

LESER USP's vs. Competition

High Efficiency Series 810



LESER

Objectives of this Presentation. Knowledge to learn.

1. [Objectives](#) | 2. [Complete POSV](#) | 3. [Main Valve](#) | 4. [Pilot](#)

The aim of this Presentation is to point out **the advantages of LESER High Efficiency Series 810** against the competition.




LESER

The-Safety-Valve.com

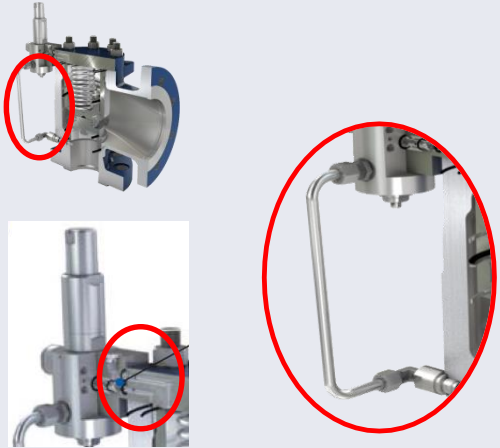

Complete POSV.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	Results in
<ul style="list-style-type: none">■ Pilot connection directly with main valve	<ul style="list-style-type: none">■ Pilot connection with angled connection to the main valve	<ul style="list-style-type: none">■ LESER pilot connection is more robust
<ul style="list-style-type: none">■ Pilot connection directly with main valve so that no additional piping of dome is needed	<ul style="list-style-type: none">■ Pilot connection with dome piping to the main valve cover	<ul style="list-style-type: none">■ LESER do not need additional dome piping which leads to less parts and less leakage possibilities
 A technical cutaway diagram of a valve assembly on the left. On the right, a circular inset shows a close-up of the LESER valve's pilot connection, which is directly integrated into the main valve's structure without any external piping.	 A technical cutaway diagram of a competitor's valve assembly on the left. On the right, a circular inset shows a close-up of the competitor's valve, which features a separate dome piping system connecting the pilot to the main valve cover. A red circle highlights the dome piping area.	

Complete POSV.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	Results in
<ul style="list-style-type: none">■ Compact installation of accessories and no need of additional tubing	<ul style="list-style-type: none">■ Additional accessories need much tubing, e.g. for BFP additional piping is required	<ul style="list-style-type: none">■ Fewer parts and fewer leakage possibilities
 The image shows three views of a LESER valve assembly. The top view is a cutaway diagram of the valve with a red circle highlighting the compact internal piping. The bottom-left view is a photograph of the valve with a red circle highlighting the compact external piping. The bottom-right view is a photograph of the valve with a red circle highlighting the compact external piping.	<p>Competitor</p>  The image shows a competitor valve assembly with a red circle highlighting the complex external piping required for the BFP (Backflow Prevention) feature.	

Complete POSV.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	Results in
<ul style="list-style-type: none">■ Support brackets on each body - standard	<ul style="list-style-type: none">■ No support brackets	<ul style="list-style-type: none">■ High reaction forces can be better handled
 	 	

Main Valve.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

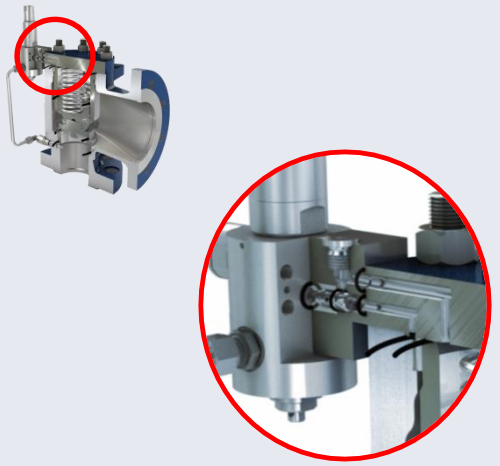
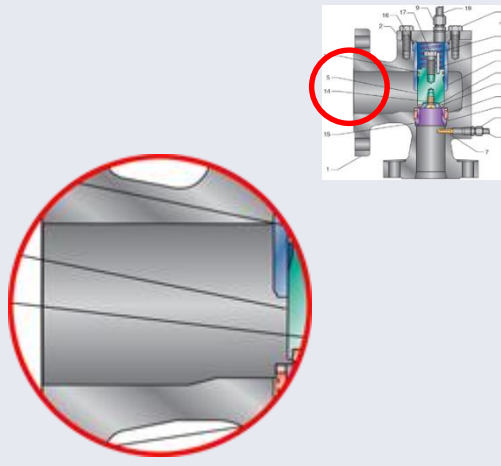
LESER	Competitor	Results in
<ul style="list-style-type: none">■ Flange drilling for multiple flange sizes possible ASME, DIN EN ISO, JIS incl. RTJ (Outside diameter and flange thickness can be bigger than standard diameters)	<ul style="list-style-type: none">■ Flange according to ASME B16.34 possible	<ul style="list-style-type: none">■ Worldwide applicable flanges of LESER body
 The image shows three views of a blue LESER valve. The top-left view shows the valve body with a red circle highlighting the flange area and another red circle highlighting the valve handle. The top-right view shows a close-up of the flange with a red circle around it. The bottom-left view shows a close-up of the valve handle with a red circle around it.	 The image shows three views of a competitor valve. The top-left view shows a close-up of the flange with a red circle around it. The top-right view shows the valve body with a red circle highlighting the flange area and another red circle highlighting the valve handle. The bottom-right view shows a close-up of the valve handle with a red circle around it.	

LESER

The-Safety-Valve.com

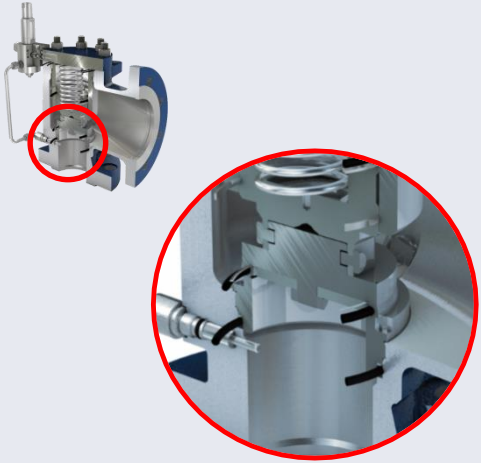
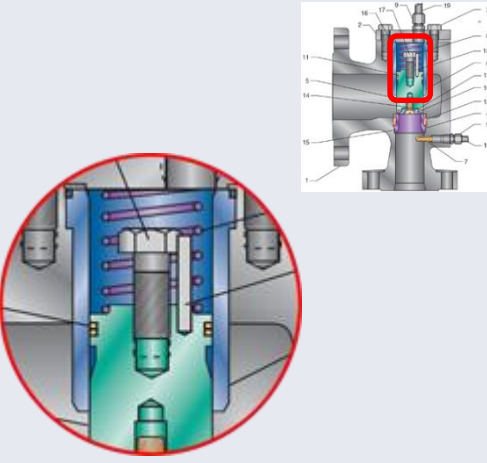
Main Valve.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	LESERs Benefit
<ul style="list-style-type: none">■ Tubing between pilot valve and main valve integrated into top plate■ BFP integrated into manifold block as a standard component	<ul style="list-style-type: none">■ If BFP is added an additional drilling of pipe connection to main valve has to be done at the outlet of main valve	<ul style="list-style-type: none">■ No additional machining and no additional piping necessary■ No added price for BFT
 The image shows a 3D cutaway of a LESER valve assembly. A red circle highlights the integrated Backflow Preventer (BFP) mechanism. A larger red circle provides a magnified view of the BFP's internal components, showing its integration into the manifold block.	 The image shows a 3D cutaway of a competitor's valve assembly. A red circle highlights the external BFP component. A larger red circle provides a magnified view of the BFP's connection to the main valve, showing the need for additional drilling and piping.	

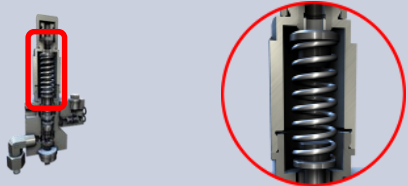
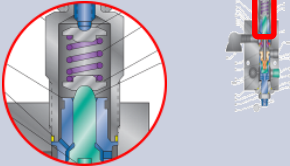
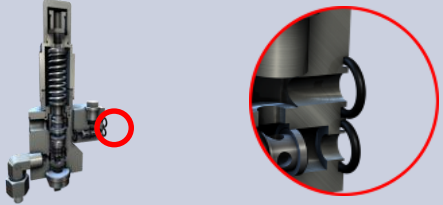
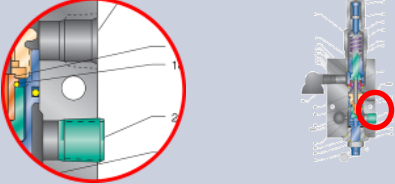
Main Valve.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	LESERs Benefit
<ul style="list-style-type: none">■ Design with no lift restriction of piston■ Design with various nozzle diameters to achieve Orifice definition	<ul style="list-style-type: none">■ Design with lift restriction with stud to achieve the Orifice definition (restricted lift in Red book)	<ul style="list-style-type: none">■ No lift restriction required → Prevention of assembly errors which could cause critical plant states
 The LESER design is shown in two parts. The top part is a small cutaway diagram of a valve assembly with a red circle highlighting the piston area. The bottom part is a larger circular cutaway showing the piston and nozzle assembly in detail, illustrating the lack of lift restriction.	 The competitor design is shown in two parts. The top part is a cutaway diagram of a valve assembly with a red box highlighting the piston area. The bottom part is a larger circular cutaway showing the piston and nozzle assembly in detail, illustrating the lift restriction caused by the stud.	

Pilot.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot


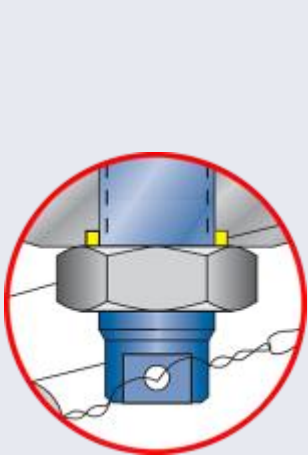
LESER	Competitor	LESERs Benefit
<ul style="list-style-type: none">The split bonnet enables to replace the spring without completely dismantling the pilot.  <p>The image shows a 3D model of a LESER pilot assembly with a split bonnet. A red circle highlights the top part of the bonnet, which is shown in a separate view to the right, illustrating how it can be removed without dismantling the entire pilot.</p>	<ul style="list-style-type: none">Single bonnet leads to loosening of inner parts while dismantling → Soft goods have to be replaced  <p>The image shows a 3D model of a competitor's pilot assembly with a single bonnet. A red circle highlights the bonnet, which is shown in a separate view to the right. This view shows the internal components, including a spring and seals, which would be loosened or damaged during the removal of the single bonnet.</p>	<ul style="list-style-type: none">Simple/quick/safe assembly is ensured, the sensitive sealing elements are not dismantled.
<ul style="list-style-type: none">The connection to the main valve cover is identical for Pop Action and Modulate Action Pilot.  <p>The image shows a 3D model of a LESER pilot assembly connected to a main valve cover. A red circle highlights the connection point, which is shown in a separate view to the right. This view shows the connection being identical for both Pop Action and Modulate Action Pilot types.</p>	<ul style="list-style-type: none">Connection with additional tubing needed, different connections with angled connection for Modulate Action Pilot  <p>The image shows a 3D model of a competitor's pilot assembly connected to a main valve cover. A red circle highlights the connection point, which is shown in a separate view to the right. This view shows the connection requiring additional tubing and having a different angled connection for the Modulate Action Pilot.</p>	<ul style="list-style-type: none">The pilot can easily be replaced.

LESER

The-Safety-Valve.com

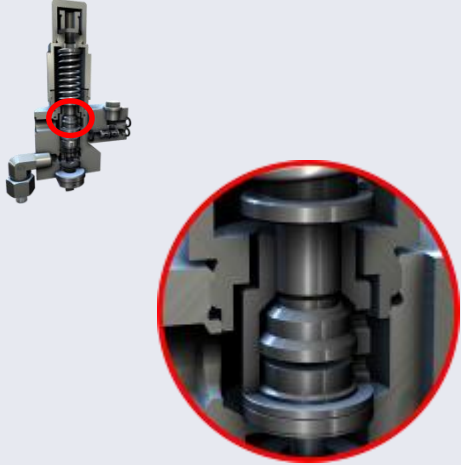
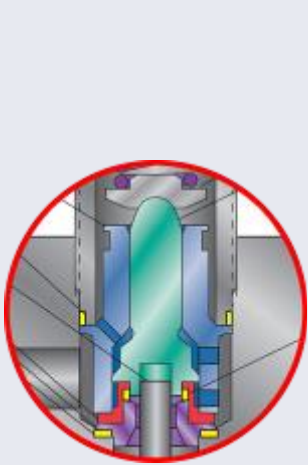
Pilot.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	LESERs Benefit
<ul style="list-style-type: none">No leakage possible when adjusting the blow down, leakage to outside is not possible.	<ul style="list-style-type: none">Leakage possible when lock nut is loosened of the blow down adjustment	<ul style="list-style-type: none">Risk potential for maintenance staff is reduced
 <p>The image shows a 3D CAD model of a LESER pilot valve assembly on the left. A red circle highlights the blow down adjustment knob on the right. Below it is a larger, circular inset showing a close-up of the adjustment knob, which is a black, cylindrical component with a flat top and a small hole on the side.</p>	 <p>The image shows a 3D CAD model of a competitor pilot valve assembly on the left. A red circle highlights the blow down adjustment knob on the right. Below it is a larger, circular inset showing a close-up of the adjustment knob, which is a grey, hexagonal nut-like component with a blue base and a chain attached to it.</p>	

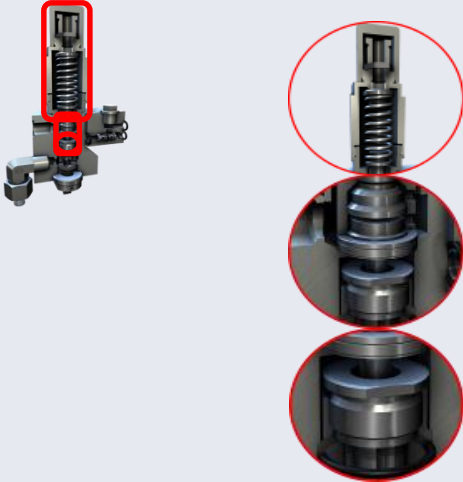
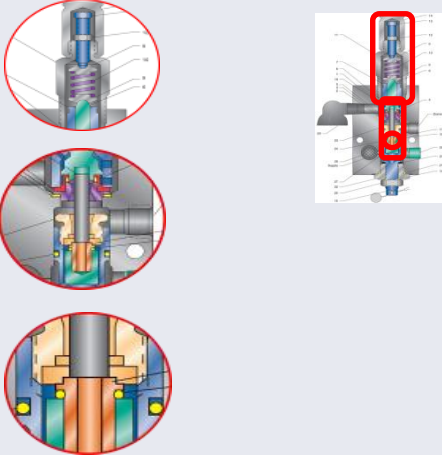
Pilot.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	LESERs Benefit
<ul style="list-style-type: none">■ Simple assembly of inner parts is given due to wide openings.	<ul style="list-style-type: none">■ Deep bore on body top to assemble sensitive parts like lower exhaust seat	<ul style="list-style-type: none">■ Sensitive inner parts can be replaced easily and safely even when installed in plant.
 <p>The image shows a 3D perspective view of a LESER pilot valve assembly on the left, with a red circle highlighting the internal components. Below it is a circular inset showing a cross-section of the valve, also with a red circle highlighting the internal assembly area.</p>	 <p>The image shows a 3D perspective view of a competitor pilot valve assembly on the right, with a red circle highlighting the internal components. Below it is a circular inset showing a cross-section of the valve, also with a red circle highlighting the internal assembly area.</p>	

Pilot.

1. Objectives | 2. Complete POSV | 3. Main Valve | 4. Pilot

LESER	Competitor	LESERs Benefit
<ul style="list-style-type: none">All parts are turned parts.	<ul style="list-style-type: none">Bonnet and cap from hexagonal semi-finished part	<ul style="list-style-type: none">Special material requirements can easily be realized.
 The image shows a 3D model of a LESER pilot valve assembly on the left. A red box highlights the pilot valve mechanism. To the right, three circular inset images provide detailed views of the internal components, including the spring, valve seat, and stem assembly.	 The image shows a 3D model of a competitor pilot valve assembly on the right, with a red box highlighting the bonnet and cap area. To the left, three circular inset images provide detailed views of the internal components, showing a different design for the valve seat and stem assembly.	

LESER USP's vs. Competition

Thank you for your attention.

