

TOUGHMATE FIREMATE

..... *For Heavy Duty Commercial and Industrial Environments*



Connecting you through innovation

Experienced

With over 60 years experience protecting people and assets in the world's most demanding environments, Hawke is the obvious choice for reliability, quality and safety.



Worldwide

Our global network of distributors can support you wherever you are.



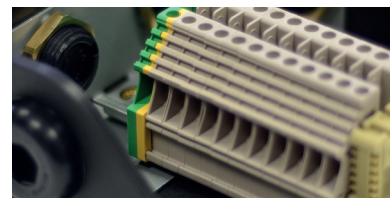
Quality-Driven

All Hawke products are designed to not only comply with ISO 9001 standards but to exceed all the latest standards. Rigorous in-house and third party testing ensures that all our products exceed expectations.



Complete Solution

With an extensive range of Cable Glands, Enclosures, Connectors, Accessories, Control Stations and more Hawke International can provide you with a complete solution, **no matter what your project is.**

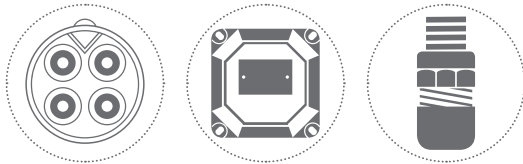


Safety, when you need it most

When you need to get people out, you need a system that can take the pressure. The Hawke **ToughMate** and **FireMate** range are designed specifically to provide unparalleled strength in evacuation and rescue situations.

Tested to the latest industrial and fire standards (BS EN 61984, voltage directive LVD 2014/35/EU, BSEN50200:2006 and BS8434-2:2003 + A2 2009) the range will maintain its structural integrity – in the world’s most severe environments.

The ranges are ideal for underground and overground rail networks, marine safety and commercial and public building applications. Wherever safety is the highest priority, choose **FireMate** and **ToughMate**.



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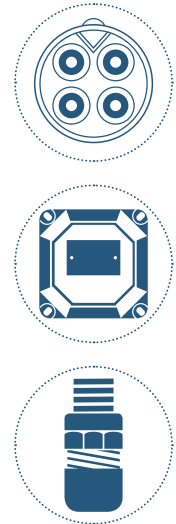


Built for the Harshest Environments

Harsh Environments demand unparalleled strength. That’s why we created the Hawke **ToughMate** range. Tested to the latest industrial standards (BS EN 61984 and LVD 2014/35/EU), the range has been developed to maintain its structural integrity in the world’s most severe environments. Ideal for underground and overground rail networks and commercial and public building applications the **ToughMate** is necessary wherever safety is imperative.

The Range

The **ToughMate** range of Connectors, Enclosures and Cable Glands provides a complete solution for use in emergency lighting circuits, fire alarms, voice alarms, shutdown systems and fire detection.



The ToughMate Connector

Designed for strength and easy installation, the **ToughMate** connector is ideal for use in rail, commercial and public applications. Its innovative fuse pin design gives circuit protection without the need for Enclosures and the custom peg design ensures the correct mating locations, every time.

The ToughMate EJB Enclosure

The EJB just got tougher. The Zinc Plated Mild Steel **ToughMate** Enclosure range combines all the incredible strength and corrosion resistance of our best-selling EJB range with unparalleled industrial strength. For simple installation and superior strength the TM EJB is the ideal choice.

The ToughMate Cable Gland Range

The **ToughMate** range combines the Hawke’s market-leading Cable Gland technology with rigorous in-house third party industrial testing to ensure exceptional performance, even in the most severe conditions. Ideal for heavy industrial or critical safety environments which are exposed to dust or extreme weather conditions the **ToughMate** Cable Gland range combines easy assembly with exceptional strength to increase productivity and give you peace of mind when you need it most.



TOUGHMATE™

CONNECTOR



The ToughMate connector has been developed to be used on underground and overground rail networks, commercial and public buildings where equipment needs to withstand the harshest of environments.

Tested to the latest Industrial BS EN 61984 and LVD 2014/35/ EU our connector will maintain its electrical and structural integrity during the toughest conditions. The product is designed to be used in emergency lighting circuits; fire alarms; voice alarms; shutdown systems and fire detection.

Technical Data

Construction and Test Standards:	BS EN 61984, GPSD (2001/95/EC)
Ingress Protection:	IP66
Material:	Nickel Plated Brass or Stainless Steel 316
Operating Temperature:	Range: -25°C to +70°C
Clamping Arrangement:	Single compression seal
Earth:	Electrical continuity using earth pin and body connection
Cable Type:	Unarmoured cable
Number of Cores:	4 + Earth Dali ready
Core Size:	Up to 6mm ²
Current range:	5, 10 & 15 Amps with Fuse, 16 Amps without
Voltage range:	250 V
Assembly Instructions:	AI 504
Max No. of make & break operations (EN61984): on and off load	≥500

Ordering Options

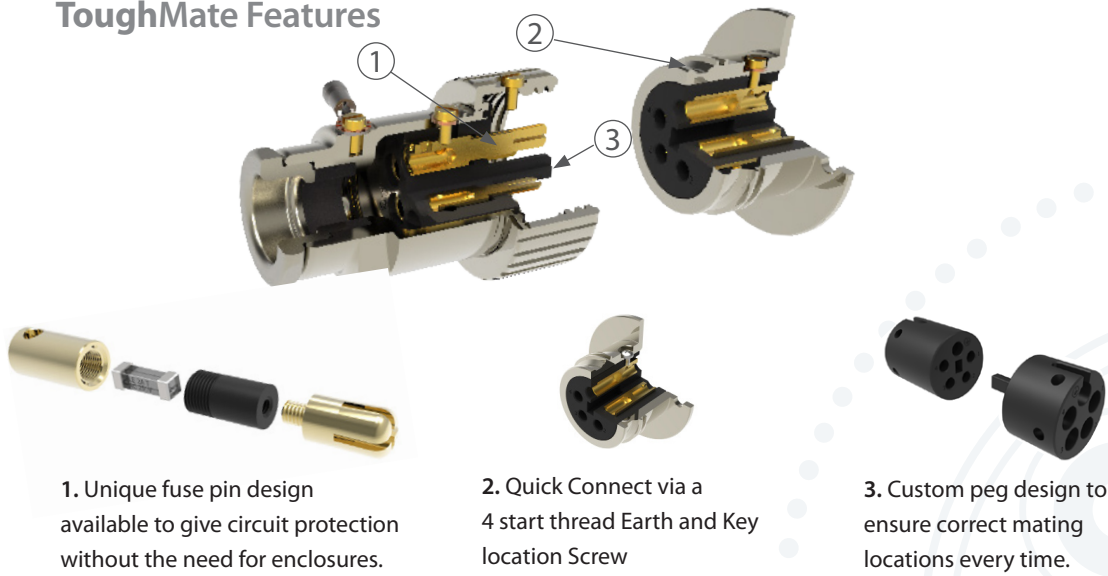
Manufacture	Hawke	H
Type	ToughMate	TM
Material	Nickel Plated Brass	N
	Stainless Steel	S
Connector Style <i>The CP is always supplied with pin contacts</i>	Connector Plug	CP
	Connector Receptacle	CR
	Bulkhead Receptacle	BR
	Besa Box Receptacle	BB
FUSE pin	3 Amp	F3
	5 Amp	F5
	10 Amp	F10
	15 Amp	F15
	Not Required or N/A for receptacle	X

* For best practice please ensure that the socket side is energised only

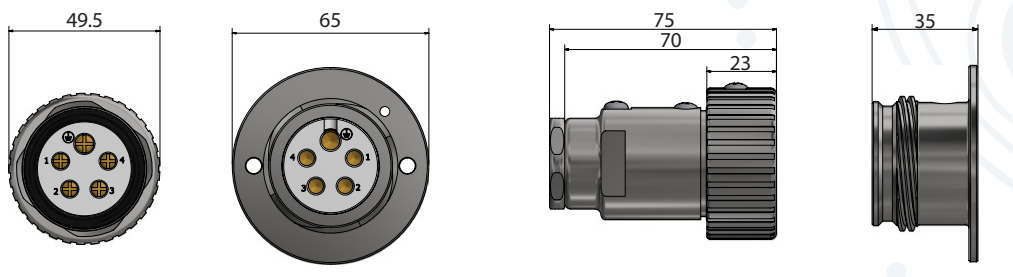
Sample Order Code

Manufacture/Type/Material etc H/TM/S/CP/F5 = Hawke, ToughMate, Stainless Steel, Connector Plug, with 5Amp Fuse.

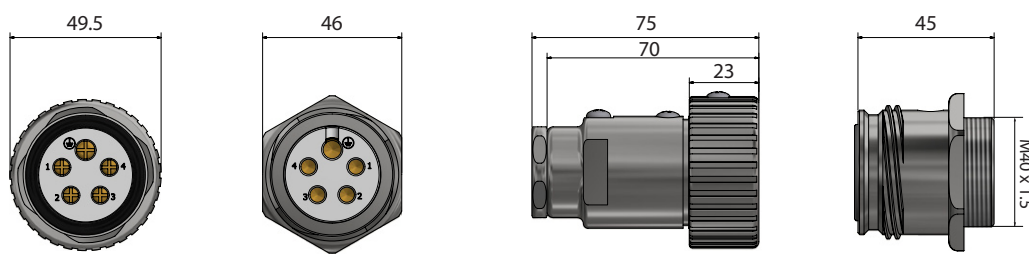
ToughMate Features



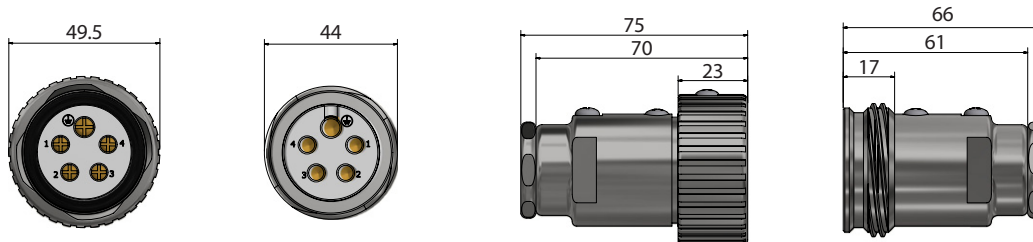
Besa Box Receptacle to Connector Plug
For Besa Box Mounting



Bulkhead Receptacle to Connector Plug
For Enclosure/Equipment Mounting



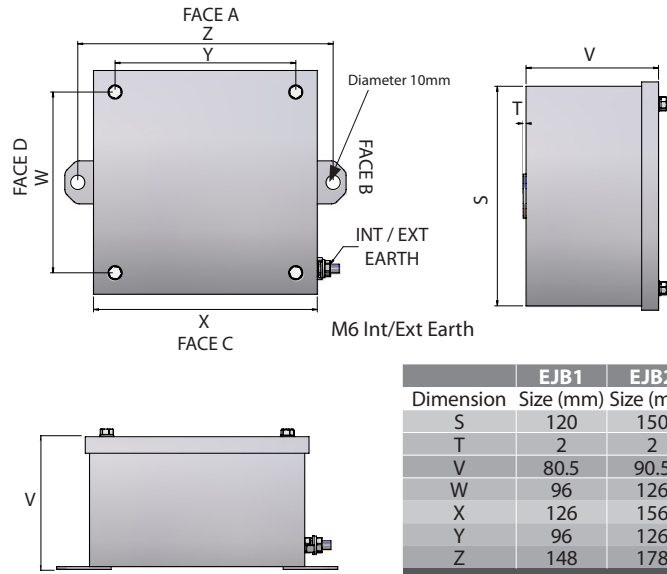
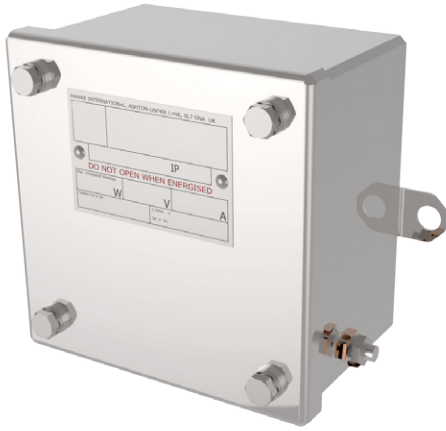
Connector Receptacle to Connector Plug
For Inline Connections



Connector plugs and connector receptacles accept a cable OD of 10mm to 14mm.
For any cable OD outside of these sizes, please contact Hawke Sales for more details.
All bulkhead receptacles are supplied with an M40 entry.



TM EJB



Dimension	EJB1 Size (mm)	EJB2 Size (mm)
S	120	150
T	2	2
V	80.5	90.5
W	96	126
X	126	156
Y	96	126
Z	148	178

Maximum Quantity of Entries Per Face													
Thread Size	M16		M20		M25		M32		M40		M50		
	TM EJB1	TM EJB2	TM EJB1	TM EJB2	TM EJB1	TM EJB2	TM EJB1	TM EJB2	TM EJB1	TM EJB2	TM EJB1	TM EJB2	
Box Type													
Face A/C	6	8	5	6	3	3	2	2	1	2	0	1	
Face B	4	7	3	5	2	3	1	2	1	1	0	1	
Face D	6	7	4	6	3	3	2	2	1	2	0	1	

Terminal Capacity							
Terminal Type	Conductor Size (mm2)		Max. Volts	Max. Physical Terminal Content			
	Min.	Max.		Terminal Qty		Amps	
				TM EJB1	TM EJB2	TM EJB1	TM EJB2
WDU 2.5N	0.5	2.5	420	12	18	15	13
WDU 2.5	0.5	2.5	550	12	18	15	13
WDU 4	0.5	4	690	10	15	20	18
WDU 6	0.5	6	550	7	11	11	24
WDU 10	1.5	10	550	6	9	9	34
WDU 16	1.5	16	550	-	7	-	47
BK 6	1	4	275	1	1	21	21
MK 6/6	1	6	420	1	1	26	26

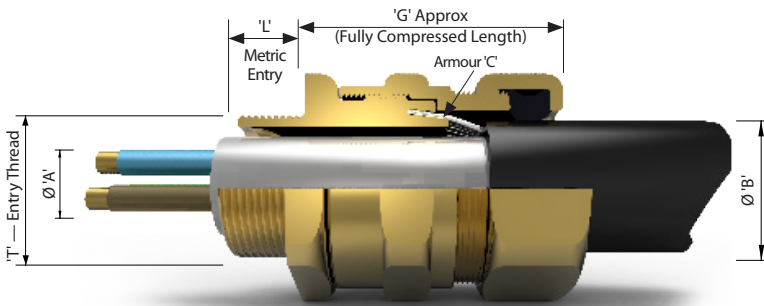
Features

ToughMate enclosures have been developed to be used on underground and over ground rail networks, commercial and public buildings, where equipment needs to withstand the toughest of environments.

Technical Data

Ingress Protection	IP66 to IEC/EN 60529
Material	Zinc Plated Mild Steel
Operating Temperature	Range: -60°C to +80°C
Assembly Instructions	AI 298

Ordering information - please state the following;
Box size, Terminal quantity/size, Gland entry quantity, Size/position
 For any further help with enclosure configuration please contact Hawke International



A robust and simple design for applications using SWA or AWA cable in a heavy industrial environment which is exposed to dust or extreme weather conditions. All cable glands can be supplied with a shroud, lock nut, serrated washer and an earth tag.

Cable Gland Selection Table										
Size Ref.	Entry Thread Size 'T'			Cable Acceptance Details					Hexagon Dimensions	
	Metric	NPT* Standard or Option	Length of Thread (mm) 'L'	Inner Sheath 'A'	Outer Sheath 'B'		Armour 'C'	'G'	Across Flats	Across Corners
					Min	Max				
Os	M20 ²	½"	10	8.0	6.5	16.0	0.8/1.25	49.0	24.0	26.5
O	M20 ²	½"	10	11.9	6.5	16.0	0.8/1.25	49.0	24.0	26.5
A	M20	¾" or ½"	10	14.3	11.5	20.9	0.8/1.25	49.0	30.0	32.5
B	M25	1" or ¾"	10	20.2	17.0	27.2	1.25/1.6	52.0	36.0	39.5
C	M32	1¼" or 1"	10	26.5	23.5	33.6	1.6/2.0	60.0	46.0	50.5
C2	M40	1½" or 1¼"	15	32.5	31.0	43.0	1.6/2.0	63.0	55.0	60.6
D	M50	2" or 1½"	15	44.4/42.3 ¹	36.0	52.6	2.0/2.5	70.0	65.0	70.8
E	M63	2½" or 2"	15	56.3/54.3 ¹	52.0	65.3	2.0/2.5	76.0	80.0	88.0
F	M75	3" or 2½"	15	68.2/65.3 ¹	64.0	78.0	2.0/2.5	76.0	95.0	104.0

'T' - metric entry threads are 1.5mm pitch as standard. All dimensions in millimetres (except * where dimensions are in inches).

¹ Smaller value is applicable when selecting reduced NPT entry option ² Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

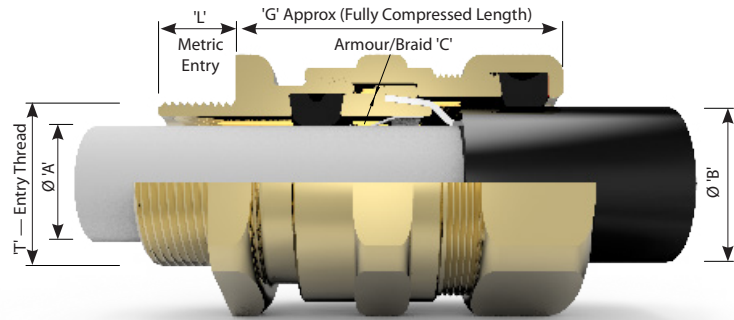
Technical Data	
Construction and Test Standards	BS EN 62444:2013 BS6121: Part 1 type CW
Ingress Protection	IP66 IEC/EN 60529
Material	Brass (standard), Nickel Plated Brass, 316L Stainless Steel with Neoprene Seal
Operating Temperature	Range: -60°C to +100°C
Clamping Arrangement	Two part armour clamp, single compression seal
Earth	Electrical continuity using the armour wire termination (SWA, AWA)
Cable Type HICW	Single Wire Armour SWA and AWA
Cable Type H1CX	Braid Wire Armour, Pliable Wire Armour (PWA), Steel Tape Armour (STA)
Kit Information	Stand kit also available with a low smoke option. Use STD for Standard kit or LSF for low smoke
Assembly Instructions	AI 506

Features
• Simple robust 4 piece single compression cable gland
• Simple mechanical clamping arrangement for all SWA and AWA cable
• Ease of assembly
• High quality materials with exceptional anti corrosion properties
• UV stable seal
• Tested to the latest industrial standards
• Excellent sealing range
• EMC tested
• All hexagon parts are the same size
• Provides cable retention seal onto the cables Outer Sheath

Note: Displacement or Compression seals do not prevent cold flow. IP seal required to maintain IP66.



TM E1W



A robust and simple dual compression cable gland for applications using SWA or AWA cable in a heavy industrial environment which is exposed to dust or extreme weather conditions. All cable glands can be supplied with a shroud, lock nut, serrated washer and an earth tag.

Cable Gland Selection Table													
Size Ref.	Entry Thread Size 'T'			Cable Acceptance Details								Hexagon Dims.	
	Metric	NPT* Standard or Option	Length of Thread (mm) 'L'	Inner Sheath 'A'				Outer Sheath 'B'		Standard Steel Wire 'W'	'G'	Across Flats	Across Corners
				Standard Seal		Alternative Seal (S)		Min	Max				
				Min	Max	Min	Max	Min	Max				
Os	M20 ²	½"	10	3.2	8.0	-	-	6.5	16.0	0.8/1.25	50.0	24.0	26.5
O	M20 ²	½"	10	6.5	11.9	-	-	6.5	16.0	0.8/1.25	50.0	24.0	26.5
A	M20	¾" or ½"	10	10.0	14.3	9.0	13.4	11.5	20.9	0.8/1.25	51.0	30.0	32.5
B	M25	1" or ¾"	10	13.0	20.2	9.5	15.4	17.0	27.2	1.25/1.6	55.0	36.0	39.5
C	M32	1¼" or 1"	10	19.5	26.5	15.5	21.2	23.5	33.6	1.6/2.0	57.0	46.0	50.5
C2	M40	1½" or 1¼"	15	25.0	32.5	22.0	28.0	31.0	43.0	1.6/2.0	65.0	55.0	60.6
D	M50	2" or 1½"	15	31.5	44.4/42.3 ¹	27.5	34.8	36.0	52.6	2.0/2.5	80.0	65.0	70.8
E	M63	2½" or 2"	15	42.5	56.3/54.3 ¹	39.0	46.5	52.0	65.3	2.0/2.5	80.0	80.0	88.0
F	M75	3" or 2½"	15	54.5	68.2/65.3 ¹	49.5	58.3	64.0	78.0	2.0/2.5	80.0	95.0	104.0

T - Metric entry threads are 1.5mm pitch as standard. All dimensions in millimetres (except * where dimensions are in inches).

¹ Smaller value is applicable when selecting reduced NPT entry option ² Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

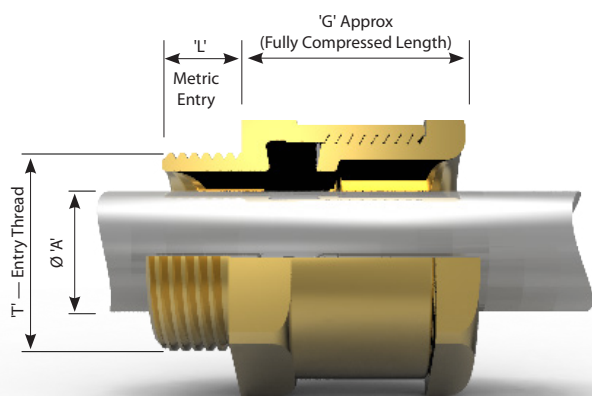
Features

- Simple robust 5 piece dual compression cable gland
- Simple mechanical clamping arrangement for all SWA and AWA cable
- Ease of assembly
- High quality materials with exceptional anti corrosion properties
- Tested to the latest industrial standards
- Excellent sealing range
- EMC tested
- All hexagon parts are the same size
- Provides cable retention seal onto the cables Outer and Inner Sheath
- Low smoke and fume, zero halogen seals and shroud available

Technical Data

Construction and Test Standards	BS EN 62444:2013 BS6121: Part 1 type E1W
Ingress Protection	IP66 IEC/EN 60529
Material	Brass (standard), Nickel Plated Brass, 316L Stainless Steel with Neoprene Seal
Operating Temperature	Range: -60°C to +100°C
Clamping Arrangement	Two part armour clamp, dual compression seal inner and outer sheath
Earth	Electrical continuity using the armour wire termination (SWA, AWA)
Cable Type	Single Wire Armour SWA and AWA
Kit Information	Stand kit also available with a low smoke option. Use STD for Standard kit or LSF for low smoke
Assembly Instructions	AI 510

Note: Displacement or Compression seals do not prevent cold flow. IP seal required to maintain IP66.



TM A2



A robust and simple design for applications using non armoured cable in a heavy industrial environment which is exposed to dust or extreme weather conditions. All cable glands can be supplied with a shroud, lock nut, serrated washer and an earth tag.

Cable Gland Selection Table							
Size Ref.	Entry Thread Size 'T'	Length of Thread (mm) 'L'	Cable Acceptance Details		'G'	Hexagon Dimensions	
			Outer Sheath 'A'			Across Flats	Across Corners
			Standard Seal				
	Metric		Min	Max			
2K	M16	10	3.2	8.0	23.5	19.0	21.2
Os	M20 ¹	10	3.2	8.0	23.5	19.0	21.2
O	M20 ¹	10	6.5	11.9	23.5	24.0	26.5
A	M20	10	10.0	14.3	23.5	24.0	26.5
B	M25	10	13.0	20.2	28.0	32.0	36.0
C	M32	10	19.5	26.5	29.0	41.0	44.0
C2	M40	15	25.0	32.5	32.0	50.0	54.0
D	M50	15	31.5	44.4	38.0	60.0	66.0
E	M63	15	42.5	56.3	42.0	80.0	86.0
F	M75	15	54.5	68.2	42.0	95.0	102.0

All dimensions in millimetres.

'T' - metric entry threads are 1.5mm pitch as standard.

¹ Sizes Os and O are available with an M16 thread size
For O size with M16 thread, the maximum cable outer sheath diameter is 10.9mm

Technical Data

Construction and Test Standards	BS EN 62444:2013 BS6121: Part 1 type A2
Ingress Protection	IP66 IEC/EN 60529
Material	Brass (standard), Nickel Plated Brass, 316L Stainless Steel with Neoprene Seal
Operating Temperature	Range: -60°C to +100°C
Clamping Arrangement	Single compression seal
Cable Type	Non armoured
Kit Information	Stand kit also available with a low smoke option. Use STD for Standard kit or LSF for low smoke
Assembly Instructions	AI 508

Note: Displacement or Compression seals do not prevent cold flow. IP seal required to maintain IP66.

Features

- Provides a cable retention seal onto the cables outer sheath
- Simple robust single compression cable gland
- Ease of assembly
- High quality materials with exceptional anti corrosion properties
- UV stable seal
- Tested to the latest industrial standards
- Excellent sealing range
- Provides cable retention seal onto the cables Outer Sheath
- Low smoke and fume, zero halogen seals and shroud available

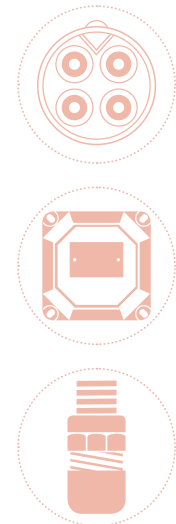


Fight Fire With FireMate

When you need to get people out safely, you need a system that can take the heat. The **FireMate** has been created to offer a complete connection and termination solution that will maintain its structural integrity, even in the harshest fire conditions. Tested to the latest fire standards including: BSEN50200:2006, BS8434-2:2003 + A2 2009, the range is ideal for overground and underground rail networks, commercial and public buildings.

The Range

The **FireMate** range of fireproof Connectors, Enclosures and Cable Glands provides a complete solution for use in escape route safety equipment, emergency lighting circuits, fire alarms, voice alarms, shutdown systems and fire detection. Wherever safety is imperative, choose **FireMate**.



The FireMate Connector

The original **FireMate** product has been developed with the rail industry to provide unparalleled strength in evacuation and rescue situations. Its unique fireproof rear intrumescent seal and high temperature pin and socket insert, ensure that it will maintain its structural integrity under the most severe conditions. Whether for underground or overground rail, marine safety or commercial and public building – the **FireMate** is necessary wherever safety is critical.

The FireMate EJB Enclosure

Our toughest Enclosure range just got tougher. The Zinc Plated Mild Steel **FireMate** Enclosure range combines all the incredible strength and corrosion resistance of our best-selling EJB range with incredible fire-proof technology. For simple installation and superior strength the FM EJB is the ideal choice.

The FireMate Cable Gland Range

The **FireMate** range combines the Hawke's market-leading Cable Gland technology with rigorous in-house third party fire testing to ensure exceptional performance, even in the most severe conditions. Ideal for heavy industrial or critical safety environments which are exposed to harsh chemical, dust or extreme weather conditions the **FireMate** Gland range combines easy assembly with unparalleled strength to increase productivity and give you peace of mind when you need it most.



FIREMATE™

CONNECTOR



The **FireMate** safety critical connector has been developed to be used on underground and overground rail networks, commercial and public buildings where it is critical for equipment to work during an evacuation and rescue situation.

Tested to the latest fire standards **BS EN50200:2006 and BS8434-2:2003 + A2 2009** our connector will maintain its electrical and structural integrity during the harshest of fire conditions. The product is designed to be used in escape route safety equipment; emergency lighting circuits; fire alarms; voice alarms; shutdown systems; fire detection.

Technical Data

Construction and Test Standards:	BS5839-1 2013 section 26.2 e), BS EN50200:2006, BS8434-2:2003 + A2 2009, BS EN61984, BS5266-2016 -8.2.2 b d, GPSD (2001/95/EC)
Ingress Protection:	IP66 (Pending)
Material:	Nickel Plated Brass or Stainless Steel 316
Operating Temperature:	Range: -25°C to +70°C
Clamping Arrangement:	Single compression seal
Earth:	Electrical continuity using earth pin and body connection
Cable Type:	Unarmoured fire rated cable
Number of Cores:	4 + Earth Dali ready
Core Size:	Up to 6mm ²
Current range:	16 Amps
Voltage range:	250V
Assembly Instructions	AI 503
Max No. of make & break operations (EN61984): on and off load	≥500

Fire Test

In accordance with BS EN50200:2006 (Resistance to fire with mechanical shock)	120mins at 830 (+40-0)°C with mechanical shock and a rated voltage of 240v rms.
Fire test: In accordance with BS 8434-2:2003 +A2 2009 (Resistance to fire with mechanical shock and water spray)	120mins at 930 (+40-0)°C with mechanical shock and a rated voltage of 240v rms. (60 mins fire and shock and 60 mins fire, shock and water)

Ordering Options

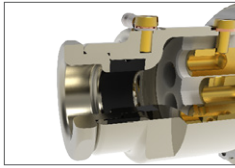
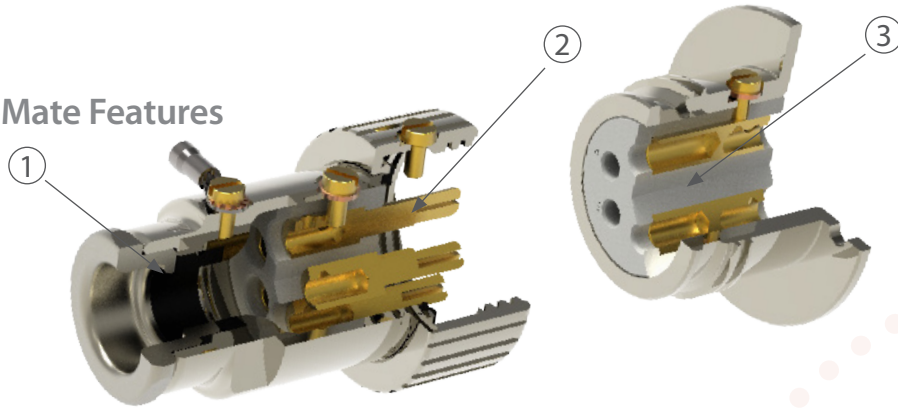
Manufacture	Hawke	H
Type	FireMate	FM
Material	Nickel Plated Brass	N
	Stainless Steel	S
Connector Style <i>The CP is always supplied with pin contacts</i>	Connector Plug	CP
	Connector Receptacle	CR
	Bulkhead Receptacle	BR
	Besa Box Receptacle	BB
FUSE pin	3 Amp	F3
	5 Amp	F5
	10 Amp	F10
	15 Amp	F15
	Not Required or N/A for receptacle	X

Fuse pins are used as part of the standard wiring operation and will not meet the increased fire rating of this connector.

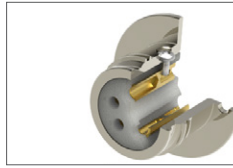
Sample Order Code

Manufacture/Type/Material etc	H/FM/S/CP = Hawke, Firemate, Stainless Steel, Connector Plug.
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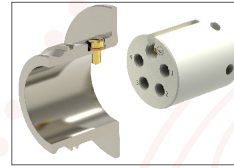
FireMate Features



1. Unique fireproof rear intumescent seal to accommodate a wide range of cables.



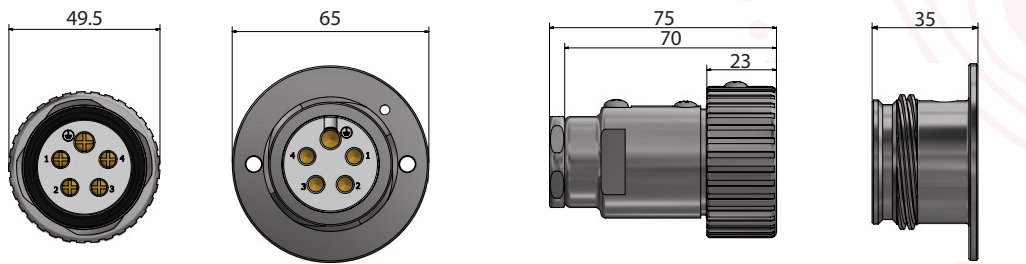
2. Quick Connect via a 4 start thread Earth and Key location Screw.



3. Unique high temperature pin and socket insert. Integral moulded keyway to ensure fool proof assembly.

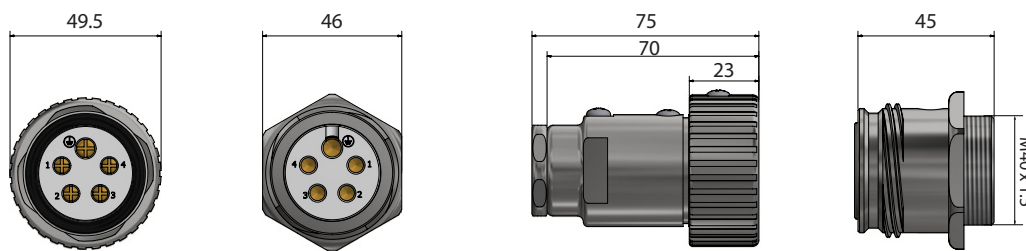
Besa Box Receptacle to Connector Plug

For Besa Box Mounting



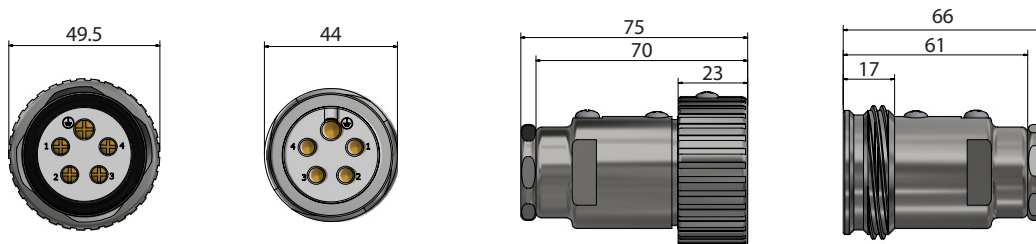
Bulkhead Receptacle to Connector Plug

For Enclosure/Equipment Mounting



Connector Receptacle to Connector Plug

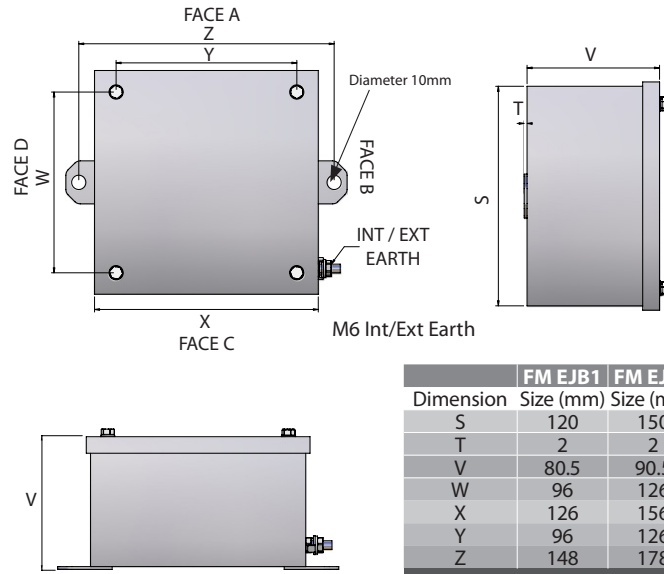
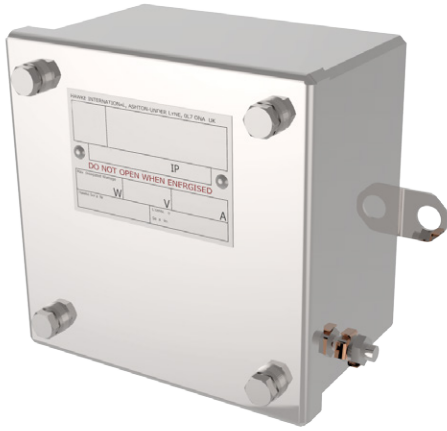
For Inline Connections



Connector plugs and connector receptacles accept a cable OD of 11mm to 14.3mm. For any cable OD outside of these sizes, please contact Hawke Sales for more details. All bulkhead receptacles are supplied with an M40 entry.



FM EJB



Dimension	FM EJB1 Size (mm)	FM EJB2 Size (mm)
S	120	150
T	2	2
V	80.5	90.5
W	96	126
X	126	156
Y	96	126
Z	148	178

Maximum Quantity of Entries Per Face												
Thread Size	M16		M20		M25		M32		M40		M50	
Box Type	FM EJB1	FM EJB2	FM EJB1	FM EJB2	FM EJB1	FM EJB2	FM EJB1	FM EJB2	FM EJB1	FM EJB2	FM EJB1	FM EJB2
Face A/C	6	10	6	8	3	3	2	2	2	2	0	1
Face B	4	8	4	6	2	2	1	2	1	2	0	1
Face D	6	10	6	8	3	3	2	3	2	2	0	1

Terminal Capacity							
Terminal Type	Conductor Size (mm ²)		Max. Volts	Max. Physical Terminal Content			
	Min.	Max.		Terminal Qty		Amps	
				FM EJB1	FM EJB2	FM EJB1	FM EJB2
SAKK 4	0.5	6	275	5	9	20	20

Fire Test	
In accordance with BS EN50200:2006 (Resistance to fire with mechanical shock)	120mins at 830 (+40-0)°C with mechanical shock and a rated voltage of 240v rms.
Fire test: In accordance with BS 8434-2:2003 +A2 2009 (Resistance to fire with mechanical shock and water spray)	120mins at 930 (+40-0)°C with mechanical shock and a rated voltage of 240v rms. (60 mins fire and shock and 60 mins fire, shock and water)

Features

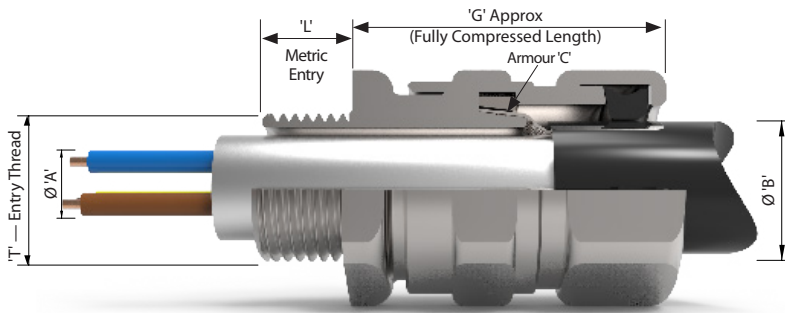
FireMate safety critical enclosures have been developed to be used on underground and over ground rail networks, and commercial and public buildings, where it is critical for equipment to work during an evacuation and rescue situation.

Tested to the latest fire standards BS EN50200:2006 and BS8434-2: 2003 + A2: 2009 our enclosure will maintain its electrical and structural integrity during the harshest of fire conditions. The product is designed to be used in escape route safety equipment: emergency lighting circuits; fire alarms; voice alarms; shutdown systems; fire detection.

Technical Data

Construction and Test Standards	BS EN50200:2006, BS8434-2:2003 + A2 2009, GPSD (2001/95/EC)
Ingress Protection	IP66 to IEC/EN 60529
Material	Zinc Plated Mild Steel
Operating Temperature	Range: -60°C to +80°C
Assembly Instructions	AI 297

Ordering information - please state the following;
Box size, Terminal quantity/size, Gland entry quantity, Size/position
 For any further help with enclosure configuration please contact Hawke International



FM CW



A fire resistant, robust and simple design for applications using SWA or AWA cable in a heavy industrial, critical safety environment which is exposed to dust or extreme weather conditions. All cable glands can be supplied with a shroud, lock nut, serrated washer and an earth tag.

Cable Gland Selection Table										
Size Ref.	Entry Thread Size 'T'			Cable Acceptance Details					Hexagon Dimensions	
	Metric	NPT* Standard or Option	Length of Thread (mm) 'L'	Inner Sheath 'A'	Outer Sheath 'B'		Armour 'C'	'G'	Across Flats	Across Corners
					Min	Max				
Os	M20 ²	½"	10	8.0	6.5	16.0	0.8/1.25	49.0	24.0	26.5
O	M20 ²	½"	10	11.9	6.5	16.0	0.8/1.25	49.0	24.0	26.5
A	M20	¾" or ½"	10	14.3	11.5	20.9	0.8/1.25	49.0	30.0	32.5
B	M25	1" or ¾"	10	20.2	17.0	27.2	1.25/1.6	52.0	36.0	39.5
C	M32	1¼" or 1"	10	26.5	23.5	33.6	1.6/2.0	60.0	46.0	50.5

'T' - metric entry threads are 1.5mm pitch as standard. All dimensions in millimetres (except * where dimensions are in inches).

² Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

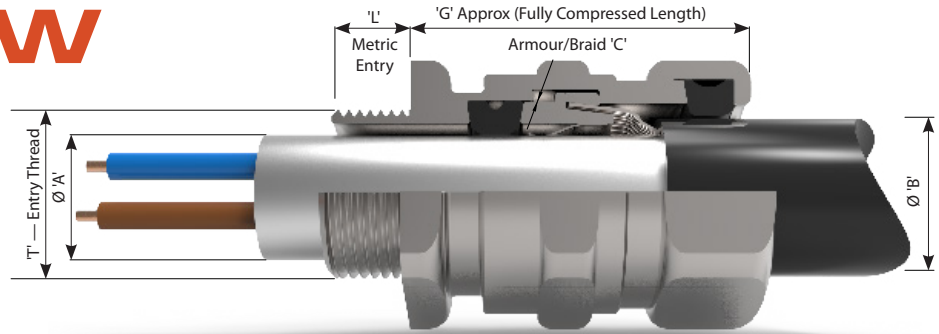
Fire Test	
In accordance with BS EN50200:2006 (Resistance to fire with mechanical shock)	120mins at 830 (+40-0)°C with mechanical shock and a rated voltage of 240v rms.
Fire test: In accordance with BS 8434-2:2003 +A2 2009 (Resistance to fire with mechanical shock and water spray)	120mins at 930 (+40-0)°C with mechanical shock and a rated voltage of 240v rms. (60 mins fire and shock and 60 mins fire, shock and water)

Technical Data	
Construction and Test Standards	BS EN 62444:2013 BS6121: Part 1 type CW
Ingress Protection	IP66 IEC/EN 60529
Material	Nickel Plated Brass with Intumescent Rubber Seal
Operating Temperature	Range: -20°C to +70°C
Clamping Arrangement	Two part armour clamp, single compression seal
Earth	Electrical continuity using the armour wire termination (SWA, AWA)
Cable Type H1CW	Single Wire Armour SWA and AWA
Cable Type H1CX	Braid Wire Armour, Pliable Wire Armour (PWA), Steel Tape Armour (STA)
Kit Information	Intumescent sealing material used for FireMate versions
Assembly Instructions	AI 505

- | Features |
|--|
| <ul style="list-style-type: none"> • Simple robust 4 piece single compression cable gland • Simple mechanical clamping arrangement for all SWA and AWA cable • Ease of assembly • High quality materials with exceptional anti corrosion properties • UV stable seal • Tested to the latest industrial standards • Excellent sealing range • EMC tested • All hexagon parts are the same size • Provides cable retention seal onto the cables Outer Sheath |



FM E1W



A fire resistant, robust and simple dual compression gland for applications using SWA or AWA cable in a heavy industrial, critical safety environment which is exposed to dust or extreme weather conditions. All cable glands can be supplied with a shroud, lock nut, serrated washer and an earth tag.

Cable Gland Selection Table													
Size Ref.	Entry Thread Size 'T'			Cable Acceptance Details							Hexagon Dims.		
	Metric	NPT* Standard or Option	Length of Thread (mm) 'L'	Inner Sheath 'A'				Outer Sheath 'B'		Standard Steel Wire 'W'	'G'	Across Flats	Across Corners
				Standard Seal		Alternative Seal (S)		Min	Max				
				Min	Max	Min	Max	Min	Max				
Os	M20 ²	½"	10	3.2	8.0	-	-	6.5	16.0	0.8/1.25	50.0	24.0	26.5
O	M20 ²	½"	10	6.5	11.9	-	-	6.5	16.0	0.8/1.25	50.0	24.0	26.5
A	M20	¾" or ½"	10	10.0	14.3	9.0	13.4	11.5	20.9	0.8/1.25	51.0	30.0	32.5
B	M25	1" or ¾"	10	13.0	20.2	9.5	15.4	17.0	27.2	1.25/1.6	55.0	36.0	39.5
C	M32	1¼" or 1"	10	19.5	26.5	15.5	21.2	23.5	33.6	1.6/2.0	57.0	46.0	50.5

*'T' - Metric entry threads are 1.5mm pitch as standard. All dimensions in millimetres (except * where dimensions are in inches).

Sizes Os and O are available with an M16 thread size. For O size with M16 thread, the maximum cable inner sheath diameter is 10.9mm

Fire Test

In accordance with BS EN50200:2006 (Resistance to fire with mechanical shock)	120mins at 830 (+40-0)°C with mechanical shock and a rated voltage of 240v rms.
Fire test: In accordance with BS 8434-2:2003 +A2 2009 (Resistance to fire with mechanical shock and water spray)	120mins at 930 (+40-0)°C with mechanical shock and a rated voltage of 240v rms. (60 mins fire and shock and 60 mins fire, shock and water)

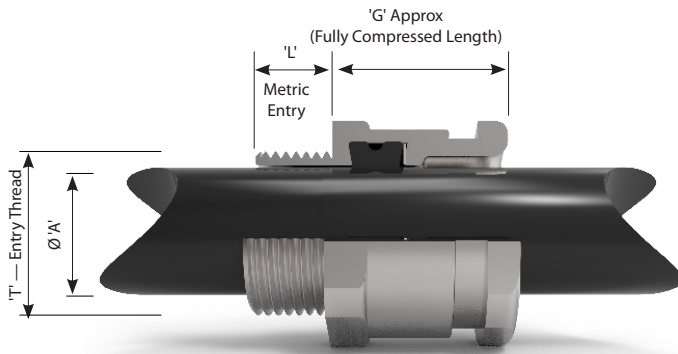
Features

- Simple robust 5 piece dual compression cable gland
- Simple mechanical clamping arrangement for all SWA and AWA cable
- Ease of assembly
- High quality materials with exceptional anti corrosion properties
- UV stable seal
- Tested to the latest industrial standards
- Excellent sealing range
- EMC tested
- All hexagon parts are the same size
- Provides cable retention seal onto the cables Outer and Inner Sheath

Technical Data

Construction and Test Standards	BS EN 62444:2013 BS6121: Part 1 type E1W
Ingress Protection	IP66 IEC/EN 60529
Material	Nickel Plated Brass with Intumescent Rubber Seal
Operating Temperature	Range: -20°C to +70°C
Clamping Arrangement	Two part armour clamp, dual compression seal inner and outer sheath
Earth	Electrical continuity using the armour wire termination (SWA, AWA)
Cable Type	Single Wire Armour SWA and AWA
Kit Information	Intumescent sealing material used for FireMate versions
Assembly Instructions	AI 509

Note: Displacement or Compression seals do not prevent cold flow. IP seal required to maintain IP66.



FM A2



A fire resistant, robust and simple design for applications using non armoured cable in a heavy industrial, critical safety environment which is exposed to dust or extreme weather conditions. All cable glands can be supplied with a shroud, lock nut, serrated washer and an earth tag.

Cable Gland Selection Table							
Size Ref.	Entry Thread Size 'T'	Length of Thread (mm) 'L'	Cable Acceptance Details		'G'	Hexagon Dimensions	
			Outer Sheath 'A'			Across Flats	Across Corners
			Standard Seal				
	Metric		Min	Max			
2K	M16	10	3.2	8.0	23.5	19.0	21.2
Os	M20 ¹	10	3.7	8.0	23.5	19.0	21.2
O	M20 ¹	10	6.5	11.9	23.5	24.0	26.5
A	M20	10	10.0	14.3	23.5	24.0	26.5
B	M25	10	13.0	20.2	28.0	32.0	36.0
C	M32	10	19.5	26.5	29.0	41.0	44.0

All dimensions in millimetres.

'T' - metric entry threads are 1.5mm pitch as standard.

¹ Sizes Os and O are available with an M16 thread size
For O size with M16 thread, the maximum cable outer sheath diameter is 10.9mm

Fire Test

In accordance with BS EN50200:2006 (Resistance to fire with mechanical shock)	120mins at 830 (+40-0)°C with mechanical shock and a rated voltage of 240v rms.
Fire test: In accordance with BS 8434-2:2003 +A2 2009 (Resistance to fire with mechanical shock and water spray)	120mins at 930 (+40-0)°C with mechanical shock and a rated voltage of 240v rms. (60 mins fire and shock and 60 mins fire, shock and water)

Technical Data

Construction and Test Standards	BS EN 62444:2013 BS6121: Part 1 type A2
Ingress Protection	IP66 IEC/EN 60529
Material	Nickel Plated Brass with Intumescent Rubber Seal
Operating Temperature	Range: -20°C to +70°C
Clamping Arrangement	Single compression seal
Cable Type	Non armoured
Kit Information	Intumescent sealing material used for FireMate versions
Assembly Instructions	AI 507

Features

- Provides a cable retention seal onto the cables outer sheath
- Simple robust single compression cable gland
- Ease of assembly
- High quality materials with exceptional anti corrosion properties
- UV stable seal
- Tested to the latest industrial standards
- Excellent sealing range
- Provides cable retention seal onto the cables Outer Sheath

Note: Displacement or Compression seals do not prevent cold flow. IP seal required to maintain IP66.

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