

Heat-shrinkable water-blocking system

The RayBlock 85 water-blocking system is designed to provide consistent sealing for cable bundles and the back of connectors. The wires in the bundle are placed within the channels of a specially formulated hot-melt adhesive profile, and then covered by dual-wall, heat-shrinkable tubing with a flame-retardant, radiation-crosslinked outer wall and hot-melt adhesive inner wall.

When the tubing is heated, the adhesive melts and the tubing shrinks, forcing the molten adhesive to fill all the voids within the wire bundle and tubing. The result is a solid plug of adhesive molded around each wire in the bundle, creating a moisture-resistant seal.

of other harness components, such as feedthroughs and grommets. The overall diameter of the installed RayBlock system is only marginally greater than the cable bundle itself. The installation is simple and can be done off-line, or on the harness board as required.

The installed product is round and concentric, allowing easy positioning

**Temperature rating**

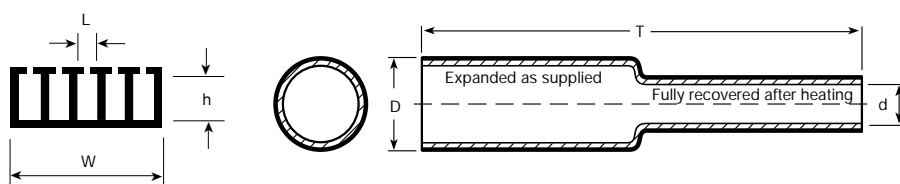
Minimum shrink temperature:	125°C
Continuous operating temperature:	-40°C to 85°C

**Specifications\***

<b>Type</b>	<b>Raychem</b>
RayBlock 85	RW-2101 and RayBlock 85 SCDs

\*When ordering, always specify latest issue.

**Dimensions (millimeters/inches)**



Ordering description	No. of channels	Profile			Tubing					
		h (nom.)	L (nom.)	W (nom.)	D (min.)	d (max.)	T (nom.)			
RayBlock 85 Kit 0102-A0	2	6.5 0.256	2.75 0.108	8.50 0.335	12.0 0.472	3.0 0.118	40 1.57			
RayBlock 85 Kit 0203-A0	3	6.5 0.256	2.75 0.108	12.25 0.482	24.0 0.945	6.0 0.236	47 1.85			
RayBlock 85 Kit 0504-A0	4	6.5 0.256	2.75 0.108	16.0 0.630	16.0 0.630	4.0 0.158	40 1.57			
RayBlock 85 Kit 0405-A0	5	6.5 0.256	2.75 0.108	19.75 0.778	24.0 0.945	6.0 0.236	45 1.77			
RayBlock 85 Kit 0107-A0	7	6.5 0.256	2.75 0.108	27.25 1.07	24.0 0.945	6.0 0.236	65 2.56			
RayBlock 85 Kit 0510-A0	10	6.5 0.256	2.75 0.108	38.50 1.52	32.0 1.26	8.0 0.315	55 2.17			

**Ordering information**

Color	Black
Size selection	See selection guide on reverse.
Standard packaging	1000 pcs. of profile and 1000 pcs. of tubing per kit

## RayBlock 85 selection guide

Ordering description	No. of channels	Wire outside diameter		Approximate installation time* (seconds)
		Up to 2.8 mm (up to 0.110 in.)	2.8 mm to 3.5 mm (0.110 in. to 0.138 in.)	
RayBlock 85 Kit 0102-AO	2	2 to 4 wires	2 wires only	45
RayBlock 85 Kit 0203-AO	3	3 to 6 wires	3 wires only	60
RayBlock 85 Kit 0504-AO	4	4 to 8 wires	4 wires only	60
RayBlock 85 Kit 0405-AO	5	5 to 10 wires	5 wires only	60
RayBlock 85 Kit 0107-AO	7	7 to 14 wires	7 wires only	90
RayBlock 85 Kit 0510-AO	10	10 to 20 wires	10 wires only	90

Note: This selection guide is for guidance only; individual bundles may well differ in requirements. Special designs may be possible on request, to accommodate large wires. \*Installation time depends on the size of the bundle and the type of equipment used. The times listed are only for guidance.

## Installation

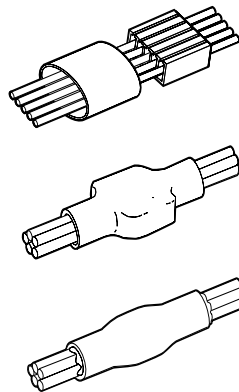
### Tools

Tyco Electronics manufactures a variety of heating tools for installing the RayBlock 85 system. These include hot air blowers, infrared heaters, and special automatic heating devices.

### Installation steps

Correct installation of the Rayblock 85 system occurs in three separate stages:

1. Without twisting or deforming them, the installer carefully places the wires in the channels. The heat-shrink sleeve is then positioned centrally over the wire-filled profile.
2. The tubing is heated and it shrinks to form an "envelope" for the adhesive.
3. Recovery of the center section forces the molten adhesive around and between the wires to form the seal.



RayBlock and Raychem are trademarks of Tyco Electronics Corporation.

### Users should independently evaluate the suitability of the product for their application.

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