

Chemical:

- +Alcohols
- +Aromatic Hydrocarbons
- +Ethers
- +Benzene
- o Chlorinated hydrocarbons
- +Esters
- +Grease, animal-vegetable
- +Fluorinated hydrocarbons
- +Keytones
- +Motor Fuels
- +Weak Alkali Solutions
- Strong Alkali Solutions
- +Petroleum Oils
- +Weak Acids
- Strong Acids
- +Trichlorethylene

+= resistant
o=with limited resistance
-= non-resistant

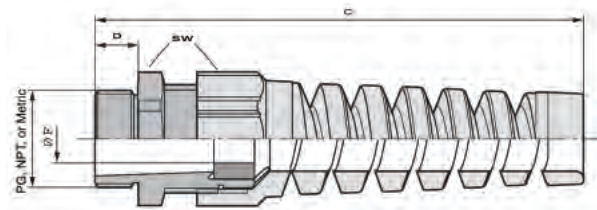
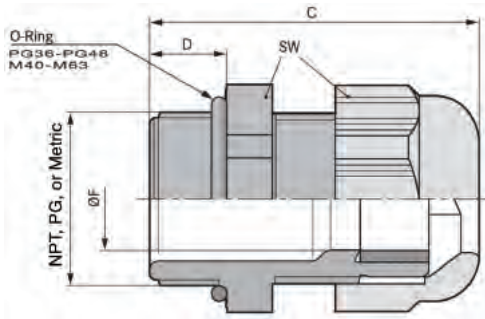
Testing: SKINTOP®
Incandescent wire test to IEC 695, Part 2-1
Test Temperature 750°C
Strain relief to DIN VDE 0619
Protection Class IP 68,
Test to DIN 40050 and 40052

International Approvals: UL #E146370
CSA #LR50370-10
VDE #57986 (Metric)
SEV #100989

* All IP ratings are dependent on proper installation by the user.

THREADING DIMENSIONS & TIGHTENING VALUES FOR SKINTOP® CABLE GLANDS

SKINTOP® Strain Relief Cable Glands - Polyamide Style



Patented Security:
Patent # P-2631996

International Approvals:
UL # E146370 Metric: VDE # 57986
CSA # LR50370-10 SEV # 100989

TECHNICAL DATA:

Protection: Up to 70 PSI

Material: Polyamide — flame retardant,
self-extinguishing nylon with CR bushing

Rated
Temperature: PG & NPT: -20°C to +80°C, short term to +100°C
Metric: -20°C to +100°C

Seal: IP 68 (International Protection —
highest grade), comparable to NEMA 6
classification
First digit (0–6): Dust Protection
Second digit (0–8): Water Protection

Resistant to: Salt water, weak acids, weak alkalis,
alcohol, ester, ketones, ether, benzene, gas,
mineral oil, animal and vegetable oils,
gasoline, oil, grease and common solvents.

SKINTOP® meets the most stringent demands of
safety and operational reliability. SKINTOP® can be used in pan-
els, switches, control boxes, submersible pumps,
appliances and many machine tool applications.

SKINTOP® is both a strain relief and a liquid tight seal — all in
one connector.

Optimum Seal:

Complete liquid tightness is achieved with a uniquely designed
molded sealing ring and flange nut combined with a neoprene
bushing and domed sealing cap.

Unique Design:

SKINTOP® outperforms traditional connectors because the design
consists of three parts which do not require dismantling before
use.

The internal ratchet mechanism allows the cap to be tightened
without twisting the cord as it compresses, pushing the collet
fingers together to form a liquid-tight seal with the neoprene
compression bushing.

Vibration Proof Protection:

An integrated locking mechanism that includes an internal ratchet
inside the sealing portion of the cord grip provides a self locking
and vibration proof element that prevents the cap from loosening
even when subjected to severe vibration.

Quick Installation:

The multi-trapezoidal thread requires just one twist to tighten the
dome cap – automatically adjusting to the size of the cable and
providing optimum strain relief and liquid tight seal.

Durability:

SKINTOP® incorporates a heavy duty design that provides greater
pullout strength and very reliable strain relief.

Easier Handling:

Larger ergonomic design and ridges in the dome cap provide
easy gripping and mounting by hand or wrench.

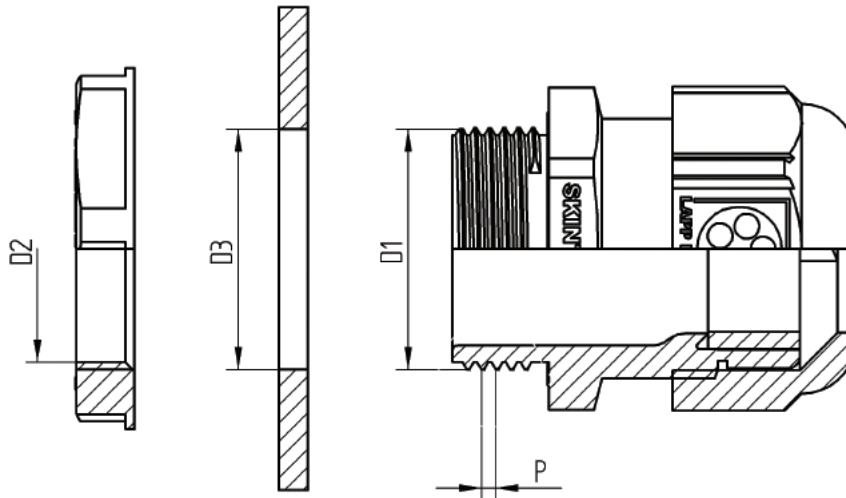
Larger Variable Clamping Range:

The uniquely designed collet, combined with the optional reducing
bushing accommodates a broad range of cords, and cable
diameters resulting in a reduction in the number of connectors
required in inventory.

Resistant to Impact at Low Temperatures:

The SKINTOP® can withstand impact at low temperatures of
-20°C.

THREADING DIMENSIONS & TIGHTENING VALUES FOR SKINTOP® CABLE GLANDS



All dimensions are in mm.

Metric Thread Technical Data for Assembly, EN 60423 (for cable glands EN 50 262)

METRIC THREAD	Core Diameter D1	Pitch P	Outside Diameter D2	Nominal thread Bore Diameter D3
M12 x 1.5	12	1.50	10.6	12.3 - 0.2
M16 x 1.5	16	1.50	14.6	16.3 - 0.2
M20 x 1.5	20	1.50	18.6	20.3 - 0.2
M25 x 1.5	25	1.50	23.6	25.3 - 0.2
M32 x 1.5	32	1.50	30.6	32.3 - 0.2
M40 x 1.5	40	1.50	38.6	40.4 - 0.3
M50 x 1.5	50	1.50	48.6	50.4 - 0.3
M63 x 1.5	63	1.50	61.6	63.4 - 0.3

PG Thread Technical Data for Assembly DIN 40430

PG-THREAD	Core Diameter D1	Pitch P	Outside Diameter D2	Nominal thread Bore Diameter D3
PG 7	12.5	1.270	11.3	13.0 ± 0.2
PG 9	15.2	1.410	13.9	15.7 ± 0.2
PG 11	18.6	1.410	17.3	19.0 ± 0.2
PG 13	20.4	1.410	19.1	21.0 ± 0.2
PG 16	22.5	1.410	21.2	23.0 ± 0.2
PG 21	28.3	1.558	26.8	28.8 ± 0.2
PG 29	37.0	1.558	35.5	37.5 ± 0.3
PG 36	47.0	1.558	45.5	47.5 ± 0.3
PG 42	54.0	1.558	52.5	54.5 ± 0.3
PG 48	59.3	1.558	57.8	59.8 ± 0.3

NPT Thread Technical Data for Assembly ASA B2.1-1945

NPT-THREAD	Core Diameter D1	Pitch P	Nominal thread Bore Diameter D3
NPT 1/4"	13.7	1.41	14.0 - 0.2
NPT 3/8"	17.1	1.41	17.4 - 0.2
NPT 1/2"	21.3	1.81	21.6 - 0.2
NPT 3/4"	26.7	1.81	27.0 - 0.2
NPT 1"	33.4	2.21	33.7 - 0.2
NPT 1 1/4"	42.2	2.21	42.5 - 0.2
NPT 1 1/2"	48.3	2.21	48.7 - 0.2
NPT 2"	60.3	2.21	60.7 - 0.2

THREADING DIMENSIONS & TIGHTENING VALUES FOR SKINTOP® CABLE GLANDS

Tightening Torque* Metric

Metric SKINTOP® recommended tightening torque for attainment of protection category IP 68-5 bar and strain relief category A acc. to EN 50262

METRIC THREAD	Tightening torque in Nm	
	Polymer	Metal
M12 x 1.5	1.5	8
M16 x 1.5	3.0	10
M20 x 1.5	6.0	12
M25 x 1.5	8.0	12
M32 x 1.5	10.0	18
M40 x 1.5	13.0	18
M50 x 1.5	15.0	20
M63 x 1.5	16.0	20
M63 Plus	--	30

Not for ATEX Glands

Tightening torque values to DIN/VDE 0619, Point 7. (PG & NPT Cable Glands)

PG THREAD	NPT THREAD	Torque for intermediary in Nm		Torque for cap nut	
		Polymer	Metal	Polymer	Metal
PG 7		2.5	6.25	1.7	4.2
PG 9	NPT 3/8"	3.75	6.25	2.5	4.2
PG 11		3.75	6.25	2.5	4.2
PG 13	NPT 1/2"	3.75	6.25	2.5	4.2
PG 16		5.0	7.50	3.3	5.0
PG 21	NPT 3/4"	7.5	10.0	5.0	6.7
PG 29	NPT 1"	7.5	10.0	5.0	6.7
PG 36		7.5	10.0	5.0	6.7
PG 42		7.5	10.0	5.0	6.7
PG 48		7.5	10.0	5.0	6.7

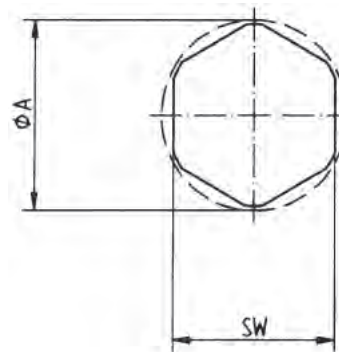
* Reference: Above values are tightening torques for the intermediary, as well as maximum tightening torques for the cap nuts. To prevent damage of the outer sheath, please note that the different cable materials require various torques.

Fitting dimensions and widths across flats

The diameter SW indicates the wrenching flats. The diameter A indicates the assembly space required for the relevant hexagon. This diameter corresponds to the width across the corner of the hexagon, plus an assembly tolerance.

Dimensions are in mm

SW	A	SW	A	SW	A
9	10.4	26	29.5	46	52.5
11	12.5	27	30.6	47	52.5
13	14.9	28	31.8	50	58.3
14	16.0	29	32.5	53	60.0
15	17.1	30	34.0	54	61.0
16	18.2	32	36.2	55	62.0
17	19.4	33	37.2	57	64.4
18	20.4	36	40.5	60	67.5
19	22.0	37	41.5	64	72.3
20	22.7	39	44.0	65	73.1
21	23.9	40	45.2	66	74.5
22	25.0	41	46.1	67	74.5
24	27.3	42	47.0		
25	28.3	45	51.2		



 **LAPP GROUP**

SKINTOP® MS-NPT/MSR-NPT

Construction: Liquid Tight, Metallic Strain Relief Cable Gland with NPT Threads.

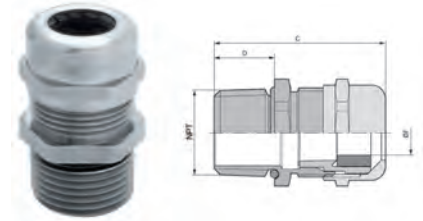
Body: Nickel-Plated Brass. **Insert:** Polyamide. **Bushing:** CR. **O-Ring:** Perbunan (NBR).

Features:

Superior quality, liquid tight, metallic cable gland intended for applications where ruggedness and durability are required. These cable glands are suitable for a wide range of applications from manufacturing machinery to measurement and control equipment, including automation and robotics.

Applications:

Suitable for use in areas with high demands on special mechanical and chemical stability. The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief. Extended temperature range due to the nickel-plated brass body. Generous high quality neoprene bushing and perbunan o-ring provide a liquid tight and dust proof, hermetic seal.



Technical Data:

Locknuts: Add NPT Metal Locknuts. Protection: IP 68, 5 Bar (Exceeds NEMA 6/6P Pressure rating)

Temperature:
-30°C to +100°C

Rated Voltage:
N/A

Approvals:



SKINTOP® MS-NPT: Liquid Tight, Metallic Strain Relief Cable Gland with NPT Threads

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112004	NPT-1/4"	0.138 - 0.276	0.630	1.417	.591	100
53112014	NPT-3/8"	0.177 - 0.394	0.787	1.563	.591	100
53112024	NPT-1/2"	0.276 - 0.512	0.945	1.673	.591	50
53112034	NPT-3/4"	0.354 - 0.669	1.142	1.752	.591	25
53112044	NPT-1"	0.433 - 0.827	1.417	1.929	.591	25
53112054	NPT-1-1/4"	0.748 - 1.102	1.772	2.264	.669	10
53112064	NPT-1-1/2"	1.063 - 1.378	2.126	2.421	.669	5
53112074	NPT-2"	1.339 - 1.772	2.638	2.500	.669	5

SKINTOP® MSR-NPT: NPT Liquid Tight, Metallic Strain Relief Cable Gland with Reducer Bushing

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112006	NPT-1/4"	0.039 - 0.197	0.630	1.417	.591	100
53112016	NPT-3/8"	0.079 - 0.276	0.787	1.563	.591	100
53112026	NPT-1/2"	0.197 - 0.394	0.945	1.673	.591	50
53112036	NPT-3/4"	0.236 - 0.512	1.142	1.752	.591	25
53112046	NPT-1"	0.276 - 0.591	1.417	1.929	.591	25
53112056	NPT-1-1/4"	0.591 - 0.906	1.772	2.264	.669	10
53112066	NPT-1-1/2"	0.866 - 1.142	2.126	2.421	.669	5
53112076	NPT-2"	1.102 - 1.535	2.638	2.500	.669	5

Not finding what you are looking for?
Please contact us at sales@lapptannehill.com, or visit our website at: www.lapptannehill.com



SKINTOP® MS/MSR

Construction: Liquid Tight, Metallic Strain Relief Cable Gland with PG Threads.

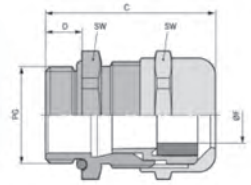
Body: Nickel-Plated Brass. **Insert:** Polyamide. **Bushing:** CR. **O-Ring:** Perbunan (NBR).

Features:

Superior quality, liquid tight metallic cable gland intended for applications where ruggedness and durability are required. These cable glands are suitable for a wide range of applications from manufacturing machinery to measurement and control equipment, including automation and robotics.

Applications:

Suitable for use in areas with high demands on special mechanical and chemical stability. The heavy duty SKINTOP® design provides great pullout strength and very reliable strain relief. Extended temperature range due to the nickel-plated brass body. Generous high quality neoprene bushing and perbunan o-ring provide a liquid tight and dust proof, hermetic seal.



Technical Data:

Locknuts: Add SM Locknuts. Protection: IP 68, 5 Bar (Exceeds NEMA 6/6P Pressure rating) when used with o-ring.

⊕ **Temperature:**
-30°C to +100°C

⚡ **Rated Voltage:**
N/A

✓ **Approvals:**
CE RoHS

SKINTOP® MS: Liquid Tight, Metallic Strain Relief Cable Gland with PG Threads

Part Number	Thread Type & Size	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
52015700	PG-7	0.079 - 0.256	0.551	0.984	.197	100
52015710	PG-9	0.157 - 0.315	0.669	1.142	.236	100
52015720	PG-11	0.157 - 0.394	0.787	1.260	.236	50
52015730	PG-13	0.197 - 0.472	0.866	1.339	.256	50
52015740	PG-16	0.315 - 0.551	0.945	1.378	.256	50
52015750	PG-21	0.433 - 0.709	1.181	1.575	.276	25
52015760	PG-29	0.630 - 0.984	1.575	1.890	.315	25
52015765	PG-36	0.748 - 1.260	1.969	2.441	.591	10
52015766	PG-42	1.102 - 1.496	2.244	2.441	.591	5
52015767	PG-48	1.339 - 1.732	2.520	2.441	.591	5

SKINTOP® MSR: Liquid Tight, Metallic Strain Relief Cable Gland with Reducer Bushing & PG Threads

Part Number	Thread Type & Size	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
52015770	PG-7	0.079 - 0.197	.551	0.984	.197	100
52015780	PG-9	0.079 - 0.236	.669	1.142	.236	100
52015790	PG-11	0.118 - 0.276	.787	1.260	.236	50
52015800	PG-13	0.157 - 0.354	.866	1.339	.256	50
52015810	PG-16	0.236 - 0.512	.945	1.378	.256	50
52015820	PG-21	0.315 - 0.630	1.181	1.575	.276	25
52015830	PG-29	0.413 - 0.787	1.575	1.890	.315	25
52015831	PG-36	0.748 - 1.024	1.969	2.441	.591	10
52015832	PG-42	0.945 - 1.220	2.244	2.441	.591	5
52015833	PG-48	1.102 - 1.378	2.520	2.441	.591	5

Complete catalog available online at: www.lapptannehill.com



SKINTOP® MS-M/MSR-M

Construction: Liquid Tight, Metallic Strain Relief Cable Gland in Metric Sizes to Meet the European Union Standards.

Body: Nickel-Plated Brass. **Insert:** Polyamide. **Bushing:** CR. **O-Ring:** Perbunan (NBR).

Features:

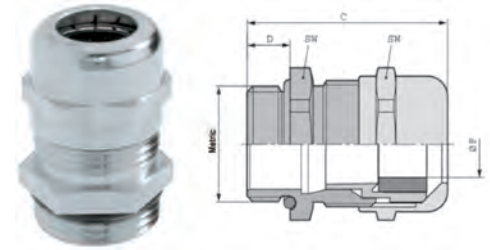
SKINTOP® MS-M/MSR-M is a superior quality, liquid tight, metallic cable gland intended for applications where ruggedness and durability are required. These cable glands are suitable for a wide range of applications from manufacturing machinery to measurement and control equipment, including automation and robotics.

Applications:

Suitable for use in areas with high demands on special mechanical and chemical stability.

Additional Information:

SKINTOP® sizes M75X1.5 to M11X2.0 feature the innovative, double lamella gasket for easier assembling of cables with larger diameters. Now with IP 69K protection for the harshest cleaning procedures of industrial machinery with high pressure cleaners and hot water.



Technical Data:

Locknuts: Add SM-M Locknuts. Protection: 70 PSI, Seal: IP 68, 10 Bar (Exceeds NEMA 6/6P Pressure rating), IP 69K

Temperature:
-30°C to +100°C

Rated Voltage:
N/A

Approvals:

SKINTOP® MS-M: Liquid Tight, Metallic Strain Relief Cable Gland with Metric Threads

Part Number	Thread Type & Size	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112000	M-12X1.5	0.118 - 0.276	0.630	1.043	0.256	100
53112010	M-16X1.5	0.177 - 0.394	0.787	1.260	0.276	100
53112020	M-20X1.5	0.276 - 0.512	0.945	1.398	0.315	50
53112030	M-25X1.5	0.354 - 0.669	1.142	1.476	0.315	25
53112040	M-32X1.5	0.433 - 0.827	1.417	1.661	0.354	25
53112050	M-40X1.5	0.748 - 1.102	1.772	1.949	0.354	10
53112060	M-50X1.5	1.063 - 1.378	2.126	2.047	0.394	5
53112070	M-63X1.5	1.339 - 1.772	2.638	2.413	0.591	5
53112080	M-63X1.5, plus	1.732 - 2.165	2.953	2.579	0.591	5
53112510	M-75X1.5	2.283 - 2.677	3.740	4.134	0.591	1
53112512	M-90X2.0	2.598 - 3.071	4.528	5.354	0.787	1
53112514	M-110X2.0	3.386 - 3.858	5.315	6.063	0.984	1

SKINTOP® MSR-M: Liquid Tight, Metallic Strain Relief Cable Gland with Reducer Bushing & Metric Threads

Part Number	Thread Type & Size	Clamping Range of inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112100	M-12X1.5	0.039 - 0.197	0.630	1.043	0.256	100
53112110	M-16X1.5	0.079 - 0.276	0.787	1.260	0.276	100
53112120	M-20X1.5	0.197 - 0.394	0.945	1.398	0.315	50
53112130	M-25X1.5	0.236 - 0.512	1.142	1.476	0.315	25
53112140	M-32X1.5	0.276 - 0.591	1.417	1.661	0.354	25
53112150	M-40X1.5	0.591 - 0.906	1.772	1.949	0.354	10
53112160	M-50X1.5	0.866 - 1.142	2.126	2.047	0.394	5
53112170	M-63X1.5	1.102 - 1.535	2.638	2.413	0.591	5
53112511	M-75X1.5	2.087 - 2.480	3.740	4.134	0.591	1
53112515	M-110X2.0	2.992 - 3.465	5.315	6.063	0.984	1

Please note:

IP 69K & DNV pending on size M75

*UL, CSA, DNV, VDE, and IP 69K pending on sizes M90 and M110

Please contact your sales representative for detailed information at sales@lapptannehill.com



SKINTOP® MS-SC/MS-SCL

Construction: Liquid Tight, Metallic Strain Relief for EMC Shielding Cable Gland with NPT, PG & Metric Threads.

Body: Nickel-Plated Brass. **Insert:** Polyamide. **Bushing:** CR. **O-Ring:** Perbunan (NBR).

Features:

Uniquely designed to address EMC considerations with its simplified grounding feature. In a few easy steps, the cable is grounded, strain relieved and sealed from moisture and dust in accordance with IP 68. The cable gland's contact springs establish a continuous electrical path from the shield of the cable to equipment ground, creating a secure shield connection.

Applications:

Optimal EMC protection. Suitable for braid shielded cable. Minimal assembly steps. The contact springs' unique design can accept cable diameters with wide dimensional tolerances. Available in both standard and long length threads for heavy-wall applications.

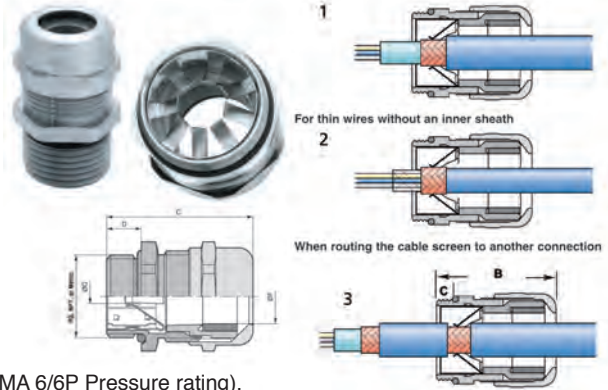
Technical Data:

Locknuts: Add SM-PE Locknuts. Seal: IP 68, 5 Bar - when used with o-ring (Exceeds NEMA 6/6P Pressure rating).

Temperature: -30°C to +100°C

Rated Voltage: N/A

Approvals: PG & NPT



NPT THREADS SKINTOP® MS-SC: Liquid Tight, Metallic Strain Relief Cable Gland with NPT Threads

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112910	NPT-3/8"	0.177 - 0.354	0.787	1.563	.591	100
53112920	NPT-1/2"	0.276 - 0.492	0.945	1.673	.591	50
53112930	NPT-3/4"	0.354 - 0.650	1.142	1.752	.591	25
53112940	NPT-1"	0.433 - 0.827	1.417	1.929	.669	25
53112950	NPT-1-1/4"	0.748 - 1.102	1.772	2.264	.669	10
53112960	NPT-1-1/2"	1.063 - 1.375	2.126	2.126	.669	5

PG THREADS SKINTOP® MS-SC: Liquid Tight, Metallic Strain Relief Cable Gland with PG Threads

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Min ø above braiding	Standard Pack Size
53112210	PG-9	.118 - 0.315	0.669	1.142	.236	.157	50
53112220	PG-11	.157 - 0.394	0.787	1.260	.236	.157	50
53112230	PG-13	.197 - 0.472	0.866	1.339	.256	.157	25
53112240	PG-16	.315 - 0.551	0.945	1.378	.256	.236	25
53112250	PG-21	.433 - 0.689	1.181	1.575	.276	.315	25
53112260	PG-29	.630 - 0.984	1.575	1.890	.315	.512	10
53112270	PG-36	.748 - 1.260	1.969	2.441	.591	.630	5

SKINTOP® MS-SCL: Liquid Tight, Metallic Strain Relief Cable Gland with Extended PG Threads

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Min ø above braiding	Standard Pack Size
53112310	PG-9	.118 - .315	0.669	1.378	.472	.157	50
53112320	PG-11	.157 - .394	0.787	1.496	.472	.157	50
53112330	PG-13	.197 - .472	0.866	1.555	.472	.157	25
53112340	PG-16	.315 - .551	0.945	1.594	.472	.236	25
53112350	PG-21	.433 - .689	1.181	1.772	.472	.315	25
53112360	PG-29	.630 - .984	1.575	2.047	.591	.512	10

METRIC THREADS SKINTOP® MS-SC-M: Liquid-Tight, Metallic Strain Relief Cable Gland with Metric Threads

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112610	M-12X1.5	0.138 - 0.276	0.630	1.043	.256	50
53112620	M-16X1.5	0.177 - 0.354	0.787	1.299	.276	50
53112630	M-20X1.5	0.276 - 0.492	0.945	1.457	.315	25
53112640	M-25X1.5	0.354 - 0.650	1.142	1.516	.315	25
53112650	M-32X1.5	0.433 - 0.827	1.417	1.791	.354	25
53112660	M-40X1.5	0.748 - 1.102	1.772	1.890	.354	10
53112670	M-50X1.5	1.063 - 1.378	2.126	2.185	.394	5

SKINTOP® MS-SC-M-XL: Liquid-Tight, Metallic Strain Relief Cable Gland with Extended Metric Threads

Part Number	Thread Type & Size	Clamping Range øF inches	SW Wrenching Flats inches	C Overall Length inches	D Thread Length inches	Standard Pack Size
53112625	M-16X1.5	0.177 - 0.354	0.787	1.496	.472	50
53112635	M-20X1.5	0.276 - 0.492	0.945	1.614	.472	25
53112645	M-25X1.5	0.354 - 0.650	1.142	1.673	.472	25
53112655	M-32X1.5	0.433 - 0.827	1.417	2.028	.591	25
53112665	M-40X1.5	0.748 - 1.102	1.772	2.126	.591	10
53112675	M-50X1.5	1.063 - 1.378	2.126	2.382	.591	5



SKINTOP® MS-M BRUSH

Construction: Liquid Tight, Metallic Strain Relief for EMC Shielding Applications, Easy to Assemble Cable Gland with Metric Threads.

Body: Nickel-Plated Brass. **Insert:** Polyamide. **Bushing:** Special Elastomer. **O-Ring:** Special Elastomer.

Features:

The SKINTOP® MS-M BRUSH provides centered, fixed strain relief with a liquid tight and dust proof seal (IP68), all in one step. Simply insert the cable, push the screen braid under the innovative EMC brush, tighten and the connection is made.

Applications:

Faster, easier, reliable screen contact. Maximum assembly and adjustment possibilities. 360°C contact area allows for optimal low-resistance current return ground path.

Additional Information:

SKINTOP® sizes M75X1.5 to M110X2.0 feature the innovative, double lamella gasket for easier assembling of cables with larger diameters.



Technical Data:

Seal: IP 68, and IP 69K sizes M25–M63. IP 68 for M68 plus. (Exceeds NEMA 6/6P Pressure rating).

Temperature:
-30°C to +100°C

Rated Voltage:
N/A

Approvals:



SKINTOP® MS-M BRUSH: Liquid Tight, Metallic Strain Relief for EMC Shielding Applications

Part Number	Thread Type & Size	Clamping Range inches	SW Wrenching Flats inches	Minimum ø above braiding inches	Thread Length inches	Standard Pack Size
53112676	M-25X1.5	0.354 - 0.669	1.142	0.236	0.315	10
53112677	M-32X1.5	0.433 - 0.827	1.417	0.315	0.354	1
53112678	M-40X1.5	0.748 - 1.102	1.772	0.394	0.354	1
53112679	M-50X1.5	1.063 - 1.378	2.126	0.551	0.394	1
53112680	M-63X1.5	1.339 - 1.772	2.638	0.787	0.591	1
53112681	M-63X1.5, plus	1.732 - 2.165	2.953	0.984	0.591	1
53112501	M-75X1.5	2.087 - 2.480	3.740	1.378	0.591	1
53112500	M-75X1.5, plus	2.283 - 2.677	3.740	1.378	0.591	1
53112503	M-90X2.0	2.598 - 3.071	4.528	1.772	0.787	1
53112505	M-110X2.0	2.992 - 3.465	5.315	2.165	0.984	1
53112504	M-110X2.0, plus	3.386 - 3.858	5.315	2.165	0.984	1

Please note:

*UL CSA, DNV, and VDE approvals pending on sizes M90X1.5 to M110X2.0

Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com

SKINDICHT® SM LOCK NUTS

Construction: Metal Lock Nuts for NPT, PG and Metric Threaded Products.

Features:

SKINDICHT® SM Lock Nuts are required wherever NPT, PG or Metric cable glands must be fastened to a housing, and tapped holes cannot be provided.

Technical Data:

Materials: NPT: Stamped Steel. PG & Metric: Nickel-Plated Brass.

Temperature:
N/A

Rated Voltage:
N/A

Approvals:



NPT Version



PG & Metric Versions



NPT Zinc-Plated Steel Locknuts

Part Number	Thread Type & Size	Wrenching Flats inches	Nut Thickness inches	Standard Pack Size
811092*	NPT- 3/8"	0.945	.138	100
811093	NPT- 1/2"	1.102	.157	100
811094	NPT- 3/4"	1.378	.157	50
811095	NPT- 1"	1.693	.157	50

* Product features a hex design.

SKINDICHT® SM: PG Brass Lock Nuts

Part Number	Thread Type & Size	Wrenching Flats		Nut Thickness		Standard Pack Size
		inches	mm	inches	mm	
52003490	PG-7	0.591	15	.110	2.8	100
52003500	PG-9	0.709	18	.110	2.8	100
52003510	PG-11	0.827	21	.118	3.0	100
52003520	PG-13	0.906	23	.118	3.0	100
52003530	PG-16	1.024	26	.118	3.0	100
52003540	PG-21	1.260	32	.138	3.5	50
52003550	PG-29	1.614	41	.157	4.0	50
52003560	PG-36	2.008	51	.197	5.0	25
52003570	PG-42	2.362	60	.197	5.0	25
52003580	PG-48	2.520	64	.217	5.5	25

SKINDICHT® SM-M: Metric Brass Lock Nuts

Part Number	Thread Type & Size	Wrenching Flats		Nut Thickness		Standard Pack Size
		inches	mm	inches	mm	
52103000	M-12X1.5	0.591	15	0.118	3.0	100
52103010	M-16X1.5	0.748	19	0.118	3.0	100
52103020	M-20X1.5	0.945	24	0.138	3.5	100
52103030	M-25X1.5	1.181	30	0.157	4.0	100
52103040	M-32X1.5	1.417	36	0.157	4.0	100
52103050	M-40X1.5	1.811	46	0.197	5.0	50
52103060	M-50X1.5	2.362	60	0.197	5.0	50
52103070	M-63X1.5	2.756	70	0.197	5.0	25
52103071	M-75X1.5	2.953	75	0.315	8.0	5
52103072	M-90X2.0	4.016	102	0.394	10.0	1
52103073	M-110X2.0	4.882	124	0.472	12.0	1

Complete catalog available online at: www.lapptannehill.com



SKINDICHT® SM-PE LOCK NUTS

Construction: Nickel-Plated Brass Grounding Lock Nuts for PG and Metric Threaded Products.

Features:


SKINDICHT® SM-PE Lock Nuts are required wherever varnished, anodized and powder coated housings are used. When the lock nut is tightened, the raised edges cut through the insulating layer, guaranteeing optimum contact.


Applications:

Ideal for use with MS-SC cable grounding cable glands.



Technical Data:

 **Temperature:**
N/A

 **Rated Voltage:**
N/A

 **Approvals:**
 

SKINDICHT® SM-PE: PG Brass Lock Nuts

Part Number	Thread Type & Size	Wrenching Flats		Nut Thickness		Standard Pack Size
		inches	mm	inches	mm	
52103200	PG-7	0.590	15	.185	4.7	100
52103210	PG-9	0.709	18	.185	4.7	100
52103220	PG-11	0.827	21	.185	4.7	100
52103230	PG-13	0.906	23	.185	4.7	100
52103240	PG-16	1.024	26	.185	4.7	100
52103250	PG-21	1.260	32	.205	5.2	50
52103260	PG-29	1.614	41	.224	5.7	50
52103270	PG-36	2.008	51	.264	6.7	50

SKINDICHT® SM-PE-M: Metric Brass Lock Nuts

Part Number	Thread Type & Size	Wrenching Flats		Nut Thickness		Standard Pack Size
		inches	mm	inches	mm	
52103300	M-12X1.5	0.591	15	0.138	3.5	100
52103310	M-16X1.5	0.748	19	0.138	3.5	100
52103320	M-20X1.5	0.945	24	0.146	3.7	100
52103330	M-25X1.5	1.181	30	0.165	4.2	50
52103340	M-32X1.5	1.417	36	0.185	4.7	50
52103350	M-40X1.5	1.811	46	0.217	5.5	25
52103360	M-50X1.5	2.362	60	0.217	5.5	10
52103370	M-63X1.5	2.756	70	0.276	7.0	10
52103371	M-75X1.5	2.953	75	0.315	8.0	5
52103372	M-90X2.0	4.016	102	0.394	10.0	1
52103373	M-110X2.0	4.882	124	0.472	12.0	1

Check out our complete inventory of products at www.lapptannehill.com

SKINDICHT® MR-Reducers

Construction: Nickel-Plated Brass.

Features:

Reducers and Enlargers in PG & Metric Combinations.

Technical Data:

⊕ **Temperature:**
-60°C to +200°C

⚡ **Rated Voltage:**
N/A

✓ **Approvals:**



SKINDICHT® MR Reducers-PG

Part Number	Thread Type & Size Male to Female	Standard Pack Size	Part Number	Thread Type & Size Male to Female	Standard Pack Size
52003750	PG-9 to 7	100	52003870	PG-21 to 16	50
52003760	PG-11 to 7	100	52003880	PG-29 to 13	50
52003770	PG-11 to 9	100	52003890	PG-29 to 16	50
52003780	PG-13 to 7	100	52003900	PG-29 to 21	50
52003790	PG-13 to 9	100	52003910	PG-36 to 16	25
52003800	PG-13 to 11	100	52003920	PG-36 to 21	25
52003810	PG-16 to 7	100	52003930	PG-36 to 29	25
52003820	PG-16 to 9	100	52003940	PG-42 to 29	10
52003830	PG-16 to 11	100	52003950	PG-42 to 36	10
52003840	PG-16 to 13	100	52003970	PG-48 to 36	10
52003850	PG-21 to 11	50	52003980	PG-48 to 42	10
52003860	PG-21 to 13	50			

SKINDICHT® MR-M Reducers-Metric

Part Number	Thread Type & Size Male to Female	Standard Pack Size	Part Number	Thread Type & Size Male to Female	Standard Pack Size
52104310	M-16 to 12	100	52104317	M-40 to 25	50
52104311	M-20 to 12	100	52104318	M-40 to 32	25
52104312	M-20 to 16	100	52104319	M-50 to 32	25
52104313	M-25 to 16	50	52104320	M-50 to 40	10
52104314	M-25 to 20	50	52104321	M-63 to 40	10
52104315	M-32 to 20	50	52104322	M-63 to 50	10
52104316	M-32 to 25	50			





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SKINDICHT® KU Reducers

Construction: Polyamide glass fiber reinforced.

Technical Data:

 **Temperature:** -40°C to +100°C
  **Rated Voltage:** N/A
  **Color Code:** RAL 7035: Light Gray
  **Approvals:**  



SKINDICHT® KU Reducers-PG

Part Number	Thread Type & Size Male to Female	Standard Pack Size	Part Number	Thread Type & Size Male to Female	Standard Pack Size
51730010	PG-11 to 7	50	52025150	PG-36 to 21	25
52025100	PG-13 to 7	50	52025050	PG-36 to 29	25
52025110	PG-16 to 9	50	52025160	PG-42 to 21	25
52025120	PG-21 to 11	25	52025170	PG-42 to 29	25
51730040	PG-21 to 13	25	52025060	PG-42 to 36	25
52025130	PG-29 to 13	25	52025180	PG-48 to 29	25
51730050	PG-29 to 16	25	52025190	PG-48 to 36	25
52025140	PG-36 to 16	25	52025070	PG-48 to 42	25






SKINDICHT® KUS Reducers-PG

Part Number	Thread Type & Size Male to Female	Standard Pack Size
52025040	PG-9 to 7	50
51730060	PG-11 to 9	50
51730070	PG-13 to 11	50
51730080	PG-16 to 13	50

SKINDICHT® ME-Enlargers

Construction: Nickel-Plated Brass. **O-Ring:** NBR.

Technical Data:

 **Temperature:** -60°C to +200°C
  **Rated Voltage:** N/A
  **Approvals:**  



ME-Enlargers-PG

Part Number	Thread Type & Size Male to Female	Standard Pack Size	Part Number	Thread Type & Size Male to Female	Standard Pack Size
52003990	PG-7 to 9	100	52004060	PG-13 to 21	50
52004000	PG-9 to 11	100	52004070	PG-16 to 21	50
52004010	PG-9 to 13	100	52004080	PG-16 to 29	50
52004020	PG-11 to 13	100	52004090	PG-21 to 29	50
52004030	PG-11 to 16	100	52004100	PG-29 to 36	50
52004040	PG-11 to 21	100	52004110	PG-36 to 42	10
52004050	PG-13 to 16	100	52004120	PG-42 to 48	10

ME-Enlargers-Metric

Part Number	Thread Type & Size Male to Female	Standard Pack Size	Part Number	Thread Type & Size Male to Female	Standard Pack Size
52104450	M-12 to 16	100	52104458	M-32 to 40	50
52104452	M-16 to 20	100	52104460	M-40 to 50	25
52104454	M-20 to 25	100	52104462	M-50 to 63	25
52104456	M-25 to 32	50			



SKINDICHT® Perbunan® O-Rings

Construction: Perbunan (NBR) Ozone & UV Resistant.

Features:

Perbunan® O-Rings provide safe sealing against oil, dust and water when placed on the fastening threads of the connector.

Part Number	Thread Type & Size	Inner Diameter		Thickness		Standard Pack Size
		inches	mm	inches	mm	
53001010	PG-7	0.394	10	.059	1.5	100
53102011	PG-9	0.512	13	.059	1.5	100
53001020	PG-11	0.630	16	.059	1.5	100
52005740	PG-13	0.709	18	.059	1.5	100
53001030	PG-16	0.787	20	.059	1.5	100
52005750	PG-21	1.024	26	.079	2.0	100
53001040	PG-29	1.339	34	.079	2.0	50
52005760	PG-36	1.732	44	.079	2.0	50
53001050	PG-42	1.969	50	.079	2.0	50
52005770	PG-48	2.165	55	.079	2.0	50

Perbunan® is a registered trademark of BAYER AG



Technical Data:

Perbunan (NBR) Ozone & UV Resistant

Temperature:
-20°C to +100°C

Rated Voltage:
N/A

Approvals:



SKINDICHT® JT PTFE O-Rings

Construction: PTFE.

Features:

JT PTFE O-rings provide safe sealing against oil, water, alkalis, acids, solvents and virtually all chemicals when placed on the fastening threads of a connector. They are suitable for food and dairy applications and have a wide temperature range.

Part Number	Thread Type & Size	Inner Diameter		Outer Diameter		Thickness		Standard Pack Size
		inches	mm	inches	mm	inches	mm	
53801035	PG-7	0.492	0.650	.079	2	100		
53801045	PG-9	0.598	0.748	.079	2	100		
53801055	PG-11	0.732	0.886	.079	2	100		
53801065	PG-13	0.803	0.984	.079	2	100		
53801075	PG-16	0.886	1.063	.079	2	100		
53801085	PG-21	1.114	1.319	.118	3	50		
53801095	PG-29	1.457	1.713	.118	3	50		
53801105	PG-36	1.850	2.165	.118	3	25		
53801115	PG-42	2.126	2.480	.118	3	25		
53801125	PG-48	2.335	2.717	.118	3	25		



Technical Data:

Temperature:
-120°C to +250°C
short term up to +300°C

Rated Voltage:
N/A

Approvals:



SKINDICHT® VITON® O-Rings

Construction: FKM Fluoroelastomer (Green).

Features:

VITON® O-rings provide safe sealing against oil, water, alkalis, acids, solvents and virtually all chemicals when placed on the fastening threads of a connector. They are also suitable for food and dairy applications and have a wide temperature range.

Part Number	Thread Type & Size	Inner Diameter		Thickness		Standard Pack Size
		inches	mm	inches	mm	
52023607	PG-7	.394	10	.059	1.5	100
52122011	PG-9	.512	13	.059	1.5	100
52023602	PG-11	.630	16	.059	1.5	100
52023601	PG-13	.709	18	.059	1.5	100
52023603	PG-16	.787	20	.059	1.5	50
52023604	PG-21	1.024	26	.079	2.0	50
52023606	PG-29	1.339	34	.079	2.0	50
52023608	PG-36	1.732	44	.079	2.0	25
52023609	PG-42	1.969	50	.079	2.0	25
52023611	PG-48	2.165	55	.079	2.0	25

Viton® is a registered trademark of DuPont de Nemour



Technical Data:

Temperature:
-20°C to +200°C

Rated Voltage:
N/A

Approvals:



SKINTOP® DIX BUSHINGS

Construction: Multiple Cable Sealing Bushing for PG & NPT SKINTOP® Cable Glands. **Body:** Silicone.

Features:

SKINTOP® DIX is a multiple hole sealing bushing designed to allow several cables to be inserted through one cable gland. This results in a reduction of space and cost, as a separate cable gland is not required for each cable.

Applications:


SKINTOP® Cable Glands

Technical Data:

 **Temperature:**
-30°C to +100°C

 **Rated Voltage:**
N/A

 **Color Code:**
Natural

 **Approvals:**
IP 54
IP 68 when all holes are optimally filled



Part Number	Thread Type & Size	Thread Type & Size	# of Holes	Size of Holes		Standard Pack Size
				inches	mm	
53607225	PG-7	-	2	.098	2.5	100
53607417	PG-7	-	4	.067	1.7	100
53609230	PG-9	NPT-3/8"	2	.118	3.0	100
53611225	PG-11	-	2	.098	2.5	100
53611240	PG-11	-	2	.157	4.0	100
53611330	PG-11	-	3	.118	3.0	100
53611430	PG-11	-	4	.118	3.0	100
53613250	PG-13	NPT-1/2"	2	.197	5.0	100
53613340	PG-13	NPT-1/2"	3	.157	4.0	100
53613440	PG-13	NPT-1/2"	4	.157	4.0	100
53616140	PG-16	-	1	.157	4.0	50
53616225	PG-16	-	2	.098	2.5	50
53616240	PG-16	-	2	.157	4.0	50
53616260	PG-16	-	2	.236	6.0	50
53616340	PG-16	-	3	.157	4.0	50
53616350	PG-16	-	3	.197	5.0	50
53616356	PG-16	-	3	.220	5.6	50
53616360	PG-16	-	3	.236	6.0	50
53616440	PG-16	-	4	.157	4.0	50
53616450	PG-16	-	4	.197	5.0	50
53616540	PG-16	-	5	.157	4.0	50
53621270	PG-21	NPT-3/4"	2	.276	7.0	50
53621280	PG-21	NPT-3/4"	2	.315	8.0	50
53621370	PG-21	NPT-3/4"	3	.276	7.0	50
53621380	PG-21	NPT-3/4"	3	.315	8.0	50
53621460	PG-21	NPT-3/4"	4	.236	6.0	50
53621550	PG-21	NPT-3/4"	5	.197	5.0	50
53621640	PG-21	NPT-3/4"	6	.157	4.0	50
53629290	PG-29	NPT-1"	2	.354	9.0	50
53629390	PG-29	NPT-1"	3	.354	9.0	50
53629470	PG-29	NPT-1"	4	.276	7.0	50
53629480	PG-29	NPT-1"	4	.315	8.0	50
53629490	PG-29	NPT-1"	4	.354	9.0	50
53629556	PG-29	NPT-1"	5	.220	5.6	50
53629570	PG-29	NPT-1"	5	.276	7.0	50
53629675	PG-29	NPT-1"	6	.295	7.5	50

SKINTOP® DIX-DV INSERTS

Construction: Inserts for SKINTOP® DIX NPT, PG & Metric. **Body:** Polyamide.

Features:

SKINTOP® DIX-DV inserts are designed to seal unused positions in SKINTOP® DIX bushings, which need to be closed to ensure the proper class protection.

Part Number	Diameter		Length		Standard Pack Size
	inches	mm	inches	mm	
53100003	.118	3.0	.354	9	100
53100004	.157	4.0	.354	9	100
53100005	.197	5.0	.433	11	100
53100006	.236	6.0	.551	14	100
53100007	.276	7.0	.551	14	100
53100008	.315	8.0	.551	14	100
53100009	.354	9.0	.551	14	100



SILVYN® RILL PA 6

Construction: Non-Metallic Flexible Quick Connect Conduit Systems.

Body: Polyamide, Halogen & Silicone Free, UL4 VO.

Features:

A flexible, non-metallic corrugated conduit suitable for use in various industrial applications. It is resistant to liquids, oils and gases, and highly resistant to acids and solvents.

Applications:

Halogen-free, flame retardant and self extinguishing. Durable, long lasting conduit that is rugged yet flexible. For use in controls, moving machine parts, motor and internal connections, as well as industrial, medical and electrical applications.



Technical Data:

IP Protection: IP 68

Temperature:
-40°C to +115°C

Rated Voltage:
N/A

Color Code:
Black or Gray

Approvals:



Part Number		Outer Diameter		Inner Diameter		Bend Radius		Conduit Coil Put-Ups Feet	Thread Type & Size for Fittings		
Black	Gray	inches	mm	inches	mm	inches	mm		NPT	PG	Metric
61746935	61746939	.394	10.0	.256	6.5	.512	13	164	NPT-1/4"	PG-7	M-10X1.0
61746945	61746940	.512	13.0	.394	10.0	.787	20	164	NPT-1/4"	PG-9	M-12X1.5
61746955	61746950	.622	15.8	.472	12.0	1.378	35	164	NPT-3/8"	PG-11	M-16X1.5
61747015	61747010	.728	18.5	.563	14.3	1.575	40	164	--	PG-13	--
61746965	61746960	.835	21.2	.650	16.5	1.772	45	164	NPT-1/2"	PG-16	M-20X1.5
61746975	61746970	1.122	28.5	.906	23.0	2.165	55	164	NPT-3/4"	PG-21	M-25 X1.5
61746985	61746980	1.358	34.5	1.142	29.0	2.559	65	82	NPT-1"	PG-29	M-32X1.5
61746995	61746990	1.673	42.5	1.417	36.0	3.543	90	82	NPT-1-1/4"	PG-36	M-40X1.5
61747005	61747000	2.146	54.5	1.890	48.0	3.937	100	82	NPT-1-1/2"	PG-48	M-50X1.5

* Fittings available in NPT, PG, and Metric

SILVYN® RILL PA 12

Construction: Non-Metallic Highly Flexible Quick Connect Conduit Systems.

Body: Polyamide, Halogen & Silicone Free, UL 94 V2.

Features:

A continuous flex non-metallic, corrugated conduit. It is resistant to liquids, oil and gas, and highly resistant to acids and solvents.

Applications:

Halogen-free, flame retardant and self-extinguishing. High flexibility makes it an excellent choice for applications such as machine and plant construction where frequent flexing and bending is required. Durable, long lasting conduit that is rugged yet extremely flexible. For use in controls, moving machine parts, motor and internal connections, as well as industrial, medical and electrical applications.



Technical Data:

IP Protection: IP 68

Temperature:
-50°C to +100°C

Rated Voltage:
N/A

Color Code:
Black or Gray

Approvals:



Part Number		Outer Diameter		Inner Diameter		Bend Radius		Conduit Coil Put-Ups Feet	Thread Type & Size for Fittings		
Black	Gray	inches	mm	inches	mm	inches	mm		NPT	PG	Metric
61815105	61815100	.394	10.0	.256	6.5	.512	13	164	NPT-1/4"	PG-7	M-10X1.0
61815115	61815110	.512	13.0	.394	10.0	.591	15	164	NPT-1/4"	PG-9	M-12X1.5
61815125	61815120	.622	15.8	.472	12.0	.866	22	164	NPT-3/8"	PG-11	M-16X1.5
61815185	61815180	.728	18.5	.563	14.3	1.063	27	164	--	PG-13	--
61815135	61815130	.835	21.2	.650	16.5	1.378	35	164	NPT-1/2"	PG-16	M-20X1.5
61815145	61815140	1.122	28.5	.906	23.0	1.772	45	164	NPT-3/4"	PG-21	M-25X1.5
61815155	61815150	1.358	34.5	1.142	29.0	1.969	50	82	NPT-1"	PG-29	M-32X1.5
61815165	61815160	1.673	42.5	1.417	36.0	3.150	80	82	NPT-1-1/4"	PG-36	M-40X1.5
61815175	61815170	2.146	54.5	1.890	48.0	3.937	100	82	NPT-1-1/2"	PG-48	M-50X1.5

* Fittings available in NPT, PG, and Metric

SILVYN® FPS Conduit

Construction: Continuous Flex Spiral Steel Reinforced PVC Conduit.

Body: Flexible PVC with an insulated spiral steel spring.

Features:

Designed with an insulated spiral steel spring with a PVC jacket which creates a continuous flexing conduit.

Applications:

Strong and durable conduit that is rugged yet extremely flexible. Silicone free, UV and chemical resistant. Airtight and watertight. Excellent for applications where abrasion resistance is a concern.

Technical Data:

IP Protection: IP 68

 **Temperature:**
-20° to +80°C

 **Rated Voltage:**
N/A

 **Color Code:**
Gray

 **Approvals:**



Part Number	Outer Diameter		Inner Diameter		Bend Radius		Conduit Coil Put-Ups Feet	PG	Thread Type & Size for Fittings	
	inches	mm	inches	mm	inches	mm			Metric LKI-M	Metric USK
61711550	.394	10	.276	7	.315	8	82	PG-7	M-12X1.5	M-10X1.5
61711590	.551	14	.394	10	.394	10	82	PG-9	M-16X1.5	M-12X1.5
61711630	.669	17	.512	13	.512	13	82	PG-11	M-20X1.5	M-16X1.5
61711670	.748	19	.591	15	.591	15	82	PG -13	---	---
61711710	.827	21	.630	16	.669	17	82	PG-16	M-25X1.5	M-20X1.5
61711750	1.063	27	.866	22	.787	20	82	PG-21	M-32X1.5	M-25X1.5
61711790	1.417	36	1.142	29	.984	25	82	PG-29	M-40X1.5	M-32X1.5
61711830	1.772	45	1.496	38	1.417	36	82	PG-36	M-50X1.5	M-40X1.5
61711910	2.205	56	1.890	48	1.575	40	82	PG-48	M-63X1.5	M-50X1.5

* Fittings available in PG and Metric

Check out our complete inventory of products at www.lapptannehill.com

Wire Management

SILVYN® KLICK-GN, KLICK-GP, and KLICK-GM

Construction: Conduit Connectors for SILVYN® RILL PA 6 & PA 12 Conduit.

Body: Polyamide-Silicone Free.

Features:

The SILVYN® KLICK-G series is available in NPT, PG and Metric threads.

Applications:

This straight conduit gland is used to create a quick, secure connection to the SILVYN® RILL conduit.



Technical Data:

IP Protection: IP 68, IP 69K according to DIN 40050 T.9

Temperature:
-30°C to 100°C

Rated Voltage:
N/A

Color Code:
Black or Gray

Approvals:



SILVYN® KLICK-GN: NPT Conduit Connectors

Part Number	Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® RILL PA 6 Conduit		For SILVYN® RILL PA 12 Conduit		Standard Pack Size
		inches	mm	inches	mm	Black	Gray	Black	Gray	
61800705	NPT-1/4"	.394	10.0	.453	11.5	61746935	61746939	61815105	61815100	50
61800715	NPT-3/8"	.512	13.0	.472	12.0	61746945	61746940	61815115	61815110	50
61800725	NPT-3/8"	.622	15.8	.472	12.0	61746955	61746950	61815125	61815120	50
61800745	NPT-1/2"	.835	21.2	.472	12.0	61746965	61746960	61815135	61815130	50
61800755	NPT-3/4"	1.122	28.5	.551	14.0	61746975	61746970	61815145	61815140	25
61800765	NPT-1"	1.358	34.5	.630	16.0	61746985	61746980	61815155	61815150	25
61800775	NPT-1-1/4"	1.673	42.5	.709	18.0	61746995	61746990	61815165	61815160	25
61800785	NPT-2"	2.146	54.5	.827	21.0	61747005	61747000	61815175	61815170	10

SILVYN® KLICK-GP: PG Conduit Connectors

Part Number	Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® RILL PA 6 Conduit		For SILVYN® RILL PA 12 Conduit		Standard Pack Size
		inches	mm	inches	mm	Black	Gray	Black	Gray	
61800865	PG-7	.394	10.0	.394	10.0	61746935	61746939	61815105	61815100	50
61800875	PG-9	.512	13.0	.394	10.0	61746945	61746940	61815115	61815110	50
61800885	PG -11	.622	15.8	.394	10.0	61746955	61746950	61815125	61815120	50
61800855	PG-13	.728	18.5	.433	11.0	61747015	61747010	61815185	61815180	50
61800895	PG-16	.835	21.2	.472	12.0	61746965	61746960	61815135	61815130	50
61800905	PG-21	1.122	28.5	.472	12.0	61746975	61746970	61815145	61815140	25
61800915	PG-29	1.358	34.5	.472	12.0	61746985	61746980	61815155	61815150	25
61800925	PG-36	1.673	42.5	.453	11.5	61746995	61746990	61815165	61815160	25
61800935	PG-48	2.146	54.5	.571	14.5	61747005	61747000	61815175	61815170	10

SILVYN® KLICK-GM: Metric Conduit Connectors

Part Number	Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® RILL PA 6 Conduit		For SILVYN® RILL PA 12 Conduit		Standard Pack Size
		inches	mm	inches	mm	Black	Gray	Black	Gray	
55501005	M-10X1.0	.394	10.0	.453	11.5	61746935	61746939	61815105	61815100	50
55501015	M-12X1.5	.512	13.0	.472	12.0	61746945	61746940	61815115	61815110	50
55501035	M-16X1.5	.622	15.8	.453	11.5	61746955	61746950	61815125	61815120	50
55501055	M-20X1.5	.835	21.2	.512	13.0	61746965	61746960	61815135	61815130	50
55501065	M-25X1.5	1.122	28.5	.512	13.0	61746975	61746970	61815145	61815140	25
55501075	M-32X1.5	1.358	34.5	.591	15.0	61746985	61746980	61815155	61815150	25
55501085	M-40X1.5	1.673	42.5	.591	15.0	61746995	61746990	61815165	61815160	25
55501095	M-50X1.5	2.146	54.5	.610	15.5	61747005	61747000	61815175	61815170	10



SILVYN® KLICK-W Series KLICK-WN, KLICK-WP, and KLICK-WM

Construction: Conduit Connectors for SILVYN® RILL PA 6 & PA 12 Conduit.

Body: Polyamide-Silicone Free.

Features:

The SILVYN® KLICK-W series is available in NPT, PG, and Metric threads.

Applications:

This 90°C angled conduit gland is used to create a quick, secure connection to the SILVYN® RILL conduit.



Technical Data:

IP Protection: IP 67, IP69K according to the DIN 40050 T.9

Temperature:
-30°C to +100°C

Rated Voltage:
N/A

Color Code:
Black or Gray

Approvals:



SILVYN® KLICK-WN: NPT Conduit Connectors

Part Number		Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® RILL PA 6 Conduit		For SILVYN® RILL PA 12 Conduit		Standard Pack Size
Black	Gray		inches	mm	inches	mm	Black	Gray	Black	Gray	
61800015	55502600	NPT-1/4"	.394	10.0	.394	10.0	61746935	61746939	61815105	61815100	50
61800025	55502610	NPT-1/4"	.512	13.0	.453	11.5	61746945	61746940	61815115	61815110	50
61800035	55502620	NPT-3/8"	.622	15.8	.472	12.0	61746955	61746950	61815125	61815120	50
61800045	55502630	NPT-1/2"	.835	21.2	.472	12.0	61746965	61746960	61815135	61815130	50
61800055	55502640	NPT-3/4"	1.122	28.5	.551	14.0	61746975	61746970	61815145	61815140	25
61800065	55502650	NPT-1"	1.358	34.5	.630	16.0	61746985	61746980	61815155	61815150	10
61800075	55502660	NPT-1-1/4"	1.673	42.5	.709	18.0	61746995	61746990	61815165	61815160	10
61800085	55502670	NPT-1-1/2"	2.146	54.5	.709	18.0	61747005	61747000	61815175	61815170	5

SILVYN® KLICK-WP: PG Conduit Connectors

Part Number		Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® RILL PA 6 Conduit		For SILVYN® RILL PA 12 Conduit		Standard Pack Size
Black	Gray		inches	mm	inches	mm	Black	Gray	Black	Gray	
61801025	61801020	PG-9	.512	13.0	.394	10	61746945	61746940	61815115	61815110	50
61801035	61801030	PG-11	.622	15.8	.394	10	61746955	61746950	61815125	61815120	50
56000105	56000100	PG-13	.728	18.5	.433	11	61747015	61747010	61815185	61815180	50
61801045	61801040	PG-16	.835	21.2	.472	12	61746965	61746960	61815135	61815130	50
61801055	61801050	PG-21	1.122	28.5	.472	12	61746975	61746970	61815145	61815140	25
61801065	61801060	PG-29	1.358	34.5	.472	12	61746985	61746980	61815155	61815150	10
61801075	61801061	PG-36	1.673	42.5	.472	12	61746995	61746990	61747085	61714200	10
61801085	61801062	PG-48	2.146	54.5	.551	14	61747005	61747000	61747095	61714210	5

SILVYN® KLICK-WM: Metric Conduit Connectors

Part Number		Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® RILL PA 6 Conduit		For SILVYN® RILL PA 12 Conduit		Standard Pack Size
Black	Gray		inches	mm	inches	mm	Black	Gray	Black	Gray	
55501115	55501110	M-10X1.0	.394	10.0	.433	11	61746935	61746939	61815105	61815100	50
55501125	55501120	M-12X1.5	.512	13.0	.472	12	61746945	61746940	61815115	61815110	50
55501145	55501140	M-16X1.5	.622	15.8	.472	12	61746955	61746950	61815125	61815120	50
55501165	55501160	M-20X1.5	.835	21.2	.512	13	61746965	61746960	61815135	61815130	50
55501185	55501180	M-25X1.5	1.122	28.5	.512	13	61746975	61746970	61815145	61815140	25
55501205	55501200	M-32X1.5	1.358	34.5	.591	15	61746985	61746980	61815155	61815150	10
55501225	55501220	M-40X1.5	1.673	42.5	.591	15	61746995	61746990	61815165	61815160	10
55501245	55501240	M-50X1.5	2.146	54.5	.630	16	61747005	61747000	61815175	61815170	5



Wire Management

SILVYN® LKI/LKI-M

Construction: Conduit Connectors for SILVYN® FD-PU and SILVYN® FPS Conduit.

Body: Polypropylene.

Features:

The SILVYN® LKI is a swivel connector designed to allow the conduit to rotate freely without damage to the conduit or the connection. It is tension and vibration resistant, providing a high quality connection between the protective conduit and the machine.

Applications:

The SILVYN® LKI is for use with both the SILVYN® FPS and SILVYN® FD-PU. The SILVYN® BW is a special mounting bracket to be used with the SILVYN LKI to provide the proper sealing protection. Locknuts are available in the SKINTOP® GMP-GL Series.



Technical Data:

IP Protection: IP 54

Temperature:
-10°C to +110°C

Rated Voltage:
N/A

Color Code:
Gray

Approvals:



SILVYN® LKI: PG Conduit Connectors

Part Number	Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® FPS Conduit	For SILVYN® FD-PU Conduit	Standard Pack Size
		inches	mm	inches	mm			
55000000	PG-7	.394	10	.394	10	61711550	64453662	50
55000010	PG-9	.551	14	.394	10	61711590	64453672	50
55000020	PG-11	.669	17	.394	10	61711630	64453682	50
55000030	PG-13	.748	19	.394	10	61711670	64453692	50
55000040	PG-16	.827	21	.433	11	61711710	64453702	50
55000050	PG-21	1.063	27	.433	11	61711750	64453712	25
55000060	PG-29	1.417	36	.472	12	61711790	64453721	25
55000070	PG-36	1.772	45	.472	12	61711830	64453731	25
55000090	PG-48	2.205	56	.591	15	61711910	64453751	10

SILVYN® LKI-M: Metric Conduit Connectors

Part Number	Thread Type & Size	Conduit Outer Diameter		Thread Length		For SILVYN® FPS Conduit	For SILVYN® FD-PU Conduit	Standard Pack Size
		inches	mm	inches	mm			
55501400	M-12X1.5	.394	10	.394	10	61711550	64453612	50
55501410	M-16X1.5	.551	14	.394	10	61711590	64453672	50
55501420	M-20X1.5	.669	17	.394	10	61711630	64453682	50
55501430	M-25X1.5	.827	21	.433	11	61711710	64453702	50
55501440	M-32X1.5	1.063	27	.472	12	61711750	64453712	25
55501450	M-40X1.5	1.417	36	.472	12	61711790	64453721	25
55501460	M-50X1.4	1.772	45	.472	12	61711830	64453731	25
55501470	M-63X1.5	2.205	56	.591	15	61711910	64453751	10

SILVYN® BW: PG Brackets

Part Number	Thread Type & Size	A		B		C		D		E		Standard Pack Size
		inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	
55000540	PG-16	.787	20	1.969	50	1.496	38	1.575	40	.906	23.0	25
55000550	PG-21	.787	20	2.362	60	1.850	47	1.969	50	1.142	29.0	25
55000560	PG-29	.787	20	2.756	70	2.244	57	2.362	60	1.476	37.5	25
55000570	PG-36	.787	20	3.150	80	2.638	67	2.756	70	1.870	47.5	25



EPIC® Rectangular Connectors

Features:

EPIC® Connectors provide a safe, cost-effective solution for your industrial wiring requirements.

Applications:

EPIC® Rectangular Connectors are designed to meet the power and control connectivity needs and requirements of your business.

Additional Information:

Watertight IP65

WATERTIGHT IP65

INSERT/ HOUSING TYPE	OPERATING VOLTAGE	OPERATING CURRENT	NUMBER OF CONTACT	INSERTS		SINGLE LEVER PANEL MOUNT BASE		DOUBLE LEVER PANEL MOUNT BASE
				MALE PLUG	FEMALE RECEPTACLE	WITHOUT COVER	WITH COVER	WITHOUT COVER
HBE6	600V	16A	6	10190000	10191000	100030C0	100040C0	-
HBE10	600V	16A	10	10192000	10193000	10032900	10033900	100320C0
HBE16	600V	16A	16	10194000	10195000	10072900	10073900	100720C0
HBE24	600V	16A	24	10196000	10197000	10102900	10103900	101020C0

WATERTIGHT IP65

INSERT/ HOUSING TYPE	TOP ENTRY HOOD W/ SINGLE LEVER BOLTS				TOP ENTRY HOOD W/ DOUBLE LEVER BOLTS	
	PG13.5	PG16	PG21	PG29	PG21	PG29
HBE6	100110R	-	700202	-	-	-
HBE10	-	100409	-	-	-	-
HBE16	-	-	100809	-	100800	100900
HBE24	-	-	101219	101119	101210	101110

WATERTIGHT IP65

INSERT/ HOUSING TYPE	SIDE ENTRY HOOD W/ SINGLE LEVER BOLTS			SIDE ENTRY HOOD W/ DOUBLE LEVER BOLTS		
	PG16	PG21	PG29	PG16	PG21	PG29
HBE6	100220	-	-	-	-	-
HBE10	100429	-	-	100420	-	-
HBE16	-	100829	-	-	100820	100920
HBE24	-	-	-	-	101110	-

EPIC® Connectors

Construction: Pin & Sleeve IEC60309-1 & -2

Features: EPIC® Connectors provide a safe, cost-effective solution for your industrial wiring requirements.

Applications: EPIC® Pin & Sleeve Connectors are designed to meet the power connectivity needs and requirements of your business.


Additional Information: MULTIMAX pin and sleeve connectors have a unique patented design that can be assembled in under 20 seconds thus saving money through reduced downtime and installation savings; they are also a sensible alternative to twist lock connectors in many applications.

Standards: IEC60309-1 & -2; UL1682 & 1686

Technical Data:



Approvals:

- Conform to IEC 60309-1 and -2 standards; 
- Watertight IP67, Splashproof IP44

CEE AND ULYSEE

WATERTIGHT IP67

CURRENT RATING (AMPS)	NUMBER OF WIRES/VOLTS	CEE STRAIGHT MALE PLUG WITH CABLE GLAND	CEE STRAIGHT FEMALE CONNECTOR WITH CABLE GLAND	CEE FEMALE ANGLED PANEL MOUNT RECEPTACLE	ULYSSE SWITCHED SOCKET OUTLET WITH FUSEHOLDER
		20	4 / 480V	477513FX	473513FX
30	4 / 480V	477516FX	473516FX	471577FX	400237FX

MULTIMAX AND CEE

SPLASHPROOF IP44

CURRENT RATING (AMPS)	NUMBER OF WIRES/VOLTS	MULTIMAX MALE PLUG W/CABLE SLEVE	MULTIMAX FEMALE CONNECTOR W/CABLE SLEEVE	CEE FEMALE STRAIGHT PANEL MOUNT RECEPTACLE	CEE FEMALE 75 DEGREE INTERNAL SURFACE MOUNT RECEPTACLE
		20	3 / 125V	700124FX	720124FX
	4 / 250V	700139FX	720139FX	441622FX	471572FX
	4 / 480V	700137FX	720137FX	441650FX	
30	3 / 250V	700226FX	720226FX	433222FX	471576FX
	4 / 480V	700237FX	720237FX	443250FX	

Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com

EPIC® Circular Connectors

Construction: EPIC® Circular Connectors: LS1.

Features: Rugged nickel-plated, die-cast zinc body. Positive vibration protection for use with motor drives and moving assemblies. Integral EMC cable gland provides strain-relief, IP67/68 protections, and 360° shielding.

No. of Contacts: 5+PE, 3+PE+4

Materials:

Housing: Nickel Plated Zinc. Insert: PA, PBT, UL94 V-0. Contacts: gold plated copper alloy. Gaskets & Seals: FPM

Standards: DIN EN 61984

Technical Data:



Temperature:
-25°C to +125°C



Rated Voltage:
• VDE: 630V (2mm contacts)
250V (1mm contacts)
• UL: 600V



Rated Current:
• 22 amps (2mm contacts)
• 7 amps (1mm contacts)



Impulse Voltage:
• 6kV (2mm contacts)
• 4kV (1mm contacts)



Contact Resistance:
<5m Ohms



Mating Cycles:
500







Approvals:



Watertight IP67/68 (10h, 1m)

LS1 CIRCULAR CONNECTORS

WATERTIGHT IP67/68 (10h, 1m)

OPERATING VOLTAGE	OPERATING CURRENT	CONTACT CONFIGURATION	STRAIGHT PANEL MOUNT INLET	ANGLED, ROTATABLE PANEL MOUNT INLET	CABLE COUPLER	CABLE CONNECTOR
						
600V	22A	5+PE	76003000	24420058*	76133000	76123000
600V	22A	3+PE+4	76004000	24420056*	76134000	76124000

*IP65

Check out our complete inventory of products at www.lapptannehill.com

EPIC® Circular Connectors

Construction: Rugged Nickel-plated, die-cast Zinc Body.

Features: EPIC® Circular Connectors M23. Positive vibration protection for use with motor drives and moving assemblies. Integral EMC cable gland provides strain-relief, IP67/IP68 protection, and 360 degree shielding.

Applications: The M23 connectors have many inherent features which offer application advantages and provide significant benefits for the customer. These features make it one of the most application friendly connectors available, and insure quick and easy assembly, high reliability, and long, uninterrupted service life in tough industrial environments.

No. of Contacts: 6,7,8+1, 9,12,16,17

Materials:

Housing: Nickel Plated Zinc. **Insert:** PA, PBT, UL94 V-0. **Contacts:** gold plated copper alloy. **Gaskets & Seals:** FPM.

Standards: DIN EN 61984

Technical Data:

- Rated Voltage:**
- 6,7,8+1,9 poles-150 volts.
 - 12 & 16 poles-100 volts.
 - 17 poles-50 volts.

- Rated Current:**
- 6&7 pole: 14 amps; 8+1, 9,12,16,17
 - pole: 7 amps

- Impulse Voltage:**
0.8kV

- Contact Resistance:**
<5m Ohms

- Mating Cycles:**
100 minimum

Approvals:



Watertight IP67/68 (10h, 1m)

M23 CIRCULAR CONNECTORS - HOUSINGS

WATERTIGHT IP67/68 (10h, 1m)





STRAIGHT MOUNT PANEL BASE	STRAIGHT THRU-HOLE MOUNT PANEL BASE	ANGLED, ROTATABLE FLANGE MOUNT PANEL BASE	CABLE COUPLER	CABLE CONNECTOR
				
72004000	44420046	24420055*	44420040	44420037

*IP65

Insert Configurations

Features: Connector inserts will accept both male and female contacts. A complete connection requires one E-Type insert and one P-Type insert.

M23 CIRCULAR CONNECTORS - INSERTS

OPERATING VOLTAGE	OPERATING CURRENT	NUMBERS OF CONTACTS	E-TYPE INSERT W/FEMALE SOLDER CONTACTS	E-TYPE INSERT W/MALE SOLDER CONTACTS	P-TYPE INSERT W/FEMALE SOLDER CONTACTS	P-TYPE INSERT W/MALE SOLDER CONTACTS
						
100V	7A	12	73002722	73002720	73002716	73002714
100V	7A	16	-	73002708	73002704	-
50V	7A	17	-	73028500	73018000	-



EPIC® Rectangular Connectors HA 3/4 Inserts

Construction:

HA Plug & Receptacles: Screw Terminated Inserts.


Features: The small HA 3/4 inserts are used whenever space is limited. The HA 3-48 screw terminated inserts fit into HA Series Housings. A modified Housing can fit 64 contacts.


No. of Contacts: 3,4,10,16,32,48,64 (+PE)

Termination: Screw

Wire Size: AWG 20-14 (0.5-2.5mm²)

Technical Data:

 **Rated Voltage:**
600V

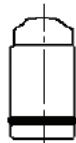
 **Rated Current:**
• 10A (HA 3/4)
• 14A (HA 10-64)

 **Approvals:**

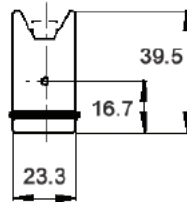


HA 3/4 Inserts

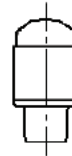
HA 3



Plug

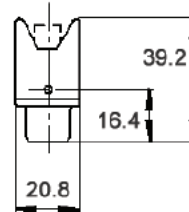


All dimensions are in mm.

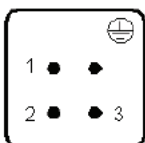


Receptacle

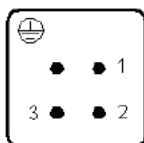
HA 4



Plug

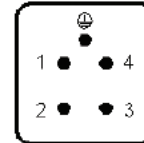


Receptacle

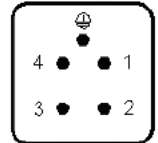


HA 3/4

Plug



Receptacle



These inserts fit in the HA 3/4 Series Housings.

Description	Plug	Receptacle
HA 3	10420000	10421000
HA 4	10431000	10432000



Coding Pin:
10451400

Complete catalog available online at: www.lapptannehill.com

EPIC® Rectangular Connectors HA 10 Inserts

Construction:

HA Plug & Receptacles: Screw Terminated Inserts.

Features: The HA 10-48 screw terminated inserts fit into HA Series housings. A modified Housing can fit 64 contacts.


No. of Contacts: 10,16,32,48,64 (+PE)

Termination: Screw

Wire Size: AWG 20-14 (0.5-2.5mm²)

Technical Data:

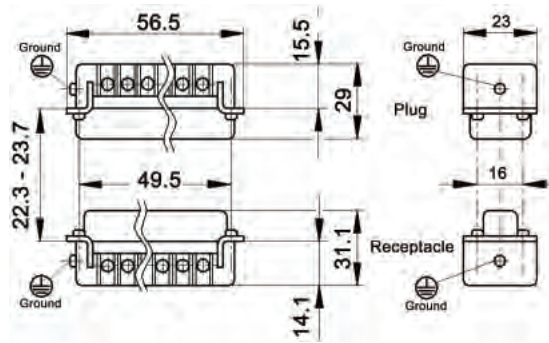
 **Rated Voltage:**
600V

 **Rated Current:**
14A (HA 10-64)

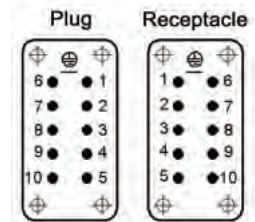
 **Approvals:**



HA 10 Inserts



View from cable side



All dimensions are in mm.



Description	Plug	Receptacle
HA 10 with Wire Protection	10440100	10441100
HA 10 without Wire Protection	10440000	10441000

Not finding what you are looking for?

Please contact us at sales@lapptannehill.com, or visit our website at: www.lapptannehill.com

EPIC® Rectangular Connectors HA 3/4 Housings: Single Lever on Base

Construction: Die cast zinc, powder coated/Thermoplastic flame retardant material rated UL 94 V-O.

Temperature Range: >-40°C to +125°C

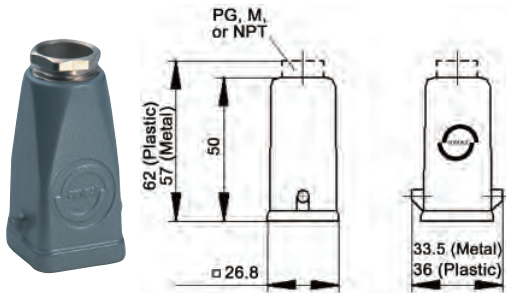
Specification: DIN 43652

Protection class: NEMA 4, NEMA 12, IP65

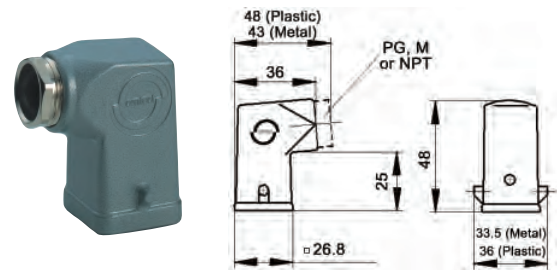


TOP & SIDE ENTRY HOODS

TOP ENTRY



SIDE ENTRY



All dimensions are in mm.

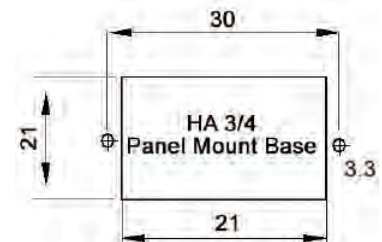
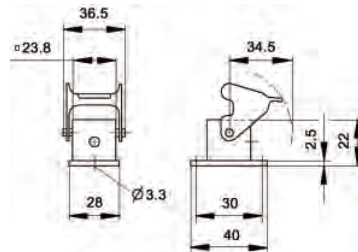
Top Entry Hoods

Material	Size of Entry			Without Cable Gland		With Cable Gland	
	PG	NPT	Metric	NPT	Metric	PG	Metric
Zinc Die Cast	11	1/2"	20	105121NP	-	10426500	19426500
Black Plastic	11	1/2"	20	104255NP	19425500	10426700	-
Grey Plastic	11	1/2"	20	104260NP	19426000	10426400	-

Side Entry Hoods

Material	Size of Entry			Without Cable Gland		With Cable Gland	
	PG	NPT	Metric	NPT	Metric	PG	Metric
Zinc Die Cast	11	1/2"	20	105123NP	-	10427500	19427500
Black Plastic	11	1/2"	20	104273NP	19427300	10620600	-
Grey Plastic	11	1/2"	20	104270NP	19427000	10427100	-

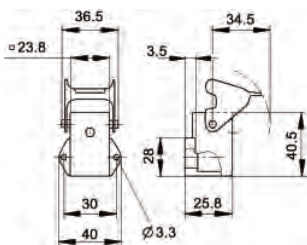
PANEL MOUNT BASES



All dimensions are in mm.

Gray Metal	Black Plastic	Gray Plastic
10422500	10422200	10422000

ANGLED PANEL MOUNT BASES



Gray Metal	Black Plastic	Gray Plastic
10423500	10423100	10423000



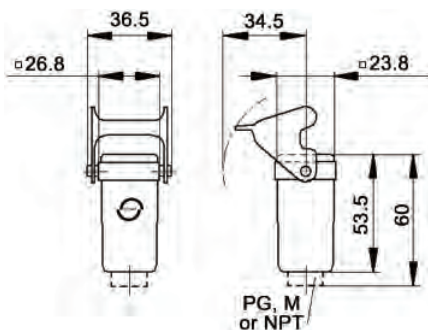
Cable Coupler Hoods

Construction: Metal or Plastic.

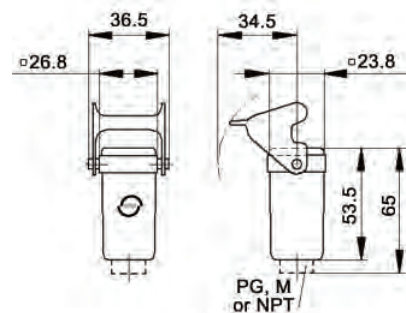


CABLE COUPLER HOODS

METAL



PLASTIC



All dimensions are in mm.

Material	Size of Entry			Without Cable Gland		With Cable Gland	
	PG	NPT	Metric	NPT	Metric	PG	Metric
Zinc Die Cast	11	1/2"	20	105129NP	19512900	10429500	19429500
Black Plastic	11	1/2"	20	104292NP	19429200	10620300	-
Grey Plastic	11	1/2"	20	104290NP	19429000	10429100	-

Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com

EPIC® Rectangular Connectors

Construction: HA 10 Housings: Single Lever on Base.

Specification: DIN 43652.

Temperature Range: -40°C to +125°C.

Protection Class: NEMA 4, NEMA 12, IP65.

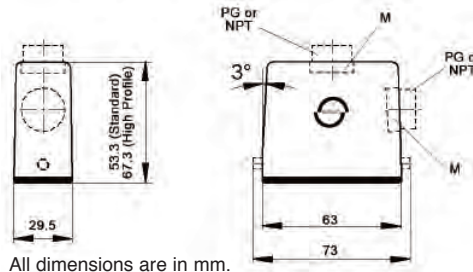
Material: Aluminum alloy, powder coated.

Additional information: Top Entry Metric hoods do not come with a neck.



TOP & SIDE ENTRY HOODS

TOP ENTRY



All dimensions are in mm.

SIDE ENTRY



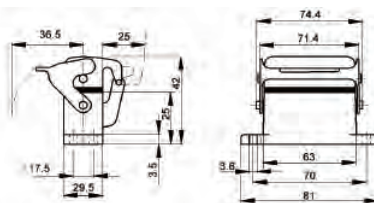
STANDARD PROFILE

Position of Cable Entry	Size of Entry			Part Numbers			Complete your installation with a SKINTOP®			
	PG	NPT	Metric	PG	NPT	Metric	PG- Nylon	PG- Metal	Metric- Nylon	Metric-Metal
Top Entry	13	1/2"	20	104460	104460NP	19446000	53015130	52015730	53111020	53112020
	16	1/2"	25	104461	104461NP	19446100	53015140	52015740	53111030	53112030
Side Entry	16	1/2"	20	104450	104450NP	19445000	53015140	52015740	53111020	53112020
	21	3/4"	25	104455	104455NP	19445500	53015150	52015750	53111030	53112030

Panel Mount Bases

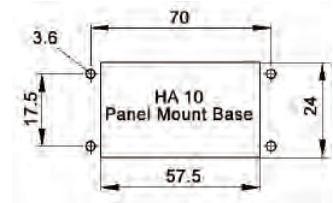


PANEL MOUNT BASES



Without Dust Cover	With Dust Cover
104420C0	704440C0

All dimensions are in mm.



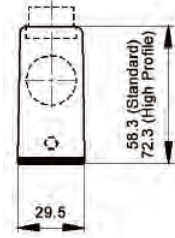
EPIC® Rectangular Connectors

Construction: HA 16 Housings: Single Lever on Base.

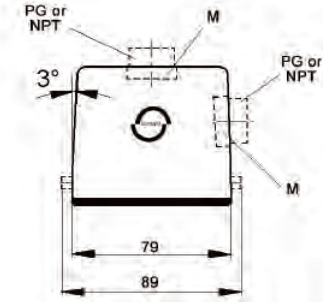
Additional information: Top Entry Metric hoods do not come with a neck.



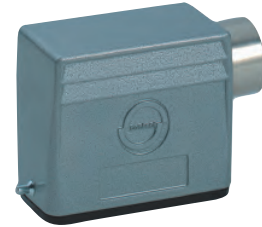
TOP ENTRY



HOODS



SIDE ENTRY



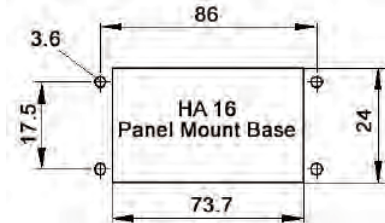
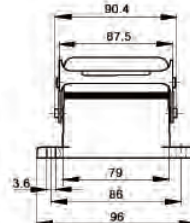
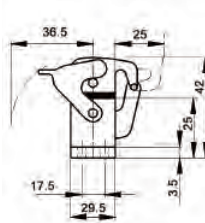
STANDARD PROFILE

Position of Cable Entry	Size of Entry			Part Numbers			Complete your installation with a SKINTOP®			
	PG	NPT	Metric	PG	NPT	Metric	PG- Nylon	PG- Metal	Metric- Nylon	Metric-Metal
Top Entry	16	1/2"	20	105650	105650NP	19565000	53015140	52015740	53111020	53112020
	21	3/4"	25	105652	105652NP	19565300	53015150	52015750	53111030	53112030
Side Entry	16	1/2"	20	105640	105640NP	19564000	53015140	52015740	53111020	53112020
	21	3/4"	25	105645	105645NP	19564500	53015150	52015750	53111030	53112030

EPIC® Rectangular Connectors-Panel Mount Base



PANEL MOUNT BASE



Without Dust Cover	With Dust Cover
104620C0	704740C0

Please contact your sales representative for detailed information at sales@lapptannehill.com

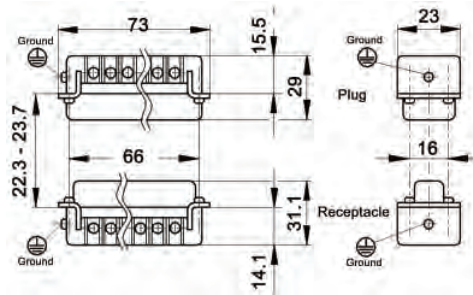
EPIC® Rectangular Connectors

Construction: HA Plug & Receptacles

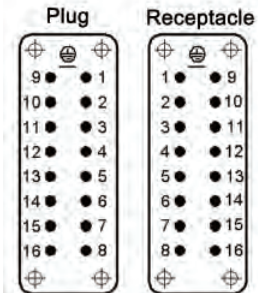
Termination: Screw Terminated.



HA 16 Inserts



View from cable side



All dimensions are in mm.



HA 16

Description	Plug	Receptacle
HA 16 with Wire Protection	10530000	10531000
HA 16 without Wire Protection	10532000	10533000

EPIC® Rectangular Connectors

Construction: HBVE Series.

Features: The HBVE series inserts are high voltage inserts which are equipped with switch contacts. The switch contacts lag when inserted and lead when separated. They can be used in an electrical interlock to prevent mating and unmating under power.

Termination: HBVE 3 Screw Terminated Inserts

Wire Size: 0.5-2.5mm² AWG: 20-14



Technical Data:

Temperature:
-40°C to 125°C

Test Voltage:
6kV

Contacts:
Copper alloy, silver plated

Contact Resistance:
<2mOhm

Mating Cycles:
100 (higher mating cycles depend on the application)

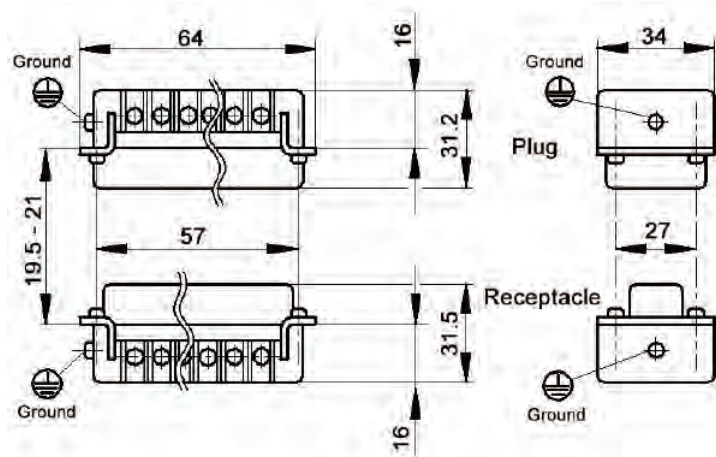
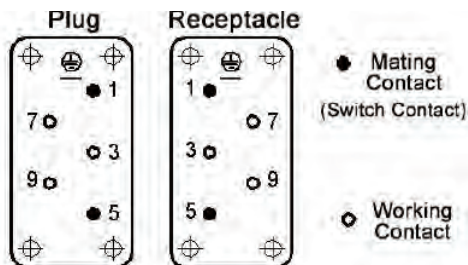
Rated Voltage Type:
600V

Rated Current:
16 amps

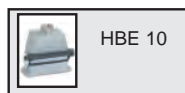
HBVE 3 SCREW TERMINATED INSERTS



View from cable side



All dimensions are in mm.



HBE 10

Description	Plug	Receptacle
With wire protection	10210010	10211010
Without wire protection	10210110	10211110



EPIC® Rectangular Connectors

Construction: Mixed Power Series.

Features: The Mixed Power series inserts provide contacts for power or a combination of power and signal in one insert. These inserts fit into the HBE series housings. Also available: 4 power/2 signal & 4 power/8 signal.

Contact Material: Copper alloy, hard silver plated.

Molding Material: Thermoplastic resin, fiberglass reinforced.

Termination Type: Screw.

Wire Size: Screw termination: up to 6 AWG, 16 mm² for power contacts. Screw termination: up to 14 AWG, 2.5 mm² for signal contacts.

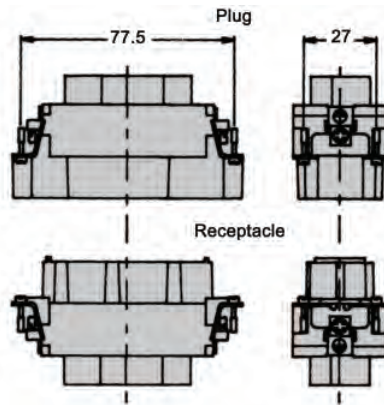
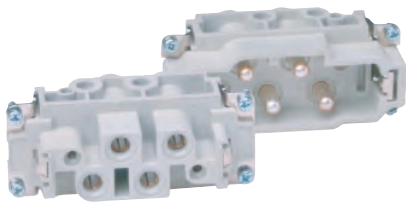
Contact Resistance: <0.3mOhm (Principle); <1mOhm (Auxiliary).



Technical Data:

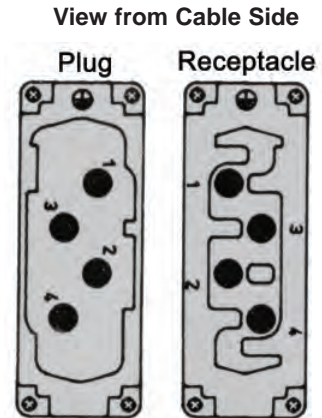
<p> Temperature: -40°C to 125°C</p> <p> Rated Voltage: 600V UL/CSA</p>	<p> Test Voltage:</p> <ul style="list-style-type: none"> • 6kV (4x0) • 6kV/4kV (4x2) • 4kV (4x8) 	<p> Rated Current:</p> <ul style="list-style-type: none"> • 80 amps power • 16 amps signal
--	--	---

4 POWER/ 0 SIGNAL MIXED POWER INSERTS



All dimensions are in mm.

Plug	Receptacle
MP/M400	MP/F400



Not finding what you are looking for?

Please contact us at sales@lapptannehill.com, or visit our website at: www.lapptannehill.com

EPIC® Rectangular Connectors

Construction: HBS Series.

Features: The HBS series inserts are characterized by their high current carrying capacity. A secure electrical connection can be made by simple screw termination for cables up to 10 AWG.

Termination Type: Screw termination: 0.5-6mm² AWG: 20-10.

Contacts: 6,12 (+PE), Copper alloy, silver plated.

Contact Resistance: <2mOhm.

Mating Cycles: 100 (higher mating cycles depends on the application).



Technical Data:

Temperature:
-40°C to 125°C

Test Voltage:
6kV

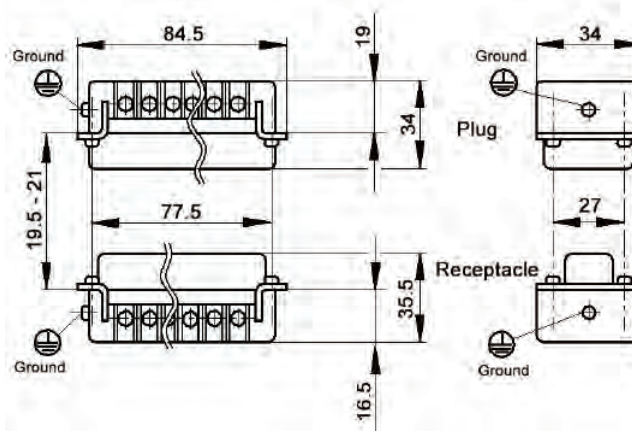
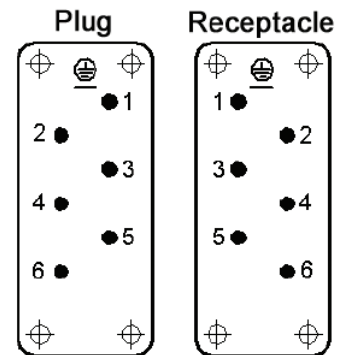
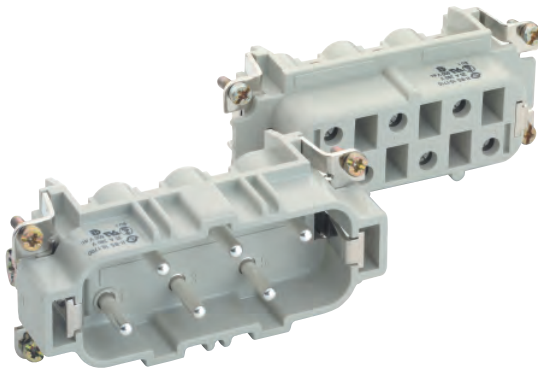
Rated Voltage:

- VDE: 400V EPIC HBS 6-12,
- UL: 600V EPIC HBS 6-12,
- CSA: 600V EPIC HBS 6-12

Rated Current:
35 amps

HBS 6 SCREW TERMINATED INSERTS

View from cable side



All dimensions are in mm.



Description	Plug	Receptacle
#1-6	10170000	10171000

Polyethylene Corrugated Loom



Construction: Black slit with no stripe. **Insulation:** Polyethylene. **Jacket:** Black

Features:

The convoluted tubing protects against mechanical aggressions. It has excellent crush and abrasion resistance.

Applications:


Applications that require the ability to drain moisture from cable assemblies. Excellent for marine, industrial, automotive, or agricultural use.

Additional Information:

Available in slit and non-slit versions.

Technical Data:

 **Temperature:**
-40°F to 200°F

 **Color Code:**
Black slit with no stripe

POLYETHYLENE

LAPP PART #	NOMINAL ID	UPS / BULK BOX QUAN.	PART DESCRIPTION
LOOM-1/8-0	.177"	20,000 FT. <i>BULK ONLY</i>	1/8" ID POLY BLK SLIT
LOOM-1/4-0-BX LOOM-1/4-0	.244"	2,500 FT. 10,000 FT.	1/4" / 6MM ID POLY BLK SLIT
LOOM-3/8-0-BX LOOM-3/8-0	.344"	1,500 FT. 7,000 FT.	3/8" / 9MM ID POLY BLK SLIT
LOOM-7/16-0-BX LOOM-7/16-0	.409"	1,200 FT. 5,000 FT.	7/16" / 10MM ID POLY BLK SLIT
LOOM-1/2-0-BX LOOM-1/2-0	.518"	900 FT. 3,500 FT.	1/2" / 13MM ID POLY. BLK SLIT
LOOM-5/8-0-BX LOOM-5/8-0	.618"	700 FT. 2,500 FT.	5/8" / 16MM ID POLY BLK SLT
LOOM-3/4-0-BX LOOM-3/4-0	.744"	500 FT. 2,000 FT.	3/4" / 19MM ID POLY. BLK SLIT
LOOM-7/8-0-BX LOOM-7/8-0	.878"	250 FT. 1,500 FT.	7/8" / 22MM ID POLY. BLK SLIT
LOOM-1-0-BX LOOM-1-0	1.031"	200 FT. 1,000 FT.	1" / 25MM ID POLY. BLK SLIT
LOOM-1 1/4-0-BX LOOM-1 1/4-0	1.201"	200 FT. 800 FT.	1.25" / 30MM ID POLY. BLK SLIT
LOOM-1-1/2-0-BX LOOM-1-1/2-0	1.484"	100 FT. 500 FT.	1 1/2" ID POLY BLK SLIT
LOOM-2-0	1.87"	300 FT. <i>BULK ONLY</i>	2"(1.88") ID POLY. BLK SLIT

UPS BOXES SMALLER QUAN. AS SHOWN PER EACH SIZE
BULK = 1/2 GAYLORDS, 2 PER PALLET FOR CUBED OUT SKID APPROX 4' X 4' X 2' H

Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com

Polypropylene black slit with green stripe

Construction: Polypropylene. **Jacket:** Black slit with green stripe.

Features:

The convoluted tubing protects against mechanical aggressions. It has excellent crush and abrasion resistance.

Applications:


Excellent for marine, industrial, automotive, or agricultural use.

Additional Information:

Available in UPS boxes and bulk.

Technical Data:

 **Temperature:**
-40°F to 275°F

 **Color Code:**
Black slit with green stripe



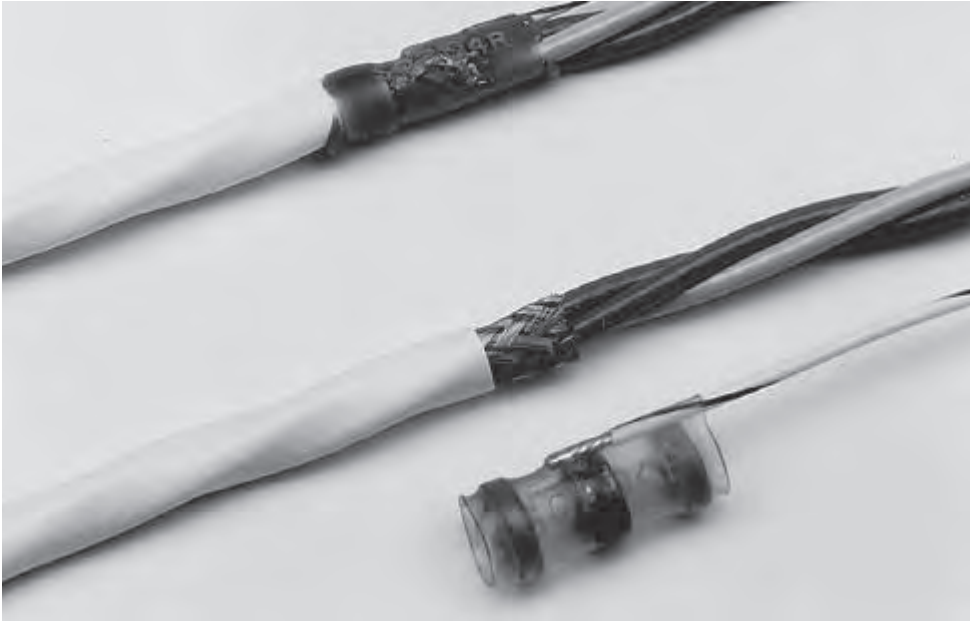
POLYETHYLENE
BLACK SLIT W/ GREEN STRIPE - TEMP. RANGE -40 TO 275F

LAPP PART #	NOMINAL ID	UPS / BULK BOX QUAN.	PART DESCRIPTION
LOOM-1/4-OPP-BX	.244"	2,500 FT.	1/4" / 6MM ID PP BLK SLT GRN STRP
LOOM-1/4-OPP		10,000 FT.	
LOOM-3/8-OPP-BX	.344"	1,500 FT.	3/8" / 9MM ID PP BLK SLT GRN STRP
LOOM-3/8-OPP		7,000 FT.	
LOOM-1/2-OPP-BX	.518"	900 FT.	1/2" / 13MM ID PP BLK SLT GRN STRP
LOOM-1/2-OPP		3,500 FT.	
LOOM-5/8-OPP	.618"	2,500 FT.	5/8" / 16MM ID PP BLK SLT GRN STRP
	<i>BULK ONLY</i>		
LOOM-3/4-OPP-BX	.744"	500 FT.	3/4" / 19MM ID PP BLK SLT GRN STRP
LOOM-3/4-OPP		2,000 FT.	
LOOM-7/8-OPP	.878"	1,500 FT.	7/8" / 22MM ID PP BLK SLT GRN STRP
	<i>BULK ONLY</i>		
LOOM-1-OPP-BX	1.031"	200 FT.	1" / 25MM ID PP BLK SLT GRN STRP
LOOM-1-OPP		1,000 FT.	
LOOM-1 1/4-OPP	1.201"	800 FT.	1 1/4" / 30MM ID PP BLK SLT GRN STRP
	<i>BULK ONLY</i>		
LOOM-1 1/2-OPP	1.484"	500 FT.	1 1/2" ID PP BLK SLT GRN STRP
	<i>BULK ONLY</i>		
LOOM-2-OPP	1.87"	300 FT.	2" ID PP BLK SLT GRN STRP
	<i>BULK ONLY</i>		

Complete catalog available online at: www.lapptannehill.com

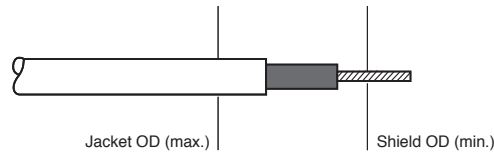
Shield Termination

Solder Sleeve Shield Terminators



Product Selection Process

1. Select product series from the Product Options table below.
2. Determine cable dimensions.
3. Optional: Select pre-installed wire lead type (see Table G on page 8-47 for type descriptions).
4. Select part number (use the selection table indicated for your product series in the Product Options table below).



Product Options

Product Series	System Oper. Temperature (Max.)	Used on Cables Rated (Min.)	Environmental Protection	Solder Alloy	Flux Type	Insulation Material	Part No. Selection Table
CWT	125°C [257°F]	85°C [185°F]	Splash resistant	Cd18	RA	Polyolefin	A
SO63*	150°C [302°F]	125°C [257°F]	Immersion resistant	Sn63	RMA	Polyvinylidene fluoride	B
S01/S02**, S03	150°C [302°F]	125°C [257°F]	Immersion resistant	Sn63	RMA	Polyvinylidene fluoride	C, D
SO96***	175°C [347°F]	150°C [302°F]	Immersion resistant	Sn96	RA	Polyvinylidene fluoride	E
SO175****	175°C [347°F]	150°C [302°F]	Immersion resistant	Sn96	RA	Polyvinylidene fluoride	F

*Meets performance requirements of SAE-AS83519 (formerly MIL-S-83519) and NAS 1747, supplied with BiAlloy temperature indicator.

**Qualified to SAE-AS83519 (formerly MIL-S-83519), supplied with thermochromic temperature indicator.

***Meets performance requirements of SAE-AS83519 (formerly MIL-S-83519) and NAS 1747, supplied with thermochromic temperature indicator.

****Meets performance requirements of SAE-AS83519 (formerly MIL-S-83519), supplied with BiAlloy temperature indicator.

Note: Cadmium-free option (B-152 series) is available for operating temperature of 125°C [257°F]. Consult Tyco Electronics for details.



Raychem, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks

CWT Solder Sleeve Shield Terminators

Insulation: Radiation-crosslinked, transparent heat-shrinkable polyolefin, **Jacket:** Solder Alloy: Cd18. Flux Type: RA.

Features:

Transparent insulation sleeve provides encapsulation, inspectability, strain relief, and insulation. Prefluxed solder preform provides a controlled soldering process. One-piece design offers easy installation and lower installed cost. Optional preinstalled ground leads provide convenience and ease of installation.

Applications:

Used for shield-to-ground termination.

Additional Information:

Environmental Protection: Splash resistant. Preinstalled lead (optional). Solder sleeve one-step terminators insulate, strain relieve, and protect terminations from environmental damage in a wide spectrum of low-temperature electrical interconnection applications. They are-as their name says-one-step solutions.

Technical Data:



Temperature:

-55°C to +125°C, 257°F

Used on Cables Rated 85°C (min).



Approvals:

UL File E87681

Raychem Specification D-5023

CWT Series

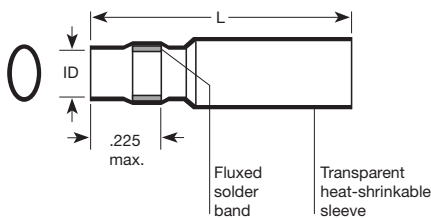
Cable OD		Part Nos.	
Jacket OD Max.	Shield OD Min.	No Preinstalled Lead	With Preinstalled Lead (22AWG/0.38 mm ² green)
1.7 [.065]	0.9 [.035]	CWT-3801	—
1.95 [.075]	1.1 [.043]	CWT-3802	—
2.7 [.105]	1.5 [.059]	CWT-3	CWT-3-W122-5
4.5 [.180]	2.0 [.079]	CWT-5	CWT-5-W122-5
6.0 [.235]	3.3 [.130]	CWT-6	CWT-6-W122-5
7.0 [.275]	3.3 [.130]	CWT-7	CWT-7-W122-5
8.7 [.340]	4.5 [.177]	CWT-9	CWT-9-W122-5
10.7 [.420]	4.5 [.177]	CWT-11	CWT-11-W122-5
13.0 [.510]	7.0 [.276]	CWT-13	CWT-13-W122-5

Note: The CWT series is suitable for applications using low-temperature wires (typically rated at 85°C [185°F] to 125°C [257°F]) with bare copper or tin plating.

Product dimensions and part number system (dimensions in inches)

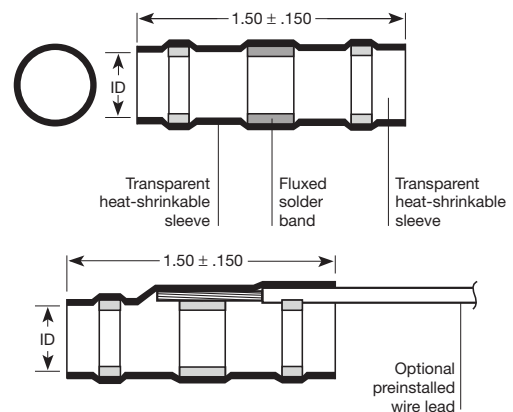
CWT -15XX Series*

Terminating wires to component terminals (pin, post, tab)



CWT -38XX Series

Terminating ground wire to cable shield
Terminating coaxial cable
Wire-to-wire splicing



Raychem, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks

Part number	Minimum	
	inside diameter (ID)	Length (L)
CWT-1501	0.060	0.575 ± 0.060
CWT-1502	0.090	0.575 ± 0.060
CWT-1503	0.110	0.575 ± 0.060
CWT-1504	0.150	0.575 ± 0.060
CWT-1505	1.102	1.00 ± 0.060

Part number	Minimum	
	inside diameter (ID)	
CWT-3801	0.065	
CWT-3802	0.075	
CWT-3803	0.105	
CWT-3805	0.180	
CWT-3806	0.235	
CWT-3807	0.275	
CWT-3809	0.340	
CWT-3811	0.420	
CWT-3813	0.510	

SO63 Series—BiAlloy Temperature Indication System

Construction: Heat-shrinkable thermoplastic sleeve contains a precisely engineered, fluxed solder band that is visible through the sleeve;

Insulation: The band provides exactly the amount of solder and flux required to terminate the ground lead to the cable shield,

Jacket: Encircling the band is a small temperature indicator ring.

Features:

This ring melts only when the surfaces to be joined have reached the correct soldering temperatures, thus ensuring a properly soldered connection. Process control is built into each sleeve.

Applications:

Used for shield-to-ground termination.

Additional Information:

The SO63 series is immersion resistant, features the Raychem BiAlloy temperature indication system, and meets the performance requirements of SAE-AS83519 (formerly MIL-S-83519),

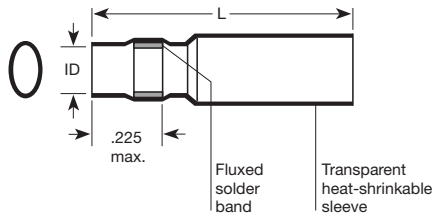
Technical Data:

Approvals:
NAS 1747
RT-1404

Product dimensions and part number system (dimensions in inches)

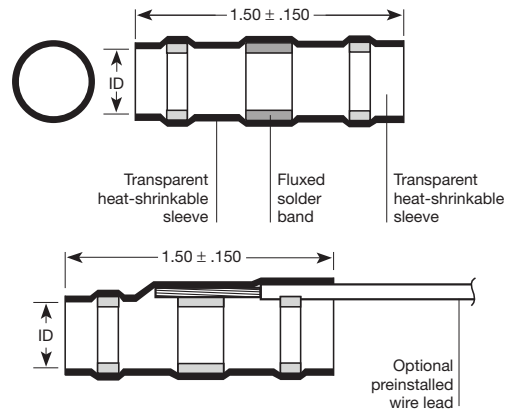
CWT -15XX Series*

Terminating wires to component terminals
(pin, post, tab)



CWT -38XX Series

Terminating ground wire to cable shield
Terminating coaxial cable
Wire-to-wire splicing



Raychem, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks

Part number	Minimum	Length (L)
	inside diameter (ID)	
CWT-1501	0.060	0.575 ± 0.060
CWT-1502	0.090	0.575 ± 0.060
CWT-1503	0.110	0.575 ± 0.060
CWT-1504	0.150	0.575 ± 0.060
CWT-1505	1.102	1.00 ± 0.060

Part number	Minimum
	inside diameter (ID)
CWT-3801	0.065
CWT-3802	0.075
CWT-3803	0.105
CWT-3805	0.180
CWT-3806	0.235
CWT-3807	0.275
CWT-3809	0.340
CWT-3811	0.420
CWT-3813	0.510

Table B. SO63 Series

Cable OD			Part Nos.						
Jacket OD Max.	Shield OD Min.	No Preinstalled Lead	Preinstalled Lead Option*				Braid Strap		
			20 AWG	22 AWG	24 AWG	26 AWG	Nickel Plated	Tin Plated	
1.95 [0.075]	0.90 [.035]	SO63-1-00	SO63-1-55-20-90	SO63-1-55-22-90	SO63-1-55-24-90	SO63-1-55-26-90	SO63-1-01	SO63-1-9030	
2.7 [0.105]	1.40 [.055]	SO63-2-00	SO63-2-55-20-90	SO63-2-55-22-90	SO63-2-55-24-90	SO63-2-55-26-90	SO63-2-01	SO63-2-9030	
4.3 [0.170]	2.15 [.085]	SO63-3-00	SO63-3-55-20-90	SO63-3-55-22-90	SO63-3-55-24-90	SO63-3-55-26-90	SO63-3-01	SO63-3-9030	
6.0 [0.235]	3.30 [.130]	SO63-4-00	SO63-4-55-20-90	SO63-4-55-22-90	SO63-4-55-24-90	SO63-4-55-26-90	SO63-4-01	SO63-4-9030	
7.0 [0.275]	4.30 [.170]	SO63-5-00	SO63-5-55-20-90	SO63-5-55-22-90	SO63-5-55-24-90	SO63-5-55-26-90	SO63-5-01	SO63-5-9030	

*See Table G for lead description. Color of wire lead is denoted by the last two digits of the part number as follows:
90 = White with a black stripe 9 = White 0 = Black 6 = Blue (24 AWG only) 5 = Green (20, 22, 24 AWG)

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.
Dimensions are shown for reference purposes only. Specifications subject to change.

S01/S02 M83519 Series—Thermochromic Temperature Indicator

Construction: The M83519 (S01 and S02) series terminators contain a colored thermochromic temperature indicator that exhibits a distinct color change when surfaces have reached wetting temperature.

Features:

This color change gives both manufacturing and Quality Control an aid in the inspection of the completed termination.

Additional Information:

M83519 is the qualified product listed in SAE-AS83519 (formerly MIL-S-83519). The series features a thermochromic temperature indicator to assist in termination and inspection. The Raychem part number is permanently marked on the sleeve.

Technical Data:

Approvals:
MIL-S-83519/1&2
RT-1404

Table C. S01/S02 M83519 Series

Cable OD		Part No. (MIL Part Number and Raychem Part No.) by Lead Option					
Jacket OD Max	Shield OD Min	No Preinstalled Lead		Preinstalled Lead Option*			
		MIL	Raychem	20 AWG		22 AWG	
				MIL	Raychem	MIL	Raychem
1.95 [0.075]	0.9 [.035]	M83519/1-1	S01-01-R	M83519/2-1	S02-01-R	M83519/2-6	S02-06-R
2.7 [0.105]	1.40 [.055]	M83519/1-2	S01-02-R	M83519/2-2	S02-02-R	M83519/2-7	S02-07-R
4.3 [0.170]	2.15 [.085]	M83519/1-3	S01-03-R	M83519/2-3	S02-03-R	M83519/2-8	S02-08-R
6.0 [0.235]	3.30 [.130]	M83519/1-4	S01-04-R	M83519/2-4	S02-04-R	M83519/2-9	S02-09-R
7.0 [0.275]	4.30 [.170]	M83519/1-5	S01-05-R	M83519/2-5	S02-05-R	M83519/2-10	S02-10-R
Jacket OD Max.	Shield OD Min.	Preinstalled Lead Option*					
				24 AWG		26 AWG	
1.95 [0.075]	0.9 [.035]			M83519/2-11	S02-11-R	M83519/2-16	S02-16-R
2.7 [0.105]	1.40 [.055]			M83519/2-12	S02-12-R	M83519/2-17	S02-17-R
4.3 [0.170]	2.15 [.085]			M83519/2-13	S02-13-R	M83519/2-18	S02-18-R
6.0 [0.235]	3.30 [.130]			M83519/2-14	S02-14-R	M83519/2-19	S02-19-R
7.0 [0.275]	4.30 [.170]			M83519/2-15	S02-15-R	M83519/2-20	S02-20-R

*See Table G for lead description.

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.

S03 Series

Construction: The S03 series terminators contain a colored thermochromic temperature indicator that exhibits a distinct color change when surfaces have reached wetting temperature.

Features:

This color change gives both Manufacturing and Quality Control an aid in the inspection of the completed termination.

Applications:

Used for shield-to-ground termination.

Table D. S03 Series

Cable OD		Part No.	
Jacket OD Max.	Shield OD Min.	Preinstalled Lead Option*	
		Tin plated Braid Strap	Nickel plated Braid Strap
1.95 [0.075]	0.9 [.035]	S03-01-R	S03-06-R
2.7 [0.105]	1.40 [.055]	S03-02-R	S03-07-R
4.3 [0.170]	2.15 [.085]	S03-03-R	S03-08-R
6.0 [0.235]	3.30 [.130]	S03-04-R	S03-09-R
7.0 [0.275]	4.30 [.170]	S03-05-R	S03-10-R

*See Table G for lead description.

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents. Dimensions are shown for reference purposes only. Specifications subject to change.



Raychem, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks

SO96 Series – Thermochromic Temperature Indicator

Construction: The SO96 series terminators contain a colored thermochromic temperature indicator that exhibits a distinct color change when surfaces have reached wetting temperature.

Features:

This color change gives both Manufacturing and Quality Control an aid in the inspection of the completed termination.

Applications:

The SO96 series is designed for high-temperature applications with operating temperature requirements up to 200°C.

Additional Information:

This series features a thermochromic temperature indicator and meets performance requirements of SAE-AS83519 (formerly MIL-S-83519). The solder SO96 with RA flux compatible with nickel-plated shields.

Technical Data:

 **Temperature:**
175°C (347°F)

**Table E. SO96 Series
(175°C [34°F] rated)**

Cable OD		No Preinstalled Lead	Part No.	
Jacket OD Max.	Shield OD Min.		Preinstalled Lead Option*	
			22 AWG	Braid Strap
1.95 [0.075]	0.90 [.035]	SO96-1-00	SO96-1-55-22-90	SO96-1-01
2.7 [0.105]	1.40 [.055]	SO96-2-00	SO96-2-55-22-90	SO96-2-01
4.3 [0.170]	2.15 [.085]	SO96-3-00	SO96-3-55-22-90	SO96-3-01
6.0 [0.235]	3.30 [.130]	SO96-4-00	SO96-4-55-22-90	SO96-4-01
7.0 [0.275]	4.30 [.170]	SO96-5-00	SO96-5-55-22-90	SO96-5-01

*See Table G for lead description.

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.
Dimensions are shown for reference purposes only. Specifications subject to change.

Specifications subject to change. For complete specifications and availability visit www.lapptannehill.com



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SO96 Series – Thermochromic Temperature Indicator

Table H. NAS, M83519, and Raychem Cross-Reference

NAS Part No.	Raychem D Series Part No.	NAS Comment
1744-1	D-1744-01	
1744-2	D-1744-02	
1744-3	D-1744-03	
1744-4	D-1744-04	
1744-5	D-1744-05	
1744-6	D-1744-06	
1744-7	D-1744-07	
1744-8	D-1744-08	
1745-1	D-144-25	Inactive, Use SAE-AS83519/1-1 (formerly MIL-S-83519)
1745-2	D-100-00	Inactive, Use SAE-AS83519/1-2 (formerly MIL-S-83519)
1745-3	D-101-00	Inactive, Use SAE-AS83519/1-3 (formerly MIL-S-83519)
1745-4	D-103-00	Inactive, Use SAE-AS83519/1-5 (formerly MIL-S-83519)
1745-5	D-144-26	
1745-6	D-100-31	
1745-7	D-101-31	
1745-8	D-103-31	
1745-9		Obsolete - Use NAS1745-13
1745-10		Obsolete - Use NAS1745-14
1745-11		Obsolete - Use NAS1745-15
1745-12		Obsolete - Use NAS1745-16
1745-13	D-142-83	Inactive, Use SAE-AS83519/1-1 (formerly MIL-S-83519)
1745-14	D-142-50	Inactive, Use SAE-AS83519/1-2 (formerly MIL-S-83519)
1745-15	D-142-51	Inactive, Use SAE-AS83519/1-3 (formerly MIL-S-83519)
1745-16	D-142-52	Inactive, Use SAE-AS83519/1-5 (formerly MIL-S-83519)
1745-17	D-107-00	Inactive, Use SAE-AS83519/1-4 (formerly MIL-S-83519)
1745-18	D-104-00	
1745-19	D-105-00	
1745-20	D-107-31	
1745-21	D-104-31	
1745-22	D-105-31	
1745-23	D-142-56	Inactive, Use SAE-AS83519/1-4 (formerly MIL-S-83519)
1745-24	D-142-65	
1745-25	D-142-66	
1746-1	D-144-25	Inactive, Use SAE-AS83519/1-1 (formerly MIL-S-83519)
1746-2	D-144-00	Inactive, Use SAE-AS83519/1-2 (formerly MIL-S-83519)
1746-3	D-144-01	Inactive, Use SAE-AS83519/1-3 (formerly MIL-S-83519)
1746-4	D-144-02	Inactive, Use SAE-AS83519/1-5 (formerly MIL-S-83519)
1746-5	D-144-26	
1746-6	D-144-03	
1746-7	D-144-04	
1746-8	D-144-05	
1746-9	D-144-46	Inactive, Use SAE-AS83519/1-4 (formerly MIL-S-83519)
1746-10	D-144-37	
Military Part No.	Raychem S01/S02 Series* Part No.	Raychem SO63 Series** Part No.
M83519/1-1	S01-01-R	SO63-1-00
M83519/1-2	S01-02-R	SO63-2-00
M83519/1-3	S01-03-R	SO63-3-00
M83519/1-4	S01-04-R	SO63-4-00
M83519/1-5	S01-05-R	SO63-5-00
M83519/2-1	S02-01-R	SO63-1-55-20-90
M83519/2-2	S02-02-R	SO63-2-55-20-90
M83519/2-3	S02-03-R	SO63-3-55-20-90
M83519/2-4	S02-04-R	SO63-4-55-20-90
M83519/2-5	S02-05-R	SO63-5-55-20-90
M83519/2-6	S02-06-R	SO63-1-55-22-90
M83519/2-7	S02-07-R	SO63-2-55-22-90
M83519/2-8	S02-08-R	SO63-3-55-22-90
M83519/2-9	S02-09-R	SO63-4-55-22-90
M83519/2-10	S02-10-R	SO63-5-55-22-90
M83519/2-11	S02-11-R	SO63-1-55-24-90
M83519/2-12	S02-12-R	SO63-2-55-24-90
M83519/2-13	S02-13-R	SO63-3-55-24-90
M83519/2-14	S02-14-R	SO63-4-55-24-90
M83519/2-15	S02-15-R	SO63-5-55-24-90
M83519/2-16	S02-16-R	SO63-1-55-26-90
M83519/2-17	S02-17-R	SO63-2-55-26-90
M83519/2-18	S02-18-R	SO63-3-55-26-90
M83519/2-19	S02-19-R	SO63-4-55-26-90
M83519/2-20	S02-20-R	SO63-5-55-26-90



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Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are U.S. equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

* QPL listed to SAE-AS83519 (formerly MIL-S-83519)

** Meets performance requirements of SAE-AS83519 (formerly MIL-S-83519)