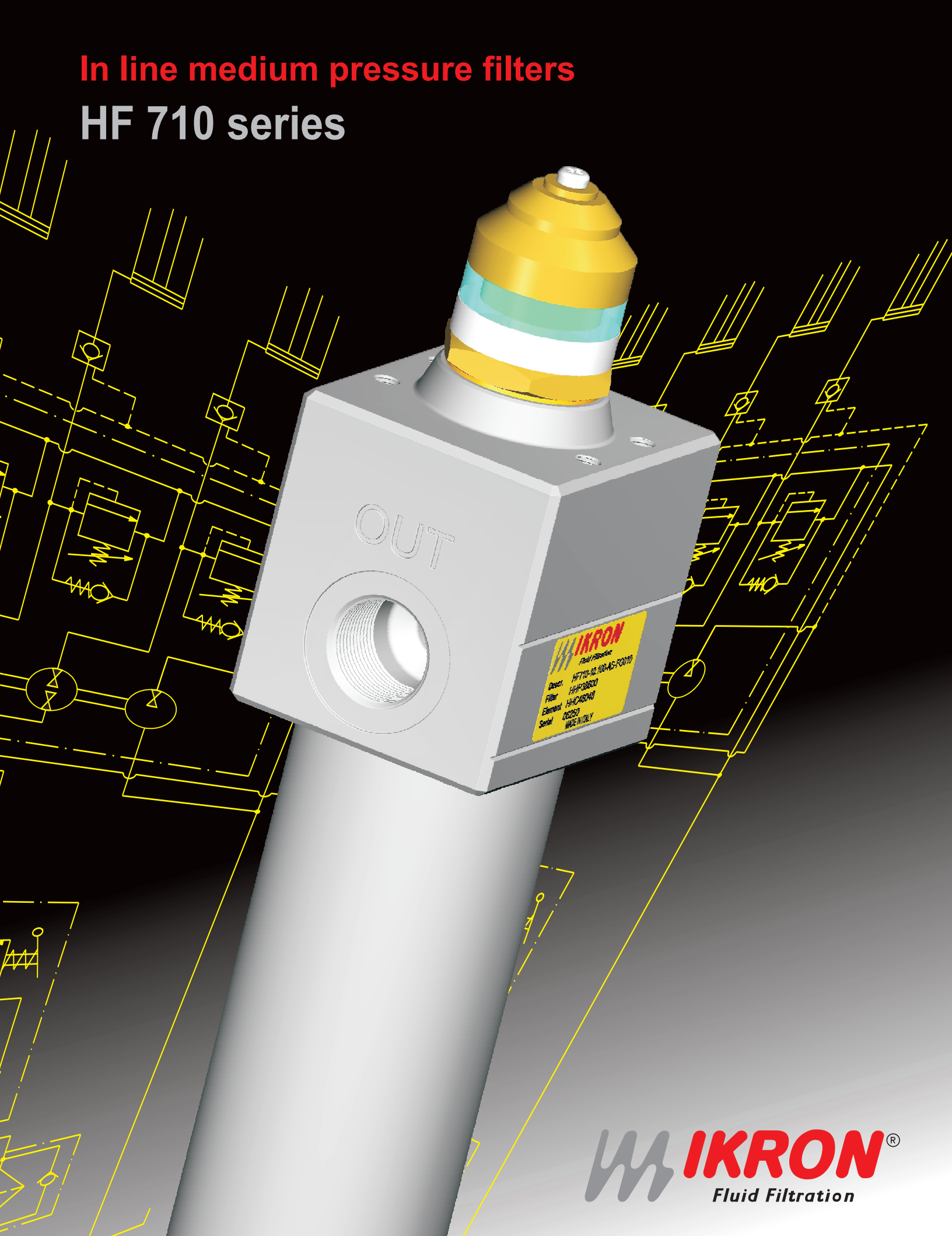
In line medium pressure filters

HF 710 series



IKRON®
Fluid Filtration

TECHNICAL CHARACTERISTICS

HF 710 filter series are connected to the pressure line of the circuit and protect the system's components against contaminant particles.
The standard filters are supplied with by-pass valve set at 87 psi (6 bar).
For applications which need maximum system's protection, such as servo drives or proportional controls, the filters are equipped with highly resistant filtering elements ("HC" versions) without by-pass valve, but they need the use of a clogging indicator.

- Maximum total weight 2.65 lbs (1,2 Kg)
- Aluminum head and bowl
- Maximum working pressure 3626 psi (250 bar)

MATERIALS

Head	Anodized aluminum
Bowl	Anodized aluminum
Seals	Buna - Viton
End cap	Zinc plated steel
Inner tube	Zinc plated steel
Filter media	Inorganic micro-fibre glass

FLUID COMPATIBILITY

Conforming to ISO 2943 (Norm ISO 6743/4)

Oil mineral (1)	HH - HL - HM - HR - HV - HG
Water emulsion (1)	HFAE - HFAS
Water glycol (1)	HFC
Synthetic fluid (2)	HS - HFDR - HFDU - HFDS

(1) With Buna seals
(2) With Viton seals

FLOW

Flow max.	12.4 US gpm (47 l/min)

PRESSURE

Working pressure	3626 psi (250 bar)
Testing pressure	5439 psi (375 bar)
Burst pressure	7252 psi (500 bar)
Element collapse pressure rating (conforming to ISO 2941)	290 psi (20 bar) (version LC) 3045 psi (210 bar) (version HC)

BY-PASS VALVE

By-pass setting	87 psi (6 bar)

OPERATING TEMPERATURE

With Buna seals	-30 ÷ 90 °C
With Viton seals	-20 ÷ 110 °C

ENDURANCE STRENGHT

1.000.000 cycle
0 ÷ 3626 psi (0 ÷ 250 bar)

DEGREE OF FILTRATION

Multi-pass test conforming to ISO 16889 (regulation in force)
Contaminant ISO MTD - final Δp 87 psi (6 bar)

Code	Degree of filtration	Ratio $ß_{x(c)}$	Percentage of efficiency
FG003	5 µm	$ß_{5(c)} \geq 200$	99,5 %
FG006	7 µm	$ß_{7(c)} \geq 200$	99,5 %
FG010	10 µm	$ß_{10(c)} \geq 200$	99,5 %
FG025	21 µm	$ß_{21(c)} \geq 200$	99,5 %

Multi-pass test conforming to ISO 4572 (previous regulation)
Contaminant ACFTD - final Δp 87 psi (6 bar)

Code	Degree of filtration	Ratio $ß_x$	Percentage of efficiency
FG003	3 µm	$ß_3 \geq 200$	99,5 %
FG006	6 µm	$ß_6 \geq 200$	99,5 %
FG010	10 µm	$ß_{10} \geq 200$	99,5 %
FG025	25 µm	$ß_{25} \geq 200$	99,5 %

INDICATORS

Visual differential indicator
Visual electrical differential indicator
Visual electrical differential indicator with thermostat

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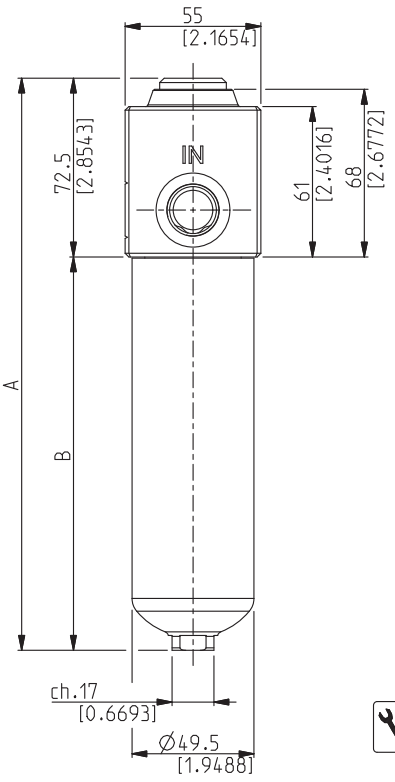
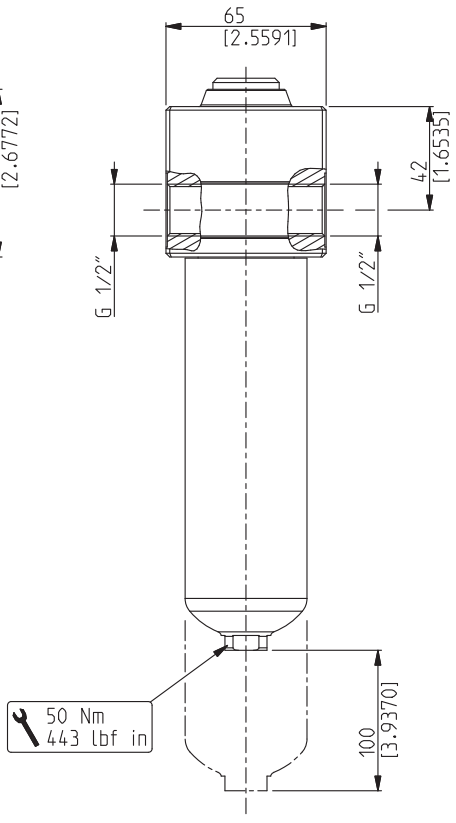
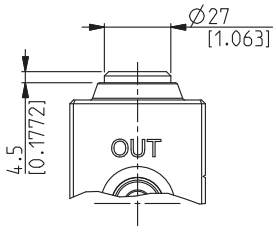
HF710-10 DIMENSIONS

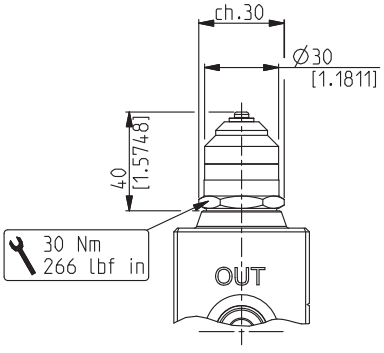




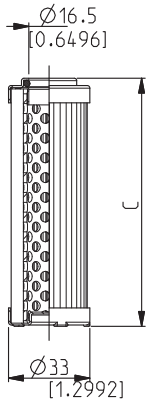
With plug "G"

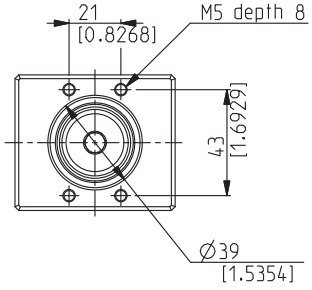


With indicator "H"

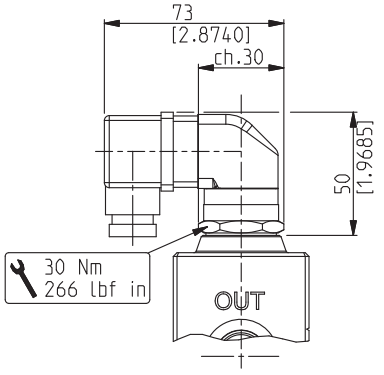


Elements HE K85-10





With indicators "U" o "W"



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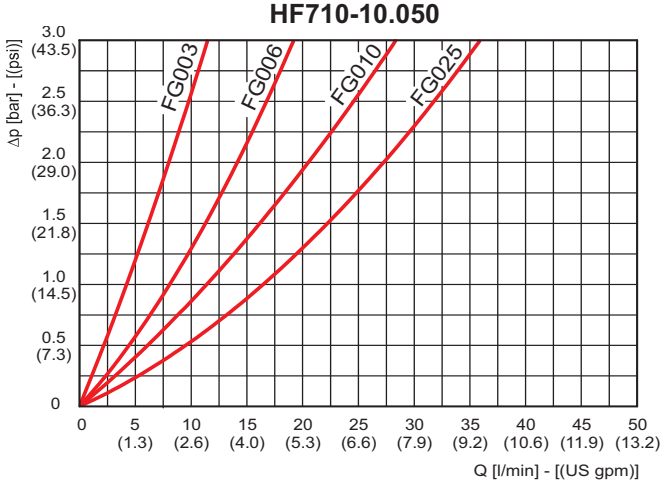
Filter type	Weight	A	B
	kg (lbs)	mm (in)	mm (in)
HF 710-10.050	1,0 (2.20)	182 (7.1653)	109.5 (4.3110)
HF 710-10.100	1,2 (2.65)	232 (9.1338)	159.5 (6.2795)

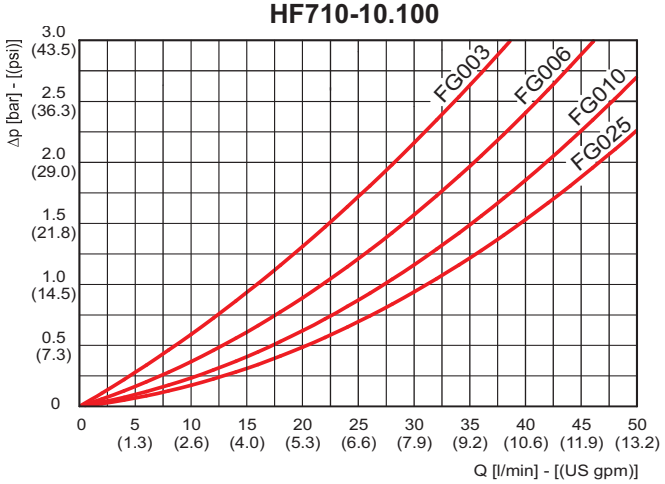
Element type	C	Filtering surface	Dirt holding capacity (ISO MTD) Δp = 72.5 psi (5 bar)			
			FG003	FG006	FG010	FG025
	mm (in)	cm^2 (in^2)	gr (lbs)	gr (lbs)	gr (lbs)	gr (lbs)
HE K85-10.050	50 (1.9685)	162 (25.1100)	0,9 (0.0020)	1,2 (0.0026)	1,3 (0.0029)	1,9 (0.0042)
HE K85-10.100	100 (3.9370)	342 (53.0101)	1,9 (0.0042)	2,5 (0.0055)	2,7 (0.0060)	4,0 (0.0088)

COMPLETE FILTER'S PRESSURE DROP

HF710-10.050



HF710-10.100



The curves are obtained in the following conditions: mineral oil type SAE 10, kinematic viscosity 120 SSU (30 cSt), density 7.29 lb/gal (0,856 kg/dm^3).

FLOW

Filter type	Degree of filtration			
	FG003	FG006	FG010	FG025
	Flow Δp= 29 psi (2 bar)			
	US gpm (l/min)			
HF 710-10.050	2.1 (8)	3.7 (14)	5.5 (21)	7.1 (27)
HF 710-10.100	7.4 (28)	9.5 (36)	11.1 (42)	12.4 (47)

HOW TO ORDER A COMPLETE FILTER

1	2	3	4	5	6	7	8	9
HF710 -	10.100 -	AS -	FG010 -	LC -	B60 -	GD -	B -	XD -	G

1 Filter type	CODE
See table pag. 2	HF710-.

2 Filtering surface	CODE
Standard	AS

3 Degree of filtration		CODE
3	[µm] Micro-fibre glass	FG003
6	[µm] Micro-fibre glass	FG006
10	[µm] Micro-fibre glass	FG010
25	[µm] Micro-fibre glass	FG025

4 Δp collapse pressure	CODE
290 [psi] (20 [bar])	LC
3046 [psi] (210 [bar])	HC

5 By-pass valve	CODE
With By-pass setting valve 87 [psi] (6 [bar])	B60
Without	B00

6 Ports IN/OUT	CODE
Threads GAS (BSPP)	
G 1/2	GD

7 Seals	CODE
Buna	B
Viton	V

8 Indicator arrangement	CODE
Upper side arranged	XD

9 Indicators	CODE
Without indicator, with plug	G
Visual differential indicator	H
Visual electrical differential indicator	U
Visual electrical differential indicator with thermostat	W

Standard On request

HOW TO ORDER A REPLACEMENT ELEMENT

1	2	3	4	5
HE K85 10.100 -	AS -	FG010 -	LC -	B

1 Filter type	CODE
See table pag. 2	HE K85-.

2 Filtering surface	CODE
Standard	AS

3 Degree of filtration		CODE
3	[µm] Micro-fibre glass	FG003
6	[µm] Micro-fibre glass	FG006
10	[µm] Micro-fibre glass	FG010
25	[µm] Micro-fibre glass	FG025

4 Δp collapse pressure	CODE
290 [psi] (20 [bar])	LC
3046 [psi] (210 [bar])	HC

5 Seals	CODE
Buna	B
Viton	V

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