

Section 7: Cable Glands and Duct Seals

CFTS	Heat Shrinkable Cable Feed Through Seal	120
EAKT	Metal Cable Glands for Polymeric and Paper Cables	121
RDSS	Rayflate - Inflatable Duct Seal	122

Cabinet Feedthrough Seals

CFTS

CFTS seals are heat shrinkable molded part for moisture sealing applications where cable enters enclosures, such as cabinets or connection boxes.

CFTS seals:

- Are suitable for environments that have existing periodic pressure difference and/or temperature differential.
- Are precoated with a thermoplastic adhesive that seals around the entering cable. The O-ring creates the water/air seal at the cabinet entry.
- Utilise a rigid plastic that, when inserted through the cabinet wall, protects the entering cable from abrasion or cut-through

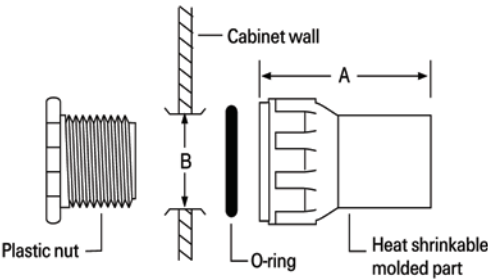
Ordering information

1. Select the appropriate catalogue number based on cable diameter.
2. CFTS seals are a three-part assembly: rigid plastic nut, elastomeric O-ring, and heat shrinkable molded part.
3. CFTS molded parts are precoated with a thermoplastic adhesive.
4. Use CFTS seals with a maximum cabinet wall thickness of 0.20 in (5 mm).
5. Standard package: 5 kits/box.
6. Related test report: EDR-5212.



Product Details

Catalogue Reference	Cable Diameter	A - Length of Molded Part	B - Clearance (knockout) hole size
	(mm)	(mm)	(mm)
CFTS-1	5 - 10	70	25
CFTS-2	6 - 17	70	25
CFTS-3	14 - 25	95	35
CFTS-4	20 - 37	114	51
CFTS-5	37 - 61	178	89



Cable Glands for Plastic and Paper Cables with and without Armour

EAKT

The connection of cables to medium voltage equipment can be problematic if the cable box is dimensioned for compound filling. In a wide range of boxes where the distance from bushing to baseplate is a limiting factor, this problem may now be overcome with the Raychem cable gland.

Simple Installation

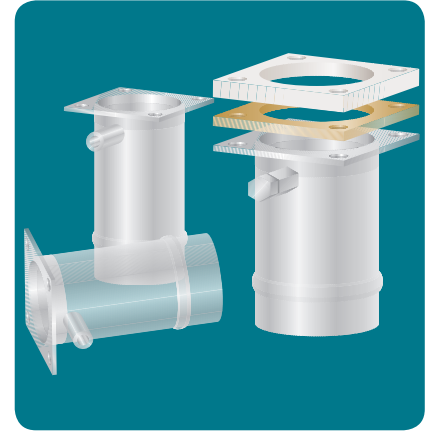
The gland is a simple bolt on modification which significantly reduces the minimum box height required. This allows cables to be connected in many British-type boxes without requiring compound, using the easy and efficient Raychem heat shrinkable termination technique.

Kitted Components

To match stud spacing to BS 2562, Raychem cable glands are available in two sizes, complete with fixing bolts. Also included in each kit are screw clips to fasten the armour to the gland, an adhesive coated heat shrinkable sleeve to insulate the assembly and protect it from corrosion, and illustrated installation instructions.

Separate Earthing

Where it is required to separate the cable earth from the equipment earth, the Raychem cable gland can be obtained with an additional insulating spacer and bolts.



Product Details - Cable Glands for Plastic and Paper Insulated Cables

Internal Gland Diameter	Catalogue Reference			
(mm)	Multicore Cables	Multicore Cables Insulated Gland	Multicore Cables Split Gland	1 Core Cables (Aluminium Gland)
65	EAKT-1605			EAKT-1608
95	EAKT-1606	EAKT-1607	SMOE-50153	

Duct Sealing System

RDSS

- Easily and quickly installed
- Provides watertight duct seal
- Helps prevent flooding
- Installs with water flowing

The RDSS duct seal is an inflatable duct sealing system that wraps around cables in the ducts of manholes or exchange vaults. The product effectively seals power cable ducts, stopping or preventing water from leaking into the manhole or vault.

The RDSS duct seal is suitable for use with polyethylene or lead sheath cables in the plastic, concrete, or steel ducts of wall feed-through systems.

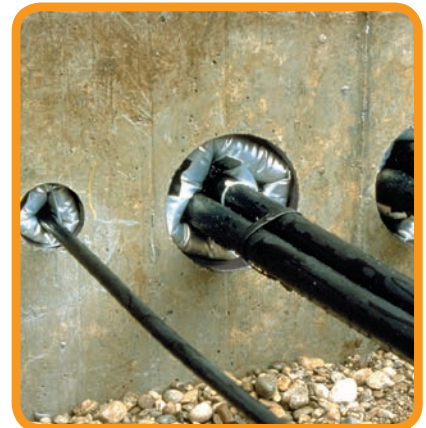
RDSS duct seal also seals around unjacketed concentric neutral cable. It permits cable movement and thermal expansion while retaining its sealing properties. The RDSS duct seal system has been tested in severe environmental conditions

and is water and airtight up to 50 kPa (equivalent to 16.7ft water head). Request test report EDR-5253.

The product can be easily and quickly installed, even in flowing water. The RDSS duct seal is inflated with air or CO₂ gas and conforms to the irregular geometry of cable and ducts. It is easy to remove as well, even in adverse field conditions.

Standard kits accommodate a wide range of cable diameters, as well as empty ducts and ducts with multiple cables. The RDSS duct seal system is environmentally friendly: no hazardous chemicals are used to create the seal. It is made from chemical and bacteria resistant materials and will provide a reliable, durable long lasting seal.

Improve your service and reduce your maintenance costs with RDSS duct seals from TE Connectivity.



RDSS-IT-16:

The inflation tool uses CO₂ gas cylinders. The CO₂ gas cylinders contain 16 gr. CO₂. One cylinder will inflate 3 pcs. of RDSS-100 duct seals in vacant ducts. If ducts are occupied with cables, more inflations per cylinder can be performed. The tool is designed with an ON/OFF switch and has an automatic pressure monitoring system of 45 3 3 psi (3,0 3 0,2 bar).



E7512-0160:

16 gr. CO₂ gas cylinders for RDSS-IT-16 tool. Each gas cylinder inflates approx. 5 pcs of RDSS-100 duct seals. Each box contains 10 gas cylinders.



RDSS-IGG-SR-AS:

The inflation gun connects to a pressurized air bottle, pump or compressor, with an outlet pressure of 60 to 150 psi (4 to 10 bar) to feed the inflation gun. The inflation gun is designed with a safety relief valve and audible signal device to facilitate the installation.

Size Selection Guide

For ducts containing three or more cables, one RDSS duct seal clip for every two cables is required.

Duct Inner Diameter	Number of Cables in Duct / Maximum Cable Bundle Diameter					
	0, 1, or 2 Cables		3 or 4 Cables		5, 6, or 7 Cables	
32	RDSS-45	13	RDSS-45, 1 RDSS-CLIP-45	8	RDSS-45, 2 RDSS-CLIP-45	3
38	RDSS-45	25	RDSS-45, 1 RDSS-CLIP-45	20	RDSS-45, 2 RDSS-CLIP-45	15
45	RDSS-45	32	RDSS-45, 1 RDSS-CLIP-45	27	RDSS-45, 2 RDSS-CLIP-45	22
50	RDSS-60	30	RDSS-60, 1 RDSS-CLIP-75	25	RDSS-60, 2 RDSS-CLIP-75	20
57	RDSS-60	41	RDSS-75, 1 RDSS-CLIP-75	36	RDSS-75, 2 RDSS-CLIP-75	31
64	RDSS-75	38	RDSS-75, 1 RDSS-CLIP-75	33	RDSS-75, 2 RDSS-CLIP-75	28
70	RDSS-75	46	RDSS-75, 1 RDSS-CLIP-75	41	RDSS-75, 2 RDSS-CLIP-75	36
75	RDSS-75	56	RDSS-75, 1 RDSS-CLIP-75	50	RDSS-75, 2 RDSS-CLIP-75	46
83	RDSS-100	56	RDSS-100, 1 RDSS-CLIP-100	50	RDSS-100, 2 RDSS-CLIP-100	46
89	RDSS-100	66	RDSS-100, 1 RDSS-CLIP-100	61	RDSS-100, 2 RDSS-CLIP-100	56
95	RDSS-100	74	RDSS-100, 1 RDSS-CLIP-100	69	RDSS-100, 2 RDSS-CLIP-100	64
100	RDSS-100	80	RDSS-100, 1 RDSS-CLIP-100	75	RDSS-100, 2 RDSS-CLIP-100	70
108	RDSS-100	89	RDSS-100, 1 RDSS-CLIP-100	85	RDSS-100, 2 RDSS-CLIP-100	79
114	RDSS-100	89	RDSS-100, 1 RDSS-CLIP-100	85	RDSS-100, 2 RDSS-CLIP-100	79
121	RDSS-125	97	RDSS-125, 1 RDSS-CLIP-125	92	RDSS-125, 2 RDSS-CLIP-125	87
125	RDSS-125	104	RDSS-125, 1 RDSS-CLIP-125	98	RDSS-125, 2 RDSS-CLIP-125	93
133	RDSS-150 [†]	109	RDSS-150 [†] , 1 RDSS-CLIP-150	104	RDSS-150 [†] , 2 RDSS-CLIP-150	98
140	RDSS-150 [†]	120	RDSS-150 [†] , 1 RDSS-CLIP-150	114	RDSS-150 [†] , 2 RDSS-CLIP-150	109
146	RDSS-150 [†]	124	RDSS-150 [†] , 1 RDSS-CLIP-150	119	RDSS-150 [†] , 2 RDSS-CLIP-150	114
150	RDSS-150 [†]	129	RDSS-150 [†] , 1 RDSS-CLIP-150	124	RDSS-150 [†] , 2 RDSS-CLIP-150	120
159	RDSS-150 [†]	138	RDSS-150 [†] , 1 RDSS-CLIP-150	133	RDSS-150 [†] , 2 RDSS-CLIP-150	125

165 - 210mm Ducts in this range require the use of RDSS-AD-210 adapter. Contact TE for application information.

[†]See Ordering information below.

*Maximum cable range is the sum of the diameters of all cables in the duct plus 0.2" for each RDSS duct seal clip

**Sealing RDSS-150 in a duct that is empty or contains a cable less than 2.4" (60mm) in outside diameter requires a RDSS-AT/AP-150 device. This device and instructions for its installation are available in a separate kit.

Duct Inside Diameter	1 x RDSS-AD-210 + RDSS-125 Cable Diameter	2 x RDSS-AD-210 + RDSS-125 Cable Diameter	1 x RDSS-AD-210 + RDSS-150 Cable Diameter	2 x RDSS-AD-210 + RDSS-150 Cable Diameter
	(mm)	(mm)	(mm)	(mm)
135	0*			
140	0 - 40			
145	0 - 50			
150	0 - 65			
160	0 - 91			
165	0 - 103			
170	70 - 110	0*	60 - 107	
180	80 - 120	0 - 50	60 - 118	
185	90 - 130	0 - 65	60 - 129	
190		0 - 83	60 - 135	
195		0 - 95	60 - 139	
205		75 - 115	115 - 155	60 - 112
210		80 - 120	120 - 160	60 - 118

* Empty ducts only

Suitable for empty ducts

With cables only

Duct seals: Do not inflate the duct seal outside the duct!