

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Termination and Joint for Cable**

with type designation(s)

InstrumEx, ControlEx, ControlEx MKIV, PowerEx,

Issued to

**HAWKE International, A member of the Hubbell Group
Lancashire, United Kingdom**

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Hazardous Area Connectors.****For use with braid armoured and non-armoured elastomer or plastic insulated cables.****Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2020-04-22**for **DNV GL**This Certificate is valid until **2024-09-17**.DNV GL local station: **Manchester**Approval Engineer: **Ivar Bull****Marta Alonso Pontes
Head of Section**


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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.





Job Id: **262.1-032070-2**
 Certificate No: **TAE00003RX**
 Revision No: **1**



Product description

Hazardous Area Connector				
Type	InstrumEx			
Connector characteristics	(CP) In line Connector Plug, (CR) In line Connector Receptable, (BR) Bulkhead Connector, Live demateable			
Material	Brass, Steel, Stainless Steel or Bronze and may be plated or coated			
Seal Material	Silicone			
Connector insert option ⁽¹⁾	(1)4-way	(2) 0.5 - 2.5 mm ²	(3)10A ac - 2.5A dc	(4)250V ac - 60V dc
Conductor size admissible ⁽²⁾	(1)8 Way	(2) 0.14 - 0.37 mm ²	(3)1A ac - 0.5A dc	(4)60 V ac - 60V dc
Max Current Rating ⁽³⁾	(1)9 way	(2) 0.5 - 2.5 mm ²	(3)10A ac - 2.5A dc	(4)250V ac - 60V dc
Max Voltage Rating ⁽⁴⁾				
Ambient Temperature	-40°C to +60°C			
Temperature Class T6	85°C Maximum Surface Temperature			
Ingress Protection	IP66 or IP67			
Application	For use with braid armoured and non-armoured elastomer or plastic insulated cables			
Classification	Intended use in explosive gas and dust atmosphere, high level protection, dust ignition and flameproof protection enclosure, increased safety protection. See Marking as reference.			
Certification	ATEX, IECEx			
Marking	Hawke Instrum Ex,  II 2GD, Ex db e, IIC Gb, Ex tb IIIC Db T85°C (Tamb: - 40°C to +60°C) IP66/67, Cert, No, Ser. No, Rating, Warning.			



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Hazardous Area Connector																																																								
Type	ControlEx																																																							
Connector characteristics	(CP) In line Connector Plug, (CR) In line Connector Receptable, (BR) Bulkhead Receptable																																																							
Material	Brass, Steel, Stainless Steel or Bronze and may be plated or coated																																																							
Seal Material	Silicone																																																							
Pin configuration: Connector size(No. insert type) (No.of pins x pins size [mm ²] + Grd)	16(2)(3x1,5; 4x1,5) 25(7)(4x1,5; 9x1,5; 12x1,5; 4x2; 7x2,5; 4x6;) 32(12)(12x1,5; 19x1,5; 10x2,5; 12x2,5; 4x6; 4x4; 6x6; 3x10; 4x10; 3x16; 4x16) 40(9)(24x1,5; 30x1,5; 19x2,5; 4x25; 4x35; 8x6; 5x10; 5x16) 50(5)(37x1,5; 27x2,5; 37x2,5; 13x6) 63(3)(37x2,5; 49x1,5; 60x1,5)																																																							
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Hazardous Area Connector							
Type	PowerEx						
Connector characteristics	(CP) In line Connector Plug, (CR) In line Connector Receptable						
Material	Brass, Steel, Stainless Steel or Bronze and may be plated or coated						
Seal Material	Silicone						
Pin configuration: Connector size (No. insert type) (No. of pins x pins size [mm ²] + Grd)	M32(5)(1x50; 1x70; 1x95; 1x120; 1x150)						
	M40(2)(1x185; 1x240)						
	M50(6)(3x50; 3x70; 4x50; 4x70; 1x185; 1x240)						
	M63(8)(3x95; 3x120; 3x150; 4x95; 4x120; 4x150; 1x300; 1x400)						
	M75(6)(3x185; 3x240; 4x185; 4x240; 1x500; 1x630)						
Maximum permissible dissipated wattage with regard to max ambient temperature, to temperature classification and to connectors size.	Size	Max ambient T=40°C		Max ambient T=50°C		Max ambient T=60°C	
		T6	T5	T6	T5	T6	T5
	32	20,5W	27,5W	15,75W	26W	7,5W	15,75W
	40	22,5W	30,5W	17,5W	28W	8,7W	17,5W
	50	28,5W	35,3W	20W	32,25W	10W	20W
	63	30,2W	41,5W	23,5W	37,7W	11,7W	23,5W
75	36,3W	49,5W	28,25W	45,25W	14W	28,25W	
Max Voltage Rating	750V ac/dc						
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Application/Limitation

The manufacturer's application instructions to be followed.

The manufacturer's assembly installation to be followed.

The information related to gas dangerous areas is for information only. Please refer to corresponding ATEX and IEC EX certificates.

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Type Approval documentation

Type Approval documentation InstrumEx	EC Type examination Certificate :Baseefa 06ATEX0061X IECEX Test report :GB/BAS/ExTR14.0307/00 IECEX Certificate of Conformity IECEX BAS 06.0018X Assembly instruction data sheet: AI 364 General Arrangement drawings as listed in the Test Reports
Type Approval documentation ControlEx	EC Type examination Certificate :Baseefa 12ATEX0014X IECEX Test report :GB/BAS/ExTR15.0019/00 IECEX Certificate of Conformity IECEX BAS 12.0006X Assembly instruction data sheet: AI 500 General Arrangement drawings as listed in the Test Reports
Type Approval documentation ControlEx MKIV	EC Type examination Certificate: Baseefa12ATEX0014X/10 IECEX Test report: GB/BAS/ExTR19.0038/00 IECEX Certificate of Conformity IECEX BAS 12.0006X Issue 10 Assembly instruction data sheet: AI 500 General Arrangement drawings as listed in the Test Reports Control Ex MKIV CP Assembly drawing no. 6907 Rev D 03/06/2019 CONTROLEX MKIV CONNECTOR CERTIFICATION DRAWING DRG. 6906 Rev F 04/4/18
Type Approval documentation PowerEx	EC Type examination Certificate :Baseefa 06ATEX0062X IECEX Test report :GB/BAS/ExTR15.0018/00 IECEX Certificate of Conformity IECEX BAS 06.0019X Assembly instruction data sheet: AI 365 General Arrangement drawings as listed in the Test Reports

Tests carried out

InstrumEx	IEC/EN 60079-0, IEC/EN 60079-1, IEC/ EN 60079-7 and IEC/EN60079-31 standards
ControlEx	IEC/EN 60079-0, IEC/EN 60079-1 and IEC/EN60079-31 standards.
PowerEx	

Marking of product

According to IECx Certificate of Conformity. See also product description

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Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT shall be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE