



## Full Face Mask Technical Data Sheet

Designed, built & supplied by NORTHERN DIVER INTERNATIONAL



# The Odyssey.

# A diver's integrated breathing system enhancing safety, comfort, and performance in every dive.

A precision-engineered solution, designed with safety and reliability as its foundation. Each component is manufactured to exacting standards to ensure optimal performance and protection in the most demanding environments. From the impact-resistant polycarbonate lens to the precision-machined side block, every feature has been rigorously tested to meet and exceed industry safety requirements while maintaining comfort and field of vision.

Built to meet the demands of the most challenging underwater environments, the Odyssey sets a new benchmark for diving technology, empowering divers with confidence and peace of mind.



# Key Features.

#### Integrated Regulator:

High-performance, low-profile design for streamlined breathing.

#### Impact-Resistant Lens:

Polycarbonate construction for maximum durability and visibility.

#### Silicone Mask Skirt:

Universal fit with an integrated oral-nasal pocket for enhanced airflow.

#### Side Block (Optional):

Enables simultaneous use of main and bailout cylinders. Ergonomically designed for single-handed operation.

#### LAWS (Optional):

Low Air Warning System provides wireless visual alerts for critical air levels.

#### Adjustable Straps & Harness:

Secure, fast-donning system for optimal fit on any face shape.

#### Mounting Options:

Pre-configured for accessories like cameras, torches, and communication systems.

#### Compliance:

EN250:2014, certified for diving up to 50m and tested in cold water environments (4°C).

#### **Breathing Performance:**

Optimised airflow system ensures efficient gas exchange, reducing CO<sub>2</sub> build-up and maintaining consistent, effortless breathing throughout the dive.

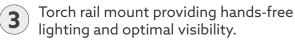
# **Technical Specifications.**

Built to last - engineered for excellence.



- **1** ABS frame with a soft silicone skirt and an impact resistant polycarbonate lens.
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Optional: Side Block enables quick access to emergency air.





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Optional: LAWS, a cutting edge RF design, eliminating hard wiring and snag hazards.

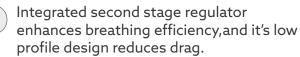
Stainless steel supply tube, engineered for reliability and performance.

Built-in communications port for clear, reliable communication in any dive.



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Pre-dive / dive lever for quick adjustment and effortless operation.



Heat exchanger for cold water diving helps reduce the risk of freezing and improves breathing comfort in extreme conditions.

# The Mask.

## Precision fit and unrivalled performance.

The Odyssey Full-Face Mask is engineered for the most demanding environments, designed to provide military and commercial divers with unmatched reliability, performance, and comfort. Manufactured with advanced materials, this mask offers superior durability, a secure fit, and exceptional functionality, ensuring peak performance during tactical operations or underwater missions.



Material	High-grade, impact-resistant polycarbonate lens for clear, durable vision.
Frame	Reinforced, high impact ABS for strength, flexibility, and comfort.
Sealing	Soft, hypo-allergenic silicone skirt for a secure, leak-proof seal.
Visibility	Wide-angle field of view with anti- fog and scratch-resistant lens.
Communications Port	Integrated port for seamless audio communication with surface teams or fellow divers.
Air Supply Tube	Stainless steel, corrosion-resistant tube for secure air delivery.
Pre-Dive / Dive Lever	Ergonomically designed lever for precise airflow and optimised breathing performance.
Optional: Torch Rail Mount	Rail for securely mounting a torch, offering hands-free lighting during dives.
Weight	Lightweight, balanced design for comfort during extended wear.
Comfortable Fit	Field tested by divers of various face shapes, sizes and genders to ensure a secure fit.
Temperatures	Approved for temperatures below 10°C and for cold water temps 4 ± 2°C (39,2 ± 3,6 °F).
Certification	EN 250:2014. PPE Regulation 2016/425.

# The Regulator.

## A streamlined low profile design.

Offers low-resistance breathing and balanced airflow control for effortless performance at any depth. Its low-profile design reduces drag, while the cold-water resistant components ensure reliability in harsh conditions. Featuring an anti-free flow mechanism, exhaust purge button, and anti-fog technology, it guarantees efficient air supply and clear vision.



Balanced Airflow Control	Delivers consistent, controlled airflow to maintain optimal breathing performance at varying depths.
Low Resistance Breathing	Designed to provide effortless inhalation and exhalation, even during strenuous dives.
Anti-Free Flow Mechanism	Lever prevents unintentional free- flowing of air, ensuring efficient use of air supply.
Low-Profile Design	Streamlined, reducing drag and enhancing hydrodynamics for improved manoeuvrability underwater.
Heavy-Duty Durability	Built with robust materials to withstand extreme conditions, from tactical dives to commercial operations.
Ergonomic Design	Ensures comfort and stability during wear, reducing fatigue and improving overall dive experience.
Cold-Water Resistant	Regulator designed to perform in low temperatures, maintaining functionality in harsh environments.
Exhaust Purge Button	Quick and easy removal of exhaled air, ensuring clear vision, reducing mask fogging, and effectively clearing the mask if flooded during dives.
Certification	EN 250:2014. PPE Regulation 2016/425.



# The Odyssey - Precision Engineered for Performance and Safety.

The result of extensive research, design, and development, driven by a commitment to delivering cutting-edge performance and safety for professional divers. Our team of experts meticulously studied the specific needs of military, commercial, and technical divers, ensuring every element of the mask—from comfort and fit to functionality and durability—meets the highest standards. We incorporated advanced materials and precision engineering to create a mask that performs flawlessly in demanding environments, all while minimising drag and maximising comfort.

EN250 Compliance means that the mask has passed rigorous European safety and performance standards for diving equipment. This certification ensures the mask's reliability in providing breathable air at depths up to 50 meters, even under extreme conditions. It guarantees the mask's airtight integrity, functionality, and safety when paired with appropriate air supplies. Meeting these standards is a testament to our dedication to diver safety, providing peace of mind that the Odyssey will perform at the highest level throughout its use.

# The Side Block.

## Secure and built for seamless air integration.

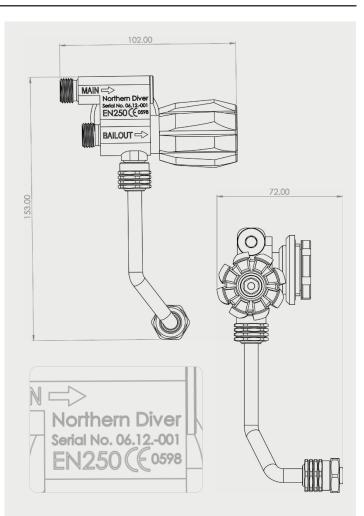
Strategically positioned for effortless, single-handed operation—even in zero visibility the side block's innovative design enables quick valve access for enhanced safety and efficiency during critical dives. Precision-machined from a solid billet, it eliminates potential leak paths, built to the highest standards, it delivers unmatched reliability in demanding environments.



Material	Precision-machined from a solid CZ121 brass housing with a chrome-plated finish for durability and corrosion resistance.	
Weight	2.3kg (5.0lb).	
Dimensions	68.5*60*44.5mm (2.7*2.4*1.8").	
Depth Rating	0-50m (164′), designed for professional diving applications.	
Breathable Air Compatibility	For use with compressed breathable air complying with EN12021 standards.	
Cold Water Performance	Approved for temps below 10°C and for cold water temperatures 4 ± 2°C (39,2 ± 3,6 °F).	
Storage Temperature	-10°C (14°F) and +50°C (122°F).	
Valve Control	Strategically positioned for easy, single-handed operation, even in zero visibility conditions.	
Sealing & Components	Engineered with 316 stainless steel springs and NBR O-rings to eliminate leak paths and ensure longevity.	
Certification	EN 250:2014. PPE Regulation 2016/425.	

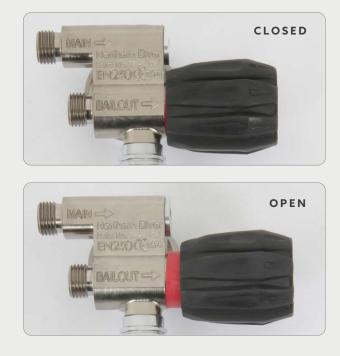
OPTIONAL ADD ON





#### BAIL OUT IDENTIFICATION MARKER

Red marker for the user to quickly identify when the bailout system is open, ensuring fast and clear status recognition in critical situations.



# The LAWS.

## Early warning, uninterrupted mission.

The Low Air Warning System (LAWS) is a critical safety feature designed for divers using full-face masks, providing a clear visual alert when air supply reaches a critical level. Engineered for military, commercial, and technical divers, LAWS ensures detection of low air situations, allowing for rapid response and safe ascent. Fully compatible with the Odyssey Full-Face Mask, it enhances situational awareness and operational confidence.

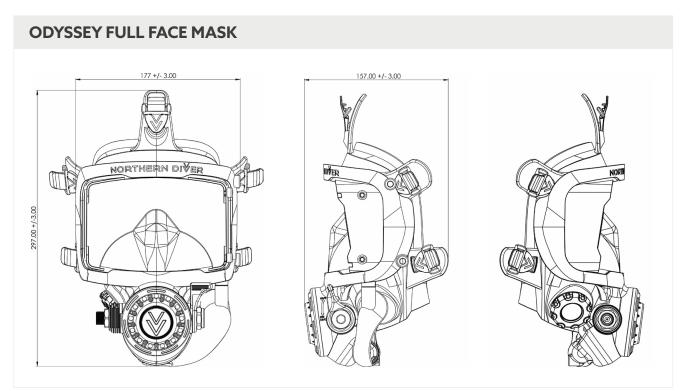




# Dimensions.

## Precision sizing for a secure, low-profile fit.

To ensure the best fit and compatibility, the full face masks dimensions have been carefully designed for comfort, functionality, and safety, with a focus on a low-profile design for enhanced mobility and reduced drag.



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# **Applications & Uses.**

## Designed for the toughest environments.

For professional divers operating in the most demanding environments. Its advanced features provide superior protection, communication, and comfort, making it the ideal choice for military, rescue, and commercial diving applications.

#### **MILITARY & TACTICAL OPERATIONS**

- » Designed for combat divers, special forces, and maritime security teams.
- » Ensures clear communication with integrated comms compatibility.
  - Provides a secure and comfortable fit for extended underwater missions.
- » Low-profile design reduces drag and enhances manoeuvrability.



#### SEARCH AND RESCUE OPERATIONS

- » Ideal for fire and rescue teams, and disaster response units.
- » Offers full face protection against contaminated/hazardous environments.
- » Compatible with surface-supplied air systems for prolonged operations.
- » Enhanced vis and anti-fog design for unobstructed vision in emergencies.





#### **COMMERCIAL DIVING**

- » Perfect for underwater inspections, construction, and maintenance.
- Durable build ensures reliability in harsh marine environments.
- » Compatible with surface-supplied and SCUBA configurations.
- Designed for comfort during long-duration dives.





The Odyssey FFM combines cutting-edge design, durability, and performance, making it the ultimate choice for professionals who demand the best in safety and efficiency.

#### ORDER YOURS TODAY.

## Mask Variants.

## Tailored for every dive.

The Odyssey is available in a range of variants, offering different features to suit your needs. Whether you're a recreational diver, commercial professional, or military user, there's an option tailored for you. If you don't see what you're looking for, contact our sales team to discuss your requirements.

OPTION 1				
Odyssey Full Face Mask With 1 Hose Assembly	ND0003936			
	Full Face Mask with Side block	1		
	Black Hose Assembly	1		
	Spanner/Communications Tool	1		
	Soft Shell Carry Case	1		
oor\$ser	User Manual & Documents	1		
ODYSSEY FULL FACE MASK	Display Box	1		

OPTION 2			
Odyssey Full Face Mask With Side Block & 2 Hose Assemblies	ND0003937		
1	Full Face Mask with Side Block	1	
	Black Hose Assembly	1	
	Yellow Hose Assembly	1	
	Spanner/Communications Tool	1	
	Soft Shell Carry Case	1	
	User Manual & Documents	1	
ODYSSEY Full FACE MASK	Display Box	1	

OPTION 3			
Odyssey Full Face Mask With LAWS & 1 Hose Assembly	ND0004051		
	Full Face Mask	1	
	Black Hose Assembly	1	
	LAWS Head Mounted Receiver (1) & Transmitters (2)	3	
	LAWS Charging Cable	1	
	Spanner/Communications Tool	1	
	Soft Shell Carry Case	1	
	User Manual & Documents	1	
ODYSSEY FULL FACE MASK	Display Box	1	

OPTION 4			
Odyssey Full face Mask With Side Block, LAWS & 2 Hose Assemblies	ND0004052		
	Full Face Mask with Side Block	1	
	Black Hose Assembly	1	
	Yellow Hose Assembly	1	
	LAWS Head Mounted Receiver (1) & Transmitters (2)	3	
	LAWS Charging Cable	1	
	Spanner/Communications Tool	1	
	Soft Shell Carry Case	1	
COVÝSEV	User Manual & Documents	1	
PULL FACE MARK	Display Box	1	



# Maintenance.

## Professional tools for safe & effective servicing.

To ensure optimal performance and longevity of the full face mask, we offer a **Service Technician Tool & Test Kit** designed for routine maintenance, troubleshooting, and functional testing. This kit provides all the essential tools and accessories required for servicing the mask, helping to maintain peak performance and safety compliance.

The kit includes a comprehensive set of specialised tools for disassembly, adjustment, and reassembly of key mask components, along with essential gauges and tools for testing. All components are securely stored in a compact, durable protective case for easy transport and storage.

For use by trained technicians only - ensuring safe & professional maintenance.

SERVICE TECHNICIAN TOOL & TEST KIT CONTENTS			
2.0mm Hex Key	1	ND0004123	
2.5mm Hex Key	1	ND0004124	
5mm Hex Key	1	ND0004125	
8mm Hex Key	1	ND0004126	
22mm Spanner	1	ND0004127	
20mm Spanner and Communications Tool	1	ND0004058	
20mm Socket	1	ND0004128	
Side Block Socket	1	ND0003897	
Front Cover Socket	1	ND0003898	
Communications Port Socket	1	ND0003899	
Skirt Clamp Socket	1	ND0003900	
Hand Adjustment 2nd Stage Tool	1	ND0004177	
Adjustment 2nd Stage Tool	1	ND0004129	
Lever Height Tool Go / No Go	1	ND0004130	
Intermediate Pressure Test Gauge	1	ND0004131	
Plastic Pick Set	1	ND0004132	
Christolube Silicone Grease	1	MOD-ITEM 142(LOT2) CHRISTO	
2.0mm Hex Bit	1	ND0004178	
2.5mm Hex Bit	1	ND0004179	
5mm Hex Bit	1	ND0004180	
8mm Hex Bit	1	ND0004181	
Hex Drive to 1/4 Drive Bit	1	ND0004182	
Wera Torque Screwdriver 0.3-1.2NM	1	ND0004183	
Teng Torque Wrench 3/8 Drive 5-25NM	1	ND0004184	
Case Insert	1	ND0004133	
Carry Case	1	CASE-RAID-15L-433015	

# Spare Parts.

## For lasting performance.

Replacement parts for the full-face mask are available for individual purchase. To ensure optimal performance and safety, we offer a range of genuine spare parts designed for effective maintenance and servicing.

Equalising Block Kit	ND0004025		
Description: Nose Block, Extension Pad and Wire Frame			
	Nose Blocker Base Pad	1	ND0001520
	Nose Blocker Extension Pad	1	ND0001521
	Nose Clip Spring	1	ND0001519
	M3 x 8mm Button Screw A4SS	1	ND0003941

Front Cover Kit	ND0004026		
Description: Inner Diaphragm Cover, Front Cover, Purge Spring and Purge Button			on
	2nd Stage Inner Cover	1	ND0001549
	2nd Stage Front Cover	1	ND0001500
	2nd Stage Purge Spring	1	ND0001502
	2nd Sage Purge Button	1	ND0001501

Harness Buckle Kit	ND0003986		
Description: 5pcs total for each strap			
	Head Strap Buckle	5	ND0001538
	Head Strap Button	5	ND0001539

Oronasal Valve	ND0003987		
Description: 2pcs total			
	One Way Valve Ring	2	ND0001531
	One Way Valve Diaphragm	2	ND0001532

Comms Port Cover Kit	ND0004027		
Description: Male & Female components			
	Port Blank	1	ND0001534
	Port Blank Nut	1	ND0001535

Second Stage Service Kit	ND0004028		
Description: O-Rings & Silicone Se	eat		
	O-Ring	2	ND0003209
	O-Ring	1	ND0003211
	O-Ring	1	ND0003212
	O-Ring	1	ND0003213
	O-Ring	1	ND0003496
	O-Ring	2	ND0003592
	2nd Stage Silicone Valve	1	ND0001494

2nd Stage Diaphragm Assembly	ND0003988		
Description: diaphragm components			
	2nd Stage Diaphragm	1	ND0001546
	2nd Stage Diaphragm Plate	1	ND0001545

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Mask Service Kit	ND0004029		
Description: Main Diaphragm, E	khaust Diaphragm, 2 x Oronasal Valve		
	2nd Stage Diaphragm	1	ND0001546
	2nd Stage Diaphragm Plate	1	ND0001545
	Exhaust Valve Diaphragm	1	ND0001613
	One Way Valve Ring	2	ND0001531
	One Way Valve Diaphragm	2	ND0001532

Side Block Service Kit	ND0004030		
Description: O-Rings & Spindle with seal			
° O O ()	Spindle Kit	1	ND0003665
	O-Ring	1	ND0003210
	O-Ring	1	ND0003944
	O-Ring	1	ND0003592
	O-Ring	1	ND0000768

Side Block Handle	ND0004031		
Description: Includes Locking Nut			
	Retaining Cap	1	ND0001341
	Spring	1	ND0001344
	Handle	1	ND0001345

Side Block Supply Tube Service Kit	ND0004032		
$\mathbf{\Omega}$	Description: O-Rings		
	O-Ring	2	ND0003212

Exhaust Valve Diaphragm	ND0001613		
	Exhaust Valve Diaphragm	1	ND0001613

Head Harness Strap	ND0001554		
+	Head Strap Harness	1	ND0001554

Second Stage Lever	ND0001942		
	2nd Stage Lever	1	ND0001492

Main Hose Assembly	ND0004020		
	750mm Length Black Hose Assembly	1	ND0004020

Bailout Hose Assembly	ND0004021		
	910mm Length Yellow Hose Assembly	1	ND0004021

## CONTACT

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Scan the QR code to learn more, watch videos, and download documents for the Odyssey, Breathe Easy.



