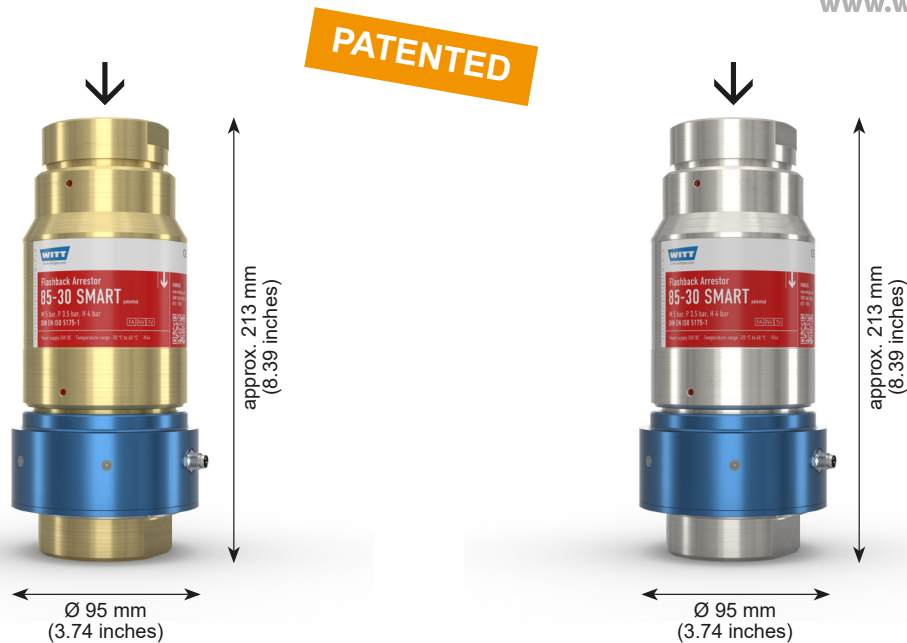


# FLASHBACK ARRESTOR 85-30 SMART



**WITT Flashback Arrestors for reliable protection against dangerous reverse gas flow and flashbacks according to DIN EN ISO 5175-1, combined with high-tech sensors and electronic components.**

**Every Arrestor 100% tested.**

**The Flashback Arrestor 85-30 SMART indicates via LEDs its current status. The signal is then transmitted to a control system. Status is communicated in real-time. This is key contribution to accident prevention and process.**

## Features of Flashback Arrestor 85-30

- according to PED 2014/68/EU, connection G1.1/2 category I
- available in brass or stainless steel (ES)
- 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

## Smart Features

- any flashback or backfire is detected electronically and recorded as a timestamped event
- four LEDs provide a visual all-round indication of normal operation, flashback, backfire, hardware faults and low battery via red/green/yellow/blue diodes located directly on the safety device
- digital signal via a NPN open collector signal or RS485 for transmission to a control system
- reset button on the safety device for resetting or acknowledging the system following a flashback or backfire
- connection M8, 4-pin plug for signal cable 5 m (Art.-No. 803097000)
- not suitable for use in hazardous areas

## Benefits

- immediate detection of flashbacks and backfires
- early detection of sources of faults before other downstream system components are damaged
- planning framework for optimised maintenance work
- minimises downtime, increases service life – reduces operating costs
- maximum protection for staff and facilities

## Approvals

Company certified according to ISO 9001 and PED 2014/68/EU Module H

CE-marked according to PED 2014/68/EU

Designed for Oxygen Service in accordance with EIGA 13/20 and CGA G-4.4: Oxygen Pipeline and Piping Systems

Cleaned for Oxygen Service in accordance with EIGA 33/18 and CGA G-4.1: Cleaning of Equipment for Oxygen Service

# FLASHBACK ARRESTOR 85-30 SMART



Safety devices	Model				
	85-30 SMART		85-30-ES SMART		85-30H-ES SMART
Flame arrestor <b>FA</b>	✓		✓		
Non-return valve <b>NV</b>	✓		✓		
Temperature sensitive cut-off valve <b>TV</b>	✓		✓		
Weight [kg]	approx. 7		approx. 7		
Material	Housing – <b>Brass</b> ; Flame arrestor – Stainless steel; Seal - Elastomer		Housing – <b>Stainless steel</b> ; Flame arrestor – Stainless steel; Seal - Elastomer		
Width across flats	60 mm		60 mm		
Certification	IBExU certification in progress		IBExU certification in progress		
Temperature range	-20 °C up to +60 °C (-4 °F up to +140 °F)		-20 °C up to +60 °C (-4 °F up to +140 °F)		
Power supply	24 V DC		24 V DC		
Protection class	IP 44		IP 44		
Interface	M8, 4-pin plug / RS485		M8, 4-pin plug / RS485		
Digital output	NPN open Collector		NPN open Collector		
<b>Gases</b>	max. working pressure [bar]				
Acetylene (A)	–	1.5	–	1.5	–
Natural gas (M)	5.0	–	5.0	–	8.0
LPG (P)	3.5	–	3.5	–	5.0
Hydrogen (H)	4.0	–	4.0	–	11.0
Ethylene (E)	4.0	–	4.0	–	–
Oxygen (O)	25.0	–	25.0	–	–
Compressed air (D)	25.0	–	25.0	–	–
<b>Connections</b>	Order-No.				
G 1.1/2 RH F	147SMART-001	147SMART-004	147SMART-002	147SMART-006	147SMART-009
NPT 3/4 F	147SMART-005	147SMART-007	147SMART-003	147SMART-008	147SMART-010

Other connections available upon request

## 85-30 SMART

Flow diagram for air (20 °C / 68 °F)

- Conversion factors:
- Acetylene x 1.04
  - Natural Gas x 1.25
  - Ethylene x 1.02
  - Methane x 1.33
  - Propane x 0.80
  - Oxygen x 0.95
  - Hydrogen x 3.75

