



THE **X** CONCEPT FOR OUR FILTERS

Protect the performance of your system with MYclean.
Quality and efficiency are fundamental for MP Filtri:
this exclusive new filter element possesses polygon shape geometry and specific seal
that ensures only original spare parts can be used - ensuring correct operation and
higher system reliability.

LFEX series

with **MYCLEAN** FEX Filter Element



- ◆ **Protects the machine from improper use of non-original products.**
- ◆ **Safety of constant quality protection & reliability**

With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil due to the use of originals filter elements.

The products identified as LFEX are protected by:

- ◆ Italian Patent n° 102014902261205
- ◆ Canadian Patent n° 2,937,258
- ◆ European Patent n° 3 124 092 B1
- ◆ US Patent n° 20170030384 A1

LFEX series

Maximum working pressure up to 1.6 MPa (16 bar) - Flow rate up to 300 l/min



INSTALLATION, SERVICE AND MAINTENANCE MANUAL AND SAFETY INSTRUCTIONS



Please scan or click the QR codes to get updated electronic version of the related document:



LFEX060



LFEX080



LFEX110



LFEX160

For all the QR codes: Scan or click me!

Description

Technical data

Low & Medium Pressure filters

Maximum working pressure up to 1.6 MPa (16 bar)

Flow rate up to 300 l/min

LFEX is a range of low pressure filter for protection of sensitive components in low pressure hydraulic systems.

They are also suitable for the off-line filtration of small reservoirs.

They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- Female threaded connections up to 1 1/4" and SAE connections up to 1 5/8", for a maximum flow rate of 300 l/min
- Fine filtration rating, to get a good cleanliness level into the system
- Water removal elements, to remove the free water from the hydraulic fluid
- Bypass valve, to relieve excessive pressure drop across the filter media
- NEW Visual and electrical differential clogging indicators, capable to hold the overall dimension
- MYclean interface connection for the filter element, to protect the product against non-original spare parts
- External protective wrap, to optimize the flow through the element and to save the element efficiency against non-proper handling

Common applications:

Delivery lines, in any low pressure industrial equipment or mobile machines

Filter housing materials

- Head: Aluminium
- Bypass valve: Polyamide - Steel
- Bowl: Polyamide

Pressure

- Test pressure: 2.4 MPa (24 bar)
- Min. Burst pressure: 4.8 MPa (48 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 1.6 MPa (16 bar)

Bypass valve

Opening pressure 0.35 MPa (3.5 bar) $\pm 10\%$

Filter element features

Filter LFEX		Filter element FEX	
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	Standard	N	8 bar
M - Wire mesh	Standard	N	8 bar
P - Paper	Standard	N	8 bar
Please see ordering code tables to check element Δp series availability based on filter features.			
Flow direction through the filter element:			
From OUT to IN			

Seals

Standard NBR series A

Temperature

From -25 °C to +110 °C

Note

LFEX filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]	Volumes [dm ³]
LFEX 060	1.00	0.60
LFEX 080	1.15	0.80
LFEX 110	1.90	1.60
LFEX 160	2.10	2.00

Flow rates [l/min]

Filter element design - N Series

Filter series	A03	A06	A10	A16	A25	M25	M60	M90	P10	P25
LFEX 060	49	51	75	77	80	104	105	107	74	95
LFEX 080	67	67	86	87	92	107	108	110	96	112

Filter series	A03	A06	A10	A16	A25	M25	M60	M90	P10	P25
LFEX 110	107	115	182	195	216	295	298	300	232	242
LFEX 160	146	150	210	212	237	300	303	304	254	262

Maximum flow rate for a complete delivery filter with a pressure drop $\Delta p = 0.7$ bar.

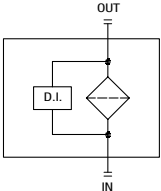
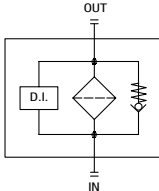
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

Please, contact our Sales Department for further additional information.

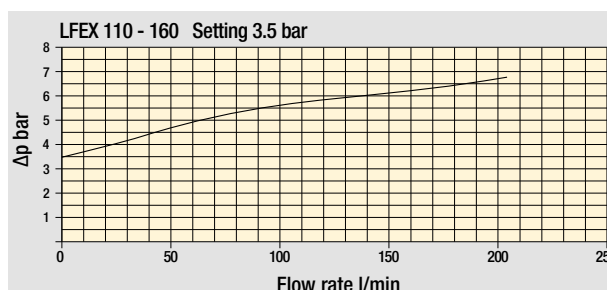
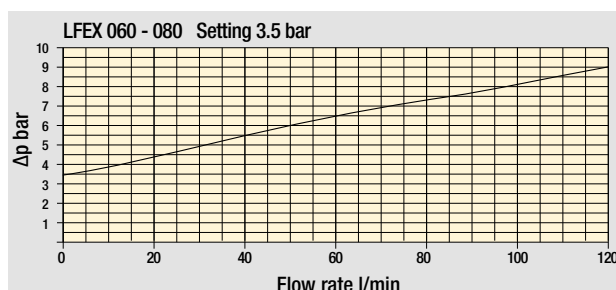
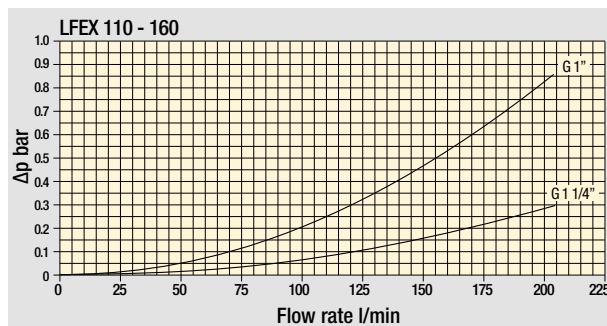
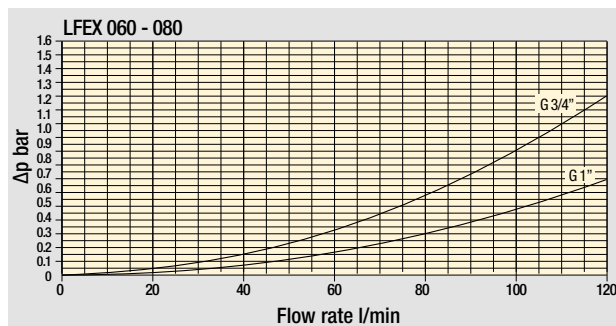
Hydraulic symbols

Filter series	Style S	Style B
LFEX 060	•	•
LFEX 080	•	•
LFEX 110	•	•
LFEX 160	•	•

Pressure drop

Filter housings
 Δp pressure drop



Bypass valve
pressure drop

The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968.

Δp varies proportionally with density.

LFEX LFEX060 - LFEX080

Designation & Ordering code

COMPLETE FILTER

Series and size

LFEX060 | **LFEX080** Filter featuring  Filter Element

Configuration example : **LFEX060**

B **A** **A** **6** **A10** **N** **P01**

Bypass valve

S Without bypass

B With bypass 3.5 bar

Seals and treatments

A NBR

Connections

A G 3/4"

B G 1"

C 3/4" NPT

D 1" NPT

E SAE 12 - 1 1/16" - 12 UN

F SAE 16 - 1 5/16" - 12 UN

Connection for clogging indicator

1 Without

6 With plugged connections

Filtration rating

A03 Inorganic microfiber 3 µm **M25** Wire mesh 25 µm

A06 Inorganic microfiber 6 µm **M60** Wire mesh 60 µm

A10 Inorganic microfiber 10 µm **M90** Wire mesh 90 µm

A16 Inorganic microfiber 16 µm **P10** Resin impregnated paper 10 µm

A25 Inorganic microfiber 25 µm **P25** Resin impregnated paper 25 µm

WA025 Water absorber inorganic microfiber 25 µm

Element Δp

N 8 bar

Execution

P01 MP Filtri standard

Pxx Customized

FILTER ELEMENT

Element series and size

FEX060 | **FEX080** Filter Element with  feature

Configuration example: **FEX060**

A10 **A** **N** **P01**

Filtration rating

A03 Inorganic microfiber 3 µm **M25** Wire mesh 25 µm

A06 Inorganic microfiber 6 µm **M60** Wire mesh 60 µm

A10 Inorganic microfiber 10 µm **M90** Wire mesh 90 µm

A16 Inorganic microfiber 16 µm **P10** Resin impregnated paper 10 µm

A25 Inorganic microfiber 25 µm **P25** Resin impregnated paper 25 µm

WA025 Water absorber inorganic microfiber 25 µm

Seals and treatments

A NBR

Element Δp

N 8 bar

Execution

P01 MP Filtri standard

Pxx Customized

CLOGGING INDICATORS

See page 720

DES Electrical differential pressure indicator

DVS Visual differential pressure indicator

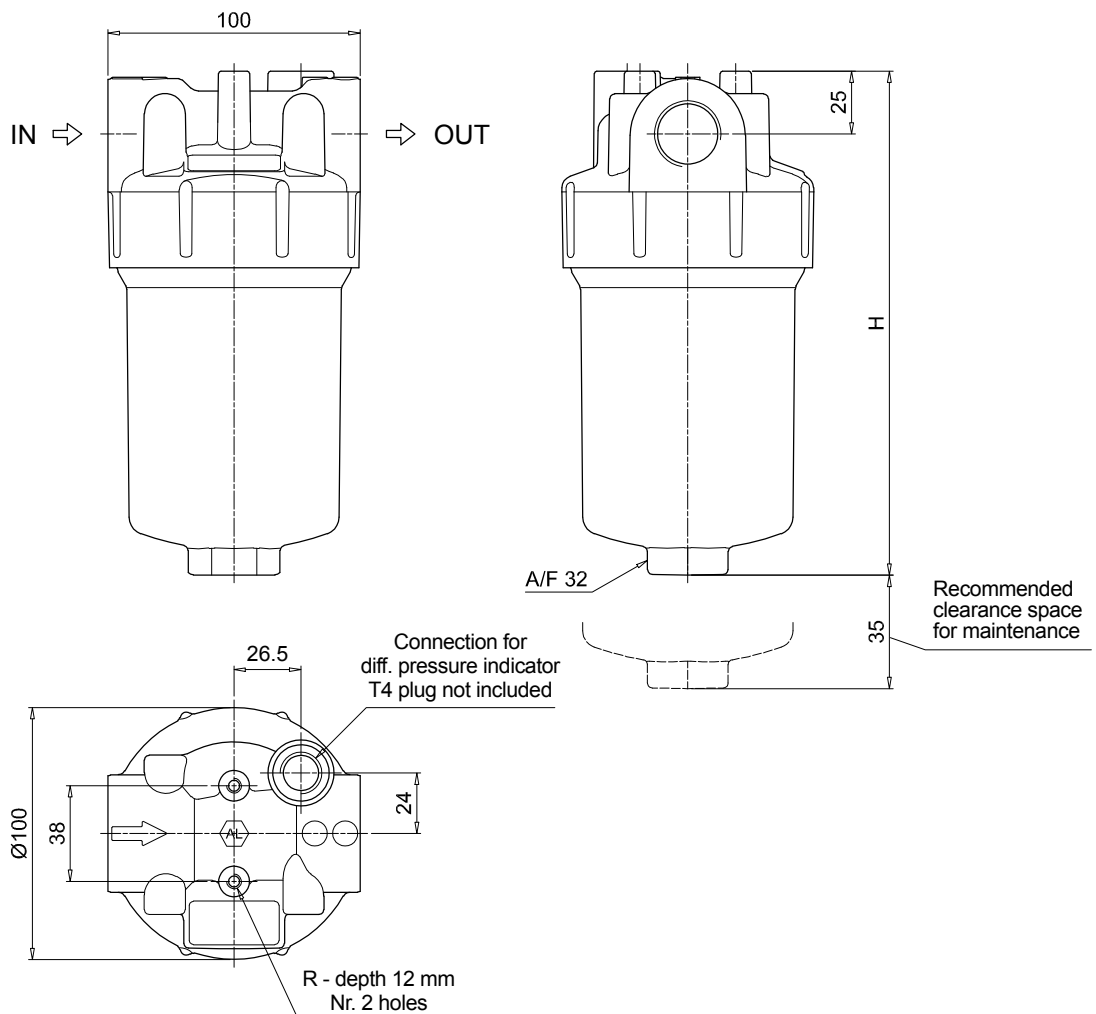
PLUGS

See page 741

T4 Plug

Filter size	H [mm]
060	202
080	265

Connections	R
A	M6
B	M6
C	1/4" UNC
D	1/4" UNC
E	1/4" UNC
F	1/4" UNC



Designation & Ordering code

COMPLETE FILTER

Series and size		Configuration example: LFEX110		B	A	A	6	A10	N	P01
LFEX110 LFEX160 Filter featuring  Filter Element										
Bypass valve										
S Without bypass										
B With bypass 3.5 bar										
Seals and treatments										
A NBR										
Connections										
A G 1"										
B G 1 1/4"										
C 1" NPT										
D 1 1/4" NPT										
E SAE 16 - 1 5/16" - 12 UN										
F SAE 20 - 1 5/8" - 12 UN										
Connection for clogging indicator										
1 Without										
6 With plugged connections										
Filtration rating										
A03 Inorganic microfiber	3 µm	M25 Wire mesh	25 µm							
A06 Inorganic microfiber	6 µm	M60 Wire mesh	60 µm							
A10 Inorganic microfiber	10 µm	M90 Wire mesh	90 µm							
A16 Inorganic microfiber	16 µm	P10 Resin impregnated paper	10 µm							
A25 Inorganic microfiber	25 µm	P25 Resin impregnated paper	25 µm							
WA025 Water absorber inorganic microfiber		25 µm								

Element Δp	Execution
N 8 bar	P01 MP Filtri standard
	Pxx Customized

FILTER ELEMENT

Element series and size		Configuration example: FEX110		A10	A	N	P01
FEX110 FEX160 Filter Element with  feature							
Filtration rating							
A03 Inorganic microfiber	3 µm	M25 Wire mesh	25 µm				
A06 Inorganic microfiber	6 µm	M60 Wire mesh	60 µm				
A10 Inorganic microfiber	10 µm	M90 Wire mesh	90 µm				
A16 Inorganic microfiber	16 µm	P10 Resin impregnated paper	10 µm				
A25 Inorganic microfiber	25 µm	P25 Resin impregnated paper	25 µm				
WA025 Water absorber inorganic microfiber		25 µm					
Seals and treatments							
A NBR							

Element Δp	Execution
N 8 bar	P01 MP Filtri standard
	Pxx Customized

CLOGGING INDICATORS

See page 720

- DES Electrical differential pressure indicator
- DVS Visual differential pressure indicator

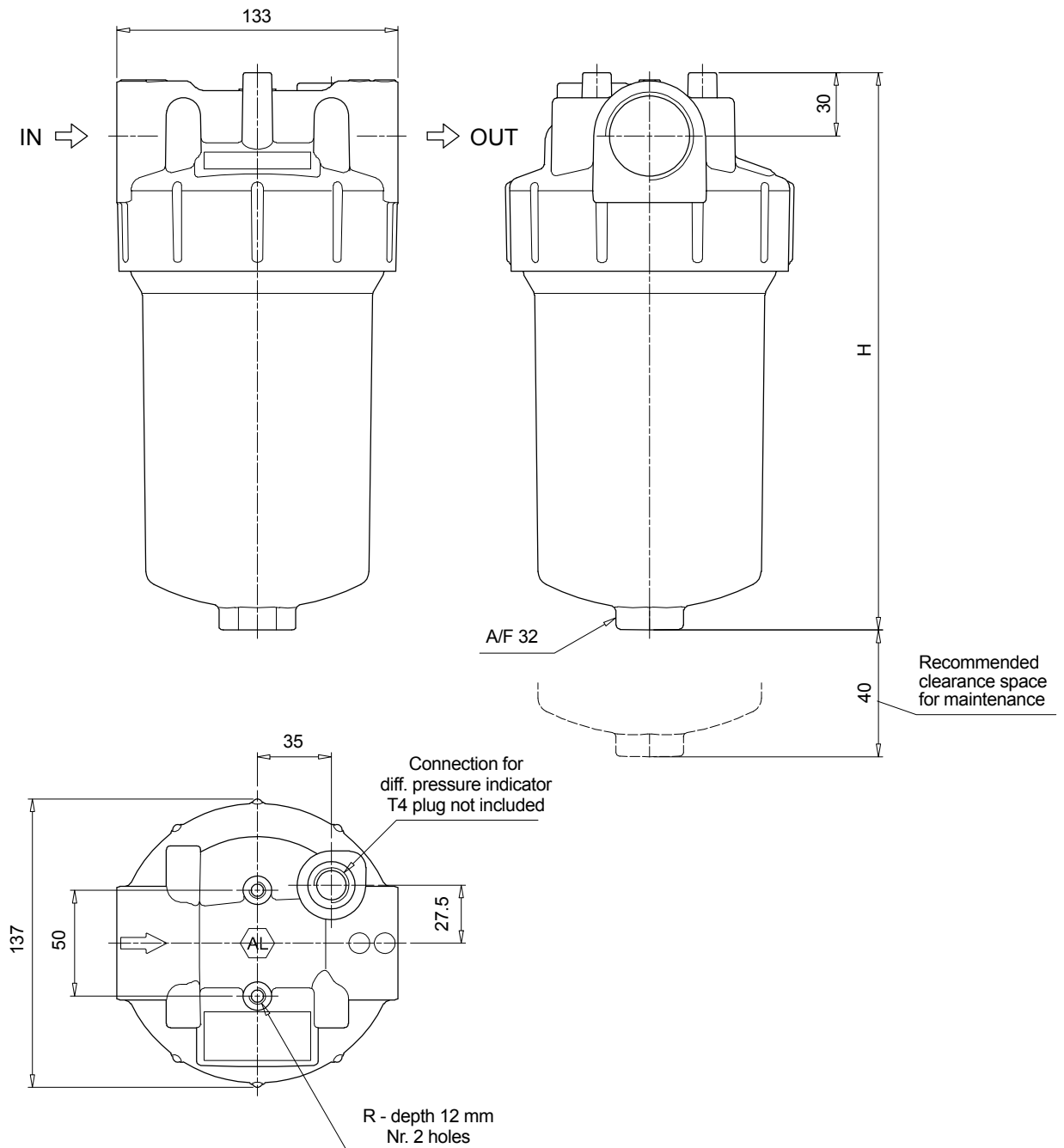
PLUGS

See page 741

- T4 Plug

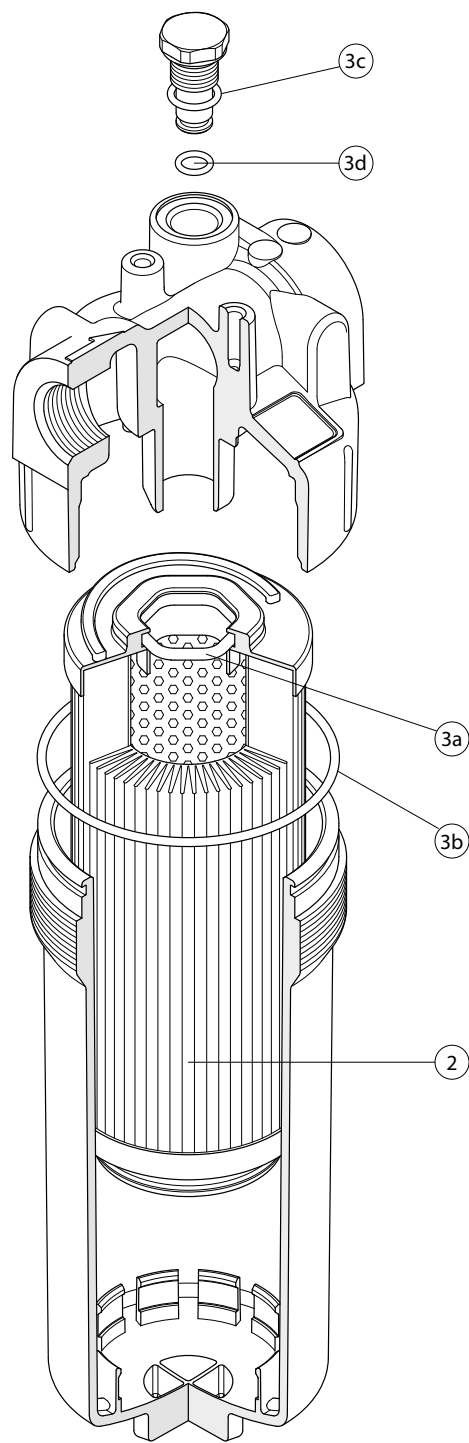
Filter size	H [mm]
110	266
160	315

Connections	R
A	M8
B	M8
C	5/16" UNC
D	5/16" UNC
E	5/16" UNC
F	5/16" UNC



LFEX SPARE PARTS

Order number for spare parts



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	Q.ty: 1 pc.
Filter series	Filter element	Seal Kit code number NBR	Indicator connection plug NBR
LFEX 060-080	See order table	02050771	T4A
LFEX 110-160		02050772	