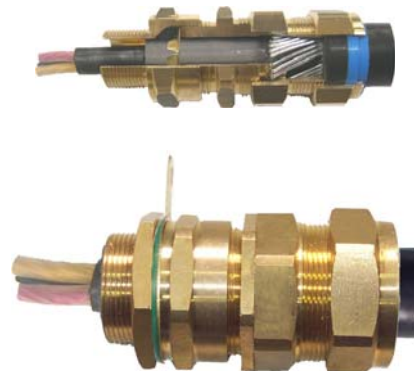


## Armoured / Un-armoured Cable Gland

### ❖ Application

These cable glands are used ;

- suited to armoured/un-armoured cables used mainly in areas where British Standards apply.
- particularly suited to Steel Wire Armoured Cable.
- compliance to BS 6121:1989.
- available in standard industrial or explosion protected designs for "Ex" equipment in both "flameproof" and "increased" enclosures (E1FW, E2FW, A2F).
- compliance to IEC 60079-0, 60079-1 and 60079-7, 60079-14, EN 50014, 50018 and 50019 (E1FW, E2FW, A2F).
- can be used in Zone 1 and Zone 2 (E1FW, E2FW, A2F)
- degree of protection max. IP66.
- available in metric and NPT inlet threads.
- Operating Temperature : -20°C ~ +80°C



### ❖ Features

- 2 or 3 part armour / earth lock.
- Knurled armour lock produces a low resistance earth clamp.
- Inner and outer displacement seal.
- Gland entry rated at IP66 with NAMBUK entry thread seal.
- Easy and fast to install.
- Displacement seal concept ensures effective seal to inner and outer sheath.
- Displacement seals suited to most hostile environments.

### ❖ Standard Finish

- Natural / Nickel Plated
- If you want another finish, contact us please.

### ❖ Degree of Protection

Gland Type	Entry thread		PVC shroud and entry thread	
	with seal	without seal	with seal	without seal
E1FW, E1W, E2FW, E2W, A2F, A2, A4e, A4, CW	IP 66	IP 54	IP 66	IP 54

### ❖ Gland Selection

Gland Type		E1FW	E1W	E2FW	E2W	BW	CW	A2	A2F	A4	A4e
Cable Type	SWA	◆	◆	◆		◆	◆				
	STA									◆	◆
Seal	SWA Lead Sheathed			◆	◆						
	Un-armoured							◆	◆		
For	Not Seal					◆					
	Outer only						◆	◆	◆	◆	◆
	Outer + Inner	◆	◆	◆	◆						
Zone 1 & 2	Indoor	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
	Outdoor	◆	◆	◆	◆		◆	◆	◆	◆	◆
	Zone 1 & 2	◆		◆					◆		◆

- 1) Check conditions of use (i.e. industrial, Ex d, etc)
- 2) Check cable external diameter
- 3) Check cable under-armour diameter
- 4) Check type of armour and thickness
- 5) Check accessories (i.e. shrouds, earth tags etc)

### ❖ Standard Materials

- Body : Brass, Aluminium
- Lock Nut : Brass, Aluminium
- Earth Tag : Brass
- Metric Entry Thread Seal : Nylon
- Shroud : PVC / LSF

### ❖ Options

- Combination concept
- Alternative materials / plating
- Cast integral earth lug
- Entry thread : NPT, PF, NPS, PG and the others
- EeCFC Seal for cable exhibit "cold flow" characteristics

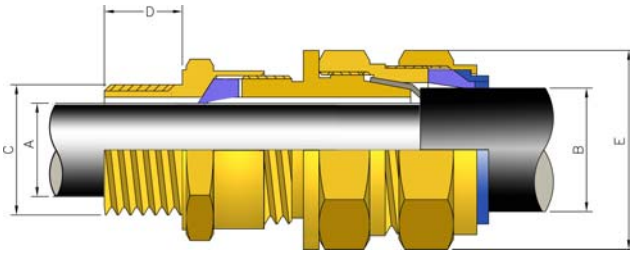
### ❖ Entry Thread

Size	Metric	NPT	PG	PF
20/16	20	1/2"	11	1/2"
20S	20	1/2"	13.5	1/2"
20	20	1/2", 3/4"	16	1/2", 3/4"
25	25	3/4", 1"	21	3/4", 1"
32	32	1", 1-1/4"	29	1", 1-1/4"
40	40	1-1/4", 1-1/2"	36	1-1/4", 1-1/2"
50S	50	1-1/2"	36	1-1/2"
50	50	2"	42	2"
63S	63	2"	48	2"
63	63	2-1/2"	-	2-1/2"
75S	75	2-1/2"	-	2-1/2"
75	75	3"	-	2-1/2" or 3"
90	90	3-1/2"	-	3" or 3-1/2"

⇒ If you need more data, contact us please.

Armoured Cable Gland for SWA Cable, Explosion-proof Type

❖ Type of Explosion-proof Flameproof ( Ex d IIC )  
 Increase Safety ( Ex e II )  
 Certificate No : PTB No. Ex - 05 IEC 1005X



❖ Technical Data

Type	E1FW	Cable Type	Steel Wire Armour
Gland Material	Brass	Sealing Area	Inner & Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor Hazardous Area

❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dimensions				Armour Wire Dia (SWA)	Max Dia 'E'
	Metric	NPT	PF		Cable Dia 'A'		Cable Dia 'B'			
					Min	Max	Min	Max		
20/16	20	1/2"	1/2"	18	3.0	8.6	14.0	14.0	0.9	25
20S	20	1/2"	1/2"	18	6.0	11.6	14.0	15.9	0.9/1.25	31
20	20	1/2"	1/2"	18	8.0	13.9	14.0	20.9	0.9/1.25	34
25	25	3/4"	3/4"	20	13.0	19.9	18.1	26.2	1.25/1.6	44
32	32	1"	1"	23	17.0	26.2	24.3	33.9	1.6/2	53
40	40	1-1/4"	1-1/4"	23	24.0	32.1	28.0	40.4	1.6/2	61
50S	50	1-1/2"	1-1/2"	23	30.0	38.1	38.0	46.7	2/2.5	67
50	50	2"	2"	25	36.0	44.0	43.0	53.1	2/2.5	78
63S	63	2"	2"	25	42.0	49.9	48.6	59.4	2.5	80
63	63	2-1/2"	2-1/2"	30	48.0	55.9	56.2	65.9	2.5	88
75S	75	2-1/2"	2-1/2"	30	52.8	61.9	60.2	72.1	2.5	104
75	75	3"	2-1/2"	30	55.0	64.0	61.0	78.5	2.5/3.15	110
90	90	3"	3"	30	68.0	79.3	81.4	90.4	3.15	127

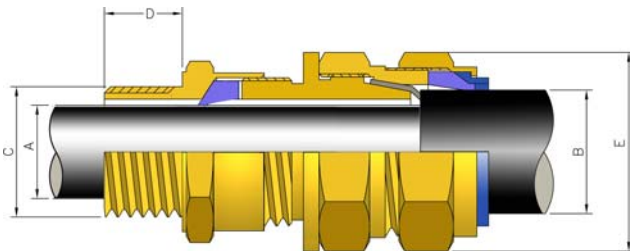
❖ Accessory

- Shrouds, Earth Tags, Locknuts, Metric Entry Thread Seals - see accessory page.

❖ Option

- Can choice EeCFC Seal instead of standard seal when use with certain cable type that exhibit "cold flow" characteristics

Armoured Cable Gland for SWA Cable, General or Regular Type



❖ Technical Data

Type	E1W	Cable Type	Steel Wire Armour
Gland Material	Brass	Sealing Area	Inner & Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor

❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dimensions				Armour Wire Dia (SWA)	Max Dia 'E'
	Metric	NPT	PF		Cable Dia 'A'		Cable Dia 'B'			
					Min	Max	Min	Max		
20/16	20	1/2"	1/2"	18	3.0	8.6	14.0	14.0	0.9	25
20S	20	1/2"	1/2"	18	6.0	11.6	14.0	15.9	0.9/1.25	31
20	20	1/2"	1/2"	18	8.0	13.9	14.0	20.9	0.9/1.25	34
25	25	3/4"	3/4"	20	13.0	19.9	18.1	26.2	1.25/1.6	44
32	32	1"	1"	23	17.0	26.2	24.3	33.9	1.6/2	53
40	40	1-1/4"	1-1/4"	23	24.0	32.1	28.0	40.4	1.6/2	61
50S	50	1-1/2"	1-1/2"	23	30.0	38.1	38.0	46.7	2/2.5	67
50	50	2"	2"	25	36.0	44.0	43.0	53.1	2/2.5	78
63S	63	2"	2"	25	42.0	49.9	48.6	59.4	2.5	80
63	63	2-1/2"	2-1/2"	30	48.0	55.9	56.2	65.9	2.5	88
75S	75	2-1/2"	2-1/2"	30	52.8	61.9	60.2	72.1	2.5	104
75	75	3"	2-1/2"	30	55.0	64.0	61.0	78.5	2.5/3.15	110
90	90	3"	3"	30	68.0	79.3	81.4	90.4	3.15	127

❖ Accessory

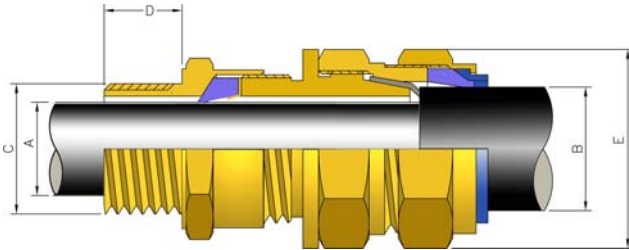
- Shrouds, Earth Tags, Locknuts, Metric Entry Thread Seals - see accessory page.

❖ Option

- Can choice EeCFC Seal instead of standard seal when use with certain cable type that exhibit "cold flow" characteristics

Armoured Cable Gland for SWA Cable, Explosion-proof Type

❖ Type of Explosion-proof Flameproof (Ex d IIC) Increase Safety (Ex e II)  
Certificate No : PTB No. Ex - 07 IEC 1007X



❖ Technical Data

Type	E2FW	Cable Type	Lead Covered Steel Wire Armour
Gland Material	Brass	Sealing Area	Inner & Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor Hazardous Area

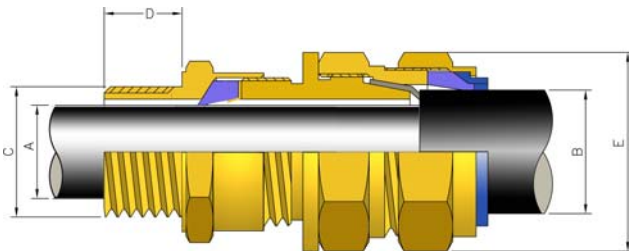
❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dimensions				Max Dia 'E'
	Metric	NPT	PF		Cable Dia 'A' Min	Cable Dia 'A' Max	Cable Dia 'B' Min	Cable Dia 'B' Max	
20S	20	1/2"	1/2"	18	6.6 - 11.6	14.0 - 15.9	0.9/1.25	31	
20	20	1/2"	1/2"	18	8.0 - 13.9	14.0 - 20.9	0.9/1.25	34	
25	25	3/4"	3/4"	20	13.0 - 19.9	22.8 - 26.2	1.25/1.6	44	
32	32	1"	1"	23	17.0 - 26.2	24.0 - 33.9	1.6/2	53	
40	40	1-1/4"	1-1/4"	23	24.0 - 32.1	30.0 - 40.4	1.6/2	61	
50S	50	1-1/2"	1-1/2"	23	30.0 - 38.1	37.5 - 46.7	2/2.5	67	
50	50	2"	2"	25	36.0 - 44.0	43.5 - 53.1	2/2.5	78	
63S	63	2"	2"	25	42.0 - 49.9	49.5 - 59.4	2.5	80	
63	63	2-1/2"	2-1/2"	30	48.0 - 55.9	56.5 - 65.9	2.5	88	
75S	75	2-1/2"	2-1/2"	30	52.8 - 61.9	56.5 - 72.1	2.5	104	
75	75	3"	2-1/2"	30	57.0 - 64.0	61.0 - 78.5	2.5/3.15	110	
90	90	3"	3"	30	69.0 - 79.3	78.0 - 90.4	3.15	127	

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Metric Entry Thread Seals - see accessory page.

Armoured Cable Gland for SWA Cable, General or Regular Type



❖ Technical Data

Type	E2W	Cable Type	Steel Wire Armour
Gland Material	Brass	Sealing Area	Inner & Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor

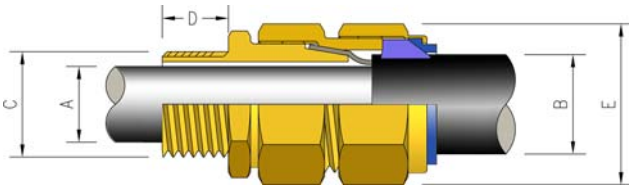
❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dimensions				Max Dia 'E'
	Metric	NPT	PF		Cable Dia 'A' Min	Cable Dia 'A' Max	Cable Dia 'B' Min	Cable Dia 'B' Max	
20S	20	1/2"	1/2"	18	6.6 - 11.6	14.0 - 15.9	0.9/1.25	31	
20	20	1/2"	1/2"	18	8.0 - 13.9	14.0 - 20.9	0.9/1.25	34	
25	25	3/4"	3/4"	20	13.0 - 19.9	22.8 - 26.2	1.25/1.6	44	
32	32	1"	1"	23	17.0 - 26.2	24.0 - 33.9	1.6/2	53	
40	40	1-1/4"	1-1/4"	23	24.0 - 32.1	30.0 - 40.4	1.6/2	61	
50S	50	1-1/2"	1-1/2"	23	30.0 - 38.1	37.5 - 46.7	2/2.5	67	
50	50	2"	2"	25	36.0 - 44.0	43.5 - 53.1	2/2.5	78	
63S	63	2"	2"	25	42.0 - 49.9	49.5 - 59.4	2.5	80	
63	63	2-1/2"	2-1/2"	30	48.0 - 55.9	56.5 - 65.9	2.5	88	
75S	75	2-1/2"	2-1/2"	30	52.8 - 61.9	56.5 - 72.1	2.5	104	
75	75	3"	2-1/2"	30	57.0 - 64.0	61.0 - 78.5	2.5/3.15	110	
90	90	3"	3"	30	69.0 - 79.3	78.0 - 90.4	3.15	127	

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Metric Entry Thread Seals - see accessory page.

Armoured Cable Gland  
for SWA Cable, General or Regular Type



❖ Technical Data

Type	CW	Cable Type	Steel Wire Armour
Gland Material	Brass	Sealing Area	Inner & Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor

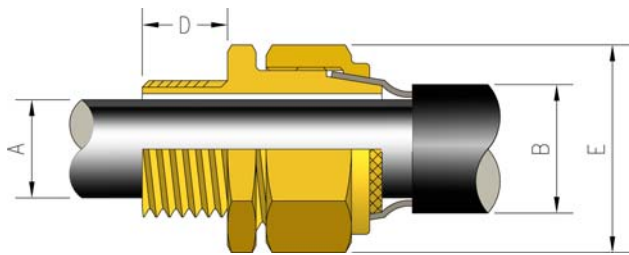
❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dimensions			Armour Wire Dia (SWA)	Max Dia 'E'
	Metric	NPT	PF		Cable Dia 'A' Max	Cable Dia 'B'			
20/16	20	1/2"	1/2"	15	8.6	6.0 - 13.4	0.9	24.4	
20S	20	1/2"	1/2"	10	11.6	9.5 - 15.9	0.9/1.25	26.6	
20	20	1/2"	1/2"	10	13.9	12.5 - 20.9	0.9/1.25	33.3	
25	25	3/4"	3/4"	10	19.9	17.0 - 26.2	1.25/1.6	40.5	
32	32	1"	1"	10	26.2	22.9 - 33.9	1.6/2	51.0	
40	40	1-1/4"	1-1/4"	15	32.1	26.0 - 40.4	1.6/2	61.0	
50S	50	1-1/2"	1-1/2"	15	38.1	35.0 - 46.7	2/2.5	66.5	
50	50	2"	2"	15	44.0	38.0 - 53.1	2/2.5	77.7	
63S	63	2"	2"	15	50.0	45.6 - 59.4	2.5	83.2	
63	63	2-1/2"	2-1/2"	15	55.9	54.6 - 65.9	2.5	88.7	
75S	75	2-1/2"	2-1/2"	15	61.9	57.0 - 72.1	2.5	101.6	
75	75	3"	2-1/2"	15	67.9	60.4 - 78.5	2.5/3.15	111.1	
90	90	3"	3"	15	79.3	69.2 - 90.4	3.15	128.6	

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Entry Thread Seals – see accessory page.

Armoured Cable Gland  
for SWA Cable, General or Regular Type



❖ Technical Data

Type	BW	Cable Type	Steel Wire Armour
Gland Material	Brass	For Area	Indoor

❖ Ordering Number & Dimension

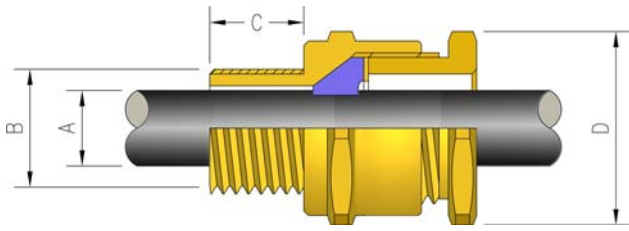
Cable Gland Size	Metric Entry Thread 'C'	Thread Length 'D'	Cable Dimensions		Armour Wire Dia (SWA)	Max Dia 'E'
			Cable Dia 'A' Max	Cable Dia 'B' Max		
20S	20	10	11.6	16.1	0.9/1.25	24.0
20	20	10	13.9	21.1	0.9/1.25	30.0
25	25	10	19.9	27.4	1.25/1.6	36.0
32	32	10	26.2	34.4	1.6/2	44.5
40	40	15	32.1	42.4	1.6/2	56.3
50S	50	15	38.1	50.1	2/2.5	63.4
50	50	15	44.0	55.7	2/2.5	72.1
63S	63	15	50.0	62.4	2.5	83.0
63	63	15	55.9	68.2	2.5	88.7
75S	75	15	61.9	76.8	2.5	99.8
75	75	15	67.9	82.9	2.5/3.15	105.3

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Serrated Washer – see accessory page.

Unarmoured Cable Gland  
Explosion-proof Type

❖ Type of Explosion-proof  
Flameproof (Ex d IIC)  
Increase Safety (Ex e II)  
Certificate No : PTB No. Ex - 07 IEC 1067X



❖ Technical Data

Type	A2F	Cable Type	Unarmoured
Gland Material	Brass	Sealing Area	Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor Hazardous Area

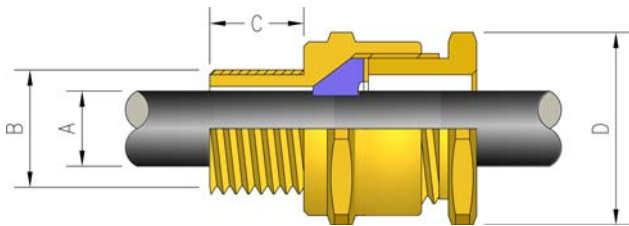
❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'B'			Thread Length 'C'	Cable Dia 'A'		Max Dia 'D'
	Metric	NPT	PF		Min	Max	
20/16	20	1/2"	1/2"	17	3.0	8.0	26
20S	20	1/2"	1/2"	17	6.0	11.5	32.5
20	20	1/2"	1/2"	17	11.0	13.5	32.5
25	25	3/4"	3/4"	20	13.2	19.5	41
32	32	1"	1"	23	17.0	25.5	55
40	40	1-1/4"	1-1/4"	23	22.3	32.0	60
50S	50	1-1/2"	1-1/2"	24	31.6	37.0	70
50	50	2"	2"	26	35.7	43.0	86
63S	63	2"	2"	26	40.3	50.0	86
63	63	2-1/2"	2-1/2"	30	47.3	55.0	97
75S	75	2-1/2"	2-1/2"	30	53.0	61.0	97
75	75	3"	2-1/2"	30	60.5	67.0	109
90	90	3"	3"	30	66.7	79.0	120

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Entry Thread Seals - see accessory page.

Unarmoured Cable Gland  
General or Regular Type



❖ Technical Data

Type	A2	Cable Type	Unarmoured
Gland Material	Brass	Sealing Area	Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor

❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'B'			Thread Length 'C'	Cable Dia 'A'		Max Dia 'D'
	Metric	NPT	PF		Min	Max	
20/16	20	1/2"	1/2"	17	3.0	8.0	26
20S	20	1/2"	1/2"	17	6.0	11.5	32.5
20	20	1/2"	1/2"	17	11.0	13.5	32.5
25	25	3/4"	3/4"	20	13.2	19.5	41
32	32	1"	1"	23	17.0	25.5	55
40	40	1-1/4"	1-1/4"	23	22.3	32.0	60
50S	50	1-1/2"	1-1/2"	24	31.6	37.0	70
50	50	2"	2"	26	35.7	43.0	86
63S	63	2"	2"	26	40.3	50.0	86
63	63	2-1/2"	2-1/2"	30	47.3	55.0	97
75S	75	2-1/2"	2-1/2"	30	53.0	61.0	97
75	75	3"	2-1/2"	30	60.5	67.0	109
90	90	3"	3"	30	66.7	79.0	120

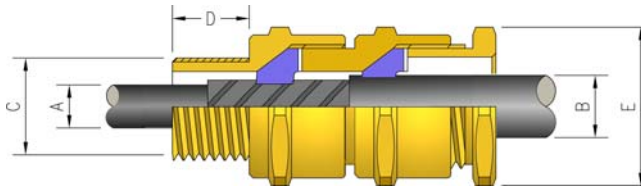
❖ Accessory

- Shrouds, Earth Tags, Locknuts, Entry Thread Seals - see accessory page.



Armoured Cable Gland  
Increase Safety Type

❖ Type of Explosion-proof  
Increase Safety (Ex e II)



❖ Technical Data

Type	A4e	Cable Type	Steel Tape Armoured
Gland Material	Brass	Sealing Area	Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor Hazardous Area

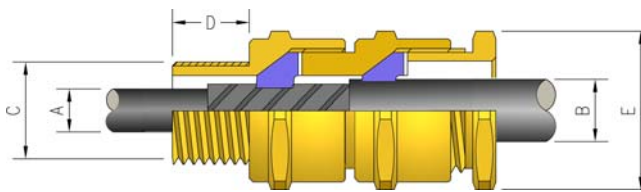
❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dia 'A'		Cable Dia 'B'		Max Dia 'E'
	Metric	NPT	PF		Min	Max	Min	Max	
20S	20	1/2"	1/2"	15	6.5	11.6	6.1	11.6	26.5
20	20	1/2"	1/2"	15	10.0	13.9	6.5	13.9	30.0
25	25	3/4"	3/4"	15	11.6	19.9	11.1	19.9	39.9
32	32	1"	1"	15	19.0	26.2	17.0	26.2	45.5
40	40	1-1/4"	1-1/4"	15	25.0	32.1	22.0	32.1	55.4
50S	50	1-1/2"	1-1/2"	15	27.5	38.1	29.5	38.1	61.0
50	50	2"	2"	15	33.1	44.0	35.6	44.0	66.5
63S	63	2"	2"	15	40.1	50.0	40.1	49.9	77.6
63	63	2-1/2"	2-1/2"	15	47.2	55.9	47.2	55.9	83.2
75S	75	2-1/2"	2-1/2"	15	43.5	61.9	52.8	61.9	88.7
75	75	3"	2-1/2"	15	49.8	67.9	59.1	67.9	94.2
90	90	3"	3"	15	64.0	79.3	66.6	79.3	120.7

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Entry Thread Seals – see accessory page.

Armoured Cable Gland  
General or Regular Type



❖ Technical Data

Type	A4	Cable Type	Steel Tape Armoured
Gland Material	Brass	Sealing Area	Outer Sheath
Seal Material	Thermoplastic Elastomer	For Area	Indoor Outdoor

❖ Ordering Number & Dimension

Cable Gland Size	Entry Thread 'C'			Thread Length 'D'	Cable Dia 'A'		Cable Dia 'B'		Max Dia 'E'
	Metric	NPT	PF		Min	Max	Min	Max	
20S	20	1/2"	1/2"	15	6.5	11.6	6.1	11.6	26.5
20	20	1/2"	1/2"	15	10.0	13.9	6.5	13.9	30.0
25	25	3/4"	3/4"	15	11.6	19.9	11.1	19.9	39.9
32	32	1"	1"	15	19.0	26.2	17.0	26.2	45.5
40	40	1-1/4"	1-1/4"	15	25.0	32.1	22.0	32.1	55.4
50S	50	1-1/2"	1-1/2"	15	27.5	38.1	29.5	38.1	61.0
50	50	2"	2"	15	33.1	44.0	35.6	44.0	66.5
63S	63	2"	2"	15	40.1	50.0	40.1	49.9	77.6
63	63	2-1/2"	2-1/2"	15	47.2	55.9	47.2	55.9	83.2
75S	75	2-1/2"	2-1/2"	15	43.5	61.9	52.8	61.9	88.7
75	75	3"	2-1/2"	15	49.8	67.9	59.1	67.9	94.2
90	90	3"	3"	15	64.0	79.3	66.6	79.3	120.7

❖ Accessory

- Shrouds, Earth Tags, Locknuts, Entry Thread Seals – see accessory page.

Accessories / Option for Cable Gland

❖ Shroud (PVC / LSF)



- Shroud totally encloses the gland body and forms an effective seal down onto the cables's overall
- The shroud has an extensive taper at the cable end and effectively seals the smallest size of cable.
- The shroud forms a protective seal to the exposed metal parts of the gland when used in highly corrosive atmospheres.
- Standard material is PVC

❖ Metric Entry Thread Seals



- For IP rating across the interface between the equipment and gland, it is essential to fit a metric entry thread seal.
- Standard material is nylon.

❖ EeCFC Seal



- For inner seal use with cable certain exhibit "cold flow" characteristics

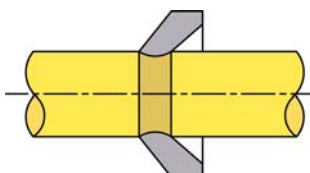
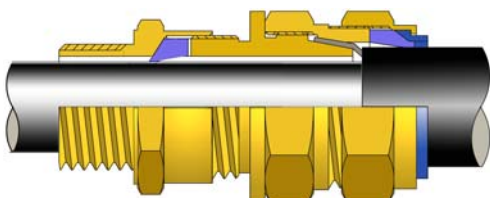
❖ Earth Washer (Serrated Type)



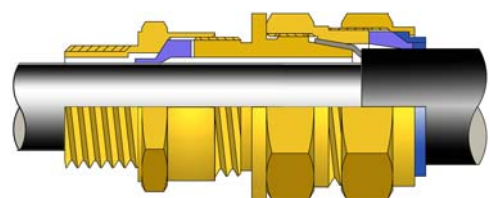
- For Lead Covered Steel Wire Armoured Cable

❖ Cold Flow

The latest IEC 60079 requires that certain cable types which employ materials which can exhibit significant "cold flow" characteristics which could have adverse effects on the protection of the apparatus, is to be used, a suitable cable entry device should be employed. "EeCFC Seal" is to avoid this problem designed that eliminating any damage to the cable sheath as opposed to conventional compression seal which usually require the cable gland to be fully tightened on installation.



<Compression Type Seal>



<Reduce Damage Type Seal>

⇒ If you need more information, contact us please.

❖ Earth Tags



- The earth tag which fits onto the thread at the terminal end is manufactured from brass strip 1.6mm thick
- By including this earth tag, a more effective bearing surface is presented to the apparatus or other conducting parts.
- The earth tag provide and earth bond connection as specified in BS 6121:Pt5.
- Earth bond connections are specified in IEE wiring regulations and relevant Codes of Practice. If fault current rating of the cable exceeds the short circuit rating specified in the table below, an integral earth gland is recommended.

Earth Tag Size	Short Circuit Rating Symmetrical Fault Current (kA) for 1s	
	Standard	High Breaking Capacity
20	3.06	4.4
25	4.00	4.8
32	5.40	5.2
40	7.20	9.8
50	10.40	11.4
63	10.40	12.0
75	10.40	14.3

❖ Locknut



- Available to suit all thread forms offered with cable glands.
- Standard material is brass
- Zinc plated mild steel locknuts are a cost effective alternative to the brass locknuts, but be used only in dry, low humidity conditions.