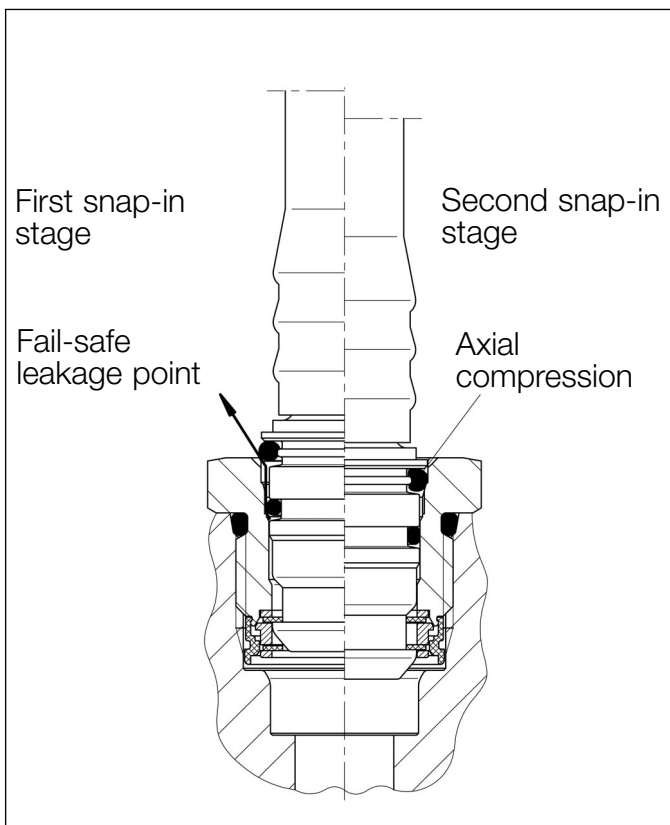
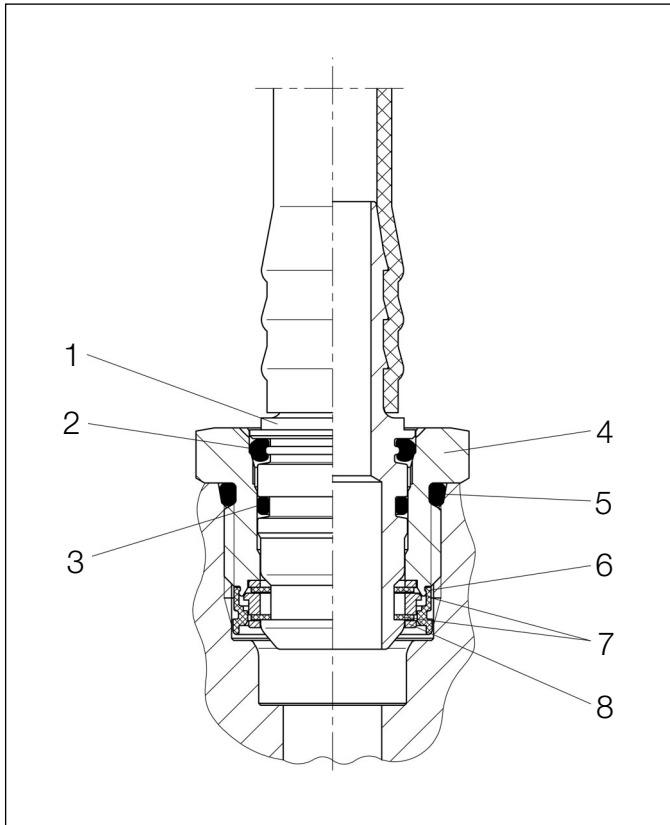


Product description of the VOSS quick connect system 232



Application

The VOSS quick connect system 232 is used primarily for connecting the components of compressed air systems in commercial vehicles. It permits the rapid assembly of nylon tubing to the corresponding pneumatic unit eg. in the brake or air suspension system.

Range of application

The individual components of the VOSS quick connect system 232 are designed for a working temperature of -40°C to $+100^{\circ}\text{C}$. The rated operating pressure is 15,5 bar and is limited by the strength of the nylon tubing used. Only nylon tube which conforms to DIN 74324 Part 1 and made of nylon 11 or nylon 12 may be used. Applications for other operating conditions are available on request.

Individual components / materials

The VOSS quick connect system 232 consists of two components: the plug itself with its barbed tail and the coupling unit.

Plug

- 1 Body of plug / Brass or PA 11 GF 30
- 2 Dirt protection and pre-tension O-ring / NBR 60
- 3 Sealing O-ring / EPDM 60

Coupling unit

- 4 Male nut / Brass
- 5 Thread seal O-ring / NBR 70
- 6 Fixing ring / POM

Retaining element:

- 7 Clips / Spring steel
- 8 Retaining ring / POM
- (9) Paint/dirt protective sticker (not shown)

Functional description

The VOSS quick connect system 232 consists of a plug with a barbed tail and a coupling unit made up of a male nut with O-ring and a retaining element clipped to it by means of a fixing ring.

The compressed air line (nylon tube) is mounted on to the barbed tail of the plug. VOSS can provide suitable assembly units for this operation.

The coupling unit is screwed into the appropriate port of the pneumatic unit.

Suitable ports are the industry standard ports for the VOSS quick connect system 230 and other ports agreed with VOSS.

The connection between line and unit is made by pushing the plug into the coupling unit. When this is done, the plug is kept in place by a two stage retaining element which once it has reached its second snap-in location is automatically pushed from the insertion to the locking position by means of the pre-tension O-ring and the force of the compressed air.

Should the second snap-in stage not be reached because of insufficient insertion force or other unfavourable circumstances, the connection is still nevertheless safe from disconnection. The retaining unit has snapped into the first stage.

The first snap-in stage is reached by a very low insertion force.

In this protected position the plug has an intentional leak path so that incomplete connections may be detected due to air noise and a drop in air pressure.

VOSS

The first snap-in stage solves the safety problem of incomplete insertion leading to failure of the connection and breakdown of the entire system.

Incorrect connections, i.e. plug connectors in the first stop position, can be reconnected to the second stop position, also if the system is pressurized (< 7 bar). This will not result in damage. Whether reconnection is possible

also depends on the possible insertion force at the installation location.

All coupling units are equipped with paint protection stickers. This makes it possible to paint vehicles on the assembly line with mounted pneumatic components equipped with the coupling units but not with the air lines. In this way shadows can be prevented from occurring behind lines when spray painting.

VOSS quick connect system 232 is available in the nominal sizes 8 and 12.

Screw-in thread	Nominal size NS	Barbed tail for tubes diam. x thickness
M 16 x 1,5	8	6 x 1 8 x 1 / 9 x 1,5 12 x 1,5
M 22 x 1,5	12	6 x 1 8 x 1 / 9 x 1,5 10 x 1,25 12 x 1,5 14 x 2 / 14 x 2,5 15 x 1,5 / 16 x 2

VOSS Automotive, Inc. · 4640 Hillegas Road · Fort Wayne, IN 46818 · USA
Phone: +1 260-373-2277 · customersvc@us.voss.net · www.vossusa.com

VOSS Automotive GmbH · P.O. Box 15 40 · 51679 Wipperfürth · Leiersmühle 2-6 · 51688 Wipperfürth · Germany
Phone: +49 2267 63-0 · Telefax: +49 2267 63-5982 · automotive@voss.net · www.voss.net