

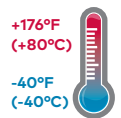
HB84G - Filter/regulator

For Extreme Temperature Applications

Excelon® Plus Modular System



- > Port size: 3/8" ... 3/4" (ISO G/PTF)
- > Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- > 5 or 40 micron particle and high efficiency water removal (> 98%)
- > Easy filter maintenance system. Element is removed together with the bowl for faster and cleaner servicing
- > Double safety lock bowl
- > Salt spray compliant to ISO 9227
- > Air purity classes in accordance to ISO8573-1:2010: 7:8:4 (40µm) 6:8:4 (5µm)
- > ABS cover with high impact properties



Technical features filter/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 ... 247 psi (0.7 ... 17 bar) optional

Filter element:
5 µm & 40 µm

Port size:
G3/8, G1/2, G3/4,
3/8 PTF, 1/2 PTF, 3/4 PTF

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

Flow:

218 scfm (103 dm³/s) at port size: 1/2", Inlet pressure 145 psi (10 bar), 91 psi (6.3 bar) set pressure and a Δp: 14.5 psi (1 bar) drop from set.

Filter element: 5µm & 40µm

Diaphragm Type:
Relieving & Non-Relieving


Drain:
Manual or automatic
Automatic drain operating conditions (float operated):
Bowl pressure required to close drain: > 5 psi (0.35 bar)
Bowl pressure required to open drain: ≤ 2.9 psi (0.2 bar)
Minimum air flow required to close drain: 2 scfm (1 dm³/s)

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:

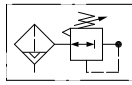
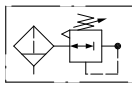
Filter/regulators HB84 are in conformity with Atex 2014/34/EU

 II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db

Materials:

Body: Die cast aluminum
Body covers:
ABS (Magnum 3904)
Bonnet: Die cast aluminum
Valve: Brass and
Low temperature Nitrile
Metal Bowl: Die cast aluminum
Filter element: Sintered polypropylene
Diaphragm: Low temperature Silicone, polyester reinforced
Lower spring rest and diaphragm retainer: Aluminum
Bowl O-ring:
Low temperature Nitrile
Elastomers:
Low temperature Nitrile
Gauge port: Aluminum

Technical data HB84G - standard models with gauge port 1/8 PTF (without gauge)

| Symbol | Port size | Drain | Pressure range psi (bar) | Filter element (µm) | Bowl | Weight lbs (kg) | Model *1) |
|---|-----------|--------|-----------------------------|------------------------|----------------------------|--------------------|-------------------|
|  | 3/8 PTF | Auto | 4...145 (0.3 ... 10) | 40 | Metal with level indicator | 2.09 (0.95) | HB84G-3AT-AD3-RMN |
| | 1/2 PTF | Auto | 4...145 (0.3 ... 10) | 40 | Metal with level indicator | 2.07 (0.94) | HB84G-4AT-AD3-RMN |
| | 3/4 PTF | Auto | 4...145 (0.3 ... 10) | 40 | Metal with level indicator | 2.03 (0.92) | HB84G-6AT-AD3-RMN |
|  | 3/8 PTF | Manual | 4...145 (0.3 ... 10) | 40 | Metal with level indicator | 2.07 (0.94) | HB84G-3AT-MD3-RMN |
| | 1/2 PTF | Manual | 4...145 (0.3 ... 10) | 40 | Metal with level indicator | 2.05 (0.93) | HB84G-4AT-MD3-RMN |
| | 3/4 PTF | Manual | 4...145 (0.3 ... 10) | 40 | Metal with level indicator | 2.01 (0.91) | HB84G-6AT-MD3-RMN |

*1) 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

Option selector *1)

| Port size | Substitute |
|--|-------------|
| 3/8" | 3 |
| 1/2" | 4 |
| 3/4" | 6 |
| Thread form | Substitute |
| PTF | A |
| ISO G | G |
| Drain | Substitute |
| Manual (standard) | M |
| Auto drain (standard) | A |
| Open ended (with male thread adaptor) | N*2) |

HB84G-★★T-★★★-★★★

| Gauge | Substitute |
|--|------------|
| Without integrated gauge but with gauge port 1/8" | N |
| With integrated gauge *4) | G |
| Pressure range *3) | Substitute |
| 4...58 psi (0.3 ... 4 bar) | F |
| 4...145 psi (0.3 ... 10 bar) | M |
| 10...247 psi (0.7 ... 17 bar) | S |
| Diaphragm Type | Substitute |
| Relieving | R |
| Non-Relieving | N |
| Element | Substitute |
| 5 µm | 1 |
| 40 µm | 3 |
| Bowl | Substitute |
| Metal with liquid indicator | D |
| Metal | M |

*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

*2) Available on request

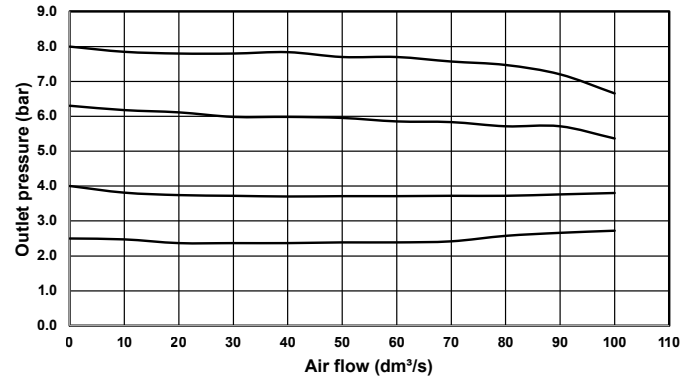
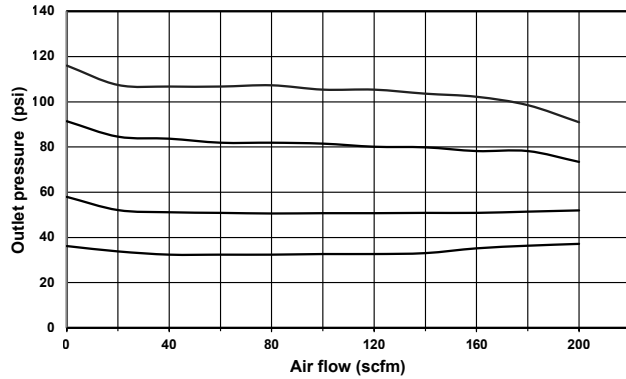
*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

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

Flow characteristics

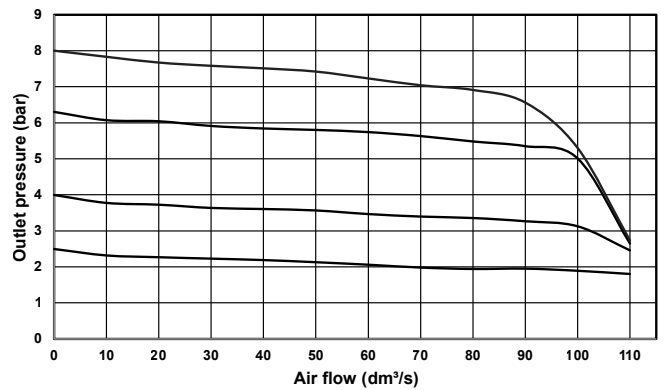
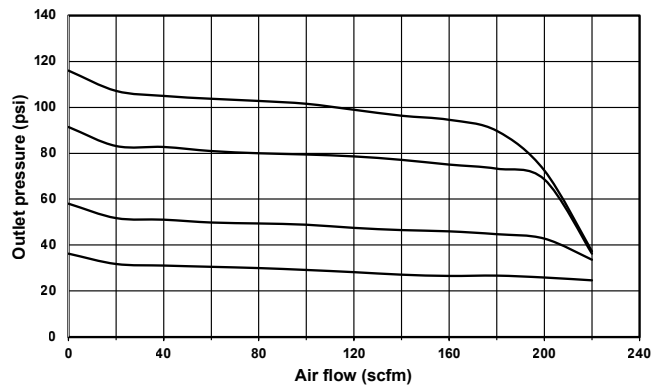
Inlet pressure: 145 psi (10 bar)

Port size: 1/2", 40 µm element



Inlet pressure: 145 psi (10 bar)

Port size: 3/8", 40 µm element



Accessories

Quikclamp®



Page 6

H840014-51KIT

Quikclamp® with bracket assembled



Page 6

H840014-52KIT

Neck mounting bracket and panel nut (plastic)



Page 6

840068-51KIT

Panel mounting nut (plastic)



Page 6

840048-89KIT

Mounting bracket



Page 6

840024-50KIT

Gauge adaptor kit 1/8 PTF



H840143-01KIT

Gauge adaptor kit R 1/8



H840143-02KIT

Neck mounting bracket and panel nut (metal)



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840068-50KIT

Panel mounting nut (metal)



Page 6

840048-01KIT

Full flow porting block horizontal, 3/4" PTF



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H840028-50KIT

Full flow porting block horizontal, G3/4



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H840028-53KIT

Full flow porting block vertical, 3/4" PTF



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H840028-68KIT

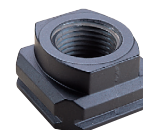
Full flow porting block vertical, G3/4"



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H840028-69KIT

Port Adaptors



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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 |

Pressure sensing block 1/4 PTF



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H840016-50KIT

Pressure sensing block G1/4



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H840016-51KIT

Pressure switch interface block (18D pressure switch) G1/2



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Pressure switch 18D 7.25 ... 116 psi (0.5 ... 8 bar) *4



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0881300000000000

*2) -4 ... +140°F (-20 ... +60°C)

*4) -14° ... +185°F (-10° ... +85°C)

Maintenance/Service

Filter cartridge 5 micron



H840038-50KIT

Filter cartridge 40 micron



H840038-51KIT

Auto drain kit with metal Nut



3000-40

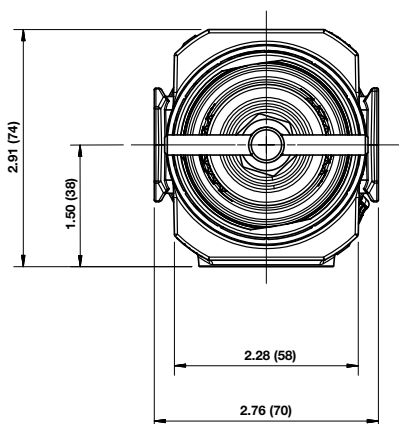
HR84 / HB84 Elastomer Kit



HFRLB84-KIT

Dimensions

Dimensions in inches (mm)
Projection/Third angle



Minimum clearance for bowl removal

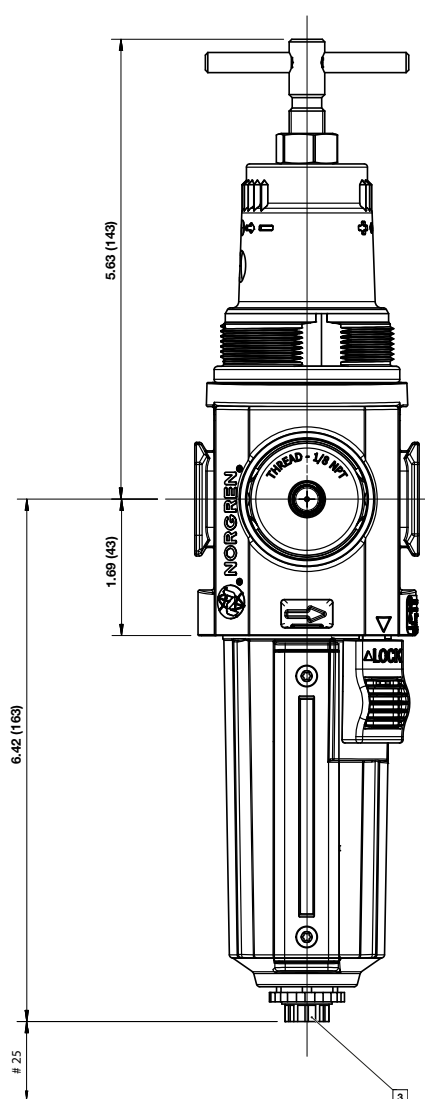
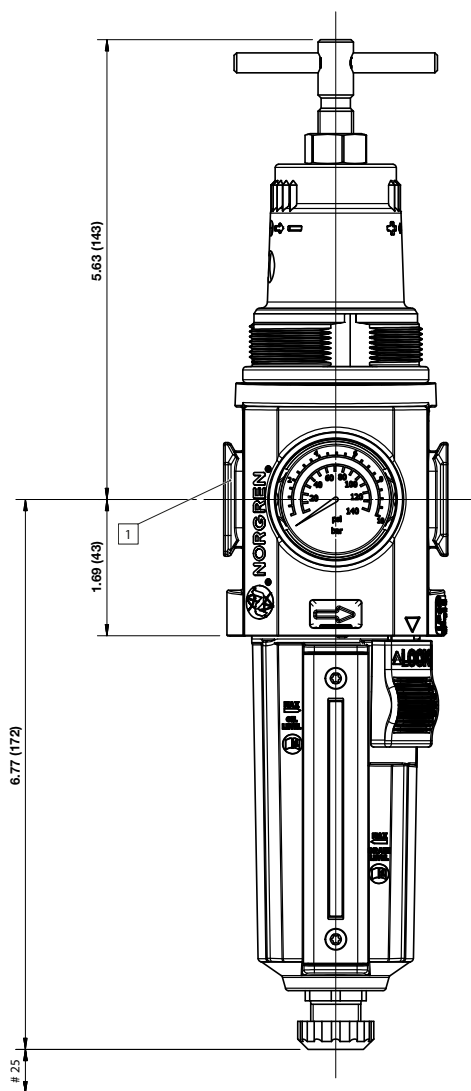
1 Main ports 3/8", 1/2" or 3/4"
(ISO G/PTF)

2 Gauge port Rc 1/8 for ISO G and
1/8 PTF for PTF main ports

3 Port size automatic drain : 1/8

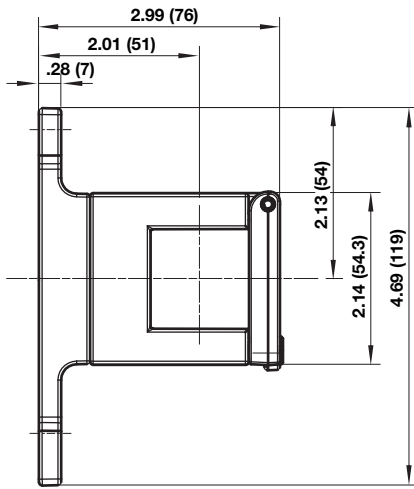
Manual Drain

Auto Drain

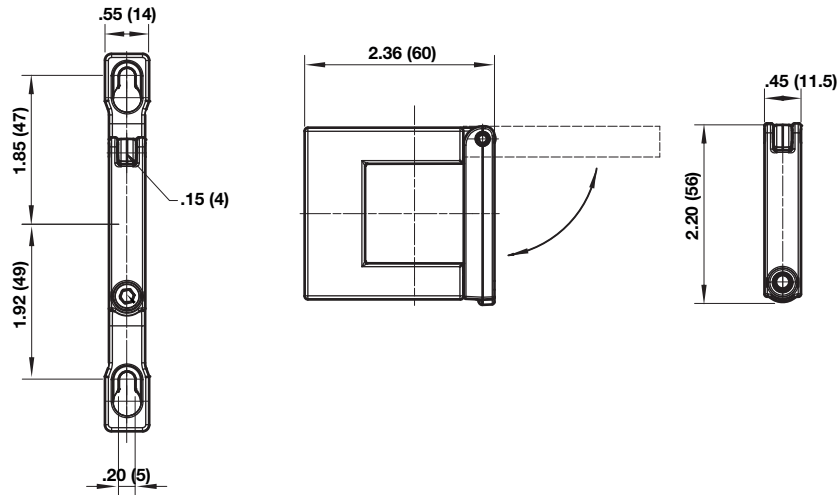


Accessories

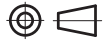
Quikclamp® with wall bracket



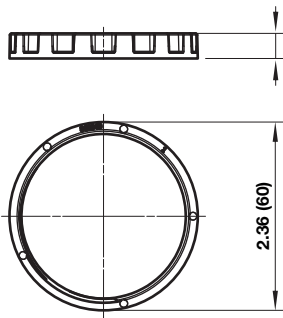
Quikclamp®



Dimensions in inches (mm)
Projection/Third angle



Panel mounting nut



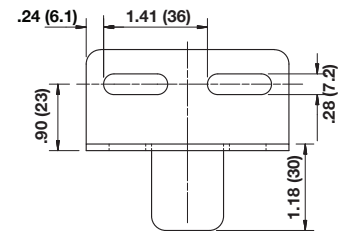
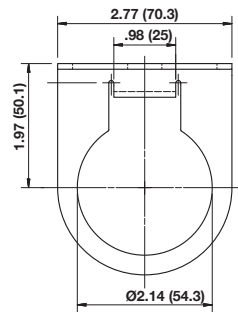
Recommended panel hole size:

ø 55 mm ... 57 mm

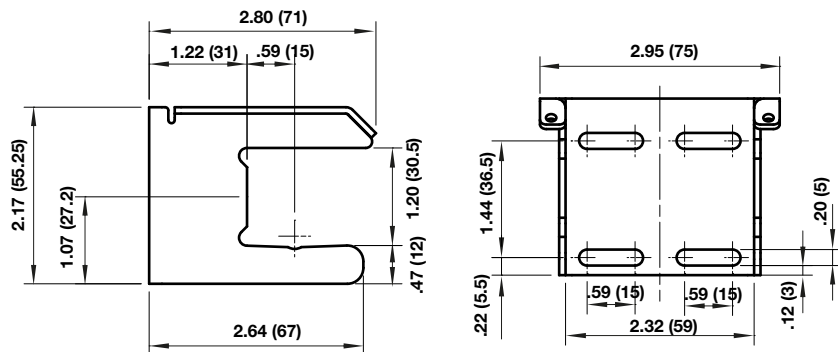
Panel thickness:

2 ... 6 mm

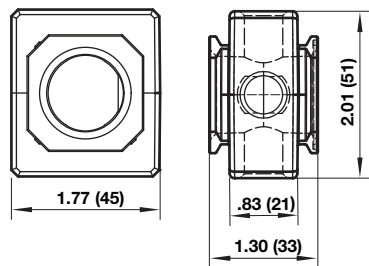
Neck mounting bracket



Mounting bracket

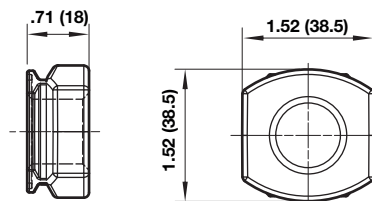


Pressure sensing block

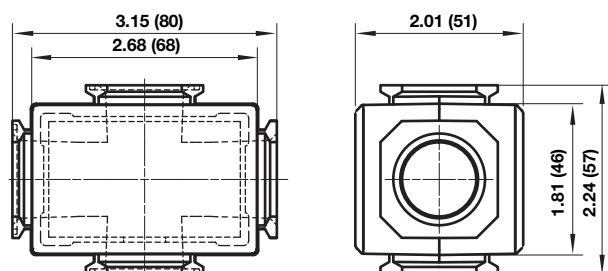


Pipe adaptor

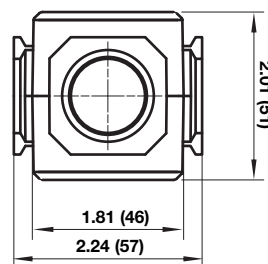
Dimensions in inches (mm)
Projection/Third angle



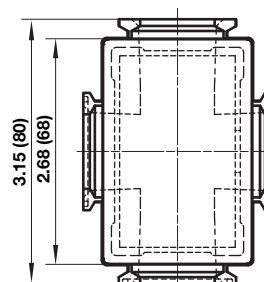
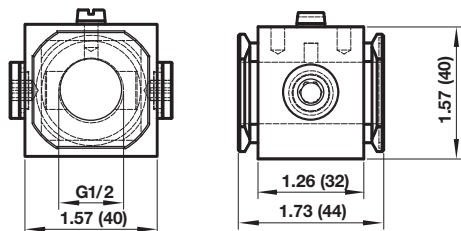
Full flow porting block horizontal



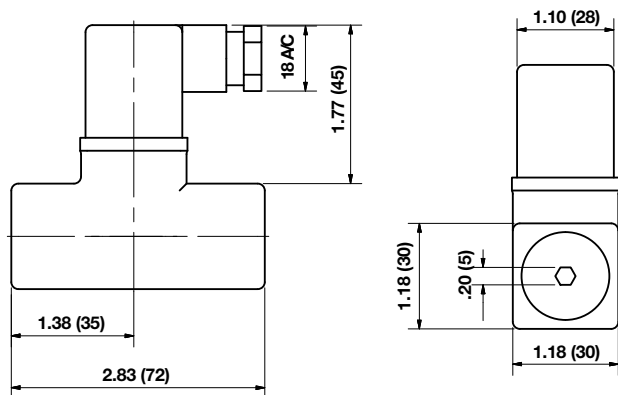
Full flow porting block vertical



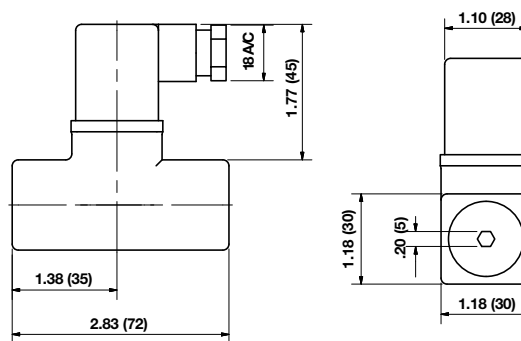
Porting block for 18D pressure switch



18D Porting block and 18D assembled



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. 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.