

High Efficiency , Type 821



High Efficiency

Type 821

Pilot Operated Safety Valves from the High Efficiency product group are especially suitable for applications with high pressure and offer optimal tightness right up to set pressure. They meet all the requirements of API 526 and therewith offer 100% compatibility. LESER offers pilot operated safety valves with rapid or proportional opening characteristics.

The supplementary loading system for the High Efficiency product group uses external air pressure to guarantee better tightness up to set pressure.

Approvals



Industries

- Oil and Gas Industry
- Chemical Industry
- Petrochemical Industry
- Power
- Technical Gases

Further Links

 [High Efficiency Catalog \[DE\]](#)

 [Instructions \[DE, EN, FR, IT, SP, RU, CN\]](#)

 [Stückliste Type 821 \[DE\]](#)

 [Sales Brief POSV \[EN\]](#)

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Datasheet

Product info	Metric unit	US unit
Key feature	pilot operated / Modulate Action	pilot operated / Modulate Action
Nominal diameter inlet	DN 25 - DN 200	1" - 8"
Nominal diameter outlet		
Orifice	API Standard as well as Extra Orifice: 1 D 2 - 8 T 10 / 1 G 2 - 8 T+ 10	API Standard as well as Extra Orifice: 1 D 2 - 8 T 10 / 1 G 2 - 8 T+ 10
Pressure		
Actual orifice diameter d0	11 - 180 mm	0,433 - 7,087 in
Actual orifice area A0	95 - 25446,9 mm ²	0,147 - 39,443 in ²
Pressure	2,5 - 426 bar	36 - 6170 psig
Flange rating inlet	PN 10 - PN 250	CL150 - CL1500
Temperature acc. to DIN EN	-45 to 200 °C	-49 to 392 °F
Temperature acc. to ASME	-45 to 200 °C	-49 to 392 °F
Body material	1.0619, 1.4408	SA 216 WCB, SA 351 CF8M, SA 352 LCB
KUB-Materials		
Valve connection	Flange acc. to DIN EN 1092 or acc. to ASME B 16.5 or JIS 2220	Flange acc. to DIN EN 1092 or acc. to ASME B 16.5 or JIS 2220
Type of loading	controlled by process medium	controlled by process medium
Approvals	ASME Sec. VIII Div. 1, PED/ DIN EN ISO 4126-4, PED/ AD 2000-Merkblatt A2, AQSIQ, EAC, TSSA	ASME Sec. VIII Div. 1, PED/ DIN EN ISO 4126-4, PED/ AD 2000-Merkblatt A2, AQSIQ, EAC, TSSA
Specials	Pilot action type: Modulate Action Full open (overpressure): max. 10% Blowdown: max. 7% Application: Steam, gasses and liquids	Pilot action type: Modulate Action Full open (overpressure): max. 10% Blowdown: max. 7% Application: Steam, gasses and liquids

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Options

Feature		Option Code
	NACE material test certificate	R70
	Soft sealing POSV complete O-ring disc, piston guide, seat, tubing, cover FKM	R04 (Standard)
	Soft sealing POSV complete O-ring disc, piston guide, seat, tubing, cover EPDM	R05
	Soft sealing POSV complete O-ring disc, piston guide, seat, tubing, cover FFKM	R06
Main valve	Special machining of flange RTJ-groove inlet	H62
	Special machining of flange RTJ-groove outlet	H63
	Special machining of flange DIN-flange facings inlet	diverse
	Special machining of flange DIN-flange facings outlet	diverse
	Metal sealing	R71
	Drain bore G1/2	J19
	Drain bore NPT 1/2"	R48
	PTFE piston seal, spring loaded	R20
	Top plate material 1.4404/ 316L	R46
	Studs / nuts 1.4401 (A4-70)	J89
Pilot	Pilot test gag	R33
	Pilot lifting device	R25
	Pilot lifting device manually operated with test gag	R22
Accessories	Field test connection	R26
	Pilot supply filter	R30
	Manual blowdown to atmosphere	R27
	Manual blowdown into main valve outlet	R24
	Remote sensing	R28
	Swagelok connection	R23
	Backflow preventer	(Standard)
	Needle Valve for field test connection	R4A