

# What You Need to Quantitatively Fit Test Various Brands of Self-Contained Breathing Apparatus Available in the USA

Application Note ITI-029

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(See TSI's [fit test adapters list](#) for information about adapters for other masks.)

## Mine Safety Appliances (MSA)

(800) 672-2222

MSA uses two basic facepieces for their line of SCBA. They are the Ultravue® mask and the newer Ultra Elite® mask. For more information on MSA Fit Test Adapters please refer to the MSA document 5555-486-MC.

### Ultravue® Mask

The [Model 8025-15 Fit Test Adapter](#) from TSI Inc. will include an adapter that temporarily replaces the respirator's speaker diaphragm. (Note: The 8025-15 adapter cannot be used if the Ultravue mask is equipped with MSA's ESP option.) Two P100 (HEPA) filters and a device for attaching them to the Ultravue mask are included in the kit. For Ultravue masks with ¼-turn MMR, use TSI's [Model 8025-15Q](#) which is identical to the [Model 8025-15](#) with the addition of a ¼-turn fitting.



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If you prefer to use a set of shared test masks, you can purchase factory-probed versions of the MSA Ultra-Twin<sup>®</sup> mask directly from MSA. Since the facepiece of the Ultra-Twin is identical to that of the Ultravue, you can use one to fit test for the other. You will need one test mask for each size your organization uses. Don't forget to order the P100 filters too.

Description	MSA No.		
	Small	Medium	Large
Probed Hycar Ultra-Twin Mask	471683	465457	471684
Probed Silicone Ultra-Twin Mask	482025	482024	482026
P100 Filters for Ultra-Twin	815175 (box of 10 filters)		

### Ultra Elite<sup>®</sup> Mask

MSA offers an adapter for the Ultra Elite. Order the MSA QuikChek<sup>®</sup> III Adapter as well as P100 (HEPA) filters and extra supplies. The identical adapter with P100 filter and supplies can be ordered from TSI as [Model 8025-22](#). If you have the ¼-turn quick disconnect version of the Ultra Elite, you will need the MSA QuikChek IV in addition to the QuikChek III. This combination is available from TSI as [Model 8025-22Q](#). If you have the Firehawk<sup>®</sup>, Airhawk<sup>®</sup>, or Blackhawk<sup>®</sup> version of the Ultra Elite, refer to the section further down in this document.

Description	MSA No.
MSA QuikChek III Fit Test Adapter	805078
Box of 6 P100 filters	491010
Replacement Kit (supplies)	803196
MSA QuikChek IV Quarter-turn Fitting	817446

### Firehawk<sup>®</sup>, Airhawk<sup>®</sup>, and Blackhawk<sup>®</sup> MMR Masks

This is basically an Ultra Elite mask with one of three different front end assemblies designed to accommodate a mask mounted regulator (MMR). The fit test adapter needed depends on which MMR version you have.

#### ¼-Turn MMR Connection

Fit Testing the ¼-turn MMR Connection requires the TSI [Model 8025-22Q Adapter Kit](#), or the manufacturer's adapter kit, Model 10107257, available directly from MSA.

#### Slide Version MMR Connection

Fit Testing the slide version requires the TSI Model 8025-31 Adapter Kit, or the manufacturer's adapter kit, model 10107229, available directly from MSA.

#### Push-to-Connect MMR Connection

Fit testing the push-to-connect version requires TSI Model 8025-31 Adapter Kit, or the manufacturer's adapter kit, Model 10107256(3), available directly from MSA.

## Scott Safety

(800) 247-7257

The Scott SCBA Model 2.2 and 4.5 use either the Scott-O-Vista, AV-2000® or AV-3000™ facepiece. In any case the Scott Adapter can be used. Two P100 (HEPA) filters are required. The identical adapter with P100 filters can be ordered from TSI as Model 8025-20.

Description	Scott No.
Probed Adapter (40mm Threaded)	805628-01
P100 Filters	642H (box of 6 filters)

The Scott SCBA Air-Pak® IIA uses the Scottoramic facepiece. Scott does not offer an adapter so a mask must be probed and then shared for fit testing. The following part numbers can be obtained from Scott:

Description	Scott No.
Scottoramic Mask	801450-40
Probe Kit	803119-01
Tool	27169-01
P100 Filter	604100-50

Scott will modify the mask at the factory if requested.

## International Safety Instruments (ISI)

(888) 474-7233 (Recently integrated with Avon Protection)

### For Ranger and Magnum SCBA

ISI manufactures an adapter that fits all Panaseal masks with snap-in regulators. This is the mask used on the Ranger, Magnum, and Magnum Plus SCBA. Be sure to order one P100 (HEPA) filter along with the adapter.

Description	ISI No.
QNFT Adapter	08925600
P100 Filter	03407100

### For any ISI mask that uses the Compact Demand Valve (CDV)

Any ISI SCBA facemask that uses the Compact Demand Valve (CDV) such as the Conventional or AirHood facemasks can be fit tested using an adapter manufactured by ISI. Order a P100 filter separately.

Description	ISI No.
CDV Fit Test Adapter	189013
P100 Filter	03407100

## For Viking or Vanguard SCBA using the Airswitch Mask

ISI does not manufacture a fit test adapter for masks with the airswitch feature. Instead, they offer probed test masks in three sizes. Each kit includes a P100 (HEPA) filter.

ISI Fit Test Kits – Mask Size	ISI Kit No.
Small	171066
Medium	171065
Large	171067

## Sperian (Survivair)

(800) 343-3411

**For Survivair SCBA masks that use panther-style *mask mounted* regulators (MMR),** you will need three different parts that all combine to make a complete adapter: a Fit Test Adapter, an MMR Adapter and two P100 (HEPA) filters. The TSI Model 8025-13 includes all these parts and more in one kit.

To Fit Test	You Need Survivair No.
Classic facepiece (panther-style MMR version)	962920 Fit Test Adapter and 962900 MMR Adapter and two 105000 filters (P100)
20/20 facepiece (panther-style MMR version)	

**For older Survivair SCBA and PAPRs using *belt/harness-mounted* regulator/blowers** (e.g., Mark 2 SCBA), you will have to obtain a probed test mask and share it between people. There is no adapter available for this facepiece because the hose that is permanently attached to the facepiece makes designing an effective adapter impossible. There are two ways to obtain a probed mask:

1. Purchase the entire factory-probed facepiece assembly directly from Survivair. Be sure to order one of each size your organization issues. Do not forget to buy some P100 filters.
2. Make your own probed test mask using a facepiece you already have along with three items from Survivair: a filter adapter that allows you to attach a P100 filter to the end of the hose; a factory-probed faceplate lens to install on the mask in place of the standard faceplate lens; and a P100 filter. You will need at least one test mask in each size your organization issues.

To Fit Test	You Need Survivair No.
Classic facepiece (hose version)	980500 filter adapter and 941899 probed faceplate lens and 105000 filter (P100)
20/20 facepiece (hose version)	980500 filter adapter and 962253 probed faceplate lens and 105000 filter (P100)

## North Safety

(800) 430-4110

North 80004 and 80004S can be fit tested using the North 7700-21 adapter along with a 7700-24 facepiece converter. For older 80003 facepieces use the 7700-21 adapter along with a 7700-25 adapter. The 80003 uses a standard 40-mm thread so the TSI model 8025-CEN will also work. For North 85400A, 85500A and 800 series SCBA use the 7700-21 along with the 7700-23. The TSI Model 8025-17 kit includes the 7700-21, 7700-23 and P100 filters.

Description	North No.
P100 Filters	N7500-8 (box of 4 filters)
80004, 80004S, 85400A, 85500A, 800 Series SCBA Masks Fit Test Adapter with converter	7700-21 with 7700-23
Older 80003 Masks	7700-21 with 7700-25

## Interspiro

(800) 468-7788

Interspiro has developed fit test adapters for the Spiromatic, and Spiromatic S-Series SCBA masks that allow quantitative fit testing with an individual's own facepiece. The adapter temporarily replaces the regulator assembly that is usually used on the SCBA facepiece. A P100 (HEPA) filter is included. The Spiromatic adapter can be ordered from TSI as Model 8025-21 and the Spiromatic S-Series adapter as Model 8025-21S.

Description	Interspiro No.
Spiromatic Fit Test Adapter (not for "S" versions)	336-890-378
Spiromatic S-Series (all "S" versions)	95991

## Dräger

(800) 922-5518

Dräger manufactures an adapter for their Panorama and Futura SCBA facepieces with plug-in connection. This is the mask used on the **PA-80 SCBA**. Be sure to order one P100 (HEPA) filter along with the adapter. The same adapter is available as a complete kit from TSI as Model 8025-26.

Description	Dräger No.
QNFT Adapter	4055670
P100 Filter	4055497

## CairnsAIR

This company is no longer doing business.

CairnsAIR manufactured an adapter kit that fitted all of their SCBA masks. There is no known replacement.

Description	CairnsAIR No.
Fit Test Adapter	3100042-42

## Pro-Tech

This company is now integrated with Sperian.

Pro-Tech manufactured an adapter kit that fitted all of their masks. There is no known replacement.

Description	Pro-Tech No.
1490 series (H), 1590 series (H), and 1690 series (F)	QNFT Adapter

## Respiratory Systems, Inc.

This company is no longer doing business.

Respiratory Systems, Inc. manufactured adapter kits for their masks. There is no known replacement.

Description	Respiratory Systems, Inc. No.
C-Flex	L-1561-75
Lifear STD, Lifear XL	L-4000-75

## Allegro Safety

Allegro Safety manufactures their own quantitative fit test adapters.

Description	Allegro Safety No.
9901 Full-face	9901-21 (QNFT)
9920 Half-face	9901-20 (QLFT)

## Can't find the manufacturer?

Check with the CDC and their listing of respirator manufacturers at

<http://www2.cdc.gov/drds/cel/prior.htm>.

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