

# SENTRY Modular FRLs Filter-Regulator-Lubricators

# VFDRL10 and 11 Models Port Sizes: 1/8, 1/4 Tube Fittings



Model Shown: VFDRL10-2

- ◆ Individual filter (**FD10**); piston-type regulator (**R10M**) or diaphragm-type (**R11M**); wick-feed lubricator (**L10**); lockout valve (**V10**).
- ◆ Modular assembly and mounting.
- ◆ Threaded ports or quick-connect fittings for tubing up to 10 mm in diameter.
- ◆ 5- $\mu$ m-rated polyethylene filter element; optional sintered bronze elements.
- ◆ High-strength polycarbonate plastic bowls or aluminum bowls.
- ◆ Internal automatic filter drain; optional manual drain.
- ◆ Self-relieving regulator; non-relieving optional.
- ◆ Pressure gauge.
- ◆ NPTF port threads; optional BSPP threads.

## SPECIFICATIONS

### Ambient/Media Temperature:

40° to 125°F (4° to 52°C).

**Bodies:** Acetal.

**Bowls:** 2-Ounce (60-ml) capacity polycarbonate plastic bowls or aluminum bowls.

### Filter Drain:

Internal automatic drain; optional manual drain.

**Filter Element:** 5- $\mu$ m-rated polyethylene; optional 5- $\mu$ m, 20- $\mu$ m, or 40- $\mu$ m sintered bronze.

**Fluid Media:** Compressed air.

### Inlet Pressure:

15 psig (1 bar) minimum with automatic drain.  
150 psig (10 bar) maximum.

**Oil Adjustment:** External, no shutoff.

**Outlet Pressure:** Adjustable up to 100 psig (7 bar).

**Pressure Gauge:** 0 to 160 psig (11 bar); 1/8 NPT gauge ports front and rear.

**Panel Mounting:** 1-3/16 inch (30 mm) hole required.

**Regulator Dome and Knob:** Acetal.

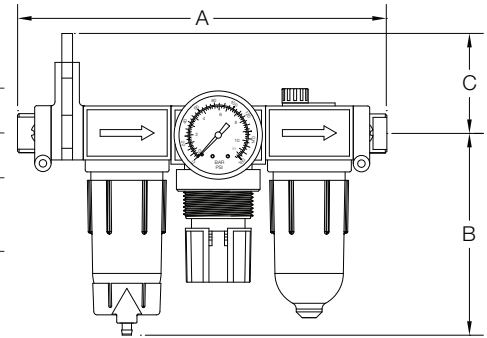
**Seals:** Nitrile.

### AIR FLOW DATA

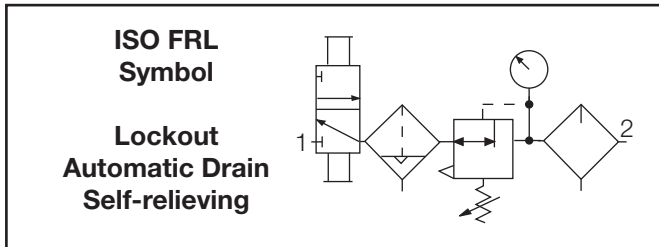
See Flow Charts for individual assembly components on preceding pages.

## DIMENSIONS inches (mm)

Ports	A **	B †	C	Depth	Weight lb (kg)
1/8, 1/4	6.9 (175)	3.9 (99)	1.7 (43)	3.6 (92)	0.53 (0.24)
<b>Models below have quick-connect fittings for tubing.</b>					
1/4	7.3 (185)	3.9 (99)	1.7 (43)	3.6 (92)	0.50 (0.23)
3/8	7.8 (198)	3.9 (99)	1.7 (43)	3.6 (92)	0.50 (0.23)
4 mm	7.3 (185)	3.9 (99)	1.7 (43)	3.6 (92)	0.50 (0.23)
6 mm	7.3 (185)	3.9 (99)	1.7 (43)	3.6 (92)	0.50 (0.23)
8 mm	7.3 (185)	3.9 (99)	1.7 (43)	3.6 (92)	0.50 (0.23)
10 mm	7.8 (198)	3.9 (99)	1.7 (43)	3.6 (92)	0.50 (0.23)



\*\* Without V10 lockout valve deduct 0.6 (15) from dimension A.  
 † Dimension for plastic bowl: metal bowl is 4.3 (109).



### REPLACEMENT FILTER ELEMENT KITS

Element Type	Kit Number
5-µm polyethylene (Std element).....	KA130-27PE5
5-µm bronze .....	KA130-27E5
20-µm bronze .....	KA130-27E4
40-µm bronze .....	KA130-27E3

### ORDERING INFORMATION

Change the letters in the sample model number below to specify the FRL you want.  
 NOTE: For model numbers longer than 15 characters, please consult Master Pneumatic.

## B V FD RL 10 P - 2 X Y G W

#### BOWL TYPE

Plastic bowls ...Leave Blank  
 Metal bowls ..... B

#### LOCKOUT VALVE

V10 valve .....V  
 None ..... Leave Blank

#### FILTER DRAIN

Internal automatic drain .....FD  
 Manual drain..... F

#### REGULATOR TYPE

Piston type ..... 10  
 Diaphragm type..... 11

#### MOUNTING HOLE LOCATION

Bottom mount (Standard) ..... Leave Blank  
 Top mount ..... P

#### INLET PORT SIZE

No inlet and outlet ports .....Leave Blank  
 Threaded:  
 1/8 NPTF ..... 1  
 1/4 NPTF ..... 2  
 Fittings for Tubing:  
 1/4..... 04  
 3/8..... 06  
 4 mm.....M4  
 6 mm.....M6  
 8 mm.....M8  
 10 mm.....M10

#### OUTLET PORT SIZE

Same as inlet port .... Leave Blank  
 Threaded:  
 1/8 NPTF ..... 1  
 1/4 NPTF ..... 2  
 Fittings for Tubing:  
 1/4..... 04  
 3/8..... 06  
 4 mm.....M4  
 6 mm.....M6  
 8 mm.....M8  
 10 mm..... M10

#### PORT TYPE

As specified in **INLET PORT**... Leave Blank  
 BSPP threads on both ports ..... W

#### OPTIONS (More than one option can be chosen. Add in alphabetical order)

None ..... Leave Blank  
 0-160 PSI Gauge ..... G  
 Plastic Panel Mount Nut ..... P  
 Metal Panel Mount Nut ..... PN  
 Hex Plastic mounting nut ..... PE

#### OPTIONS (More than one option can be chosen. Add in alphabetical order)

None ..... Leave Blank  
 Non-relieving regulator..... A  
 Sintered bronze filter element:

5-µm rating ..... E5  
 20-µm rating ..... E4  
 40-µm rating ..... E3

#### Adjusting springs:

0-125 psig (0-8.6 bar) ..... H  
 0-50 psig (0-3.4 bar) ..... L  
 0-8 psig (0-0.6 bar) ..... L8  
 0-15 psig (0-1.0 bar) ..... L15  
 0-30 psig (0-2.1 bar) ..... L30

#### Tamper-resistant spinning

knob (psig preset) ..... MV(\*)  
 Quick-fill lubricator Q-cap ..... Q  
 Viton seals ..... V

\*Insert preset pressure.