

Gas mixer: SuperShield

Compact gas mixer with proportional mixing valve

Gas mixer **SuperShield** for the production of mixtures of two gases

Highlights

Individual adjustment of mixture and flow rate

High mixing precision

Infinitely variable up to 435 ft³/hr (205 l/min) (based on air)

Mixture production stops automatically when gas supply is interrupted

Does not depend on the input pressure difference due to integrated constant pressure regulation

Gas inlet filters protect the device against contamination

Cost savings due to the avoidance of storage of different premixes

Low maintenance

Compact, space saving and sturdy design

Easy to operate and to assemble

No power supply required



Accessories:

- Safety devices for use with fuel gas

Maintenance:

Gas mixers are to be tested for leaks at least once a month.

The inlet filters are only to be cleaned and exchanged by qualified personnel.

Gas mixers are only to be opened and repaired by the manufacturer.

Technical Data:				
Carrier gas:	Argon (Ar)		Nitrogen (N ₂)	
Additive gas:	Carbon dioxide (CO ₂) Helium (He) Nitrogen (N ₂) Hydrogen (H ₂) Oxygen (O ₂)		Carbon dioxide (CO ₂) Helium (He) Hydrogen (H ₂) Oxygen (O ₂)	
Mixing range:	0-100 %			
Inlet pressure:	36 - 145 PSI (2.5 – 10 bar) Allowable difference between inlet pressures: 43 PSIG (3.0 bar)			
Outlet pressure:	11 - 116 PSI (.75 – 8.0 bar)			
Mixed gas capacity:	25 - 435 ft ³ /hr (12 – 205 l/min) infinitely variable (based on air)			
Mixing precision:	better than +/- 2% abs.			
Temperature:	19° F to 100°F (-7°C to +38°C)			
Inlet/Outlet connection:	1/4NPT-F			
Material:	Housing: aluminum, anodized; Internal parts: brass, stainless steel, Elastomer			
Measure and weight:	height:	width:	depth:	weight:
	6.57" (167 mm)	6.18" (157 mm)	5.78" (147 mm)	7.49 lbs (ca. 3.4 kg)

Further gas mixer versions for the production of gas mixtures of two gases are available on request.

**Flow Rate Table (SCFH Air)
 Max Flow Valve at 100%**

Inlet Pressure (PSIG) ↓	Outlet Pressure → Operating Pressure (PSIG)	11	18	25	32	39	46	53	60	67	74	81	88	95	102	109	116
40	18	78															
47	25	111	84														
54	32	144	126	90													
61	39	168	156	132	102												
68	46	204	192	174	150	108											
75	53	228	222	192	186	156	114										
82	60	252	246	234	222	198	168	126									
89	67	282	276	264	252	234	192	174	126								
96	74	312	306	300	288	270	252	222	186	138							
103	81	336	336	330	324	300	288	264	234	198	150						
110	88	366	366	360	348	336	324	306	282	246	210	150					
117	95	396	396	390	384	372	360	342	324	300	264	228	156				
124	102	420	420	414	408	396	384	366	348	336	312	276	234	156			
131	109	444	444	438	432	426	420	408	390	372	348	324	288	228	174		
138	116	468	468	468	462	456	444	432	420	396	372	360	318	300	258	192	
145	123	498	498	498	492	486	474	468	450	432	420	396	372	342	312	252	204

1) Outlet pressure regulated by flow control valve downstream from the mixer outlet.
 2) Constant inlet pressure