

Constant Flow Air-Line Respirator with Ultravue® facepiece.



Constant Flow Air-Line Respirator with Comfo® facepiece.



Constant Flow Air-Line Respirator with Welder's Comfo® facepiece

Constant Flow Air-Line Respirator with Ultra Elite facepiec

# Constant Flow Air-Line Respirators and Accessories

# **Features**

- Full-facepiece protection with Ultravue or Ultra Elite Facepiece
- Half-mask face protection, where eye protection is not required, with Comfo and Welder's Comfo Facepieces
- Ideal for use in shipbuilding, utilities, chemical, petrochemical and pharmaceutical industries

# Description

MSA's Constant Flow Air-Line Respirators are designed to maintain a slight positive pressure of air inside the facepiece whether the wearer is inhaling or exhaling. This helps prevent contaminants from seeping in around the facepiece, even if there should be small breaks in the face-to-facepiece seal.

- NIOSH/MSHA Approvals
- A wide range of applications including welding, painting and handling certain hazardous materials in non-IDLH nvironments
- Direct-Connect configurations, which feature fewer parts, are available to simplify the respirator system.

Complete assemblies are available and include a web support belt, air-flow control valve with quick disconnect, breathing tube and a choice of facepiece.



# **Required Components**

#### **Facepiece and Breathing Tube Assembly**

MSA Air-Line Respirator users can choose between two full- and two half-mask facepiece styles. Full facepieces are the state-of-the-art, wide-vision, Ultra Elite Facepiece and the proven Ultravue Facepiece with wrap-around lens.



Comfo<sup>®</sup>, Welder's Comfo, Ultravue<sup>®</sup> and Ultra Elite<sup>®</sup> Facepieces

#### Ultra Elite<sup>®</sup> Facepiece

Designed to provide exceptional peripheral and downward vision, the Ultra Elite Facepiece is available in three sizes and in a choice of two materials: silicone or Hycar<sup>™</sup> rubber. Hycar rubber provides a super-soft facepiece texture for a smooth and comfortable fit. It also resists chemical attack and temperature extremes and withstands rugged day-to-day use without tearing and ripping.

The design of the Ultra Elite Facepiece is based on extensive anthropometric studies of the face length, temple width and chin width data of more than 8,000 individuals. The result is a facepiece that provides improved seals against a wide range of facial contours. The MSA E-Z Don™ or a rubber head harness are available. Optional nosecup is offered in two sizes.

# Ultravue<sup>®</sup> Facepiece

To accommodate a wide range of applications, Ultravue Facepieces are available in black Hycar rubber or silicone. Ultravue Facepieces also come in three sizes and supports three syles of optional nosecups.

# **Complete Assemblies**

Choose facepiece (medium size in black Hycar), control valve and quickdisconnect assembly. Comes with breathing tube and a web support belt. For optional PVC (polyvinylchloride) belt, see Accessories on page 6.

# *High-Pressure Control Valve* (35-40 psig inlet pressure for 8-300 ft of hose)

Quick-Disconnect	Ultra Elite Facepiece	Ultravue Facepiece	Comfo Facepiece	Comfo Facepiece
Snap-Tite aluminum	810829	460863	460865	460862
Foster steel	810831	461717	461719	480600
Duff-Norton brass	810834	486258	†	†
CEJN Locking chrome-plated brass	810832	480629	480631	480671
Snap-Tite Locking hard-coat anodized aluminum	810833	480633	480635	480672

# *Low-Pressure Control Valve* (10-15 psig inlet pressure for 8-50 ft of hose)

Quick-Disconnect	Ultra Elite Facepiece	Ultravue Facepiece	Comfo Facepiece	Welder's Comfo Facepiece
Snap-Tite aluminum	806775	463300	463302	463281
Foster steel	806776	480472	480474	480468
Hansen brass	806779	484836	484837	†
CEJN Locking chrome-plated brass	806777	480637	480639	480645
Snap-Tite Locking hard-coat anodized aluminum	806778	480641	480643	480646

*t* Available by special order only.

High-pressure control valves are also available with the following special order quick-disconnects: Snap-Tite brass or stainless steel, Foster brass, and Hansen brass or stainless steel. Low-pressure control valves also available with: Snap-Tite brass or stainless steel, Foster brass, Hansen brass, and Duff-Norton brass. Please call your MSA distributor for complete ordering information.

#### **Comfo<sup>®</sup> Respirator**

The Comfo is a half-mask facepiece used when eye protection is not required. The Comfo style is formulated from SoftFeel<sup>®</sup> material, which improves the pliability and softness of both Hycar and silicone rubber.

# Welder's Comfo<sup>®</sup> Facepiece

A Welder's Comfo Facepiece is also available. This half-mask has an elbow that permits the breathing tube to be carried over the shoulder where it won't interfere with a welder's helmet. A web harness with a leather keeper holds the breathing tube in place.



# **Lens Covers**

Lens covers, available in a variety of types, provide a convenient way to add a layer of protection against scratches. The self-adhesive covers can be easily installed and removed when necessary. The tinted versions are intended for applications in direct sunlight.



Part No.	Description
491500	Ultra Elite clear cover lens (25 per pack)
805456	Ultra Elite smoke-tinted cover lens (25 per pack)
480326	Ultravue smoke-tinted cover lens (25 per pack)
456975	Ultravue clear cover lens (25 per pack)

# Waist Belts

MSA offers an optional clear polyvinylchloride (PVC) belt that is easy to decontaminate. If decontamination is not a factor, users may also opt for an uncoated nylon webbelt.



Part No.	Description
492827	Polyurethane-coated-nylon Belt, standard on all PAPRs
473902	PVC Waist Belt
9961	Uncoated-Nylon Web Waist Belt

# **Direct-Connect 3/8" Airline Respirator Part Numbers**

All of the facepieces below are size medium and black hycar. The Ultravue and Ultra Elite facepieces include nosecups.

#### **Direct-Connect 1/2" Airline Respirator Part Numbers**

Only has approval for Snap-Tite Aluminum or Cejn Chromeplated Brass, locking fittings. All of the facepieces below are size medium and black hycar. The Ultravue and Ultra Elite facepieces include nosecups.

**NOTE:** This respirator requires 1/2" ID MSA airline hose with 1/2" Quick-Disconnect fittings and union adapters. Please contact Customer Service for more information.

Ultravue Fcpc w/ rubber harness with Snap-Tite	488089
Ultravue Fcpc w/ rubber harness with Cejn	488090
Ultra Elite Fcpc with E-Z Don with Snap-Tite	806795
Ultra Elite Fcpc with cotton E-Z Don with Cejn	806796
Comfo Fcpc with Snap-Tite	488091
Comfo Fcpc with Cejn	488092
Comfo Welders Fcpc with Snap-Tite	488093
Comfo Welders Fcpc with Cejn	488094

# **Direct-Connect**

The Direct-Connect configurations are low-cost alternatives to standard configurations because they eliminate the need for a control valve.

# 3/8" Direct-Connector

Approved air-supply hose: 3/8''; length: 8-300 ft. The approved inlet air pressure needed to maintain at least 4 cfm to each respirator is listed below for 3/8'' hose.

Feet	PSIG
8 to 25	6 to 8
25 to 75	8 to 12
75 to 100	11 to 15
100 to 150	14 to 18
150 to 200	16 to 23
200 to 250	18 to 28
250 to 300	20 to 32

# 1/2" Direct-Connector

Approved air-supply hose: 1/2''; length: 25-300 ft. The approved inlet air pressure needed to maintain at least 4 cfm to each respirator is listed below.

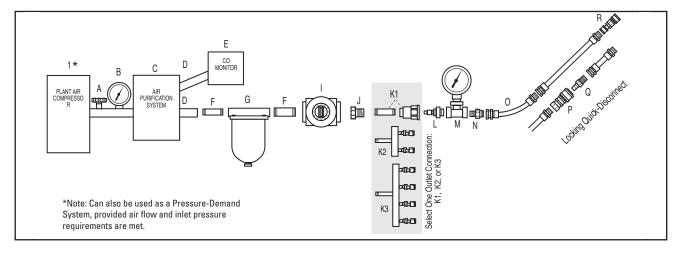
Feet	PSIG
25 to 50	2 to 4
50 to 100	3 to 5
100 to 150	4 to 6
150 to 200	5 to 8
200 to 250	6 to 10
250 to 300	7 to 12

#### Caution

The Snap-Tite Quick-Disconnect for 1/2" id. hose does not have a check valve. If disconnected under pressure, air will discharge through the connector.

MSA

# **The Constant-Flow System**



Descr	iption	Part No.	Page	Descrij	ption	Part No.	Page	Descri	ption	Part No.	Page
F	Nipple (VXV)	68833	—	K1	Nipple	459867	—	Ν	Union Adapter	65942	8
G	Filter	81857	5	K2/3	Manifolds		5	0	MSA Air Hose		5
I	Regulator	66716	5	L	Male Plug w/ W''			P/Q	Locking Quick		
J	Bushing	625528			male threads		8		Disconnects		
K1	Female Socket			Μ	Inlet Gauge	_	5	R	Female Socket A	ssy —	8

See Pocket Guide To Airline Respirators (01-14-14) for more information.

# **Online Response® Respirator Selector**

Available on the World Wide Web at www.MSAnet.com/response

- Helps identify the proper respirator you need
- Has broadest range of respiratory protective devices available
- Recommends respirators for more than 700 chemical hazards
- Has nearly 3,000 chemical synonyms
- Lists up to 27 categories of respirators, with MUCs
- Is generic in nature

# **MSA Confidence Plus® Germicidal Cleaner**

Mix with warm water for a germicidal cleaner that is effective against various micro-organisms including immunodeficiency virus Type 1 (HIV-1) (associated with AIDS). EPA approved for use on safety equipment.

Part No.	Description
10009971	MSA Confidence Plus Germicidal Cleaner in 32 oz. bottle







# Accessories

# **Air-Supply Hose**



The MSA 3/8-inch ID Air-Supply Hose is available in smooth, reinforced, lightweight polyvinylchloride; chemical-resistant black neoprene; or smooth, coiled nylon. An MSA hose must be used to maintain NIOSH/MSHA approvals.

Neoprene Part No.	Length	Hose Coupling
455022	50 ft.	Brass
481080	50 ft.	Stainless Steel
455021	25 ft.	Brass
481079	25 ft.	Stainless Steel
455020	15 ft.	Brass
481078	15 ft.	Stainless Steel
481071	8 ft.	Brass
481077	8 ft.	Stainless Steel

PVC		
Part No.	Length	Hose Coupling
484225	100 ft.	Brass
471513	50 ft.	Brass
481060	50 ft.	Stainless Steel
471512	25 ft.	Brass
481059	25 ft.	Stainless Steel
471511	15 ft.	Brass
481058	15 ft.	Stainless Steel
481051	8 ft.	Brass
481057	8 ft.	Stainless Steel

# Coiled Nylon\*

Part No.	Length	Hose Coupling			
474043	50 ft.	Brass			
491515	25 ft.	Brass			
491514	15 ft.	Brass			
491513	8 ft.	Brass			

\* Recommend 4-25 ft. usable lengths

#### Manifolds

Manifolds are required whenever two to four respirators are connected to a single air source. MSA manifolds have quickdisconnect assemblies with automatic shut-off outlets.



Part No.	Description		
47370	Four-outlet Manifold Assembly with Foster(S) Quick-Disconnects		
84416	Two-outlet Manifold Assembly with Foster(S) Quick-Disconnects		
488914	Four-outlet Manifold Assembly less Quick-Disconnects		
84418	Two-outlet Manifold Assembly less Quick-Disconnects		

# **Pressure Regulator**

When an air-line unit is used with a plant air compressor system, the MSA pressure regulator reduces compressor pressure to the desired



operating pressure. The regulator maintains pressure on the outlet side until readjusted for use with inlet pressures of up to 125 psig.

#### Part No. Description

66716 Pressure Regulator

#### Inlet Pressure Gauge



MSA offers an inlet pressure gauge that enables a user to check pressure at the inlet of the MSA air-supply hose, thereby assuring that air pressure is within the certified range.

The gauge is supplied with quick-disconnect fittings to accommodate your air-line system. (Part numbers below include quick-disconnect plug and union adapter.)

Part No.	Description
476734	With Snap-tite(AL) fitting
476735	With Foster(S) or Schrader fitting
476737	With Hansen brass fitting
492586	Inlet Gauge less quick-disconnect and union adapter

# **Air-Line Filter**

The MSA air-line filter provides high-efficiency filtration of compressed air lines. In operation, it removes a minimum of 99 percent of 0.3 micron and larger particulates, including dusts, mists,



fumes, smokes and petroleum vapors. It does not remove carbon monoxide. The air-line filter can be used at inlet pressure up to 125 psig. The pressure drop is one psig at a maximum rated air flow of 25 cubic feet per minute (cfm).

Part No.	Description
81857	Air-line Filter
484923	Replacement Filter Kit



#### **Breathing Air Distribution System**

This system consists of: an air filter (with HEPA particulate filter and organic vapor elements), a pressure regulator, a pressure gauge and a 4outlet manifold. A sealed,



rugged, stainless steel case prevents contamination of interior components. Using external controls, water condensation can be drained directly from the filter bowl and manifold pressure can be adjusted without opening the system. *CAUTION: The Breathing Air Distribution System is not effective for removing carbon monoxide.* 

# Part No. Description

488113	Breathing Air Distribution System, (Quick-Disconnects
	must be ordered separately)
488118	"Toolbox" Carrying Handle Bar

#### Nosecups



Molded from a soft rubber compound that is resistant to facial oils, the optional nosecup helps reduce the possibility of lens fogging. The nosecup is particularly effective under conditions of

high humidity and/or low temperatures by inhibiting contact of the moist exhalation with the facepiece lens. A nosecup can be easily affixed to the facepiece without tools, and any size nosecup may be installed in any size Ultra Elite, Ultravue or Duo-Twin Facepiece resulting in a customized facepiece for more comfortable use.

Part No.	Description
810412	Medium nosecup for Ultra Elite Facepiece
810413	Large nosecup for Ultra Elite Facepiece
813138	Small nosecup for Ultravue Facepiece
813139	Medium nosecup for Ultravue Facepiece
813140	Large nosecup for Ultravue Facepiece

Welder's Hood

#### Welder's Hood

Glass yarn hood fits over the Welder's Adapter to protect the head, neck and shoulders from sparks.

486568

#### Spectacle Kit



For use by workers who must wear corrective lenses, the spectacle kit can be easily inserted into an Ultra Elite or Ultravue Facepiece. The kit includes a wire

support, rubber guide and one pair of metal frame spectacles. Desired adjustment is obtained by moving the spectacles in and out of the rubber guide and by moving the rubber guide up and down the wire support. One size of spectacle frame is used (S-7 shape, 44-mm lens size) with Universal Bridge Corrective lenses that can be obtained from local sources. The spectacle kit may be worn in conjunction with a nosecup.

Part No.	Description
804638	Ultra Elite Spectacle Kit (side wire support)
493581	Ultra Elite Spectacle Kit (center support)
454819	Ultravue Facepiece Spectacle Kit

#### Welder's Adapter

For eye protection in welding applications where respiratory protection is required, a welder's adapter can be easily installed over an Ultravue Facepiece lens. The clip-on style adapter can be easily removed if needed, whereas the integral adapter



model is used in place of the facepiece lens. Both models are made of polycarbonate and feature a flip-up lens with large  $4-1/2'' \times 5-1/4''$  (11.4 cm x 13.3 cm) vision area.

#### Part No. Description

472859	Clip-on Welder's Adapter for Ultravue Facepiece, complete with cover lens, less filter plate (see below)
470786	Integral Welder's Adapter for Ultravue Facepiece, complete with cover lens, less filter plate
806482	Clip-on Welder's Adapter for Ultra Elite Facepiece, with cover lens, less filter plate

#### Heat-Treated Rayfoe™ Filter Plates with Cover Lens

Part No.	Description
38346	Shade 6
38347	Shade 10
38277	Shade 12
38348	Shade 14



# Control Valve with Quick-Disconnect Assembly



High-pressure control valve is designed to deliver the required air flow to the facepiece at an inlet pressure range of 35-40 psig for hose lengths of 8 to 300 feet. Low-pressure control valve is designed to deliver the required air flow to the facepiece at an inlet pressure range of 10-15 psig for hose lengths of 8 to 50 feet. The valve includes an integral belt clip and male and female quick-disconnect assemblies. (See back page for parts information chart).



# **Breathing Tube**

The MSA Breathing Tube is designed to resist crushing and pinching. Made of synthetic rubber polymer, it is durable and chemicalresistant. It has numerous corrugations along the length of the tube which allow it to stretch for better head movement.

Part No.	Description	
457158	Breathing Tube	

# Ultra Elite Full Facepiece

Size	Black Hycar	Black Silicone	Head Harness	Nosecup
Small	493064	493072	Rubber	Yes
	491146	491505	E-Z Don	Yes
Medium	493020	493028	Rubber	Yes
	491145	491502	E-Z Don	Yes
Large	493108	493116	Rubber	Yes
	491147	491508	E-Z Don	Yes

# Ultravue Full Facepiece

(Rubber 5-point head harness is standard.)

	Black Hycar	Black Silicone		
Size			Nosecup	
Small	471218	480251	Yes	
Medium	457126	480247	Yes	
Large	471230	480255	Yes	

# Comfo Half-Mask Facepieces

(Cradle headbar	nd is standard.)		
Size	Black Hycar	Black Silicone	Headband
Small	465817	480126	Elastic
	480127	480130	Cradle
Medium	94331	480121	Elastic
	480122	480125	Cradle
Large	469130	480131	Elastic
	480132	480135	Cradle

# Welder's Comfo Half-Mask Demand Facepieces

(Cradle headband is standard.)

	Black	Black	
Size	Hycar	Silicone	Headband
Small	480745	480748	Elastic
	480749	480752	Cradle
Medium	480737	480740	Elastic
	480741	480744	Cradle
Large	480753	480756	Elastic
	480757	480760	Cradle

Replacement Harness for Welder's ComfoP/N 78362



# **MSA Parts Information Chart for Control Valve Components**

(High- & Low-Pressure Valves)

#### **Quick-Disconnects and Adapters**

AL=Aluminum	SST=Stainless Steel		ST=Steel		BR=Brass	
	Replacement Control Valve, complete with belt clip, male plug and female socket assembly	Replacement Control Valve, with belt clip, male plug, less female socket assembly	Male Plug 1/4" male NPT for Control Valve	Female Socket 1/4" NPT	Union Adapter 1/4 " NPT for connecting socket to MSA Air-Supply Hose	Female Socket Assembly (includes union adapter P/N 6954 and socket)
High-Pressure Valves						
Snap-Tite (AL)	460814	474022	66273	66272	69542	455019
Snap-Tite (BR)	471812	474023	630306	630305	69542	471777
Snap-Tite (SST)	471813	474024	629671	629673	808358	471778
Duff-Norton (BR)	473830	474029	630309	630308	69542	471780
Hansen (BR)	471815	474026	630312	630311	69542	471501
Hansen (SST)	473829	474028	473502	628768	808358	471779
Foster (ST)	471814	474025	56549	628770	69542	467044
Foster (BR)	473828	474027	473501	629980	69542	470194
CEJN Locking (Chrome-plated BR)	479065	479093	479020	631870	69542	479001
Snap-Tite Locking (Hard-coat anodized AL)	479067	479095	479021	_		479032*
Low-Pressure Valves						
Snap-Tite (AL)	463278	474031	66273	66272	69542	455019
Snap-Tite (BR)	471816	474032	630306	630305	69542	471777
Snap-Tite (SST)	471817	474033	629671	629673	808358	471778
Duff-Norton (BR)	473833	474038	630309	630308	69542	471780
Hansen (BR)	471819	474035	630312	630311	69542	471501
Hansen (SST)	473832	474037	473502	628768	808358	471779
Foster (ST)	471818	474034	56549	628770	69542	467044
Foster (BR)	473831	474036	473501	629980	69542	470194
CEJN Locking Chrome-plated BR)	479072	479100	479020	631870	69542	479001
Snap-Tite Locking (Hard-coat anodized AL)	479073	479101	479021			479032*

\* Note: These socket assemblies have the union adapter machined directly on the socket (one-piece design).

Note: This Bulletin contains only a general description of the products shown. While uses and performance capabilities are described, under no circumstances shall the products be used by untrained or unqualified individuals and not until the product instructions including any warnings or cautions provided have been thoroughly read and understood. Only they contain the complete and detailed information concerning proper use and care of these products.

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 Corporate Headquarters

 PO. Box 426, Pittsburgh, PA 15230 USA

 Phone
 412-967-3000

 www.MSAnet.com
 US.

 U.S. Customer Service Center

 Phone
 1-800-MSA-2222

 Fax
 1-800-967-0398

 MSA Canada

 Phone
 1-800-MSA-2222

 Fax
 905-238-4151

 MSA Mexico

 Phone
 52-55 535 9 4330

 MSA International

 Phone
 412-967-3354

 Fax
 412-967-3451

#### Offices and representatives worldwide For further information:

MSA