

Sinorix™

CYF-20-300-N2, CYF-80-300-xx, CYF-140-300-xx,
CYE-xx-300-N2

IG-01, IG-55, IG-100, IG-541



Cylinders equipped with valve and protective cap

- 300 bar cylinders
Working pressure: 300 bar / Test pressure: 450 bar
- Various gases and gas mixtures available: IG-01, IG-55, IG-100, IG-541
- For extinguishing
- Various capacities available

Product codes:

CYF-20-300-N2 - S54476-C680-A3
CYF-80-300-N2 - S54476-C680-A2
CYF-80-300-AR - S54476-C683-A1
CYF-80-300-541 - S54476-C686-A1
CYF-80-300-55 - S54476-C689-A1
CYE-80-300-N2 - S54476-C680-A12
CYF-140-300-N2 - S54476-C640-A1
CYF-140-300-AR - S54476-C643-A1
CYF-140-300-541 - S54476-C646-A1
CYF-140-300-55 - S54476-C649-A1
CYE-140-300-N2 - S54476-C640-A11

Use

These products must only be used with Sinorix™ fixed automatic gas extinguishing systems.

Functions

The cylinder is empty or contains one of the following gases or gas mixtures:

- IG-01 (argon)
- IG-55 (nitrogen and argon)
- IG-100 (nitrogen)
- IG-541 (nitrogen, argon and CO₂)

The cylinder is used alone or as part of a cylinder battery.

The equipped cylinder — including the cylinder, its valve, and its protective cap — has been manufactured in compliance with the European directive regarding transportable pressure equipment (TPED 2010/35/EU). The valve and the cylinder are marked π (pi).

A cap ensures protection of the valve during transport, handling and storage of the cylinder.

Type summary



Item	Description	Item	Description
1	Cylinder valve	3	Shoulder
2	Cylinder	4	Protective cap



Refer to the Technical data section for gas or gas mixture, and relevant shoulder color.

Equipment combinations

Compatible cylinder valve

Reference	Description	Product code
F230-IG300	Cylinder valve F2303000	S54476-B500-A3

Product documentation

Type	Title	Document ref.
Data sheet	F230-IG300	A6V11162662

Notes

Safety

This product may only be installed by Siemens-authorized specialized installers, with experience in the design, installation, and maintenance of automatic extinguishing systems. During installation, it must be ensured that:

- this product is installed in compliance with the accident prevention regulations and national regulations in force,
- this product is used as intended,
- any danger is avoided,
- Siemens requirements are met (assembly instructions, technical instructions, commissioning, and operating instructions),
- the operators have received and understood the information related to this product.

At commissioning, ensure compliance with the legislation in force, technical regulations, and safety instructions.

Failure to comply with Siemens' instructions may result in serious bodily injury or significant property damage, for which Siemens cannot be held liable.

Siemens reserves the right to make technical modifications and/or improvements at any time.

Transport

- Do not transport the cylinder if the valve is fitted with actuators.
- Ensure that all valve ports are closed with Siemens caps.
- Always transport the cylinder equipped with its protective cap.
- Never let the cylinder fall.
- Never bang cylinders together.
- Comply with the applicable transport regulations.

Installation

- Put the cylinder in the rack.
- Align the position of the valve outlet.
- Fix the cylinder to the rack.
- Remove the protective cap (only when about to fit the products onto the valve).

Maintenance

Storage before commissioning

- Store the cylinders in a secure, clean, well-ventilated, well-lit room, protected from adverse conditions (rain, direct sunlight, significant variations in temperature, etc.).
- Store the cylinders at a stable temperature (see Technical data).
- Store cylinders equipped with their protective caps.

- Secure the cylinders with straps or put them in a stillage (and strap them in the stillage).
- Make sure that the cylinders can be replaced and maintained at any time: ensure free access to the cylinders.

Inspection

- Check that the product is in good condition.
- Compare the pressure indicated on the pressure gauge with the values given on the cylinder's instruction label, taking into account the room temperature when performing the check.
 - If the pressure is 10% (or more) below the temperature-adjusted nominal pressure, replace the cylinder.



The product must be inspected as often as required by applicable local regulations. For more information, refer to the maintenance documentation.

Safety measures

- Before handling, dismantling or transport, place the cylinder in safe position.

After an actuation

- Make the installation safe.
- Replace the cylinder with an identical cylinder.



Refer to the maintenance instructions to obtain detailed procedures.

Regulatory check

Depends on the current regulations in the country. Observe ADR regulation in case of road transportation.

- Carry out periodic inspections in compliance with Siemens' instructions.

20 l cylinder

Technical data							
Capacity	20 l +5/-0 %						
Cylinder test pressure	450 bar						
Cylinder valve	F230-IG300 / F2303000						
Cylinder valve connection	W28.8 x 1/14", 25E internal thread (ISO 11363- 1)						
Thread on cylinder valve outlet	M24x1.5						
Neck ring thread	W80 x 1/11" (ISO 11117)						
Sealing	PTFE						
Materials	<table border="0"> <tr> <td style="text-align: right;">Cylinder</td> <td>Seamless forged steel 34CrMo4</td> </tr> <tr> <td style="text-align: right;">Valve</td> <td>Refer to the product data sheet</td> </tr> <tr> <td style="text-align: right;">Protective cap</td> <td>Yes</td> </tr> </table>	Cylinder	Seamless forged steel 34CrMo4	Valve	Refer to the product data sheet	Protective cap	Yes
Cylinder	Seamless forged steel 34CrMo4						
Valve	Refer to the product data sheet						
Protective cap	Yes						
Design	Complies with ISO 9809-2:2010						
Operating temperature	-20 °C to +50 °C, non-condensing						
Transport and storage temperature	<table border="0"> <tr> <td style="text-align: right;">Filled cylinder</td> <td>-30 °C to +55 °C, non-condensing</td> </tr> <tr> <td style="text-align: right;">Empty cylinder</td> <td>-40 °C to +65 °C, non-condensing</td> </tr> </table>	Filled cylinder	-30 °C to +55 °C, non-condensing	Empty cylinder	-40 °C to +65 °C, non-condensing		
Filled cylinder	-30 °C to +55 °C, non-condensing						
Empty cylinder	-40 °C to +65 °C, non-condensing						
Cylinder color (+ reference)	Black (RAL 3000)						
Thickness of paint coating	80 µm						
Empty weight, w/o cylinder valve	32 kg ±10 %						

Filling ⁽¹⁾					
Extinguishant	IG-100				
Filling weight	6.2 kg				
Standard volume @ 15 °C, 1.01325 bar	5.2 Nm ³				
Pressure @ 15 °C ⁽²⁾	<table border="0"> <tr> <td style="text-align: right;">Nominal</td> <td>300 bar_g</td> </tr> <tr> <td style="text-align: right;">Minimum</td> <td>292.5 bar_g</td> </tr> </table>	Nominal	300 bar _g	Minimum	292.5 bar _g
Nominal	300 bar _g				
Minimum	292.5 bar _g				
UN No	UN 1066				
Shoulder color (+ reference)	Black (RAL 9005)				

⁽¹⁾ Gas qualities according to ISO 14520

⁽²⁾ bar_(g) = bar_(gauge)

80 l cylinder

Technical data							
Capacity	80 l +5/-0 %						
Cylinder test pressure	450 bar						
Cylinder valve	F230-IG300 / F2303000						
Cylinder valve connection	W28.8 x 1/14", 25E internal thread (ISO 11363- 1)						
Thread on cylinder valve outlet	M24x1.5						
Neck ring thread	W80 x 1/11" (ISO 11117)						
Sealing	PTFE						
Materials	<table border="0"> <tr> <td style="text-align: right; padding-right: 10px;">Cylinder</td> <td>Seamless forged steel 34CrMo4</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Valve</td> <td>Refer to the product data sheet</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Protective cap</td> <td>Yes</td> </tr> </table>	Cylinder	Seamless forged steel 34CrMo4	Valve	Refer to the product data sheet	Protective cap	Yes
Cylinder	Seamless forged steel 34CrMo4						
Valve	Refer to the product data sheet						
Protective cap	Yes						
Design	Complies with ISO 9809-2:2010						
Operating temperature	-20 °C to +50 °C, non-condensing						
Transport and storage temperature	<table border="0"> <tr> <td style="text-align: right; padding-right: 10px;">Filled cylinder</td> <td>-30 °C to +55 °C, non-condensing</td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Empty cylinder</td> <td>-40 °C to +65 °C, non-condensing</td> </tr> </table>	Filled cylinder	-30 °C to +55 °C, non-condensing	Empty cylinder	-40 °C to +65 °C, non-condensing		
Filled cylinder	-30 °C to +55 °C, non-condensing						
Empty cylinder	-40 °C to +65 °C, non-condensing						
Cylinder color (+ reference)	Black (RAL 3000)						
Thickness of paint coating	80 µm						
Empty weight, w/o cylinder valve	105 kg ±10 %						

Filling ⁽¹⁾					
Extinguishant	IG-01	IG-55	IG-100	IG-541	Empty (IG-100)
Reference	CYF-80-300-AR	CYF-80-300-55	CYF-80-300-N2	CYF-80-300-541	CYE-80-300-N2
Filling weight	40.9 kg	32.2 kg	24.7 kg	33.3 kg	0 kg (empty)
Standard volume @ 15 °C, 1.01325 bar	24.2 Nm ³	22.4 Nm ³	20.9 Nm ³	23.5 Nm ³	0 Nm ³ (empty)
Pressure @ 15 °C ⁽²⁾					0 bar _g (empty)
Nominal	300 bar _g	300 bar _g	300 bar _g	300 bar _g	
Minimum	292.5 bar _g	292.5 bar _g	292.5 bar _g	292.5 bar _g	
UN No.	UN 1006	UN 1956	UN 1066	UN 1956	-
Shoulder color (+ reference)	Emerald green (RAL 6001)	Pure green (RAL 6037)	Black (RAL 9005)	Yellow green (RAL 6018)	Black (RAL 9005)

⁽¹⁾ Gas qualities according to ISO 14520

⁽²⁾ bar_(g) = bar_(gauge)

140 l cylinder


Technical data							
Capacity	140 l +5/-0 %						
Cylinder test pressure	450 bar						
Cylinder valve	F230-IG300 / F2303000						
Cylinder valve connection	W28.8 x 1/14", 25E internal thread (ISO 11363- 1)						
Thread on cylinder valve outlet	M24x1.5						
Neck ring thread	W80 x 1/11" (ISO 11117)						
Sealing	PTFE						
Materials	<table border="0"> <tr> <td style="text-align: right;">Cylinder</td> <td>Seamless forged steel 34CrMo4</td> </tr> <tr> <td style="text-align: right;">Valve</td> <td>Refer to the product data sheet</td> </tr> <tr> <td style="text-align: right;">Protective cap</td> <td>Yes</td> </tr> </table>	Cylinder	Seamless forged steel 34CrMo4	Valve	Refer to the product data sheet	Protective cap	Yes
Cylinder	Seamless forged steel 34CrMo4						
Valve	Refer to the product data sheet						
Protective cap	Yes						
Design	Complies with ISO 9809-2:2010						
Operating temperature	-20 °C to +50 °C, non-condensing						
Transport and storage temperature	<table border="0"> <tr> <td style="text-align: right;">Filled cylinder</td> <td>-30 °C to +55 °C, non-condensing</td> </tr> <tr> <td style="text-align: right;">Empty cylinder</td> <td>-40 °C to +65 °C, non-condensing</td> </tr> </table>	Filled cylinder	-30 °C to +55 °C, non-condensing	Empty cylinder	-40 °C to +65 °C, non-condensing		
Filled cylinder	-30 °C to +55 °C, non-condensing						
Empty cylinder	-40 °C to +65 °C, non-condensing						
Cylinder color (+ reference)	Black (RAL 3000)						
Thickness of paint coating	80 µm						
Empty weight, w/o cylinder valve	196 kg ±10 %						

Filling ⁽¹⁾					
Extinguishant	IG-01	IG-55	IG-100	IG-541	Empty (IG-100)
Reference	CYF-140-300-AR	CYF-140-300-55	CYF-140-300-N2	CYF-140-300-541	CYE-140-300-N2
Filling weight	71.6 kg	56.4 kg	43.3 kg	58.3 kg	0 kg (empty)
Standard volume @ 15 °C, 1.01325 bar	42.3 Nm ³	39.2 Nm ³	36.6 Nm ³	41.1 Nm ³	0 Nm ³ (empty)
Pressure @ 15 °C ⁽²⁾					0 bar _g (empty)
	Nominal 300 bar _g	300 bar _g	300 bar _g	300 bar _g	
	Minimum 292.5 bar _g	292.5 bar _g	292.5 bar _g	292.5 bar _g	
UN No.	UN 1006	UN 1956	UN 1066	UN 1956	-
Shoulder color (+ reference)	Emerald green (RAL 6001)	Pure green (RAL 6037)	Black (RAL 9005)	Yellow green (RAL 6018)	Black (RAL 9005)

⁽¹⁾ Gas qualities according to ISO 14520

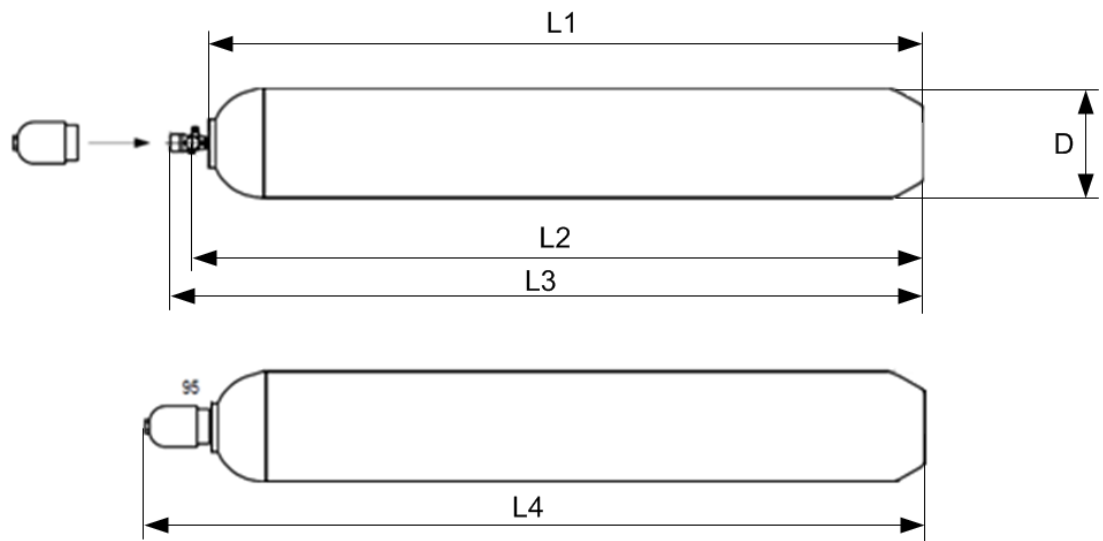
⁽²⁾ bar_(g) = bar_(gauge)

Certifications and compliances	
LPCB	Compliant
GOST R	Certificate GOST R
RoHS	Compliant
TPED compliance Cylinder / cylinder valve	Directive 2010/35/UE

	
305/2011/EU (CPR) EN 12094-4 Cylinder valve	0786-CPR-30230
<p>The declared performance and conformity can be seen in the Declaration of Performance (DoP) and/or the EU Declaration of Conformity (DoC), which are obtainable via the Customer Support Center: Tel. +49 89 9221-8000 or https://siemens.com/bt/download.</p>	

Dimensions

Dimensions in mm



	Cylinder height L1	Height up to valve outlet L2	Cylinder + valve L3	Cylinder + protective cap L4	Outer diameter D
CYF-20	810 ±20	853 ±20	913 ±20	965 ±20	204 ±1 %
CYF-80 CYE-80	1 780 ±20	1 823 ±20	1 883 ±20	1 935 ±20	267 ±1 %
CYF-140 CYE-140	1 745 ±20	1 788 ±20	1 848 ±20	1 925 ±20	360 ±1 %

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