

- Less assembly time
- Superior strain-relief
- Fewer errors – Less rework
- Rework made easier
- No build-up taping or feeding wire through grommet
- Typical installation in just 10-20 seconds
- Re-expandable I.D. allows wire addition to a cable bundle



shrinkHOOP grommet (URHR) is a high ratio heat-shrinkable-strain-relief grommet that can be placed over the cable assembly after the connector pinning operation is completed. The ultra-high expansion ratio material conveniently fills the space between the clamp type connector accessory and the cable. When clamped into position, URHR grommet strain relief that is more consistent and convenient strain relief than many conventional practices for example taping, grommet, or tape/grommet combination. The high ratio conformity of URHR grommet will match most typical cable configurations from single conductor to the high density multiple conductor arrangements.

With URHR grommet, repairs and rework are a snap – simply heat the grommet until soft, slide a NON-METALLIC probe through the center of the wire bundle (enlarging the grommet I.D.). Cooled, the grommet will remain open allowing wires to be added, removed or reworked. The system can then be checked, the grommet reheated (shrinking it down again), positioned, and clamped in place.



shrinkHOOP grommet before and after size comparison

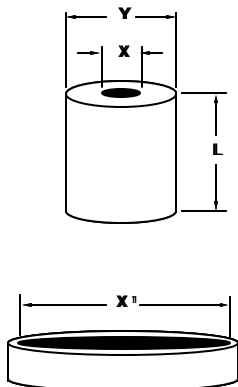


shrinkHOOP grommet in application

Temperature ratings Operating temperature range -55°C to 135°C

Specifications and Approvals MIL-I-81765/1 Type I

Dimensions inches (mm)



Part Number	I.D. Expanded (X')	I.D. Recovered (X)	O.D. (Y)	Length (L)	Wt. (grams)	Notes
URHR-1	1 (25)	0.045 (1)	0.25 (6)	0.5 (13)	0.75 (19)	a) Recovered length will allow for 0.075" either side of the collar, minimum. b) Recovered I.D. will conform to all wire arrangements available in the connector size. c) URHR rings can be made to fit any connector size - consult factory.
URHR-2	1.23 (31)	0.062 (2)	0.375 (10)	0.5 (13)	1 (25)	
URHR-3	1.44 (37)	0.125 (3)	0.5 (13)	0.5 (13)	1.5 (38)	
URHR-4	1.85 (47)	0.125 (3)	0.562 (14)	0.75 (19)	3.5 (89)	
URHR-5	2 (51)	0.125 (3)	0.812 (21)	0.75 (19)	5 (127)	

Typical **shrinkHOOP** grommet performance

	Property	Performance	Test method
Physical	Tensile strength	1500 psi (10.3 Mpa)	ASTM D-412
	Ultimate elongation	250% minimum	ASTM D-412
	Specific gravity	1.4 maximum	ASTM D-792
	Water absorption	0.5 % maximum	ASTM D-570 A
	Flammability	Pass	ASTM D-635
	Corrosion resistance	Pass	ASTM D-2671 A
	Low temperature flex	Pass	ASTM D-2671 C
	4 hours at - 67+/-2°F (- 55+/-1°C)		
	Heat resistance	200% ultimate elongation, minimum	ASTM D-2671
	168 hrs at 347+/-2°F (175+/-1°C)	1200 psi (8.3 Mpa) tensile strength, minimum	
Heat shock	No cracking, dripping or flowing	ASTM D 2671	
4 hrs at 437+/-5°F (225+/-2°C)			
Elastic Memory		275% minimum expansion to 4 inch (10 cm) of a fully recovered test specimen, and 93% recovery of expanded specimen after oven conditioning for 1 minute at 302 +/- 4°F (150+/-2°C)	
Electrical	Dielectric strength	200 v/mil (7880 v/mm) minimum	ASTM D-876
	Volume resistivity	10 ¹⁴ ohm-cm minimum	ASTM D-257
Chemical Fluid Resistance		200% ultimate Elongation, minimum	ASTM F-146
		1200 psi (8.3 Mpa) tensile strength, minimum	

Selection Chart

Connector Series	Connector Size				
	8 (9)	10, 12 (11, 13)	14, 16 (15, 17)	18, 20 (19, 21)	22, 24, 28*
MIL-C-5015					
MS3451, 52, 56, 59	1	2	3	4	5
MS3450	2	3	4	5	*
MIL-C-26500**					
MS24266	1	2	3	4	5
MS24264, 265	2	3	4	5	*
MIL-C-26482					
MS3120, 21, 22, 26	1	2	3	4	5
MS3470, 71, 74, 75, 76	1	2	3	4	5
MS3124, MS3472	2	3	4	5	*
MIL-C-83723 Series I					
M83723/01 & 02, 05 & 06	1	2	3	4	5
07 & 08, 13 & 14, 23 & 24	1	2	3	4	5
M83723/03 & 04	2	3	4	5	*
MIL-C-83723 Series II					
M83723/17 & 18, 23 & 24	1	2	3	4	5
M83723/12 & 20, 21 & 22	2	3	4	5	*
MIL-C-83723 Series III					
M83723/71 & 72 thru 97 & 98	1	2	3	4	5
M83723/66, 67, 68 & 69	2	3	4	5	*
MIL-C-38999 Series I					
MS27469	1	2	3	4	5
MS27466, 68, 96, 27505, 27656	2	3	4	5	*
MIL-C-38999 Series II					
MS27472, 97, 98, 27508, 27513	1	2	3	4	5
MS27473, 84, 27474	2	3	4	5	*
MIL-C-38999 Series III					
38999/26	1	2	3	4	5
38999/20, 24	3	4	5	5	*
Boeing					
BACC45, F, M, N, P, R, S, T	-	2	3	4	5
BACC 63X	-	3	4	5	*
Boeing					
DC39, 31, 34, 35, 50-57	1	2	3	4	5
DC32, 33, 36, 37, 60, 61, 62, 63	2	3	4	5	*

* Consult factory for availability of larger sizes.

** Note: cable support clamp I.D. may effect the size of **shrinkHOOP** grommet selected.