



PRODUCT CATALOG-I

ALLOYSTAR CO.,LTD

A ALLOYSTAR

SCUBA DIVING EQUIPMENT

FACTORIES • CUSTOMIZATION
PROFESSIONAL



Page 1 of 29 UNICO20250812XS178

Technical Construction File
EN 250:2014 Respiratory equipment
Open-circuit self-contained compressed air diving apparatus —
Requirements, testing and marking

Report reference No.: UNICO20250812XS178

Approved by (+ signature): Kosco Vent Project Manager

Date of issue: August 12, 2025

Reviewing laboratory: Unico Certification Testing Co., LTD

Reviewing location: 7 COPPERFIELD ROAD, COVENTRY WEST MIDLANDS, ENGLAND UNITED KINGDOM CV2 4AQ

Applicant: ALLOY STAR CO., LTD.

Address: 2 F.-4, NO. 502, DA'AN RD., SHULIN DIST., NEW TAIPEI CITY 238009, TAIWAN

Manufacturer: ALLOY STAR CO., LTD.

Address: 2 F.-4, NO. 502, DA'AN RD., SHULIN DIST., NEW TAIPEI CITY 238009, TAIWAN

Factory: The same as applicant

Address:

Standard: EN 250:2014

Review Report Form No.: EN 250:2014 TRF

originator: UNICO

Master TRF: Reference No. EN 250:2014

Review procedure: UNICO

Type of Review object: Regulators

Trademark: -

Model/type reference: AS Series AS-100~120, AS-200~220

Remark: Page 1 of 29



CERTIFICATE OF CONFORMITY

No. UNICO20250812XS178

Holder of Certificate

Name: ALLOY STAR CO., LTD.

Address: 2 F.-4, NO. 502, DA'AN RD., SHULIN DIST., NEW TAIPEI CITY 238009, TAIWAN

Manufacturer Name & Address:

Name: ALLOY STAR CO., LTD.

Address: 2 F.-4, NO. 502, DA'AN RD., SHULIN DIST., NEW TAIPEI CITY 238009, TAIWAN

Product: Regulators

Model: AS Series

AS-100~120, AS-200~220

Harmonized technical standards: EN 250:2014

Technical File no.: UNICO20250812XS178

Based on our assessment we confirm that the product is in accordance with the technical requirements of the above standards and hence fulfils the technical requirements of the Regulation (EU) 2016/425 Personal protective equipment. The manufacturer shall affix the CE marking to each product that is in conformity with those described in this Certificate, after completion of the EC Declaration of Conformity and in accordance with the above directive.

This certificate is only valid for the product and configuration described (annex), in conjunction with the detailed test data and with all applicable legal requirement for the product. Maintaining certification is based on compliance with the requirements of certification contract.

Annex: Product identification - 2 pages

Issue Date: August 12, 2025

Expiry Date: August 11, 2030

RENOWS CERTIFICATION TESTING CO., LTD

Chase Business Centre, 39-41 Chase Side, London, United Kingdom, N14 5BP

E-Mail: info@renows.net

Signature of Authorized Person: Jacqueline Marti

Partial reproduction of this certificate is not allowed

REGULATOR

Performance

- **Cold-water & Ice-diving**
- **Lightweight, comfortable designs**
- **Low resistance, High airflow**



Customization

- **ADJ / NON-ADJ 2nd stage options**
- **Swivel turrets, Multiple LP/HP ports**
- **Optional exterior finishes**



**1ST STAGE
&
2ND STAGE**

YOUR VISION FULLY CUSTOMIZED

At Alloystar Co.,Ltd , we turn your vision into reality with fully customized solutions. Tailored to your unique needs, we ensure every detail is crafted to exceed your expectations. Your idea, your way-- perfectly customized.





1st REGULATOR

PHOTO										
ITEM NO	AS-101 Y	AS-101 D	AS-102 Y	AS-102 D	AS-103 Y	AS-103 D	AS-104 Y	AS-104 D	AS-105 Y	AS-105 D
CONNECTION YOKE / DIN	YOKE	DIN	YOKE	DIN	YOKE	DIN	YOKE	DIN	YOKE	DIN
DESCRIPTION	PISTON	PISTON	DIAPHRAGM BALANCE	DIAPHRAGM BALANCE	PISTON BALANCE	PISTON BALANCE	DIAPHRAGM BALANCE	DIAPHRAGM BALANCE	DIAPHRAGM BALANCE	DIAPHRAGM BALANCE
NITROX 40%UP	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
DRY SEAL / COLD WATER	NO	NO	OPTION	OPTION	NO	NO	OPTION	OPTION	OPTION	OPTION
LP PORT SWIVEL	NO	NO	YES	YES	YES	YES	NO	NO	NO	NO
HP PORT	1	1	2	2	2	2	2	2	2	2
LP PORT	4	4	4 OR 5	4 OR 5	5	5	4 OR 5	4 OR 5	5 OR 6	5 OR 6

AS-101-DIN

- Intermediate Pressure Output : 135 ~ 145 PSI (Balanced Piston) @3000 psi
- Intermediate Pressure Ports : Four 3/8-24 UNF-2B
- High Pressure Port : One 7/16-20 UNF-2B
- Body Material : Chromium plated brass body
- Springs Material : Stainless steel
- Weight : 540 grams
- Connection Type : DIN



AS-101-YOKE

- Intermediate pressure output : 135-145 PSI (Balanced Piston) @3000 psi
- Intermediate Pressure Ports : Four 3/8-24 UNF-2B
- High Pressure Port : One 7/16-20 UNF-2B
- Body Material : Chromium plated brass
- Springs Material : Stainless steel
- Weight : 740 grams
- Connection Type : YOKE



AS-102-DIN



0216



- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)
- Intermediate Pressure : 135 ~ 145 psi (9.5 ~ 10.2 bar)
- High Pressure Ports : 2 × 7/16"-20 UNF
- Low Pressure Ports : 4 × 3/8"-24 UNF + Swiveling turret
- Weight : 750 g
- Connection Type : DIN

AS-102-DIN-ICE



DC-04

0216



- Ventilation rate (air supply / 3000 psi) : 33 SCFM.
- Intermediate pressure: 135-145 psi. (9.5-10.2 bar)
- High pressure port: (7/16"-20 UNF) x 2
- Low pressure port: (3/8"-24 UNF) x 4 plus swiveling turret DIN.
- Weight: 800g

AS-102-YOKE



- Ventilation rate (air supply / 3000 psi) : 33 SCFM.
- Intermediate pressure: 135-145 psi. (9.5-10.2 bar)
- High pressure port: (7/16"-20 UNF) x 2
- Low pressure port: (3/8"-24 UNF) x 4 plus swiveling turret Yoke.
- Weight: 950g

AS-102-YOKE-ICE



- Ventilation rate (air supply / 3000 psi) : 33 SCFM.
- Intermediate pressure: 135-145 psi. (9.5-10.2 bar)



- High pressure port: (7/16"-20 UNF) x 2
- Low pressure port: (3/8"-24 UNF) x 4 plus swiveling turret Yoke.
- Weight: 1010g

AS-103-DIN



- Low pressure port swivel assembly for versatile positioning
- Intermediate Pressure Output : 135 ~ 145 PSI (Balanced Piston) @3000 psi
- Low Pressure Ports : 5 × 3/8-24 UNF-2B
- High Pressure Ports : 2 × 7/16-20 UNF-2B
- Body Material : Chromium plated brass
- Springs Material : Stainless steel
- Weight : 700 grams

AS-103P-DIN



- Low Pressure Port : Swivel assembly for versatile positioning
- Intermediate Pressure Output : 135 ~ 145 PSI (Balanced Piston) @3000 psi
- Intermediate Pressure Ports : 5 × 3/8-24 UNF-2B
- High Pressure Ports : 2 × 7/16-20 UNF-2B
- Body Material : Chromium plated brass
- Springs Material : Stainless steel
- Weight : 700 grams

AS-103-YOKE



- Low Pressure Port : Swivel assembly for versatile positioning
- Intermediate Pressure Output : 135 ~ 145 PSI (Balanced Piston) @3000 psi

- Intermediate Pressure Ports : 5 × 3/8-24 UNF-2B
- High Pressure Ports : 2 × 7/16-20 UNF-2B
- Body Material : Chromium plated brass
- Springs Material : Stainless steel
- Weight : 920 g (Including packaging 1.04KG)



AS-103P-YOKE



- Low Pressure Port : Swivel assembly for versatile positioning
- Intermediate Pressure Output : 135 ~ 145 PSI (Balanced Piston) @3000 psi



- Intermediate Pressure Ports : 5 × 3/8-24 UNF-2B
- High Pressure Ports : 2 × 7/16-20 UNF-2B
- Body Material : Chromium plated brass
- Springs Material : Stainless steel
- Weight : 889 grams

AS-104-DIN



- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)
- Intermediate Pressure : 135 ~ 145 psi (9.5 ~ 10.2 bar)
- High pressure port : (7/16"-20 UNF) x 2
- Low pressure port : (3/8"-24 UNF) x 4

- Body Material : Corrosion resistant marine brass, chrome plated finish
- Weight : 755g



AS-104-DIN-ICE



- Design Type : Balanced diaphragm
- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)

- Intermediate Pressure : 135~145 psi (9.5 ~ 10.2 bar)
- High pressure port: (7/16"-20 UNF) x 2
- Low pressure port: (3/8"-24 UNF) x 4



- Weight : 800 g
- Body Material : Corrosion resistant marine brass, chrome plated finish



AS-104-YOKE



- Design Type : Balanced diaphragm
- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)
- Intermediate Pressure : 135 ~ 145 psi (9.5 ~ 10.2 bar)

- High pressure port: (7/16"-20 UNF) x 2
- Low pressure port: (3/8"-24 UNF) x 4
- Body Material : Chromium plated brass
- Body Material : Corrosion resistant marine brass, chrome plated finish
- Weight : 940g



AS-104-YOKE-ICE



- Design Type : Balanced diaphragm
- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)

- Intermediate Pressure : 135 ~ 145 psi (9.5 ~ 10.2 bar)
- High pressure port: (7/16"-20 UNF) x 2
- Low pressure port: (3/8"-24 UNF) x 4



- Body Material : Corrosion resistant marine brass, chrome plated finish
- Weight : 990 g



AS-105-DIN



- Design Type : Diaphragm Balanced
- Weight : 750 g

- Intermediate Pressure : 135 ~ 145 PSI
- Low Pressure Ports : 5 × 3/8-24 UNF 2B
- High Pressure Ports : 2 × 7/16-20 UNF 2B
- Body Finish : Bright Chromium Plated Surface (custom options : Black Chrome or Trivalent Chrome)



AS-105-DIN-ICE



- Design Type : Balanced diaphragm
- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)
- Intermediate Pressure : 135-145 psi. (9.5-10.2 bar)
- High Pressure Ports : (7/16"-20 UNF) x 2
- Low Pressure Ports : (3/8"-24 UNF) x 5
- Body Material : Corrosion resistant marine brass, white or black chrome plated finish
- Weight : 800 g



AS-105-YOKE



- Design Type : Diaphragm Balanced
- Intermediate Pressure : 135 ~ 145 PSI
- Low Pressure Ports : 5 × 3/8-24 UNF 2B
- High Pressure Ports : 2 × 7/16-20 UNF 2B
- Body Finish : Bright Chromium Plated Surface (custom options: Black Chrome or Trivalent Chrome)
- Weight : 950 g

AS-105-YOKE-ICE



- Design Type : Diaphragm Balanced
- Ventilation Rate : 33 SCFM (Air supply / 3000 psi)
- Intermediate Pressure : 135 ~ 145 psi (9.5 ~ 10.2 bar)
- High Pressure Ports :(7/16"-20 UNF) x 2
- Low Pressure Ports :(3/8"-24 UNF) x 5
- Body Material : Corrosion resistant marine brass, white or black chrome plated finish
- Weight : 1000 g

AS-110



- Type : Extra Air Source First Stage – Standard Piston First Stage for SCUBA Dive
- Features : On/Off Valve, Burst Disc
- Swivel Adapter : For 2nd Stage Hose
- Low Pressure Ports : 3
- High Pressure Ports : 1



PHOTO							
ITEM NO	AS-201 ADJ	AS-201 N-ADJ	AS-202 ADJ	AS-202 N-ADJ	AS-208 ADJ	AS-208 N-ADJ	AS-209
DESCRIPTION	BALANCED	BALANCED	DOWNSTREAM VALVE	DOWNSTREAM VALVE	BALANCED	BALANCED	DOWNSTREAM VALVE
COVER RING AND PURGE COVER	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
ADJUSTABLE	YES	NO	YES	NO	YES	NO	NO
NITROX 40%UP	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION	OPTION
COLD WATER	OPTION	OPTION	NO	NO	OPTION	OPTION	NO
DEFLATOR KNOB	YES	YES	NO	NO	YES	YES	NO



2nd Stage Regulator

AS-201-ADJ

COLOR : ● ● ●



- Type : Adjustable 2nd Stage Regulator
- Maximum Intermediate Pressure : 150 PSI
- Inhalation Effort : 1.0–1.2 CIW (with adjustment knob on max)
- Exhalation Effort : 1.1 CIW
- Ventilation Rate : 30+ SCFM (air supply: 3000 PSI)
- Weight : 251 g





2nd Stage Regulator

AS-201-NON-ADJ



- Type :Non-Adjustable 2nd Stage Regulator
- Maximum Intermediate Pressure: 150 PSI
- Inhalation Effort: 1.0–1.2 CIW (Adjustment knob on max)
- Exhalation Effort: 1.1 CIW
- Ventilation Rate: 30+ SCFM (Air supply: 3000 PSI)
- Weight : 251 grams

AS-202-NON-ADJ



- Type: Non-Adjustable 2nd Stage Regulator
- Valve Type: Downstream demand valve with external air intake adjustment
- Maximum Intermediate Pressure: 150 PSI
- Inhalation Effort: 1.0–1.2 CIW
- Exhalation Effort: 1.1 CIW
- Ventilation Rate: 30+ SCFM (Air supply: 3000 PSI)
- Weight: 203 g



2nd Stage Regulator

AS-202-ADJ



- Type: Adjustable 2nd Stage Regulator
- Valve Type: Downstream demand valve with external air intake adjustment
- Maximum Intermediate Pressure: 150 PSI
- Inhalation Effort: 1.0–1.2 CIW (Adjustment knob on max)
- Exhalation Effort: 1.1 CIW
- Ventilation Rate: 30+ SCFM (Air supply: 3000 PSI)
- Weight: 237 g



2nd Stage Regulator

AS-208-ADJ



- Type: Adjustable 2nd Stage Regulator
- Hose Mounting System: Right and Left Mounting Available
- Maximum Intermediate Pressure: 150 PSI
- Inhalation Effort: 1.0–1.2 CIW (ADJ-Knob on Max)
- Exhalation Effort: 1.1 CIW
- Air Flow: 30+ SCFM (air supply: 3000 PSI)
- Weight: 251 g
- Remarks : For Exclusive Customization Only





2nd Stage Regulator

AS-208-NON-ADJ



- Type : Non-Adjustable 2nd Stage Regulator
- Hose Mounting System : Right and Left Mounting Available
- Maximum Intermediate Pressure : 150 PSI
- Inhalation Effort : 1.0–1.2 CIW
- Exhalation Effort : 1.1 CIW
- Air Flow : 30+ SCFM (air supply: 3000 PSI)
- Weight : 251 g
- Remarks : For Exclusive Customization Only





2nd Stage Regulator

AS-209



- Type: Downstream Non-Adjustable
- Maximum Intermediate Pressure: 150 PSI
- Inhalation Effort: 1.0–1.2 CIW
- Exhalation Effort: 1.1 CIW
- Air Flow: 30+ SCFM (air supply: 3000 PSI)
- Weight: 180 g

