

SAFETY DEVICES

F53N-ES / F53N/H-ES
RF53N-ES / RF53N/H-ES



WITT Flashback Arrestors for reliable protection against dangerous reverse gas flow and flashbacks according to EN 730 / ISO 5175-1 Certified and under surveillance
Every Arrestor 100% tested.

The best Flashback Arrestors in the world

Benefits

- a large surface area flame arrester of stainless steel construction extinguishes any dangerous flashback entering the device in any direction
- a temperature sensitive cut-off valve extinguishes sustained flashbacks long before the internal temperature of the arrestors reaches a dangerous level
- a spring loaded non-return valve prevents slow or sudden reverse gas flow forming explosive mixtures in the gas supply
- a filter at the gas inlet protects the arrestor against dirt contamination, extending the service life (RF53N-ES)

Operation / Usage

- Flashback Arrestors are used to protect gas cylinders and pipeline outlet points (hoses and any equipment) against dangerous reverse gas flow (RF53N-ES) and flashbacks
- without non-return valve (F53N-ES) for lower working pressures i.e. before and after analysers
- ideal for use with corrosive gases in the chemical industry, process technology or in the laboratory area
- WITT Flashback Arrestors may be mounted in any position / orientation
- the maximum ambient/working temperature is 70 °C / 158 °F

Maintenance

- annual testing of the non-return valve, body leak tightness and flow capacity is recommended
- WITT is happy to supply special test equipment
- Flashback Arrestors are only to be serviced by the manufacturer. The dirt filter may be replaced by competent staff

Approvals

Company certified according to ISO 9001:2000 and ISO 14001
Other connections available on request

Safety device	Model ...-ES			
	F53N	F53N/H	RF53N	RF53N/H
Flame arrester	X		X	
Non-return valve	–		X	
Temperature sensitive cut-off valve	X		X	
Weight [g]	181		195	
Approval BAM	BAM/ZBA/003/04			
Material	Housing – Stainless steel; Flame arrester – Stainless steel; Seal – Elastomer			
Gases	max. working pressure [bar]			
Acetylene (A)	–	–	1.5	–
Town gas (C)	5.0	–	5.0	–
Natural gas (M)	5.0	12.0	5.0	12.0
LPG (P)	5.0	8.0	5.0	8.0
Hydrogen (H)	3.0	9.0	3.0	10.0
Ethylene (E)	–	9.0	–	9.0
Connections	Order-No.			
1/4" NPT F	145.059	145.106	145.001	145.107
3/8" NPT F	–	–	145.031	145.121
Gases	max. working pressure [bar]			
Oxygen (O)	30,0	–	30,0	–
Compressed air (D)	30,0	–	30,0	–
Anschlüsse	Order-No.			
1/4" NPT F	145.157	–	145.116	–
3/8" NPT F	–	–	145.024	–

A01/D0 subject to change

Product Information / Technical Data

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www.wittgas.com

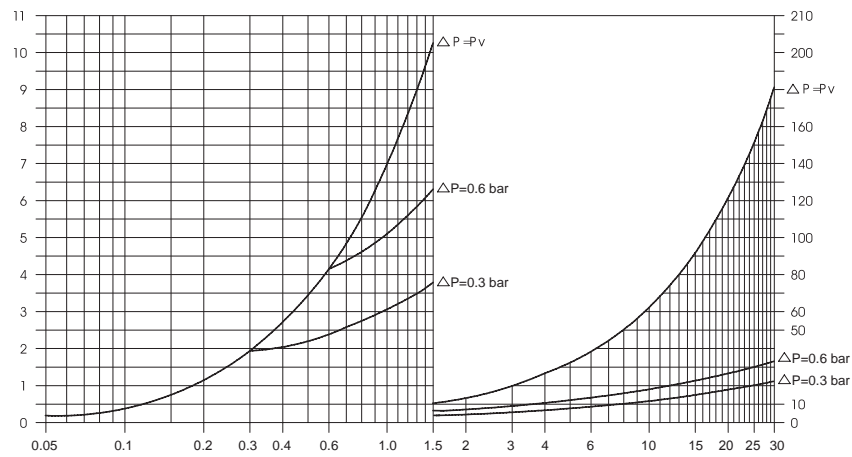
RF53N-ES

145.001
145.031
145.116
145.024

Conversion factors:

Acetylene	x 1.04
Butane	x 0.68
Natural gas	x 1.25
Methane	x 1.33
Propane	x 0.80
Oxygen	x 0.95
Town gas	x 1.54
Hydrogen	x 3.75

Flow diagram for air (20 °C / 68 °F)



Standard volume flow [Nm³/h]
(1013 mbar / 14.7 psi, 0 °C / 32 °F)

Inlet pressure: P_v [bar] Opening pressure: 30 mbar

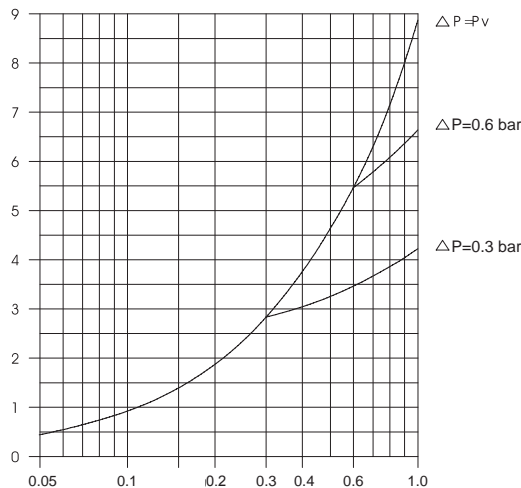
F53N-ES

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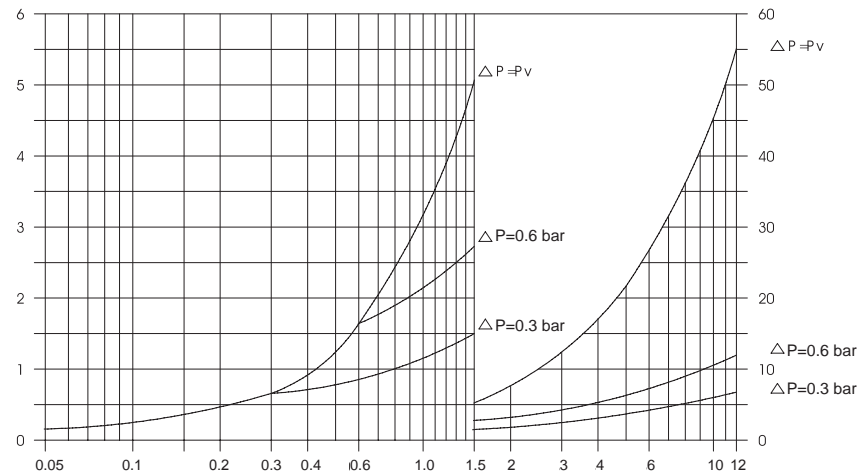
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