

# HR84G - Pressure regulator For Extreme Temperature applications Excelon® Plus Modular System

- > Port size: 3/8" ... 3/4" (ISO G/PTF)
- > ABS cover with High impact properties
- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- > Salt Spray compliant to ISO 9227

# Technical features pressure regulator

#### Medium:

Compressed air only **Maximum supply pressure:** 20 bar (290 psi) **Outlet pressure ranges:** 0.3 ...10 bar (4 ... 145 psi), 0.3 ... 4 bar (4 ... 58 psi) optional, 0.7...17bar (10...247psi) optional

#### Gauge:

Gauge port as standard (Rc 1/8 or 1/8 PTF) Integrated gauge as option

# Port size:

G3/8, G1/2, G3/4, 3/8 PTF, 1/2 PTF, 3/4 PTF **Diaphragm Type:** Relieving & Non-Relieving **Flow:** 

116 dm<sup>3</sup>/s at port size:  $\frac{1}{2}$ ", Inlet pressure 10 bar (145 psi), 6.3 bar (91 psi) set pressure and a  $\Delta$ p: 1 bar (14.5 psi) doop from set.

#### Ambient/Media temperature:

Unit with gauge port without integrated gauge : -40 ... +80°C (-40 ... +176°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F). Atex:

#### Regulators HR84 are in conformity with Atex 2014/34/EU

Ex h IIC T6 Gb EX h IIC T6 Gb EX h IIIC T85°C Db

#### Materials:

Body: Die cast aluminium Body covers: ABS (Magnum 3904) Bonnet: Die cast Aluminium Valve: Brass and Low temperature Nitrile Elastomers: Low temperature Nitrile Diaphragm: Low temperature Silicone, polyester reinforced Lower spring rest and diaphragm retainer: Aluminium

# Technical data HR84G - standard models with gauge port Rc1/8 (without gauge)

Symbol	Port size	Pressure range (bar)	Adjustment	Diaphragm Type	Weight (kg)	Model*)
	G3/8	0.3 10	T-bar	Relieving	0.75	HR84G-3GT-RMN
	G1/2	0.3 10	T-bar	Relieving	0.75	HR84G-4GT-RMN
	G3/4	0.3 10	T-bar	Relieving	0.73	HR84G-6GT-RMN

\*) All models shown here are supplied with gauge port applicable for flow direction left to right.

With flow direction right to left please use the online configurator <u>www.norgren.com/air-preparation-configurator</u> or contact Norgren



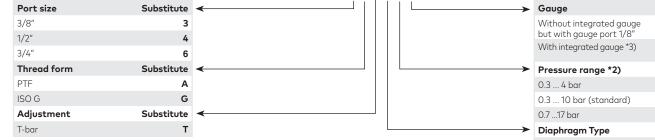






# **Option selector \*1)**

# HR84G- $\star\star$ T- $\star\star\star$

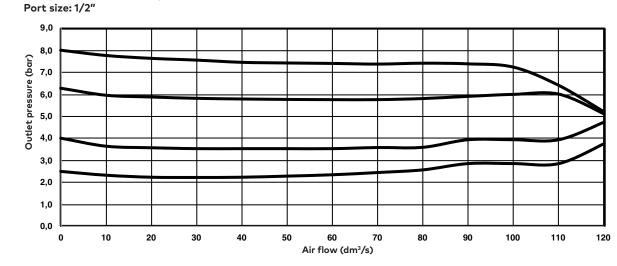


\*1) All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator www.norgren.com/air-preparation-configurator or contact Norgren

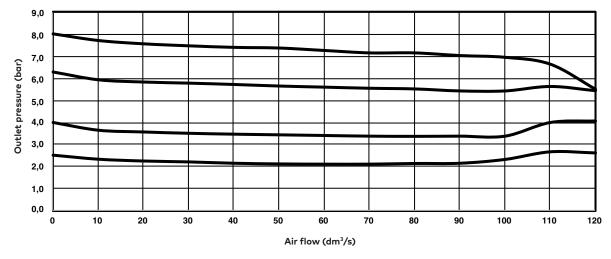
Substitute	Gauge
N	Without integrated gauge but with gauge port 1/8"
G	With integrated gauge *3)
Substitute	Pressure range *2)
F	0.3 4 bar
М	0.3 10 bar (standard)
S	0.717 bar
Substitute	Diaphragm Type
R	Relieving
N	Non-Relieving

- \*2) 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.
- \*3) Attention : With integrated gauge temperature range of the unit changes to -20°C ... +65°C

#### **Flow characteristics** Inlet pressure: 10 bar (145 psi)



#### Inlet pressure: 10 bar (145 psi) Port size: 3/8"





#### Accessories

Quikclamp

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H840014-51KIT

H840143-01KIT

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0881300

HR84 / HB84 Elastomer Kit

H840016-50KIT

Pressure switch 18D (0,5 ... 8bar) \*4

\*2) -20 ... +60°C (-4 ... +140°F) \*4) -10°... +85°C (-14° ...+185°F)

H840028-50KIT

Pressure sensing block 1/4 PTF

Full flow porting block horizontal, 3/4 PTF





Quikclamp® with bracket

assembled

H840014-52KIT





Full flow porting block horizontal, G3/4



H840028-53KIT



H840016-51KIT



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Full flow porting block vertical, 3/4"PTF

Neck mounting bracket and

Page 5 840068-51KIT

panel nut

Panel mounting nut



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#### Mounting bracket



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Full flow porting block vertical, G3/4"



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3/8 PTF	H840015-02KIT
1/2 PTF	H840015-03KIT
3/4 PTF	H840015-04KIT
G3/8	H840015-10KIT
G1/2	H840015-11KIT
G3/4	H840015-12KIT



H840028-69KIT



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H840028-68KIT

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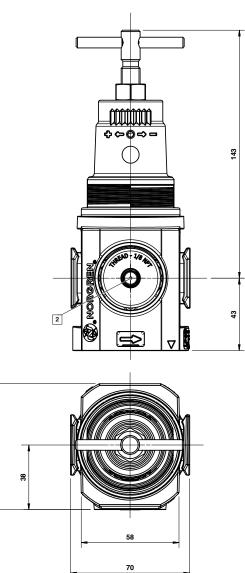


# Dimensions



58

70

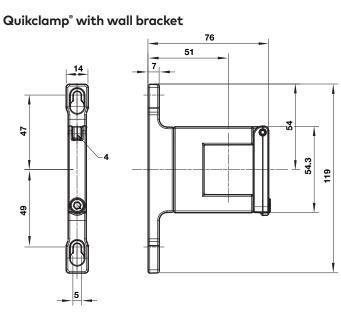


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1 Main ports 3/8", 1/2" or 3/4" (ISO G/PTF)
2 Gauge Port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports



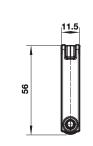
# Accessories

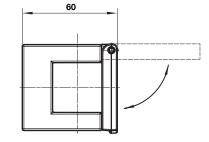


Dimensions in mm Projection/First angle

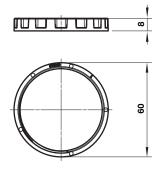






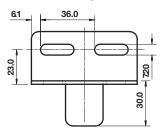


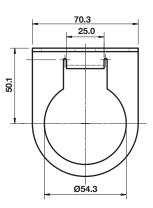
Panel mounting nut



Recommended panel hole size: ø 55 mm ... 57 mm Panel thickness: 2 ... 6 mm

# Neck mounting bracket

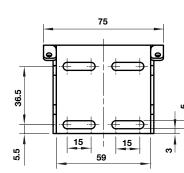


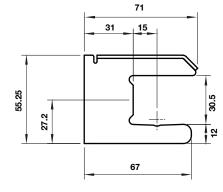




# Mounting bracket

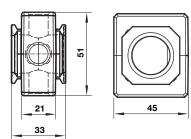
Dimensions in mm Projection/First angle





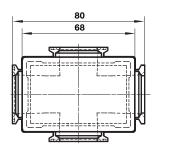
Pressure sensing block

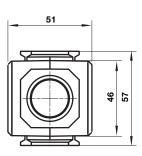
Pipe adaptor



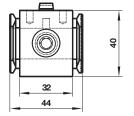
38.5 18 99

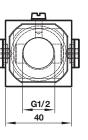
# Full flow porting block horizontal



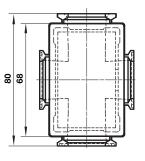


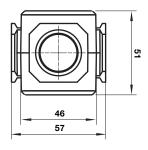
Porting block for 18D pressure switch





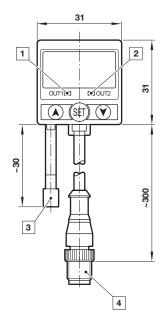
# Full flow porting block vertical

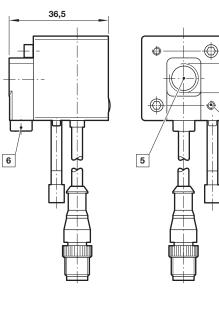






# 51D Pressure switch - digital





# G1/8 7

1 Switch OUT 1, green LED 2 Switch OUT 2, red LED 3 Dustproof protector 4 Connector M12 x 1 5 Inlet port Alternative inlet port G1/8 plugged

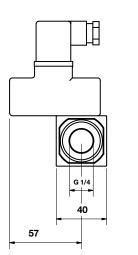
Dimensions in mm

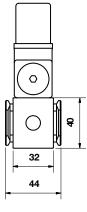
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Projection/First angle

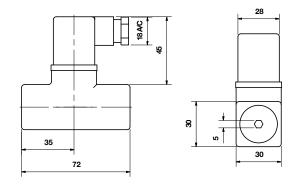
**7** Thread for mounting screw

# 18D Porting block and





18D Pressure switch



#### 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 features/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 IMI Precision Engineering, Norgren Ltd.

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.



# 18D assembled