**Miniature Series 07**
**General Purpose Filter/Regulator**
**1/8″ and 1/4″ Port Sizes**

- **Compact design**
- **Full flow gauge ports**
- **Low torque, non-rising adjusting knob**
- **Snap action knob locks pressure setting when pushed in**
- **Standard relieving models allow reduction of outlet pressure even when the system is dead-ended**
- **Protects air operated devices by removing liquid and solids contaminants**
- **Screw-on bowl reduces maintenance time**
- **Can be disassembled without the use of tools or removal from the air line**

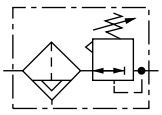
## Technical Data

Fluid: Compressed air
Maximum pressure:
  Transparent bowl: 10 bar (145 psig)
  Metal bowl: 17 bar (250 psig)
Operating temperature:*
  Transparent bowl: -20° to +50°C (0° to +125°F)
  Metal bowl: -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: 5 µm or 40 µm filter element
Air quality: Within ISO 8573-1, Class 3 and Class 5 (particulates)
Typical flow at 10 bar (100 psig) inlet pressure, 6,3 bar (90 psig) set pressure and a droop of 1 bar (15 psig) from set:
  1/8" Ports: 6 $dm^3/s$ (13 scfm) with 5 µm element
  1/4" Ports: 6 $dm^3/s$ (13 scfm) with 5 µm element
Nominal bowl size: 31 ml (1 oz)
Gauge ports:
  1/8" PTF with PTF main ports
  1/8" ISO Rc with ISO Rc main ports
  1/8" ISO Rc with ISO G main ports
Drain connection: 1/8" pipe
Automatic drain operation: Spitter type drain operates momentarily when a rapid change in air flow occurs or when the supply pressure is reduced.
Materials:
  Body: Zinc
  Bonnet: Acetal
  Valve: Brass/nitrile
  Valve seat: Acetal
  Bowl:
    Transparent: Polycarbonate
    Metal: Zinc
  Element: Sintered polypropylene
  Elastomers: Nitrile

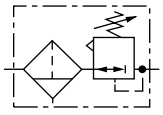
## Ordering Information

See *Ordering Information* on the following pages.

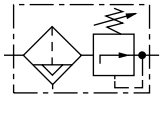
## ISO Symbols



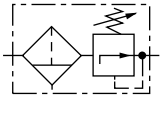
Automatic Drain
Relieving



Manual Drain
Relieving



Automatic Drain
Non-relieving

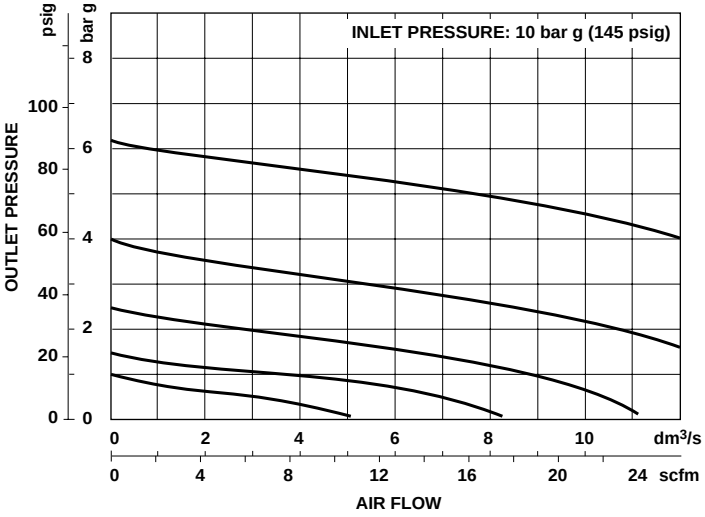


Manual Drain
Non-relieving

## Typical Performance Characteristics

**PORT SIZE: 1/4"**
**RANGE: 0,3 to 7 bar (5 to 100 psi)**
**ELEMENT: 40 µm**

**FLOW CHARACTERISTICS**




**Ordering Information.** Models listed include ISO G threads, transparent bowl, relieving diaphragm, automatic drain, 40 µm element, 0,3 to 7 bar (5 to 100 psig) outlet pressure adjustment range* .

| Port Size | Model Number | Flow† dm³/s (scfm) | Weight kg (lbs) |
|---|---|---|---|
| G1/8 | B07-101-A3KG | 6,2 dm³/s (13) | 0,26 (0.57) |
| G1/4 | B07-201-A3KG | 6,5 dm³/s (14) | 0,26 (0.57) |

† Typical flow with 7 bar (100 psig) inlet pressure, 6,3 bar (90 psig) set pressure and a 1 bar (14.5 psig) droop from set.

## Alternative Models

B 0 7 - ★ ★ ★ - ★ ★ ★ ★

| Port Size | Substitute |
|---|---|
| 1/8" | 1 |
| 1/4" | 2 |

| Bowl | Relief Type | Gauge | Substitute |
|---|---|---|---|
| Transparent | Relieving | Without | 01 |
| Transparent | Non-relieving | Without | 03 |
| Metal | Relieving | Without | 33 |
| Metal | Non-relieving | Without | 35 |
| Metal | Relieving | Without | 05** |
| Metal | Non-relieving | Without | 07** |

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

| Outlet Pressure Adjustment Ranges* | Substitute |
|---|---|
| 0.1 to 0.7 bar (1 to 10 psig) | A |
| 0.3 to 3.5 bar (5 to 50 psig) | E |
| 0.3 to 7 bar (5 to 100 psig) | K |
| 0.3 to 10 bar (5 to 145 psig) | M** |

| Element | Substitute |
|---|---|
| 5 µm | 1 |
| 40 µm | 3 |

| Drain | Substitute |
|---|---|
| Automatic | A |
| Manual | M |

* Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

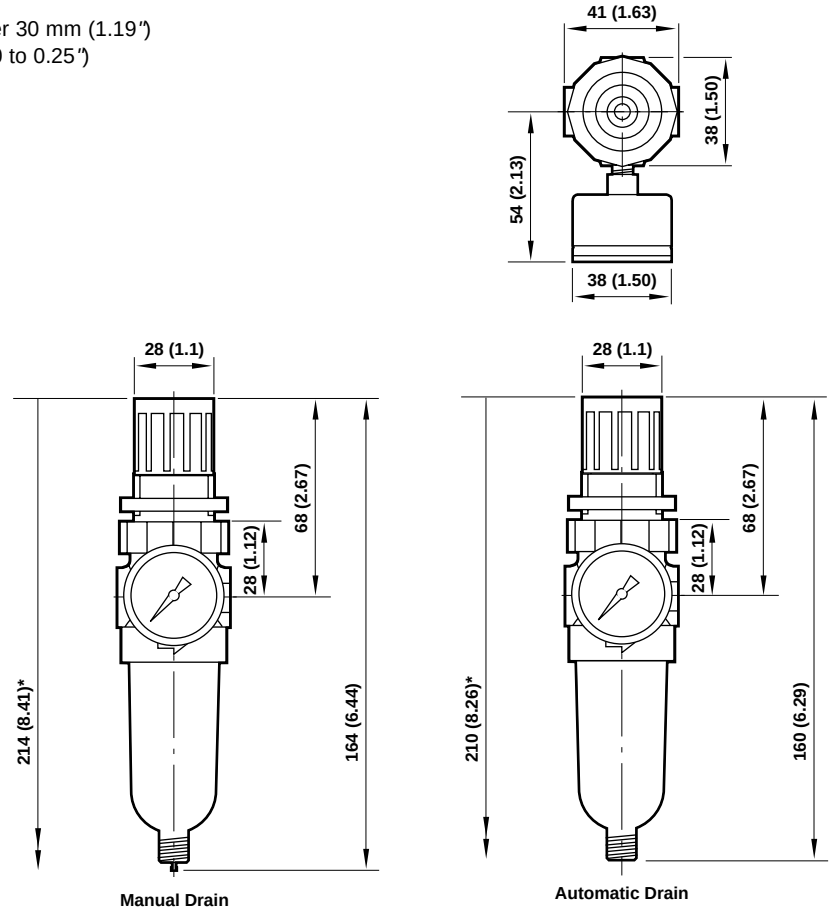
** When specifying 10 bar (145 psig) unit, eg. B07-2**05**-A3**M**G, also note correct code at 5th and 6th digits.

## Accessories

|  Wall Mounting Bracket and Panel Nut for P1H Unit |  Panel Nut |  Tamper Resistant Field Modification | Ø 40 mm Pressure Gauge |  R1/8 Connection | 1/8"PTF Connection |
|---|---|---|---|---|---|
| Plastic: 18-025-003 | Plastic: 2962-89 | Knob and screw: 18-001-092 | 2 bar (30 psig): | — | 18-013-214 |
| | Metal: 2962-04 | Screw only: 6097-08 | 4 bar (60 psig): | 18-013-990 | 18-013-211 |
| | | | 10 bar (150 psig): | 18-013-989 | 18-013-212 |
| | | | 25 bar (350 psig): | 18-013-908 | — |

## Dimensions mm (inches)

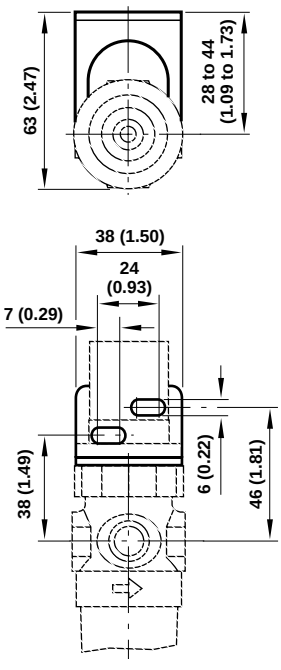
Panel mounting hole diameter 30 mm (1.19″)
Panel thickness 0 to 6 mm (0 to 0.25″)




* Minimum clearance to remove bowl

## Bracket Mounting

Use 3mm (1/8") screws to mount bracket to wall.




## Bracket Kit Reference

| Item | Part Number |
|---|---|
| All models | 18-025-003 |

## Service Kits

| Item | Type | Part number |
|---|---|---|
| Service kit | Relieving models, 40 µm element | 3820-14 |
| | Non-relieving models, 40 µm element | 3820-13 |
| Replacement drains | Manual | 773-03 |
| | Automatic | 3654-02 |

Service kit includes slip ring, diaphragm, valve seat with o-ring, valve, valve spring, element, element 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.