

# **PORATECH INOX**

PORATECH INOX filter elements are realized with a filter media for sintering at high temperature of granular metallic dust of stainless steel AISI 316 of dimensions and analysis severally controlled. The porosity of the media depends on filter rating and can exceed 50% of voids.

PORATECH INOX elements are precise filtration, even under severe pressure and temperature condition is required.

PORATECH INOX filter elements are available as cylinders and cartridge.

#### **CYLINDERS**

One end is completely closed by stainless steel flat cap welded to the isostatic seamless tube, while the other end is screwed. On request, the fitting can be substituted with a flange or with a different type of fitting.

### CARTRIDGES

The cartridge is constructed by seamless tube obtained by isostatic process; the extremities are welded to stainless steel end caps with different type of adapters.

Filtrati	PORATECH			
Liqu	ids	Dry (	INOX Class	
99,9%	98%	99,9%	98%	Class
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 "Poratech-Inox" cylinders have the advantage to guarantee the absolute tightness when filtering steam and other fluids at high temperature since the sealing is made without gaskets that can deteriorate, but metal to metal. Phenomena of thermal dilatation have no influence at all on the safety of filtration. Cylinders can be used for temperatures up to 450°C. Cylinders are available also in "Poratech-Monel" and "Poratech-Inconel".

#### **CARTRIDGE APPLICATIONS**

The cartridge are used as precision filter, when the operative temperatures are compatible with the sealing gasket material. Typical application is steam filtration utilized in the sterilization process of membrane cartridges .

Standard	Blank	
With screw	В	

5 30														
	CYLINDER MODEL													
	L	POS - = - 05 - =	POS -= - 12 -=	POS -= - 18 - =	POS - = - 24 - =	POS - = - 30 - =	POS - = - 36 - =	POL - = - 10 - =	POL - = - 12 - =	POL - = - 18 - =	POL - = - 24 - =	POL - = - 30 - =	POL - = - 36 - =	POL - = - 40 - =
Diameter mm	D	50	50	50	50	50	50	60	60	60	60	60	60	60
Length mm	L	130	300	450	600	750	900	250	300	450	600	750	900	1000
Tapered connection Gas UNI 339		1⁄2"	1"	1"	1"	1"	1"	1"	1"	1"	1 1⁄2"	1 1⁄2"	1 1⁄2"	1 1⁄2"
Filtering area	cm <sup>2</sup>	200	470	800	950	1200	1400	470	560	850	1130	1400	1700	1880
Max differential	Outlet-Inlet	10	10	10	10	10	10	10	10	10	10	10	10	10
pressure	Inlet-Outlet	24	24	24	24	24	24	24	15	15	15	15	15	15
Wall Thickness	mm	2	2	2	2	2	2	2	2	2	2	2	2	2

## AIR, STEAM AND WATER FLOW RATE

The below cartridge values can be increased (please contact our technical office for further details); however this practice tends to reduce the service life; it is recommended to design filters with lower flow rate when the fluid is expected with high content of contaminant.

Model	F	- low rate with pre		Max Diff. Press.				
		Air	Water	Steam		Wall tick.	Max Dill. Pless.	
	Class	Nm³/h @ 7 bar	l/h	2 bar Kg/h	6 bar Kg/h	mm	Out-In	In-Out
	03	25	40	4	8	_	10	24
POC - 1001	05	40	160	10	21	2		
100 1001	10	100	730	25	55			
	20	100	840	25	55			
	03	60	100	9	20	_		
	05	100	400	23	50			
POC - 2001	10	200	1750	58	130	2	5,5	19
	20	200	2000	58	130			
	30	200	2000	58	130			

# **PORATECH INOX ORDERING INFORMATION**

0

Р	OC <u>200</u>
END	CODE
SOE: open end with (1) O -Ring 2.116. Blind side with top flat.	100
DOE: double open end with flat gaskets.	200
SOE: open end with (2) O -Ring 2.226 and bayonet locks. Blind side with fin.	207

END CAPS	FILTERING AREA	NOMINAL LENGTH	OUTSIDE DIAMETER	CODE
Code 100	210 cm <sup>2</sup>	135 mm	50 mm	1
Code 200 Code 207	470 cm <sup>2</sup>	10″		1
	940 cm <sup>2</sup>	20″	(2, 10, 10)	2
	1410 cm <sup>2</sup>	30″	63 mm	3
	1880 cm <sup>2</sup>	40″		4

<u>s</u> - [			
CODE	O-RIN	GS	END CAPS
Blank	Standard	EPDM	
v	On request	Viton	ALL CODES
N	On request	Buna N	ALL CODES
S	On request	Silicon	
т	On request	Teflon	ONLY CODE 200

	Filtration grade - Micrometers							
CODE	Liqu	ids	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				

Data contained in this bulletin are informative and subject to change without notice. User is responsible for determining whether the products is fit for particular purpose and suitable for user's method of application.



Bea Technologies Spa Via Newton, 4 - 20016 Pero (Milano) ITALY Tel +39 02 339271 FAX +39 02 3390713 e-mail: <u>info@bea-italy.com</u> web: www.bea-italy.com

DS-PO-674-UK-14