

**Dimensions:** 

235

285

419

519

175

225

175

225

type

WPL 90

WPL 130

WPL 180

WPL 260

**SPIN-ON FILTER** 

Series WPL 45-260 DN 20-40 PN 10

Sheet No.

9000 N

1.2. Filter element: (ordering example)

= spin-on cartridge for in-lin filter

= 10 µm(c) Interpor fleece (glass fibre),

WPL 45/90/180

WP. 90. 10P

1 series:

WP

10 P

10 VG

1 2 3

2 nominal size: 45, 90, 130

WPL 180 = 2x NG 90

WPL 260 = 2x NG 130

3 | filter-fineness and filter-material:

= 10 µm paper

## 1. Type index:

1.1. Complete filter: (ordering example) WPL. 90. 10P. R. E1. -. -. -

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

1 series:

WPL = spin-on filter

2 | nominal size: 45, 90, 130, 180, 260

3 filter-fineness and filter-material:

10 VG = 10 μm<sub>(c)</sub> Interpor fleece (glass fibre) WPL 45/90/180

4 internal valve:

= without (WPL 45/90/130)

S = by-pass valve suction filter  $\Delta p$  0,28 bar R = by-pass valve pressure filter  $\Delta p$  2,0 bar

5 measuring connection M1:

without clogging indicator

= clogging indicator visual, see sheet-no. 1616 = pressure switch, see sheet-no. 1616

pressure switch, see sheet-no. 1616
pressure switch, see sheet-no. 1616
pressure switch, see sheet-no. 1616

PA = potential equalisation
6 measuring connection M2:

= without clogging indicator

O1 = clogging indicator visual, see sheet-no. 1616

E4 = pressure switch, see sheet-no. 1616

PA = potential equalisation

7 measuring connection M3:

possible indicators see position 5 of the type index ( WPL 45/90/130)

8 measuring connection M4:

possible indicators see position 6 of the type index ( WPL 45/90/130)

## 2. Description:

In-line filter series WPL and WP-spin-on-cartridges are suitable for an operating pressure up to 10 bar. They are appointed for mounting into pressure lines and return lines, the spin-on-cartridges, e.g. are directly screwed to hydrostatic drives. These series allow an easy maintaining with short operating interruption. After pollution the complete spin-on-cartridges has to be changed. The WPL-filter can alternatively be equiped with pressure switch and/or pre ssure gauge. The serie can be used for all mineral oils (hydraulic- and lubrication oils).

## 3. Technical data:

temperature range  $-10 \, ^{\circ}\text{C}$  to  $+110 \, ^{\circ}\text{C}$ 

operating medium: mineral oil, other media on request max. operating pressure: 10 bar

test pressure: 13 bar opening pressure by-pass valve for pressure filter: 4p 2,0 bar opening pressure by-pass valve for suction filter: 4p 0,28 bar

opening pressure by-pass valve for suction filter: Δp 0,28 bar pressure switch: Δp 1,5 bar see sheet-no. 1616

pressure switch: Δp 1,5 bar see sneet-no. 1616

pressure switch: Δp 0,25 bar see sheet-no. 1616

gaskets: Nitrile (NBR)

Classified under the Pressure Equipment Directive 97/23/EC for mineral oil (fluid group 2), Article 3, Para. 3. Classified under ATEX Directive 94/9/EC according to specific application (see questionnaire sheet-no. 34279-4).

4. Pressure drop flow curves: Precise flow rates see 'INT-Expert-System Filter', respectively Δp-curves; depending on filter fin eness and viscosity.

## 5. Test methods:

weight kg

1,70

2,10

3,25

4.00

205

255

195

245

195

245

Filter elements are tested according to the following ISO standards:

ISO 2941 Verification of collapse/burst resistance ISO 3724 Verification of flow fatigue characteristics

ISO 2942 Verification of fabrication integrity ISO 3968 Evaluation of pressure drop versus flow characteristics ISO 2943 Verification of material compatibility with fluids ISO 16889 Multi-pass method for evaluating filtration performance

ISO 3723 Method for end load test

Changes of measures and design are subject to alteration!



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