

Commitment of Quality



COMPANY PROFILE



Rupam group of companies is a family owned business located in Jamnagar, India. Rupam has come a long way since its inception in 1965. Today, the Rupam group of companies is an established group of six recognized companies, established as the leading manufacturer and exporter of brass electrical wiring accessories and several other brass products.

The Rupam group is guided by its corporate philosophy to uphold the highest standards of professionalism, business ethics, service and quality. Its unfailing commitment to deliver only the best to its customers is the driving force behind the growth of the group, not just in size, but also in depth knowledge and scope.

As a part of its long – term strategy to expand its core competencies and increase its market presence, Rupam group has aggressively sought opportunities to grow through attainments of broad customer base with diversified product portfolio.

Our sustainability strategy sets out the overall direction for us, to grow and manage our businesses in order to deliver valued products to our customer. It emphasises the importance of partnership with our customers, transparency and value creation which form the basis for the culture we foster throughout the group.

The business world is shrinking and Rupam Group has crossed many geographical boundaries. We serve today several customers in Europe, USA, United Kingdom, South East Asia and the entire region of Gulf.

All kind of brass parts and components are carefully manufactured with automatic machines under a controlled environment with absolute quality control. These products are mainly suitable for Electrical, Switchgear, Controlgear, Hardware & Sanitary industries.

VISION AND MISSION

The Rupam group will preserve the integrity and professionalism that have characterized the company's brand image over the past decades and remain on course to realize its vision of becoming one of the india's largest group to manufacture all kind of brass products, guided by our mission statement:

- A customer-focused organization ever improving on service and quality standards
- Using sustainability to drive product development and enhance operational efficiencies
- Constantly building people to increase knowledge and innovation

RUPAM PHILOSOPHY

It is our strong desire always to remain in contact continuously with all our customers. Our directors visit each of this customers personally at least once a year. This has helped us not only to grow but to also to establish a long tem business association and friendship.

Our customers are not just customers but in true sense they are "Business Partners" who are the constant source of inspiration in our progress.

Our quality is superb, the service is excellent and support to our customer is genuine. We offer in general best of everything at a very competitive price.

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CABLE GLANDS AND IT'S CONSTRUCTION TYPES





INTRODUCTION OF CABLE GLANDS

Cable glands are mechanical devices which are used for the retention of cables. The glands can be constructed from non-ferrous metallic and non-metallic material. They can be used at a termination junction for all type of cables which may be Electrical, Telecommunication, Control or Data Cables. They are used as a sealing, holding and terminating device which ensures that the cables would retain all characteristics at the enclosure. These characteristics can be summarised as under:

- 1. Providing continuity of electricity for all armoured cables as the metallic property would facilitate earthing.
- 2. Provide a holding force on the cable to ensure the cables are retained against accidental pull outs.
- 3. Provide environmental protection by ensuring a sealing on the outer cable sheath, thus shutting out dust and moisture effects on the electrical or instrumental enclosure.
- 4. Providing a suitable level of adequate protection to the instrument or equipment in hazardous areas.
- 5. Provide additional security at the cable entry point and maintain an ingress protection rating on the enclosure with suitable additional accessories

OVERVIEW OF CABLE GLAND CONSTRUCTION TYPES

There are numerous types of glands available in the market. However, there are some specific standards selected by an industry while deciding the type of gland to be used against the specific type of cable. The sealing ring employed within the cable gland design may be a deciding factor for selection of the gland to be used.

Throughout the world, there are different types of cables manufactured. The standards of these cable also vary from country to country. Eventhough the electrical parameters and ratings may be the same, still, the product may differ from company to company. Thus, a very close attention should be paid while selecting the cable gland which is to be used against the different cable as the design of the gland would matter for the sealing and retention required against the said cable.

The sealing on the cable inner side and the armour termination are ensured in one simultaneous action. This involves the tightening of an armour cone with the gland till a defined mechanical stop is ensured. This would lead to the compression seal being tightened and checks should be maintained that overtightening of the seal is avoided.

CABLE GLAND DEFINITIONS





Below are tables composed from data included in BS 6121: Part 1: 1989

TADICA.	DE DECLORIATIONIC EO	R UNARMOURED CABLES.
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Type Definition

A1 For unarmoured cable with an elastomeric or plastic outer sheath, with sealing function between the

cable sheath and the sealing ring of the cable gland.

A2 As type A1, but with seal protection degree IP66

TABLE B: CABLE GLAND TYPE DESIGNATIONS FOR ARMOURED CABLES

CodeDefinitionBNo sealCSingle outer sealDSingle inner seal

E Double(inner & outer)seal

Suffix '1' = Normal

Suffix'2' = lead sheathed

TABLE C: CABLE TYPE DESIGNATIONS

Designation of cable armouring

T Pliable Wire Armour
 W Single Wire Armour
 X Wire Braid Armour
 Y Strip Armour
 Z Tape Armour

TABLE D: TYPICAL CABLE GLAND TYPE DESIGNATIONS DERIVED FROM TABLES A TO C

Туре	Definition
A2	Cable gland for unarmoured cable with outer seal
BW	${\sf CableglandforSingleWireArmourCablewithoutseal}$
CW	Single seal cable gland for Single Wire Armour cable
CX	Single seal cable gland for braided cable
E1W	Double seal cable gland for Single Wire Armour cable
E1X	Double seal cable gland for braided cable
G	${\sf CableglandforSingleWireArmourCablewithoutseal}$
TRS	Cable gland for unarmoured cable with outer seal

INGRESS PROTECTION RATINGS



Ingress Protection is the most significant part for any electrical equipment. For any industry, the electrical installations require high level of integrity and the protection systems are dependent upon the equipment used to maintain the continuous electrical supply.

The cable glands are required to go thru several standard tests to verify the ingress protection rating. This is in line for similar for all electrical equipments. We at Rupam have got all our Glands tested by an independent agency to validate our Ingress Protection i.e. I.P Ratings. The tests are done as per the standards EN 60529 (iec 60529). Our Cable glands have been tested to IP 54. Please note that the Ingress Protection tests are different from Deluge Protection tests.

IP RATING CHART

IP	EXAMPLE	SOLID PROTECTION			
4		Protected against a solid object greater than 50mm, such as a hand			
		Protected against a solid object greater than 12.5mm, such as a hanger			
3	====	Protected against a solid object greater than 2.5mm, such as a screwdriver			
L,		Protected against a solid object greater then 1.0mm, such as a wire			
S Ly at S		Dust Protected. Limited ingress of dust permitted			
4		Dust Tight. Zero ingress of dust permitted			

IP	EXAMPLE	LIQUID PROTECTION
3		Protected against vertically falling drops of water. Limited ingress permitted
0	L ₁	Protected against vertically falling drops of water with enclosure tilted 15° from vertical. Limited ingress permitted
3	4	Protected against sprays to 60° from the vertical. Limited ingress permitted
		Protected against water splashed from all directions. Limited ingress permitted
9	4	Protected against jets of water. Limited ingress permitted
6		Protected against strong jets of water. Limited ingress permitted
8		Protected against the effects of immersion between 15cm and 1m
8		Protected against long periods of immersion under pressure

A2 CABLE GLAND







CABLE GLAND KIT CONTAINS:

Gland
Lock Nut
Shroud
Earth Tag
Kit contains two sets of
above items up to 32mm sizes
& one set from 40mm and

above sizes

RUPAM A2 Type brass indoor cable gland is used with all types of unarmoured cable, providing mechanical cable retention. sealing is provided on the cable outer sheath. The RUPAM A2 range of industrial cable gland is designed and tested as per BS 6121:Part 1:1989. It meets the requirements of EN 50262:1999.

TECHNICAL INFORMATION

Type : A2

Design Specification : BS 6121: Part 1: 1989.

Ingress Protection Rating: IP66
Standard Gland Material: Brass

Optional Gland Material : Nickel Plated Brass

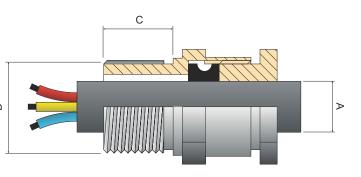
Cable Type : Unarmoured

Sealing Area(s) : Cable Outer Sheath

Available Accessories : Steel/Brass Locknut,PVC/LSF Shroud

Brass Earth Tag, Nylon Washer,

Brass Reducer



Gland	Entry ⁻	Thread	Cable Acceptance Detail			
Size	Dia. B	Length Minimum C	Dia. "A" Max	Across Flat	Across Corner	
16 L	16	10	3.50 - 9.00	21.00	24.00	
20 S	20	15	8.00 - 11.70	22.50	25.00	
20 L	20	15	11.00 - 14.00	24.00	26.60	
25 S	25	15	12.00 - 17.00	27.00	30.50	
25 L	25	15	13.00 - 20.50	29.50	33.00	
32 S	32	15	16.50 - 23.00	35.00	38.50	
32 L	32	15	19.00 - 26.30	39.00	43.00	
40 S	40	20	23.00 - 29.00	43.00	48.00	
40 L	40	20	25.00 - 33.00	46.00	51.00	
50 S	50	20	31.50 - 39.00	56.00	62.00	
50 L	50	20	36.50 - 44.00	62.00	68.00	
63 S	63	20	42.50 - 50.00	66.00	73.00	
63 L	63	20	48.00 - 56.00	72.00	79.00	
75 S	75	20	54.50 - 62.00	77.00	85.00	
75 L	75	20	60.50 - 68.00	86.00	95.00	
90 L	90	20	67.00 - 79.00	100.00	112.00	

BW CABLE GLAND KNURLING 2 PART







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains two sets of above items up to 32mm sizes & one set from 40mm and above sizes RUPAM BW Type brass indoor cable gland for use with all types of Single Wire Armour (SWA) cable providing mechanical cable retention and electrical continuity thru armour wire termination. This cable gland is designed and tested as per BS6121:1989. It meets the requirement of EN 50262:1999

TECHNICAL INFORMATION

Type : BW Knurling 2 Part

Design Specification : BS 6121: Part 1: 1989

Standard Gland Material: Brass

Optional Gland Material: Nickel Plated Brass

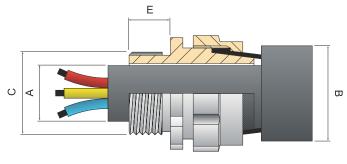
Cable Type : Single Wire Armour (SWA)

Armour Clamping : Two Part Armour Lock

Available Accessories : Steel/Brass Locknut, PVC/LSF Shroud,

Brass Earth Tag, Nylon Washer,

Brass Reducer



Gland	Entry ⁻	Thread	Cable	e Acceptance D	etail	Across	Across
Size	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Armour Diameter	Flat	Corner
20 S	20	10	11.60	16.00	0.90/1.25	21.00	23.40
20 L	20	10	14.50	20.00	0.90/1.25	24.00	27.00
25 L	25	10	20.50	26.30	1.25/1.60	32.00	35.50
32 L	32	10	27.00	33.50	1.60/2.00	40.50	45.00
40 L	40	15	34.00	41.00	1.60/2.00	49.00	55.50
50 L	50	15	44.00	52.50	2.00/2.50	61.00	68.00
63 L	63	15	56.00	66.00	2.50	76.00	86.00
75 L	75	15	68.00	78.00	2.50	88.00	98.00
90 L	90	20	79.00	90.00	2.50/3.15	104.00	117.00

BW CABLE GLAND 4 PART







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains two sets of above items up to 32mm sizes & one set from 40mm and above sizes

RUPAM BW 4 Part Type brass indoor cable gland is used with all types of Single Wire Armour (SWA) cable providing mechanical cable retention and electrical continuity thru armour wire termination. The BW design offers the benefit of a longer body to protect the armour wires from impact. This cable gland is designed and tested to BS6121:1989. It meets the requirement of EN 50262:1999

TECHNICAL INFORMATION

Type : BW 4 Part

Design Specification : BS 6121: Part 1: 1989

Standard Gland Material: Brass

Optional Gland Material: Nickel Plated Brass

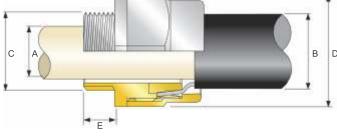
Cable Type : Single Wire Armour (SWA)

Armour Clamping : Clamping Ring

Available Accessories : Steel/Brass Locknut, PVC/LSF Shroud

Brass Earth Tag, Nylon Washer,

Brass Reducer



Gland	Entry ⁻	Thread	Cable	e Acceptance D	Petail	Across	Across
Size	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Armour Diameter	Flat D	Corner
20 S	20	9	11.60	16.00	0.9/1.25	21.50	24.50
20 L	20	9	14.00	20.00	0.9/1.25	24.00	27.30
25 S	25	9	19.00	24.00	1.25/1.60	30.50	34.00
25 L	25	9	20.50	26.50	1.25/1.60	32.00	35.50
32 S	32	9	23.00	29.50	1.60/2.00	34.50	39.00
32 L	32	10	27.00	33.00	1.60/2.00	39.00	44.00
40 S	40	10	30.00	37.00	1.60/2.00	44.50	49.00
40 L	40	10	33.50	41.00	1.60/2.00	47.00	53.50
50 S	50	11	40.00	47.50	2.00/2.50	56.00	62.00
50 L	50	11	44.00	52.60	2.00/2.50	60.00	67.50
63 S	63	14	50.50	60.00	2.50	69.00	78.00
63 L	63	14	56.00	66.00	2.50	74.50	84.00
75 S	75	15	62.00	72.00	2.50	82.00	93.00
75 L	75	15	68.00	78.00	2.50	87.00	99.00
90 L	90	20	79.00	90.00	2.50/3.15	105.00	117.00

CW CABLE GLAND







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains two sets of above items up to 32mm sizes & one set from

40mm and above sizes

RUPAM CW Type brass indoor and outdoor cable gland is used with all types of Single Wire Armour (SWA) cable providing mechanical cable retention and electrical continuity thru armour wire termination. Clamping ring allows the cable to be easily disconnect from the equipment, for maintenance etc. This feature also provides remote make off procedures when the termination is to be conducted in areas of restricted access. This cable gland is designed and tested as per BS 6121:Part 1:1989. It meets the requirement of EN 50262:1999.

TECHNICAL INFORMATION

Type : CW

Design Specification : BS 6121: Part 1: 1989.

Ingress Protection Rating: IP54

Standard Gland Material: Brass

Optional Gland Material: Nickel Plated Brass

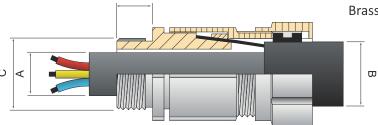
Type of Cable : Single Wire Armour (SWA),

Sealing Area(s) : Cable Outer Sheath

Available Accessories : Steel/Brass Locknut, PVC/LSF Shroud

Brass Earth Tag, Nylon Washer,

Brass Reducer



Ε

Gland	Entry Thread		Cabl	e Acceptance D	etail	Across	Across
Size	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Armour Diameter	Flat	Corner
20 S	20	10	11.60	16.00	0.90/1.25	22.00	25.00
20 L	20	10	14.50	20.50	0.90/1.25	26.00	29.00
25 S	25	10	19.00	24.00	1.25/1.60	31.50	35.50
25 L	25	10	20.50	27.00	1.25/1.60	34.00	38.00
32 S	32	10	24.00	30.50	1.60/2.00	38.50	43.50
32 L	32	10	27.00	33.00	1.60/2.00	41.00	46.50
40 S	40	15	30.00	37.00	1.60/2.00	46.00	51.00
40 L	40	15	33.50	41.00	1.60/2.00	48.50	55.00
50 S	50	15	40.00	47.00	2.00/2.50	57.00	64.00
50 L	50	15	44.00	52.60	2.00/2.50	61.00	68.00
63 S	63	15	50.50	60.00	2.50	70.00	79.00
63 L	63	15	56.00	66.00	2.50	78.00	86.00
75 S	75	15	62.00	72.00	2.50	84.00	95.00
75 L	75	15	68.00	78.00	2.50	92.00	102.00
90 L	90	20	79.00	90.00	2.50/3.15	105.00	118.00

CX CABLE GLAND







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains two sets of above items up to 32mm sizes & one set from 40mm and above sizes

RUPAM CX Type brass indoor and outdoor cable gland is used with all types of Wire Braid Armour, Strip Armour, Pliable Wire Armour & Steel Tape Armour (STA) Cable. It also provides mechanical cable retention and electrical continuity thru armour wire termination. An armour cone clamping ring arrangement allows the cable to be easily disconnect from the equipment, for maintenance etc. This feature also facilitate remote make off procedures when the termination is to be conducted in areas of restricted access. This cable gland is designed as per BS 6121:Part 1:1989.

TECHNICAL INFORMATION

Type : CX

Design Specification : BS 6121: Part 1: 1989,

Standard Gland Material: Brass

Optional Gland Material : Nickel Plated Brass

Cable Type : Wire Braid Armour, Screened Flexible

Wire Braid (e.g.CY/SY), Pliable Wire Armour(PWA) Steel Tape Armour (STA)

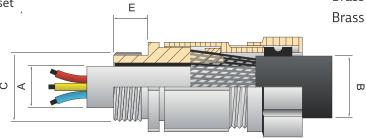
Sealing Area(s) : Cable Outer Sheath

Available Accessories

 $: \ \, \mathsf{Steel/Brass} \,\, \mathsf{Locknut,PVC/LSF} \,\, \mathsf{Shroud} \,\,$

Brass Earth Tag, Nylon Washer,

Brass Reducer



Gland	Gland Entry Thread		Cabl	Cable Acceptance Detail			Across
Size	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Armour Diameter	Across Flat	Corner
20 S	20	10	11.60	16.00	0.40/0.80	22.00	25.00
20 L	20	10	14.50	20.50	0.60/1.00	26.00	29.00
25 S	25	10	19.00	24.00	0.60/1.10	31.50	35.50
25 L	25	10	20.50	27.00	0.60/1.10	34.00	38.00
32 S	32	10	24.00	30.50	0.60/1.20	38.50	43.50
32 L	32	10	27.00	33.00	0.60/1.20	41.00	46.50
40 S	40	15	30.00	37.00	0.60/1.20	46.00	51.00
40 L	40	15	33.50	41.00	0.60/1.20	48.50	55.00
50 S	50	15	40.00	47.00	0.60/1.50	57.00	64.00
50 L	50	15	44.00	52.60	0.80/1.50	61.00	68.00
63 S	63	15	50.50	60.00	0.80/1.50	70.00	79.00
63 L	63	15	56.00	66.00	0.80/1.50	78.00	86.00
75 S	75	15	62.00	72.00	0.80/1.50	84.00	95.00
75 L	75	15	68.00	78.00	0.80/1.50	92.00	102.00
90 L	90	20	79.00	90.00	0.80/1.50	105.00	118.00

E1W CABLE GLAND







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains two sets of above items up to 32mm sizes & one set from 40mm and above sizes

RUPAM E1W Type brass indoor and outdoor cable gland is used with Single Wire Armour (SWA) cable providing a seal on the cable inner sheath and the cable outer sheath. A detachable armour cone and clamping ring arrangement allows the cable to be easily disconnect from the equipment, for maintenance etc. This feature also facilitate remote make off procedures when the termination is to be conducted in areas of restricted access. Separate tightening actions for the inner displacement seal and the armour termination affords maximum control cover the pressure applied to the cable inner bedding. This cable gland is designed and tested as per BS 6121:Part 1:1989. It meets the requirement of EN 50262:1999.

TECHNICAL INFORMATION

Type : E1W

Design Specification : BS 6121: Part 1: 1989

Ingress Protection Rating: IP54
Standard Gland Material: Brass

Optional Gland Material: Nickel Plated Brass

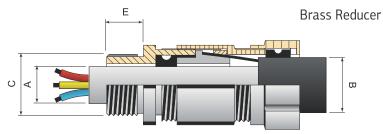
Cable Type : Single Wire Armour (SWA)

Armour Clamping : Detachable Armour Cone & Clamping Ring

Sealing Area(s) : Cable Inner Bedding & Cable Outer Sheath

Available Accessories : Steel/Brass Locknut, PVC/LSF Shroud

Brass Earth Tag, Nylon Washer,



Gland	Entry ⁻	Thread	Cable	e Acceptance D	etail	Across	Across
Size	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Armour Diameter	Flat	Corner
20 S	20	10	8.00 - 11.50	12.00 - 16.00	0.90/1.25	22.00	25.00
20 L	20	10	11.00 - 14.00	15.50 - 20.00	0.90/1.25	26.00	29.00
25 S	25	10	12.00 - 17.00	17.50 - 23.00	1.25/1.60	31.50	35.50
25 L	25	10	14.00 - 20.00	23.00 - 26.50	1.25/1.60	34.00	38.00
32 S	32	10	18.00 - 23.00	25.00 - 30.00	1.60/2.00	38.50	43.50
32 L	32	10	20.00 - 26.00	26.70 - 33.00	1.60/2.00	41.00	46.00
40 S	40	15	23.00 - 30.00	32.00 - 37.50	1.60/2.00	46.00	51.00
40 L	40	15	26.00 - 32.20	33.00 - 40.50	1.60/2.00	49.50	56.00
50 S	50	15	32.50 - 38.50	39.50 - 46.00	2.00/2.50	57.00	64.00
50 L	50	15	36.50 - 44.00	46.00 - 52.00	2.00/2.50	61.00	68.00
63 S	63	15	43.50 - 50.00	52.00 - 59.00	2.50	70.00	79.00
63 L	63	15	49.00 - 56.00	58.50 - 66.00	2.50	78.00	86.00
75 S	75	15	54.50 - 62.00	65.00 - 72.00	2.50	84.00	95.00
75 L	75	15	61.00 - 68.00	71.50 - 78.00	2.50	92.00	102.00

E1X CABLE GLAND







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains Two Sets up to 32mm Sizes & One Set from 40mm and above

RUPAM E1X Type brass indoor and outdoor cable gland is used with all types of Wire Braid Armour, Strip Armour, Pliable Wire Armour & Steel Tape Armour (STA) cable providing a seal on the cable inner bedding and cable outer sheath. The cable gland provides mechanical cable retention and electrical continuity via armour termination. A detachable armour cone clamping ring arrangement allows the cable to be easily disconnect from the equipment, for maintenance etc. This feature also facilitate remote make off procedures when the termination is to be conducted in areas of restricted access. Separate tightening actions for the inner displacement seal and the armour termination afford maximum control over the pressure applied to the cable inner bedding. This cable gland is designed as per BS 6121:Part 1:1989.

TECHNICAL INFORMATION

Type E1X

Design Specification : BS 6121: Part 1: 1989

Standard Gland Material : Brass

Optional Gland Material : Nickel Plated Brass

Type of Cable Wire Braid Armour or Screened Flexible

> Wire Braid (e.g.CY/SY), Pliable Wire Armour(PWA) Steel Tape Armour (STA)

Armour Clamping : Detachable Armour Cone &

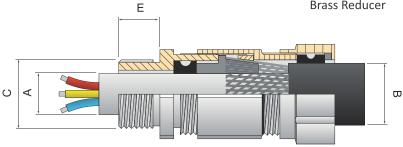
Clamping Ring

Sealing Area(s) Cable Inner Bedding & Cable Outer Sheath

Available Accessories Steel/Brass Locknut, PVC/LSF Shroud

Brass Earth Tag, Nylon Washer,

Brass Reducer



	Entry Thread		Cable	Cable Acceptance Detail			
Gland Size	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Armour Diameter	Across Flat	Across Corner
20 S	20	10	8.00 - 11.50	12.00 - 16.00	0.40/0.80	22.00	25.00
20 L	20	10	11.00 - 14.00	15.50 - 20.00	0.60/1.00	26.00	29.00
25 S	25	10	12.00 - 17.00	17.50 - 23.00	0.60/1.10	31.50	35.50
25 L	25	10	14.00 - 20.00	23.00 - 26.50	0.60/1.10	34.00	38.00
32 S	32	10	18.00 - 23.00	25.00 - 30.00	0.60/1.20	38.50	43.50
32 L	32	10	20.00 - 26.00	26.70 - 33.00	0.60/1.20	41.00	46.00
40 S	40	15	23.00 - 30.00	32.00 - 37.50	0.60/1.20	46.00	51.00
40 L	40	15	26.00 - 32.20	33.00 - 40.50	0.60/1.20	49.50	56.00
50 S	50	15	32.50 - 38.50	39.50 - 46.00	0.60/1.50	57.00	64.00
50 L	50	15	36.50 - 44.00	46.00 - 52.00	0.80/1.50	61.00	68.00
63 S	63	15	43.50 - 50.00	52.00 - 59.00	0.80/1.50	70.00	79.00
63 L	63	15	49.00 - 56.00	58.50 - 66.00	0.80/1.50	78.00	86.00
75 S	75	15	54.50 - 62.00	65.00 - 72.00	0.80/1.50	84.00	95.00
75 L	75	15	61.00 - 68.00	71.50 - 78.00	0.80/1.50	92.00	102.00

CXT CABLE GLAND







CABLE GLAND KIT CONTAINS:

Gland Lock Nut Shroud Earth Tag

Kit contains two sets of above items up to 32mm sizes & one set from 40mm and above sizes

RUPAM CXT type brass indoor and outdoor cable gland is unarmoured cable gland. This gland provides sealing on the cable outer sheath. It also provides mechanical cable retention and electrical continuity thru internal pig tail termination of the flexible wire braid.

The RUPAM CXT range of industrial cable gland is designed as per BS 6121:Part 1:1989.

TECHNICAL INFORMATION

Type : CXT

Design Specification : BS 6121: Part 1: 1989

Standard Gland Material : Brass

Optional Gland Material : Nickel Plated Brass

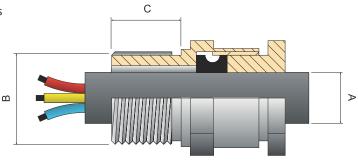
Type of Cable : Unarmoured

Sealing Area(s) : Cable Outer Sheath

Available Accessories : Steel/Brass Locknut, PVC/LSF

Shroud Brass Earth Tag,

Nylon Washer, Brass Reducer



Gland Size	Entry Thread		Cable Acceptance Detail			Across
	Dia. C	Length Minimum E	Dia. "A" Max	Dia. "B" Max	Across Flat	Corner
20 S	20	15	12.00	16.00	22.00	25.00
20 L	20	15	14.50	20.00	25.50	28.50
25 L	25	15	20.50	27.00	34.00	38.00
32 L	32	15	26.50	33.00	40.00	45.00
40 L	40	20	33.50	41.00	46.00	51.00
50 L	50	20	44.00	52.60	60.00	67.00

ALCO G CABLE GLAND





RUPAM Alco G Type brass indoor cable gland for use with all types of Single Wire Armour (SWA) cable providing mechanical cable retention and electrical continuity thru armour wire termination. The Alco G design offers the benefit of a longer body to protect the armour wires from impact. The Alco G range of industrial cable gland is designed as per BS6121:1989

TECHNICAL INFORMATION

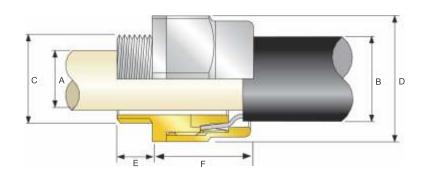
Type : G

Design Specification : BS 6121: Part 1: 1989

Standard Gland Material: Nickel Plated Brass,

Cable Type : Single Wire Armour (SWA)

Armour Clamping : Clamping Ring



Gland	Entry Thread		Cable Acceptance Details			Across	Across
Size	Dia C	Length Minimum E	Dia A Maximum	Dia B Maximum	Armour Diameter	Flat	Corner
204	20	9	11.50	17.00	0.90/1.25	21.50	24.50
206	20	9	13.80	20.00	0.90/1.25	24.00	27.30
254	25	9	16.50	22.00	1.25/1.60	27.00	30.50
256	25	9	18.80	24.50	1.25/1.60	30.50	34.00
324	32	9	22.80	29.00	1.60/2.00	34.50	39.00
326	32	10	26.50	33.00	1.60/2.00	39.00	44.00
405	40	10	33.00	40.50	1.60/2.00	47.50	54.00
503	50	11	39.00	47.00	2.00/2.50	52.00	58.00
505	50	11	44.00	52.00	2.00/2.50	53.00	59.50
636	63	15	55.00	65.00	2.50	70.50	79.00
753	75	15	61.50	71.00	2.50	78.50	88.00
755	75	15	67.50	77.00	2.50	85.00	95.20

PG CABLE GLAND





RUPAM PG Cable Gland ensures continuous contacting without gaps. The cap and the insert are simply pushed on to the lead. The exposed cable shield is folded around the insert, and the glands body is then pushed on. Screw-fitting of the cap ensures that cable shield is pressed over a large surface between the torsion protected insert and the gland body.

TECHNICAL INFORMATION

Type : PG
Ingress Protection Rating : IP66

Standard Gland Material : Nickel Plated Brass

Gland	Clamping Range		
Size	Min. (MM)	Max. (MM)	
PG 7	3.00	6.50	
PG 9	4.00	8.00	
PG 11	5.00	10.00	
PG 13.5	6.00	12.00	
PG 16	10.00	14.00	
PG 21	13.00	18.00	
PG 29	18.00	25.00	
PG 36	22.00	32.00	
PG 42	32.00	38.00	
PG 48	37.00	44.00	

TRS CABLE GLAND



TECHNICAL INFORMATION

Type : TRS

Design Specification : BS 6121: Part 1: 1989

Standard Gland Material : Brass

Type of Cable : Unarmoured

Sealing Area(s) : Cable Outer Sheath

Size	Thread	Cable Dia Maximum	Across Flat Maximum
16	M16	11.50	17.50
20	M20	16.00	21.50
25	M25	20.00	27.00
32	M32	27.00	34.00

CABLE GLAND ACCESSORIES



Lock Nuts are available in Brass & Steel (Galv.) In Metric, Inches, NPT, BSP & PG Threads. PVC Shrouds are available to suit each size of Cable Gland and denotes Gland Size.

Earth Tags are available from 16mm to 90mm



LOCKNUT







EARTH TAG



P.V.C. COLORED SHROUD IN SPECIAL CASES



NYLON WASHER FROM 20 MM TO 90 MM

HEXAGONAL REDUCER



Male Thread	Female Thread
M16	M12
M20	M12
M20	M16
M25	M16
M25	M20
M32	M20
M32	M25
M40	M20
M40	M25
M40	M32
M50	M25
M50	M32
M50	M40
M63	M40
M63	M50
M75	M50
M75	M63

HEXAGONAL STOP PLUG





Size	Thread
M 12	M 12 X 1.5
M 16	M 16 X 1.5
M 20	M 20 X 1.5
M 25	M 25 X 1.5
M 32	M 32 X 1.5
M 40	M 40 X 1.5
M 50	M 50 X 1.5
M 63	M 63 X 1.5
M 75	M 75 X 1.5
M 90	M 90 X 1.5
M 100	M 100 X 1.5

ROUND HEAD STOP PLUG





Size	Thread
M 12	M 12 X 1.5
M 16	M 16 X 1.5
M 20	M 20 X 1.5
M 25	M 25 X 1.5
M 32	M 32 X 1.5
M 40	M 40 X 1.5
M 50	M 50 X 1.5
M 63	M 63 X 1.5

BRASS ELECTRICAL ACCESSORIES



MALE BUSHES





SIZE: METRIC Threads 20MM TO 75MM
IMPERIAL Threads 1/2" to 2 1/2"
NOTE: Male Bush Available in short threads and long threads

FEMALE BUSHES





SIZE: METRIC Threads 20MM TO 75MM IMPERIAL Threads 3/4" to 2 1/2"

ROUND ADAPTORS MALE & FEMALE





METRIC

Conduit Thread	Flexible Thread
12mm	12 mm
16 mm	12 mm
16 mm	16 mm
20 mm	16 mm
20 mm	20 mm
25mm	20 mm
25 mm	25 mm
32 mm	32 mm
40 mm	40 mm
50 mm	50 mm
63 mm	63 mm
75 mm	75 mm

IMPERIAL

Conduit Thread	Flexible Thread
1/2"	1/2"
5/8"	1/2"
5/8"	5/8"
3/4"	5/8"
3/4"	3/4"
1"	3/4"
1"	1"
11/4"	11/4"
11/2"	11/2"
2"	2"
2 1/2"	2 1/2"
3"	3"

MALE CONNECTORS



METRIC

Conduit Thread	Flexible Thread
20 mm	20 mm
25 mm	25 mm
32 mm	32 mm
40 mm	40 mm
50 mm	50 mm

NOTE:

Above products are available as per customer's specification & requirement.

BRASS ELECTRICAL ACCESSORIES



SQUARE TEST CLAMPS



SIZE: 25 mm X 3 mm, 50 mm X 6 mm

OTHER SIZES CAN BE PRODUCED AS PER REQUIREMENT
ALSO AVAILABLE IN GUN METAL, PHOSPHOROUS BRONZE,
ALUMINUM

TAPE CLIPS



SIZE: 20 mm X 3 mm, 25 mm X 3 mm
OTHER SIZES CAN BE PRODUCED AS PER REQUIREMENT
ALSO AVAILABLE IN ALUMINUM

COUPLING



SIZE:

Thread	Length	Туре
5/8"	50 mm	Round
5/8"	60 mm	Round
5/8"	70 mm	Round
3/4"	70 mm	Round
14MM	50 mm	Round
5/8"	70 mm	Hex Centre
3/4"	70 mm	Hex Centre

ALSO AVAILABLE IN GUN METAL

ROUND TEST CLAMPS



SIZE: 25mm X 3mm ALSO AVAILABLE IN GUN METAL, PHOSPHOROUS BRONZE

D. C. TAPE CLIPS



SIZE:

25mm X 3mm

50mmX 3mm

25mm X 6mm

50mm X 6mm

OTHER SIZES CAN BE PRODUCED AS PER
REQUIREMENT ALSO AVAILABLE IN GUN METAL,

LINE TAPE

PHOSPHOROUS BRONZE



SIZE : 6mm², 10mm², 16mm², 25mm², 35mm². 50mm², 70mm², 95mm², 120mm²

PLATING: COPPER/TIN

STEEL DRIVING STUD



SIZE: 5/8"
Plating: Blue Zinc

NOTE:

Above products are available as per customer's specification & requirement.

BRASS EARTHING ACCESSORIES



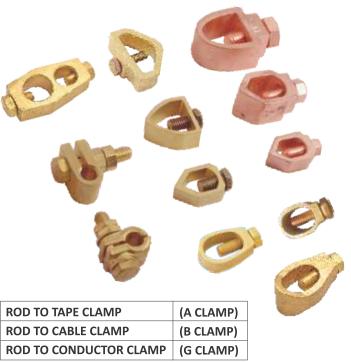
ARRESTOR BASE WITH ROD

ROD SIZE : 12", 18", 24", 30", 36" THREAD SIZE: 3/8", 7/16", 1/2", 5/8"





EARTH ROD CLAMPS



Conductor size from 10mm² to 120mm²

Special clamps as per customer's specifications can be manufactured.

BRASS SPECIAL CLAMPS

BRASS TAPE TO ROD CABLE CLAMP



ROD DIA	TAPE CONDUCTOR
5/8" OR 3/4"	25MM X 3MM

BRASS ROD TO CABLE CLAMP



ROD DIA WIRE TO CONDUCTOR 5/8" OR 3/4" 16mm2 - 240mm2

BRASS TEST JUNCTION CLAMP



SIZE:

ROD DIA	TAPE CONDUCTOR
5/8" OR 3/4"	25MM X 3MM

NOTE:

Above products are available as per customer's specification & can be manufactured from Gun Metal, Aluminium, Phosphorous Bronze etc.

BRASS HEAVY DUTY EARTHING ACCESSORIES



B BOND



SIZE:

Max. Rod Dia	Tape Width
16MM	25MM
25MM	25MM
31MM	25MM
38MM	25MM
50MM	25MM

U BOLT CLAMP WITH DOUBLE PLATE



Normal Rod Dia to Cable Dia 5/8" x 16MM 3/4" X 20MM

CROSS SADDLE



SIZE : 25MM X 3MM 50MM X 6MM

U BOLT - ROD CLAMP



HEAVY DUTY EARTHING ACCESSORIES

OBLONG TEST CLAMP (PHOSPHOROUS BRONZE)



SIZE: 28MM X 10MM

NOTE:

Above products are available as per customer's specification

CABLE EARTH CLAMP (GUN METAL)



WIRE CONDUCTOR SIZE:
6MM² TO 25MM²

BRASS NEUTRAL & EARTH LINKS



EARTH BLOCK



NEUTRAL, EARTH AND FUSE BARS

Neutral Links/Bars are used as an accessory in Panel Boards & Electrical Board in Industries like Electrical, Electronics & Telecommunications. It is considered as a backbone in building Circuit Protections such as MCB, Switchgears, Circuit breaker, RCB etc.

We are also manufacturing Distribution blocks consisting in and out termination. Some of the products we are supplying along with insulation support as per customer needs.



BRASS COMPONENTS



COMPONENTS FOR ELECTRIC ENERGY METERS

 $RANGE: 40A\ to\ 120A\ for\ Single\ phase\ as\ well\ as\ Three\ phase\ meters.$

FINISH: Natural / Nickel / Any coating as per customer's specification.



FUSE CUTOUT COMPONENTS



SCREWS & FASTNERS

TYPES: PAN HEAD, CSK, CHEESE HEAD, PAN COMBINATION

THREAD TYPES: BA, BSW, BSPT, BSF, METRIC, IMPERIAL & AMERICAN THREADS LIKE UNC, UNF, UNEF & NPT.

FINISH: NATURAL / NICKEL / ANY COATING AS PER CUSTOMER'S SPECIFICATION.

MATERIAL: BRASS, MILD STEEL, STAINLESS STEEL



SWITCH/SOCKET TERMINALS, INSERTS & CONNECTORS

RANGE: Thread Size M1.6 to M50.

THREAD TYPES: BA, BSW, BSPT, BSF & AMERICAN THREADS LIKE UNC, UNF, UNEF & NPT.

FINISH: NATURAL / NICKEL / ANY COATING AS PER CUSTOMER'S SPECIFICATION.



CABLE GLAND SELECTION GUIDELINES



For selection of cable glands used in installations of electrical equipments, there are several factors to be considered. Any glands which are not as per specifications or having minor differences will be accepted at the time of installation but may create some issues in the later stages. It is most important that the contractor/installer should have a complete gland selection chart which is given herein. Rupam is always ready to assist for any technical enquiries or understanding required by the contractor.

Here is a summary of some aspects to carefully consider when selecting cable gland

- Identify the type of cable to be used specially armoured, unarmoured, braided
- Check the construction, size & material properties of the cable.

When the cable is armoured, verify the following:-

- Check the type and material of the cable armour, (*).
- Check the short circuit fault current rating of the cable armour, (**).
- Check the actual diameter of the inner bedding (where present) against this catalogue.
- Check the actual diameter of the lead covering (where present) against this catalogue.
- Check the actual size of the overall cable diameter against this catalogue.
- Check the size and type of armour or braid (where present) against this catalogue.
- Check any special environmental requirements in relation to corrosion protection.
- Check the material of the mating electrical enclosures to eliminate dis-similar metals.
- Consider whether any protective plating is required to be applied to the cable gland.
- Check the type and size of the cable entry hole in mating electrical equipment.
- Check the ingress protection rating of the electrical equipment or site standard.
- Check whether a single seal or double seal cable gland is required.
- Check whether an entry thread seal is required for IP66 (or IP67/IP68) conditions.
- Check whether fixing accessories such as locknuts and serrated washers are required.
- Check whether earth tags are required(**).
- Check whether shrouds, tags are required.
- Select a corresponding cable gland type from this catalogue.
- For installations in hazardous area, special considerations should be taken into account to ensure compliance with national or international codes of practice.
- Check whether a thread conversion adaptor/reducer is required to make the installation.
- Select a corresponding adaptors or reducers from this catalogue.
- Check whether any stopper plugs are required to close unused cable entries.
- Select corresponding stopper plugs from this catalogue.

Note (*): if the cable armour is of a non standard material .e.g. aluminum wire armour, it may be necessary to consider an alternative cable gland material. E.g. Aluminum.

Note (**): For certain medium voltage and high voltage cables where the fault current carrying capacity of the cable armour is greater than that of the standard earth tag it may be necessary to consider a cable gland utilizing.

The gland sizes recommended are in accordance with calculation based on PVC / SWA cables manufactured to BS6346 (1997) and "RUPAM" cannot accept any responsibility for cables that prove to deviate materially from the nominal diameters quoted in BS6346 (1997)

Gland Selection Chart for PVC & XLPE Armoured Cables To BS6346 AND BS5467

CABLE SIZE CONDUCTOR	Number Of Cores												
NOM. AREA MM2	1	2	3	3.5	4	5	7	10	12	19	27	37	48
1.5		205	205		205	205	205	20	25	25	32	32	40
2.5		205	205		205	205	20	25	25	32	32	40	40
4.0		205	205		20	20	25	25	25	32	40	40	50S
6.0		20	20		20	25							
10.0		25	25		25	25							
16.0		25	25		25	32							
25.0		32	32	32	32	32							
35.0		32	32	32	40	40							
50.0	20	32	32	32	40	50S							
70.0	25	32	40	40	40	50S							
95.0	25	40	40	50\$	50S								
120.0	25	40	50S	50	50								
150.0	32	50S	50	50	63S								
185.0	32	50S	50	63S	63S								
240.0	40	50	63S	63	63								
300.0	40	63S	63	75	75								
400.0	50	63	75 S	90	90								

PVC / PVC UNARMOURED 660 - 1100 VOLT

CONDUCTOR

AREA MM ²	1.5	2.5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	400	500	630	800	1000
1 Core									25	25	25	32	32	32	40	40	50S	50	50	63S	63
2 Cores					25	25	25	25	32	32	40	40	50S	50	50	63S	63				
3 Cores					25	25	32	32	32	40	50S	50S	50	63S	635	63	75 S				
3 1/2 Cores							32	32	40	40	50S	50	635	63S	63	75	75				
4 Cores					25	25	32	32	40	505	50S	50	63	63	75 S	75					

Selection charts are intended as a guide. it is strongly recommended that the actual cable dimension are checked against the gland dimension to ensure a correct selection. This is particularly important where seals are required.

"RUPAM" and their stockist cannot accept responsibility where an incorrect selection is made either of type or size.

CABLE GLAND INSTALLATION GUIDELINES



For installation of cable gland, a skilled competent person is required. The gland must be fitted properly and damage to the insulation should be avoided during installation.

During installation, proper care should be taken to ensure that the electrical power is shut off. Till then, the gland should not be open. Once the gland is properly installed in the electrical equipment, power can be turned on.

It is important to note that the gland is a whole product in itself. The installer should not try and use spares or components of any other product with the rest of the cable gland. Any modification to the gland or the design can lead to hazardous circumstances.

There are no intermediate spares supplied with the cable gland.

The compulsory accessories required for installation of cable gland like earth tags, shrouds etc are supplied in the KIT of the cable gland. During installation, care should be taken to ensure these spares are properly fitted to ensure continuity of electricity and avoidance of exposure to external forces.

ACCESSORIES TO BE USED DURING INSTALLATION

RUPAM supplies accessories along with the gland in a KIT form. These accessories are also supplied as spares and can be ordered separately. These accessories include Earth Tags, Shrouds and Sealing washers. The Earth tag is used to ensure continuity of the electrical power earthing and prevents shocks. The shrouds are used to cover the cable gland and avoid exposure to moisture, dust, snow etc. The sealing washer is used on the equipment where the cable entry is provided. It is highly recommended to be fitted on the flameproof device to maintain the minimum IP rating

Always ensure that the enclosure in which the cable gland is fitted have sufficient thickness. The plate thickness of any enclosure having a sufficient area suitable for threading need not have a washer to be fitted in. For such cases, the enclosure would have the threads equivalent to the threads of the cable gland so gland can be fitted directly on the enclosure. Care should be taken that both the threads should be parallel threads and the cable entry should be directly perpendicular to the enclosure.

RUPAM also provides locknuts and serrated washers as separate accessories. These should be used for all cable gland other than Explosion proof to ensure the tightening of the Cable to the equipment. This depends upon the requirement and the fitment of the different type of cable gland used with the apparatus. Please ensure that the fixing accessories provided by RUPAM are used to secure the gland with the electrical equipment.

TOOLS FOR INSTALLING GLANDS AND ACCESSORIES

Personal protection equipment is a top priority while installing an electrical accessories. Gloves are a must requirement while handling the Cables and the installation of the Cable gland. Any incorrect tools may lead to potential damage to the product or the installer. RUPAM is not liable for any installation mishaps and the instruction given herein the catalogue is a guide only.

To cut open the cable strip, any knives or sharp tools should be having a safely blade.

The excess braids on the cable should be cut properly only by a certified braid snip. The braids should be cut cleanly to avoid any drag or snagging during installation.

To cut the armour wires, proper cutting tools, like a sharp hacksaw, should be used. The blades of the hacksaw should be checked periodically for their sharpness and replaced accordingly. During cutting of the armour, care should be taken and it should be a clean cut. Also ensure that the insulation or the inner cable is not cut alongwith the armour.

Please do not use wrenches or adjustable spanners during fitment. These are liable to slippage during tightening the gland which could result in damage to the product.





Certificate of Test

We hereby declare that the item described below has been tested by BSI and complies with the requirements of

DOMESTIC BUILDING

The full details of the sexts and the results are given in our Report No. 266/006309 Dated: 20 December 1999

Description of items rested:

Brass Cable Glands Representative of the ranges BW-205 to BW-75 CW-208 to CW-75

Submitted by Bones 21 Wood Str Darlaton hehalf of Rupson Intere B-8 G.L.D.C.

B-8 G.L.D.C. Udyogsagur Shanker Tekri Janenagar – 361 00halio

Certificate authorised by:

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CERTIFICATE

The Certification Body of TÜV SÜD South Asia Private Limited certifies that



Rupam Overseas Plot No. 7/8, Shanker Tekri, G.I.D.C. Udyognagar, Jamnagar - 361004, Gujarat, INDIA

has implemented a Quality Management System in accordance with ISO 9001:2008

For Scope of

Manufacturer and Exporter of Brass Extruded Rods and Sections, Brass Sanitary Fittings and Brass Components.

The certificate is valid From 2017-01-07 until 2018-09-14
Subject to successful completion of annual periodic audits
The present status of his Certificate can be obtained on www.tus-aud in
Further clarifications regarding the scope of this certificate may be obtained by consulting the certification box

Certificate Registration No. 99 100 14995

Date of Initial certification: 2014-01-07





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GROUP OF COMPANIES

RUPAM OVERSEAS

RUPAM IMPEX

H. P. INTERNATIONAL CORPORATION

JAY INTERNATIONAL

JTK INTERNATIONAL

RUPAM PRODUCTS



B-8, GIDC, Shanker Tekri, Udyognagar, Jamnagar - 361 004 (India)

Phone: +91 288 2565612, 2560561 Fax: +91 288 2565676, 2560560

Email: sales@rupamimpex.org Email: hpintlcorp@rupamgroup.org

Website: www.rupamgroup.org

