



Explosion Protection by SUREALL



Product Catalogue

**Explosion Proof Cable Gland, Connector, Conduit Fittings
Use in Hazardous Locations**



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Explosion Proof Fittings

Connect Cable And Conduit

Explosion proof fittings is structured with flame proof body, connector and thread to connect cable and conduit, increased safety cable gland to fix the cable to protect the electrical cable conductors. On the basis of different functions, explosion proof fittings are classified to three kinds, explosion proof cable gland to connect cable directly, explosion proof connector to connect the conduit directly and compactly where cable passed through, explosion proof conduit fittings to connect conduit directly with quick programming changes, sealing compound and flexible length extending.

Material ranges from anti-corrosive polyamide to high strength metal, explosion proof fittings can be installed together with explosion proof lighting, explosion proof junction box, explosion proof panel, explosion proof enclosure to meet class 1 division 1 conduit requirements, class 1 division 2 conduit requirements, class 2 division 1 and class 2 division 2 conduit requirements.

Explosion proof fittings consist of :

Explosion proof cable gland
Explosion proof connector
Explosion proof conduit fittings

Whole Series fittings to connect cable and conduit In Harsh and Hazardous location

What is explosion proof fitting?



Generally, explosion proof fittings can be divided to explosion proof cable gland, explosion proof connector, explosion proof conduit fittings.

1. Explosion proof cable gland

> Why explosion proof cable gland?

Protect conductors through fixing the cable entering into the plastic or metal explosion proof lighting and explosion proof enclosure.

> Types

Armored and non-armored, cable wiring and conduit wiring, single sealing and dual sealing, plastic and metal material

2 . Explosion proof connector

> Why explosion proof connector?

Protect conductors through interconnecting the conduit to the conduit, metal explosion proof lighting and explosion proof enclosure.

> Types

Adapter, reducer, enlarger, union, conduit hub, liquid tight connector

3 . Explosion proof conduit fittings

> Why explosion proof conduit fittings?

Enable the conduit to extend to any direction and corner where explosion lighting and explosion proof enclosure installed.

> Types

conduit body, sealing fittings, flexible conduit

FAQS about Explosion Proof Fittings

1. Where can you use explosion-proof fittings?

Explosion proof fittings are widely used to connect cable and conduit where electrical cable and rigid conduit exist among explosion proof conduit system, Depends on the function, application places include where between cable and explosion proof lighting, cable and explosion proof junction box, cable and explosion proof panel, conduit and explosion proof lighting, conduit and explosion proof junction box, conduit and explosion proof panel, conduit and explosion proof enclosure, two explosion proof panel.

2. How do you install an explosion proof cable gland?

You should firstly disassembly the explosion cable gland to sub assembly A(close to enclosure) and sub assembly B(close to cable), sub assembly C(middle detachable armor cone) if the cable is armored type, then secondly fix the sub assembly A into the enclosure thread hole, thirdly strip the outer sheath of cable and expose the armor layer, then pass the stripped cable into the sub assembly B, then fix the armored layer with sub assembly C into the sub assembly A and push forward the cable into the enclosure, finally hold all parts tightly using a spanner.



Power Distribution for Near-end Lighting Control System In Harsh and Hazardous location



3. What is a conduit adapter?

SUREALL SA series Explosion proof conduit adapter is conduit connector and fittings in explosive protected environment to connect one threaded end of conduit to another conduit, one threaded hub of explosion proof lighting, explosion proof junction box, explosion proof enclosure to another conduit, one threaded hub of explosion proof lighting to another metal explosion proof cable gland, the thread of ends are same or similar, such as NPT 3/4' ' to M25x1.5 thread.

4. What is a reduction bushing? What are reducer bushings used for?

SUREALL SR series explosion proof reduction bushing is conduit connector, reducer, enlarger in hazardous classified area to connect one threaded end of conduit to another rigid conduit, one threaded hub of explosion proof lighting, explosion proof enclosure, explosion proof panel and explosion proof fittings to another conduit, one threaded hub of explosion proof enclosure to another metal explosion proof cable gland or fittings, whereas, the thread of ends are different, like NPT3/4' ' to NPT 1/2' ' .

5. Where do you put explosion-proof seals?

SUREALL SCS series explosion proof seals can be put and used at the connection points between two explosion proof enclosures, between explosion proof enclosure and rigid conduit in hazardous location, the explosion proof sealing fittings plug drain function should be put in the environment where moisture and water can accumulate potentially.

6. What is a conduit body?

SUREALL SCB series explosion proof conduit body provides the connection nodes for rigid conduits in explosion proof wiring system for flammable gas areas, permitting more space for bending of electrical raceway from diversified directions, fast access to pull the cable inside the conduit, convenient maintenance for conduit layout.

7. Are rigid couplings explosion proof? Are rigid compression couplings explosion proof?

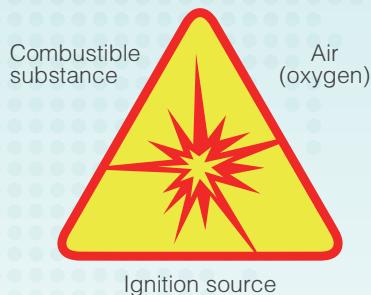
Yes, rigid couplings are explosion proof. A complete conduit layout contains rigid conduit, rigid couplings, explosion proof conduit fittings and explosion proof cable gland, since explosion proof conduit fittings and explosion proof cable gland can stop the explosion from passing into the inner rigid conduit and couplings system basically, more, rigid couplings can be used on hazardous locations since they are already threaded to alleviate the explosion compound to come out from the conduit.

General Information for Use in Hazardous Locations

1. Explosion Formation

Explosion takes place in the conditions of the following factors:

- > Combustible substances, such as gas, vapour, mist and dust
- > Air (oxygen)
- > Ignition source



Combustible substance

Air (oxygen)

Ignition source

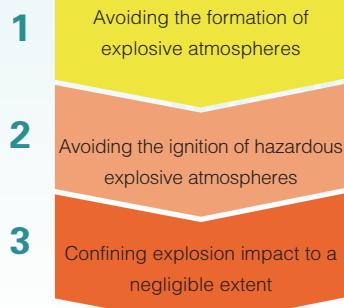
2. Explosion Protection

In order to avoid explosions and consequential dangers, the operator must incorporate effective explosion-proof protection precautions.

Measures :

- > Avoiding the formation of explosive atmospheres
- > Avoid the ignition of hazardous explosive atmospheres
- > Confining explosion impact to a negligible extent

Integrated explosion protection



3. Hazardous Location Classification

Hazardous locations are classified into different Group/Class, Zones/Divisions depending on the composition and presence of an flammable substances, which enables anyone to select the suitable explosion-proof equipments.

3.1 Group/Class

Locations	Group		Class
	EU	IEC	
methane under mine	Group I	Group I	M
hazardous gas and vapour		Group II	Class I
hazardous dust	Group II		Class II
hazardous fiber		Group III	Class III

3.2 Division/Zone

Gas and Vapour			
Presence Frequency	Flammable Substances		
	Present Continuously	Present Intermittently	Present Abnormally
EU/IEC	Zone 0	Zone 1	Zone 2
US NEC500	Division 1		Division 2

Dust and Fiber			
Presence Frequency	Flammable Substances		
	Present Continuously	Present Intermittently	Present Abnormally
EU/IEC	Zone 20	Zone 21	Zone 22
US NEC500	Division 1		Division 2

4. Flammable Substances Classification

Flammable substances are classified into different groups depending on the exact flammable substances, which enables anyone to select the suitable explosion-proof equipments.

Gas and Vapour		
Typical Gas and Vapour	EU/IEC	NEC500
Acetylene C ₂ H ₂	IIC	Class I/Group A
Hydrogen H ₂	IIB+H2	Class I/Group B
Ethylene C ₂ H ₄	IIB	Class I/Group C
Propane C ₃ H ₈	IIA	Class I/Group D
Methane CH ₄	I	Mining

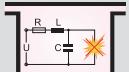
Dust and Fiber		
Typical Dust and Fiber	EU/IEC	NEC500
Metal dusts	IIIC	Class II/Group E
Carbonaceous dusts	IIIB	Class II/Group F
Non-conductive dusts	IIIB	Class II/Group G
Fibers and flyings	IIIA	Class III

5. Explosive Temperature Classification

Explosive temperature is the lowest temperature of a surface of an explosion-proof products at which an flammable substance is able to ignites on it. Explosion-proof products may be classified into different temperature groups.

Marking	EU/IEC	US NEC500
450°C	T1	T1
300°C	T2	T2
280°C		T2A
260°C		T2B
230°C		T2C
215°C		T2D
200°C	T3	T3
180°C		T3A
165°C		T3B
160°C		T3C
135°C	T4	T4
120°C		T4A
100°C	T5	T5
85°C	T6	T6

6. Explosion-proof Protection Types

Ex-Mark	Protection Types	Diagram	Illustration
Ex d	Flameproof		The enclosures are constructed so that the internal explosions can not be transmitted to the external atmosphere
Ex e	Increased safety		Prevention to ignition sources, only simple electrical components
Ex p	Pressurized		Electrical parts are purged and pressurized with a protective gas
Ex q	Powder filling		Electrical parts are submerged in a quartz powder
Ex i	Intrinsic safety		Limitation of the energy stored in the electrical circuits
Ex o	Oil immersion		Electrical parts are submerged in oil
Ex m	Encapsulation		Electrical parts are encapsulated in a specific resin
Ex n	“n” protection		No ignition source in normal operation, no sparks, no hot surfaces

CONTENT

Part 1 - Explosion Proof Cable Gland

1. SGP Series

03

For all types of non-armored cable

Non-metallic material, polyamide



2. SGM Series

05

For all types of non-armored cable

Metallic material



3. SGN Series

07

For all types of non-armored cable and type P cable

Metallic material, dual seal



4. SGA Series

09

For all types of armored cable

Metallic material, dual seal



Part 2- Explosion Proof Connector

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Part 3- Explosion Proof Conduit Fittings

11. SCB Series

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Outlet Fittings Couplings



12. SCS Series

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13. SFC Series

25

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14. Other Fittings

27

Other Fittings



SGP Series Cable Gland For use in Hazardous Locations

For all types of non-armored cable
Non-metallic material, polyamide



Features

- > Wide cable outer connection diameters
- > Integrated sealing lip on thread
- > Low torque required for tightening
- > High flame retardant property, UV resistance
- > Metric thread (M16x1.5 - M63x1.5) and NPT thread (NPT3/8" - NPT2")
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature: -40°C ~ +100°C

Standard Material

- > Polyamide, black (optional grey white)

Kit Accessories Options

K0: no accessories

K1: with locknut and seal washer



Locknut



Seal washer

Standards

EN Standard-ATEX

II 2 G Ex eb IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

II 2 D Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEX

Ex eb IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

Class I, Division 2, Group A B C D

Class II, Division 1, Group E F G

Type 4X

Catalogue Numbering System

SGP **01**
Thread Code

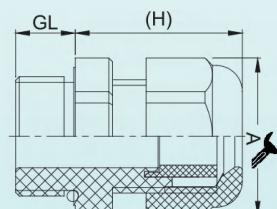
M
Thread Type

K0
Kit Accessories

M16x1.5 – M63x1.5
NPT3/8" – NPT2"

M: Metric thread
N: NPT thread

K0: no accessories
K1: Locknut & Seal



Ordering Information

Metric Thread		NPT Thread		Cable outer diameter(mm)	Thread length(mm)	Protrusion length(mm)	Across flats(mm)
Size	Cat.#	Size	Cat.#	-	GL	H	A
Short Thread							
M16x1.5	SGP01M	NPT3/8"	SGP01N	2.5–6	8	22	19
M16x1.5	SGP02M	NPT3/8"	SGP02N	4–8	8	22	19
M16x1.5	SGP03M	NPT3/8"	SGP03N	5–10	8	25	22
M20x1.5	SGP04M	NPT1/2"	SGP04N	5–9	9	26.5	24
M20x1.5	SGP05M	NPT1/2"	SGP06N	6–12	9	26.5	24
M20x1.5	SGP06M	NPT1/2"	SGP06N	8–14	10	28	27
M25x1.5	SGP07M	NPT3/4"	SGP07N	11–16	11	31.5	33
M25x1.5	SGP08M	NPT3/4"	SGP08N	13–18	11	31.5	33
M32x1.5	SGP09M	NPT1"	SGP09N	14–21	11	39	42
M32x1.5	SGP10M	NPT1"	SGP10N	18–25	11	39	42
M40x1.5	SGP11M	NPT 1 1/4"	SGP11N	22–32	13	48.5	53
M50x1.5	SGP12M	NPT 1 1/2"	SGP12N	30–38	15	47.3	60
M63x1.5	SGP13M	NPT 2"	SGP13N	37–44	15	47	68
Long Thread							
M16x1.5	SGP14M	–	–	2.5–6	15	22	19
M16x1.5	SGP15M	–	–	4–8	15	22	19
M16x1.5	SGP16M	–	–	5–10	15	25	22
–	–	NPT3/8"	SGP14N	2–6	11	25	20
–	–	NPT3/8"	SGP15N	4–8	11	25	24
M20x1.5	SGP17M	–	–	5–9	15	26.5	24
M20x1.5	SGP18M	–	–	6–12	15	26.5	24
M20x1.5	SGP19M	–	–	8–14	15	28	27
–	–	NPT1/2"	SGP17N	5–9	13	26.5	24
–	–	NPT1/2"	SGP18N	6–12	13	26.5	24
M25x1.5	SGP20M	–	–	11–16	15	33	33
M25x1.5	SGP21M	–	–	13–18	15	33	33
–	–	NPT3/4"	SGP20N	11–16	13	31.5	30
–	–	NPT3/4"	SGP21N	13–18	13	31.5	30
M32x1.5	SGP22M	–	–	14–21	15	42	42
M32x1.5	SGP23M	–	–	18–25	15	42	42
–	–	NPT1"	SGP22N	14–21	16	39	40
–	–	NPT1"	SGP23N	18–25	16	39	40

SGM Series Cable Gland For use in Hazardous Locations

For all types of non-armored cable
Metallic material



Features

- > Wide cable outer connection diameters
- > Secure against self-loosening
- > Silicon modified rubber internal sealing
- > Low torque required for tightening
- > Corrosion resistance, impact resistance, EMC application
- > Metric thread (M16x1.5-M63x1.5) and NPT thread (NPT3/8 " - NPT2")
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature:-40°C ~+100°C

Standard Material

- > Nickel Plated Brass
- > 304 Stainless Steel
- > 316 Stainless Steel

Kit Accessories Options

- K0: no accessories
- K1: ■ Locknut ■ Seal washer
- K2: ■ Locknut ■ Seal washer ■ Earth lug
- K3: ■ Locknut ■ Seal washer ■ Earth lug ■ Sheath



Locknut



Seal washer



Earth lug



Sheath

Standards

EN Standard-ATEX

Ex II 2 G Ex eb IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex II 2 D Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEX

Ex eb IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex tb IIIC Db

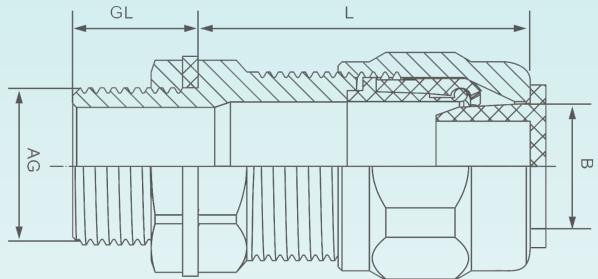
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

Class I, Division 2, Group A B C D

Class II, Division 1, Group E F G

Type 4X



Ordering Information

Metric Thread		NPT Thread		Cable outer diameter(mm)	Thread length(mm)	Protrusion length(mm)	Across flats(mm)
Size	Cat.#	Size	Cat.#	-	GL	H	A
M16x1.5	SGM01M	NPT3/8"	SGM01N	2-7	16	40	27
M16x1.5	SGM02M	NPT3/8"	SGM02M	4-8	16	40	27
M16x1.5	SGM03M	NPT3/8"	SGM03M	5.5-12	16	40	27
M20x1.5	SGM04M	NPT1/2"	SGM04N	5.5-12	16	40	27
M20x1.5	SGM05M	NPT1/2"	SGM05N	9.5-16	16	40	27
M20x1.5	SGM06M	NPT1/2"	SGM06N	12-20	16	40	29
M25x1.5	SGM07M	NPT3/4"	SGM07N	8-14	16	40	29
M25x1.5	SGM08M	NPT3/4"	SGM08N	12-20.5	16	40	37
M25x1.5	SGM09M	NPT3/4"	SGM09N	17-26	16	40	44
M32x1.5	SGM10M	NPT1"	SGM10N	12-20.5	18	42	37
M32x1.5	SGM11M	NPT1"	SGM11N	17-26	18	42	44
M32x1.5	SGM12M	NPT1"	SGM12N	22-33	18	42	55
M40x1.5	SGM13M	NPT1 1/4"	SGM13N	17-26	18	47	44
M40x1.5	SGM14M	NPT1 1/4"	SGM14N	22-33	18	47	55
M40x1.5	SGM15M	NPT1"	SGM15N	28-41	18	47	67
M50x1.5	SGM16M	NPT1 1/2"	SGM16N	28-41	20	50	67
M63x1.5	SGM17M	NPT 2"	SGM17N	36-52.5	21	63	73
M75x1.5	SGM18M	NPT 2 1/2"	SGM18N	46-64	22	75	89

Catalogue Numbering System

SGM

01

Thread Code

M

Thread Type

KO

Kit Accessories

M16x1.5 – M63x1.5

M: Metric thread

K0: no accessories

NPT3/8 " – NPT2 1/2"

N: NPT thread

K1: Locknut & Seal washer

K2: Locknut & Seal washer & Earth lug

K3: Locknut & Seal washer & Earth lug & Sheath

SGN Series Cable Gland For use in Hazardous Locations

For all types of non-armored cable and type P cable
Metallic material, dual seal



Features

- > Wide cable outer connection diameters
- > Controlled pulling resistance
- > Low torque required for tightening
- > Flameproof sealing on the outer sheath of non-armored cable
- > Dual silicon modified rubber internal sealing, optional: single sealing
- > Superior corrosion resistance, high strength impact resistance, EMC application
- > Metric thread (M16x1.5-M63x1.5) and NPT thread (NPT3/8 " - NPT2")
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature: -40°C ~ +130°C

Standard Material

- > Nickel Plated Brass
- > 304 Stainless Steel
- > 316 Stainless Steel

Kit Accessories Options

- K0: no accessories
- K1: ■ Locknut ■ Seal washer
- K2: ■ Locknut ■ Seal washer ■ Earth lug
- K3: ■ Locknut ■ Seal washer ■ Earth lug ■ Serrated washer
- K4: ■ Locknut ■ Seal washer ■ Earth lug ■ Serrated washer ■ Sheath



Locknut



Seal washer



Earth lug



Serrated washer



Sheath

Standards

EN Standard-ATEX

Ex II 2 G Ex db IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex II 2 D Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

Ex db IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex tb IIIC Db

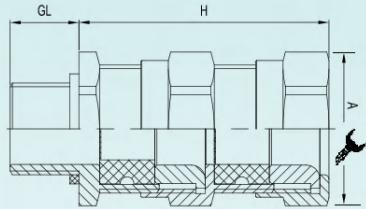
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

Class I, Division 1, Group A B C D

Class II, Division 1, Group E F G

Type 4X



Ordering Information

Metric Thread		NPT Thread		Cable outer diameter(mm)	Thread length(mm)	Protrusion length(mm)	Across flats(mm)
Size	Cat.#	Size	Cat.#	–	GL	H	A
M16x1.5	SGN01M	NPT3/8"	SGN01N	6–12	15	48	26
M20x1.5	SGN02M	–	–	10–15	15	54.5	30
–	–	NPT1/2"	SGN02N	10–15	20	54.5	30
M25x1.5	SGN03M	–	–	14–18	15	54.5	34
–	–	NPT3/4"	SGN03N	14–18	21	54.5	34
M32x1.5	SGN04M	–	–	22–27	15	58	50
–	–	NPT1"	SGN04N	22–27	26	58	50
M40x1.5	SGN05M	–	–	26–33	15	58	55
–	–	NPT1 1/4"	SGN05N	26–33	26	58	55
M50x1.5	SGN06M	–	–	32–41	15	67	65
–	–	NPT1 1/2"	SGN06N	32–41	27	67	65
M63x1.5	SGN07M	–	–	48–57	20	68	80
–	–	NPT 2"	SGN07N	40–49	27	67	75

Catalogue Numbering System

SGN **01**

Thread Code

M

Thread Type

K0

Kit Accessories

M16x1.5 – M63x1.5

M: Metric thread

K0: no accessories

NPT3/8 " – NPT2"

N: NPT thread

K1: Locknut & Seal washer

K2: Locknut & Seal washer & Earth lug

K3: Locknut & Seal washer & Earth lug & Serrated washer

K4: Locknut & Seal washer & Earth lug & Serrated washer & Sheath

SGA Series Cable Gland For use in Hazardous Locations

For all types of armored cable
Metallic material, dual seal



Features

- > Wide cable outer connection diameters
- > Controlled pulling resistance
- > Low torque required for tightening
- > Flameproof sealing on the outer sheath of non-armored cable
- > Dual silicon modified rubber internal sealing, optional: single sealing
- > Superior corrosion resistance, high strength impact resistance, EMC application
- > Metric thread (M16x1.5-M63x1.5) and NPT thread (NPT3/8 " - NPT2")
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature: -40°C ~ +130°C



Standard Material

- > Nickel Plated Brass
- > 304 Stainless Steel
- > 316 Stainless Steel

Kit Accessories Options

- K0: no accessories
- K1: ■ Locknut ■ Seal washer
- K2: ■ Locknut ■ Seal washer ■ Earth lug
- K3: ■ Locknut ■ Seal washer ■ Earth lug ■ Serrated washer
- K4: ■ Locknut ■ Seal washer ■ Earth lug ■ Serrated washer ■ Sheath



Locknut



Seal washer



Earth lug



Serrated washer



Sheath

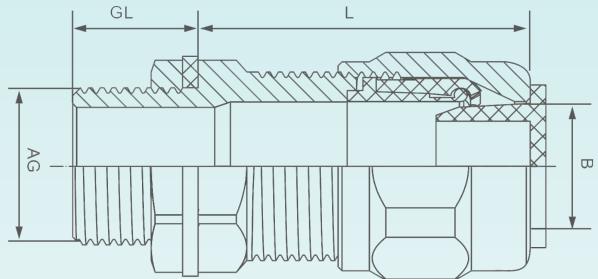
Standards

EN Standard-ATEX

- Ex II 2 G Ex db IIC Gb
Zone 1, Zone 2 Group IIA, IIB and IIC
Ex II 2 D Ex tb IIIC Db
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

- Ex db IIC Gb
Zone 1, Zone 2 Group IIA, IIB and IIC
Ex tb IIIC Db
Zone 21, Zone 22 Group IIIA, IIIB and IIIC



Ordering Information

Metric Thread		NPT Thread		Cable outer diameter(mm)	Thread length(mm)	Protrusion length(mm)	Across flats(mm)
Size	Cat.#	Size	Cat.#	-	GL	H	A
M16x1.5A	SGA01M	NPT3/8"	SGA01N	4-8 / 5.5-12	16	63	29
M16x1.5B	SGA02M	NPT3/8"	SGA02M	6.5-11 / 9.5-16	16	63	29
M20x1.5A	SGA03M	NPT1/2"	SGA03M	4-8 / 5.5-12	16	63	29
M20x1.5B	SGA04M	NPT1/2"	SGA04N	6.5-10 / 9.5-16	16	63	29
M20x1.5C	SGA05M	NPT1/2"	SGA05N	10-15 / 12-21	16	64	37
M25x1.5B	SGA06M	NPT3/4"	SGA06N	10-15 / 12-21	16	64	37
M25x1.5C	SGA07M	NPT3/4"	SGA07N	12-20 / 17-26	16	71	44
M32x1.5B	SGA08M	NPT1"	SGA08N	12-20 / 17-26	18	71	44
M32x1.5C	SGA09M	NPT1"	SGA09N	19-26 / 22-23	18	77	55
M40x1.5B	SGA10M	NPT1 1/4"	SGA10N	19-26 / 22-23	18	77	55
M40x1.5C	SGA11M	NPT1 1/4"	SGA11N	25-31 / 28-41	18	84	67
M50x1.5B	SGA12M	NPT1 1/2"	SGA12N	25-31 / 28-41	20	84	67
M50x1.5C	SGA13M	NPT1 1/2"	SGA13N	31-37 / 36-53	20	109	73
M63x1.5B	SGA14M	NPT2"	SGA14N	31-37 / 36-53	21	109	73
M63x1.5C	SGA15M	NPT2"	SGA15N	42-49 / 46-64	21	120	89
M75x1.5B	SGA16M	NPT2 1/2"	SGA16N	42-49 / 46-64	22	120	89
M75x1.5C	SGA17M	NPT2 1/2"	SGA17N	54-64 / 57-78	22	130	105
M80x1.5	SGA18M	NPT 3"	SGA18N	54-64 / 57-78	22	130	105

Catalogue Numbering System

SGA

01

Thread Code

M

Thread Type

KO

Kit Accessories

M16x1.5 – M80x1.5

M: Metric thread

K0: no accessories

NPT3/8 " – NPT3"

N: NPT thread

K1: Locknut & Seal washer

K2: Locknut & Seal washer & Earth lug

K3: Locknut & Seal washer & Earth lug & Sheath

SA Series Adaptors and SR Series Reducers

SA series adaptors connect two same hubs sizes

SR series reducer connect a certain hub size to a smaller

For use in Hazardous Locations



Application

- > SA series adaptors and SR series reducer are used for thread connection in heavy conduit resistance
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present



Features

- > SA series adaptors connect two same conduit hubs sizes together from two conduits ends
- > SR series reducer reduce two different conduit hubs sizes from a larger size to smaller size
- > Corrosion resistance, impact resistance
- > Metric thread (M16x1.5-M115x1.5) and NPT thread (NPT3/8 " - NPT4")
- > Male thread/female thread, male thread/male thread, female thread/female thread
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature: -40°C ~ +100°C

Standard Material

- > Nickel Plated Brass
- > 304 Stainless Steel
- > 316 Stainless Steel

Kit Accessories Options

- K0: no accessories
- K1: O-Ring



Standards

EN Standard-ATEX

- II^EG Ex d IIC Gb
- Zone 1, Zone 2 Group IIA, IIB and IIC
- II^ED Ex tb IIIC Db
- Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEX

- Ex d IIC Gb
- Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex tb IIIC Db
- Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

- Class I, Division 1, Group A B C D
- Class II, Division 1, Group E F G
- Type 4X

Catalogue Numbering System

SA-

MM

Thread Type of Conduit Hub

MM: Male/Male thread

FF: Female /Female thread

MF: Male/Female thread

01

Thread Code

M16x1.5 – M115x1.5

NPT3/8 " – NPT4"

K0

Kit Accessories

K0: no accessories

K1: O-Ring

SR-

MM

Thread Type of Conduit Hub

MM: Male/Male thread

FF: Female /Female thread

MF: Male/Female thread

01

Thread Code

M16x1.5 – M115x1.5

NPT3/8 " – NPT4"

K0

Kit Accessories

K0: no accessories

K1: O-Ring

Ordering Information

SA Series Adaptors



Cat.#	Hub size	Cat.#	Hub size	Cat.#	Hub size
Male Thread/ Male Thread		Male Thread/ Female Thread		Female Thread / Female Thread	
SA-MM01	M16x1.5/NPT3/8"	SA-MF01	M16x1.5/NPT3/8"	SA-FF01	M16x1.5/NPT3/8"
SA-MM02	M20x1.5/NPT1/2"	SA-MF02	M20x1.5/NPT1/2"	SA-FF02	M20x1.5/NPT1/2"
SA-MM03	M25x1.5/NPT3/4"	SA-MF03	M25x1.5/NPT3/4"	SA-FF03	M25x1.5/NPT3/4"
SA-MM04	M32x1.5/NPT1"	SA-MF04	M32x1.5/NPT1"	SA-FF04	M32x1.5/NPT1"
SA-MM05	M40x1.5/NPT1 1/4"	SA-MF05	M40x1.5/NPT1 1/4"	SA-FF05	M40x1.5/NPT1 1/4"
SA-MM06	M50x1.5/NPT1 1/2"	SA-MF06	M50x1.5/NPT1 1/2"	SA-FF06	M50x1.5/NPT1 1/2"
SA-MM07	M63x1.5/NPT2"	SA-MF07	M63x1.5/NPT2"	SA-FF07	M63x1.5/NPT2"

SR Series Reducers



Cat.#	Hub size	Cat.#	Hub size	Cat.#	Hub size
Male Thread/ Male Thread		Male Thread/ Female Thread		Female Thread / Female Thread	
SR-MM01A	M16x1.5/M20x1.5	SR-MF01A	M16x1.5/M20x1.5	SR-FF01A	M16x1.5/M20x1.5
SR-MM01B	M16x1.5/NPT1/2"	SR-MF01B	M16x1.5/NPT1/2"	SR-FF01B	M16x1.5/NPT1/2"
SR-MM01C	NPT3/8" /M20x1.5	SR-MF01C	NPT3/8" /M20x1.5	SR-FF01C	NPT3/8" /M20x1.5
SR-MM01D	NPT3/8" /NPT1/2"	SR-MF01D	NPT3/8" /NPT1/2"	SR-FF01D	NPT3/8" /NPT1/2"
SR-MM02A	M20x1.5/M25x1.5	SR-MF02A	M20x1.5/M25x1.5	SR-FF02A	M20x1.5/M25x1.5
SR-MM02B	M20x1.5/NPT3/4"	SR-MF02B	M20x1.5/NPT3/4"	SR-FF02B	M20x1.5/NPT3/4"
SR-MM02C	NPT1/2" /M25x1.5	SR-MF02C	NPT1/2" /M25x1.5	SR-FF02C	NPT1/2" /M25x1.5
SR-MM02D	NPT1/2" /NPT3/4"	SR-MF02D	NPT1/2" /NPT3/4"	SR-FF02D	NPT1/2" /NPT3/4"
SR-MM03A	M25x1.5/M32x1.5	SR-MF03A	M25x1.5/M32x1.5	SR-FF03A	M25x1.5/M32x1.5
SR-MM03B	M25x1.5/NPT1"	SR-MF03B	M25x1.5/NPT1"	SR-FF03B	M25x1.5/NPT1"
SR-MM03C	NPT3/4" /M32x1.5	SR-MF03C	NPT3/4" /M32x1.5	SR-FF03C	NPT3/4" /M32x1.5
SR-MM03D	NPT3/4" / NPT1"	SR-MF03D	NPT3/4" / NPT1"	SR-FF03D	NPT3/4" / NPT1"
SR-MM04A	M32x1.5/M40x1.5	SR-MF04A	M32x1.5/M40x1.5	SR-FF04A	M32x1.5/M40x1.5
SR-MM04B	M32x1.5/NPT1 1/4"	SR-MF04B	M32x1.5/NPT1 1/4"	SR-FF04B	M32x1.5/NPT1 1/4"
SR-MM04C	NPT1" /M40x1.5	SR-MF04C	NPT1" /M40x1.5	SR-FF04C	NPT1" /M40x1.5
SR-MM04D	NPT1" /NPT1 1/4"	SR-MF04D	NPT1" /NPT1 1/4"	SR-FF04D	NPT1" /NPT1 1/4"
SR-MM05A	M40x1.5/M50x1.5	SR-MF05A	M40x1.5/M50x1.5	SR-FF05A	M40x1.5/M50x1.5
SR-MM05B	M40x1.5/NPT1 1/2"	SR-MF05B	M40x1.5/NPT1 1/2"	SR-FF05B	M40x1.5/NPT1 1/2"
SR-MM05C	NPT1 1/4" /M50x1.5	SR-MF05C	NPT1 1/4" /M50x1.5	SR-FF05C	NPT1 1/4" /M50x1.5
SR-MM05D	NPT1 1/4" /NPT1 1/2"	SR-MF05D	NPT1 1/4" /NPT1 1/2"	SR-FF05D	NPT1 1/4" /NPT1 1/2"
SR-MM06A	M50x1.5/M63x1.5	SR-MF06A	M50x1.5/M63x1.5	SR-FF06A	M50x1.5/M63x1.5
SR-MM06B	M50x1.5/NPT2"	SR-MF06B	M50x1.5/NPT2"	SR-FF06B	M50x1.5/NPT2"
SR-MM06C	NPT1 1/2" /M63x1.5	SR-MF06C	NPT1 1/2" /M63x1.5	SR-FF06C	NPT1 1/2" /M63x1.5
SR-MM06D	NPT1 1/2" /NPT2"	SR-MF06D	NPT1 1/2" /NPT2"	SR-FF06D	NPT1 1/2" /NPT2"

SU Series Unions

SU series unions connect hubs with detachable assembly
For use in Hazardous Locations



Application

- > SU series unions are installed to connect conduit to conduit, a conduit fitting, junction box or device enclosure in rigid conduit systems
- SU series unions are designed to connect conduits without change of direction
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present

Features

- > SU series unions have taped thread in both two ends
 - M/F: One end is male thread, the other end is female thread
 - M/M: Both two ends are male thread
 - F/F: Both two ends are female thread
- > Compact threaded design which permits detachable assembly for both two ends, ease the connection and disconnection for two ends conduits
- > Super corrosion resistance, high strength impact resistance
- > Suitable thread for both two ends:
 - SU series unions
 - Metric thread (M16x1.5-M115x1.5) and NPT thread (NPT3/8 " - NPT4")
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature:-40°C ~+100°C

Standard Material

- > Carbon Steel
- > Nickel Plated Brass
- > 304 Stainless Steel
- > 316 Stainless Steel

Kit Accessories Options

- K0: no accessories
- K1: O-Ring



Standards

EN Standard-ATEX

II 2 G Ex d IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

II 2 D Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

Ex d IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

Class I, Division 1, Group A B C D

Class II, Division 1, Group E F G

Type 4X

Ordering Information

Cat.#	Hub size	Cat.#	Hub size	Cat.#	Hub size
Male Thread/ Female Thread		Male Thread/ Male Thread		Female Thread / Female Thread	
SU-MF01A	M16x1.5/ M16x1.5	SU-MM01A	M16x1.5/ M16x1.5	SU-FF01A	M16x1.5/ M16x1.5
SU-MF01B	NPT3/8" /NPT3/8"	SU-MM01B	NPT3/8" /NPT3/8"	SU-FF01B	NPT3/8" /NPT3/8"
SU-MF02A	M20x1.5/ M20x1.5	SU-MM02A	M20x1.5/ M20x1.5	SU-FF02A	M20x1.5/ M20x1.5
SU-MF02B	NPT1/2" /NPT1/2"	SU-MM02B	NPT1/2" /NPT1/2"	SU-FF02B	NPT1/2" /NPT1/2"
SU-MF03A	M25x1.5/ M25x1.5	SU-MM03A	M25x1.5/ M25x1.5	SU-FF03A	M25x1.5/ M25x1.5
SU-MF03B	NPT3/4" /NPT3/4"	SU-MM03B	NPT3/4" /NPT3/4"	SU-FF03B	NPT3/4" /NPT3/4"
SU-MF04A	M32x1.5/ M32x1.5	SU-MM04A	M32x1.5/ M32x1.5	SU-FF04A	M32x1.5/ M32x1.5
SU-MF04B	NPT1" /NPT1"	SU-MM04B	NPT1" /NPT1"	SU-FF04B	NPT1" /NPT1"
SU-MF05A	M40x1.5/ M40x1.5	SU-MM05A	M40x1.5/ M40x1.5	SU-FF05A	M40x1.5/ M40x1.5
SU-MF05B	NPT1 1/4" /NPT1 1/4"	SU-MM05B	NPT1 1/4" /NPT1 1/4"	SU-FF05B	NPT1 1/4" /NPT1 1/4"
SU-MF06A	M50x1.5/ M50x1.5	SU-MM06A	M50x1.5/ M50x1.5	SU-FF06A	M50x1.5/ M50x1.5
SU-MF06B	NPT1 1/2" /NPT1 1/2"	SU-MM06B	NPT1 1/2" /NPT1 1/2"	SU-FF06B	NPT1 1/2" /NPT1 1/2"
SU-MF07A	M63x1.5/ M63x1.5	SU-MM07A	M63x1.5/ M63x1.5	SU-FF07A	M63x1.5/ M63x1.5
SU-MF07B	NPT2" /NPT2"	SU-MM07B	NPT2" /NPT2"	SU-FF07B	NPT2" /NPT2"



Male Thread/ Female Thread



Male Thread/ Male Thread



Female Thread / Female Thread

Catalogue Numbering System

SU- **MM**

Thread Type of Conduit Hub

MM: Male/Male thread

MF: Male/Female thread

FF: Female /Female thread

01A

Thread Type

M16x1.5 – M115x1.5

NPT3/8 " – NPT4"

K0

Kit Accessories

K0: no accessories

K1: O-Ring

SE Series Elbows

SE series elbows connect hubs with 90°/45° direction change
For use in Hazardous Locations



Application

- > SE series elbows are installed to connect conduit to conduit, a conduit fitting, junction box or device enclosure in rigid conduit systems
- SE series elbows are designed to change direction in threaded rigid conduit by 90° or 45° angle
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present

Features

- > SE series elbows have taped thread in both two ends
 - M/F: One end is male thread, the other end is female thread
 - M/M: Both two ends are male thread
 - F/F: Both two ends are female thread
- > Compact threaded design which permits detachable assembly for both two ends, ease the connection and disconnection for two ends conduits
- > Super corrosion resistance, high strength impact resistance
- > Suitable thread for both two ends:
 - SE series elbows
 - Metric thread (M16x1.5-M115x1.5) and NPT thread (NPT3/8 " – NPT4")
- > Ingress protection: standard IP66, optional IP68 with special sealing
- > Operating Temperature:-40°C ~+100°C

Standard Material

- > Carbon Steel
- > Nickel Plated Brass
- > 304 Stainless Steel
- > 316 Stainless Steel

Kit Accessories Options

- K0: no accessories
- K1: O-Ring



Standards

EN Standard-ATEX

- II 2 G Ex d IIC Gb
- Zone 1, Zone 2 Group IIA, IIB and IIC
- II 2 D Ex tb IIIC Db
- Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

- Ex d IIC Gb
- Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex tb IIIC Db
- Zone 21, Zone 22 Group IIIA, IIIB and IIIC

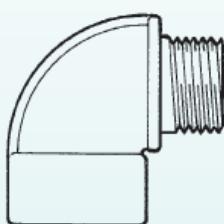
NEC Standard-UL

- Class I, Division 1, Group A B C D
- Class II, Division 1, Group E F G
- Type 4X

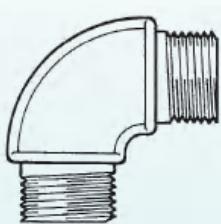
Ordering Information

Cat.#	Hub size	Cat.#	Hub size	Cat.#	Hub size
Male Thread/ Female Thread		Male Thread/ Male Thread		Female Thread / Female Thread	
SE-MF01A	M16x1.5/ M16x1.5	SE-MM01A	M16x1.5/ M16x1.5	SE-FF01A	M16x1.5/ M16x1.5
SE-MF01B	NPT3/8" /NPT3/8"	SE-MM01B	NPT3/8" /NPT3/8"	SE-FF01B	NPT3/8" /NPT3/8"
SE-MF02A	M20x1.5/ M20x1.5	SE-MM02A	M20x1.5/ M20x1.5	SE-FF02A	M20x1.5/ M20x1.5
SE-MF02B	NPT1/2" /NPT1/2"	SE-MM02B	NPT1/2" /NPT1/2"	SE-FF02B	NPT1/2" /NPT1/2"
SE-MF03A	M25x1.5/ M25x1.5	SE-MM03A	M25x1.5/ M25x1.5	SE-FF03A	M25x1.5/ M25x1.5
SE-MF03B	NPT3/4" /NPT3/4"	SE-MM03B	NPT3/4" /NPT3/4"	SE-FF03B	NPT3/4" /NPT3/4"
SE-MF04A	M32x1.5/ M32x1.5	SE-MM04A	M32x1.5/ M32x1.5	SE-FF04A	M32x1.5/ M32x1.5
SE-MF04B	NPT1" /NPT1"	SE-MM04B	NPT1" /NPT1"	SE-FF04B	NPT1" /NPT1"
SE-MF05A	M40x1.5/ M40x1.5	SE-MM05A	M40x1.5/ M40x1.5	SE-FF05A	M40x1.5/ M40x1.5
SE-MF05B	NPT1 1/4" /NPT1 1/4"	SE-MM05B	NPT1 1/4" /NPT1 1/4"	SE-FF05B	NPT1 1/4" /NPT1 1/4"
SE-MF06A	M50x1.5/ M50x1.5	SE-MM06A	M50x1.5/ M50x1.5	SE-FF06A	M50x1.5/ M50x1.5
SE-MF06B	NPT1 1/2" /NPT1 1/2"	SE-MM06B	NPT1 1/2" /NPT1 1/2"	SE-FF06B	NPT1 1/2" /NPT1 1/2"
SE-MF07A	M63x1.5/ M63x1.5	SE-MM07A	M63x1.5/ M63x1.5	SE-FF07A	M63x1.5/ M63x1.5
SE-MF07B	NPT2" /NPT2"	SE-MM07B	NPT2" /NPT2"	SE-FF07B	NPT2" /NPT2"
SE-MF08A	M75x1.5/ M75x1.5	SE-MM08A	M75x1.5/ M75x1.5	SE-FF08A	M75x1.5/ M75x1.5
SE-MF08B	NPT2 1/2" /NPT2 1/2"	SE-MM08B	NPT2 1/2" /NPT2 1/2"	SE-FF08B	NPT2 1/2" /NPT2 1/2"
SE-MF09A	M90x1.5/ M90x1.5	SE-MM09A	M90x1.5/ M90x1.5	SE-FF09A	M90x1.5/ M90x1.5
SE-MF09B	NPT3" /NPT3"	SE-MM09B	NPT3" /NPT3"	SE-FF09B	NPT3" /NPT3"
SE-MF10A	M115x1.5/ M115x1.5	SE-MM10A	M115x1.5/ M115x1.5	SE-FF10A	M115x1.5/ M115x1.5
SE-MF10B	NPT4" /NPT4"	SE-MM10B	NPT4" /NPT4"	SE-FF10B	NPT4" /NPT4"

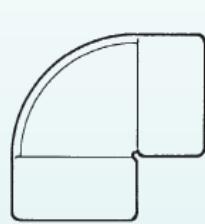
* Standard angle is 90°, optional 45°.



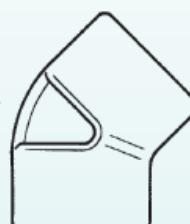
90°Male & Female Thread



90°Male & Male Thread



90°Female & Female Thread



45°Female & Female Thread

Catalogue Numbering System

SE-

MM

Thread Type of Conduit Hub

MM: Male/Male thread

MF: Male/Female thread

FF: Female /Female thread

FF45: 45° Female/Female Thread

01A

Thread Type

M16x1.5 – M115x1.5

NPT3/8 " – NPT4"

K0

Kit Accessories

K0: no accessories

K1: O-Ring

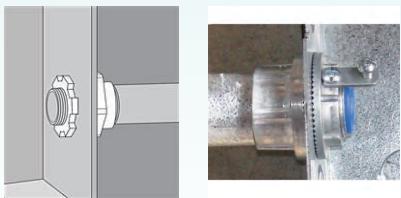
SH Series Conduit Hubs

For Rigid Metal Conduit (RMC), IMC, EMT
For use in Hazardous Locations



Standard Material

- > Threaded termination of electrical conduit through thin wall of sheet metal enclosure
- > Connection indoors or outdoors with rigid metal conduit (RMC),IMC,EMT.
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present



Application

- > Tapered female thread for rigid metal conduit(RMC),IMC,EMT
- > Designed strong and oversized serrations assure tight bite into wall of sheet metal enclosure
- > Insulated throat protects conductors when pulling the cables
- > Recessed O-ring to assure water-proof and dust-proof connections
- > Optional added safety grounding screw
- > NPT thread (NPT3/8 " – NPT6")
- > Ingress protection: standard IP66
- > Operating Temperature:-15°C ~+120°C

Standard Material

- > Zinc Die Cast
- > Aluminium Alloy

Standards

EN Standard-ATEX

- Ex II 2 G Ex e II Gb
- Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex II 2 D Ex tb III Db
- Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

- Ex e II Gb
- Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex tb IIIC Db
- Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

- Class I, Division 2, Group A B C D
- Class II, Division 1, Group E F G
- Type 4X

Ordering Information

Zinc Die Cast

Cat. #	Hub size
SH-Z01	NPT3/8"
SH-Z02	NPT1/2"
SH-Z03	NPT3/4"
SH-Z04	NPT1"
SH-Z05	NPT1 1/4"
SH-Z06	NPT1 1/2"
SH-Z07	NPT2"
SH-Z08	NPT2 1/2"
SH-Z09	NPT3"
SH-Z10	NPT4"
SH-Z11	NPT5"
SH-Z12	NPT6"



Zinc Die Cast

Cat. #	Hub size
SH-Z01G	NPT3/8"
SH-Z02G	NPT1/2"
SH-Z03G	NPT3/4"
SH-Z04G	NPT1"
SH-Z05G	NPT1 1/4"
SH-Z06G	NPT1 1/2"
SH-Z07G	NPT2"
SH-Z08G	NPT2 1/2"
SH-Z09G	NPT3"
SH-Z10G	NPT4"
SH-Z11G	NPT5"
SH-Z12G	NPT6"



Zinc Die Cast

Cat. #	Hub size
SH-A01	NPT3/8"
SH-A02	NPT1/2"
SH-A03	NPT3/4"
SH-A04	NPT1"
SH-A05	NPT1 1/4"
SH-A06	NPT1 1/2"
SH-A07	NPT2"
SH-A08	NPT2 1/2"
SH-A09	NPT3"
SH-A10	NPT4"
SH-A11	NPT5"
SH-A12	NPT6"



Zinc Die Cast

Cat. #	Hub size
SH-Z01G	NPT3/8"
SH-Z02G	NPT1/2"
SH-Z03G	NPT3/4"
SH-Z04G	NPT1"
SH-Z05G	NPT1 1/4"
SH-Z06G	NPT1 1/2"
SH-Z07G	NPT2"
SH-Z08G	NPT2 1/2"
SH-Z09G	NPT3"
SH-Z10G	NPT4"
SH-Z11G	NPT5"
SH-Z12G	NPT6"



Catalogue Numbering System

SH-

Z

Material

01

Thread Size

G

Grounding

Z: Zinc Die Cast

A: Aluminium Alloy

01: NPT3/8"

02: NPT1/2"

Blank

G:With Grounding

SL Series Liquid Tight Connector

For Liquid-tight Flexible Metal Conduit (LFMC)
For use in Hazardous Locations



Application

- > Threaded connection of liquid tight flexible metal conduit through thin wall of sheet metal enclosure
- > Direct connection outdoors with liquid tight flexible metal conduit (LFMC) in wet, dusty and corrosive environments.
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present



Features

- > Long steel ferrule connect liquid tight flexible metal conduit (LFMC) to avoid pulling out
- > Designed locknut assure tight fixing with thin wall of sheet metal enclosure
- > Insulated throat protects conductors when pulling the cables
- > Seal gasket to assure liquidtight, raintight, oiltight protection
- > Available in straight, 90 degree and 45 degree bend
- > Optional added safety grounding screw
- > NPT thread (NPT3/8 " – NPT6")
- > Ingress protection: standard IP66
- > Operating Temperature:-15°C ~+120°C

Standard Material

- > Malleable Iron
- > Zinc Die Cast

Standards

EN Standard-ATEX

- Ex II 2 G Ex e II Gb
Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex II 2 D Ex tb III Db
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

- Ex e II Gb
Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex tb IIIC Db
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

- Class I, Division 2, Group A B C D
- Class II, Division 1, Group E F G
- Type 4X

Ordering Information

Straight Connector, Malleable Iron



Cat. #	Hub size
SL-MA01	NPT3/8"
SL-MA02	NPT1/2"
SL-MA03	NPT3/4"
SL-MA04	NPT1"
SL-MA05	NPT1 1/4"
SL-MA06	NPT1 1/2"
SL-MA07	NPT2"
SL-MA08	NPT2 1/2"
SL-MA09	NPT3"
SL-MA10	NPT4"

90°Angle Connector, Malleable Iron



Cat. #	Hub size
SL-MB01	NPT3/8"
SL-MB02	NPT1/2"
SL-MB03	NPT3/4"
SL-MB04	NPT1"
SL-MB05	NPT1 1/4"
SL-MB06	NPT1 1/2"
SL-MB07	NPT2"
SL-MB08	NPT2 1/2"
SL-MB09	NPT3"
SL-MB10	NPT4"

45°Angle Connector, Malleable Iron



Cat. #	Hub size
SL-MC01	NPT3/8"
SL-MC02	NPT1/2"
SL-MC03	NPT3/4"
SL-MC04	NPT1"
SL-MC05	NPT1 1/4"
SL-MC06	NPT1 1/2"
SL-MC07	NPT2"
SL-MC08	NPT2 1/2"
SL-MC09	NPT3"
SL-MC10	NPT4"

Straight Connector, Malleable Iron



Cat. #	Hub size
SL-ZA01	NPT3/8"
SL-ZA02	NPT1/2"
SL-ZA03	NPT3/4"
SL-ZA04	NPT1"
SL-ZA05	NPT1 1/4"
SL-ZA06	NPT1 1/2"
SL-ZA07	NPT2"
SL-ZA08	NPT2 1/2"
SL-ZA09	NPT3"
SL-ZA10	NPT4"

90°Angle Connector, Zinc Die Cast



Cat. #	Hub size
SL-ZC01	NPT3/8"
SL-ZC02	NPT1/2"
SL-ZC03	NPT3/4"
SL-ZC04	NPT1"
SL-ZC05	NPT1 1/4"
SL-ZC06	NPT1 1/2"
SL-ZC07	NPT2"
SL-ZC08	NPT2 1/2"
SL-ZC09	NPT3"
SL-ZC10	NPT4"

45°Angle Connector, Zinc Die Cast



Cat. #	Hub size
SL-ZB01	NPT3/8"
SL-ZB02	NPT1/2"
SL-ZB03	NPT3/4"
SL-ZB04	NPT1"
SL-ZB05	NPT1 1/4"
SL-ZB06	NPT1 1/2"
SL-ZB07	NPT2"
SL-ZB08	NPT2 1/2"
SL-ZB09	NPT3"
SL-ZB10	NPT4"

Catalogue Numbering System

SL-

M

Material

M: Malleable Iron

Z: Zinc Die Cast

A

Connector Type

A: Straight type

B: 90° bend type

C: 45° bend type

01

Thread Size

01: NPT3/8"

02: NPT1/2"

...

10: NPT4"

G

Grounding

Blank

G:With Grounding

SCB Series Conduit Couplings

Connect hubs with 90° bend

For use in Hazardous Locations



Application

- > SCC series coupling outlet boxes are installed in rigid conduit systems:
 - Provide 90°bend for branch conduit
 - Connect conduit ends from different directions
 - Pull and splice for cable conductors
 - Offer mounting outlets for luminaires
 - Hide exposed cable conductors in sealing condition
 - Connect inner lengths for conduit
 - Provide access for cable conductors when maintenance needs and future replacement
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present

Features

- > Designed tapered thread to match conduit size for neat, compact installations
- > Electrostatic surface powder finish, grey, and clean surface ease maintenance
- > Superior durability lower replacement cost
- > Seven different kinds of conduit layout arrangement
- > Flameproof joint between body and cover, ensure wire insulation and proper safety protection
- > Silicon sealing cover to reach IP66
- > Suitable thread: Metric thread (M20x1.5-M63x1.5) and NPT thread (NPT1/2 " - NPT2")
- > Operating Temperature:-40°C ~+100°C

Standard Material

Aluminum Alloy

Cast iron

Standards

EN Standard-ATEX

II 2 G Ex d IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

II 2 D Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEX

Ex d IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

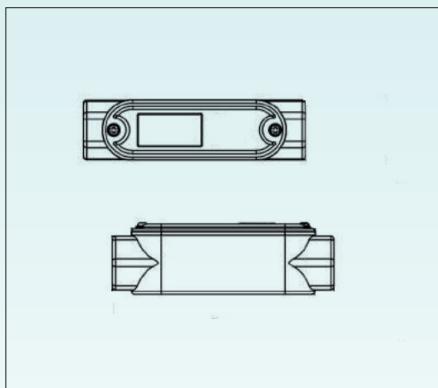
Class I, Division 1, Group A B C D

Class II, Division 1, Group E F G

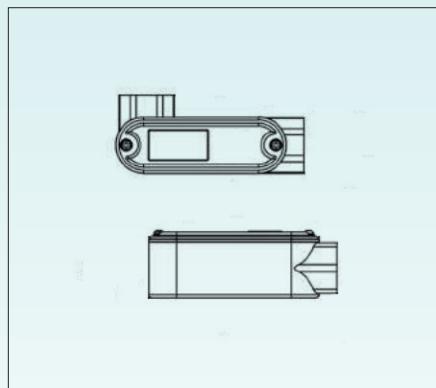
Type 4X

Ordering Information

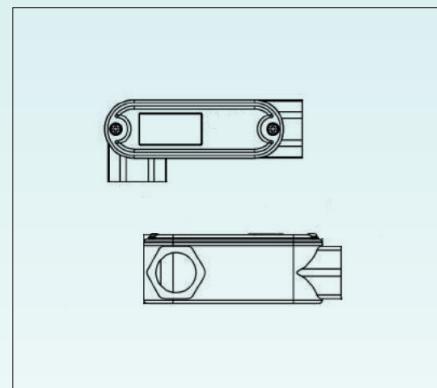
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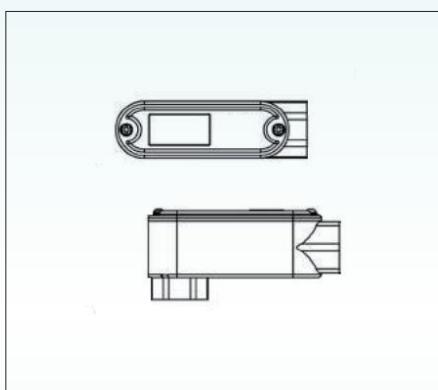
Type B



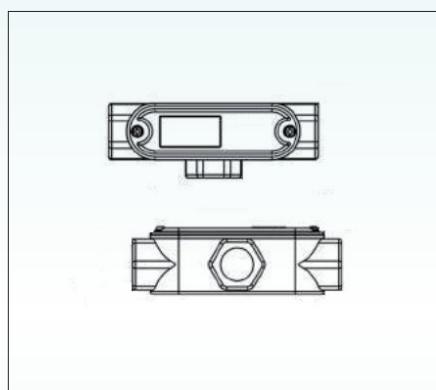
Type C



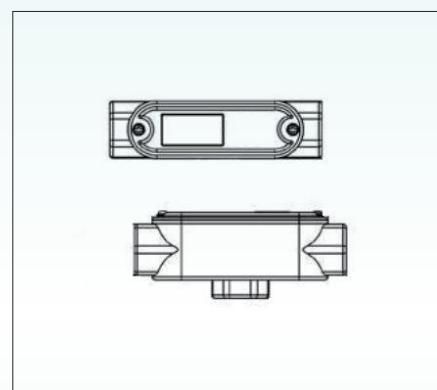
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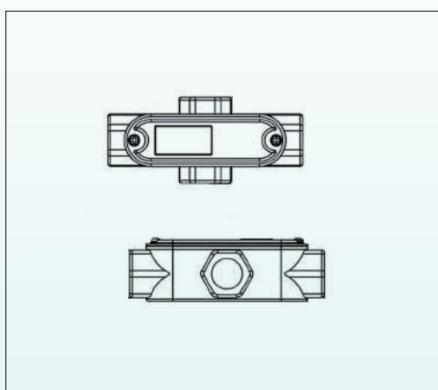
Type E



Type F



Type G



Cat.#	Metric Thread (M)	NPT Thread (N)
SCB-□01M/N	M20x1.5	NPT1/2"
SCB-□02M/N	M25x1.5	NPT3/4"
SCB-□03M/N	M32x1.5	NPT1"
SCB-□04M/N	M40x1.5	NPT1 1/4"
SCB-□05M/N	M50x1.5	NPT1 1/2"
SCB-□06M/N	M63x1.5	NPT2"

*□= Type A,B,C,D,E,F,G

Catalogue Numbering System

SCB-

A

Conduit Direction Type

A-G

01

Thread Code

M20x1.5 – M63x1.5
NPT1/2 " – NPT2"

M

Thread Type

M: Metric thread
N: NPT thread

SCS Series Conduit Sealing Couplings with Drains Plug

Connect hubs with sealing
For use in Hazardous Locations



Application

- > SCS series conduit sealing coupling are installed in conduit system to reduce accumulation of condensate inside the conduit
- In vertical direction of conduit
- At low points in conduit system
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present

Features

- > Limit mechanical explosion impact from the sealed couplings inside to outside
- > Control the overloading pressure and pre-compression in conduit system
- > Restrict the passage of gases, vapors or flames from one portion of the electrical installation to another
- > SCS-B series conduit sealing couplings with drain plug offer continuous automatic drainage of condensate
- > Ensure conductor or cable insulation from damage
- > Designed taped thread to ease the access for conduit connection
- > Electrostatic surface powder finish, grey, and clean surface ease maintenance
- > Suitable thread: Metric thread (M20x1.5-M63x1.5) and NPT thread (NPT1/2 " - NPT2")
- > Operating Temperature:-40°C ~+100°C

Standard Material

- > Aluminum Alloy
- > Cast iron
- > Stainless steel

Standards

EN Standard-ATEX	IEC Standard-IECEx	NEC Standard-UL
II 2 G Ex d IIC Gb	Ex d IIC Gb	Class I, Division 1, Group A B C D
Zone 1, Zone 2 Group IIA, IIB and IIC	Zone 1, Zone 2 Group IIA, IIB and IIC	Class II, Division 1, Group E F G
II 2 D Ex tb IIIC Db	Ex tb IIIC Db	Type 4X
Zone 21, Zone 22 Group IIIA, IIIB and IIIC	Zone 21, Zone 22 Group IIIA, IIIB and IIIC	

Catalogue Numbering System

SCS-

A1

Conduit Direction Type

A1,A2,B,C

01

Thread Code

M20x1.5 – M63x1.5

M

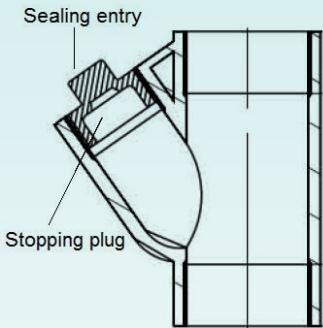
Thread Type

M: Metric thread

N: NPT thread

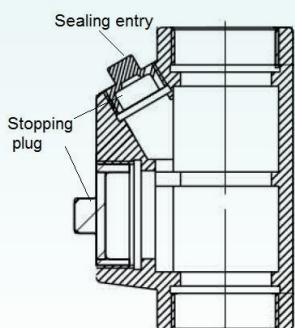
Ordering Information

Type A1



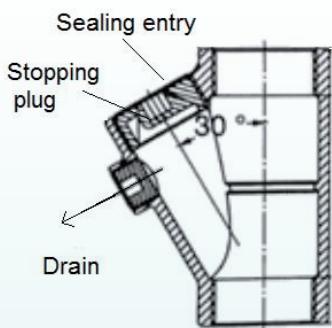
Cat. #	Metric Thread (M)	NPT Thread(N)
SCS-A1-01M/N	M20x1.5	NPT1/2"
SCS-A1-02M/N	M25x1.5	NPT3/4"
SCS-A1-03M/N	M32x1.5	NPT1"
SCS-A1-04M/N	M40x1.5	NPT1 1/4"
SCS-A1-05M/N	M50x1.5	NPT1 1/2"
SCS-A1-06M/N	M63x1.5	NPT2"

Type A2



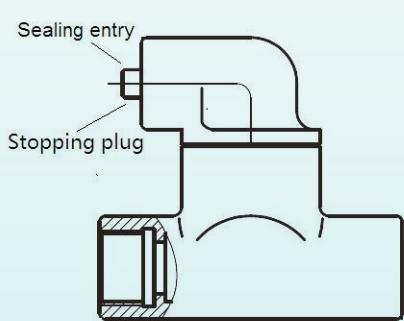
Cat. #	Metric Thread (M)	NPT Thread(N)
SCS-A2-01M/N	M20x1.5	NPT1/2"
SCS-A2-02M/N	M25x1.5	NPT3/4"
SCS-A2-03M/N	M32x1.5	NPT1"
SCS-A2-04M/N	M40x1.5	NPT1 1/4"
SCS-A2-05M/N	M50x1.5	NPT1 1/2"
SCS-A2-06M/N	M63x1.5	NPT2"

Type B



Cat. #	Metric Thread (M)	NPT Thread(N)
SCS-B-01M/N	M20x1.5	NPT1/2"
SCS-B-02M/N	M25x1.5	NPT3/4"
SCS-B-03M/N	M32x1.5	NPT1"
SCS-B-04M/N	M40x1.5	NPT1 1/4"
SCS-B-05M/N	M50x1.5	NPT1 1/2"
SCS-B-06M/N	M63x1.5	NPT2"

Type C



Cat. #	Metric Thread (M)	NPT Thread(N)
SCS-C-01M/N	M20x1.5	NPT1/2"
SCS-C-02M/N	M25x1.5	NPT3/4"
SCS-C-03M/N	M32x1.5	NPT1"
SCS-C-04M/N	M40x1.5	NPT1 1/4"
SCS-C-05M/N	M50x1.5	NPT1 1/2"
SCS-C-06M/N	M63x1.5	NPT2"

SFC Series Flexible Couplings

Connect hubs with different flexible bends

For use in Hazardous Locations



Application

- > SFC series flexible coupling are installed in rigid conduit systems:
- Provide different bends degree from any direction where lack of working space
- Permit movement, vibration and replacement for connected equipments
- Flexible connection at both conduit ends
- Pull and splice for cable conductors
- Hide exposed cable conductors in corrosive condition
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present

Features

- > Taped thread at both ends
- > Mechanical pressure resistance for heavy equipment
- > Waterproof for wet locations
- > Superior durability lower replacement cost
- > SFC series flexible couplings have taped thread in both two ends
 - M/F: One end is male thread, the other end is female thread
 - M/M: Both two ends are male thread
 - F/F: Both two ends are female thread
- > Flameproof joint for coupling and conduit ends, against explosive pressure and electrical sparks
- > Inner sealing to reach IP66
- > Suitable thread: Metric thread (M20x1.5-M115x1.5) and NPT thread (NPT1/2 " – NPT4")
- > Operating Temperature:-40°C ~ +55°C



Standard Material

Stainless steel

Optional: Silicone rubber

Standard length

- > L1:500mm / 20"
- > L2:700mm / 28"
- > L3:1000mm / 40"
- > L4:1200mm / 47"
- > L5:1500mm / 59"
- > L6:2000mm / 79"

Standards

EN Standard-ATEX

II 2 G Ex d IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

II 2 D Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEx

Ex d IIC Gb

Zone 1, Zone 2 Group IIA, IIB and IIC

Ex tb IIIC Db

Zone 21, Zone 22 Group IIIA, IIIB and IIIC

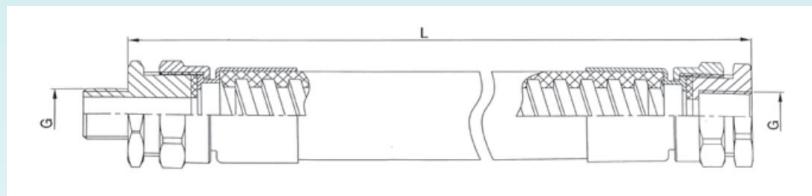
NEC Standard-UL

Class I, Division 1, Group A B C D

Class II, Division 1, Group E F G

Type 4X

Ordering Information



Cat.#	Thread Option		Length (mm/inch)
	Metric Thread (M)	NPT Thread (N)	
SFC-01M/N	M20x1.5	NPT1/2"	L1:500mm / 20"
SFC-02M/N	M25x1.5	NPT3/4"	L2:700mm / 28"
SFC-03M/N	M32x1.5	NPT1"	L3:1000mm / 40"
SFC-04M/N	M40x1.5	NPT1 1/4"	L4:1200mm / 47"
SFC-05M/N	M50x1.5	NPT1 1/2"	L5:1500mm / 59"
SFC-06M/N	M63x1.5	NPT2"	L6:2000mm / 79"

Catalogue Numbering System

SFC- **01**
Thread Code

M20x1.5 – M115x1.5
NPT1/2" – NPT4"

M
Thread Type

M: Metric thread
N: NPT thread

L1
Length

L1: 500mm / 20"
L2: 700mm / 28"
L3:1000mm / 40"
L4:1200mm / 47"
L5:1500mm / 59"
L6:2000mm / 79"

SBP Series BlindStopping Plug and SDP Series Drainage (Breather) Plug

SBP Series for use inspare cable entries without cable glands
 SDP Series for use in drainage valve and breatherFor use in Hazardous Locations



Application

- > SBP series are usedfor terminationof electrical cable throughhousing wall, and SDP series are usedfor water or moisture drainage and air exchange inside metal housing
- > Classified and hazardous locations where flammable vapors, gases, ignitable dusts, fibers or flying are present

Features

- > Corrosion resistance, impact resistance
- > Metric thread (M16x1.5-M115x1.5) and NPT thread (NPT3/8 " - NPT4")
- > Ingress protection: standard IP66,optional IP68 with special sealing
- > Operating Temperature:-60 °C ~+100 °C

Standard Material

- > Plastic
- > 304 Stainless Steel
- > AluminumAlloy

Kit Accessories Options

- K0: no accessories
- K1: O-Ring



Standards

EN Standard-ATEX

- IIC** Ex e IICGb
Zone 1, Zone 2 Group IIA, IIB and IIC
- ID** Ex tb IIIC Db
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

IEC Standard-IECEX

- Ex e IICGb
Zone 1, Zone 2 Group IIA, IIB and IIC
- Ex tb IIIC Db
Zone 21, Zone 22 Group IIIA, IIIB and IIIC

NEC Standard-UL

- Class I, Division 1, Group A B C D
- Class II, Division 1, Group E F G
- Type 4X

Catalogue Numbering System

SBP

P

Material

P: Plastic

A: AluminumAlloy

SS-304 stainless steel

01

Thread Code

M16x1.5 – M115x1.5

NPT3/8 " – NPT4"

K0

Kit Accessories

K0: no accessories

K1: O-Ring

SDP

P

Material

SS-304 stainless steel

01

Thread Code

M20x1.5

Ordering Information

SBP BlindStopping Plug

Cat.#	Hub size	Cat.#	Hub size
SBP M01	M16x1.5	SBP-N01	NPT3/8"
SBP M02	M20x1.5	SBP-N02	NPT1/2"
SBP M03	M25x1.5	SBP-N03	NPT3/4"
SBP M04	M32x1.5	SBP-N04	NPT1"
SBP M05	M40x1.5	SBP-N05	NPT1 1/4"
SBP M06	M50x1.5	SBP-N06	NPT1 1/2"
SBP M07	M63x1.5	SBP-N07	NPT2"



SDP Drainage and Breather Plug

Cat.#	Hub size
SDP	M20x1.5





To Be SURE
To Be ALL



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