HTP®

HIGH TECH PRODUCTS S.R.L.

TÜV SÜD

CERTIFICATO № 50 100 10684 - Rev.002

ATEX CONNECTORS

The electrical, electronic and mechanical equipment present in not dangerous places are safe if they are CE-labelled, that means that the manufacturers ensure the observance of the requirements established by EU applicable regulations and standards.

Increasingly, electrical and electronic equipment is being used in potentially hazardous environments to automate or control certain production processes.

However, the use of such equipment in close proximity to flammable or combustible gases or materials increases the risk of fire or explosion,as the normal operation of electrical and electronic equipment often involves actions or reactions that are a potential ignition of risk.

These potentially hazardous environments, also known as “Ex areas” (short for explosive areas), are found in a range of industries, including oil and gas refineries and distribution facilities, chemical processing plants, grain and agricultural handling, processing and storage facilities, underground mines, and even hospital operating environments.

In the European Union (EU) the equipment present in potentially dangerous places must comply with the conditions established by EU Directive 2014/34/EU, also known as ATEX Directive (ATEX comes from French “*ATmosphere EXplosible*”).

The Regulation applies to all electrical and non-electrical products that are used in dangerous places, including equipment, protection systems, components and safety devices.

Like all *“New Approach” Directives*, the ATEX Legislation lays down the application of standards that assess the technical compliance of products.

The tests of conformity are usually proved by the supplier with a declaration that is based on a technical evaluation.

In addition, manufacturers of electrical equipment of Category 1 and Category 2 have to get a certification issued by an EU Notified Body.

Moreover, the conformity with the essential requirements established by ATEX Directive ensure not to run into additional risks or undermine the security of the working environment.

The need of the producers to satisfy specific safety requirements of their products expand the market opportunities and allow to meet the customers' requests.

ZERTIFIKAT ◆ CERTIFICATE ◆ 证书 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

CERTIFICATE

EU-TYPE EXAMINATION CERTIFICATE

[1]

[2] Equipment or Protective System intended for use in potentially explosive atmospheres Directive 2014/34/EU

[3] EU-Type Examination Certificate number:

TUV IT 20 ATEX 037 X

[4] Equipment: Junction devices type M12, M8, G1+G2, M1+M2, P1+P2
[5] Manufacturer: H.T.P. High Tech Products S.R.L.

[6] Address: Via Lesina 45
24030 Brembate di Sopra (BG) – ITALY

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

[8] TÜV Italia, notified body no. 0948 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. R 20 EX 035

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 - EN IEC 60079-7:2015/A1:2018- EN 60079-31:2014

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

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

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

II 2G Ex eb IIC T5 Gb
II 2D Ex tb IIIC T100°C Db
II 2G Ex eb IIC T5 Gb (only M8)
Tamb: -20 +85 °C

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

Issue date: 22nd September 2020

ACCREDIA
PRD N° 081B

TÜV Italia S.r.l.
Notified body N° 0948

Alberto Carelli
Industry Service - Real Estate & Infrastructure
Managing Director

TÜV Italia has been authorized by Italian government to operate as notified body for the certification of equipment or protective system intended for use in potentially explosive atmospheres. This document is not valid without official signature and logo. The internal reference code is 722228220.

REX-01-M002 rev03 del 28/03/2018

TÜV Italia • Gruppo TÜV SÜD • Via Cardinal Nicolini 125, Pal. 23 • 20019 Sesto San Giovanni (MI) • Italia • www.tuv.it

H.T.P. CONNECTOR'S TYPE	ATEX MARKING
DIN VALVE CONNECTORS FIELD ATTACHABLE	CE 0948 Ex II 2G Ex eb IIC T5 Gb ; II 2D Ex tb IIIC T100°C Db IP65/67
M12 CIRCULAR CONNECTORS FIELD ATTACHABLE	CE 0948 Ex II 2G Ex eb IIC T5 Gb ; II 2D Ex tb IIIC T100°C Db IP65/67
M8 CIRCULAR CONNECTORS FIELD ATTACHABLE	CE 0948 Ex II 2G Ex eb IIC T5 Gb IP55/57

DIN VALVE CONNECTORS FIELD ATTACHABLE:

1	2	3	4	5	6	7	8	9	10
CE 0948	Ex	II	2G / 2D	Ex	eb / tb	IIC / IIIC	T5 / T100°C	Gb / Db	IP65/67

M12 CIRCULAR CONNECTORS FIELD ATTACHABLE:

1	2	3	4	5	6	7	8	9	10
CE 0948	Ex	II	2G / 2D	Ex	eb / tb	IIC / IIIC	T5 / T100°C	Gb / Db	IP65/67

M8 CIRCULAR CONNECTORS FIELD ATTACHABLE:

1	2	3	4	5	6	7	8	9	10
CE 0948	Ex	II	2G	Ex	eb	IIC	T5	Gb	IP55/57

GUIDE TO THE ATEX WORLD:

1 ID 1	2 ID 2	3 Group Equipment	4 Equipment Category

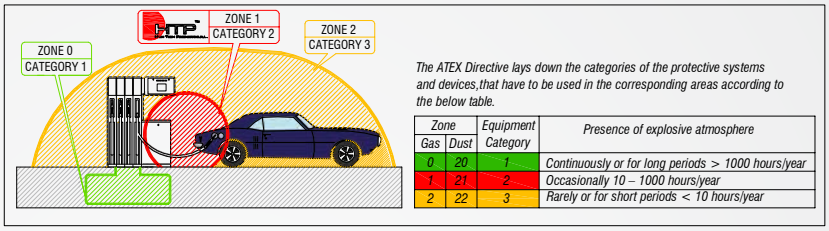
CE Marking
0948 : Notified body.

ATEX Marking.

II = used in all other EX environments.

2G = equipment suitable for areas where, during normal activities, explosive atmospheres due to gas, vapors or mists (zone 1) may occur; suitable to be installed in zone 1.
2D = equipment suitable for areas where, during normal activities, explosive atmospheres due to a mixture of air and flammable dusts (zone 21) and that has inside a bonded device that will be connected to a category 1 equipment; suitable to be installed in zone 21.

Equipment Category	Gas zone (G)	Dust zone(D)
2	1	21



The ATEX Directive lays down the categories of the protective systems and devices,that have to be used in the corresponding areas according to the below table.

Zone Gas	Zone Dust	Equipment Category	Presence of explosive atmosphere
0	20	1	Continuously or for long periods > 1000 hours/year
1	21	2	Occasionally 10 – 1000 hours/year
2	22	3	Rarely or for short periods < 10 hours/year

5 Equipment	6 Type of inition protection	7 Explosion Group

Ex= explosion-proof equipment.

eb = "eb" increased safety equipment.
tb = equipment with an enclosure that prevents dust ingress and with devices to limit surface temperatures; protection level "b".

IIC = equipment not addressed to underground work in mines or their surface plants which could exposed to risk of explosive atmospheres - subgroup of C gas; suitable to be installed in presence of any gas (subgroups A, B and C).
IIIC = equipment not addressed to underground work in mines or their surface plants which could exposed to risk of explosive atmospheres - subgroup of C dusts;suitable to be installed in presence of any dust (subgroups A, B and C).

8 Definition of temperatures generated by equipment	9 Equipment protection level	10 Protection class

T5 = equipment that can reach, but not exceed 100°C of absolute temperature.
T...°C = equipment that can reach, but not exceed in surface …°C of absolute temperature.

Gb = equivalent to 2G category.
Db = equivalent to 2D category.

IP protection type.

Product description								
Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-104		IEC 61076-2-104		IEC 61076-2-104		IEC 61076-2-104	
Construction type	M8 A -Coding		M8 A -Coding		M8 A -Coding		M8 A -Coding	
Part number	**08FC3000-ATEX**	**08MC3000-ATEX**	**08FC4000-ATEX**	**08MC4000-ATEX**	**08FC3000-S-ATEX**	**08MC3000-S-ATEX**	**08FC4000-S-ATEX**	**08MC4000-S-ATEX**
Housing type	Straight 180°		Straight 180°		Straight 180°		Straight 180°	
Cable gland	Hexagonal SW10		Hexagonal SW10		Hexagonal SW10		Hexagonal SW10	
Contacts type	Female	Male	Female	Male	Female	Male	Female	Male
Number of contacts	3poles		4poles		3poles		4poles	
Housing colour	Black		Black		Black		Black	
Technical data								
Type of termination	Contacts to solder wires		Contacts to solder wires		Screw contacts		Screw contacts	
Contact screw torque	-		-		0.1 N*m		0.1 N*m	
Contacts material	Brass+Gold flash		Brass+Gold flash		Brass+Gold flash		Brass+Gold flash	
Housing material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0		UL94-V0		UL94-V0	
M8 coupling nut type	Hexagonal nut SW13		Hexagonal nut SW13		Hexagonal nut SW13		Hexagonal nut SW13	
M8 coupling nut material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
M8 coupling nut torque	0.4 N*m		0.4 N*m		0.4 N*m		0.4 N*m	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 3.5 - 5mm		ø 3.5 - 5mm		ø 3.5 - 5mm		ø 3.5 - 5mm	
Maximum voltage	30V AC/ 60V DC		30V AC/ 60V DC		30V AC/ 60V DC		30V AC/ 60V DC	
Maximum current	4A		4A		4A		4A	
Operating temperature	-20°C +85°C		-20°C +85°C		-20°C +85°C		-20°C +85°C	
Protection class	IP 55/57(assembled)		IP 55/57(assembled)		IP 55/57(assembled)		IP 55/57(assembled)	

Product description				
Connector type	DIN valve connectors	DIN valve connectors	DIN valve connectors	DIN valve connectors
Conforms to	EN175301-803	EN175301-803	Industrial	EN175301-803
Construction type	A	A	B	B
Part number	**G1NU2000-ATEX**	**G1NU3000-ATEX**	**M1NS2000-ATEX**	**M2NS2000-ATEX**
Contacts spacing	18mm	18mm	11mm	10mm
Number of contacts	2poles + P.E.	3poles + P.E.	2poles + P.E.	2poles + P.E.
Earth positioning	H.12 (turnable)	H.12 (turnable)	H.12 (turnable)	H.12 (turnable)
Housing colour	Black	Black	Black	Black
Housing height	30mm	30mm	30mm	30mm
Cable gland	PG9/PG11 unified	PG9/PG11 unified	PG9	PG9
Gasket type	Flat Silicone gasket	Flat Silicone gasket	Flat Silicone gasket	Flat Silicone gasket
Technical data				
Type of termination	Screw contacts	Screw contacts	Screw contacts	Screw contacts
Contact screw torque	0.3 N*m	0.3 N*m	0.3 N*m	0.3 N*m
Contacts material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
Housing material	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0
Internalcore material	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0
Flammability resistance	UL 94 - V0	UL 94 - V0	UL 94 - V0	UL 94 - V0
Suitable cable	ø cable 6-10mm	ø cable 6-10mm	ø cable 4-8mm	ø cable 4-8mm
Central fixing screw	M3 L=32.5mm	M3 L=32.5mm	M3 L=32.5mm	M3 L=32.5mm
Central fixing screw material	Iron+Zinc plated	Iron+Zinc plated	Iron+Zinc plated	Iron+Zinc plated
Max. central screw torque IEC60947-1	0.5 N*m	0.5 N*m	0.5 N*m	0.5 N*m
Maximum voltage	230V AC/ 300VDC	230V AC/ 300VDC	230V AC/ 300VDC	230V AC/ 300VDC
Maximum contact current	10A*	10A*	10A*	10A*
Operating temperature	-20°C +85°C	-20°C +85°C	-20°C +85°C	-20°C +85°C
Protection class	IP65/67 (assembled)	IP65/67 (assembled)	IP65/67 (assembled)	IP65/67 (assembled)

*Max current permanent ammisible for one contacts pair.

Product description				
Connector type	DIN valve connectors	DIN valve connectors	DIN valve connectors	DIN valve connectors
Conforms to	EN175301-803	EN175301-803	Industrial	Industrial
Construction type	C	C	C	C
Part number	**P1NZ2000-ATEX**	**P1NZ3000-ATEX**	**P2NZ2000-ATEX**	**P2NZ3000-ATEX**
Contacts spacing	8mm	8mm	9.4mm	9.4mm
Number of contacts	2poles + P.E.	3poles + P.E.	2poles + P.E.	3poles + P.E.
Earth positioning	H.6 (turnable)	H.6 (turnable)	H.6 (turnable)	H.6 (turnable)
Housing height	26mm	26mm	26mm	26mm
Cable gland	PG7	PG7	PG7	PG7
Gasket type	Flat Silicone gasket	Flat Silicone gasket	Flat Silicone gasket	Flat Silicone gasket
Technical data				
Type of termination	Screw contacts	Screw contacts	Screw contacts	Screw contacts
Contact screw torque	0.25 N*m	0.25 N*m	0.25 N*m	0.25 N*m
Contacts material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
Housing material	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0
Internalcore material	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0	PA66 UL94 - V0
Flammability resistance	UL 94 - V0	UL 94 - V0	UL 94 - V0	UL 94 - V0
Suitable cable	ø cable 4-6mm	ø cable 4-6mm	ø cable 4-6mm	ø cable 4-6mm
Central fixing screw	M2.5 L=28mm	M2.5 L=28mm	M3 L=28mm	M3 L=28mm
Central fixing screw material	Iron+Zinc plated	Iron+Zinc plated	Iron+Zinc plated	Iron+Zinc plated
Max. central screw torque IEC60947-1	0.4 N*m	0.4 N*m	0.5 N*m	0.5 N*m
Maximum voltage	230V AC/ 300VDC	230V AC/ 300VDC	230V AC/ 300VDC	230V AC/ 300VDC
Maximum contact current	6A*	6A*	6A*	6A*
Operating temperature	-20°C +85°C	-20°C +85°C	-20°C +85°C	-20°C +85°C
Protection class	IP65/67 (assembled)	IP65/67 (assembled)	IP65/67 (assembled)	IP65/67 (assembled)

*Max current permanent ammisible for one contacts pair.

Product description								
Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	**12FC4000-ATEX**	**12FB4000-ATEX**	**12FC5000-ATEX**	**12FB5000-ATEX**	**12FC8000-ATEX**	**12FB8000-ATEX**	**12FC12000-ATEX**	**12FB12000-ATEX**
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG7 standard		PG7 standard		PG7 standard		PG7 standard	
Contacts type	Female		Female		Female		Female	
Number of contacts	4poles		5poles		8poles		12poles	
Technical data								
Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Contacts material	Brass+Gold flash		Brass+Gold flash		Brass+Gold flash		Brass+Gold flash	
Housing material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0		UL94-V0		UL94-V0	
M12 coupling nut type	Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17	
M12 coupling nut material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
M12 coupling nut torque	0.6 N*m		0.6 N*m		0.6 N*m		0.6 N*m	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 4 - 6mm		ø 4 - 6mm		ø 4 - 6mm		ø 4 - 6mm	
Maximum voltage	250V AC/DC		125V AC/DC		60V AC/DC		30V AC/DC	
Maximum current	4A		4A		2A		1A	
Operating temperature	-20°C +85°C		-20°C +85°C		-20°C +85°C		-20°C +85°C	
Protection class	IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)	

Product description								
Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	**12MC4000-ATEX**	**12MB4000-ATEX**	**12MC5000-ATEX**	**12MB5000-ATEX**	**12MC8000-ATEX**	**12MB8000-ATEX**	**12MC12000-ATEX**	**12MB12000-ATEX**
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG7 standard		PG7 standard		PG7 standard		PG7 standard	
Contacts type	Male		Male		Male		Male	
Number of contacts	4poles		5poles		8poles		12poles	
Technical data								
Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Contacts material	Brass+Gold flash		Brass+Gold flash		Brass+Gold flash		Brass+Gold flash	
Housing material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0		UL94-V0		UL94-V0	
Coupling nut type	Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17	
M12 coupling nut material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
M12 coupling nut torque	0.6 N*m		0.6 N*m		0.6 N*m		0.6 N*m	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 4 - 6mm		ø 4 - 6mm		ø 4 - 6mm		ø 4 - 6mm	
Maximum voltage	250V AC/DC		125V AC/DC		60V AC/DC		30V AC/DC	
Maximum current	4A		4A		2A		1A	
Operating temperature	-20°C +85°C		-20°C +85°C		-20°C +85°C		-20°C +85°C	
Protection class	IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)	

Product description								
Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	**12FL4000-ATEX**	**12FU4000-ATEX**	**12FL5000-ATEX**	**12FU5000-ATEX**	**12FL8000-ATEX**	**12FU8000-ATEX**	**12FL12000-ATEX**	**12FU12000-ATEX**
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit	
Contacts type	Female		Female		Female		Female	
Number of contacts	4poles		5poles		8poles		12poles	
Technical data								
Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Contacts material	Brass+Gold flash		Brass+Gold flash		Brass+Gold flash		Brass+Gold flash	
Housing material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0		UL94-V0		UL94-V0	
Coupling nut type	Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17	
M12 coupling nut material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
M12 coupling nut torque	0.6 N*m		0.6 N*m		0.6 N*m		0.6 N*m	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 6-10mm Double exit ø5.5mm(max.)		ø 6-10mm Double exit ø5.5mm(max.)		ø 6-10mm Double exit ø5.5mm(max.)		ø 6-10mm Double exit ø5.5mm(max.)	
Maximum voltage	250V AC/DC		125V AC/DC		60V AC/DC		30V AC/DC	
Maximum current	4A		4A		2A		1A	
Operating temperature	-20°C +85°C		-20°C +85°C		-20°C +85°C		-20°C +85°C	
Protection class	IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)	

Product description								
Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	**12ML4000-ATEX**	**12MU4000-ATEX**	**12ML5000-ATEX**	**12MU5000-ATEX**	**12ML8000-ATEX**	**12MU8000-ATEX**	**12ML12000-ATEX**	**12MU12000-ATEX**
Housing type	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°	Straight 180°	Angled 90°
Cable gland	PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit		PG9-11 unified /Double cable exit	
Contacts type	Male		Male		Male		Male	
Number of contacts	4poles		5poles		8poles		12poles	
Technical data								
Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Contacts material	Brass+Gold flash		Brass+Gold flash		Brass+Gold flash		Brass+Gold flash	
Housing material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0		UL94-V0		UL94-V0	
Coupling nut type	Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17	
M12 coupling nut material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
M12 coupling nut torque	0.6 N*m		0.6 N*m		0.6 N*m		0.6 N*m	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 6-10mm Double exit ø5.5mm(max.)		ø 6-10mm Double exit ø5.5mm(max.)		ø 6-10mm Double exit ø5.5mm(max.)		ø 6-10mm Double exit ø5.5mm(max.)	
Maximum voltage	250V AC/DC		125V AC/DC		60V AC/DC		30V AC/DC	
Maximum current	4A		4A		2A		1A	
Operating temperature	-20°C +85°C		-20°C +85°C		-20°C +85°C		-20°C +85°C	
Protection class	IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)	

Product description								
Connector type	Circular connector field attachable		Circular connector field attachable		Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 A-Coded		M12 A-Coded		M12 A-Coded		M12 A-Coded	
Part number	**12F14000-ATEX**	**12M14000-ATEX**	**12F15000-ATEX**	**12M15000-ATEX**	**12F18000-ATEX**	**12M18000-ATEX**	**12F112000-ATEX**	**12M112000-ATEX**
Housing type	Straight 180°		Straight 180°		Straight 180°		Straight 180°	
Cable gland	PG9 standard		PG9 standard		PG9 standard		PG9 standard	
Contacts type	Female	Male	Female	Male	Female	Male	Female	Male
Number of contacts	4poles		5poles		8poles		12poles	
Technical data								
Type of termination	Screw contacts		Screw contacts		Screw contacts		Solder contacts	
Contact screw torque	0.2 N*m		0.2 N*m		0.2 N*m		-	
Contacts material	Brass+Gold flash		Brass+Gold flash		Brass+Gold flash		Brass+Gold flash	
Housing material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0		UL94-V0		UL94-V0	
Coupling nut type	Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17		Hexagonal nut SW17	
M12 coupling nut material	Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated		Brass+Nickel plated	
M12 coupling nut torque	0.6 N*m		0.6 N*m		0.6 N*m		0.6 N*m	
O-ring material	NBR		NBR		NBR		NBR	
Suitable cable	ø 4 - 8mm		ø 4 - 8mm		ø 4 - 8mm		ø 4 - 8mm	
Maximum voltage	250V AC/DC		125V AC/DC		60V AC/DC		30V AC/DC	
Maximum current	4A		4A		2A		1A	
Operating temperature	-20°C +85°C		-20°C +85°C		-20°C +85°C		-20°C +85°C	
Protection class	IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)		IP 65/67(assembled)	

Product description				
Connector type	Circular connector field attachable		Circular connector field attachable	
Conforms to	IEC 61076-2-101		IEC 61076-2-101	
Construction type	M12 B-Coded		M12 D-Coded	
Part number	**B-12F15000-ATEX**	**B-12M15000-ATEX**	**D-12F14000-ATEX**	**D-12M14000-ATEX**
Housing type	Straight 180°		Straight 180°	
Cable gland	PG9 standard		PG9 standard	
Contacts type	Female	Male	Female	Male
Number of contacts	5poles		4poles	
Technical data				
Type of termination	Screw contacts		Screw contacts	
Contact screw torque	0.2 N*m		0.2 N*m	
Contacts material	Brass+Gold flash		Brass+Gold flash	
Housing material	Brass+Nickel plated		Brass+Nickel plated	
Internalcore material	PA66 UL94-V0		PA66 UL94-V0	
Flammability resistance	UL94-V0		UL94-V0	
Coupling nut type	Hexagonal nut SW17		Hexagonal nut SW17	
M12 coupling nut material	Brass+Nickel plated		Brass+Nickel plated	
M12 coupling nut torque	0.6 N*m		0.6 N*m	
O-ring material	NBR		NBR	
Suitable cable	ø 4 - 8mm		ø 4 - 8mm	
Maximum voltage	125V AC/DC		250V AC/DC	
Maximum current	4A		4A	
Operating temperature	-20°C +85°C		-20°C +85°C	
Protection class	IP 65/67(assembled)		IP 65/67(assembled)	

VIA LESINA, 45 - 24030
BREMBATE DI SOPRA (BG) ITALY

+39.035692509

INFO@WEBHTP.EU

HTP-HIGH-TECH-PRODUCTS-SRL

WWW.WEBHTP.EU

+39.035203291