

# 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:** 290 psi (20 bar)

**Outlet pressure ranges:** 4 ... 145 psi (0.3 ...10 bar) 4 ... 58 psi (0.3 ... 4 bar) optional, 10...247psi (0.7...17bar) 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:

246 scfm (116 dm<sup>3</sup>/s) at port size: ½", Inlet pressure 145 psi (10 bar), 91 psi (6.3 bar) set pressure and a Δp: 1 bar (14.5 psi) drop from set

#### Ambient/Media temperature:

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

#### Atex:

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

Ex h IIC T6 Gb Ex h IIC T6 Gb EX h IIC T85℃ Db

#### Materials:

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

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

Symbol	Port size	Pressure range psi (bar)	Adjustment	Diaphragm Type	Weight Ibs. (kg)	Model*)
<u></u>	3/8 PTF		HR84G-3AT-RMN			
	1/2 PTF	4 145 (0.3 10)	T-bar	Relieving	1.65 (0.75)	HR84G-4AT-RMN
	3/4 PTF	4 145 (0.3 10)	T-bar	Relieving	1.61 (0.73)	HR84G-6AT-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 www.norgren.com/air-preparation-configurator or contact Norgren





+176°F

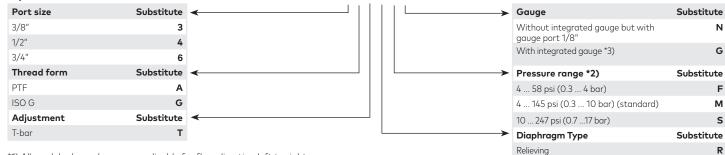
(+80°C) -40°F (-40°C)





# Option selector \*1)

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



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

\*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.

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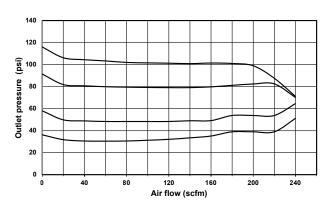
Non-Relieving

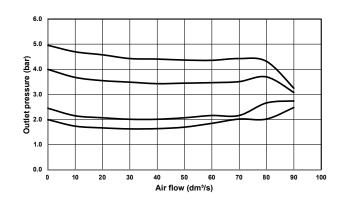
 \*3) Attention : With integrated gauge temperature range of the unit changes to -4°F ...
+149°F (-20°C ... +65°C)



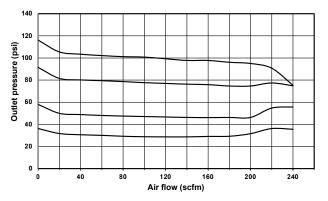
#### **Flow characteristics**

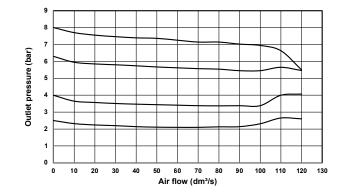
Inlet pressure: 145 psi (10 bar) Port size: 1/2"





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



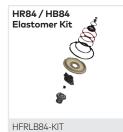




# Accessories

Accessories				
Quikclamp®	Quikclamp® with bracket assembled	Neck mounting bracket and panel nut (plastic)	Panel mounting nut (plastic)	Mounting bracket
Page 6	Page 6	Page 6	Page 6	Page 7
H840014-51KIT	H840014-52KIT	840068-51KIT	840048-89KIT	840024-50KIT
Gauge adaptor kit 1/8 PTF	Gauge adaptor kit R 1/8	Neck mounting bracket and panel nut (metal)	Panel mounting nut (metal)	
		Page 6	Page 6	
H840143-01KIT	H840143-02KIT	840068-50KIT	840048-01KIT	
ull flow porting block Full flow porting block   porizontal, 3/4 PTF Full flow porting block   full flow porting block forizontal, G3/4		Full flow porting block vertical, 3/4"PTF	Full flow porting block vertical, G3/4" Port Adaptors   Image: Constraint of the second secon	
Page 7	Page 7	Page 7	Page 7	Page 7
H840028-50KIT	H840028-53KIT	H840028-68KIT	H840028-69KIT	3/8 PTF H840015-02KIT
				1/2 PTF H840015-03KIT
Pressure sensing block	Pressure sensing block	Pressure switch interface		3/4 PTF H840015-04KIT
	Pressure sensing block G1/4	Pressure switch interface block (18D pressure switch)		3/4 PTFH840015-04KITG3/8H840015-10KIT
		block (18D pressure switch)		G3/8 H840015-10KIT
Pressure sensing block 1/4 PTF		block (18D pressure switch)		G3/8 H840015-10KIT G1/2 H840015-11KIT

Pressure switch 18D 7.25 ... 116 psi (0.5 ... 8 bar) \*4 Page 8 088130000000000 \*2) -4 ... +140°F (-20 ... +60°C) \*4) -14° ... +185°F (-10°... +85°C)

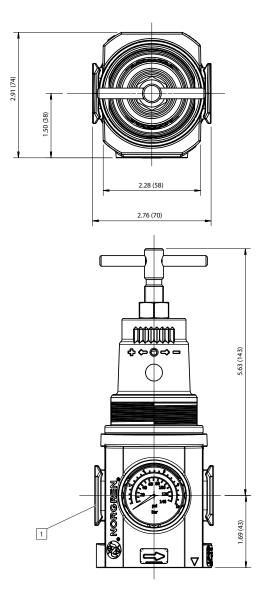


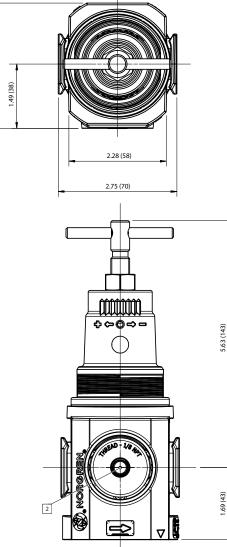
en 8.200.250.04



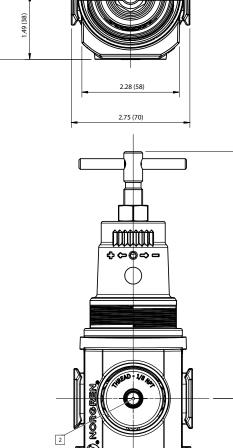
# Dimensions

Dimensions in inches (mm) Projection/Third angle  $\ominus \odot$ 





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

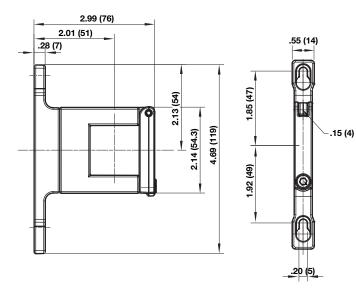


2.91 (74)

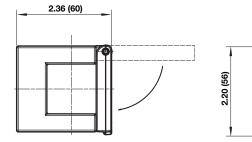


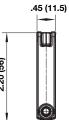
# Accessories

### Quikclamp<sup>®</sup> with wall bracket



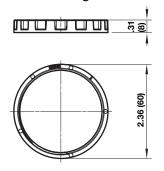
# Quikclamp®





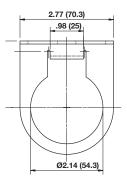
Dimensions in inches (mm) Projection/Third angle

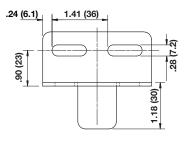
# Panel mounting nut



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

#### Neck mounting bracket



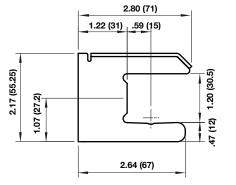


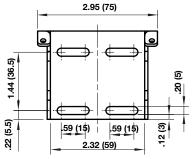


### Mounting bracket

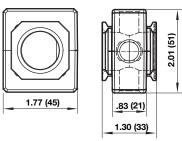
Dimensions in inches (mm) Projection/Third angle



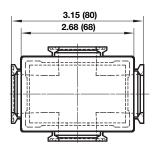


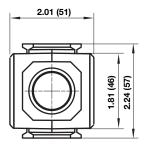


#### Pressure sensing block

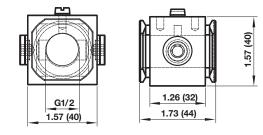


# Full flow porting block horizontal

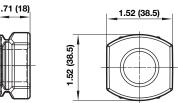




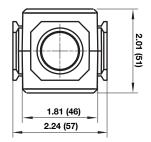
Porting block for 18D pressure switch

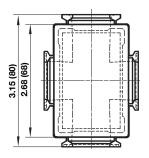


Pipe adaptor



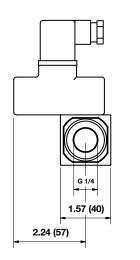
# Full flow porting block vertical

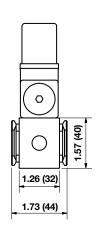






# 18D Porting block and 18D assembled

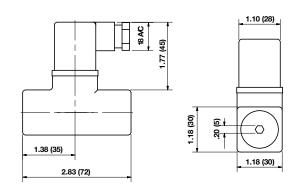




**18D Pressure switch** 

Dimensions in inches (mm) Projection/Third angle





#### 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.