



## MANÁSOLDA® - FIXO2

Static gas mixer with O<sub>2</sub> gases inlet and generation of two constant and independent gas mixtures, according to the demand of each application. Factory-set (non-adjustable) gas mixing outputs.

Suitable for welding, plasma cutting, laser cutting, steel/metal processing, offshore, shipbuilding, and other segments where the proper gas mixture is an important factor to guarantee quality and consistency in the manufacturing process.

### BENEFITS:

- **A GAS MIXER REDUCES GAS MIXTURE COST/WELDING COST;**
- **PRE ADJUSTED GAS MIXTURE FROM 0 TO 100%, – ISO 14175;**
- **GAS MIXTURE FLOW RATE up to 12 m<sup>3</sup>/h (205 l/min);**
- **HIGH OUTLET PRESSURE STABILITY;**
- **WHEN INLET GAS SUPPLY IS INTERRUPTED, GAS MIXTURE PRODUCTION STOPS AUTOMATICALLY;**

## TECHNICAL INFORMATION:

<b>Carrier Gas</b>	Argon (Ar)	Nitrogen (N <sub>2</sub> )
<b>Balance Gas</b>	Carbon Dioxide (CO <sub>2</sub> ) Helium (He) Nitrogen (N <sub>2</sub> )	Carbon Dioxide (CO <sub>2</sub> ) Helium (He)
<b>Gas mixture Range</b>	From 0 to 100% (ISO 14175)	
<b>Gas mixture Accuracy (ISO 14175)</b>	+/- 0,5% to 1 – 5 % in volume +/- 10% to 5 – 20% in volume +/- 2% to >20% in volume	
<b>Gas mixture outlet flow rate</b>	0,72 à 12,3 m <sup>3</sup> /h – (12 – 205 L/min) (in Nitrogen)	
<b>Maximum inlet pressure</b>	10 bar	
<b>Minimum inlet pressure</b>	5 bar	
<b>Outlet pressure</b>	0,75 to 8 bar (depends on the inlet pressure)	
<b>Outlet/Inlet Door</b>	G 1/4 F or 8 mm quick plug in connection	
<b>Dimensions (height x width x length)</b>	114 x 127 x 120 (mm)	
<b>Weight (kg)</b>	2,2	

FIXO2 Flow rate - m <sup>3</sup> /hour in Nitrogen		Outlet Pressure (bar)									
		0,5	1,0	2,0	3,0	4,0	5,0	6,0	7,0	8,0	
Minimum Inlet Pressure (bar) (max. 10 bar)	4,0	4,5	4,2	3	-	-	-	-	-	-	-
	5,0	6,9	6,4	5,4	3,8	-	-	-	-	-	-
	6,0	8,4	8,2	7,5	6,3	4,7	-	-	-	-	-
	7,0	10,5	10,1	9,5	8,6	7,2	5,3	-	-	-	-
	8,0	12,5	12	11,7	10,9	9,7	8,2	6	-	-	-
	9,0	14,3	13,9	13,5	13,1	11,9	10,7	8,7	6,7	-	-
	10,0	15,8	15,5	15	14,8	14,3	12,5	11,8	9,5	7,2	-

Gas Mixture	Content Range
Carbon Dioxide balance Argon	5-92% CO <sub>2</sub>
Carbon Dioxide balance Nitrogen	5-92% CO <sub>2</sub>
Carbon Dioxide balance Air	5-92% CO <sub>2</sub>
Oxygen balance Carbon Dioxide	5-85% O <sub>2</sub>
Oxygen balance Argon	5-92% O <sub>2</sub>
Oxygen balance Helium	5-88% O <sub>2</sub>
Oxygen balance Nitrogen	5-87% O <sub>2</sub>
Helium balance Argon	5-92% He
Helium balance Nitrogen	5-87% He
Nitrogen balance Argon	5-92% N <sub>2</sub>
Hydrogen balance with Nitrogen	5-95% H <sub>2</sub>
Hydrogen balance with Argon	8-95% H <sub>2</sub>

	Gas 1	Gas 2	FACTOR
<b>Gas Mixture</b>	<b>CO<sub>2</sub></b>	<b>Ar</b>	
Concentration (%)	18	82	0,8812
Concentration (%)	4	96	0,8336
Concentration (%)	25	75	0,905
<b>Gas Mixture</b>	<b>CO<sub>2</sub></b>	<b>N<sub>2</sub></b>	
Concentration (%)	30	70	1,048
Concentration (%)	5	95	1,008
Concentration (%)	80	20	1,128
<b>Gas Mixture</b>	<b>He</b>	<b>Ar</b>	
Concentration (%)	20	80	0,866
Concentration (%)	60	40	0,958
<b>Gas Mixture</b>	<b>He</b>	<b>N<sub>2</sub></b>	
Concentration (%)	10	90	1,005
<b>Gas Mixture</b>	<b>O<sub>2</sub></b>	<b>Ar</b>	
Concentration (%)	4	96	0,8224
Concentration (%)	10	90	0,826
<b>Gas Mixture</b>	<b>O<sub>2</sub></b>	<b>N<sub>2</sub></b>	
Concentration (%)	4	96	0,9952
Concentration (%)	25	75	0,97
<b>Gas Mixture</b>	<b>O<sub>2</sub></b>	<b>CO<sub>2</sub></b>	
Concentration (%)	50	50	1,02
Concentration (%)	85	15	0,922