



# Technical Datasheet

## RPB® Z4® Respirator

### DESCRIPTION

The Z4 weld/grind headtop is a supplied air or powered air respirator which provides the user with protection while performing heavy industry welding related applications, including eye protection from weld arc, respiratory protection from airborne contaminants while performing or inspecting their work, and eye and hearing protection while cutting or grinding.

This respirator does not require face fit testing.

#### Type description

Loose fitting continuous flow supplied air respirator (NIOSH only) or powered air purifying respirator.

#### The Z4 offers a number of optional accessory items, including:

	Part #
Quiet-Slim™ ear defender system <small>(under the cape so user maintains APF 1000(US)/TH3/2 (EU) respiratory protection)</small>	18-524
Vision-Link™ helmet light	16-901
Comms-Link™ in-helmet communication system	16-922
Bump cap	15-850
FR breathing tube cover	04-814
Shade 5 side windows	15-821-5
Side window blockers	15-821
Comfort side padding system	15-848

#### Required components

- Z4 respirator head-top
- Cape or face seal
- Breathing tube
- Flow control device and breathing airline, or RPB® PAPR

#### Application ranges (including but not limited to the following)

Welding, grinding, arc spray/metalization, plasma/oxy acetylene cutting, lancing and burning.



RPB Z4 respirator with FR shoulder cape.

### APPROVALS & STANDARDS

**ISO9001**  
CERTIFIED COMPANY

National Institute for Occupational Safety and Health  
**NIOSH**  
PAPR & SAR Type C

**ANSI**  
S3.19  
HEARING PROTECTION  
Only in conjunction with 18-524 earmuffs.  
**Z87+**  
EYE & FACE PROTECTION  
**Z87W**  
WELDING EYE PROTECTION

**SEI**  
Certified Model  
Modèle certifié  
**CSA Z94.3-15**  
EYE & FACE PROTECTION  
Class 7D and 7B Respirator Facepiece  
**PROTECTION DES YEUX ET DU VISAGE**  
*Masque respiratoire classe 7D et 7B*

**CE 2797**

EN12941:1998  
+A2:2008 TH3/2 P R SL  
RESPIRATORY PROTECTION

EN352-1:2002  
HEARING PROTECTION  
Only in conjunction with 18-524 earmuffs.

EN166:2001 CLASS 1B  
EYE & FACE PROTECTION

EN379:2003+A1:2009  
and EN175:1997  
WELDING EYE PROTECTION

EN812:2012  
HEAD PROTECTION  
Only in conjunction with 15-850 Bump Cap.

**BSI Certified Product**  
**AS/NZS 1716:2012**  
**BMP# 714303**  
RESPIRATORY PROTECTION

**AS/NZS 1337.1:2010**  
**BMP# 714304**  
EYE & FACE PROTECTION

**AS/NZS 1338.1:2012**  
**BMP# 714305**  
WELDING EYE PROTECTION

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## RPB® Z4® Respirator (continued)

### PRODUCT PACKAGES

NIOSH approved packages	Part #
Z4 with face seal and PX5® PAPR	15-018-11-FR
Z4 with shoulder cape and PX5® PAPR	15-018-21-FR
Z4 with face seal	15-010-11
Z4 with shoulder cape	15-010-21

Additional configurations are available.

CE & AS/NZS approved packages	Part #
Z4 with face seal	15-010-11-CE
Z4 with shoulder cape	15-010-21-CE

Additional configurations are available.

### REQUIRED COMPONENT OPTIONS

#### Fittings and couplers

NIOSH	RPB Quick Connect
	Schrader Twist Connect
	RPB RZ Quick Connect

NIOSH approved flow control devices	Part #
C40™ Climate Control Device	03-501
Constant Flow Valve	03-101
PX4 Air® PAPR	03-901-FR
PX5® PAPR	03-801-FR

CE & AS/NZS approved flow control devices	Part #
PX4 Air® PAPR (TH3)	03-901-G
PX5® PAPR (TH2)	03-801-G

Cape options	Part #
FR Face Seal	15-711
FR Shoulder Cape	15-721

### REQUIRED COMPONENT OPTIONS (continued)

#### NIOSH approved breathing airlines - standard hose

Fitting type	Hose length	Part #
RPB	25ft breathing airline	NV2028
RPB	50ft breathing airline	NV2029
RPB	100ft breathing airline	NV2027
Schrader	25ft breathing airline	04-342-25
Schrader	50ft breathing airline	04-342-50
Schrader	100ft breathing airline	04-342-100
RZ	25ft breathing airline	04-352-25-RZ
RZ	50ft breathing airline	04-352-50-RZ
RZ	100ft breathing airline	04-352-100-RZ

Standard hoses maximum working length - 300ft

Max working pressure - 300psi

#### NIOSH approved breathing airlines - recoil hose

Fitting type	Hose length	Part #
RPB	15ft recoil hose	04-412-15
RPB	25ft recoil hose	04-412-25
Schrader	15ft recoil hose	04-442-15
Schrader	25ft recoil hose	04-442-25

Recoil hose maximum working length - 1 hose

Max working pressure - 300psi

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## RPB® Z4® Respirator (continued)

### LENS OPTIONS

#### Auto Darkening Lens (ADF) Part #

ADF - standard with 15-010 Z4 assembly 16-871

#### Passive fixed shade lens - parts required Part #

1. Z4 visor without ADF, with FR face seal 15-000-11

Z4 visor without ADF, with FR face seal - CE 15-000-11-CE

Z4 visor without ADF, with FR shoulder cape 15-000-21

2. Fixed shade lens frame 16-877

3. Passive fixed shade lens

Shade 5 16-877-5

Shade 8 16-877-8

Shade 9 16-877-9

Shade 10 16-877-10

Shade 11 16-877-11

Shade 12 16-877-12

#### Protective lenses (to protect ADF and fixed shade lenses) Part #

Front impact lens 16-872

(for both ADF and fixed shade lenses)

Front impact lens - Aluminum Plated 16-872-AL

Shade 4 (for high heat applications)

Rear lens (for ADF only) 16-873

Rear lens (for fixed shade only) 16-878

#### Magnifying lenses Part #

1.0x 13-072-1

1.5x 13-072-1.5

2.0x 13-072-2

2.5x 13-072-2.5

### SPECIFICATIONS

#### Assigned Protection Factor

NIOSH APF 1000+

CE APF 40 - TH3 (NPF 500) w/PX4

APF 20 - TH2 (NPF 50) w/PX5

#### Materials

Nylon Injection molded parts

Polyurethane Silencer foam, comfort padding

MDPE Head suspension

Polycarbonate Safety lens, shade 5 side windows

Glass ADF Lens, fixed shade lens

FR Cotton Cape, face seal

The Z4 is latex free.

#### Noise rating (when used with the 18-524 ear defenders)

NRR: 21 / SNR: 28

#### Operating temperature

14°F to 140°F / -10°C to 60°C

#### Storage temperature

14°F to 113°F / -10°C to 45°C <90%RH

#### Weight

Z4 with cape and ADF lens 1.77lbs/805g

#### Warranty

1 year for Z4 Weld Visor. 3 years for ADF lens.

Conditions apply, visit [rpbsafety.com/industrial/legal](http://rpbsafety.com/industrial/legal) for full details.

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## RPB® Z4® Respirator (continued)

### ADF technical data

Model	RPB ADF
Viewing area	2.66 x 3.89 in 67.6 x 98.8mm
ADF overall dimensions	4.49 x 4.57 x 0.47 in 114 x 116.2 x 11.9mm
Weight	4.59oz / 130g
Open state shade	3 (bright mode)
Closed state shade	9-13 (dark mode)
Switching time from light to dark	0.1 ms (23°C / 73°F) 0.1 ms (55°C / 131°F)
Switching time from dark to light	0.15s / 1.0s
UV / IR protection	Maximum protection in light and dark modes
Operating temperature	23°F to 131°F -5°C to 55°C
Storage temperature	-4°F to 157°F -20°C to 70°C
Power supply	Solar cells, 2 pcs. replaceable 3V LI batteries (CR2032)
Classification in accordance with EN379	Optical class = 1 Scattered light = 1 Homogeneity = 1 Viewing angle dependence = 2
Standard	EN379:2003+A1:2009
Certifications	CE, ANSI, compliance with CSA



### Employers

Read the Z4 respirator and the flow control device instruction manuals and carry out the employer responsibilities.

Provide the manuals to all users.

### Product users

Read the Z4 respirator and the flow control device instruction manual and follow the product user safety instructions.

Manuals are regularly updated.

### Current version of manual and for other languages:

[rpbsafety.com/industrial/resources](http://rpbsafety.com/industrial/resources)

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