



## Model 8280 and 8284 Series Dyna-Blenders Dynamic Gas Blending Systems



### Description

The 8280 and 8284 Series of Dynamic Gas Blending Systems are used to prepare accurate mixtures of different gases. These systems are dynamic with respect to flow conditions and have no ability to store gas for demand usage. These control systems function utilizing the Matheson 8272/8273 Series Controller Transducers. There are two basic types of units: a Modular Dyna-Blender and a Multichannel Dyna-Blender.

### Modular Dyna-Blender Model 8280

Matheson's Modular Dyna-Blender, when used with an existing mass flowmeter or controller, accurately blends gases in a dynamic flowing system. Several units can be utilized to make multiple component mixtures. The unit requires the presence of an existing mass flowmeter or mass flow controller for mixing operations, or can be used as a stand alone controller.\*

The basis of the system is a mass flow controller transducer, which either responds to an external command signal or can be slaved to another mass flowmeter, mass flow controller or even another

8280 Dyna-Blender. This unit can also be used in conjunction with other equipment interfaced through user supplied circuitry via a 0-5 VDC signal or 4-20 mA signal (optional) for dynamic flow systems. The Model 8124 Totalizer is also available and can be used to compile the total amount of gas used over a period of time, regardless of varying flow rates.

The 8280 control box may be ordered as a stand alone item, or as part of a system (8280 control box, transducer assembly, and cable-see table for ordering information).

### Multichannel Dyna-Blender Model 8284

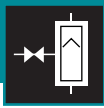
Matheson's Multichannel Dyna-Blender accurately controls the flow rates of four different gases in a dynamic flowing system. Each of the four channels has individual potentiometers and control switches. The single display is operated by an eight position switch and reads in percent of range. The unit can control gas mixtures up to four components in composition, with user supplied manifolds.

The gas flow of the system can be controlled by the individual controller, or an external 0-5 VDC or 4-20 mA signal (optional) for remote operation. **Each individual channel requires a mass flow controller transducer which must be ordered separately.**

### Specifications

	Model 8280	Model 8284
Voltage Input:	115 VAC, 10 Watts	115 VAC, 40 Watts
Signal Voltage Output:	0-5 VDC; 4-20 mA (optional)	0-5 VDC; 4-20 mA
Cable Lengths		
Power Cord:	6 ft	6 ft
Signal Cable:	8 ft	8 ft (4)
Alarm Contacts Maximum (Each Channel):	1 amp at 30 VDC	1 amp at 30 VDC
Rack Mounting:	1/2 rack (9-1/2")	Full rack (19")
Shipping Weight:	8 lbs	13 lbs

\*Use of supplied piping is required to blend gases.



## Model 8280 and 8284 Series Dyna-Blenders *(continued)* Dynamic Gas Blending Systems

### Ordering Information

Model Number	Description
8280	Modular Dyna-Blender Control Box
8284	Multichannel Dyna-Blender Control Box

*The 8280 control box may be ordered as a stand alone item, or as part of a system (8280 control box, transducer assembly, and cable - see the following table for system ordering information).*

Modular Dyna-Blender Model Number	Range in Nitrogen @ 0°C and 14.7 psia	Standard End Fittings
8280-0411	0-10 sccm	1/4" Swagelok
8280-0421	0-20 sccm	1/4" Swagelok
8280-0431	0-30 sccm	1/4" Swagelok
8280-0451	0-50 sccm	1/4" Swagelok
8280-0412	0-100 sccm	1/4" Swagelok
8280-0422	0-200 sccm	1/4" Swagelok
8280-0432	0-300 sccm	1/4" Swagelok
8280-0452	0-500 sccm	1/4" Swagelok
8280-0413	0-1 slpm	1/4" Swagelok
8280-0423	0-2 slpm	1/4" Swagelok
8280-0433	0-3 slpm	1/4" Swagelok
8280-0453	0-5 slpm	1/4" Swagelok
8280-0414	0-10 slpm	1/4" Swagelok
8280-0424	0-20 slpm	1/4" Swagelok
8280-0434	0-30 slpm	1/4" Swagelok
8280-0454	0-50 slpm	3/8" Swagelok
8280-0415	0-100 slpm	3/8" Swagelok
8280-0425	0-200 slpm	3/8" Swagelok
8280-0435	0-300 slpm	1/2" Swagelok
8280-0455	0-500 slpm	1/2" Swagelok
8280-0416	0-1000 slpm	3/4" Swagelok

*Note: Model numbers listed above consist of a complete single channel Dyna-Blender System which includes a transducer assembly and 8280 control box with connecting cable.*

### Options

Model Number	Description
8292	230 VAC Models
8284-8294**	8284 with 4-20 mA Input/Output – Modular Dyna-Blender (4 channel)*
8280-8294**	8280 with 4-20 mA Input/Output*
8295	PTFE Teflon Seals
HAN-0007-AA	Full Rack Mounting Adapter

*\*Note: 0-5 VDC signal included*

*\*\*Requires one 8272/8273 series controller to be ordered separately.*