

# PETROLEUM TECHNOLOGY COMPANY

The Artificial Lift Company

## SAS

1 ¼", 1.5", 2.0"



[www.ptc.as](http://www.ptc.as)

## SAS

This Mark-4 - Surface Annulus Safety Valve is a one-way check valve and is designed to fit into a "VR" thread profile within a tubing head spool or wellhead.

The check valve comprises of a main body which threads directly into any VR thread profile.

Mounted within the body are a spring, spring retainer and dart valve.

The valve is normally closed by the spring force, where this spring force aids the check valve dart against the seat creating a metal to metal seal.

Once installed the check valve allows gas to be injected into the annulus and seals off against well pressure when injection is stopped.

When Injecting, the gas passes between the dart valve and the housing and exits through a series of angled holes drilled out in the rear locking mechanism. The spring is not exposed to flow.

One of the design features is that the gas flow has limited angle direction change and when valve is open has limited variation in flow area and offer the best flow area possible for all VR thread sizes.

More than 240 valves have been delivered to date and approx 75 billion scf of gas injected through.

The valve is xylan coated for galling resistance, reduce friction and to secure easy retrieval.

The valve is easy to change out, using a telescopic hydraulic installation tool also provided by PTC.

### Design Specifications

Description	SAS 1.5"
Valve Body Material	K-500 Monel
For API Flange Size	2 1/16" 5K Interface
Service	API Class EE for H <sub>2</sub> S Unique Service (pp H <sub>2</sub> S <sub>0</sub> = 20 bar)
Valve OD Size	1.97"
Running Tool	PTC VR Installation Tool
Seal Ring	Customer Standard
Pressure Rating	10 000 PSI
Temperature Rating	- 46°C to 150°C
Test According to	API 6A
Special Feature	Xylan Coated Threads
Min Valve Flow Area	0,78 sq.in.
Weight	1,0kg/ 2.2 lb
Valve Thread Connection	1.5" Line Pipe

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For further information contact PTC at: [post@ptc.as](mailto:post@ptc.as)  
+47 51 95 08 00 or +1 281 378 4776 or +44 (0)1224 57 93 50

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# PETROLEUM TECHNOLOGY COMPANY

The Artificial Lift Company

## SAS 1 1/4"



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## SAS

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The valve is xylan coated for galling resistance, reduce friction and to secure easy retrieval.

The valve is easy to change out, using a telescopic hydraulic installation tool also provided by PTC.

### Design Specifications

Description	SAS 1 1/4"
Valve Body Material	K-500 Monel
For API Flange Size	2 1/16" 5K Interface
Service	API Class EE for H <sub>2</sub> S Unique Service (pp H <sub>2</sub> S <sub>0</sub> = 20 bar)
Valve OD Size	1.97"
Running Tool	PTC VR Installation Tool
Seal Ring	Customer Standard
Pressure Rating	10 000 PSI
Temperature Rating	- 46°C to 150°C
Test According to	API 6A
Special Feature	Xylan Coated Threads
Min Valve Flow Area	0,85 sq.in.
Weight	0,9kg/ 2.0 lb
Valve Thread Connection	1.25" Line Pipe

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# PETROLEUM TECHNOLOGY COMPANY

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## SAS 1.5"



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More than 240 valves have been delivered to date and approx 75 billion scf of gas injected through.

The valve is xylan coated for galling resistance, reduce friction and to secure easy retrieval.

The valve is easy to change out, using a telescopic hydraulic installation tool also provided by PTC.

### Design Specifications

Description	SAS 1.5"
Valve Body Material	K-500 Monel
For API Flange Size	2 1/16" 5K Interface
Service	API Class EE for H <sub>2</sub> S Unique Service (pp H <sub>2</sub> S <sub>0</sub> = 20 bar)
Valve OD Size	1.97"
Running Tool	PTC VR Installation Tool
Seal Ring	Customer Standard
Pressure Rating	10 000 PSI
Temperature Rating	- 46°C to 150°C
Test According to	API 6A
Special Feature	Xylan Coated Threads
Min Valve Flow Area	0,78 sq.in.
Weight	1,0kg/ 2.2 lb
Valve Thread Connection	1.5" Line Pipe



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# PETROLEUM TECHNOLOGY COMPANY

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## SAS 2.0"



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## SAS

This Mark-4 - Surface Annulus Safety Valve is a one-way check valve and is designed to fit into a "VR" thread profile within a tubing head spool or wellhead.

The check valve comprises of a main body which threads directly into any VR thread profile. Mounted within the body are a spring, spring retainer and dart valve.

The valve is normally closed by the spring force, where this spring force aids the check valve dart against the seat creating a metal to metal seal.

Once installed the check valve allows gas to be injected into the annulus and seals off against well pressure when injection is stopped.

When Injecting, the gas passes between the dart valve and the housing and exits through a series of angled holes drilled out in the rear locking mechanism. The spring is not exposed to flow.

One of the design features is that the gas flow has limited angle direction change and when valve is open has limited variation in flow area and offer the best flow area possible for all VR thread sizes.

More than 240 valves have been delivered to date and approx 75 billion scf of gas injected through.

The valve is xylan coated for galling resistance, reduce friction and to secure easy retrieval.

The valve is easy to change out, using a telescopic hydraulic installation tool also provided by PTC.

### Design Specifications

Description	SAS 2.0"
Valve Body Material	K-500 Monel
For API Flange Size	2 1/16" 5K and 10K Interface
Service	API Class EE for H <sub>2</sub> S Unique Service (pp H <sub>2</sub> S <sub>0</sub> = 20 bar)
Valve OD Size	2.0"
Running Tool	PTC VR Installation Tool
Seal Ring	Customer Standard
Pressure Rating	10 000 PSI
Temperature Rating	- 46°C to 150°C
Test According to	API 6A
Sepecial Feature	Xylan Coated Threads
Min Valve Flow Area	0,85 sq.in.
Weight	1,0kg/ 2.2 lb
Valve Thread Connection	2.0" - 8 Stub Acme



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