SAR

Welding Safety

Supplied Air Respirator

Quick **Specs**

OSHA Classification

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

Assigned Protection Factor (APF) 25

Certifications

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



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 can cool air entering the helmet up to 50 degrees Fahrenheit (28°C). heightening productivity and relieving heat stress. 360-degree swivel air hose connection alleviates hose coiling, reducing potential trip hazards.



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



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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.)



Model	Fitting Type	Available Lengths	Material	Pressure Type	Allowable Connections	Hose Length	Hose Pressure
Straight	Industrial	25 or 100 ft.	Rubber	High	1 hose	25-100 ft.	58-61 psi
Air Hose	Interchange				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 work-site 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



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)	19.7 lb. (8.9 kg)
ranci	Up to 4	4		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

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

Statistics compare T94i to previous model.



Industry's 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** 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.

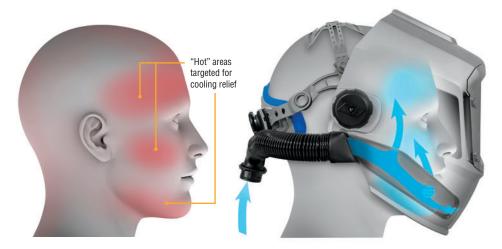
Four lens operating modes provide versatility for various welding, cutting and grinding applications.

- 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 6-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			Price	
SAR with T94i-R™ Helmet	951800	With 25 ft. straight air hose		1		
Complete System	951801	With 100 ft. straight air hose	Complete system consists of T94i-R,			
	951802	With 25 ft. coiled air hose	C50 air regulator, belt assembly, flowmeter, breathing tube with			
	951803	With 100 ft. coiled air hose	flame-resistant cover, and tool bag			
	264871	Without air hose				
C50 Air Regulator	270412	Air control device (cooling) with	1/4 in. Industrial Interchange fittings			
T94i-R Helmet Upgrade Kit	279871	For use with existing PAPR/SAR	For use with existing PAPR/SAR system. Includes T94i-R helmet assembly,			
		breathing tube, breathing tube co	ver and flowmeter			
Replacement Parts/Accessories						
Battery, Helmet CR2450	217043					
Helmet Cover Lens, Outside	265304 / 265304B	5 pack or 50 pack (bulk)				
Helmet Cover Lens, Inside	216327 / 216327B	5 pack or 50 pack (bulk)				
Grind Shield	258979					
Breathing Tube Assembly	261704	Without breathing tube cover				
Breathing Tube Cover	265312	Flame-resistant				
Belt	270416	Flame-resistant cotton				
	264872	Leather				
Belt Pad	270415					
Belt and Pad Assembly	271394	Includes flame-resistant cotton b	elt and pad			
Belt Extension	244151	For flame-resistant cotton belt of	nly. Adds 18 in. length to belt assembly			
Muffler	270417	Connects breathing tube and C5	Connects breathing tube and C50 air regulator			
Tool Bag	228028					
Air Hoses and Fittings						
Straight Air Hose	270405	25 ft., 3/8 in. ID with 1/4 in. Indu	etrial Interchange fittings			
270405 270407		100 ft., 3/8 in. ID with 1/4 in. Ind				
Coiled Air Hose 270408		25 ft., 3/8 in. ID with 1/4 in. Indu				
	270410	100 ft., 3/8 in. ID with 1/4 in. Ind				
Hose Plug 270436		Industrial Interchange, 1/4 in. FF	T, 1/4 in. body, brass			
	270437	Schrader, 1/4 in. FPT, 1/4 in. boo	-			
Hose Socket	270438	Industrial Interchange, 1/4 in. FF				
	270440	Schrader, 1/4 in. FPT, 1/4 in. boo				
C50 Valve Plug	272735	Industrial Interchange, curved, 1				
OFO Value Next with Meakers	272736	Schrader, curved, 1/4 in. FPT, 1/	4 In. body, steel			
C50 Valve Nut with Washer	272740					
BreatheAir™ Filtration Systems						
BreatheAir Panel	275961	Two person, 10 ppm alarm (USA	.)			
	275970 275963	Four person, 10 ppm alarm (USA				
	275981	Two person, 5 ppm alarm (Cana Four person, 5 ppm alarm (Cana				
BreatheAir Portable Box	275983	Two person, 10 ppm alarm (USA	,			
2.542.07.01 1 01.00.00 007	275985	Four person, 10 ppm alarm (USA				
	275984	Two person, 5 ppm alarm (Cana	da)			
	275986	Four person, 5 ppm alarm (Cana				
Box/Panel Monitor Calibration Kit 275988		10 ppm, regulator, kit, zero air, 2				
D (D LEW 10)	275989	5 ppm, regulator, kit, zero air, 10				
Box/Panel Filter Kit 275996		Two-person unit, 1st, 2nd and 3 Four-person unit, 1st, 2nd and 3				
Poy/Danol Dlug	276000		ru miers with 0-migs			
Box/Panel Plug	276007	Industrial Interchange, 1/2 in.				
Box/Panel Socket	276158 276162	Industrial Interchange, 1/4 in. Schrader, 1/4 in.				
Box/Panel Air Hose	276102	· · · · · · · · · · · · · · · · · · ·	2 in. Industrial Interchange fittings			
DOWL WILL HILL HILL	276006		/2 in. Industrial Interchange fittings			

Date: Total Quoted Price:

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