





**B SERIES**COMMERCIAL FILTER

# B SERIES COMMERCIAL FILTER





# Features & Advantages

- 100% factory tested according to international and Minder improved standard.
- Smart air release valve for manual & automatic air pressure release
- Designed to assemble with valve manifold
- In-fluent manifold distribution to prevent clogging
- Materials used are durable and suitable for all-weather performance
- 10 15 years life-time
- Available in standard 2.5bar and advance 4.0bar operating pressure model

#### Warranty

Fittings	1 year
Filter Tank	5 years

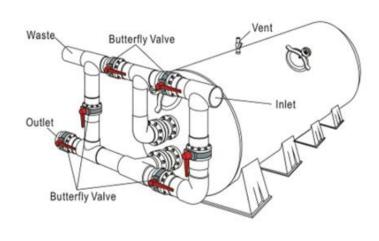
**Minder B Series** horizontal Commercial filters offer a much bigger filtration system for big commercial projects. B Series filters size range from 1050mm to 2500mm in diameter with optional accessories.

#### **Operating Limits**

Model	2.5bar	4.0bar
Maximum water temperature	40°C	40°C
Operating Pressure	2.5bar	4.0bar
Maximum Pressure	4.0bar	6.0Bar

#### **Optional Components**

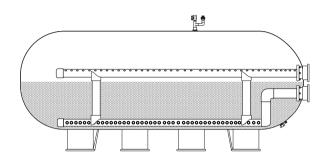
- Nozzle collection system
- Internal sight glass
- Additional inline sight glass
- Sedi manhole
- Valve manifold (valve battery)
- Vinyl-ester internal coating

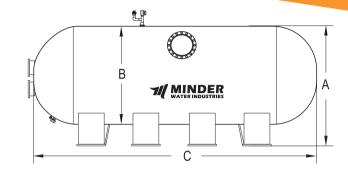




Optional configuration avaiulable by request





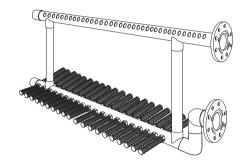


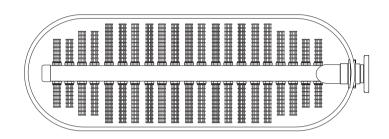
# **Technical Specification & Dimensions**

Model	Code	Tank Ø A	Height B	Length C	Flange Connection	Filtration Area	Designed Velocity	Maximum Flow Rate	Media Bed depth	Silica Sand (kg)	Gravel (kg)
	2.5bar	mm	mm	mm	mm	m²	m³/h/m²	m³/h	mm	1-1.2mm	0.4-0.8mm
						diameter 105					
B1050-1.9	70682		1260	1,900	90	1.72	30	52		350	950
B1050-2.3	70683		1260	2,300	110	2.12	20	42		475	1,250
B1050-2.5	70684	1050	1260	2,500	110	2.32	20	46	500	575	1,525
B1050-2.7	70685		1260	2,700	160	2.51	40	100		700	1,600
B1050-3.0	70686		1260	3,000	160	2.81	40	112		775	2,025
					A: Tank	diameter 120	00mm				
B1200-2.5	70687	1200	1500	2,500	160	2.65	40	106	600	700	1,750
B1200-3.0	70688	1200	1500	3,000	160	3.21	40	129	000	925	2,325
					A: Tank	diameter 140	00mm				
B1400-2.5	70689	1400	1600	2,500	160	3.02	40	121	800	800	2,825
B1400-3.0	70690	1 100	1600	3,000	160	3.67	30	110	000	1,000	3,450
					A: Tank	diameter 160	00mm				
B1600-2.5	70691	1600	1830	2,500	160	3.36	30	101	1000	850	3,875
B1600-3.0	70692	1000	1830	3,000	160	4.1	30	123	1000	1,050	4,750
					A: Tank	diameter 180	00mm				
B1800-2.5	70693		2050	2,500	160	3.74	30	112		975	4,850
B1800-3.0	70694	1800	2050	3,000	160	4.58	30	137	1000	1,225	5,925
B1800-3.5	70695	1000	2050	3,500	200	5.41	30	162	1000	1,475	7,000
B1800-4.0	70696		2050	4,000	200	6.25	30	187		1,700	8,075
					A: Tank	diameter 200	00mm				
B2000-2.5	70697		2220	2,500	160	4.34	30	130		1,050	6,575
B2000-3.0	70698		2220	3,000	160	5.3	30	159		1,300	8,025
B2000-3.5	70699	2000	2220	3,500	200	6.25	30	187	1200	1,550	9,475
B2000-4.0	70700		2220	4,000	200	7.21	30	216		1,800	10,925
B2000-4.5	70701		2220	4,500	200	8.16	20	163		2,075	12,375
					A: Tank	diameter 235	i0mm				
B2300-3.0	70702		2560	3,000	160	5.94	20	119		2,575	9,300
B2300-3.5	70703		2560	3,500	200	7.06	30	212		3,125	11,050
B2300-4.0	70704	2350	2560	4,000	250	8.17	40	327	1200	3,650	12,800
B2300-4.5	70705		2560	4,500	250	9.28	40	371		4,200	14,525
B2300-5.0	70706	_	2560	5,000	250	10.4	30	312		4,750	16,250
					A: Tank	diameter 250	00mm				
B2500-3.5	70707		2710	3,500	200	7.34	30	223		3,175	11,675
B2500-4.0	70708	0500	2710	4,000	250	8.62	40	345	1000	3,725	13,500
B2500-4.5	70709	2500	2710	4,500	250	9.8	30	294	1300	4,300	15,350
B2500-5.0	70710		2710	5,000	250	10.98	30	329		4,850	17,200



# **Collection Systems**





# Standard Inclusions for F and B Series

All Minder commercial filters come with the following fittings. Please inform our representative if you prefer not to have these items installed.

### **Pressure Gauge Panel**



Every F or B series comes with a pressure gauge panel with dual extra large gauges. Gauges are oil-filled for long-lasting durability.

Re-order code: 30144

#### **Water Drain**



Easy draining of sand and water for F & B series

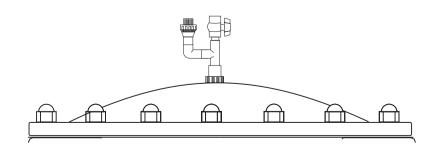
Re-order code: 70306

#### Smart Air Release Valve

Minder's unique feature "Smart Air Release Valve" can manually release the air inside the tank. Also, the one way valve is able to automatically release negative pressure during water drainage to minimize the impact to the filter tank.



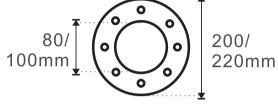






# **Internal Sight Glass**



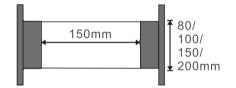


Model	Code	Inner Dia. (mm)	Outer Dia. (mm)
SG80	70713	80	200
SG100	70714	100	200

Operational internal sight glass for F or B series. Available in 2 sizes. Position above sand bed.

# Inline Sight Glass (External Sight Glass)

Model	Code	Inner Dia. (mm)	Outer Dia. (mm)
ILSG80	70715	80	150
ILSG100	70716	100	150
ILSG150	70717	150	150
ILSG200	70718	200	150



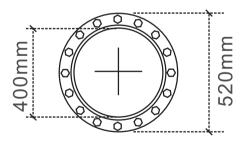
Optional inline sight glass for F or B series. Available in 4 sizes. Allows operators to effectively monitor water condition during backwashing.

#### **Manhole**

Model	Code	Inner Dia. (mm)	Outer Dia. (mm)
MH400	30234	400	520

Optional manhole access for F or B series

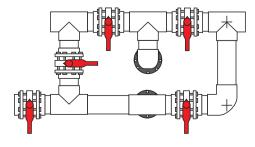




# Valve Manifold (Valve Battery)

Model	Code	Inner Dia. (mm)
MF80	70719	80
MF100	70720	100
MF150	70721	150
MF200	70722	200



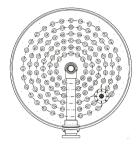




# **Nozzle Plate Collection System**

Model	Code	Sand Filter
NP1200	70515	F1200
NP1400	70516	F1400
NP1600	70517	F1600
NP1800	70518	F1800
NP2000	70519	F2000
NP2300	70520	F2300
NP2500	70521	F2500
NP3000	70522	F3000

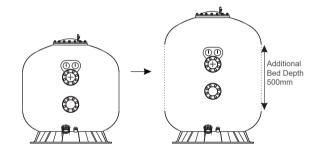




Nozzle plate collection system allows equal distribution of water and enable air wash capability that optimize water saving. Suitable for F series only.

# **Additional Bed Depth**

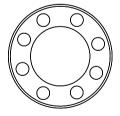
Model	Code	Sand Filter
ABD1200	70612	F1200
ABD1400	70613	F1400
ABD1600	70614	F1600
ABD1800	70615	F1800
ABD2000	70616	F2000
ABD2300	70617	F2300
ABD2500	70618	F2500
ABD3000	70619	F3000

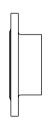


Optional bed depth extension for deep bed filtration. Suitable for F series only. Extra depth is in 500mm block.

# **PVC Flanges**

Model	Code	Inner Dia. (mm)
FG80	40154	80
FG100	40162	100
FG150	40178	150
FG200	40186	200

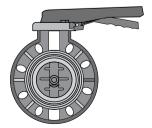




Optional PVC flanges for connecting valves and fittings. Available in 4 sizes. Suitable for F or B series.

## **Valve Butterfly**

Model	Code	Inner Dia. (mm)
BV80	40247	80
BV100	40248	100
BV150	40249	150
BV200	40251	200



# **Vinyl-Ester Coating**

Additional internal layer coating of Vinyl-ester for resistant against corrosion for ozone application

# **Bobbin wound material & Quality Test**





Minder Offers 2 types of bobbin-wound threading: For commercial filter, the overlapping technology will be chosen, and for Minder domestic products, Minder's cross-winding technology will be chosen for great strength on Minder domestic products.

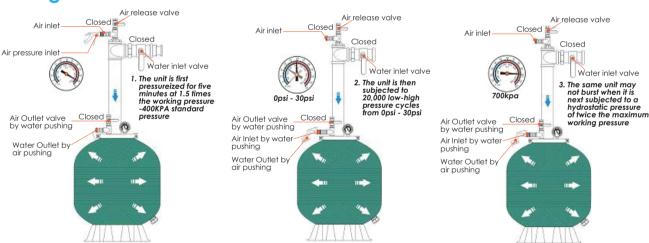
Minder filters are produced with 6 processes to achieve it's highest quality with possible extreme weather conditions in mind.

- 1. Optional Vinyl-ester layer: For resistance against corrosion for ozone application
- 2. Chemical Layer: ISO or VE laminated layer for resistance against corrosion
- 3. Internal Structural Layer: Threading of fibreglass thread with polyester resin
- 4. Reinformacement Layer: Thickening of fibreglass threading for additional strength
- 5. Inner winding layer: Further figbreglass threading for higher pressure strength
- 6. **Surface finishing**: UV screen coating for resistance against UV light and excellent surface finishing

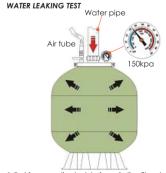
Minder Filter are 100% tested with international and improved Minder standard to to ensure filters are able to withstand up to it's maximum pressure and also for any possible leakage.

- 1. **Internal fibreglass layer**: Tested at operating pressure
- 2. Completed filters: Tested at maximum pressure

#### **Testing method**

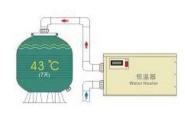


#### Additional Minder test standard



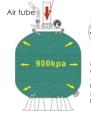
 Test for supporting tank before winding fibreglass abd tested at 400kpa, the unit must be passed pressure successfully at 150kpa for 5 minutes

HEAT - RESISTANT TEST



 Test the unit at 43°C temperature for 7 days, be subjected to heat - resistant character used for swimming pools, spas/Hot tubs

# Water pipe Air tube



900kpa

Burst test to exam the maximum pressure (over 900kpa) onpressure filter, observe temperal situation and analyze factor

Situation A

Pressure filter under 28 diameter, the cover O'ring move place and air bleed, thus release pressure, ni crack on tank body or the plastic ring on the top mount that inserted into fibreglass, which is also a part might cause leaking. If put the O'ring back in the propper position, test can be performed again Situation B

Pressure filter above 32 diameter, water leaking from bottom of filter and air bleed, no crack on the sides. It happen bsaed on production technology by no winding fibreglass on that side

# MINDER WATER INDUSTRIES

