

# SAR

## Supplied Air Respirator

### Quick Specs

#### OSHA Classification

Loose-fitting supplied air respirator (no fit test required)

#### Assigned Protection Factor (APF) 25

#### Certifications

- ANSI Z87.1+ 2015 (helmet)
- NIOSH 42 CFR 84 (SAR system)

*To provide a NIOSH-approved respiratory system, the SAR with T94i-R must be used with Miller® helmet, hoses, connectors, filters and other components recommended by the manufacturer*



Horizontal position



Vertical position



### Designed for Comfort

**Well-balanced design** reduces torque on neck, increasing all-day wear.

**Patent-pending Dualtec™ manifold system** optimizes helmet balance and sound, while **six-point air distribution system** maximizes cooling through targeted air placement.

**Ergonomic headgear** provides secure fit without the need for over-tightening.

**Lightweight versatile C50 air regulator** can be positioned horizontally or vertically to naturally align with body movements.

### Superior Visibility

**ClearLight™ lens technology** optimizes contrast and clarity in light and welding states, easing eye strain.

**Shade 5.0 side windows and oversized clear grind shield** maximize downward and peripheral visibility, improving sense of surroundings.

**Half-shade lens adjustability** provides fine shade adjustment for optimized comfort and vision.

### Improved Productivity

**Enhanced comfort, cooling and visibility** maximize all-day wearability — increasing productivity, safety and regulatory compliance.

**C50 air regulator** supplies down to 50-degree Fahrenheit (28°C) Grade-D air under your hood, heightening productivity and relieving heat stress. Performance under different applications may vary. 360-degree swivel air hose connection alleviates hose coiling, reducing potential trip hazards.



C50 air regulator is warrantied for one year, parts.  
Auto-darkening lens is warrantied for three years, parts.  
BreatheAir boxes/panels are warrantied for one year, parts.  
CO monitor is warrantied for two years, parts.



**Miller Electric Mfg. LLC**  
An ITW Welding Company  
1635 West Spencer Street  
P.O. Box 1079  
Appleton, WI 54912-1079 USA

**Equipment Sales US and Canada**  
Phone: 866-931-9730  
FAX: 800-637-2315  
International Phone: 920-735-4554  
International FAX: 920-735-4125

**MillerWelds.com**  

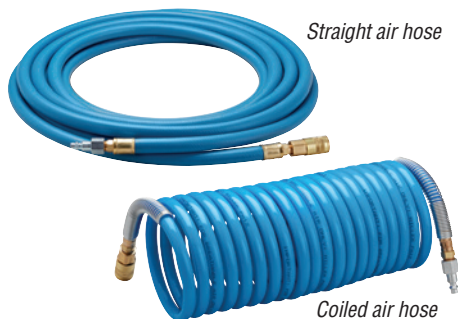



## C50 Air Regulator Specifications (Subject to change without notice.)



Valve	Temperature	Flow Rate Low	Flow Rate High	Suspension	Certification	Dimensions	Weight
Cooling	≤50°F (28°C) cooling	≥199 lpm (liters per minute)	366 lpm (liters per minute)	Belt	NIOSH 42 CFR Part 84	H: 2.75 in. (70 mm) W: 11.75 in. (298 mm) D: 4.13 in. (105 mm)	0.9 lb. (0.4 kg)

## Air Hose and Fittings Specifications (Subject to change without notice.)



Straight air hose

Coiled air hose

Model	Fitting Type	Available Lengths	Material	Pressure Type	Allowable Connections	Hose Length	Hose Pressure
Straight Air Hose	Industrial Interchange	25 or 100 ft.	Rubber	High	1 hose	25–100 ft.	58–61 psi
					2 hoses	125–200 ft.	64–68 psi
					3 hoses	225–300 ft.	70–76 psi
Coiled Air Hose	Industrial Interchange	25 or 100 ft.	Rubber	High	1 hose	25–100 ft.	60–62 psi

Note: Per OSHA 29 CFR 1910.134(i)(8), breathing air fittings must be incompatible with outlets for non-respirable worksite air or other gas systems. Therefore, Schrader-style fittings are available for use with the above air hoses, in place of Industrial Interchange. Must order separately.

## BreatheAir™ Filtration Systems Specifications (Subject to change without notice.)



BreatheAir panel



BreatheAir portable box

Model	Number of Operators	Number of Outlets	Inlet Thread Size	Dimensions	Weight
BreatheAir Panel	Up to 2	2	1/2 in. Industrial Interchange	H: 23 in. (584 mm) W: 22 in. (559 mm) D: 8 in. (203 mm)	19.7 lb. (8.9 kg)
	Up to 4	4	1/2 in. Industrial Interchange	H: 23 in. (584 mm) W: 22 in. (559 mm) D: 8 in. (203 mm)	26.4 lb. (12.0 kg)
BreatheAir Portable Box	Up to 2	2	1/2 in. Industrial Interchange	H: 13 in. (330 mm) W: 19 in. (483 mm) D: 7 in. (178 mm)	19.7 lb. (8.9 kg)
	Up to 4	4	1/2 in. Industrial Interchange	H: 17 in. (432 mm) W: 24 in. (610 mm) D: 8.5 in. (216 mm)	26.4 lb. (12.0 kg)

**Three-stage filtration process** provides respiratory users Grade-D breathing air while monitoring for CO during use, ensuring compliance and worker safety.

- First stage removes 95 percent of liquids and particulate down to 5.0 microns.
- Second stage removes 99.99 percent of fine oil mists and particulate down to .01 microns in size.
- Third stage removes organic vapors, odors and tastes.

**Filter change indicators** clearly notify users of needed change, eliminating guesswork and amplifying unit performance.

- Unmatched filter change process is quick and easy, minimizing downtime.
- Automatic condensation drain extends filter life.
- Internal monitor continuously monitors carbon monoxide (CO) levels in the breathing air.

**External warning lights and alarms** quickly notify users of heightened CO levels, reducing user reaction time.

**Calibration of CO monitors takes less than two minutes**, reducing operator downtime while increasing safety.

**Durable construction** designed to perform in the toughest industrial applications.

**Systems available in portable or stationary configurations**, supporting up to two or up to four operators each, with CO monitors set to either 10 ppm (USA) or 5 ppm (Canada).

**Recommended** for use with the C50 SAR system.

# T94i-R™ Helmet Specifications and Features (Subject to change without notice.)

Viewing Area	Operating Modes (Shades)	Sensors	Battery Life	TIG Rating	Switching Speed
9 sq. in. (58 sq. cm)	Weld (8–13), Cut (5–8), Grind (3), X-Mode™ (8–13)	4	1,200 hours	≥3 amps	1/20,000 second

**Lightweight well-balanced design** reduces neck torque, minimizing operator fatigue and strain leading to an increase in comfort as well as long-term health benefits.



**34% BETTER BALANCE**  
for elevated comfort



**27% LESS TORQUE**  
**55% LESS TORQUE (when weld visor is raised)**  
for reduced neck strain

*Statistics compare T94i to previous model.*

**Ergonomic four-point flexible headgear design with oversized pivoting back pad** provides a secure fit, while avoiding major pressure points within the head, maximizing all-day wear. Customizable fit with seamless tilt, distance and tightness adjustments.



### Largest integrated grind shield.

Provides 44 square inches of clear viewing area for grinding and other tasks, increasing helmet on time, decreasing the potential for eye injuries.



**Flame-resistant washable head seal with ultra-soft outer cuff** enhances wear without causing skin irritation. Unique design can provide additional protection by covering the ears, or ease communication if placed in front of the ears. Cape offers necessary head protection in out-of-position applications.



ClearLight lens technology

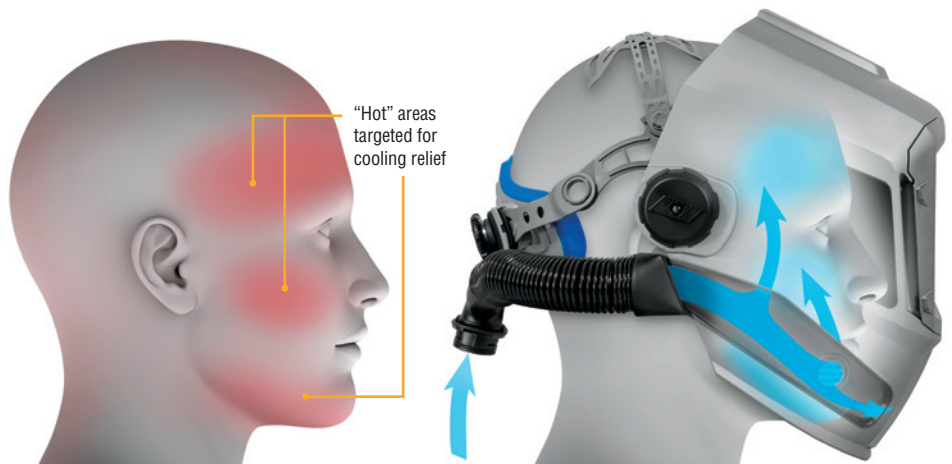
Lens controls

**ClearLight™ lens technology** optimizes contrast and clarity in welding and light states, while providing a brighter light state to increase helmet-on time for non-welding tasks, enhancing visibility and reducing eye strain.

**Four lens operating modes** provide versatility for various welding, cutting and grinding applications.

- X-Mode™ senses the arc's electromagnetic field rather than arc rays to darken the lens — ideal for outdoor low-amp TIG and obstructed-view applications.
- Half-shade settings for precise lens adjustment.
- Infotrack™ 2.0 allows for monitoring of arc time and arc count.
- Simplistic digital lens interface allows for easy adjustment with or without gloves.

## Dualtec™ Manifold System



**Patent-pending Dualtec manifold design with six-point airflow distribution system maximizes perceived cooling through targeted air placement.**

- System targets body's natural thermal regulation system to minimize operator heat stress.
- Six-point airflow distribution system targets "hot" areas within the face for immediate cooling relief, without causing eye and/or nose irritation.
- Adjustable interior vents allow for customized flow depending on user preference.

## Ordering Information (Order from Miller Service Parts.)

SAR and Options	Stock No.	Description	Qty.	Price
<b>SAR with T94i-R™ Helmet Complete System</b>	<b>951800</b>	With 25 ft. straight air hose		
	<b>951801</b>	With 100 ft. straight air hose		
	<b>951802</b>	With 25 ft. coiled air hose		
	<b>951803</b>	With 100 ft. coiled air hose		
	<b>264871</b>	Without air hose		
<b>C50 Air Regulator</b>	<b>270412</b>	Air control device (cooling) with 1/4 in. Industrial Interchange fittings		
<b>T94i-R Helmet Upgrade Kit</b>	<b>279871</b>	For use with existing PAPR/SAR system. Includes T94i-R helmet assembly, breathing tube, breathing tube cover and flowmeter		
<b>Replacement Parts/Accessories</b>				
Battery, Helmet CR2450	<b>217043</b>			
Helmet Cover Lens, Outside	<b>265304 / 265304B</b>	5 pack or 50 pack (bulk)		
Helmet Cover Lens, Inside	<b>216327 / 216327B</b>	5 pack or 50 pack (bulk)		
Grind Shield	<b>258979</b>			
Breathing Tube Assembly	<b>261704</b>	Without breathing tube cover		
Breathing Tube Cover	<b>265312</b>	Flame-resistant		
Belt	<b>270416</b>	Flame-resistant cotton		
	<b>264872</b>	Leather		
Belt Pad	<b>270415</b>			
Belt and Pad Assembly	<b>271394</b>	Includes flame-resistant cotton belt and pad		
Belt Extension	<b>244151</b>	For flame-resistant cotton belt only. Adds 18 in. length to belt assembly		
Muffler	<b>270417</b>	Connects breathing tube and C50 air regulator		
Tool Bag	<b>228028</b>			
<b>Air Hoses and Fittings</b>				
Straight Air Hose	<b>270405</b>	25 ft., 3/8 in. ID with 1/4 in. Industrial Interchange fittings		
	<b>270407</b>	100 ft., 3/8 in. ID with 1/4 in. Industrial Interchange fittings		
Coiled Air Hose	<b>270408</b>	25 ft., 3/8 in. ID with 1/4 in. Industrial Interchange fittings		
	<b>270410</b>	100 ft., 3/8 in. ID with 1/4 in. Industrial Interchange fittings		
Hose Plug	<b>270436</b>	Industrial Interchange, 1/4 in. FPT, 1/4 in. body, brass		
	<b>270437</b>	Schrader, 1/4 in. FPT, 1/4 in. body, steel		
Hose Socket	<b>270438</b>	Industrial Interchange, 1/4 in. FPT, 1/4 in. body, steel		
	<b>270440</b>	Schrader, 1/4 in. FPT, 1/4 in. body, brass/steel		
C50 Valve Plug	<b>272735</b>	Industrial Interchange, curved, 1/4 in. FPT, 1/4 in. body, steel		
	<b>272736</b>	Schrader, curved, 1/4 in. FPT, 1/4 in. body, steel		
C50 Valve Nut with Washer	<b>272740</b>			
<b>BreatheAir™ Filtration Systems</b>				
BreatheAir Panel	<b>275961</b>	Two person, 10 ppm alarm (USA)		
	<b>275970</b>	Four person, 10 ppm alarm (USA)		
	<b>275963</b>	Two person, 5 ppm alarm (Canada)		
	<b>275981</b>	Four person, 5 ppm alarm (Canada)		
BreatheAir Portable Box	<b>275983</b>	Two person, 10 ppm alarm (USA)		
	<b>275985</b>	Four person, 10 ppm alarm (USA)		
	<b>275984</b>	Two person, 5 ppm alarm (Canada)		
	<b>275986</b>	Four person, 5 ppm alarm (Canada)		
Box/Panel Monitor Calibration Kit	<b>275988</b>	10 ppm, regulator, kit, zero air, 20 ppm gas, 12 stickers (USA)		
	<b>275989</b>	5 ppm, regulator, kit, zero air, 10 ppm gas, 12 stickers (Canada)		
Box/Panel Filter Kit	<b>275996</b>	Two-person unit, 1st, 2nd and 3rd filters with o-rings		
	<b>276000</b>	Four-person unit, 1st, 2nd and 3rd filters with o-rings		
Box/Panel Plug	<b>276007</b>	Industrial Interchange, 1/2 in.		
Box/Panel Socket	<b>276158</b>	Industrial Interchange, 1/4 in.		
	<b>276162</b>	Schrader, 1/4 in.		
Box/Panel Air Hose	<b>276005</b>	50 ft., straight, 1/2 in. ID with 1/2 in. Industrial Interchange fittings		
	<b>276006</b>	100 ft., straight, 1/2 in. ID with 1/2 in. Industrial Interchange fittings		

Date:

Total Quoted Price:

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