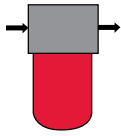


# MEDIUM PRESSURE FILTERS

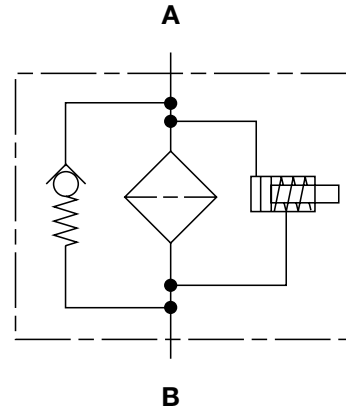
## MFX Series

Inline Filters

725 psi • up to 35 gpm



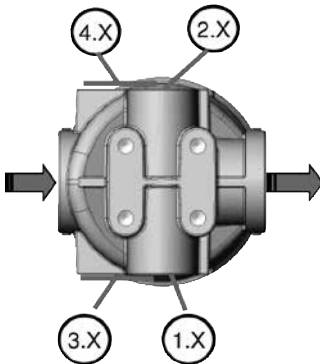
### Hydraulic Symbol



### Features

- Eco-friendly, cost-effective alternative to spin-on filters
- Integrated retrofit protection
- Longer service life of the filter bowl because of fatigue resistant up to 725 psi
- High level of operational safety - Bowl seal and bypass valve are integrated in the filter element and therefore replaced at every element change
- "Missing Element Protection" - cannot operate without element installed.
- Many choices of clogging indicators available
- Various port connection types (SAE-12, G 3/4, SAE-16, G 1, M33x2)

### Clogging Indicator Assignment



### Technical Specifications

<b>Mounting Method</b>	4 Mounting holes (3/8-16UNC) or (M10-13) Ref. Drawing
<b>Port Connection</b>	SAE-12, G 3/4 SAE-16, G 1, M33x2
<b>Flow Direction</b>	Inlet: Side      Outlet: Side (opposite each other)
<b>Construction Materials</b>	
Head	Die Cast Aluminum
Bowl	Extruded Aluminum
<b>Flow Capacity</b>	
100	26 gpm (100 lpm)
200	35 gpm (130 lpm)
<b>Housing Pressure Rating</b>	
Max. Allowable Working Pressure	725 psi (50 bar)
Fatigue Pressure	725 psi (50 bar) @ 1 million cycles
Burst Pressure	2600 psi (183 bar)
<b>Element Collapse Pressure Rating</b>	
BN4HC	290 psid (20 bar)
ECON2, MM	145 psid (10 bar)
<b>Fluid Temperature Range</b> -22°F to 212°F (-30°C to 100°C) Consult HYDAC for applications below -22°F (-30°C)	
<b>Fluid Compatibility</b> Compatible with all hydrocarbon based, synthetic, and high water based fluids compatible with Nitrile Rubber (NBR) seals	
<b>ΔP Indicator Trip Pressure</b> ΔP = 36.25 psid (2.5 bar) -10% (standard). ΔP = 14.5 psid (1 bar) -10% (optional)	
<b>Bypass Valve Cracking Pressure</b> ΔP = 50.75 psid (3.5 bar) +10% (standard) ΔP = 25 psid (1.7 bar) +10% (optional)	

### Applications



Agricultural



Automotive



Construction

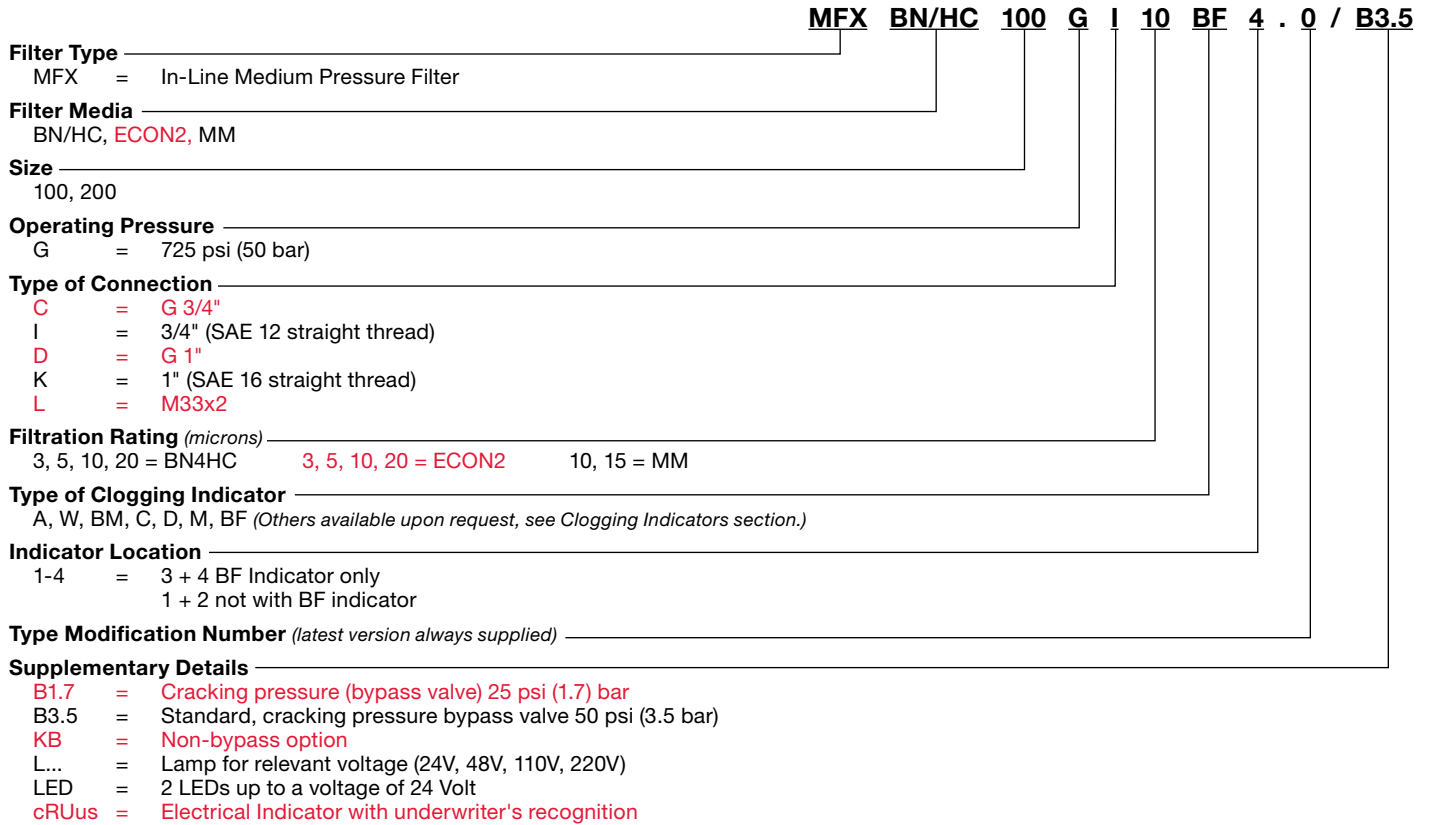


Commercial  
Municipal

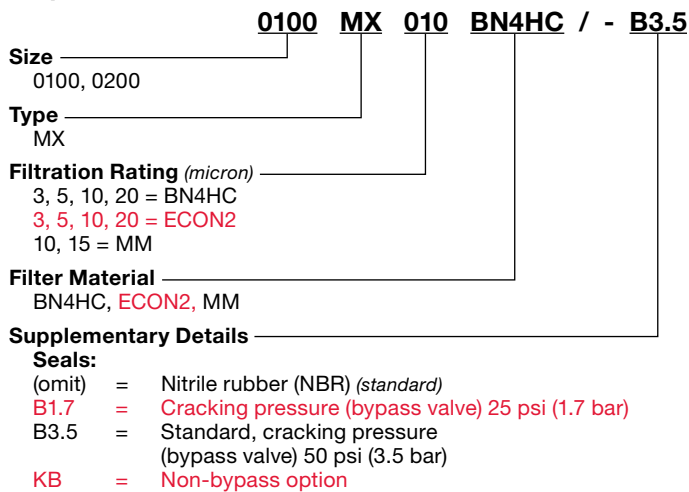


Railways

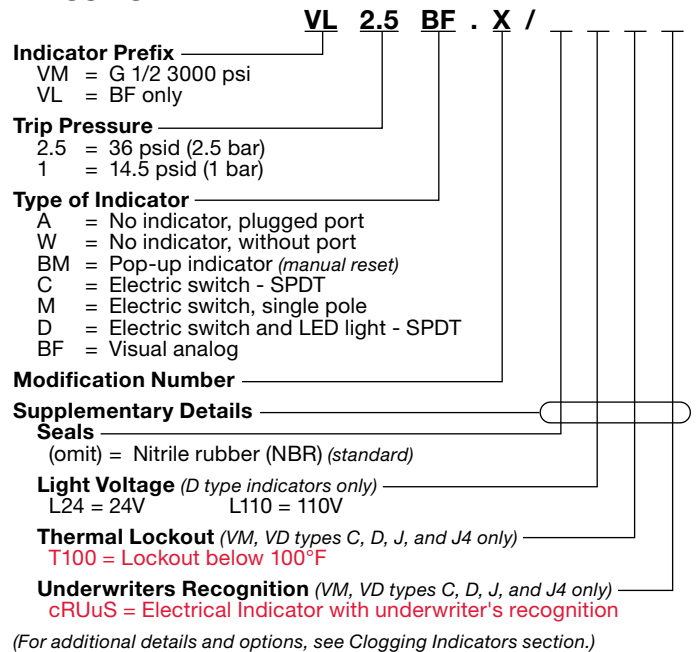
## Model Code



## Replacement Element Model Code



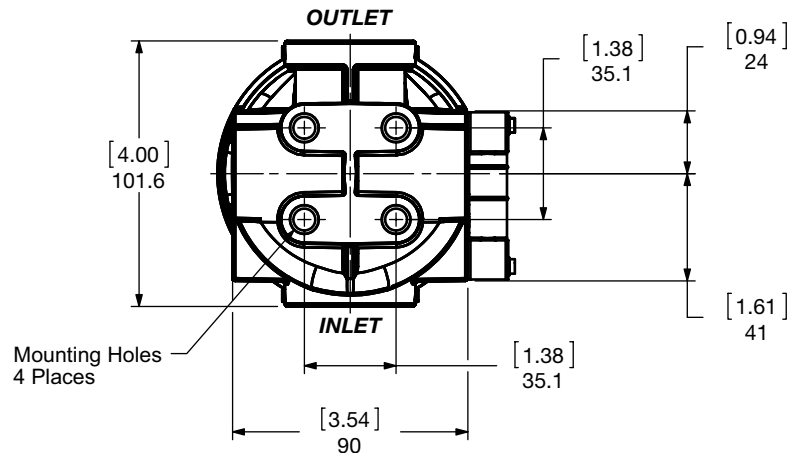
## Clogging Indicator Model Code



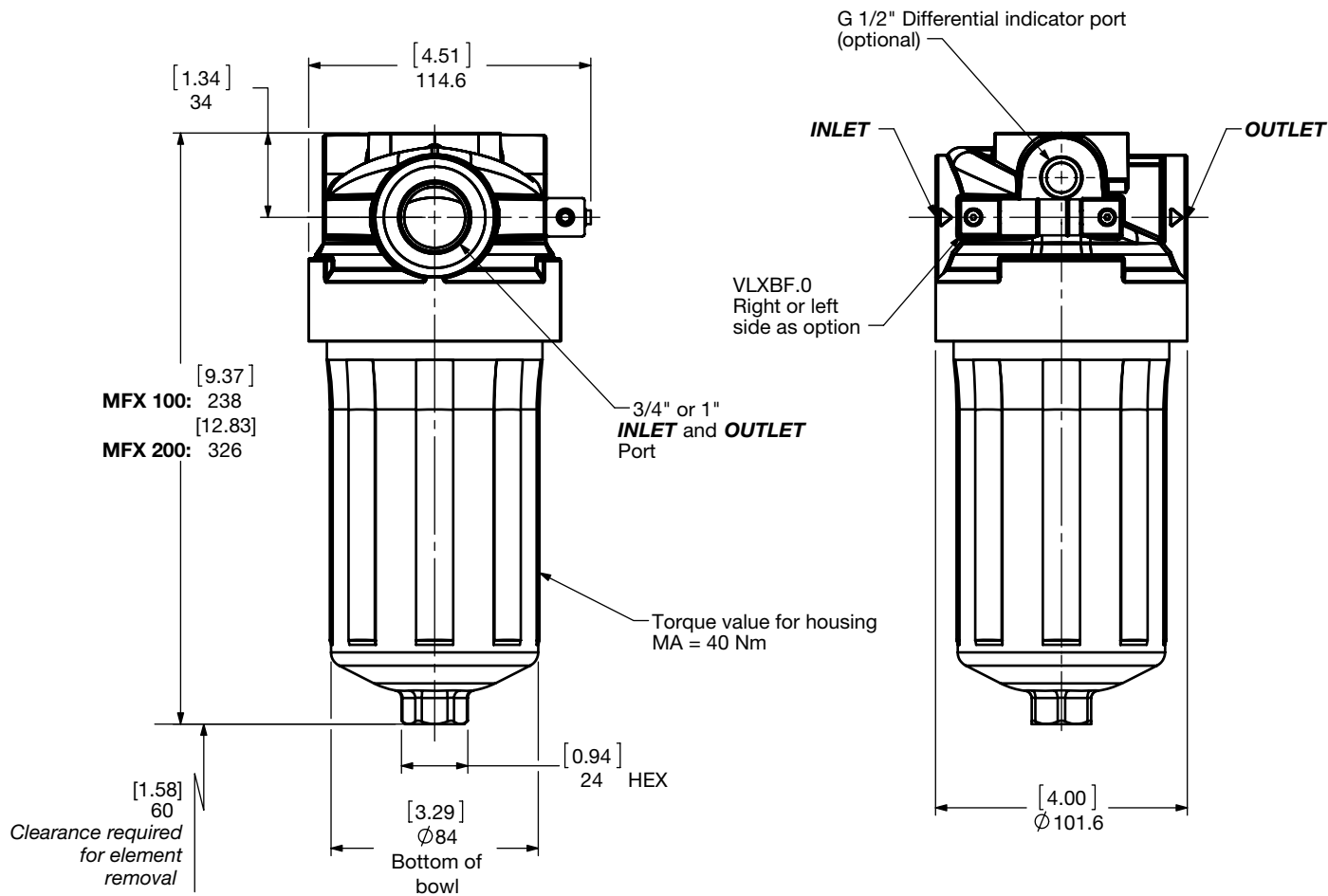
Model Codes Containing RED are non-stock items — Minimum quantities may apply — Contact HYDAC for information and availability

# MEDIUM PRESSURE FILTERS

## Dimensions MFX 100 / 200



MFX 100/200...	Mounting x
...G C...	M10-13 [0.5] Deep
...G D...	M10-13 [0.5] Deep
...G I...	3/- 16UNC. 13 [0.5] Deep
...G K...	3/8-16UNC. 13 [0.5] Deep
...G L...	M10-13 [0.5] Deep



Size	100	200
Weight (lbs.)	3.3	3.9

Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element. For complete dimensions please contact HYDAC to request a certified print.

## Sizing Information

Total pressure loss through the filter is as follows:

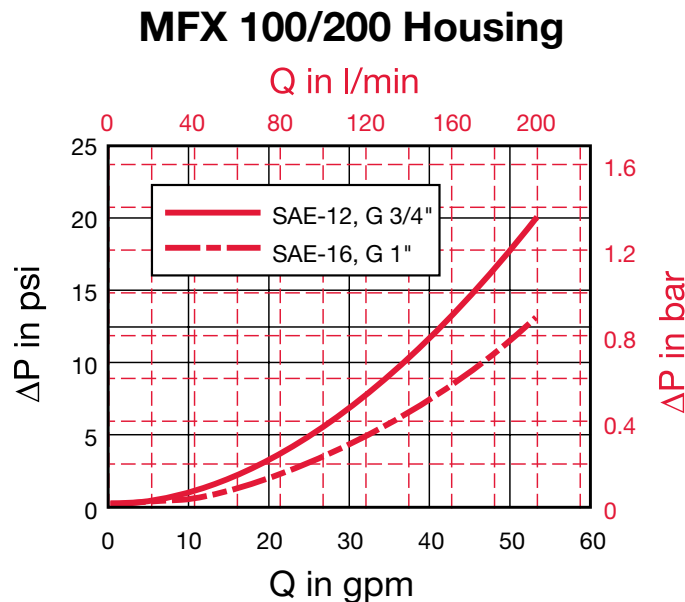
$$\text{Assembly } \Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$$

### Housing Curve:

Pressure loss through housing is as follows:

$$\text{Housing } \Delta P = \text{Housing Curve } \Delta P \times \frac{\text{Actual Specific Gravity}}{0.86}$$

Adjustments must be made for viscosity & specific gravity of the fluid to be used! (see "Sizing HYDAC Filter Assemblies" in Section B - Overview)



## Element K Factors

$$\Delta P \text{ Elements} = \text{Elements (K) Flow Factor} \times \text{Flow Rate (gpm)} \times \frac{\text{Actual Viscosity (SUS)}}{141 \text{ SUS}} \times \frac{\text{Actual Specific Gravity}}{0.86}$$

*(From Tables Below)*

Betamicron	...MX...BN4HC (Betamicron® Low Collapse)				
	Size	3 μm	5 μm	10 μm	20 μm
	0100 MX XXX BN4HC	0.659	0.494	0.252	0.187
	0200 MX XXX BN4HC	0.384	0.291	0.148	0.110

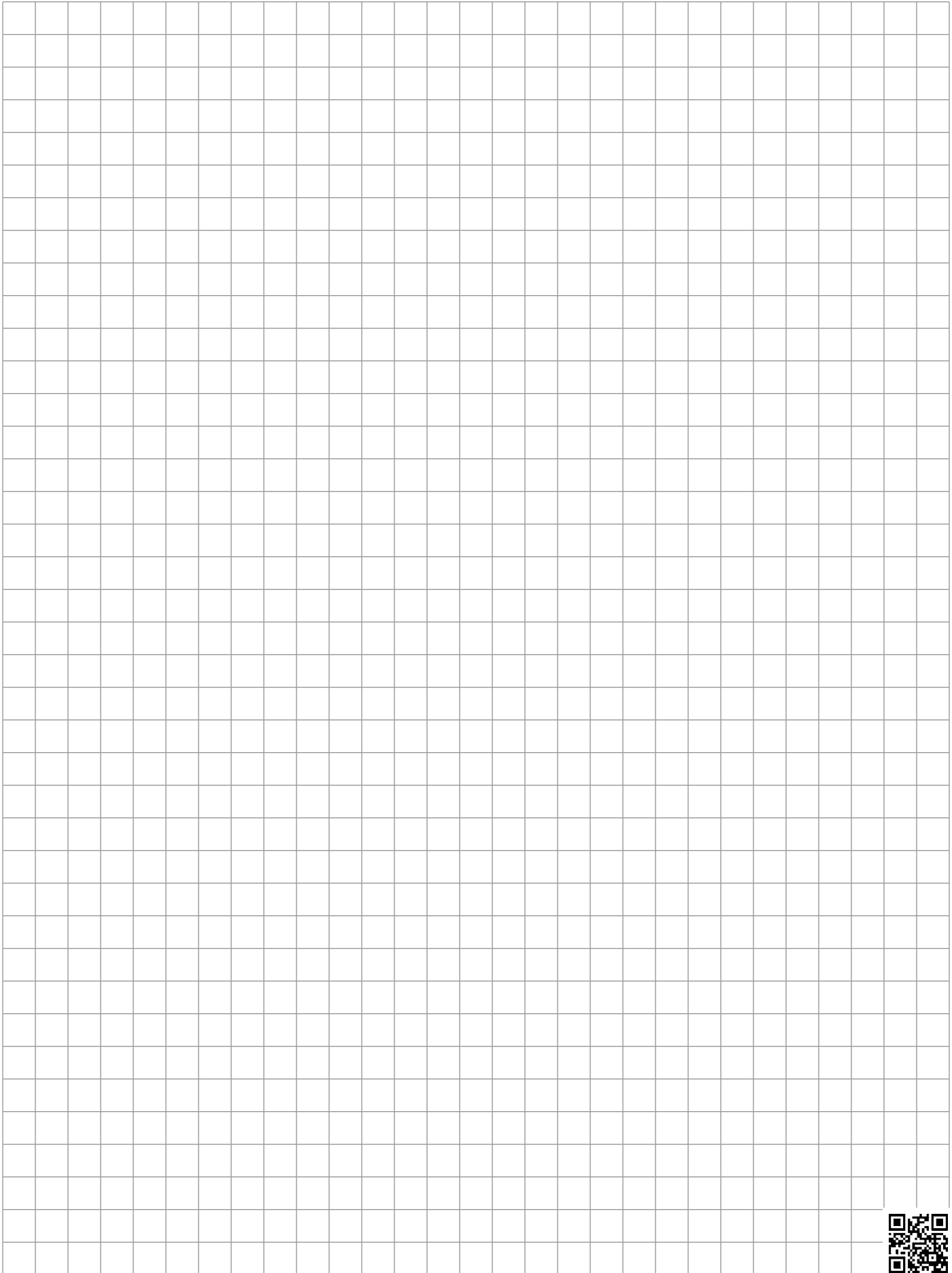
ECOMICRON	...MX...ECON2				
	Size	3 μm	5 μm	10 μm	20 μm
	0100 MX XXX ECON2	0.713	0.549	0.357	0.263
	0200 MX XXX ECON2	0.439	0.324	0.209	0.154

MOBILEMICRON	...MX...MM			
	Size	8 μm	10 μm	15 μm
	0100 MX XXX MM	0.148	0.148	0.121
	0200 MX XXX MM	0.088	0.088	0.071

All Element K Factors in psi / gpm.

# MEDIUM PRESSURE FILTERS

Notes

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.