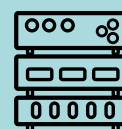




# DUO<sup>Air</sup>

## ANALOG A/E CONVERTER BOX



Interface Boxes for Data Acquisition

**Duo Air™** is an interface box for easy and economical management of a wide range of air gauges.

It can be supplied with one or two analog air-to-electronics converters with adjustable sensitivity and zeroing nozzles, to connect one or two Marposs and non-Marposs gauges respectively.

## Product features



Each converter is supplying an LVDT output signal, which is conveniently managed by the Duo gauge computer to offer a compact and affordable solution for your measurement applications.

Duo Air is ideal for measurements with small tolerances, requiring high resolution (0.1  $\mu\text{m}$ ).

It is accurate, robust and versatile, accepting air gauges from different manufacturers.

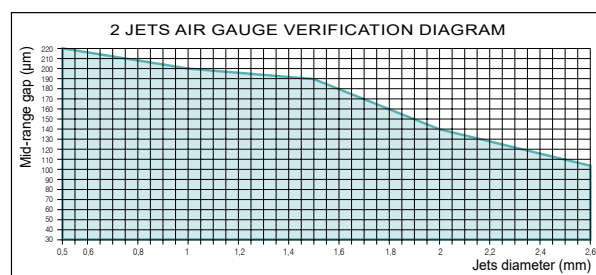
N.B. Air must be dry and unoiled, with 5 $\mu\text{m}$  filtration grade

## Application range

The MARPOSS and non-MARPOSS air gauges, with specifications inside the blue area of the diagram, can be easily and immediately connected to Duo Air.

The parameters to be considered are the following:

- air supply pressure (3 bar  $\pm$  0.1)
- number of air gauge jets
- diameter of air gauge jets
- “mid-range gap”, as to the difference between the mid-tolerance diameter of the part to be measured and the distance between the air gauge jets.



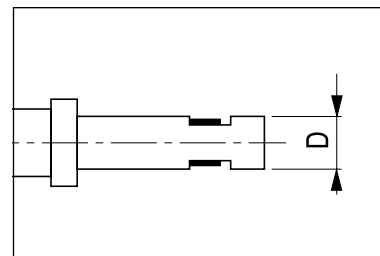
## EXAMPLE OF MEASUREMENT WITH AIR-PLUG

- number of jets: 2
- diameter of jets: 2 mm (.0787")
- mid tolerance diameter of the part to be measured = 10 mm (.3937")
- distance between the jets D = 9.90 mm (.3898")

We obtain:

- “mid-range gap”: (10 - 9.90) = 0.10 mm = 100  $\mu\text{m}$

As shown in the diagram the intersection between the value of the “mid-range gap”, 100  $\mu\text{m}$  (.0039"), and the diameter of the jet, 2 mm (.0787"), stays inside the blue area: the application can be therefore realized.



Description	Order code
Duo Air with 1 air transducer input	B830DUOA001
Duo Air with 2 air transducer inputs	B830DUOA000
Connecting cable from Duo Air to Duo (L = 0.3 m)	B6735932033
Connecting cable from Duo Air to Duo (L = 1.0 m)	B6735932026
Connecting cable from Duo Air to Duo (L = 2.0 m)	B6735932015
Connecting cable from Duo Air to Duo (L = 5.0 m)	B6735932016
Connecting cable from Duo Air to Duo (L = 10.0 m)	B6735932017
Duo Air 1 ch.+ Duo Basic (standard 0.3 m connecting cable from Duo Air to Duo included in the supply)	PSDUD01201
Duo Air 1 ch.+ Duo Ethernet/IP (standard 0.3 m connecting cable from Duo Air to Duo included in the supply)	PSDUD01211
Duo Air 1 ch.+ Duo Profibus (standard 0.3 m connecting cable from Duo Air to Duo included in the supply)	PSDUD01221
Duo Air 1 ch.+ Duo Profinet (standard 0.3 m connecting cable from Duo Air to Duo included in the supply)	PSDUD01231
Duo Air 2 ch.+ Duo Basic (standard 0.3 m connecting cables from Duo Air to Duo included in the supply)	PSDUD01200
Duo Air 2 ch.+ Duo Ethernet/IP (standard 0.3 m connecting cables from Duo Air to Duo included in the supply)	PSDUD01210
Duo Air 2 ch.+ Duo Profibus (standard 0.3 m connecting cables from Duo Air to Duo included in the supply)	PSDUD01220
Duo Air 2 ch.+ Duo Profinet (standard 0.3 m connecting cables from Duo Air to Duo included in the supply)	PSDUD01230

Displacement  
Sensors



Bore  
Gauges



Forks and  
Ring Gauges



Bench  
Gauges



Indicators and  
Electronic  
Display Units



Interface  
Boxes for Data  
Acquisition



Software

