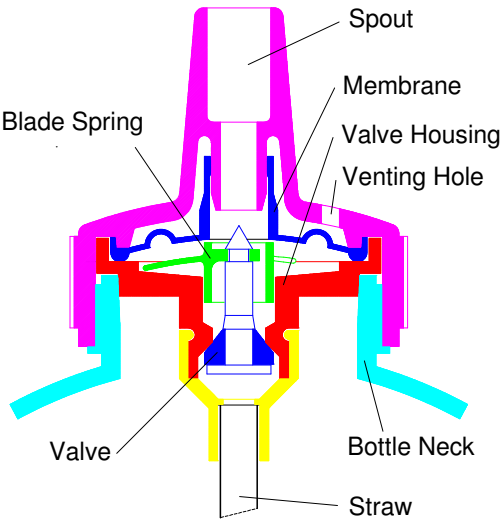
Self Regulating Spout
What is it?



SRS

The Self Regulating Spout (**SRS**) is a newly patented closure for beverages in Bottles, Cups or Cans

How does the SRS work?

The **SRS** consists of a spout, a valve housing with a valve that closes off the inside of the bottle or cup from the outside. The valve is held in place by a (blade-)spring, that pulls the valve close, when the bottle or cup is not in use. Above the valve there is a membrane moving up and down, when there is a pressure difference over the membrane.

When someone sucks on the spout a vacuum is created under the membrane, while the atmospheric pressure remains on the upper site, by a venting hole in the spout. The pressure difference over the membrane thus created, moves the membrane downwards, thereby pushing the valve open.

Access to the fluid is now established and the fluid flows to the mouth. By using an internal straw, the bottle or cup can be sucked empty in the upright position.

As soon as the suction stops, the membrane moves back to its original position and the spring closes the valve. When carbonized drinks are used, the carbon dioxide cannot leave the bottle or cup and therefore the fluid will not go flat.

Advantages of the SRS system:

Relative to other drinking solutions on the market, the **SRS** offers the following advantages:

- There is no need to open the bottle or cup (Easy access)
- The bottle will not leak when overthrown
- Carbonized drinks will not go flat
- The **SRS** can be used for hot and cold drinks
- No spilling of fluid when drinking, while in motion
- The bottle or cup can be sucked empty in the upright position.

In other words the SRS is applicable to all situations, whereby a beverage is used for consumption without leaking and spilling.

- Disposable bottles, for the Soft drink industry
- The non-disposable bottles used with sport activities
- Children and elderly care (Non-spilling Cup)

Patent situation:

The **SRS** is a new development of Enpros International B.V. and has been worldwide patented under Wipo patent number WO 01/92133 A2 and US patent 6,290,090 B1

Non-Spilling Cup with **SRS**

Baby Cup with **SRS**

Sport Bottle (Bidon) with **SRS**

Disposable Bottle with **SRS**

March 2009

© Copyright

For more information see: www.enpros.nl Email: info@enpros.nl Tel.: +31-(0)180-390138 Fax.: +31-(0)180-390139