



## SH Valve

Operating and Installation Instructions  
SH Air // Nitrox with 232 and 300 bar

### Construction description

The Nautec SH Valve is a stop valve for scuba diving tanks with an operating pressure of 232 and 300 bar for pure breathing air, nitrox or pure oxygen.

Only one pressure regulator can be connected. The screw-in thread of the valve in the scuba diving tank is metric (M 18 x 1,5 ISO) and complies with German Industrial Standard DIN EN 144-1.

An O-ring is used as a seal and is located between the tank and the valve. The valve covers the O-ring groove in the neck of the tank.

Our proven spindle technology (BAM) is used in the inside of the valve. The shut-off mechanism is arranged horizontally.

The most important central sealing element is the lower spindle with an inner hexagonal socket and a fitted inset of a special high tech plastic material.

The lower spindle is moved with a hand knob above the stainless steel upper spindle. The upper spindle with its outer hexagonal socket is perfectly seated into the inner hexagonal socket of the lower spindle. The upper spindle is supported by the sealing ring in the pressure screw. In this case, the seal not only functions as a sliding ring, but is also a very important seal. The tightness is supported by a spring located in the hand knob.

### Installation information

It is imperative to make sure that the Nautec gas cylinder valve is used only for the pressure gas cylinder approved for the model. The valve and the cylinder must have the same thread (both threads must be free of impurities and undamaged). For example: The Air 232 SH Valve can be used only in compressed air cylinders with an operating pressure of 232 bar for compressed air; the Nitrox 232 SH Valve can be screwed only into nitrox cylinders with an operating pressure of 232 bar for nitrox.

Before tightening, a new O-ring must always be placed on the screw-in thread. The O-ring is to be lubricated sparingly (**gleitmo 599 lubricant**). Basically, the valve is initially to be twisted manually onto the scuba diving tank until the O-ring is covered by the collar of the cylinder valve. The valve is then to be tightened to a torque of 100 + 30 Nm.

### User instructions

No tools are needed to install the pressure regulator! The connection thread of the valve and the thread of the pressure regulator hand knob (with compressed air at e.g. G 5/8") must be free of all foreign matter.

The pressure regulator is to be hand-tightened into the valve. Afterwards, the valve is to be opened completely by turning the hand knob carefully to the left until it stops and then a quarter turn back to the right. You should not be able to detect any noise from gas leaking out.

The proper functioning of the attached diving regulator (pressure regulator) can now be tested. After use, the valve is to be hand-tightened. Too much strain can damage the valve.

**Oxygen compatibility:** These Nautec-Valves are 100 % Oxygen-compatible in unused condition!

### Warning!

Cylinder valves for nitrox gas mixtures and oxygen must be kept completely clean and free of oil or grease. Nautec valves are to be repaired and maintained only by the manufacturer, qualified experts or staff specifically trained by Nautec!

Only original spare parts and original lubricants (**gleitmo 599**) are to be used to maintain or repair Nautec valves. We recommend that maintenance be done at regular two-year intervals.

Valve insertion torque and sealant			
Valve-type	Nm	Kp	Sealant
M25 x 2	100 + 30	10 + 3	O-ring Item no. 500036
3/4" NPSM	100 + 30	10 + 3	O-ring Item no. 500036
M18 x 1,5	100 + 30	10 + 3	O-ring Item no. 500034
5/8" UNF	60 + 20	6 + 3	O-ring Item no. 500014V
Burst Disc retainer	15	1,5	X

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