

## Low pressure filter Spin-on cartridges PX

Nominal pressure 16/10 bar (230/140 psi), nominal size up to 160

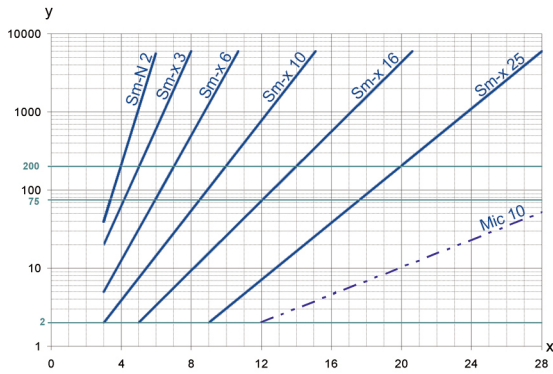
### 1. Short description

#### Efficient filter for modern hydraulic systems

- Modular system for optimum filter selection
- Small space requirement through compact design
- Minimal pressure drop through optimal flow design of components
- Equipped with highly efficient Mic, Sm-N or Sm-x filter elements
- Guaranteed separation according to ISO 16889 multipass test
- Elements with high differential pressure stability and dirt holding capacity
- Customer-specific printing on request
- Worldwide sales



## 2. Abscheidegrad-Kennlinie



y = beta value

x = particle size [ $\mu\text{m}$ ]

determined by multipass measurements (ISO 16889)

Calibration according to ISO 11171 (NIST)

## 4. Quality assurance

Filtration Group Filter and filter elements are manufactured and tested according to the following international standards:

Standard	Title
DIN ISO 2941	Hydraulic fluid power filter elements; verification of collapse/burst resistance
DIN ISO 2942	Hydraulic fluid power filter elements; verification of fabrication integrity
DIN ISO 2943	Hydraulic fluid power filter elements; verification of compatibility with hydraulic fluid
DIN ISO 3723	Hydraulic fluid power filter elements; method for end load test
DIN ISO 3724	Hydraulic fluid power filter elements; verification of flow fatigue characteristics
ISO 3968	Hydraulic fluid power-filters-evaluation of pressure drop versus flow characteristics
ISO 10771.1	Fatigue pressure testing of metal containing envelopes in hydraulic fluid applications
ISO 16889	Hydraulic fluid power filters-multipass method for evaluation filtration performance of a filter element

## 3. Filter performance data

measured according to ISO 16889 (multipass test)

Sm-x/Sm-N elements with

max.  $\Delta p$  5 bar

Sm-N 2  $\beta_{4(C)} \geq 200$

Sm-x 3  $\beta_{5(C)} \geq 200$

Sm-x 6  $\beta_{7(C)} \geq 200$

Sm-x 10  $\beta_{10(C)} \geq 200$

Sm-x 25  $\beta_{20(C)} \geq 200$

up to 5 bar differential

pressure

## 5.1 Type number key and order numbers

Type number key									
<b>Type</b>	<b>PX</b> Spin-on cartridge								
	<b>Housing diameter*</b>								
	<b>1</b>	≤ 82 mm							
	<b>2</b>	90 - 120 mm							
	<b>3</b>	≥ 135 mm							
	<b>Length*</b>								
	<b>0</b>	< 120 mm							
	<b>1</b>	120 - 130 mm							
	<b>2</b>	135 - 150 mm							
	<b>3</b>	170 - 175 mm							
	<b>4</b>	178 - 190 mm							
	<b>5</b>	205 - 220 mm							
	<b>6</b>	240 mm							
	<b>7</b>	310 mm							
	<b>Type of cover disc</b>								
	<b>1</b>	Standard							
	<b>Connection thread</b>								
	<b>0</b>	Sonder*							
	<b>1</b>	¾" 16UNF-2B							
	<b>2</b>	1" 12UNF-2B							
	<b>3</b>	1½" 16UNF-2B							
	<b>4</b>	G1¼"							
	<b>5</b>	M39x1.5							
	<b>6</b>	M42x2							
	<b>Nominal pressure*</b>								
	<b>1</b>	10 – 14 bar							
	<b>2</b>	16 - 18 bar							
	<b>3</b>	20 - 25 bar							
	<b>4</b>	> 25 bar							
	<b>Options</b>								
	<b>Vx.x</b>	Bypass valve with x.x bar							
	<b>R</b>	Non-return device							
	<b>RC</b>	Non-return device clean side							
	<b>RD</b>	Non-return device dirt side							
	<b>Filter material</b>								
	<b>Sm-N**</b>								
	<b>Sm-x**</b>								
	<b>Mic**</b>								
	<b>Fineness</b>								
	<b>1</b>	1 µm							
	<b>3</b>	3 µm							
	<b>5</b>	5 µm							
	<b>6</b>	6 µm							
	<b>10</b>	10 µm							
	<b>15</b>	15 µm							
	<b>16</b>	16 µm							
	<b>25</b>	25 µm							
	<b>30</b>	30 µm							
<b>PX</b>	<b>3</b>	<b>7-</b>	<b>1</b>	<b>3-</b>	<b>2</b>	<b>-</b>	<b>-Sm-x</b>	<b>10</b>	selection example

\* exact information on request

\*\* Sm-N, Sm-x – Glass fibre  $\beta_{x(C)} \geq 200$   
Mic - Cellulose  $\beta_{x(C)} \geq 2$

## 5.2 Housing design

Nominal size NG [l/min]	Order number	Type designation	Nominal pressure [bar]	Filter material	Filter surface [cm <sup>2</sup> ]
100	70548477	PX33-13-2-SmN2	16	Sm-N 2	3400
	70541521	PX33-13-2-Smx3		Sm-x 3	3400
	70541522	PX33-13-2-Smx6		Sm-x 6	3400
	70541523	PX33-13-2-Smx10		Sm-x 10	3400
	70541524	PX33-13-2-Smx25		Sm-x 25	3400
	70541525	PX33-13-2-Mic10		Mic 10	7000
	70541527	PX33-13-2-Mic25		Mic 25	7000
	70541528	PX33-14-1-Mic10	10	Mic 10	7000
130	70553366	PX36-13-2-SmN2	16	Sm-N 2	5400
	70541529	PX36-13-2-Smx3		Sm-x 3	5400
	70541531	PX36-13-2-Smx6		Sm-x 6	5400
	70541532	PX36-13-2-Smx10		Sm-x 10	5400
	70541533	PX36-13-2-Smx25		Sm-x 25	5400
	70541534	PX36-13-2-Mic10		Mic 10	9700
	70541535	PX36-13-2-Mic25		Mic 25	9700
160	70553384	PX37-13-2-SmN2	16	Sm-N 2	7400
	70541536	PX37-13-2-Smx3		Sm-x 3	7400
	70541537	PX37-13-2-Smx6		Sm-x 6	7400
	70541538	PX37-13-2-Smx10		Sm-x 10	7400
	70541539	PX37-13-2-Smx25		Sm-x 25	7400
	70541540	PX37-13-2-Mic10		Mic 10	13500
	70541541	PX37-13-2-Mic25		Mic 25	13500
	70541543	PX37-14-1-Smx3	10	Smx3	7400

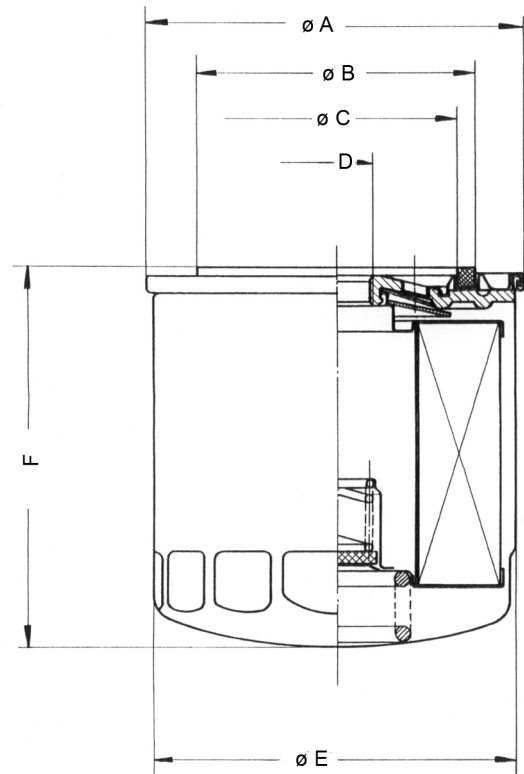
## 6. Technical data

Nominal pressure:	16/10 bar (230/140 psi)
Burst pressure:	35 bar (500psi)
Temperature range:	-10 °C to +120 °C
Filter housing material:	Steel
Sealing material:	Perbunan
Fitting position:	preferably upright
Collapse pressure of elements:	$\Delta p \geq 5$ bar
Creep strength:	min. $10^5$ LW at nominal pressure

We draw attention to the fact that all values indicated are average values. Our products are continually being further developed. Values, dimensions and weights can change as a result of this. Our specialized department will be pleased to help you.

We recommend you to contact us concerning applications of our filters in areas governed by the EU Directive 94/9 EC (ATEX 95). The standard version can be used for liquids based on mineral oil (corresponding to the fluids in Group 2 of Directive 97/23 EC Article 9). If you consider to use other fluids please contact us for additional support.

Subject to technical alteration without prior notice!



## 7. Dimensions

All dimensions in mm except "D".

Type designation	Ø A	Ø B	Ø C	D	Ø E	F
PX33-13	140	111	100	1½" 16 UN 2B	136	172
PX36-13	140	111	100	1½" 16 UN 2B	136	240
PX37-13	140	111	100	1½" 16 UN 2B	136	310
PX33-14	140	111	100	G1¼	136	172
PX37-14	140	111	100	G1¼	136	310

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70556108.06/2018