

Description

PORAL INOX is a filter media made from 316 stainless steel granulated dust sintered at high temperature, whose calibration and quality have been carefully controlled. The porosity of the media depends on the filtration threshold and can exceed 50% void.

PORAL INOX elements are recommended when fine filtration, together with high pressure and/or temperature are required. From the PORAL INOX media we produce cylinders and filter cartridges.

Cylinders

One of the ends is completely closed by a flat bottom welded to the isostatic tube without welding "PORAL INOX" and the other end has a threaded hole. On request, the end cap can be changed by a flange or another accessory.

Cartridges

The cartridge is made of a seamless isostatic tube "PORAL INOX"; the ends are welded with a flat bottom and different types.

References

Filtration grade - micrometers				Poral Inox class
Fluids		Dry gases		
99,9%	98%	99,9%	98%	
4,5	3	0,5	0,2	03
9	6	1	0,4	05
24	16	4	1,2	10
58	40	9	3,2	20
90	60	13	5	30



Cylinder applications

The «PORAL INOX» cylinder has the advantage of guaranteeing total tightness for the filtration of steam and other fluids at high temperatures because it uses a metal/metal seal and does not require a seal that could deteriorate. Expansion phenomena have no influence on filtration safety. The cylinders can operate at temperatures up to 450°C. The cylinders also exist in «PORAL MONEL» and «PORAL INCONEL». True filtration and particle retention capacity. Lighter than a carbon block cartridge Certified and tested by NSF International to NSF/ANSI Standard 42.

Cartridge applications

These cartridges are designed for fine filtration, when the temperature is compatible with the seal materials.

The typical application is steam filtration used in membrane sterilization processes.

	Cylinder model													
		POS-05	POS-12	POS-18	POS-24	POS-30	POS-36	POS-10	POL-12	POL-18	POL-24	POL-30	POL-36	POL-40
Diameter in mm	D	50	50	50	50	50	50	60	60	60	60	60	60	60
Length	L	130	300	450	600	750	900	250	300	450	600	750	900	1000
Conical gas fitting UNI 339		½"	1"	1"	1"	1"	1"	1"	1"	1"	1 ½"	1 ½"	1 ½"	1 ½"
Filtering surface	cm²	200	470	800	950	1200	1400	470	560	850	1130	1400	1700	1880
Maximum pressure drop	Crushing	10	10	10	10	10	10	10	10	10	10	10	10	10
	Bursting	24	24	24	24	24	24	24	15	15	15	15	15	15

Order reference

REFERENCE POC - **200** - **1** - **V** - **05**
Tab 1 Tab 2 Tab 3 Tab 4

Table 1 : Tips

Code	Tips
100	SOE: opening with 1 O-ring 2.116 and flat closure at the other end
200	DOE: double opening with flat seals
207	SOE: open end with 2 O-rings 2.226 + 2-pronged gag. Closing at the other end with point

Table 3 : Seals

Code	Seals	Tips
Vide	EPDM	Standard
V	Viton	On request
N	Buna N	On request
S	Silicone	On request
T	Teflon	On request

Available for all codes

Available for all the codes

Table 2 : Size

Code	Filtering surface	length	Diameter	Tips
1	210 cm ²	135 mm	50 mm	Code 100
1	470 cm ²	10"	63 mm	Code 200 Code 207
2	940 cm ²	20"		
3	1410 cm ²	30"		
4	1880 cm ²	40"		

Table 4 : Filtration threshold

Code	Filtration grade - Micrometer			
	Fluids		Dry gas	
	99,9%	98%	99,9%	98%
03	4,5	3	0,5	0,2
05	9	6	1	0,4
10	24	16	4	1,2
20	58	40	9	3,2
30	90	60	13	5

Model	Flow rate at 0.1 bar pressure drop					Maximum allowable pressure drop		
	Class	Air	Water	Steam		Exterior to interior	Interior to exterior	
		7 bar		2 bar	6 bar			
POC-1001	03	25 Nm ³ /h	40 l/h	4 kg/h	8 kg/h	2 mm	10	24
	05	40 Nm ³ /h	160 l/h	10 kg/h	21 kg/h			
	10	100 Nm ³ /h	730 l/h	25 kg/h	55 kg/h			
	20	100 Nm ³ /h	840 l/h	25 kg/h	55 kg/h			
POC-2001	03	60 Nm ³ /h	100 l/h	9 kg/h	20 kg/h	2 mm	5,5	19
	05	100 Nm ³ /h	400 l/h	23 kg/h	50 kg/h			
	10	200 Nm ³ /h	1750 l/h	58 kg/h	130 kg/h			
	20	200 Nm ³ /h	2000 l/h	58 kg/h	130 kg/h			
	30	200 Nm ³ /h	2000 l/h	58 kg/h	130 kg/h			

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