SPIN-ON FILTER
Series WPL 45-260 145 PSI

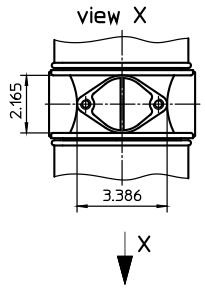
Sheet No. **9000 R**

measuring connection M1/M2/M3/M4 = thread NPT 1/8“

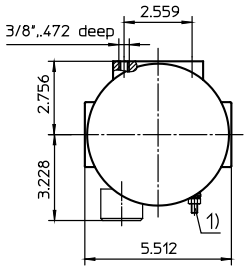
[1] connection for the potential equalisation, only for application in the explosive area

Dimensions: inch

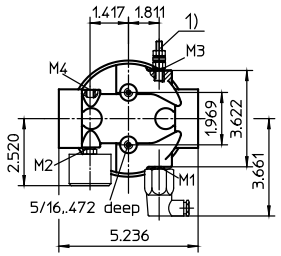
type	A	B	C	D	weight lbs.
WPL 90	9.25	6.89	7.68	5.07	3.75
WPL 130	11.22	8.86	9.65	10.04	4.63
WPL 180	16.50	6.89	7.68	-	7.16
WPL 260	20.43	8.86	9.65	-	8.81



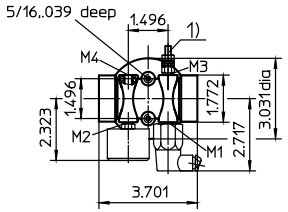
WPL 180/260

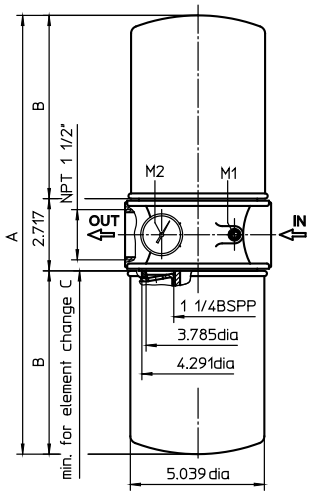


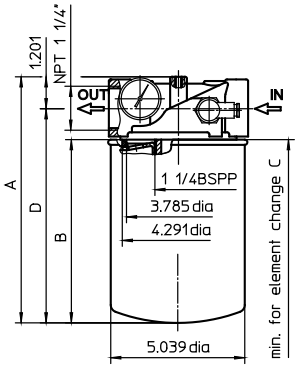
WPL 90/130

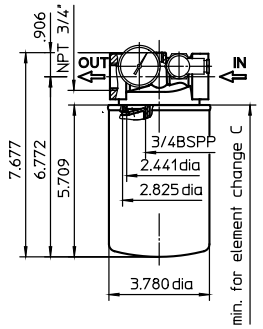


WPL 45









1. Type index:

1.1. Complete filter: (ordering example)

WPL. 90. 10P. NPT. 6. R. E1. -. -. -

1	2	3	4	5	6	7	8	9	10

1 **series:**
WPL = spin-on filter

2 **Nominal size:** 45, 90, 130, 180, 260

3 **filter-material and filter-fineness:**
10 P = 10 µm paper
10 VG = 10 $\mu m_{(c)}$ glass fiber (WPL 45/90/180)

4 **process connection:**
NPT = thread connection

5 **process connection size:**
4 = NPT ¾“ (WPL 45)
6 = NPT 1 ¼“ (WPL 90/130)
7 = NPT 1 ½” (WPL 180/260)

6 **internal valve:**
- = without (WPL 45/90/130)
S = by-pass valve suction filter Δp 4 PSI
R = by-pass valve pressure filter Δp 29 PSI

7 **measuring connection M1:**
- = without clogging indicator
O = clogging indicator visual, see sheet-no. 1616
E1 = pressure switch, see sheet-no. 1616
E2 = pressure switch, see sheet-no. 1616
E5 = pressure switch, see sheet-no. 1616
PA = potential equalization

8 **measuring connection M2:**
- = without clogging indicator
O1 = clogging indicator visual, see sheet-no. 1616
E4 = pressure switch, see sheet-no. 1616
PA = potential equalization

9 **measuring connection M3:**
possible indicators see position 7 of the type index (WPL 45/90/130)

10 **measuring connection M4:**
possible indicators see position 8 of the type index (WPL 45/90/130)

1.2. Filter element: (ordering example)

WP. 90. 10P

1	2	3

1 **series**
WP = spin-on cartridge for in-lin filter

2 **nominal size:** 45, 90, 130
WPL 180 = 2x NG 90
WPL 260 = 2x NG 130

3 **filter-material and filter-fineness:**
10 P = 10 µm paper
10 VG = 10 $\mu m_{(c)}$ glass fiber (WPL 45/90/180)

Dimensions: inches

Changes of measures and design are subject to alteration!

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2. Description:

In-line filter series WPL and WP-spin-on-cartridges are suitable for an operating pressure up to 145 PSI. 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 equipped with pressure switch and/or pressure gauge. The series can be used for all mineral oils (hydraulic- and lubrication oils).

3. Technical data:

operating temperature:	+14 °F to +230°F
operating medium:	mineral oil, other media on request
max. operating pressure:	145 PSI
test pressure:	207 PSI
opening pressure by-pass valve for pressure filter:	Δp 29 PSI
opening pressure by-pass valve for suction filter:	Δp 4 PSI
pressure switch:	Δp 22 PSI see sheet-no. 1616
pressure switch:	Δp 3.6 PSI see sheet-no. 1616
gaskets:	Nitrile (NBR)

Classified under the Pressure Equipment Directive 2014/68/EU for mineral oil (fluid group 2), Article 4, Para. 3.
Classified under ATEX Directive 2014/34/EU according to specific application (see questionnaire sheet-no. 34279-4).

4. Pressure drop flow curves:

Precise flow rates see ‘Interactive Product Specifier’, respectively Δp- curves; depending on filter fineness and viscosity.

5. Test methods:

Filter elements are tested according to the following ISO standards:

ISO 2941	Verification of collapse/burst resistance
ISO 2942	Verification of fabrication integrity
ISO 2943	Verification of material compatibility with fluids
ISO 3723	Method for end load test
ISO 3724	Verification of flow fatigue characteristics
ISO 3968	Evaluation of pressure drop versus flow characteristics
ISO 16889	Multi-pass method for evaluating filtration performance