

Technical Data Sheet

Dräger X-plore® 8700 EX

North America

Powered Air-Purifying Respirator

1.0 General Data																																		
1.1 Manufacturer	Dräger Safety AG & Co. KGaA																																	
1.2 Designation	Dräger X-plore 8700 EX Powered Air Purifying Respirator																																	
1.3 Dräger part number	R59550																																	
GTIN-Code	04026056021512																																	
1.4 Intended use	The Powered Air Purifying Respirator is used to filter hazardous substances from the ambient air and is suitable for use in explosive areas. Depending on the type of filter used, it can protect against various gases, vapors, and particles or combinations hereof.																																	
1.5 Functional description	The powered air purifying respirator filters the ambient air and makes it available as breathable air. The device continuously takes in ambient air through the filter. The filter absorbs harmful substances, depending on the filter type. This way, the ambient air is recycled and finally reaches the facepiece. There it is available as breathable air. A continuous overpressure in the facepiece prevents contaminated ambient air from penetrating.																																	
1.6 Relevant Standards	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Standard</th> </tr> </thead> <tbody> <tr> <td>Ex ib IIB T4 Gb Ex ib IIIB 135°C Db Class I, Zone 1, AEx ib IIB T4 Gb Zone 21, AEx ib IIIB 135°C Db</td> <td></td> </tr> <tr> <th colspan="2">Applicable Requirements</th> </tr> <tr> <td>CSA C22.2 No. 61010-1-12, Rev May 11, 2012</td> <td>Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition</td> </tr> <tr> <td>CAN/CSA-C22.2 No. 60079-0:19</td> <td>Explosive Atmospheres - Part 0: Equipment - General requirements</td> </tr> <tr> <td>CAN/CSA-C22.2 No. 60079-11:14</td> <td>Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "i"</td> </tr> <tr> <td>UL 61010-1, 3rd ed, Rev May 11, 2012</td> <td>Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition</td> </tr> <tr> <td>ANSI/UL 60079-0:2020</td> <td>Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements</td> </tr> <tr> <td>ANSI/UL 60079-11:13</td> <td>Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"</td> </tr> <tr> <td>Approval designation device</td> <td>APR 00**</td> </tr> <tr> <td>Approval designation battery</td> <td>LBT 04**</td> </tr> <tr> <td colspan="2">The X-plore 8700 blower unit must not be used in potentially explosive atmospheres with the Welding visor (R59940), Welding belt (R59720), Hose cover, disposable (R59670) and Tyvek protective hood (R55354).</td> </tr> </tbody> </table>	Standard		Ex ib IIB T4 Gb Ex ib IIIB 135°C Db Class I, Zone 1, AEx ib IIB T4 Gb Zone 21, AEx ib IIIB 135°C Db		Applicable Requirements		CSA C22.2 No. 61010-1-12, Rev May 11, 2012	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition	CAN/CSA-C22.2 No. 60079-0:19	Explosive Atmospheres - Part 0: Equipment - General requirements	CAN/CSA-C22.2 No. 60079-11:14	Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "i"	UL 61010-1, 3rd ed, Rev May 11, 2012	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition	ANSI/UL 60079-0:2020	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements	ANSI/UL 60079-11:13	Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"	Approval designation device	APR 00**	Approval designation battery	LBT 04**	The X-plore 8700 blower unit must not be used in potentially explosive atmospheres with the Welding visor (R59940), Welding belt (R59720), Hose cover, disposable (R59670) and Tyvek protective hood (R55354).										
Standard																																		
Ex ib IIB T4 Gb Ex ib IIIB 135°C Db Class I, Zone 1, AEx ib IIB T4 Gb Zone 21, AEx ib IIIB 135°C Db																																		
Applicable Requirements																																		
CSA C22.2 No. 61010-1-12, Rev May 11, 2012	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition																																	
CAN/CSA-C22.2 No. 60079-0:19	Explosive Atmospheres - Part 0: Equipment - General requirements																																	
CAN/CSA-C22.2 No. 60079-11:14	Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "i"																																	
UL 61010-1, 3rd ed, Rev May 11, 2012	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition																																	
ANSI/UL 60079-0:2020	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements																																	
ANSI/UL 60079-11:13	Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"																																	
Approval designation device	APR 00**																																	
Approval designation battery	LBT 04**																																	
The X-plore 8700 blower unit must not be used in potentially explosive atmospheres with the Welding visor (R59940), Welding belt (R59720), Hose cover, disposable (R59670) and Tyvek protective hood (R55354).																																		
Ingress Protection	IP 65 (6-dust-tight, 5-water jets) (with inserted filter and battery)																																	
2.0 Design & Construction																																		
2.1 Design	A complete device includes: - blower unit - battery - facepiece (helmet, visor, hood, half or full face mask) - breathing hose - carrying system - charger																																	
2.2 Blower unit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Dimensions (LxWxH)</td> <td>250 x 84 x 235 mm (incl. splash guard lid)</td> </tr> <tr> <td>Weight</td> <td>940 g (incl. standard battery and splash guard lid 1,530 g)</td> </tr> </tbody> </table>	Dimensions (LxWxH)	250 x 84 x 235 mm (incl. splash guard lid)	Weight	940 g (incl. standard battery and splash guard lid 1,530 g)																													
Dimensions (LxWxH)	250 x 84 x 235 mm (incl. splash guard lid)																																	
Weight	940 g (incl. standard battery and splash guard lid 1,530 g)																																	
2.3 Battery	<table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Technology</td> <td colspan="2">Lithium-Ion-Battery</td> </tr> <tr> <td>Operating temperature</td> <td colspan="2">-10 °C to +50 °C</td> </tr> <tr> <td>Storage temperature</td> <td colspan="2">-20 °C to +50 °C</td> </tr> <tr> <td>Charging temperature</td> <td colspan="2">0 °C to +50 °C</td> </tr> <tr> <td>Dimensions (LxWxH)</td> <td colspan="2">210 x 60 x 31 mm</td> </tr> <tr> <td>Charging time</td> <td colspan="2"><4 hours (in 2 hours 80 % can be reached)</td> </tr> <tr> <td>Rated period of service</td> <td>> 4 h (Standard battery)</td> <td>> 8 h (High capacity battery)</td> </tr> <tr> <td>Rated voltage</td> <td colspan="2">10,8 V</td> </tr> <tr> <td>Rated capacity</td> <td>3.35 Ah (Standard battery)</td> <td>6.70 Ah (High capacity battery)</td> </tr> <tr> <td>Output power</td> <td>36 Wh (Standard battery)</td> <td>72 Wh (High capacity battery)</td> </tr> <tr> <td>Weight</td> <td>480 g (Standard battery)</td> <td>560 g (High capacity battery)</td> </tr> </tbody> </table>	Technology	Lithium-Ion-Battery		Operating temperature	-10 °C to +50 °C		Storage temperature	-20 °C to +50 °C		Charging temperature	0 °C to +50 °C		Dimensions (LxWxH)	210 x 60 x 31 mm		Charging time	<4 hours (in 2 hours 80 % can be reached)		Rated period of service	> 4 h (Standard battery)	> 8 h (High capacity battery)	Rated voltage	10,8 V		Rated capacity	3.35 Ah (Standard battery)	6.70 Ah (High capacity battery)	Output power	36 Wh (Standard battery)	72 Wh (High capacity battery)	Weight	480 g (Standard battery)	560 g (High capacity battery)
Technology	Lithium-Ion-Battery																																	
Operating temperature	-10 °C to +50 °C																																	
Storage temperature	-20 °C to +50 °C																																	
Charging temperature	0 °C to +50 °C																																	
Dimensions (LxWxH)	210 x 60 x 31 mm																																	
Charging time	<4 hours (in 2 hours 80 % can be reached)																																	
Rated period of service	> 4 h (Standard battery)	> 8 h (High capacity battery)																																
Rated voltage	10,8 V																																	
Rated capacity	3.35 Ah (Standard battery)	6.70 Ah (High capacity battery)																																
Output power	36 Wh (Standard battery)	72 Wh (High capacity battery)																																
Weight	480 g (Standard battery)	560 g (High capacity battery)																																

2.4	Facepieces	The following loose and tight-fitting facepieces are available: <ul style="list-style-type: none"> ● Dräger X-plore 8000 Helmets and (Welding) Visors ● Dräger X-plore 8000 Hoods as Standard or Premium hood in two sizes (S/M, L/XL) and two versions (short, long) ● Dräger X-plore 4740 Half masks ● Dräger X-plore 6300, 6530 und 6570, and Dräger FPS 7000 Full face masks 			
2.5	Breathing hoses	Material helix:	PA		
		Material flex tape:	TPU-Ether		
		Facepiece	Type of hose	Dimensions (Length / Outer-Ø)	Weight
		Helmet/Hood	Standard hose	688 mm / Ø 32 mm	164 g
			Flexible hose	442/791* mm / Ø 32 mm	225 g
		Half and Full face mask	Standard hose	952 mm / Ø 32 mm	185 g
	Flexible hose		615/1,147* mm / Ø 32 mm	232 g	
* Length specifications for flexible hoses: block length/hanging.					
2.6	Carrying system		Length range	Weight	
		X-plore 8000 Standard belt features a textile belt strap and snap fasteners to attach an optional comfort pad.	approx. 720 - 1,400 mm	365 g	
		X-plore 8000 Decon belt features a smooth plastic webbing and is especially suitable for decontaminating.	approx. 700 - 1,400 mm	371 g	
		X-plore 8000 Welding belt features a leather belt strap and is especially designed for	approx. 800 - 1,350 mm	450 g	
There is an optional belt extension (350 mm) available for the X-plore 8000 Standard belt and the X-plore 8000 Decon belt. Likewise, all belts can be extended by a Shoulder carrying system (R59740) for an improved weight distribution.					
2.7	Filter	For the various applications either particle, gas or combination filters are available.			
3.0 Technical data					
3.1	Flow rate	Automatic identification of the attached facepiece and corresponding adjustment of the minimum flow rate. The flow rate is manually adjustable in three levels : Hoods / Helmets / Visors 170/ 190/ 210 L/min Half / Full face masks 115/ 130/ 145 L/min			
3.2	Alarm system	Malfunctions during operation are indicated by warning devices. <ul style="list-style-type: none"> ● Optical alarm (display on control panel) ● Acoustic alarm (≥ 80 dB(A) @ 1m) ● Vibration alarm 			
3.3	Operating temperature	-10 °C to +50 °C			
3.4	Storage temperature	-20 °C to +60 °C (without battery and filter)			
3.5	Operating / storage	≤ 95 % relative humidity			
3.6	Noise level	≤ 64 dB(A)			
3.7	Operating altitude	-500 m to +2,000 m1) above sea level 1) Ambient pressure for ex protection approval acc. to IEC 60079 limited to 1.1 bar (corresponds to approx. +2,000 m above sea level). Without ex protection usable up to +3,000 m above sea level.			
4.0 Documentation					
4.1	Marking	Name plate blower unit: Product name, International Protection Code, approval marking, Symbol "Follow instructions for use", WEEE symbol "Separate collection of electrical and electronic equipment", Country of production, Manufacturer, CE marking, DataMatrix code with part and serial number, Serial number, Part number, Use indoors only, not outdoors, Maximum ambient temperature, Electrical data, Plug assignment, Recycling symbol, Warning labeling			
4.2	Instructions for use	Each packaging unit contains an IFU in the following languages: English, German, French, Spanish, Portuguese, Italian, Dutch, Danish, Finnish, Norwegian, Swedish, Polish, Russian, Croatian, Slovenian, Slovakian, Czech, Bulgarian, Romanian, Hungarian, Turkish, Chinese.			
5.0 User notes and limitations					
		The devices conform to the minimum requirements of the standard indicated by the class and type of the filter it is marked with. It must be noted that laboratory values can differ from those measured in practice. This may result in longer or shorter breakthrough times. The user must read and understand the instructions for use. Additionally, the knowledge of all relevant application rules is mandatory (see in particular, the restrictions on the use of filtering devices). The X-plore 8700 blower unit must not be used in potentially explosive atmospheres with the Welding visor, the Standard hood, long and the Hose cover, disposable.			