FLEXIBLOK<sup>®</sup> FRL Series







# Table of Contents



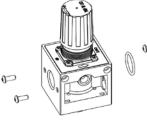
FLEXIBLOK <sup>®</sup> FRL Series	
Features and Benefits	
StockBlok and ModuBlok Combinations	
Particulate Filters	
Coalescing Filters	
Regulators	
Manifold Regulators - MR14 Series	
Miniature Manifold Regulators - MR02 Series	
Pilot Operated Regulators	
Particulate Filter/Regulator	
Coalescing Filter/Regulator	
Lubricators	
Solenoid Soft Start Quick Exhaust Valve	
Solenoid Quick Exhaust Valves	
Pilot Operated Soft Start & Quick Exhaust Valves (Internal & External Pilot)	
VS Slide Plate Style Shut Off Valves - 14, 22, 32 Series, VSL Spool Type Shut Off Valve - 42 Serie	s34
Diverter Block	
Diverter Plates	
Rear-Ported End Plates	
Drain Options	
Replacement and Repair Kits	

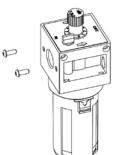
# IUMATICS



#### **FLEXIBLOK<sup>®</sup> FRL Series**

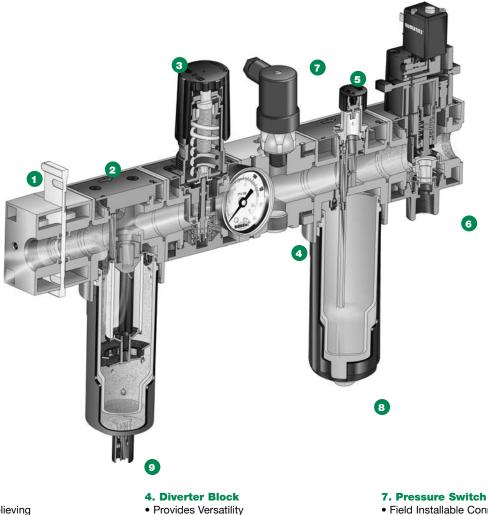






The Numatics FLEXIBLOK® FRL line leads the industry in ease of assembly. While many competitors rely on special brackets, mounting kits, port connectors, and component connectors for assembly - which are not only costly but are awkward and difficult to use - FLEXIBLOK® components use only a single o-ring and two screws to connect together. Integrated mounting holes eliminate the need for mounting brackets. The need for end plates are eliminated, as the in/out ports of all components are tapped so that any unit can be used as a stand alone unit.

By eliminating the need for additional special components, the Numatics **FLEXIBLOK®** line keeps costs down and maintenance and assembly quick and easy.



#### 1. Shutoff Valve • Relieving/Non-Relieving

- 2. Filter
- 5 Micron particulate
- Three Coalescing Grades
- Adsorbing Grade

#### 3. Regulator

- Multiple Pressure Ranges
- Relieving/Non-Relieving

#### 5. Lubricator

 Siphon Tube Design Provides Accurate Oil Metering

#### 6. Solenoid Soft Start Quick Exhaust Valve

· Solenoid Quick Exhaust and Air **Pilot Versions** 

• Field Installable Connector or 12 mm Micro Styles

#### 8. Bowls

- Polycarbonate, metal, CircleVision
- 9. Drains
- 6 Styles



# **numatics**°

## FLEXIBLOK<sup>®</sup> FRL Series

# **STOCKBLOK**<sup>®</sup>

FRLs in standard combinations



**STOCKBLOK**<sup>®</sup> assemblies utilize one model number for standard configurations, complete with gauges. Each component is factory assembled and tested.

Each of the standard **STOCKBLOK**<sup>®</sup> combinations is a complete assembly. Bowl, drain, and fill options are available where applicable. Additional options are not available and, if required, components can be ordered as a **MODUBLOK**<sup>™</sup> combination (see page 9).

To order any of the **STOCKBLOK**<sup>®</sup> models without the Shut-Off Valve, replace the "V" in the part number with an "X" (i.e. M22-03XFCXX).

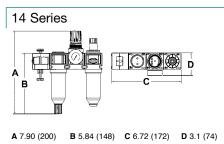
See individual component pages for specifications and dimensions.

\*All **STOCKBLOK**<sup>®</sup> model # assemblies on the next few pages are called out as NPT. For BSPP models replace the "-" with a "G". For BSPT models replace "-" with an "R"

## Shut Off/Particulate Filter/Regulator/Lubricator w/ Gauge



\* To order this **STOCKBLOK**® model without a shutoff valve, replace the "V" in the model number with an "X" (ie. M42-08XFRLX).



#### Components

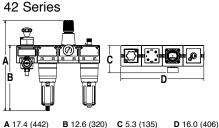
		PART	ICULA	TE		WEIGH	Т	
MODEL #	SHUT OFF	FILTE	R	REGULATOR	LUBRICATOR	LBS.	KGS	
M14-01VFRLX	VS14-01	F14B-	01	R14R-01G	L14L-01	2.55	1.17	
M14-02VFRLX	VS14-02	F14B-	02	R14R-02G	L14L-02	2.55	1.17	
M22-02VFRLX	VS22-02	F22B-	02	R22R-02G	L22L-02	2.38	1.08	
M22-03VFRLX	VS22-03	F22B-	03	R22R-03G	L22L-03	2.38	1.08	
M22-04VFRLX	VS22-04	F22B-	04	R22R-04G	L22L-04	2.38	1.08	
M32-04VFRLX	VS32-04	F32B-	04	R32R-04G	L32L-04	4.78	2.17	
M32-06VFRLX	VS32-06	F32B-	06	R32R-06G	L32L-06	4.78	2.17	
M42-06VFRLX	VSL42-06	F42B-	06	R42R-06G	L42L-06	16.65	7.55	
M42-08VFRLX	VSL42-08	F42B-	08	R42R-08G	L42L-08	16.65	7.55	
Options (se	e page 36	for Dra	ain O	ptions)				
<b>A</b> = Auto Drain ( <b>B</b> = Flexible Dra		es only)	)		= Metal Bowls w = Lubricator Qui		alass	
C = CircleVision	™ Sight Bowl		<b>Q</b> = Metal Manual Drain					
E = Endplates (42 Series only)R = Manual Lever DrainJ = External Pulse Drain								
6		— [	42 S	eries				

22/32 Series

 22 Series:

 A 10.02 (255)
 B 7.62 (194)
 C 9.32 (237)
 D 3.42 (87)

 <u>32 Series:</u>
 A 12.32 (313)
 B 9.12 (232)
 C 11.25 (286)
 D 4.10 (104)



# numatics





## Shut Off/Filter-Regulator/Diverter Block/Lubricator w/ Gauge



#### Components

		FILTER/	DIVERTER		WEIGH	IT
MODEL #	SHUT OFF	REGULATOR	BLOCK	LUBRICATOR	LBS.	KGS
M14-01VPDLX	VS14-01	P14B-01G	DK14-02	L14L-01	2.50	1.13
M14-02VPDLX	VS14-02	P14B-02G	DK14-02	L14L-02	2.50	1.13
M22-02VPDLX	VS22-02	P22B-02G	DK22-03	L22L-02	2.26	1.03
M22-03VPDLX	VS22-03	P22B-03G	DK22-03	L22L-03	2.26	1.03
M22-04VPDLX	VS22-04	P22B-04G	DK22-03	L22L-04	2.26	1.03
M32-04VPDLX	VS32-04	P32B-04G	DK32-04	L32L-04	4.86	2.21
M32-06VPDLX	VS32-06	P32B-06G	DK32-04	L32L-06	4.86	2.21
M42-06VPDLX	VSL42-06	P42B-06G	DK42-06	L42L-06	15.85	7.19
M42-08VPDLX	VSL42-08	P42B-08G	DK42-08	L42L-08	15.85	7.19

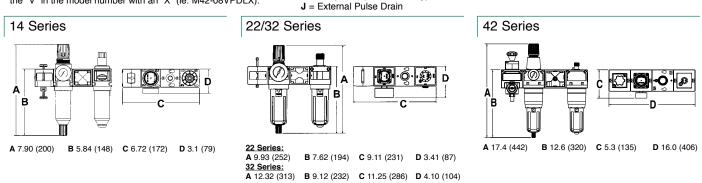
Options (see page 36 for Drain Options)

A = Auto Drain (22,32,42 Series only)

- \* To order this STOCKBLOK® model without a shutoff valve, replace the "V" in the model number with an "X" (ie. M42-08VPDLX).
- B = Flexible Drain **C** = CircleVision<sup>™</sup> Sight Bowl
- E = Endplates (42 Series only)
- F = Lubricator Quick Fill
  - Q = Metal Manual Drain

M = Metal Bowls w/ Sight Glass

R = Manual Lever Drain



## Shut Off/Particulate Filter/Coalescing Filter/Regulator w/ Gauge



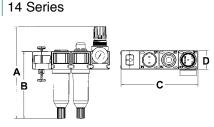
the "V" in the model number with an "X" (ie. M42-08XFFRX).

#### Components

		PARTICUL	ATE	COALESCING	WEIGI	HT
MODEL #	SHUT OFF	FILTER	FILTER	REGULATOR	LBS.	KGS
M14-01VFFRX	VS14-01	F14B-01	F14D-01	R14R-01G	2.60	1.20
M14-02VFFRX	VS14-02	F14B-02	F14D-02	R14R-02G	2.60	1.20
M22-02VFFRX	VS22-02	F22B-02	F22D-02	R22R-02G	2.38	1.08
M22-03VFFRX	VS22-03	F22B-03	F22D-03	R22R-03G	2.38	1.08
M22-04VFFRX	VS22-04	F22B-04	F22D-04	R22R-04G	2.38	1.08
M32-04VFFRX	VS32-04	F32B-04	F32D-04	R32R-04G	4.90	2.23
M32-06VFFRX	VS32-06	F32B-06	F32D-06	R32R-06G	4.90	2.23
M42-06VFFRX	VSL42-06	F42B-06	F42D-06	R42R-06G	16.65	7.55
M42-08VFFRX	VSL42-08	F42B-08	F42D-08	R42R-08G	16.65	7.55

#### Options (see page 36 for Drain Options)

- A = Auto Drain (22,32,42 Series only)
- **B** = Flexible Drain
- C = CircleVision<sup>™</sup> Sight Bowl
- E = Endplates (42 Series only)
- 22/32 Series



A 7.90 (200) B 5.84 (148) C 6.72 (172) D 3.1 (79)

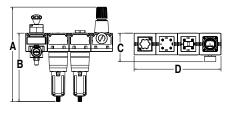
Α B

22 Series: A 10.02 (255) **B** 7.62 (194) C 9.30 (237) D 3.42 (87) 32 Series: A 12.32 (313) B 9.12 (232) C 11.25 (286) D 4.10 (104)



- M = Metal Bowls w/ Sight Glass
- Q = Metal Manual Drain
- R = Manual Lever Drain

42 Series



A 17.4 (442) B 12.6 (320) C 5.3 (135) **D** 16.0 (406)



## Shut Off/Coalescer-Regulator/Lubricator w/ Gauge



\* To order this STOCKBLOK® model without a shutoff valve, replace

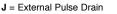
the "V" in the model number with an "X" (ie. M42-08XFRLX).

Components

		COALESCER/		WEIGHT	
MODEL #	SHUT OFF	REGULATOR	LUBRICATOR	LBS.	KGS
M14-01VCLXX	VS14-01	C14D-01G	L14L-01	2.10	0.94
M14-02VCLXX	VS14-02	C14D-02G	L14L-02	2.10	0.94
M22-02VCLXX	VS22-02	C22D-02G	L22L-02	1.96	0.89
M22-03VCLXX	VS22-03	C22D-03G	L22L-03	1.96	0.89
M22-04VCLXX	VS22-04	C22D-04G	L22L-04	1.96	0.89
M32-04VCLXX	VS32-04	C32D-04G	L32L-04	3.93	1.79
M32-06VCLXX	VS32-06	C32D-06G	L32L-06	3.93	1.79
M42-06VCLXX	VSL42-06	C42D-06G	L42L-06	13.70	6.21
M42-08VCLXX	VSL42-08	C42D-08G	L42L-08	13.70	6.21

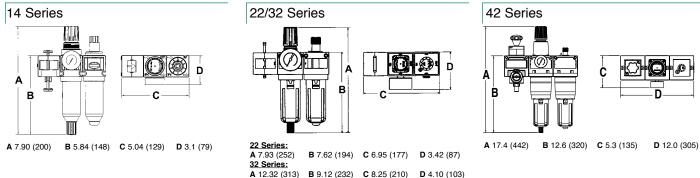
#### Options (see page 36 for Drain Options)

- A = Auto Drain (22, 32, 42 Series only)
- **B** = Flexible Drain
- C = CircleVision™ Sight Bowl
- D = 3 Micron Internal Prefilter
- E = Endplates (42 Series only)



umatics

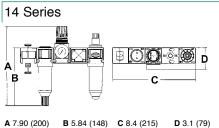
- M = Metal Bowls w/ Sight Glass
- F = Lubricator Quick Fill
- Q = Metal Manual Drain
- R = Manual Lever Drain



## Shut Off/Particulate Filter/Regulator/Diverter Block/Lubricator w/ Gauge



\* To order this STOCKBLOK® model without a shutoff valve, replace the "V" in the model number with an "X" (ie. M42-08XFRLX).



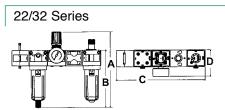
D 3.1 (79)

#### Components

		PARTICULA	TE		DIVERTER	WEIGH	HT
MODEL #	SHUT OFF	FILTER	REGULATOR	BLOCK	LUBRICATOR	LBS.	KGS
M14-01VFRDL	VS14-01	F14B-01	R14R-01G	DK14-02	L14L-01	3.00	1.37
M14-02VFRDL	VS14-02	F14B-02	R14R-02G	DK14-02	L14L-02	3.00	1.37
M22-02VFRDL	VS22-02	F22B-02	R22R-02G	DK22-03	L22L-02	2.69	1.22
M22-03VFRDL	VS22-03	F22B-03	R22R-03G	DK22-03	L22L-03	2.69	1.22
M22-04VFRDL	VS22-04	F22B-04	R22R-04G	DK22-03	L22L-04	2.69	1.22
M32-04VFRDL	VS32-04	F32B-04	R32R-04G	DK32-04	L32L-04	5.72	2.60
M32-06VFRDL	VS32-06	F32B-06	R32R-06G	DK32-04	L32L-06	5.72	2.60
M42-06VFRDL	VSL42-06	F42B-06	R42R-06G	DK42-06	L42L-06	18.80	8.53
M42-08VFRDL	VSL42-08	F42B-08	R42R-08G	DK42-08	L42L-08	18.80	8.53

#### Options (see page 36 for Drain Options)

- A = Auto Drain (22, 32, 42 Series only)
- B = Flexible Drain
- C = CircleVision<sup>™</sup> Sight Bowl
- E = Endplates (42 Series only)
- J = External Pulse Drain



22 Series A 10.02 (255) B 7.62 (193) C 11.50 (292) D 3.42 (87) 32 Series **A** 12.32 (313) **B** 9.12 (232) **C** 14.25 (362) **D** 4.10 (103)

- M = Metal Bowls w/ Sight Glass
- F = Lubricator Quick Fill
- Q = Metal Manual Drain
- R = Manual Lever Drain

# 42 Series

**A** 17.4 (442) B 12.6 (320) C 5.3 (135) **D** 20.0 (508)





## FlexiBlok<sup>®</sup> FRL Series

## Shut Off/Particulate Filter/Diverter Block/Coalescer-Regulator w/ Gauge



#### Components

		PARTICULATE	DIVERTER	COALESCER/	WEIGH	Т
MODEL #	SHUT OFF	FILTER	BLOCK	REGULATOR	LBS.	KGS
M14-01VFDCX	VS14-01	F14B-01	DK14-02	C14D-01G	2.55	1.15
M14-02VFDCX	VS14-02	F14B-02	DK14-02	C14D-02G	2.55	1.15
M22-02VFDCX	VS22-02	F22B-02	DK22-03	C22D-02G	2.26	1.03
M22-03VFDCX	VS22-03	F22B-03	DK22-03	C22D-03G	2.26	1.03
M22-04VFDCX	VS22-04	F22B-04	DK22-03	C22D-04G	2.26	1.03
M32-04VFDCX	VS32-04	F32B-04	DK32-04	C32D-04G	4.87	2.21
M32-06VFDCX	VS32-06	F32B-06	DK32-04	C32D-06G	4.87	2.21
M42-06VFDCX	VSL42-06	F42B-06	DK42-06	C42D-06G	15.85	7.19
M42-08VFDCX	VSL42-08	F42B-08	DK42-08	C42D-08G	15.85	7.19

#### Options (see page 36 for Drain Options)

**A** = Auto Drain (22, 32, 42 Series only) **B** = Flexible Drain

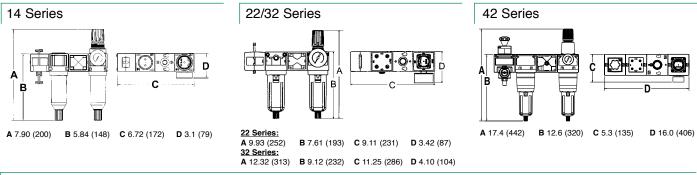
F = Lubricator Quick Fill (42 Series only)

- J=
- J = External Pulse Drain
   M = Metal Bowls w/ Sight Glass
   Q = Metal Manual Drain

R = Manual Lever Drain

- C = CircleVision™ Sight Bowl
- E = Endplates (42 Series only)

\* To order this STOCKBLOK® model without a shutoff valve, replace the "V" in the model number with an "X" (ie. M42-08XFDCX).



## Shut Off/Filter-Regulator/Lubricator w/ Gauge

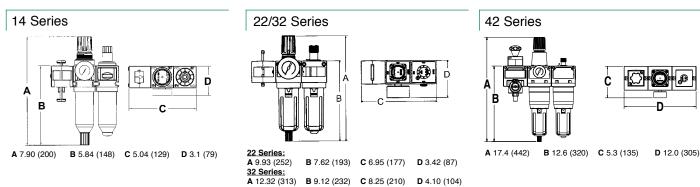


#### Components

		PARTICULATE/		WEIGHT			
MODEL #	SHUT OFF	REGULATOR	LUBRICATOR	LBS.	KGS		
M14-01VPLXX	VS14-01	P14B-01G	L14L-01	2.05	0.93		
M14-02VPLXX	VS14-02	P14B-02G	L14L-02	2.05	0.93		
M22-02VPLXX	VS22-02	P22B-02G	L22L-02	1.95	0.89		
M22-03VPLXX	VS22-03	P22B-03G	L22L-03	1.95	0.89		
M22-04VPLXX	VS22-04	P22B-04G	L22L-04	1.95	0.89		
M32-04VPLXX	VS32-04	P32B-04G	L32L-04	3.92	1.78		
M32-06VPLXX	VS32-06	P32B-06G	L32L-06	3.92	1.78		
M42-06VPLXX	VSL42-06	P42B-06G	L42L-06	13.70	6.21		
M42-08VPLXX	VSL42-08	P42B-08G	L42L-08	13.70	6.21		
Options (see page 36 for Drain Options)							
A = Auto Drain (22, 32, 42 Series only) M = Metal Bowls w/ Sight Glass							

- $\mathbf{B} = \text{Flexible Drain}$
- **C** = CircleVision<sup>™</sup> Sight Bowl
- E = Endplates (42 Series only)
- $\mathbf{J}$  = External Pulse Drain
- F = Lubricator Quick Fill
- Q = Metal Manual Drain
- **R** = Manual Lever Drain

\* To order this **STOCKBLOK**® model without a shutoff valve, replace the "V" in the model number with an "X" (ie. M42-08XPLXX).





## Shut Off/Particulate Filter/Diverter Block/Regulator/Lubricator w/ Gauge



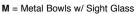
#### \* To order this STOCKBLOK® model without a shutoff valve, replace the "V" in the model number with an "X" (ie. M42-08XFDRL).

#### Components

		PARTICULATE	DIVERTER			WEIGH	łT
MODEL #	SHUT OFF	FILTER	BLOCK	REGULATOR	LUBRICATOR	LBS.	KGS
M14-01VFDRL	VS14-01	F14B-01	DK14-02	R14R-01G	L14L-01	3.00	1.37
M14-02VFDRL	VS14-02	F14B-02	DK14-02	R14R-02G	L14L-02	3.00	1.37
M22-02VFDRL	VS22-02	F22B-02	DK22-03	R22R-02G	L22L-02	2.69	1.22
M22-03VFDRL	VS22-03	F22B-03	DK22-03	R22R-03G	L22L-03	2.69	1.22
M22-04VFDRL	VS22-04	F22B-04	DK22-03	R22R-04G	L22L-04	2.69	1.22
M32-04VFDRL	VS32-04	F32B-04	DK32-04	R32R-04G	L32L-04	5.72	2.60
M32-06VFDRL	VS32-06	F32B-06	DK32-04	R32R-06G	L32L-06	5.72	2.60
M42-06VFDRL	VSL42-06	F42B-06	DK42-06	R42R-06G	L42L-06	18.80	8.53
M42-08VFDRL	VSL42-08	F42B-08	DK42-08	R42R-08G	L42L-08	18.80	8.53

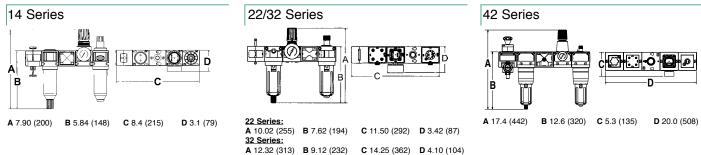
Options (see page 36 for Drain Options)

- A = Auto Drain (22, 32, 42 Series only)
- B = Flexible Drain
- C = CircleVision<sup>™</sup> Sight Bowl
- E = Endplates (42 Series only)
- J = External Pulse Drain



IUMATICS

- F = Lubricator Quick Fill
- Q = Metal Manual Drain
- R = Manual Lever Drain



## Shut Off/Particulate Filter/Coalescer-Regulator w/ Gauge



\* To order this STOCKBLOK® model without a shutoff valve, replace

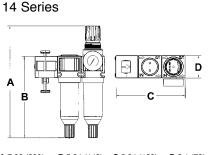
the "V" in the model number with an "X" (ie. M42-08XFCXX).

#### Components

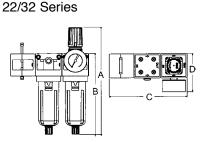
		PARTICULA	TE COALESCER/	WEIGHT	
MODEL #	SHUT OFF	FILTER	REGULATOR	LBS.	KGS
M14-01VFCXX	VS14-01	F14B-01	C14D-01G	2.10	0.95
M14-02VFCXX	VS14-02	F14B-02	C14D-02G	2.10	0.95
M22-02VFCXX	VS22-02	F22B-02	C22D-02G	1.95	0.89
M22-03VFCXX	VS22-03	F22B-03	C22D-03G	1.95	0.89
M22-04VFCXX	VS22-04	F22B-04	C22D-04G	1.95	0.89
M32-04VFCXX	VS32-04	F32B-04	C32D-04G	3.93	1.79
M32-06VFCXX	VS32-06	F32B-06	C32D-06G	3.93	1.79
M42-06VFCXX	VSL42-06	F42B-06	C42D-06G	13.70	6.21
M42-08VFCXX	VSL42-08	F42B-08	C42D-08G	13.70	6.21

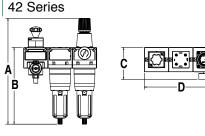
Options (see page 36 for Drain Options)

- A = Auto Drain (22,32,42 Series only)
- B = Flexible Drain C = CircleVision™ Sight Bowl
- E = Endplates (42 Series only)
- J = External Pulse Drain M = Metal Bowls w/ Sight Glass
  - Q = Metal Manual Drain
  - R = Manual Lever Drain



**A** 7.90 (200) **B** 5.84 (148) **C** 5.04 (129) **D** 3.1 (79)

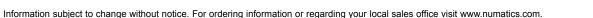




**A** 17.4 (442) **B** 12.6 (320) **C** 5.3 (135) **D** 12.0 (305)

**D** 3.42 (87) A 9.93 (252) B 7.62 (193) C 6.95 (177) 32 Series **A** 12.32 (313) **B** 9.12 (232) **C** 8.25 (210) **D** 4.10 (104)

22 Series



# numatics



## **FLEXIBLOK<sup>®</sup> FRL Series**

# **ModuBlok**™

Combination models



#### MOD22-08

	00	
STATION POSITION	DESCRIPTION	MODEL NUMBER
1	Shut-Off Valve	VS22-03
1	Shut-On valve	V322-03
2	Particulate Filter	F22B-03
3	Coalescer w/ metal bowl and pulse drain	F22D-03JM
4	Diverter Block	DK22-03
4T	Regulator	R22R-03
4B	Pressure Switch	PS180CAN02
5	Regulator w/ gauge	R22R-03G
6	Lubricator	L22L-03

NEED MORE PARTS AND INFORMATION?

See page 36 for more information on available drain options.

See page 37 and 38 for information on ordering replacement parts.

## L1 AND L2 Series Air Prep to Valve Adapter



A B		← D →	
<b>°</b>	C	0	
° 0			E

Dimens	SIONS				
Model #	А	В	С	D	E
L1A22	2.5	1.25	2	1	.75
LIAZZ	(64)	(32)	(51)	(25)	(19)
L2A22	3	1.5	2	1	.75
LZAZZ	(76)	(38)	(51)	(52)	(19)
L1A32	3	1.5	3	1.5	.75
	(76)	(38)	(76)	(38)	(19)
L2A32	3	1.5	3	1.5	.75
	(76)	(20)	(76)	(20)	(10)

#### About MoDuBLOK<sup>™</sup> Assemblies

The **FLEXIBLOK**<sup>®</sup> modular system is designed to connect individual components into a complete assembly. Sometimes it is necessary to order an assembly using additional or non-standard components or combinations. The **MODUBLOK**<sup>™</sup> system makes it easy to order non-standard combinations.

As with all other components and combinations, all modular assemblies come factory tested and approved and assembled complete. For more information on flow, dimensions, options, and accessories, see individual component pages.

Because of the many possible combinations when utilizing modular systems, it is recommended that complex stations include a schematic drawing. When ordering, specify all components at each station, based on the example to the left.

#### How to label diverter blocks

When using a diverter block, indicate all units at that station before continuing. If additional units are mounted above the diverter block, use the letter 'T' (for 'top') as well as a letter sequence (TA, TB, TC, etc.) starting from the diverter block, and continuing out. If units are placed below the diverter block, begin the two letter alphabetic sequence with the letter 'B' (for bottom) as well as a letter sequence (BA, BB, BC, etc.) starting with the diverter block and continuing outward. Continue in this pattern until all units are placed correctly.

#### Reducing Bushings

Reducing bushings may be required to connect some components (i.e. pressure switches, etc).

SERIES	SIZE
22	3/8 to 1/4 or 3/8 to 1/8
32	1/2 to 1/4 or 1/2 to 1/8
42	Not necessary as diverter block has 1/4 indicator ports.

#### Application

The Numatics L1 and L2 Series Valve Adapters, when used with a coalescing regulator ('piggyback') equipped with a pleated prefilter coalescing element and the specified valve, provides a low-cost, complete control package. This design eliminates fittings and potential air leaks - thus reducing cost, space, and installation time.

#### Features

 Modular adaptable to 22 or 32 Series FLEXIBLOK® products.

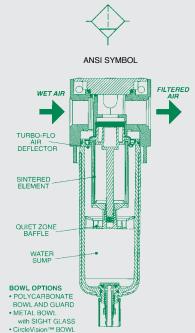
· Easy installation and service.

How to Order	
MODEL NUMBER	DESCRIPTION
L1A22	L1 Series valve adapter for use with 22 Series air preparation products
L2A22	L2 Series valve adapter for use with 22 Series air preparation products
L1A32	L1 Series valve adapter for use with 32 Series air preparation products
L2A32	L2 Series valve adapter for use with 32 Series air preparation products



# numatics<sup>®</sup>

## **FLEXIBLOK<sup>®</sup> FRL Series**



#### Particulate Filter

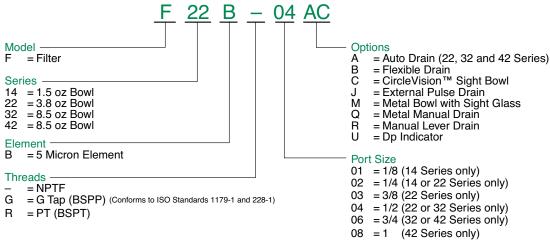
F14B, F22B, F32B, F42B Series

- Four convenient sizes
- · 5 micron sintered elements standard
- · Can be installed as modular or individual unit
- Includes screws and o-rings for modular connection
- Manual or automatic drain
- · Polycarbonate bowl standard
- · Optional metal bowl with sight glass
- Optional CircleVision™ sight bowl
- Bowl seal held captive (22, 32 and 42 Series)

## Specifications

BOWL	POLYCARBONATE BOWL	CIRCLEVISION™ BOWL	METAL BOWL
Temperature Range (°F)	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50
Max. Pressure (PSIG)	150	250	200
Max. Pressure (BAR)	10	17	14
14 Series (Weight, lbs.)	.60	.80	.65
14 Series (Weight, kg)	.28	.36	.30
22 Series (Weight, lbs.)	.65	.86	1.25
22 Series (Weight, kg)	.30	.39	.57
32 Series (Weight, lbs.)	1.3	1.7	2.5
32 Series (Weight, kg)	.59	.77	1.14
42 Series (Weight, lbs.)	3.70	4.15	4.80
42 Series (Weight, kg)	1.68	1.88	2.18

## How to Order



NEED MORE PARTS AND INFORMATION?

• See page 36 for more information on available drain options.

• See pages 37 & 38 for information on ordering replacement parts.

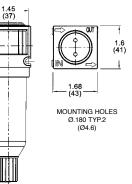


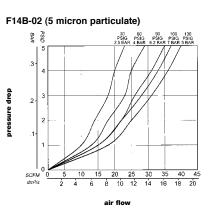


## 14 Series Particulate









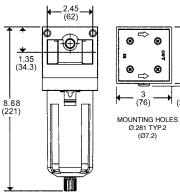
#### 22 Series Particulate F22B-04 (5 micron particulate) **1.83** (46.5) PSID BAR 36 PSIG 2.5 BAR 60 80 100 PSIG PSIG PSIG 4 BAR 6 BAR 7 BAR 20 PSIG 1 BAR 8 8 ίC 2.165 (54.9) 1.045 (26.5) ŝ FLEXIB .3 ⊗ ⊗ drop ν .21 (5.3) 375 7.41 (188) pressure (60.4) MOUNTING HOLES Ø.200 TYP.2 (Ø5.1) SCFM dm³/s 40 50 60 70 80 ร่ก 30 10 15 20 25 35 m

(76)

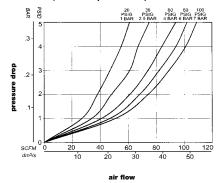
.14

## 32 Series Particulate





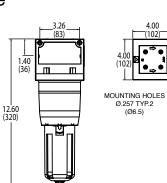
#### F32B-06 (5 micron particulate)



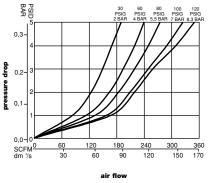
air flow

## 42 Series Particulate





#### F42B-08 (5 micron particulate)

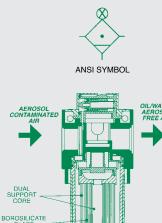


4.00

102







#### Coalescing Filter

F14, F22, F32, F42 Series

- Four convenient sizes
- Cartridge element design
- Inner and outer support cores prevent element from crushing in either flow direction
- · Available with manual or automatic drain
- Optional CircleVision<sup>™</sup> sight bowl
- · Dp indicator standard on 14, 22, 32 and 42 Series

#### **Recommended Uses**

C grade element, identified by its blue drain layer, is a coarse filter for large amounts of water, rust, pipe scale, and liquid hydrocarbons. Excellent for environments that have severe contamination. Can be used for lubricated or 'dry' systems. Ideal for mainline filtration of plant air.

D grade element, identified by its green drain layer, is a fine filter for cylinder or valves - especially when the circuit is being run without lubrication ('dry'). Excellent filter for desiccant or regenerative style dryers.

E grade element, identified by its red drain layer, is an ultra fine filter for oilfree instrumentation air, blow molding, food and drug packaging, electronics applications, and other applications requiring maximum contamination removal. F grade element, identified by its white drain layer, is an adsorbing filter that utilizes activated carbon to capture hydrocarbon vapor and deodorize compressed air. Typically it is used to protect worker environments, food and drug applications, breathing air, and instrumentation for analytical instruments. Life expectancy is approximately 3 months at rated flow.

## **Specifications**

GLASS -

DRAIN LAYER

(Element Grade is Identified by Color)

OIL SUMP

BOWL OPTIONS POLYCARBONATE

BOWL AND GUARD

METAL BOWL
 CircleVision™ BOWL

BOWL	POLYCARBONATE BOWL	CIRCLEVISION™ BOWL	METAL BOWL
Temperature Range (°F)	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50
Max. Pressure (PSIG)	150	250	200
Max. Pressure (BAR)	10	17	14
14 Series (Weight, Ibs.)	0.65	.82	0.70
14 Series (Weight, kg)	0.30	.37	0.32
22 Series (Weight, Ibs.)	0.66	0.89	1.28
22 Series (Weight, kg)	0.30	0.40	0.58
32 Series (Weight, Ibs.)	1.42	1.83	2.56
32 Series (Weight, kg)	0.65	0.83	1.16
42 Series (Weight, Ibs.)	3.70	4.15	4.80
42 Series (Weight, kg)	1.68	1.88	2.18

#### How to Order

Model F = Filter Series 14 = 1.5  oz Bowl 22 = 3.8  oz Bowl	Options A = Auto Drain (22, 32 and 42 Series) B = Flexible Drain C = Circlevision™ Sight Bowl D = 3 Micron, Internal Pleated Prefilter J = External Pulse Drain
32 = 8.5 oz Bowl 42 = 8.5 oz Bowl Element	M = Metal Bowl With Sight Glass Q = Metal Manual Drain R = Manual Lever Drain U = No Dp Indicator
$\begin{array}{rcl} C &=& 0.7 \text{ Micron Coarse Coalescer} \\ D &=& 0.3 \text{ Micron Fine Coalescer} \\ E &=& 0.01 \text{ Micron Ultra Fine Coalescer} \\ F &=& \text{Vapor adsorber} \end{array}$	Port Size 01 = 1/8 (14 Series Only) 02 = 1/4 (14 or 22 Series Only)
Threads - = NPTF G = G Tap (BSPP) (Conforms to ISO Standards 1179-1 and 22 R = PT (BSPT)	$\begin{array}{rcl} 03 &=& 3/8 & (22 \text{ Series Only}) \\ 04 &=& 1/2 & (22 \text{ or } 32 \text{ Series Only}) \\ 06 &=& 3/4 & (32 \text{ or } 42 \text{ Series Only}) \\ 08 &=& 1 & (42 \text{ Series Only}) \end{array}$
D MORE PARTS AND INFORMATION?	

F 14 D - 02 AC

NEED

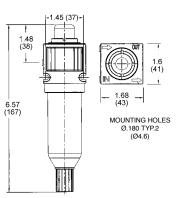
- · See page 36 for more information on available drain options.
- See pages 37 & 38 for information on ordering replacement parts.



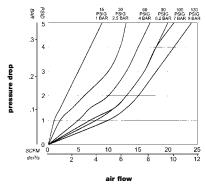


## 14 Series Coalescer



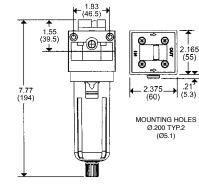


F14D-02 (0.3 micron coalescer)

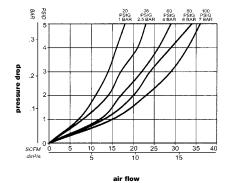


## 22 Series Coalescer



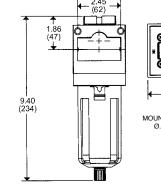


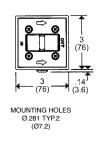
F22D-04 (0.3 micron coalescer)



## 32 Series Coalescer

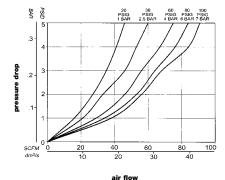






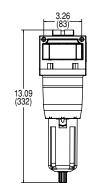
(5.3)

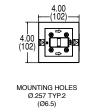
F32D-06 (0.3 micron coalescer)



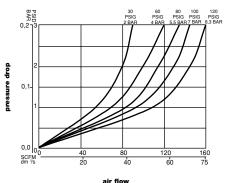
## 42 Series Coalescer







#### F42D-08 (0.3 micron coalescer)







MAIN

RELIEF ORIFICE CONTROL CHAMBER

ASPIRATOR

BRASS VALVE VALVE SPRING

SUPPLY PRESSURE

## **FLEXIBLOK<sup>®</sup> FRL Series**

Ø

ANSI SYMBOL (NON-RELIEVING)

ANEL MOUNT

REDUCED

NON-RISING ADJUSTMENT KNOB

ANSI SYMBOL (BELIEVING)

#### Regulator

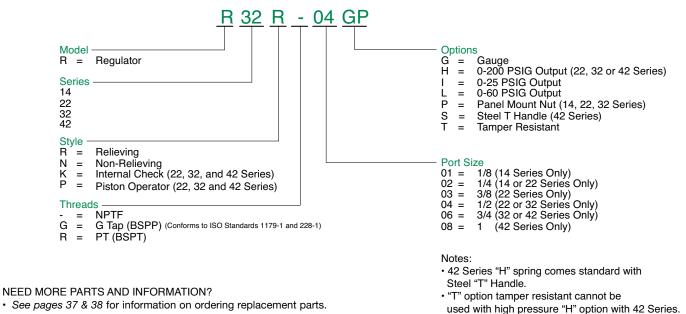
R14, R22, R32, R42 Series

- · Four convenient sizes
- · High flow in compact size
- · Locking adjustment knob
- · Four different pressure ratings available
- · Relieving or non-relieving models
- · Can be installed as modular or individual unit
- Standard output pressure 0-125 PSIG



	14 SERIES	22 SERIES	32 SERIES	42 SERIES
Temperature Range (°F)	40-120	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50	4-50
Max. Pressure (PSIG)	250	200	250	250
Max. Pressure (BAR)	17	14	14	17
Weight (lbs.)	0.65	0.69	1.37	4.30
Weight (kg)	0.30	0.31	0.62	1.95
Body Material	Zinc	Aluminum	Aluminum	Aluminum

## How to Order

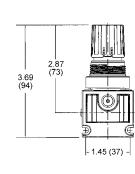


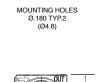




## 14 Series Regulator







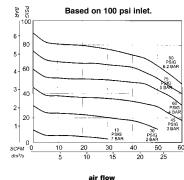
1.6 (41)

1/8 gauge ports

-1.68 (43)-

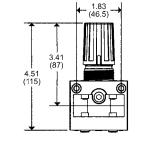


reduced pressure



22 Series Regulator



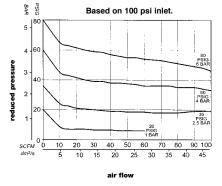






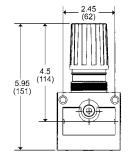






32 Series Regulator



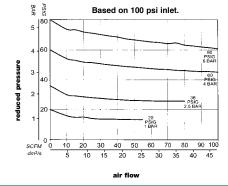


1/4 gauge ports MOUNTING HOLES Ø.281 TYP.2 (Ø7.2)

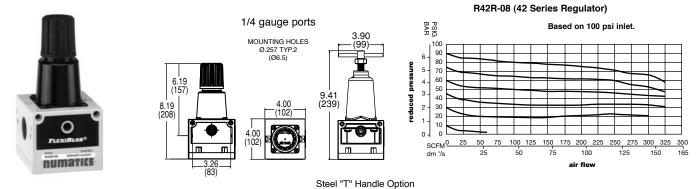


(76)

R32R-06 (32 Series Regulator)



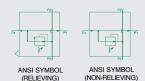
## 42 Series Regulator

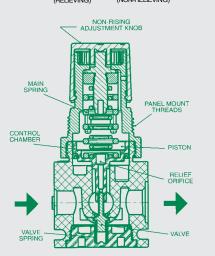


Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.









## Specifications

	14 SERIES
Temperature Range (°F)	40-120
Temperature Range (°C)	4-50
Max. Pressure (PSIG)	250
Max. Pressure (BAR)	17
Weight (lbs.)	0.60
Weight (kg)	0.27
Body Material	Zinc

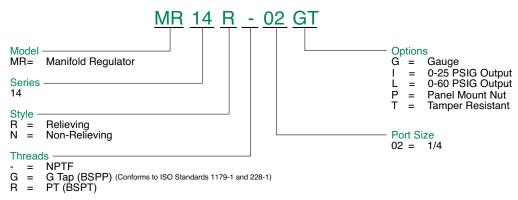
## How to Order

#### Manifold Regulator MR14 Series

The 14 Series Manifold Regulator allows several regulators to be chained together while maintaining a constant primary pressure to each regulator. This regulator features a dual spring design which covers any possible outlet setting without the need to indicate a specific spring, eliminating confusing options and part numbers. The regulator uses the inner spring for more precise, lower pressures, and the outer spring for middle to high pressures. As the smaller, inner spring is compressed, the larger, outer spring takes over for higher pressures.

Regulators consist of a piston which floats between the main springs (top) and a valve stem (bottom). By turning the adjustment knob clockwise, the main spring is forced onto the piston which, in turn, is pressed onto the valve stem. When the spring force becomes greater than the force of the air pressure in the control chamber below the piston, the valve is forced down and flow begins. As flow continues, the pressure begins to build and air, via the aspirator tube, fills the control chamber. When the underside piston force is greater than the main spring force, the piston is forced upward, causing the main valve to close. The cycle continues in a balanced process of reducing or increasing flow based upon the downstream pressure.

- · High flow in compact size
- · Locking adjustment knob
- · Single pressure range suits any application
- · Relieving or non-relieving models
- · Can be installed as modular or individual unit
- Standard output pressure 0-125 PSIG



NEED MORE PARTS AND INFORMATION?

· See pages 37 & 38 for information on ordering replacement parts.





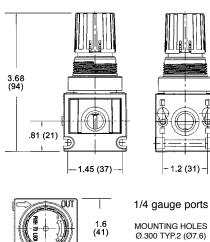
PSIG

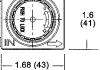
60 70

## FLEXIBLOK<sup>®</sup> FRL Series

## 14 Series Manifold Regulator







MR14R-02 (14 Series Manifold Regulator) BAR 1100 Based on 100 psi inlet. reduced pressure З PSIG 7 BAF n SCFM dm³/s 10 15 

air flow



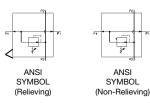
# numatics

#### FLEXIBLOK<sup>®</sup> FRL Series

#### Miniature Manifold Regulator MR02 Series



MR02R-01G pictured shown assembled and individually



#### Application

The MR02 Series Miniature Manifold Regulator offers the flexibility necessary for many of today's applications. The MR02 Series allows several regulators to be chained together while maintaining a constant primary pressure to each regulator.

A system equipped with the Miniature Manifold Regulator can help reduce operation costs by reducing unnecessary downstream pressures and improve efficiencies by keeping them in one, convenient location for easy adjustment.

#### Features

- · Can be installed as an individual or manifold unit
- Standard output pressure 0 -125 PSIG
- 3 available outlet/gauge ports (one in front, one in back, and one in the bottom)
- · Integral mounting holes allow for easy panel mounting
- · Connects easily without adapters or independent manifold system
- Standard 5 mm tamper resistant adjustment
- High flow capability in relation to compact size (2.7" height x 1" square)
- Relieving or non-relieving models

#### Specifications

P1 Ports: 1/8 NPTF Outlet/Gauge Ports: 10-32 UNF Temperature Range: 40 -120 F (4-50 C) Max Inlet Pressure: 200 PSIG (14 Bar) Weight: .15 lbs (68 grams) \*\*SCFM w/100 PSI inlet set @ 75: 5 scfm \*\*SCFM w/100 PSI inlet set @ 60: 4 scfm \*\*SCFM w/100 PSI inlet set @ 40: 3 scfm Body material: Aluminum

\*\* based on a 25% pressure drop from set

#### **Optional Accessories**

ITEM	PART NO.
23mm Gauge "G" Option	NG23-M
10-32 - 1/8 NPTF Adapter	134-034
10-32 - 1/8 O.D Barb Fitting	134-236
10-32 - 1/4 O.D Barb Fitting	134-234

Each Regulator includes an R02K assembly kit which includes (1) 10-32 pipe plug, (1) 1/8 pipe plug, (1) P1 port o-ring, (2) connector screws

## How to Order

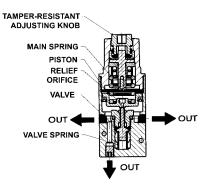


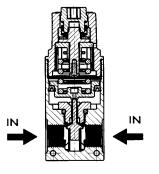




#### Miniature Manifold Regulator MR02 Series

**Product Cross Section** 

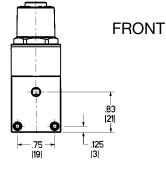


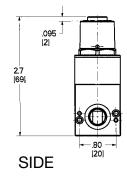


## Dimensions

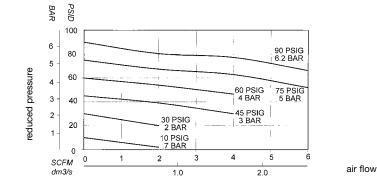


## 28 [7] ---- .50 [3]



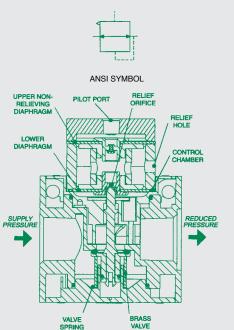


## Flow Ratings









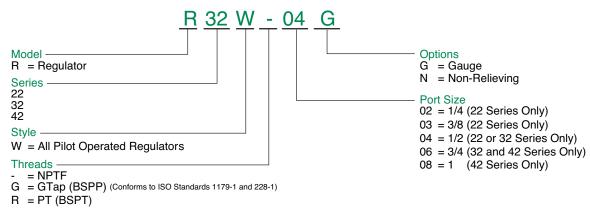
#### Regulator - Pilot Operated R22, R32, R42 Series

- Three convenient sizes
- High flow in compact size
- Can be installed as modular or individual unit
- Standard output pressure 0-125 PSIG
- Relieving or non-relieving models

## Specifications

	22 SERIES	32 SERIES	42 SERIES
Temperature Range (°F)	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50
Min. Pilot Pressure (PSI)	15	15	15
Min. Pilot Pressure (BAR)	1	1	1
MaxPilot Pressure (PSI)	150	150	200
Max. Pilot Pressure (BAR)	10.2	10.2	14
Max. Supply Pressure (PSI)	150	150	250
Max. Supply Pressure (BAR)	10.2	10.2	17.2
Weight (lbs.)	0.66	1.35	3.85
Weight (kg)	0.25	0.50	1.75
Body Material	Aluminum	Aluminum	Aluminum

## How to Order



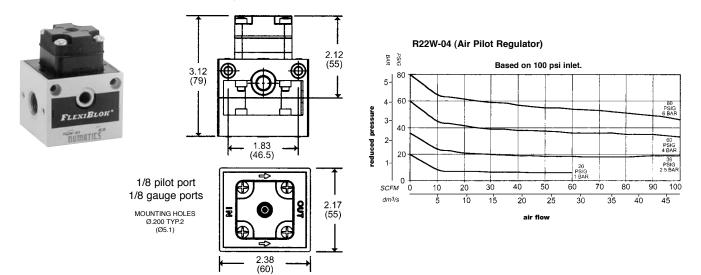
NEED MORE PARTS AND INFORMATION?

See pages 37 & 38 for information on ordering replacement parts.

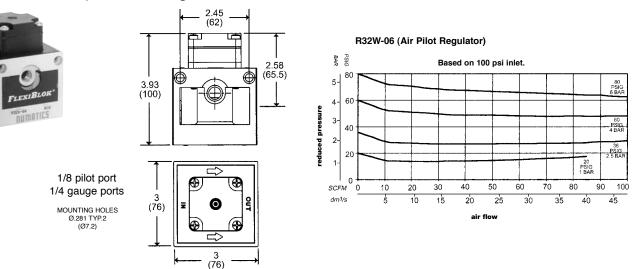




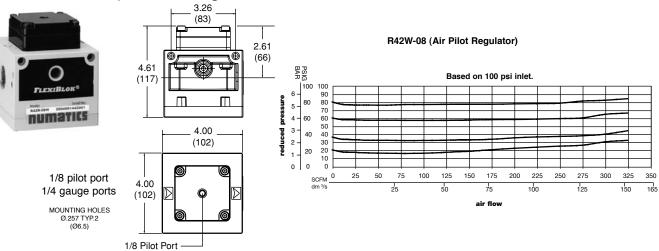
## 22 Series Pilot Operated Regulator



## 32 Series Pilot Operated Regulator

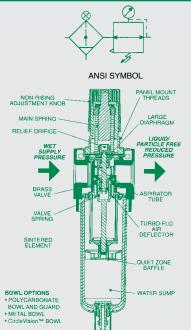


## 42 Series Pilot Operated Regulator









## Particulate Filter/Regulator

P14B, P22B, P32B, P42B Series

- Four convenient sizes
- 5 micron element standard
- · Can be installed as individual or modular unit
- Non-rising knob
- Optional CircleVision™ sight bowl
- · Optional metal bowl with sight glass
- Standard output pressure 0-125 PSIG
- Bowl seal held captive (22, 32, and 42 Series)

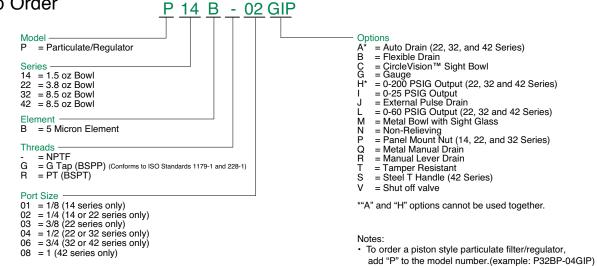
• "T" option tamper resistant cannot be used with high

pressure "H" option with 42 Series.

## Specifications

	POLYCARBONATE	CIRCLEVISION™	METAL
BOWL	BOWL	BOWL	BOWL
Temperature Range (°F)	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50
Max. Pressure (PSIG)	150	250	200
Max. Pressure (BAR)	10	17	14
14 Series (Weight, lbs.)	0.75	0.90	0.80
14 Series (Weight, kg)	0.34	0.40	0.37
22 Series (Weight, lbs.)	0.91	1.20	1.50
22 Series (Weight, kg)	0.41	0.55	0.68
32 Series (Weight, Ibs.)	1.81	2.34	2.94
32 Series (Weight, kg)	0.82	1.06	1.34
42 Series (Weight, lbs)	5.05	5.50	6.15
42 Series (Weight, kg)	2.29	2.49	2.79

## How to Order



#### NEED MORE PARTS AND INFORMATION?

• See pages 37 & 38 for information on ordering replacement parts. • See page 36 for more information on available drain options.

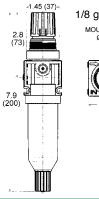
Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.





## 14 Series Filter/Regulator





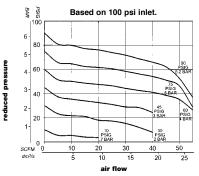
1/8 gauge ports MOUNTING HOLES Ø.180 TYP.2 (Ø4.6)

> 1 68 (43)

1.6

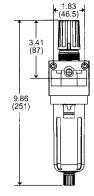
(41)

#### P14B-02 (5 micron particulate)

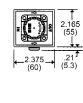


## 22 Series Filter/Regulator

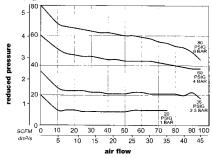




1/8 gauge ports MOUNTING HOLES Ø.200 TYP.2 (Ø5.1)

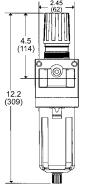


P22B-04 (5 micron particulate) Based on 100 psi inlet. PSIG



32 Series Filter/Regulator





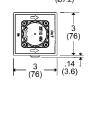
1/4 gauge ports MOUNTING HOLES Ø.281 TYP.2 (Ø7.2)

3.90

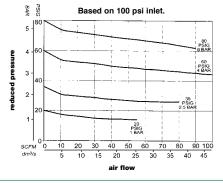
(99)

0

П



P32B-06 (5 micron particulate)

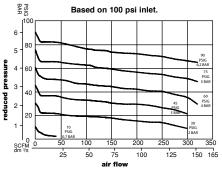


## 42 Series Filter/Regulator



3.26 (83) 1/4 gauge ports MOUNTING HOLES Ø.257 TYP.2 (Ø6.5) 6.00 (152) 4.00 18.63 (102) ш Ш ш (473)17.39 (442) 4.00 (102) Steel "T" Handle Option









#### Ø ANSI SYMBOL NON-RISING -----ADJUSTMENT KNOB PANEL MOUNT MAIN RELIEF ASPIRATOR ഔ OIL/WATER AEROSOL FREE REDUCED PRESSURE BRASS VALVE BOROSILICATE VALVE GLASS ELEMENT DRAIN LAYER (Element Grade is Identified by Color) OIL SUMP

## Coalescing Filter/Regulator

C14, C22, C32, C42 Series

- Four convenient sizes
- · Cartridge element design
- Inner/outer support cores prevent element from crushing in either flow direction
- · Connects easily to FLEXIBLOK® Modular system
- · Four element grades available

#### **Recommended Uses**

**C** grade element, identified by its blue drain layer, is a coarse filter for large amounts of water, rust, pipe scale, and liquid hydrocarbons. Excellent for environments that have severe contamination. Can be used for lubricated or 'dry' systems. Ideal for mainline filtration of plant air.

**D** grade element, identified by its green drain layer, is a fine filter for cylinder or valves - especially when the circuit is being run without lubrication ('dry'). Excellent filter for desiccant or regenerative style dryers.

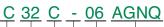
E grade element, identified by its red drain layer, is an ultra fine filter for oilfree instrumentation air, blow molding, food and drug packaging, electronics applications, and other applications requiring maximum contamination removal. F grade element, identified by its white drain layer, is an adsorbing filter that utilizes activated carbon to capture hydrocarbon vapor and deodorize compressed air. Typically it is used to protect worker environments, food and drug applications, breathing air, and instrumentation for analytical instruments. Life expectancy is approximately 3 months at rated flow.

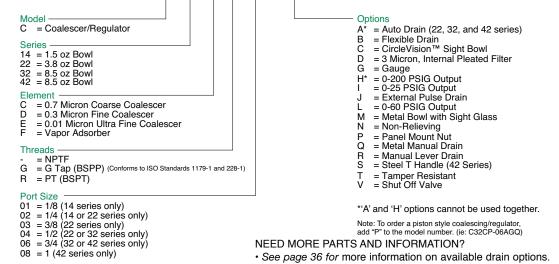
## Specifications

BOWL OPTIONS • POLYCARBONATE BOWL AND GUARD • METAL BOWL • CircleVision™ BOWL

BOWL	POLYCARBONATE BOWL	CIRCLEVISION™ BOWL	METAL BOWL
Temperature Range (°F)	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50
Max. Pressure (PSIG)	150	250	200
Max. Pressure (BAR)	10	17	14
14 Series (Weight, lbs.)	0.80	0.95	0.85
14 Series (Weight, kg)	0.35	0.43	0.38
22 Series (Weight, Ibs.)	0.92	1.20	1.60
22 Series (Weight, kg)	0.42	0.55	0.73
32 Series (Weight, lbs.)	1.82	2.35	2.95
32 Series (Weight, kg)	0.83	1.07	1.34
42 Series (Weight, lbs.)	5.05	5.50	6.15
42 Series (Weight, kg)	2.29	2.49	2.79

## How to Order







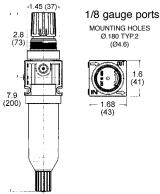
1.68 (43)

1.6 (41)

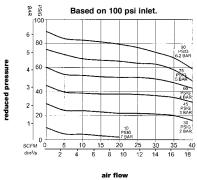


## 14 Series Coalescer/Regulator



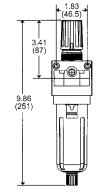


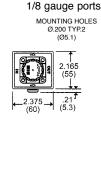
C14D-02 (0.3 micron coalescing)



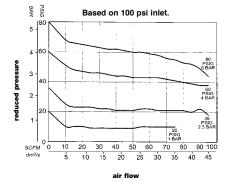
## 22 Series Coalescer/Regulator





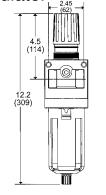


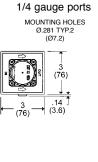
C22D-04 (0.3 micron coalescing)



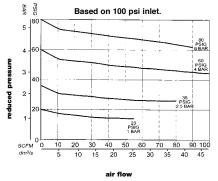
## 32 Series Coalescer/Regulator





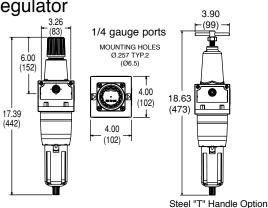


C32D-06 (0.3 micron coalescing)

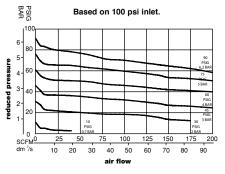


## 42 Series Coalescer/Regulator





C42D-08 (0.3 micron coalescing)



Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.

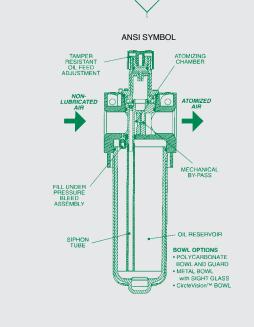




## Lubricator

L14L, L22L, L32L, L42L Series

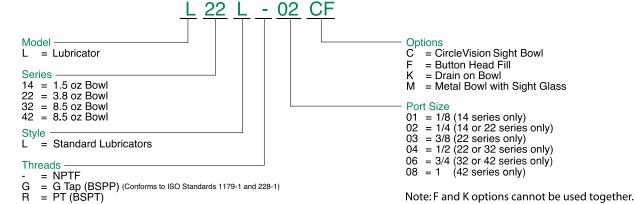
- · Four convenient sizes
- Lubrication to begin at 2 SCFM
- · Can be filled under pressure (32 and 42 series only)
- Tamper-resistant knob standard
- Optional CircleVision<sup>™</sup> sight bowl
- · Optional metal bowl with sight glass
- · Can be mounted as individual or modular unit
- · Button head fill optional on all sizes
- Atomizing chamber develops longer life aerosols



## Specifications

	14 SERIES	22 SERIES	32 SERIES	42 SERIES
Temperature Range (°F)	40-120	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50	4-50
Max. Pressure (PSIG)	200	200	200	200
Max. Pressure (BAR)	14	14	14	14
Weight (lbs.)	0.60	0.69	1.37	4.15
Weight (kg)	0.27	0.31	0.62	2.18
Body Material	Zinc	Aluminum	Aluminum	Aluminum

## How to Order



#### NEED MORE PARTS AND INFORMATION?

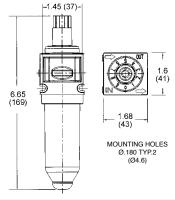
See pages 37 & 38 for information on ordering replacement parts.



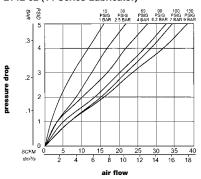


## 14 Series Lubricator



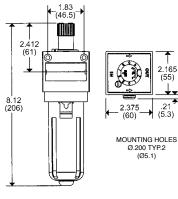


#### L14L-02 (14 Series Lubricator)

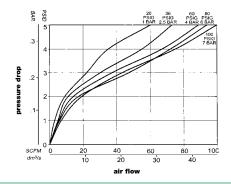


## 22 Series Lubricator



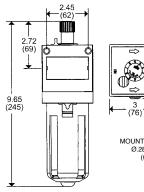


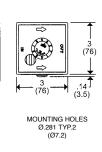
L22L-04 (22 Series Lubricator)



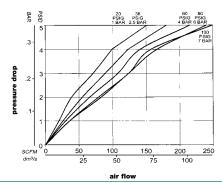
### 32 Series Lubricator





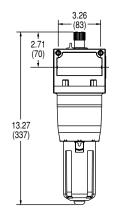


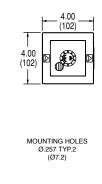
#### L32L-06 (32 Series Lubricator)



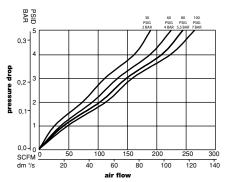
### 42 Series Lubricator





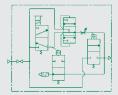


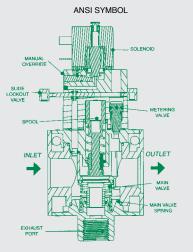
L42L-06 (42 Series Lubricator)











## Specifications

	22	32	42
	SERIES	SERIES	SERIES
Exhaust Ports (NPTF)	1/2	1/2	3/8 (3 exh. ports)
Gauge Ports (NPTF)	1/8	1/4	1/4
Temperature Range (°F)	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50
Min. Pressure (PSI)	60	60	20
Min. Pressure (BAR)	4	4	1.38
MaxPressure (PSI)	150	150	150
Max. Pressure (BAR)	10	10	10
Weight, lbs. (kg.)	0.94 (0.43)	1.56 (0.71)	4.35 (1.97)
Body Material	Aluminum	Aluminum	Aluminum

Cv in-out/out-exh (22 Series, 1/4)	2 / 1.2
Cv in-out/out-exh (22 Series, 3/8)	2.87 / 1.38
Cv in-out/out-exh (22 Series, 1/2)	3.62 / 1.32
Cv in-out/out-exh (32 Series, 1/2)	5.24 / 3.01
Cv in-out/out-exh (32 Series, 3/4)	6.47 / 3.14
Cv in-out/out-exh (42 Series, 3/4)	7.5 / 5.0
Cv in-out/out-exh (42 Series, 1)	8.0 / 5.0

Solenoid Soft Start Quick Exhaust Valve

· Lockout feature prevents unauthorized

High inlet to outlet flow capability

controls the slow start feature

· High exhaust capacity for quick depletion of

· Incorporated metering valve controls how

Connects easily to FLEXIBLOK<sup>®</sup> Modular system

quickly downstream pressure is reached, which

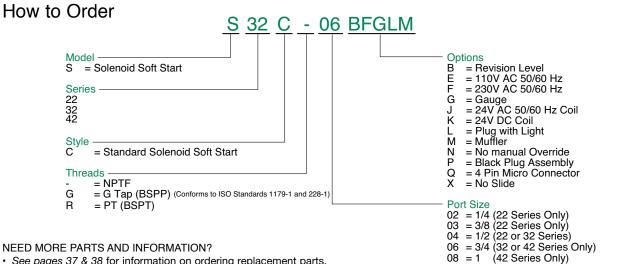
S22C, S32C, S42C Series Three convenient sizes

pressurization of system

pressure

#### WATTAGE AND AMPERAGE

110V AC	1.42 watts / 0.022 amps
230V AC	2.00 watts / 0.016 amps
24V AC	2.00 watts / 0.011 amps
24V DC	2.00 watts / 0.080 amps



#### NEED MORE PARTS AND INFORMATION?

· See pages 37 & 38 for information on ordering replacement parts.

20
----

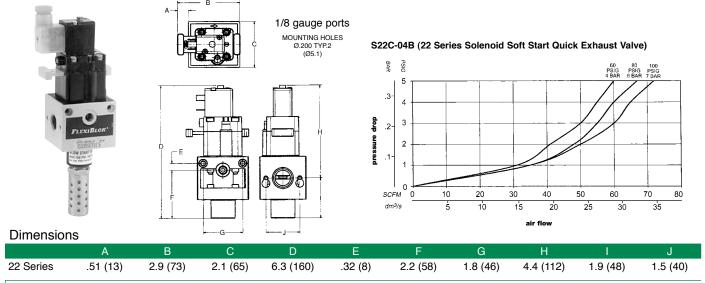
Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.



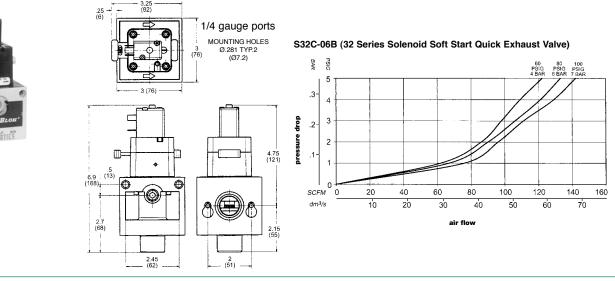
## FlexiBlok<sup>®</sup> FRL Series



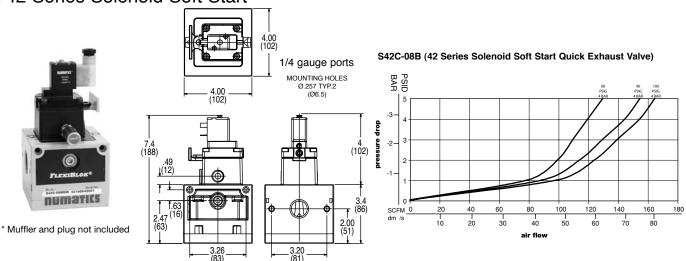
## 22 Series Solenoid Soft Start



## 32 Series Solenoid Soft Start



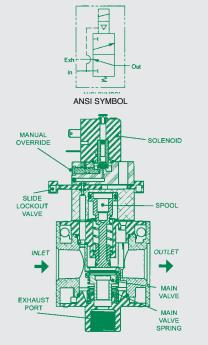
## 42 Series Solenoid Soft Start







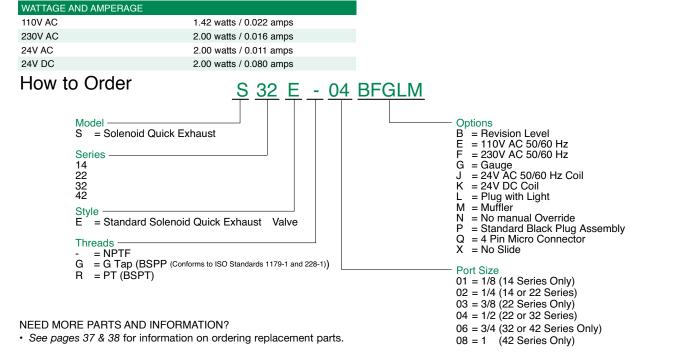
## **FLEXIBLOK®** FRL Series



## Specifications

	14 SERIES	22 SERIES	32 SERIES	42 SERIES
Exhaust Ports (NPTF)	1/8	1/2	1/2	3/4
Gauge Ports (NPTF)	10-32 UNF	1/8	1/4	1/4
Temperature Range (°F)	40-120	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50	4-50
Min. Pressure (PSI)	40	40	40	20
Min. Pressure (BAR)	2.76	2.76	2.76	1.38
MaxPressure (PSI)	150	150	150	150
Max. Pressure (BAR)	10	10	10	10
Weight, lbs. (kg.)	1.25 (0.57)	1.15 (0.53)	1.75 (0.79)	3.45 (1.56)
Body Material	Zinc	Aluminum	Aluminum	Aluminum

#### 1.15 / 1.10 Cv in-out/out-exh (14 Series, 1/8) 1.55 / 1.10 Cv in-out/out-exh (14 Series, 1/4) Cv in-out/out-exh (22 Series,1/4) 2/1.2 Cv in-out/out-exh (22 Series, 3/8) 2.87 / 1.38 Cv in-out/out-exh (22 Series, 1/2) 3.62 / 1.32 Cv in-out/out-exh (32 Series, 1/2) 5.24 / 3.01 Cv in-out/out-exh (32 Series, 3/4) 6.47 / 3.14 Cv in-out/out-exh (42 Series, 3/4) 7.5 / 5.0 Cv in-out/out-exh (42 Series, 1) 8.0 / 5.0



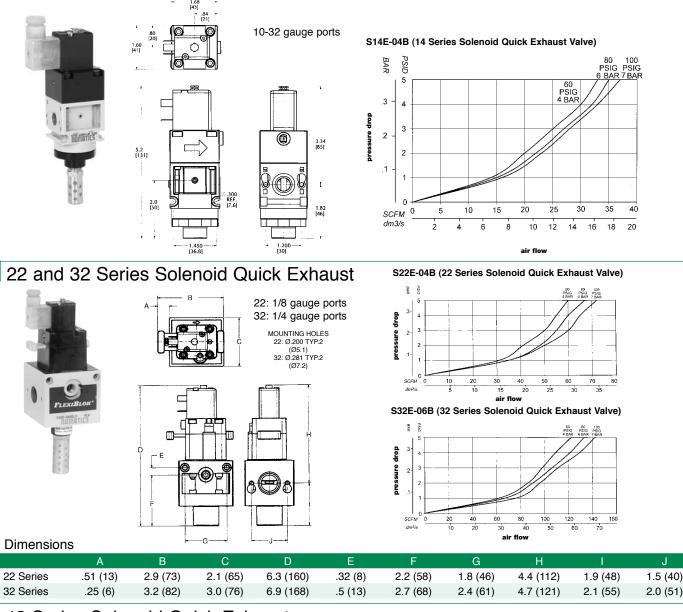
## Solenoid Quick Exhaust Valve S14E, S22E, S32E, S42E Series

- Four convenient sizes
- Lockout feature (located in slide valve) prevents unauthorized pressurization of system (22, 32, and 42 Series)
- Standard manual override (or with no manual override option)
- · Low-wattage coil prevents high-temperatures
- High exhaust capacity for quick depletion of pressure
- · High inlet to outlet flow capability
- · Connects easily to FLEXIBLOK® Modular system





## 14 Series Solenoid Quick Exhaust

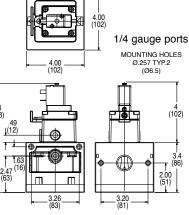


## 42 Series Solenoid Quick Exhaust

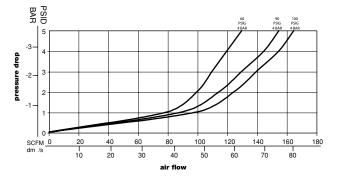
7.4 (188)



\* Muffler and plug not included



S42E-08B (42 Series Solenoid Soft Start Quick Exhaust Valve)

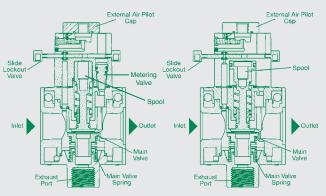


Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.





# ANSI SYMBOL



Air Piloted Soft Start Quick Exhaust Valve

Air Piloted Quick Exhaust Valve

## **Specifications**

	14 SERIES	22 SERIES	32 SERIES	42 SERIES
Exhaust Ports (NPTF)	1/4	1/2	1/2	3/4
Gauge Ports (NPTF)	10-32 UNF	1/8	1/4	1/4
Temperature Range (°F)	40-120	40-120	40-120	40-120
Temperature Range (°C)	4-50	4-50	4-50	4-50
Min. Pressure (PSI)	40	40	40	20
Min. Pressure (BAR)	2.76	2.76	2.76	1.38
MaxPressure (PSI)	150	150	150	150
Max. Pressure (BAR)	10	10	10	10
Weight, lbs. (kg.)	1.25 (0.57)	1.15 (0.53)	1.75 (0.79)	3.45 (1.56)
Body Material	Zinc	Aluminum	Aluminum	Aluminum

#### Internally/Externally Pilot Operated Quick Exhaust Valves

Pilot Operated "Soft Start" Quick Exhaust Valves External Pilot - Style "C" – Available three series S22, S32 , S42 only Pilot Operated "Soft Start" Quick Exhaust Valves Internal Pilot - Style "P" - Available three series S22, S32 , S42 only Pilot Operated "Quick Exhaust" Valves External Pilot - Style "E" - Available four series S14, S22, S32 , S42

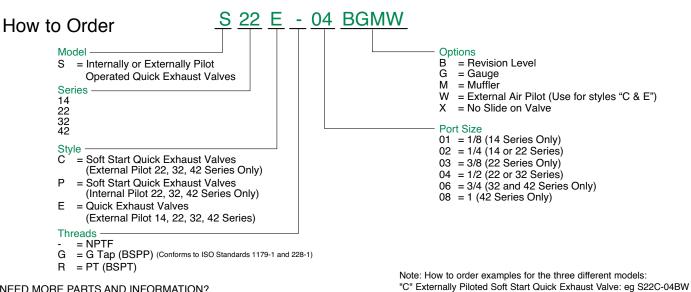
- Lockout feature (located in yellow slide valve) prevents unauthorized system pressurization. Available three series S22, S32, S42 only
- · High flow capacity Inlet to Outlet
- · High exhaust capacity for guick depletion of downstream pressure
- Connects easily to FLEXIBLOK<sup>®</sup> Modular FRL systems

Cv in-out/out-exh (14 Series, 1/8)	1.15 / 1.10
Cv in-out/out-exh (14 Series, 1/4)	1.55 / 1.10
Cv in-out/out-exh (22 Series,1/4)	2 / 1.2
Cv in-out/out-exh (22 Series, 3/8)	2.87 / 1.38
Cv in-out/out-exh (22 Series, 1/2)	3.62 / 1.32
Cv in-out/out-exh (32 Series, 1/2)	5.24 / 3.01
Cv in-out/out-exh (32 Series, 3/4)	6.47 / 3.14
Cv in-out/out-exh (42 Series, 3/4)	7.5 / 5.0
Cv in-out/out-exh (42 Series, 1)	8.0 / 5.0

"P" Internally Piloted Soft Start Quick Exhaust Valve: eg S22P-04

"E" Externally Piloted Quick Exhaust Valve: eg S22E-04BW "C & E "externally pilot operated valves are not field convertible to

solenoid operated. Consult factory.



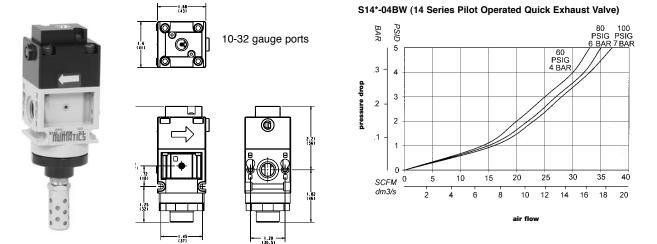
NEED MORE PARTS AND INFORMATION?

· See pages 37 & 38 for information on ordering replacement parts.

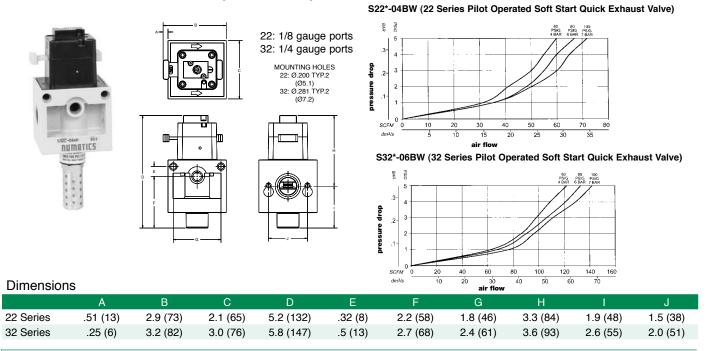




## 14 Series Internally/Externally Piloted Quick Exhaust Valve



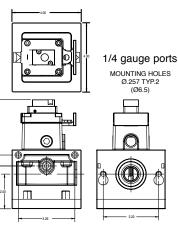
## 22 and 32 Series Internally/Externally Piloted Quick Exhaust Valve



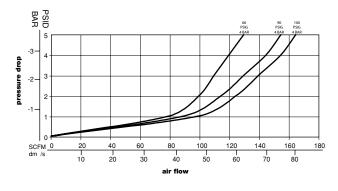
## 42 Series Internally/Externally Piloted Quick Exhaust Valve



\* Muffler not included



S42\*-08BW (42 Series Pilot Operated Soft Start Quick Exhaust Valve)







## Shut-Off Valve

VS14, VS22, VS32, VSL42 Series

The **FLEXIBLOK**<sup>®</sup> Shut-Off Valve is an easy and inexpensive way to add shut off capability to an FRL. The valve includes a lockout feature designed for a padlock to prevent unauthorized downstream pressurization during maintenance. The shut off valve is usually mounted first in the assembly.

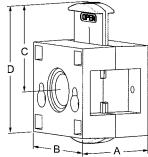
Max. inlet pressure: 200 PSI (13.7 bar) 250 PSI (17 bar) - 42 Series

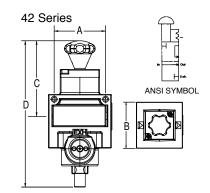
- Relieves downstream pressure when closed
- · Lockout feature prevents unauthorized pressurization of system
- Easy modular connection
- Can be used as individual component

		MODEL #S			DIMENSI	ONS		
	NPTF	BSPP	BSPT	А	В	С	D F	PORTS
14	VS14-01	VS14G01	VS14R01	1.63 (41)	1.6 (41)	1.6 (41)	3 (76)	1/8
	VS14-02	VS14G02	VS14R02	1.63 (41)	1.6 (41)	1.6 (41)	3 (76)	1/4
22	VS22-02	VS22G02	VS22R02	2.0 (50)	2.16 (55)	1.86 (47)	3.1 (79)	1/4
	VS22-03	VS22G03	VS22R03	2.0 (50)	2.16 (55)	1.86 (47)	3.1 (79)	3/8
	VS22-04	VS22G04	VS22R04	2.0 (50)	2.16 (55)	1.86 (47)	3.1 (79)	1/2
32	VS32-04	VS32G04	VS32R04	2.25 (57)	3.0 (76)	2.57 (65)	4.2 (107	) 1/2
	VS32-06	VS32G06	VS32R06	2.25 (57)	3.0 (76)	2.57 (65)	4.2 (107	) 3/4
42	VSL42-06	VSL42G06	VSL42R06	3.2 (83)	4.0 (102)	4.8 (122)	9.3 (236	) 3/4
	VSL42-08	VSL42G08	VSL42R08	3.2 (83)	4.0 (102)	4.8 (122)	9.3 (236	) 1



14, 22, 32 Series





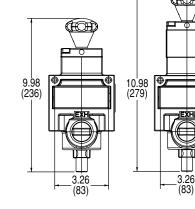
**NOTE:** Add "N" to end of model number for non-relieving model (i.e. VS14-01*N*) (Not available on 42 series models)

# Quick Exhaust Lockout Valve MVL42/MVT42 Series

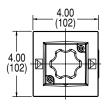
- · Rugged all metal design
- Placed last in an air preparation assembly. To be used as a system quick exhaust valve.

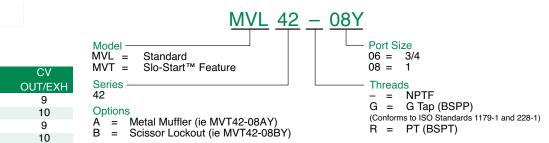
#### Specifications

Temperature Range: 40-120°F (4-50°C) Max. Pressure: 250 PSIG (17 bar) Weight: 4.95 lbs (2.25 kg)











CV

IN/OUT

11.5

12.5

11.5

12.5

**CV** Ratings

MODEL #

MVL42-06Y

MVL42-08Y

MVT42-06Y

MVT42-08Y

# numatics<sup>®</sup>

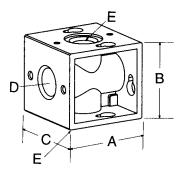
## FLEXIBLOK<sup>®</sup> FRL Series



#### Diverter Block DK14, DK22, DK32, DK42 Series

Designed to give **FLEXIBLOK**<sup>®</sup> components total versatility, the diverter block mounts directly inline with the FRL combination. Additional components can then be manifold mounted in a compact manner that doesn't cause excessive pressure drop. There are two available ports per unit; both are tapped for standard service.

## Max. inlet pressure: 200 PSI (13.7 bar) (14, 22, 32 Series) 250 PSI (17 bar) (42 Series)

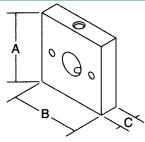


		MODEL #			DIMENS	SIONS			
SERIES	NPTF	BSPP	BSPT	А	В	С	D	Е	PORTS
14	DK14-02	DK14G02	DK14R02	1.72 (44)	1.54 (39)	1.6 (41)	1/4	1/8	Tapped 1/4 NPTF In & Out with two 1/8 NPTF branches
22	DK22-03	DK22G03	DK22R03	2.16 (55)	2.00 (50)	2.16 (55)	1/2	3/8	Tapped 1/2 NPTF in & out with two 3/8 NPTF branches
32	DK32-04	DK32G04	DK32R04	3.00 (76)	2.70 (69)	3.00 (76)	3/4	1/2	Tapped 3/4 NPTF in & out with two 1/2 NPTF branches
42	DK42-06	DK42G06	DK42R06	4.00 (102)	3.40 (87)	4.00 (102)	3/4	3/4	In & Out and branches 3/4 with two 3/4 NPTF branches
42	DK42-08	DK42G08	DK42R08	4.00 (102)	3.40 (87)	4.00 (102)	1	1	In & Out and branches 1 with two 1 NPTF branches

## **Diverter Plates**

#### HK14, HK22, HK32 Series

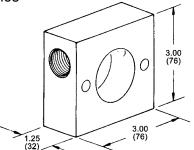
Diverter plates are designed to provide air signals in a compact space. Used individually or in combination, they can be used with gauges or switches to determine a pressure or  $\Delta$  pressure signal.



Max. inlet pressure: 200 PSI (13.7 bar)

		MODEL #		DIN	<b>MENSIONS</b>		OUTLET	
SERIES	NPTF	BSPP	BSPT	А	В	С	PORT	APPLICATION
14	HK14-01	HK14G01	HK14R01	1.54 (39)	1.50 (38)	.75 (19)	1/8	Mounts between two units
22	HK22-01	HK22G01	HK22R01	2.00 (51)	2.15 (55)	.75 (19)	1/8	Mounts between two units
32	HK32-01	HK32G01	HK32R01	3.00 (76)	3.00 (76)	.75 (19)	1/8	Mounts between two units

#### Rear-Ported End Plates MR32 Series



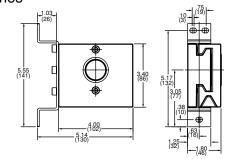
Available only in the 32 Series, the Rear-Ported End Plate allows an FRL to be mounted flush with a surface and the piping to exit the rear of the combination.

#### Max. inlet pressure: 200 PSI (13.7 bar)

#### How to Order

MODEL NUMBER	STYLE	NPTF	DESCRIPTION
MR32A	А	1/2	Left rear porting
MR32B	В	1/2	Right side rear porting
MR32AB	A/B	1/2	Both rear ported plates

# End Plates



The 42 series easy slide end plate and mounting bracket kit is a unique option allowing a full assembly to be quickly added or removed, giving the customer even greater versatility in its popular compact space.

#### Max. inlet pressure: 250 PSI (17 bar)

#### How to Order

PORT SIZE	MODEL # NPTF	BSPP	BSPT
3/4	MK42AB-06	MK42ABG06	MK42ABR06
1	MK42AB-08	MK42ABG08	MK42ABR08

Information subject to change without notice. For ordering information or regarding your local sales office visit www.numatics.com.





#### Drain Options Automatic Float Drain - 'A' Option



The Auto Float Drain is installed into the bottom of the filter bowl. As the liquid level inside the bowl increases, the tire-like float lifts, allowing the liquid to drain. This drain should not be used in applications exceeding 175 PSI.

#### MODEL FOR SERIES

AKF00 22, 32, 42 Series Autodrain only AKF02 22, 32, 42 Series (inc. drain, bushing, o-ring)

#### Flexible Drain - 'B' Option



The Flexible Drain is as easy to use as pushing the stem to one side and allowing contents to expel. A popular option due to low cost and ease of use. This drain should not be used in applications exceeding 125 PSI.

#### MODEL FOR SERIES

BKF02 14, 22, 32, 42 Series (inc. flexible rubber exterior and inner stem)

#### External Pulse Drain - 'J' Option



The External Pulse Drain is designed for use in the 12, 14 and 42 Series bowl but also works with the 22 and 32 Series. This inexpensive and reliable drain features an incorporated barbed fitting which fits 3/16 ID tubing for easy drainage of liquid and contaminant.

MODELFOR SERIESJKF0212,14, 22, 32, 42 Series<br/>(includes bushing kit)IDF-01drain only

#### Metal Manual Drain - 'Q' Option



The Metal Manual Drain is a newer drain option for the **FLEXIBLOR**<sup>®</sup> line. Simply turn the drain counter-clockwise to expel bowl contents. Standard on 50 and 70 Series.

#### MODEL FOR SERIES

QKF02 14, 22, 32, 42 Series (inc. drain, retaining clip, bushing, o-ring)

#### Manual Lever Drain - 'R' Option



The Manual Lever Drain allows for convenience and ease of use. Press down on the white lever to manually drain bowl contents. Available for all **FLEXIBLOK®** filters.

#### MODEL FOR SERIES

RKF02 14, 22, 32, 42 Series Filters (inc. drain, bushing, clip, o-ring)

# umatics



#### FLEXIBLOK<sup>®</sup> Coalescing Filter

#### Element Replacement Kits Filter/Regulators

Element Replacement Kits Filter/Regula		
includes filte	er element only	
kit #	description	
14 SERIES		
EKF12C	14 Series, 0.7 micron element	
EKF12CD	14 Series, 0.7 micron element with	
	prefilter	
EKF12D	14 Series, 0.3 micron element	
EKF12DD	14 Series, 0.3 micron element with prefilter	
EKF12E	14 Series, 0.1 micron element	
EKF12ED	14 Series, 0.1 micron element with prefilter	
EKF12F	14 Series, adsorbing element	
22 SERIES		
EKF22C	22 Series, 0.7 micron element	
EKF22CD	22 Series, 0.7 micron element with prefilter	
EKF22D	22 Series, 0.3 micron element	
EKF22DD	22 Series, 0.3 micron element with	
	prefilter	
EKF22E	22 Series, 0.1 micron element	
EKF22ED	22 Series, 0.1 micron element with	
	prefilter	
EKF22F	22 Series, adsorbing element	
32 SERIES		
EKF32C	32 Series, 0.7 micron element	
EKF32CD	32 Series, 0.7 micron element with prefilter	
EKF32D	32 Series, 0.3 micron element	
EKF32DD	32 Series, 0.3 micron element with	
	prefilter	
EKF32E	32 Series, 0.1 micron element	
EKF32ED	32 Series, 0.1 micron element with	
	prefilter	
EKF32F	32 Series, adsorbing element	
42 SERIES		
EKF42C	42 Series, .7 micron element	
EKF42CD	42 Series, .7 micron element with	
	prefilter	
EKF42D	42 Series, .3 micron element	
EKF42DD	42 Series, .3 micron element with	
	prefilter	

#### prefilter EKF42E 42 Series, .1 micron element EKF42ED 42 Series, .1 micron element with prefilter EKF42F 42 Series, adsorbing element

#### ► Bowl Replacement Kits Filter/Regulators includes bowl and o-ring

description kit #

#### 14 SERIES

BKF12 BKF12M	14 Series, polycarbonate bowl 14 Series, metal bowl
22 SERIES BKF22 BKF22C BKF22M	22 Series, polycarbonate bowl 22 Series, CircleVision™ bowl 22 Series, metal bowl
32 SERIES BKF32 BKF32C BKF32M	32 Series, polycarbonate bowl 32 Series, CircleVision™ bowl 32 Series, metal bowl

#### 42 SERIES

BKF32 32 Series, polycarbonate bowl BKF32C 32 Series, CircleVision™ bowl BKF32M 32 Series, metal bowl To order the bowl replacement kit with a drain, specify the drain suffix in the kit number (keeping suffixes in alphabetical order). For example, to order an flexible drain with a BKF12 kit, order as **BKF12B**. To order an external pulse drain with a BKF12M kit, order as BKF12JM. Drain suffixes are as follows: B=flexible drain, J=external pulse drain, Q=metal manual drain, R=manual lever drain. See page 34 for additional drain option information.

#### **FLEXIBLOK<sup>®</sup> FRL Series**

#### Bowl Replacement Kits Lubricated includes bowl and o-ring description kit # BKL12 14 Series, polycarbonate bowl BKL12M 14 Series, metal bowl BKL22 22 Series, polycarbonate bowl BKL22C 22 Series, CircleVision<sup>™</sup> bowl BKL22M 22 Series, metal bowl 32 Series, polycarbonate bowl BKL32 BKL32C 32 Series, CircleVision™ bowl BKL32M 32 Series, metal bowl To order the bowl replacement kit with a drain or buttonhead fill, specify the appropriate suffix in the kit number (keeping

suffixes in alphabetical order). For example, to order a drain with a BKL12 kit, order as BKF12K. To order a buttonhead fill with a BKL22M kit, order as BKL22FM. Drain suffixes are as follows: F=buttonhead fill, K=drain.

#### ➤ Replacement Drain Kits

kit #	description
AKF02	auto float drain kit (inc. drain,
	bushing, clip, o-ring)
BKF02	flexible drain (includes drain ass'y)
DKF02	standard drain (inc. drain ass'y)
QKF02	metal manual drain (inc. drain,
	bushing, clip, o-ring)
JKF02	external pulse drain (inc. drain,
	bushing, clip, o-ring)
RKF02	manual lever drain (inc. drain,
	bushing, clip, o-ring)

#### FLEXIBLOR<sup>®</sup> Particulate Filter

#### ➤ Element Replacement Kits Filter/Regulators includes filter element only

kit #	description
EKF12B	14 Series, 5 micron element
EKF22B	22 Series, 5 micron element
EKF32B	32 Series, 5 micron element
EKF42B	42 Series, 5 micron element

#### ➤ Filter Repair Kits

includes Turbo-Flo, element retainer, quiet zone baffle, deflector retainer kit # description

KIT #	description
RKF12B	14 Series, 5 micron element
RKF22B	22 Series, 5 micron element
RKF32B	32 Series, 5 micron element
RKF42B	42 Series, 5 micron element

#### FLEXIBLOK<sup>®</sup> Coalescing Filter

#### ► DPI Replacement Kits

includes DPI assembly		
kit #	description	
UK600	14 Series DPI replacement kit	
DP122	22 Series DPI replacement kit	
DP132	32 Series DPI replacement kit	
DPI42	42 Series, DPI replacement kit	

#### FLEXIBLOK<sup>®</sup> Regulator - Filter-Regulator

#### Regulator Repair Cage Kits Filter/Regulators

includes bonnet with main spring (0-125 psi), adjusting screw and adjusting knob

aujusting	screw and auju
kit #	description
RKC14	14 Series
RKC22	22 Series
RKC32	32 Series
RKC42	42 Series

#### Diaphragm Repair Kits

F

F

F

F

F

F

F

F

k

#### includes diaphragm, inner valve assembly and inner valve spring

cit #	description
RKR12R	14 Series, relieving kit
RKR22R	22 Series, relieving kit
RKR32R	32 Series, relieving kit
RKR42R	42 Series, relieving kit
RKR12N	14 Series, non-relieving kit
RKR22N	22 Series, non-relieving kit
RKR32N	32 Series, non-relieving kit
RKR42N	42 Series, non-relieving kit

#### ➤ Piston Repair Kits

includes piston assembly, inner valve assembly and inner valve spring

kit #	description
PKR14R	14 Series, relieving kit
PKR22R	22 Series, relieving kit
PKR32R	32 Series, relieving kit
PKR42R	42 Series, relieving kit
PKR14N	14 Series, non-relieving kit
PKR22N	22 Series, non-relieving kit
PKR32N	32 Series, non-relieving kit
PKR42N	42 Series, relieving kit

#### Replacement Adjustment Knob Kits

#### includes adjustment knob only

kit #	description
R12-03	14 Series, adjustment knob
R22-03B	22 Series, adjustment knob
R32-03	32 Series, adjustment knob
R32-03	42 Series, adjustment knob

#### FLEXIBLOK<sup>®</sup> Pilot Operated Regulators

#### > Diaphragm Repair Kits

includes upper & lower diaphragm, inner valve assembly and inner valve spring

-	
kit #	description
RKW22	22 Series, relieving kit
RKW32	32 Series, relieving kit
RKW42	42 Series, relieving kit
RKW22N	22 Series, non-relieving kit
RKW32N	32 Series, non-relieving kit
RKW42N	42 Series, non-relieving kit

#### FLEXIBLOK<sup>®</sup> Lubricator

#### Lubricator Dome Repair Kits

includes adjustment knob and adjustment assembly

kit #	description
RKL12T	14 Series, lub. dome repair kit or
	22 Series, lub. dome repair kit or
	32 Series, lub. dome repair kit
	42 Series, lub. dome repair kit

#### Replacement Adjustment Knob Kits

#### includes adjustment knob only

kit #

kit #	description
L32-06	14 Series, adjustment knob or
	22 Series, adjustment knob or
	32 Series, adjustment knob



#### FLEXIBLOK<sup>®</sup> Shut-Off Valve

#### ► Shut-Off Valve Repair Kits

## includes slide and 2 o-rings

KIT #	description
RKSV14	14 Series, shut-off valve repair kit
RKSV22	22 Series, shut-off valve repair kit
RKSV32	32 Series, shut-off valve repair kit

#### ➤ Mounting Brackets

#### includes bracket and panel nut

kit #	description
PK12	14 Series mounting bracket
PK22	22Series mounting bracket
PK32	32 Series mounting bracket

#### FLEXIBLOK<sup>®</sup> Sol. Soft Start Quick Exhaust

#### ► Solenoid Replacement Kits includes coil only (fits 22 or 32 Series)

NOTE: Numatics FRL does not recommend the

disassembly of a solenoid soft start unit outside of our factory.

#### kit # description

S32-44A	110V (22 or 32 Series)
S32-45A	230V (22 or 32 Series)
S32-46A	24V AC (22 or 32 Series)
S32-43A	24V DC (22 or 32 Series)

#### FLEXIBLOK<sup>®</sup> Screws & O-Rings

#### ► Screw & O-Ring Replacement Kits

kit #	description
KG14	14 Series, inc. 2 screws, 1 o-ring
	(M4 x 12mm)
KGB14	14 Series bulk pack, inc. 100
	screws, 50 o-rings (M4 x 12mm)
KG22	22 Series, inc. 2 screws, 1 o-ring
	(M5 x 12mm)
KGB22	22 Series bulk pack, inc. 100
	screws, 50 o-rings (M5 x 12mm)
KG32	32 Series, inc. 2 screws, 1 o-ring
	(M6 x 16mm)
KGB32	32 Series bulk pack, inc. 100
	screws, 50 o-rings (M6 x 16mm)►
KG42	42 Series, inc. 2 screws, 1 o-ring
	(M8 x 1.25)
KGB42	42 Series bulk pack, inc. 100
	screws, 50 o-rings (M8 x 1.25)

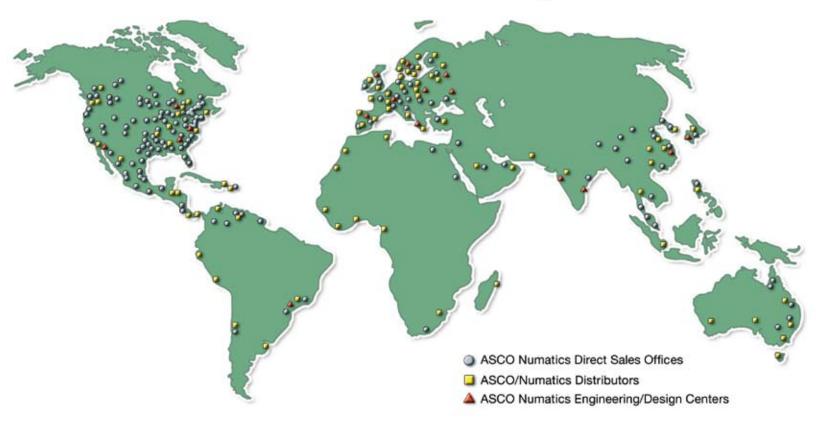


**FLEXIBLOK®** FRL Series





# World Class Supplier of Pneumatic Components



## **WORLD HEADQUARTERS**

USA Numatics, Incorporated

46280 Dylan Drive Novi, Michigan 48377

P: 1-888-Numatics 1-888-686-2842

#### Canada Numatics, Ltd

P: 519-452-1777

Mexico Numatics de Mexico S.A. de C.V. P: 52-222-284-6176

For a comprehensive listing of all Numatics production and distribution facilities worldwide, visit:

www.numatics.com