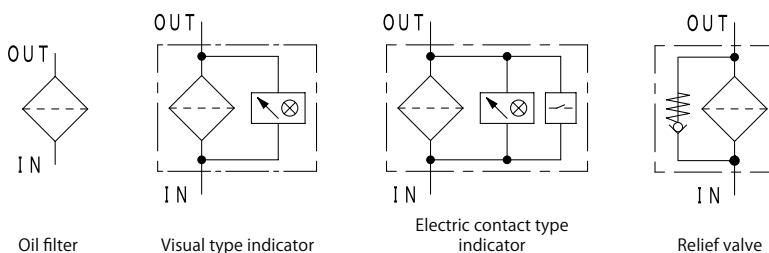


Spin-on type Multi-functional Oil Filter



Characteristics

- Easy maintenance by cartridge replacement
- High performance C-fiber (3μm) and paper (10μm) are selectable for cartridge
- Water absorption element is available
- Clogging indicator and relief valve are selectable as an option
- Pipe connection type is "Rc threaded"



★ Refer to P.222 for hydraulic graphic symbol of other combination of optional equipment.

SPECIFICATION

Max working pressure	MPa	1.0
Repetition durability test		0~1.0MPa x10 ⁷ times
Working temperature	Standard	°C -10 ~ 90
	Working fluid	Mineral oil
Indicator working pressure	MPa	0.3
Cracking pressure	MPa	0.35
Flow direction/Extract direction of filter element		OUT→IN / Downward

Model code		107-10-2	107-10-3	107-10-W
Standard flow rate ☆	ℓ /min	150		20 (Max)
Main material	Body	Aluminum		
	Body	Non-coating		
Coating	Cartridge	3C	Yellow	Blue
		10U	Black	
Weight	kg	2.4	2.7	2.8

☆Standard flow rate is estimated by the condition of density: 0.86, kinematic viscosity: 32mm²/s, filtration rating: U10, pressure drop: lower than 0.05MPa.
(Since it is adjusted by characteristic of each product, value can be different in some cases.)

MODEL CODE

(Model code example)



Code	Inner diameter
10	Rc1 1/4

Code	Cartridge size
2	Approx. 220mm
3	Approx. 300mm

Code	Filtration rating
C-Fiber	
3C *1	3 μm
Paper	
10U	10 μm
Water absorption cartridge	
W	W-1321

Refer to P.15 -16 for detail information of filter element.

Code	Option
① Indicator	
Blank	Closing plug
I	Visual type
E	Electric contact type
D	Electric contact type (Micro capacity)
② Relief valve	
K	Non
V	Relief valve

* 1 3C element (3μm) is available only for the model with cartridge size code: 2 (approx. 220mm)

FLOW RATE GRAPH

Condition

Fluid type : ISO VG32
Oil temperature : 40°C

(Density: 0.86,
Kinematic
viscosity: 32mm²/s)

How to calculate of pressure drop

Estimate pressure drop of filter assembly by following equation:

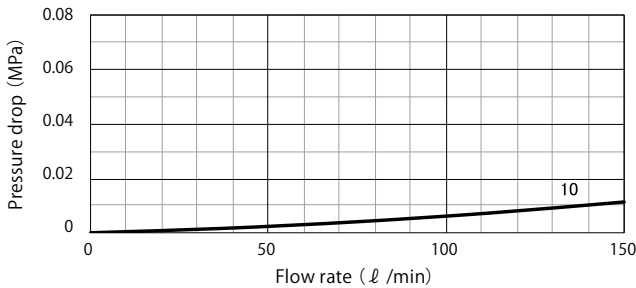
$$\text{Pressure drop of filter assembly} = \text{① Pressure drop of filter housing} + \text{② Pressure drop of filter element}$$

Estimate pressure drop of filter assembly by following equation if required condition is different:

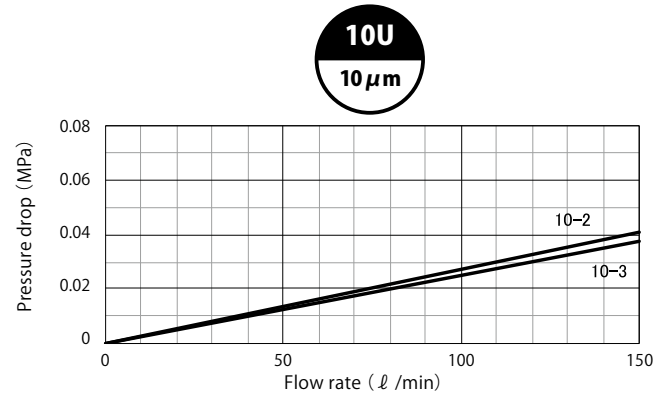
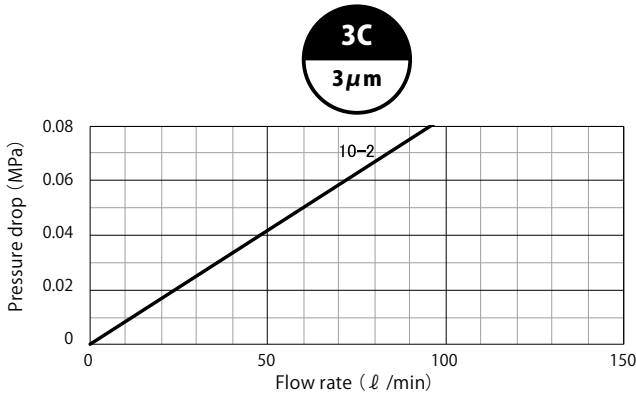
$$\begin{aligned} \text{Pressure drop of filter housing} &= \frac{\text{Fluid density}}{0.86} \times \text{Pressure drop of filter housing at density of 0.86} \\ \text{Pressure drop of filter element} &= \frac{\text{Fluid density}}{0.86} \times \frac{\text{Kinematic viscosity}}{32} \times \text{Pressure drop of filter element at density of 0.86, kinematic viscosity of 32} \end{aligned}$$

★ Pressure drop of filter housing is proportional to fluid density, and pressure drop of filter element is proportional to fluid density and kinematic viscosity.

① Pressure drop of filter housing

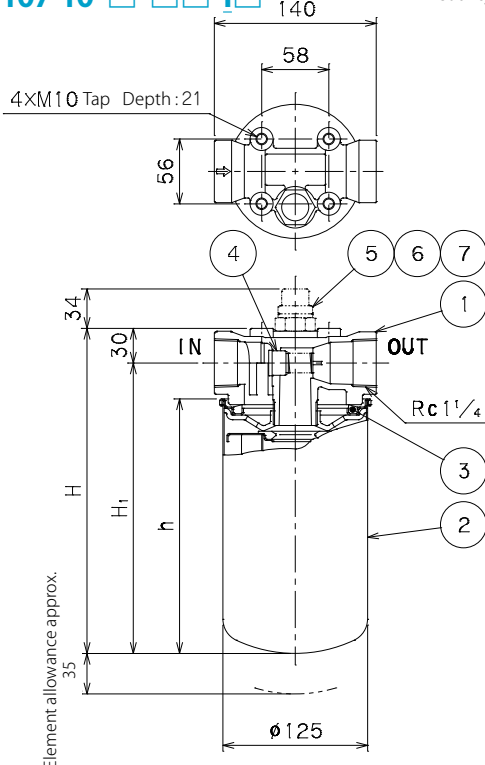


② Pressure drop of filter element



DIMENSION • PARTS LIST

107-10-□-□□-!□ I : Visual type indicator



No.	Item	Qty
1	Body	1
2	Cartridge	1
3	Relief valve	1
4	Packing	1
5	Indicator	1
6	O-ring	1
7	O-ring	1

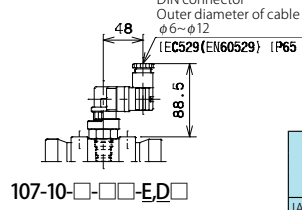
Spare Cartridge

Filtration rating	10U	3C	W
	Cartridge model code		
107-10-2	J-1321-10	J-1321-03	W-1321
107-10-3	J-1330-10		

Sealing parts

No.	6	7
Standard	JIS B2401 1B	JIS B2401 1A
Size	P18	P14

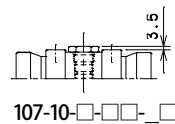
E,D : Electric contact type indicator



107-10-□-□□-E,D

Mark	H	H ₁	h
107-10-2	281	251	220
107-10-3	339	309	278
107-10-W	281	251	220

Closing plug



107-10-□-□□-□

Cartridge model	Weight (kg)
J-1321-10	1.63
J-1330-10	1.78
J-1321-03	1.84
W-1321	1.92

Indicator model code	Working pressure (MPa)		
	Visual observation signal		Electric signal
	Caution	Clogging	
IA-3	0.2	0.3	○ 3. NO ● 2. NC
EA-3			
EA-3D	0.2	0.3	

<Micro switch specification>

Model code	Rated capacity	Contact diagram : 1C	
EA-3	Resistance load		
			3A,250V AC 3A,30V DC
EA-3D	Inductive load		2A,250V AC 2A,30V DC
	Micro capacity		100mA,125V AC 100mA,30V DC