



EFRD Series

EVOTEK Return Filters

Product Description

- Operating pressure up to 20 bar
- 650 l/min max. flow rate
- Install on top of tank
- application in waste management trucks, mobile cranes, power packs, wheeled loaders, drilling equipment
- compliant with industry relevant ISO standards(see ISO test below)

Technical Specifications

Application

Tank-top return filter

Port Sizes:

Threaded Connections according to BSP and NPT standard in 1-½" and SAE20 Flange Connections in SAE DN40 &SAE DN65 for 3000psi

Flow Rate:

max. 650 l/min

Flow Direction

Inside to out flow direction ,keeping the filter bowl decontaminated and minimizing the risk of re-contamination during element change.

Operating Pressure:

max. 20 bar

Burst Pressure:

min. 60 bar

Element Collapse Pressure:

10 bar

By-pass Opening Pressure:

$\Delta p=3 \text{ bar} +0.3\text{bar}$

Material

Seals:

NBR or FPM (-25°C to 100°C)

Filter Head:

Aluminium

Filter Bowl:

Zinc plated steel

Compatibility:

Suitable for mineral oils, lubrication oils, non-flam fluids, synthetic and rapidly biodegradable oils (for use with water or other fields please contact our technical department)

Tested according to ISO standards:

ISO2941 Collapse/burst resistance

ISO2942 Fabrication integrity

ISO2943 Material compatibility integrity

ISO3723 Method for end load test

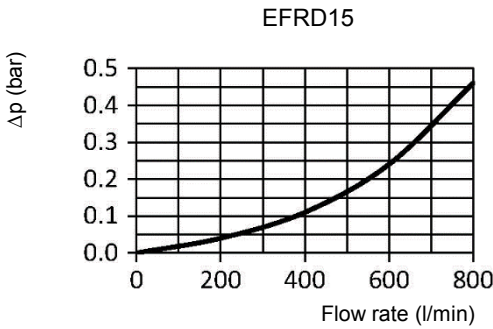
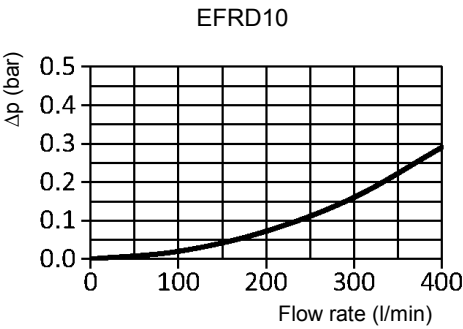
ISO3724 Flow fatigue characteristics

ISO3968 Pressure Drop vs. Flow Rate

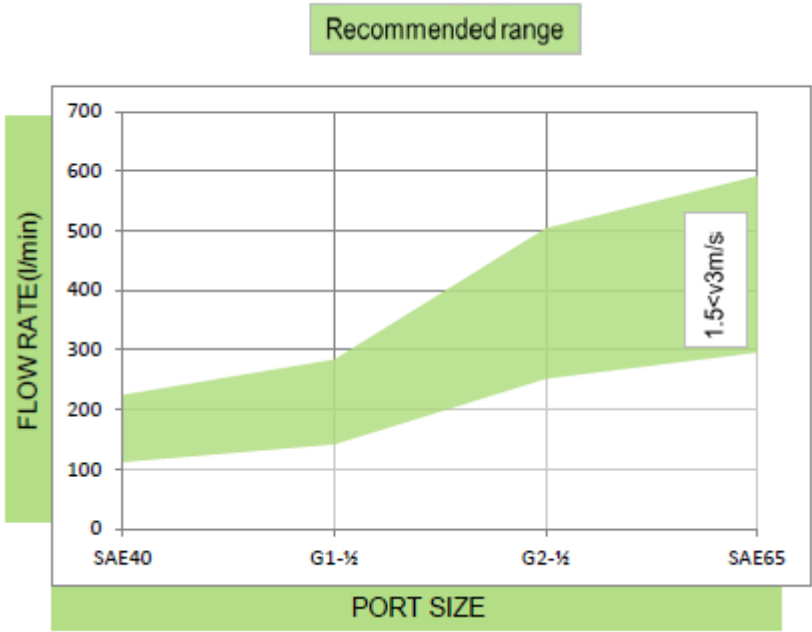
ISO16889 Multi-Pass Test

EFRD Return Filter Series

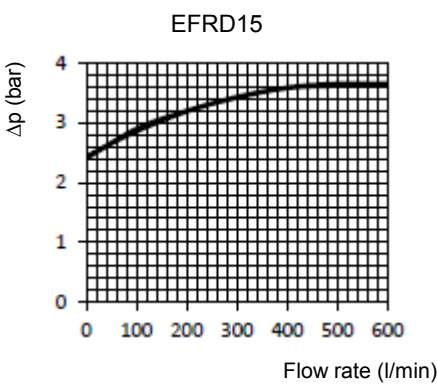
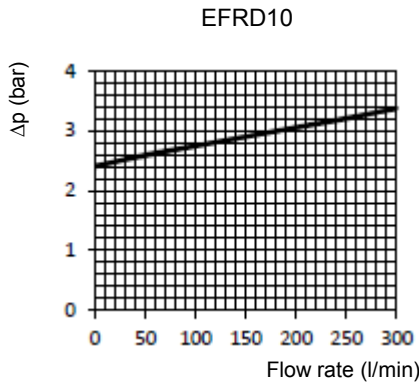
Pressure Drop Graphs (Δp)
Pressure Drop of Filter Housing only



Graph of oil flow velocity
(we recommend to select size of the filter considering range of oil velocity between 1.5 to 3 m/s for return series)



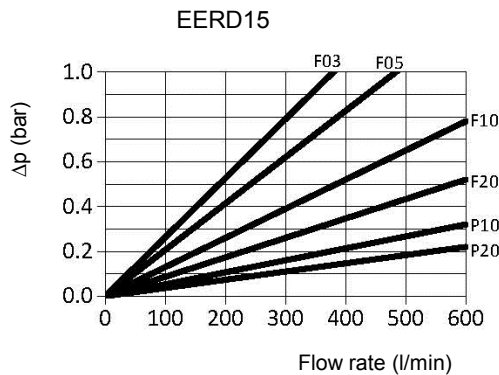
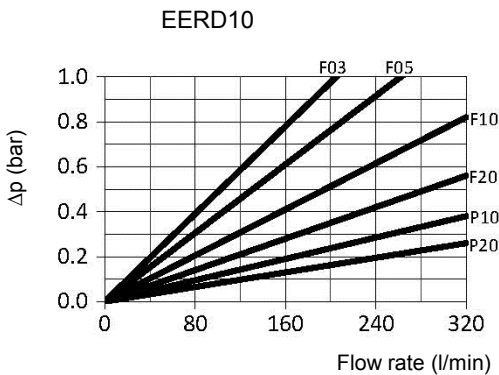
Pressure drop graph on by-pass valve



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Pressure Drop Graphs (Δp)

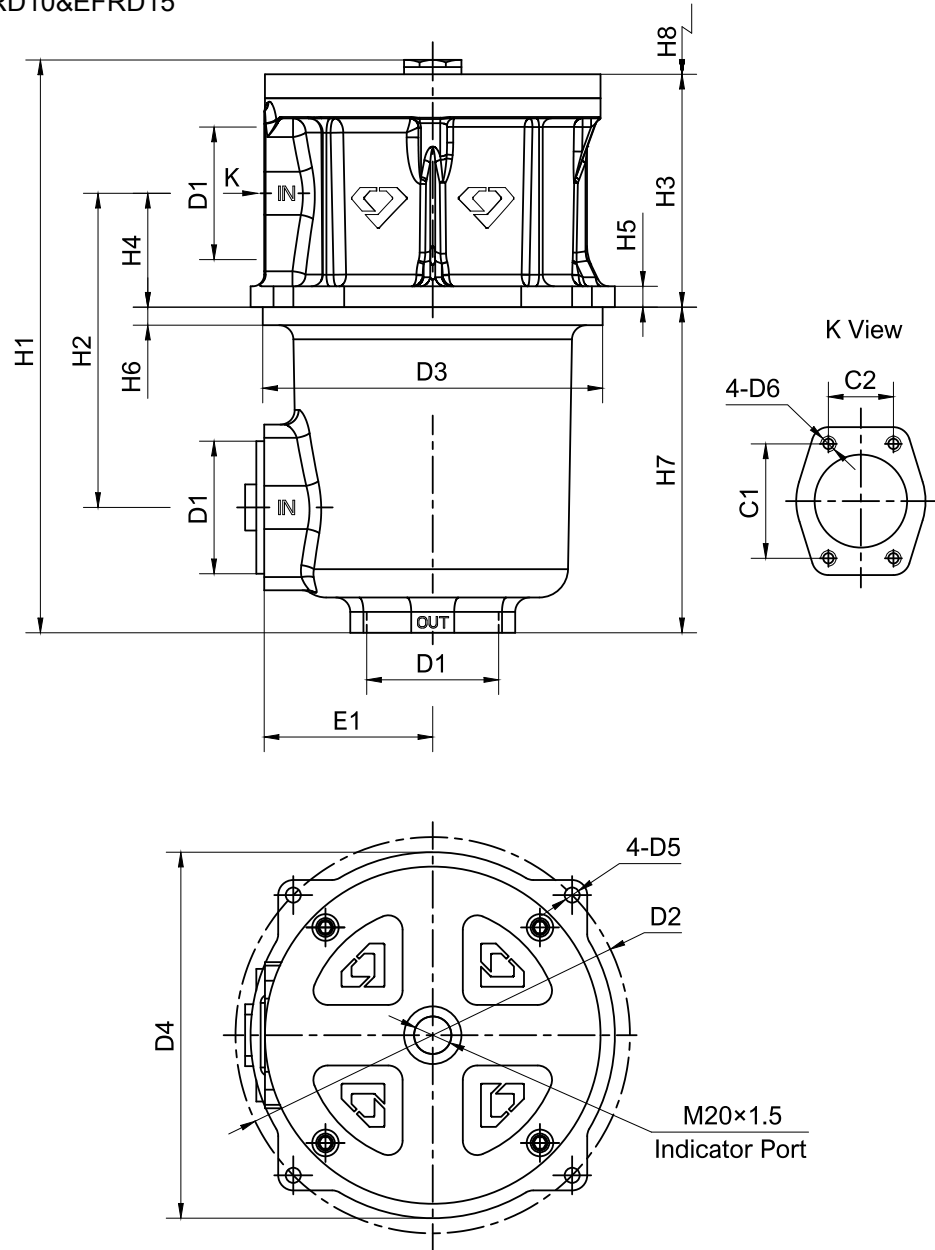
Pressure Drop with Clean Filter Elements (F ,P and W filter media)



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Technical Drawings and Dimension

EFRD10&EFRD15



Threaded Connection Ports

Connection Port
(BSP/NPT/SAE)

Type	D1	D2	D3	D4	D5	D6	E1	C1	C2
EFRD10	1-1/2", SAE DN40 3000psi	180	162	174	8.5	M10	82	70	35.7
EFRD15	2-1/2", SAE DN65 3000psi	275	237	254	10.5	M12	117.5	88.9	50.8
Type	H1	H2	H3	H4	H5	H6	H7	H8	
EFRD10	340	174	126	58	10	8	206	240	
EFRD15	395	218	161	79	14.5	12.5	226	275	

RETURN FILTERS

EFRD