

# ADAPTORS AND REDUCERS

Class I / II / III Div. 1, 2;

Class I / II / III Zone 1 & Zone 21



## Features and Benefits

- Used to convert mismatching cable gland thread types or sizes to the required ones.
- Product with metric male threads are supplied with a sealing gasket.

## Technical Data

<b>Product:</b>	Adaptor (female thread the same size or larger than the male thread). Reducer (female thread smaller than the male thread).
<b>Material:</b>	Aluminium, Brass (Marine Grade Electroless Nickel Plated), Bronze PB2 (Larger sizes only - Marine Grade Electroless Nickel Plated), or Stainless Steel
<b>Gasket:</b>	HDPE, Nylon 66 or PTFE. (Selected according to the temperature range required)
<b>Note:</b>	The installer should check that the materials are suitable for the installation environment.
<b>Temperature ranges:</b>	When fitted with sealing gaskets the temperature range for the Adaptors and Reducers will be:-
<b>Sealing gasket material</b>	<b>Temperature range</b>
HDPE	-20°C or -60°C to +95°C
Nylon	-20°C or -60°C to +100°C
PTFE	-20°C or -60°C to +160°C
<b>Note:</b>	-20°C temperature range applies to Div. 1 & AEx / Ex db applications only

## Standards and Certifications

Type	Certificate	Protection Level
NEC / CEC:	E115595	Class I/II/III Div. 1,2; Class I, Zone 1; Zone 21 AEx / Ex db IIC Gb, AEx/ Ex eb IIC Gb, Ex ta IIC Da

In accordance with NEC/CEC the products can additionally be used in Zones 2 and 22



Other certification types are available for this product e.g. IECEx.

## Specific Conditions of Use - X

1. Products have a minimum IP rating of IP65 with no sealing gasket. Metric threads can have an IP rating of IP66/67/68 if fitted with the supplied sealing gasket. NPT threads can have an IP rating of IP66/67/68 if fitted using a suitable thread sealant.
2. Suitable for use in indoor and outdoor locations.
3. Aluminium products should not be used in a salt water / vapour atmosphere.

## Product Code Structure

The product codes are made up as follows:-

1st Digit:	2nd Digit:	3rd to 5th Digit	6th Digit	
A = Adaptor R = Reducer	N = NPT thread (female) M = Metric thread (female)	Thread size (see table below)	N = NPT thread (female) M = Metric thread (female)	Thread size (see table below) Followed by "E-MNA"

NPT Code	Thread Size	Metric Code	Thread Size
012	½ NPT	016	M16 x 1.5
034	¾ NPT	020	M20 x 1.5
001	1 NPT	025	M25 x 1.5
114	1¼ NPT	032	M32 x 1.5
112	1½ NPT	040	M40 x 1.5
002	2 NPT	050	M50 x 1.5
212	2½ NPT	063	M63 x 1.5
003	3 NPT	075	M75 x 1.5
312	3½ NPT	080	M80 x 2.0
004	4 NPT	090	M90 x 2.0
		100	M100 x 2.0
		115	M115 x 2.0
		130	M130 x 2.0

For example:-

AN012M025E-MNA is an Adaptor with a ½ NPT male thread and an M25 female thread.

(Note that the female thread on a reducer may be any size smaller than the male thread, but the female thread on an adaptor may only be a maximum of two standard thread sizes larger than the male thread.)

## Fitting Instructions

Adaptors / Reducers with NPT threads should be tightened wrench tight. Adaptors / Reducers with metric threads should be tightened according to the table below.

Thread Size	Torque Nm / lb ft	Thread Size	Torque Nm / lb ft
M16	21 / 16	M63	66 / 49
M20	21 / 16	M75	72 / 53
M25	30 / 22	M80	80 / 59
M32	42 / 31	M90	89 / 66
M40	52 / 38	M100	98 / 72
M50	57 / 42	>M100	175 / 129