



Product Note PN 427, Revision 5

Valve Series High Temperature Options

June 10, 2021

The chart below depicts the available combinations of valve series and seat materials for different operating temperature options. Standard product with a polyimide (VS) seat are rated to 90C. No changes to the product are required for this rating. There are two high temperature options, H1 and H3, each of which have a variety of ratings depending upon seat material.

The H1 and H3 options have many changes from standard product, both internal and external, to achieve the ratings. External modifications include: serial numbers engraved in the valve body, model number and pressure ratings are engraved on a metal tag attached to the valve, manual knob handles are all metal and aluminum is clear anodized (dye colors tend to discolor at higher temperatures).

Please note that if a valve is not listed it may simply mean it has not been previously requested or tested. However, the high pressure pneumatic actuator, such as used on the AP 3000, 3130 and 3113 valves, cannot be rated to higher temperatures, as the springs in the actuator tend to lose load operating above 70C.

Valve Series	Seat material / temperature rating							Pressure Rating	
	Standard	H1			H2	H3		psig/bar	
	VS/90C	VS/150C	PF/130C	metal/150C	PF/200C	VS/250C	metal/250C	125/9	250/17
Pneumatic									
3540/4540	•	•	• ¹			•		•	
3550/4550	•	•	• ¹						•
3580/4580	•	•	• ¹						•
3580 H3						•		•	
4440					•			•	
Manual									
3600/4600	•	•	• ¹			•			•
3625/4625	•	•	• ¹			•			•
3650/4650	•	•	• ¹			•			•
3657/4657	•	•	• ¹			•			•
3659/4659	•	•	• ¹			•			•
3260				•			•	•	
4457/4459					•			•	

VS = Polyimide Seat

PF = PFA Seat

Metal = Metal Seat

¹ PF H1 seat only available in 4 series

It is important to remember that both the high temperature (H1 or H3) designators and the seat material designators (except metal seated valve models and AP 4440, 4457 and 4459 H2 which has PF seat as a standard feature) must be specified in the model number to achieve the operating temperature rating in the chart. The valve models apply to all series, AP, AZ and AK.

Please contact the factory or your local representative for further information.