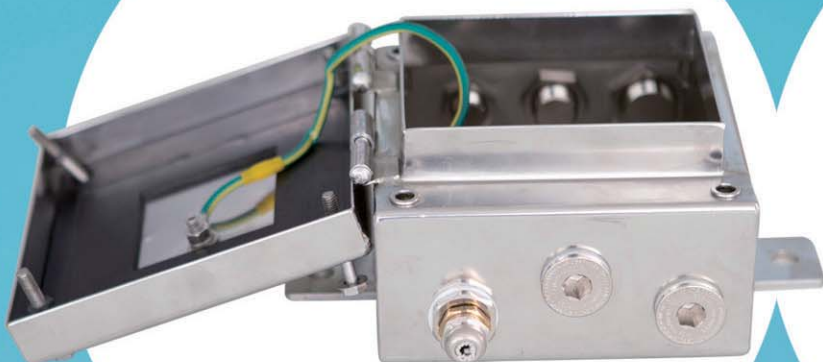




# OSCG

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 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 Ex db & Ex eb & Ex tb CABLE GLAND : Certified by Presafe IECEX, ATEX, CU TR, KCs, DNV, RMRS
- Explosion proof type Ex db & Ex eb & Ex tb STOPPING PLUG : Certified by IECEX, ATEX, CU TR, KCs, DNV, RMRS
- Explosion proof type Ex db & Ex eb & Ex tb REDUCER / ADAPTOR / STOPPING PLUG / ELBOW :  
Certified by IECEX, ATEX, CU TR, KCs, DNV, RMRS
- Water proof & Weather proof CABLE GLAND : Certified by KOMERI, Presafe
- JIS, DIN type CABLE GLAND and Flexible Connectors
- Special cable connector for Vessels, Power Plants, On & Offshore Projects
- Explosion proof Ex e & Industrial type 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 TATAL 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

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
2018	ATEX/IECEX/CUTR	GRP/Stainless steel Junction Box

# 2018



# Certificate

**ACE**  
 CERTIFICATE NO. **AQ-13B053/1**  
 WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY  
**OSCG Co., Ltd.**  
 FOR THE FOLLOWING ACTIVITIES  
**Site:**  
 1242, Nakhong-dong, Seongsu-gu, Busan, Republic of Korea  
 IS IN COMPLIANCE WITH THE SCHEME REQUIREMENTS  
**ISO 9001:2015 / KS Q ISO 9001:2015**  
 FOR THE FOLLOWING ACTIVITIES  
**The Design, Development and Manufacture of General Cable Glands, Flameproof Cable Glands, Flexible Connector and Junction Box**

JAS-ANZ Original Date of Certification 05 Feb 2013 Date of Issue 27 Dec 2017  
 IAF Date of Expiry 26 Dec 2020

*Kim Byung Cheol*  
 APPROVED BY

인증번호: AQ-13B053 / AQ-13B053-1  
 인증기준: KS Q ISO 9001:2015 / KS Q ISO 9001:2015  
 인증대상: 1242, 낙동동, 송서구, 부산광역시  
 TEL: 82-51-305-4194-5 Fax: 82-51-305-4096 www.oscgn.net

**ACE**  
 CERTIFICATE NO. **AE-13B053/1**  
 WE HEREBY CERTIFY THAT THE ENVIRONMENTAL MANAGEMENT SYSTEM OPERATED BY  
**OSCG Co., Ltd.**  
 FOR THE FOLLOWING ACTIVITIES  
**Site:**  
 1242, Nakhong-dong, Seongsu-gu, Busan, Republic of Korea  
 IS IN COMPLIANCE WITH THE SCHEME REQUIREMENTS  
**ISO 14001:2015 / KS I ISO 14001:2015**  
 FOR THE FOLLOWING ACTIVITIES  
**The Design, Development and Manufacture of General Cable Glands, Flameproof Cable Glands, Flexible Connector and Junction Box**

JAS-ANZ Original Date of Certification 05 Feb 2013 Date of Issue 27 Dec 2017  
 IAF Date of Expiry 26 Dec 2020

*Kim Byung Cheol*  
 APPROVED BY

인증번호: AE-13B053 / AE-13B053-1  
 인증기준: KS I ISO 14001:2015 / KS I ISO 14001:2015  
 인증대상: 1242, 낙동동, 송서구, 부산광역시  
 TEL: 82-51-305-4194-5 Fax: 82-51-305-4096 www.oscgn.net

**ACE**  
 CERTIFICATE NO. **AS-14L031**  
 WE HEREBY CERTIFY THAT THE OCCUPATIONAL HEALTH & SAFETY MANAGEMENT SYSTEM OPERATED BY  
**OSCG Co., Ltd.**  
 FOR THE FOLLOWING ACTIVITIES  
**Site:**  
 1242, Nakhong-dong, Seongsu-gu, Busan, Republic of Korea  
 IS IN COMPLIANCE WITH THE SCHEME REQUIREMENTS  
**OHSAS 18001:2007**  
 FOR THE FOLLOWING ACTIVITIES  
**The Design, Development and Manufacture of General Cable Glands, Flameproof Cable Glands, Flexible Connector and Junction Box**

OHSAF Original Date of Certification 03 Dec 2014 Date of Issue 03 Dec 2017  
 H IAF Date of Expiry 02 Dec 2020

*Kim Byung Cheol*  
 APPROVED BY

인증번호: AS-14L031 / AS-14L031-1  
 인증기준: KS OHSAS 18001:2007 / KS OHSAS 18001:2007  
 인증대상: 1242, 낙동동, 송서구, 부산광역시  
 TEL: 82-51-305-4194-5 Fax: 82-51-305-4096 www.oscgn.net

**IEC** **IECEC**  
**IECEx Certificate of Conformity**  
 INTERNATIONAL ELECTROTECHNICAL COMMISSION  
 IEC Certification Scheme for Explosive Atmospheres  
 For more details see the IECEx Scheme web site

Certificate No.: **OSCG PRE 18200X** Issue No.: **0** Certificate history Issue No. 0 (2019-12-18)  
 Status: **Current** Page 1 of 3  
 Date of Issue: **2019-12-18**  
 Applicant: **OSCG Co., Ltd.**  
 #1242, Nakhong-dong, Seongsu-gu, Busan, Republic of Korea  
 Equipment: **Insulated adaptor**  
 Model: **MSD1 (MSM) / MSD1 (SM)**  
 Optional accessory:  
 Type of Protection: **Ex e, Ex s, Ex b**  
 Marking: **Ex e IIC Dn, Ex s IIC Dn, Ex b IIC Dn**  
 Approved for issue on behalf of the IECEx Certification Body: **Born Sponsgren** 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 authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by: **DNV Norske Presafe AS**  
 Rosenkrantz 33  
 NO-2007, TT Bldg  
 NO-040, Norway

**Presafe**  
**EU-Type Examination Certificate**

[1] EQUIPMENT INTENDED FOR USE ONLY AS AN EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/54/EU  
 [2] EU-Type Examination Certificate Number: **Presafe 16 ATEX 9111U** Issue: **0**  
 [3] Product: **OSCG 20**  
 [4] Manufacturer: **OSCG Co., Ltd.**  
 [5] Address: **1242, Nakhong-dong, Seongsu-gu, Busan, Korea, Republic of**  
 [6] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.  
 [7] **DNV Norske Presafe AS**, notified body number 2860, in accordance with Article 17 of Directive 2014/54/EU of the European Parliament and of the Council, dated 28 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.  
 [8] 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**  
 [9] The sign "TP" 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.  
 [10] 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.  
 [11] The marking of the product shall include the following:  
 Ex e IIC Dn  
 Ex s IIC Dn  
 Ex b IIC Dn  
 Date of issue: **2016-12-13**

For DNV Norske Presafe AS  
 Head of the Certification Department

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

1 of 2  
 DNV Norske Presafe AS, Gustafsholmen 30, 0373 Oslo, Norway

**KCS** **kcti**  
 No. 2017-022606-01  
**안전인증서**  
**Certificate of Safety**  
**OSCG Co., Ltd.**  
 1242, Nakhong-dong, Seongsu-gu, Busan, Korea  
 The following product manufactured by the above company has been authorized for the use of safety certification mark on 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**  
 Insulated Adapter  
 Model (Marking) / Certificate No. **OSCG 2016 + IC / 17-A280-000K**  
**Applied standards**  
 Announcement No. 2017-04 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, Nakhong-dong, Seongsu-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: MS2 = 1.5, MS3 = 1.5, MP1 10T, MP1 30T)  
 Ignition Protection: IP20  
 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, meeting factory surveillance and informing any changes to the certified products.  
 This certificate shall be used with the related KCCS certificate (KCCS PRE 18200X) Issue No. 0.

Date of issue: 2017-05-18  
**한국산업기술시험원장**  
**KOREA TESTING LABORATORY**

산업안전보건법 제34조 제1항 제4호, 제59조 제4항  
 (제2017-04) 고용노동부 고시 제2017-04호  
 (제2016-01) 안전보건공단 안전인증서 발급규칙 제18항 제1호



**ТАМОЖЕННЫЙ СОЮЗ**

**СЕРТИФИКАТ СООТВЕТСТВИЯ**

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

**ОРГАН ПО СЕРТИФИКАЦИИ** независимых средств измерений, контроля и элементов автоматизации ФГУП «ВНИИФТРИ» (ОС ВСИ «ВНИИФТРИ») Адрес: Россия, 141570, Московская область, Солнечногорский район, городское поселение Мещалеево телефон/факс +7 (495)526-63-03; ivsi@vniiftri.ru Адрес: аттестация № РОСС RU.0001.11ГБ06 от 25 апреля 2013 г. выдан Росаккредитивной 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; azma-szem@mail.ru ИЗГОТОВИТЕЛЬ OSGC Co., Ltd (Республика Корея) 416-2 – Samrak-Dong, Ssang-Gu, Busan, Republic of Korea

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

**КОД ТИПА 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 Ic

СРОК ДЕЙСТВИЯ с 12.08.2013 г. по 11.08.2018 г. **ВЛАДИТЕЛЬНО**  
Г.Е.Евдокимова  
Н.Ю.Мироносицкая

**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  
**OSGC 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: **Busan**  
Approval Engineer: **Dong Ho Park**

for DNV GL  
Dong Ho Park  
Approval Engineer  
**Baeg Soon Choi**  
Head of Section

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

Form Code: TA 14.1414 Revision: 2015-05 www.dnvgl.com Page 1 of 5

**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 craftsmanship status or certification has **not** been verified.

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

EXD1	Preparation & Installation of Ex'd, 'n', 'l' and 'p' electrical equipment	Rev (2)
EXD2	Maintenance & Inspection of Ex'd, 'n', 'l' and 'p' electrical equipment	Rev (2)
EXD3	Preparation & Installation of Ex't equipment and systems	Rev (2)
EXD4	Maintenance & Inspection of Ex't equipment and systems	Rev (2)

**All units are based on the IEC Standards 60079-1 Parts 14 & 17 and the ATEX/IEC Guide as appropriate**

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

U.K.A.S. 0370  
Maurin D. Jones  
JL Limited | 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

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

© JL007 Rev8 06/16

РОССИЙСКИЙ МОРСКОЙ РЕГИСТР СУДОВОДСТВА  
RUSSIAN MARITIME REGISTER OF SHIPPING

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**СВИДЕТЕЛЬСТВО О ТИПОВОМ ОДОБРЕНИИ**  
**TYPE APPROVAL CERTIFICATE**

Изготовитель: **OSGC Co., Ltd.**  
Адрес: **1242 Nakdong-daero, Ssang-gu, Busan, Korea**

Издан: **2015**  
Продукт: **Взрывозащитные кабельные вводы типов E1WF, E1XF, OSNJ-A2F; Адаптер типа OSAJ; Узеловое соединение типа OSAE; Соединитель типа OSSA; 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: **11130200**  
Code of nomenclature

На основании освидетельствования и проведенных испытаний удостоверяется, что вышеупомянутые(ые) изделие(я) удовлетворяет(ют) 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.

Часть XI Правил классификации и постройки морских судов, вкл. 2015 г., раздел 10 Части IV Правил технического надзора за постройкой судов и изготовлением материалов и изделий для судов (вкл. 2015 г.) 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 Shipboard Materials and Products.

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

Российский морской регистр судоходства  
Russian Maritime Register of Shipping

Дубейковский С.В./S.Dubeykovskiy  
(подпись/подпись)  
2016

\*Дополнительная информация см. на обороте  
Additional information see on reverse



# Major Clients





# OSCG CABLE GLAND

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03. SMC	SMC	97

OSCG GRP RAW MATERIALS(SMC-Sheet Molding Compound)

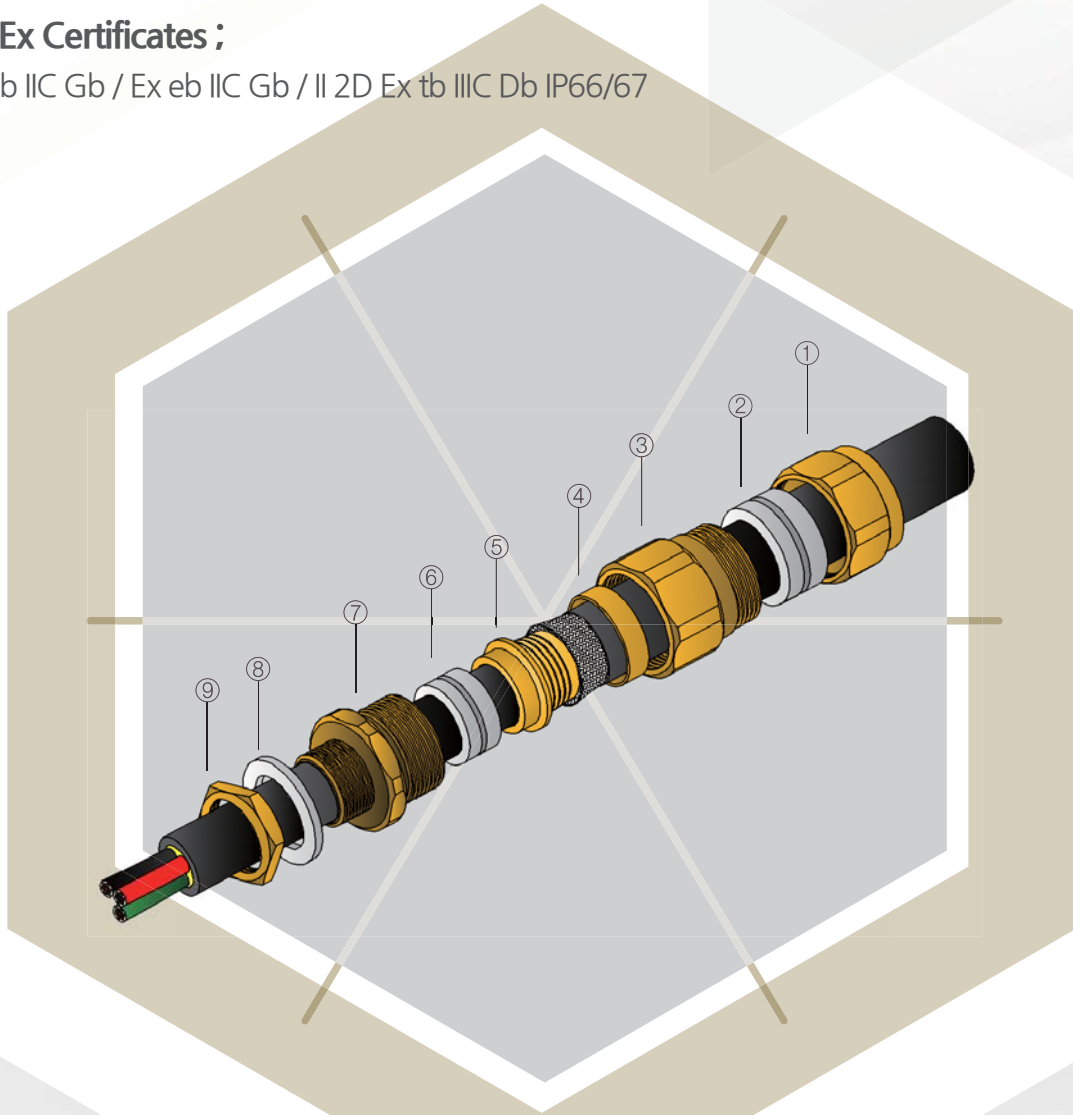


# Instruction for Installation

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



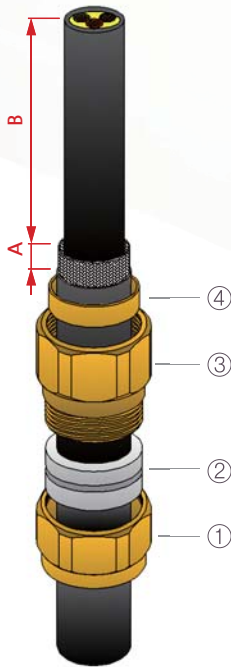
Braid armoured  
Position



# 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'

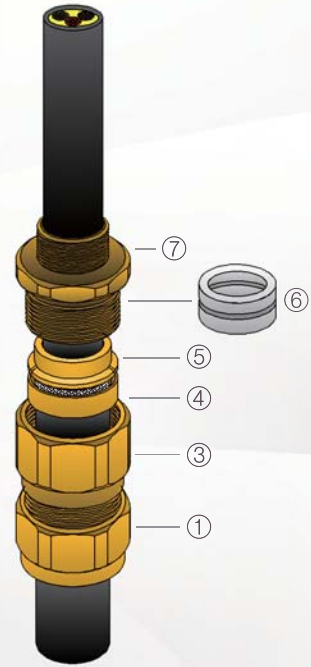
A: 20mm for cable gland size 16 to 32

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



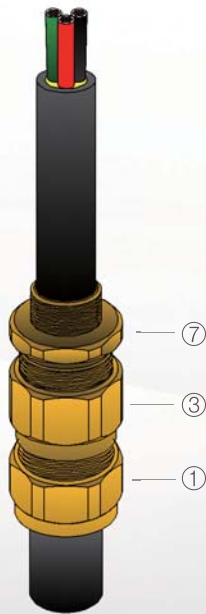
Place the hub body⑦ and position over the +insert⑤.

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

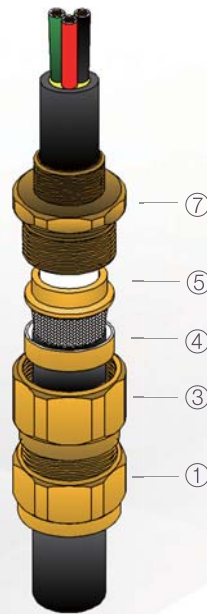
*Note : if middle body③ and hub body⑦ do not meet due to the thickness of armour, recommend putting out inner packing⑥ and tighten without inner packing⑥.*

# Instruction for Installation

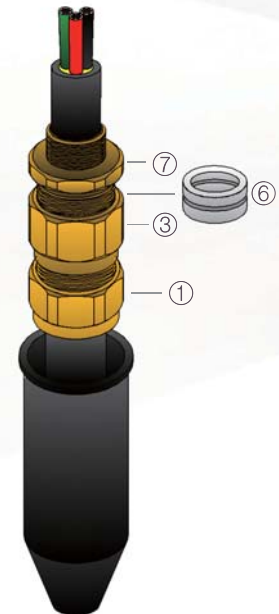
IV



V



VI



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.

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.

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.



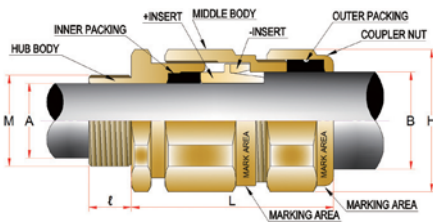
## Cable Gland Selection Chart

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

# 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) - EMC tested
- \* 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 eb 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 (optional)	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)			Minimum Thread Length(L)			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	137	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	212	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	325	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	570	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	876	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	1445	100
OS-E1UF 63	M63	2"	/	15	24	/	39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	1740	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	1907	108
OS-E1UF 75	M75	2-1/2"	/	20	27	/	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	2912	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 need not greater than 0.7mm

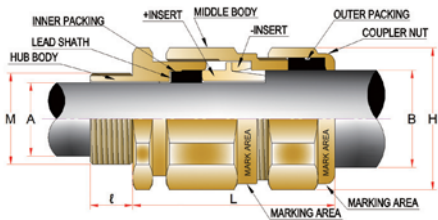
※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard



# Hazardous Cable Gland Type:OS-E1UF/LS



## OS-E1UF/LS Type



### Application : Any Type of Lead Sheathed Armoured Cable

- \* For use with any type of Lead Sheathed Armoured Cable
- \* Outdoor & Indoor use.
- \* Flameproof & Increased Safety.
- \* EMC Cable Gland. (360° contact) - EMC tested
- \* 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 eb 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 (optional)	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)			Minimum Thread Length(ℓ)			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	137	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	212	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	325	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	570	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	876	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	1445	100
OS-E1UF/LS 63	M63	2"		15	24		39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	1740	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	1907	108
OS-E1UF/LS 75	M75	2-1/2"		20	27		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	2912	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 need not greater than 0.7mm

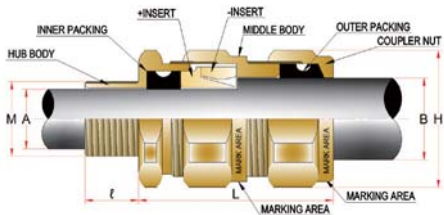
※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

▷ Hazardous > Armoured > Double Compression > E1WF

# Hazardous Cable Gland Type: E1WF



## E1WF Type



### Application : Steel & Aluminium Wire Armoured Cable

- \* For use with any types of steel & aluminum wire armoured cable
- \* Outdoor & Indoor use
- \* Flameproof & Increased Safety
- \* EMC Cable Gland.(360° contact) - EMC tested
- \* 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 db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
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(Optional)
Packing	Silicone
Accessories (optional)	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

### 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)			Minimum Thread Length(L)			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							7.0 ~ 11.0	12.0 ~ 15.1				
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							13.0 ~ 15.1	16.0 ~ 19.5				
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							17.0 ~ 19.5	21.0 ~ 26.0				
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							22.0 ~ 26.0	27.0 ~ 32.0				
E1WF 40A	M40	1-1/4"	1-1/2"	15	19	21	28.0 ~ 28.5	30.0 ~ 35.0	1.6 ~ 2.0	H55 x P59	850	94
E1WF 40B							28.0 ~ 32.0	35.1 ~ 40.0				
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							35.5 ~ 41.5	43.0 ~ 50.0				
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							45.0 ~ 50.5	51.0 ~ 56.0				
E1WF 63C							49.0 ~ 53.0	55.0 ~ 60.0				
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							55.0 ~ 60.0	62.1 ~ 66.0				
E1WF 75C							59.0 ~ 62.0	66.1 ~ 70.0				
E1WF 75D							61.0 ~ 63.0	68.0 ~ 75.0				
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							68.0 ~ 77.0	82.0 ~ 90.0				
E1WF 100A	M100	3-1/2"	4"	25	32	32	73.1 ~ 80.0	89.0 ~ 94.0	1.8 ~ 3.0	H120 x P130	5500	144
E1WF 100B							79.0 ~ 85.0	93.0 ~ 98.0				

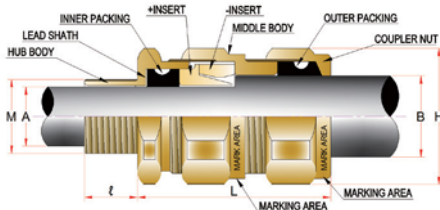
\* The entry holes need not greater than 0.7mm  
 \* Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard



# Hazardous Cable Gland Type: E1WF/LS



## E1WF/LS Type



### Application : Lead Sheathed Steel & Aluminium Wire Armoured Cable

- \* For use with Lead sheathed steel & Aluminium armoured cable
- \* Outdoor & Indoor use
- \* Flameproof & Increased Safety
- \* EMC Cable Gland (360° contact) - EMC tested
- \* 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 db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
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 (optional)	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

### 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)			Minimum Thread Length(L)			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							7.0 ~ 11.0	12.0 ~ 15.1				
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							13.0 ~ 15.1	16.0 ~ 19.5				
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							17.0 ~ 19.5	21.0 ~ 26.0				
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							22.0 ~ 26.0	27.0 ~ 32.0				
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							28.0 ~ 32.0	35.1 ~ 40.0				
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							35.5 ~ 41.5	43.0 ~ 50.0				
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							45.0 ~ 50.5	51.0 ~ 56.0				
E1WF/LS 63C							49.0 ~ 53.0	55.0 ~ 60.0				
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							55.0 ~ 60.0	62.1 ~ 66.0				
E1WF/LS 75C							59.0 ~ 62.0	66.1 ~ 70.0				
E1WF/LS 75D							61.0 ~ 63.0	68.0 ~ 75.0				
E1WF/LS 90A							63.0 ~ 70.0	74.0 ~ 83.0				
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							73.1 ~ 80.0	89.0 ~ 94.0				
E1WF/LS 100B	M100	3-1/2"	4"	25	32	32	79.0 ~ 85.0	93.0 ~ 98.0	1.8 ~ 3.0	H120 x P130	5500	144
E1WF/LS 100B							79.0 ~ 85.0	93.0 ~ 98.0				

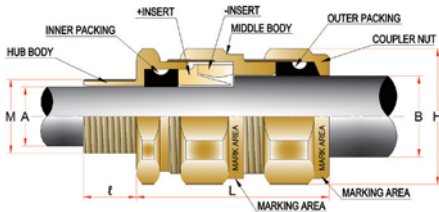
※ The entry holes need not greater than 0.7mm  
 ※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

▷ Hazardous ▷ Armoured ▷ Double Compression ▷ E1XF

# Hazardous Cable Gland Type:E1XF



## E1XF Type



### Application : Braided & Steel Tape Armoured Cable

- \* For use with any types of Braided & Steel tape armoured cable
- \* Outdoor & Indoor use
- \* Flameproof & Increased Safety
- \* EMC Cable Gland.(360° contact) - EMC tested
- \* 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 db IIC Gb, Ex eb IIC Gb, II2D Ex tb IIIC Db
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 (optional)	Sealing Washer, Lock Nut, Shroud, Earth Tag, Serrated Washer

### 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)			Minimum Thread Length(L)			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							7.0 ~ 11.0	12.0 ~ 15.1				
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							13.0 ~ 15.1	16.0 ~ 19.5				
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							17.0 ~ 19.5	21.0 ~ 26.0				
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							22.0 ~ 26.0	27.0 ~ 32.0				
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							28.0 ~ 32.0	35.1 ~ 40.0				
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							35.5 ~ 41.5	43.0 ~ 50.0				
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							45.0 ~ 50.5	51.0 ~ 56.0				
E1XF 63C							49.0 ~ 53.0	55.0 ~ 60.0				
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							55.0 ~ 60.0	62.1 ~ 66.0				
E1XF 75C							59.0 ~ 62.0	66.1 ~ 70.0				
E1XF 75D							61.0 ~ 63.0	68.0 ~ 75.0				
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							68.0 ~ 77.0	82.0 ~ 90.0				
E1XF 100A	M100	3-1/2"	4"	25	32	32	73.1 ~ 80.0	89.0 ~ 94.0	0.05 ~ 1.6	H120 x P130	5500	144
E1XF 100B							79.0 ~ 85.0	93.0 ~ 98.0				

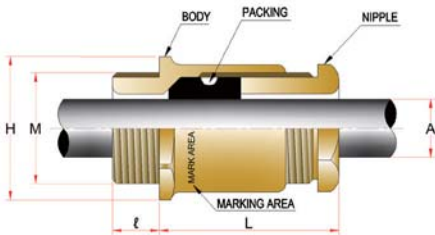
\* The entry holes need not greater than 0.7mm  
\* Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard



# Hazardous Cable Gland Type:OS-A2F-U



## OS-A2F-U Type



### Application : Non-Armoured Cable

- \* For use with non-armoured & braided 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 eb 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 (optional)	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)

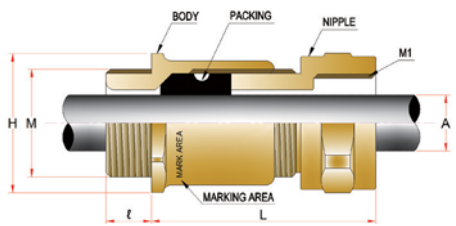
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OS-A2F-U 16	M16	1/2"	M20	15	15	15	3 ~ 7	H24 x P26	72	31
OS-A2F-U 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	72	31
OS-A2F-U 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	79	33
OS-A2F-U 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	108	34
OS-A2F-U 32	M32	1"	1-1/4"	15	18	19	17 ~ 26.5	H39 x P41.5	168	38
OS-A2F-U 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	272	40
OS-A2F-U 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	371	42
OS-A2F-U 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	720	46
OS-A2F-U 63X	M63	/	2-1/2"	15	/	27	46 ~ 55	H73 x P78	600	46
OS-A2F-U 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	950	52
OS-A2F-U 75X	M75	/	3"	20	/	30	58 ~ 68	H94 x P99	1070	52
OS-A2F-U 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	1480	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

※ The entry holes need not greater than 0.7mm  
 ※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# Hazardous Cable Gland Type: OS-A2F-UF



## OS-A2F-UF Type



### Application : Non-Armoured Cable with Male-Female Type

- \* For use with non-armoured & braided 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 eb 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 (optional)	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	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 ~ 26.5	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

\* The entry holes need not greater than 0.7mm

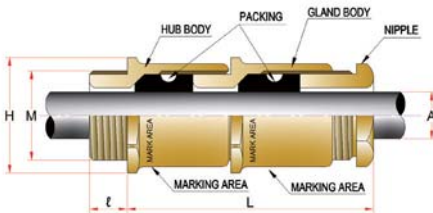
\* Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard



# Hazardous Cable Gland Type:OS-A2F-UD



## OS-A2F-UD Type



### Application : Non-Armoured Cable with Double Compression

- \* For use with non-armoured & braided 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 eb 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 (optional)	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	Hexagon Dimensions	Length (L)
	Metric	NPT	Option	Metric	NPT	Option			
OS-A2F-UD 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	51
OS-A2F-UD 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	51
OS-A2F-UD 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	55
OS-A2F-UD 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	58
OS-A2F-UD 32	M32	1"	1-1/4"	15	18	19	17 ~ 26.5	H39 x P41.5	63
OS-A2F-UD 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	67
OS-A2F-UD 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	71
OS-A2F-UD 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	77
OS-A2F-UD 63X	M63	/	2-1/2"	15	/	27	45 ~ 55	H73 x P78	77
OS-A2F-UD 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	87
OS-A2F-UD 75X	M75	/	3"	20	/	30	58 ~ 68	H94 x P99	87
OS-A2F-UD 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	102
OS-A2F-UD 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	119
OS-A2F-UD 115	M115	4"	/	25	32	/	88 ~ 101	H126 x P136	125

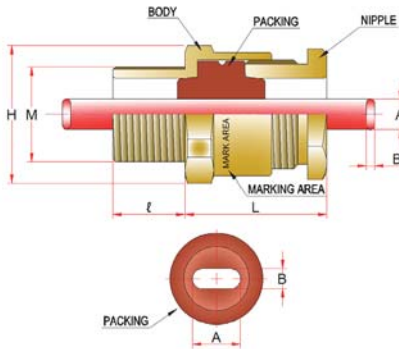
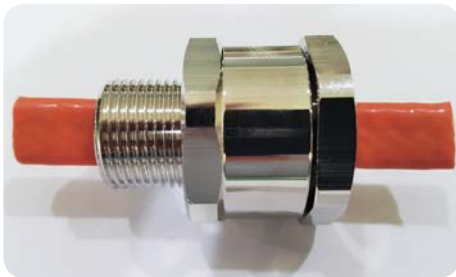
※ The entry holes need not greater than 0.7mm  
 ※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

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

# Hazardous Cable Gland Type:OS-A2F-UH



## OS-A2F-UH Type



### Application : Heat Tracing / Flat Form Cable

- \* For use with flat form non-armoured & braided armoured cable
- \* Increased Safety.
- \* Suitable for Heat Tracing / Flat Form 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 (optional)	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

### 20 type packing size

Size	Dimension	
	A	B
A	12	5
B	13	6.5
C	14	6
D	15	6.5
F	12	7.5

### 25 type packing size

Size	Dimension	
	A	B
A	12	5
B	13	6.5
C	14	6
D	15	6.5
E	16.5	7
F	12	7.5

(\* 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 ~ 15.0	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

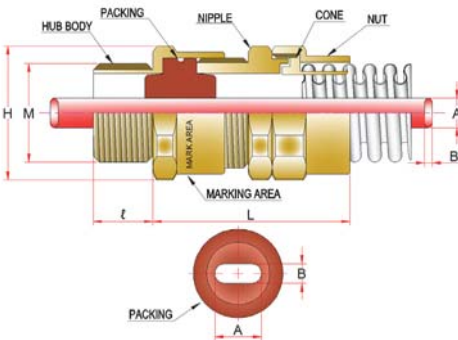
※ The entry holes need not greater than 0.7mm



# Hazardous Cable Gland Type:OS-A2F-UHMH



## OS-A2F-UHMH Type



### Application : Heat Tracing / Flat Form Cable with Metal Hose

- \* For use with flat form non-armoured & braided armoured cable
- \* Increased Safety.
- \* Suitable for Heat Tracing / Flat Form 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 (optional)	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

### 20 type packing size

Size	Dimension	
	A	B
A	12	5
B	13	6.5
C	14	6
D	15	6.5
F	12	7.5

### 25 type packing size

Size	Dimension	
	A	B
A	12	5
B	13	6.5
C	14	6
D	15	6.5
E	16.5	7
F	12	7.5

(\* 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 ~ 15.0	4.5 ~ 8.0	H32 x P34	125	48
OS-A2F-UHMH 25	M25	3/4"	1"	15	16	18	11 ~ 16.5	4.5 ~ 8.0	H32 x P34	110	48

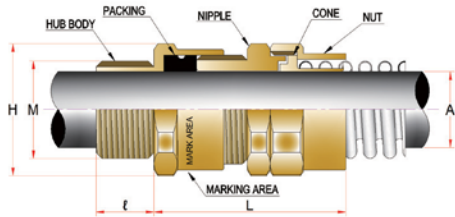
※ The entry holes need not greater than 0.7mm

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

# Hazardous Cable Gland Type:OS-A2F-UMH



## OS-A2F-UMH Type



### Application : Non-armoured Cable with Metal Hose Type

- \* For use with non-armoured & braided 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 eb 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 (optional)	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, Serrated washer

- \* 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	Length (L)
	Metric	NPT	Option	Metric	NPT	Option			
OS-A2F-UMH 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	31
OS-A2F-UMH 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	31
OS-A2F-UMH 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	33
OS-A2F-UMH 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	34
OS-A2F-UMH 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	38

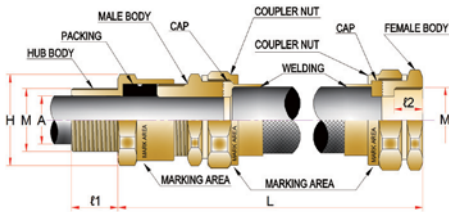
※ The entry holes need not greater than 0.7mm



# Hazardous Cable Gland Type:OS-A2F-UEP



## OS-A2F-UEP Type



### Application : Non-Armoured Cable with Flexible Type

- \* For use with non-armoured & braided 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 eb 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)
Flexible Material	Stainless steel(304, 316L)
Gasket (washer)	Nylon(Standard), PTFE-Teflon(Option)
Packing	Silicone
Accessories (optional)	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

### Order Example

Part No.	Thread	Flexible (mm)	Material	Accessories
OS-A2F-UEP 20	M20	300≤	Nickel plated brass	Lock nut, Sealing washer, Serrated washer

- \* 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	Length(L)
	Metric	NPT	Option	Metric	NPT	Option			Gland
OS-A2F-UEP 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	31
OS-A2F-UEP 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	31
OS-A2F-UEP 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	33
OS-A2F-UEP 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	34
OS-A2F-UEP 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	38

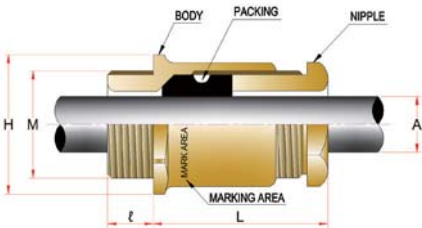
※ The entry holes need not greater than 0.7mm

▷ Hazardous > Non Armoured > Single Compression > OSNJ-A2F

# Hazardous Cable Gland Type: OSNJ-A2F



## OSNJ-A2F Type



### Application : Non Armoured Cable

- \* For use with non-armoured & braided 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 d IIC, Ex e II, 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 (optional)	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~M63 Length 15mm, M75 Length 20mm, M90~M100 Length 25mm)

\* Material for accessories is required

(\* in mm)

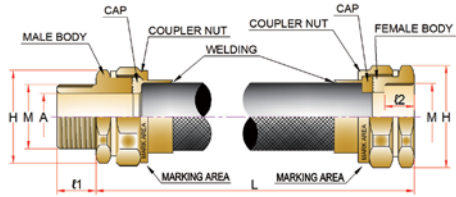
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNJ-A2F 16A	M16	1/2"	M20	15	15	15	3.0 ~ 7.5	H24 x P26	79/95	31
OSNJ-A2F 16B							6.1 ~ 10.0		79/95	
OSNJ-A2F 20A	M20	1/2"	3/4"	15	15	16	10.1 ~ 13.0	H27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

\* The entry holes need not greater than 0.7mm

\* Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# 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	Nickel Plated Brass/ SUS 304/ SUS 316L
Flexible Material	Stainless steel(304, 316L)

### Order Example

Part No.	Thread	Flexible(mm)	Material
OSEP-16	NPT 1/2"(M) x NPT 1/2"(F)	300≤	Gland : Nickel Plated Brass, Flexible : Stainless Steel 304

\* 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	Male(ℓ1)	Female(ℓ2)			
OSEP - 16	1/2"	17	16	6 ~ 13.5	H32 x P34	Standard 500mm 700mm 1000mm ≤
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	

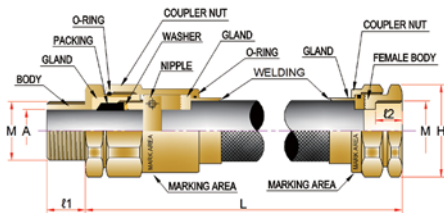
The entry holes need not greater than 0.7mm



▷ 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)

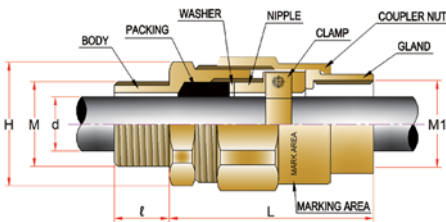
Part No.	Entry Thread Size(M)	Thread Length( $\ell$ ) - Min		Cable Dia	Hexagon Dimensions	Length (L)
	NPT/PF/PT	Male( $\ell 1$ )	Female( $\ell 2$ )	Inner 'A'		
OSEP-W - 16	1/2"	17	16	6 ~ 13.5	H32 x P34	300mm ≤
OSEP-W - 22	3/4"	18	17	14 ~ 18	H38 x P40	
OSEP-W - 28	1"	21	19	19 ~ 22	H45 x P48	
OSEP-W - 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	

※ The entry holes need not greater than 0.7mm

# 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	16, 22, 28 : 10-AV2BO-0416X
	36, 42, 54 : 10-AV2BO-0479X
	70, 82, 104 : 10-AV2BO-0417X
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 (optional)	Sealing Washer, Lock Nut, Earth Tag, Serrated Washer, Reducer, Adaptor

### Order Example

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

\* Material for tube and gland is required

(\* in mm)

Part No.	Entry Thread Size(M)		Thread Length(ℓ) - Min		Cable Dia Inner 'A'	Hexagon Dimensions	Length (L)
	Metric	NPT/PF/PT	Metric	NPT/PF/PT			
OSXP-F 16	M20	1/2"	15	16	6 ~ 14	H30 x P33	65
OSXP-F 22	M25	3/4"	15	17	14 ~ 18	H35 x P38	71
OSXP-F 28	M32	1"	15	18	18 ~ 22	H43 x P47	74
OSXP-F 36	M40	1-1/4"	15	20	22 ~ 29	H50 x P54	82
OSXP-F 42	M50	1-1/2"	15	22	29 ~ 35	H57 x P61	84
OSXP-F 54	M63	2"	15	24	35 ~ 45	H70 x P75	90
OSXP-F 70	M75	2-1/2"	20	26	45 ~ 56	H85 x P91	100
OSXP-F 82	M90	3"	25	31	56 ~ 74	H98 x P106	108
OSXP-F 104	M100	4"	25	33	74 ~ 88	H125 x P133	112

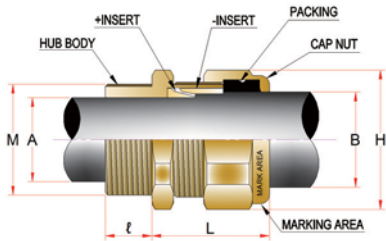
※ The entry holes need not greater than 0.7mm

▷ Hazardous > Armoured > Single Compression > OSER-Z

# 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 (optional)	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	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSER-Z 20	M20	1/2"	3/4"	15	15	16	9 ~ 16	H25 x P27	235	74
OSER-Z 25S	M20	1/2"		15	15		13 ~ 17.5	H36 x P39	290	79
OSER-Z 25	M25	3/4"	1"	15	16	18	14 ~ 20	H36 x P39	290	79

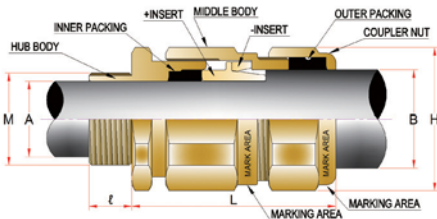
\* The entry holes need not greater than 0.7mm



# 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) - EMC tested
- \* 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 (optional)	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)

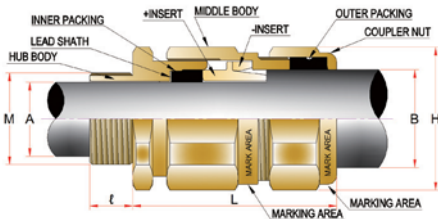
Part No.	Entry Thread Size(M)			Thread Length(ℓ)-Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	M/PF	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OS-E1U 16	M16	1/2"	M20	15	15	15	5.0 ~ 11.5	7.0 ~ 16.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	137	67
OS-E1U 20	M20	1/2"	3/4"	15	15	16	7.5 ~ 15.2	12.0 ~ 21.0	0.9 ~ 1.25	0.05 ~ 0.8	H31 x P33	212	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	325	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	570	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	876	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	1445	100
OS-E1U 63	M63	2"	/	15	24	/	39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	1740	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	1907	108
OS-E1U 75	M75	2-1/2"	/	20	27	/	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	2912	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 need not greater than 0.7mm  
 ※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# Industrial Cable Gland Type: OS-E1U/LS



## OS-E1U/LS Type



### Application : Any Type of Lead Sheathed Armoured Cable

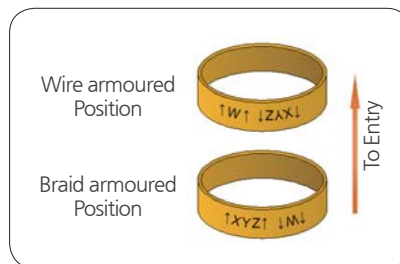
- \* For use with any type of armoured cable
- \* Outdoor & Indoor use.
- \* Weatherproof & Waterproof
- \* EMC Cable Gland. (360° contact) - EMC tested
- \* Reduce The Effect of Coldflow Characteristics.
- \* Double Compression.

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 (optional)	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)

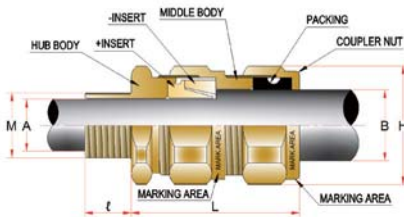
Part No.	Entry Thread Size(M)			Thread Length(L)-Min			Cable Dia		Armour Size		Hexagon Dimensions	Weight (g)	Length (L)
	M/PF	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'	Wire	Braid			
OS-E1U/LS 16	M16	1/2"	M20	15	15	15	5.0 ~ 11.5	7.0 ~ 16.1	0.9 ~ 1.25	0.05 ~ 0.8	H25 x P27	137	67
OS-E1U/LS 20	M20	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	212	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	325	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	570	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	876	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	1445	100
OS-E1U/LS 63	M63	2"		15	24		39.0 ~ 50.0	45.0 ~ 60.0	1.8 ~ 2.5	0.05 ~ 1.2	H77 x P82	1740	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	1907	108
OS-E1U/LS 75	M75	2-1/2"		20	27		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	2912	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 need not greater than 0.7mm  
 ※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# 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) - EMC tested
- \* 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 (optional)	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	M/PF	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								12.0 ~ 15.1					
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								16.0 ~ 19.5					
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								21.0 ~ 26.0					
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								27.0 ~ 32.0					
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								35.1 ~ 40.0					
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								43.0 ~ 50.0					
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								51.0 ~ 56.0					
OSNJ-CW 63C								55.0 ~ 60.0					
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								62.1 ~ 66.0					
OSNJ-CW 75C								66.1 ~ 70.0					
OSNJ-CW 75D								68.0 ~ 75.0					
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								82.0 ~ 90.0					
OSNJ-CW 100A	M100	3-1/2"	4"	25	32	32	86.0	89.0 ~ 94.0	1.8 ~ 3.0	0.05 ~ 1.6	H120 x P130	5500	144
OSNJ-CW 100B								93.0 ~ 98.0					

※ The entry holes need not greater than 0.7mm

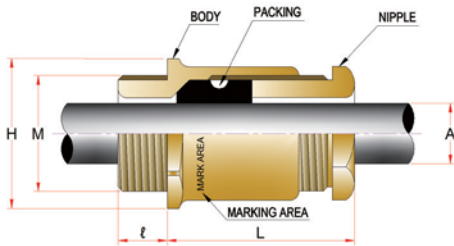
※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard



# Industrial Cable Gland Type:OSNU



## OSNU Type



### Application : Non-Armoured Cable

- \* For use with non-armoured & braided 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 (optional)	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	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	M/PF	NPT	Option				
OSNU 16	M16	1/2"	M20	15	15	15	3 ~ 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

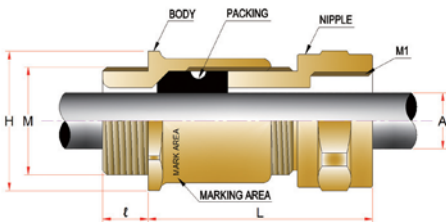
※ The entry holes need not greater than 0.7mm

※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# Industrial Cable Gland Type: OSNU-F



## OSNU-F Type



### Application : Non-Armoured Cable with Male-Female Type

- \* For use with non-armoured & braided 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 (optional)	Sealing Washer, lock nut, Earth Tag, Shroud, Serrated Washer

### Order Example

Part No.	Thread	Material	Accessories
OSNU-F 20	M20(M)×M20(F)	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	M/PF	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

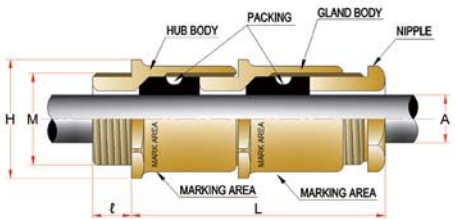
※ The entry holes need not greater than 0.7mm

※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# Industrial Cable Gland Type: OSNU-D



## OSNU-D Type



### Application : Non-Armoured Cable with Double Compression

- \* For use with non-armoured & braided 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 (optional)	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	Hexagon Dimensions	Length (L)
	Metric	NPT	Option	M/PF	NPT	Option			
OSNU-D 16	M16	1/2"	M20	15	15	15	5 ~ 7	H24 x P26	51
OSNU-D 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	51
OSNU-D 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	55
OSNU-D 25	M25	3/4"	1"	15	16	18	13 ~ 20	H32 x P34	58
OSNU-D 32	M32	1"	1-1/4"	15	18	19	17 ~ 26	H39 x P41.5	63
OSNU-D 40	M40	1-1/4"	1-1/2"	15	19	21	22 ~ 32	H48 x P51	67
OSNU-D 50	M50	1-1/2"	2"	15	21	24	30 ~ 42	H58 x P62	71
OSNU-D 63	M63	2"	2-1/2"	15	24	27	39 ~ 51	H73 x P78	77
OSNU-D 63X	M63		2-1/2"	15		27	45 ~ 55	H73 x P78	77
OSNU-D 75	M75	2-1/2"	3"	20	27	30	54 ~ 61	H85 x P90	87
OSNU-D 75X	M75		3"	20		30	58 ~ 68	H94 x P99	87
OSNU-D 90	M90	3"	3-1/2"	25	30	32	66 ~ 78	H103 x P109	102
OSNU-D 100	M100	3-1/2"	4"	25	32	32	77 ~ 89	H112 x P120	119
OSNU-D 115	M115	4"		25	32		88 ~ 101	H126 x P136	125

※ The entry holes need not greater than 0.7mm

※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

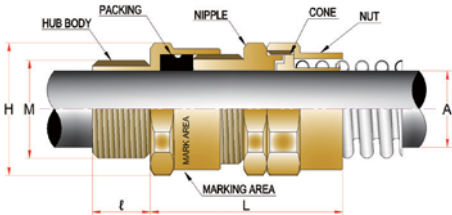




# Industrial Cable Gland Type:OSNU-MH



## OSNU-MH Type



### Application : Non-Armoured Cable with Metal Hose Type

- \* For use with non-armoured & braided 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 (optional)	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, Serrated Washer

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

(\* in mm)

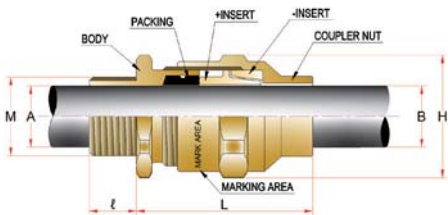
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia	Hexagon Dimensions	Weight (g)	Length (L)
	Metric	NPT	Option	Metric	NPT	Option				
OSNU-MH 16X	M16	1/2"	M20	15	15	15	5 ~ 10.3	H24 x P26	79/95	44
OSNU-MH 20	M20	1/2"	3/4"	15	15	16	9 ~ 15.3	H27 x P29	95	49
OSNU-MH 25	M25	3/4"	1"	15	16	18	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

※ The entry holes need not greater than 0.7mm

# 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(Optional)
Packing	Silicone
Accessories (optional)	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)

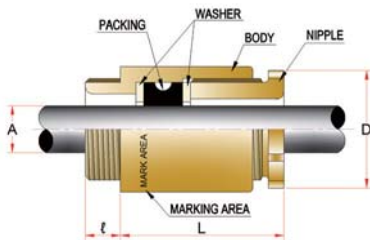
Part No.	Entry Thread Size(M)			Thread Length(ℓ) - Min			Cable Dia		Armour Size	Hexagon Dimensions	Length (L)
	Metric	NPT	Option	Metric	NPT	Option	Inner 'A'	Outer 'B'			
OSD1 16A	M16	1/2"	M20	15	15	15	3.0 ~ 7.5	3.0 ~ 9.5	0.05 ~ 0.5	H25 x P27	52
OSD1 16B							6.1 ~ 10.0	6.1 ~ 12.0			
OSD1 20A	M20	1/2"	3/4"	15	15	16	8.0 ~ 13.0	8.0 ~ 15.4	0.05 ~ 0.6	H31 x P34	57
OSD1 20B							12.0 ~ 15.1	12.0 ~ 17.5			
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							16.1 ~ 19.5	16.1 ~ 22.3			
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							21.0 ~ 26.0	21.0 ~ 30.0			
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							27.0 ~ 32.0	27.0 ~ 36.8			
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							34.0 ~ 40.0	34.0 ~ 44.8			
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							43.0 ~ 50.0	43.0 ~ 57.6			
OSD1 63C							49.0 ~ 54.0	49.0 ~ 61.6			
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							55.0 ~ 60.0	55.0 ~ 67.6			
OSD1 75C							59.0 ~ 62.0	59.0 ~ 69.6			
OSD1 75D							62.0 ~ 66.0	62.0 ~ 73.6			
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							68.0 ~ 76.0	68.0 ~ 84.0			
OSD1 100A	M100	3-1/2"	4"	25	32	32	73.1 ~ 81.0	73.1 ~ 89.0	0.05 ~ 2.0	H120 x P130	137
OSD1 100B							81.0 ~ 85.0	81.0 ~ 93.0			

\* The entry holes need not greater than 0.7mm  
 \* Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# 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 (optional)	Sealing Washer, Lock Nut

### Order Example

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

(\* in mm)

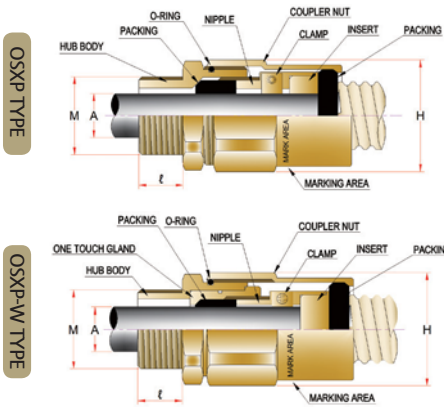
Part No.	Entry Thread Size(M)	Thread Length (ℓ) - Min	Cable Dia Outer 'A'	Packing Inner Dia			D	Length (L)
	PF			A	B	C		
OSCG - 10	3/8"	11	6.0 ~ 8.0	7	8		22	33
OSCG - 15	1/2"	11	7.5 ~ 11.0	9	10	11	28	36
OSCG - 20	3/4"	11	11.0 ~ 15.0	12	13	15	34	41
OSCG - 25	1"	11	15.0 ~ 20.0	16	18	20	42	47
OSCG - 30	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			
OSCG - 70	3"	14	60 ~ 64	62	64		100	85
OSCG - 75	3"	14	64 ~ 71	66	68	70		
OSCG - 80	3-1/2"	14	70 ~ 74	72	74			
OSCG - 85	3-1/2"	14	74 ~ 78	76	78		110	90
OSCG - 90	4"	16	78 ~ 82	80	82			
OSCG - 95	3"	16	82 ~ 86	84	86		130	94
OSCG - 100	4"	16	86 ~ 93	88	93			

※ The entry holes need not greater than 0.7mm  
 ※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard



# 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)
Packing	Silicone
Accessories (optional)	Sealing Washer, Lock Nut

### Order Example

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

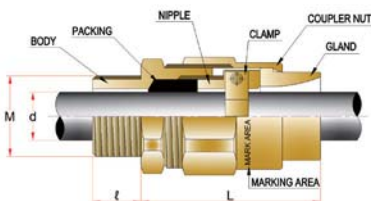
\* Material for accessories is required

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

※ The entry holes need not greater than 0.7mm

# 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(Option)
Packing	Silicone
Accessories (optional)	Sealing Washer, Lock Nut

\* Material for accessories is required

(\* in mm)

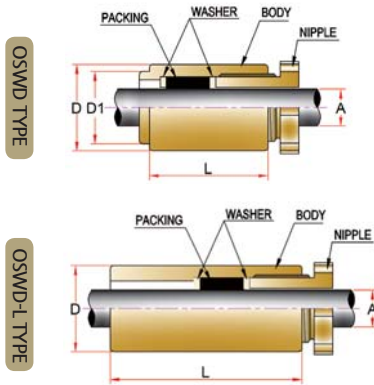
Part No.	Entry Thread Size(M)		Thread Length (ℓ) - Min		Cable Dia (d)	Hexagon Dimensions	Length (L)
	Metric	NPT/PF/PT	Metric	NPT/PF/PT			
OSXP-M 16	M20	1/2"	15	16	6~14	H30 x P33	65
OSXP-M 22	M25	3/4"	15	17	14~18	H35 x P38	71
OSXP-M 28	M32	1"	15	18	18~22	H43 x P47	74
OSXP-M 36	M40	1-1/4"	15	20	22~29	H50 x P54	82
OSXP-M 42	M50	1-1/2"	15	22	29~35	H57 x P61	84
OSXP-M 54	M63	2"	15	24	35~46	H70 x P75	90
OSXP-M 70	M75	2-1/2"	20	26	46~56	H85 x P91	100
OSXP-M 82	M90	3"	25	31	56~74	H98 x P106	108
OSXP-M 104	M100	4"	25	33	74~88	H125 x P133	112

※ The entry holes need not greater than 0.7mm

※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# 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
Nipple Material	Nickel Plated Brass, Stainless Steel(316L)
Body Material	Steel
Packing	EPDM

### Order Example

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

\* Material for accessories is required

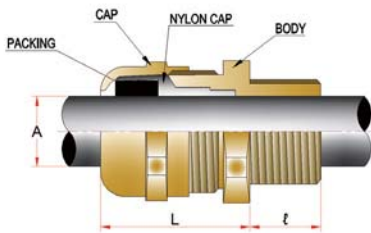
(\* in mm)

Part No.		Pipe Size PF	Cable Dia(d) Outer 'A'	Packing Size			Entry Hole Size		[D]	[D1]	Length[L]	
				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	50
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	
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	

# 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 (optional)	O-ring, Sealing Washer(Option-Teflon), 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 [t]	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

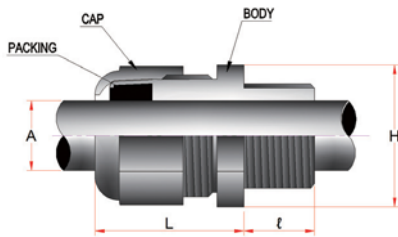
(\* in mm)

Part No.	Entry Thread Size(M)	Cable Dia[A]	Thread Length [t]	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

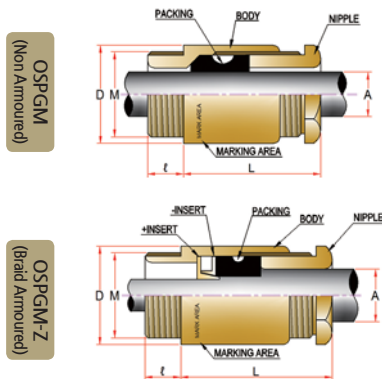
(\* in mm)

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 (optional)	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

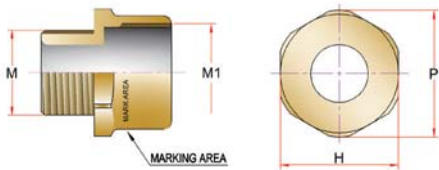
(\* in mm)

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	-60°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)
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
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

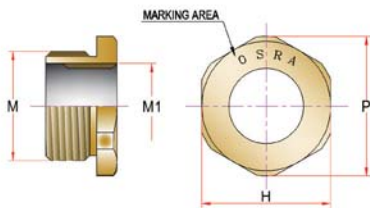
(\* in mm)

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"	3-1/2"	4"							
METRIC(A-M)	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	609								
	M75								77	78	79							706	707	708	709	710							
	M90									88	89								807	808	809	810							
	M100										99									908	909	910							
NPT(PF/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	0609								
	2-1/2"								077	078	079								0707	0708	0709	0710							
	3"									088	089									0808	0809	0810							
	3-1/2"										099										0909	0910							
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.ГБ06.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	-60°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)
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
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

(\* in mm)

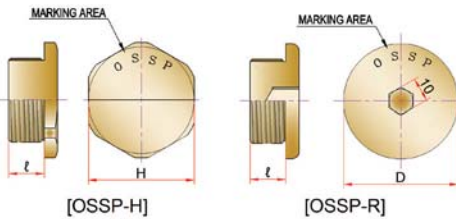
OSRA	FEMALE THREAD SIZE(M1)																					
	METRIC(R-M)										NPT(R-N)											
	M16	M20	M25	M32	M40	M50	M63	M75	M90	M100	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	
METRIC(RM-)	M16																					
	M20	10									100											
	M25	20	21								200	201										
	M32	30	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/PP(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	-60°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)
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
OSSP - H16	M16	Nickel plated brass	Lock Nut, Sealing Washer

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

(\* in mm)

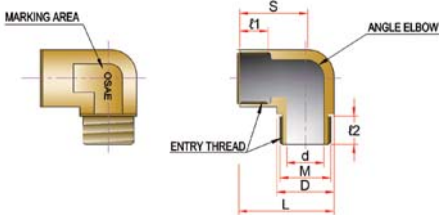
Stopping plug Type / Size		Entry Thread		Thread Length[ℓ]		Dimension[H/D]		Weight(g)	
OSSP-H	OSSP-R	Metric	NPT/PF	Metric	NPT/PF	Metric	NPT/PF	OSSP-H	OSSP-R
OSSP-H 16	OSSP-R 16	M16	-	15	-	24/24	-	50	35
OSSP-H 20	OSSP-R 20	M20	1/2"	15	15	27/28	27/28	75	55
OSSP-H 25	OSSP-R 25	M25	3/4"	15	16	31/32	31/32	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
			4"						

※ Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# 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	-60°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)
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

\* Only Metric and NPT Thread

(\* in mm)

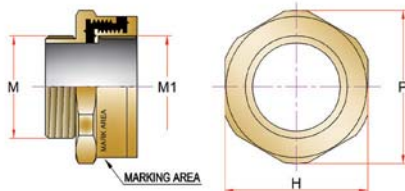
Part No.	Entry Thread Size[M]				D	d	S	l1	l2	Length[L]
	Metric		NPT							
	Male	Female	Male	Female						
OSAE 16	M16	M16	1/2"	1/2"	24	10.3	32	16	15	43
OSAE 20	M20	M16	1/2"	1/2"	27	15.2	34.5	16	15	43
		M20								
OSAE 25	M25	M16	3/4"	1/2"	32	19.8	37	17	15	50
		M20		3/4"						
		M25								
OSAE 32	M32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

\* Up to M75, 1.5 pitch is standard and from M90, 2.0 pitch is standard

# Hazardous Accessories Type:OSAJ(I)



## OSAJ(I) Type



### Application : Insulated Adaptor

\* 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 (optional)	Lock Nut, Sealing Washer

### Order Example

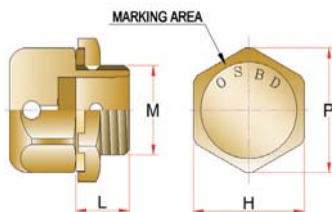
Part No.	Thread	Material	Accessories
OSAJ(I)	M50 x M50	Nickel plated brass	Sealing Washer, Lock Nut
OSAJ(I)	M50 x M50	Stainless steel(316L)	

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

\* 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.

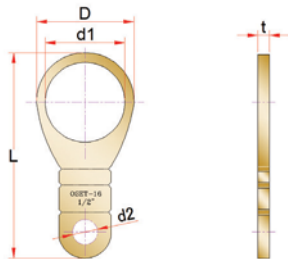
### Order Example

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"	H31 X 33

# 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

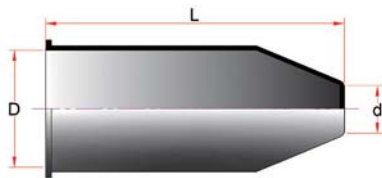
(\* in mm)

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						

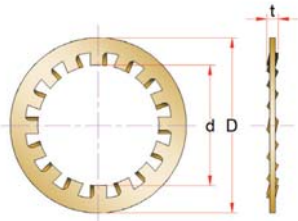
### SELECTION CHART

(\* 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

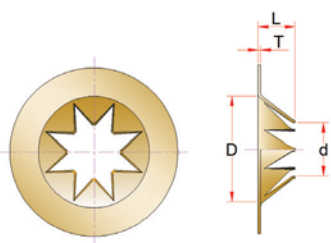
Part No.	Material
OSTW 16	Stainless Steel

(\* 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	3.0
OSTW 25	M25	3/4"	38	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

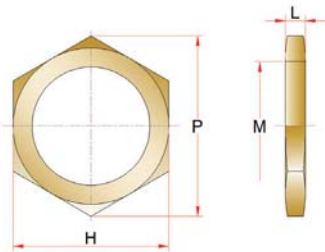
Part No.	Material	Use
OSLS-16	Nickel plated brass	OSNJ-A2F

(\* in mm)

Part No.	D	d	L	T
OSLS-16	10	6	3.5	0.2
OSLS-20	14	6	4.5	0.35
OSLS-25	18	11	7	0.35
OSLS-32	25	16	10.5	0.35
OSLS-40	31	21	12	0.5
OSLS-50	40	27	13	0.5
OSLS-63	53	38	16	0.5
OSLS-75	61	47	18	0.5
OSLS-90	70	57	18	0.6
OSLS-100	83	64	19	0.7
OSLS-115	98	78	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 & NPT/PF Type

(\* in mm)

Type	Metric Thread			Type	NPT & PF Thread		
Part No.	H	P	L	Part No.	H	P	L
OSLN - M16	22	25	4				
OSLN - M20	27	31	4	OSLN - 1/2"	27	31	4
OSLN - M25	32	36.5	4	OSLN - 3/4"	32	36	4
OSLN - M32	39	44.5	5	OSLN - 1"	39	45.0	5
OSLN - M40	48	55	5	OSLN - 1-1/4"	48	55.5	5
OSLN - M50	60	69	5	OSLN - 1-1/2"	60	67	6
OSLN - M63	73	84	6	OSLN - 2"	73	87	6
OSLN - M75	85	98	6	OSLN - 2-1/2"	85	98	6
OSLN - M90	102	117	10	OSLN - 3"	102	119	10
OSLN - M100	112	128	12	OSLN - 3-1/2"	112	126	12
OSLN - M115	125	144	12	OSLN - 4"	125	144	12

#### ● PG Type

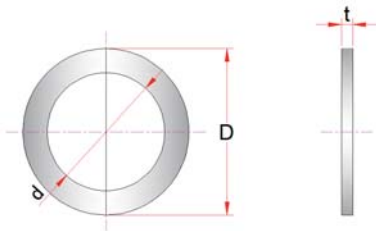
(\* in mm)

Type	PG Thread			Type	Metric Thread		
Part No.	H	P	L	Part No.	H	P	L
OSLN - PG7	15	31	3	OSLN - PG M12	14	15	3
OSLN - PG9	18	36	3	OSLN - PG M16	18	20	3
OSLN - PG11	21	45	3	OSLN - PG M20	22	25	3
OSLN - PG13.5	23	55.5	3	OSLN - PG M25	27	30	4
OSLN - PG16	26	67	3	OSLN - PG M32	36	40	4
OSLN - PG21	32	84	4	OSLN - PG M40	45	50	5
OSLN - PG29	41	98	4	OSLN - PG M50	54	59	5
OSLN - PG36	51	119	5	OSLN - PG M63	67	73	6
OSLN - PG42	60	126	5				
OSLN - PG48	66	144	6				

Note.  
For OSPG-R metric thread type.

# Accessories Type:OSSR

## OSSR Type



### Application : Sealing Washer

- \* Sealing for IP Grade
- \* Material : Nylon(only metric), 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 (Nylon & PTFE)

(\* in mm)

TYPE Part No.	Armour Type			Non Armour Type		
	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
OSSR M115	134	115	2	116	115	2

### ● NPT & PF Thread (only PTFE)

(\* in mm)

Type Part No.	NPT Thread			PF Thread		
	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



## Installation Tool : Spanner



### Application

\* Used for installation of Cable Glands (E1XF / E1WF or Lock Nut)

Spanner Size	Cable Gland Thread Size	Lock Nut Size	Spanner Length
SPANNER 16/20	M16 / M20	M16 / M20	260
SPANNER 25/32	M25 / M32	M25 / M32	300
SPANNER 40	M40	M40	295
SPANNER 50	M50	M50	325
SPANNER 63	M63	M63	345
SPANNER 75	M75	M75	377
SPANNER 90	M90	M90	500
SPANNER 100	M100	M100	510

### Materials

Structural Steel S45C (Nickel Plated)

### Spanner Ordering (Size)

e.g. SPANNER-16/20 (for Lock Nut)  
 SPANNER-50 (for Lock Nut)  
 SPANNER-16/20 (for E1XF)  
 SPANNER-50 (for E1XF)

### Regulation

According to KS standard

#### ● Note

Used for installing E1XF / E1WF / E1X / E1W / OSNJ-CW / Lock Nut M16-M20 / M25-M32 can be used for installing 2 sized of Cable Gland

# EX 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	
Earthing		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		CE 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

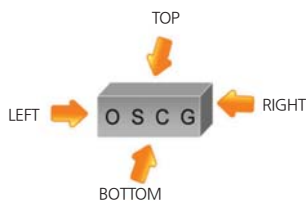
The OSSJ series of enclosures available in stainless steel of finish material have been designed to accommodate railmounted terminals or other electrical component stainless steel give maximum protection for components from aggressive environments in indoor/outdoor.

## 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

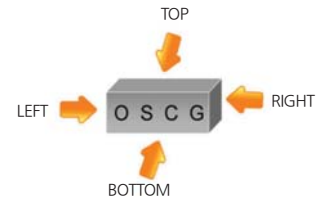
The COMPLETE MODEL No is as follows:

OSSJ 151510	4	M	O	T	1
①	②	③	④	⑤	⑥

No	Description	Symbol	Detail
①	Empty Box	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

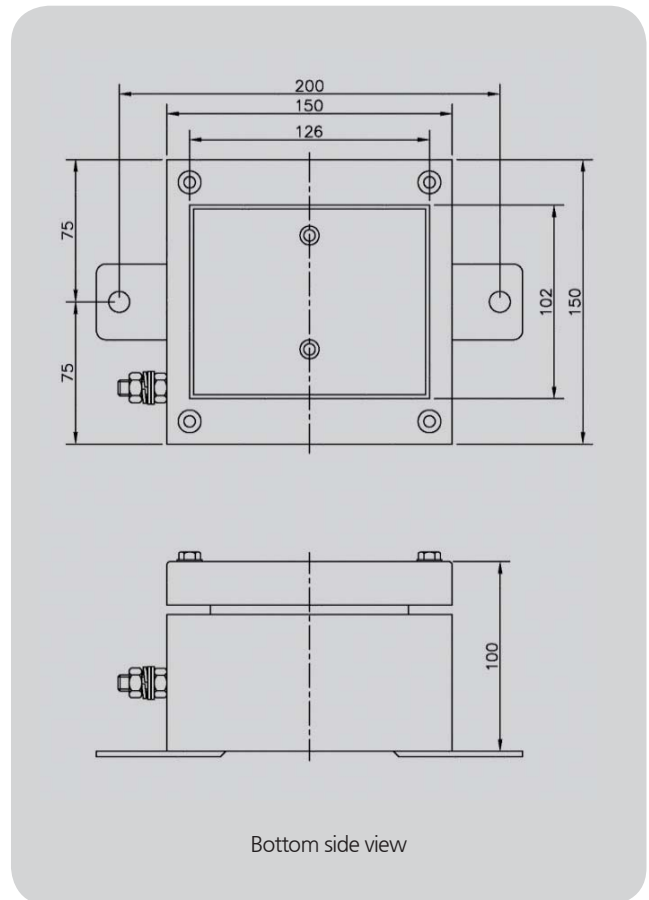
OSSJ 151510 - 150mm x 150mm x 100mm



### 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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)

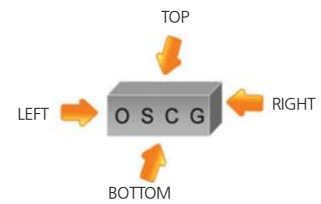
### Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

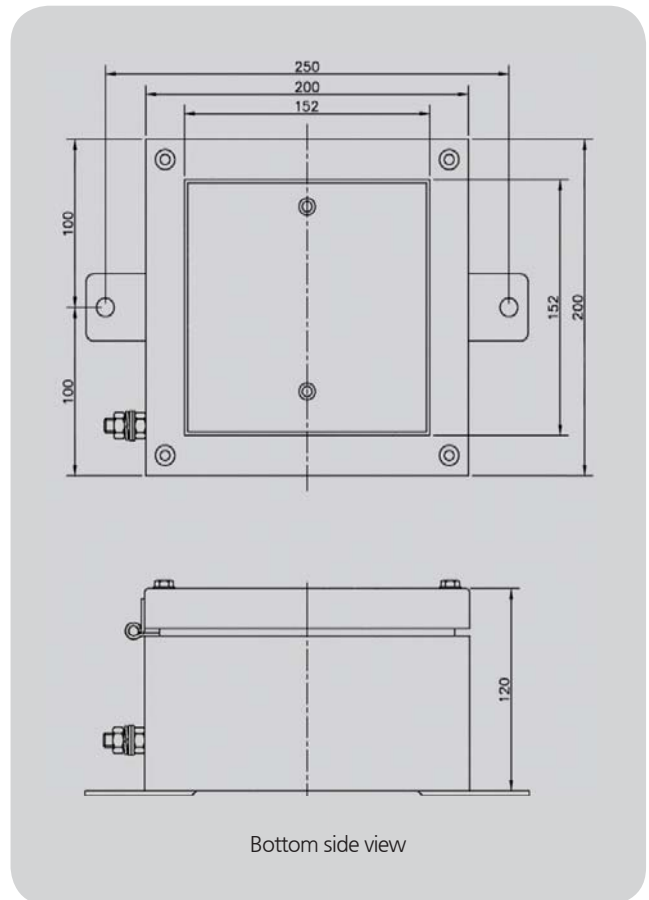
OSSJ 202012 - 200mm x 200mm x 120mm



## 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

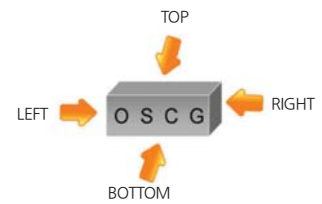
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

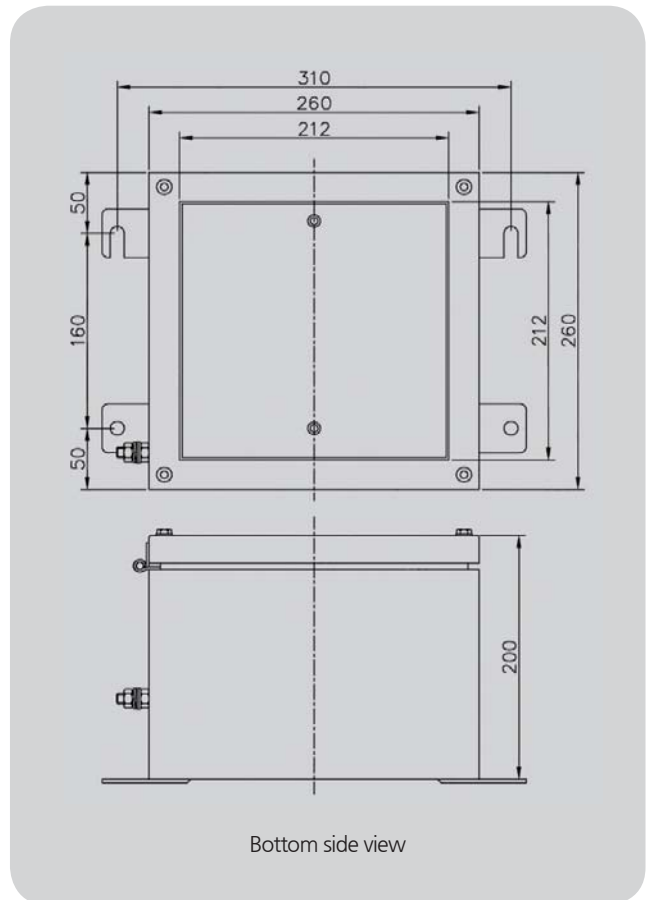
OSSJ 262620 - 260mm x 260mm x 200mm



## 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



Bottom side view

## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

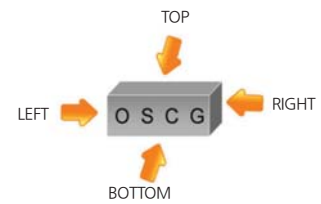
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

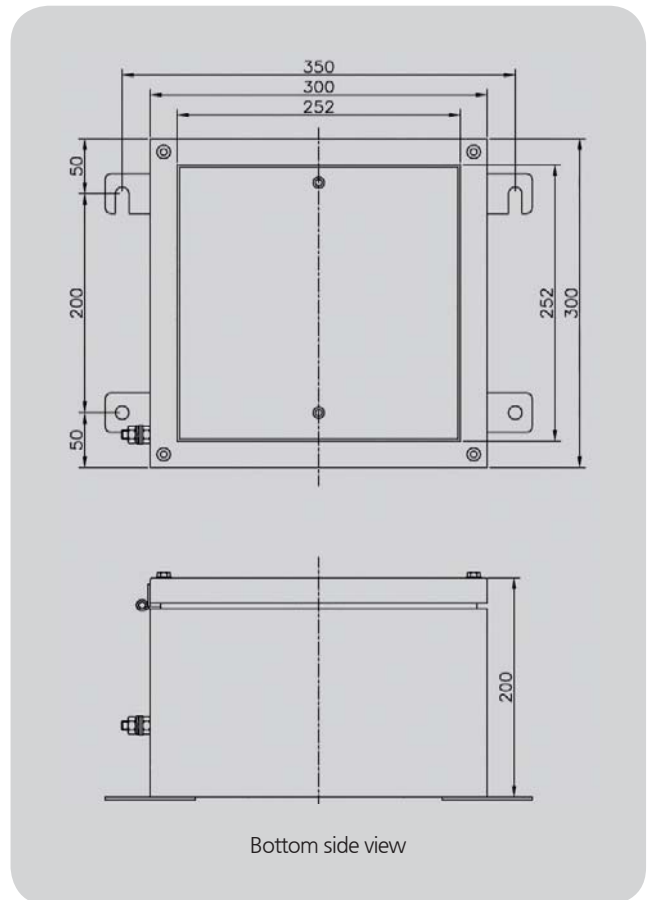
OSSJ 303020 - 300mm x 300mm x 200mm



## 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

2.5 SQ	SQ 4	SQ 6	SQ 10	SQ 16	SQ 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

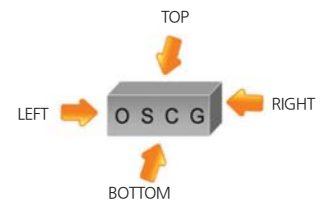
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

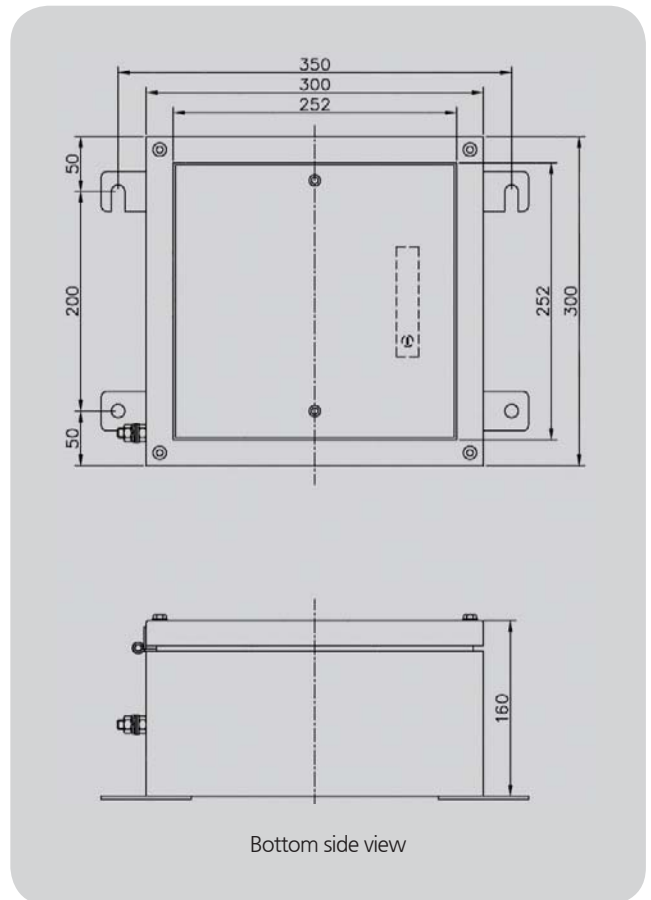
OSSJ 303016L - 300mm x 300mm x 160mm



## 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 KOMERI-0307-16T4175

## Drawing



Bottom side view

## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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)

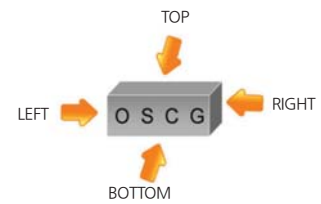
## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

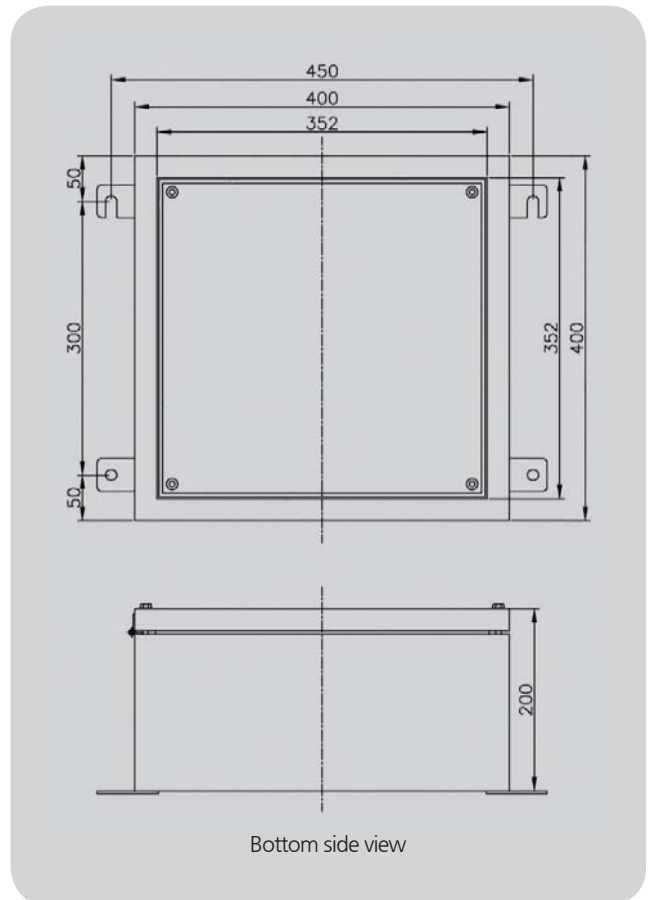
OSSJ 404020 - 400mm x 400mm x 200mm



## 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

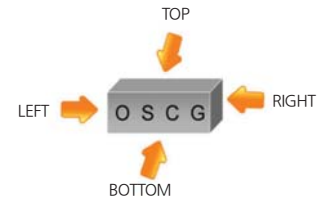
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

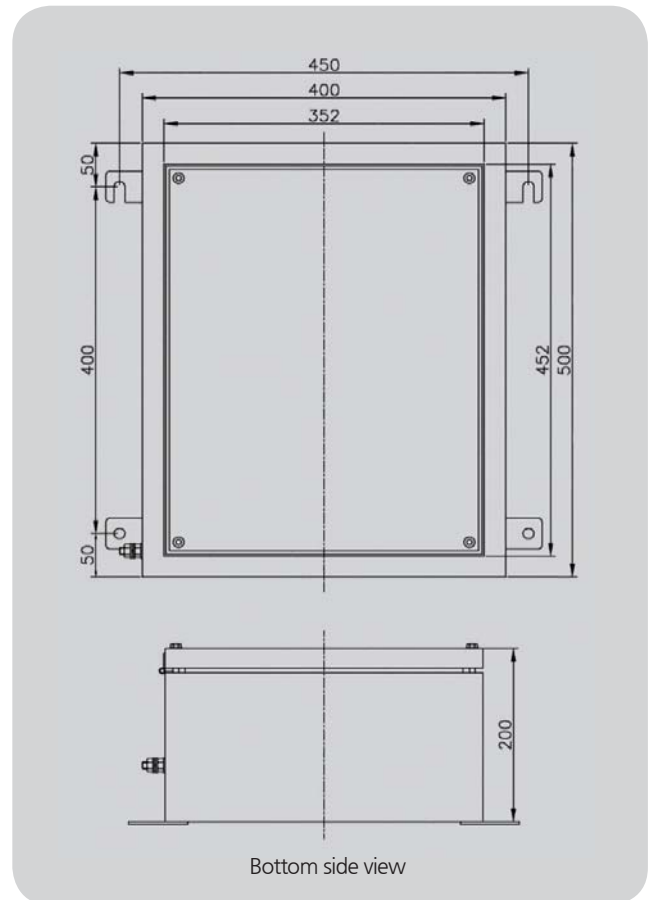
OSSJ 405020 - 400mm x 500mm x 200mm



## 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 KOMERI-0307-16T4176

## Drawing



Bottom side view

## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

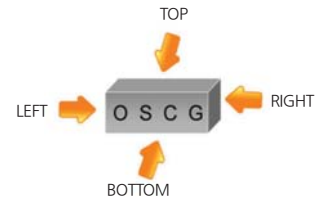
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

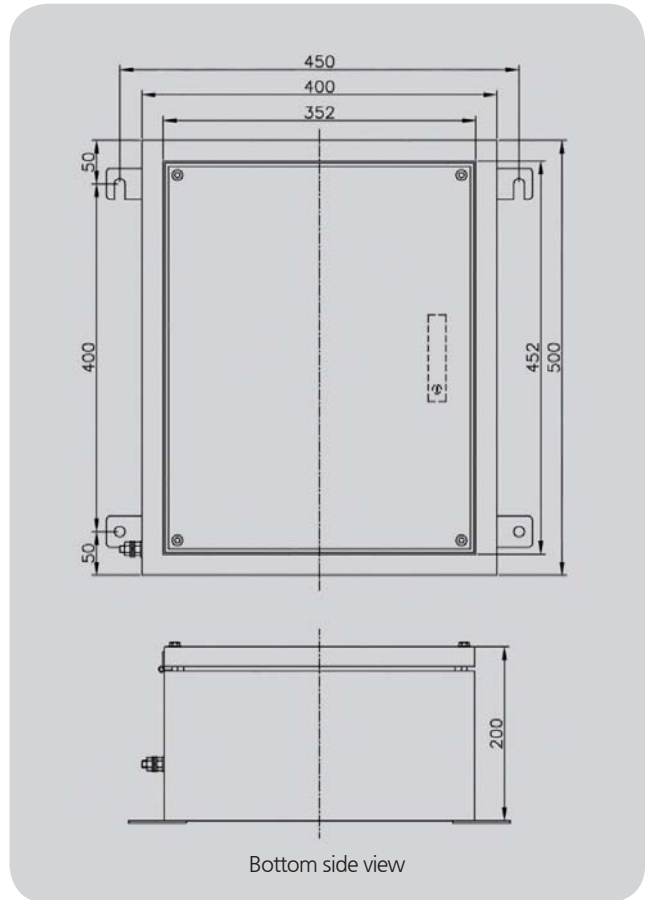
OSSJ 405020L - 400mm x 500mm x 200mm



## 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

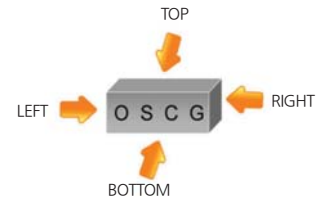
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

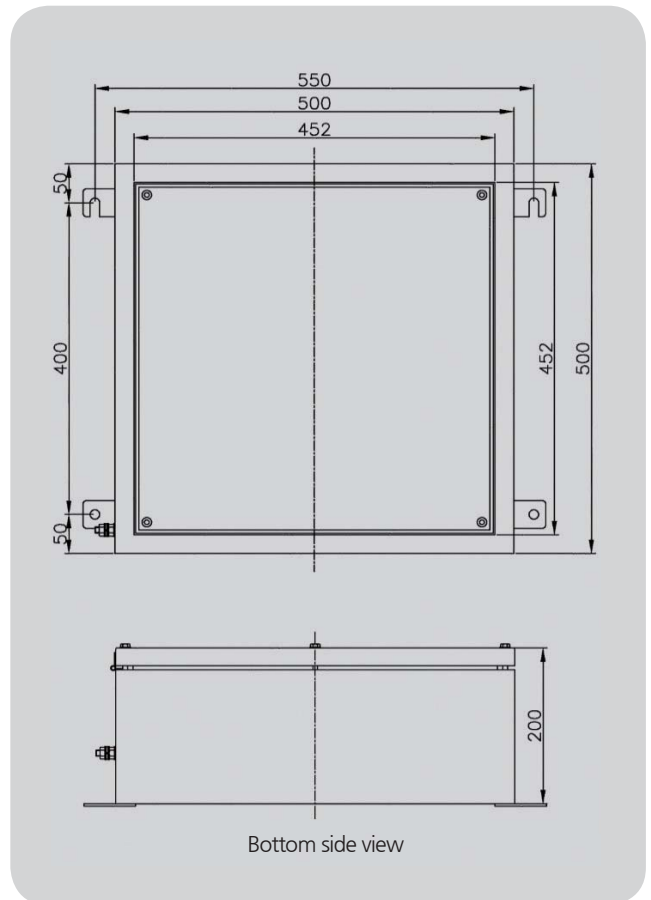
OSSJ 505020 - 500mm x 500mm x 200mm



## 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



Bottom side view

## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

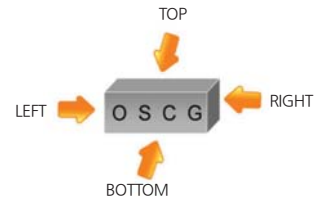
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

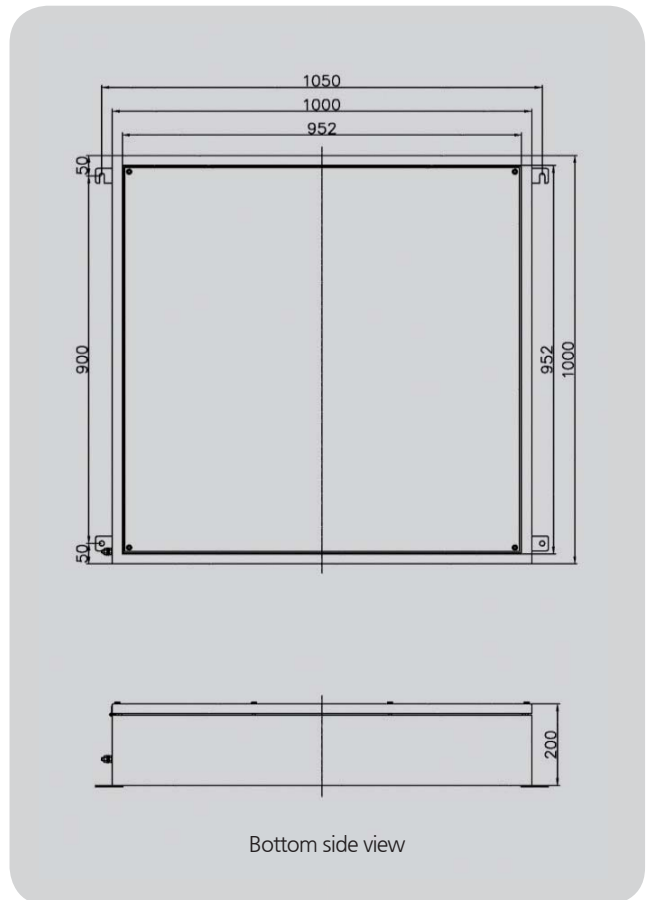
OSSJ 10010020 - 1000mm x 1000mm x 200mm



## 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )	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 11 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 ~ +110°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<sup>9</sup> Ohm ≤ black ≤ 10<sup>9</sup> Ohm 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  
**Earth Plate** : optional at request (design)

## Certificate

IECEx PRE 17.0054X  
 Presafe 17 ATEX 11238X  
 KCs 16-KA2BO-0596~0605

## Type Designation

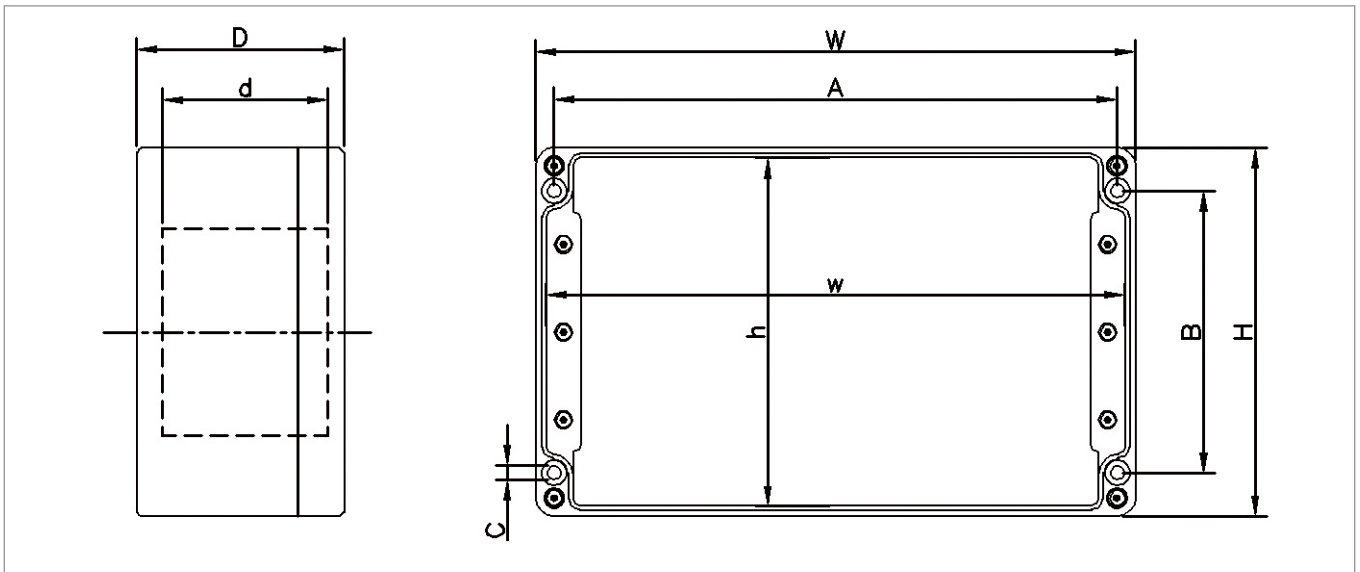
The COMPLETE MODEL No is as follows:

OSGP	4	M	O	T	1
①	②	③	④	⑤	⑥

NO	Description	Symbol	Detail
①	Empty Box	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)
		OSGP11	405 x 400 x 200(mm)
②	TB SIZE(SQ)	2.5	2.5SQ
		04	4SQ
		06	6SQ
		10	10SQ
		16	16SQ
		35	35SQ
		50	50SQ
		70	70SQ
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

# 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 11	405	400	200	393	388	187	385	350	6.5	7.17	31.03

# OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

## Maximum terminal quantity

TYPE	2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ	50 SQ	70/95 SQ
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	2 x 18	1 x 12
OSGP 11	3 x 67	3 x 56	3 x 43	2 x 35	2 x 28	2 x 21	2 x 18	1 x 12

※ 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 11	Top / Bottom	48	27	18	14	10	5	3	2
	Left / Right	32	23	17	11	18	5	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<sub>t</sub> [W] :Total resistance of terminals.

R<sub>c</sub> [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 <sup>2</sup> )	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 <sup>2</sup> )	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<sub>max</sub>: 6.17W)

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

OSGP 6 (P<sub>max</sub>: 18.03W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 9.78W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 21.87W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 12.23W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 23.34W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 14.89W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 28.98W)

Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 16.17W)



Current (A)	Cross section(mm <sup>2</sup> )						
	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<sub>max</sub>: 31.03W)

Current (A)	Cross section(mm <sup>2</sup> )									
	2.5	4	6	10	16	25	35	50	70	95
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	23		
70							13	17		
95								9		
120									7	10
150										8

OSGP 11 (P<sub>max</sub>: 31.03W)

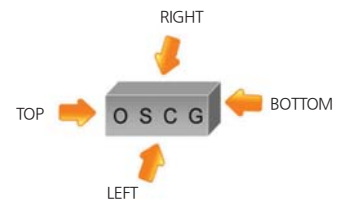
Current (A)	Cross section(mm <sup>2</sup> )									
	2.5	4	6	10	16	25	35	50	70	95
5										
8	106									
10	67									
16	26	41	62							
21		24	36	59						
28			20	33	48					
37				19	27	39				
50					15	21	27			
60						14	18	23		
70							13	17		
95								9		
120									7	10
150										8

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



# OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

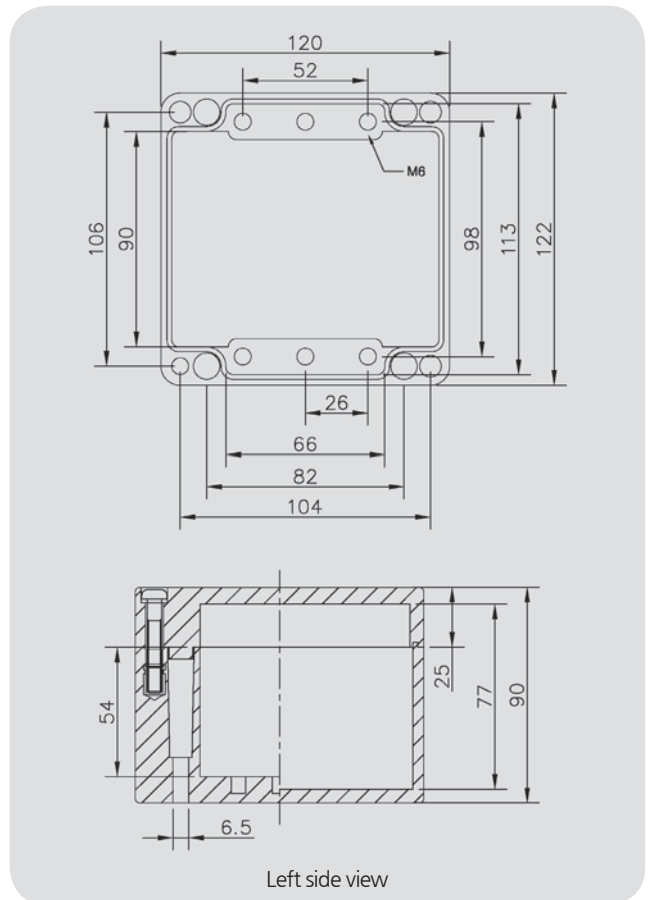
OSGP 1 - 122mm x 120mm x 90mm



## 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 ~ 110°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	10°Ohm ≤black ≤10°Ohm
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 clearnce holes m 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

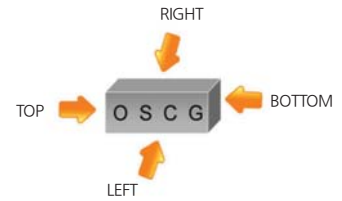
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

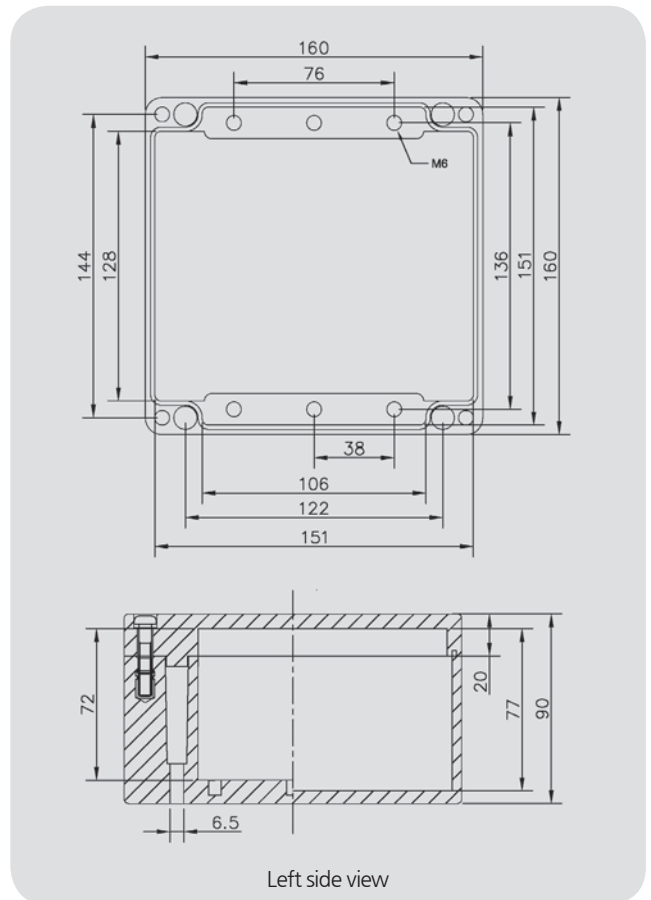
OSGP2 - 160mm x 160mm x 90mm



## OSGP 2 Specification

<b>Material</b>	Glass Fibre Reinforced Polyester(GRP)
<b>Weight(g)</b>	1060g
<b>Area Classification</b>	Zone 1 and Zone2, Zone 21 and Zone 22
<b>Ingress Protection</b>	IP66, IP67 -EN/IEC 60529
<b>Wide Operating Temperature</b>	-60°C ~ 110°C
<b>Impact Resistance</b>	7Nm(EN50014)
<b>Color</b>	RAL9005 Black
<b>Surface Insulation Resistance</b>	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
<b>Toxicity</b>	Low Smoke Halogen-Free
<b>Gasket</b>	Silicon rubber
<b>Finish</b>	Moulded self color black
<b>Earthing</b>	Optional M6 internal/external earth stud, brass or stainless steel
<b>Mounting</b>	Integral 6mm clearnace holes moulded into the body
<b>Certificate No.</b>	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
<b>Ex Code</b>	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
<b>Ambient Temperature</b>	- 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

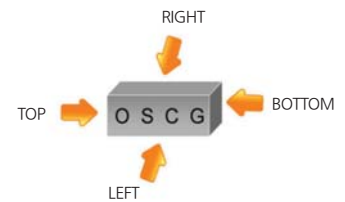
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

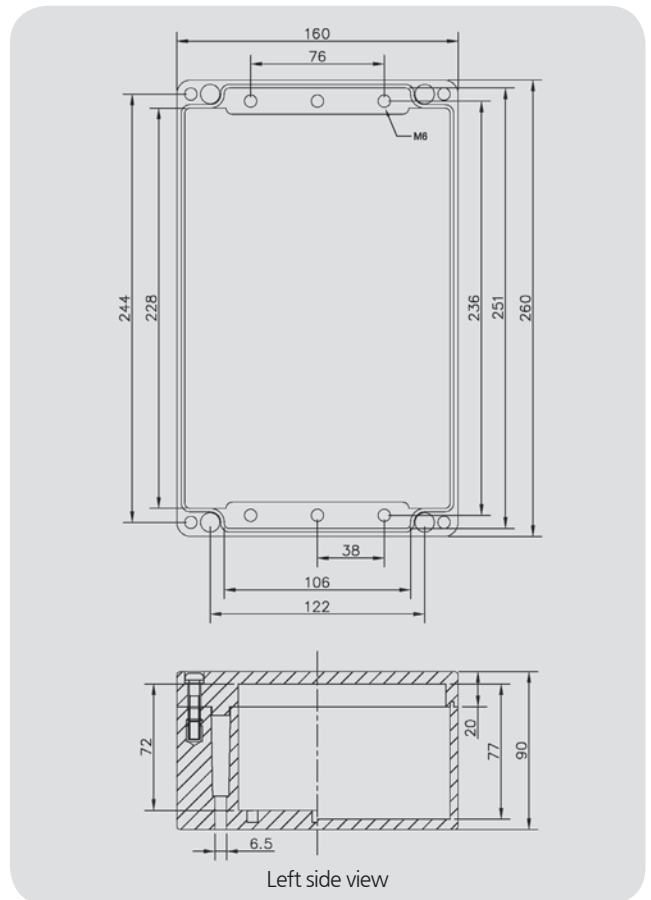
OSGP3 - 260mm x 160mm x 90mm



## 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 ~ 110°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
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 clearace 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

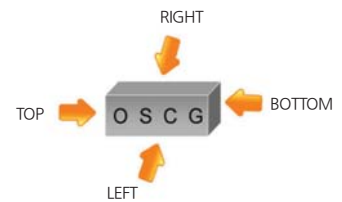
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

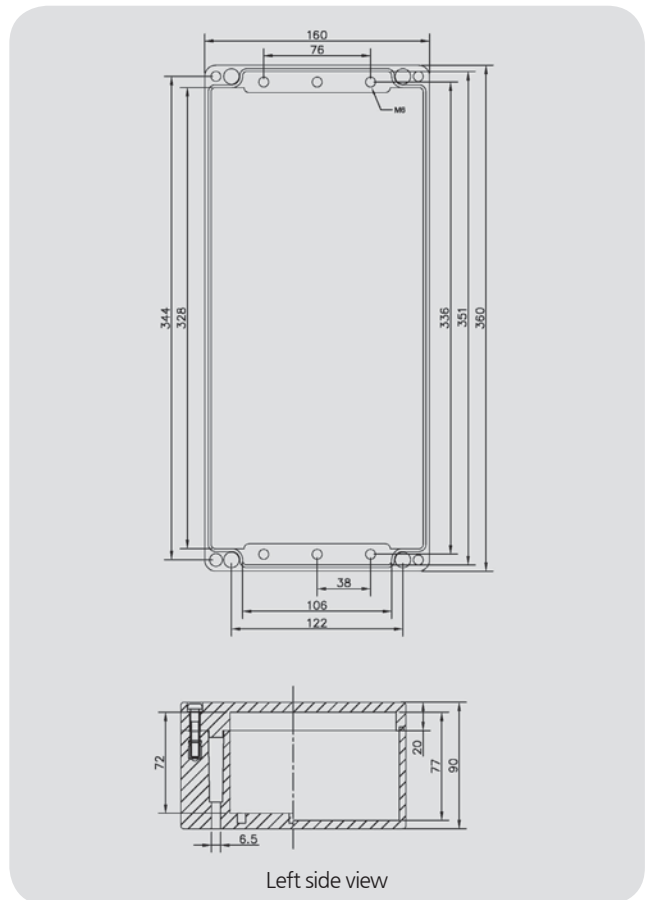
OSGP4 - 360mm x 160mm x 90mm



## OSGP 4 Specification

<b>Material</b>	Glass Fibre Reinforced Polyester(GRP)
<b>Weight(g)</b>	2150g
<b>Area Classification</b>	Zone 1 and Zone2, Zone 21 and Zone 22
<b>Ingress Protection</b>	IP66, IP67 -EN/IEC 60529
<b>Wide Operating Temperature</b>	-60°C ~ 110°C
<b>Impact Resistance</b>	7Nm(EN50014)
<b>Color</b>	RAL9005 Black
<b>Surface Insulation Resistance</b>	$10^6\text{Ohm} \leq \text{black} \leq 10^9\text{Ohm}$
<b>Toxicity</b>	Low Smoke Halogen-Free
<b>Gasket</b>	Silicon rubber
<b>Finish</b>	Moulded self color black
<b>Earthing</b>	Optional M6 internal/external earth stud, brass or stainless steel
<b>Mounting</b>	Integral 6mm clearnace holes moulded into the body
<b>Certificate No.</b>	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
<b>Ex Code</b>	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
<b>Ambient Temperature</b>	- 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

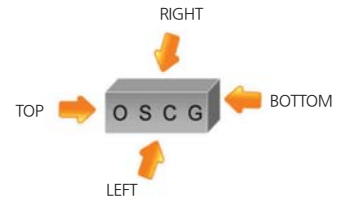
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

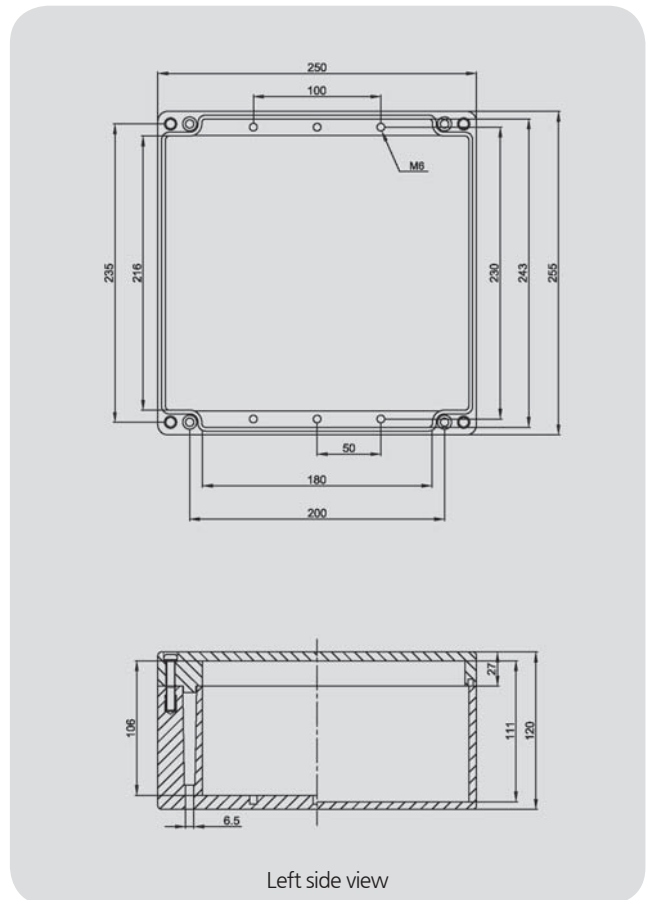
OSGP5 - 255mm x 250mm x 120mm



## OSGP 5 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	2996g
Area Classification	Zone 1 and Zone 2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C ~ 110°C
Impact Resistance	7Nm (EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	10 <sup>6</sup> Ohm ≤ black ≤ 10 <sup>9</sup> Ohm
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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

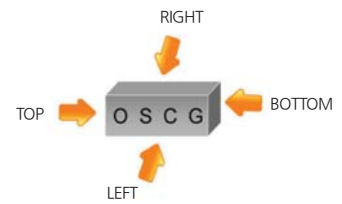
Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

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



# OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

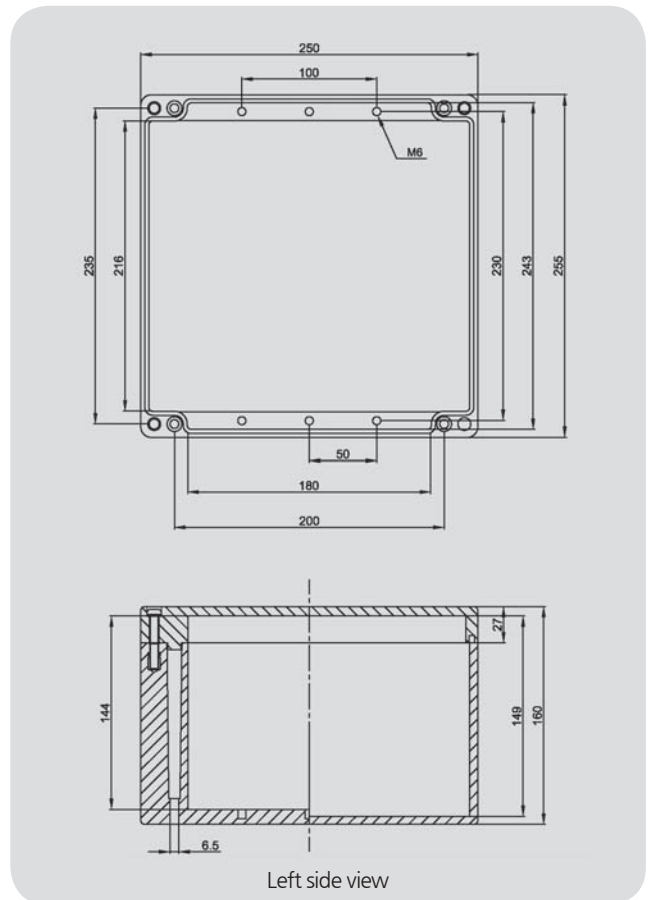
OSGP6 - 255mm x 250mm x 160mm



## OSGP 6 Specification

<b>Material</b>	Glass Fibre Reinforced Polyester(GRP)
<b>Weight(g)</b>	3482g
<b>Area Classification</b>	Zone 1 and Zone2, Zone 21 and Zone 22
<b>Ingress Protection</b>	IP66, IP67 -EN/IEC 60529
<b>Wide Operating Temperature</b>	-60°C ~ 110°C
<b>Impact Resistance</b>	7Nm(EN50014)
<b>Color</b>	RAL9005 Black
<b>Surface Insulation Resistance</b>	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
<b>Toxicity</b>	Low Smoke Halogen-Free
<b>Gasket</b>	Silicon rubber
<b>Finish</b>	Moulded self color black
<b>Earthing</b>	Optional M6 internal/external earth stud, brass or stainless steel
<b>Mounting</b>	Integral 6mm clearnace holes moulded into the body
<b>Certificate No.</b>	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
<b>Ex Code</b>	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
<b>Ambient Temperature</b>	- 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

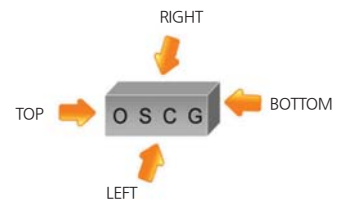
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

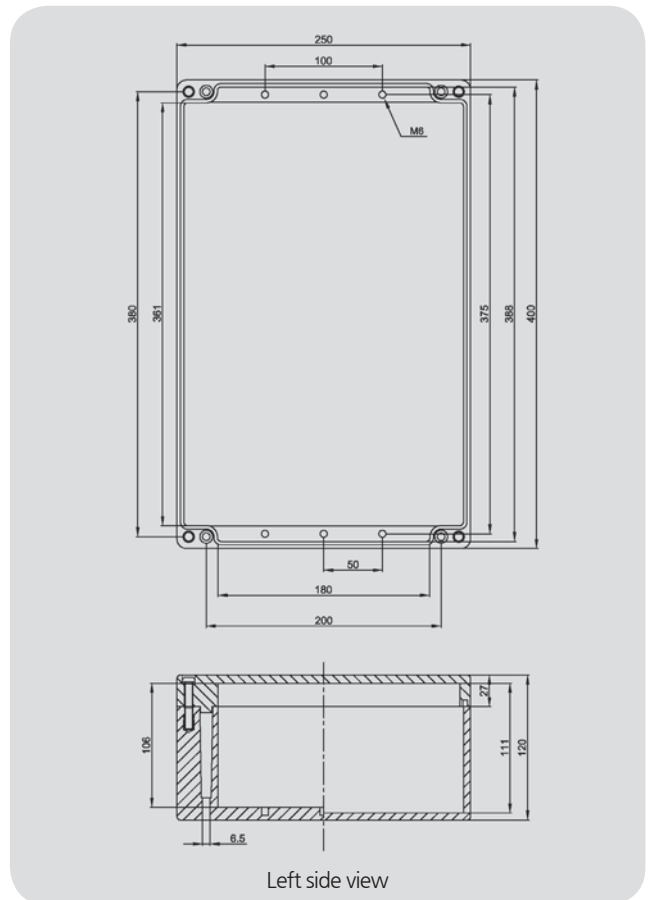
OSGP7 - 400mm x 250mm x 120mm



## 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 ~ 110°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
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 clearace 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

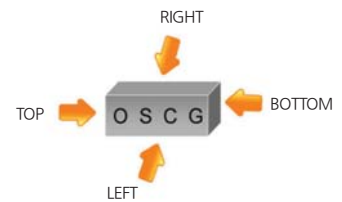
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

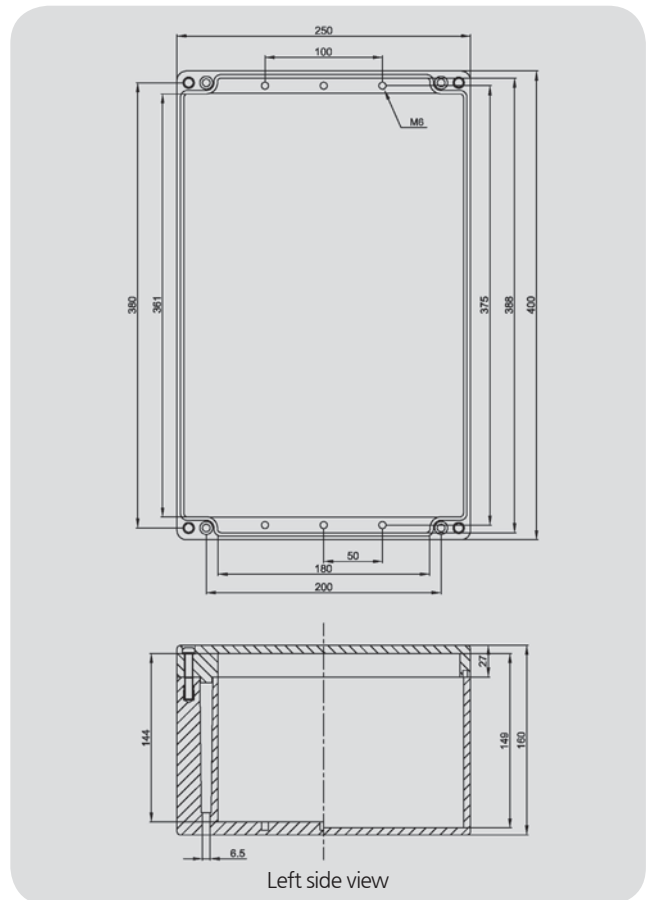
OSGP8 - 400mm x 250mm x 160mm



## OSGP 8 Specification

<b>Material</b>	Glass Fibre Reinforced Polyester(GRP)
<b>Weight(g)</b>	4910g
<b>Area Classification</b>	Zone 1 and Zone2, Zone 21 and Zone 22
<b>Ingress Protection</b>	IP66, IP67 -EN/IEC 60529
<b>Wide Operating Temperature</b>	-60°C ~ 110°C
<b>Impact Resistance</b>	7Nm(EN50014)
<b>Color</b>	RAL9005 Black
<b>Surface Insulation Resistance</b>	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
<b>Toxicity</b>	Low Smoke Halogen-Free
<b>Gasket</b>	Silicon rubber
<b>Finish</b>	Moulded self color black
<b>Earthing</b>	Optional M6 internal/external earth stud, brass or stainless steel
<b>Mounting</b>	Integral 6mm clearnace holes moulded into the body
<b>Certificate No.</b>	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
<b>Ex Code</b>	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
<b>Ambient Temperature</b>	- 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )						
	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.

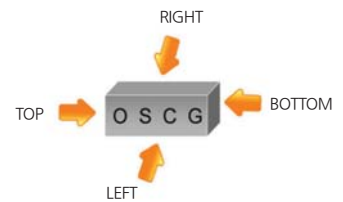
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

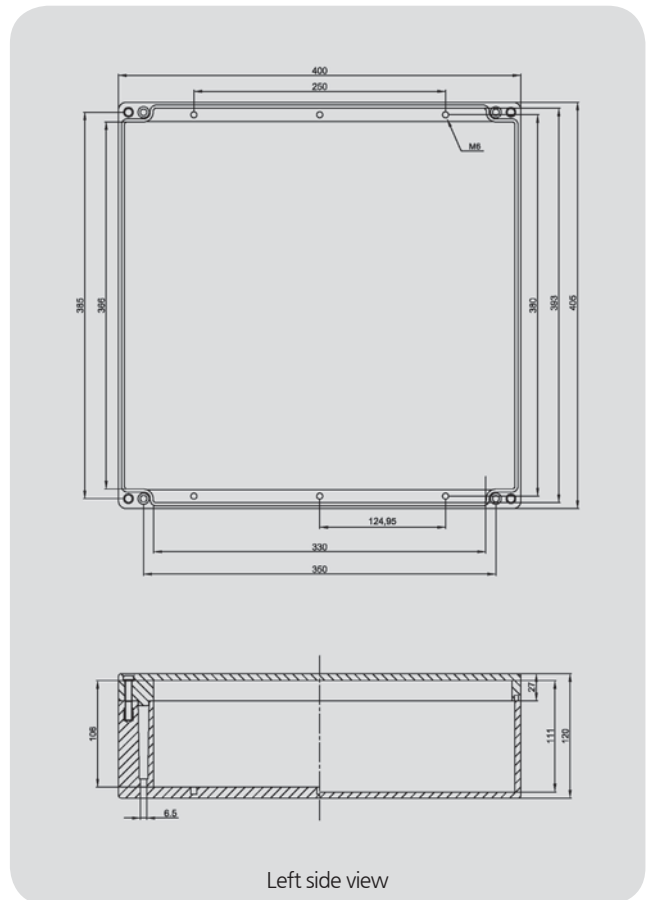
OSGP9 - 405mm x 400mm x 120mm



## OSGP 9 Specification

Material	Glass Fibre Reinforced Polyester (GRP)
Weight(g)	5914g
Area Classification	Zone 1 and Zone 2, Zone 21 and Zone 22
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C ~ 110°C
Impact Resistance	7Nm (EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	10 <sup>6</sup> Ohm ≤ black ≤ 10 <sup>9</sup> Ohm
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 clearnce 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 (mm <sup>2</sup> )						
	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.

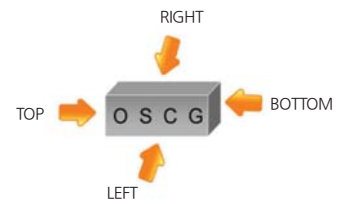
In any terminal box, the maximum heat dissipation power must not be exceeded.

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

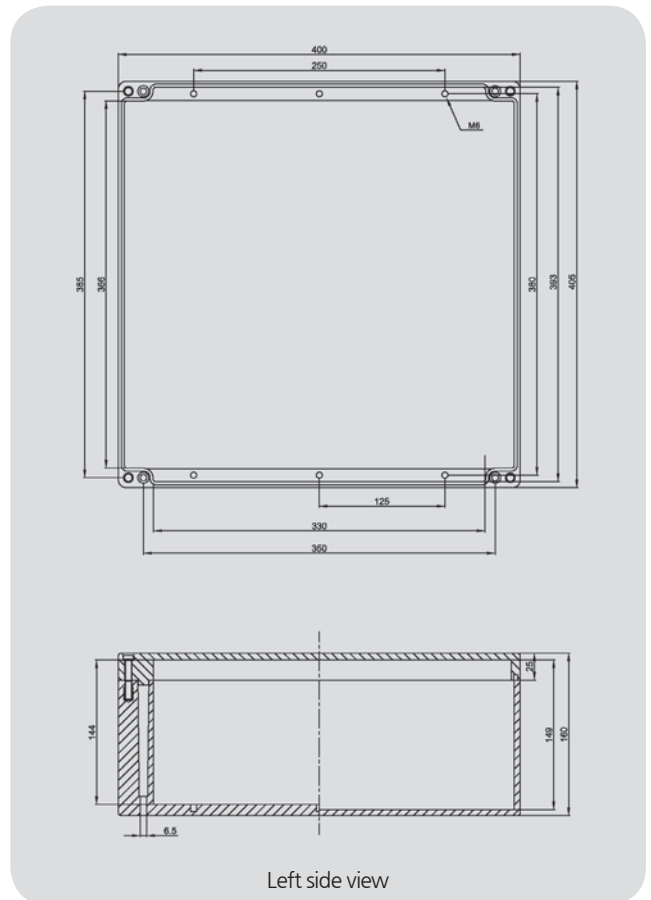
OSGP10 - 405mm x 400mm x 160mm



## OSGP 10 Specification

<b>Material</b>	Glass Fibre Reinforced Polyester(GRP)
<b>Weight(g)</b>	6542g
<b>Area Classification</b>	Zone 1 and Zone2, Zone 21 and Zone 22
<b>Ingress Protection</b>	IP66, IP67 -EN/IEC 60529
<b>Wide Operating Temperature</b>	-60°C ~ 110°C
<b>Impact Resistance</b>	7Nm(EN50014)
<b>Color</b>	RAL9005 Black
<b>Surface Insulation Resistance</b>	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
<b>Toxicity</b>	Low Smoke Halogen-Free
<b>Gasket</b>	Silicon rubber
<b>Finish</b>	Moulded self color black
<b>Earthing</b>	Optional M6 internal/external earth stud, brass or stainless steel
<b>Mounting</b>	Integral 6mm clearnace holes moulded into the body
<b>Certificate No.</b>	IECEX PRE 17.0054X, Presafe 17 ATX 11238X
<b>Ex Code</b>	Ex eb IIC T6/T5 Gb, Ex tD IIIC T57°C/72°C, Ex eb I Mb
<b>Ambient Temperature</b>	-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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ	50 SQ	70/95 SQ
3 X 67	3 X 56	3 X 43	2 X 35	4 X 10	2 X 21	2 X 18	1 X 12

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

## Typical Terminal Load Configuration

Current (A)	Cross section (mm <sup>2</sup> )									
	2.5	4	6	10	16	25	35	50	70	95
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	23		
70							13	17		
95								9		
120								7	10	10
150									8	8

## 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.

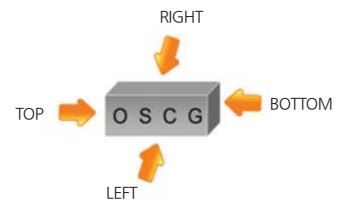
Maximum current value for terminals must be calculated with choosing the right T class and maximum ambient temperature.

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



# OSGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

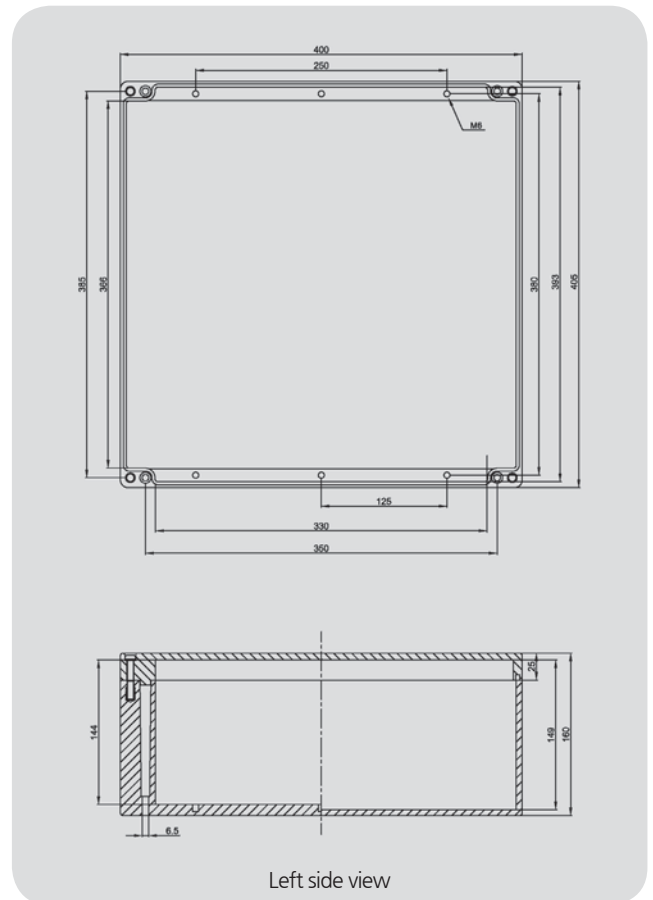
OSGP11 - 405mm x 400mm x 200mm



## OSGP 11 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 ~ 110°C
Impact Resistance	7Nm(EN50014)
Color	RAL9005 Black
Surface Insulation Resistance	10 <sup>6</sup> Ohm ≤black ≤10 <sup>9</sup> Ohm
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 clearnce 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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ	50 SQ	70/95 SQ
3 X 67	3 X 56	3 X 43	2 X 35	4 X 10	2 X 21	2 X 18	1 X 12

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

## Typical Terminal Load Configuration

Current (A)	Cross section (mm <sup>2</sup> )									
	2.5	4	6	10	16	25	35	50	70	95
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	23		
70							13	17		
95								9		
120								7	10	10
150									8	8

## A Guide to Entry Capacity

SIDE	M16	M20	M25	M32	M40	M50	M63	M75
T/B	48	27	18	14	10	5	3	2
L/R	32	23	17	11	8	5	2	1

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

## Maximum heat dissipation power: 31.03W

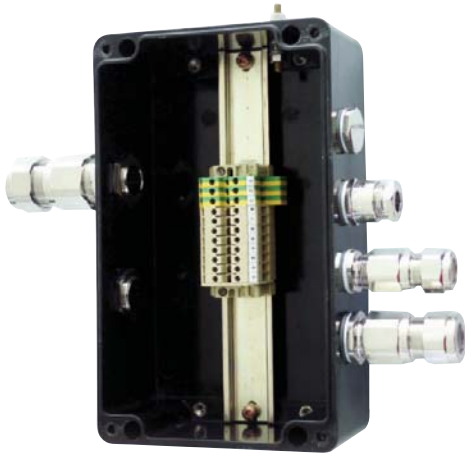
The beside table given theoretical values are calculated depending on typical configurations.

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



## 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	Empty Box	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)
		OSGP11	405 x 400 x 200(mm)
②	TB SIZE(SQ)	2.5	2.5SQ
		04	4SQ
		06	6SQ
		10	10SQ
		16	16SQ
		35	35SQ
		50	50SQ
		70	70SQ
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

## Application

The OSIGP GRP junction boxes have proven their use in many sectors of industry. The OSIGP GRP enclosure comprise 11 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 ~ +110°C

**Impact Resistance** : 7Nm (EN50014)

**Color** : RAL9005 Black (standard)  
RAL7001 Gray (negotiation)  
RAL3001 Red (negotiation)

**Toxicity** : V-0 Self Extinguishing, UL94

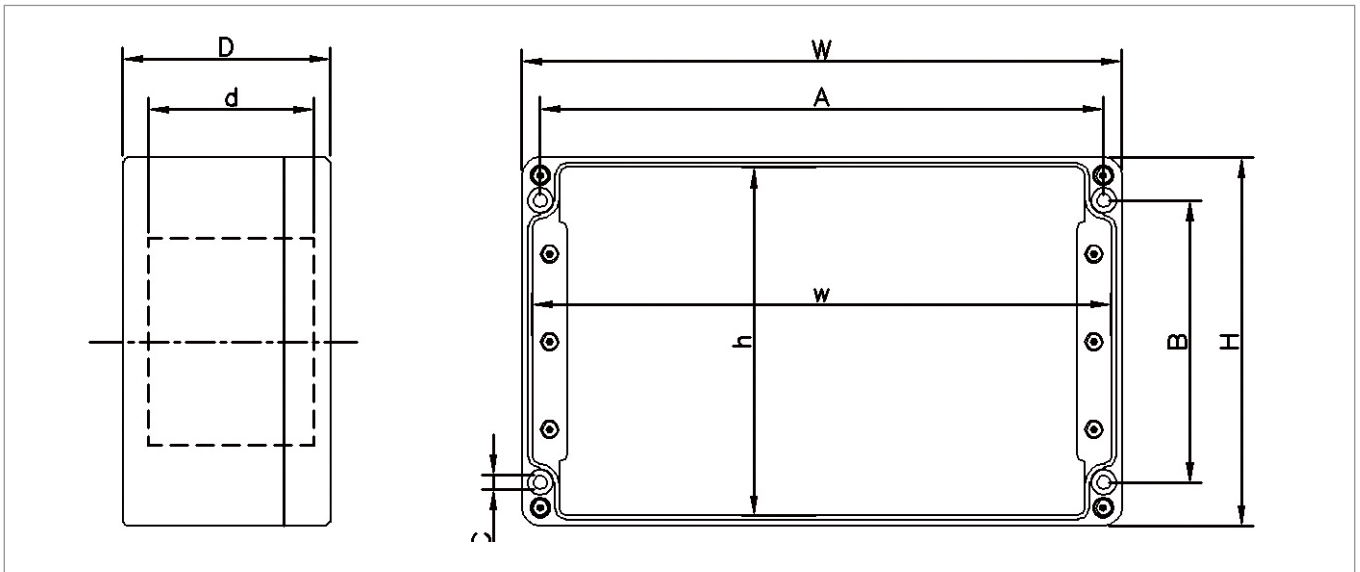
**Gasket** : Silicon rubber

**Mounting** : Integral 6mm clearance holes moulded into the body

**Earthing** : Optional M6 internal/external earth stud, brass or stainless steel

# 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
OSGP 11	405	400	200	393	388	187	385	350	6.5	7.17

### Maximum terminal quantity

TYPE	2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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
OSGP 11	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 <sup>2</sup> )	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
50SQ	690	126	192/70	3.5~6.0(M6)	24
70/95SQ	1100	218	232/120	6.0~12(M8)	30

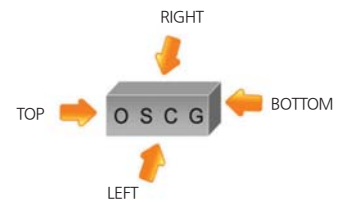
※ For other types of TB and combination of different TB please contact OSCG.

### 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
OSGP 11	Top / Bottom	48	27	18	14	10	5	3	2
	Left / Right	32	23	17	11	8	5	2	1

# OSIGP Series Glass Fibre Reinforced Polyester Terminal Enclosure & Junction Box

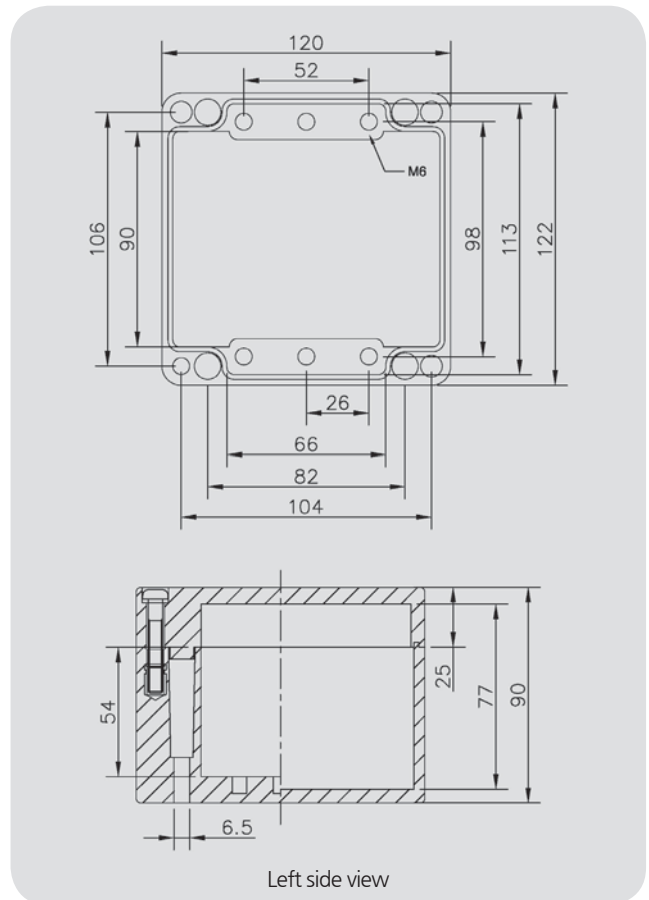
OSIGP 1 - 122mm x 120mm x 90mm



## 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	-60°C ~ 110°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 clearace holes moulded into the body
Certificate No.	KOMERI-0306-11T1322,23

## Drawing



## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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)

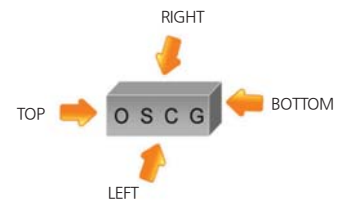
## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

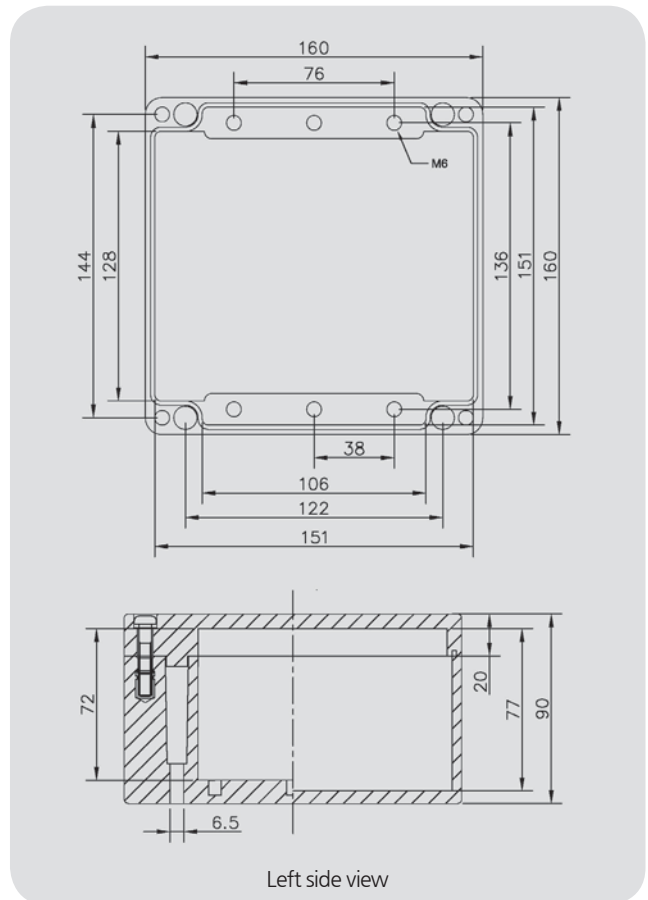
OSIGP 2 - 160mm x 160mm x 90mm



## 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	-60°C ~ 110°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 clearance holes moulded into the body
Certificate No.	KOMERI-0306-11T1324,25

## Drawing



Left side view

## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

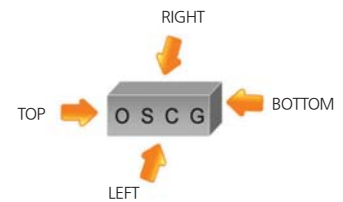
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

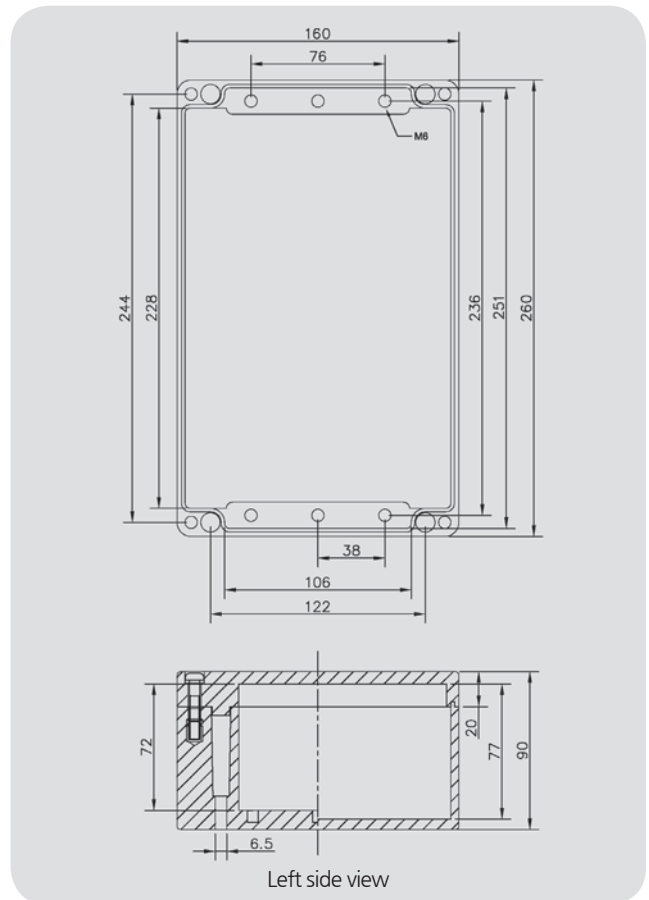
OSIGP 3 - 260mm x 160mm x 90mm



## 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	-60°C ~ 110°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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

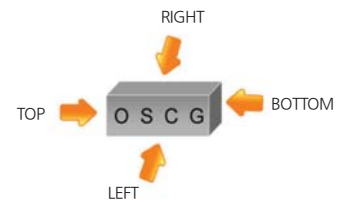
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

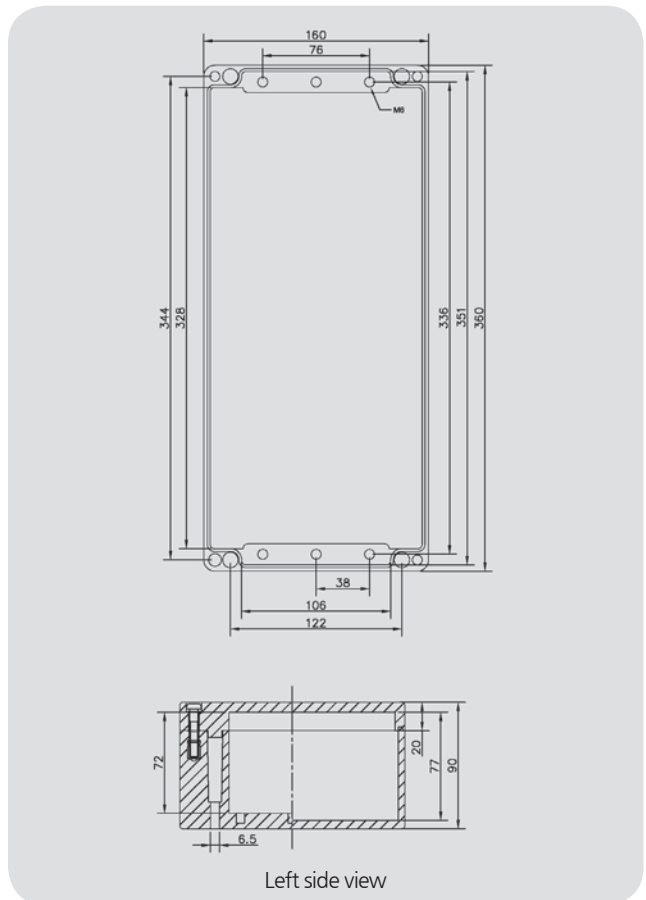
OSIGP 4 - 360mm x 160mm x 90mm



## 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	-60°C ~ 110°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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

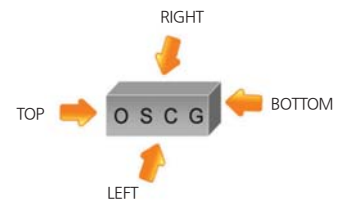
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

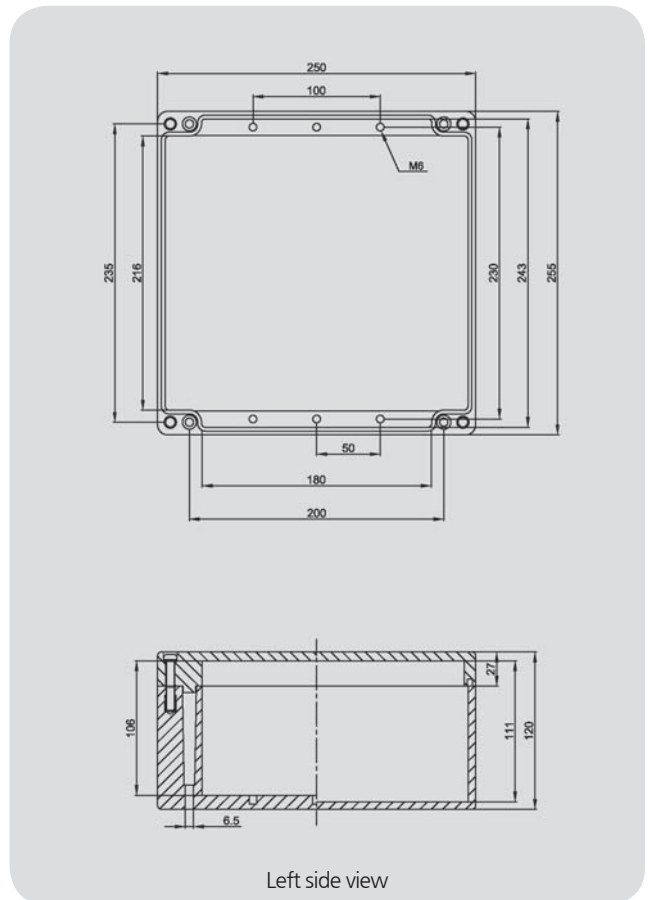
OSIGP 5 - 255mm x 250mm x 120mm



## 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 ~ 110°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 clearace holes moulded into the body
Certificate No.	In progress

## Drawing



## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

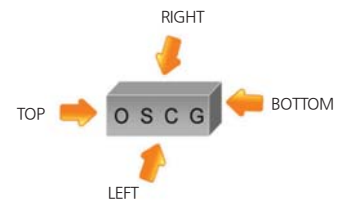
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

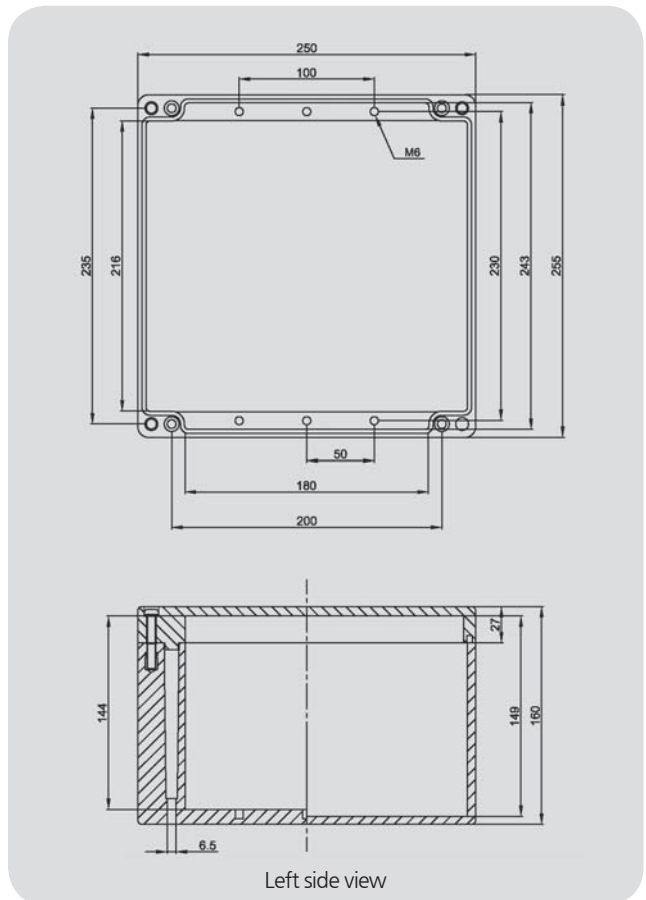
OSIGP 6 - 255mm x 250mm x 160mm



## 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 ~ 110°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 clearance holes moulded into the body
Certificate No.	In progress

## Drawing



## A Guide to Physical Terminal Capacity

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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)

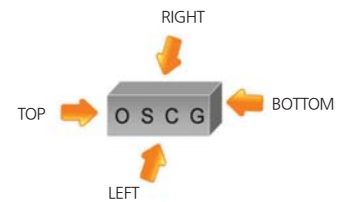
## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

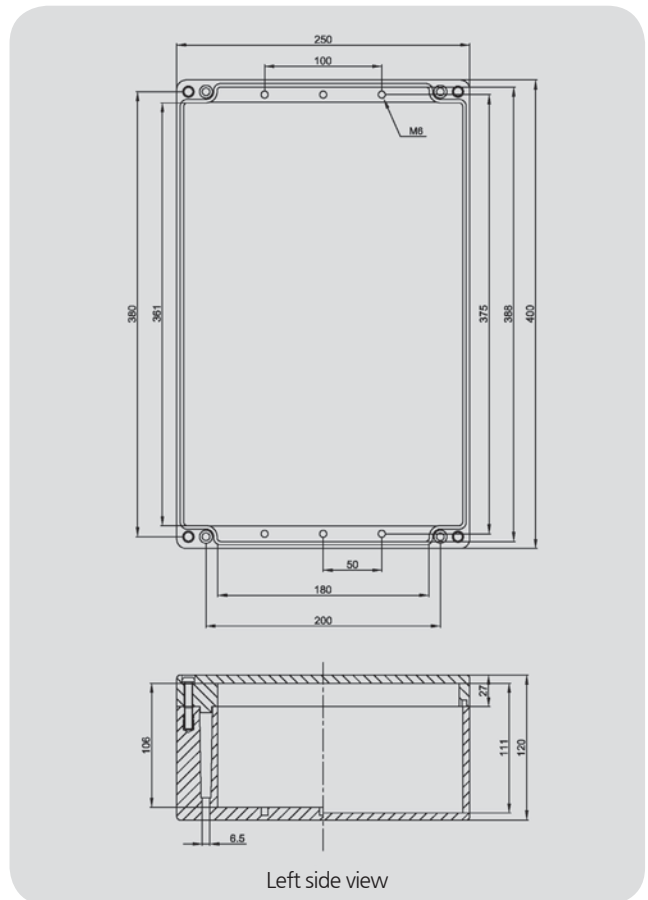
OSIGP 7 - 400mm x 250mm x 120mm



## 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 ~ 110°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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

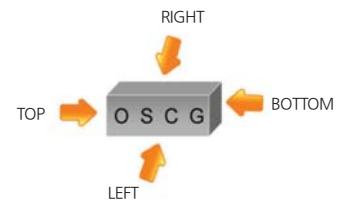
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

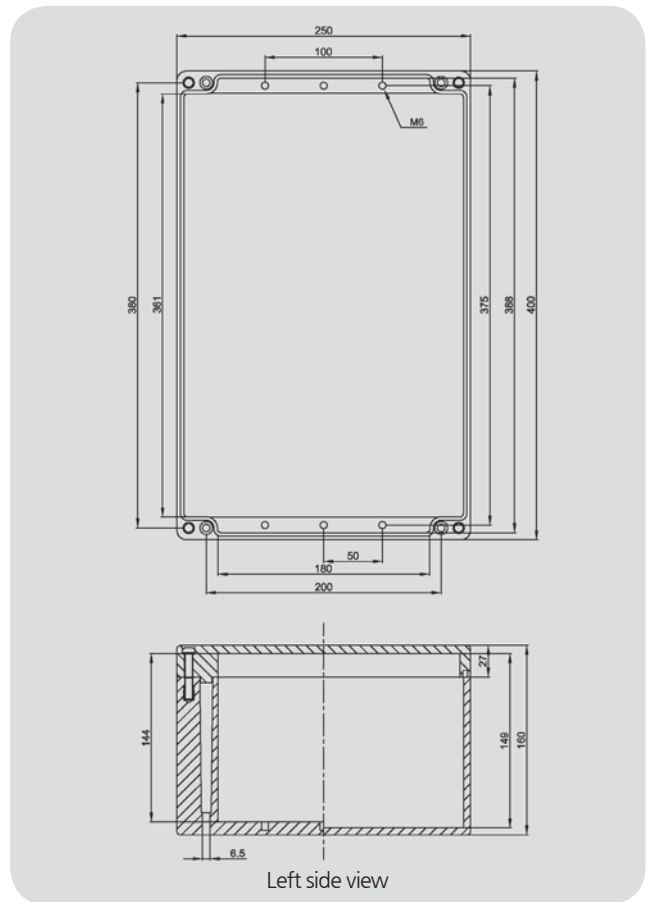
OSIGP 8 - 400mm x 250mm x 160mm



## 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 ~ 110°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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

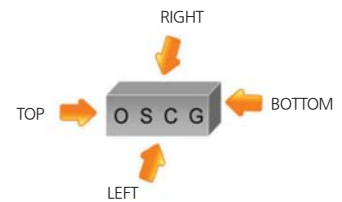
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

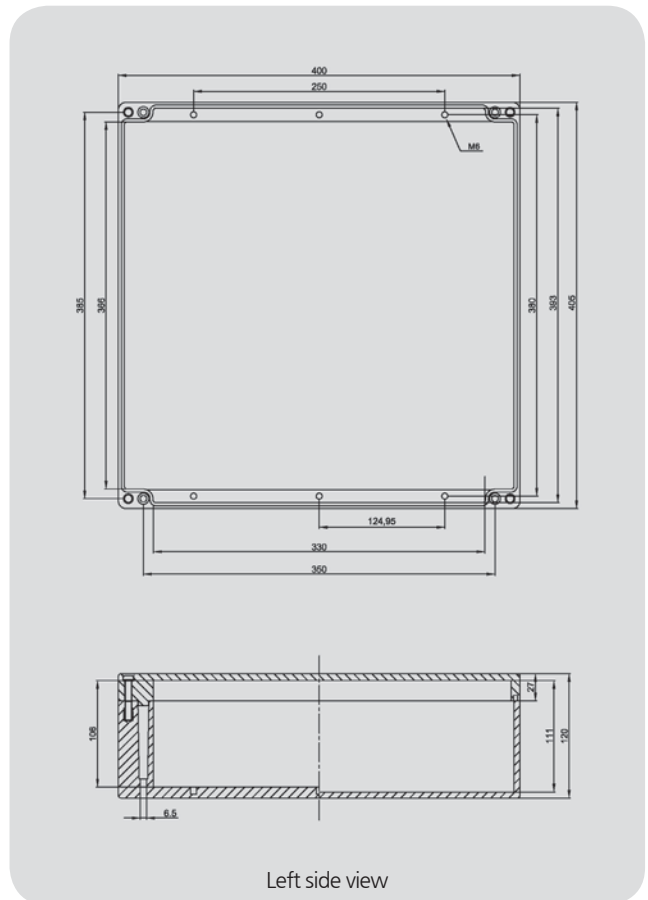
OSIGP 9 - 405mm x 400mm x 120mm



## 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℃ ~ 110℃
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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

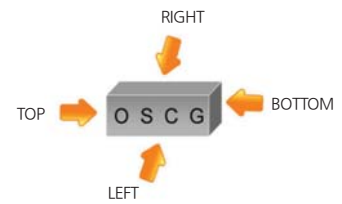
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max current/cond (A/mm <sup>2</sup> )	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

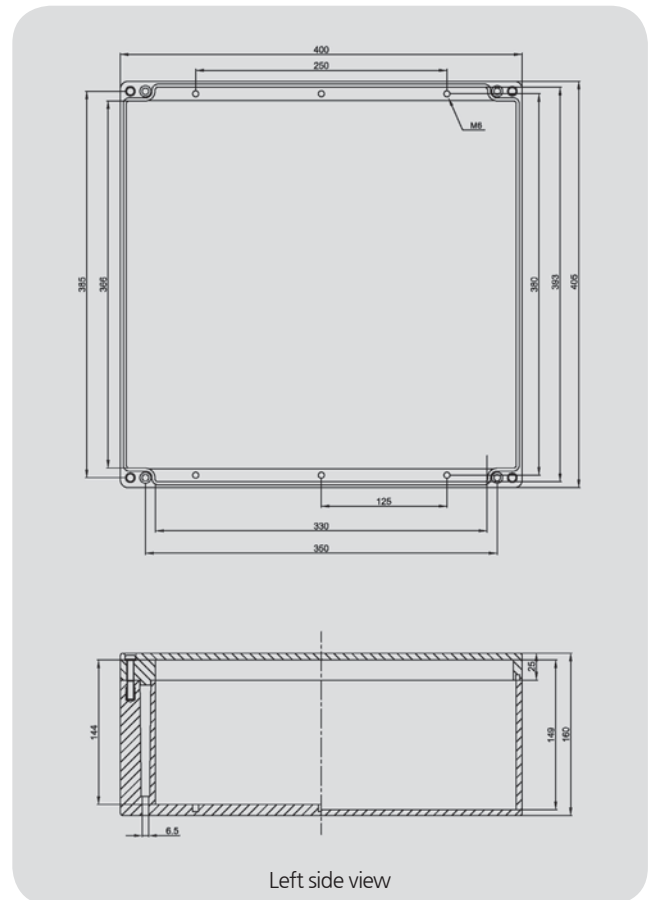
OSIGP 10 - 405mm x 400mm x 160mm



## 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 ~ 110°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

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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

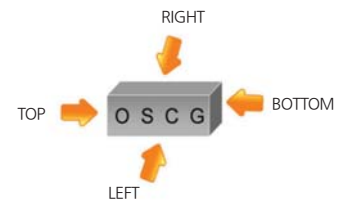
(\*T/B : Top/Bottom, L/R : Left/Right)

## Used Terminal Block / Power Rating / Temperature Grade

TB Type	Max.current/cond (A/mm <sup>2</sup> )	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

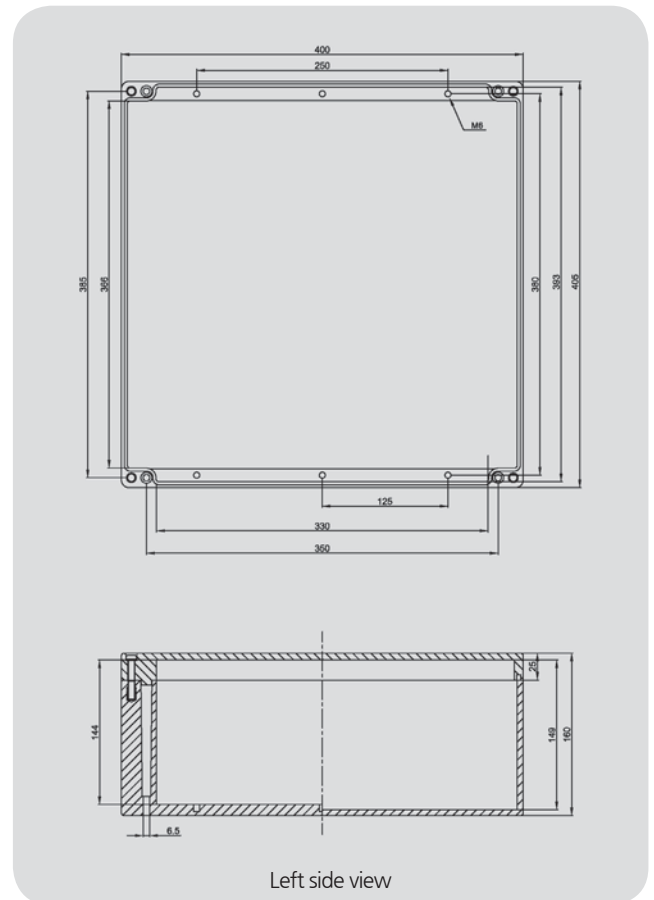
OSIGP 11 - 405mm x 400mm x 200mm



## OSIGP 10 Specification

Width(mm)	405mm
Length(mm)	400mm
Depth(mm)	200mm
Weight(g)	6542g
Material	Glass Fibre Reinforced Polyester(GRP)
Ingress Protection	IP66, IP67 -EN/IEC 60529
Wide Operating Temperature	-60°C ~ 110°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 clearace holes moulded into the body
Certificate No.	In progress

## Drawing



## OSIGP 11 Specification

2.5 SQ	4 SQ	6 SQ	10 SQ	16 SQ	35 SQ
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 <sup>2</sup> )	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

### EMC(BS6121 - EN 50262 Table 1. Test Requirements)

Electromagnetic Compatibility	No test required (glands are considered passive)
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## Cold Flow

IEC 60079-14, 10.2 Selection of cable glands

The cable gland shall be selected to match the cable diameter. The use of sealing tape, heat shrink tube or other materials is not permitted to make the cable fit to the cable gland.

Cable glands and/or cables shall be selected to reduce the effects of “coldflow characteristics” of the cable.

NOTE 1 Cables employ materials which could exhibit “coldflow” characteristics. Coldflow in cables can be described as the movement of the cable sheath under the compressive forces created by the displacement of seals in cable glands where the compressive force applied by the seal is greater than the resistance of the cable sheath to deformation. Coldflow could give rise to a reduction in the insulation resistance of the cable. Low smoke and/or fire resistant cables usually exhibit significant cold flow characteristics.



## GRP(Glass Fibre Reinforced Polyester) JUNCTION BOX - IMPACT TEST



Impact resistant : >7 Nm



Impact resistant : >3 Nm

## 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

Maximum surface Temperature	US(NEC 505) IEC CENELEC	US(NEC 500)
180°C	T3	T3A
165°C		T3B
160°C		T3C
135°C	T4	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

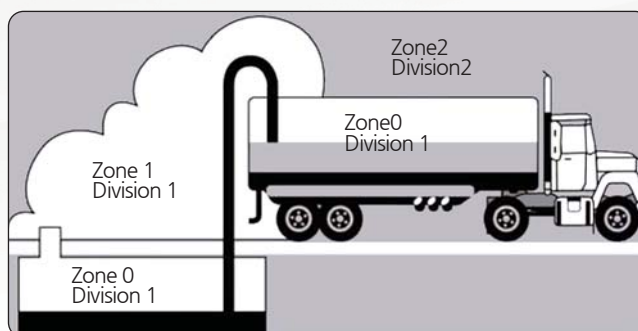
The ambient temperature is the surrounding temperature of the environment in which the equipment is installed, whether indoors or outdoors. For electrical equipment certified in Europe it is assumed that the ambient temperature in which the equipment may be operated is between -20°C to + 40°C. Some types 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


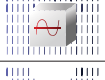

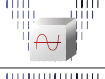
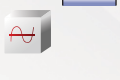
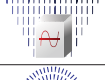

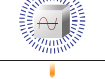

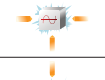


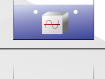

As can be seen from the table above, Division 1 covers both the European/IEC Zones 0 & 1. Therefore, care must be taken when using zone classified equipment in a Division 1 area as to the suitability of the protection employed. Underwriters Laboratory (UL) and Factory Mutual Inc (FM) are two main certification 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
Dust ignition proof	Ex d	0, 1 & 2	1, 2 & 3	EN 61241-1	60079-31	Dust ignition protection

## 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:


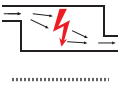





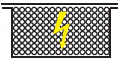
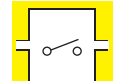
- Reduced testing and certification costs to manufacturer
- Reduced time to market
- International confidence in the product assessment process
- One interantional database listing

The goal is to help manufacturers reduce costs and time while developing and maintaing 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 IEXEx 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-potection being appointed as IECEx Assessors.

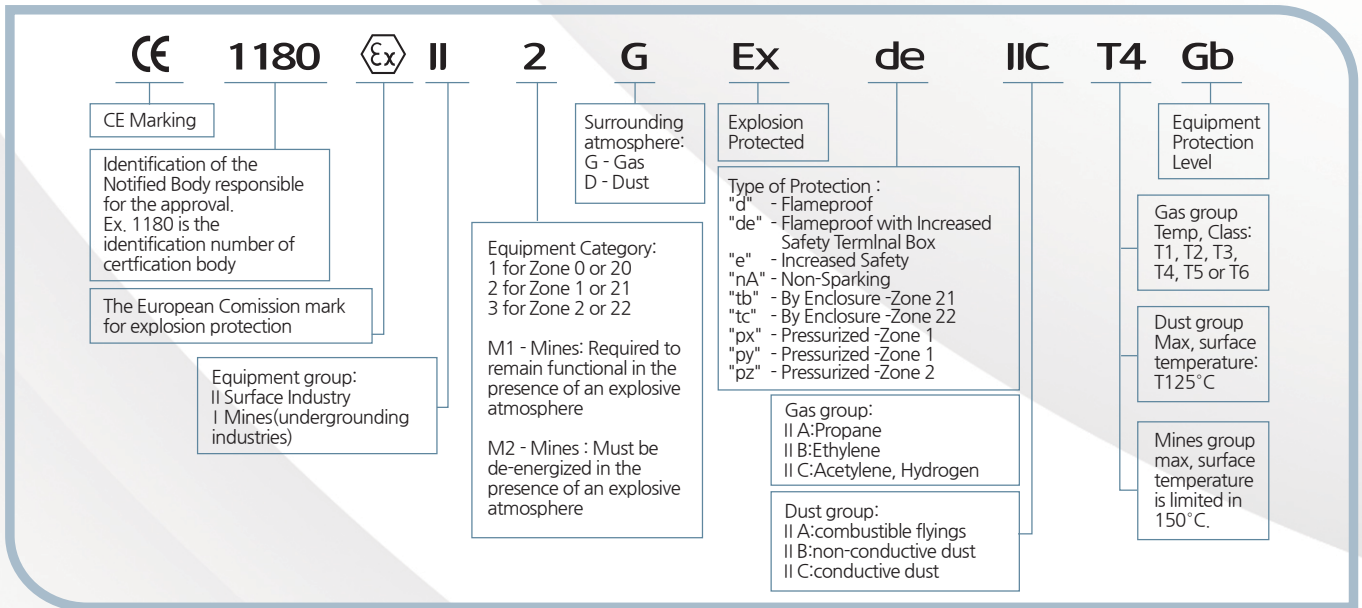




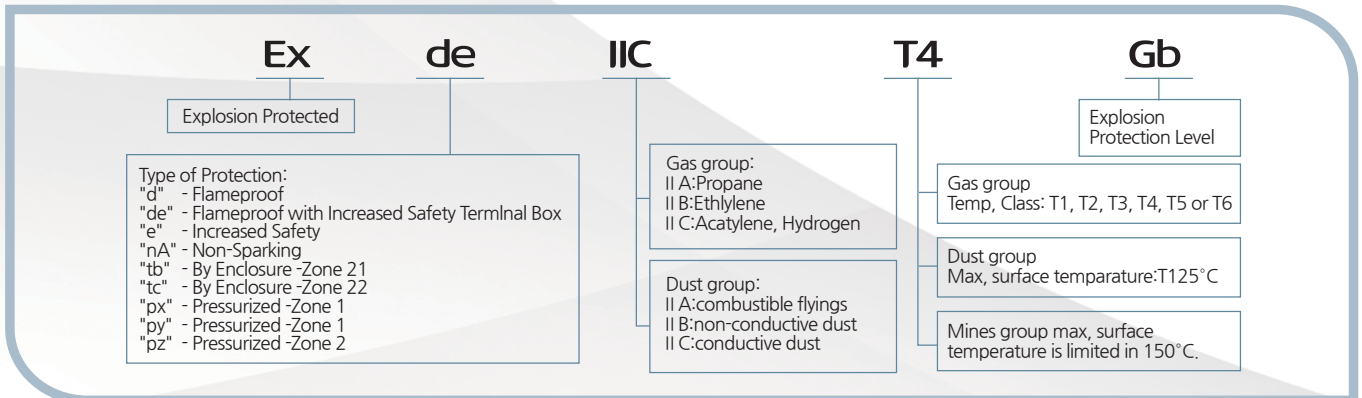
## TYPE OF ENCLOSURE

Type of Enclosure	Basic Principle	Schematic	IEC Standard
Flame proof Enclosure <b>d</b>	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 <b>p</b>	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 <b>q</b>	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 <b>o</b>	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 <b>e</b>	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 <b>i</b>	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 <b>n</b>	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 <b>m</b>	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 <b>DIP</b>	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.		

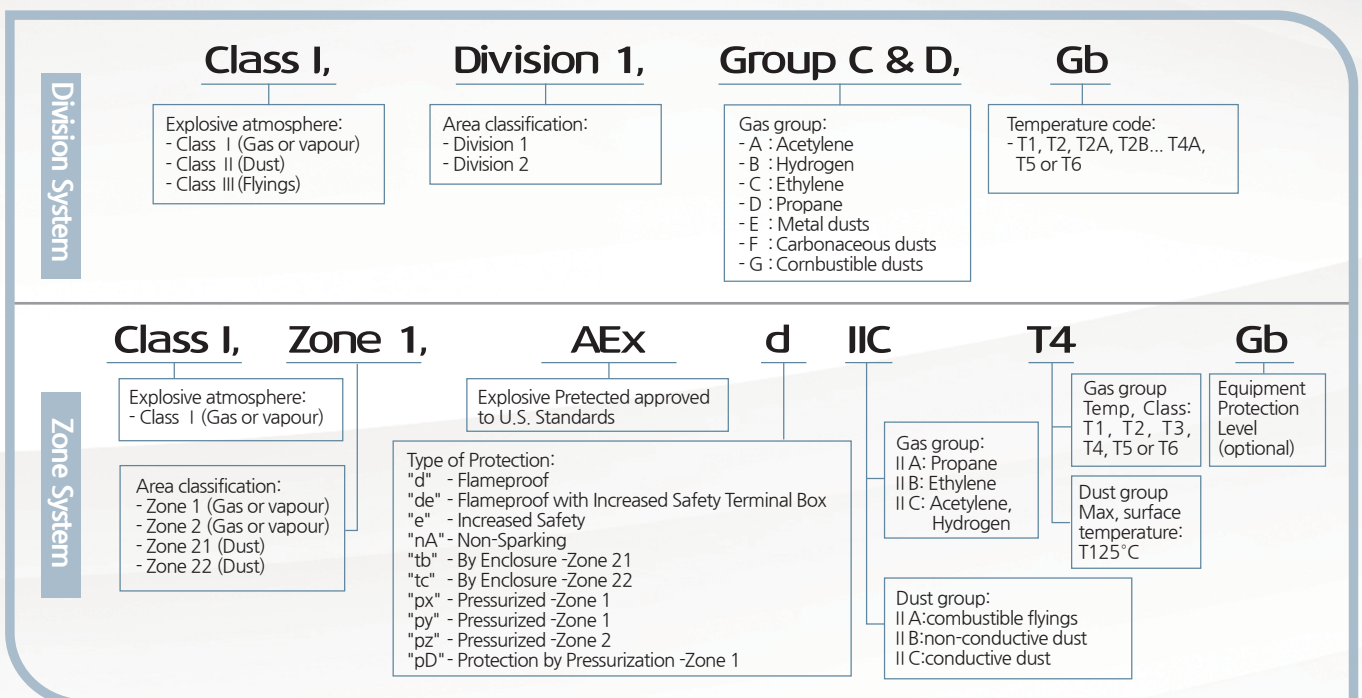
## ATEX MARKING(EUROPEAN)



## 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

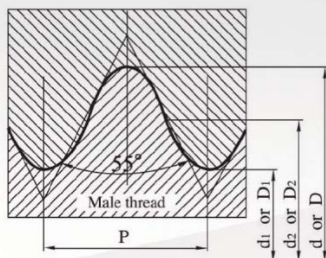
# THE TYPE OF THREAD ON CABLE GLAND



- 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

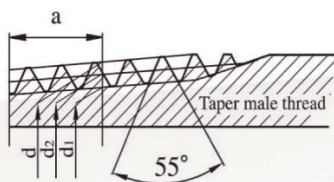


JIS B0202

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



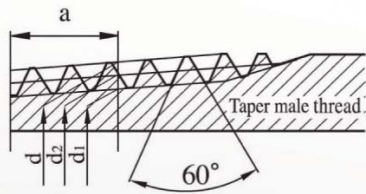
JIS B0203

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

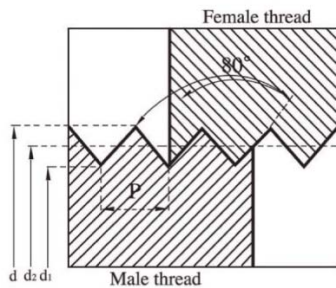


ANSI / ASME-B 1201

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

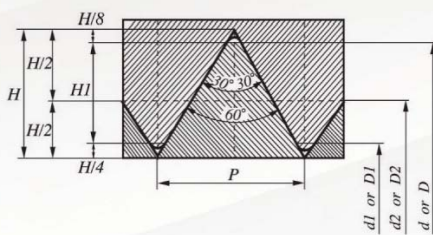


DIN 40430

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	
				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



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

$$H_1 = 0.541266 P \quad d_1 = d - 1.082532 P$$

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

KS B 0204-86      JIS B 0207-1982

Nominal size	Pitch P	Diameter D	Effective 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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-  **PAKISTAN** - SAGE OILFIELD SERVICES TEL : +92-21-34386844 / FAX : +92-21-34386791
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Thailand

Vietnam

Malaysia

Singapore

Indonesia

Australia

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OSCG SEOUL

Seoul Agency  
PROCESS CONTROLS CO.,LTD.

Ulsan Branch  
OSCG ULSAN

Busan Branch  
OSCG B.S.S  
OSCG G.Y.S  
DYNASTY SOLUTION CO.,LTD.

Busan Agency  
E.E.C WORLD  
MJ TECH CO.,LTD.  
SECHANG CORP.



OSCG CO., LTD. was founded in Nov. 1983.

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