

# P1H, PTH Combination Unit

Miniature Series 07 Filter/Regulator-Lubricator 1/8" and 1/4" Port Sizes

- Compact design
- Filter removes liquids and solid particles down to 5 μm
- Push to lock adjusting knob with tamper resistant option
- Micro-Fog lubricator provides air line lubrication to one or more air driven tools or other devices
- Nearly constant oil density output with varying air flow
- 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 (150 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 +35°F (+2°C)

Typical flow at 7 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: T.B.A.

1/4" ports: 3 dm<sup>3</sup>/s (6 scfm)

Drain connection: 1/8" pipe

#### Filter/Regulator

Partical removal: 5  $\mu m$  or 40  $\mu m.$  Within ISO 8573-1, Class 3 and Class 5

Recommended regulating pressure ranges†:

0,3 to 7 bar (5 to 100 psig) standard

0,3 to 3,5 bar (5 to 50 psig) optional

† Outlet pressures 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.

#### 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

Automatic drain operation: Spitter type drain operates momentarily when a rapid change in air flow occurs or when the supply pressure is reduced.

#### Lubricator

Start point (i.e., minimum flow required for lubricator operation): 0,24 dm<sup>3</sup>/s (0.5 scfm) at 6,3 bar (90 psig) inlet pressure Nominal bowl capacity: 31 ml (1 fluid ounce)

Recommended lubricants: See page N/AL.8.990.935



Materials:

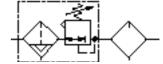
Polycarbonate bowl standard, zinc bowl optional. Zinc body. Nitrile elastomeric materials.

Filter/Regulator: Acetal bonnet. Sintered polypropylene element. Brass/Nitrile valve. Lubricator: Transparent nylon sight dome.

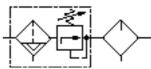
#### **Ordering Information**

See Ordering Information on the following pages.

## **ISO Symbols**



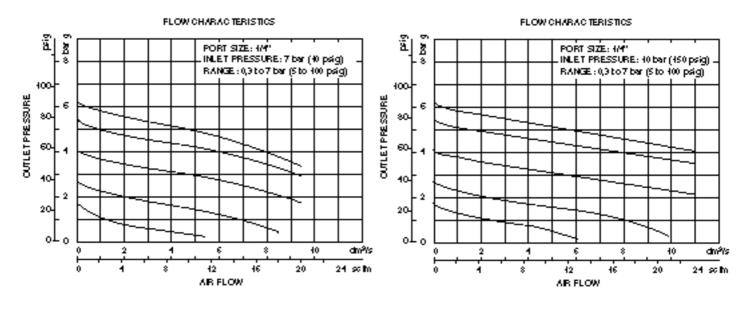
Relieving filter/regulator with automatic drain, lubricator with manual drain



Non relieving filter/regulator with automatic drain, lubricator with manual drain



# **Typical Performance Characteristics**



**Ordering Information.** Models listed include ISO G threads, transparent bowls, filter/regulator with relieving diaphragm, automatic drain, 40 µm element, 0,3 to 7 bar (5 to 100 psig) outlet pressure adjustment range\*, lubricator with manual drain.

Port Size	Model Number	Flow† dm <sup>3</sup> /s (scfm)	Weight kg (lbs)
G1/8	P1H-101-A3AG	T.B.A.	0,35 (0.78)
G1/4	P1H-201-A3AG	3,9 (8.2)	0,35 (0.78)

 $P \star H - \star \star \star - \star \star \star$ 

† Approximate flow at 7 bar (100 psig) inlet pressure, 6,3 bar (90 psig) set pressure and a droop of 1 bar (15 psig) from set.

## **Alternative Models**

Integral Wall Bracket	Substitute			
Without (P1H Combination Unit)	1			
With (PTH Combination Unit)	Т			
		-		
Port Size	Substitute		 1	
1/8"	1			
1/4"	2			

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	Outlet Pressure				
Filter/Regulator	Adjustment Range*		Relief		
Bowl	bar	psig	Туре	Gauge	Substitute
Transparent	0,3 to 8,6	5 to 125	Relieving	Without	01
Transparent	0,3 to 8,6	5 to 125	Non relieving	Without	02
Transparent	0,3 to 3.5	5 to 50	Relieving	Without	04
Transparent	0,3 to 3.5	5 to 50	Non relieving	Without	06
Metal	0,3 to 8,6	5 to 125	Relieving	Without	41
Metal	0,3 to 8,6	5 to 125	Non relieving	Without	42
Metal	0,3 to 3.5	5 to 50	Relieving	Without	44
Metal	0,3 to 3.5	5 to 50	Non relieving	Without	46

Threads	Substitute
PTF	A
ISO Rc taper	В
ISO G parallel	G
Lubricator Reservoir	Substitute
Transparent with drain	A
Transparent without drain	Q
Metal with drain	М
Metal without drain	F
Filter/Regulator Element	Substitute
5 μm	1
40 µm	3
Filter/Regulator Drain	Substitute
Automatic	А
Manual	М

 Do not use these units to control pressures outside of the specified ranges.



# Accessories

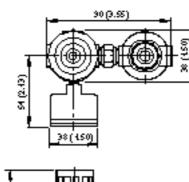
5			<b>F</b>	Ô
Tamper Resistant Seal Wire for Lubricator	Wall Mounting Bracket and Panel Nut for P1H Unit	Wall Bracket for PTH Unit	Panel Nut	Tamper Resistant Field Modification
2117-01	Plastic: 18-025-003	6700-30	Plastic: 2962-89	Knob and screw: 18-001-092
	Metal: 2962-04			Screw only: 6097-08

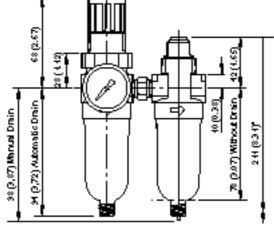


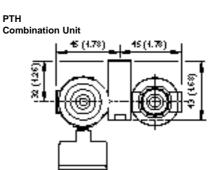
Ø 40 mm Pressure Gauge	R1/8 Connection	1/8" PTF Connection
2 bar (30 psig):	_	18-013-214
4 bar (60 psig):	18-013-990	18-013-211
10 bar (150 psig):	18-013-989	18-013-212
25 bar (360 psig):	18-013-908	_

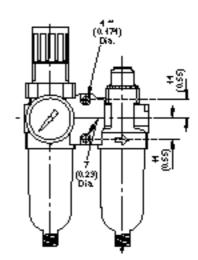
# **Dimensions – mm (Inches)**











\* Minimum clearance to remove bowl.

\*\* Use 51 mm (2") long screws, 5/32" diameter, to mount PTH Unit to wall.



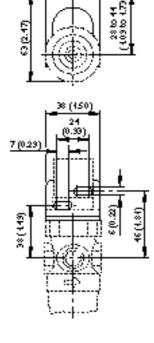
# Wall Bracket for P1H Combination Unit

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

Wall bracket Installed on filter/regulator

#### Wall Bracket reference

Model	Part number
P1H combination units	18-025-003



#### **Service Kits**

Item	Туре	Part number
Service kits,	relieving, 40 µm element	3820-14
filter/regulator	non relieving, 40 µm element	3820-13
Service kit, lubricator		3795-03
Replacement drains	Manual	773-03
	Automatic	3654-02
Replacement wall bracket for PTH unit	Integral 2 piece	6700-30

Filter/regulator service kit contains slip ring, diaphragm, valve seat with o-ring, valve, valve spring, element, element gasket, and bowl o-ring.

Lubricator service kit contains sight-feed dome seal, cartridge o-ring, 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 nonindustrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

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.