

Certificate for Type Test of Specific Equipments (Safety Appurtenances)

Certificate No. : TSX71000820110020

Manufacturer: Leser GmbH & Co.KG
Address: Itzehoer-Str.63-65,24594 Hohenwestedt Germany
Manufacture Range: Spring Loaded Safety Valves
Type Test Report No. : TSX7100082011020S
 TSX7100082010057S
 2006-020S*

Characteristics which the sample valves have shown in type testing are satisfactory according to *Safety Technical Supervision Regulations for Safety Valves* and can cover the following products:

Title	Series/Type	Inlet Size Range(mm)	Design pressure (MPa-g)	Design temperature(° C)	Applicable medium
Spring Loaded Safety Valve	431/433	15 - 150	0.02 - 16	-196 up to +450	S, G, L, LT
	441/442	20 - 400	0.02 - 4	-196 up to +450	S, G, L, LT
	444	25-80	0.02-1.6	-45 up to +300	S, G, L
	447/449	25 -100	0.02 - 1.6	-85 up to +200	S, G, L
	488	25 -100	0.02 - 1.6	-45 up to +250	S, G, L
	455-458	25 -150	0.25 - 40	-85 up to +550	S, G, L
	460/459/462	10 - 20	0.02 - 85	-196 up to +550	S, G, L, LT
	483/484/485	25 - 50	0.02 - 1.6	-45 up to +250	S, G, L
	437/439	10 - 20	0.1 - 39	-196 up to +280	S, G, L, LT
	438/481	10 - 25	0.1 - 18	-196 up to +200	S, G, L
	526	25 - 200	0.02 - 41.5	-196 up to +550	S, G, L, LT
	546	25 - 100	0.02 - 1.0	-60 up to +200	S, G, L
	427/429* ²	15-150	0.15 - 4.0	-196 up to +400	S, G
	440* ²	20-150	0.1 - 1.0	-85 up to +450	S, G
	532/534	15-150	0.3 - 4.0	-85 up to +400	S, G, L
424	25 - 200	0.02 - 0.1	-10 up to +300	S, G	

*Note:

- 2006-020S was type test report in 2006, the judging principles conformed to *Safety Technical Supervision Regulations for Safety Valves*. This certificate is issued according to TSX7100082011020S & TSX7100082010057S, and also taking 2006-020S and data provided by manufacturer into account.
- All steam valves follow the requirement of ASME Section VIII.

