

RDSS

Rayflate duct sealing system

The Rayflate duct sealing system (RDSS) has been designed for use in conjunction with plastic, concrete, or steel ducts to provide a watertight duct seal. The RDSS seals cable ducts and helps to prevent flooding in cable vaults, access manholes, substation base-ments, and customer feeds.

Provides watertight seal

The RDSS sealing system consists of an inflatable, sealed bladder of flexible, metallic laminate material, which has preinstalled, high-temperature sealant strips on both sides. The bladder is first inflated to 45 psi (three-bar) internal pressure, and then presses the sealant

against the duct wall and onto the substrate. The bag uses a self-sealing gel material to seal the filling hole when the filling tube is removed.

Seals multiple cable ducts

For applications with three or more cables, an RDSS-CLIP is inserted between the cables. The RDSS-CLIP is a high-temperature mastic mounted on an installation stick. It seals the area between the cables when used in conjunction with the RDSS inflatable bladder.

Acceptable to use on medium voltage cables including unjacketed concentric neutral.



Selection information (dimensions in inches/millimeters)

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	
1.25 (32)	RDSS-45	0.5 (13)	RDSS-45, 1 RDSS-CLIP-45	0.3 (8)	RDSS-45, 2 RDSS-CLIP-45	0.1 (3)
1.50 (38)	RDSS-45	1.0 (25)	RDSS-45, 1 RDSS-CLIP-45	0.8 (20)	RDSS-45, 2 RDSS-CLIP-45	0.6 (15)
1.75 (45)	RDSS-45	1.3 (32)	RDSS-45, 1 RDSS-CLIP-45	1.05 (27)	RDSS-45, 2 RDSS-CLIP-45	0.9 (22)
2.00 (50)	RDSS-60	1.2 (30)	RDSS-60, 1 RDSS-CLIP-75	1.0 (25)	RDSS-60, 2 RDSS-CLIP-75	0.8 (20)
2.25 (57)	RDSS-60	1.6 (41)	RDSS-75, 1 RDSS-CLIP-75	1.4 (36)	RDSS-75, 2 RDSS-CLIP-75	1.2 (31)
2.50 (64)	RDSS-75	1.5 (38)	RDSS-75, 1 RDSS-CLIP-75	1.3 (33)	RDSS-75, 2 RDSS-CLIP-75	1.1 (28)
2.75 (70)	RDSS-75	1.8 (46)	RDSS-75, 1 RDSS-CLIP-75	1.6 (41)	RDSS-75, 2 RDSS-CLIP-75	1.4 (36)
3.00 (75)	RDSS-75	2.2 (56)	RDSS-75, 1 RDSS-CLIP-75	2.0 (50)	RDSS-75, 2 RDSS-CLIP-75	1.8 (46)
3.25 (83)	RDSS-100	2.2 (56)	RDSS-100, 1 RDSS-CLIP-100	2.0 (50)	RDSS-100, 2 RDSS-CLIP-100	1.8 (46)
3.50 (89)	RDSS-100	2.6 (66)	RDSS-100, 1 RDSS-CLIP-100	2.4 (61)	RDSS-100, 2 RDSS-CLIP-100	2.2 (56)
3.75 (95)	RDSS-100	2.9 (74)	RDSS-100, 1 RDSS-CLIP-100	2.7 (69)	RDSS-100, 2 RDSS-CLIP-100	2.5 (64)
4.00 (100)	RDSS-100	3.2 (80)	RDSS-100, 1 RDSS-CLIP-100	3.0 (75)	RDSS-100, 2 RDSS-CLIP-100	2.8 (70)
4.25 (108)	RDSS-100	3.5 (89)	RDSS-100, 1 RDSS-CLIP-100	3.3 (85)	RDSS-100, 2 RDSS-CLIP-100	3.1 (79)
4.50 (114)	RDSS-100	3.5 (89)	RDSS-100, 1 RDSS-CLIP-100	3.3 (85)	RDSS-100, 2 RDSS-CLIP-100	3.1 (79)
4.75 (121)	RDSS-125	3.8 (97)	RDSS-125, 1 RDSS-CLIP-125	3.6 (92)	RDSS-125, 2 RDSS-CLIP-125	3.4 (87)
5.00 (125)	RDSS-125	4.1 (104)	RDSS-125, 1 RDSS-CLIP-125	3.9 (98)	RDSS-125, 2 RDSS-CLIP-125	3.7 (93)
5.25 (133)	RDSS-150 [†]	4.3 (109)	RDSS-150 [†] , 1 RDSS-CLIP-150	4.1 (104)	RDSS-150 [†] , 2 RDSS-CLIP-150	3.9 (98)
5.50 (140)	RDSS-150 [†]	4.7 (120)	RDSS-150 [†] , 1 RDSS-CLIP-150	4.5 (114)	RDSS-150 [†] , 2 RDSS-CLIP-150	4.3 (109)
5.75 (146)	RDSS-150 [†]	4.9 (124)	RDSS-150 [†] , 1 RDSS-CLIP-150	4.7 (119)	RDSS-150 [†] , 2 RDSS-CLIP-150	4.5 (114)
6.00 (150)	RDSS-150 [†]	5.1 (129)	RDSS-150 [†] , 1 RDSS-CLIP-150	4.9 (124)	RDSS-150 [†] , 2 RDSS-CLIP-150	4.7 (120)
6.25 (159)	RDSS-150 [†]	5.4 (138)	RDSS-150 [†] , 1 RDSS-CLIP-150	5.2 (133)	RDSS-150 [†] , 2 RDSS-CLIP-150	5.0 (125)

6.50 - 8.00 (165 - 210mm) Ducts in this range require the use of RDSS-AD-210 adapter. Contact Tyco Electronics for application information.

[†]See Ordering information below.

Ordering information

1. In ducts where the cable/cable bundle is less than 2.4" (60mm) in diameter, an RDSS-AT/AP-150 device must be used in conjunction with the RDSS-150.
2. Standard package: RDSS = 10 kits/box, RDSS-CLIP = 5 clips/box
RDSS-TOOLS = 1 each/box, CO₂ cartridges = 10 each/box,
RDSS-AT/AP-150 = 1 each/box
3. Related test report: [EDR-5253](#)
4. S-1278 sealant, used in RDSS-CLIPS, is available separately (see page 48).

Related installation instructions
[RDSS](#)

Duct Sealing System

RDSS sealing clip

RDSS duct sealing clips are to be used if the duct is occupied by more than two cables. The maximum number of cables sealed with one RDSS-CLIP is four. If more cables are to be sealed, one extra clip is needed for every three additional cables. Check with your Tyco Electronics representative for applications with more than seven cables.

Catalog number	Kit used with
RDSS-CLIP-45	RDSS-45
RDSS-CLIP-75	RDSS-75 and RDSS-60
RDSS-CLIP-100	RDSS-100
RDSS-CLIP-125	RDSS-125
RDSS-CLIP-150	RDSS-150

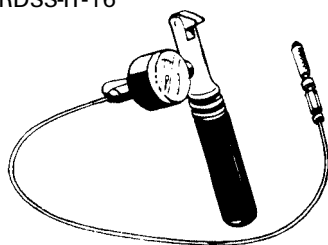
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RDSS installation tools

RDSS duct seals can be installed with a variety of inflation tools having the capability of inflating RDSS to 45±3 psi (3 bar) of pressure. The tools Tyco Electronics offers are summarized in the table below.

Catalog number	Description	Standard package
RDSS-IT-16	Inflation tool designed with an ON/OFF switch and an automatic pressure-monitoring system. The required CO ₂ gas cylinders (E7512-0160) must be ordered separately.	1 tool/box
E7512-0160	16-gr CO ₂ gas cylinders for the RDSS-IT-16 tool. Each gas cylinder inflates approximately four RDSS-100 duct seals.	10 cylinders/box
RDSS-IG-SR-AS	Inflation tool designed for use with customer's own source of nitrogen or compressed air. Features a pressure gauge, automatic shutoff, VGF valve connection, and two alternate connections for plastic or rubber hoses.	1 tool/box
E7512-0220	Tube snap assembly. Spare part for RDSS-IT-16 inflation tool.	1 each/box
E7512-0240	Spare pressure gauge assembly for RDSS-IT-16 inflation tool.	1 each/box
E7512-0260	Spare delivery pipe for RDSS-IT-16 inflation tool.	1 each box
S-1278-3 x 61 x 7620	RDSS sealant roll.	1 25-ft roll/box
RDSS-AT/AP-150	For use with the RDSS-150 in duct 5.25" or larger with cable/cable bundles less than 2.4" (60mm) in diameter.	1 each/box
RDSS-AD-210	Adapter for ducts 6.5 - 8.0" (165 - 210mm) diameter.	4 each/box
E4540-1250	RDSS-LUBE for installation of RDSS.	25 each/box

RDSS-IT-16



RDSS-IG-SR-AS

