Operation
through balance of force

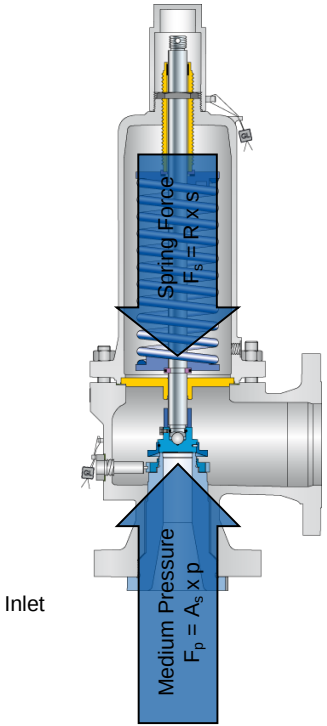
Objectives of this Presentation. Knowledge to learn.

The aim of this presentation is to explain the **functionality of safety valves** by means of **balance force**.

Function. How Spring-loaded Safety Valves work.

The downward force through the spring **affects from above** on the disc and keeps the safety valve closed.

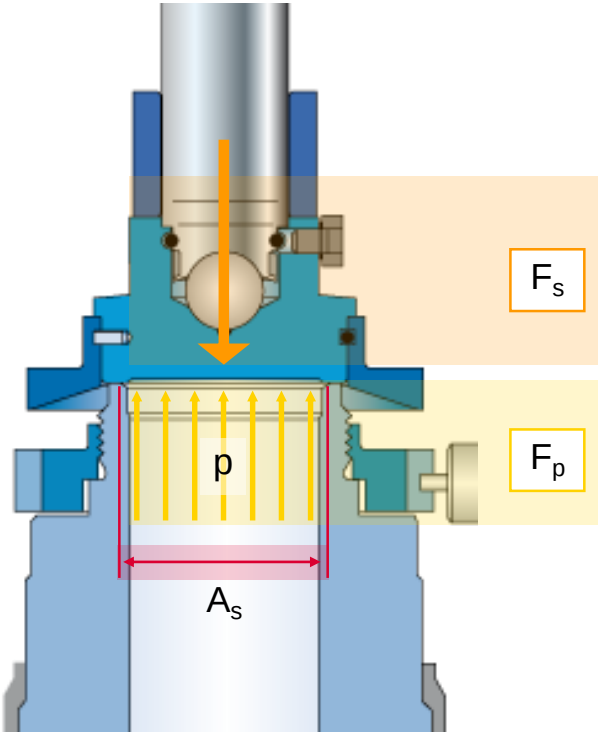
As soon as the **force below the disc exceeds the downward force**, the safety valve will open.



Function. Closed Position.

When the downward **Spring Force (F_s)** is greater than the upward **Medium Pressure Force (F_p)** on the disc, the valve remains closed.

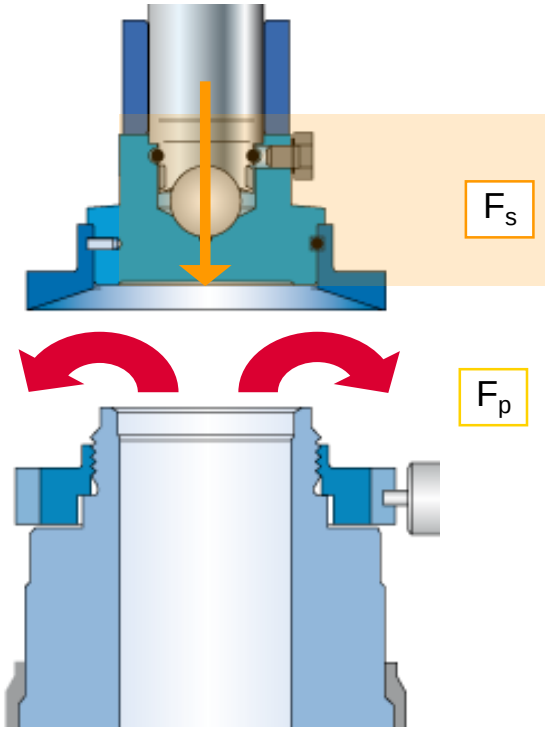
Valve is closed:
$F_s > F_p$



Function. Open Position.

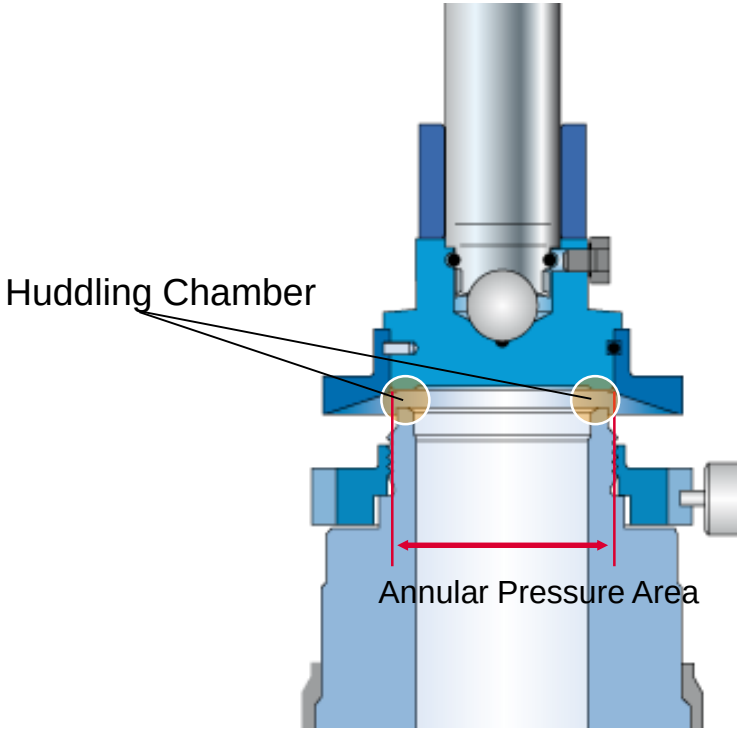
When **the seating force is less than the upward force** on the disc, the valve **opens**.

Valve is open:
$F_s < F_p$



Function. Huddling Chamber.

An **annular chamber (huddling chamber)** located **downstream of the** seat of a safety valve for the purpose of **assisting** the valve to **achieve the full lift**.



Operation

Thank you for your attention.