



COVID-19 Update: Draeger FPS7000 Combined Breathing Apparatus Facemask and Respirator

Draeger FPS7000 Combined Breathing Apparatus Facemask and Respirator

6th April 2020

This guidance note is designed to assist Draeger users in the use of the FPS7000 facemask as a respirator. It is worth noting that this is only an immediate option for fire and rescue services (FRS) which currently use the FPS7000 ESA face mask allowing the connection of RD40 fitment P3 filter. A list of those services that have this particular combination is attached as Appendix 1.

It is noted that there is currently no standard available which allows the certification of a Positive Pressure Facemask to be used as a Respirator, however, attention is drawn to the attached letter from the Health & Safety Laboratory on this issue.

For FRS which do not use the ESA connection and instead use the 'push fit' Lung Demand Valve (LDV) connection, there are a limited number of options which can be considered to utilise the face mask as a respirator, these are:

- Replace the facemask and LDV equipped with an ESA connector (delivery lead times will apply).
- Change the face mask front port and LDV to an ESA version (delivery lead times and possible engineer lead times will apply).

As mentioned above, to further support this procedure an FRS has employed the services of the Health and Safety Laboratory to carryout quantitative Portacount testing of a Firefighter donning their FPS7000 ESA mask in line with the donning procedure in DCOL-2-2004. Portacount tests were carried out when the mask was used as a SCBA mask and as a respirator whilst the Firefighter completed a number of activities, the results of which are captured in (Appendix 2).

Draeger have a limited stock of the respirator attachments should an FRS wish to consider using their FPS7000 masks as a respirator and are looking at shortening delivery times for grater number of units should they be required. Current approximate delivery times are in the region of six weeks for these products.

Fire and Rescue Services with the PFS 7000 facemask and the ESA Connector

| FRS | Connector |
|--|------------------|
| Scottish FRS | ESA |
| Bedfordshire & Luton FRS | ESA |
| Hampshire FRS | ESA |
| Warwickshire FRS | ESA |
| London FB | ESA |
| Royal Berks FRS | ESA |
| Beds FRS | ESA |
| Leicestershire FRS | ESA |
| Northants FRS | ESA |
| Buckinghamshire FRS | ESA |
| Kent FRS | ESA |
| Norfolk FRS | ESA |
| Hampshire FRS | ESA |
| Isle of Wight FRS | ESA |
| West Sussex FRS | ESA |
| Surrey FRS | ESA |
| Dorset and Wiltshire FRS | ESA |
| Cheshire FRS | ESA |
| Greater Manchester FRS | ESA |
| Lancashire FRS | ESA |
| Northumberland FRS | ESA |
| Hereford & Worcestershire FRS | ESA |
| Staffordshire FRS | ESA |
| Cornwall FRS | ESA |
| West Midlands FRS | ESA |

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3 January 2007

Dear [REDACTED]

Fit testing of the new Drager FPS7000 ESA combined BA/respirator facemask for the [REDACTED]

Background

HSL was asked for assistance in carrying out a small number of fit tests in conjunction with the DCOL fitting procedure to check whether the new Drager FPS7000 ESA facemask is likely to raise issues over the suitability of the DCOL procedure for assessing the fit of the new facemask when used as a respirator.

Following the fit testing day at HSL, I have summarised the main findings below, and have compiled two tables of the fit test results, which are attached. Table 1 lists the fit factor results of the fit tests, and Table 2 contains observations noted by Shirley Frost and myself whilst watching the firefighters don the facemasks, conduct the DCOL fit checking procedure and during and after the Portacount fit tests.

A total of 20 fit tests were conducted, 13 following donning the facemask as a BA mask and after completion of the DCOL procedure, and 7 following donning the facemask fitted with a filter, i.e. as a respirator.

Fit tests on the New Drager FPS7000 ESA facemask following the DCOL procedure

10 out of 11 fit test conducted following a successful DCOL fit check returned fit factors >2000. On test No. 7, firefighter [REDACTED] returned a fit factor <2000 during the talking exercise. This particular firefighter was talking at quite a quick pace. The fit factors measured in the previous and following exercises were well in excess of 2000. Because of *wearer generated particles* which can be a particular problem during the talking exercise, this test would normally have been repeated before being classified as a failure. It should also be noted that the initial test by firefighter Mancuso was a pass.

Fit tests on the New Drager FPS7000 ESA facemask fitted as a respirator

Six fit tests were performed on the FPS7000 fitted with either a multi-type gas filter or a NIOSH approved CBRN filter. The weights of these filters were approx. 330g. The facemask was donned and a negative pressure (i.e. suck-down) fit check was performed. Once the firefighter was happy with the fit, a fit test was then conducted. Five of these fit tests returned fit factors >2000. On test No. 14, firefighter [REDACTED] returned a fit factor

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<2000 during the deep breathing exercise. As with the previous 'failed' fit test, this particular firefighter was exercising at a quick pace and taking very deep breaths. Following this fit test, the normal and deep breathing exercises were repeated - without removal of the facemask - and fit factors >2000 were achieved.

From the small number of fit tests performed and the small number of firefighters fit tested, the DCOL fit test procedure appears still to be valid for assessing the fit of the new Drager FPS7000 ESA facemask when used in the respirator mode. It is recommended that [REDACTED] should run further tests on a larger number and mix of firefighters to gain further confidence that the DCOL procedure still holds valid for assessing the fit of the new Drager FPS7000 ESA facemask when used as a respirator as well as when used as a BA mask.

I hope you found it a useful day, and please don't hesitate to contact me if you require any further assistance during your future fit testing programmes.

Yours sincerely

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cc: -

enc: Fit test results