

For Un-Pressurised Telecommunication Networks.



## Description

The Dexseal gel filled closure provides a moisture proof splice simply and quickly. 4 sizes in the range accommodate pair counts up to 30 pairs. No special tools are required to securely close the splice case.

All cables entering the splice case are strain relieved. Discrete IDC, Modular and Single Pair In-line connectors can be used. In-line, Butt and branched splicing configurations can be spliced.

- Prevents water ingress by use of non-flowing gel under permanent compression
- Four sizes are available accommodating joints up to 30 pairs
- · Quick, easy to use
- · No special tools required to install
- Robust and reliable under a wide variety of environmental conditions
- · Many connector types can be accommodated
- Butt, in-line, and branch configurations are possible
- · Easy, clean re-entry

## Kit Contents

Dexseal Gel filled Splice Closure [inclusive of strain relief straps]

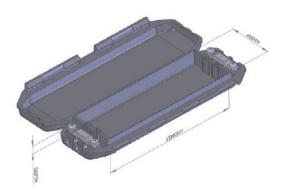
Instruction leaflet.





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# Sizing/ordering information



### GELSNAP INTERNAL DIMENSIONS - Approximate

Dexseal	Length mm	Width mm	Depth mm	Internal Closed Depth mm	Max Splice Opening	Max Splice Capacity No. of Pairs	Splice Type
GFSC 3	209	84	14	28	180	30	In-line Cable each end
GFSC 2A	150	62	10	20	130	15	Butt/In-line 2 cables at each end
GFSC 2	114	37	7	14	80	5	Butt/In-line 2 cables at each end
Dual-In-Line	60	20	7	14	70	2	in-line Cable at each end.





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#### **Technical Specification**

#### **DexSeal Gel Filled Closure system**

- The Dexseal gel filled closures provide a quick and easy method of providing environmental and mechanical protection for small pair-count cables in buried applications without risk of cable damage.
- It is suitable for use on both polyethylene and lead-jacketed cables.
- . The product design allows splices to be either
  - butt-type (one-in/out), or
  - in-line (maximum two-in/out).

Each closure incorporates a strain-relief system.

Four sizes are available: 2pr, 5pr, 10/15pr and 30 pair closures.

#### Scope

This specification describes the performance and material requirements and testing methods for the DexSeal Gel filled Splice Closures.

#### **Product Description**

The DexSeal Gel filled splice closure consists of a gel contained in both the lid and splice case. The lid and splice case are injection moulded using a life hinge which combines both compartments. The cables are restrained using a mechanical fixing strap which forms part of the closure.

#### Requirements

#### **General Requirements**

- The product shall be capable of meeting the functional requirements as specified within this report when installed
  in accordance with the applicable installation instructions and tested according to the methods of test described in
  this document.
- The gel shall be compatible with the PE and lead-jacketed cables used by the customer.
- The fastenings shall be resistant to corrosion.
- Dimensions of the parts shall comply with the applicable specification control drawings.
- The components of the Dexseal gel filled closure kits shall be free of defects which would adversely affect product performance.

#### Installation

The product shall be installable at temperatures of between -10°C and +45°C.







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# **Functional Requirements**

TEST	METHOD AND CO	NDITIONS	NORM	REQUIREMENT
Appearance			None	No defects which would adversely affect product performance.
Immersion	Test temperature: Immersion medium: Immersion time: Immersion depth:	(23 ± 3)°C Water 48 hours 1 metre	None	Insulation resistance. No water ingress.
Insulation resistance	Test temperature: Voltage: Measurement time	(23 ± 3)°C 500 v DC 1 minute	IEC 512-2 Method C	Min. E9 Ω.
Resistance to aggressive media	Test temperature: Test time: Test media:	(23 ± 3)°C 30 days pH 2, pH 12 Diesel for cars Petroleum jelly	None None EN 590 None	Insulation resistance. No water ingress. Immersion.
Resistance to stress cracking	Test temperature: Test medium: Test time:	(50 ± 2)°C 10% Igepal 7 days	None	Insulation resistance. No visible cracking. No water ingress.
Axial pull	Test temperature: Load: Duration:	(23 ± 3)°C D* /45 x 500 N 8 hours/cable	None	No cable movement > 5 mm.
Static load	Test temperature: Time: Load: Die area: Applications: Site:	(-15 ± 2)°C 5 minutes (1000 ± 10) N 5 cm2 Two Middle of closure	No defects	

<sup>\*</sup>D is the cable outer diameter in mm.







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# Gel Specification

#### Performance Benefits:

- Extremely Soft Consistency to Absorb Environmental Mechanical Shock and Vibration
- Probe Testable and Self Healing, Allowing Multiple Connections Without Loss of Sealing Effectiveness
- Excellent Dielectric Properties
- Excellent, Reformable, Pressure Sensitive Characteristics
- Excellent Adhesion
- · Solventless Formulation for EPA Compliance
- Nontoxic

#### **Gel Characteristics:**

- · Clear to Assist in Installation
- Superior Tear Resistance Properties
- Extended Low/High Temperature Stability
- Resistant to Fungi Growth
- Not Hydroscopic (unlike certain competitive gels)
  Does Not Need to be Compressed to Operate Effectively in All Applications

TEST		RESULT
	A/B	
	Viscosity A/B mpa.s	1500~2500
	Operation time Hrs ≥	3
	Sulfuration time 23°C min ≥ 70°C min ≥	120 15-20
	Penetration ratio @25°C 1/10mm	150~300
	Impulse spark over voltage MV/m ≥	20
	Volume resistivity Ω.cm ≥	1×10 <sup>14</sup>
	Dielectric constant 1MHz ≤	3.2
	Dielectric loss 1MHz ≤	1×10 <sup>-9</sup>

