

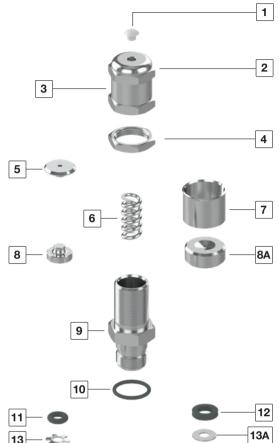
FEATURES

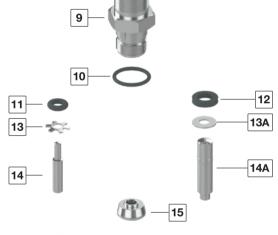
- SST 316 construction
- Service 10-225 psi
- MAWP* 300 psi
- One spring for all set pressure ranges
- Available in all pipe threads and LET-LOK® connections
- Option to comply with standards CE/PED
- End connections: 1/4",1/2", 6mm and 12mm

Maximum Allowable Working Pressure

GENERAL

The H-900 series is a relief valve designed for low pressure services. It is most suited for use where changes in pressure can cause process issues, system damage or personal injury.





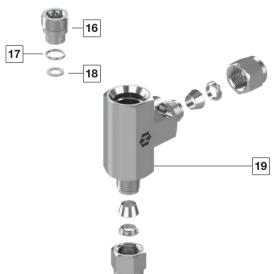
MATERIALS OF CONSTRUCTION

Item No.	Components	Qty.	1/4" Body Size	1/2" Body Size		
1	Cap Plug	1	Polypropylene	Polypropylene		
2	Adjustment Cap	1	SST 316	SST 316		
3	Cap Lable	1	Polyester	Polyester		
4	Locking Nut	1	SST 316	SST 316		
5	Upper Spring Button	1	SST 316	-		
6	Spring	1	SST 302	SST 302		
7	Spring Sleeve	1	-	SST 302		
8	Lower Spring Button	1	SST 316	-		
8A	Lower Spring Button	1	-	SST 316		
9	Bonnet	1	SST 316	SST 316		
10	O-Ring	1	Fluorocarbon FKM	Fluorocarbon FKM		
11	O-Ring	1	Fluorocarbon FKM	-		
12	Quad Ring	1	-	Fluorocarbon FKM		
13	Retaining Ring	1	PH15-7 Mo	-		
13A	Location Ring	1	-	SST 316		
14	Stem*	1	SST 316	-		
14A	Stem*	1	-	SST 316		
15	*Bonded Poppet	1	SST 316 bonded with Fluorocarbon FKM	SST 316 bonded with Fluorocarbon FKM		
16	Insert*	1	SST 316 -			
17	Packing*	1	PTFE -			
18	Ring*	1	SST 316	-		
19	Body*	1	SST 316	SST 316		
	Lubricant*		Silicone based and PTFE based			

Wetted parts

PRESSURE TEMPERATURE RATING

Series	H-900 Body Size: 1/4" & 1/2"						
Seal Material	Fluorocarbon FKM	Buna N	EPDM				
TEMP °C (°F)	MAX SET PRESSURE psig (bar)						
-40 (-40)	-	-	-				
-34 (-30)	-	-					
-23 (-10)	-			225 (15.5)			
-18 (0)	-						
-12 (10)							
-4 (25)							
-1 (30)			225 (15.5)				
10 (50)	225 (15.5)	225 (15.5)	223 (13.5)				
65 (150)							
93 (200)							
121 (250)							
135 (275)							
148 (300)	-						



CLEANING & PACKAGING

Every H-900 series relief valve is cleaned in accordance with Standard Cleaning and Packaging Procedure 8184. Oxygen Clean & Lubricant-Free cleaning and Packaging is conducted in accordance with Special Cleaning and Packaging Procedure 8185.

TESTING

The H-900 relief valve design has been tested for proof and burst. Every H-900 relief valve is factory tested for proper assembly, set and resealing performance. No detectable leakage is allowed during the shell test.

SETTING AND RESEALING PRESSURE

- Upstream set pressure is the first indicator of flow process.
 Every pressure relief after the first indication is repeatable within a deviation of 5% at room temperature.
- Blocked upstream set pressure is the first indicator of a stopped flow process and is always lower than the set pressure.
- Calculation of set pressure valve design demands back pressure consideration as the system back pressure increases the set pressure. To balance the system, the back pressure must be multiplied by 0.8 and the result shall be subtracted from the required set pressure.

Lock Wire Holes

Δ

Lubricant-free cleaned valves have higher reseal pressure.

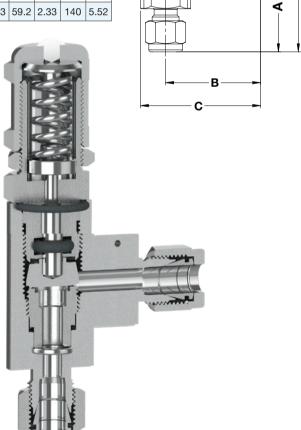
STANDARD CONFIGURATION DIMENSIONS

	Connection / size		Orifice*		Dimensions											
Description	Inlet	Outlet	Office		Α		В		С		D					
			mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				
H-900	1/4 LET-LOK	1/4 LET-LOK	4.8		37	1.45	39	1.53	50	1.97	96	3.78				
H-900	6MM LET-LOK	6MM LET-LOK		4.8	4.8	0.10	37	1.45	39	1.53	50	1.97	96	3.78		
H-985	1/4 Male NPT	1/4 Female NPT				4.0	4.0	4.0	4.0	0.19	32	1.26	30	1.18	40	1.57
H-995	1/4 Male NPT	1/4 LET-LOK			32	1.26	39	1.53	50	1.97	88.6	3.49				
H-900	½ LET-LOK	½ LET-LOK	6.4			46.5	1.83	46.5	1.83	59.2	2.33	150	5.92			
H-900	12MM LET-LOK	12MM LET-LOK		0.25	46.5	1.83	46.5	1.83	59.2	2.33	150	5.92				
H-985	½ Male NPT	½ Female NPT		0.25	36.3	1.43	36.3	1.43	49	1.93	140	5.52				
H-995	½ Male NPT	½ LET-LOK			36.3	1.43	46.5	1.83	59.2	2.33	140	5.52				

^{*} Orifice in fully open position

H900 RE-SEAL PRESSURE

Series	Test Set Pressure psig (bar)	Min Resealing Pressure as a Percentage of Set pressure, %				
H-900	10 - 20 (0.68 to 1.3)	50				
п-900	175 - 225 (12.0 to 15.5)	90				



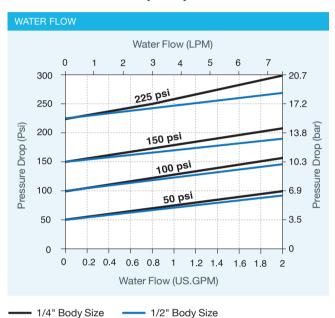


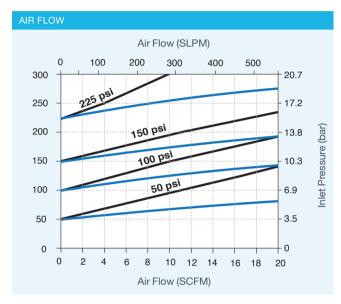
OPERATION

H-900 relief valves open when the system pressure reaches the set pressure and closes when the system pressure drops below the set pressure.

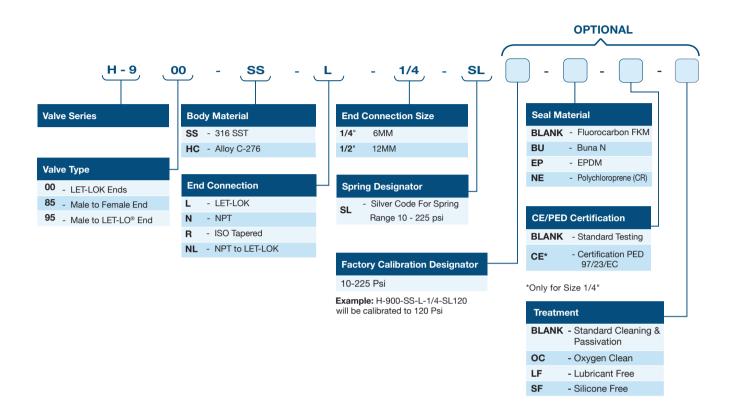
Nalves that have not been actuated for some time may contain initial relief pressure higher than the set pressure.

FLOW DATA AT 70°F (20°C) SPRING 10-225PSIG





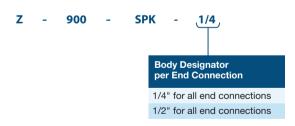
H-900 SERIES ORDERING INFORMATION



ORDERING INFORMATION FOR SPARE KITS

SPRING KIT

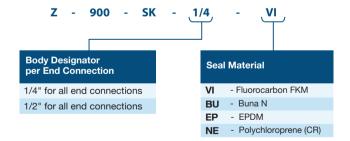
Includes: Spring, Label, wire and lock



Oxygen applications work shall be carried out according to procedures for working with oxygen. In case spare kits are ordered for oxygen clean valves, such kits must be ordered as oxygen clean by adding "-OC" designator. Example: Z-900-SK-1/4-VI-OC

SEAL KIT

Includes: O-rings, Bonded poppet and label



Warning!

The system designer and user have the sole responsibility for selecting products suitable for their special application requirements, ensuring their safe and trouble-free installation, operation, and maintenance. Application details, material compatibility and product ratings should all be considered for each selected product. Improper selection, installation or use of products can cause property damage or personal injury.

Relief Valves H-900 Series | June 2023

