



EC - TYPE EXAMINATION CERTIFICATE

**Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC**

- 3 EC - Type Examination Certificate Number: **Baseefa09ATEX0188X**
- 4 Equipment or Protective System: **ABAD and ABRE Range of Thread Adaptors & Reducers**
- 5 This certificate is held by: **Abtech Limited**
- 6 Address: **Sanderson Street, Lower Don Valley, Sheffield, S9 2UA**
- 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 Baseefa, Notified Body number 1180, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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. GB/BAS/ExTR09.0126/00
- 9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0: 2006, EN 60079-1: 2004, EN 60079-7: 2003, IEC 61241-0: 2006, IEC 61241-1: 2004
except in respect of those requirements listed at item 18 of the Schedule.
- 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 EC - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified equipment or protective system. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- 12 The marking of the equipment or protective system shall include the following :

⊕ II 2GD Ex d IIC Ex e II Ex tD A21 IP66

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


Baseefa Customer Reference No. 6376

Project File No. 09/0435

This certificate is granted subject to the general terms and conditions of Baseefa. It does not necessarily indicate that the equipment may be used in particular industries or circumstances.

Baseefa

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R S SINCLAIR
DIRECTOR
On behalf of
Baseefa



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Schedule

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Certificate Number Baseefa09ATEX0188X

15 Description of Equipment or Protective System

A Range of Thread Adaptors & Reducers

The ABAD range of thread adaptors and ABRE range of thread reducers are manufactured in nickel plated brass and may be supplied in metric or NPT threadforms. The internal and external thread sizes may vary between M16 and M85 (or NPT equivalent) with the female thread being either smaller, or up to three sizes larger, than the male.

16 Report Number

GB/BAS/ExTR09.0126/00

17 Special Conditions for Safe Use

1. If the adapters are intended for use with increased safety (Ex e) or dust tight (Ex tD) enclosures, the threads should be sealed to maintain an IP 54 or IP6X respectively in accordance with EN 60079-14.
2. Only one thread adaptor is permitted for each cable entry, blanking elements shall not be used with adaptors.

18 Essential Health and Safety Requirements

All relevant Essential Health and Safety Requirements are covered by the standards listed at item 9.

19 Drawings and Documents

Number	Issue	Date	Description
ABT20088	A	02/07/09	Certification marking – ABAD adaptors & reducers
Baseefa08ATEX0019X	--	28/01/08	A Range of Thread Adaptors & Reducers

ABAD Adaptor & ABRE Reducer

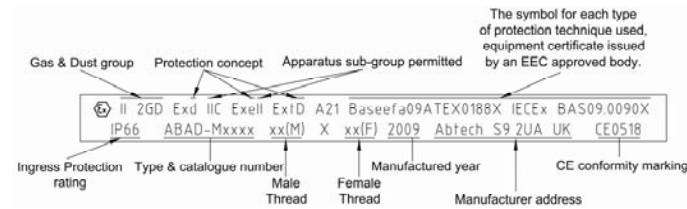


Installation Procedure



- 1) It is important that the size of the corresponding threads of equipment to be connected is measured carefully to ensure correct connection with the adaptor or reducer. Check the attached tables to ensure compatibility of thread variations.
- 2) In order to maintain the IP rating of the enclosure it may be necessary to fit a suitable sealing washer or non setting sealing compound to the threads.
- 3) Fit the adaptor or reducer to the apparatus and tighten until resistance is felt. Using a suitable spanner or wrench, tighten a further 1/2 to 3/4 of a turn.
Fit the cable gland to the adaptor or reducer and tighten until resistance is felt, then using a suitable spanner or wrench, tighten a further 1/2 to 3/4 of a turn.
- 4) For flameproof applications, Ex d, the user must ensure that a minimum of 5 full threads are engaged on both the adaptor or reducer and the cable gland and apparatus.

ATEX and IEC EX Marking details



Special Conditions for Safe Use

1. If the adaptors are intended for use with increased safety (Ex e) or dust tight (Ex tD) enclosures, the threads should be sealed to maintain an IP 54 or IP6X respectively in accordance with IEC/EN 60079-14.
2. Only one thread adaptor is permitted for each cable entry, blanking elements shall not be used with adaptors.

ABTQ-86
Revision Date: 13.08.2009 rev00

Adaptor Selection Chart

Gland Thread Size (NPT)	Part No	Thread size (NPT)		Hexagon Dimensions		D'	Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"		
NPT 3/4"	ABAD-N3412	3/4"	1 1/2"	32	35	14.5	15.5
NPT 1"	ABAD-N3112	1"	1 1/2"	40	44	14.5	15.5
	ABAD-N134		3/4"	20.0	16		
NPT 1 1/4"	ABAD-N11434	1 1/4"	3/4"	45.8	51.2	20.2	16
	ABAD-N1141		1"	26.5	20		
NPT 1 1/2"	ABAD-N1121	1 1/2"	1"	45.8	51.2	26.5	20
	ABAD-N12114		1 1/4"	32.5	20		
NPT 2"	ABAD-N2114	2"	1 1/4"	65	72	32.5	20
	ABAD-N2112		1 1/2"	42.5	20.5		
NPT 2 1/2"	ABAD-N21212	2 1/2"	1 1/2"	80	89.5	42.5	20.5
	ABAD-N2122		2"	54.5	21		
NPT 3"	ABAD-N32	3"	2"	100	110	54.5	21
	ABAD-N3212		2 1/2"	66.4	32		
NPT 4"	ABAD-N4212	4"	2 1/2"	125	137	66.4	32
	ABAD-N43		3"	68.4	33.5		

Gland Thread Size (Metric)	Part No	Thread size (NPT)		Hexagon Dimensions		D'	Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"		
M20	ABAD-M2016	M20X1.5	M16X1.5	24	26.8	11	
	ABAD-M2516	M25X1.5	M16X1.5	30	33.5	11	
M25	ABAD-M2520	M25X1.5	M20X1.5	30	33.5	15	
	ABAD-M2716	M27X1.5	M16X1.5			11	
M32	ABAD-M3220	M32X1.5	M20X1.5	36	40.5	15	
	ABAD-M3225	M32X1.5	M25X1.5			20.2	
M40	ABAD-M4020	M40X1.5	M20X1.5			15	
	ABAD-M4025	M40X1.5	M25X1.5	45.8	51.2	20.2	
M50	ABAD-M4032	M40X1.5	M32X1.5			26.5	
	ABAD-M5025	M50X1.5	M25X1.5			20.2	
M50	ABAD-M5040	M50X1.5	M20X1.5	55	61.5	26.5	15
	ABAD-M5040	M50X1.5	M40X1.5			26.5	
M63	ABAD-M6340	M63X1.5	M40X1.5	70	77	32.5	
	ABAD-M6350	M63X1.5	M50X1.5			44.5	
M75	ABAD-M7540	M75X1.5	M40X1.5			32.5	
	ABAD-M7550	M75X1.5	M50X1.5	80	88.5	44.5	
M85	ABAD-M7563	M85X1.5	M50X1.5			56.5	
	ABAD-M8550	M85X1.5	M63X1.5	90	99	44.5	
ABAD-M8563	M85X1.5	M75X1.5			56.5		
ABAD-M8575	M85X1.5	M75X1.5			68.3		

Reducer Selection Chart

Gland Thread Size (Metric)	Part No	Thread size (NPT)		Hexagon Dimensions		Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"	
M16	ABRE-M1625	M16X1.5	M25X1.5	30	33.5	
	ABRE-M1632		M32X1.5	36	40.5	
M20	ABRE-M2025	M20X1.5	M25X1.5	30	33.5	
	ABRE-M2032		M32X1.5	36	40.5	
M25	ABRE-M2040	M25X1.5	M40X1.5	45.8	51.2	
	ABRE-M2532		M32X1.5	36	40.5	
M25	ABRE-M2540	M25X1.5	M40X1.5	45.8	51.2	
	ABRE-M2550		M50X1.5	55	61.5	
M32	ABRE-M3240	M32X1.5	M40X1.5	45.8	51.2	
	ABRE-M3250		M50X1.5	55	61.5	
M40	ABRE-M4050	M40X1.5	M50X1.5	55	61.5	
	ABRE-M4063		M63X1.5	70	77	
M50	ABRE-M4075	M50X1.5	M75X1.5	80	88.5	
	ABRE-M5063		M63X1.5	70	77	
M63	ABRE-M5075	M63X1.5	M75X1.5	80	88.5	
	ABRE-M5085		M85X1.5	90	99	
M75	ABRE-M6375	M75X1.5	M85X1.5	80	88.5	
	ABRE-M6385		M85X1.5	90	99	
ABRE-M7585	M75X1.5	M85X1.5	90	99		

Gland Thread Size (Metric)	Part No	Thread size (NPT)		Hexagon Dimensions		Min. Thread Length °C
		Ni (Female)	N (Male)	"H"	"P"	
N 1/2"	ABRE-N1234	1/2"	3/4"	30	33.5	16
	ABRE-N1231		1"	36	40.5	20
N 3/4"	ABRE-N12114	1/2"	1 1/4"	45.8	51.2	20
	ABRE-N341	3/4"	1"	36	40.5	20
N 1"	ABRE-N34114	3/4"	1 1/4"	45.8	51.2	20
	ABRE-N34112		1 1/2"	52	57.5	20.5
N 1 1/4"	ABRE-N1114	1"	1 1/4"	45.8	51.2	20
	ABRE-N1112		1 1/2"	52	57.5	20.5
N 1 1/2"	ABRE-N12	1 1/4"	2"	63	70	21
	ABRE-N11412		2 1/2"	80	88.5	32
N 2"	ABRE-N1122	1 1/2"	2"	63	70	21
	ABRE-N12212		2 1/2"	80	88.5	32
N 2 1/2"	ABRE-N1123	2"	3"	95	104.5	33.5
	ABRE-N2212		2 1/2"	80	88.5	32
N 3"	ABRE-N24	2 1/2"	3"	95	104.5	33.5
	ABRE-N2123		4"	125	137	36
N 3"	ABRE-N2124	3"	4"	125	137	36
	ABRE-N34		4"	125	137	36

Certification Details

Certificate Number: ATEX: Baseefa09ATEX0188X, IEC Ex: IEC ExBAS09.0090X
Coding: II 2GD Ex d IIC Ex e II Ex tD A21
Ambient Temperature: Not Applicable
Ingress Protection: IP 66

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