



# Technical Data Sheet

## Dräger X-plore® 3500

### Air Purifying Respirator

1.0 General Data				
1.1 Manufacturer	Dräger Safety AG & Co. KGaA			
1.2 Designation	Dräger X-plore® 3500 Half Mask Respirator			
1.3 Dräger Part Number	S: R 55 351	M: R 55 350	L: R 55 352	
EAN Code	4026056001064	4026056001071	4026056001088	
1.4 Intended Use	Respirator for protection against particulates, gases and vapors in conjunction with suitable respiratory filters. The scope is limited by the product documentation, technical standards, installed application rules and choice of respiratory filters.			
1.5 Relevant Standards	EN 140:1998	Federal register 42 CFR part 84 <sup>(1)</sup>	AS/NZS 1716:2003	GOST R 12.4.190-99
1.6 Certification Body	DEKRA EXAM GmbH Dinnendahlstr. 9 44809 Bochum Germany Reference number: CE 0158	National Institute for Occupational Safety and Health (NIOSH) 626 Cochran's Mill Road Pittsburgh, PA 15236 USA	SAI Global Assurance Services Ltd Winterhill House Snowdon Drive Milton Keynes MK6 1AX United Kingdom	VNIIS, JSC 3/10, Electrichesty Ln. Bld. 1 Moscow 123557 Russia

2.0 Design & Construction				
2.1 Filter Connection	Dräger-specific bayonet connection			
2.2 Material	Mask Body:	Thermoplastic Elastomer (TPE) and Polypropylene		
	Mask Yoke:	Polypropylene		
	Head Cradle:	Thermoplastic Elastomer (TPE) and Polypropylene		
	Head Strap:	Polyester / Elastodien / Cotton		
	Inhalation Valves:	Natural Rubber		
	Exhalation Valve:	Nitrile Rubber (NBR)		
2.3 Construction	The X-plore® 3500 half mask consists of six main components: mask body, mask yoke, head cradle, head straps, exhalation valve and (2) inhalation valves. The mask body is constructed of a soft component and a hard component that is specially bonded to maintain its form. The mask yoke covers the front of the mask body and is a guide for the routing of the head straps. The head cradle utilizes a hard component for the head strap adjustment that specially bonded to a soft component that fits on crown of head. The inhalation valves are flat discs that only allows air into the mask and the exhalation valve is of a stepped design to apply even sealing pressure that only allows air to exit the mask.			
2.4 Working Principle	The half face mask, in combination with two breathing filters, offers respiratory protection against potentially hazardous gases, vapors and/or particles. Scope and effectiveness of respiratory protection results from the combination of half mask with suitable and certified respiratory protective filters, along with following local regulations on use limitations. The sealing line on the inside of the mask body conforms to the face of the wearer along the cheeks, over the nose and under the chin. A head harness with adjustable straps and a clasp firmly holds the mask onto the face. During inhalation, ambient air passes through the filters where it is "cleaned," and then into the mask. During exhalation, air passes through the exhalation valve only since the inhalation valves close. This prevents exhaled humidity from affecting the filters and reduces "dead space."			
2.5 Sizes	Small, Medium and Large			
2.6 Service-Life	Only certain components (e.g. exhalation valve) must be periodically replaced. See Instructions For Use for details. There are no time limitations on mask materials assuming proper storage, maintenance and cleaning as stated in IFU. Damage and wear are outside of this statement.			
2.7 Dimensions (approx.)	Size: Small	Height: 115mm	Width: 104mm	Depth: 72mm
	Size: Medium	Height: 128mm	Width: 103mm	Depth: 73mm
	Size: Large	Height: 139mm	Width: 109mm	Depth: 74mm
2.8 Weight (approx.)	S/M/L	95g	99g	103g

3.0 Performance	
3.1 Inhalation Resistance	< or = 0.5 mbar @ 30 l/min constant flow < or = 1.3 mbar @ 95 l/min constant flow < or = 2.0 mbar @ 160 l/min constant flow
3.2 Exhalation Resistance	< or = 3.0 mbar @ 160l/min constant flow
3.3 Temperature Resistance	to EN 140 (pre-conditioned at +70°C and -30°C and t hen tested)
3.4 Flammability	to EN 140 (exposed to 800°C flame and must not burn for > 5s after removed)
3.5 Speech Diaphragm	n/a
3.6 Inward Leakage	< or = 2.0% average (to EN 140)

<b>4.0 Documentation</b>	
4.1 Identification	<ul style="list-style-type: none"> <li>- "S" or "M" or "L" on the mask body</li> <li>- "TPE" on inside of mask body</li> <li>- "Dräger X-plore 3500" on inside of mask body</li> <li>- CE marking on inside of mask body ("EN140:1998 CE 0158")</li> <li>- "Dräger" on mask yoke</li> </ul>
4.2 Instructions	<p>Each unit contains an instruction booklet in the following languages: English, German, French, Spanish, Portuguese, Italian, Dutch, Norwegian, Swedish, Danish, Finnish, Greek, Turkish</p> <p>Additionally, a NIOSH version in English, French, Spanish</p>

<b>5.0 Packaging</b>	
5.1 Packaging	Durable, color printed carton, marked with: features, application uses, manufacturer location, use warning and relevant approvals. The closing label includes the product number, name, EAN code, control number and manufacturing location.
5.2 Packing Unit	1 Half mask per box Kits are also available that include a mask with cartridges for certain applications

<b>6.0 User Notes</b>	
6.1 System Usability	Suitable with certified respiratory filters with Dräger-specific bayonet connection (series Dräger X-plore® bayonet)
6.2 Limitations	This mask meets the minimum requirements according to specified standards (see label). It should be noted that laboratory test values may significantly differ from those that are achieved in practice. The user must read and understand all instructions for use. In addition, the knowledge of all relevant application rules is absolutely necessary (in particular the limits of use for masks and filter units). More information will be made available upon request.

(1) In connection with approved respiratory filters (see Approval Label).