18 Series
Oil Removal Filter
1 1/2″ and 2″ Port Sizes

- **High efficiency oil and particle removal**
- **Highly visible, prismatic liquid level indicator lens**
- **Patented quarter turn manual drain**
- **Can be disassembled without removal from the air line**
- **Two gauge ports on top of body for installation of pressure gauges**
- **Standard service indicator turns from green to red when the filter element needs to be replaced**
- **Optional electrical service indicator also available**

Technical Data

Fluid: Compressed air
Maximum pressure: 17 bar (250 psig)
Operating temperature:* -20° to +65°C (0° to +150°F)

* Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Particle removal: Down to 0,01 µm
Air quality: Within ISO 8573-1, Class 1 (particulates) and Class 2 (oil content)
Maximum remaining oil content in outlet air: 0.01 ppm at +20°C (+70°F) with an inlet concentration of 17 ppm
Maximum flow for oil-saturated element at 6,3 bar (90 psig) inlet pressure to maintain stated oil removal performance:
- 1 1/2″ Ports: 118 dm^3/s (250 scfm)
- 2″ Ports: 142 dm^3/s (300 scfm)
- 2″ Ports, high flow element: 283 dm^3/s (600 scfm)

Typical flow for dry element at 6,3 bar (90 psig) inlet pressure and 0,3 bar (5 psid) pressure drop:
- 1 1/2″ Ports: 368 dm^3/s (780 scfm)
- 2″ Ports: 392 dm^3/s (830 scfm)
- 2″ Ports, high flow element: 1 086 dm^3/s (2 300 scfm)

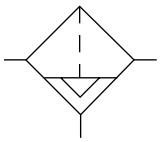
Nominal bowl size: 0,2 litre (7 fluid ounce)
Manual drain connection: 7/16-24 UNS male for 1/4″ tube nut and ferrule
Automatic drain connection: 1/8″
Automatic drain operating conditions:
- Minimum pressure: 0,7 bar (10 psig).
- Drain opens when bowl pressure drops below 0,2 bar (3 psig).
- Minimum air flow: 1 dm^3/s (2 scfm) required to close drain.

Materials:
- Body, intermediate body, bowl: Aluminum
- Metal bowl liquid level indicator lens: Transparent nylon
- Filter element: Synthetic fiber and polyurethane foam
- Elastomers: Neoprene and nitrile
- Service indicator:
  - Body: Transparent nylon
  - Internal parts: Acetal
  - Spring: Stainless steel
  - Elastomers: Nitrile

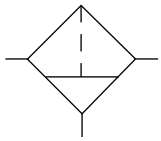
Ordering Information

See *Ordering Information* on following pages.

ISO Symbols



Automatic drain



Manual drain

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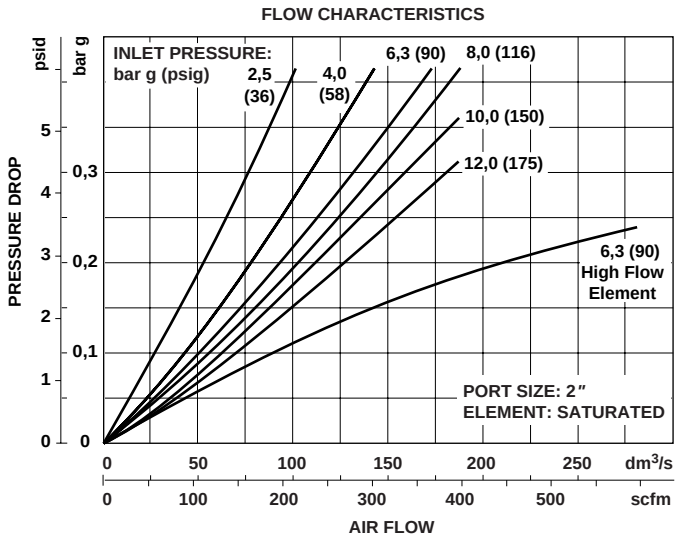
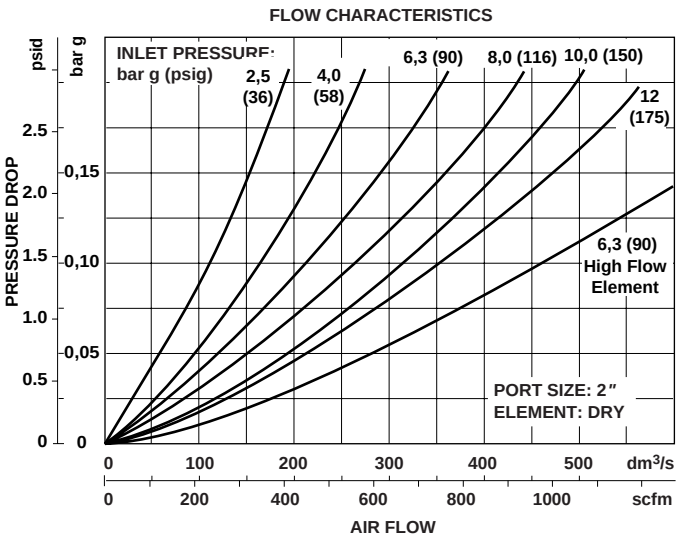
Typical Performance Characteristics

Inlet Pressure bar	(psig)	Maximum Flow† dm^3/s	(scfm)
2,5	(36)	61,4	(130)
4	(58)	103,8	(220)
6,3	(90)	141,6	(300)
8	(116)	161,0	(341)
10	(150)	195,9	(415)

† Maximum flow to maintain stated oil removal performance.





Ordering Information. Models listed include service indicator, automatic drain, metal bowl with sight glass, and ISO G threads.

Port Size	Body and Element	Model Numbers	Flow dm^3/s (scfm) *	Weightkg (lbs)
G1 1/2	Standard	F47-B01-A0DG	118 (250)	7,04 (15.51)
G2	Standard	F47-C01-A0DG	142 (300)	6,47 (14.26)
G2	High Flow	F47-C21-A0DG	283 (600)	10,06 (22.17)

* Maximum flow at 6,3 bar (90 psig) inlet pressure to maintain stated oil removal performance.

Alternative Models

F 4 7 - ★ ★ ★ - ★ ★ ★ ★

Port Size	Substitute
1 1/2″	B
2″	C

Option	Substitute
Standard body and element	0
High flow body and element (use only with 2″ ports)	2

Service Indicator	Substitute
Without	0
With	1

Threads	Substitute
PTF	A
ISO Rc taper	B
ISO G parallel	G

Bowl	Substitute
Metal with sight glass	D
Metal	M

Element	Substitute
Coalescing	0

Drain	Substitute
Automatic	A
Manual, 1/4 turn	T

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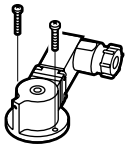
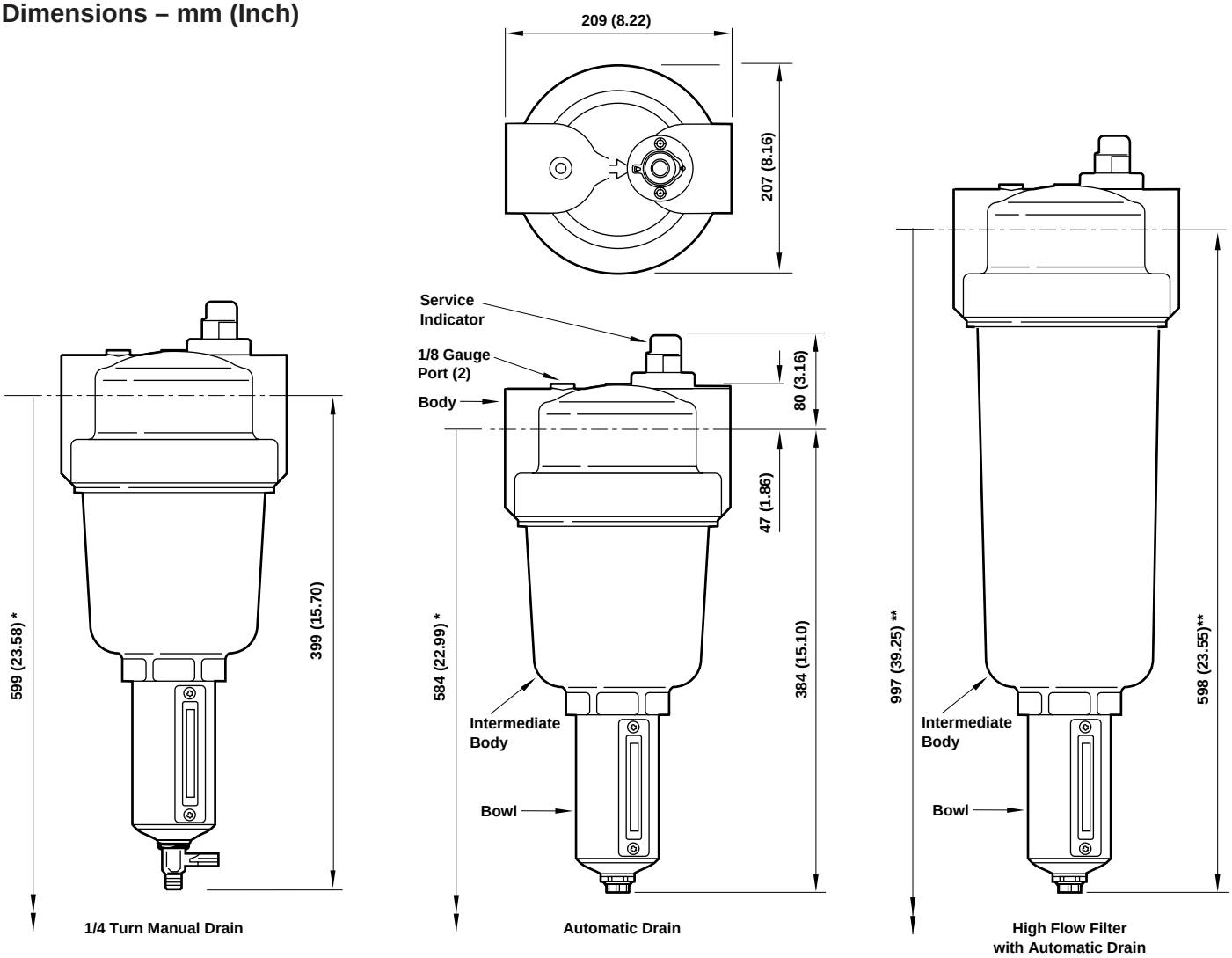
Accessories

	
Service Life Indicator (visual)	Service Life Indicator (electrical)
5797-50	4020-51

Dimensions – mm (Inch)



* Minimum clearance required to remove intermediate body and bowl.

** Minimum clearance required to remove intermediate body and bowl. Add 15 mm (0.59″) for 1/4 turn manual drain.

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Service Kits

Item	Type	Part Number
Service kit	Standard	3203-02
	High Flow	3203-05
Liquid level lens kit	Prismatic	4380-050
Replacement drains	Automatic (1/8 NPT outlet)	3000-10
	Automatic (G 1/8 outlet)	3000-97
	Manual quarter turn	619-50
Service life indicator	Visual	5797-50
	Electrical	4020-51

Service kit contains body o-ring, element, element gasket, automatic drain gasket, and bowl o-ring.

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where *pressures* and *temperatures* can exceed those listed under **'Technical Data'**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult Norgren.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes. The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Water vapor will pass through these units and will condense into liquid if air temperature drops in the downstream system. Install an air dryer if water condensation could have a detrimental effect on the application.

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