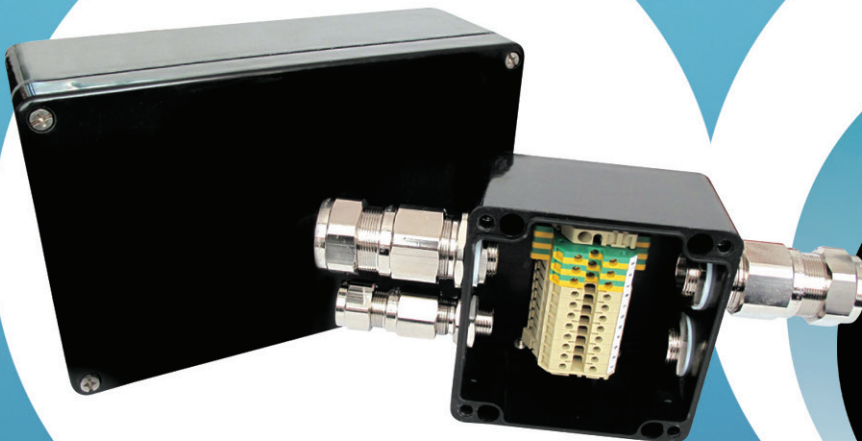
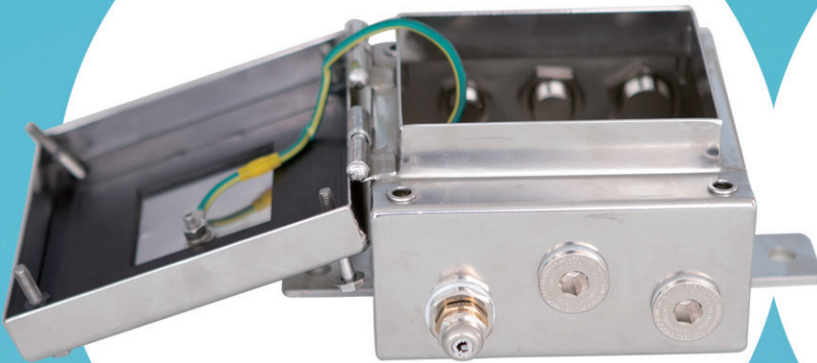




OSCG

Cable Gland / Junction Box
hazardous & industrial area



OSCG



CE

ATEX IECEx CU-TR DNV RMRS KCS ISO OHSAS

OSCG

CABLE GLAND / JUNCTION BOX

OSCG Since November 1983.

OSCG Co., Ltd. has a long history company since 1983, and is specialized in the Ex cable gland and junction box. We supply our cable gland and junction box to many different kind of clients all over the world. We acquired ISO 9001, 14001 and OHSAS 18001 to qualify our products, environment and HSE requirement in 1999. As the products we manufacture are explosion proof, these products are certified by Presafe IECEx, ATEX, CU TR and KCs certifications, and DNV and RMRS classifications in accordance with its standards, EN and IEC. We are committed to enhancing customer satisfaction through continuous technology innovation and quality improvement.

Main Products

- Explosion proof type Exd & Exe CABLE GLAND : Certified by Presafe IECEx, ATEX, CU TR, KCs, DNV, RMRS
- Explosion proof type Exd & Exe STOPPING PLUG : Certified by IECEx, ATEX, CU TR, KCs, DNV, RMRS
- Explosion proof type Exd & Exe REDUCER / ADAPTOR : Certified by IECEx, ATEX, CU TR, KCs, DNV, RMRS
- Watertight CABLE GLAND : Certified by KOMERI, Presafe
- JIS, DIN type CABLE GLAND and Flexible Connectors
- Special cable connector for Vessels, Power Plants, On & Offshore Projects
- JUNCTION BOX : Certified by Presafe IECEx, ATEX, KOMERI



1983

1983

Established Oh-Sung Company in Busan

1997

Moved to present location at 1242 street, Nakdongdaero Sasang-Gu, Busan, Korea

2000 OSCG

Changed the Company name to "OSCG. Co.,Ltd"

2000 NEMKO

Certified by NEMKO for Exd type Cable Gland and Stopping Plug

2001 SHELL

Approved by SHELL international exploration and production B.V for BONGA PJT.

2002 MOQ

Certified by MOQ for Exd CABLE GLAND of PLATFORMS

2003 ATEX

Certified by NEMKO ATEX for Exd type & Exe CABLE GLAND and Stopping Plug

2003 SHELL

Approved by Shell for Exd & Exe CABLE GLAND for BTIP Project

2003 TOTAL

Approved by TOTAL E&P for Exd & Exe CABLE GLAND for DALIA Project

2004 AGIP

Approved by AGIP GAS BV for Exd & Exe CABLE GLAND for SABRATHA Project

2004 GOST-R/FSETAN

Certified by GOST R/FSETAN for Exd & Exe CABLE GLAND, REDUCER ADAPTOR, STOPPING PLUG

2005 EXXON

Approved by Exxon for Exd & Exe CABLE GLAND for SAKHALIN OPF Project

2006 TATL E&F

Approved by T.E.F for Exd & Exe CABLE GLAND for AKPO FPSO Project

2006 TOTAL

Approved by TOTAL for Exd & Exe CABLE GLAND for MOHO FPU Project

2006 SMEDVIG

Approved by SMEDVIG for Exd & Exe CABLE GLAND for WEST E-DRILL RIG Project

2007 ODFJELL

Approved by ODFJELL for Exd & Exe CABLE GLANDS for D-RIG Project

2007 TRANS OCEAN

Approved by TRANS-OCEAN for Exd & Exe CABLE GLANDS for D-SHIP Project

OSCG Co.,Ltd.

OSCG Company was established in 1983 as a Cable Gland maker and has been providing the best quality products for onshore and Offshore Projects. We always try our best to meet the requirement.



Head Office



Factory

OSEG & OSCG RESEARCH INSTITUTE

Business Office

DYNASTY(BUSAN)
OSCG BUSAN GANGSEO
OSCG BUSAN SASANG
OSCG SEOUL
OSCG ULSAN

Oversea Business Office

OSCG JAPAN TOKYO

2017

2007	TOTAL	Approved by TOTAL for Exd & Exe CABLE GLANDS for YADANA PLATFORM Project
2007	SEA-DRILL	Approved by SEA-DRILL for Exd & Exe CABLE GLANDS for D-RIG Project
2008	ISO 14001, ROHS	Certified ISO 14001, Approved ROHS
2009	IECEX SCHEME	Certified IECEX Scheme by KOSHA for Exd & Exe CABLE GLAND, Reducer, Adaptor, Stopping Plug
2009	TOTAL E&F	Certified by TOTAL for Exd & Exe CABLE GLANDS of PAZFLOR FPSO Project
2011	GRP J/B	Certified by ATEX INERIS / IECEX
2011	ISO	ISO 9001:2008 and ISO 14001:2004 Review
2012	ATWOOD	Approved by ATWOOD for Exd & Exe CABLE GLANDS for D-SHIP Project
2012	TRANS OCEAN	Approved by TRANS OCEAN for Exd & Exe CABLE GLANDS for D-SHIP Project
2013	SHELL	Approved by SHELL for Exd & Exe CABLE GLANDS for SHELL FLNG Project
2013	SMBA	A Promising Export Firm by the Small & Medium Business Administration, Republic of Korea
2013	PETRONAS	Approved by PETRONAS for Exd & Exe CABLE GLANDS of PETRONAS FLNG Project
2014	ATEX/IECEX	ATEX/IECEX Review
2015	KCs	KCs certification approval
2015	DNV	DNV type approval
2015	RMRS	RMRS type approval
2017	ATEX/IECEX	Renewal Certificates

Certificate

CERTIFICATE NO. AQ-13B053/1

WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY

OSCG Co., Ltd.

FOR THE FOLLOWING ACTIVITIES

Site:
Nakdong-dong 1242, Samrak-dong, Sasang-gu, Busan, Korea

IS IN COMPLIANCE WITH THE SCHEME REQUIREMENTS

ISO 9001:2008 / KS Q ISO 9001:2009

FOR THE FOLLOWING ACTIVITIES

The Design, Development, Manufacture and Service of General Cable Glands, Flameproof Cable Glands, Flexible Connector and Junction Box

JAS-ANZ IAF Original Date of Certification 05 FEB 2013 Date of Issue 26 JAN 2016 Date of Expiry 14 SEP 2018

Kim Byung Cheol
APPROVED BY

ACE REGISTRAR Co., Ltd.
0-094, Digital Empire Bldg. 16, Deogyong-dae-ro 1556-gil, Youngsag-gu, Suwon-si, Gyeonggi-do, KOREA
Tel: 82-31-303-4594-5 Fax: 82-31-303-4596 Web: www.ace.or.kr

CERTIFICATE NO. AE-13B053/1

WE HEREBY CERTIFY THAT THE ENVIRONMENTAL MANAGEMENT SYSTEM OPERATED BY

OSCG Co., Ltd.

FOR THE FOLLOWING ACTIVITIES

Site:
Nakdong-dong 1242, Samrak-dong, Sasang-gu, Busan, Republic of Korea

IS IN COMPLIANCE WITH THE SCHEME REQUIREMENTS

ISO 14001:2004 / KS I ISO 14001:2009

FOR THE FOLLOWING ACTIVITIES

The Design, Development, Manufacture and Service of General Cable Glands, Flameproof Cable Glands, Flexible Connector and Junction Box

JAS-ANZ IAF Original Date of Certification 05 FEB 2013 Date of Issue 26 JAN 2016 Date of Expiry 14 SEP 2018

Kim Byung Cheol
APPROVED BY

ACE REGISTRAR Co., Ltd.
0-094, Digital Empire Bldg. 16, Deogyong-dae-ro 1556-gil, Youngsag-gu, Suwon-si, Gyeonggi-do, KOREA
Tel: 82-31-303-4594-5 Fax: 82-31-303-4596 Web: www.ace.or.kr

Certificate of Registration

This is to certify that the Occupational Health & Safety Management System of

OSCG Co., Ltd.

1242, Nakdong-dong, Samrak-dong, Sasang-gu, Busan, KOREA.

The Design, Development, Manufacture and Service of General Cable Glands, Flameproof Cable Glands, Flexible Connector and Junction Box

Has been assessed by ACE Registrar and complies with Occupational Health and Safety Assessment Series Requirements of

OHSAS 18001:2007

OHSAS 18001 Original Date of Certification 03 DEC 2014 Date of Issue 03 DEC 2014 Date of Expiry 02 DEC 2017 Certificate No. AS-14L031

Latte
APPROVED BY

ACE REGISTRAR Co., Ltd.
F-1020, Digital Empire Bldg. 16, Deogyong-dae-ro 1556-gil, Youngsag-gu, Suwon-si, Gyeonggi-do, KOREA
Tel: 82-31-303-4594-5 Fax: 82-31-303-4596 Web: www.ace.or.kr

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

Certificate No.: IECEx PRE 16.0003X Issue No: 0 Certificate History: Issue No. 0 (2016-12-13)

Status: **Current** Page 1 of 3

Date of Issue: **2016-12-13**

Applicant: **OSCG Co., Ltd.**
1242, Nakdong-dong, Sasang-gu, Busan, Korea, Republic of

Equipment: **Insulated adapter**
Optional accessory: **MSD1.5(MA)-MSD1.5(Female)**

Type of Protection: **Ex d, Ex e, Ex b**

Marking: **Ex d IIC Db, Ex e IIC Db, Ex b IIC Db**

Approved for issue on behalf of the IECEx Certification Body: Bjorn Sponsgaen Certification Manager

Signature: (for printed version) Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The status and authority of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by: **DNV Norske Presafe AS**
Dagfinn Sponsgaen
For DNV Norske Presafe AS
Information on electronic signature: www.dnv.com

Presafe EU-Type Examination Certificate

[2] COMPONENT INTENDED FOR USE ON AN EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/54/EU

[3] EU-Type Examination Certificate Number: **Presafe 16 ATEX 91310** Issue 0

[4] Product: **OSBD 20**

[5] Manufacturer: **OSCG Co., Ltd.**

[6] Address: **1242, Nakdong-dong, Sasang-gu, Busan, Korea, Republic of**

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] DNV Norske Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/54/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in confidential reports listed in section 16.

[9] Compliance with the Essential Health and Safety Requirements has been assessed by compliance with: **EN 60079-0:2012/A11:2013 and EN 60079-7:2015, EN 60079-31:2014**

[10] The sign "EP" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

[12] The marking of the product shall include the following:

Ex d IIC Db, Ex e IIC Db, Ex b IIC Db

Date of issue: **2016-12-13**

Bjorn Sponsgaen
For DNV Norske Presafe AS
Information on electronic signature: www.dnv.com

This certificate may only be reproduced in its entirety and without any change, including schedule.

DNV Norske Presafe AS, Gustavsløkken 30, 0373 Oslo, Norway

안전인증서 Certificate of Safety

OSCG Co., Ltd.
1242, Nakdong-dong, Sasang-gu, Busan, Korea

The following product manufactured by the above company has been authorized for the use of safety certification mark as the product has satisfied the safety and health requirements under Article 34 of OCCUPATIONAL SAFETY AND HEALTH ACT and paragraph 4 of ARTICLE 59-4 of ENFORCEMENT ORDINANCE of the same ACT.

Electrical Equipment
Model (Marking) / Certificate No.: **OSBD 20(e) x IIC / 17-A280-0300**
Applied standards: **Announcement No. 2013-24 of Ministry of Employment and Labor**
Conditions of Certification

1. Manufacturing location(s): This certificate is valid only for the specified products produced at 1242, Nakdong-dong, Sasang-gu, Busan, Korea.

2. Description of equipment: The device is intended to be used with certified Ex e enclosures positioned at the bottom of the enclosure.
Size: M20 x 1.5, M25 x 1.5, NPT 1/2", NPT 3/4"
Ingress Protection: IP66
Service Temperature: -40 °C ≤ T ≤ +110 °C

3. Scope of certification: This certificate is valid only for the models as above.

4. Special conditions for safe use: None

5. Details of certificate changes: None

6. Details of the others: Manufacturer shall take the responsibility including maintaining quality requirements for the certified products, receiving factory surveillance and informing any changes to the certified products.
This certificate shall be used with the related IECEx Certificate (IECEx PRE 16.0003X Issue No. 0).

Date of issue: **2017-05-19**

한국산업기술시험원장 KOREA TESTING LABORATORY

산업안전연구원 시험장 (본격 제10호시험장) (2016) 시험장 구조물 디자인 및 25일 신규시험장(http://www.ktl.or.kr) (2016) 안전보건 연구실 용서 (10층부속)

ТАМОЖЕННЫЙ СОЮЗ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ТС RU C-KR.ГБ06.В.00061
Серия RU № 0038604

ОРГАН ПО СЕРТИФИКАЦИИ взрывозащищенных средств измерений, контроля и элементов автоматизации
ФГУП «ВНИИФТРИ» (ОС ВСИ «ВНИИФТРИ»)
Адрес: Россия, 141570, Московская область, Солнечногорский район, городское поселение Менделеево
телефон/факс +7 (495) 526-63-03; ilvsi@vniiftri.ru
Аттестат аккредитации № РОСС RU.0001.11ГБ06 от 25 апреля 2013 г. выдан Росаккредитацией
ЗАЯВИТЕЛЬ
ЗАО «Северо-Западное Монтажное Управление Севзапэнергомонтаж»
Россия, 193079, г. Санкт-Петербург, Октябрьская наб., д. 108
ОГРН - 1027806063207; телефон: (812) 496-5375; факс: (812) 496-5379, szmu-szem@mail.ru
ИЗГОТОВИТЕЛЬ
OSCG Co., Ltd (Республика Корея)
416-2 - Samrak-Dong, Sasang-Gu, Busan, Republic of Korea

ПРОДУКЦИЯ
Кабельные вводы типа E1WF/E1XF/OSNJ-A2F/OSNJ-A2FD, адаптеры типа OSAJ/OSRA, заглушка типа OSSP, фитинги типа OSAE серийный выпуск

КОД ТН ВЭД ТС 7307 19 900 0

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ
Технического регламента Таможенного союза ТР ТС 012/2011
«О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ ВЫДАН НА ОСНОВАНИИ
1. Протокола испытаний № 13.1505 от 23.07.2013 г.
ИЛ ВСИ «ВНИИФТРИ» (РОСС RU.0001.21ИП09 от 25 апреля 2013 г.)
2. Акт о результатах анализа состояния производства от 09.07.2013 г.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ
Сертификат действителен с Эк-приложением
схема сертификации 1с

СРОК ДЕЙСТВИЯ 12.08.2013 г. ПО 11.08.2018

ВКЛЮЧИТЕЛЬНО
Г.Е. Епихина
(инициалы, фамилия)
Н.Ю. Мирошникова
(инициалы, фамилия)

DNV-GL
Certificate No:
TAE00000CW

TYPE APPROVAL CERTIFICATE

This is to certify:
That the Cable Gland

with type designation(s)
E1WF, E1XF, OSNJ-A2F, OSAE, OSAJ, OSRA and OSSP

Issued to
OSCG Co., Ltd.
Busan, Republic of Korea

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Mobile Offshore Units

Application :
Hazardous areas cable glands & cable gland's accessories.
The manufacturer's installation description to be followed.

This Certificate is valid until **2019-08-31**.
Issued at **Busan** on **2015-09-01**

DNV GL local station: **Pusan**
Approval Engineer: **Dong Ho Park**

for DNV GL
Digitally Signed By: Choi, Baeg Soon
Location: DNVGL, Busan
Signing Date: 20150901
Baeg Soon Choi
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Form code: TA 4411a Revision: 2015-05 www.dnvgl.com Page 1 of 5
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CompEx

"Competency Validation of personnel who work on equipment
for use in explosive atmospheres"

**CERTIFICATE
of
CORE COMPETENCE**

This certificate has been awarded to:

Chang-Hoon Lee
Certificate No: 61183CSNV

This person's electrotechnical craftsman status or certification has **not** been verified.

On successful completion of the Competence Validation Tests in relation to the following units:

EX01 Preparation & Installation of Ex'd, 'n', 'u' and 'p' electrical equipment	Rev (2)
EX02 Maintenance & Inspection of Ex'd, 'n', 'u' and 'p' electrical equipment	Rev (2)
EX03 Preparation & Installation of Ex'i equipment and systems	Rev (2)
EX04 Maintenance & Inspection of Ex'i equipment and systems	Rev (2)

All units are based on the IEC Standards 60079 : Parts 14 & 17 and the APEA/IP Guide as appropriate

(PLEASE NOTE THAT FULL DETAILS OF ALL THE COMPLEX UNITS ARE GIVEN OVERLEAF)

UKAS
0270

JT LIMITED
Certification Body

Martin D. Jones
JTLimited / CompEx Operations Manager

Date Awarded: **23 September 2017**

Expiry Date: **23 September 2022**

This certificate is valid up to five years from the date of the award

To verify this certificate call:
+44 (0)800 085 23 08
or email info@compex.org.uk

© JTL907 Rev 06/16

This certificate remains the property of JTLimited who reserve the right to withdraw this certificate if evidence shows failure to comply with the requirements of the CompEx Scheme.

**РОССИЙСКИЙ МОРСКОЙ РЕГИСТР СУДОВОДСТВА
RUSSIAN MARITIME REGISTER OF SHIPPING**

Стр.
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6.8.3

**СВИДЕТЕЛЬСТВО О ТИПОВОМ ОДОБРЕНИИ
TYPE APPROVAL CERTIFICATE**

Изготовитель
Manufacturer: **OSCG Co., Ltd.**

Адрес
Address: **1242 Nakdong-daero, Sasang-gu, Busan, Korea**

Изделие*
Product*:
Взрывозащищенные кабельные вводы типов E1WF, E1XF, OSNJ-A2F; Адаптер типа OSAJ; Узловое соединение типа OSAE; Соединение типа OSRA; Заглушка типа OSSP.
The explosion-proof cable glands of types E1WF, E1XF, OSNJ-A2F; Adapter of type OSAJ; Angle bow of type OSAE; Reducer of type OSRA; Stopping plug of type OSSP.

Код номенклатуры
Code of nomenclature: **11130200**

На основании освидетельствования и проведенных испытаний удостоверяется, что вышеуказанное(ые) изделие(а) удовлетворяет(от) требованиям Российского морского регистра судоходства.
This is to certify that on the basis of the survey and tests carried out the above mentioned item(s) comply(ies) with the requirements of Russian Maritime Register of Shipping.

Части XI Правил классификации и постройки морских судов, изд. 2015 г., раздела 10 Части IV Прием технического надзора за постройкой судов и изготовлением материалов и изделий для судов (изд. 2015г.)
Part XI of RS Rules for the Classification and Construction of Sea-Going Ships, ed. 2015, sec. 10 Part IV Rules for the Technical Supervision During Construction of Ships and Manufacture of Materials and Products for Ships (ed. 2015)

Настоящее Свидетельство о типовом одобрении действительно до **25.01.2021**
This Type Approval Certificate is valid until

Настоящее Свидетельство о типовом одобрении теряет силу в случаях, установленных в Правилах технического надзора за постройкой судов и изготовлением материалов и изделий для судов.
This Type Approval Certificate becomes invalid in cases stipulated in Rules for the Technical Supervision during Construction of Ships and Manufacture of Materials and Products for Ships.

Дата выдачи **25.01.2016** № **16.10002.296**
Date of issue

Российский морской регистр судоходства
Russian Maritime Register of Shipping

Дубейковский С.Б./S.Dubeykovskiy
(подпись, инициалы, фамилия)
(signature)

*Дополнительную информацию см. на обороте.
Additional information see overleaf

Major Clients



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04. Lead sheath steel wire armoured cable gland	E1WF / LS	15
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07. Non-armoured male and female cable gland	OS-A2F-UF	18
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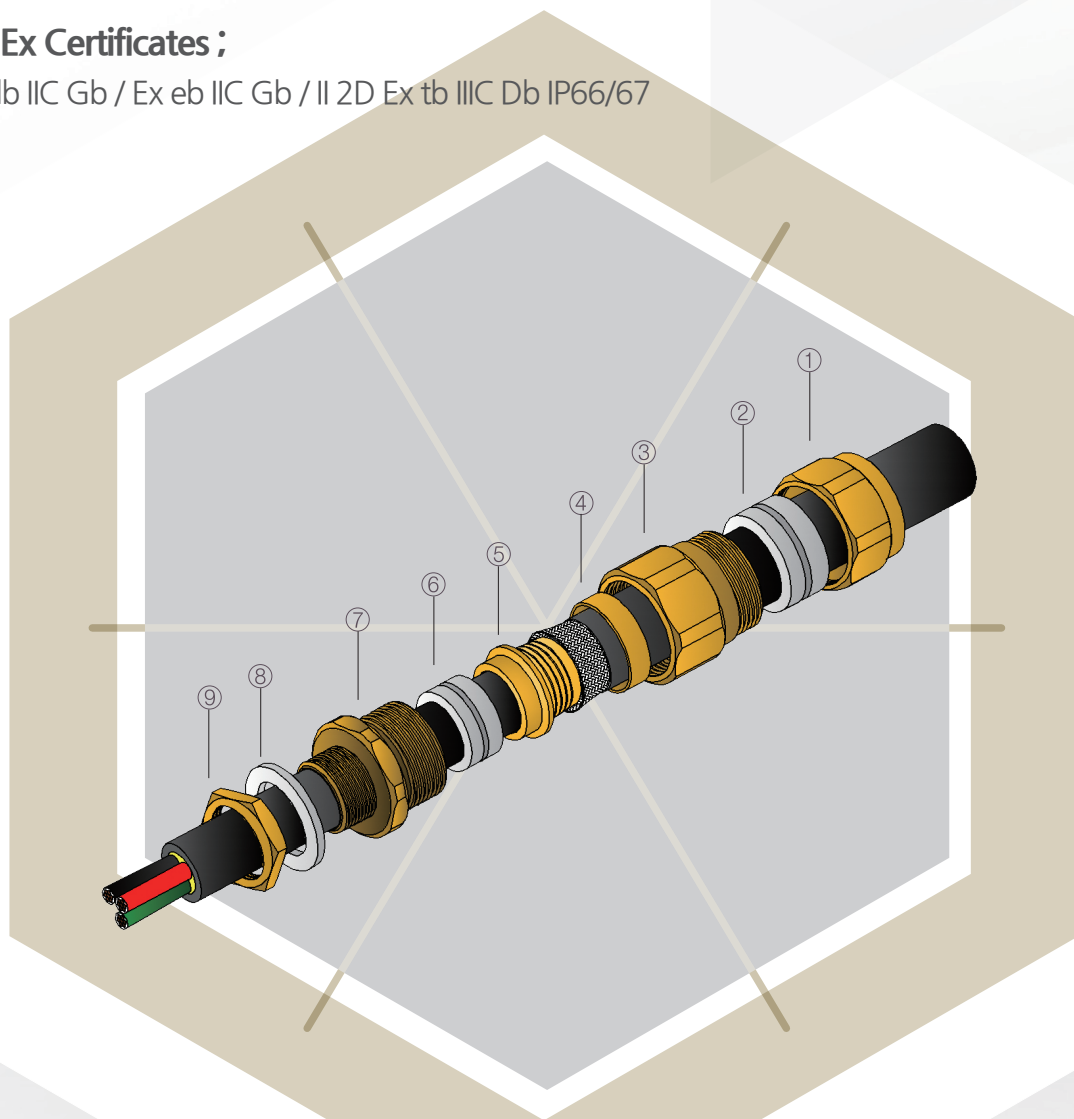
OSCG GRP RAW MATERIALS(SMC-Sheet Molding Compound)

Instruction for Installation

Double Compression type
Cable Gland

ATEX / IECEx Certificates ;

Ex II 2G Ex db IIC Gb / Ex eb IIC Gb / II 2D Ex tb IIIC Db IP66/67



- ① Coupler nut
- ② Outer packing
- ③ Middle body
- ④ -Insert
- ⑤ +Insert
- ⑥ Inner packing
- ⑦ Hub body
- ⑧ IP Washer
- ⑨ Lock nut

-Insert direction

Wire armoured
Position



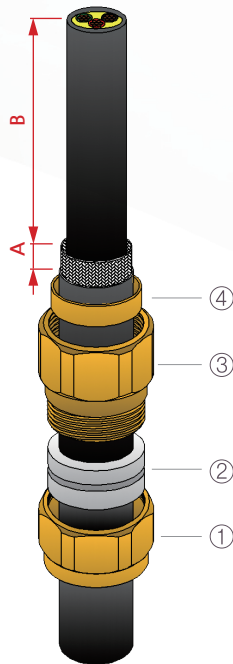
Braid armoured
Position



Instruction for Installation

BS 6121 Type of Gland
(The suffix for each type of protection)

Single wire armoured	W
Wire braided	X
Aluminium strip armoured	Y
Double steel tape armoured	Z



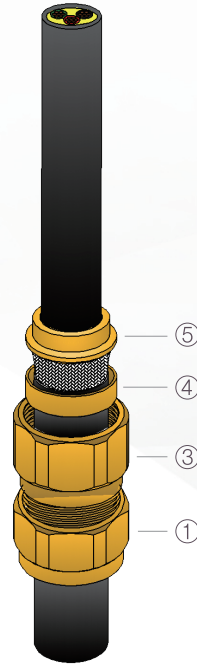
Prepare gland components as image I (if shroud is required, fit it before assembly)

Strip cable the fit corresponding equipment as shown above armour/braid 'A'

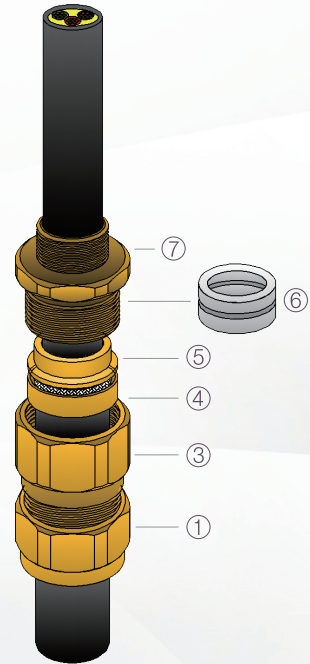
A : 20mm for cable gland size 16 to 32

A : 25~32mm for cable gland size 40 to 115

B : To suit other components



Put the +insert⑤ through the cable, spread cable armour/braid over the +insert⑤ until the end of the armour/braid is up against the shoulder of the +insert⑤. Position the -insert④



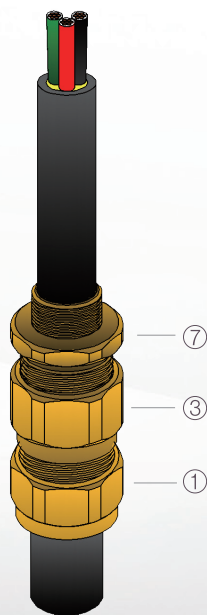
Place the hub body⑦ and position over the +insert⑤.

Move the sub assembly coupler nut① and middle body③ up to meet the hub body⑦

Note : if middle body③ and hub body⑦ do not meet due to the thickness of armour, recommend putting out inner packing⑥ and tighten without inner packing⑥.

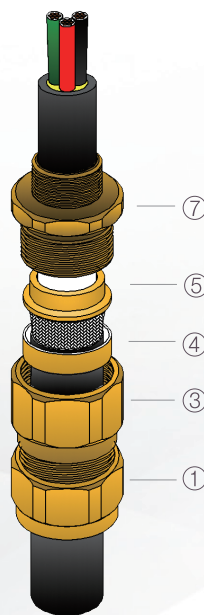
Instruction for Installation

IV



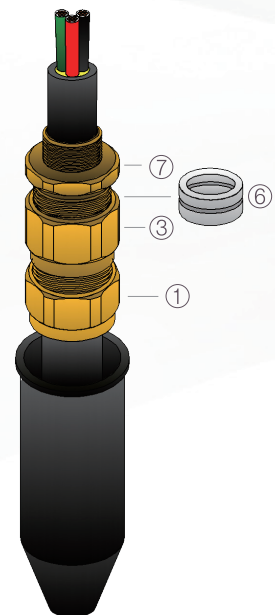
Unless already screwed into the equipment hole, Place the hub body⑦ in position with a spanner/wrench to prevent rotation. Hand tighten the middle body③ to hub body⑦ and turn a further half to one full turn to complete with a wrench/spanner.

V



Unscrew the middle body③ and visually inspect that the armour/braid has been successfully clamped between the +insert⑤ and the -insert④. If armour/braid not clamped, repeat assembly.

VI



If inner packing⑥ is removed, remove hub body⑦ and refit inner packing⑥. Replace hub body⑦ and re-assemble middle body③ onto the hub body⑦. Tighten up the middle body③ using a wrench/spanner until resistance is felt between the seal and cable. Then, turn the middle body③ through a further full one turn to complete the inner packing⑥. Tighten the coupler nut① using a wrench/spanner until the cable tie does not enter into the gap of packing, then tighten a further full one turn using a spanner/wrench. Ensure that the middle body③ does not rotate when tightening the coupler nut①. Locate the shroud over the cable gland, if applicable.

Cable Gland Selection Chart

Application Area	Cable type	Armoured Type	Sealing (compression)	IP	Remarks	Model	Page	Standard Thread
Hazardous	Armoured	Steel wire	Double	66/67	Double compression	E1WF	14p	Metric, NPT
				66/67	E1WF + For lead sheath cable	E1WF/LS	15p	
		Braid	Double	66/67	Double compression	E1XF	16p	
		Any type	Double	66/67	Double compression	OS-E1UF	12p	
				66/67	E1UF + For lead sheath cable	OS-E1UF/LS	13p	
		Touch	Single	66/68	IP 68(20bar, 2H)	OSER-Z	30p	PF, NPT
	Non-Armoured	N/A	Single	66/67	Use with pipe connection or machine	OSXP-F	29p	Metric, NPT
			Single	66/67	Single compression	OSNJ-A2F	24p	
			Single	66/67	Male and female type	OSNJ-A2FF	25p	
			Double	66/67	Double compression	OSNJ-A2FD	26p	
			Single	66/67	Wide range packing	OS-A2F-U	17p	
			Single	66/67	A2UF + Male and female type	OS-A2F-UF	18p	
			Double	66/67	A2UF + Double Comp.	OS-A2F-UD	19p	
			Single	66/67	For heating cable	OS-A2F-UH	20p	
			Single	66/67	Metal hose type for heating cable	OS-A2F-UHMH	21p	
			Single	66/67	Metal hose type	OS-A2F-UMH	22p	
			Single	66/67	Flexible fitting	OS-A2F-UEP	23p	
			Single	66/67	Single compression	OSNJ-CW	37p	
				66/67	Wide range packing, Single Comp.	OSCU	36p	
		Any type	Double	66/67	Double compression	OS-E1U	31p	
					E1U + For lead sheath cable	OS-E1U/LS	32p	
		Steel wire	Double	66	Double compression	E1W	33p	
				66	E1W + For lead sheath cable	E1W/LS	34p	
		Braid	Double	66	Double compression	E1X	35p	
		Braided OutJacket	Single	66	Braided OutJacket + Single Comp.	OSD1	46p	
Industrial	Non-Armoured	N/A	Single	N/A	Use with Cable	OSXP-M	48p	Metric, NPT
				N/A	Use with flexible fitting	OSXP	48p	
				N/A	OSXP+One touch	OSXP-W	48p	
			Single	66/67	Single compression	OSNJ	43p	Metric, NPT
			Single	66/67	OSNJ + Male and female type	OSNJ-F	44p	
			Double	N/A	OSNJ + Double compression	OSNJ-D	45p	
			Single	66/67	Wide range packing	OSNU	38p	
			Single	66/67	OSNU + Male and female type	OSNU-F	39p	
			Double	66/67	OSNU + Double Comp.	OSNU-D	40p	
			Single	66/67	Metal hose type	OSNU-MH	41p	
			Single	66/67	Flexible fitting	OSNU-EP	42p	
			Single	66	JIS Standard type	OSCG	47p	PF
				66	JIS, Welding Type	OSWD-L	49p	PF (Pipe)
				66	OSWD-L+Hole insert type	OSWD	49p	
				66	Round feature nipple	OSPG-R	50p	Metric, PG
				68	Plastic type OSPG-R	OSPGR-P	51p	
			Single	66	DIN Standard type	OSPGM	52p	Metric, PG
				66	OSPGM+Clamping type	OSPGM-Z	52p	
	Armoured	Braid	Single	66/67	Changing thread size to smaller	OSAJ	53p	Metric, NPT
	N/A	N/A	N/A	66/67	Insulated Adaptor	OSAJ(I)	57p	
				66/67	Changing thread size to bigger	OSRA	54p	
				66/67	To block entries for maintenance	OSSP	55p	
				66/67	90° Changing direction	OSAE	56p	
				66	Breather Drains	OSBD	57p	
Hazardous	N/A	N/A	N/A	54	Flexible fitting	OSEP	27p	NPT, PT, PF
Hazardous	N/A	N/A	Single	N/A	OSEP+One touch	OSEP-W	28p	

Required Ordering Information(example)

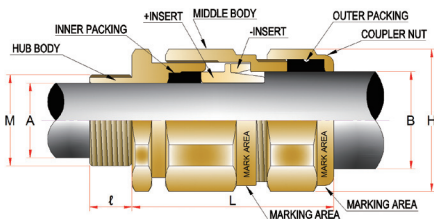
Part No.	Thread	Material	Q'ty	Accessories	Note
E1WF 20A	M20	Stainless Steel	200	Nylon Washer, Lock Nut, Earth Tag	None
OSAJ 25	M16 * NPT3/4"	Brass	200	Teflon Washer, Lock Nut, Shroud(PCP)	None
OSSJ-H 16	M16	Nickel Plated Brass	300	Teflon Washer, Lock Nut	Thread 30mm

* Optional Thread Length : ≥15mm. * Material for accessories is necessarily required.

Hazardous Cable Gland Type:OS-E1UF



OS-E1UF Type



Application : Any Type of Armoured Cable

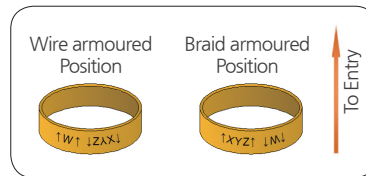
- * For use with any type of armoured cable
- * Outdoor & Indoor use.
- * Flameproof & Increased Safety.
- * EMC Cable Gland. (360° contact)
- * Reduce The Effect of Coldflow Characteristics.
- * Double Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11456X
IECEX Certification	IECEX PRE 17.0063X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1, 2, 21&22, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of armoured cable
Gland Material	Nickel plated brass(standard), brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-E1UF 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)
- * Material for accessories is required



BS 6121 Type of Gland
(The suffix for each type of protection)

Single wire armoured	W
Wire braided	X
Aluminium strip armoured	Y
Double steel tape armoured	Z

(* in mm)

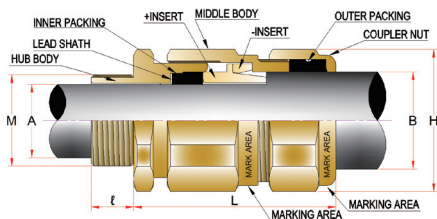
Part No.	Entry Thread Size(M)			Thread Length(L)-Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OS-E1UF 16	M16	1/2"	M20	15	15	15	5.0 ~ 11.5	7.0 ~ 16.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	150	67
OS-E1UF 20	M20	1/2"	3/4"	15	15	16	7.5 ~ 15.2	12.0 ~ 21.0	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P33	235	74
OS-E1UF 25	M25	3/4"	1"	15	16	18	13.0 ~ 19.6	17.0 ~ 26.2	1.25 ~ 1.6	0.05 ~ 0.8	H37 x P40	290	79
OS-E1UF 32	M32	1"	1-1/4"	15	18	19	16.5 ~ 26.2	22.0 ~ 34.0	1.6 ~ 2.0	0.05 ~ 1.2	H47 x P50	490	86
OS-E1UF 40	M40	1-1/4"	1-1/2"	15	19	21	23.0 ~ 32.3	30.0 ~ 42.0	1.6 ~ 2.0	0.05 ~ 1.2	H56 x P60	850	94
OS-E1UF 50	M50	1-1/2"	2"	15	21	24	29.0 ~ 41.5	38.0 ~ 53.7	1.8 ~ 2.5	0.05 ~ 1.2	H70 x P75	1390	100
OS-E1UF 63	M63	2"	2-1/2"	15	24	27	39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	2070	108
OS-E1UF 63X	M63	2-1/2"		15	27		46.0 ~ 55.0	52.0 ~ 66.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OS-E1UF 75	M75	2-1/2"	3"	20	27	30	52.0 ~ 61.0	58.0 ~ 72.0	1.8 ~ 2.5	0.05 ~ 1.2	H92 x P100	3270	125
OS-E1UF 75X	M75	3"		20	30		59.0 ~ 67.0	66.1 ~ 79.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OS-E1UF 90	M90	3"	3-1/2"	25	30	32	66.0 ~ 80.0	72.0 ~ 90.0	1.8 ~ 3.0	0.05 ~ 1.6	H110 x P120	4600	132
OS-E1UF 100	M100	3-1/2"	4"	25	32	32	76.0 ~ 90.5	84.0 ~ 102	1.8 ~ 3.0	0.05 ~ 1.6	H123 x P133	5500	144
OS-E1UF 115	M115	4"		25	32		88.0 ~ 102	100 ~ 118	1.8 ~ 3.0	0.05 ~ 1.6	H135 x P143	5500	144

※ The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.60)

Hazardous Cable Gland Type:OS-E1UF/LS



OS-E1UF/LS Type



Application : Lead Sheath Type of Armoured Cable

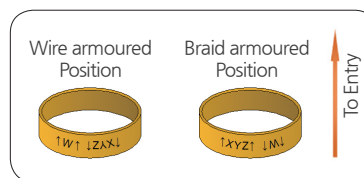
- * For use with any type of armoured cable
- * Outdoor & Indoor use.
- * Flameproof & Increased Safety.
- * EMC Cable Gland. (360° contact)
- * Reduce The Effect of Coldflow Characteristics.
- * Double Compression

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11456X
IECEX Certification	IECEX PRE 17.0063X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1, 2, 21&22, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of armoured cable
Gland Material	Nickel plated brass(standard), brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-E1UF/LS 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)
- * Material for accessories is required



BS 6121 Type of Gland
(The suffix for each type of protection)

Single wire armoured	W
Wire braided	X
Aluminium strip armoured	Y
Double steel tape armoured	Z

(* in mm)

Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OS-E1UF/LS 16	M16	1/2"	M20	15	15	15	5.0 ~ 11.5	7.0 ~ 16.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	150	67
OS-E1UF/LS 20	M20	1/2"	3/4"	15	15	16	7.5 ~ 15.2	12.0 ~ 21.0	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P33	235	74
OS-E1UF/LS 25	M25	3/4"	1"	15	16	18	13.0 ~ 19.6	17.0 ~ 26.2	1.25 ~ 1.6	0.05 ~ 0.8	H37 x P40	290	79
OS-E1UF/LS 32	M32	1"	1-1/4"	15	18	19	16.5 ~ 26.2	22.0 ~ 34.0	1.6 ~ 2.0	0.05 ~ 1.2	H47 x P50	490	86
OS-E1UF/LS 40	M40	1-1/4"	1-1/2"	15	19	21	23.0 ~ 32.3	30.0 ~ 42.0	1.6 ~ 2.0	0.05 ~ 1.2	H56 x P60	850	94
OS-E1UF/LS 50	M50	1-1/2"	2"	15	21	24	29.0 ~ 41.5	38.0 ~ 53.7	1.8 ~ 2.5	0.05 ~ 1.2	H70 x P75	1390	100
OS-E1UF/LS 63	M63	2"	2-1/2"	15	24	27	39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	2070	108
OS-E1UF/LS 63X	M63	2-1/2"		15	27		46.0 ~ 55.0	52.0 ~ 66.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OS-E1UF/LS 75	M75	2-1/2"	3"	20	27	30	52.0 ~ 61.0	58.0 ~ 72.0	1.8 ~ 2.5	0.05 ~ 1.2	H92 x P100	3270	125
OS-E1UF/LS 75X	M75	3"		20	30		59.0 ~ 67.0	66.1 ~ 79.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OS-E1UF/LS 90	M90	3"	3-1/2"	25	30	32	66.0 ~ 80.0	72.0 ~ 90.0	1.8 ~ 3.0	0.05 ~ 1.6	H110 x P120	4600	132
OS-E1UF/LS 100	M100	3-1/2"	4"	25	32	32	76.0 ~ 90.5	84.0 ~ 102	1.8 ~ 3.0	0.05 ~ 1.6	H123 x P133	5500	144
OS-E1UF/LS 115	M115	4"		25	32		88.0 ~ 102	100 ~ 118	1.8 ~ 3.0	0.05 ~ 1.6	H135 x P143	5500	144

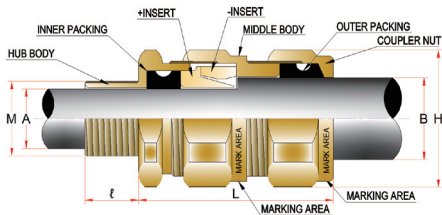
※ The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter. (Entry hole size tolerance : Thread size+0.60)

► Hazardous ► Armoured ► Double Compression ► E1WF

Hazardous Cable Gland Type:E1WF



E1WF Type



Application : Wire Armoured Cable

- * For use with any types of steel & aluminum wire cable
- * Outdoor & Indoor use
- * Flameproof & Increased Safety
- * EMC Cable Gland.(360° contact)
- * Double Compression
- * Reduce The Effect of Coldflow Characteristics

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
IECEx Certification	IECEx KOS 09.0018X IECEx PRE 15.0018X
ATEX Certification	02 ATEX 500X Presafe 17 ATEX 11343X
CU TR Certification(-60°C~130°C)	TC RU C-KR,ГБ06.B.00061
KCS Certification	15-AV2BO-0136~38
Classification	DNV, RMRS
Code of Protection	II2G Ex e II, Ex d IIC, II2D Ex tD A21
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of steel & aluminum wire (SWA) Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
E1WF 20A	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

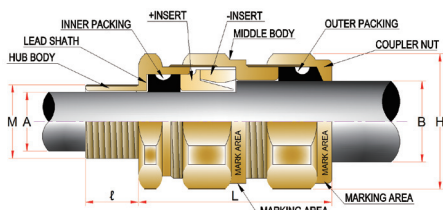
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
E1WF 16A	M16	1/2"	M20	15	15	15	5.0 ~ 8.0	8.0 ~ 13.0	0.9 ~ 1.25	H25 x P27	150	67
E1WF 16B	M16	1/2"	M20	15	15	15	7.0 ~ 11.0	12.0 ~ 15.1	0.9 ~ 1.25	H25 x P27	150	67
E1WF 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.1	13.0 ~ 17.5	0.9 ~ 1.25	H31 x P34	235	74
E1WF 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.1	16.0 ~ 19.5	0.9 ~ 1.25	H31 x P34	235	74
E1WF 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	17.5 ~ 22.0	1.25 ~ 1.6	H36 x P39	290	79
E1WF 25B	M25	3/4"	1"	15	16	18	17.0 ~ 19.5	21.0 ~ 26.0	1.25 ~ 1.6	H36 x P39	290	79
E1WF 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.5	22.0 ~ 28.0	1.6 ~ 2.0	H45 x P49	490	86
E1WF 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	27.0 ~ 32.0	1.6 ~ 2.0	H45 x P49	490	86
E1WF 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.5	30.0 ~ 35.0	1.6 ~ 2.0	H55 x P59	850	94
E1WF 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	35.1 ~ 40.0	1.6 ~ 2.0	H55 x P59	850	94
E1WF 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 35.5	38.0 ~ 45.0	1.8 ~ 2.5	H68 x P73	1390	100
E1WF 50B	M50	1-1/2"	2"	15	21	24	35.5 ~ 41.5	43.0 ~ 50.0	1.8 ~ 2.5	H68 x P73	1390	100
E1WF 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 45.5	48.0 ~ 53.0	1.8 ~ 2.5	H82 x P88	2070	108
E1WF 63B	M63	2"	2-1/2"	15	24	27	45.0 ~ 50.5	51.0 ~ 56.0	1.8 ~ 2.5	H82 x P88	2070	108
E1WF 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 53.0	55.0 ~ 60.0	1.8 ~ 2.5	H82 x P88	2070	108
E1WF 75A	M75	2-1/2"	3"	20	27	30	49.0 ~ 56.0	56.0 ~ 62.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	62.1 ~ 66.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	66.1 ~ 70.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF 75D	M75	3"		20	30		61.0 ~ 63.0	68.0 ~ 75.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	74.0 ~ 83.0	1.8 ~ 3.0	H110 x P120	4600	132
E1WF 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 77.0	82.0 ~ 90.0	1.8 ~ 3.0	H110 x P120	4600	132
E1WF 100A	M100	3-1/2"	4"	25	32		73.1 ~ 80.0	89.0 ~ 94.0	1.8 ~ 3.0	H120 x P130	5500	144
E1WF 100B	M100	3-1/2"	4"	25	32		79.0 ~ 85.0	93.0 ~ 98.0	1.8 ~ 3.0	H120 x P130	5500	144

* The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.6φ)

Hazardous Cable Gland Type:E1WF/LS



E1WF/LS Type



Application : Wire Armoured Cable

- * For use with lead sheath steel & aluminum cable
- * Outdoor & Indoor use
- * Flameproof & Increased Safety
- * EMC Cable Gland.(360° contact)
- * Double Compression
- * Reduce The Effect of Coldflow Characteristics

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
IECEx Certification	IECEx KOS 09.0018X IECEx PRE 15.0018X
ATEX Certification	02 ATEX 500X Presafe 17 ATEX 11343X
CU TR Certification(-60°C~130°C)	TC RU C-KR.ГБ06.В.00061
KCS Certification	15-AV2BO-0136~38
Classification	DNV, RMRS
Code of Protection	II2G Ex e II, Ex d IIC, II2D Ex tD A21
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All lead sheath types of steel & aluminum wire (SWA) Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
E1WF/LS 20A	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

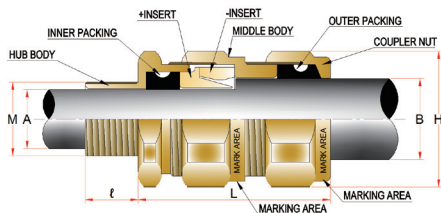
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
E1WF/LS 16A	M16	1/2"	M20	15	15	15	5.0 ~ 8.0	8.0 ~ 13.0	0.9 ~ 1.25	H25 x P27	150	67
E1WF/LS 16B	M16	1/2"	M20	15	15	15	7.0 ~ 11.0	12.0 ~ 15.1	0.9 ~ 1.25	H25 x P27	150	67
E1WF/LS 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.1	13.0 ~ 17.5	0.9 ~ 1.25	H31 x P34	235	74
E1WF/LS 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.1	16.0 ~ 19.5	0.9 ~ 1.25	H31 x P34	235	74
E1WF/LS 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	17.5 ~ 22.0	1.25 ~ 1.6	H36 x P39	290	79
E1WF/LS 25B	M25	3/4"	1"	15	16	18	17.0 ~ 19.5	21.0 ~ 26.0	1.25 ~ 1.6	H36 x P39	290	79
E1WF/LS 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.5	22.0 ~ 28.0	1.6 ~ 2.0	H45 x P49	490	86
E1WF/LS 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	27.0 ~ 32.0	1.6 ~ 2.0	H45 x P49	490	86
E1WF/LS 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.5	30.0 ~ 35.0	1.6 ~ 2.0	H55 x P59	850	94
E1WF/LS 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	35.1 ~ 40.0	1.6 ~ 2.0	H55 x P59	850	94
E1WF/LS 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 35.5	38.0 ~ 45.0	1.8 ~ 2.5	H68 x P73	1390	100
E1WF/LS 50B	M50	1-1/2"	2"	15	21	24	35.5 ~ 41.5	43.0 ~ 50.0	1.8 ~ 2.5	H68 x P73	1390	100
E1WF/LS 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 45.5	48.0 ~ 53.0	1.8 ~ 2.5	H82 x P88	2070	108
E1WF/LS 63B	M63	2"	2-1/2"	15	24	27	45.0 ~ 50.5	51.0 ~ 56.0	1.8 ~ 2.5	H82 x P88	2070	108
E1WF/LS 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 53.0	55.0 ~ 60.0	1.8 ~ 2.5	H82 x P88	2070	108
E1WF/LS 75A	M75	2-1/2"	3"	20	27	30	49.0 ~ 56.0	56.0 ~ 62.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF/LS 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	62.1 ~ 66.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF/LS 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	66.1 ~ 70.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF/LS 75D	M75	3"		20	30		61.0 ~ 63.0	68.0 ~ 75.0	1.8 ~ 2.5	H98 x P106	3270	125
E1WF/LS 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	74.0 ~ 83.0	1.8 ~ 3.0	H110 x P120	4600	132
E1WF/LS 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 77.0	82.0 ~ 90.0	1.8 ~ 3.0	H110 x P120	4600	132
E1WF/LS 100A	M100	3-1/2"	4"	25	32		73.1 ~ 80.0	89.0 ~ 94.0	1.8 ~ 3.0	H120 x P130	5500	144
E1WF/LS 100B	M100	3-1/2"	4"	25	32		79.0 ~ 85.0	93.0 ~ 98.0	1.8 ~ 3.0	H120 x P130	5500	144

※ The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.60)

Hazardous Cable Gland Type:E1XF



E1XF Type



Application : Braided Armoured Cable

- * For use with any types of braided armoured cable
- * Outdoor & Indoor use
- * Flameproof & Increased Safety
- * EMC Cable Gland.(360° contact)
- * Double Compression
- * Reduce The Effect of Coldflow Characteristics

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
IECEX Certification	IECEX KOS 09.0018X IECEX PRE 15.0018X
ATEX Certification	02 ATEX 501X Presafe 17 ATEX 11343X
CU TR Certification(-60°C~130°C)	TC RU C-KR.ГБ06.В.00061
KCS Certification	15-AV2BO-0133 ~35
Classification	DNV, RMRS
Code of Protection	II2G Ex e II, Ex d IIC, II2D Ex tD A21
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of braided armoured cable Steel tape Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
E1XF 20A	M20	Nickel plated brass	Lock Nut Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

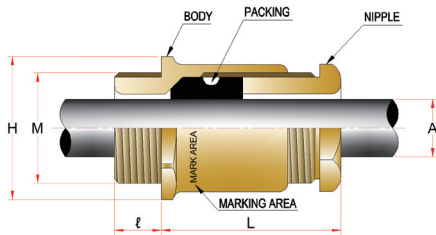
Part No.	Entry Thread Size(M)			Thread Length(L) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
E1XF 16A	M16	1/2"	M20	15	15	15	5.0 ~ 8.0	8.0 ~ 13.0	0.05 ~ 0.8	H25 x P27	150	67
E1XF 16B	M16	1/2"	M20	15	15	15	7.0 ~ 11.0	12.0 ~ 15.1	0.05 ~ 0.8	H25 x P27	150	67
E1XF 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.1	13.0 ~ 17.5	0.05 ~ 0.8	H31 x P34	235	74
E1XF 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.1	16.0 ~ 19.5	0.05 ~ 0.8	H31 x P34	235	74
E1XF 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	17.5 ~ 22.0	0.05 ~ 0.8	H36 x P39	290	79
E1XF 25B	M25	3/4"	1"	15	16	18	17.0 ~ 19.5	21.0 ~ 26.0	0.05 ~ 0.8	H36 x P39	290	79
E1XF 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.5	22.0 ~ 28.0	0.05 ~ 1.2	H45 x P49	490	86
E1XF 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	27.0 ~ 32.0	0.05 ~ 1.2	H45 x P49	490	86
E1XF 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.5	30.0 ~ 35.0	0.05 ~ 1.2	H55 x P59	850	94
E1XF 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	35.1 ~ 40.0	0.05 ~ 1.2	H55 x P59	850	94
E1XF 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 35.5	38.0 ~ 45.0	0.05 ~ 1.2	H68 x P73	1390	100
E1XF 50B	M50	1-1/2"	2"	15	21	24	35.5 ~ 41.5	43.0 ~ 50.0	0.05 ~ 1.2	H68 x P73	1390	100
E1XF 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 45.5	48.0 ~ 53.0	0.05 ~ 1.2	H82 x P88	2070	108
E1XF 63B	M63	2"	2-1/2"	15	24	27	45.0 ~ 50.5	51.0 ~ 56.0	0.05 ~ 1.2	H82 x P88	2070	108
E1XF 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 53.0	55.0 ~ 60.0	0.05 ~ 1.2	H82 x P88	2070	108
E1XF 75A	M75	2-1/2"	3"	20	27	30	49.0 ~ 56.0	56.0 ~ 62.0	0.05 ~ 1.2	H98 x P106	3270	125
E1XF 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	62.1 ~ 66.0	0.05 ~ 1.2	H98 x P106	3270	125
E1XF 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	66.1 ~ 70.0	0.05 ~ 1.2	H98 x P106	3270	125
E1XF 75D	M75	3"		20	30		61.0 ~ 63.0	68.0 ~ 75.0	0.05 ~ 1.2	H98 x P106	3270	125
E1XF 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	74.0 ~ 83.0	0.05 ~ 1.6	H110 x P120	4600	132
E1XF 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 77.0	82.0 ~ 90.0	0.05 ~ 1.6	H110 x P120	4600	132
E1XF 100A	M100	3-1/2"	4"	25	32		73.1 ~ 80.0	89.0 ~ 94.0	0.05 ~ 1.6	H120 x P130	5500	144
E1XF 100B	M100	3-1/2"	4"	25	32		79.0 ~ 85.0	93.0 ~ 98.0	0.05 ~ 1.6	H120 x P130	5500	144

* The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.6φ)

Hazardous Cable Gland Type:OS-A2F-U



OS-A2F-U Type



Application : Non-Armoured Cable

- * For use with braided armoured & non-armoured cable
- * Flameproof & Increased Safety.
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11454X
IECEx Certification	IECEx PRE 17.0062X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-U 20	M20	Nickel plated brass	Lock Nut Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OS-A2F-U 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	79/95	31
OS-A2F-U 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	31
OS-A2F-U 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	33
OS-A2F-U 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	34
OS-A2F-U 32	M32	1"	1-1/4"	15	18	19	17 ~ 26.5	H39 x P41.5	195	38
OS-A2F-U 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	40
OS-A2F-U 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	42
OS-A2F-U 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	46
OS-A2F-U 63X	M63	2-1/2"		15	27		46 ~ 55	H73 x P78	575	46
OS-A2F-U 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	52
OS-A2F-U 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	52
OS-A2F-U 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	60
OS-A2F-U 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	69
OS-A2F-U 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	74

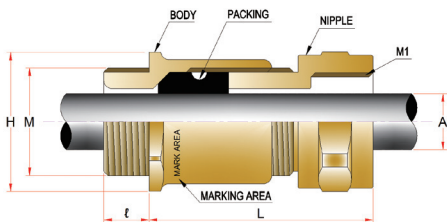
※ Entry hole size tolerance : Thread size+0.6ℓ

► Hazardous > Non-Armoured > Single Compression > OS-A2F-UF

Hazardous Cable Gland Type:OS-A2F-UF



OS-A2F-UF Type



Application : Non-Armoured Cable with Male-Female Type

- * For use with braided armoured & non-armoured cable / male and female threads type
- * Flameproof & Increased Safety.
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11454X
IECEX Certification	IECEX PRE 17.0062X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-UF 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

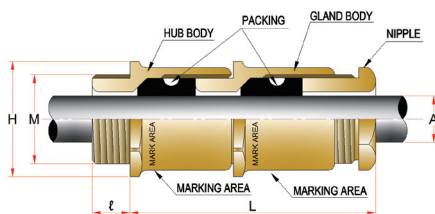
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OS-A2F-UF 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	79/95	44
OS-A2F-UF 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	44
OS-A2F-UF 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	49
OS-A2F-UF 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	52
OS-A2F-UF 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	54
OS-A2F-UF 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	55
OS-A2F-UF 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	62
OS-A2F-UF 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	68
OS-A2F-UF 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	68
OS-A2F-UF 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	78
OS-A2F-UF 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	78
OS-A2F-UF 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	92
OS-A2F-UF 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	109
OS-A2F-UF 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	115

* Entry hole size tolerance : Thread size+0.60

Hazardous Cable Gland Type:OS-A2F-UD



OS-A2F-UD Type



Application : Non-Armoured Cable with Double Compression

- * For use with braided armoured & non-armoured cable
- * Flameproof & Increased Safety.
- * Double Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11454X
IECEx Certification	IECEx PRE 17.0062X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-UD	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OS-A2F-UD 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	79/95	51
OS-A2F-UD 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	51
OS-A2F-UD 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	55
OS-A2F-UD 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	58
OS-A2F-UD 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	63
OS-A2F-UD 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	67
OS-A2F-UD 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	71
OS-A2F-UD 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	77
OS-A2F-UD 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	77
OS-A2F-UD 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	87
OS-A2F-UD 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	87
OS-A2F-UD 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	102
OS-A2F-UD 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	119
OS-A2F-UD 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	125

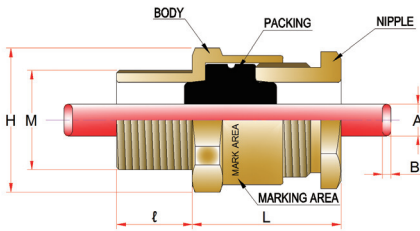
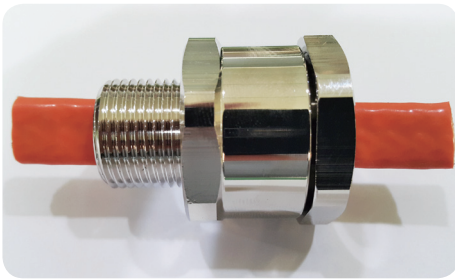
※ Entry hole size tolerance : Thread size+0.6φ

► Hazardous > Non-Armoured > Single Compression > OS-A2F-UH

Hazardous Cable Gland Type:OS-A2F-UH



OS-A2F-UH Type



Application : Heating Cable

- * For use with braided armoured & non-armoured cable
- * Increased Safety.
- * Suitable for Heating Cable
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 7, 31
ATEX Certification	Presafe 17 ATEX 11486X
IECEx Certification	IECEx PRE 17.0083X
Code of Protection	II2G Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 121°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66
Applicable Cable Specification	Heating cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-UH 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag

- * Optional Thread Length : ≥15mm
- * Material for accessories is required

(* in mm)

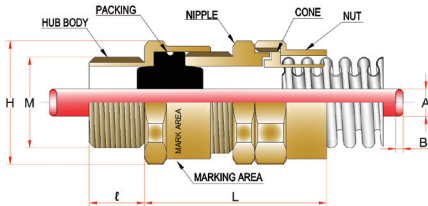
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	A'	B'			
OS-A2F-UH 20	M20	1/2"		15	15		11 ~ 16.5	4.5 ~ 8.0	H32 x P34	125	48
OS-A2F-UH 25	M25	3/4"	1"	15	16	18	11 ~ 16.5	4.5 ~ 8.0	H32 x P34	110	48

※ Entry hole size tolerance : Thread size+0.6ℓ

Hazardous Cable Gland Type:OS-A2F-UHMH



OS-A2F-UHMH Type



Application : Heating Cable with Metal Hose

- * For use with braided armoured & non-armoured cable
- * Increased Safety.
- * Suitable for Heating Cable
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 7, 31
ATEX Certification	Presafe 17 ATEX 11486X
IECEX Certification	IECEX PRE 17.0083X
Code of Protection	II2G Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 121°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66
Applicable Cable Specification	Heating cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-UHMH 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

- * Optional Thread Length : ≥15mm
- * Material for accessories is required

(* in mm)

Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	A'	B'			
OS-A2F-UHMH 20	M20	1/2"		15	15		11 ~ 16.5	4.5 ~ 8.0	H32 x P34	130	66
OS-A2F-UHMH 25	M25	3/4"	1"	15	16	18	11 ~ 16.5	4.5 ~ 8.0	H32 x P34	115	66

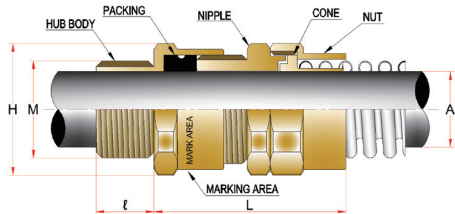
※ Entry hole size tolerance : Thread size+0.6ℓ

► Hazardous > Non-Armoured > Single Compression > OS-A2F-UMH

Hazardous Cable Gland Type:OS-A2F-UMH



OS-A2F-UMH Type



Application : Metal Hose Type

- * For use with braided armoured & non-armoured cable.
- * Flameproof & Increased Safety.
- * Suitable for metal hose.
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11454X
IECEx Certification	IECEx PRE 17.0062X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-UMH 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

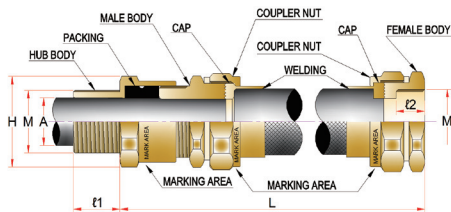
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OS-A2F-UMH 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	44
OS-A2F-UMH 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	49
OS-A2F-UMH 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	52
OS-A2F-UMH 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	54
OS-A2F-UMH 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	55
OS-A2F-UMH 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	62
OS-A2F-UMH 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	68
OS-A2F-UMH 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	68
OS-A2F-UMH 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	78
OS-A2F-UMH 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	78
OS-A2F-UMH 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	92
OS-A2F-UMH 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	109
OS-A2F-UMH 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	115

※ Entry hole size tolerance : Thread size+0.60

Hazardous Cable Gland Type:OS-A2F-UEP



OS-A2F-UEP Type



Application : Flexible Type

- * For use with braided armoured & non-armoured cable.
- * Used in narrow space or complicated area which requires flexibility.
- * Flameproof & Increased Safety.
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 17 ATEX 11454X
IECEX Certification	IECEX PRE 17.0062X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, II2D Ex tb IIC Db
Operating Temperature	-60°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC, Dust Group IIIA, IIIB and IIIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-A2F-UEP 20	M20	Nickel plated brass	Lock nut, Sealing washer, Earth tag, Serrated washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

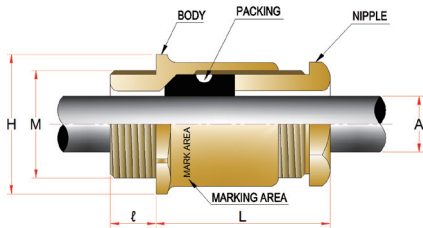
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Length (L)
	Metric	NPT	Option	Metric	NPT	Option			
OS-A2F-UEP 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	61 + Flexible
OS-A2F-UEP 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	66 + Flexible
OS-A2F-UEP 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	70 + Flexible
OS-A2F-UEP 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	76 + Flexible
OS-A2F-UEP 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	81 + Flexible
OS-A2F-UEP 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	85 + Flexible
OS-A2F-UEP 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	92 + Flexible
OS-A2F-UEP 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	92 + Flexible
OS-A2F-UEP 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	104 + Flexible
OS-A2F-UEP 75X	M75	3"		20	30		58 ~ 68	H94 x P99	104 + Flexible
OS-A2F-UEP 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	122 + Flexible
OS-A2F-UEP 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	143 + Flexible
OS-A2F-UEP 115	M115	4"		25	32		88 ~ 101	H126 x P136	150 + Flexible

※ Entry hole size tolerance : Thread size+0.60

Hazardous Cable Gland Type:OSNJ-A2F



OSNJ-A2F Type



Application : Non Armoured Cable

- * For use with braided armoured & non armoured cable
- * Flameproof & Increased Safety
- * Single Compression

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	03 ATEX 1460X
IECEX Certification	IECEX KOS 09.0017X
CU TR Certification(-60°C~130°C)	TC RU C-KR.ГБ06.B.00061
KCS Certification	15-AV2BO-0108 ~ 10
Classification	DNV, RMRS
Code of Protection	II2G Ex e II, Ex d IIC, II2D Ex tD A21
Operating Temperature	-20°C ~ 110°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer
Only Ex e certified Available	Product Code : OSNJ-A2FE

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
OSNJ-A2F 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16~M75 Length 15mm, M90~M100 Length 20mm)
- * Material for accessories is required

(* in mm)

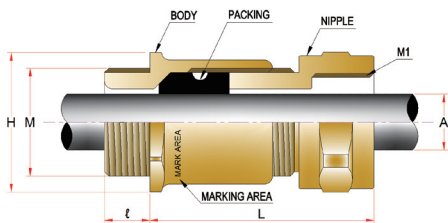
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ-A2F 16A	M16	1/2"	M20	15	15	15	3.0 ~ 7.5	H24 x P26	79/95	31
OSNJ-A2F 16B	M16	1/2"	M20	15	15	15	6.1 ~ 10.0	H24 x P26	79/95	31
OSNJ-A2F 20A	M20	1/2"	3/4"	15	15	16	10.1 ~ 13.0	H27 x P29	95	33
OSNJ-A2F 20B	M20	1/2"	3/4"	15	15	16	13.1 ~ 15.0	H27 x P29	85	33
OSNJ-A2F 25A	M25	3/4"	1"	15	16	18	14.0 ~ 17.5	H32 x P34	125	34
OSNJ-A2F 25B	M25	3/4"	1"	15	16	18	16.1 ~ 19.5	H32 x P34	115	34
OSNJ-A2F 32A	M32	1"	1-1/4"	15	18	19	18.1 ~ 22.0	H39 x P41.5	195	38
OSNJ-A2F 32B	M32	1"	1-1/4"	15	18	19	21.0 ~ 26.0	H39 x P41.5	175	38
OSNJ-A2F 40A	M40	1-1/4"	1-1/2"	15	19	21	24.0 ~ 28.0	H48 x P51	300	40
OSNJ-A2F 40B	M40	1-1/4"	1-1/2"	15	19	21	27.0 ~ 32.0	H48 x P51	265	40
OSNJ-A2F 50A	M50	1-1/2"	2"	15	21	24	32.1 ~ 34.0	H58 x P62	425	42
OSNJ-A2F 50B	M50	1-1/2"	2"	15	21	24	34.1 ~ 40.0	H58 x P62	360	42
OSNJ-A2F 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 44.0	H73 x P78	680	46
OSNJ-A2F 63B	M63	2"	2-1/2"	15	24	27	43.0 ~ 50.0	H73 x P78	575	46
OSNJ-A2F 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 54.0	H73 x P78	575	46
OSNJ-A2F 75A	M75	2-1/2"	3"	20	27	30	52.0 ~ 56.0	H85 x P90	875	52
OSNJ-A2F 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	H85 x P90	860	52
OSNJ-A2F 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	H85 x P90	750	52
OSNJ-A2F 75D	M75	3"		20	30		62.1 ~ 66.0	H85 x P90	725	52
OSNJ-A2F 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	H100 x P106	1690	60
OSNJ-A2F 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 76.0	H100 x P106	1480	60
OSNJ-A2F 100A	M100	3-1/2"	4"	25	32		76.1 ~ 81.0	H112 x P120	2250	69
OSNJ-A2F 100B	M100	3-1/2"	4"	25	32		81.1 ~ 85.0	H112 x P120	2005	69

※ Entry hole size tolerance : Thread size+0.60

Hazardous Cable Gland Type:OSNJ-A2FF



OSNJ-A2FF Type



Application : Non Armoured Cable with Male-Female Type

- * For use with braided armoured & non armoured cable / male and female threads type
- * Flameproof & Increased Safety
- * Single Compression

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	14ATEX5680X
IECEX Certification	IECEX PRE 14.0041X
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, Ex tb IIC Db
Operating Temperature	-55°C ~ 100°C
Regulation	Zone 1&2, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66/67
Applicable Cable Specification	Braided armoured & unarmoured cable, Male and female thread type
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNJ-A2FF 20A	M20(M)*M20(F)	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16~M75 Length 15mm, M90~M100 Length 20mm)
- * Material for accessories is required

(* in mm)

Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ-A2FF 16A	M16	1/2"	M20	15	15	15	5.0 ~ 7.5	H24 x P26	79/95	44
OSNJ-A2FF 16B	M16	1/2"	M20	15	15	15	7.5 ~ 10.0	H24 x P26	79/95	44
OSNJ-A2FF 20A	M20	1/2"	3/4"	15	15	16	10.0 ~ 13.0	H27 x P29	95	49
OSNJ-A2FF 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.0	H27 x P29	85	49
OSNJ-A2FF 25A	M25	3/4"	1"	15	16	18	15.0 ~ 17.5	H32 x P34	125	52
OSNJ-A2FF 25B	M25	3/4"	1"	15	16	18	17.5 ~ 19.5	H32 x P34	115	52
OSNJ-A2FF 32A	M32	1"	1-1/4"	15	18	19	19.5 ~ 22.0	H39 x P41.5	195	54
OSNJ-A2FF 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	H39 x P41.5	175	54
OSNJ-A2FF 40A	M40	1-1/4"	1-1/2"	15	19	21	26.0 ~ 28.0	H48 x P51	300	55
OSNJ-A2FF 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	H48 x P51	265	55
OSNJ-A2FF 50A	M50	1-1/2"	2"	15	21	24	32.0 ~ 36.0	H58 x P62	425	62
OSNJ-A2FF 50B	M50	1-1/2"	2"	15	21	24	36.0 ~ 40.0	H58 x P62	360	62
OSNJ-A2FF 63A	M63	2"	2-1/2"	15	24	27	40.0 ~ 44.0	H73 x P78	680	68
OSNJ-A2FF 63B	M63	2"	2-1/2"	15	24	27	44.0 ~ 50.0	H73 x P78	575	68
OSNJ-A2FF 63C	M63	2"	2-1/2"	15	24	27	50.0 ~ 54.0	H73 x P78	575	68
OSNJ-A2FF 75A	M75	2-1/2"	3"	20	27	30	54.0 ~ 56.0	H85 x P90	875	78
OSNJ-A2FF 75B	M75	2-1/2"	3"	20	27	30	56.0 ~ 60.0	H85 x P90	860	78
OSNJ-A2FF 75C	M75	2-1/2"	3"	20	27	30	60.0 ~ 62.0	H85 x P90	750	78
OSNJ-A2FF 75D	M75	3"		20	30		62.0 ~ 66.0	H85 x P90	725	78
OSNJ-A2FF 90A	M90	3"	3-1/2"	25	30	32	66.0 ~ 70.0	H100 x P106	1690	92
OSNJ-A2FF 90B	M90	3"	3-1/2"	25	30	32	70.0 ~ 76.0	H100 x P106	1480	92
OSNJ-A2FF 100A	M100	3-1/2"	4"	25	32		76.0 ~ 81.0	H112 x P120	2250	109
OSNJ-A2FF 100B	M100	3-1/2"	4"	25	32		81.0 ~ 85.0	H112 x P120	2005	109

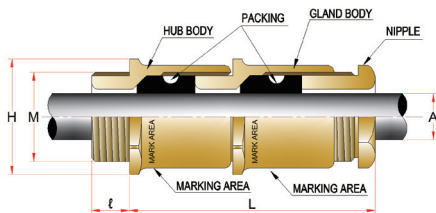
※ Entry hole size tolerance : Thread size+0.60

► Hazardous > Non Armoured > Double Compression > OSNJ-A2FD

Hazardous Cable Gland Type:OSNJ-A2FD



OSNJ-A2FD Type



Application : Non Armoured Cable with Double Compression

- * For use with braided armoured & non armoured cable
- * Flameproof & Increased Safety
- * Double Compression

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	14ATEX5680X
IECEx Certification	IECEx PRE 14.0041X
CU TR Certification(-60°C~130°C)	TC RU C-KR,ГБ06.B.00061
Code of Protection	II2G Ex db IIC Gb, Ex e IIC Gb, Ex tb IIIC Db
Operating Temperature	-55°C ~ 100°C
Regulation	Zone 1 & 2, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured & unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNJ-A2FD 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16~M75 Length 15mm, M90~M100 Length 20mm)
- * Material for accessories is required

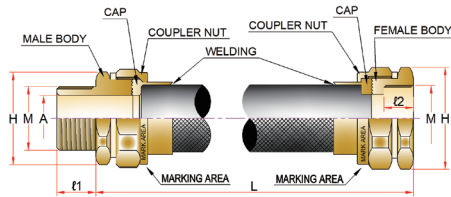
(* in mm)

Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ-A2FD 16A	M16	1/2"	M20	15	15	15	5.0 ~ 7.5	H24 x P26	79/95	51
OSNJ-A2FD 16B	M16	1/2"	M20	15	15	15	7.5 ~ 10.0	H24 x P26	79/95	51
OSNJ-A2FD 20A	M20	1/2"	3/4"	15	15	16	10.0 ~ 13.0	H27 x P29	95	55
OSNJ-A2FD 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.0	H27 x P29	85	55
OSNJ-A2FD 25A	M25	3/4"	1"	15	16	18	15.0 ~ 17.5	H32 x P34	125	58
OSNJ-A2FD 25B	M25	3/4"	1"	15	16	18	17.5 ~ 19.5	H32 x P34	115	58
OSNJ-A2FD 32A	M32	1"	1-1/4"	15	18	19	19.5 ~ 22.0	H39 x P41.5	195	63
OSNJ-A2FD 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	H39 x P41.5	175	63
OSNJ-A2FD 40A	M40	1-1/4"	1-1/2"	15	19	21	26.0 ~ 28.0	H48 x P51	300	67
OSNJ-A2FD 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	H48 x P51	265	67
OSNJ-A2FD 50A	M50	1-1/2"	2"	15	21	24	32.0 ~ 36.0	H58 x P62	425	71
OSNJ-A2FD 50B	M50	1-1/2"	2"	15	21	24	36.0 ~ 40.0	H58 x P62	360	71
OSNJ-A2FD 63A	M63	2"	2-1/2"	15	24	27	40.0 ~ 44.0	H73 x P78	680	77
OSNJ-A2FD 63B	M63	2"	2-1/2"	15	24	27	44.0 ~ 50.0	H73 x P78	575	77
OSNJ-A2FD 63C	M63	2"	2-1/2"	15	24	27	50.0 ~ 54.0	H73 x P78	575	77
OSNJ-A2FD 75A	M75	2-1/2"	3"	20	27	30	54.0 ~ 56.0	H85 x P90	875	87
OSNJ-A2FD 75B	M75	2-1/2"	3"	20	27	30	56.0 ~ 60.0	H85 x P90	860	87
OSNJ-A2FD 75C	M75	2-1/2"	3"	20	27	30	60.0 ~ 62.0	H85 x P90	750	87
OSNJ-A2FD 75D	M75	3"		20	30		62.0 ~ 66.0	H85 x P90	725	87
OSNJ-A2FD 90A	M90	3"	3-1/2"	25	30	32	66.0 ~ 70.0	H100 x P106	1690	102
OSNJ-A2FD 90B	M90	3"	3-1/2"	25	30	32	70.0 ~ 76.0	H100 x P106	1480	102
OSNJ-A2FD 100A	M100	3-1/2"	4"	25	32		76.0 ~ 81.0	H112 x P120	2250	119
OSNJ-A2FD 100B	M100	3-1/2"	4"	25	32		81.0 ~ 85.0	H112 x P120	2005	119

※ Entry hole size tolerance : Thread size+0.6φ

Hazardous Flexible Fittings Type:OSEP

OSEP Type



Application : Explosion Proof Flexible Fittings

* used in narrow space or complicated area which requires flexibility

Code of Protection	Ex d
Ingress Protection	IP 54
Thread Available	Male and Female thread type, Male and Male type, Female and Female type
Gland Material	SUS 304 For Flexible Part(tube), Nickel Plated Brass/ SUS 304/ SUS 316L For Gland Part(Standard)

Order Example

Part No.	Thread	Material
OSEP-16	NPT 1/2"(M) x NPT 1/2"(F)	Gland : Nickel Plated Brass, Flexible(1.2m) : Stainless Steel 304

* Material for tube and gland is required

(* in mm)

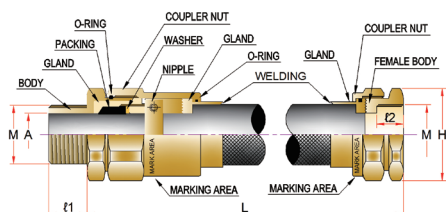
Part No.	Entry Thread Size(M)	Thread Length(ℓ) - Min		Cable Dia	Hexagon Dimensions	Length (L)
	NPT/PF/PT	Male(ℓ1)	Female(ℓ2)	Inner 'A'		
OSEP - 16	1/2"	17	16	6 ~ 13.5	H32 x P34	300mm ~ 3000mm
OSEP - 22	3/4"	18	17	14 ~ 18	H38 x P40	
OSEP - 28	1"	21	19	19 ~ 22	H45 x P48	
OSEP - 36	1-1/4"	26	24	23 ~ 29	H57 x P60	
OSEP - 42	1-1/2"	26	24	30 ~ 35	H64 x P67	
OSEP - 54	2"	26	24	36 ~ 46	H76 x P80	
OSEP - 70	2-1/2"	30	26	47 ~ 56	H90 x P95	
OSEP - 82	3"	32	28	57 ~ 74	H102 x P109	
OSEP - 104	4"	32	29	75 ~ 88	H135 x P142	

※ Entry hole size tolerance : Thread size+0.6φ

► Hazardous > Flexible(Metal Hose) > One Touch type > OSEP-W

Hazardous One Touch OSEP Type:OSEP-W

OSEP-W Type



Application : One Touch Flexible Fittings

- * For use with cable for the factory electrical equipment or machine
- * High performance flexibility of seamless tube provides easy workability in the narrow space or complicated area

Thread Available	Male and Female thread type, Male and Male type, Female and Female type
Gland Material	SUS 304 For Flexible Part(tube), Nickel Plated Brass/ SUS 304/ SUS 316L For Gland Part(Standard)

Order Example

Part No.	Thread	Material
OSEP-W-16	NPT 1/2"(M) x NPT 1/2"(F)	Gland : Nickel Plated Brass, Flexible(1.2m) : Stainless Steel 304

* Material for tube and gland is required

(* in mm)

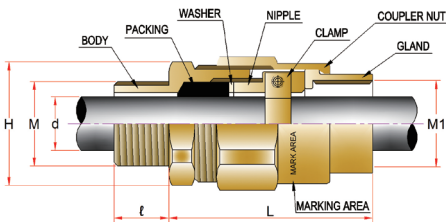
Part No.	Entry Thread Size(M)	Thread Length(ℓ) - Min		Cable Dia	Hexagon Dimensions	Length (L)
	NPT/PF/PT	Male(ℓ1)	Female(ℓ2)	Inner 'A'		
OSEP-W - 16	1/2"	17	16	6 ~ 13.5	H32 x P34	300mm ~ 3000mm
OSEP-W - 22	3/4"	18	17	14 ~ 18	H38 x P40	
OSEP-W - 28	1"	21	19	19 ~ 22	H45 x P48	
OSEP-W - 36	1-1/4"	26	24	23 ~ 29	H57 x P60	
OSEP-W - 42	1-1/2"	26	24	30 ~ 35	H64 x P67	
OSEP-W - 54	2"	26	24	36 ~ 46	H76 x P80	
OSEP-W - 70	2-1/2"	30	26	47 ~ 56	H90 x P95	
OSEP-W - 42	1-1/2"	26	24	30 ~ 35	H64 x P67	

※ Entry hole size tolerance : Thread size+0.60

Hazardous Cable Gland Type:OSXP-F



OSXP-F Type



Application : Cable Packing Type

- * For use with pipe connection or machine
- * Flameproof & Increased Safety
- * Single Compression
- * Male and Female Type

Compliance Standard	KS IEC 60079-0, 1, 7, 31
KCS Certification	10-AV2B0-0416X, 10-AV2B0-0417X, 10-AV2B0-0479X
Code of Protection	Ex e, Ex d (Dual Certified)
Ingress Protection	IP 66 / 67
Thread Available	Male and female thread type
Gland Material	Nickel Plated Brass(Standard), Stainless Steel
Gasket (washer)	PTFE (Teflon)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Earth Tag, Serrated Washer, Reducer, Adaptor

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
OSXP-F 16	NPT 1/2"	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag

* Material for accessories is required

(* in mm)

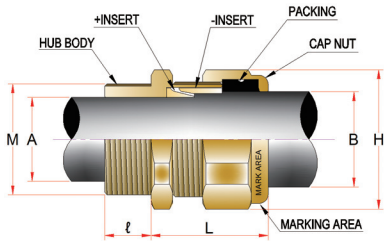
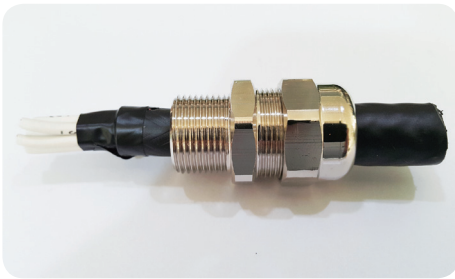
Part No.	Entry Thread Size(M)	Thread Length(ℓ) - Min	Cable Dia	Hexagon Dimensions	Length (L)
	NPT/PF/PT	NPT/PF/PT	Inner 'A'		
OSXP-F 16	1/2"	16	6 ~ 13.5	H30 x P33	65
OSXP-F 22	3/4"	17	14 ~ 18	H35 x P38	71
OSXP-F 28	1"	18	19 ~ 22	H43 x P47	74
OSXP-F 36	1-1/4"	20	23 ~ 29	H50 x P54	82
OSXP-F 42	1-1/2"	22	30 ~ 35	H57 x P61	84
OSXP-F 54	2"	24	36 ~ 46	H70 x P75	90
OSXP-F 70	2-1/2"	26	47 ~ 56	H85 x P91	100
OSXP-F 82	3"	31	57 ~ 74	H98 x P106	108
OSXP-F 104	4"	33	75 ~ 88	H125 x P133	112

※ Entry hole size tolerance : Thread size+0.6ℓ

Hazardous Cable Gland Type:OSER-Z



OSER-Z Type



Application : Any Type of Armoured Cable(touch)

- * For use with any type of armoured cable.
- * Outdoor & Indoor use. * Touch type.
- * EMC Cable Gland. (360° contact)
- * Increased Safety. * Single Compression.
- * Reduce The Effect of Coldflow Characteristics.

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 7, 31
ATEX Certification	Presafe 17 ATEX 11342X
IECEX Certification	IECEX PRE 17.0060X
Code of Protection	II2G Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 130°C
Regulation	Zone 1, 2, 21&22, Gas Group IIA, IIB and IIC
Ingress Protection	IP 66 / 68(20Bar, 2H)
Applicable Cable Specification	Any types of armoured cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(standard), PTFE(Teflon)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag,

Order Example

Part No.	Thread	Material	Accessories
OSER-Z 16	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Material for accessories is required

(* in mm)

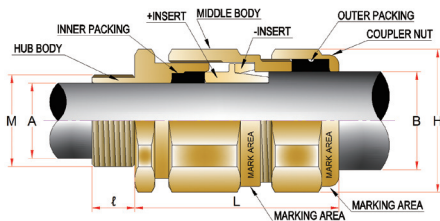
Part No.	Entry Thread Size(M)			Thread Length(l) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSER-Z 16	M16	1/2"	M20	15	15	15	5 ~ 11.5	H21 x P23	150	67
OSER-Z 20	M20	1/2"	3/4"	15	15	16	9 ~ 16	H25 x P27	235	74
OSER-Z 25	M25	3/4"	1"	15	16	18	14 ~ 20	H36 x P39	290	79
OSER-Z 32	M32	1"	1-1/4"	15	18	19	20 ~ 26	H45 x P49	490	86
OSER-Z 40	M40	1-1/4"	1-1/2"	15	19	21	25 ~ 34	H47 x P50	850	94
OSER-Z 50	M50	1-1/2"	2"	15	21	24	33 ~ 42	H56 x P60	1390	100
OSER-Z 63	M63	2"	2-1/2"	15	24	27	42 ~ 52	H70 x P75	2070	108

* Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type:OS-E1U



OS-E1U Type



Application : Any Type of Armoured Cable

- * For use with any type of armoured cable
- * Outdoor & Indoor use.
- * Weatherproof & Waterproof
- * EMC Cable Gland. (360° contact)
- * Reduce The Effect of Coldflow Characteristics.
- * Double Compression

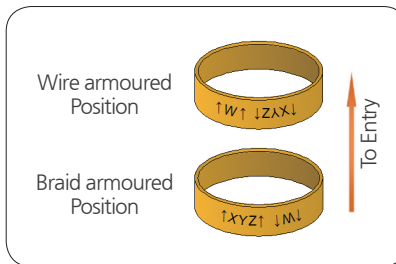
Design Specification	BS 6121, IEC 62444, EN 50262
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of armoured cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-E1U 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required



BS 6121 Type of Gland

(The suffix for each type of protection)

Single wire armoured	W
Wire braided	X
Aluminium strip armoured	Y
Double steel tape armoured	Z

(* in mm)

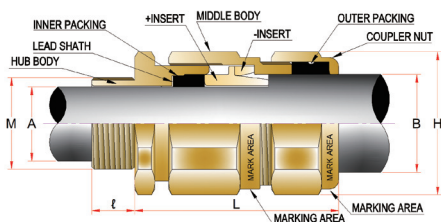
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OS-E1U 16	M16	1/2"	M20	15	15	15	5.0 ~ 11.5	7.0 ~ 16.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	150	67
OS-E1U 20	M20	1/2"	3/4"	15	15	16	7.5 ~ 15.2	12.0 ~ 21.0	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P33	235	74
OS-E1U 25	M25	3/4"	1"	15	16	18	13.0 ~ 19.6	17.0 ~ 26.2	1.25 ~ 1.6	0.05 ~ 0.8	H37 x P40	290	79
OS-E1U 32	M32	1"	1-1/4"	15	18	19	16.5 ~ 26.2	22.0 ~ 34.0	1.6 ~ 2.0	0.05 ~ 1.2	H47 x P50	490	86
OS-E1U 40	M40	1-1/4"	1-1/2"	15	19	21	23.0 ~ 32.3	30.0 ~ 42.0	1.6 ~ 2.0	0.05 ~ 1.2	H56 x P60	850	94
OS-E1U 50	M50	1-1/2"	2"	15	21	24	29.0 ~ 41.5	38.0 ~ 53.7	1.8 ~ 2.5	0.05 ~ 1.2	H70 x P75	1390	100
OS-E1U 63	M63	2"	2-1/2"	15	24	27	39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	2070	108
OS-E1U 63X	M63	2-1/2"		15	27		46.0 ~ 55.0	52.0 ~ 66.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OS-E1U 75	M75	2-1/2"	3"	20	27	30	52.0 ~ 61.0	58.0 ~ 72.0	1.8 ~ 2.5	0.05 ~ 1.2	H92 x P100	3270	125
OS-E1U 75X	M75	3"		20	30		59.0 ~ 67.0	66.1 ~ 79.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OS-E1U 90	M90	3"	3-1/2"	25	30	32	66.0 ~ 80.0	72.0 ~ 90.0	1.8 ~ 3.0	0.05 ~ 1.6	H110 x P120	4600	132
OS-E1U 100	M100	3-1/2"	4"	25	32	32	76.0 ~ 90.5	84.0 ~ 102	1.8 ~ 3.0	0.05 ~ 1.6	H123 x P133	5500	144
OS-E1U 115	M115	4"		25	32		88.0 ~ 102	100 ~ 118	1.8 ~ 3.0	0.05 ~ 1.6	H135 x P143	5500	144

※ The entry holes shall have a diameter not more than 0.6 mm greater than the nominal diameter. (Entry hole size tolerance : Thread size+0.60)

Industrial Cable Gland Type:OS-E1U/LS



OS-E1U/LS Type



Application : Lead Sheath Type of Armoured Cable

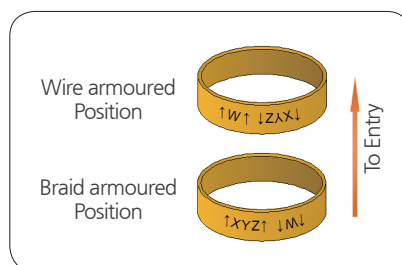
- * For use with any type of armoured cable
- * Outdoor & Indoor use.
- * Weatherproof & Waterproof
- * EMC Cable Gland. (360° contact)
- * Reduce The Effect of Coldflow Characteristics.
- * Double Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of armoured cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OS-E1U/LS 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)
- * Material for accessories is required



BS 6121 Type of Gland (The suffix for each type of protection)

Single wire armoured	W
Wire braided	X
Aluminium strip armoured	Y
Double steel tape armoured	Z

(* in mm)

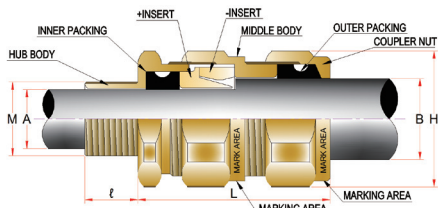
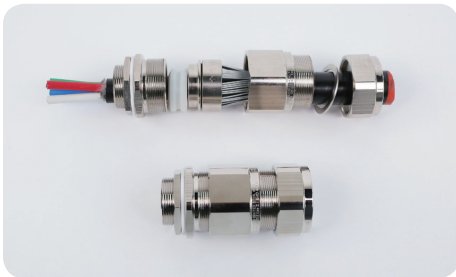
Part No.	Entry Thread Size(M)			Thread Length(L)-Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OS-E1U/LS 16	M16	1/2"	M20	15	15	15	5.0 ~ 11.5	7.0 ~ 16.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	150	67
OS-E1U/LS 20	M20	1/2"	3/4"	15	15	16	7.5 ~ 15.2	12.0 ~ 21.0	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P33	235	74
OS-E1U/LS 25	M25	3/4"	1"	15	16	18	13.0 ~ 19.6	17.0 ~ 26.2	1.25 ~ 1.6	0.05 ~ 0.8	H37 x P40	290	79
OS-E1U/LS 32	M32	1"	1-1/4"	15	18	19	16.5 ~ 26.2	22.0 ~ 34.0	1.6 ~ 2.0	0.05 ~ 1.2	H47 x P50	490	86
OS-E1U/LS 40	M40	1-1/4"	1-1/2"	15	19	21	23.0 ~ 32.3	30.0 ~ 42.0	1.6 ~ 2.0	0.05 ~ 1.2	H56 x P60	850	94
OS-E1U/LS 50	M50	1-1/2"	2"	15	21	24	29.0 ~ 41.5	38.0 ~ 53.7	1.8 ~ 2.5	0.05 ~ 1.2	H70 x P75	1390	100
OS-E1U/LS 63	M63	2"	2-1/2"	15	24	27	39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	2070	108
OS-E1U/LS 63X	M63	2-1/2"		15	27		46.0 ~ 55.0	52.0 ~ 66.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OS-E1U/LS 75	M75	2-1/2"	3"	20	27	30	52.0 ~ 61.0	58.0 ~ 72.0	1.8 ~ 2.5	0.05 ~ 1.2	H92 x P100	3270	125
OS-E1U/LS 75X	M75	3"		20	30		59.0 ~ 67.0	66.1 ~ 79.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OS-E1U/LS 90	M90	3"	3-1/2"	25	30	32	66.0 ~ 80.0	72.0 ~ 90.0	1.8 ~ 3.0	0.05 ~ 1.6	H110 x P120	4600	132
OS-E1U/LS 100	M100	3-1/2"	4"	25	32	32	76.0 ~ 90.5	84.0 ~ 102	1.8 ~ 3.0	0.05 ~ 1.6	H123 x P133	5500	144
OS-E1U/LS 115	M115	4"		25	32		88.0 ~ 102	100 ~ 118	1.8 ~ 3.0	0.05 ~ 1.6	H135 x P143	5500	144

※ The entry holes shall have a diameter not more than 0.6 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.6φ)

Industrial Cable Gland Type:E1W



E1W Type



Application : Wire Armoured Cable

- * For use with any types of steel & aluminum wire cable
- * Outdoor & Indoor use
- * EMC Cable Gland.(360° contact)
- * Weatherproof & Waterproof
- * Double Compression
- * Reduce The Effect of Coldflow Characteristic

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
KOMERI Certification	KOMERI-2014-02
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All types of steel & aluminum wire Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
E1W 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100Length 25mm)

* Material for accessories is required

(* in mm)

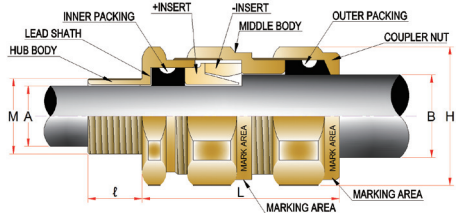
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
E1W 16A	M16	1/2"	M20	15	15	15	5.0 ~ 8.0	8.0 ~ 13.0	0.9 ~ 1.25	H25 x P27	150	67
E1W 16B	M16	1/2"	M20	15	15	15	7.0 ~ 11.0	12.0 ~ 15.1	0.9 ~ 1.25	H25 x P27	150	67
E1W 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.1	13.0 ~ 17.5	0.9 ~ 1.25	H31 x P34	235	74
E1W 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.1	16.0 ~ 19.5	0.9 ~ 1.25	H31 x P34	235	74
E1W 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	17.5 ~ 22.0	1.25 ~ 1.6	H36 x P39	290	79
E1W 25B	M25	3/4"	1"	15	16	18	17.0 ~ 19.5	21.0 ~ 26.0	1.25 ~ 1.6	H36 x P39	290	79
E1W 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.5	22.0 ~ 28.0	1.6 ~ 2.0	H45 x P49	490	86
E1W 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	27.0 ~ 32.0	1.6 ~ 2.0	H45 x P49	490	86
E1W 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.5	30.0 ~ 35.0	1.6 ~ 2.0	H55 x P59	850	94
E1W 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	35.1 ~ 40.0	1.6 ~ 2.0	H55 x P59	850	94
E1W 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 35.5	38.0 ~ 45.0	1.8 ~ 2.5	H68 x P73	1390	100
E1W 50B	M50	1-1/2"	2"	15	21	24	35.5 ~ 41.5	43.0 ~ 50.0	1.8 ~ 2.5	H68 x P73	1390	100
E1W 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 45.5	48.0 ~ 53.0	1.8 ~ 2.5	H82 x P88	2070	108
E1W 63B	M63	2"	2-1/2"	15	24	27	45.0 ~ 50.5	51.0 ~ 56.0	1.8 ~ 2.5	H82 x P88	2070	108
E1W 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 53.0	55.0 ~ 60.0	1.8 ~ 2.5	H82 x P88	2070	108
E1W 75A	M75	2-1/2"	3"	20	27	30	49.0 ~ 56.0	56.0 ~ 62.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	62.1 ~ 66.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	66.1 ~ 70.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W 75D	M75	3"		20	30		61.0 ~ 63.0	68.0 ~ 75.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	74.0 ~ 83.0	1.8 ~ 3.0	H110 x P120	4600	132
E1W 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 77.0	82.0 ~ 90.0	1.8 ~ 3.0	H110 x P120	4600	132
E1W 100A	M100	3-1/2"	4"	25	32		73.1 ~ 80.0	89.0 ~ 94.0	1.8 ~ 3.0	H120 x P130	5500	144
E1W 100B	M100	3-1/2"	4"	25	32		79.0 ~ 85.0	93.0 ~ 98.0	1.8 ~ 3.0	H120 x P130	5500	144

※ The entry holes shall have a diameter not more than 0.6 mm greater than the nominal diameter. (Entry hole size tolerance : Thread size+0.60)

Industrial Cable Gland Type:E1W/LS



E1W/LS Type



Application : Lead Sheath Type of Armoured Cable

- * For use with lead sheath steel & aluminum cable
- * Outdoor & Indoor use
- * EMC Cable Gland.(360° contact)
- * Weatherproof & Waterproof
- * Double Compression
- * Reduce The Effect of Coldflow Characteristic

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Ingress Protection	IP 66 / 67
Applicable Cable Specification	All lead sheath types of steel & aluminum wire Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
E1W/LS 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100Length 25mm) 로 수정

* Material for accessories is required

(* in mm)

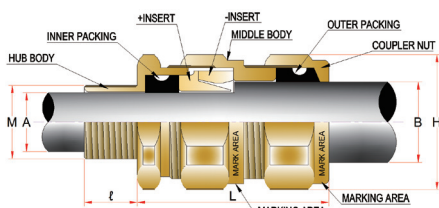
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
E1W/LS 16A	M16	1/2"	M20	15	15	15	5.0 ~ 8.0	8.0 ~ 13.0	0.9 ~ 1.25	H25 x P27	150	67
E1W/LS 16B	M16	1/2"	M20	15	15	15	7.0 ~ 11.0	12.0 ~ 15.1	0.9 ~ 1.25	H25 x P27	150	67
E1W/LS 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.1	13.0 ~ 17.5	0.9 ~ 1.25	H31 x P34	235	74
E1W/LS 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.1	16.0 ~ 19.5	0.9 ~ 1.25	H31 x P34	235	74
E1W/LS 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	17.5 ~ 22.0	1.25 ~ 1.6	H36 x P39	290	79
E1W/LS 25B	M25	3/4"	1"	15	16	18	17.0 ~ 19.5	21.0 ~ 26.0	1.25 ~ 1.6	H36 x P39	290	79
E1W/LS 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.5	22.0 ~ 28.0	1.6 ~ 2.0	H45 x P49	490	86
E1W/LS 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	27.0 ~ 32.0	1.6 ~ 2.0	H45 x P49	490	86
E1W/LS 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.5	30.0 ~ 35.0	1.6 ~ 2.0	H55 x P59	850	94
E1W/LS 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	35.1 ~ 40.0	1.6 ~ 2.0	H55 x P59	850	94
E1W/LS 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 35.5	38.0 ~ 45.0	1.8 ~ 2.5	H68 x P73	1390	100
E1W/LS 50B	M50	1-1/2"	2"	15	21	24	35.5 ~ 41.5	43.0 ~ 50.0	1.8 ~ 2.5	H68 x P73	1390	100
E1W/LS 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 45.5	48.0 ~ 53.0	1.8 ~ 2.5	H82 x P88	2070	108
E1W/LS 63B	M63	2"	2-1/2"	15	24	27	45.0 ~ 50.5	51.0 ~ 56.0	1.8 ~ 2.5	H82 x P88	2070	108
E1W/LS 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 53.0	55.0 ~ 60.0	1.8 ~ 2.5	H82 x P88	2070	108
E1W/LS 75A	M75	2-1/2"	3"	20	27	30	49.0 ~ 56.0	56.0 ~ 62.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W/LS 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	62.1 ~ 66.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W/LS 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	66.1 ~ 70.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W/LS 75D	M75	3"		20	30		61.0 ~ 63.0	68.0 ~ 75.0	1.8 ~ 2.5	H98 x P106	3270	125
E1W/LS 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	74.0 ~ 83.0	1.8 ~ 3.0	H110 x P120	4600	132
E1W/LS 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 77.0	82.0 ~ 90.0	1.8 ~ 3.0	H110 x P120	4600	132
E1W/LS 100A	M100	3-1/2"	4"	25	32		73.1 ~ 80.0	89.0 ~ 94.0	1.8 ~ 3.0	H120 x P130	5500	144
E1W/LS 100B	M100	3-1/2"	4"	25	32		79.0 ~ 85.0	93.0 ~ 98.0	1.8 ~ 3.0	H120 x P130	5500	144

※ The entry holes shall have a diameter not more than 0.6 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.6ℓ)

Industrial Cable Gland Type:E1X



E1X Type



Application : Braided Armoured Cable

- * For use with any types of braided armoured cable
- * Outdoor & Indoor use
- * EMC Cable Gland.(360° contact)
- * Weatherproof & Waterproof
- * Double Compression
- * Reduce The Effect of Coldflow Characteristic

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
KOMERI Certification	KOMERI-2014-03
Ingress Protection	IP 66 / 67
Applicable Cable Specification	braided armoured / Steel tape armoured cable
Gland Material	Nickel plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
E1X 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

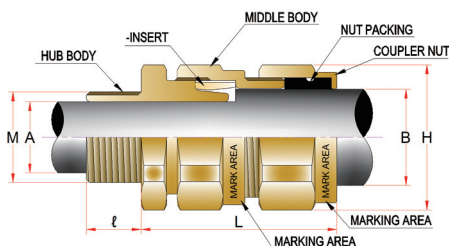
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
E1X 16A	M16	1/2"	M20	15	15	15	5.0 ~ 8.0	8.0 ~ 13.0	0.05 ~ 0.8	H25 x P27	150	67
E1X 16B	M16	1/2"	M20	15	15	15	7.0 ~ 11.0	12.0 ~ 15.1	0.05 ~ 0.8	H25 x P27	150	67
E1X 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.1	13.0 ~ 17.5	0.05 ~ 0.8	H31 x P34	235	74
E1X 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.1	16.0 ~ 19.5	0.05 ~ 0.8	H31 x P34	235	74
E1X 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	17.5 ~ 22.0	0.05 ~ 0.8	H36 x P39	290	79
E1X 25B	M25	3/4"	1"	15	16	18	17.0 ~ 19.5	21.0 ~ 26.0	0.05 ~ 0.8	H36 x P39	290	79
E1X 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.5	22.0 ~ 28.0	0.05 ~ 1.2	H45 x P49	490	86
E1X 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	27.0 ~ 32.0	0.05 ~ 1.2	H45 x P49	490	86
E1X 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.5	30.0 ~ 35.0	0.05 ~ 1.2	H55 x P59	850	94
E1X 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	35.1 ~ 40.0	0.05 ~ 1.2	H55 x P59	850	94
E1X 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 35.5	38.0 ~ 45.0	0.05 ~ 1.2	H68 x P73	1390	100
E1X 50B	M50	1-1/2"	2"	15	21	24	35.5 ~ 41.5	43.0 ~ 50.0	0.05 ~ 1.2	H68 x P73	1390	100
E1X 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 45.5	48.0 ~ 53.0	0.05 ~ 1.2	H82 x P88	2070	108
E1X 63B	M63	2"	2-1/2"	15	24	27	45.0 ~ 50.5	51.0 ~ 56.0	0.05 ~ 1.2	H82 x P88	2070	108
E1X 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 53.0	55.0 ~ 60.0	0.05 ~ 1.2	H82 x P88	2070	108
E1X 75A	M75	2-1/2"	3"	20	27	30	49.0 ~ 56.0	56.0 ~ 62.0	0.05 ~ 1.2	H98 x P106	3270	125
E1X 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	62.1 ~ 66.0	0.05 ~ 1.2	H98 x P106	3270	125
E1X 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	66.1 ~ 70.0	0.05 ~ 1.2	H98 x P106	3270	125
E1X 75D	M75	3"		20	30		61.0 ~ 63.0	68.0 ~ 75.0	0.05 ~ 1.2	H98 x P106	3270	125
E1X 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	74.0 ~ 83.0	0.05 ~ 1.6	H110 x P120	4600	132
E1X 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 77.0	82.0 ~ 90.0	0.05 ~ 1.6	H110 x P120	4600	132
E1X 100A	M100	3-1/2"	4"	25	32		73.1 ~ 80.0	89.0 ~ 94.0	0.05 ~ 1.6	H120 x P130	5500	144
E1X 100B	M100	3-1/2"	4"	25	32		79.0 ~ 85.0	93.0 ~ 98.0	0.05 ~ 1.6	H120 x P130	5500	144

※ The entry holes shall have a diameter not more than 0.6 mm greater than the nominal diameter. (Entry hole size tolerance : Thread size+0.60)

Industrial Cable Gland Type:OSCU



OSCU Type



Application : Armoured Cable with Single Compression

- * For any types of armoured cable
- * Outdoor & Indoor use.
- * Single Compression.
- * EMC Cable Gland. (360° contact)
- * Weatherproof & Waterproof.
- * Reduce The Effect of Coldflow Characteristics.

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Ingress Protection	IP 66
Applicable Cable Specification	Any type of Armoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, shroud, Earth Tag, serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSCU 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)
- * Material for accessories is required

(* in mm)

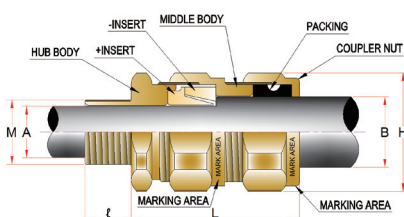
Part No.	Entry Thread Size(M)			Thread Length(l)-Min			Cable Dia		Armour Size	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'				
OSCU 16	M16	1/2"	M20	15	15	15	11.8	7.0 ~ 16.1	0.05 ~ 1.25	H25 x P27	150	67
OSCU 20	M20	1/2"	3/4"	15	15	16	15.4	12.0 ~ 21.0	0.05 ~ 1.25	H31 x P33	235	74
OSCU 25	M25	3/4"	1"	15	16	18	20.0	17.0 ~ 26.2	0.05 ~ 1.6	H37 x P40	290	79
OSCU 32	M32	1"	1-1/4"	15	18	19	26.4	22.0 ~ 34.0	0.05 ~ 2.0	H47 x P50	490	86
OSCU 40	M40	1-1/4"	1-1/2"	15	19	21	33.0	30.0 ~ 42.0	0.05 ~ 2.0	H56 x P60	850	94
OSCU 50	M50	1-1/2"	2"	15	21	24	44.0	42.0 ~ 52.0	0.05 ~ 2.5	H70 x P75	1390	100
OSCU 63	M63	2"	2-1/2"	15	24	27	50.0	45.0 ~ 60.0	0.05 ~ 2.5	H77 x P82	2070	108
OSCU 63X	M63	2-1/2"		15	27		56.0	52.0 ~ 66.0	0.05 ~ 2.5	H82 x P88	2070	108
OSCU 75	M75	2-1/2"	3"	20	27	30	62.0	54.0 ~ 72.0	0.05 ~ 2.5	H92 x P100	3270	125
OSCU 75X	M75	3"		20	30		68.0	66.1 ~ 79.0	0.05 ~ 2.5	H98 x P106	3270	125
OSCU 90	M90	3"	3-1/2"	25	30	32	80.0	72.0 ~ 90.0	0.05 ~ 3.0	H110 x P120	4600	132
OSCU 100	M100	3-1/2"	4"	25	32	32	91.0	84.0 ~ 102	0.05 ~ 3.0	H123 x P133	5500	144
OSCU 115	M115	4"		25	32		102.0	100 ~ 118	0.05 ~ 3.0	H135 x P143	5500	144

* The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.6Ø)

Industrial Cable Gland Type:OSNJ-CW



OSNJ-CW Type



Application : Armoured Cable with Single Compression

- * For use with any types of armoured cable
- * Outdoor & Indoor use
- * EMC Cable Gland. (360° contact)
- * Weatherproof & Waterproof
- * Single Compression
- * Reduce The Effect of Coldflow Characteristic

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
KOMERI Certification(KAS)	KOMERI-2014-01
Ingress Protection	IP 66
Applicable Cable Specification	All types of steel & aluminum wire Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNJ-CW 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

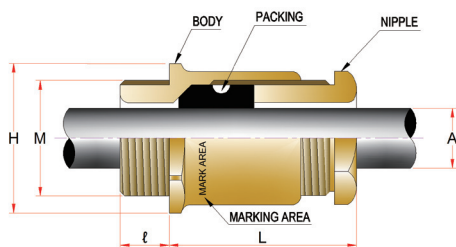
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OSNJ-CW 16A	M16	1/2"	M20	15	15	15	11.5	8.0 ~ 13.0	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	150	67
OSNJ-CW 16B	M16	1/2"	M20	15	15	15	11.5	12.0 ~ 15.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	150	67
OSNJ-CW 20A	M20	1/2"	3/4"	15	15	16	15.2	13.0 ~ 17.5	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P34	235	74
OSNJ-CW 20B	M20	1/2"	3/4"	15	15	16	15.2	16.0 ~ 19.5	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P34	235	74
OSNJ-CW 25A	M25	3/4"	1"	15	16	18	19.6	17.5 ~ 22.0	1.25 ~ 1.6	0.05 ~ 0.8	H36 x P39	290	79
OSNJ-CW 25B	M25	3/4"	1"	15	16	18	19.6	21.0 ~ 26.0	1.25 ~ 1.6	0.05 ~ 0.8	H36 x P39	290	79
OSNJ-CW 32A	M32	1"	1-1/4"	15	18	19	26.2	22.0 ~ 28.0	1.6 ~ 2.0	0.05 ~ 1.2	H45 x P49	490	86
OSNJ-CW 32B	M32	1"	1-1/4"	15	18	19	26.2	27.0 ~ 32.0	1.6 ~ 2.0	0.05 ~ 1.2	H45 x P49	490	86
OSNJ-CW 40A	M40	1-1/4"	1-1/2"	15	19	21	33.0	30.0 ~ 35.0	1.6 ~ 2.0	0.05 ~ 1.2	H55 x P59	850	94
OSNJ-CW 40B	M40	1-1/4"	1-1/2"	15	19	21	33.0	35.1 ~ 40.0	1.6 ~ 2.0	0.05 ~ 1.2	H55 x P59	850	94
OSNJ-CW 50A	M50	1-1/2"	2"	15	21	24	42.0	38.0 ~ 45.0	1.8 ~ 2.5	0.05 ~ 1.2	H68 x P73	1390	100
OSNJ-CW 50B	M50	1-1/2"	2"	15	21	24	42.0	43.0 ~ 50.0	1.8 ~ 2.5	0.05 ~ 1.2	H68 x P73	1390	100
OSNJ-CW 63A	M63	2"	2-1/2"	15	24	27	54.5	48.0 ~ 53.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OSNJ-CW 63B	M63	2"	2-1/2"	15	24	27	54.5	51.0 ~ 56.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OSNJ-CW 63C	M63	2"	2-1/2"	15	24	27	54.5	55.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H82 x P88	2070	108
OSNJ-CW 75A	M75	2-1/2"	3"	20	27	30	63.0	56.0 ~ 62.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OSNJ-CW 75B	M75	2-1/2"	3"	20	27	30	63.0	62.1 ~ 66.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OSNJ-CW 75C	M75	2-1/2"	3"	20	27	30	63.0	66.1 ~ 70.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OSNJ-CW 75D	M75	3"		20	30		63.0	68.0 ~ 75.0	1.8 ~ 2.5	0.05 ~ 1.2	H98 x P106	3270	125
OSNJ-CW 90A	M90	3"	3-1/2"	25	30	32	78.0	74.0 ~ 83.0	1.8 ~ 3.0	0.05 ~ 1.6	H110 x P120	4600	132
OSNJ-CW 90B	M90	3"	3-1/2"	25	30	32	78.0	82.0 ~ 90.0	1.8 ~ 3.0	0.05 ~ 1.6	H110 x P120	4600	132
OSNJ-CW 100A	M100	3-1/2"	4"	25	32		86.0	89.0 ~ 94.0	1.8 ~ 3.0	0.05 ~ 1.6	H120 x P130	5500	144
OSNJ-CW 100B	M100	3-1/2"	4"	25	32		86.0	93.0 ~ 98.0	1.8 ~ 3.0	0.05 ~ 1.6	H120 x P130	5500	144

※ The entry holes shall have a diameter not more than 0.7 mm greater than the nominal diameter.(Entry hole size tolerance : Thread size+0.60)

Industrial Cable Gland Type:OSNU



OSNU Type



Application : Non-Armoured Cable

- * For use with braided armoured & non armoured cable
- * Weatherproof & Waterproof
- * Single Compression

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
KOMERI Certification(KAS)	KOMERI-2016-06
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNU 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

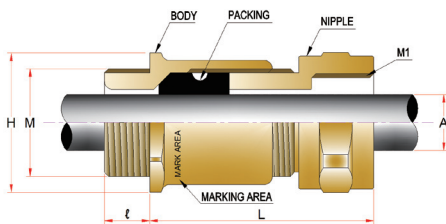
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNU 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	79/95	31
OSNU 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	31
OSNU 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	33
OSNU 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	34
OSNU 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	38
OSNU 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	40
OSNU 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	42
OSNU 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	46
OSNU 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	46
OSNU 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	52
OSNU 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	52
OSNU 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	60
OSNU 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	69
OSNU 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	74

※ Entry hole size tolerance : Thread size+0.6ℓ

Industrial Cable Gland Type:OSNU-F



OSNU-F Type



Application : Non-Armoured Cable with Male-Female Type

- * For use with braided armoured & non-armoured cable
- * male and female threads type
- * Weatherproof & Waterproof
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNU-F 20	M20(M)xM20(F)	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : $\geq 15\text{mm}$ (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

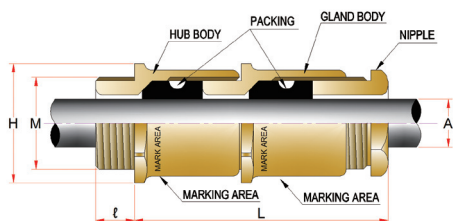
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNU-F 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	79/95	44
OSNU-F 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	44
OSNU-F 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	49
OSNU-F 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	52
OSNU-F 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	54
OSNU-F 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	55
OSNU-F 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	62
OSNU-F 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	68
OSNU-F 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	68
OSNU-F 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	78
OSNU-F 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	78
OSNU-F 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	92
OSNU-F 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	109
OSNU-F 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	115

※ Entry hole size tolerance : Thread size+0.6 ϕ

Industrial Cable Gland Type:OSNU-D



OSNU-D Type



Application : Non-Armoured Cable with Double Compression

- * For use with braided armoured & non-armoured cable
- * Weatherproof & Waterproof
- * Double Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNU-D 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

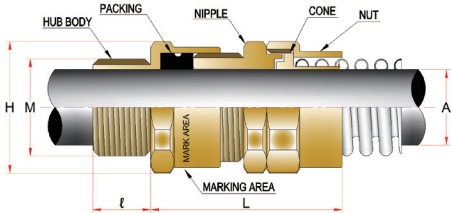
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNU-D 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	79/95	51
OSNU-D 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	51
OSNU-D 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	55
OSNU-D 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	58
OSNU-D 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	63
OSNU-D 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	67
OSNU-D 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	71
OSNU-D 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	77
OSNU-D 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	77
OSNU-D 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	87
OSNU-D 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	87
OSNU-D 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	102
OSNU-D 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	119
OSNU-D 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	125

※ Entry hole size tolerance : Thread size+0.6ℓ

Industrial Cable Gland Type:OSNU-MH



OSNU-MH Type



Application : Metal Hose Type

- * For use with braided armoured & non-armoured cable.
- * Weatherproof & Waterproof
- * Suitable for metal hose.
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNU-MH 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

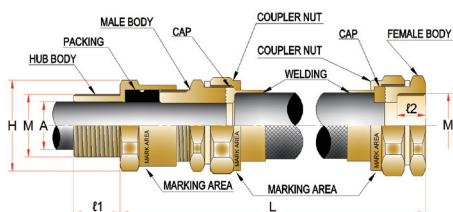
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'			
OSNU-MH 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	44
OSNU-MH 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	49
OSNU-MH 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	125	52
OSNU-MH 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	195	54
OSNU-MH 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	300	55
OSNU-MH 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	425	62
OSNU-MH 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	680	68
OSNU-MH 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	575	68
OSNU-MH 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	875	78
OSNU-MH 75X	M75	3"		20	30		58 ~ 68	H94 x P99	860	78
OSNU-MH 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1690	92
OSNU-MH 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	2250	109
OSNU-MH 115	M115	4"		25	32		88 ~ 101	H126 x P136	2400	115

※ Entry hole size tolerance : Thread size+0.6ℓ

Industrial Cable Gland Type:OSNU-EP



OSNU-EP Type



Application : Flexible type

- * For use with braided armoured & non-armoured cable.
- * Used in narrow space or complicated area which requires flexibility.
- * Weatherproof & Waterproof
- * Single Compression.

Design Specification	BS 6121, IEC 62444, EN 50262
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable, Unarmoured Cable
Gland Material	Nickel plated brass(standard), Brass(only), Stainless steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNU-EP 20	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90 ~ M115 Length 25mm)

* Material for accessories is required

(* in mm)

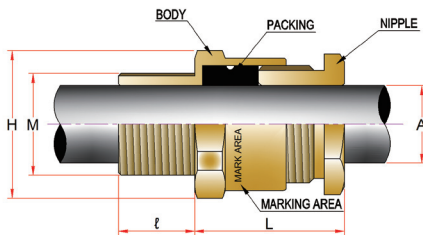
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia Inner 'A'	Hexagon Dimensions	Length (L)
	Metric	NPT	Option	Metric	NPT	Option			
OSNU-EP 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	61 + Flexible
OSNU-EP 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	66 + Flexible
OSNU-EP 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	70 + Flexible
OSNU-EP 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	76 + Flexible
OSNU-EP 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	81 + Flexible
OSNU-EP 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	85 + Flexible
OSNU-EP 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	92 + Flexible
OSNU-EP 63X	M63	2-1/2"		15	27		45 ~ 55	H73 x P78	92 + Flexible
OSNU-EP 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	104 + Flexible
OSNU-EP 75X	M75	3"		20	30		58 ~ 68	H94 x P99	104 + Flexible
OSNU-EP 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	122 + Flexible
OSNU-EP 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	143 + Flexible
OSNU-EP 115	M115	4"		25	32		88 ~ 101	H126 x P136	150 + Flexible

* Entry hole size tolerance : Thread size+0.6φ

Industrial Cable Gland Type:OSNJ



OSNJ Type



Application : Non Armoured Cable

- * For use with braided armoured & non armoured cable
- * Weatherproof & Waterproof
- * Single Compression

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Classification	Class NK
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured cable Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNJ 20A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥ 15 mm (Standard : M16~M75 Length 15mm, M90~M100 Length 20mm)
- * Material for accessories is required

(* in mm)

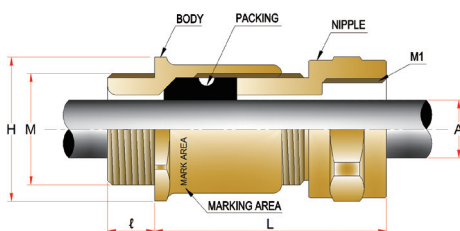
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ 16A	M16	1/2"	M20	15	15	15	3.0 ~ 7.5	H24 x P26	79/95	31
OSNJ 16B	M16	1/2"	M20	15	15	15	6.1 ~ 10.0	H24 x P26	79/95	31
OSNJ 20A	M20	1/2"	3/4"	15	15	16	10.1 ~ 13.0	H27 x P29	95	33
OSNJ 20B	M20	1/2"	3/4"	15	15	16	13.1 ~ 15.0	H27 x P29	85	33
OSNJ 25A	M25	3/4"	1"	15	16	18	14.0 ~ 17.5	H32 x P34	125	34
OSNJ 25B	M25	3/4"	1"	15	16	18	16.1 ~ 19.5	H32 x P34	115	34
OSNJ 32A	M32	1"	1-1/4"	15	18	19	18.1 ~ 22.0	H39 x P41.5	195	38
OSNJ 32B	M32	1"	1-1/4"	15	18	19	21.0 ~ 26.0	H39 x P41.5	175	38
OSNJ 40A	M40	1-1/4"	1-1/2"	15	19	21	24.0 ~ 28.0	H48 x P51	300	40
OSNJ 40B	M40	1-1/4"	1-1/2"	15	19	21	27.0 ~ 32.0	H48 x P51	265	40
OSNJ 50A	M50	1-1/2"	2"	15	21	24	32.1 ~ 34.0	H58 x P62	425	42
OSNJ 50B	M50	1-1/2"	2"	15	21	24	34.1 ~ 40.0	H58 x P62	360	42
OSNJ 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 44.0	H73 x P78	680	46
OSNJ 63B	M63	2"	2-1/2"	15	24	27	43.0 ~ 50.0	H73 x P78	575	46
OSNJ 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 54.0	H73 x P78	575	46
OSNJ 75A	M75	2-1/2"	3"	20	27	30	52.0 ~ 56.0	H85 x P90	875	52
OSNJ 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	H85 x P90	860	52
OSNJ 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	H85 x P90	750	52
OSNJ 75D	M75	3"		20	30		62.1 ~ 66.0	H85 x P90	725	52
OSNJ 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	H100 x P106	1690	60
OSNJ 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 76.0	H100 x P106	1480	60
OSNJ 100A	M100	3-1/2"	4"	25	32		76.1 ~ 81.0	H112 x P120	2250	69
OSNJ 100B	M100	3-1/2"	4"	25	32		81.1 ~ 85.0	H112 x P120	2005	69

※ Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type:OSNJ-F



OSNJ-F Type



Application : Non Armoured Cable with Male-Female Type

- * For use with braided armoured & non armoured cable / male and female threads type
- * Weatherproof & Waterproof
- * Single Compression

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured & unarmoured Cable Male and female thread type
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNJ-F 20A	M20(M)xM20(F)	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥15mm (Standard : M16~M75 Length 15mm, M90~M100 Length 20mm)
- * Material for accessories is required

(* in mm)

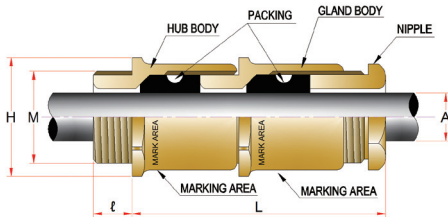
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ-F 16A	M16	1/2"	M20	15	15	15	5.0 ~ 7.5	H24 x P26	79/95	44
OSNJ-F 16B	M16	1/2"	M20	15	15	15	7.5 ~ 10.0	H24 x P26	79/95	44
OSNJ-F 20A	M20	1/2"	3/4"	15	15	16	10.0 ~ 13.0	H27 x P29	95	49
OSNJ-F 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.0	H27 x P29	85	49
OSNJ-F 25A	M25	3/4"	1"	15	16	18	15.0 ~ 17.5	H32 x P34	125	52
OSNJ-F 25B	M25	3/4"	1"	15	16	18	17.5 ~ 19.5	H32 x P34	115	52
OSNJ-F 32A	M32	1"	1-1/4"	15	18	19	19.5 ~ 22.0	H39 x P41.5	195	54
OSNJ-F 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	H39 x P41.5	175	54
OSNJ-F 40A	M40	1-1/4"	1-1/2"	15	19	21	26.0 ~ 28.0	H48 x P51	300	55
OSNJ-F 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	H48 x P51	265	55
OSNJ-F 50A	M50	1-1/2"	2"	15	21	24	32.0 ~ 36.0	H58 x P62	425	2
OSNJ-F 50B	M50	1-1/2"	2"	15	21	24	36.0 ~ 40.0	H58 x P62	360	62
OSNJ-F 63A	M63	2"	2-1/2"	15	24	27	40.0 ~ 44.0	H73 x P78	680	68
OSNJ-F 63B	M63	2"	2-1/2"	15	24	27	44.0 ~ 50.0	H73 x P78	575	68
OSNJ-F 63C	M63	2"	2-1/2"	15	24	27	50.0 ~ 54.0	H73 x P78	575	68
OSNJ-F 75A	M75	2-1/2"	3"	20	27	30	54.0 ~ 56.0	H85 x P90	875	78
OSNJ-F 75B	M75	2-1/2"	3"	20	27	30	56.0 ~ 60.0	H85 x P90	860	78
OSNJ-F 75C	M75	2-1/2"	3"	20	27	30	60.0 ~ 62.0	H85 x P90	750	78
OSNJ-F 75D	M75	3"		20	30		62.0 ~ 66.0	H85 x P90	725	78
OSNJ-F 90A	M90	3"	3-1/2"	25	30	32	66.0 ~ 70.0	H100 x P106	1690	92
OSNJ-F 90B	M90	3"	3-1/2"	25	30	32	70.0 ~ 76.0	H100 x P106	1480	92
OSNJ-F 100A	M100	3-1/2"	4"	25	32		76.0 ~ 81.0	H112 x P120	2250	109
OSNJ-F 100B	M100	3-1/2"	4"	25	32		81.0 ~ 85.0	H112 x P120	2005	109

※ Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type:OSNJ-D



OSNJ-D Type



Application : Non Armoured Cable with Double Compression

- * For use with armoured & non armoured cable
- * Weatherproof & Waterproof
- * Double Compression

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Ingress Protection	IP 66 / 67
Applicable Cable Specification	Braided armoured & unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSNJ-D 20A	M20(M)xM20(F)	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

- * Optional Thread Length : ≥ 15 mm (Standard : M16~M75 Length 15mm, M90~M100 Length 20mm)
- * Material for accessories is required

(* in mm)

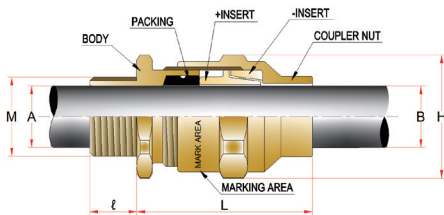
Part No.	Entry Thread Size(M)			Thread Length(L)-Min			Cable Dia Inner 'A'	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ-D 16A	M16	1/2"	M20	15	15	15	5.0 ~ 7.5	H24 x P26	79/95	51
OSNJ-D 16B	M16	1/2"	M20	15	15	15	7.5 ~ 10.0	H24 x P26	79/95	51
OSNJ-D 20A	M20	1/2"	3/4"	15	15	16	10.0 ~ 13.0	H27 x P29	95	55
OSNJ-D 20B	M20	1/2"	3/4"	15	15	16	13.0 ~ 15.0	H27 x P29	85	55
OSNJ-D 25A	M25	3/4"	1"	15	16	18	15.0 ~ 17.5	H32 x P34	125	58
OSNJ-D 25B	M25	3/4"	1"	15	16	18	17.5 ~ 19.5	H32 x P34	115	58
OSNJ-D 32A	M32	1"	1-1/4"	15	18	19	19.5 ~ 22.0	H39 x P41.5	195	63
OSNJ-D 32B	M32	1"	1-1/4"	15	18	19	22.0 ~ 26.0	H39 x P41.5	175	63
OSNJ-D 40A	M40	1-1/4"	1-1/2"	15	19	21	26.0 ~ 28.0	H48 x P51	300	67
OSNJ-D 40B	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 32.0	H48 x P51	265	67
OSNJ-D 50A	M50	1-1/2"	2"	15	21	24	32.0 ~ 36.0	H58 x P62	425	71
OSNJ-D 50B	M50	1-1/2"	2"	15	21	24	36.0 ~ 40.0	H58 x P62	360	71
OSNJ-D 63A	M63	2"	2-1/2"	15	24	27	40.0 ~ 44.0	H73 x P78	680	77
OSNJ-D 63B	M63	2"	2-1/2"	15	24	27	44.0 ~ 50.0	H73 x P78	575	77
OSNJ-D 63C	M63	2"	2-1/2"	15	24	27	50.0 ~ 54.0	H73 x P78	575	77
OSNJ-D 75A	M75	2-1/2"	3"	20	27	30	54.0 ~ 56.0	H85 x P90	875	87
OSNJ-D 75B	M75	2-1/2"	3"	20	27	30	56.0 ~ 60.0	H85 x P90	860	87
OSNJ-D 75C	M75	2-1/2"	3"	20	27	30	60.0 ~ 62.0	H85 x P90	750	87
OSNJ-D 75D	M75	3"		20	30		62.0 ~ 66.0	H85 x P90	725	87
OSNJ-D 90A	M90	3"	3-1/2"	25	30	32	66.0 ~ 70.0	H100 x P106	1690	102
OSNJ-D 90B	M90	3"	3-1/2"	25	30	32	70.0 ~ 76.0	H100 x P106	1480	102
OSNJ-D 100A	M100	3-1/2"	4"	25	32		76.0 ~ 81.0	H112 x P120	2250	119
OSNJ-D 100B	M100	3-1/2"	4"	25	32		81.0 ~ 85.0	H112 x P120	2005	119

※ Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type:OSD1



OSD1 Type



Application : Braided outjacket cable gland

- * For use with braided out jacket armoured & Steel tape armoured covered cable
- * Outdoor & Indoor use
- * Single Compression
- * Weatherproof & Waterproof
- * Inspectable armoured clamping cable gland

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Classification	Class NK
Ingress Protection	IP 66
Applicable Cable Specification	All types of steel & aluminum wire Armoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSD1 16A	M20	Nickel plated brass	Lock Nut, Sealing Washer, Earth Tag, Serrated Washer, Shroud

* Optional Thread Length : ≥15mm (Standard : M16 ~ M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

* Material for accessories is required

(* in mm)

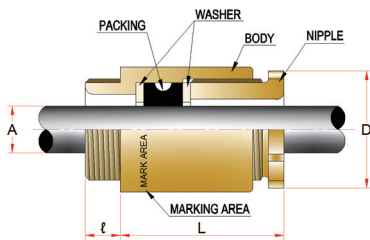
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'			
OSD1 16A	M16	1/2"	M20	15	15	15	3.0 ~ 7.5	3.0 ~ 9.5	0.05 ~ 0.5	H25 x P27	52
OSD1 16B	M16	1/2"	M20	15	15	15	6.1 ~ 10.0	6.1 ~ 12.0	0.05 ~ 0.5	H25 x P27	52
OSD1 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.0	8.0 ~ 15.4	0.05 ~ 0.6	H31 x P34	57
OSD1 20B	M20	1/2"	3/4"	15	15	16	12.0 ~ 15.1	12.0 ~ 17.5	0.05 ~ 0.6	H31 x P34	57
OSD1 25A	M25	3/4"	1"	15	16	18	13.0 ~ 17.5	13.0 ~ 20.3	0.05 ~ 0.7	H36 x P39	60
OSD1 25B	M25	3/4"	1"	15	16	18	16.1 ~ 19.5	16.1 ~ 22.3	0.05 ~ 0.7	H36 x P39	60
OSD1 32A	M32	1"	1-1/4"	15	18	19	17.5 ~ 22.0	17.5 ~ 26.0	0.05 ~ 1.0	H45 x P49	66
OSD1 32B	M32	1"	1-1/4"	15	18	19	21.0 ~ 26.0	21.0 ~ 30.0	0.05 ~ 1.0	H45 x P49	66
OSD1 40A	M40	1-1/4"	1-1/2"	15	19	21	22.0 ~ 28.0	22.0 ~ 32.8	0.05 ~ 1.2	H55 x P59	72
OSD1 40B	M40	1-1/4"	1-1/2"	15	19	21	27.0 ~ 32.0	27.0 ~ 36.8	0.05 ~ 1.2	H55 x P59	72
OSD1 50A	M50	1-1/2"	2"	15	21	24	30.0 ~ 34.0	30.0 ~ 38.8	0.05 ~ 1.2	H68 x P73	75
OSD1 50B	M50	1-1/2"	2"	15	21	24	34.0 ~ 40.0	34.0 ~ 44.8	0.05 ~ 1.2	H68 x P73	75
OSD1 63A	M63	2"	2-1/2"	15	24	27	38.0 ~ 44.0	38.0 ~ 51.6	0.05 ~ 1.9	H82 x P88	86
OSD1 63B	M63	2"	2-1/2"	15	24	27	43.0 ~ 50.0	43.0 ~ 57.6	0.05 ~ 1.9	H82 x P88	86
OSD1 63C	M63	2"	2-1/2"	15	24	27	49.0 ~ 54.0	49.0 ~ 61.6	0.05 ~ 1.9	H82 x P88	86
OSD1 75A	M75	2-1/2"	3"	20	27	30	52.0 ~ 56.0	52.0 ~ 63.6	0.05 ~ 1.9	H98 x P106	101
OSD1 75B	M75	2-1/2"	3"	20	27	30	55.0 ~ 60.0	55.0 ~ 67.6	0.05 ~ 1.9	H98 x P106	101
OSD1 75C	M75	2-1/2"	3"	20	27	30	59.0 ~ 62.0	59.0 ~ 69.6	0.05 ~ 1.9	H98 x P106	101
OSD1 75D	M75	3"		20	30		62.0 ~ 66.0	62.0 ~ 73.6	0.05 ~ 1.9	H98 x P106	101
OSD1 90A	M90	3"	3-1/2"	25	30	32	63.0 ~ 70.0	63.0 ~ 78.0	0.05 ~ 2.0	H110 x P120	128
OSD1 90B	M90	3"	3-1/2"	25	30	32	68.0 ~ 76.0	68.0 ~ 84.0	0.05 ~ 2.0	H110 x P120	128
OSD1 100A	M100	3-1/2"	4"	25	32		73.1 ~ 81.0	73.1 ~ 89.0	0.05 ~ 2.0	H120 x P130	137
OSD1 100B	M100	3-1/2"	4"	25	32		81.0 ~ 85.0	81.0 ~ 93.0	0.05 ~ 2.0	H120 x P130	137

※ The entry holes shall have a diameter not more than 0.6 mm greater than the nominal diameter. (Entry hole size tolerance : Thread size+0.60)

Industrial Cable Gland Type:OSCG



OSCG Type



Application : Jis Standard Type

- * For use with Non armoured cable
- * Weatherproof & Waterproof
- * Single Compression

Design Specification	JIS F8801 H - "A" Type Gland
KOMERI Certification	KOMERI-2016-02
Ingress Protection	IP 66
Applicable Cable Specification	Unarmoured Cable
Gland Material	Chrome(Standard) and Nickel Plated Brass, Brass(only), Stainless Steel(316L), Aluminum
Gasket (washer)	NBR
Packing	EPDM
Accessories	Sealing Washer, Lock Nut, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSCG - 20A	PF 3/4"	Chrome Plated Brass	With Lock Nut, Sealing Washer

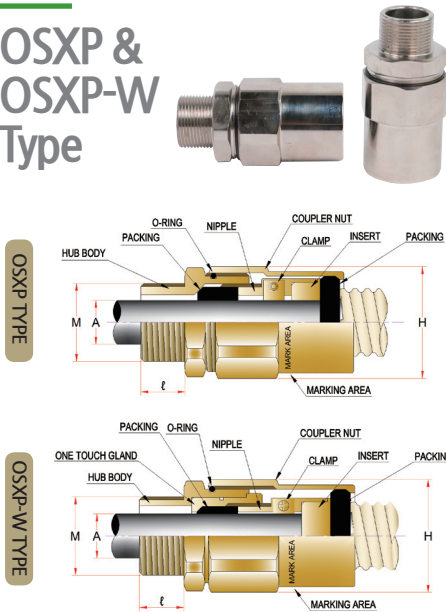
(* in mm)

Part No.	Entry Thread Size(M)	Thread Length (ℓ) - Min	Cable Dia	Packing Inner Dia			D	Length (L)
	PF		Outer 'A'	A	B	C		
OSCG - 10	3/8"	11	6.0 ~ 8.0	7	8		22	33
OSCG - 15	1/2"	11	7.5 ~ 11.0	9	10	11	28	36
OSCG - 20	3/4"	11	11.0 ~ 15.0	12	13	15	34	41
OSCG - 25	1"	11	15.0 ~ 20.0	16	18	20	42	47
OSCG - 30	1-1/4"	12	19.5 ~ 26.0	22	24	26	50	52
OSCG - 35	1-1/2"	12	26 ~ 30	28	30		56	54
OSCG - 40	1-1/2"	12	30 ~ 34	32	34		56	54
OSCG - 45	2"	12	34 ~ 40	36	38	40	70	60
OSCG - 50	2"	12	38 ~ 44	42	44		70	64
OSCG - 55	2-1/2"	12	43 ~ 50	46	48	50	86	73
OSCG - 60	2-1/2"	12	49 ~ 57	52	54	57	86	73
OSCG - 65	3"	14	56 ~ 60	58	60		100	85
OSCG - 70	3"	14	60 ~ 64	62	64			
OSCG - 75	3"	14	64 ~ 71	66	68	71	110	90
OSCG - 80	3-1/2"	14	70 ~ 74	72	74			
OSCG - 85	3-1/2"	14	74 ~ 78	76	78		130	94
OSCG - 90	4"	16	78 ~ 82	80	82			
OSCG - 95	3"	16	82 ~ 86	84	86			
OSCG - 100	4"	16	86 ~ 93	88	93			

※ Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type: OSXP & OSXP-W

OSXP & OSXP-W Type



Application : Flexible Packing Type

- * For use with conduit for electrical equipment or machine
- * Outdoor & Indoor use
- * Weatherproof & Waterproof

Design Specification	JIS B 0202 thread
Applicable Cable Specification	Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSXP 16	NPT 1/2"	Nickel plated brass	Sealing Washer, Lock Nut, Earth Tag

* Material for accessories is required

(* in mm)

Part No.		Entry Thread Size(M)	Thread Length (ℓ) - Min	Cable Dia (d)	Hexagon Dimensions
OSXP	OSXP-W	NPT/PF/PT	NPT/PF/PT		
OSXP 16	OSXP - W 16	1/2"	16	6~13	H30 x P33
OSXP 22	OSXP - W 22	3/4"	17	13~18	H35 x P38
OSXP 28	OSXP - W 28	1"	18	18~22	H43 x P47
OSXP 36	OSXP - W 36	1-1/4"	20	22~29	H50 x P54
OSXP 42	OSXP - W 42	1-1/2"	22	29~35	H57 x P61
OSXP 54	OSXP - W 54	2"	24	36~46	H70 x P75
OSXP 70	OSXP - W 70	2-1/2"	26	46~56	H85 x P91

※ Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type:OSXP-M

OSXP-M Type



Application : Cable Packing Type

- * For use with cable for electrical equipment or machine
- * Outdoor & Indoor use
- * Weatherproof & Waterproof

Design Specification	IEC62444
Applicable Cable Specification	Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

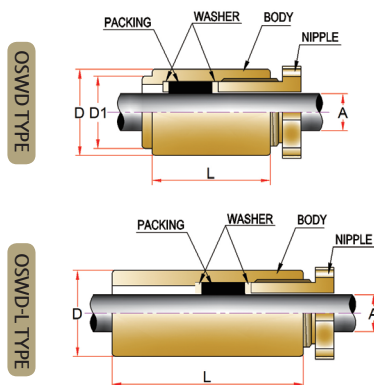
(* in mm)

Part No.	Entry Thread Size(M)	Thread Length (L) - Min	Cable Dia (d)	Hexagon Dimensions	Length(L)
OSXP-M 16	1/2"	16	6~14	H30 x P33	65
OSXP-M 22	3/4"	17	14~18	H35 x P38	71
OSXP-M 28	1"	18	18~22	H43 x P47	74
OSXP-M 36	1-1/4"	20	22~29	H50 x P54	82
OSXP-M 42	1-1/2"	22	29~35	H57 x P61	84
OSXP-M 54	2"	24	35~46	H70 x P75	90
OSXP-M 70	2-1/2"	26	46~56	H85 x P91	100
OSXP-M 82	3"	31	56~74	H98 x P106	108
OSXP-M 104	4"	33	74~88	H125 x P133	112

※ Entry hole size tolerance : Thread size+0.60

Industrial Cable Gland Type :OSWD & OSWD-L

OSWD & OSWD-L Type



Application : Welding Type

- * For use with Non armoured cable
- * This cable gland conforms to JIS standard

Design Specification	JIS F8801 H - "C" Type Gland
Applicable Cable Specification	Unarmoured Cable
Gland Material	Steel(Standard), Stainless Steel(316L)
Gasket (washer)	N/A
Packing	EPDM
Accessories	N/A

Order Example

Part No.	Hole / Pipe Size	Material
OSWD - 10A	PF 3/8"	Nickel plated brass

* Material for accessories is required

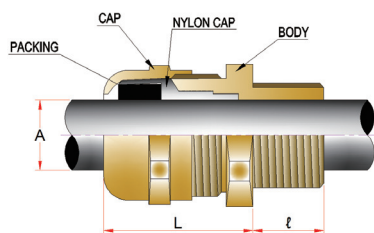
(* in mm)

Part No.		Pipe Size	Cable Dia(d)	Packing Size			Entry Hole Size		[D]	[D1]	Length[L]	
		PF	Outer 'A'	A	B	C	OSWD	OSWD-L			OSWD	OSWD-L
OSWD - 10	OSWD - L - 10	3/8"	6~8	7	8		18	23	23	16	21	
OSWD - 15	OSWD - L - 15	1/2"	8~11	9	10	11	22	29	29	20	24	
OSWD - 20	OSWD - L - 20	3/4"	11~15	12	13	15	27	35	35	26	27	
OSWD - 25	OSWD - L - 25	1"	15~20	16	18	20	34	43	43	33	31	
OSWD - 30	OSWD - L - 30	1-1/4"	21~26	22	24	26	43	51	51	41	33	
OSWD - 35	OSWD - L - 35	1-1/2"	27~30	28	30		49	57	57	47	35	
OSWD - 40	OSWD - L - 40	1-1/2"	31~34	32	34		49	57	57	47	35	
OSWD - 45	OSWD - L - 45	2"	35~40	36	38	40	61	71	71	59	40	50
OSWD - 50	OSWD - L - 50	2"	41~44	42	44		61	71	71	59	40	
OSWD - 55	OSWD - L - 55	2-1/2"	45~50	46	48	50	76	87	86	75	47	~
OSWD - 60	OSWD - L - 60	2-1/2"	51~56	52	54	56	76	87	86	75	47	
OSWD - 65	OSWD - L - 65	3"	57~60	58	60		89	101	101	87	60	300
OSWD - 70	OSWD - L - 70	3"	61~64	62	64	66	89	101	101	87	60	
OSWD - 75	OSWD - L - 75	3"	65~70	66	68	70	89	101	101	87	60	
OSWD - 80	OSWD - L - 80	3-1/2"	71~74	72	74		101	114	114	99	60	
OSWD - 85	OSWD - L - 85	3-1/2"	75~78	76	78		101	114	114	99	60	
OSWD - 90	OSWD - L - 90	4"	79~82	80	82		114	131	131	112	60	
OSWD - 95	OSWD - L - 95	4"	83~86	84	86		114	131	131	112	60	
OSWD - 100	OSWD - L - 100	4"	86~93	88	93		114	131	131	112	60	

Industrial Cable Gland Type:OSPG-R



OSPG-R Type



Application : Round Type Cable Gland

- * For use with non armoured cable
- * Weatherproof & Waterproof
- * Single Compression

Design Specification	DIN Thread (DIN 40430), ISO Metric Thread
KOMERI Certification	KOMERI-2016-01
Ingress Protection	IP 66
Applicable Cable Specification	Unarmoured Cable
Gland Material	Nickel Plated Brass(Standard), Brass(Only),
Gasket (washer)	EPDM(Standard), PTFE-Teflon
Packing	Silicone
Accessories	Sealing Washer, Lock Nut

Order Example

Part No.	Thread	Material	Accessories
OSPG - R 13.5	PG 13.5	Nickel Plated Brass	Lock Nut, Sealing Washer

● OSPG-R PG Thread Type

(* in mm)

Part No.	Entry Thread Size(M)	Cable Dia[A]	Thread Length[L1]	Entry Hole Size	[L]	Hexagon Dimensions (H x P)
OSPG-R 7	PG 7	2~6.5	5.0	13.0	19	15 x 16.5
OSPG-R 9	PG 9	4~8	6.0	15.5	22	18 x 20
OSPG-R 11	PG 11	5~10	6.0	19.0	24	21 x 23.4
OSPG-R 13.5	PG 13.5	6~12	6.5	21.0	25	23 x 25.5
OSPG-R 16	PG 16	10~14	6.5	23.0	26	26 x 28.8
OSPG-R 21	PG 21	13~18	7.0	29.0	31	32 x 35.4
OSPG-R 29	PG 29	18~25	8.0	37.5	39	41 x 45
OSPG-R 36	PG 36	22~32	10.0	47.5	45	51 x 56
OSPG-R 42	PG 42	30~38	10.0	54.5	47	57 x 61
OSPG-R 48	PG 48	34~44	10.0	60.5	53	64 x 69

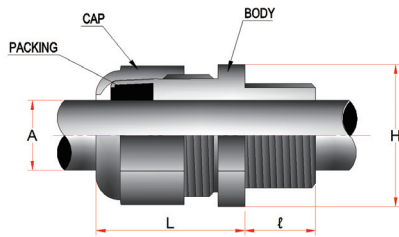
● OSPG-R Metric Thread Type

(* in mm)

Part No.	Entry Thread Size(M)	Cable Dia[A]	Thread Length[L1]	Entry Hole Size	[L]	Hexagon Dimensions (H x P)
OSPG-R M12	M12 X 1.5	4~7	6.5	13.0	21.0	18 x 20
OSPG-R M16	M16 X 1.5	5~10	7	17.0	25.0	21 x 23.4
OSPG-R M20	M20 X 1.5	9~14	8	21.0	27.0	26 x 28.8
OSPG-R M25	M25 X 1.5	13~18	9	26.0	29.0	32 x 35.4
OSPG-R M32	M32 X 1.5	13~22	9	33.0	33.0	36 x 39.5
OSPG-R M40	M40 X 1.5	19~28	9	41.0	40.0	45 x 49.5
OSPG-R M50	M50 X 1.5	27~35	10	51.0	42.0	54 x 59
OSPG-R M63	M63 X 1.5	34~45	15	64.0	46.0	67 x 73

Industrial Cable Gland Type:OSPGR-P

OSPGR-P Type



Application : Round Type Plastic Cable Gland

- * For use with non armoured cable
- * Weatherproof & Waterproof
- * Single Compression

Design Specification	DIN Thread (DIN 40430), ISO Metric Thread
Ingress Protection	IP 68
Applicable Cable Specification	Unarmoured Cable
Gland Material	Plastic(Nylon - PA6)
Gasket (O-Ring)	NBR
Packing	NBR
Accessories	Lock Nut
Color	PG : Silver Gray(RAL 7001), Metric : Black(RAL 9005)

Order Example

Part No.	Thread	Material	Accessories
OSPGR - P 13.5	PG 13.5	Plastic	Lock Nut
OSPGR - P M12	M12 X 1.5	Plastic	
OSPGR - P 16	PG 16	Plastic	

● OSPGR-P PG Thread Type

(* in mm)

Part No.	Entry Thread Size(M)	Cable Dia[A]	Thread Length[L1]	Entry Hole Size	[H]	[L]
OSPGR-P 7	PG 7	3 ~ 6.5	8	13.0	15	19
OSPGR-P 9	PG 9	4 ~ 8	8	15.5	19	22
OSPGR-P 11	PG 11	5 ~ 10	8	19.0	22	24
OSPGR-P 13.5	PG 13.5	6 ~ 12	9	21.0	24	25
OSPGR-P 16	PG 16	10 ~ 14	10	23.0	27	26
OSPGR-P 21	PG 21	13 ~ 18	11	29.0	33	31
OSPGR-P 29	PG 29	18 ~ 25	11	37.5	42	39
OSPGR-P 36	PG 36	22 ~ 32	13	47.5	52	45
OSPGR-P 42	PG 42	32 ~ 38	14	54.5	60	47
OSPGR-P 48	PG 48	37 ~ 44	15	60.5	65	53

● OSPGR-P Metric Thread Type

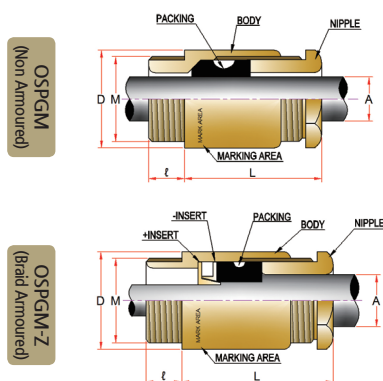
(* in mm)

Part No.	Entry Thread Size(M)	Cable Dia[A]	Thread Length[L1]	Entry Hole Size	[H]	[L]
OSPGR-P M12	M12 X 1.5	3 ~ 6.5	8	13	15	21.0
OSPGR-P M16	M16 X 1.5	4 ~ 8	8	17	19	25.0
OSPGR-P M20	M20 X 1.5	6 ~ 12	9	21	24	27.0
OSPGR-P M25	M25 X 1.5	13 ~ 18	11	26	33	29.0
OSPGR-P M32	M32 X 1.5	18 ~ 25	11	33	42	33.0
OSPGR-P M40	M40 X 1.5	22 ~ 32	13	41	52	40.0
OSPGR-P M50	M50 X 1.5	32 ~ 38	14	51	60	42.0
OSPGR-P M63	M63 X 1.5	37 ~ 44	15	64	65	46.0

Industrial Cable Gland Type :OSPGM & OSPGM-Z



OSPGM & OSPGM-Z Type



Application : DIN 89280 Type

- * For use with pannel of battle ship and other military vessels
- * Hexagon nipple and lock nut

Design Specification	DIN 89280 Type Gland
Applicable Cable Specification	OSPGM : Unarmoured Cable OSPGM-Z : Braided Armoured Cable
Gland Material	Chrome(Standard) and Nickel Plated Brass, Brass(Only), Stainless Steel(316L)
Gasket (washer)	NBR
Packing	Silicone
Accessories	Sealing Washer, Lock Nut, Earth Tag, Serrated Washer

Order Example

Part No.	Thread	Material	Accessories
OSPGM 18A	M18 X 1.5	Chrome plated Brass	Lock Nut, Sealing Washer

* Material for accessories is required

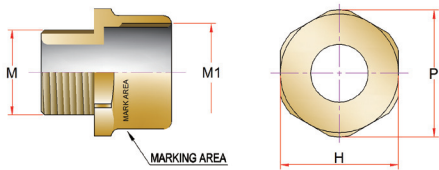
(* in mm)

Part No.		Entry Thread Size [M]	Cable Dia [A]	Packing Inner Dia		Thread Length [ℓ]	Dimension[D]	OSPGM [L]	OSPGM-Z [L]
OSPGM 18	OSPGM-Z 18	M18 X 1.5	7 ~ 10	A	8	10	D22	32	40
				B	10				
OSPGM 24	OSPGM-Z 24	M24 x 1.5	7 ~ 17	A	8	11	D28	36	43
				B	10				
				C	12				
				D	14				
				E	16				
				F	17				
OSPGM 30	OSPGM-Z 30	M30 X 2.0	17 ~ 20	A	18	12	D35	40	48
				B	20				
OSPGM 36	OSPGM-Z 36	M36 X 2.0	21 ~ 26	A	22	13	D41	44	51
				B	24				
				C	26				
OSPGM 45	OSPGM-Z 45	M45 X 2.0	27 ~ 32	A	28	14	D51	47	55
				B	30				
				C	32				
OSPGM 56	OSPGM-Z 56	M56 X 2.0	34 ~ 41	A	35	15	D62	52	59
				B	38				
				C	41				
OSPGM 72	OSPGM-Z 72	M72 X 2.0	43 ~ 56	A	44	16	D78	56	64
				B	48				
				C	52				
				D	56				

Hazardous Accessories Type: OSAJ



OSAJ Type



Application : Adaptor

* Provides a means of thread conversion

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 16 ATEX 7985X
IECEX Certification	IECEX PRE 15.0019X
CU TR Certification(-60°C~130°C)	TC RU C-KR.ГБ06.B.00061
KCS Certification	15-AV2BO-0140~42
Classification	DNV, RMRS
Code of Protection	II2G Ex db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-55°C ~ 100°C
Ingress Protection	IP 66 / 67
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Accessories	Lock Nut, Sealing Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
OSAJ 01	M16 X M20	Nickel plated brass	Lock Nut, Sealing Washer

* Part No Example : OSAJ 0809(OSAJ, NPT 3" x NPT 3-1/2") => Please refer to the below table

* Material for accessories is required

* PF and PG Thread are available on Ex 'e' only

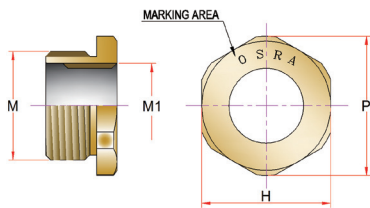
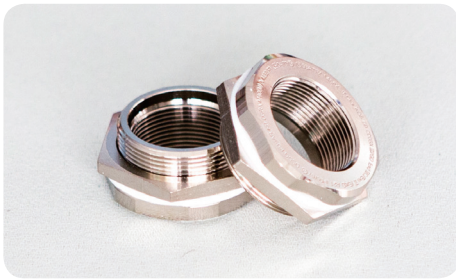
(* in mm)

OSAJ		FEMALE THREAD SIZE(M1)																		
		METRIC(A-M)										NPT(A-N)								
		M16	M20	M25	M32	M40	M50	M63	M75	M90	M100	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"
MALE THREAD SIZE(M)	METRIC(AM-)	M16	00	01	02	03						000	001	002	003					
	M20		11	12	13	14							101	102	103	104				
	M25			22	23	24	25							202	203	204	205			
	M32				33	34	35	36							303	304	305	306		
	M40					44	45	46	47							404	405	406	407	
	M50						55	56	57	58						504	505	506	507	508
	M63							66	67	68	69						605	606	607	608
	M75								77	78	79							706	707	708
	M90									88	89								807	808
	M100										99									908
MALE THREAD SIZE(M)	NPT(AN-)	3/8"	000	001	002	003						0000	0001	0002	0003					
	1/2"			011	012	013	014						0101	0102	0103	0104				
	3/4"				022	023	024	025						0202	0203	0204	0205			
	1"					033	034	035	036						0303	0304	0305	0306		
	1-1/4"						044	045	046	047						0404	0405	0406	0407	
	1-1/2"							055	056	057	058						0505	0506	0507	0508
	2"								066	067	068	069						0606	0607	0608
	2-1/2"									077	078	079							0707	0708
	3"										088	089								0808
	3-1/2"											099								0909
	4"											109								1010

Hazardous Accessories Type:OSRA



OSRA Type



Application : Reducer

* Provides a means of thread conversion

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 16 ATEX 7985X
IECEX Certification	IECEX PRE 15.0019X
CU TR Certification(-60°C~130°C)	TC RU C-KR.Γ506.B.00061
KCS Certification	15-AV2BO-0147~49
Classification	DNV, RMRS
Code of Protection	II2G Ex db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-55°C ~ 100°C
Ingress Protection	IP 66 / 67
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Accessories	Lock Nut, Sealing Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
OSRA 21	M25 X M20	Nickel plated brass	Lock Nut, Sealing Washer

* Part No Example : OSRA20(OSRA, M25 x M16) => Please refer to the below table

* Material for accessories is required

* PF and PG Thread are available on Ex 'e' only

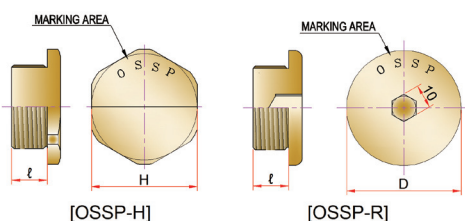
(* in mm)

OSRA			FEMALE THREAD SIZE(M1)																				
			METRIC(R-M)										NPT(R-N)										
			M16	M20	M25	M32	M40	M50	M63	M75	M90	M100	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"
MALE THREAD SIZE(M)	METRIC(RM-)	M16																					
		M20	10										100										
		M25	20	21									200	201									
		M32	30	31	32								300	301	302								
		M40	40	41	42	43							400	401	402	403							
		M50	50	51	52	53	54						500	501	502	503	504						
		M63	60	61	62	63	64	65					600	601	602	603	604	605					
		M75		71	72	73	74	75	76					701	702	703	704	705	706				
		M90			82	83	84	85	86	87					802	803	804	805	806	807			
		M100				93	94	95	96	97	98					903	904	905	906	907	908		
	NPT(RN-)	3/8"																					
1/2"		010										0100											
3/4"		020	021									0200	0201										
1"		030	031	032								0300	0301	0302									
1-1/4"		040	041	042	043							0400	0401	0402	0403								
1-1/2"		050	051	052	053	054						0500	0501	0502	0503	0504							
2"		060	061	062	063	064	065					0600	0601	0602	0603	0604	0605						
2-1/2"			071	072	073	074	075	076					0701	0702	0703	0704	0705	0706					
3"				082	083	084	085	086	087					0802	0803	0804	0805	0806	0807				
3-1/2"					093	094	095	096	097	098					0903	0904	0905	0906	0907	0908			
4"					104	105	106	107	108	109					1004	1005	1006	1007	1008	1009			

Hazardous Accessories Type:OSSP



OSSP Type



Application : Stopping Plug

* Provides a means of blanking unused or spare entries

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 16 ATEX 7985X
IECEX Certification	IECEX PRE 15.0019X
CU TR Certification(-60°C~130°C)	TC RU C-KR.ГБ06.В.00061
KCS Certification	15-AV2BO-0144~46
Classification	DNV, RMRS
Code of Protection	II2G Ex db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-55°C ~ 100°C
Ingress Protection	IP 66 / 67
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Optional)
Accessories	Lock Nut, Sealing Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
OSSP - H16	M16	Nickel plated brass	Lock Nut, Sealing Washer

* Optional Thread Length : ≥15mm (Standard : M16~M75 Length 15mm, M90~M100 Length 25mm)

* Material for accessories is required

* PF and PG Thread are available on Ex 'e' only

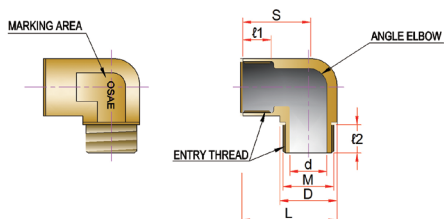
(* in mm)

Stopping plug Type / Size		Entry Thread		Thread Length[ℓ]		Dimension[H/D]		Weight(g)	
OSSP-H	OSSP-R	Metric	NPT/PF	Metric	NPT/PF	Metric	NPT/PF	OSSP-H	OSSP-R
OSSP-H 16	OSSP-R 16	M16	-	15	-	24/24	-	50	35
OSSP-H 20	OSSP-R 20	M20	1/2"	15	15	27/28	27/28	75	55
OSSP-H 25	OSSP-R 25	M25	3/4"	15	16	31/32	31/32	100	90
OSSP-H 32	OSSP-R 32	M32	1"	15	18	38/40	38/40	120	155
OSSP-H 40	OSSP-R 40	M40	1-1/4"	15	19	46/48	48/50	195	250
OSSP-H 50	OSSP-R 50	M50	1-1/2"	15	21	57/58	57/55	310	410
OSSP-H 63	OSSP-R 63	M63	2"	15	24	70/71	70/70	475	655
OSSP-H 75	OSSP-R 75	M75	2-1/2"	15	27	82/83	82/84	730	890
OSSP-H 90	OSSP-R 90	M90	3"	20	30	98/98	98/97	950	1150
OSSP-H 100	OSSP-R 100	M100	3-1/2"	20	32	110/108	110/112	1285	1550

Hazardous Accessories Type: OSAE



OSAE Type



Application : Elbow(90°)

* Provides a means of bending due to crawlspace

Design Specification	BS 6121, IEC 62444, EN 50262
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	Presafe 16 ATEX 7984U
IECEX Certification	IECEX PRE 15.0022U
CU TR Certification(-60°C~130°C)	TC RU C-KR.ГБ06.B.00061
KCS Certification	15-AV2BO-0150~52
Classification	DNV, RMRS
Code of Protection	II2G Ex db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
Operating Temperature	-55°C ~ 100°C
Ingress Protection	IP 66 / 67
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Accessories optional	Lock Nut, Sealing Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

Part No.	Thread	Material	Accessories
OSAE - 16	M16 X M16	Nickel plated brass	Lock Nut, Sealing Washer

* Material for accessories is required
* Only Metric and NPT Thread

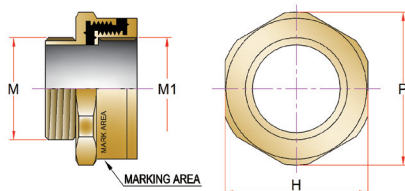
(* in mm)

Part No.	Entry Thread Size[M]		D	d	S	ℓ1	ℓ2	Length[L]
	Metric	NPT						
OSAE 16	M16	1/2"	24	10.3	32	16	15	43
OSAE 20	M20	1/2"	27	15.2	34.5	16	15	43
OSAE 25	M25	3/4"	32	19.8	37	17	15	50
OSAE 32	M32	1"	39	26	43	18	15	62
OSAE 40	M40	1-1/4"	48	33	50	18	15	73
OSAE 50	M50	1-1/2"	58	43	57	18	15	85
OSAE 63	M63	2"	73	55	70	18	15	107
OSAE 75	M75	2-1/2"	85	68	76	22	15	118

Hazardous Accessories Type:OSAJ(I)



OSAJ(I) Type



Application : Insulated Adaptor

- * Flameproof & Increased Safety
- * Usage : Exd Insulated adaptors provide a means to isolate the earth of the supply cable from the load equipment thus reducing the risk of damage to electronic equipment within the enclosure in the event of a short circuit to ground through the enclosure

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Compliance Standard	IEC/EN 60079-0, 1, 7, 31
ATEX Certification	16ATEX9168X
IECEX Certification	IECEX PRE 16.0093X
Code of Protection	II2G Ex db IIC Gb / Ex eb IIC Gb / II2D Ex tb IIIC Db
Operating Temperature	-20°C ~ 110°C
Ingress Protection	IP 66 / 67
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Sealing	N/A
Accessories	Lock Nut, Sealing Washer

Order Example

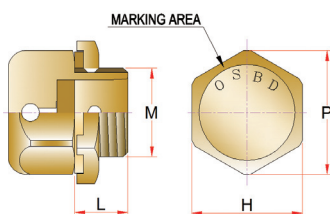
Part No.	Thread	Material	Accessories
OSAJ(I)	M50 x M50	Nickel plated brass	Sealing Washer, Lock Nut
OSAJ(I)	M50 x M50	Stainless steel(316L)	

Part No.	Entry Thread Size		Hexagon Dimension [H]
	M(Male)	M1(Female)	
OSAJ(I)	M50 X 1.5	M50 X 1.5	H70 X 75

Hazardous Accessories Type:OSBD



OSBD Type



Application : Breather Drains

- * Increased Safety
- * Breather Drains provide a method of preventing moisture blind-up within a hazardous area approved enclosure whilst ensuring the integrity and Ex approval of the installation is maintained

Design Specification	BS 6121, IEC 62444, EN/IEC 60529
Compliance Standard	IEC/EN 60079-0, 7, 31
ATEX Certification	16ATEX9111U
IECEX Certification	IECEX PRE 16.0091U
KCs Certification	17-KA2BO-0309U
Code of Protection	II2G Ex eb IIC Gb / II2D Ex tb IIIC Db
Operating Temperature	-60°C ~ 110°C
Ingress Protection	IP 66
Gland Material	Nickel Plated Brass(Standard), Brass(Only), Stainless Steel(304, 316, 316L)
Gasket (washer)	PTFE(Teflon)
Filter	Copper compressed metallic sinter
Accessories	Lock Nut, Sealing Washer

*The standard applied to KCS is Korean industrial standard created by translating IEC international standards without changing the technical content and standard format.

Order Example

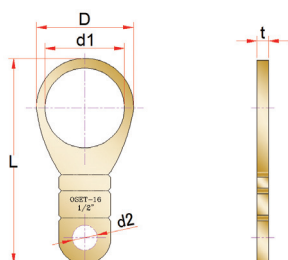
Part No.	Thread	Material	Accessories
OSBD	M20 X 1.5	Nickel plated brass	Sealing Washer, Lock Nut
OSBD	NPT 3/4"	Stainless steel(316L)	

Part No.	Entry Thread Size		Hexagon Dimension [H]
	Metric	NPT	
OSBD	M 20 X 1.5	NPT 1/2"	H25 X 28
	M 25 X 1.5	NPT 3/4"	

Accessories

Type:OSET

OSET Type



Application : Earth Tag

- * Provides an earth bonding
- * Material : Nickel plated brass(standard), Brass(only), Stainless steel(316L)

Order Example

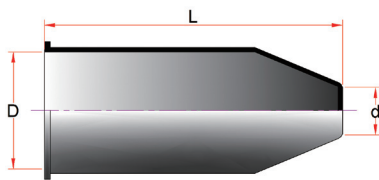
Part No.	Material
OSET 16	Nickel plated Brass

(* in mm)

Part No.	Entry Thread Size		D	d1	d2	t	L
	Metric	NPT/PF/PT					
OSET 16	M16	3/8"	24	17.5	7	1.5	59
OSET 20	M20	1/2"	30	21.5	7	1.5	72
OSET 25	M25	3/4"	35	27	7	1.5	82.4
OSET 32	M32	1"	44	33.4	8.6	1.5	99
OSET 40	M40	1-1/4"	54	42.4	8.6	1.5	112
OSET 50	M50	1-1/2"	67	50.5	8.6	1.5	125
OSET 63	M63	2"	80	64	8.6	1.5	154
OSET 75	M75	2-1/2"	97	76	14	1.5	163
OSET 90	M90	3"	110	91	14	1.5	178
OSET 100	M100	3-1/2"	120	103	14	1.5	195
OSET 115	M115	4"	130	116	14	1.5	208

Accessories Type:OSSH

OSSH Type



Application : Shroud

- * Provide means of protection from impurity on the gland body and addition to IP grade
- * Material : PCP(CR70) or PVC

Order Example

Item Code	Material	Q'ty
OSSH-A-16	PVC	100

Item data sheet

Part No.	A			B			D		
	D	d	L	D	d	L	D	d	L
OSSH- 16	28	6	93	24	4	52	25	4	93
OSSH- 20	35	10	98	28	7	55			
OSSH- 25	40	14	102	32	12	59			
OSSH- 32	50	18	115	40	15	65			
OSSH- 40	60	24	124	50	21	71			
OSSH- 50	74	30	132	60	28	79			
OSSH- 63	89	38	152	78	30	111			
OSSH- 63X	83	41	150						
OSSH- 75	107	53	171						
OSSH- 75X	101	54	170						
OSSH- 90	121	72	175						
OSSH- 100	131	86	190						
OSSH- 115	141	96	220						

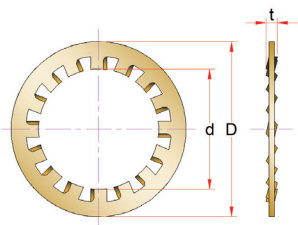
SELECTION CHART

(* in mm)

GLAND SIZE	E1WF, E1WF/LS, E1XF, OSNJ-CW, E1W/LS, E1X	OSCU, OS-E1UF, OS-E1UF/LS, E1U, E1U/LS	OSNJ-A2F, OSNJ	OSNJ-A2FF, OSNJ-A2FD, OSNJ-F, OSNJ-D	OS-A2F-U, OSNU	OS-A2F-UF, OS-A2F-UD, OSNU-F, OSNU-D
16	OSSH-A-16	OSSH-A-16	OSSH-B-16	OSSH-D-16	OSSH-B-16	OSSH-D-16
16X					OSSH-B-16	OSSH-D-16
20	OSSH-A-20	OSSH-A-20	OSSH-B-20	OSSH-A-16	OSSH-B-20	OSSH-A-16
25	OSSH-A-25	OSSH-A-25	OSSH-B-25	OSSH-A-20	OSSH-B-25	OSSH-A-20
32	OSSH-A-32	OSSH-A-32	OSSH-B-32	OSSH-A-25	OSSH-B-32	OSSH-A-25
40	OSSH-A-40	OSSH-A-40	OSSH-B-40	OSSH-A-32	OSSH-B-40	OSSH-A-32
50	OSSH-A-50	OSSH-A-50	OSSH-B-50	OSSH-A-40	OSSH-B-50	OSSH-A-40
63	OSSH-A-63	OSSH-A-63X	OSSH-B-63	OSSH-A-50	OSSH-B-63	OSSH-A-50
63X		OSSH-A-63			OSSH-B-63	OSSH-A-50
75	OSSH-A-75	OSSH-A-75X	OSSH-A-63	OSSH-A-63	OSSH-A-63	OSSH-A-63
75X		OSSH-A-75			OSSH-A-75X	OSSH-A-75X
90	OSSH-A-90	OSSH-A-90	OSSH-A-75	OSSH-A-75	OSSH-A-75	OSSH-A-75
100	OSSH-A-100	OSSH-A-100	OSSH-A-90	OSSH-A-90	OSSH-A-90	OSSH-A-90
115		OSSH-A-115			OSSH-A-100	OSSH-A-100

Accessories Type:OSTW

OSTW Type



Application : Serrated Washer / Teeth Washer

- * To reduce vibrations of the cable gland/ equipment assembly which may loosen the cable gland or lock nut
- * Material : Stainless steel 304(standard), stainless steel(316L)

Order Example

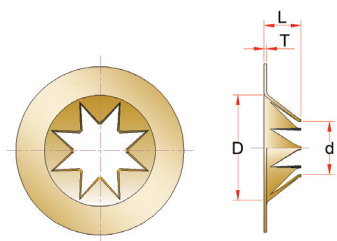
Part No.	Material
OSTW 16	Stainless Steel

(* in mm)

Part No.	Entry Thread Size		D	d	t
	Metric	NPT/PF/PT			
OSTW 16	M16	3/8"	26	17.5	2.0
OSTW 20	M20	1/2"	32	21.5	2.5
OSTW 25	M25	3/4"	37.5	27	3.0
OSTW 32	M32	1"	46	33.4	3.5
OSTW 40	M40	1-1/4"	57	42.4	3.5
OSTW 50	M50	1-1/2"	72	50.5	3.5
OSTW 63	M63	2"	87	64	4.0
OSTW 75	M75	2-1/2"	98	76	4.0
OSTW 90	M90	3"	113	91	4.0
OSTW 100	M100	3-1/2"	124	103	4.0
OSTW 115	M115	4"	140	116	4.0

Accessories Type:OSLS

OSLS Type



Application : Lead Sheath Washer

- * For use of lead sheathed cable
- * Material : Nickel plated brass

Order Example

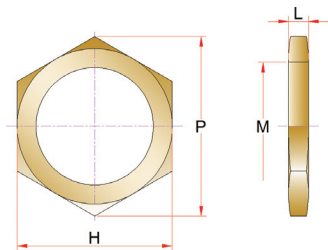
Part No.	Material	Use
OSLS-M16	Nickel plated brass	OSNJ-A2F

(* in mm)

Part No.	D	d	L	T
OSLS-M16	10	6	3.5	0.2
OSLS-M20	14	6	4.5	0.35
OSLS-M25	18	11	7	0.35
OSLS-M32	25	16	10.5	0.35
OSLS-M40	31	21	12	0.5
OSLS-M50	40	27	13	0.5
OSLS-M63	53	38	16	0.5
OSLS-M75	61	47	18	0.5
OSLS-M90	70	57	18	0.6
OSLS-M100	83	64	19	0.7

Accessories Type:OSLN

OSLN Type



Application : Lock Nut

- * Secure a cable gland in position of the equipment
- * Material : Brass, Nickel plated brass(Standard), Stainless steel

Order Example

Model	Thread size	Material
OSLN	M16	Nickel Plated Brass

● Metric & PG Type

(* in mm)

Metric Thread				OSPG-R Thread							
Part No.	H	P	L	Part No.	H	P	L	Part No.	H	P	L
OSLN - M16	22	25	4	OSLN - PG7	15	16.5	3	OSLN - PG M12	14	15	3
OSLN - M20	27	31	4	OSLN - PG9	18	20	3	OSLN - PG M16	18	20	3
OSLN - M25	32	36.5	4	OSLN - PG11	21	23.5	3	OSLN - PG M20	22	24.5	3
OSLN - M32	39	44.5	5	OSLN - PG13.5	23	25.5	3	OSLN - PG M25	27	29.5	4
OSLN - M40	48	55	5	OSLN - PG16	26	29	3	OSLN - PG M32	36	39.5	4
OSLN - M50	60	69	5	OSLN - PG21	32	35.5	4	OSLN - PG M40	45	50	5
OSLN - M63	73	84	6	OSLN - PG29	41	45	4	OSLN - PG M50	54	59	5
OSLN - M75	85	98	6	OSLN - PG36	51	56	5	OSLN - PG M63	67	73	6
OSLN - M90	102	117	10	OSLN - PG42	60	65	5	Note. For OSPG-R metric thread type.			
OSLN - M100	112	128	12	OSLN - PG48	66	73	6				

● NPT & PF Type

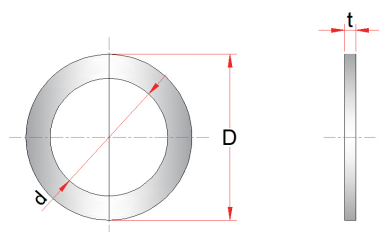
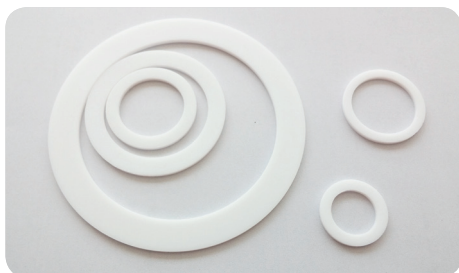
(* in mm)

Type	NPT Thread			Type	PF Thread		
Part No.	H	P	L	Part No.	H	P	L
OSLN - 1/2"	27	31	4	OSLN - 1/2"	27	31	4
OSLN - 3/4"	32	36	4	OSLN - 3/4"	32	36	4
OSLN - 1"	39	45	5	OSLN - 1"	39	45	5
OSLN - 1-1/4"	48	55.5	5	OSLN - 1-1/4"	48	55.5	5
OSLN - 1-1/2"	58	67	6	OSLN - 1-1/2"	58	67	6
OSLN - 2"	73	84	6	OSLN - 2"	73	84	6
OSLN - 2-1/2"	85	98	6	OSLN - 2-1/2"	85	99	6
OSLN - 3"	102	119	10	OSLN - 3"	102	119	10
OSLN - 3-1/2"	112	126	12	OSLN - 3-1/2"	112	128	12
OSLN - 4"	125	144	12	OSLN - 4"	125	144	12

Accessories

Type:OSSR

OSSR Type



Application : Sealing Washer

- * Sealing for IP Grade
- * Material : Nylon, PTFE(Teflon)
- * This item is impossible for individual purchase
(It is only part of cable gland package)

Order Example

Model	Type	Size
OSSR	E1WF	M16
OSSR	OSNJ	NPT 1/2"

● Armour Type & Non Armour Type

(* in mm)

TYPE	Armour Type			Non Armour Type		
Part No.	D	d	t	D	d	t
OSSR M16	26	16	2	24	16	2
OSSR M20	30	20	2	27	20	2
OSSR M25	35	25	2	32	25	2
OSSR M32	44	32	2	40	32	2
OSSR M40	53	40	2	48	40	2
OSSR M50	66	50	2	58	50	2
OSSR M63	81	64	2	73	64	2
OSSR M75	97	75	2	85	75	2
OSSR M90	110	90	2	100	90	2
OSSR M100	119	100	2	112	100	2

● NPT & PF Thread

(* in mm)

Type	NPT Thread			PF Thread		
Part No.	D	d	t	D	d	t
OSSR 1/2"	24	16	2	24	16	2
OSSR 3/4"	30	22	2	30	22	2
OSSR 1"	35	27	2	35	27	2
OSSR 1-1/4"	44	34	2	54	43	2
OSSR 1-1/2"	54	43	2	58	48	2
OSSR 2"	67	49	2	70	60	2
OSSR 2-1/2"	86	73	2	85	75	2
OSSR 3"	110	90	2	105	87	2
OSSR 3-1/2"	119	100	2	119	100	2
OSSR 4"	126	114	2	125	114	2

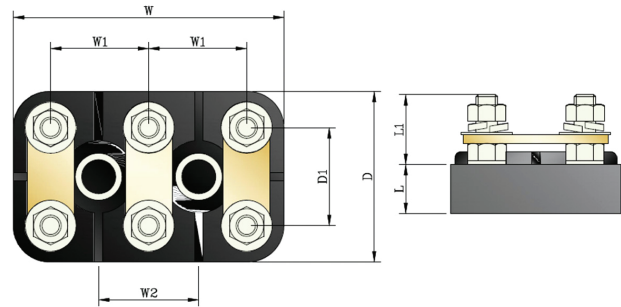
OSCG TERMINAL BLOCK

TERMINAL BLOCK Type



Application

For wires connection
Terminal block is safe because it is made of PHENOLIC which has not only excellent electrical insulating properties but also flame-retardant properties



Normal Type	A (ampere)	V (voltage)	W	W1	W2	D	D1	L	L1	PLATE SIZE
OSGT - TB 1	27.2	690	63.5	23	23.5	40	23	11.5	15	2T*35*11
OSGT - TB 2	102.9	690	95	35	35	60	35	15	25	2T*53*18
OSGT - TB 3	500	690	133	54	54	69	43.5	19	42	4T*68*25

Materials

Description	Q'ty	Material
BODY	1	PHENOLIC
BOLT	6	BRASS
PLATE	3	COPPER
HEX NUT	12	BRASS
SPRING WASHER	6	BRASS
PLAIN WASHER	12	BRASS

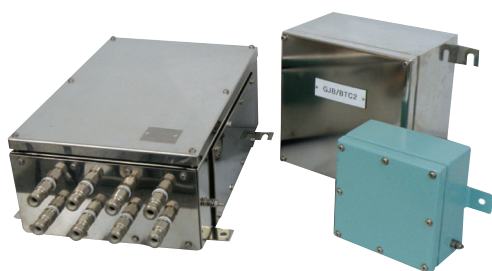
Electric Rating

OSGT-TB 1 : 690V 27.2A
OSGT-TB 2 : 690V 102.9A
OSGT-TB 3 : 690V 500A

Certificates

OSGT-TB 1 (KERI 2013DC00031)
OSGT-TB 2 (KERI 2013DC00032)
OSGT-TB 3 (KERI 2013DC00033)

Win Series stainless steel Terminal Enclosure & Junction Box



Material	Hazardous	Body & Lib	1.5/2.0mm 316,316L Stainless steel
		Gland plates	3.0mm 316,316L Stainless steel
	Outdoor /Indoor	Body & Lib	1.5/2.0mm 316,316L Stainless steel or Sheet steel
		Gland plates	3.0mm 316,316L Stainless steel
Finish		DOT hairline(standard) / Electro-polishing / Painting(special colors)	
		accrding to customer specifications	
Gasket		Lid & Gland plates Neoprene	
Lid Fixing		Fully detachable hinged lid with Flat handle or M6 hexagonal head captive screws	
Earthig		M8 Internal/External earth stud	
Box mounting		4-external lugs with 12mm clearance holes/ slot or self standing	
Equipment mounting		Stand off pillars M6	
Protection		Exe IIC T5/T6 Gb	
		Ex tD A21 IP66 T85°C/T100°C	
Approval		☑️ ATEX IECEx KCs	

The Win Series of enclosures available in stainless steel of finish material have been designed to accommodate rail mounted terminals or other electrical components.

Stainless steel are recommended to give maximum protection for components in indoor/ outdoor and Hazardous / aggressive environments. Features of this range includes sixteen basic sizes in many kinds of depths. Fully removable hinged lid, concealed hinges provides 180° opening.

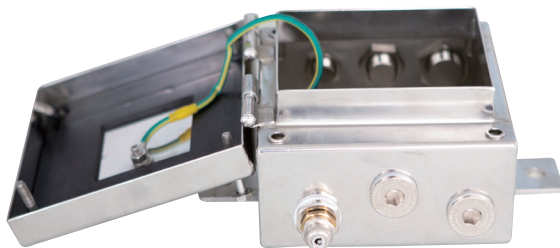
Lid fixing, stainless captive screws and handle device locked on side, on complex spacers. Lip on upstand increases gasket contact area, ensuring high degree of ingress protection. Earth stud located on lower left hand side.

Permits unobtrusive earthing of terminal or wire looping to lid. Option of gland plates on 1 or 4 sides.

One piece gasket on lid and gland plates.

Normal Type	Overall Dimension			Mounting Dimension		Physically Max. number of Terminal block				Max.apower consumption
	Width	Height	Depth	W1	H1	2.5SQ	4.0SQ	6.0SQ	10SQ	
WIN 701	150	150	100 / 120	200	-	1 × 10	1 × 8	1 × 6	1 × 5	4.83W
WIN 702	200	200	120 / 160	250	-	1 × 16	1 × 13	1 × 10	1 × 8	6.30W
WIN 703	260	260	160 / 200	310	160	1 × 20	1 × 16	1 × 13	1 × 10	10.04W
WIN 704	300	300	160 / 200	350	200	1 × 32	1 × 32	1 × 20	1 × 16	11.27W
WIN 705	260	380	160 / 200	310	280	1 × 48	1 × 48	1 × 40	1 × 30	11.89W
WIN 706	400	400	160 / 200	450	300	2 × 52	2 × 52	2 × 43	2 × 32	16.93W
WIN 707	350	500	160 / 200 / 250	400	400	2 × 72	2 × 72	2 × 60	2 × 45	18.33W
WIN 708	500	500	160 / 200 / 250	550	400	3 × 72	3 × 72	3 × 60	3 × 45	24.32W
WIN 709	450	620	160 / 200 / 250	500	520	3 × 96	3 × 96	3 × 80	3 × 60	25.98W
WIN 710	550	740	200 / 250 / 300	600	640	4 × 120	4 × 120	4 × 100	4 × 75	31.61W
WIN 711	640	860	200 / 250 / 300	690	760	5 × 115	5 × 115	5 × 96	5 × 72	35.62W
WIN 712	750	1000	200 / 250 / 300	800	900	5 × 168	5 × 168	5 × 140	5 × 105	41.02W
WIN 713	1000	1000	200 / 250 / 300	1050	900	6 × 168	6 × 168	6 × 140	6 × 105	45.86W
WIN 714	800	1200	300 / 400 / 500	850	1100	6 × 212	6 × 212	6 × 176	6 × 132	48.38W
WIN 715	1000	1200	300 / 400 / 500	1050	1100	6 × 252	6 × 252	6 × 210	6 × 157	66.77W
WIN 716	1000	1400	300 / 400 / 500	1050	1300	6 × 252	6 × 292	6 × 256	6 × 178	66.77W

OSSJ Series Stainless steel Terminal Enclosure & Junction Box



Application

The OSSJ series of enclosures available in stainless steel of finish material have been designed to accommodate railmounted terminals or other electrical component stainless steel give maximum protection for components from aggressive environments in indoor/outdoor.

Technical Information / Specifications

Material : Stainless steel(SUS 304, SUS 316), Mild steel

Wall thickness : 1.5t or 1.6t

Ingress Protection : IP65 or IP 66 or IP66/67 - EN/IEC 60529

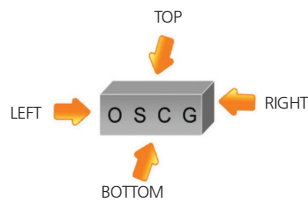
Gasket : Silicone rubber

Finish : Electro-polishing(standard) / Powder coating(special colors)
(according to customer specifications)

Earthing : M8 internal/external earth stud,
(same kind of material)

Certificate / Test report

KOMERI-2016-05
KOMERI-0307-16T4175 ~ 77
KOMERI-0307-17T0087 ~ 88



Model Type

Type	W(Width) x H(Height) x D(Depth)			Max power consumption
	W	H	D	
OSSJ 151510	150	150	100	4.83W
OSSJ 202012	200	200	120	6.30W
OSSJ 262620	260	260	200	10.04W
OSSJ 303020	300	300	200	11.27W
OSSJ 303016L	300	300	160	11.27W
OSSJ 404020	400	400	200	16.93W
OSSJ 405020	400	500	200	18.33W
OSSJ 405020L	400	500	200	18.33W
OSSJ 505020	500	500	200	24.32W
OSSJ 10010020	1000	1000	200	45.86W

※ 'L' means 'Locking type' ※ OSSJ 10010020 is not certified.

Type Designation

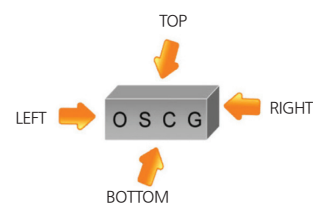
The COMPLETE MODEL No is as follows:

OSSJ 151510	4	M	O	T	1
①	②	③	④	⑤	⑥

No	Description	Symbol	Detail
①	BASIC MODEL	OSSJ 000000	W x H x D (mm)
		OSSJ 151510	150 x 150 x 100 (mm)
		OSSJ 202012	200 x 200 x 120 (mm)
		OSSJ 10010020	1000 x 1000 x 200 (mm)
②	TB SIZE(SQ)	2.5	2.5SQ
		04	4SQ
		06	6SQ
		10	10SQ
		16	16SQ
		35	35SQ
③	ENTRY THREAD TYPE	M	METRIC
		NPT	NPT
④	ENTRY SIZE	0	M16 or NPT 1/2"
		1	M20 or NPT 1/2"
		2	M25 or NPT 3/4"
		3	M32 or NPT 1"
⑤	ENTRY SIDE	T	TOP SIDE
		B	BOTTOM SIDE
		L	LEFT SIDE
		R	RIGHT SIDE
⑥	Q'TY OF ENTRY(EA)	01	1EA
		02	2EA
		03	3EA
		-	-
		52	52EA
		0	0

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

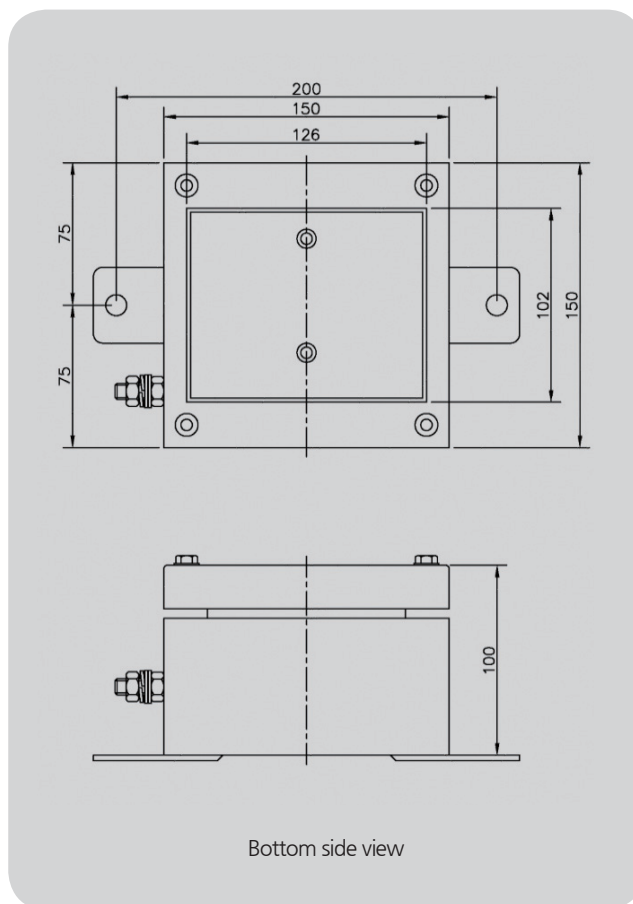
OSSJ 151510 - 150mm x 150mm x 100mm



OSSJ 151510 Specification

Width(mm)	150mm
Length(mm)	150mm
Depth(mm)	100mm
Max power consumption	4.83W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66, 67 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KAS KOMERI-2016-05

Drawing



A Guide to Physical Terminal Capacity

WDU 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 10	1 X 8	1 X 6	1 X 5	1 X 4	1 X 3

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	8	6	4	4	2
L/R	7	5	4	3	2

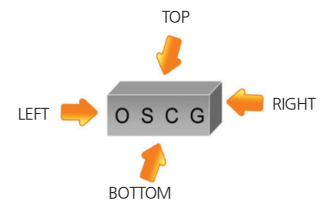
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

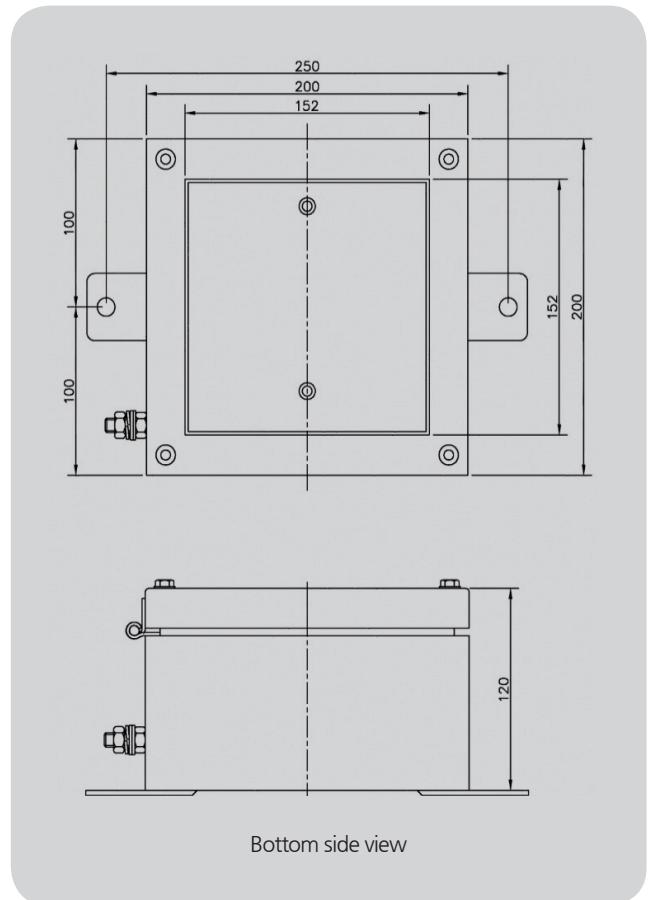
OSSJ 262620 - 260mm x 260mm x 200mm



OSSJ 202012 Specification

Width(mm)	200mm
Length(mm)	200mm
Depth(mm)	120mm
Max power consumption	6.30W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66, 67 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KAS KOMERI-2016-05

Drawing



A Guide to Physical Terminal Capacity

WDU 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 19	1 X 16	1 X 12	1 X 10	1 X 8	1 X 6

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	16	8	8	6	4
L/R	15	7	7	5	4

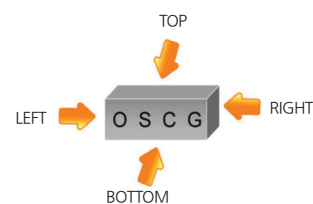
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

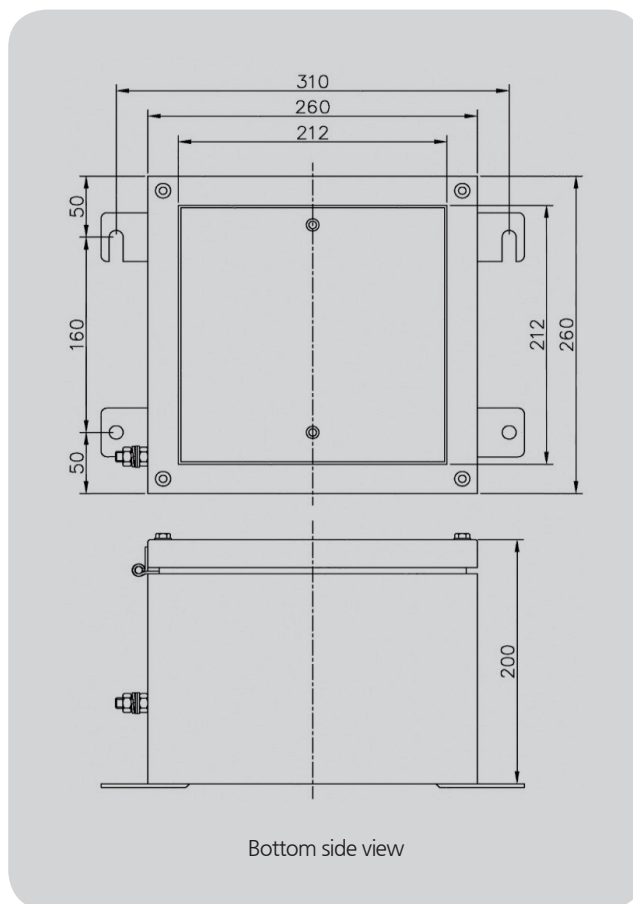
OSSJ 262620 - 260mm x 260mm x 200mm



OSSJ 262620 Specification

Width(mm)	260mm
Length(mm)	260mm
Depth(mm)	200mm
Max power consumption	10.04W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66, 67 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KAS KOMERI-2016-05

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
1 X 30	1 X 25	1 X 20	1 X 16	1 X 13	1 X 10

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	56	30	28	22	12
L/R	52	27	25	19	11

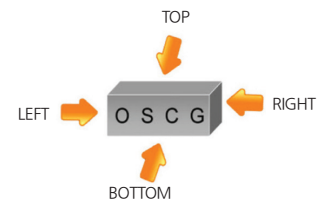
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

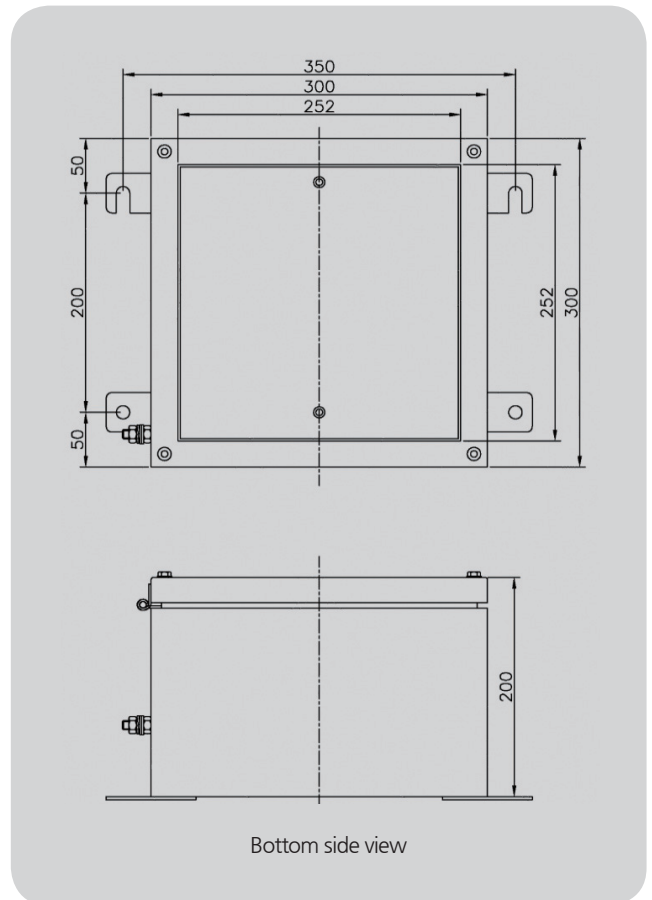
OSSJ 303020 - 300mm x 300mm x 200mm



OSSJ 303020 Specification

Width(mm)	300mm
Length(mm)	300mm
Depth(mm)	200mm
Max power consumption	11.27W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66, 67 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KAS KOMERI-2016-05

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 38	1 X 32	1 X 25	1 X 20	1 X 16	1 X 12

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	64	48	30	24	16
L/R	60	44	29	23	14

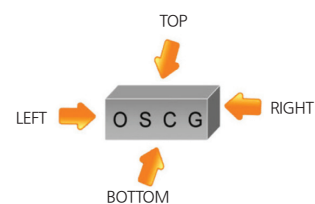
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

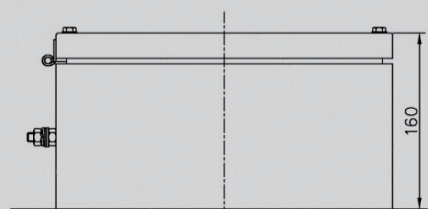
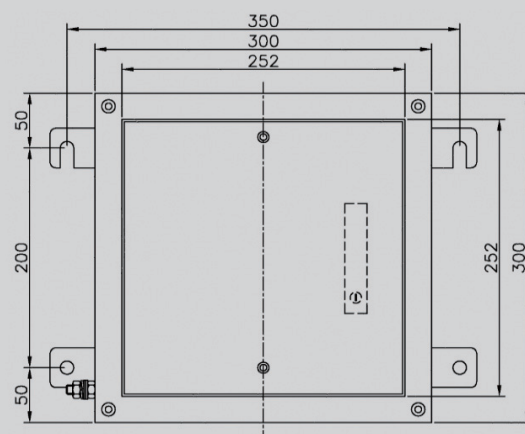
OSSJ 303016L - 300mm x 300mm x 160mm



OSSJ 303016L Specification

Width(mm)	300mm
Length(mm)	300mm
Depth(mm)	160mm
Max power consumption	11.27W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP65 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KOLAS KOMER-0307-16T4175

Drawing



Bottom side view

A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
1 X 38	1 X 32	1 X 25	1 X 20	1 X 16	1 X 12

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	60	36	20	16	14
L/R	56	33	20	16	13

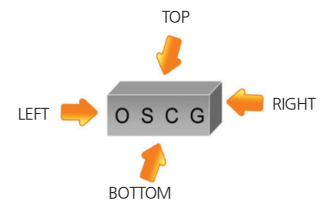
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

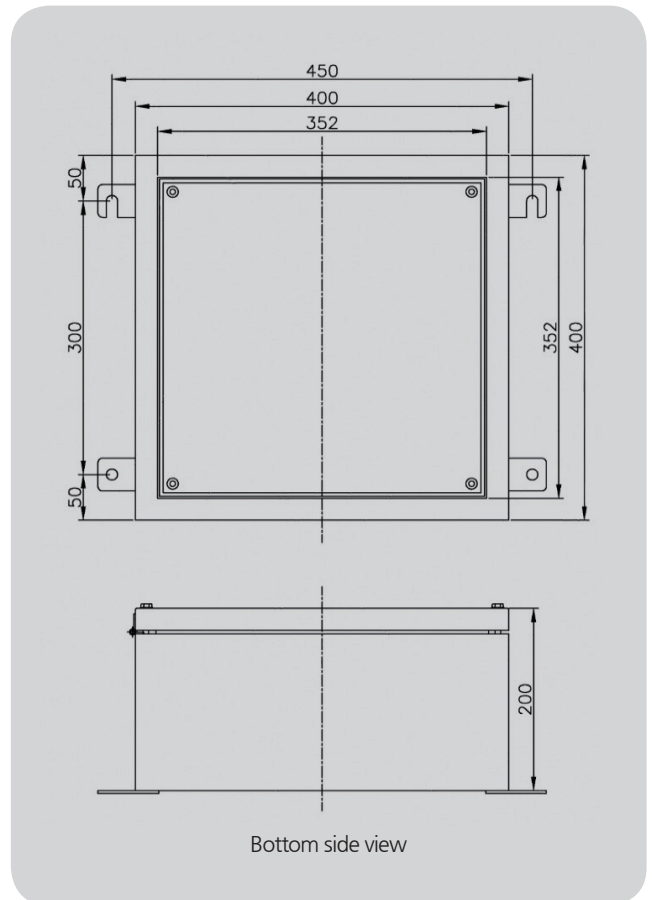
OSSJ 404020 - 400mm x 400mm x 200mm



OSSJ 404020 Specification

Width(mm)	400mm
Length(mm)	400mm
Depth(mm)	200mm
Max power consumption	16.93W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KOLAS KOMERI-0307-17T0087

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 X 58	2 X 48	2 X 37	2 X 30	2 X 25	2 X 18

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	106	64	42	36	20
L/R	101	60	41	33	20

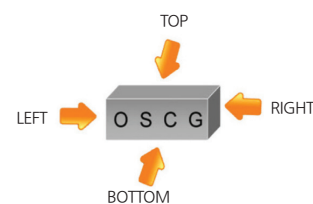
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

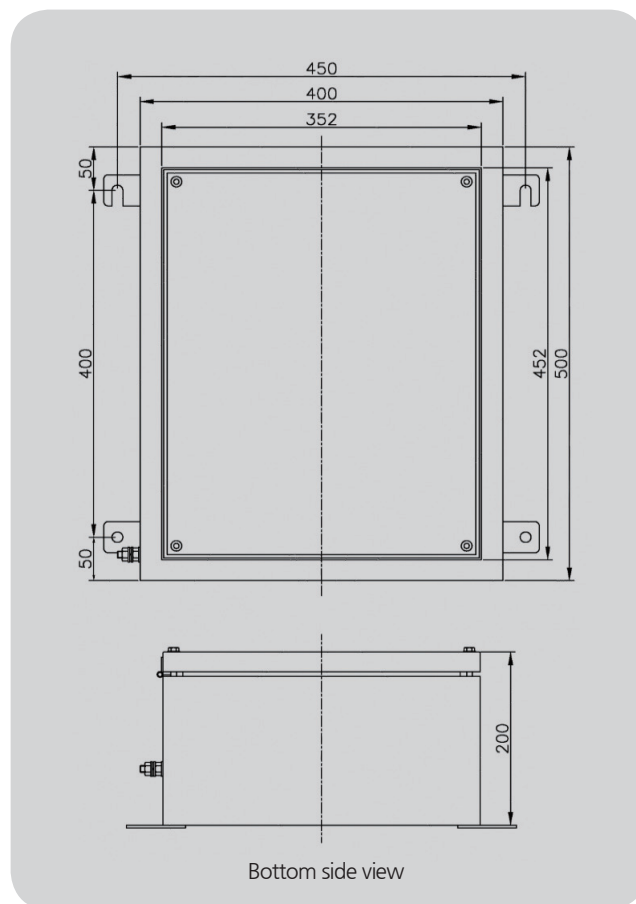
OSSJ 405020 - 400mm x 500mm x 200mm



OSSJ 405020 Specification

Width(mm)	400mm
Length(mm)	500mm
Depth(mm)	200mm
Max power consumption	18.33W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66, 67 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KOLAS KOMER-0307-16T4176

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
2 X 78	2 X 65	2 X 50	2 X 40	2 X 33	2 X 25

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	106	64	42	36	20
L/R	131	80	57	43	26

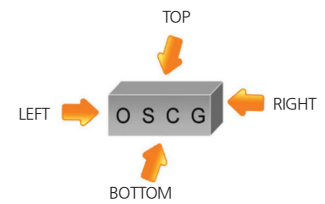
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

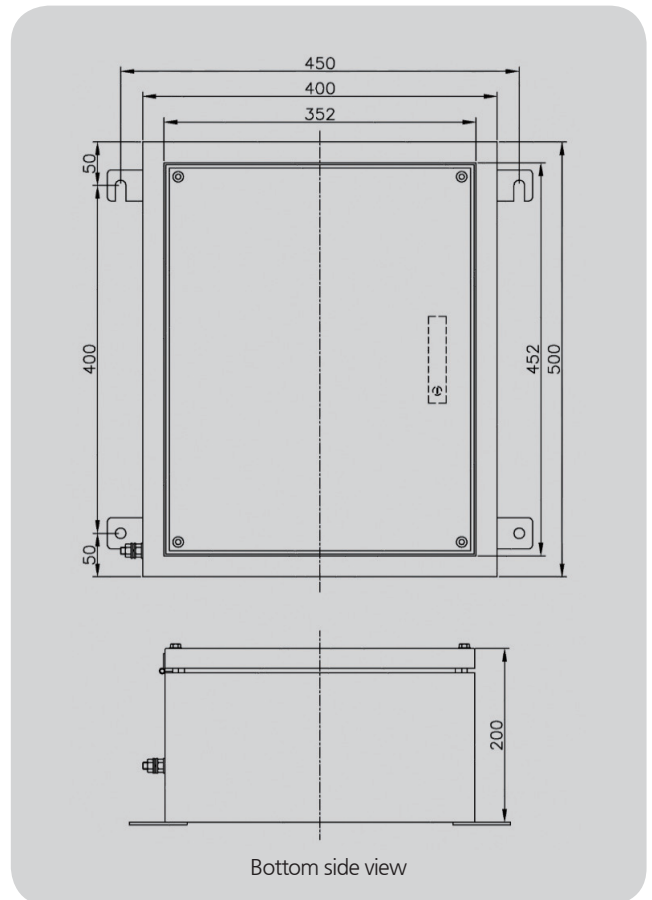
OSSJ 405020L - 400mm x 500mm x 200mm



OSSJ 405020L Specification

Width(mm)	400mm
Length(mm)	500mm
Depth(mm)	200mm
Max power consumption	18.33W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP65 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KOLAS KOMERI-0307-16T4177

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 X 78	2 X 65	2 X 50	2 X 40	2 X 33	2 X 25

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	106	64	42	36	20
L/R	131	80	57	43	26

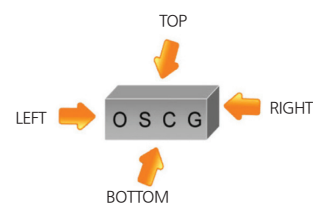
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

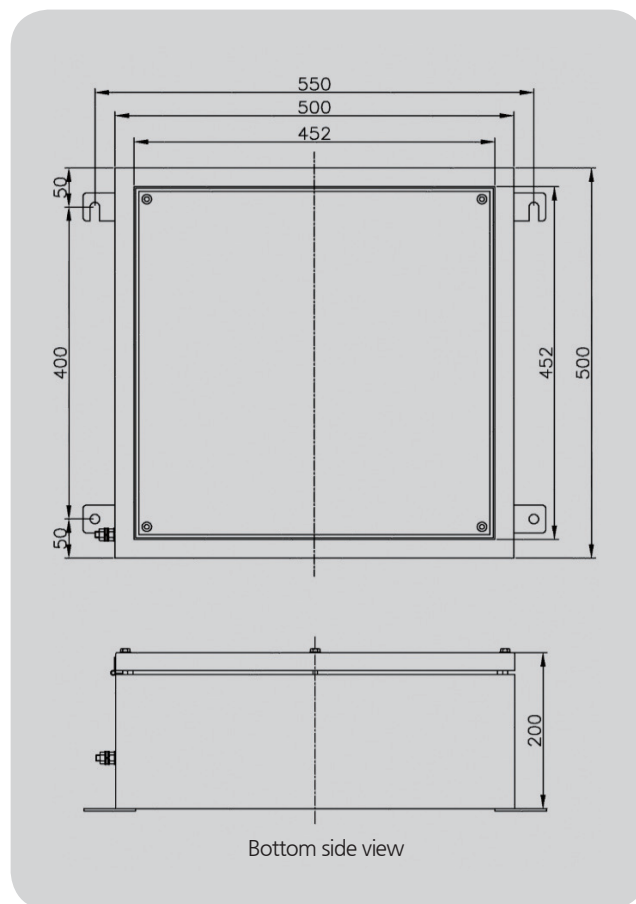
OSSJ 505020 - 500mm x 500mm x 200mm



OSSJ 505020 Specification

Width(mm)	500mm
Length(mm)	500mm
Depth(mm)	200mm
Max power consumption	24.32W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	KOLAS KOMERI-0307-17T0088

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
3 X 78	3 X 65	3 X 50	3 X 40	3 X 33	3 X 25

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

SIDE	M16	M20	M25	M32	M40
T/B	136	84	60	46	28
L/R	131	80	57	43	26

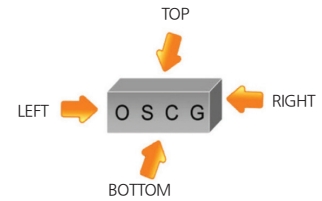
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSSJ Series Stainless steel Terminal Enclosure & Junction Box

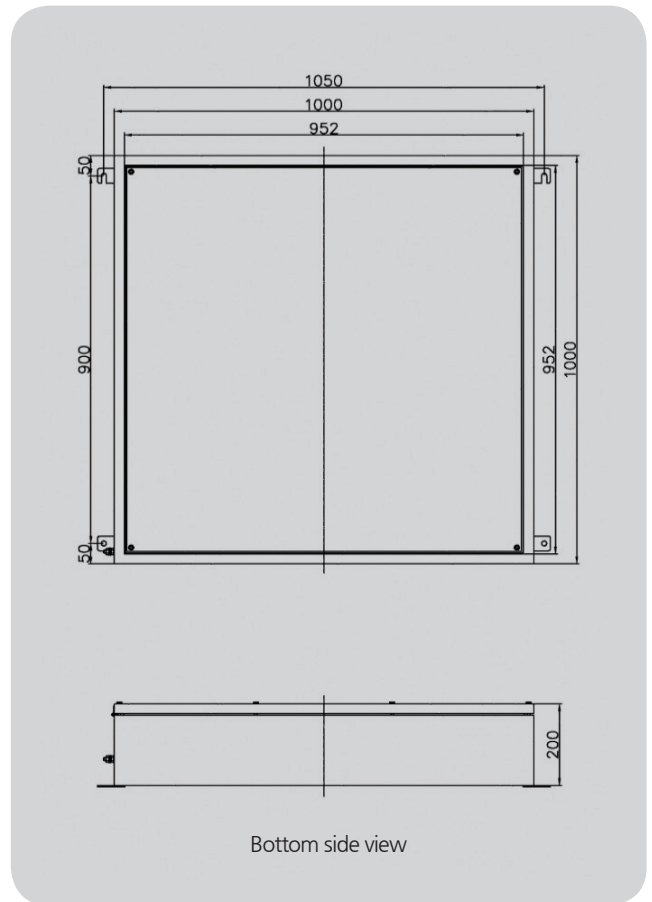
OSSJ 10010020 - 1000mm x 1000mm x 200mm



OSSJ 10010020 Specification

Width(mm)	1000mm
Length(mm)	1000mm
Depth(mm)	200mm
Max power consumption	45.86W
Material	SUS 316, SUS304, Mild steel
Wall thickness	1.5t or 1.6t
Finish	Electro-polishing(standard) (according to customer specifications)
Ingress Protection	IP66 (EN/IEC 60529)
Color	Material color (Powder coating - special)
Gasket	Silicone rubber
Hinge	SUS 304, SUS 316, Mild steel
Lid Fixing	Stainless steel / M6(Hexagonal head)
Earthing	M8 Internal / External earth stud (same kind of material)
Equipment mounting	Stand off pillars M6
Certificate No.	N/A

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
6 X 174	6 X 145	6 X 112	6 X 90	6 X 75	6 X 51

(* Terminal block is WDU series or equivalent products.)

A Guide to Physical Entry Capacity

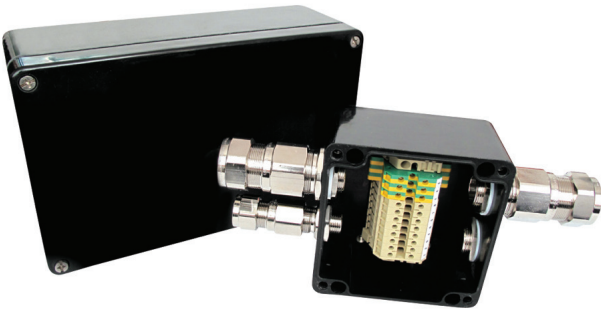
SIDE	M16	M20	M25	M32	M40
T/B	276	172	120	96	56
L/R	271	168	117	93	54

(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5 SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4 SQ	41/6	690	28	0.5~1.0(M3)	10
6 SQ	57/10	550	36	0.8~1.6(M3.5)	12
10 SQ	76/16	550	50	1.2~2.4(M4)	12
16 SQ	101/25	690	66	3.0~4.0(M5)	16
35 SQ	150/50	690	109	4.5~5.0(M6)	18

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box



Application

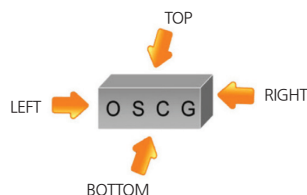
OSGP GRP Junction boxes have been proved by many sectors of industries. These OSGP GRP enclosure comprises of 10 different sizes enclosure made of Glass Fibre Reinforced Polyester. This material is highly resistant to contamination from oils, fats, aliphatic and also is suitable for LSOH (low smoke zero halogen) applications. Polyester gives excellent mechanical strength and life expectancy. The OSGP enclosures are suitable for use with in hazardous areas and can be supplied certificates, such as ATEX and IECEx.

Technical Information / Specifications

Material : Glass Fibre Reinforced Plastic (GRP)
Area Classification : Zone1, Zone2, Zone21 and Zone22
Ingress Protection : IP66, IP67 -EN/IEC 60529
Wide Operating Temperature : -60°C ~ +100°C
Certificate : ATEX, IECEx (Ex "e")
Impact Resistance : 7Nm (EN50014)
Color : RAL9005 Black
Toxicity : Low Smoke Halogen-Free V-0 Self Extinguishing, UL94
Gasket : Silicon rubber
Mounting : Integral 6mm clearance holes moulded into the body
Earthing : Optional M6 internal/external earth stud, brass or stainless steel
Surface Insulation Resistance : $10^9 \Omega \text{m} \leq \text{black} \leq 10^{10} \Omega \text{m}$ UV Protection
Ex Code : Ex eb IIC T6/T5 Gb, Ex tb IIIC T57°C/T72°C, Ex eb I Mb
Ambient Temperature : -60°C to +40°C for T6/T57°C,
 -60°C to +55°C for T5/T72°C

Certificate

IECEx PRE 17.0054X
 Presafe 17 ATEX 11238X



Type Designation

The COMPLETE MODEL No is as follows:

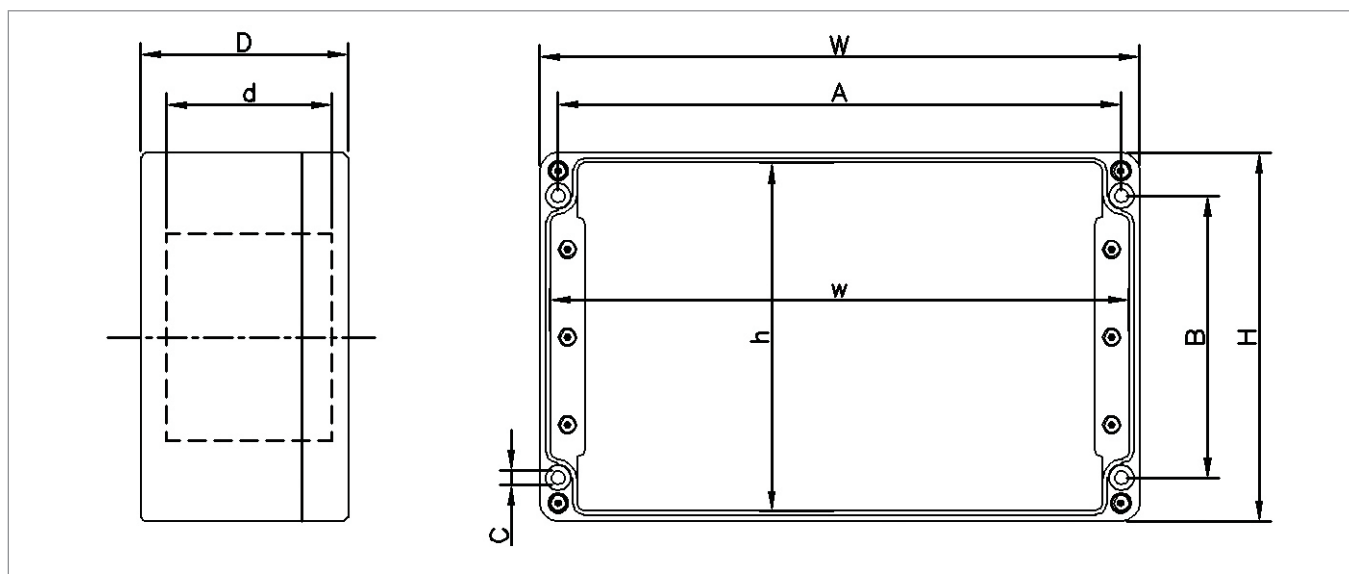
OSGP	4	M	O	T	1
①	②	③	④	⑤	⑥

NO	Description	Symbol	Detail
①	BASIC MODEL	OSGP1	122 x 120 x 90(mm)
		OSGP2	160 x 160 x 90(mm)
		OSGP3	260 x 160 x 90(mm)
		OSGP4	360 x 160 x 90(mm)
		OSGP5	255 x 250 x 120(mm)
		OSGP6	255 x 250 x 160(mm)
		OSGP7	400 x 250 x 120(mm)
		OSGP8	400 x 250 x 160(mm)
		OSGP9	405 x 400 x 120(mm)
		OSGP10	405 x 400 x 160(mm)
②	TB SIZE(SQ)	2.5	2.5SQ
		04	4SQ
		06	6SQ
		10	10SQ
		16	16SQ
		35	35SQ
③	ENTRY THREAD TYPE	M	METRIC
		NPT	NPT
④	ENTRY SIZE	0	M16 or NPT1/2"
		1	M20 or NPT1/2"
		2	M25 or NPT3/4"
		3	M32 or NPT1"
		4	M40 or NPT1-1/4"
		5	M50 or NPT1-1/2"
		6	M63 or NPT2"
		7	M75 or NPT2-1/2"
⑤	ENTRY SIDE	T	TOP SIDE
		B	BOTTOM SIDE
		L	LEFT SIDE
		R	RIGHT SIDE
⑥	Q'TY OF ENTRY (EA)	1	1EA
		2	2EA
		3	3EA
		~	~EA

OSCG GRP RAW MATERIALS(SMC-Sheet Molding Compound)

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

Dimensions



Legend

W : External wide
H : External height
D : External depth

w : Internal wide
h : Internal height
d : Internal depth

A : Horizontal fixing hole distance
B : Vertical fixing hole distance
C : Fixing hole diameter

Dimensions Data Table

TYPE	External dimension [mm]			Internal dimension [mm]			Fixation [mm]			Weight [kg]	Max. dissipation power [W]
	W	H	D	w	h	d	A	B	C		
OSGP 1	122	120	90	113	111	72	106	82	6.5	0.75	6.17
OSGP 2	160	160	90	151	151	77	140	110	6.5	1.06	9.78
OSGP 3	260	160	90	251	151	77	240	110	6.5	1.17	12.23
OSGP 4	360	160	90	351	151	77	340	110	6.5	2.15	14.89
OSGP 5	255	250	120	243	238	111	235	200	6.5	2.996	16.17
OSGP 6	255	250	160	243	238	149	235	200	6.5	3.482	18.03
OSGP 7	400	250	120	388	238	111	380	200	6.5	4.346	21.87
OSGP 8	400	250	160	388	238	149	380	200	6.5	4.91	23.34
OSGP 9	405	400	120	393	388	111	385	350	6.5	5.914	28.98
OSGP 10	405	400	160	393	388	149	385	350	6.5	6.542	31.03

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

Maximum terminal quantity

TYPE	WDU 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
OSGP 1	1 x 12	1 x 10	1 x 8	1 x 6	1 x 5	1 x 4
OSGP 2	1 x 19	1 x 16	1 x 12	1 x 10	1 x 8	1 x 5
OSGP 3	1 x 39	1 x 32	1 x 25	1 x 20	1 x 16	1 x 12
OSGP 4	1 x 58	1 x 48	1 x 37	1 x 30	1 x 24	1 x 18
OSGP 5	2 x 38	2 x 32	2 x 25	2 x 20	2 x 16	2 x 12
OSGP 6	2 x 38	2 x 32	2 x 25	2 x 20	2 x 16	2 x 12
OSGP 7	2 x 66	2 x 55	2 x 43	2 x 34	2 x 28	2 x 21
OSGP 8	2 x 66	2 x 55	2 x 43	2 x 34	2 x 28	2 x 21
OSGP 9	3 x 67	3 x 56	3 x 43	2 x 35	2 x 28	2 x 21
OSGP 10	3 x 67	3 x 56	3 x 43	2 x 35	2 x 28	2 x 21

※ Terminal block is WDU series or equivalent products.

Maximum Cable entry quantity

TYPE	ENTRY POSITION	M16	M20	M25	M32	M40	M50	M63	M75
OSGP 1	Top / Bottom	2	2	2	1	-	-	-	-
	Left / Right	1	1	1	1	-	-	-	-
OSGP 2	Top / Bottom	5	4	2	2	-	-	-	-
	Left / Right	3	3	1	1	-	-	-	-
OSGP 3	Top / Bottom	9	7	4	3	-	-	-	-
	Left / Right	3	3	1	1	-	-	-	-
OSGP 4	Top / Bottom	14	10	6	5	-	-	-	-
	Left / Right	3	3	1	1	-	-	-	-
OSGP 5	Top / Bottom	14	10	7	4	3	2	-	-
	Left / Right	10	7	5	3	2	1	-	-
OSGP 6	Top / Bottom	22	11	8	6	5	2	2	1
	Left / Right	14	9	6	6	3	2	1	1
OSGP 7	Top / Bottom	21	15	12	6	4	3	-	-
	Left / Right	9	7	4	3	2	1	-	-
OSGP 8	Top / Bottom	29	23	15	11	9	4	3	2
	Left / Right	14	11	6	6	3	2	1	1
OSGP 9	Top / Bottom	20	14	12	7	5	3	-	-
	Left / Right	17	12	9	6	4	3	-	-
OSGP 10	Top / Bottom	40	23	15	11	9	4	3	2
	Left / Right	26	20	14	9	6	3	2	1

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

Terminal box maximum heat dissipation

An ignition temperature is the temperature at which hot surface will cause an ignition to occur in a given atmosphere. Depending on the type of gas or dust, the maximum temperature, the surface of the terminal box can reach without a spontaneous ignition is known as the "T Class". The maximum surface temperature must always be lower than the ignition temperature of the atmosphere in which it is used.

Each terminal box within the OSGP series has been assigned a maximum heat dissipation relating to the ambient and T Class.

The OSGP series offer T6 and T5 protection:

T6 = Maximum 85°C

T5 = Maximum 100°C

Resistance and temperature rise must be calculated as follows:

$$P = I^2 \times (R_t + R_c)$$

P[W] :Total heat dissipation.

I[A] :Maximum current at cables and terminals.

R_t [W] :Total resistance of terminals.

R_c [W] :Total resistance of cable(s).

*Each cable is internal maximum length measured diagonally across the terminal box.

$P \leq P_{\max}$ condition must always be obtained.

MAXIMUM TERMINAL LOAD CONFIGURATION

For some applications, it may be necessary to have a variety of terminal sizes. The following tables and examples demonstrate how this is achieved. The power heat dissipation determines the maximum number of terminals permissible for any size of terminal box, based on a 100% load.

Example 1 : OSGP 5

Conductor size (mm ²)	Current (A)	Number of terminals	Load = 100% (Max.)
2.5	10	10(max:47)	21.27%
4.0	21	6(max:16)	37.5%
6.0	28	4(max:14)	28.57%

Total : 87.34%

Example 2 : OSGP 5

Conductor size (mm ²)	Current (A)	Number of terminals	Load = 100% (Max.)
2.5	16	10(max:18)	55.55%
4.0	21	2(max:16)	12.5%
10.0	37	5(max:12)	41.66%

Total : 109.71%

In example 2, the required size and number of terminals cannot be fitted into this terminal box because the total load has exceeded the maximum value of 100%.

In this case, a larger size terminal box must be chosen and the same steps should be repeated in order to keep the total load within 100% value.

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

TYPICAL TERMINAL LOAD CONFIGURATION

The below given theoretical values are calculated depending on typical configurations. In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

OSGP 1 (P_{max} : 6.17W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10							
16	14						
21		12					
28			11				
37							
50							
60							
70							

OSGP 6 (P_{max} : 18.03W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	58						
16	22	35					
21		20	31				
28			17	27			
37				15	22		
50					12	16	20
60						11	14
70							10

OSGP 2 (P_{max} : 9.78W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	48						
16	18	28					
21		16	25				
28			14	22			
37				12			
50							
60							
70							

OSGP 7 (P_{max} : 21.87W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	57						
16	22	34					
21		20	30				
28			17	27			
37				15	22		
50					12	17	21
60						12	15
70							11

OSGP 3 (P_{max} : 12.23W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	47						
16	18	28	43				
21		16	25	39			
28			14	22			
37				12			
50							
60							
70							

OSGP 8 (P_{max} : 23.34W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	59						
16	23	36					
21		21	32				
28			18	29			
37				16	23		
50					13	18	23
60						12	16
70							11

OSGP 4 (P_{max} : 14.89W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	45						
16	17	27	42				
21		16	24	39			
28			13	22			
37				12			
50							
60							
70							

OSGP 9 (P_{max} : 28.98W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8	100						
10	64						
16	25	39	59				
21		22	34	56			
28			19	31	45		
37				18	26	36	
50					14	20	25
60						14	17
70							13

OSGP 5 (P_{max} : 16.17W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	53						
16	21	32					
21		18	28				
28			16	25			
37				14	20		
50					11	15	19
60						10	13
70							9

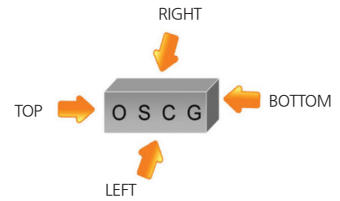
OSGP 10 (P_{max} : 31.03W)

Current (A)	Cross section(mm2)						
	2.5	4	6	10	16	25	35
5							
8	106						
10	67						
16	26	41	62				
21		24	36	59			
28			20	33	48		
37				19	27	39	
50					15	21	27
60						14	18
70							13

Any number of conductors and terminals additionally.
To be engineered by the manufacturer.

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

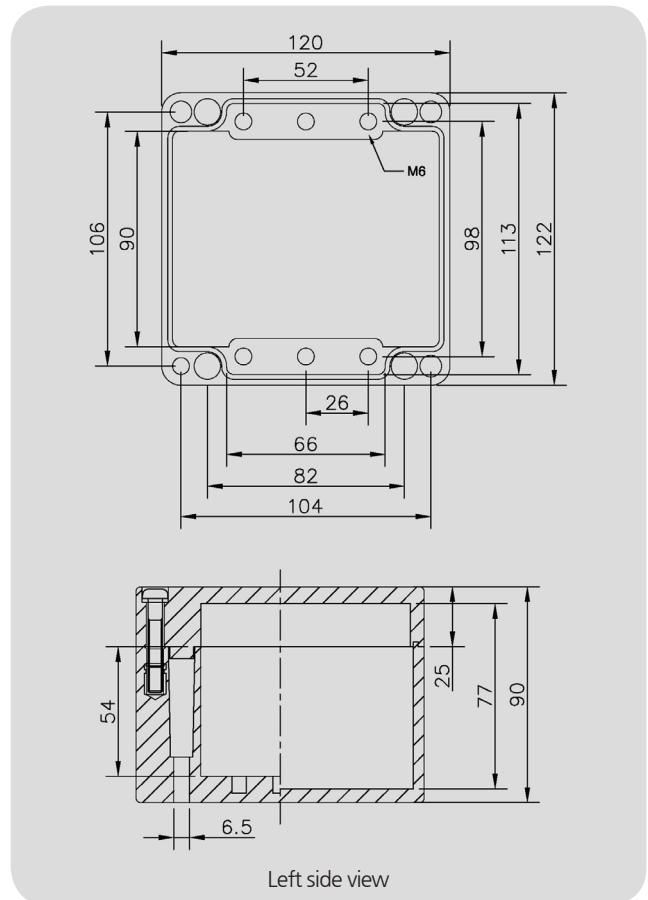
OSGP 1 - 122mm x 120mm x 90mm



OSGP 1 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	750g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤ black ≤ 109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	- 60°C to +40°C for T6/T57°C, - 60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
1 X 12	1 X 10	1 X 8	1 X 6	1 X 5	1 X 4

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10							
16	14						
21		12					
28			11				
37							
50							
60							
70							

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	2	2	2	1	N/A	N/A	N/A	N/A
L/R	1	1	1	1	N/A	N/A	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 6.17W

The beside table given theoretical values are calculated depending on typical configurations.

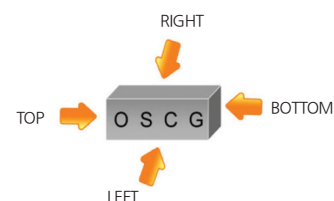
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

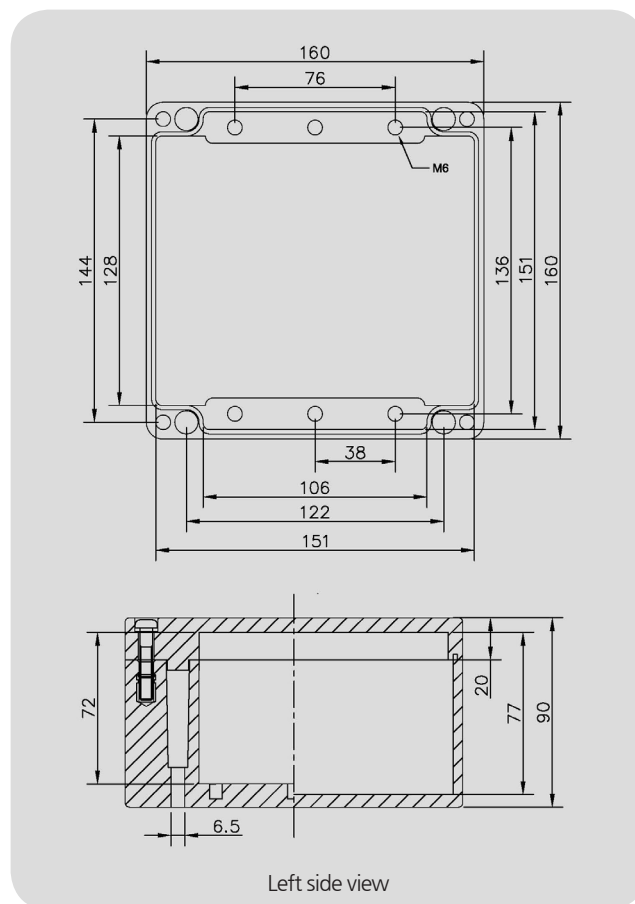
OSGP2 - 160mm x 160mm x 90mm



OSGP 2 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	1060g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	1060hm ≤ black ≤ 1090hm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	-60°C to +40°C for T6/T57°C, -60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 19	1 X 16	1 X 12	1 X 10	1 X 8	1 X 5

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10	48						
16	18	28					
21		16	25				
28			14	22			
37				12			
50							
60							
70							

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	5	4	2	2	N/A	N/A	N/A	N/A
L/R	3	3	1	1	N/A	N/A	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 9.78W

The beside table given theoretical values are calculated depending on typical configurations.

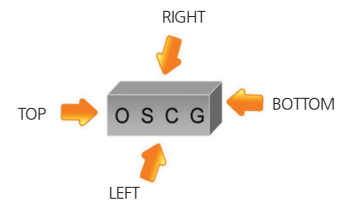
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

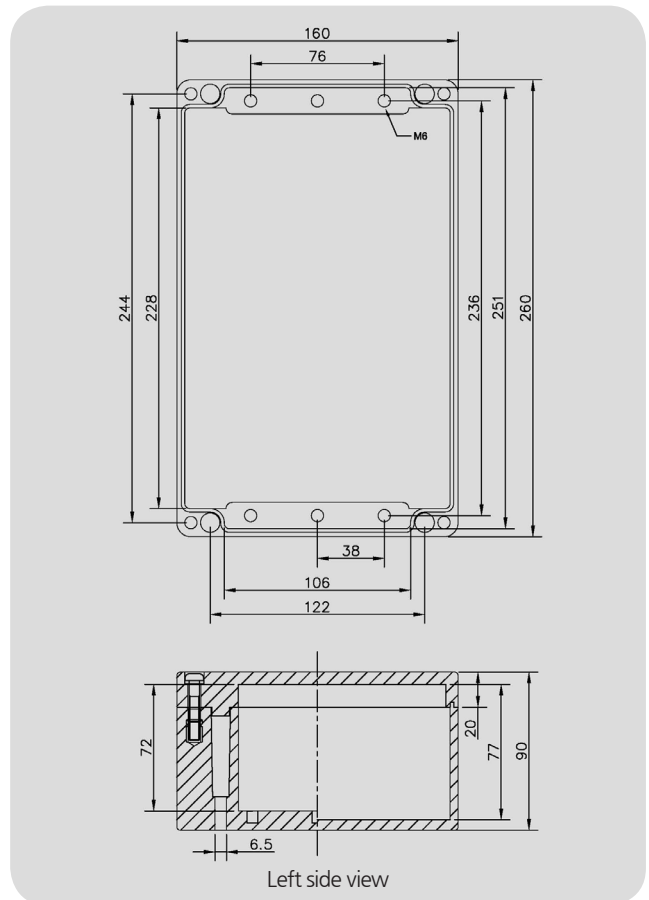
OSGP3 - 260mm x 160mm x 90mm



OSGP 3 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	1170g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm (EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤ black ≤ 109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearance holes moulded into the body
Certificate No.	IECEx PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	-60°C to +40°C for T6/T57°C, -60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 39	1 X 32	1 X 25	1 X 20	1 X 16	1 X 12

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10	47						
16	18	28	43				
21		12	25	39			
28			14	22			
37				12			
50							
60							
70							

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	9	7	4	3	N/A	N/A	N/A	N/A
L/R	3	3	1	1	N/A	N/A	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 12.23W

The beside table given theoretical values are calculated depending on typical configurations.

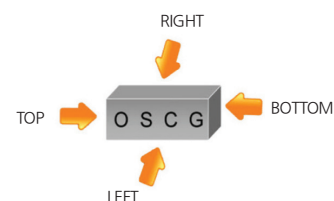
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

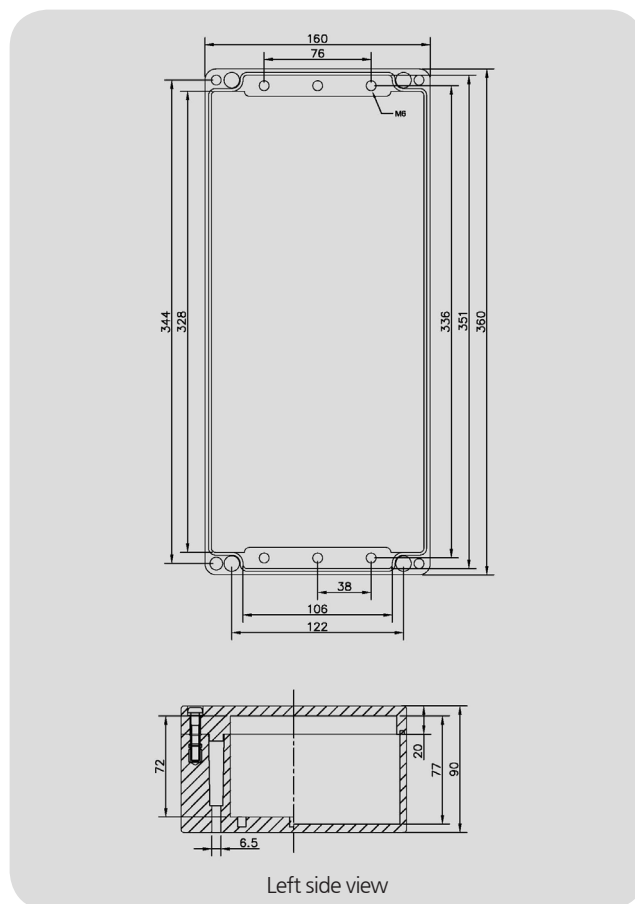
OSGP4 - 360mm x 160mm x 90mm



OSGP 4 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	2150g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤ black ≤ 109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	-60°C to +40°C for T6/T57°C, -60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2,5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
1 X 58	1 X 48	1 X 37	1 X 30	1 X 24	1 X 18

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10	47						
16	17	27	42				
21		16	24	39			
28			13	22			
37				12			
50							
60							
70							

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	14	10	6	5	N/A	N/A	N/A	N/A
L/R	3	3	1	1	N/A	N/A	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 14.89W

The beside table given theoretical values are calculated depending on typical configurations.

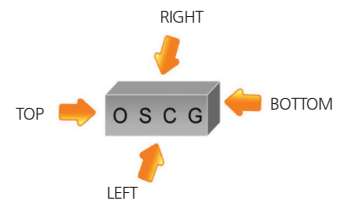
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

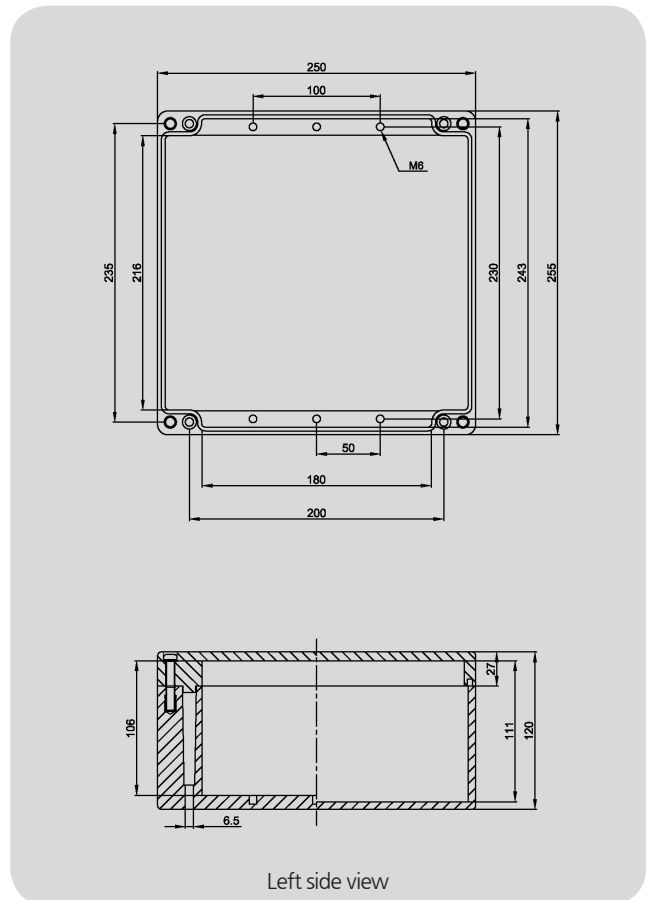
OSGP5 - 255mm x 250mm x 120mm



OSGP 5 Specification

Material	Glass Fibre Reinforced Polyester(GRP)
Weight(g)	2996g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤black ≤109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEx PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	- 60°C to +40°C for T6/T57°C, - 60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 X 38	2 X 32	2 X 25	2 X 20	2 X 16	2 X 12

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10	53						
16	21	32					
21		18	28				
28			16	25			
37				14	20		
50					11	15	19
60						10	13
70							9

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	14	10	7	4	3	2	N/A	N/A
L/R	10	7	5	3	2	1	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 16.17W

The beside table given theoretical values are calculated depending on typical configurations.

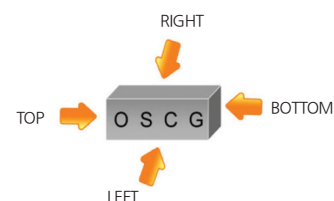
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

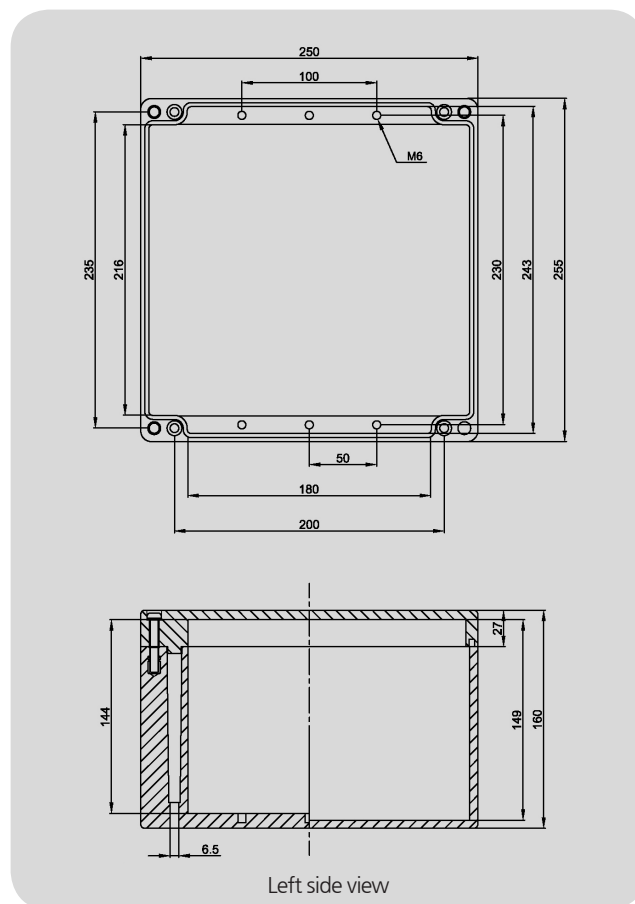
OSGP6 - 255mm x 250mm x 160mm



OSGP 6 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	3482g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤ black ≤ 109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	-60°C to +40°C for T6/T57°C, -60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2,5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
2 X 38	2 X 32	2 X 25	2 X 20	2 X 16	2 X 12

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10	58						
16	22	35					
21		20	31				
28			17	27			
37				15	22		
50					12	17	21
60						12	15
70							11

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	22	11	8	6	5	2	2	1
L/R	14	9	6	6	3	2	1	1

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 18.03W

The beside table given theoretical values are calculated depending on typical configurations.

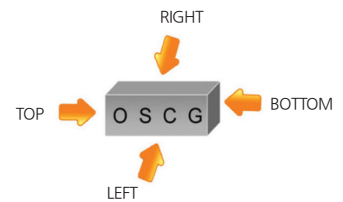
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

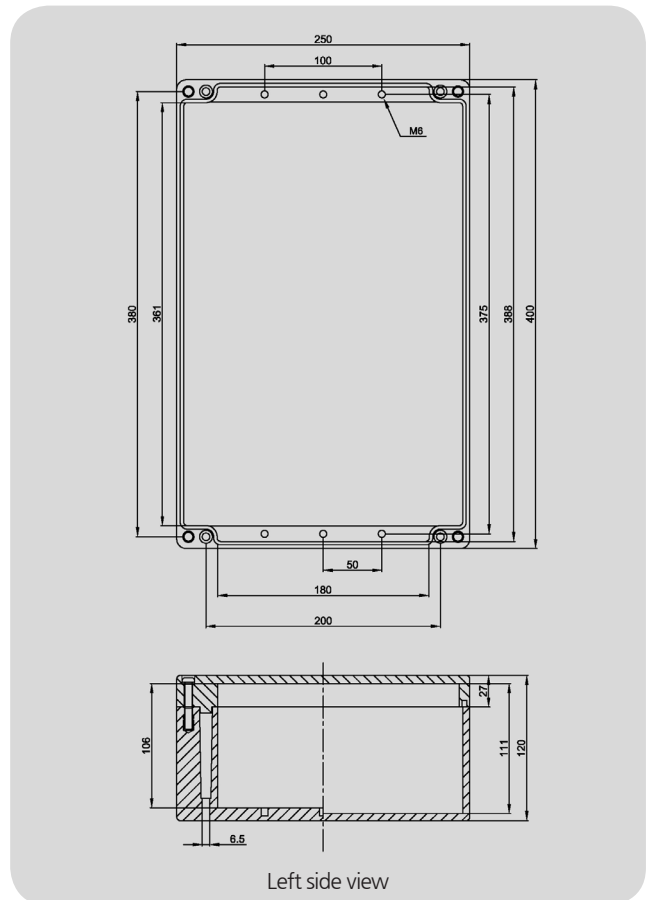
OSGP7 - 400mm x 250mm x 120mm



OSGP 7 Specification

Material	Glass Fibre Reinforced Polyester(GRP)
Weight(g)	4346g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤black ≤109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEx PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	- 60°C to +40°C for T6/T57°C, - 60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 X 66	2 X 55	2 X 43	2 X 34	2 X 28	2 X 21

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8							
10	58						
16	22	34					
21		20	30				
28			17	27			
37				15	22		
50					12	17	21
60						12	15
70							11

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	21	15	12	6	4	3	N/A	N/A
L/R	9	7	4	3	2	1	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 21.87W

The beside table given theoretical values are calculated depending on typical configurations.

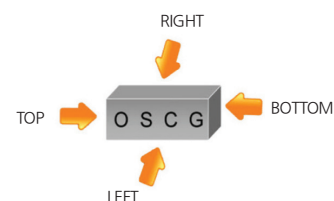
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

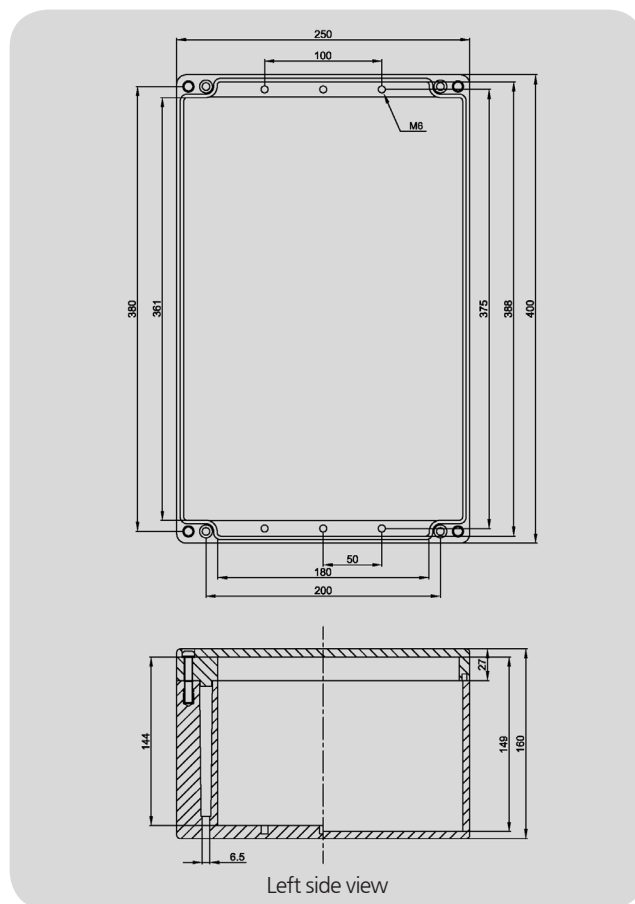
OSGP8 - 400mm x 250mm x 160mm



OSGP 8 Specification

Material	Glass Fibre Reinforced Polyester(GRP)
Weight(g)	4910g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤ black ≤ 109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	-60°C to +40°C for T6/T57°C, -60°C to +55°C for T5/T72°C

Drawing



A Guide to Physical Terminal Capacity

WD U 2,5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
2 X 66	2 X 55	2 X 43	2 X 34	2 X 28	2 X 21

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm2)						
	2.5	4	6	10	16	25	35
5							
8							
10	59						
16	23	36					
21		21	32				
28			18	29			
37				16	23		
50					13	18	23
60						12	16
70							11

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	29	23	15	11	9	4	3	2
L/R	14	11	6	6	3	2	1	1

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 23.34W

The beside table given theoretical values are calculated depending on typical configurations.

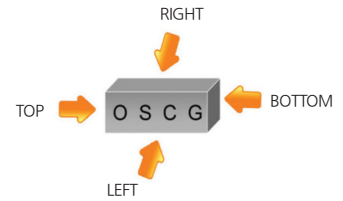
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

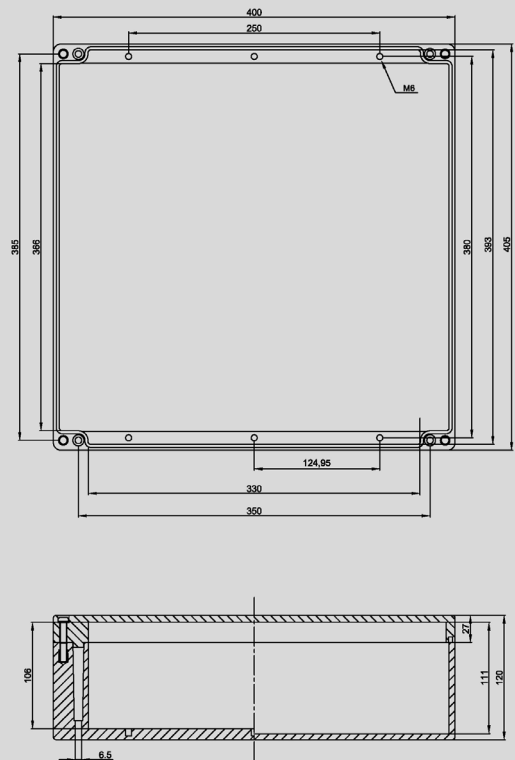
OSGP9 - 405mm x 400mm x 120mm



OSGP 9 Specification

Material	Glass Fibre Reinforced Polyester(GRP)
Weight(g)	5914g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤black ≤109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEx PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	- 60°C to +40°C for T6/T57°C, - 60°C to +55°C for T5/T72°C

Drawing



Left side view

A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
3 X 67	3 X 56	3 X 43	2 X 35	3 X 28	3 X 21

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm2)						
	2.5	4	6	10	16	25	35
5							
8	100						
10	64						
16	25	39	59				
21		22	34	56			
28			19	31	45		
37				18	26	36	
50					14	20	25
60						14	17
70							13

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	20	14	12	7	5	3	N/A	N/A
L/R	17	12	9	6	4	3	N/A	N/A

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 28.98W

The beside table given theoretical values are calculated depending on typical configurations.

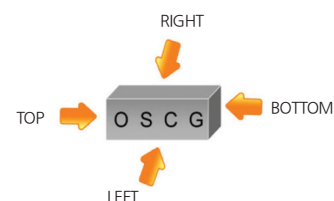
In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

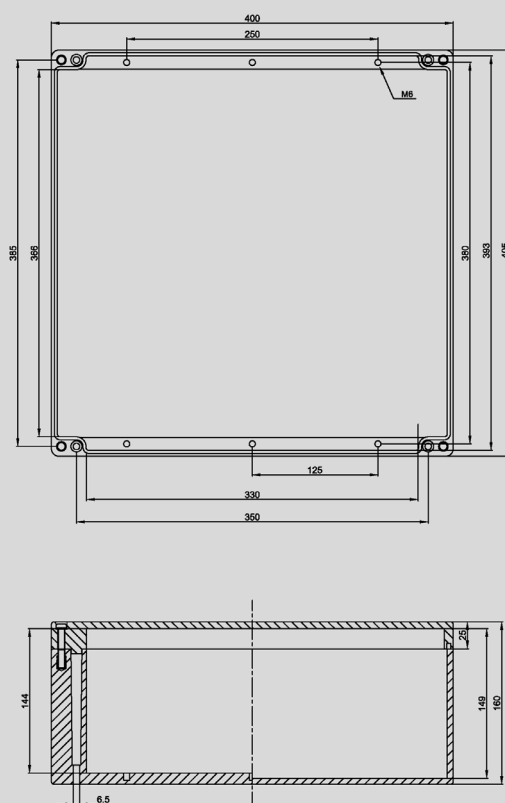
OSGP10 - 405mm x 400mm x 160mm



OSGP 10 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	6542g
Area Classification	Zone 1 and Zone2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	106Ohm ≤ black ≤ 109Ohm
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
Ex Code	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
Ambient Temperature	-60°C to +40°C for T6/T57°C, -60°C to +55°C for T5/T72°C

Drawing



Left side view

A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
3 X 67	3 X 56	3 X 43	3 X 35	3 X 28	3 X 21

(* Terminal block is WDU series or equivalent products.)

Typical Terminal Load Configuration

Current (A)	Cross section (mm ²)						
	2.5	4	6	10	16	25	35
5							
8	106						
10	67						
16	26	41	62				
21		24	36	59			
28			20	33	48		
37				19	27	39	
50					15	21	27
60						14	18
70							13

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	40	23	15	11	9	4	3	2
L/R	26	20	14	9	6	3	2	1

(*T/B : Top/Bottom, L/R : Left/Right)

Maximum heat dissipation power: 31.03W

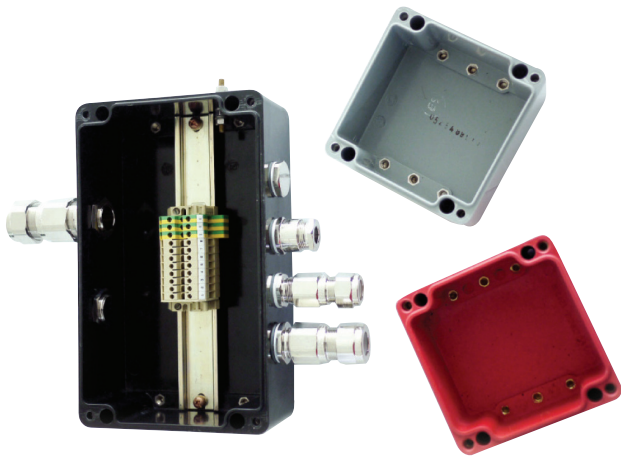
The beside table given theoretical values are calculated depending on typical configurations.

In any terminal box, the maximum heat dissipation power must not be exceeded.

Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

- Any number of conductors and terminals additionally.
- To be engineered by the OSCG

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box



Application

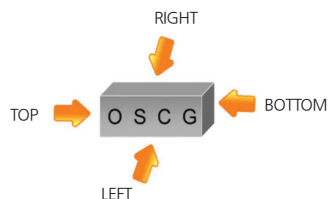
The OSIGP GRP junction boxes have proven their use in many sectors of industry. The OSIGP GRP enclosure comprise 10 sizes of enclosure manufactured in Glass Fibre Reinforced Polyester (GRP). This material is highly resistant to contamination from oils, fats, aliphatic. Polyester gives excellent mechanical strength and life expectancy.

Technical Information / Specifications

Material : Glass Fibre Reinforced Plastic (GRP)
Ingress Protection : IP66, IP67 -EN/IEC 60529
Wide Operating Temperature : -20°C ~ +100°C
Impact Resistance : 7Nm (EN50014)
Color : RAL9005 Black / RAL7001 Grey / RAL3001 Red
Toxicity : V-O Self Extinguishing, UL94
Gasket : Silicon rubber
Mounting : Integral 6mm clearance holes moulded into the body
Earthing : Optional M6 internal/external earth stud, brass or stainless steel

Certificate

KOMERI-0306-11T1322 ~ 25
 KOMERI-0306-12T1067 ~ 70



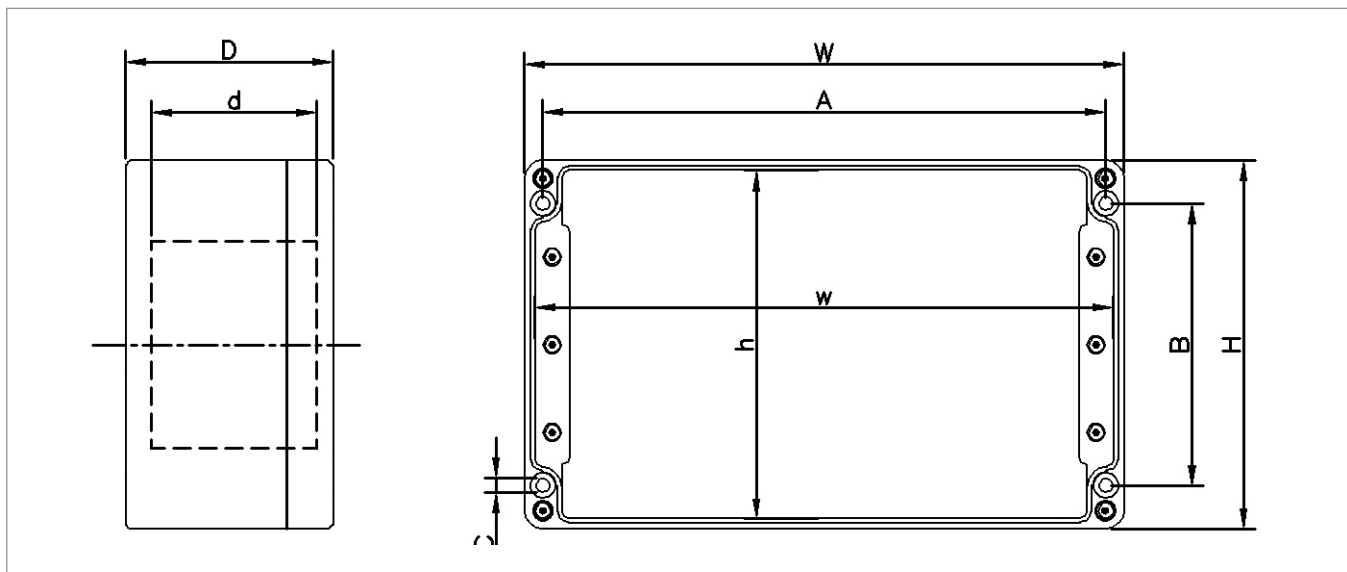
Type Designation

The COMPLETE MODEL No is as follows:

OSIGP1	4	M	O	T	1
①	②	③	④	⑤	⑥
NO	Description	Symbol	Detail		
①	BASIC MODEL	OSGP1	122 x 120 x 90(mm)		
		OSGP2	160 x 160 x 90(mm)		
		OSGP3	260 x 160 x 90(mm)		
		OSGP4	360 x 160 x 90(mm)		
		OSGP5	255 x 250 x 120(mm)		
		OSGP6	255 x 250 x 160(mm)		
		OSGP7	400 x 250 x 120(mm)		
		OSGP8	400 x 250 x 160(mm)		
		OSGP9	405 x 400 x 120(mm)		
		OSGP10	405 x 400 x 160(mm)		
②	TB SIZE(SQ)	2.5	2.5SQ		
		04	4SQ		
		06	6SQ		
		10	10SQ		
		16	16SQ		
		35	35SQ		
③	ENTRY THREAD TYPE	M	METRIC		
		NPT	NPT		
④	ENTRY SIZE	0	M16 or NPT1/2"		
		1	M20 or NPT1/2"		
		2	M25 or NPT3/4"		
		3	M32 or NPT1"		
		4	M40 or NPT1-1/4"		
		5	M50 or NPT1-1/2"		
		6	M63 or NPT2"		
⑤	ENTRY SIDE	7	M75 or NPT2-1/2"		
		T	TOP SIDE		
		B	BOTTOM SIDE		
		L	LEFT SIDE		
⑥	Q'TY OF ENTRY (EA)	R	RIGHT SIDE		
		1	1EA		
		2	2EA		
		3	3EA		
		~	~EA		

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

Dimensions



Legend

W : External wide
H : External height
D : External depth

w : Internal wide
h : Internal height
d : Internal depth

A : Horizontal fixing hole distance
B : Vertical fixing hole distance
C : Fixing hole diameter

Dimensions Data Table

TYPE	External dimension [mm]			Internal dimension [mm]			Fixation [mm]			Weight [kg]
	W	H	D	w	h	d	A	B	C	
OSGP 1	122	120	90	113	111	72	106	82	6.5	0.75
OSGP 2	160	160	90	151	151	77	140	110	6.5	1.06
OSGP 3	260	160	90	251	151	77	240	110	6.5	1.17
OSGP 4	360	160	90	351	151	77	340	110	6.5	2.15
OSGP 5	255	250	120	243	238	111	235	200	6.5	2.996
OSGP 6	255	250	160	243	238	149	235	200	6.5	3.482
OSGP 7	400	250	120	388	238	111	380	200	6.5	4.346
OSGP 8	400	250	160	388	238	149	380	200	6.5	4.91
OSGP 9	405	400	120	393	388	111	385	350	6.5	5.914
OSGP 10	405	400	160	393	388	149	385	350	6.5	6.542

Maximum terminal quantity

TYPE	WDU 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
OSGP 1	1 x 12	1 x 10	1 x 8	1 x 6	1 x 5	1 x 4
OSGP 2	1 x 19	1 x 16	1 x 12	1 x 10	1 x 8	1 x 5
OSGP 3	1 x 39	1 x 32	1 x 25	1 x 20	1 x 16	1 x 12
OSGP 4	1 x 58	1 x 48	1 x 37	1 x 30	1 x 24	1 x 18
OSGP 5	2 x 38	2 x 32	2 x 25	2 x 20	2 x 16	2 x 12
OSGP 6	2 x 38	2 x 32	2 x 25	2 x 20	2 x 16	2 x 12
OSGP 7	2 x 66	2 x 55	2 x 43	2 x 34	2 x 28	2 x 21
OSGP 8	2 x 66	2 x 55	2 x 43	2 x 34	2 x 28	2 x 21
OSGP 9	3 x 67	3 x 56	3 x 43	2 x 35	2 x 28	2 x 21
OSGP 10	3 x 67	3 x 56	3 x 43	2 x 35	2 x 28	2 x 21

※ Terminal block is WDU series or equivalent products.

Used Terminal Block Information (WDU)

TB Type	Rated voltage (V)	Rated current (A)	Max. current/ conductor (A/mm ²)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	550	21	23/2.5	0.4~0.8(M2.5)	10
4SQ	690	28	41/6	0.5~1.0(M3)	10
6SQ	550	36	57/10	0.8~1.6(M3.5)	12
10SQ	550	50	76/16	1.2~2.4(M4)	12
16SQ	690	66	101/25	3.0~4.0(M5)	16
35SQ	690	109	150/50	4.5~5.0(M6)	18

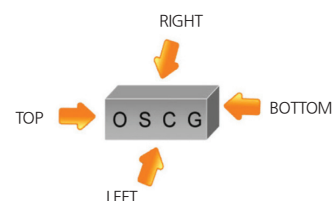
※ For other types of TB and combination of different TB please contact OSCG.

Maximum Cable entry quantity

TYPE	ENTRY POSITION	M16	M20	M25	M32	M40	M50	M63	M75
OSGP 1	Top / Bottom	2	2	2	1	-	-	-	-
	Left / Right	1	1	1	1	-	-	-	-
OSGP 2	Top / Bottom	5	4	2	2	-	-	-	-
	Left / Right	3	3	1	1	-	-	-	-
OSGP 3	Top / Bottom	9	7	4	3	-	-	-	-
	Left / Right	3	3	1	1	-	-	-	-
OSGP 4	Top / Bottom	14	10	6	5	-	-	-	-
	Left / Right	3	3	1	1	-	-	-	-
OSGP 5	Top / Bottom	14	10	7	4	3	2	-	-
	Left / Right	10	7	5	3	2	1	-	-
OSGP 6	Top / Bottom	22	11	8	6	5	2	2	1
	Left / Right	14	9	6	6	3	2	1	1
OSGP 7	Top / Bottom	21	15	12	6	4	3	-	-
	Left / Right	9	7	4	3	2	1	-	-
OSGP 8	Top / Bottom	29	23	15	11	9	4	3	2
	Left / Right	14	11	6	6	3	2	1	1
OSGP 9	Top / Bottom	20	14	12	7	5	3	-	-
	Left / Right	17	12	9	6	4	3	-	-
OSGP 10	Top / Bottom	40	23	15	11	9	4	3	2
	Left / Right	26	20	14	9	6	3	2	1

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

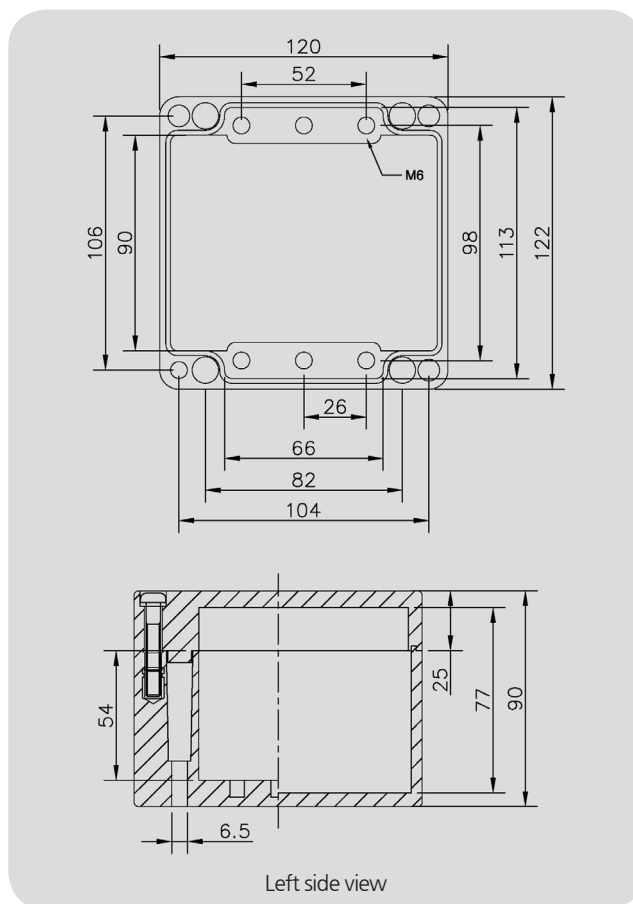
OSIGP 1 - 122mm x 120mm x 90mm



OSIGP 1 Specification

Width(mm)	122mm
Length(mm)	120mm
Depth(mm)	90mm
Weight(g)	750g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-20°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	KOMERI-0306-11T1322,23

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
1 X 12	1 X 10	1 X 8	1 X 6	1 X 5	1 X 4

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	2	2	2	1	N/A	N/A	N/A	N/A
L/R	1	1	1	1	N/A	N/A	N/A	N/A

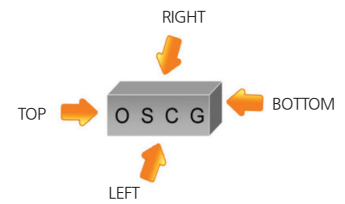
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

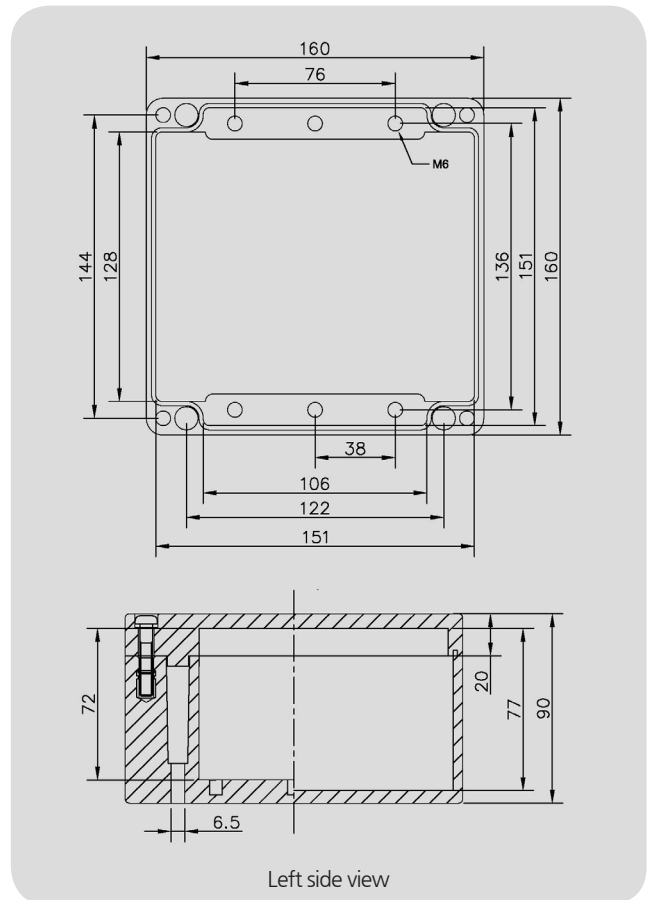
OSIGP 2 - 160mm x 160mm x 90mm



OSIGP 2 Specification

Width(mm)	160mm
Length(mm)	160mm
Depth(mm)	90mm
Weight(g)	1100g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-20°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	KOMERI-0306-11T1324,25

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 19	1 X 16	1 X 12	1 X 10	1 X 8	1 X 5

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	5	4	2	2	N/A	N/A	N/A	N/A
L/R	3	3	1	1	N/A	N/A	N/A	N/A

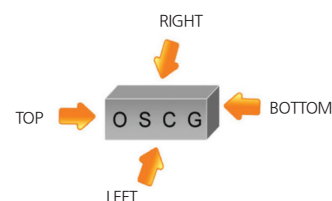
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

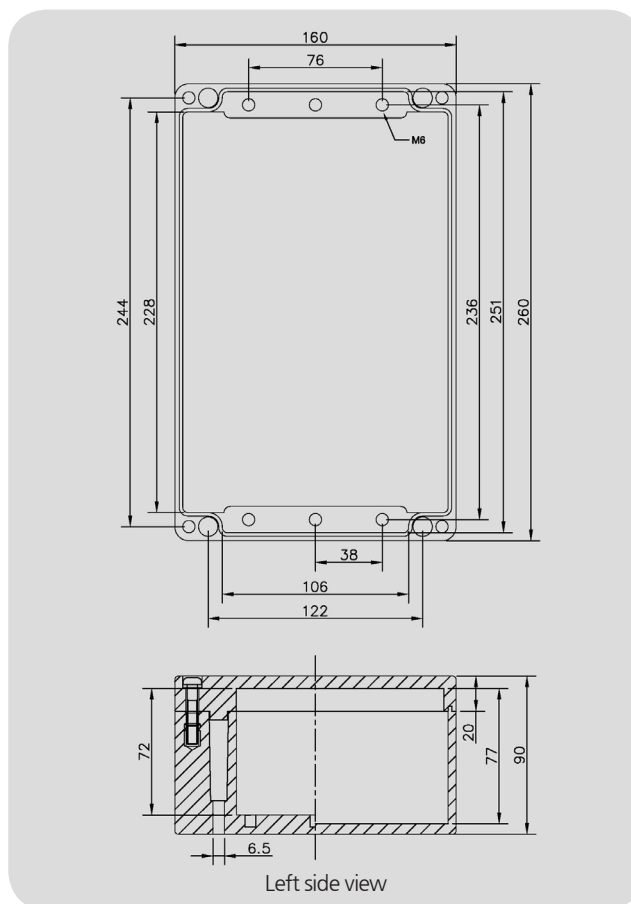
OSIGP 3 - 260mm x 160mm x 90mm



OSIGP 3 Specification

Width(mm)	260mm
Length(mm)	160mm
Depth(mm)	90mm
Weight(g)	1700g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-20°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 4.5mm clearance holes moulded into the body
Certificate No.	KOMERI-0306-12T1067,68

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WD U 4	WD U 6	WD U 10	WD U 16	WD U 35
1 X 39	1 X 32	1 X 25	1 X 20	1 X 16	1 X 12

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	9	7	4	3	N/A	N/A	N/A	N/A
L/R	3	3	1	1	N/A	N/A	N/A	N/A

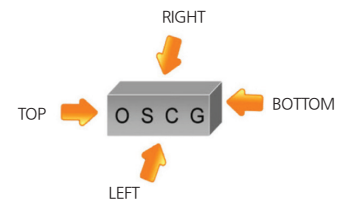
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

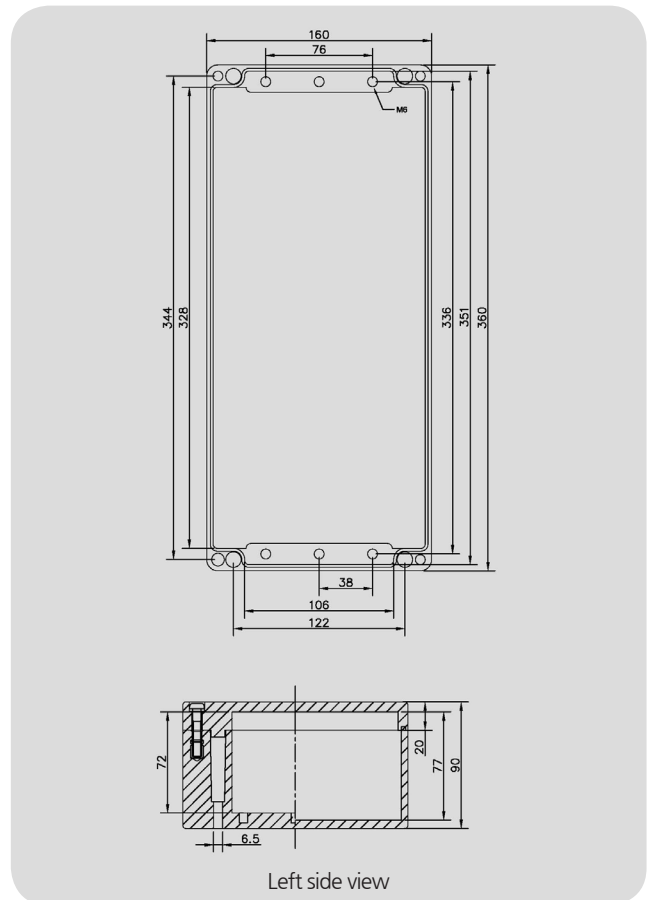
OSIGP 4 - 360mm x 160mm x 90mm



OSIGP 4 Specification

Width(mm)	360mm
Length(mm)	160mm
Depth(mm)	90mm
Weight(g)	2150g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-20°C - +100°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	KOMERI-0306-12T10069,70

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
1 X 58	1 X 48	1 X 37	1 X 30	1 X 24	1 X 18

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	14	10	6	5	N/A	N/A	N/A	N/A
L/R	3	3	1	1	N/A	N/A	N/A	N/A

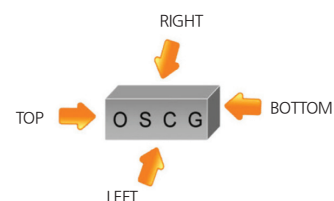
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

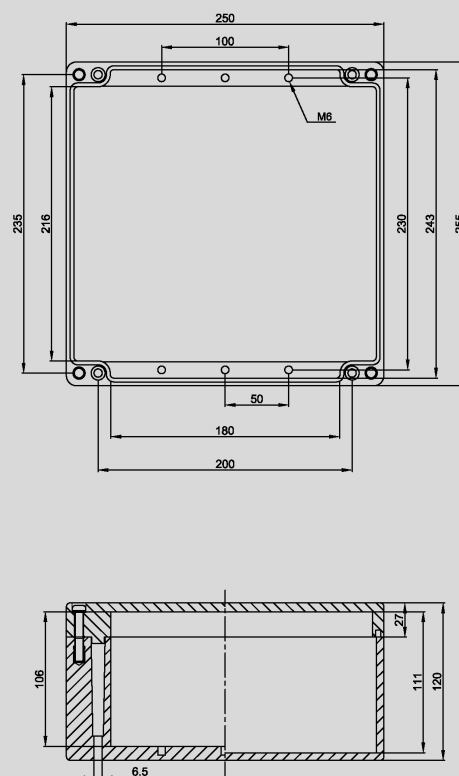
OSIGP 5 - 255mm x 250mm x 120mm



OSIGP 5 Specification

Width(mm)	255mm
Length(mm)	250mm
Depth(mm)	120mm
Weight(g)	2996g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +130°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	In progress

Drawing



Left side view

A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 x 38	2 x 32	2 x 25	2 x 20	2 x 16	2 x 12

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	14	10	7	4	3	2	N/A	N/A
L/R	10	7	5	3	2	1	N/A	N/A

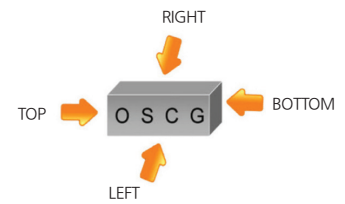
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

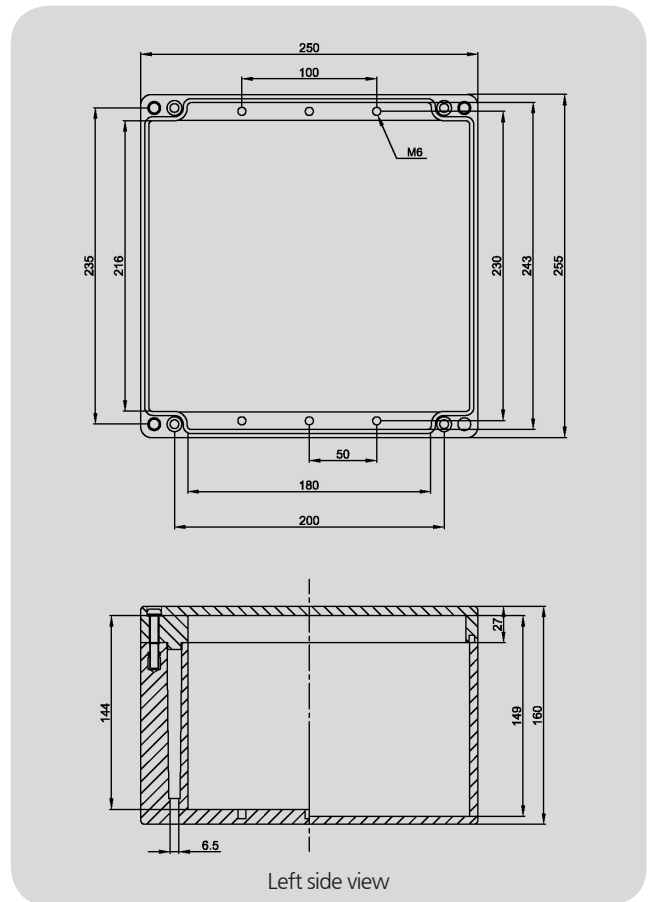
OSIGP 6 - 255mm x 250mm x 160mm



OSIGP 6 Specification

Width(mm)	255mm
Length(mm)	250mm
Depth(mm)	160mm
Weight(g)	3482g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +130°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	In progress

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 x 38	2 x 32	2 x 25	2 x 20	2 x 16	2 x 12

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	29	23	15	11	9	4	3	2
L/R	14	11	6	6	3	2	1	1

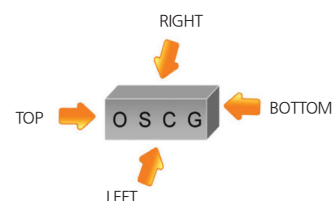
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

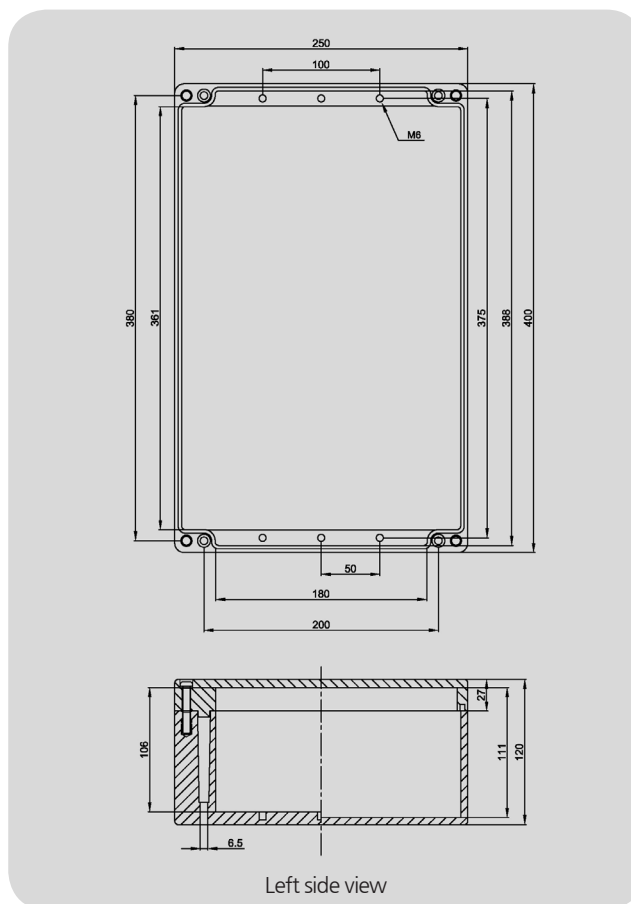
OSIGP 7 - 400mm x 250mm x 120mm



OSIGP 7 Specification

Width(mm)	400mm
Length(mm)	250mm
Depth(mm)	120mm
Weight(g)	4346g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +130°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 4.5mm clearance holes moulded into the body
Certificate No.	In progress

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 x 66	2 x 55	2 x 43	2 x 34	2 x 28	2 x 21

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	21	15	12	6	4	3	N/A	N/A
L/R	9	7	4	3	2	1	N/A	N/A

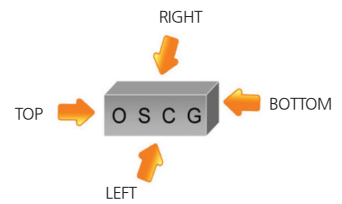
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

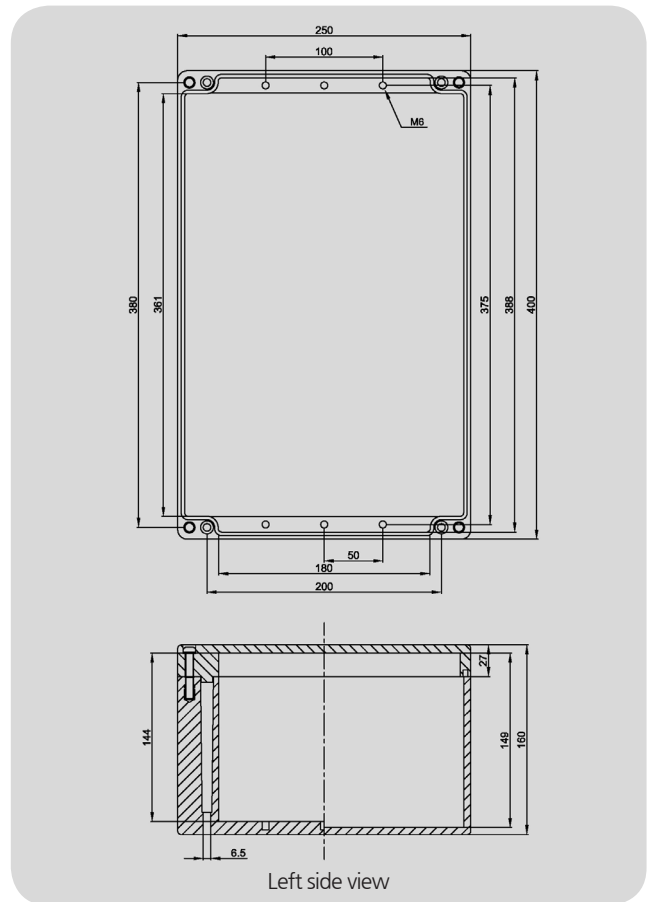
OSIGP 8 - 400mm x 250mm x 160mm



OSIGP 8 Specification

Width(mm)	400mm
Length(mm)	250mm
Depth(mm)	160mm
Weight(g)	4910g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +130°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	In progress

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
2 x 66	2 x 55	2 x 43	2 x 34	2 x 28	2 x 21

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	29	23	15	11	9	4	3	2
L/R	14	11	6	6	3	2	1	1

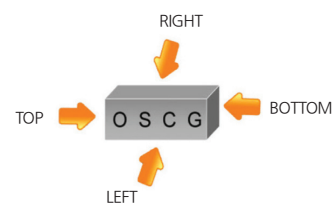
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

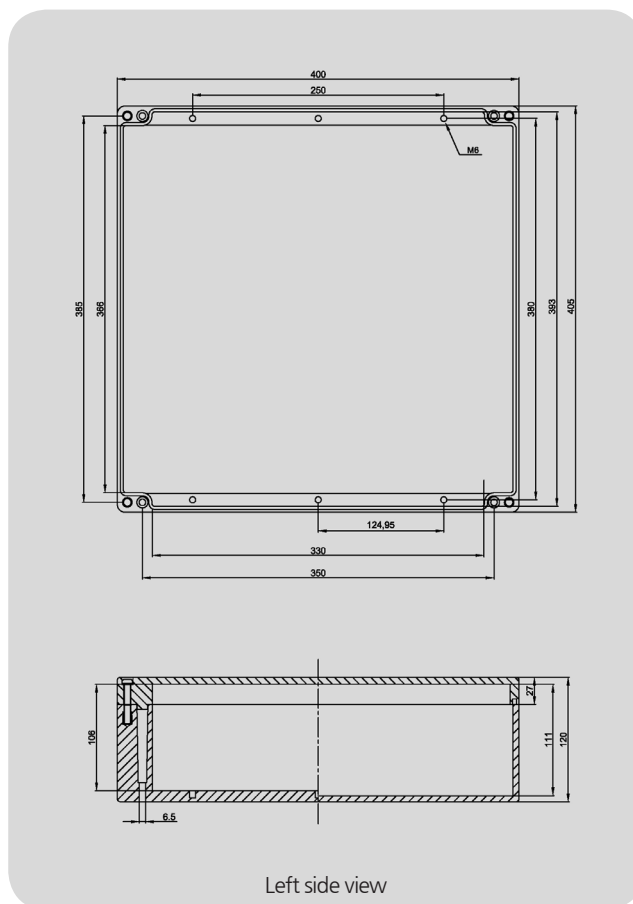
OSIGP 9 - 405mm x 400mm x 120mm



OSIGP 9 Specification

Width(mm)	405mm
Length(mm)	400mm
Depth(mm)	120mm
Weight(g)	5914g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +130°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 4.5mm clearance holes moulded into the body
Certificate No.	In progress

Drawing



A Guide to Physical Terminal Capacity

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
3 x 67	3 x 56	2 x 43	2 x 35	2 x 28	2 x 21

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	20	14	12	7	5	3	N/A	N/A
L/R	17	12	9	6	4	3	N/A	N/A

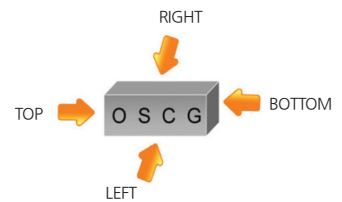
(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

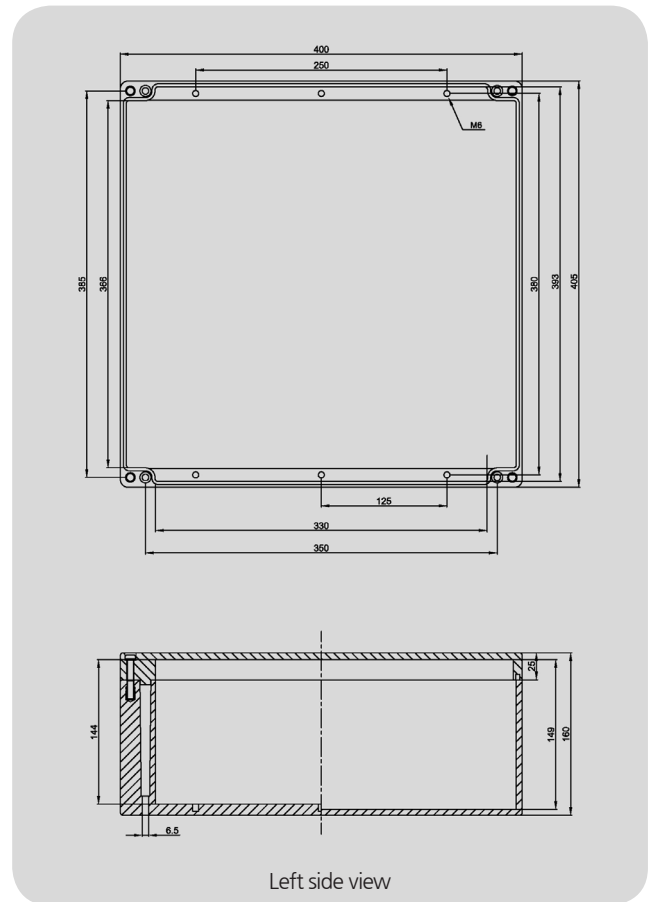
OSIGP 10 - 405mm x 400mm x 160mm



OSIGP 10 Specification

Width(mm)	405mm
Length(mm)	400mm
Depth(mm)	160mm
Weight(g)	6542g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C - +130°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black, RAL7001 Grey, RAL3001 Red
Toxicity	Low Smoke Halogen-Free
Gasket	Silicon rubber
Finish	Moulded self color black
Earthing	Optional M6 internal/external earth stud, brass or stainless steel
Mounting	Integral 6mm clearnace holes moulded into the body
Certificate No.	In progress

Drawing



OSIGP 10 Specification

WD U 2.5	WDU 4	WDU 6	WDU 10	WDU 16	WDU 35
3 x 67	3 x 56	2 x 43	2 x 35	2 x 28	2 x 21

(* Terminal block is WDU series or equivalent products.)

A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	40	23	15	11	9	4	3	2
L/R	26	20	14	9	6	3	2	1

(*T/B : Top/Bottom, L/R : Left/Right)

Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm ²)	Rated Voltage (V)	Rated current (A)	Tightening torque (Nm)	Stripping length (mm)
2.5SQ	23/2.5	550	21	0.4~0.8(M2.5)	10
4SQ	41/6	690	28	0.5~1.0(M3)	10
6SQ	57/10	550	36	0.8~1.6(M3.5)	12
10SQ	76/16	550	50	1.2~2.4(M4)	12
16SQ	101/25	690	66	3.0~4.0(M5)	16
35SQ	150/50	690	109	4.5~5.0(M6)	18

BS 6121 TYPE OF GLAND

Type A1	For unarmoured cable with an elastomeric or plastics outer sheath, where the function of the gland is to secure the outer sheath of the cable.
Type A2	As type A1, but with an IP66 seal between the outer sheath and gland.
Type B	For armoured or wire braided cable, where the function of the gland is to secure the armour or metallic braid and to provide electrical continuity between such armour or braid and the threaded fixing component of the gland.
Type C	For armoured or wire braided cable with elastomeric or plastics outer sheath. As type B, but with an IP66 seal between outer sheath and gland.
Type E1	For armoured or wire braided cable with an extruded elastomeric or plastics inner sheath and elastomeric or plastics outer sheath. As type B, but with IP66 seals between the outer sheath and gland and between the inner sheath and threaded fixing component.

The suffix for each type of protection shall be as follows.

Single wire armoured	W
Pliable wire armoured flexible	T
Wire braided	X

Aluminium strip armoured	Y
Double steel tape armoured	Z

TYPE TESTS

Proof torque test

Test one gland of each size and type. The gland shall be clean, new and without lubricant. Screw the threaded fixing component of the gland into a suitably tapped hole in a substantial block of steel. The thickness of the block shall be greater than the length of the thread on the component, and the hole pass right through the block. Assemble the gland with a short piece of the appropriate kind of cable of any diameter within the range of the gland. Tighten the gland with a manually operated torque spanner to the appropriate proof torque given in tables 1 to 6(BS 6121) ; apply the spanner first to the main body of the gland and then to each successive hexagonal component. Dismantle the gland and examine it. Ignore any seal distortion.

Load test for type A glands.

Test one gland of each size and type. The gland shall be clean, new and without lubricant. Mount the gland as shown in figure 1. Secure a cylindrical low carbon steel mandrel, of the diameter specified in table 1(BS 6121) and any convenient length, in the gland; do this by tightening the gland with a torque spanner to a torque equal to 50% of the proof torque specified in table 1(BS 6121). The mandrel, which shall be clean, dry and polished, shall carry a platform on which weights may be placed. Mark the mandrel so that any movement relative to the gland can easily be detected. Load the mandrel with weights until the total tensile load of the mandrel, platform and weights is in accordance with table 1(BS 6121). Maintain the load for 6 hrs. Measure at the end of this period, the distance, if any, through which the mandrel has moved relative to the gland.

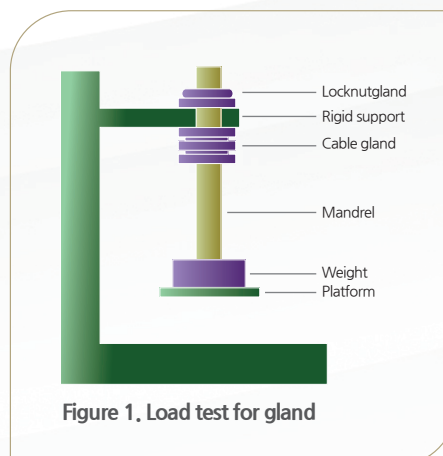


Figure 1. Load test for gland



RADIAL LOAD TEST

Test one insulated adaptor of each size.

Mount the adaptor in a suitable gland plate as shown in figure 2. Tighten a suitable gland into the adaptor to enable the radial torque to be applied. Insert into the gland a mandrel of appropriate size, ensuring that the mandrel does not enter the adaptor. Make arrangements to suspend weights from the mandrel. When calculating the radial torque to be applied assume that the weight of the mandrel itself acts halfway along its length. Apply the load for not less than 5 min. Finally, dismantle the assembly and inspect the insulated adaptor for signs of damage.

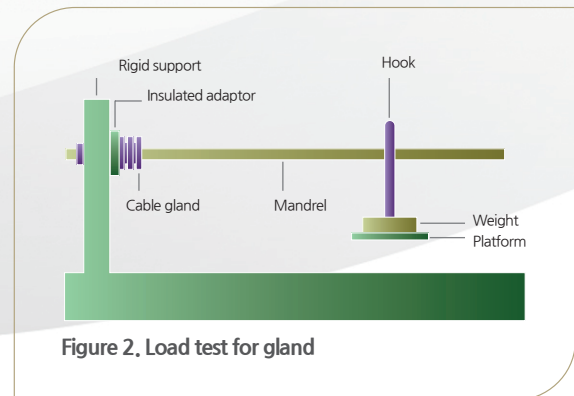


Figure 2. Load test for gland

TEMPERATURE CLASSIFICATION & GAS GROUPINGS

Flammable mixtures can be classified under two main characteristics in respect of explosion protection; temperature of ignition by hot surfaces and the spark energy required to ignite the mixture. The spark energy of the ignition is also related to the intensity of the explosion. Classification of maximum surface temperatures in both North America and Europe are similar but vary slightly in the nomenclature used. The temperature classification is important to ensure that the correct equipment is matched to the flammable atmosphere that could potentially exist in an area. This will take into account such things as maximum ambient temperature and maximum operating voltage with a + 10% over voltage or an overload condition applied. In some types of protection such as Ex 'd' or 'nR' the temperature classification is based on the outside temperature of the enclosure whereas in other types of protection such as Ex 'e' or 'nA' the temperature classification is based on the temperature of the internal components.

TEMPERATURE CLASSIFICATION

(Unless otherwise specified on the rating plate it is assumed that the operating ambient temperature is in the range -20oC to + 40oC in accordance with European standards) All gases are grouped according to their physical properties and details of their grouping can be found in either National or International codes of practice. Some examples of Gas Groups are shown below.

Maximum surface Temperature	US(NEC 505) IEC CENELEC	US(NEC 500)
450°C	T1	T1
300°C		T2
280°C	T2	T2A
260°C		T2B
230°C		T2C
215°C		T2D
200°C	T3	T3

Maximum surface Temperature	US(NEC 505) IEC CENELEC	US(NEC 500)
180°C	T3	T3A
165°C		T3B
160°C	T4	T3C
135°C		T4
120°C		T4A
100°C	T5	T5
85°C	T6	T6

TECHNICAL

GAS GROUPING FOR ELECTRICAL APPARATUS(EN 50014)

GROUP	GAS
I(Mining)	Methane(firedamp)
IIA	Industrial methane, propane, petrol & most industrial gases.
IIB	Ethylene, Town gas & other industrial gases
IIC	Hydrogen, Acetylene & Carbon Di-sulphide

Ambient Temperature

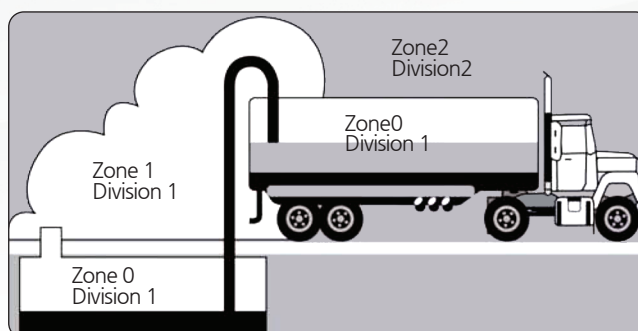
The ambient temperature is the surrounding temperature of the environment in which the equipment is installed, whether indoors or outdoors. For electrical equipment certified in Europe it is assumed that the ambient temperature in which the equipment may be operated is between -20°C to + 40°C. Some types of equipment are certified for operation outside this range and if so must be stated on the equipment label or certificate.

ATEX DIRECTIVE

The ATEX directive came into force in April 1994 and was enacted into UK law in March 1996. It became a mandatory requirement in July 2003. Most of the products in this catalogue have an EC type examination certificate to the ATEX directive. ATEX covers both electrical and mechanical ignition hazards. Apparatus are divided into equipment groups (I for mining and II non-mining), source of ignition Gas(G) and Dust(D) and Categories 1, 2 and 3. The categories provide respectively, very high, high and normal levels of protection against ignition. The categories deliver the level of protection which is currently obtained by applying the existing protection techniques(Ex 'd', Ex 'e' etc) and they also take into account other protection concepts proposed by manufacturers and considered by the notified(certification) bodies who produce EC type examination(ATEX) Certificates. The categories in practice are equated to suitability for Zones. The actual category of apparatus specified for a Zone depends on the overall risk assessment for a Zone. The zoning considers only the probability of the existence of an explosive atmosphere. It does not consider the consequential effects of an ignition taking place. Apparatus are marked with the grouping and category in addition to the marking required by the individual protection standards.

NORTH AMERICAN STANDARDS

Although this code change permits the use of products that have a Zonal classification, in a similar way to European practice, mixing of different forms of equipment approval across zones or divisions is not acceptable. e. g. products approved for Zone 1 do not necessarily meet the requirements of Division 1, which also encompasses Zone 0. Although no direct equivalents exist between European/IEC and American codes of protection and Area Classification there are similarities and there is a developing acceptance of European/IEC methods in North America and vice versa. The following table shows the basic relationships between the North American and European classifications.





EQUIVALENT DIVISION / ZONE

	Flammable gas always present → 1000 hrs/year	Flammable gas normally present → 10-1000 hrs/year	Flammable gas not normally present → 10 hrs/year
CENELEC/IEC	Zone 0 (Zone 20 dust)	Zone 1 (Zone 21 dust)	Zone 2 (Zone 22 dust)
ATEX	Category 1G Category 1D	Category 2G Category 2GAS	Category 3G Category 3D
US-NEC 505	Zone 0	Zone 1	Zone 2
US-NEC 500	Division 1	Division 1	Division 2

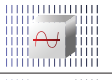
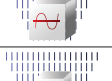
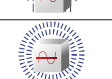
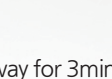
As can be seen from the table above, Division I covers both the European/IEC Zones 0 & 1. Therefore, care must be taken when using zone classified equipment in a Division 1 area as to the suitability of the protection employed. Underwriters Laboratory (UL) and Factory Mutual Inc (FM) are two main certification bodies in North America and in some cases, electrical equipment may also need to meet certain Marine Standards, and be separately approved by the US Coast Guards, before it can be used e.g. on an offshore oil rig.

PROTECTION CONCEPTS

Method of Protection	Symbol	Permitted Zone	ATEX Category	CENELEC Standard	IEC Standard	Protection Principle
Flameproof	Ex d	1 & 2	2 & 3	EN 50018	60079-1	Contain the explosion and prevent transmission
Enclosed Break	Ex nC	2	3	EN 50021	60079-15	
Powder Filled	Ex q	1 & 2	2 & 3	EN 50017	60079-5	
Increased Safety	Ex e	1 & 2	2 & 3	EN 50019	60079-7	No Arcs, sparks or hot surfaces or components
Non Sparking	Ex nA	2	3	EN 50021	60079-15	
Intrinsic Safety	Ex ia	0, 1 & 2	1, 2 & 3	EN 50020	60079-11	Limit energy of sparks and limit temperature of hot surfaces or components
	Ex ib	1 & 2	2 & 3	EN 50020	60079-11	
Energy Limitation	Ex nL	2	3	EN 50021	60079-15	
Pressurised	Ex p	1 & 2	2 & 3	EN 50016	60079-2	Prevent flammable gas coming into contact with hot surfaces and ignition capable equipment
Encapsulation	Ex m	1 & 2	2 & 3	EN 50028	60079-18	
Oil Immersion	Ex o	1 & 2	2 & 3	EN 50015	60079-6	
Restricted Breathing	Ex nR	2	3	EN 50021	60079-15	
Special	Ex s	0, 1 & 2	1, 2 & 3	EHSR		Any proven method

INGRESS PROTECTION

A major secondary protection parameter is the ingress protection of the electrical equipment. Moisture or dust if allowed to come into contact with electrical circuits could lead to either sparking or physical breakdown of the components and interfere with the protection method being used. In some cases the IP ratings for products in this catalogue have been carried out in accordance with EN 60529 (IEC 529) and have been witness tested by independent test laboratories. It will be noted that some products have both IP66 and IP67 ratings and this is because in some instances the IP66 requirement is more onerous than the IP67 requirement. This is one of the most onerous water ingress tests and we designed specifically for electrical equipment which would be subject to deluge conditions, e.g. Ships decks, fire deluge areas. The following table shows the criterion for IP requirement to EN/IEC 60529.

First Digit		Degree of Protection	Second Digit		Degree of Protection
0		No protection	0		No protection
1		Protection against ingress of large solid particles	1		Protection against ingress of vertically dripping water
2		Protection against ingress of medium sized solid particles	2		Protection against ingress of water dripping at an angle of 75° to 90°
3		Protection against ingress of medium solid particles greater in thickness than 2.5mm	3		Protected against drops of water falling at up to 60° from the vertical
4		Protection against ingress of small solid foreign bodies greater in thickness than 1mm	4		Protected against projections of water from all directions
5		Protection against ingress of dust in an amount sufficient to interfere with enclosed equipment.	5		Protection against ingress of water jets
6		Complete Protection against ingress of dust	6		Protection against ingress of water in heavy water
			7		Protection against effects of temporary immersion
			8		Protection against effects of indefinite immersion

IP TEST METHOD

IP X6 : Spraying 100 liters of water per minute through 12.5mm nozzle from 3m away for 3minutes.

IP X7 : Immersing in the depth of less than 1m for 30min.

IP X8 : According to the conditions requested by the manufacturer.

IEC INTRODUCTION

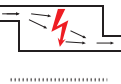
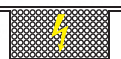
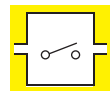
The IECEx is a single global certification framework to facilitate international trade in equipment and services for use in explosive atmosphere based on the IEC(International Electrotechnical Commission)'s international standard while maintaining the required level of safety:

- Reduced testing and certification costs to manufacturer
- Reduced time to market
- International confidence in the product assessment process
- One international database listing

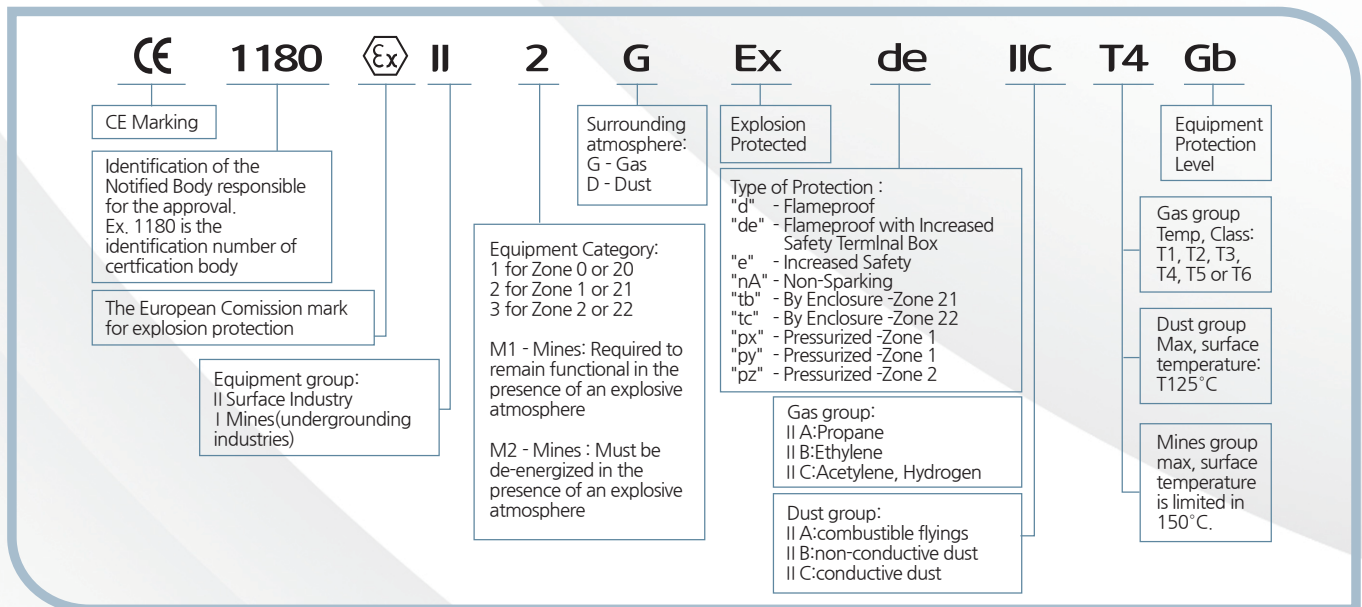
The goal is to help manufacturers reduce costs and time while developing and maintaining uniform product evaluation to protect users against products that are not in line with the required level of safety. So it should help industry to open up new markets from different conformity assessment criteria in various countries. The aim of the IECEx Scheme and its programs is to ease international trade of explosion protected equipment(termed Ex equipment) by eliminating the need for duplication of testing and certification while preserving safety. IECEx accepts the participation of Ex certification bodies and Ex test laboratories only after successful completion for the IECEx Assessment Process which also includes on-going surveillance each Ex candidate certification body and testing laboratory is subjected to the same IECEx assessment process utilizing the internationally established ISO/IEC standards and guides on conformity assessment supplemented with the IECEx technical guidance documents with world experts in the field of explosion-protection being appointed as IECEx Assessors.



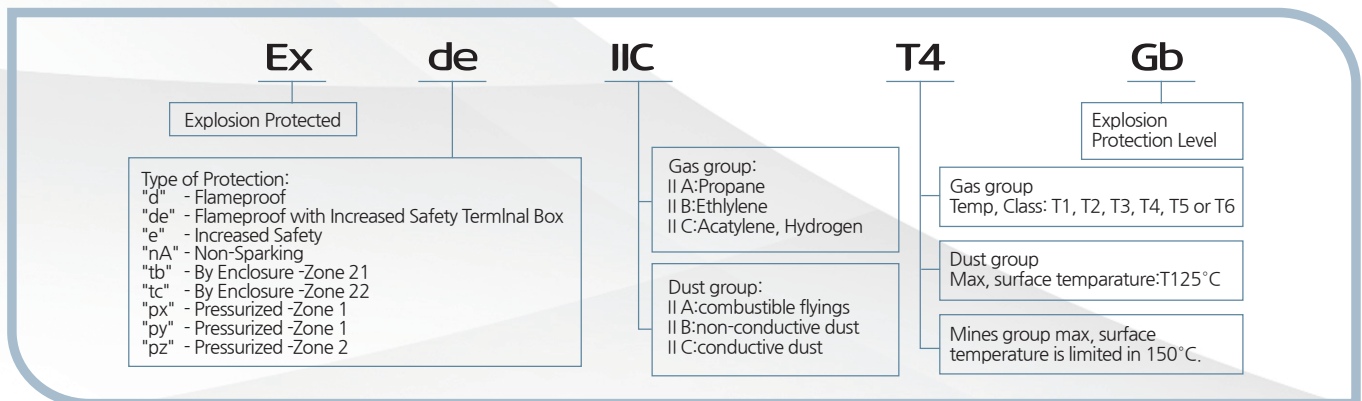
TYPE OF ENCLOSURE

Type of Enclosure	Basic Principle	Schematic	IEC Standard
Flame proof Enclosure d	A type of protection of electrical apparatus in which the enclosure will withstand an internal explosion of a flammable mixture which has penetrated into the interior, without suffering damage and without causing ignition, through any joints or structural openings in the enclosure, of an external explosive atmosphere consisting of one or more the gases or vapours for which it is designed.		IEC 60079-1
Pressurized Enclosure p	A type of protection in which the entry of a surrounding atmosphere into the enclosure of the electrical apparatus is prevented by maintaining inside the said enclosure a protective gas at a higher pressure than that of the surrounding atmosphere.		IEC 60079-2
Powder Filling q	A type of protection in which the enclosure of electrical apparatus is filled with a material in a finely granulated state so that, in the intended conditions of service, any arc occurring within the enclosure of an electrical apparatus will not ignite the surrounding atmosphere.		IEC 60079-5
Oil Immersion o	A type of protection in which the electrical apparatus or parts of the electrical apparatus are immersed in oil in such a way that an explosive atmosphere, which may be above the oil or outside the enclosure cannot be ignited.		IEC 60079-6
Increased Safety e	A type of protection applied to electrical apparatus that does not produce arcs or sparks in normal service, in which additional measures are applied so as to give increased security against the possibility of excessive temperatures and of the occurrence of arcs and sparks.		IEC 60079-7
Intrinsic Safety i	A type of protection in which the electrical apparatus contains intrinsically safe circuits, which are incapable of causing an explosion in the surrounding atmosphere.		IEC 60079-11
Non-Sparking Structure n	A type of protection where electrical equipment, in normal operation, is not capable of igniting a surrounding explosive gas atmosphere and a fault capable of causing ignition is not likely to occur.		IEC 60079-15
Encapsulation m	A type of protection in which the parts which can ignite an explosive atmosphere are enclosed in a resin sufficiently resistant to environmental influences in such a way that this explosive atmosphere cannot be ignited by either sparking or heating, which may occur within the encapsulation.		IEC 60079-18
Dust Ignition Protection DIP	An enclosure that will exclude ignitable amounts of dusts that might affect performance or rating and that, when installed and protected in accordance with the original design intent, will not permit arcs, sparks, or heats otherwise generated or liberated inside the enclosure to cause ignition of exterior accumulations or atmospheric suspensions of a specified dust.		

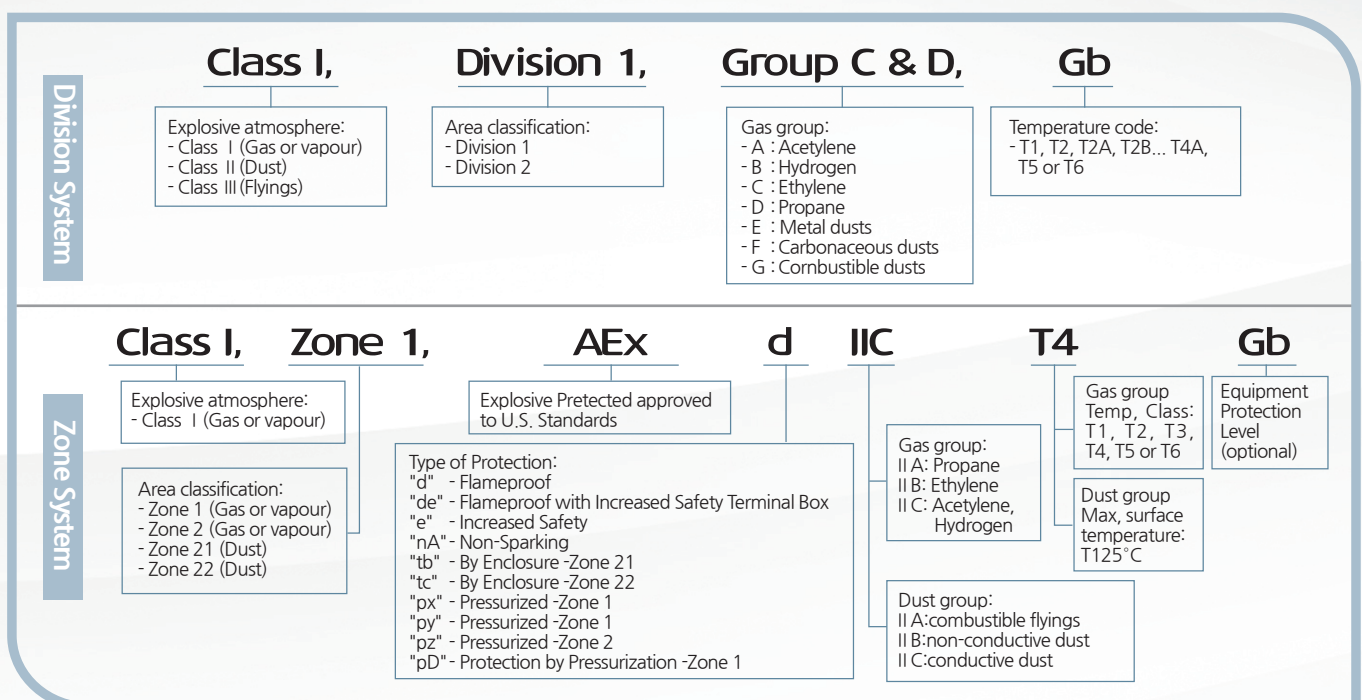
ATEX MARKING(EUROPEAN)



IECEX MARKING(GLOBAL)



NORTH AMERICAN MARKING



(1) For Dust environments (Zone 21 or 22) the Class of the hazard(Class II) shall not be mentioned in the marking. e.g. Zone 21, AEx tb IIC T125°C Db

(2) For Canadian Standards letter "A" shall not be mentioned in the marking. e.g. Class I, Zone I, Ex d IIC T4 Gb

(3) Certificates emitted according the new standards versions require the EPL marking close to protection type. e.g. Ex db eb(Old:Ex de)

MEMO

OSCG

Cable Gland / Junction Box
hazardous & industrial area

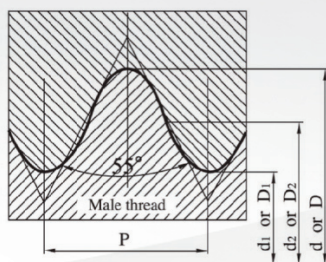
THE TYPE OF THREAD ON CABLE GLAND



- 01 JIS B0202 Standard ————— PF(=G) thread
- 02 JIS B0203 Standard ————— PT thread
- 03 ANSI/ASME-B 1201 Standard — NPT thread
- 04 DIN 40430 Standard ————— PG thread
- 05 ISO 965-1&3 Standard ————— ISO Metric thread

PF(=G) thread (Pipe straight thread)

Units : mm

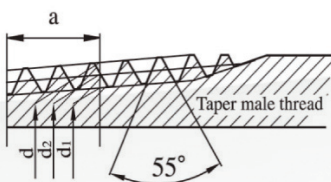


JIS B0202

Nominal size	Number of threads per inch	Pitch p (Ref.)	Depth of threads h	Crest/root radius r	Male thread		
					O.D d	Effective diameter d2	Diameter at root d1
					Female thread		
					Diameter at root D	Effective diameter d2	I.D D1
PF 1/2"	14	1.8143	1.162	0.25	20.955	19.793	18.631
PF 3/4"	14	1.8143	1.162	0.25	26.441	25.279	24.117
PF 1"	11	2.3091	1.479	0.32	33.249	31.770	30.291
PF 1-1/4"	11	2.3091	1.479	0.32	41.910	40.431	38.952
PF 1-1/2"	11	2.3091	1.479	0.32	47.803	46.324	44.845
PF 2"	11	2.3091	1.479	0.32	59.614	58.135	56.656
PF 2-1/2"	11	2.3091	1.479	0.32	75.184	73.705	72.226
PF 3"	11	2.3091	1.479	0.32	87.884	86.405	84.926
PF 3-1/2"	11	2.3091	1.479	0.32	100.330	98.851	97.372
PF 4"	11	2.3091	1.479	0.32	113.030	111.551	110.072

PT thread (Pipe Taper thread)

Units : mm

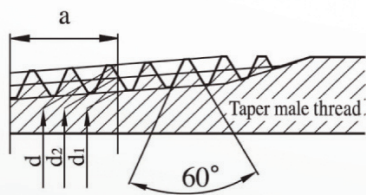


JIS B0203

Nominal size	Thread			Length a	Basic diameters		
	Number of threads per inch	Pitch p	Depth of threads h		O.D d	Effective diameter d2	Diameter at root d1
PT 1/2"	14	1.814	1.162	8.16	20.955	19.793	18.631
PT 3/4"	14	1.814	1.162	9.53	26.441	25.279	24.117
PT 1"	11	2.309	1.479	10.39	33.249	31.77	30.291
PT 1-1/4"	11	2.309	1.479	12.70	41.91	40.431	38.952
PT 1-1/2"	11	2.309	1.479	12.70	47.803	46.324	44.845
PT 2"	11	2.309	1.479	15.88	59.614	58.135	56.656
PT 2-1/2"	11	2.309	1.479	17.46	75.184	73.705	72.226
PT 3"	11	2.309	1.479	20.64	87.884	86.405	84.926
PT 3-1/2"	11	2.309	1.479	22.23	100.330	98.851	97.372
PT 4"	11	2.309	1.479	25.40	113.03	111.551	110.072

NPT thread (American taper thread)

Units : mm

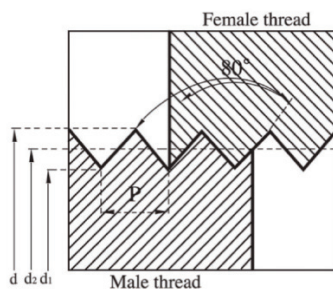


ANSI / ASME-B 1201

Nominal size	Thread			Basic diameters			
	Number of threads per inch	Pitch p	Depth of threads h	Length a	O.D d	Effective diameter d2	Diameter at root d1
NPT 1/2"	14	1.814	1.451	8.128	21.223	19.772	18.321
NPT 3/4"	14	1.814	1.451	8.61	25.117	23.666	20.764
NPT 1"	11.5	2.208	1.766	10.16	33.227	31.461	29.695
NPT 1-1/4"	11.5	2.208	1.766	10.668	41.983	40.217	38.451
NPT 1-1/2"	11.5	2.208	1.766	10.668	48.053	46.287	44.521
NPT 2"	11.5	2.208	1.766	11.074	60.091	58.325	56.55
NPT 2-1/2"	8	3.175	2.54	17.322	72.698	70.158	67.61
NPT 3"	8	3.175	2.54	19.456	88.607	86.067	83.52
NPT 3-1/2"	8	3.175	2.54	20.853	101.6	98.776	97.473
NPT 4"	8	3.175	2.54	21.437	113.972	111.432	108.892

PG thread (German pipe thread)

Units : mm

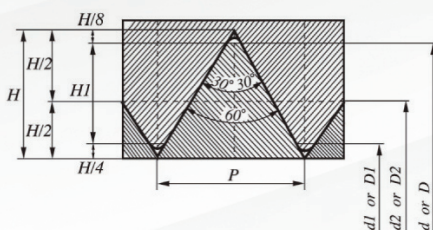


DIN 40430

Nominal size	Number of threads per inch	Pitch p (Ref.)	Height of contiguous surface H1	Male thread			Minimum diameter of mounting hole in box
				O.D d	Effective diameter d2	Diameter at root d1	
				Female thread			
				Diameter at root D	Effective diameter d2	I.D D1	
PG 7	20	1.270	0.61	12.5	11.89	11.28	13
PG 9	18	1.411	0.67	15.2	14.53	13.86	16
PG 11	18	1.411	0.67	18.6	17.93	17.36	19
PG 13.5	18	1.411	0.67	20.4	19.73	19.06	21
PG 16	18	1.411	0.67	22.5	21.83	21.16	23
PG 21	16	1.588	0.76	28.3	27.54	26.78	29
PG 29	16	1.588	0.76	37	36.24	35.48	38
PG 36	16	1.588	0.76	47	46.24	45.48	48
PG 42	16	1.588	0.7	54	53.24	52.48	55
PG 48	16	1.588	0.76	59.3	58.54	57.78	60

ISO Metric Thread

Units : mm



$$H = 0.866025 P \quad d_2 = d - 0.649519 P$$

$$H = 0.541266 P \quad d_1 = d - 1.082532 P$$

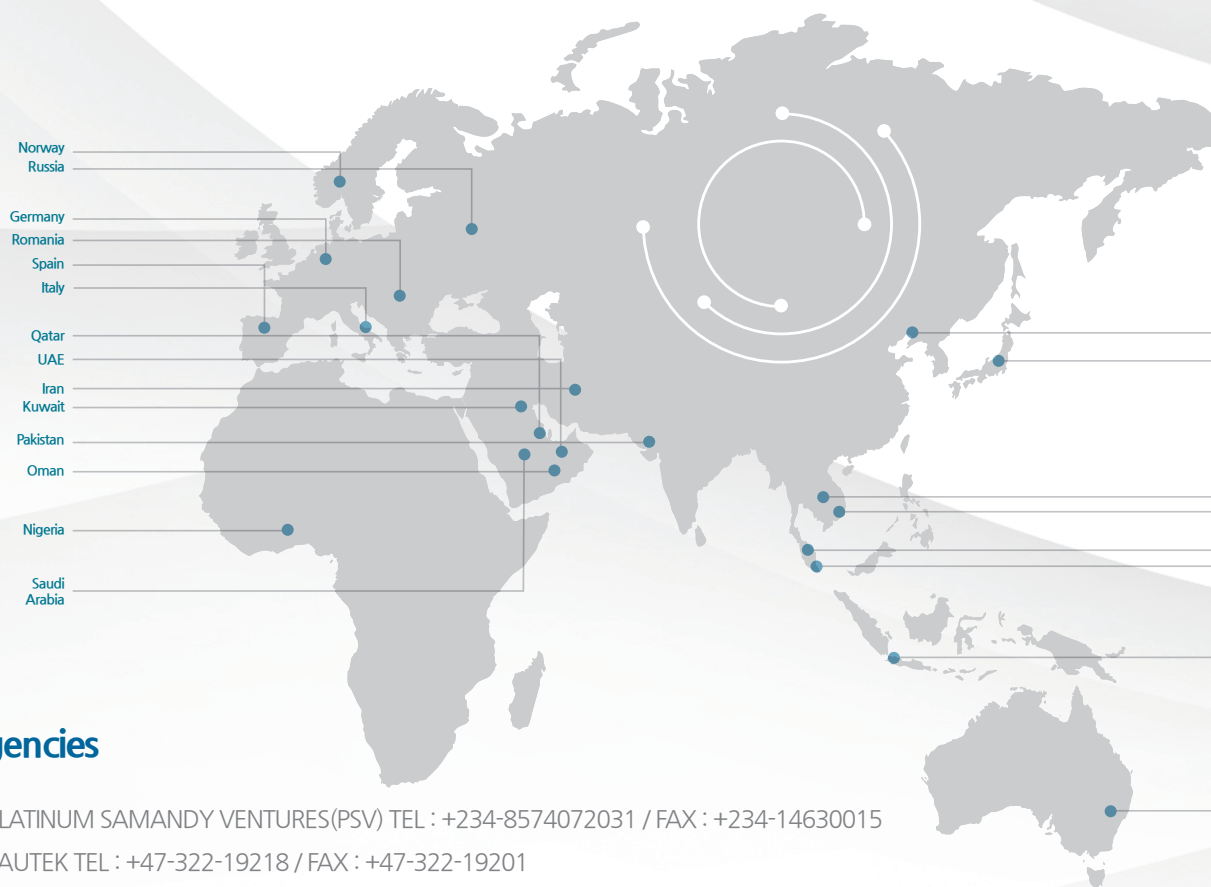
$$D = d \quad D_2 = d_2 \quad D_1 = d_1$$

KS B 0204-86 JIS B 0207-1982

Nominal size	Pith P	Diameter D	Effektiv Diameter d2	Diameter at root d1
M16	1.5	16	15.026	14.376
M20	1.5	20	19.026	18.376
M24	1.5	24	23.026	22.376
M25	1.5	25	24.026	23.376
M27	1.5	27	26.026	25.376
M30	1.5	30	29.026	28.376
M32	1.5	32	31.026	30.376
M36	1.5	36	35.026	34.376
M40	1.5	40	39.026	38.376
M42	1.5	42	41.026	40.376
M45	1.5	45	44.026	43.376
M50	1.5	50	49.026	48.376
M55	1.5	55	54.026	53.376
M56	1.5	56	55.026	54.376
M60	1.5	60	59.026	58.376
M63	1.5	63	62.026	61.376
M65	1.5	65	64.026	63.376
M70	1.5	70	69.026	68.376
	2.0	70	68.701	67.835
M72	1.5	72	71.026	70.376
	2.0	72	70.701	69.835
M75	1.5	75	72.026	73.376
	2.0	75	73.701	72.835
M90	2.0	90	88.701	87.835
M100	2.0	100	98.701	97.835

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