



ODE srl

SOLENOID
VALVES

Product Training

New KP Series Total Separation Solenoid valve





Agenda

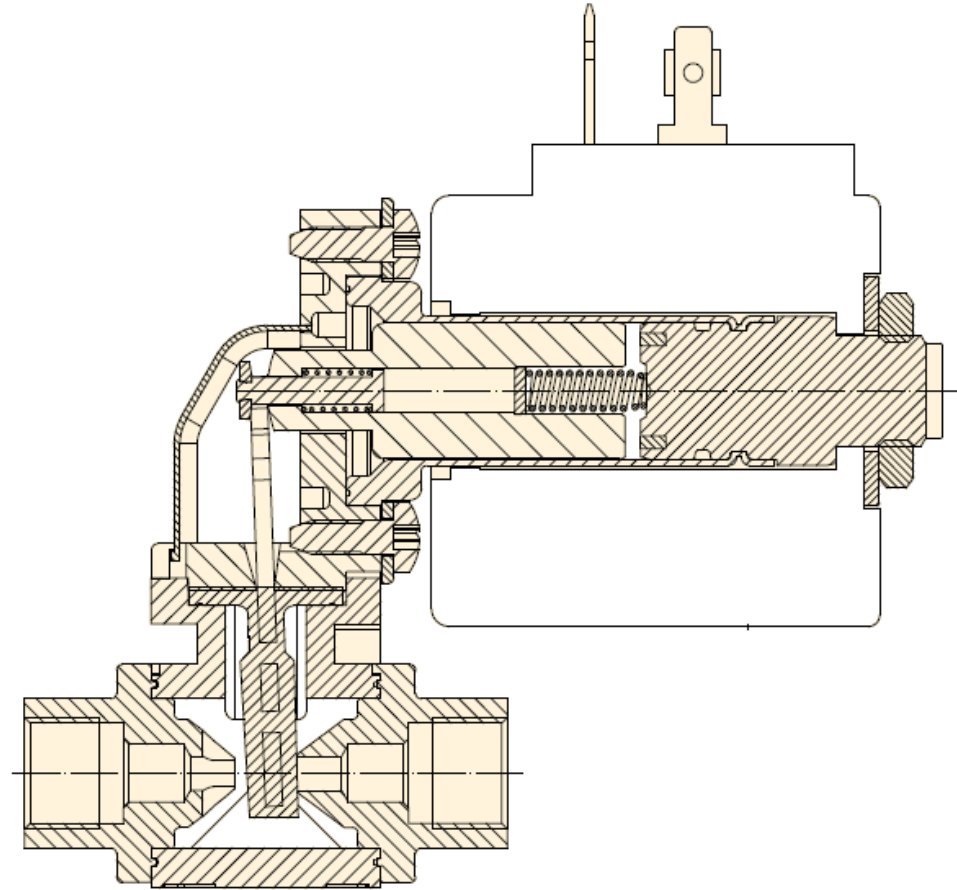
- **What's a total separation valve?**
- **Technical characteristics**
- **Production process**
- **Certifications**
 - **UL**
 - **VDE**
 - **NSF**
- **Applications**
- **Competitors**





Total Separation?

- Fully developed in ODE
- Different design
- In line orifices
- Lever Control System
- Simple and reliable Design





Total Separation?

- Different Materials
 - Polysulfone
 - Silicon
 - EPDM (on development)
 - VITON (on development)
- Sonic welding system
- As usual 100% test
- Safety Factor: 5





Total Separation?

- Flow: 3,2 & 4 L/min
 - 2/2 NC Kv 3,2
 - 3/2 Diverting Kv 4,0
- In line orifices
- Silicon Sealing
 - Viton (on development)
 - EPDM (on development)
- Latching system available





Total Separation?

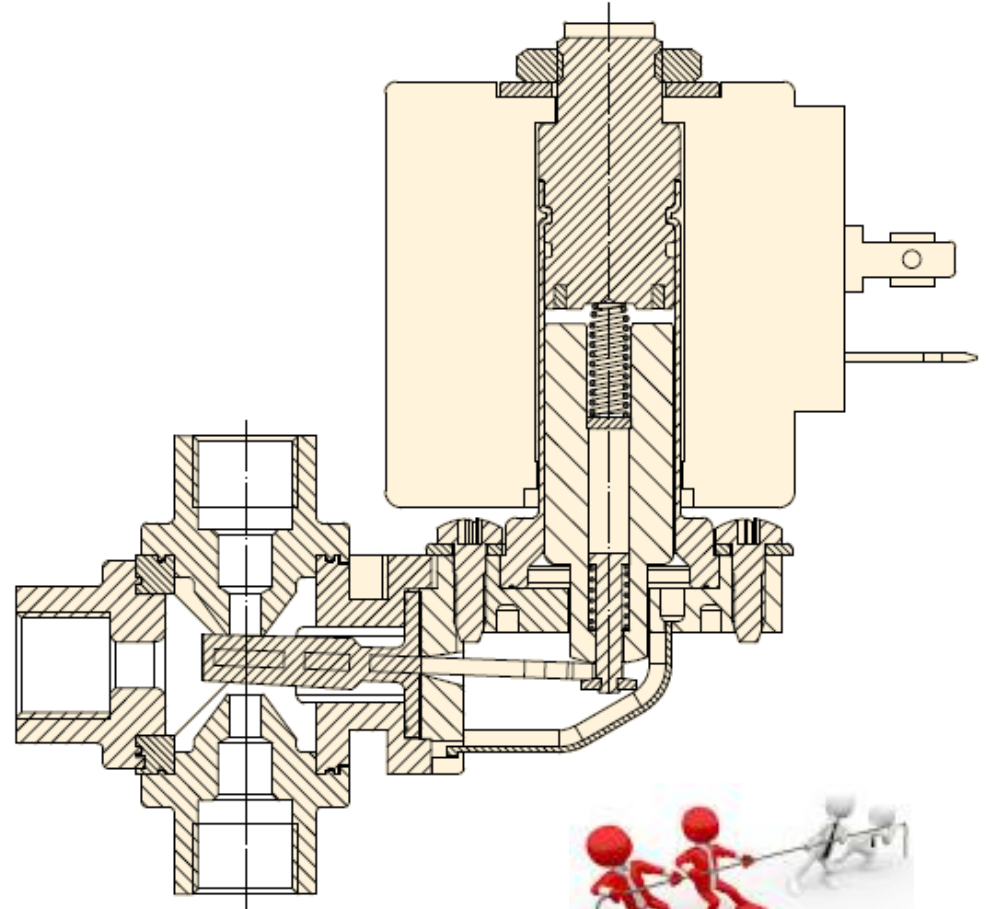
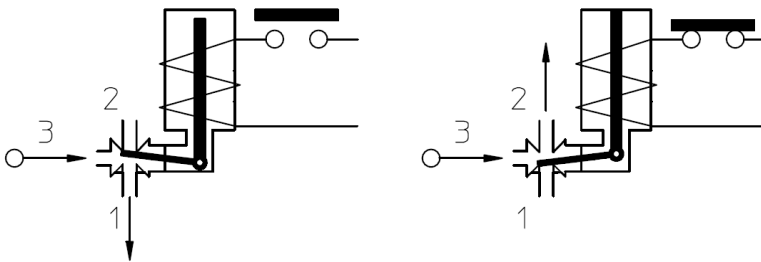
- Connections
 - G 1/8" Female STD
 - G 1/8" Male - on Demand
 - Hose Tail 6x4 – on Demand
- Functions
 - 2/2 N.C. (3-6 bar)
 - 3/2 Diverting (4-7 bar)
 - 2/2 N.O. (coming soon)
 - 3/2 Selecting (coming soon)
- Piloting separated from fluid
- Available for sterilized or aggressive fluids





Total Separation?

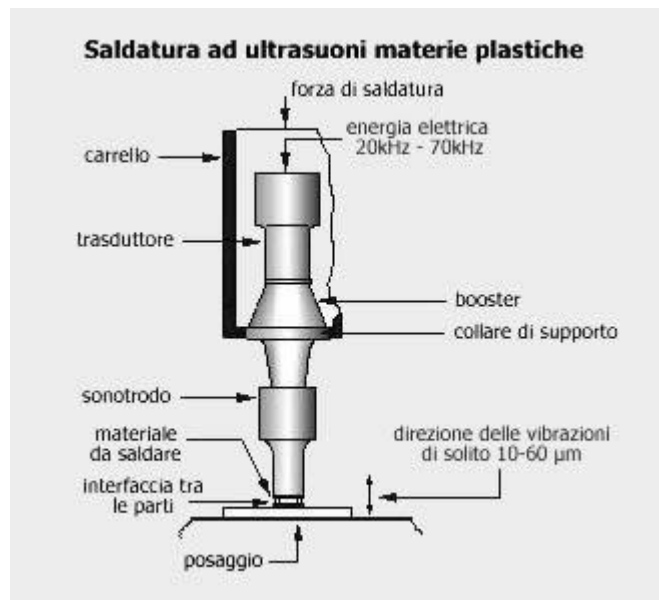
- 3/2 Diverting





Production Process

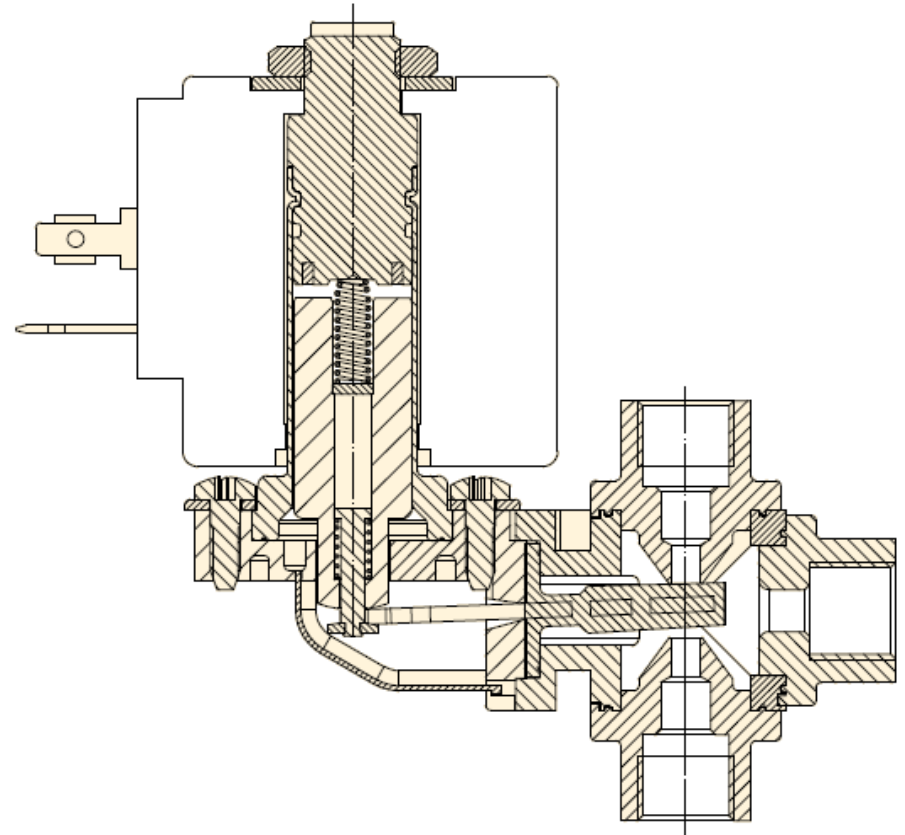
- Well known Technology
- New @ ODE
- Widely used in the home appliances
- Not used in the industrial valves





Certifications

- NSF
- UL & CSA
- Materials certified
- Sealing approved
- Temperatures:
 - -10°C \rightarrow 100°C
- LCT
- Thermal Cycling



Applications

**Pressurize or move a fluid ...
...without contaminations...**

Washing plants and sterile rooms:

- Aggressive fluids
- Guarantee of purity
- Controlling or deviating the fluid
- Avoid contamination
- Cip
- Washing processes



Applications

Agriculture – Milking plants

- Automatic plant
- Employers costs
- Fluid temperature
- Avoid contamination



Applications

Medical Sector – Sterilizers

- Sterilized fluid & sterilizers
- Process / Product Criticality
- Fluid at ambient temperature
- Avoid contamination
- Fluid without contamination
- Aggressive fluids



Applications

Agriculture

- Fertilizers
- Aggressive fluids
- Dosing (costs)
- Green world



Applications

Vending

- Drink dispensers
- Juices
- Mixture of concentrates
- Water management



Applications

Food - Dosing

- Packaging
- Noble Gases N_2 , He_2 etc...
- End use date
- Food essences





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ODE thanks...



for the attention



solenoid valves