

# S153 Safety valve

- > Protect systems against over pressure
- > Set pressure up to 450 bar
- > Cat. 4 safety valve according to PED 2014/68/EU



## Technical features

### Medium:

Hydrogen

### Applications:

- Hydrogen Refueling Station
- Gas distribution/mixing
- Pressure test rigs
- Marine industries
- Off shore / aggressive environments
- Compressor regulation
- Air, O<sub>2</sub>, CH<sub>4</sub> compressor

### Medium:

H<sub>2</sub>, air, N<sub>2</sub>, O<sub>2</sub>, Ar, CH<sub>4</sub>, C<sub>2</sub>H<sub>2</sub>, CO<sub>2</sub>, N<sub>2</sub>O, etc.

### Maximum inlet pressure:

450 bar

### Set pressure range:

8 ... 450 bar (116 ... 6.527 psi)

### O-ring:

NBR, EPDM, FPM

### Leakage:

Internal leakage: <math>10^{-3}</math> mbar.l/sec  
External leakage: <math>10^{-4}</math> mbar.l/sec

### Weight:

1,2 kg

### Ambient/Media temperature:

-20 ... +50°C (-4 ... +122°F)

(NBR)

-40 ... +99°C (-40 ... +210°F)

(EPDM)

### Seat Diameter:


5 mm

### Material:

Body: Brass, Stainless Steel  
Valve insert: PCTFE, Peek or stainless steel

Seat: Stainless steel, PTFE, Nitrile, FPM, EPDM

## Technical data

Symbol	Set pressure range		Rubber Material	Poppet Material	Seat Material	Model
	(bar)	(psi)				
	27 ... 60	392 ... 870	NBR	PEEK	Stainless steel	S 153 IT 37 N P I 1000
	50 ... 130	725 ... 1.885	NBR	PEEK	Stainless steel	S 153 IT 46 N P I 1000
	100 ... 200	1.450 ... 2.901	NBR	PEEK	Stainless steel	S 153 IT 54 N P I 1000
	175 ... 340	2.538 ... 4.931	NBR	PEEK	Stainless steel	S 153 IT 68 N P I 1000
	280 ... 450	4.061 ... 6.527	NBR	PEEK	Stainless steel	S 153 IT 73 N P I 1000

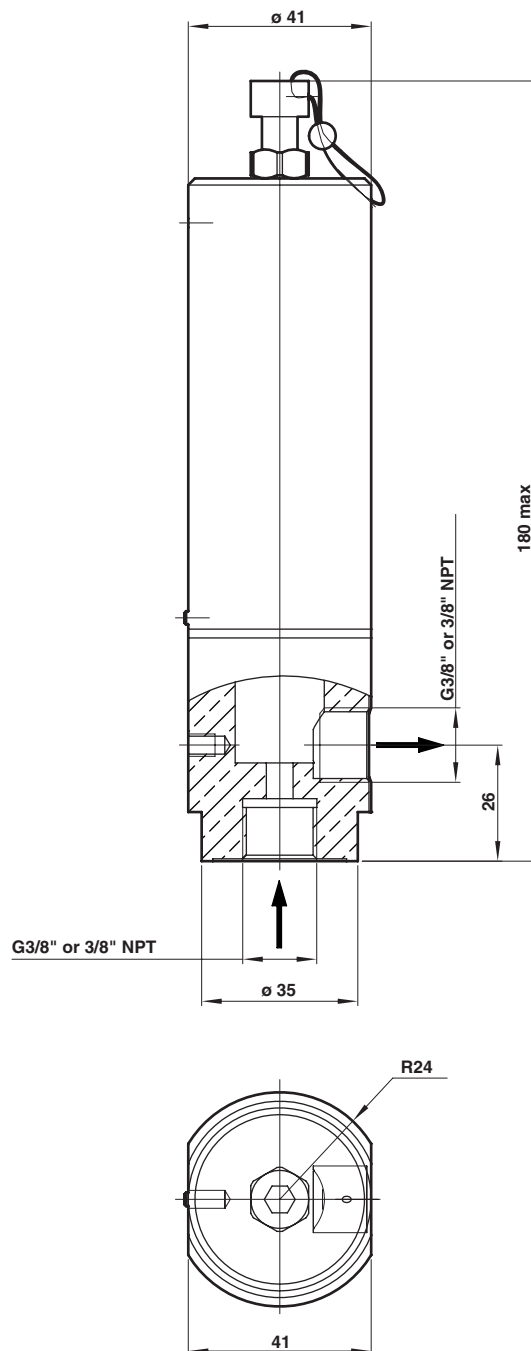
**Option selector**
**S153**★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

Body Material	Substitute
Stainless steels	I
Brass	L
Max. Working pressure	Substitute
280 bar	M
450 bar	T
Response Pressure Setpoint Range	Substitute
8 ... 17 bar Spring R3,5	27
15 ... 30 bar Spring R4,5	30
27 ... 60 bar spring R3	37
50 ... 130 bar Spring R3,5	46
100 ... 200 bar Spring R4,5	54
175 ... 280 bar Spring R5,3	77
175 ... 340 bar Spring R5,3	68
280 ... 450 bar Spring R5, 6	73
O-Ring type	Substitute
Nitrile O-ring / Cleaning procedure P902	N
EPDM O-ring / Cleaning procedure P902	E
Valve insert	Substitute
PCTFE	K
Stainless steel	I
PEEK	P
Seat Material	Substitute
Stainless Steel	I
PTFE	U
Nitrile	N
FPM	V

Main options	Substitute
Standard version	1000
1/2" BSP male adaptor on the inlet port	1078
3/8" NPT thread	1145

## Dimensions

Dimensions in mm  
Projection/First angle



## Warning

Do not use these products where pressures and temperatures can exceed those listed under »**Technical features/data**«. Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren, IMF sas.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided. System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.