

## DUROCEL Products Information



Scanning Electron  
Micrograph



### 1. General Material Description

DUROCEL is a high porous filter media made of resin bonded micro glass fibres. The material composition as well as a special process of manufacturing guarantee form stable filter cylinders. The combination of fine pores, high porosity and a large inner surface offers a filter

media with low pressure loss at a concurrently efficient separation behaviour. DUROCEL-elements are therefore mainly used as fine filters for filtration of gases. The large inner surface of the bonded glass fibre network makes DUROCEL to an excellent coalescing filter.

### 2. Fields of Applications

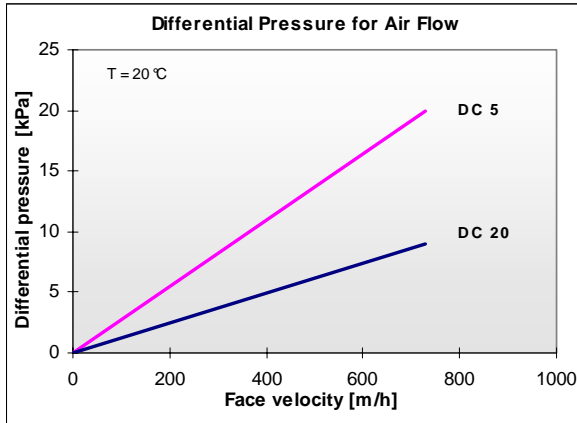
DUROCEL (DC)	Examples
<b>Particle filter for gases</b>	▪ Depth filter for compressed air, natural gas, bio gas, technical gases
<b>Coalescer</b>	▪ Separation of oil and condensates from process air or earth gas

Further applications possible.

### 3. Physical Properties

DUROCEL (DC)	Unit	5	20
<b>Filtration fineness of gases</b>	µm	< 0,5	0,5
<b>Porosity</b>	%	65	60
<b>Material density</b>	g/cm <sup>3</sup>	0,65	0,6
<b>Specific permeability</b>	10 <sup>-13</sup> m <sup>2</sup>	27	60
<b>Bursting pressure</b>	bar	15	15
<b>Max. temperature resistance</b>	°C	150	150
<b>Dimensions Do / Di</b>	mm	70/40	70/40

#### 4. Differential Pressure Diagram



The physical data are valid for the dimensions listed in table „Physical Properties“.

#### 5. Chemical Resistance

DUROCEL filter elements are chemical resistant against nearly all mineral and artificial lubricants and chlorinated hydrocarbons. Furthermore, DUROCEL filter elements are resistant against most kinds of solvents. The chemical resistance reaches up to pH 9.5 in the alkaline range.

#### 6. Standard Dimensions

	Type	Do / Di [mm]	Length [mm]	Filter Area [m <sup>2</sup> ]	Mass [kg]
Cylinder	DC 20	40/20	75	0.01	0.05
Cylinder	DC 20	40/20	110	0.014	0.07
Cylinder	DC 5, DC 20	70/40	150	0.033	0.25
Cylinder	DC 5, DC 20	70/40	500	0.11	0.85
Cylinder	DC 5, DC 20	70/40	1000	0.22	1.70

Special dimensions and special products on request.

#### 7. General Information

- DUROCEL filter elements can be utilised for compressed air manufacturing in the food industry according to the German regulation of food and consumer goods LMBG.
- Elements can be easily glued using commercial glues which Pall Schumacher can supply. Consideration must be paid to operating temperature and chemical resistance.
- Pall Schumacher can supply a variety of element fixing systems.