SELF-CONTAINED BREATHING APPARATUS (SCBA)

AERO-FIRE/7100

Flagship firefighting SCBA with HUD, PASS, RIC-UAC and PTT radio

The AERO-FIRE/7100 is the flagship of the HELIOS INNOVATIVE SCBA range: a positive-pressure self-contained breathing apparatus engineered for first responders and direct fire combat operations.

Its textile components are made of high-performance aramid fibers, inherently flame-resistant and built to withstand extreme heat, abrasion and severe operating conditions.

HUD, voice amplifier, PASS alarm, RIC-UAC connection and PTT radio system come standard. The factory-fitted multi-pin connector is compatible with a wide range of radios, including most Motorola® models and other major brands.



APPLICATIONS

- Firefighting
- First responders
- Industrial fire brigades
- Rescue operations

TECHNICAL SPECIFICATIONS

	3 L cylinder	6.8 L cylinder
Breathing gas	Compressed breathing air	
Cylinder type	Carbon-fiber composite	
Working pressure	30 MPa (300 bar)	
Free air volume	≈ 900 L	≈ 2,040 L
Rated duration*	30 min	60 min
Cylinder weight	2.2 kg	3.8 kg
Total weight	≈ 13.5 kg (with 6.8 L cylinder)	
Operating temperature	−30 °C to +60 °C	
Standard	EN 137:2006 · CE marked	

* Nominal service time. Actual duration depends on air consumption, workload and user.

EQUIPMENT

Aramid-fiber harness	Standard
Electronic monitoring	Standard
Head-Up Display	Standard
PASS alarm	Standard
RIC-UAC	Standard
Voice amplifier	Standard
PTT radio system	Standard

EN 137:2006
Certified · CE marked

SYSTEM COMPONENTS

Inside the AERO-FIRE/7100



Full-Face Mask

– Flame-resistant aramid-fiber head harness
– Wide panoramic view, dual sealing edge
– 5-point harness, quick-release buckles
– Anti-fog visor, 92% light transmission
– Integrated voice amplifier



Head-Up Display (HUD)

– Indicators positioned just below the eyes
– Wireless link to the monitoring unit
– Ultra-low power: battery life up to one year
– Real-time cylinder pressure status



Positive-Pressure Demand Valve

– Plug-in connection with 360° rotation
– Compact and lightweight
– Air supply above 500 L/min
– Maintains constant positive pressure in the mask



Electronic Monitoring Unit

– Real-time cylinder pressure and remaining air time
– Automatic warning at 5–6 MPa
– Continuous 90 dB acoustic and visual signal
– PASS alarm: automatic distress signal when the wearer is motionless



RIC-UAC

– Integrated pressure reducer, output flow ≥ 1,000 L/min
– Automatic relief valve above 1.1 MPa intermediate pressure
– Rapid Intervention Crew – Universal Air Connection: equalizes cylinder pressure within 60 seconds for emergency air transfer



Backplate & Harness

– High-quality impact-resistant plastics
– Dual-layer lumbar support
– Inherently flame-resistant aramid-fiber harness



“Y” Connector

– Connects a second full-face mask
– or an emergency air line

EN 137:2006
Certified · CE marked

PTT radio
Multi-pin connector, wide radio compatibility

–30 °C to +60 °C
Operating temperature range