

CORUS bracket for DELTA, Fluxi 2000/TZ and MZ meters

Introduction

This document describes the mounting kit for the installation of our volume converter CORUS onto the DELTA, Fluxi 2000/TZ and MZ meters. It can also be used for large diaphragm meters.

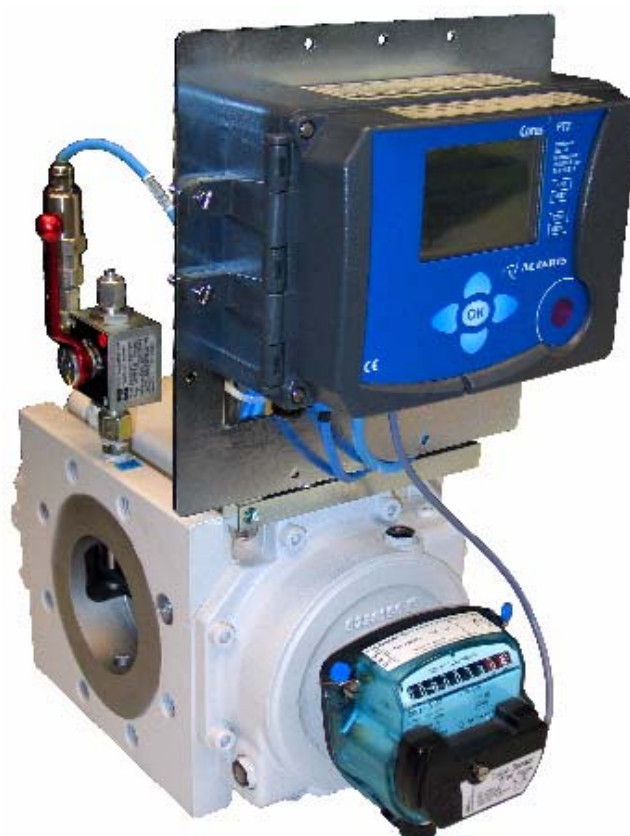
1) Benefits

- Essential complement to the DELTA meter, Fluxi 2000/TZ, MZ and the CORUS converter.
- Easy installation onto the meter.
- Large flexibility to install the converter at the most convenient position.

*CORUS mounted
onto the DELTA*

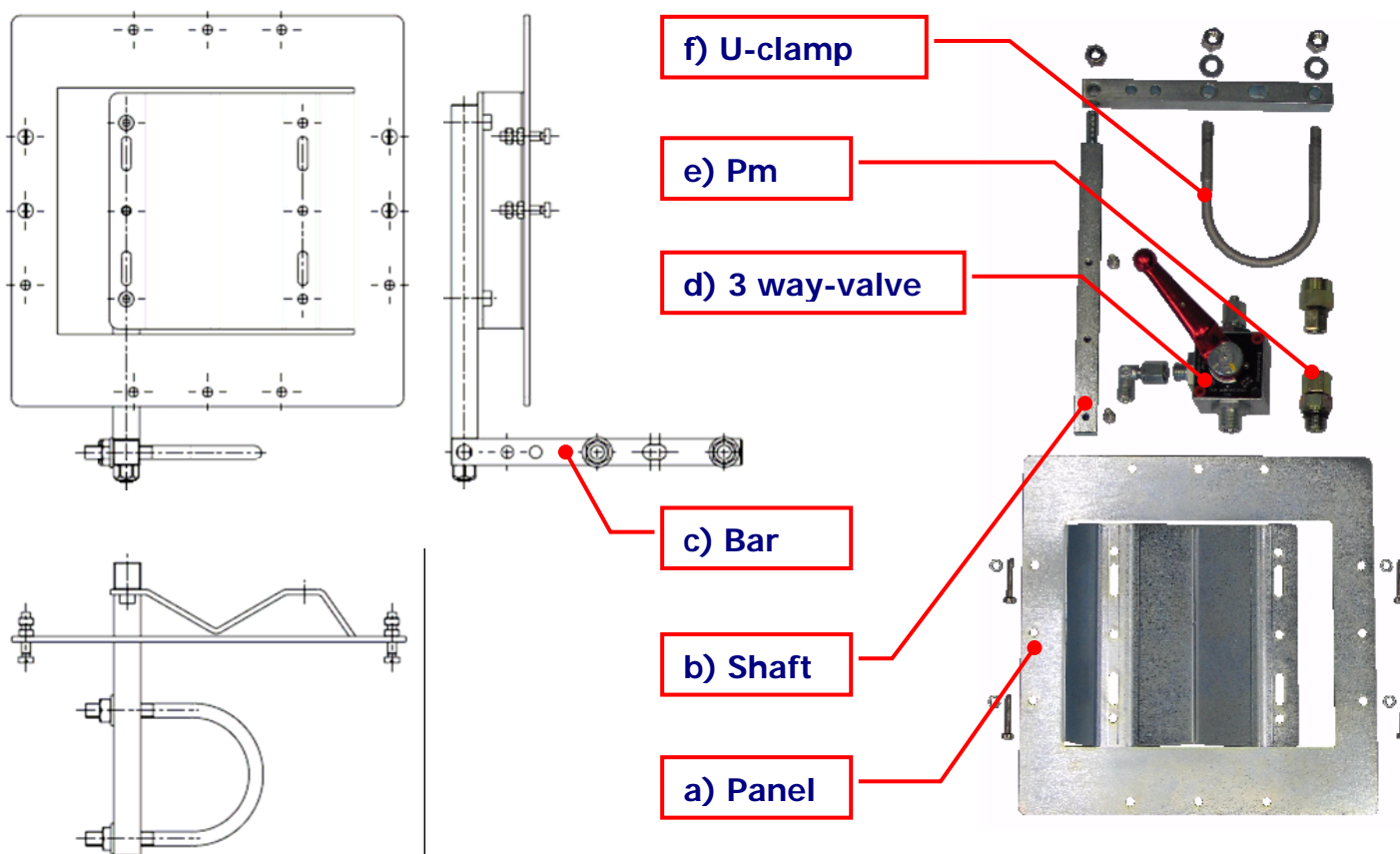


*CORUS mounted
onto the Fluxi 2000/TZ*



2) Description

- a) Panel: It gives the possibility to mount the converter onto the meter in different positions depending of the available space.
 - b) Shaft: It insures the connection between the panel and the bar. It is fixed at the backside of the panel.
 - c) Bar: To be mounted onto the body of the meter. It allows different assembling positions.
 - d) 3 way-valve: It allows the calibration or the checking of the pressure sensor in the field without breaking the metrological seals.
 - Maximum pressure: 100 bar.
 - The connecting nut used allows an easy mounting without twisting the cable of the pressure sensor.
 - The connection to the external pressure source is an Ermeto 6L.
 - e) Connection Pm: to mount the 3 way-valve onto the meter.
 - f) U-clamp: it is mounted around the neck of the **turbine meter** to fix the bar.
- Parts **a, b, c, d** are the same for turbine meters and delta meters. The part **e** is different for Delta and turbine meters ($\frac{1}{4}$ " NPT for Delta, $\frac{1}{4}$ " BSP for TZ). The part **f** is used only with turbine meters.



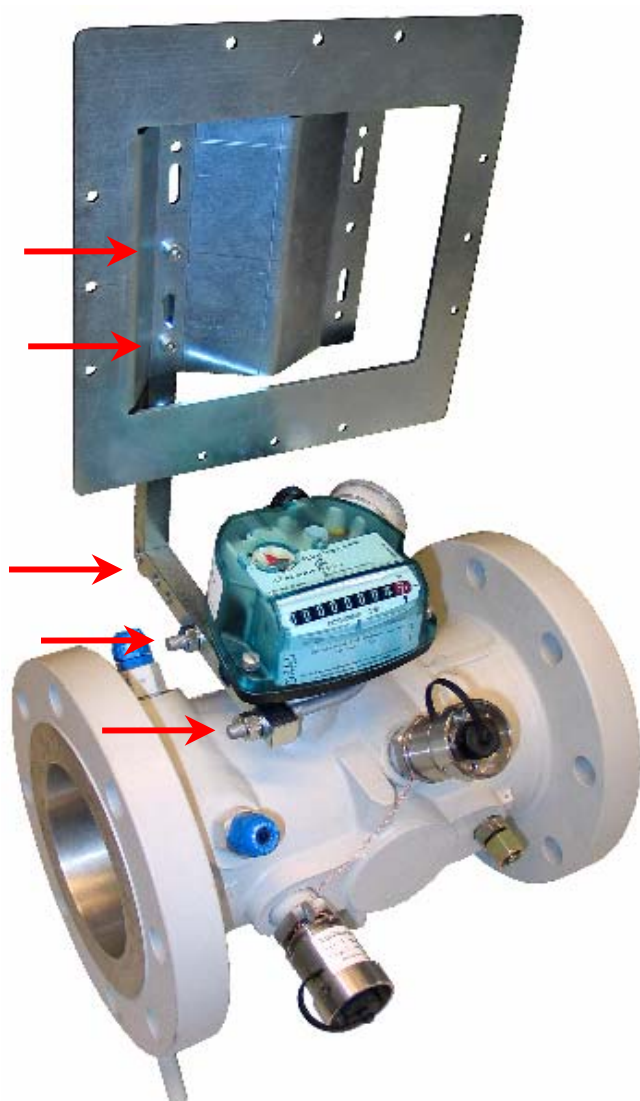
3) Mounting onto the Fluxi 2000/TZ

Step 1: Mounting of the bar with the U-clamp and 2 nuts at the neck of the Turbine meter then assembly of the vertical shaft (1 nut) and the panel (2 screws).

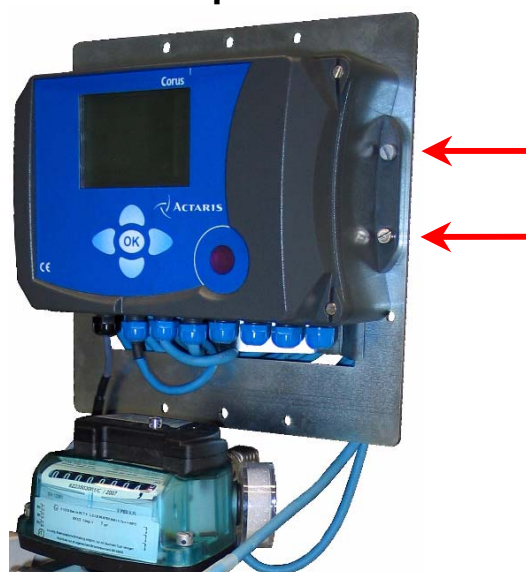
Step 2: Installation of the CORUS onto the panel (4 screws).

Step 3: Mounting of the 3-way valve onto the TZ meter, connection of the pressure and temperature sensors. Connection of the LF or Cyble sensor. Official sealing when requested.

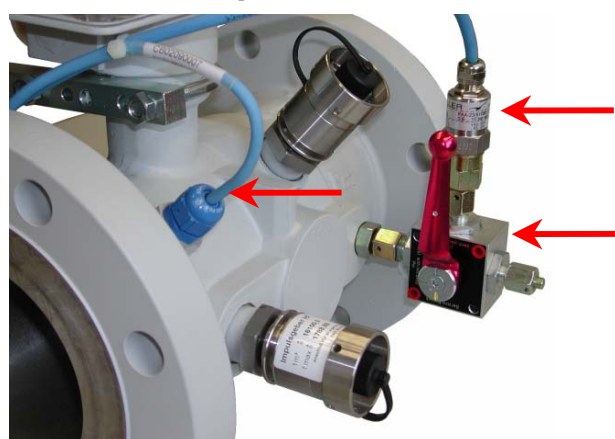
Step 1



Step 2



Step 3



***Note:** Information about thermowell and pressure tapping for Fluxi 2000/TZ is available in the TIB n°41.*

TIB

Technical Information
Bulletin

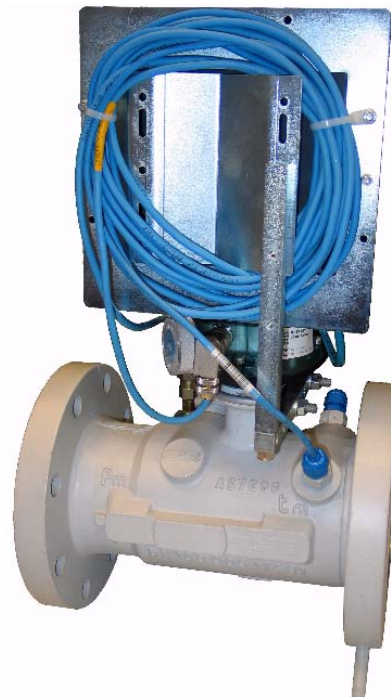
DELTA - Fluxi 2000/TZ - MZ meters
CORUS bracket

N° 26

Page 3 / 7

File: TIB_26_DELTA-TZ-
MZ_CORUS_bracket_2010-
02-04.doc

Cables of the converter have to be rolled and tied up behind the panel.



Note: The CORUS is available with 2 length of cable; 0,8m and 2,5m. The length has to be specified when ordering the CORUS.

Possible installations

Mounted on the meter: The Converter can be installed in all positions around the index then it allows the installation even in case of restricted available space.

It can be also mounted attached to the body (at the opposite place of the oil pump).

Horizontal mounting



Vertical mounting



Mounting attached to the body



TIB

Technical Information
Bulletin

DELTA - Fluxi 2000/TZ - MZ meters
CORUS bracket

N° 26

Page 4 / 7

File: TIB_26_DELTA-TZ-
MZ_CORUS_bracket_2010-
02-04.doc

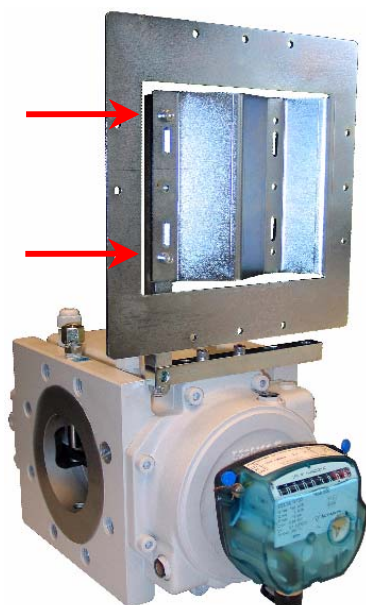
4) Mounting onto the Delta meter

Step 1: Mounting of the bar with 2 screws onto the Delta meter (2 screws) then assembly of the vertical shaft (1 nut) and panel (2 screws).

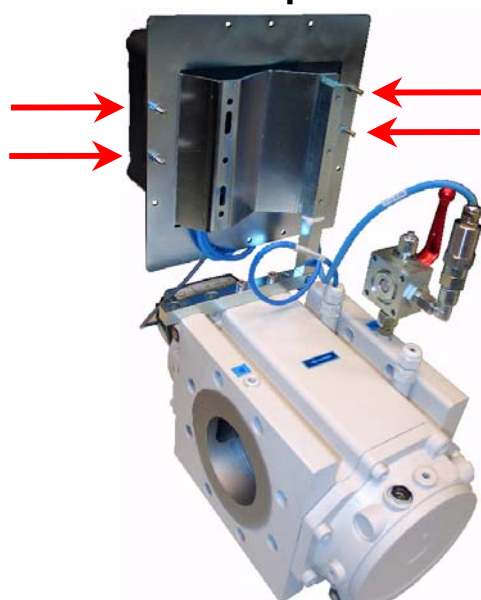
Step 2: Installation of the CORUS onto the panel (4 screws).

Step 3: Mounting of the 3-way valve onto the Delta meter, connection of the pressure and temperature sensors. Connection of the LF or Cyble sensor. Official sealing when requested.

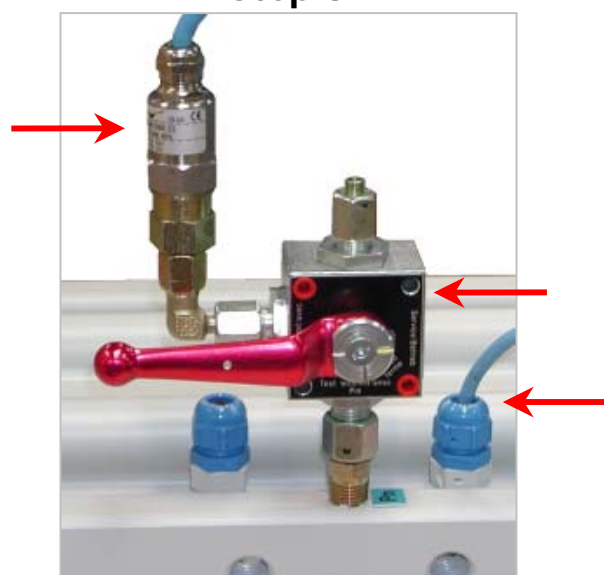
Step 1



Step 2



Step 3



Note: Information about thermowell and pressure tapping for DELTA meters is available in the TIB n°25.

TIB

Technical Information
Bulletin

DELTA - Fluxi 2000/TZ - MZ meters
CORUS bracket

N° 26

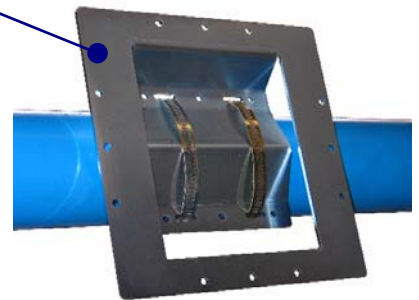
Page 5 / 7

File: TIB_26_DELTA-TZ-
MZ_CORUS_bracket_2010-
02-04.doc

5) Mounting on the pipeline

The panel can be also mounted directly onto the pipeline with the help of 2 hose clamps. It is very useful when the CORUS is used with diaphragm meters or when the meter is not an Actaris one.

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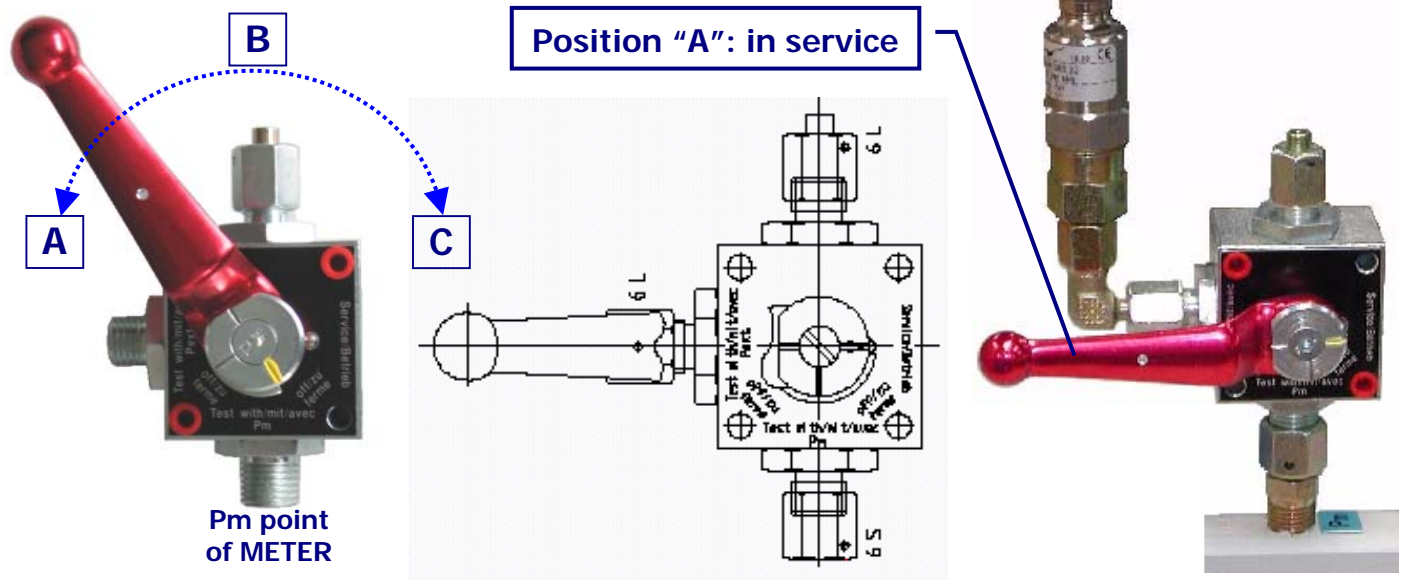


6) Instruction to use the 3 way-valve for the calibration of the pressure sensor

Position "A": In service, the pressure sensor is connected to the meter.

Position "B": Test with the Pm source (the meter), the 3 ways are connected.

Position "C": Test with an external pressure source, the pressure sensor is connected only to the external pressure source.



Metrological Sealing of the CORUS converter on the meter:

When requested, this operation can be done at Karlsruhe. In this case, the PTB seals are used. Before ordering this operation, you must check that your local authority will recognise this sealing.

7) Transport and installation

The transport of a complete assembled meter + converter is not the optimal solution in term of size of packing compared to the actual packing for a meter alone + 1 converter alone, especially for overseas shipping.

As the assembly is quite easy, we recommend assembling it on site after the installation of the meter in the piping.

Annex 1: Articles references

Bracket for the Fluxi 2000/TZ + 3 way-valve kit : 046-200-00
 Bracket for the Delta meter + 3 way-valve kit : 046-200-01
 Bracket for diaphragm meters without 3 way-valve, with 2 clamps : 046-200-03

Bracket for the Fluxi 2000/TZ without 3 way-valve kit : 046-200-05

Bracket for the Delta meter without 3 way-valve kit : 046-200-06

3 way-valve kit without bracket for the Fluxi 2000/TZ : 951-847-47

3 way-valve kit without bracket for the Delta : 951-847-48

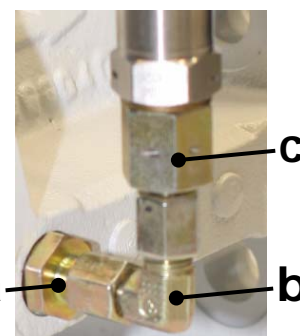
Parts needed to connect the pressure sensor directly to the meter:

TZ:

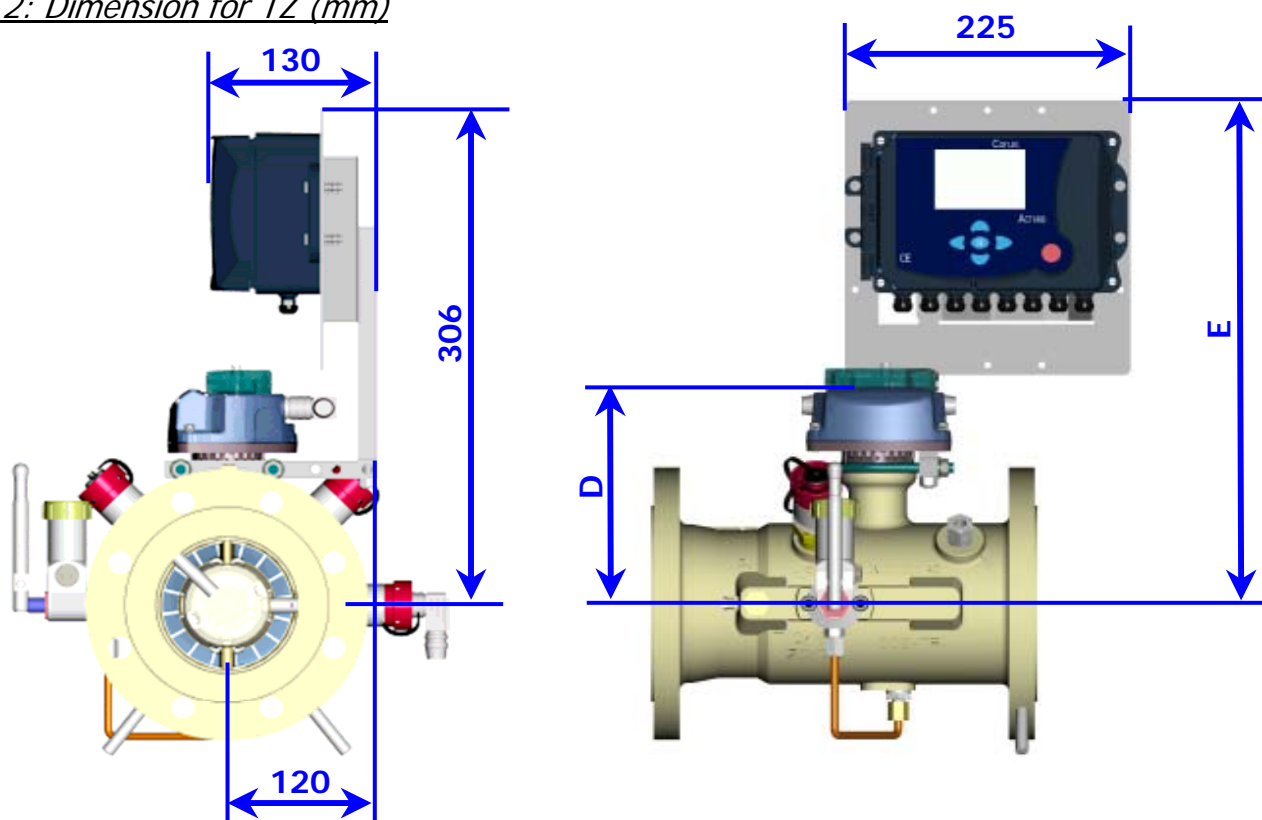
- a) Ermeto ¼ BSP 6L : 955-164-37
- b) Elbow (option to get the P sensor vertical) : 955-164-17
- c) Adaptor (to avoid to twist the cable of P sensor) : 951-821-82

Delta:

- a) Ermeto ¼ NPT 6L : 951-821-07
- b) Elbow (option to get the P sensor vertical, useful only if the meter is installed vertically) : 955-164-17
- c) Adaptor (to avoid to twist the cable of P sensor) : 951-821-82



Annex 2: Dimension for TZ (mm)



DN	50	80	100	150	200	250	300	400	500
D	175	180	195	205	240	270	300	350	383
E	403	408	423	433	468	498	528	578	611

TIB

Technical Information
Bulletin

DELTA - Fluxi 2000/TZ - MZ meters
CORUS bracket

N° 26

Page 7 / 7

File: TIB_26_DELTA-TZ-
MZ_CORUS_bracket_2010-
02-04.doc