

**WITT RF Flashback Arrestors for reliable protection against dangerous reverse gas flow and flashbacks according to DIN EN ISO 5175-1.**

**Every Arrestor 100% tested.**



## The best Flashback Arrestors in the world

- a large surface area flame arrestor **[FA]** of stainless steel construction extinguishes any dangerous flashback
- a temperature sensitive cut-off valve **[TV]** extinguishes sustained flashbacks long before the internal temperature of the arrestors reaches a dangerous level
- a spring loaded non-return valve **[NV]** prevents slow or sudden reverse gas flow from forming explosive mixtures in the gas supply
- a filter at the gas inlet protects the arrestor against dirt contamination, extending the service life
- a pressure relief valve vents excessive pressure and soot into the atmosphere, protecting the hose from bursting and the flame arrestor from clogging up, thus maintaining the flow rate (only RF53DN)

## Operation / Usage

- RF Flashback Arrestors are used to protect gas cylinders and pipeline outlet points (hoses and any equipment) against dangerous reverse gas flow and flashbacks
- for pipeline outlets and single cylinders: Models RF53N, RF53DN and RF53NSK

- for torches or burners with high flow: Model RF53NU
- for cutting machines with high flow: Model RF53U
- WITT Flashback Arrestors may be mounted in any position / orientation
- only one piece of equipment may be connected to a single Flashback Arrestor
- 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  
Cleaned for Oxygen Service according to:  
- EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems

Safety devices	Model				
	RF53N	RF53DN	RF53NSK	RF53NU	RF53U
Flame arrestor <b>[FA]</b>	✓	✓	✓	✓	✓
Non-return valve <b>[NV]</b>	✓	✓	✓	✓	✓
Temperature sensitive cut-off valve <b>[TV]</b>	✓	✓	✓	✓	—
Pressure relief valve	—	✓	—	—	—
Weight [g]	191	260	248	191	191
Certification BAM	BAM/ZBA/003/04			—	—
Material	Housing – Brass; Flame arrestor – Stainless steel; Seal - Elastomer				

	Model				
	RF53N	RF53DN	RF53NSK	RF53NU*	RF53U*
<b>Gases</b>	max. working pressure [bar]				
Acetylene (A)	1.5	1.5	1.5	1.5	1.5
Town gas (C)*	5.0	5.0	5.0	5.0	5.0
Natural gas (M)	5.0	5.0	5.0	5.0	5.0
LPG (P)	5.0	3.0	5.0	5.0	5.0
Hydrogen (H)	3.0	3.0	3.0	3.0	3.0
<b>Connections</b>	Order-No.				
G 1/4 LH	145-009	—	—	—	—
G 3/8 LH	145-012	145-041	145SK-002	145-034	145-003
G 1/2 LH	145-016	145-043	—	145-035	—

	Model				
	RF53N	RF53DN	RF53NSK	RF53NU*	RF53U*
<b>Gases</b>	max. working pressure [bar]				
Oxygen (O)	25.0	10.0	20.0	25.0	25.0
Compressed air (D)	25.0	10.0	20.0	25.0	25.0
<b>Connections</b>	Order-No.				
G 1/4 RH	145-021	145-048	145SK-008**	145-036	145-004
G 3/8 RH	145-022	145-049	145SK-001**	145-037	145-005
G 1/2 RH	145-023	145-050	—	145-038	145-006

\*\*RF53NSK with coupling body according to EN 561 – for coupling probes SK100

\* no Certification BAM

## RF53N

## RF53NU

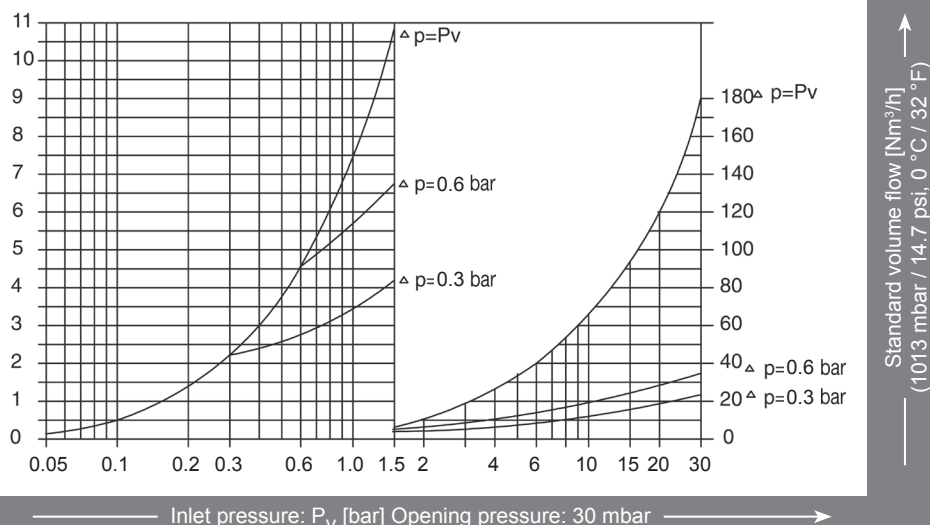
## RF53U

## RF53DN Flow 10% less

Conversion factors:

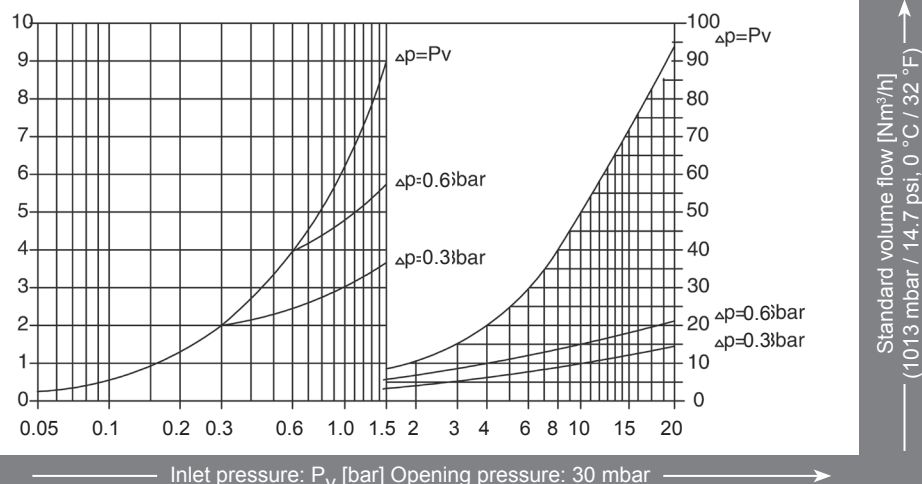
Acetylene	x 1.04
Butane	x 0.68
Natural Gas	x 1.25
Methane	x 1.33
Propane	x 0.80
Oxygen	x 0.95
Town gas	x 1.54
Hydrogen	x 3.75

Flow diagram for air (20 °C / 68 °F)



## RF53NSK

Flow diagram for air (20 °C / 68 °F)



Other connections available upon request