

# RAIL D-SUB BACKSHELLS

FOR D-SUBMINIATURE CONNECTORS

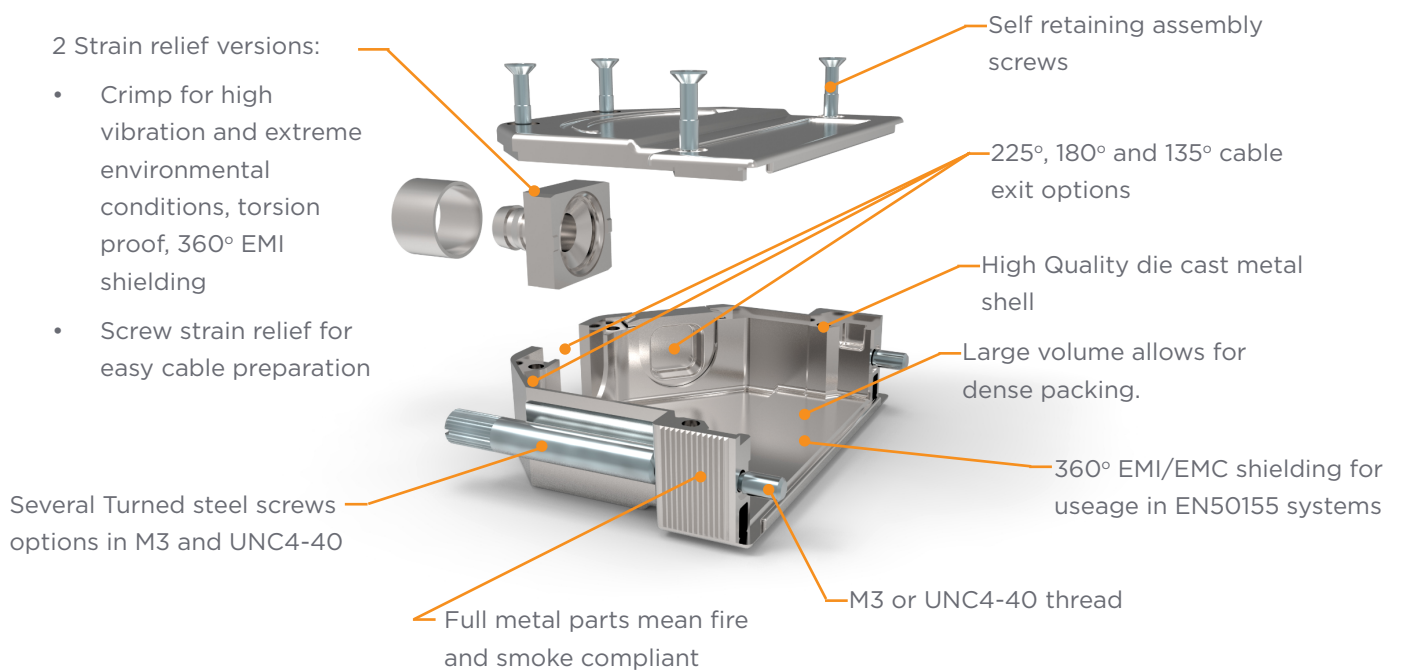
## D-Sub Backshells

For D-Subminiature Connectors

# RAIL D-SUB BACKSHELLS

## FOR D-SUBMINIATURE CONNECTORS

TE Connectivity (TE) provide a comprehensive range of ruggedized metal backshells for D-Subminiature connectors that allow for a fast easy installation and assembly thanks to a practical construction with a minimum number of single parts. TE have many options available including two cable exit variants and a unique retrofittable quick-lock system for easy robust assembly in tight spaces. With a cable exit option of crimp inserts ensuring unparalleled 360° EMI/EMC Shielding, the crimp insert also protects the conductors against damage during the crimping process. For quick and easy installation we also have a screw strain relief cable exit option which requires no special tooling.



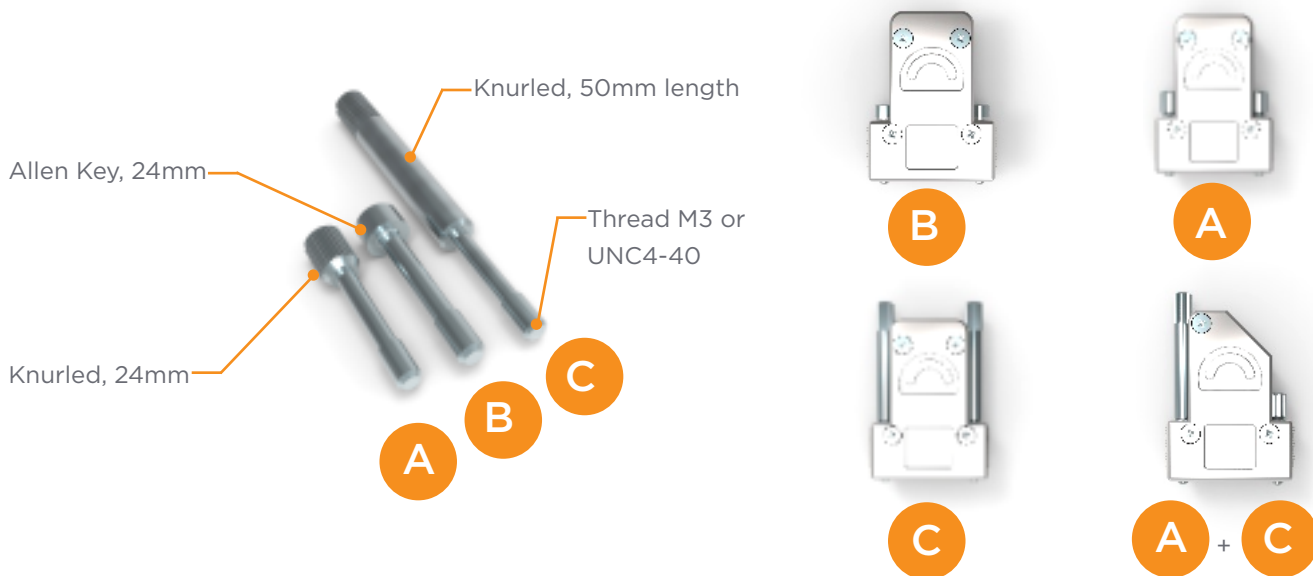
Cable Outlet	Size 1 9/15p	Size 2 15/26p	Size 3 25/44p	Size 4 37/62p	Size 5 50/78p
180° Cable Outlet					
135° Cable Outlet					
225° Cable Outlet					

## D-Sub Backshells

For D-Subminiature Connectors

### Screw Lock Options

With multiple screw lock options our D-Sub backshells meet all requirements for D-Subminiature connectors.



### Ordering Information

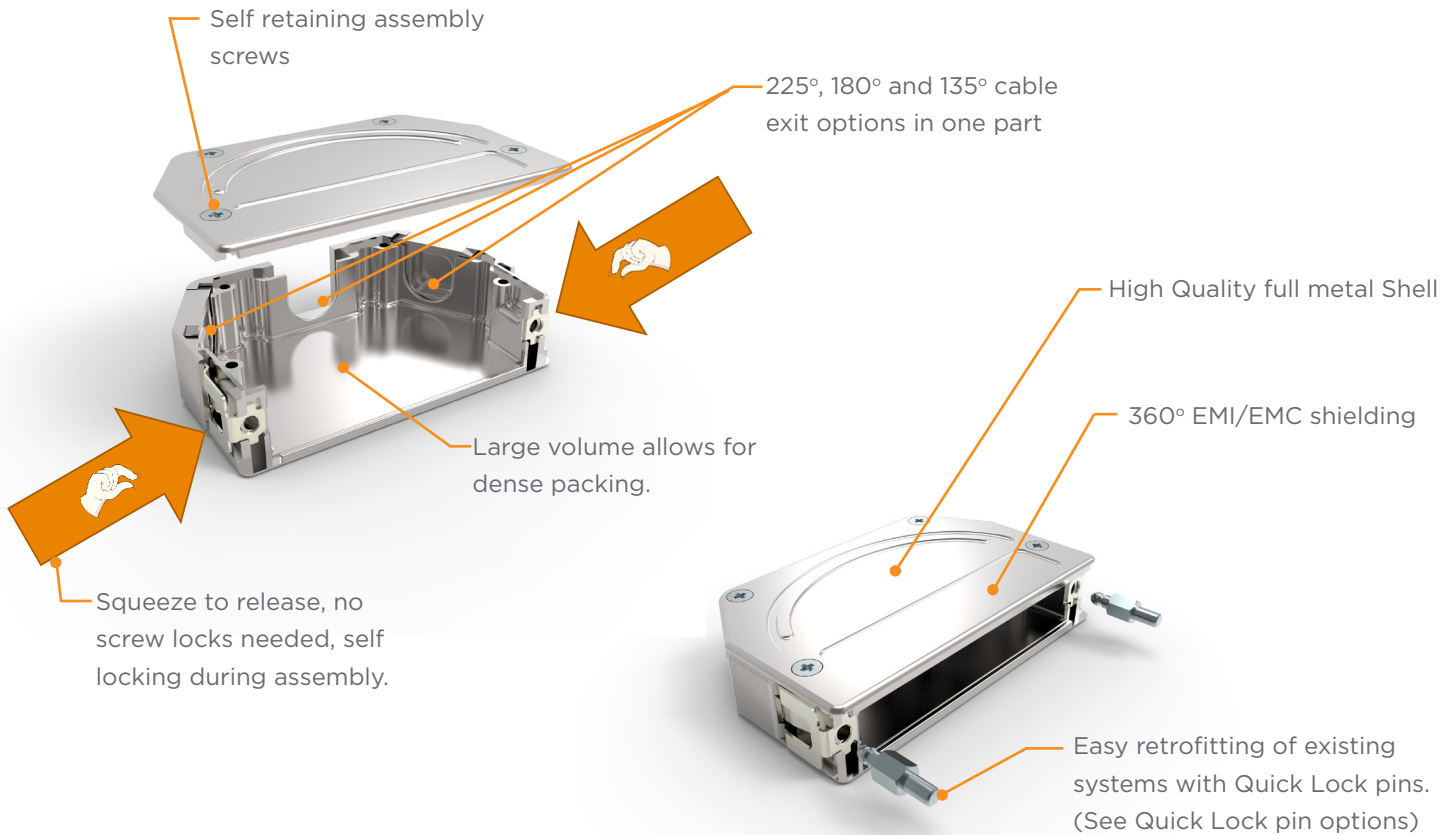
	Positions	Picture	Thread	Locking Screw				Cable Outlet		
				w/Spring Washer	Short Knurled	Long Knurled	Long Knurled and Locking Screw Short Knurled	180°	135°	225°
			Screw Length	20.7mm	24mm	50mm	24/50mm			
1	9P/15P		UNC 4-40	1-2308340-1	1-2308340-3	1-2308340-5	-	●		
			M3	1-2308340-2	1-2308340-4	1-2308340-6	-	●		
			UNC-4-40	1-2308340-7	1-2308340-9	-	2-2308340-1		●	
			M3	12308340-8	2-230834-0	-	2-2308340-2		●	
2	15/26P		UNC 4-40	1-2308341-1	1-2308341-3	1-2308341-5	-	●		
			M3	1-2308341-2	1-2308341-4	1-2308341-6	-	●		
			UNC 4-40	1-2308341-7	1-2308341-9	-	2-2308341-1		●	
			M3	1-2308341-8	2-2308341-0	-	2-2308341-2		●	
3	25/44P		UNC 4-40	1-2308342-1	1-2308342-3	1-2308342-5	1-2308342-7	●	●	
			M3	1-2308342-2	1-2308342-4	1-2308342-6	1-2308342-8	●	●	
4	37/62P		UNC 4-40	1-2308345-1	1-2308345-3	1-2308345-5	1-2308345-7	●	●	●
			M3	1-2308345-2	1-2308345-4	1-2308345-6	1-2308345-8	●	●	●
5	50/78P		UNC 4-40	1-2308346-1	1-2308346-3	1-2308346-5	1-2308346-7	●	●	●
			M3	1-2308346-2	1-2308346-4	1-2308346-6	1-2308346-8	●	●	●

# D-Sub Backshells

For D-Subminiature Connectors

## Quick Lock Hoods

Our quick lock versions are an effective, time saving solution, with self retaining assembly screws and with its 'squeeze to release' self locking system it also provides three cable exit options in just one single part.



## Quick Lock pin options


<p><b>A Fixed female screwlock</b></p> <p>D-Sub Female connector</p> <p>Quick lock pins mounted in existing M3 or UNC4-40 sockets</p> <p>Panel (front or back mounted)</p>	<p><b>C Standard mounting hole</b></p> <p>Length depending on panel thickness</p> <p>Quick lock pins mounted in standard mounting holes using M3 nuts</p> <p>Panel (front mounted)</p>
<p><b>B Threaded insert</b></p> <p>Length depending on panel thickness</p> <p>Quick lock pins mounted in threaded sockets on the backside of the connector</p> <p>Panel (front mounted)</p>	<p><b>D Bracket mounting (2x Sub-D)</b></p> <p>2x D-Sub connector used to connect two cables with each other</p> <p>Quick lock pins mounted in bracket using locking ring</p> <p>Panel</p>

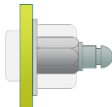
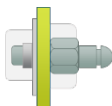
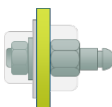

## D-Sub Backshells

For D-Subminiature Connectors

### Ordering Information

Quick Lock Versions

Quick Lock Shells						
Shell Size	Positions	Picture	Part Number	Cable Outlet		
				225°	180°	135°
1	9p/15p		1-2308319-1	●	●	●
2	15p/26p		1-2308321-1	●	●	●
3	25p/44p		1-2308327-1	●	●	●
4	37p/62p		1-2308330-1	●	●	●
5	50p/78p		1-2308338-1	●	●	●

Quick Lock Pin Options				
	Picture	PN	Thread	Panel Thickness mm
A		1-2308273-1	M3	N/A
		1-2308273-2	4-40 UNC	N/A
B		1-2308265-1	4-40 UNC	N/A
		1-2308265-2	4-40 UNC	1.0-1.3
		1-2308265-3	4-40 UNC	1.5-1.8
		1-2308265-4	4-40 UNC	1.7-2.0
		1-2308265-5	4-40 UNC	2.2-2.5
		1-2308265-6	M3	N/A
		1-2308265-7	M3	1.0-1.3
		1-2308265-8	M3	1.5-1.8
		2-2308265-0	M3	2.2-2.5
C		1-2308290-1	M3	1.7-2.0
D		1-2308298-1	N/A	1.25
		1-2308298-2		1.5
		1-2308298-3		2
		1-2308298-4		2.2
		1-2308298-5		2.5
		1-2308298-6		3

## D-Sub Backshells

For D-Subminiature Connectors

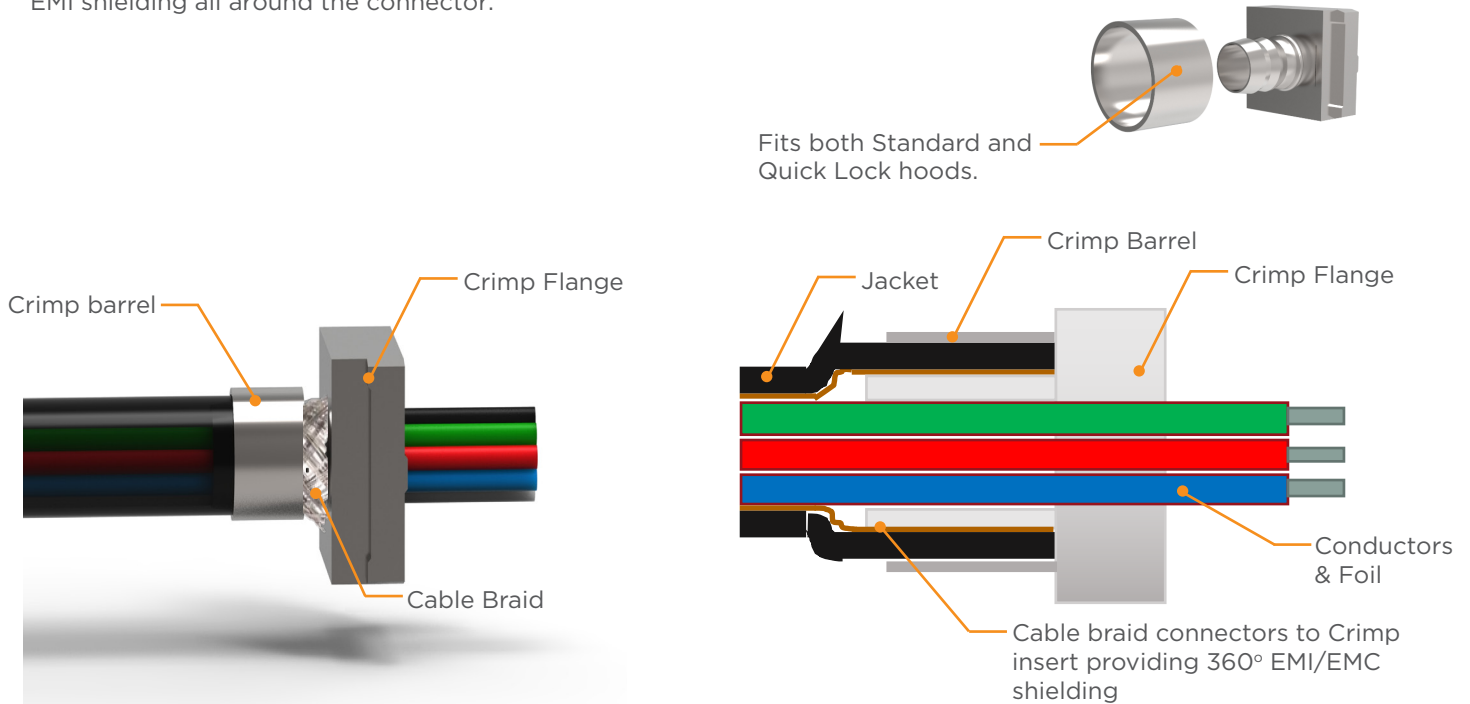
### Cable Exit options

#### Option 1: Crimped Strain relief


Cable rotation can lead to breakage of the individual wires in the cable. This can lead to intermittent system errors which are typically very difficult to find.

**The Solution:** Crimping the cable jacket

**Advantage:** A well defined and proven method. The crimp insert protects the conductors against damage during the crimping process. Creating unparallelled EMI shielding all around the connector.



#### How to select the correct crimp flange

Step	Description	Example
1	Measure the outside cable diameter (3 times on different places at different angles)	OD = 6.5mm
2	Strip the cable and remove the cable braiding	
3	Measure the diameter of the inner cable bundle including the foil	ID = 4.4mm
4	Select the crimp flange with a hole diameter next up to the cable bundle diameter	PN = 2-2308349-1, ID = 4.5mm, OD = 5.5mm
5	Calculate the recommended barrel inner diameter with the following formula: <b>Recommended Inner crimp barrel diameter = OD of crimp flange + 2x(thickness of the cable jacket) + 0.2mm</b>	Thickness cable jacket = $(6.5 - 4.4)/2 = 1.05\text{mm}$ Barrel ID = $5.5\text{mm} + 2 \times 1.05 + 0.2\text{mm} = 7.8\text{mm}$
6	Select the crimp barrel with the next size up	PN = 1-2308350-7, ID = 8.0mm, OD = 9.0mm
7	Order the correct crimp tool & crimp insert using the crimp barrel selection matrix	PN = 1-2823557-1 & 1-2823558-3
8	Prepare a cable sample and check if the pull out force meets your requirements. Contact TE Connectivity representative in case of any questions.	

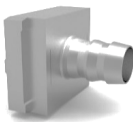
## D-Sub Backshells

For D-Subminiature Connectors

### Ordering Information

Crimp Strain relief

#### Crimp flanges (Can be used with all shells)

Picture	Size 1-4 QD shells 1-3 Std Shells P/N	Size 5 QD shells or size 4-5 Std Shells P/N	Inner diameter / cable diameter mm	Outer diameter mm
	2-2308349-4	1-2308348-1	3.0	4.0
	2-2308349-3	1-2308348-2	3.5	4.5
	2-2308349-2	1-2308348-3	4.0	5.0
	2-2308349-1	1-2308348-4	4.5	5.5
	2-2308349-0	1-2308348-5	5.0	6.0
	1-2308349-9	1-2308348-6	5.5	6.5
	1-2308349-8	-	5.7	6.7
	1-2308349-7	1-2308348-7	6.0	7.0
	1-2308349-6	1-2308348-8	6.5	7.5
	1-2308349-5	1-2308348-9	7.0	8.0
	1-2308349-4	1-2308348-0	7.6	8.5
	1-2308349-3	2-2308348-1	8.0	9.0
	1-2308349-2	2-2308348-2	8.5	9.5
	1-2308349-1	2-2308348-3	9.0	10.0
	-	2-2308348-4	9.5	10.5
	-	2-2308348-5	10.0	11.0
	-	2-2308348-6	10.5	11.5
-	2-2308348-7	11.0	12.0	

#### Recommended Tooling




Cable Jacket stripping tool  
1-2823559-1



Crimp flange insert tool  
1-2314418-1 for small size  
flanges  
1-2314418-2 for large  
size flanges

#### Crimp barrel (in combination wth crimp flanges)

Picture	Part Number	Barrel Inner diame- ter/cable diameter mm	Barrel Outer diameter mm	PN recommended crimp insert
	1-2308350-1	5.0	6.0	1-2823558-8
	1-2308350-2	5.5	6.5	1-2823558-9
	1-2308350-3	6.0	7.0	2-2823558-0
	1-2308350-4	6.5	7.5	2-2823558-1
	1-2308350-5	7.0	8.0	2-2823558-2
	1-2308350-6	7.5	8.5	2-2823558-3
	1-2308350-7	8.0	9.0	2-2823558-4
	1-2308350-8	8.5	9.5	2-2823558-5
	1-2308350-9	9.0	10.0	2-2823558-6
	2-2308350-0	9.5	10.5	2-2823558-7
	2-2308350-1	10.0	11.0	2-2823558-8
	2-2308350-2	10.5	11.5	2-2823558-9
	2-2308350-3	11.0	12.0	3-2823558-0
	2-2308350-4	11.5	12.5	3-2823558-1
	2-2308350-5	11.7	13.0	3-2823558-2
	2-2308350-6	12.0	13.0	3-2823558-3
	2-2308350-7	12.5	13.5	3-2823558-4
	2-2308350-8	13.0	14.0	3-2823558-5
	2-2308350-9	13.7	15.0	3-2823558-6
	3-2308350-0	14.0	15.0	3-2823558-7
	3-2308350-1	14.5	15.5	3-2823558-8
3-2308350-2	16.0	17.0	3-2823558-9	



Crimp tool  
1-2823557-1

Crimp Insert  
X-2823558-X  
(see table for  
recommended crimp insert)

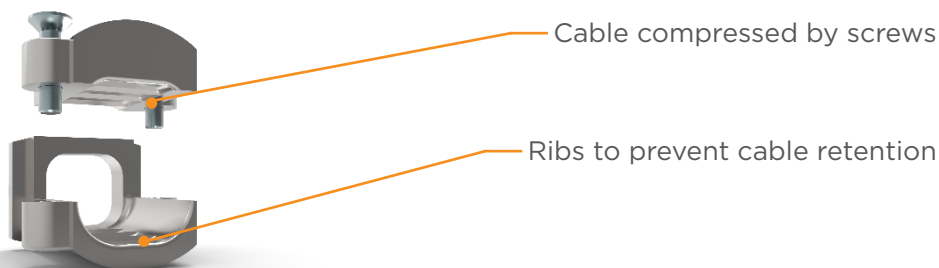
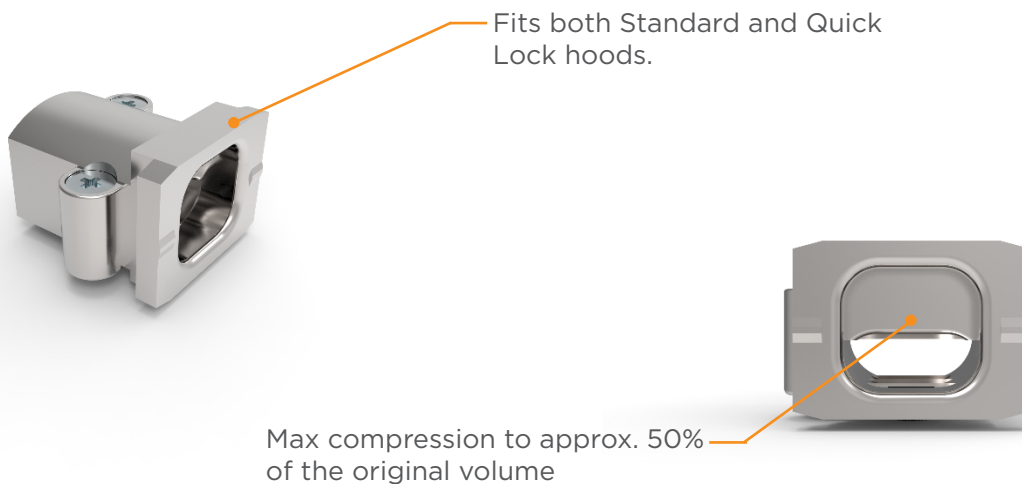
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For D-Subminiature Connectors

### Cable Exit Options

#### Option 2: Cable outlet with screws

For quick and easy installation requiring no special tools TE's cable outlet with screws option suits those needing a fast and simple installation. With a two piece cable clamp to allow for effective strain relief this cable exit is fitted with ribs to prevent cable retention.



### Ordering Information

Fits on shells		Cable diameter	Part Number
Standard shell	Quick Lock shell		
Size 1-3 (small)	Size 1-4	4-7mm	1-2308272-1
		7-10mm	1-2308272-2
		9-12mm	1-2308272-3
		11-14mm	1-2308272-4
Size 4-5 (Large)	Size 5	8-10mm	1-2308272-5
		11-14mm	1-2308272-6
		14-16mm	1-2308272-7





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