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climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Parker Global Air Preparation System

A complete air preparation system

Catalogue 0750-UK April 2011



ENGINEERING YOUR SUCCESS.



DECLARATION OF COMPLIANCE (ROHS)

European Directive 2002/95/EC - RoHS (Restriction of use of certain Hazardous Substances in electrical and electronic equipment), restricts the use of the 6 substances below in the manufacture of specified electrical equipment.

Substance	Concentration
LEAD:	Product containing lead and its compounds (except for application of lead as an alloying element by weight in steel up to 0.35%, in aluminium up to 0.4% and in copper alloys up to 4% and in Circuit Board solder) must not exceed 0.1% by weight.
MERCURY:	The concentration level must not exceed 0.1% by weight.
CADMIUM:	The concentration level must not exceed 0.01% by weight.
HEXAVALENT CHROMIUM:	This is a corrosive protective finish used on our product line. Were this finish is utilised the Chromate solution is Hexavalent (Chrome 6) free.
POLYBROMINATED BIPHENYLS (PBB):	The concentration level must not exceed 0.1% by weight. This substance is not known to be in any of our products.
POLYBROMINATED DIPHENYL ETHERS (PBDE):	The concentration level must not exceed 0.1% by weight. This substance is not known to be in any of our products.

This information applies to product sold on or after 1st July 2006



WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met. The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

SALE CONDITIONS

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered into by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).

Introduction	4-13
Combos	
P31 Mini Series	15
P32 Compact Series	16
P33 Standard Series	17
Filters	
P31 Mini Series	18-19
P32 Compact Series	20-21
P33 Standard Series	22-23
Coalescing & Adsorber Filters	
P31 Mini Series	24-25
P32 Compact Series	26-27
P33 Standard Series	28-29
Regulators	
P31 Mini Series	30-31
P31 Mini Common Port Regulator.....	32-33
P32 Compact Series	34-35
P32 Compact Common Port Regulator.....	36-37
P33 Standard Series	38-39
Filter / Regulators	
P31 Mini Series	40-41
P32 Compact Series	42-42
P33 Standard Series	44-45
Lubricators	
P31 Mini Series	46-47
P32 Compact Series	48-49
P33 Standard Series	50-51
Proportional Regulators	
P31 Mini Series & P32 Compact Series.....	52-61
Combined Soft Start Dump Valve and Remote Operated Dump Valve	62-63
Remote Operated Dump Valve	64-65
Soft Start Dump Valve	66-67
Solenoid Operators.....	68-69
Safety Lockout Valve	70
Modular Ball Valve	71
Manifold Blocks.....	72
Accessories	
P31 Mini Series	73
P32 Compact Series	74
P33 Standard Series	75
Accessories Kits.....	76-78



Parker Global Air Preparation System

Global.
Economical.
Modular.



*Performance you need,
 wherever you need it.*

The comprehensive Global Air Preparation System is available in three body sizes with either BSPP or NPT to accommodate thread type requirements.

Full featured filters, regulators, filter/regulators, and lubricators are available with a wide range of standard options to meet air preparation needs.

Individual units can easily be assembled into various combinations, utilizing patented modular lightweight body connectors.

www.parker.com/globalfri

Comprehensive Offering



P31 Mini Series
1/4" ports
40mm body width



P32 Compact Series
1/4", 3/8" and 1/2"
60mm body width



P33 Standard Series
1/2" and 3/4"
73mm body width



Filters

- 5 μ particulate, 1.0 μ and 0.01 μ coalescing, and adsorber available as standard
- Transparent or metal bowl with manual or auto float drains standard



Regulators

- Available as stand alone, common port and electronic proportional
- Both relieving and non-relieving versions available



Filter/Regulators

- Compact design for space savings
- Available with all the same standard options as the filters and regulators



Lubricators

- Proportional oil delivery over a wide range of air flows
- Fill under pressure



Combinations

- Compact design for space savings
- Easily assembled
- Many configurations available



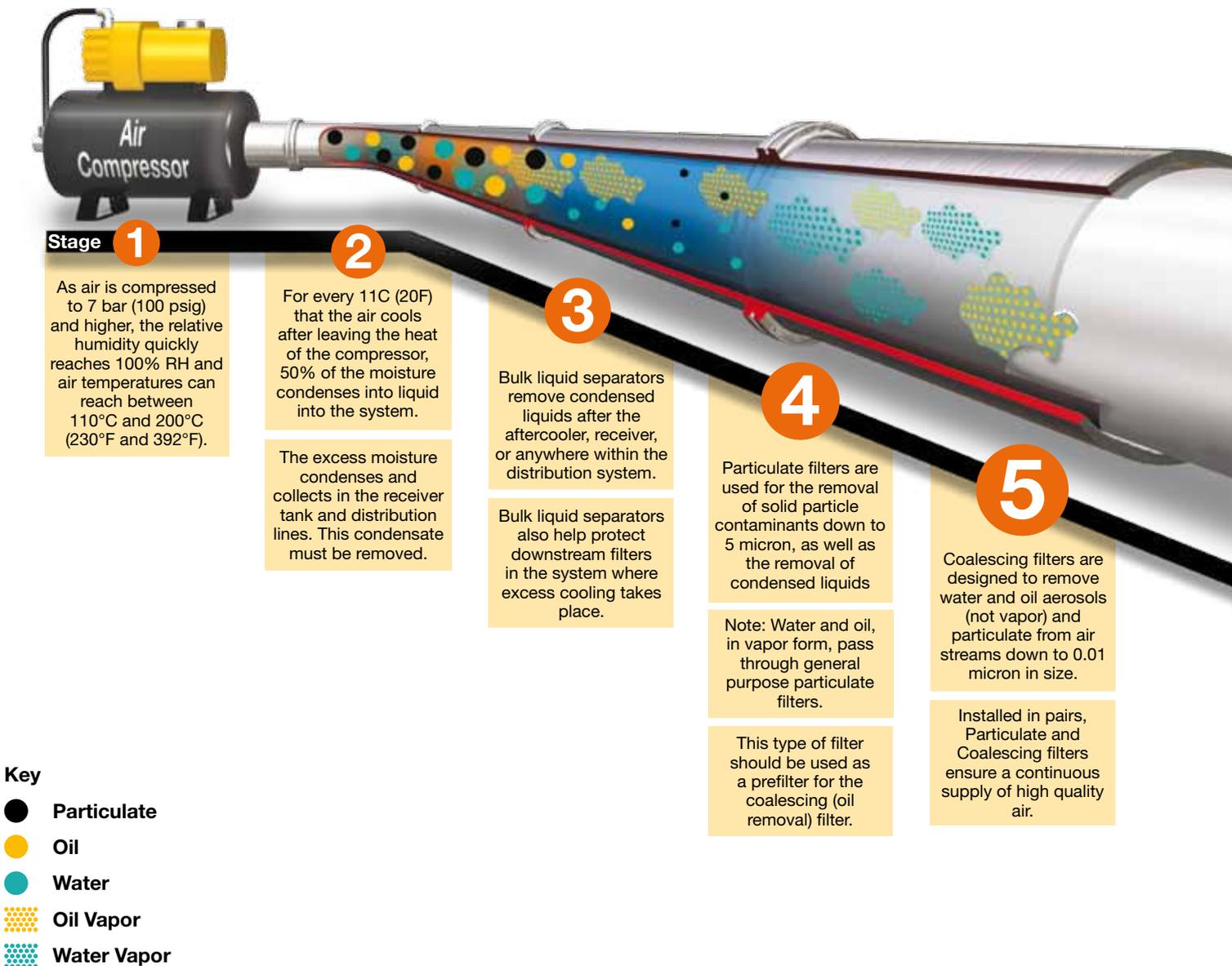
Accessories

- Solenoid operated soft start, quick dump, and soft start/quick dump valves
- Manifold blocks
- Shut-off slide valves
- Service kits, gauges, etc.

Together we can power your application with clean, dry air

Fast cycle times, high product quality, and low downtime all require a clean, dry pneumatic system to function properly. Parker has what it takes to make sure pneumatic systems perform at their best.

Clean, dry pneumatic systems with Parker Global Air Preparation



						
Stages	1 2	3	4	5	6	7
Function	Air Compressor	Bulk Liquid Removal	Particulate Filtration	Coalescing Filtration	Air Dryers	Hydrocarbon Removal
Application	All pneumatic systems	Basic pneumatic systems	Basic pneumatic systems	Systems requiring highest quality air.	Systems requiring air with reduced moisture content	Systems requiring highest quality air for critical applications
Description	Air leaving the compressor room at 93°C (200°F) releases 95% of its moisture into the piping system when it cools to 38°C (100°F)	Removes bulk liquid contamination and protects filters where excess cooling takes place in the distribution piping	Removes solid particulates down to 5 micron, and the separation of bulk contaminants.	Removes liquid aerosols and submicron particulates (not vapor) down to 0.01 micron.	Removes water vapor from air stream. Dew point reduced down to -40°C membrane and -70°C desiccant.	Removal of odors and trace vapors for critical applications.
Parker Global Air Preparation Solution	Customer supplied	P3TF Bulk Liquid Separator	P31, P32, P33 Particulate Filter	P31, P32, P33 Coalescing Filter	P3XJ Membrane Dryer P3TJ Regenerative Desiccant Dryer	P31, P32, P33 Activated Carbon (Adsorber) Filter



6

Refrigeration, membrane and desiccant dryers lower the air's dew point by removing water vapor, providing appropriately dry air for the downstream application.

7

Hydrocarbon and oil vapors are removed using filters utilizing activated carbon. These airborne hydrocarbons are often left over from the compressor oils.

A completely modular air preparation system



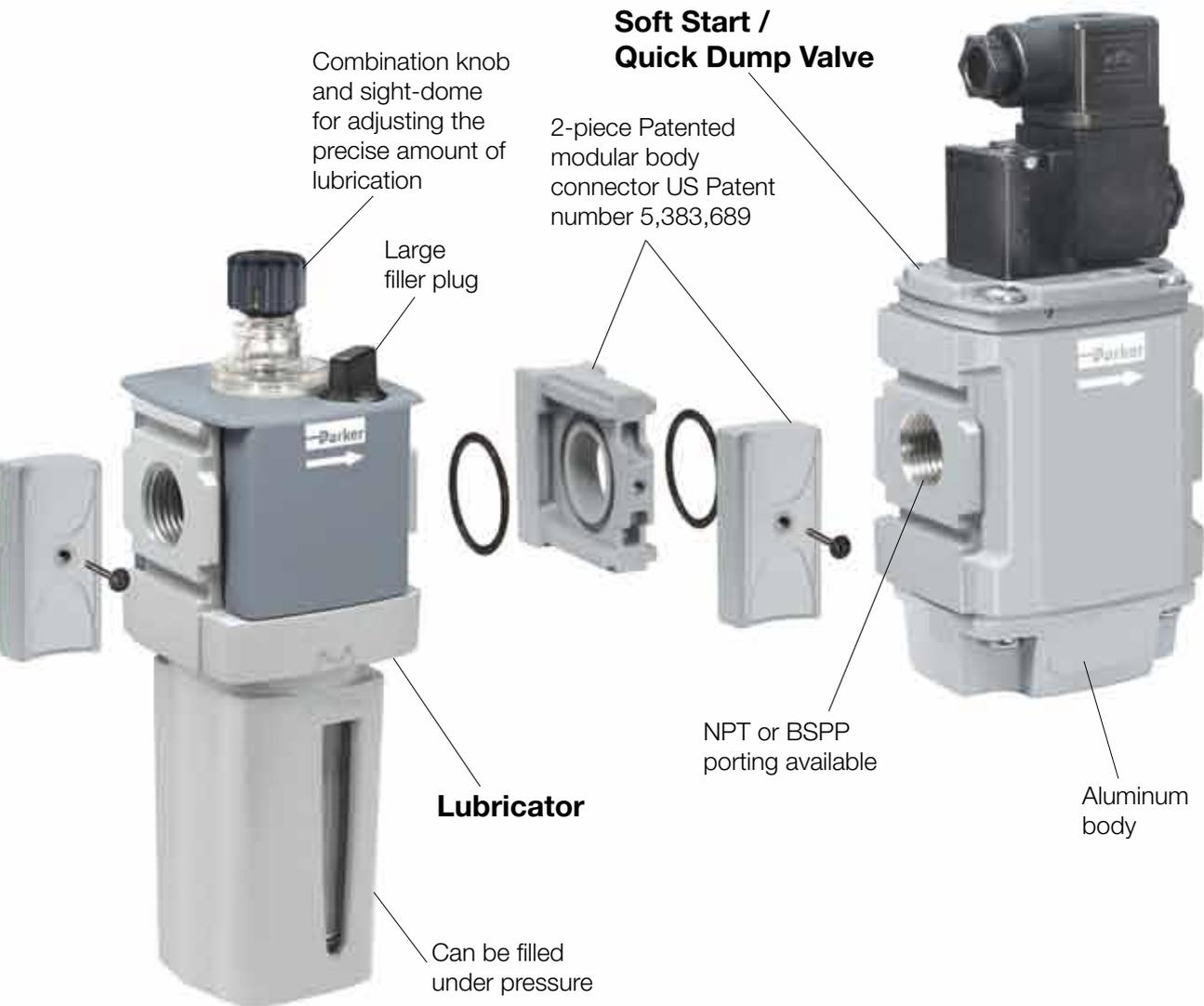
Electronic Proportional Regulator

- Electro-Pneumatic regulator
- Integrated systems control
- Accurate output pressure
- Micro parameter settings
- Selectable I/O parameters
- Quick, full flow exhaust
- LED display indicates output pressure
- No air consumption in steady state
- Multiple mounting options
- Protection to IP65



P31P Mini Series

P32P Compact Series



Common Port Manifold Regulators

- Multiple output pressures (P2, P3, P4, etc.) with common inlet (P1)
- Available in two sizes P31 and P32
- Balanced valve design for accurate pressure regulation
- Outlet pressure ports in front and rear of unit.
- Four spring ranges available



Air Preparation

P31 Mini Series

40mm body width
1/4" Ported

Flows up to:	dm ³ /s	(SCFM)
Filter	12	(25)
Coalescer	2	(4.2)
Regulator	30	(64)
Filter/Regulator	14	(30)
Lubricator	13	(28)

Features:

- Space saving integral gauge
- Manifold style regulators available
- OSHA compliant shut-off valves
- Soft-Start & Quick Dump valves
- Electronic Proportional Regulator



P32 Compact Series

60mm body width
1/4", 3/8", & 1/2" Ported

Flows up to:	dm ³ /s	(SCFM)
Filter	38	(80)
Coalescer	11	(23)
Regulator	67	(142)
Filter/Regulator	64	(136)
Lubricator	47	(100)

Features:

- Manifold style regulators available
- OSHA Compliant shut-off valves
- Soft-Start & Quick Dump valves
- Electronic Proportional Regulator



P33 Standard Series

73mm body width
1/2" & 3/4" Ported

Flows up to:	dm ³ /s	(SCFM)
Filter	48	(102)
Coalescer	20	(42)
Regulator	100	(212)
Filter/Regulator	98	(208)
Lubricator	68	(144)

Features:

- OSHA Compliant shut-off valves
- Soft-Start & Quick Dump valves
(Utilizes P32 size only)
- Electronic proportional regulator
(Utilizes P32 size only)



Valves and Actuators

Mini Series Complimentary Products

The P31 Mini Series FRL's and accessories are well matched for use with these Parker valves and actuators.



Isys Micro



Moduflex Size 1



OSP-P



P1D



P1A

Compact Series Complimentary Products

The P32 Series FRL's & accessories are well matched for use with these Parker valves and actuators.



Isys Micro



Isys HA / HB



P1D



OSP-P

Standard Series Complimentary Products

The P33 Series FRL's & accessories are well matched for use with these Parker valves and actuators.



Isys Size 1



Isys HA / HB



P1D



OSP-P

Complete Pneumatic System

Pressure Regulation

Accurate pressure regulation is important to control forces, speeds, torque, dispensing, processes, etc. Parker has a global solution to pressure regulation needs, with support around the world.

			
Function	Single	Common Port Manifold	Electronic Proportional
Description	For pneumatic systems requiring single pressure regulation.	For pneumatic systems requiring multiple pressures for different parts of the system, yet still having a common inlet supply.	For pneumatic systems requiring an electronic to pneumatic proportional control signal. Also allows pressure regulation to be integrated into your control systems.
Parker Global Air Preparation Solution	P31R, P32R, P33R	P31H, P32H	P31P, P32P fits Compact & Standard

Accessories

Today's sophisticated pneumatic systems need more than just FRL's. Often times peripheral accessory products are needed to complete pneumatic systems. Parker has what is needed to ensure safe and reliable start-ups, shut-downs, and lockouts, etc.

					
	Slide Valve	Soft Start / Quick Dump	Soft Start	Quick Dump	Manifold Block
Soft Start Function					
Quick Dump Function	Slow Exhaust				
Operation	Manual Slide	Solenoid or Air Pilot	Solenoid, Air Pilot, or Internal Air Pilot	Solenoid or Air Pilot	N/A
Placement	Before or after FRL, or stand alone	After FRL	After FRL	After FRL	Anywhere within FRL or stand alone
Parker Global Air Preparation Solution	P31V, P32V, P33V	P31T Mini, P32T fits Compact & Standard	P31S Mini, P32S fits Compact & Standard	P31D Mini, P32D fits Compact & Standard	P31M Mini, P33M fits Compact & Standard

Application Guide

FRL to Valve: The chart below contains recommendations for the correct selection of Global Air Preparation units to suit the number and size of valves in a typical application.

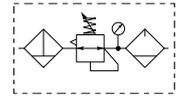
	P31 Mini Series 					P32 Compact Series 						P33 Standard Series 				
	Number of valves that would actuate at once															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Moduflex 1	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Pink	Pink	Pink	Pink
Isys Micro	Yellow	Yellow	Yellow	Yellow	Green	Green	Green	Green	Green	Green	Green	Pink	Pink	Pink	Pink	Pink
HB / Viking Xtreme	Yellow	Yellow	Yellow	Green	Green	Green	Green	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink
Moduflex 2	Yellow	Yellow	Green	Green	Green	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink
HA / Global ISO	Yellow	Green	Green	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink	Pink
See Larger Parker FRL Offering																

Actuator to FRL: The chart below contains recommendations for the correct selection of Global Air Preparation units suitable for each cylinder size. If you have a tube length over 2 m, choose one tube size larger than the chart. The table is based on a maximum cylinder speed of 0.5m/s

Cyl Ø mm Cyl Ø inches		Cylinder bore size															
		5 (5/16)	10 (7/16)	16 (9/16)	20 (3/4)	25 (1)	28 (1-1/8)	32 (1-1/4)	40 (1-1/2)	45 (1-3/4)	50 (2)	63 (2-1/2)	75 (3)	80 (3-1/4)	100 (4)		
Tube Ø mm Tube Ø inches		Tube diameter external															
		4 (5/32)	4 (5/32)	4 (5/32)	6 (1/4)	6 (1/4)	6 (1/4)	6 (1/4)	8 (5/16)	8 (5/16)	8 (5/16)	10 (3/8)	10 (3/8)	12 (1/2)	12 (1/2)		
Number of cylinders actuating at once	1	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	2	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	3	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	4	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	5	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	6	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	7	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	8	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	9	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
	10	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
		P31 Mini Series 					P32 Compact Series 					P33 Standard Series 					See Larger Parker FRL Offering

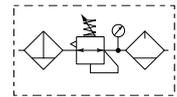
Note: Data listed above is simply a guideline for a typical application only. Proper sizing and correct flow requirements must be taken into account.

Popular Combinations : Inlet pressure 10 bar, Secondary pressure 6.3 bar, 1 bar pressure drop.



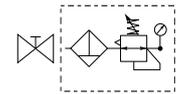
**Filter + Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s (scfm)		Manual Drain	Weight	Pulse Drain	Weight
1/4"	13	27	P31CB12GEMNTLNW	0.46 kg (1.01 lbs)	P31CB12GEBNTLNW	0.46 kg (1.01 lbs)



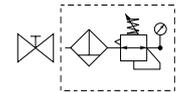
**Filter/Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s (scfm)		Manual Drain	Weight	Pulse Drain	Weight
1/4"	14	28	P31CA12GEMNTLNW	0.35 kg (0.77 lbs)	P31CA12GEBNTLNW	0.35 kg (0.77 lbs)



**Slide Valve + Filter/Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s (scfm)		Manual Drain	Weight	Pulse Drain	Weight
1/4"	14	28	P31YA12GEMNTLNW	0.54 kg (1.19 lbs)	P31YA12GEBNTLNW	0.54 kg (1.19 lbs)



**Slide Valve + Filter/Regulator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s (scfm)		Manual Drain	Weight	Pulse Drain	Weight
1/4"	14	28	P31YN12GEMNTW	0.4 kg (0.88 lbs)	P31YN12GEBNTW	0.4 kg (0.88 lbs)

P 3 1					E		N		LN	W
Combination		Thread type		Port size		Drain type		Adjustment range		Add only for options with Lubricator
Combination C		BSPP 1		1/4 2		Manual drain M		With square gauge		
Shut off + Combi ¹ Y		NPT 9				Pulse drain B		2 bar * V		
								4 bar S		
								8 bar ** T		
Combination type		Bowl type								
F/R+L A		Poly bowl with bowl guard G								
F+R+L B		Metal bowl without sight glass M								
F/R N										

Note: All bowl types are the same for each component

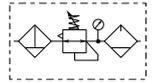
Example: If a "G" is specified for a F+L, both units would get a poly bowl with bowl guard.

* Unit comes with 0-4 bar, gauge respectively

** Unit comes with 0-10 bar, gauge respectively

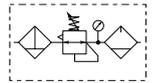
¹ Option not available with F+R+L

Popular Combinations : Inlet pressure 10 bar, Secondary pressure 6.3 bar, 1 bar pressure drop.



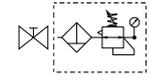
**Filter + Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow		Manual Drain	Weight	Auto Drain	Weight
	dm ³ /s	(scfm)				
1/4"	20	42	P32CB12GEMNGLNW	1.29 kg (2.84 lbs)	P32CB12GEANGLNW	1.29 kg (2.84 lbs)
3/8"	32	68	P32CB13GEMNGLNW	1.29 kg (2.84 lbs)	P32CB13GEANGLNW	1.29 kg (2.84 lbs)
1/2"	40	85	P32CB14GEMNGLNW	1.29 kg (2.84 lbs)	P32CB14GEANGLNW	1.29 kg (2.84 lbs)



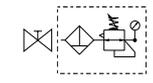
**Filter/Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow		Manual Drain	Weight	Auto Drain	Weight
	dm ³ /s	(scfm)				
1/4"	22	45	P32CA12GEMNGLNW	1.03 kg (2.27 lbs)	P32CA12GEANGLNW	1.03 kg (2.27 lbs)
3/8"	33	70	P32CA13GEMNGLNW	1.03 kg (2.27 lbs)	P32CA13GEANGLNW	1.03 kg (2.27 lbs)
1/2"	43	90	P32CA14GEMNGLNW	1.03 kg (2.27 lbs)	P32CA14GEANGLNW	1.03 kg (2.27 lbs)



**Slide Valve + Filter/Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow		Manual Drain	Weight	Auto Drain	Weight
	dm ³ /s	(scfm)				
1/4"	22	45	P32YA12GEMNGLNW	1.5 kg (3.3 lbs)	P32YA12GEANGLNW	1.5 kg (3.3 lbs)
3/8"	33	70	P32YA13GEMNGLNW	1.5 kg (3.3 lbs)	P32YA13GEANGLNW	1.5 kg (3.3 lbs)
1/2"	43	90	P32YA14GEMNGLNW	1.5 kg (3.3 lbs)	P32YA14GEANGLNW	1.5 kg (3.3 lbs)



**Slide Valve + Filter/Regulator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

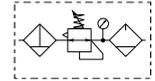
Port size	Flow		Manual Drain	Weight	Auto Drain	Weight
	dm ³ /s	(scfm)				
1/4"	22	45	P32YN12GEMNGW	1.1 kg (2.42 lbs)	P32YN12GEANGW	1.1 kg (2.42 lbs)
3/8"	33	70	P32YN13GEMNGW	1.1 kg (2.42 lbs)	P32YN13GEANGW	1.1 kg (2.42 lbs)
1/2"	43	90	P32YN14GEMNGW	1.1 kg (2.42 lbs)	P32YN14GEANGW	1.1 kg (2.42 lbs)

P 3 2					E		N		L N	W
Combination		Thread type		Port size		Drain type		Adjustment range		Add only for options with Lubricator
Combination C		BSPP 1		1/4 2		Auto drain A		With round gauge		
Shut off + Combination ¹ Y		NPT 9		3/8 3		Manual drain M		0-2 bar; 0-30 psi; 0.2 MPa Z		
				1/2 4				4 bar; 60 psi; 0.4 MPa M		
								8 bar; 125 psi; 0.8 MPa G		
Combination type		Bowl type		Note: All bowl types are the same for each component						
F/R+L A		Poly bowl with bowl guard G		Example: If a "G" is specified for a F+L, both units would get a poly bowl with bowl guard.						
F+R+L B		Metal bowl with sight glass S								
F/R N										

¹ Option not available with F+R+L

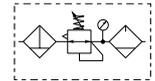


Popular Combinations : Inlet pressure 10 bar, Secondary pressure 6.3 bar, 1 bar pressure drop.



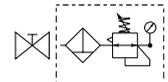
**Filter + Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s	Flow (scfm)	Manual Drain	Weight	Auto Drain	Weight
1/2"	43	90	P33CB14GEMNGLNW	1.84 kg (4.06 lbs)	P33CB14GEANGLNW	1.84 kg (4.06 lbs)
3/4"	52	110	P33CB16GEMNGLNW	1.84 kg (4.06 lbs)	P33CB16GEANGLNW	1.84 kg (4.06 lbs)



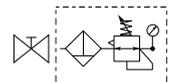
**Filter/Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s	Flow (scfm)	Manual Drain	Weight	Auto Drain	Weight
1/2"	52	110	P33CA14GEMNGLNW	1.51 kg (3.33 lbs)	P33CA14GEANGLNW	1.51 kg (3.33 lbs)
3/4"	71	150	P33CA16GEMNGLNW	1.51 kg (3.33 lbs)	P33CA16GEANGLNW	1.51 kg (3.33 lbs)



**Slide Valve + Filter/Regulator + Lubricator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s	Flow (scfm)	Manual Drain	Weight	Auto Drain	Weight
1/2"	52	110	P33YA14GEMNGLNW	2.35 kg (5.2 lbs)	P33YA14GEANGLNW	2.35 kg (5.2 lbs)
3/4"	71	150	P33YA16GEMNGLNW	2.35 kg (5.2 lbs)	P33YA16GEANGLNW	2.35 kg (5.2 lbs)



**Slide Valve + Filter/Regulator Combinations + Poly bowl
5 micron element, 8 bar Regulator + Gauge and Wall Mounting Brackets**

Port size	Flow dm ³ /s	Flow (scfm)	Manual Drain	Weight	Auto Drain	Weight
1/2"	52	110	P33YN14GEMNGW	1.7 kg (3.75 lbs)	P33YN14GEANGW	1.7 kg (3.75 lbs)
3/4"	71	150	P33YN16GEMNGW	1.7 kg (3.75 lbs)	P33YN16GEANGW	1.7 kg (3.75 lbs)

P 3 3					E		N		L N	W
--------------	--	--	--	--	----------	--	----------	--	------------	----------

Combination

Combination	C
Shut off + Combination ¹	Y

¹ Option not available with F+R+L

Thread type

BSPP	1
NPT	9

Port size

1/2	4
3/4	6

Drain type

Auto drain	A
Manual drain	M

Adjustment range

With round gauge	
0-2 bar; 0-30 psi; 0.2 MPa	Z
4 bar; 60 psi; 0.4 MPa	M
8 bar; 125 psi; 0.8 MPa	G

Add only for options with Lubricator

Combination type	
F/R+L	A
F+R+L	B
F/R	N

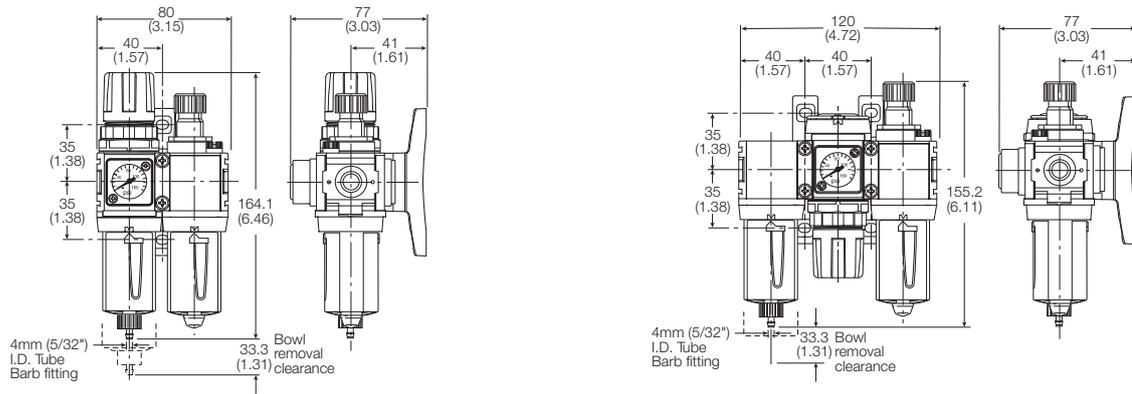
Bowl type	
Poly bowl with bowl guard	G
Metal bowl with sight glass	S

Note: All bowl types are the same for each component

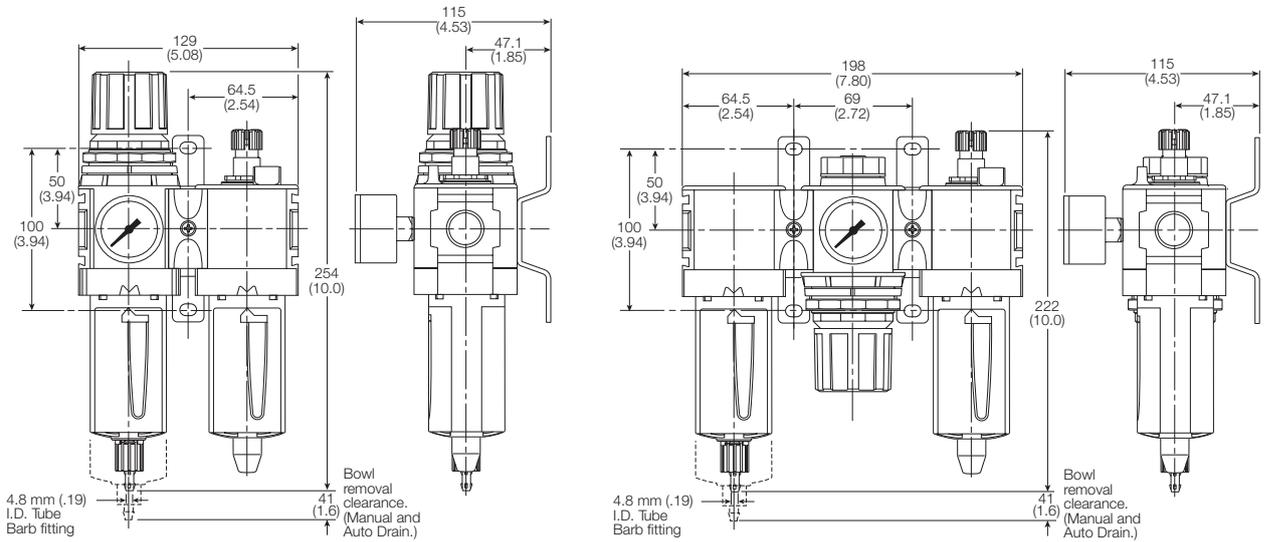
Example: If a "G" is specified for a F+L, both units would get a poly bowl with bowl guard.

Popular Combination Dimensions - mm (inches)

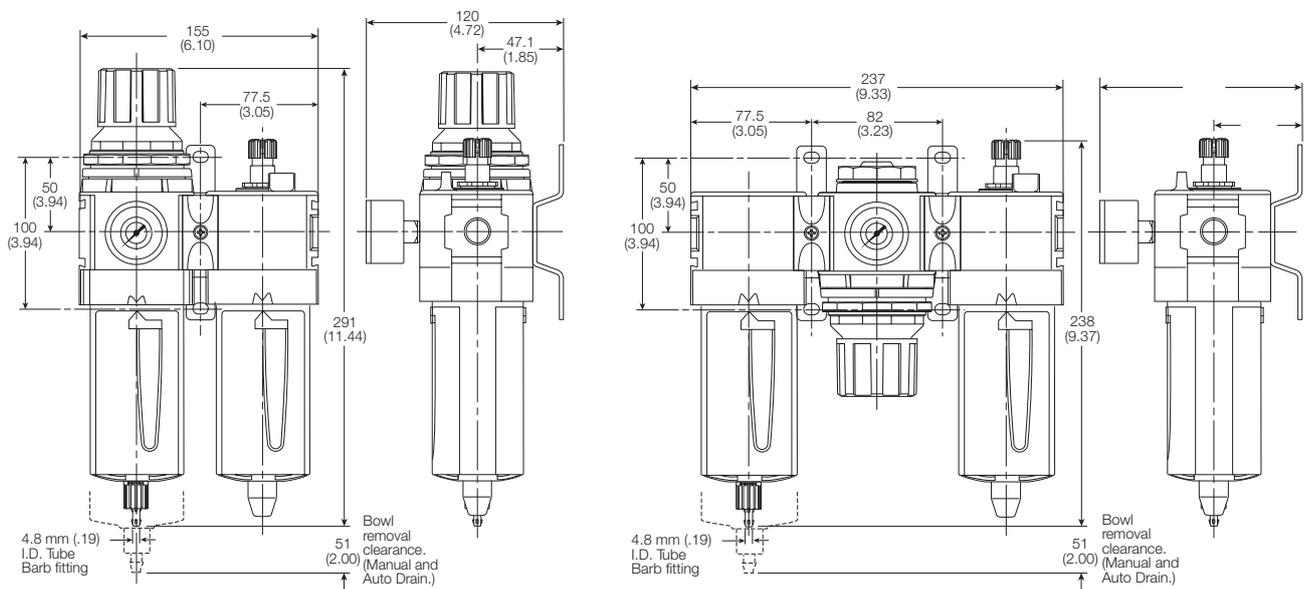
P31



P32



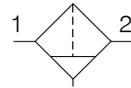
P33



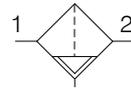
Mini Particulate Filter P31



Symbols



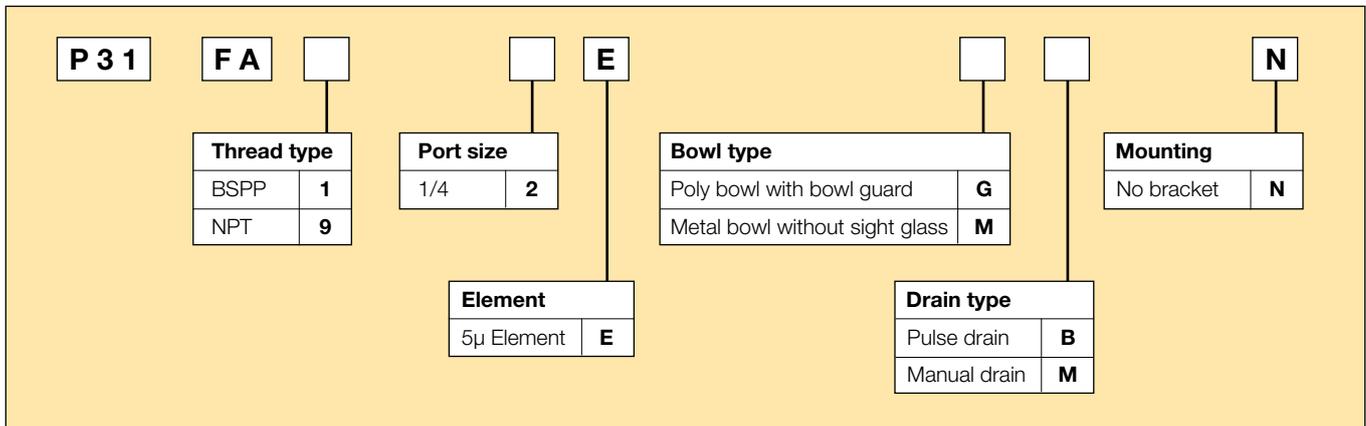
Manual drain



Pulse drain

- Integral 1/4 ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- One hand operation for easy element cartridge removal
- Positive bayonet latch to ensure correct & safe fitting

Options:



Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	Poly bowl - Manual drain	P31FA12EGMN	12 (25)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Poly bowl - Pulse drain	P31FA12EGBN	12 (25)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - Manual drain	P31FA12EMMN	12 (25)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - Pulse drain	P31FA12EMBN	12 (25)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

Specifications

Flow Capacity	1/4	12 dm ³ /s (25 scfm)
Operating Temperature	Plastic Bowl	-10°C (14°F) to 52°C (125°F)
	Metal Bowl	-10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration		5 Micron
Useful Retention		12 cm ³ (0.4 US oz.)
Port Size	BSPP / NPT	1/4
Weight		0.11 kg (0.24 lbs)

* Inlet pressure 6.3 bar (91.3 psig). Pressure drop 0.34 bar (4.9 psig).

Air quality:

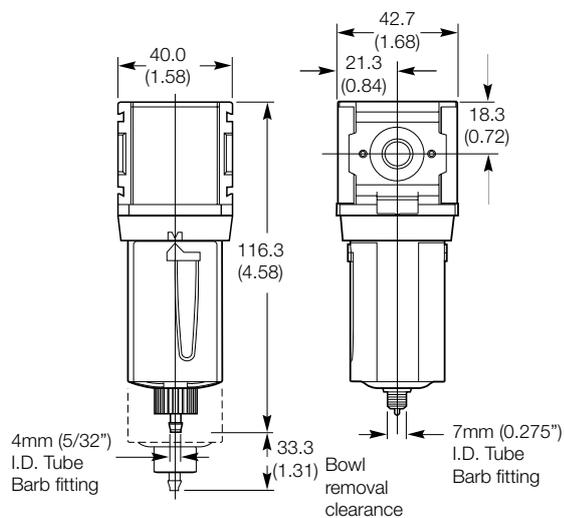
Within ISO 8573-1: 1991 Class 3 (Particulates)

Within ISO 8573-1: 2001 Class 6 (Particulates)

Materials of Construction

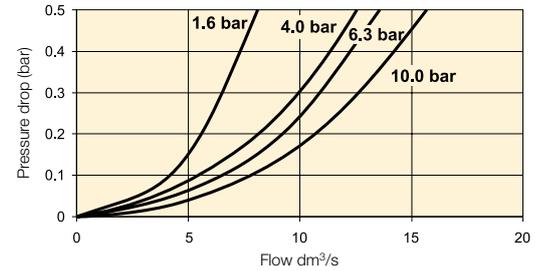
Body	Aluminium
Body Cap	ABS
Bowl	Polycarbonate
Bowl Guard	Nylon
Element Retainer	Acetal
Baffle	Acetal
Filter Element	Sintered Polyethylene
Seals	Nitrile

Dimensions



Flow Charts

1/4 Filter



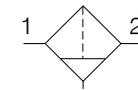
Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P31KA00BGM
Metal bowl / w/o sight gauge manual drain	P31KA00BMM
Plastic bowl / Bowl guard pulse drain	P31KA00BGB
Metal bowl / w/o sight gauge pulse drain	P31KA00BMB
5μ particle filter element	P31KA00ESE
C-Bracket (fits to body)	P31KA00MW
T-Bracket with body connector	P31KA00MT
Body connector	P31KA00CB

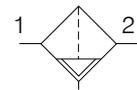
Compact Particulate Filter P32



Symbols



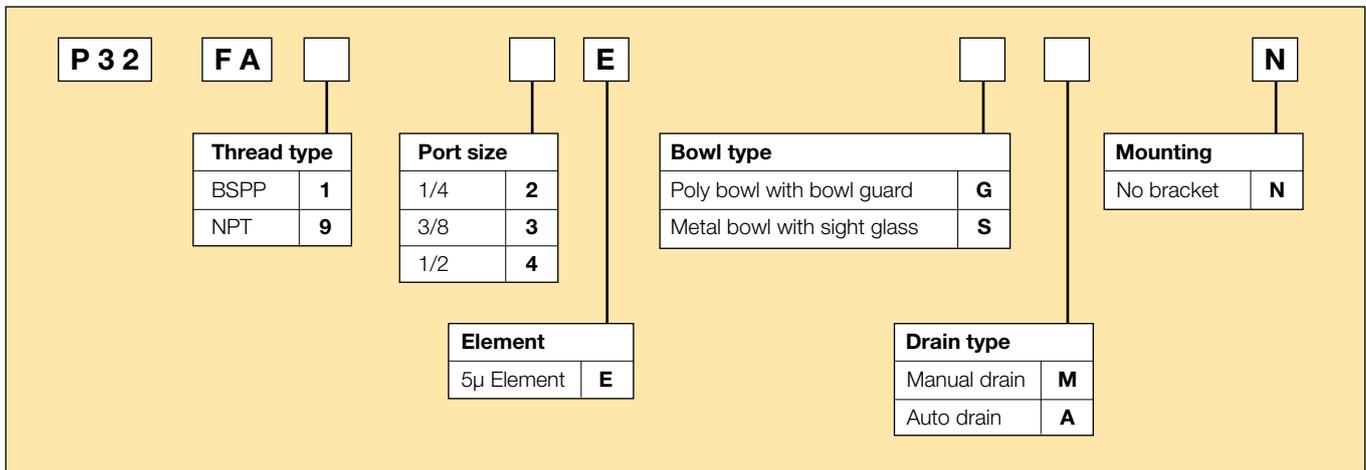
Manual drain



Auto drain

- Integral 1/4, 3/8 or 1/2 ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- Positive bayonet latch to ensure correct & safe fitting

Options:



Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4	Poly bowl - Manual drain	P32FA12EGMN	18 (38)	10 (150)	188 (7.4)	60 (2.36)	60 (2.36)
1/4	Poly bowl - Auto drain	P32FA12EGAN	18 (38)	10 (150)	182 (7.2)	60 (2.36)	60 (2.36)
1/4	Metal bowl sight glass - Manual drain	P32FA12ESMN	18 (38)	17 (250)	188 (7.4)	60 (2.36)	60 (2.36)
1/4	Metal bowl sight glass - Auto drain	P32FA12ESAN	18 (38)	17 (250)	182 (7.2)	60 (2.36)	60 (2.36)
3/8	Poly bowl - Manual drain	P32FA13EGMN	30 (64)	10 (150)	188 (7.4)	60 (2.36)	60 (2.36)
3/8	Poly bowl - Auto drain	P32FA13EGAN	30 (64)	10 (150)	182 (7.2)	60 (2.36)	60 (2.36)
3/8	Metal bowl sight glass - Manual drain	P32FA13ESMN	30 (64)	17 (250)	188 (7.4)	60 (2.36)	60 (2.36)
3/8	Metal bowl sight glass - Auto drain	P32FA13ESAN	30 (64)	17 (250)	182 (7.2)	60 (2.36)	60 (2.36)
1/2	Poly bowl - Manual drain	P32FA14EGMN	38 (80)	10 (150)	188 (7.4)	60 (2.36)	60 (2.36)
1/2	Poly bowl - Auto drain	P32FA14EGAN	38 (80)	10 (150)	182 (7.2)	60 (2.36)	60 (2.36)
1/2	Metal bowl sight glass - Manual drain	P32FA14ESMN	38 (80)	17 (250)	188 (7.4)	60 (2.36)	60 (2.36)
1/2	Metal bowl sight glass - Auto drain	P32FA14ESAN	38 (80)	17 (250)	182 (7.2)	60 (2.36)	60 (2.36)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

Specifications

Flow Capacity*	1/4	18 dm ³ /s (38 scfm)
	3/8	30 dm ³ /s (64 scfm)
	1/2	38 dm ³ /s (80 scfm)
Operating Temperature	Plastic Bowl	-25°C (-13°F) to 52°C (125°F)
	Metal Bowl	-25°C (-13°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration	5 Micron	
Useful Retention**	51 cm ³ (1.7 US oz.)	
Port Size	BSPP / NPT 1/4, 3/8, 1/2	
Weight	0.28 kg (0.62 lbs)	

* Inlet pressure 6.3 bar (91.3 psig). Pressure drop 0.34 bar (4.9 psig).

** Useful retention refers to volume below the quiet zone baffle.

Air quality:

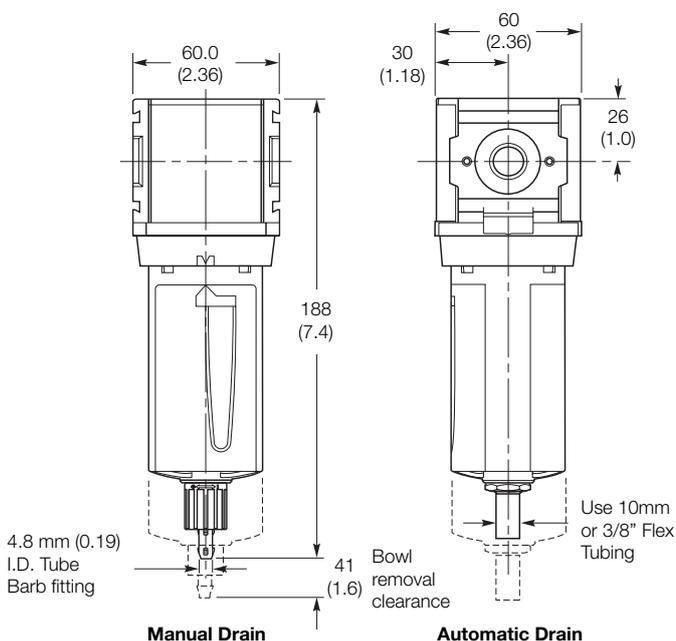
Within ISO 8573-1: 1991 Class 3 (Particulates)

Within ISO 8573-1: 2001 Class 6 (Particulates)

Materials of Construction

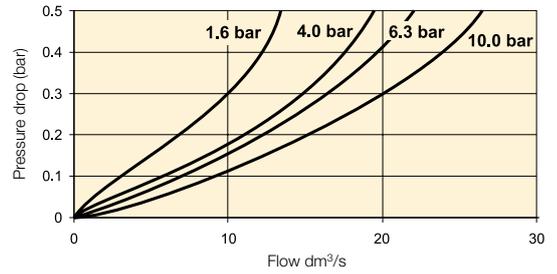
Body	Aluminium	
Body Cap	ABS	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Bowl Guard	Nylon	
Deflector	Polypropylene	
Element Retainer / Baffle	Acetal	
Filter Element	Sintered Polyethylene	
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Sight Gauge	Metal Bowl	Polycarbonate

Dimensions

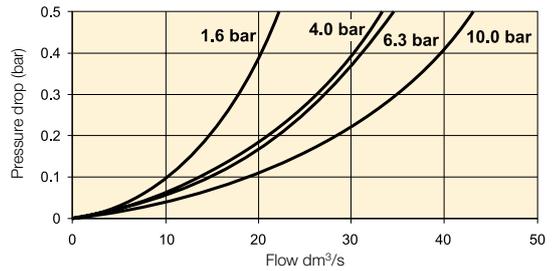


Flow Charts

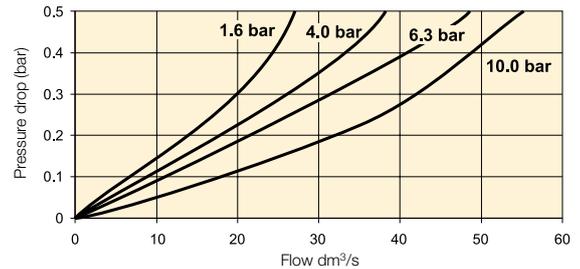
1/4 Filter



3/8 Filter



1/2 Filter



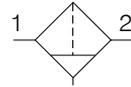
Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P32KA00BGM
Metal bowl / Sight gauge manual drain	P32KA00BSM
Auto drain	P32KA00DA
5µ particle filter element	P32KA00ESE
L-Bracket (fits to body)	P32KA00ML
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB

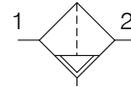
Standard Particulate Filter P33



Symbols



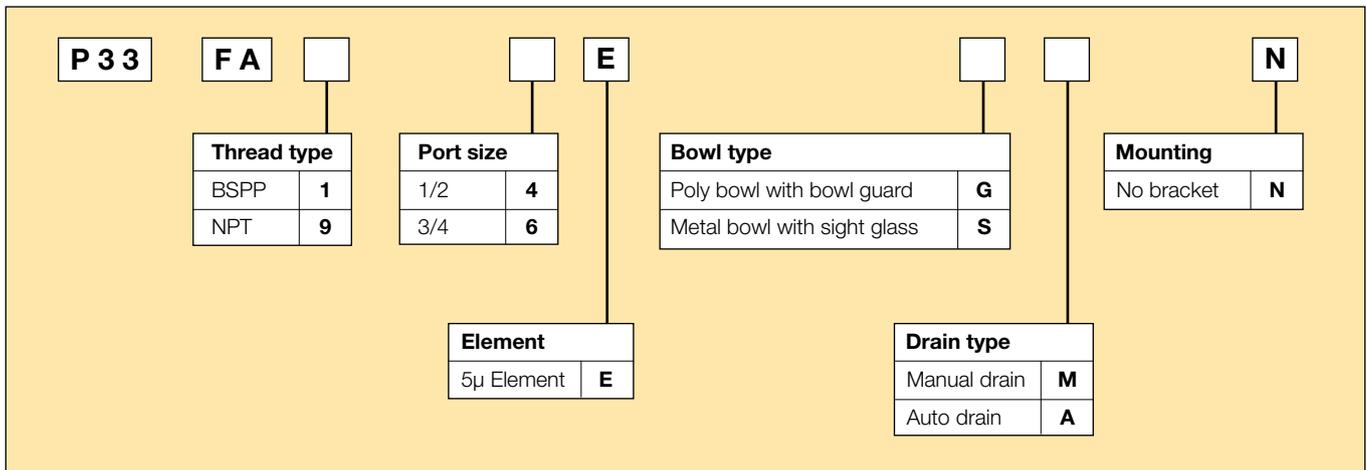
Manual drain



Auto drain

- Integral 1/2 or 3/4 ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- Positive bayonet latch to ensure correct & safe fitting

Options:



Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/2"	Poly bowl - Manual drain	P33FA14EGMN	40 (85)	10 (150)	213 (8.4)	73 (2.9)	73 (2.9)
1/2"	Poly bowl - Auto drain	P33FA14EGAN	40 (85)	10 (150)	207 (8.2)	73 (2.9)	73 (2.9)
1/2"	Metal bowl sight glass - Manual drain	P33FA14ESMN	40 (85)	17 (250)	213 (8.4)	73 (2.9)	73 (2.9)
1/2"	Metal bowl sight glass - Auto drain	P33FA14ESAN	40 (85)	17 (250)	207 (8.2)	73 (2.9)	73 (2.9)
3/4"	Poly bowl - Manual drain	P33FA16EGMN	48 (102)	10 (150)	213 (8.4)	73 (2.9)	73 (2.9)
3/4"	Poly bowl - Auto drain	P33FA16EGAN	48 (102)	10 (150)	207 (8.2)	73 (2.9)	73 (2.9)
3/4"	Metal bowl sight glass - Manual drain	P33FA16ESMN	48 (102)	17 (250)	213 (8.4)	73 (2.9)	73 (2.9)
3/4"	Metal bowl sight glass - Auto drain	P33FA16ESAN	48 (102)	17 (250)	207 (8.2)	73 (2.9)	73 (2.9)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

Specifications

Flow Capacity*	1/2	40 dm ³ /s (85 scfm)
	3/4	48 dm ³ /s (102 scfm)
Operating Temperature	Plastic Bowl	-25°C (-13°F) to 52°C (125°F)
	Metal Bowl	-25°C (-13°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration		5 Micron
Useful Retention**		85 cm ³ (2.8 US oz.)
Port Size	BSPP / NPT	1/2, 3/4
Weight		0.46 kg (1.01 lbs)

* Inlet pressure 6.3 bar (91.3 psig). Pressure drop 0.34 bar (4.9 psig).

** Useful retention refers to volume below the quiet zone baffle.

Air quality:

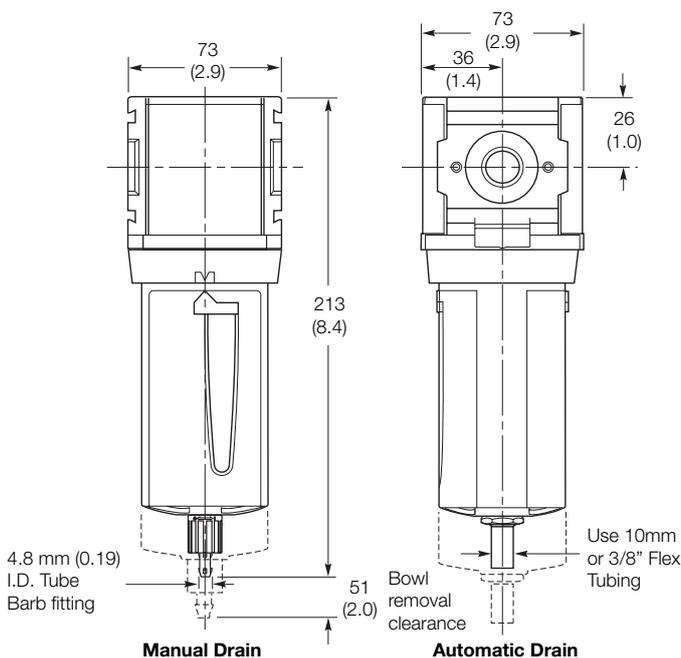
Within ISO 8573-1: 1991 Class 3 (Particulates)

Within ISO 8573-1: 2001 Class 6 (Particulates)

Materials of Construction

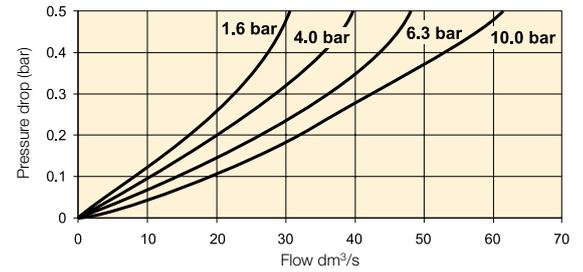
Body	Aluminium	
Body Cap	ABS	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Bowl Guard	Nylon	
Deflector	Polypropylene	
Element Retainer / Baffle	Acetal	
Filter Element	Sintered Polyethylene	
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Sight Gauge	Metal Bowl	Polycarbonate

Dimensions

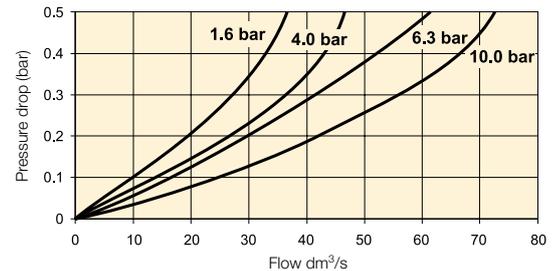


Flow Charts

1/2 Filter



3/4 Filter



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P33KA00BGM
Metal bowl / Sight gauge manual drain	P33KA00BSM
Auto drain	P32KA00DA
5µ particle filter element	P33KA00ESE
L-Bracket (fits to body)	P33KA00ML
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB

Mini Coalescing and Adsorber Filters P31

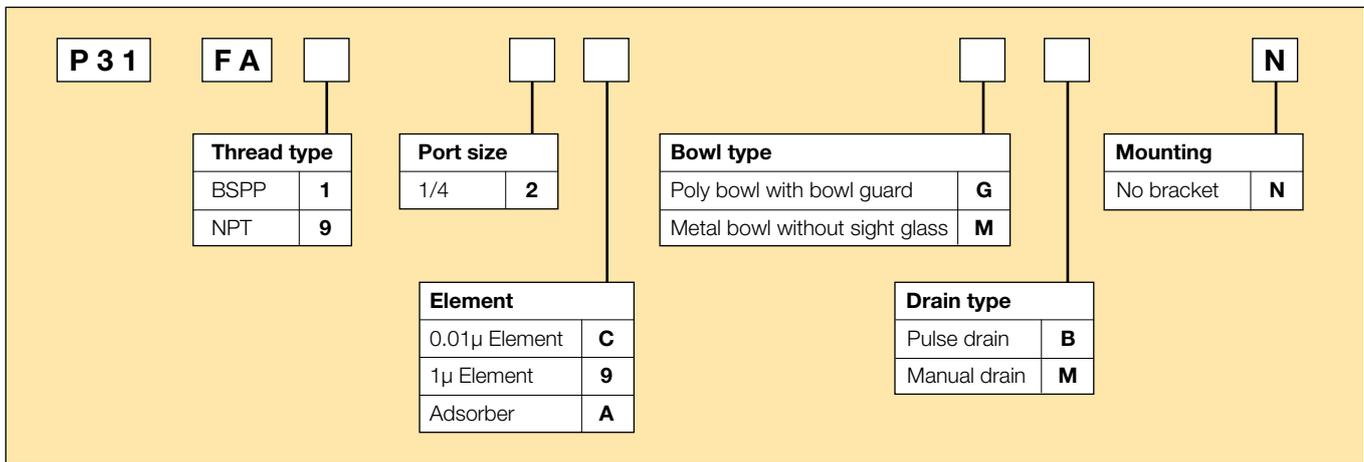


- Integral 1/4 ports (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Positive bayonet latch to ensure correct & safe fitting
- Adsorbing activated carbon element removes oil vapours and most hydrocarbons

Note: To optimise the life of coalescing element, it is advisable to install a P31F pre-filter with a 5 micron element upstream of the coalescing filter.

To optimise the life of an Adsorber it is advisable to install a P31 Coalescing Filter upstream of the Adsorber. Adsorber element should be replaced approx. every 1000 hours of service

Options:



Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	Poly bowl - 0.01 micron - Manual drain	P31FA12CGMN	2 (4.2)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Poly bowl - 0.01 micron - Pulse drain	P31FA12CGBN	2 (4.2)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - 0.01 micron - Manual drain	P31FA12CMMN	2 (4.2)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - 0.01 micron - Pulse drain	P31FA12CMBN	2 (4.2)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Poly bowl - Adsorber	P31FA12AGMN	6 (13)	10 (150)	116.3 (4.58)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - Adsorber	P31FA12AMMN	6 (13)	17 (250)	116.3 (4.58)	40 (1.58)	42.7 (1.68)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.2 bar (3 psig) pressure drop.

Specifications

Flow Capacity		dm ³ /s SCFM
1.0 Micron Coalescing	Energy Efficient Flow*	3.8 (8)
	Maximum Flow**	6 (13)
0.01 Micron Coalescing	Energy Efficient Flow*	2 (4.2)
	Maximum Flow**	3.8 (8)
Activated Carbon Adsorber	Rated Flow*	6 (13)
Operating Temperature	Plastic Bowl	-10°C (14°F) to 52°C (125°F)
	Metal Bowl	-10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration**		1.0 and 0.01 Micron ppm wt
Adsorber	Max oil carryover (ppm w/w)	0.003 @ 21°C (70°F)
Useful Retention		12 cm ³ (0.4 US oz.)
Port Size	BSPP / NPT	1/4
Weight		0.11 kg (0.24 lbs)

* Inlet pressure 6.3 bar (90 psi), Pressure drop 0.2 bar (3 psig), Saturated Element.

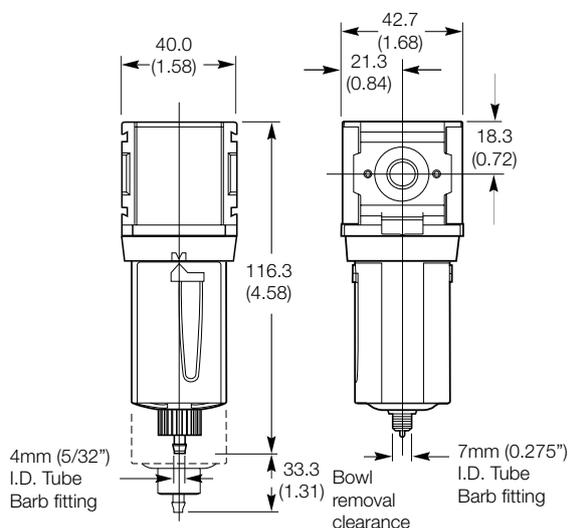
** Inlet pressure 6.3 bar (90 psi), Pressure drop 0.4 bar (6 psig), Saturated Element.

† Useful retention refers to volume below the quiet zone baffle.

Materials of Construction

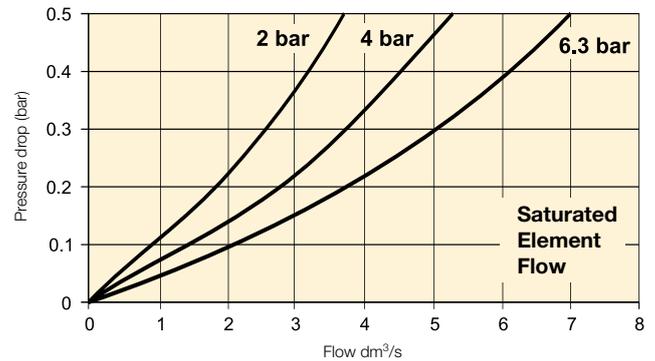
Body	Aluminium	
Body Cap	ABS	
Bowl	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Filter Element	1.0 and .01 Micron	Borosilicate Cloth
Adsorber	Activated Carbon	
Seals	Nitrile	

Dimensions

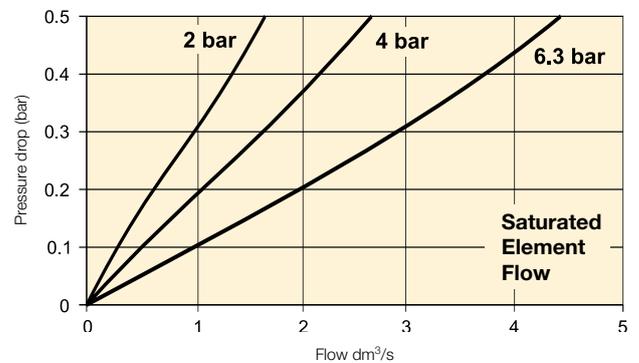


Flow Charts

P31 - 1.0 micron flow



P31 - 0.01 micron flow



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P31KA00BGM
Metal bowl / w/o sight gauge manual drain	P31KA00BMM
Plastic bowl / Bowl guard pulse drain	P31KA00BGB
Metal bowl / w/o sight gauge pulse drain	P31KA00BMB
1µ coalescing filter element	P31KA00ES9
0.01µ coalescing filter element	P31KA00ESC
Activated carbon adsorber filter element	P31KA00ESA
C-Bracket (fits to body)	P31KA00MW
T-Bracket with body connector	P31KA00MT
Body connector	P31KA00CB

Compact Coalescing and Adsorber Filter P32



- Integral 1/4, 3/8 or 1/2 ports (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Differential Pressure Indicator (DPI) standard on Coalescing Filters
- Positive bayonet latch to ensure correct & safe fitting
- Adsorbing activated carbon element removes oil vapours and most hydrocarbons

Note: To optimise the life of coalescing element, it is advisable to install a P32F pre-filter with a 5 micron element upstream of the coalescing filter.

To optimise the life of an Adsorber it is advisable to install a P32 Coalescing Filter upstream of the Adsorber. Adsorber element should be replaced approx. every 1000 hours of service

Options:

P 3 2	F A						N
Thread type		Port size		Bowl type		Mounting	
BSPP	1	1/4	2	Poly bowl with bowl guard	G	No bracket	N
NPT	9	3/8	3	Metal bowl with sight glass	S		
		1/2	4				
Element				Drain type			
0.01µ Element with dpi		D		Manual drain		M	
1µ Element with dpi		Q		Auto drain		A	
Adsorber		A					

Port size	Description	Order Code	Flow dm ³ /s *	(scfm) *	Max bar	(psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	Poly bowl - 0.01 Micron, Manual drain	P32FA12DGMN	11	(23)	10	(150)	209 (8.2)	60 (2.36)	60 (2.36)
1/4"	Poly bowl - 0.01 Micron, Auto drain	P32FA12DGAN	11	(23)	10	(150)	203 (8.0)	60 (2.36)	60 (2.36)
1/4"	Metal bowl sight glass - 0.01 Micron, Manual drain	P32FA12DSMN	11	(23)	17	(250)	209 (8.2)	60 (2.36)	60 (2.36)
1/4"	Metal bowl sight glass - 0.01 Micron, Auto drain	P32FA12DSAN	11	(23)	17	(250)	203 (8.0)	60 (2.36)	60 (2.36)
3/8"	Poly bowl - 0.01 Micron, Manual drain	P32FA13DGMN	11	(23)	10	(150)	209 (8.2)	60 (2.36)	60 (2.36)
3/8"	Poly bowl - 0.01 Micron, Auto drain	P32FA13DGAN	11	(23)	10	(150)	203 (8.0)	60 (2.36)	60 (2.36)
3/8"	Metal bowl sight glass - 0.01 Micron, Manual drain	P32FA13DSMN	11	(23)	17	(250)	209 (8.2)	60 (2.36)	60 (2.36)
3/8"	Metal bowl sight glass - 0.01 Micron, Auto drain	P32FA13DSAN	11	(23)	17	(250)	203 (8.0)	60 (2.36)	60 (2.36)
1/2"	Poly bowl - 0.01 Micron, Manual drain	P32FA14DGMN	11	(23)	10	(150)	209 (8.2)	60 (2.36)	60 (2.36)
1/2"	Poly bowl - 0.01 Micron, Auto drain	P32FA14DGAN	11	(23)	10	(150)	203 (8.0)	60 (2.36)	60 (2.36)
1/2"	Metal bowl sight glass - 0.01 Micron, Manual drain	P32FA14DSMN	11	(23)	17	(250)	209 (8.2)	60 (2.36)	60 (2.36)
1/2"	Metal bowl sight glass - 0.01 Micron, Auto drain	P32FA14DSAN	11	(23)	17	(250)	203 (8.0)	60 (2.36)	60 (2.36)
1/4"	Poly bowl - Adsorber	P32FA12AGMN	27	(57)	10	(150)	209 (8.2)	60 (2.36)	60 (2.36)
1/4"	Metal bowl sight glass - Adsorber	P32FA12ASMN	27	(57)	17	(250)	209 (8.2)	60 (2.36)	60 (2.36)
3/8"	Poly bowl - Adsorber	P32FA13AGMN	27	(57)	10	(150)	209 (8.2)	60 (2.36)	60 (2.36)
3/8"	Metal bowl sight glass - Adsorber	P32FA13ASMN	27	(57)	17	(250)	209 (8.2)	60 (2.36)	60 (2.36)
1/2"	Poly bowl - Adsorber	P32FA14AGMN	27	(57)	10	(150)	209 (8.2)	60 (2.36)	60 (2.36)
1/2"	Metal bowl sight glass - Adsorber	P32FA14ASMN	27	(57)	17	(250)	209 (8.2)	60 (2.36)	60 (2.36)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.2 bar (3 psig) pressure drop.

Specifications

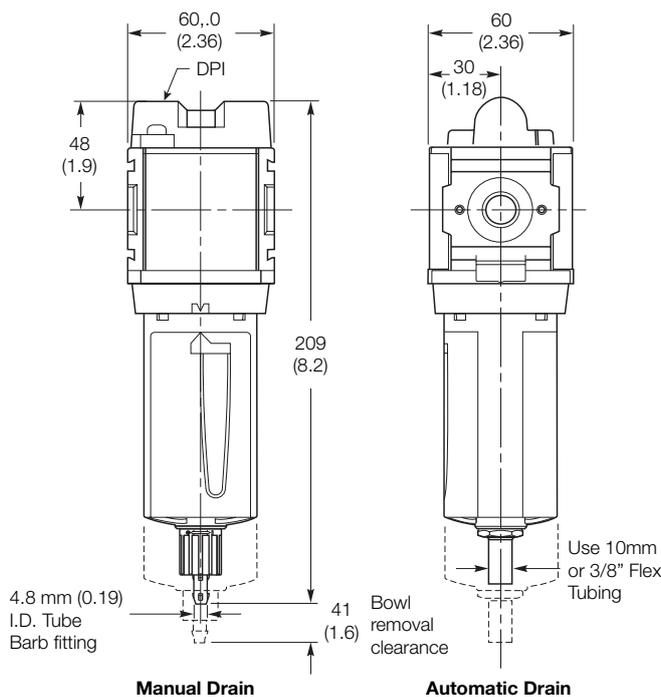
Flow Capacity		dm ³ /s	SCFM
1.0 Micron Coalescing	Energy Efficient Flow*	17	(36)
	Maximum Flow**	27	(57)
0.01 Micron Coalescing	Energy Efficient Flow*	11	(23)
	Maximum Flow**	18	(38)
Activated Carbon Adsorber	Rated Flow*	27	(57)
Operating Temperature	Plastic Bowl	-25°C (-13°F) to 52°C (125°F)	
	Metal Bowl	-25°C (-13°F) to 65.5°C (150°F)	
Max Supply Pressure**	Plastic Bowl	10 bar (150 psi)	
	Metal Bowl	17 bar (250 psi)	
Standard Filtration†		1.0 and 0.01 Micron ppm wt	
Adsorber	Max oil carryover (ppm w/w)	0.003 @ 21°C (70°F)	
Useful Retention†		51 cm ³ (1.7 US oz.)	
Port Size	BSPP / NPT	1/4, 3/8, 1/2	
Weight		0.32 kg (0.71 lbs)	

* Inlet pressure 6.3 bar (90 psi), Pressure drop 0.2 bar (3 psig), Saturated Element.

** Inlet pressure 6.3 bar (90 psi), Pressure drop 0.4 bar (6 psig), Saturated Element.

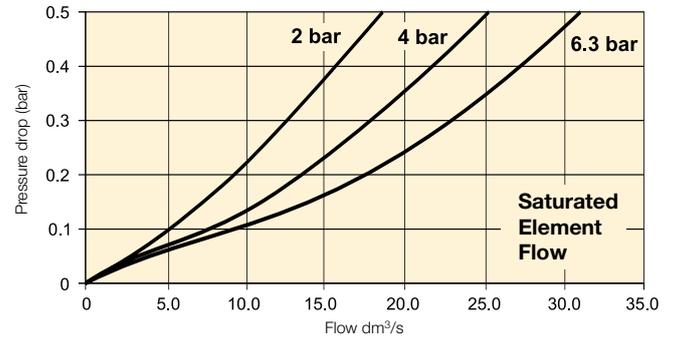
† Useful retention refers to volume below the quiet zone baffle.

Dimensions

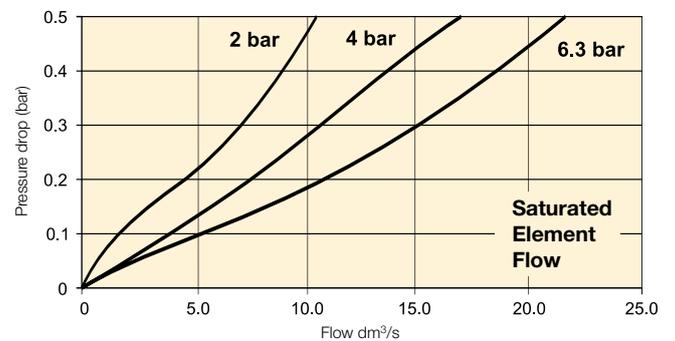


Flow Charts

P32 - 1.0 micron flow



P32 - 0.01 micron flow



Materials of Construction

Body	Aluminium	
Body Cap	ABS	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Filter Element	1.0 and .01 Micron	Borosilicate Cloth
Adsorber	Activated Carbon	
Seals	Nitrile	
Sight Gauge	Metal Bowl	Polycarbonate

Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P32KA00BGM
Metal bowl / Sight gauge manual drain	P32KA00BSM
Auto drain	P32KA00DA
1µ coalescing filter element	P32KA00ES9
0.01µ coalescing filter element	P32KA00ESC
Activated carbon adsorber filter element	P32KA00ESA
L-Bracket (fits to body)	P32KA00ML
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB
Differential pressure indicator (replacement)	P32KA00RQ

Standard Coalescing and Adsorber Filter P33

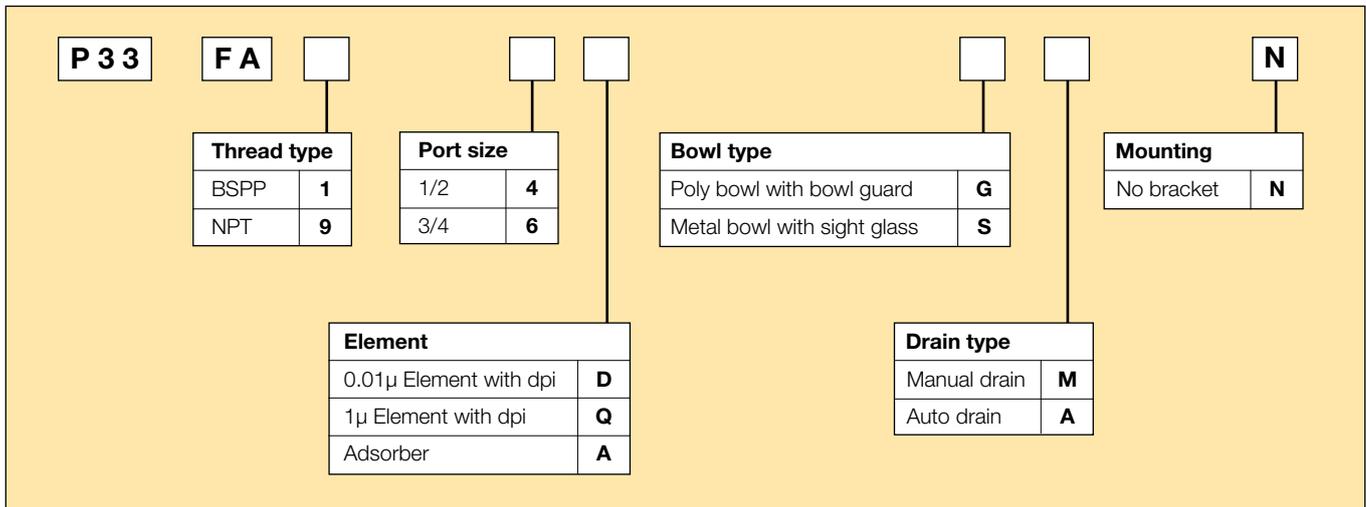


- Integral 1/2 or 3/4 ports (BSPP & NPT)
- Removes liquid aerosols and sub micron particles
- Oil free air for critical applications, such as air gauging, pneumatic instrumentation and control
- Differential Pressure Indicator (DPI) standard on Coalescing Filters
- Positive bayonet latch to ensure correct & safe fitting
- Adsorbing activated carbon element removes oil vapours and most hydrocarbons

Note: To optimise the life of coalescing element, it is advisable to install a P33F pre-filter with a 5 micron element upstream of the coalescing filter.

To optimise the life of an Adsorber it is advisable to install a P33 Coalescing Filter upstream of the Adsorber. Adsorber element should be replaced approx. every 1000 hours of service

Options:



Port size	Description	Order Code	Flow dm ³ /s *	(scfm) *	Max bar	(psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/2"	Poly bowl - 0.01 Micron, Manual drain	P33FA14DGMN	20	(42)	10	(150)	235 (9.3)	73 (2.9)	73 (2.9)
1/2"	Poly bowl - 0.01 Micron, Auto drain	P33FA14DGAN	20	(42)	10	(150)	229 (9.0)	73 (2.9)	73 (2.9)
1/2"	Metal bowl sight glass - 0.01 Micron, Manual drain	P33FA14DSMN	20	(42)	17	(250)	235 (9.3)	73 (2.9)	73 (2.9)
1/2"	Metal bowl sight glass - 0.01 Micron, Auto drain	P33FA14DSAN	20	(42)	17	(250)	229 (9.0)	73 (2.9)	73 (2.9)
3/4"	Poly bowl - 0.01 Micron, Manual drain	P33FA16DGMN	20	(42)	10	(150)	235 (9.3)	73 (2.9)	73 (2.9)
3/4"	Poly bowl - 0.01 Micron, Auto drain	P33FA16DGAN	20	(42)	10	(150)	229 (9.0)	73 (2.9)	73 (2.9)
3/4"	Metal bowl sight glass - 0.01 Micron, Manual drain	P33FA16DSMN	20	(42)	17	(250)	235 (9.3)	73 (2.9)	73 (2.9)
3/4"	Metal bowl sight glass - 0.01 Micron, Auto drain	P33FA16DSAN	20	(42)	17	(250)	229 (9.0)	73 (2.9)	73 (2.9)
1/2"	Poly bowl - Adsorber	P33FA14AGMN	44	(93)	10	(150)	253 (9.3)	73 (2.9)	73 (2.9)
1/2"	Metal bowl sight glass - Adsorber	P33FA14ASMN	44	(93)	17	(250)	253 (9.3)	73 (2.9)	73 (2.9)
3/4"	Poly bowl - Adsorber	P33FA16AGMN	44	(93)	10	(150)	253 (9.3)	73 (2.9)	73 (2.9)
3/4"	Metal bowl sight glass - Adsorber	P33FA16ASMN	44	(93)	17	(250)	253 (9.3)	73 (2.9)	73 (2.9)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.2 bar (3 psig) pressure drop.

Specifications

Flow Capacity		dm ³ /s	SCFM
1.0 Micron Coalescing	Energy Efficient Flow*	32	(68)
	Maximum Flow**	44	(93)
0.01 Micron Coalescing	Energy Efficient Flow*	20	(42)
	Maximum Flow**	34	(72)
Activated Carbon Adsorber	Rated Flow*	44	(93)
Operating Temperature	Plastic Bowl	-25°C (-13°F) to 52°C (125°F)	
	Metal Bowl	-25°C (-13°F) to 65.5°C (150°F)	
Max Supply Pressure**	Plastic Bowl	10 bar (150 psi)	
	Metal Bowl	17 bar (250 psi)	
Standard Filtration†		1.0 and 0.01 Micron ppm wt	
Adsorber	Max oil carryover (ppm w/w)	0.003 @ 21°C (70°F)	
Useful Retention†		85 cm ³ (2.8 US oz.)	
Port Size	BSPP / NPT	1/2, 3/4	
Weight		0.50 kg (1.10 lbs)	

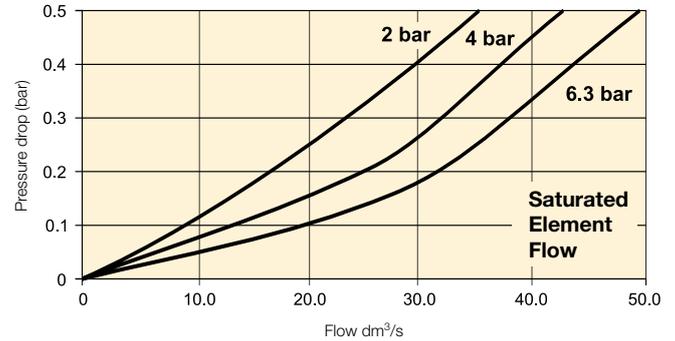
* Inlet pressure 6.3 bar (90 psi), Pressure drop 0.2 bar (3 psig), Saturated Element.

** Inlet pressure 6.3 bar (90 psi), Pressure drop 0.4 bar (6 psig), Saturated Element.

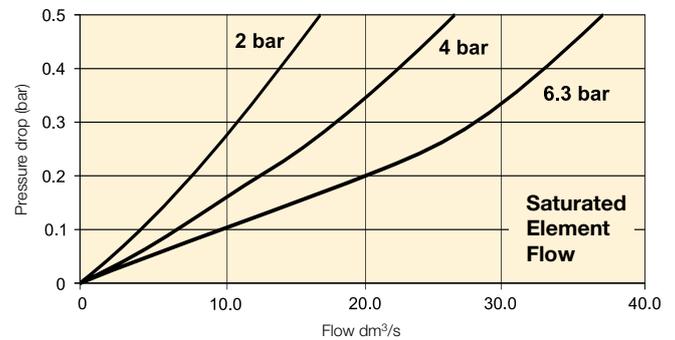
† Useful retention refers to volume below the quiet zone baffle.

Flow Charts

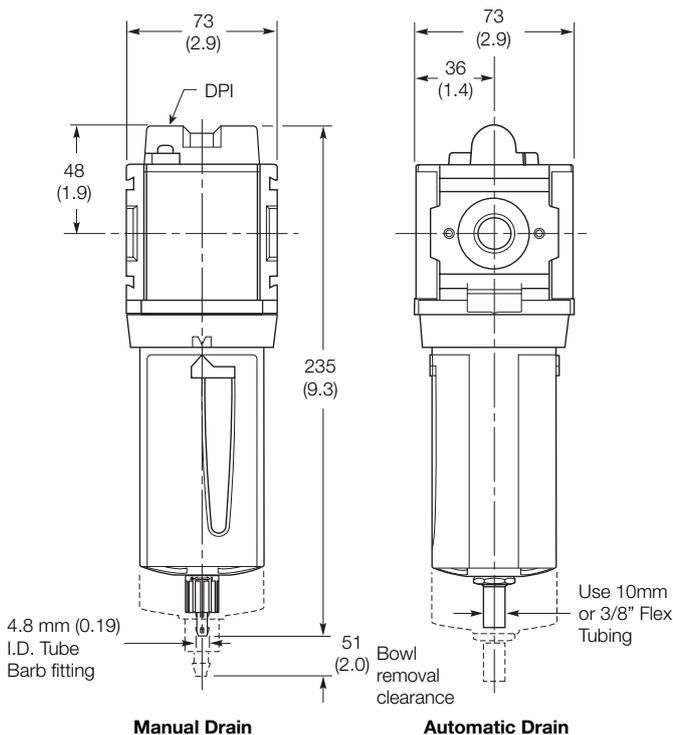
P33 - 1.0 micron flow



P33 - 0.01 micron flow



Dimensions



Materials of Construction

Body	Aluminium	
Body Cap	ABS	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Zinc
Filter Element	1.0 and .01 Micron	Borosilicate Cloth
Adsorber	Activated Carbon	
Seals	Nitrile	
Sight Gauge	Metal Bowl	Polycarbonate

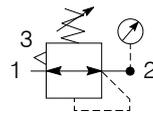
Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P33KA00BGM
Metal bowl / Sight gauge manual drain	P33KA00BSM
Auto drain	P32KA00DA
1µ coalescing filter element	P33KA00ES9
0.01µ coalescing filter element	P33KA00ESC
Activated carbon adsorber filter element	P33KA00ESA
L-Bracket (fits to body)	P33KA00ML
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB
Differential pressure indicator (replacement)	P32KA00RQ

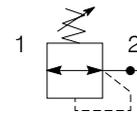
Mini Regulator P31



Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 1/4 ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4 & 8 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & Non-relieving types
- Non-rising knob

Options:

P 3 1	R A				N		P
Thread type		Port size		Mounting			
BSPP	1	1/4	2	Plastic panel mount nut		P	
NPT	9						
Relief				Adjustment range			
Relieving		B		With square gauge		Without gauge	
Non relieving		N		2 bar *	V	2 bar	Y
				4 bar	S	4 bar	L
				8 bar **	T	8 bar	N

* Unit comes with 0-4 bar gauge
 ** Unit comes with 0-10 bar gauge

Port size	Description	Order Code	Flow dm ³ /s (scfm) * *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	8 bar relieving	P31RA12BNNP	30 (64)	20 (300)	100.1 (3.94)	40 (1.58)	40 (1.58)
1/4"	8 bar relieving + gauge	P31RA12BNTP	30 (64)	20 (300)	100.1 (3.94)	40 (1.58)	64.3 (2.53)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

Flow Capacity*	1/4	30 dm ³ /s (64 scfm)
Operating Temperature	-20°C (-4°F) to 65.5°C (150°F)	
Max Supply Pressure	20 bar (300 psi)	
Adjusting Range Pressure	0-2 bar (30 psi) 0-4 bar (60 psi) 0-8 bar (125 psi)	
Port Size	BSPP / NPT	1/4
Gauge Port (2 ea.)**	BSPP / NPT	1/8
Weight	0.17 kg (0.37 lbs)	

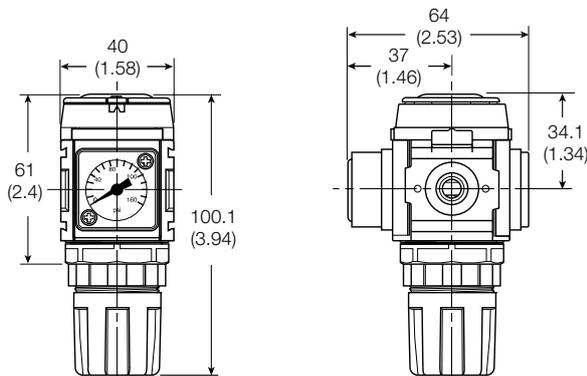
* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

** Non-gauge option only.

Materials of Construction

Body	Aluminium
Adjustment Knob	Acetal
Body Cap	ABS
Bonnet	PBT
Diaphragm Assembly	Brass / Nitrile
Bottom Plug	33% Glass-Filled Nylon
Valve Assembly	Brass / Nitrile
Springs	Steel
Seals	Nitrile
Panel Nut	Acetal

Dimensions



NOTE: 31.7 mm hole required for panel nut mounting.



WARNING

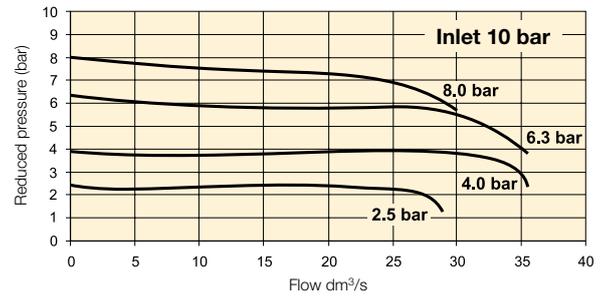
**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Flow Charts

1/4 Regulator



Repair and Service Kits

Panel mount nut - Aluminium	P31KA00MM
Panel mount nut - Plastic	P31KA00MP
Angle Bracket (uses panel mount threads)	P31KA00MR
C-Bracket (fits to body)	P31KA00MW
T-Bracket with body connector	P31KA00MT
Body connector	P31KA00CB

Gauges

Square flush mount gauge

replacement for unit ordered with square gauge

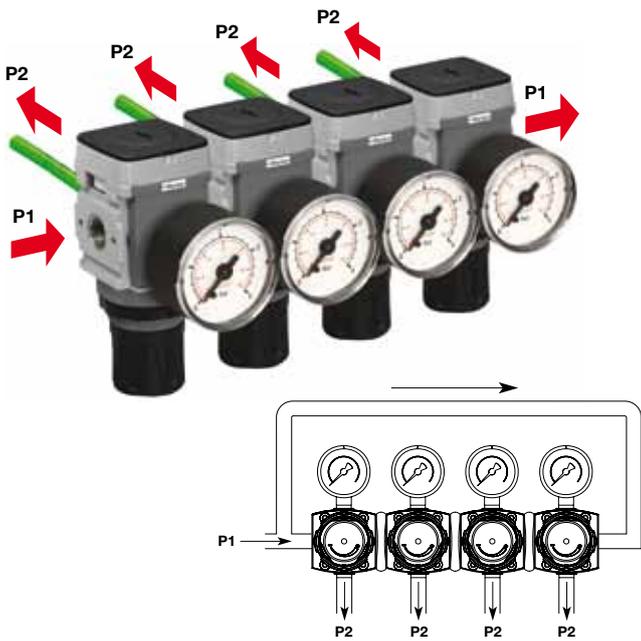
0-4 bar	K4511SCR04B
0-10 bar	K4511SCR11B

40mm (1½") Round 1/8" center back mount

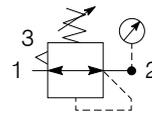
for units ordered without square gauge

0-30 PSIG / 0-2 bar	P3D-KAB1AYN
0-58 PSIG / 0-4 bar	P3D-KAB1ALN
0-160 PSIG / 0-10 bar	P3D-KAB1ANN

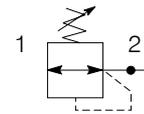
Mini Common - P1 Regulator P31



Symbols



Self relieving regulator with gauge



Non relieving regulator with gauge

- Manifold style regulator with line pressure on both sides.
- Pressure output is at front or rear.
- Integral 1/4 ports (BSPP & NPT)
- Robust construction
- Secondary pressure ranges 2, 4 & 8 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & Non-relieving types
- Non-rising knob

Options:

P 3 1	H A				N		P
Thread type		Port size		Mounting			
BSPP	1	1/4	2	Plastic panel mount nut P			
NPT	9						
Relief				Adjustment range			
Relieving B				Without gauge			
Non relieving N				2 bar; 30 psi; 0.2 MPa Y			
				4 bar; 60 psi; 0.4 MPa L			
				8 bar; 125 psi; 0.8 MPa N			

Note: Only round gauges to be used on common regulator, Order gauges separately- see page 33.

Port size	Description	Order Code	Flow dm ³ /s (scfm) * *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	8 bar (125 psi) Relieving	P31HA12BNNP	7 (16)	20 (300)	100.1 (3.94)	40 (1.58)	40 (1.58)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

Flow Capacity*	1/4	7 dm ³ /s (16 scfm)
Operating Temperature	-20°C (-4°F) to 65.5°C (150°F)	
Max Supply Pressure	20 bar (300 psi)	
Adjusting Range Pressure	0-2 bar (30 psi) 0-4 bar (60 psi) 0-8 bar (125 psi)	
P1 Port Size (Inlet / Outlet)	BSPP / NPT	1/4
P2 Regulated Ports (2 ea.)	BSPP / NPT	1/8
Weight	0.30 kg (0.66 lbs)	

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

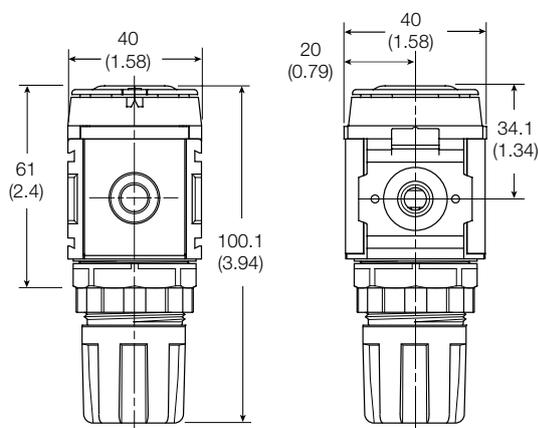
Materials of Construction

Body	Zinc
Adjustment Knob	Acetal
Body Cap	ABS
Bonnet	33% Glass-filled PBT
Diaphragm Assembly	Brass / Nitrile
Bottom Plug	33% Glass-filled Nylon
Valve Assembly	Brass / Nitrile

WARNING

**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

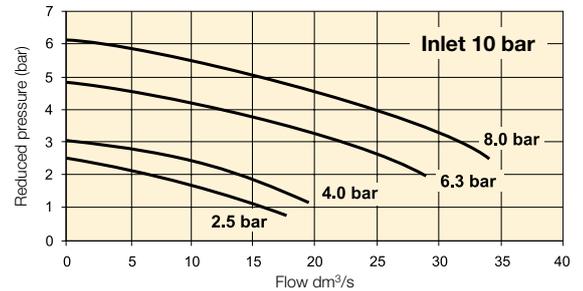
Dimensions



NOTE: 31.8 mm hole required for panel nut mounting.

Flow Charts

1/4 Common Regulator



Gauges

40mm (1 1/2") Round 1/8" center back mount

for units ordered without square gauge

0-30 PSIG / 0-2 bar	P3D-KAB1AYN
0-58 PSIG / 0-4 bar	P3D-KAB1ALN
0-160 PSIG / 0-10 bar	P3D-KAB1ANN

Repair and Service Kits

Panel mount nut - Aluminium	P31KA00MM
Panel mount nut - Plastic	P31KA00MP
Angle Bracket (uses panel mount threads)	P31KA00MR
T-Bracket with body connector	P31KA00MT
Body connector	P31KA00CB

CAUTION:

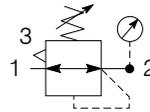
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design.

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

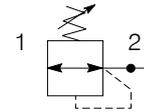
Compact Regulator P32



Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 1/4, 3/8 or 1/2 ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 17 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & Non-relieving types
- Non-rising knob

Options:

P 3 2	R A				N		P
Thread type		Port size		Mounting			
BSPP	1	1/4	2	Plastic panel mount nut		P	
NPT	9	3/8	3				
		1/2	4				
Relief				Adjustment range			
Relieving		B		With round gauge			
Non relieving		N		2 bar; 30 psi; 0.2 MPa	Z		
				4 bar; 60 psi; 0.4 MPa	M		
				8 bar; 125 psi; 0.8 MPa	G		
				17 bar; 250 psi; 1.7 MPa	J		
				Without gauge			
				2 bar; 30 psi; 0.2 MPa	Y		
				4 bar; 60 psi; 0.4 MPa	L		
				8 bar; 125 psi; 0.8 MPa	N		
				17 bar; 250 psi; 1.7 MPa	H		

Port size	Description	Order Code	Flow dm ³ /s (scfm) * *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	8 bar (125 psi) Relieving	P32RA12BNNP	41 (87)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
1/4"	8 bar (125 psi) Relieving + Gauge	P32RA12BNGP	41 (87)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
3/8"	8 bar (125 psi) Relieving	P32RA13BNNP	65 (136)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
3/8"	8 bar (125 psi) Relieving + Gauge	P32RA13BNGP	65 (136)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
1/2"	8 bar (125 psi) Relieving	P32RA14BNNP	67 (142)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
1/2"	8 bar (125 psi) Relieving + Gauge	P32RA14BNGP	67 (142)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

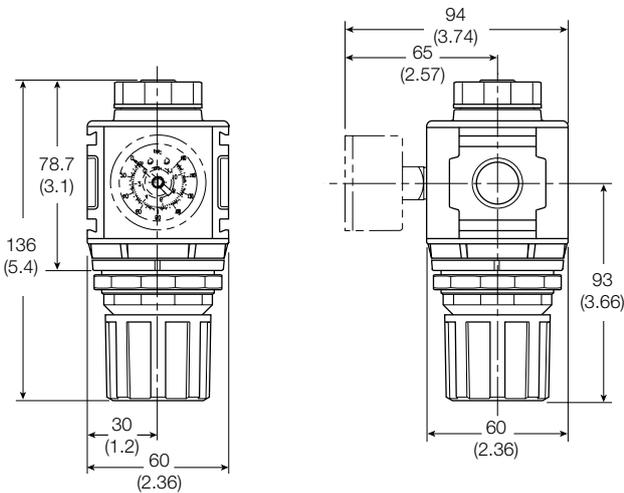
Flow Capacity*	1/4	41 dm ³ /s (81 scfm)
	3/8	65 dm ³ /s (138 scfm)
	1/2	67 dm ³ /s (142 scfm)
Operating Temperature	-25°C (-13°F) to 65.5°C (150°F)	
Max Supply Pressure	20 bar (300 psi)	
Adjusting Range Pressure	0-2 bar (30 psi)	
	0-4 bar (60 psi)	
	0-8 bar (125 psi)	
	0-17 bar (250 psi)	
Port Size	BSPP / NPT	1/4, 3/8, 1/2
Gauge Port (2 ea.)	BSPP / NPT	1/4
Weight	0.41 kg (0.90 lbs)	

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

Materials of Construction

Body	Aluminium	
Adjustment Knob	Acetal	
Body Cap	ABS	
Bonnet	33% glass-filled nylon	
Diaphragm Assembly	Nitrile / Zinc	
Bottom Plug	33% Glass-filled Nylon	
Valve Assembly	Brass / Nitrile	
Springs	Main Regulating	Steel
	Valve	S.S.
Seals	Nitrile	
Panel Nut	Acetal	

Dimensions



NOTE: 51 mm hole required for panel nut mounting.

WARNING

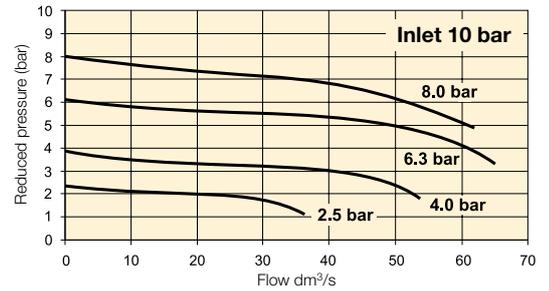
**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

CAUTION:

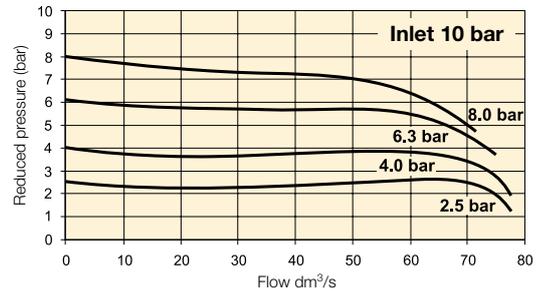
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Flow Charts

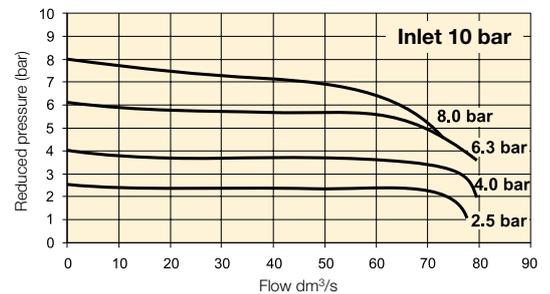
1/4 Regulator



3/8 Regulator



1/2 Regulator



Repair and Service Kits

Panel mount nut - Aluminium	P32KA00MM
Panel mount nut - Plastic	P32KA00MP
Angle Bracket (uses panel mount threads)	P32KA00MR
T-Bracket with body connector	P32KA00MT
T-Bracket	P32KA00MB
Body connector	P32KA00CB

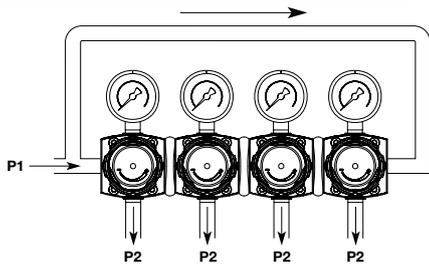
Gauges

50mm (2") Round 1/4" center back mount

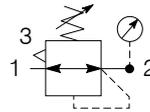
for units ordered without square gauge

0-60 PSIG / 0-4 bar / 0-0.4 MPa	P6G-ERB2040
0-160 PSIG / 0-11 bar / 0-1.1 MPa	P6G-ERB2110
0-300 PSIG / 0-20 bar / 0-2 MPa	P6G-ERB2200

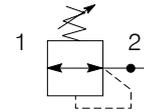
Compact Common P1 Regulator P32



Symbols



Self relieving regulator with gauge



Non relieving regulator with gauge

- Manifold style regulator with line pressure on both sides.
- Pressure output is at front or rear.
- Integral 1/4, 3/8 or 1/2 ports (BSPP & NPT)
- Robust construction
- Secondary pressure ranges 2, 4, 8 & 17 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & Non-relieving types
- Non-rising knob

Options:

P 3 2	H A				N			P																																					
<table border="1"> <tr><th colspan="2">Thread type</th></tr> <tr><td>BSPP</td><td>1</td></tr> <tr><td>NPT</td><td>9</td></tr> </table>		Thread type		BSPP	1	NPT	9	<table border="1"> <tr><th colspan="2">Port size</th></tr> <tr><td>1/4</td><td>2</td></tr> <tr><td>3/8</td><td>3</td></tr> <tr><td>1/2</td><td>4</td></tr> </table>		Port size		1/4	2	3/8	3	1/2	4	<table border="1"> <tr><th colspan="2">Relief</th></tr> <tr><td>Relieving</td><td>B</td></tr> <tr><td>Non relieving</td><td>N</td></tr> </table>		Relief		Relieving	B	Non relieving	N	<table border="1"> <tr><th colspan="2">Adjustment range</th></tr> <tr><th colspan="2">Without gauge</th></tr> <tr><td>2 bar; 30 psi; 0.2 MPa</td><td>Y</td></tr> <tr><td>4 bar; 60 psi; 0.4 MPa</td><td>L</td></tr> <tr><td>8 bar; 125 psi; 0.8 MPa</td><td>N</td></tr> <tr><td>17 bar; 250 psi; 1.7 MPa</td><td>H</td></tr> </table>		Adjustment range		Without gauge		2 bar; 30 psi; 0.2 MPa	Y	4 bar; 60 psi; 0.4 MPa	L	8 bar; 125 psi; 0.8 MPa	N	17 bar; 250 psi; 1.7 MPa	H	<table border="1"> <tr><th colspan="2">Mounting</th></tr> <tr><td>Plastic panel mount nut</td><td>P</td></tr> </table>		Mounting		Plastic panel mount nut	P
Thread type																																													
BSPP	1																																												
NPT	9																																												
Port size																																													
1/4	2																																												
3/8	3																																												
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17 bar; 250 psi; 1.7 MPa	H																																												
Mounting																																													
Plastic panel mount nut	P																																												

Order gauges separately- see page 37.

Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	8 bar (125 psi) Relieving	P32HA12BNNP	28 (59)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
3/8"	8 bar (125 psi) Relieving	P32HA13BNNP	28 (59)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)
1/2"	8 bar (125 psi) Relieving	P32HA14BNNP	28 (59)	20 (300)	136 (5.4)	60 (2.36)	60 (2.36)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

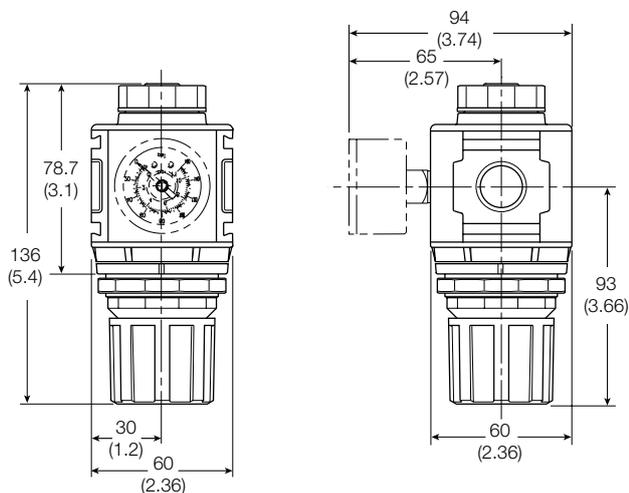
Flow Capacity*	1/4	28 dm ³ /s (59 scfm)
	3/8	28 dm ³ /s (59 scfm)
	1/2	28 dm ³ /s (59 scfm)
Operating Temperature	-25°C (-13°F) to 65.5°C (150°F)	
Max Supply Pressure	20 bar (300 psi)	
Adjusting Range Pressure	0-2 bar (30 psi)	
	0-4 bar (60 psi)	
	0-8 bar (125 psi)	
	0-17 bar (250 psi)	
Port Size	BSPP / NPT	1/4, 3/8, 1/2
P2 Regulated Ports (2 ea.)	BSPP / NPT	1/4
Weight	0.50 kg (1.10 lbs)	

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

Materials of Construction

Body	Zinc	
Adjustment Knob	Acetal	
Body Cap	ABS	
Bonnet	33% glass-filled nylon	
Diaphragm Assembly	Nitrile / Zinc	
Bottom Plug	33% Glass-filled Nylon	
Valve Assembly	Brass / Nitrile	
Springs	Main Regulating	Steel
	Valve	S.S.
Seals	Nitrile	
Panel Nut	Acetal	

Dimensions



NOTE: 51 mm hole required for panel nut mounting.

⚠ WARNING

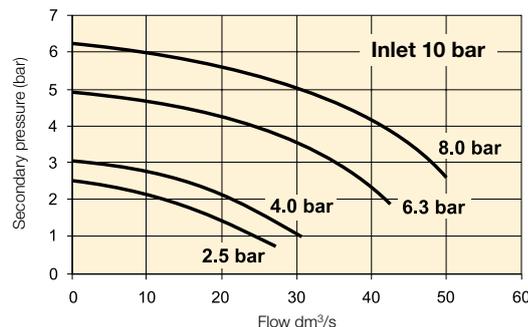
**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

CAUTION:

REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Flow Charts

P32 Common Port Regulator



Repair and Service Kits

Panel mount nut - Aluminium	P32KA00MM
Panel mount nut - Plastic	P32KA00MP
Angle Bracket (uses panel mount threads)	P32KA00MR
T-Bracket with body connector	P32KA00MT
T-Bracket	P32KA00MB
Body connector	P32KA00CB

Gauges

50mm (2") Round 1/4" center back mount

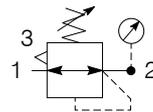
for units ordered without square gauge

0-60 PSIG / 0-4 bar / 0-0.4 MPa	P6G-ERB2040
0-160 PSIG / 0-11 bar / 0-1.1 MPa	P6G-ERB2110
0-300 PSIG / 0-20 bar / 0-2 MPa	P6G-ERB2200

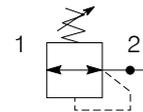
Standard Regulator P33



Symbols



Self relieving regulator with gauge



Non relieving regulator

- Integral 1/2 or 3/4 ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Secondary pressure ranges 2, 4, 8 & 17 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.
- Relieving & Non-relieving types
- Non-rising knob

Options:

P 3 3	R A				N		P
Thread type		Port size		Mounting			
BSPP	1	1/2	4	Plastic panel mount nut		P	
NPT	9	3/4	6				
Relief				Adjustment range			
Relieving		B		With round gauge			
Non relieving		N		2 bar; 30 psi; 0.2 MPa	Z		
				4 bar; 60 psi; 0.4 MPa	M		
				8 bar; 125 psi; 0.8 MPa	G		
				17 bar; 250 psi; 1.7 MPa	J		
				Without gauge			
				2 bar; 30 psi; 0.2 MPa	Y		
				4 bar; 60 psi; 0.4 MPa	L		
				8 bar; 125 psi; 0.8 MPa	N		
				17 bar; 250 psi; 1.7 MPa	H		

Port size	Description	Order Code	Flow dm ³ /s (scfm)	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/2"	8 bar (125 psi) Relieving	P33RA14BNNP	100 (212)	20 (300)	149 (5.9)	73 (2.9)	73 (2.9)
1/2"	8 bar (125 psi) Relieving + Gauge	P33RA14BNGP	100 (212)	20 (300)	149 (5.9)	73 (2.9)	73 (2.9)
3/4"	8 bar (125 psi) Relieving	P33RA16BNNP	100 (212)	20 (300)	149 (5.9)	73 (2.9)	73 (2.9)
3/4"	8 bar (125 psi) Relieving + Gauge	P33RA16BNGP	100 (212)	20 (300)	149 (5.9)	73 (2.9)	73 (2.9)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

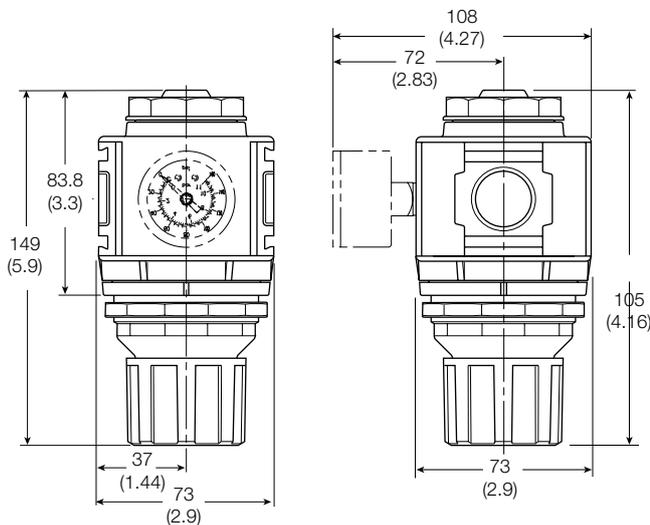
Flow Capacity*	1/2	100 dm ³ /s (212 scfm)
	3/4	100 dm ³ /s (212 scfm)
Operating Temperature	-25°C (-13°F) to 65.5°C (150°F)	
Max Supply Pressure	20 bar (300 psi)	
Adjusting Range Pressure	0-2 bar (30 psi)	
	0-4 bar (60 psi)	
	0-8 bar (125 psi)	
	0-17 bar (250 psi)	
Port Size	BSPP / NPT	1/2, 3/4
Gauge Port (2 ea.)	BSPP / NPT	1/4
Weight	0.62 kg (1.37 lbs)	

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

Materials of Construction

Body	Aluminium	
Adjustment Knob	Acetal	
Body Cap	ABS	
Bonnet	33% Glass-filled Nylon	
Diaphragm Assembly	Nitrile / Zinc	
Valve Assembly	Brass / Nitrile / Acetal	
Springs	Main Regulating Valve	Steel S.S.
Seals	Nitrile	
Panel Nut	Acetal	

Dimensions



NOTE: 61 mm hole required for panel nut mounting.

WARNING

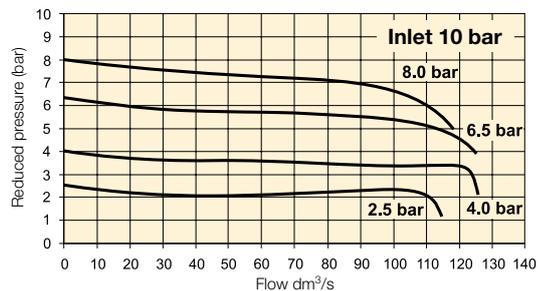
**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

CAUTION:

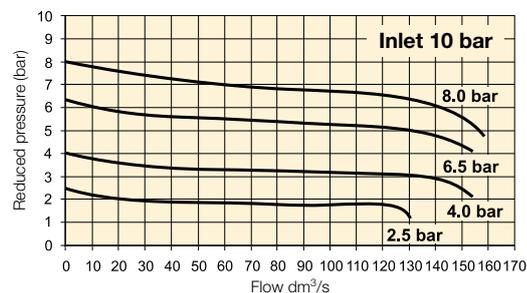
REGULATOR PRESSURE ADJUSTMENT – The working range of knob adjustment is designed to permit outlet pressures within their full range. Pressure adjustment beyond this range is also possible because the knob is not a limiting device. This is a common characteristic of most industrial regulators, and limiting devices may be obtained only by special design. For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Flow Charts

1/2 Regulator



3/4 Regulator



Repair and Service Kits

Panel mount nut - Aluminium	P33KA00MM
Panel mount nut - Plastic	P33KA00MP
Angle Bracket (uses panel mount threads)	P33KA00MR
T-Bracket with body connector	P32KA00MT
T-Bracket	P32KA00MB
Body connector	P32KA00CB

Gauges

50mm (2") Round 1/4" center back mount

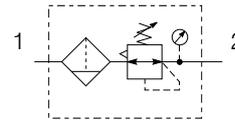
for units ordered without square gauge

0-60 PSIG / 0-4 bar / 0-0.4 MPa	P6G-ERB2040
0-160 PSIG / 0-11 bar / 0-1.1 MPa	P6G-ERB2110
0-300 PSIG / 0-20 bar / 0-2 MPa	P6G-ERB2200

Mini Filter / Regulator P31



Symbols



- Integral 1/4 ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- Positive bayonet latch to ensure correct & safe fitting
- Secondary pressure ranges 2, 4 & 8 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.

Options:

P 3 1	E A			E				N		P
Thread type		Drain type		Relief		Adjustment range		Mounting		
BSPP	1	Pulse drain	B	Relieving	B	With square gauge		Plastic panel		
NPT	9	Manual drain	M	Non relieving	N	Without gauge		mount nut		
Port size		Element		Bowl type		2 bar *	V	2 bar	Y	
1/4	2	5µ Element	E	Poly bowl with bowl guard	G	4 bar	S	4 bar	L	
				Metal bowl without sight glass	M	8 bar **	T	8 bar	N	
						* Unit comes with 0-4 bar gauge				
						** Unit comes with 0-10 bar gauge				

Port size	Description	Order Code	Flow dm ³ /s (scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	8 bar (125 psi) Relieving - Poly bowl - Manual drain	P31EA12EGMBNTP	14 (30)	10 (150)	164.1 (6.46)	40 (1.58)	64 (2.53)
1/4"	8 bar (125 psi) Relieving - Poly bowl - Pulse drain	P31EA12EGBBNTP	14 (30)	10 (150)	164.1 (6.46)	40 (1.58)	64 (2.53)
1/4"	8 bar (125 psi) Relieving - Metal bowl - Manual drain	P31EA12EMMBNTP	14 (30)	17 (250)	164.1 (6.46)	40 (1.58)	64 (2.53)
1/4"	8 bar (125 psi) Relieving - Metal bowl - Pulse drain	P31EA12EMBBNTP	14 (30)	17 (250)	164.1 (6.46)	40 (1.58)	64 (2.53)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

Flow Capacity*	1/4	14 dm ³ /s (30.0 scfm)
Operating Temperature	Plastic Bowl Metal Bowl	-10°C (14°F) to 52°C (125°F) -10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl Metal Bowl	10 bar (150 psi) 17 bar (250 psi)
Standard Filtration		5 Micron
Useful Retention		12 cm ³ (0.4 US oz.)
Adjusting Range Pressure		0-2 bar (30 psi) 0-4 bar (60 psi) 0-8 bar (125 psi)
Port Size	BSPP / NPT	1/4
Gauge Port (2 ea.)**	BSPP / NPT	1/8
Weight		0.19 kg (0.42 lbs)

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

** Non-gauge option only.

Air quality:

Within ISO 8573-1: 1991 Class 3 (Particulates)

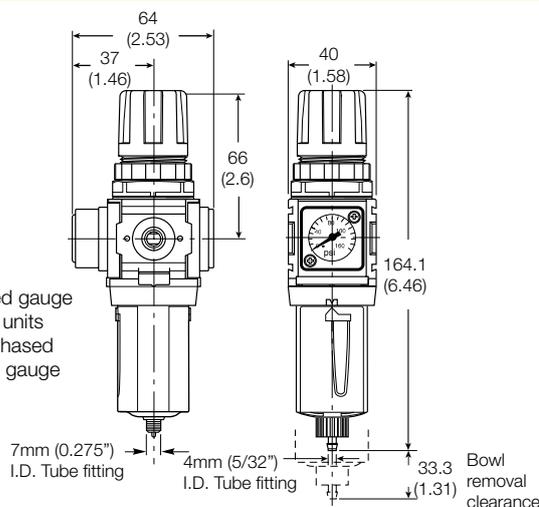
Within ISO 8573-1: 2001 Class 6 (Particulates)

Materials of Construction

Body	Aluminium	
Adjustment Knob	Acetal	
Body Cap	ABS	
Bonnet	PBT	
Bowl	Plastic Bowl Metal Bowl	Polycarbonate Aluminium
Bowl Guard	Nylon	
Filter Element	Polyethylene	
Seals	Plastic Bowl Metal Bowl	Nitrile Nitrile
Springs	Steel	
Valve Assembly	Brass / Nitrile	
Diaphragm Assembly	Brass / Nitrile	
Panel Nut	Acetal	

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Dimensions



Note:

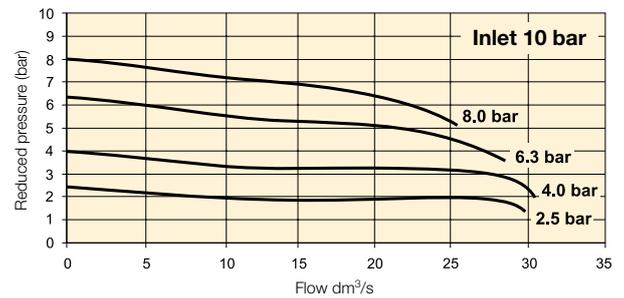
Flush-mounted gauge kits will not fit units originally purchased with threaded gauge ports.

⚠ WARNING

**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

Flow Charts

1/4 Filter/Regulator



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P31KA00BGM
Metal bowl / w/o sight gauge manual drain	P31KA00BMM
Plastic bowl / Bowl guard pulse drain	P31KA00BGB
Metal bowl / w/o sight gauge pulse drain	P31KA00BMB
5μ particle filter element	P31KA00ESE
Panel mount nut - Aluminium	P31KA00MM
Panel mount nut - Plastic	P31KA00MP
Angle Bracket (uses panel mount threads)	P31KA00MR
C-Bracket (fits to body)	P31KA00MW
T-Bracket with body connector	P31KA00MT
Body connector	P31KA00CB

Gauges

Square flush mount gauge

replacement for unit ordered with square gauge

0-4 bar	K4511SCR04B
0-10 bar	K4511SCR11B

40mm (1 1/2") Round 1/8" center back mount

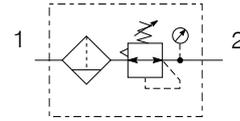
for units ordered without square gauge

0-30 PSIG / 0-2 bar	P3D-KAB1AYN
0-58 PSIG / 0-4 bar	P3D-KAB1ALN
0-160 PSIG / 0-10 bar	P3D-KAB1ANN

Compact Filter / Regulator P32



Symbols



- Integral 1/4, 3/8 or 1/2 ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- Positive bayonet latch to ensure correct & safe fitting
- Secondary pressure ranges 2, 4, 8 & 17 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.

Options:

P 3 2	E A			E			N		P
Thread type		Port size		Drain type		Mounting			
BSPP	1	1/4	2	Manual drain	M	Plastic panel mount nut		P	
NPT	9	3/8	3	Auto drain	A				
		1/2	4						
Element				Relief		Adjustment range			
5µ Element				Relieving		With round gauge			
E				Non relieving		2 bar; 30 psi; 0.2 MPa			
				N		4 bar; 60 psi; 0.4 MPa			
						8 bar; 125 psi; 0.8 MPa			
						17 bar; 250 psi; 1.7 MPa			
						Without gauge			
						2 bar; 30 psi; 0.2 MPa			
						4 bar; 60 psi; 0.4 MPa			
						8 bar; 125 psi; 0.8 MPa			
						17 bar; 250 psi; 1.7 MPa			
Bowl type									
Poly bowl with bowl guard						Z			
G						M			
Metal bowl with sight glass						G			
S						J			
						Y			
						L			
						N			
						H			

Port size	Description	Order Code	Flow dm³/s *	(scfm) *	Max bar	(psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	8 bar (125 psi) Relieving - Poly bowl - Manual drain	P32EA12EGMBNGP	42	(89)	10	(150)	254 (10.0)	60 (2.36)	60 (2.36)
1/4"	8 bar (125 psi) Relieving - Poly bowl - Auto drain	P32EA12EGABNGP	42	(89)	10	(150)	248 (9.76)	60 (2.36)	60 (2.36)
1/4"	8 bar (125 psi) Relieving - Metal bowl sight glass - Manual drain	P32EA12ESMBNGP	42	(89)	17	(250)	245 (9.66)	60 (2.36)	60 (2.36)
1/4"	8 bar (125 psi) Relieving - Metal bowl sight glass - Auto drain	P32EA12ESABNGP	42	(89)	17	(250)	248 (9.76)	60 (2.36)	95 (3.74)
3/8"	8 bar (125 psi) Relieving - Poly bowl - Manual drain	P32EA13EGMBNGP	58	(123)	10	(150)	254 (10.0)	60 (2.36)	60 (2.36)
3/8"	8 bar (125 psi) Relieving - Poly bowl - Auto drain	P32EA13EGABNGP	58	(123)	10	(150)	248 (9.76)	60 (2.36)	60 (2.36)
3/8"	8 bar (125 psi) Relieving - Metal bowl sight glass - Manual drain	P32EA13ESMBNGP	58	(123)	17	(250)	245 (9.66)	60 (2.36)	60 (2.36)
3/8"	8 bar (125 psi) Relieving - Metal bowl sight glass - Auto drain	P32EA13ESABNGP	58	(123)	17	(250)	248 (9.76)	60 (2.36)	95 (3.74)
1/2"	8 bar (125 psi) Relieving - Poly bowl - Manual drain	P32EA14EGMBNGP	64	(136)	10	(150)	245 (9.66)	60 (2.36)	95 (3.74)
1/2"	8 bar (125 psi) Relieving - Poly bowl - Auto drain	P32EA14EGABNGP	64	(136)	10	(150)	248 (9.76)	60 (2.36)	95 (3.74)
1/2"	8 bar (125 psi) Relieving - Metal bowl sight glass - Manual drain	P32EA14ESMBNGP	64	(136)	17	(250)	254 (10.0)	60 (2.36)	60 (2.36)
1/2"	8 bar (125 psi) Relieving - Metal bowl sight glass - Auto drain	P32EA14ESABNGP	64	(136)	17	(250)	248 (9.76)	60 (2.36)	60 (2.36)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

Flow Capacity*	1/4	42 dm ³ /s (89 scfm)
	3/8	58 dm ³ /s (123 scfm)
	1/2	64 dm ³ /s (136 scfm)
Operating Temperature	Plastic Bowl	-25°C (-13°F) to 52°C (125°F)
	Metal Bowl	-25°C (-13°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration		5 Micron
Useful Retention**		51 cm ³ (1.7 US oz.)
Adjusting Range Pressure		0-2 bar (30 psi)
		0-4 bar (60 psi)
		0-8 bar (125 psi)
		0-17 bar (250 psi)
Port Size	BSPP / NPT	1/4, 3/8, 1/2
Gauge Port (2 ea.)	BSPP / NPT	1/4
Weight		0.53 kg (1.17 lbs)

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

** Useful retention refers to volume below the quiet zone baffle.

Air quality:

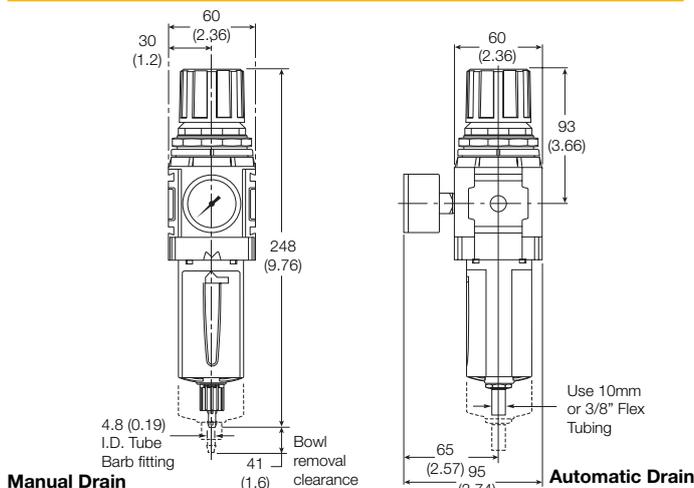
Within ISO 8573-1: 1991 Class 3 (Particulates)

Within ISO 8573-1: 2001 Class 6 (Particulates)

Materials of Construction

Body		Aluminium
Adjustment Knob		Acetal
Body Cap		ABS
Element Retainer / Baffle		Acetal
Bowl	Plastic Bowl	Polycarbonate
	Metal Bowl	Zinc
Bowl Guard		Nylon
Filter Element		Sintered Polyethylene
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Springs	Main Regulating / Valve	Steel / S.S.
Valve Assembly		Brass / Nitrile
Diaphragm Assembly		Nitrile / Zinc
Panel Nut		Acetal
Sight Gauge	Metal Bowl	Polycarbonate

Dimensions

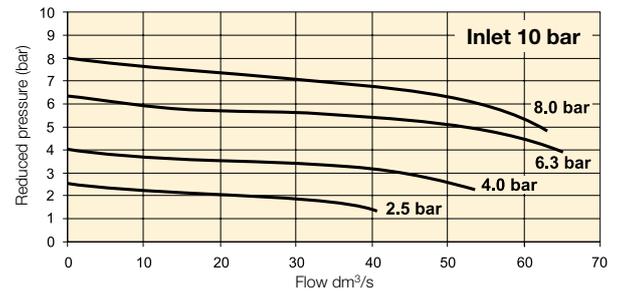


WARNING

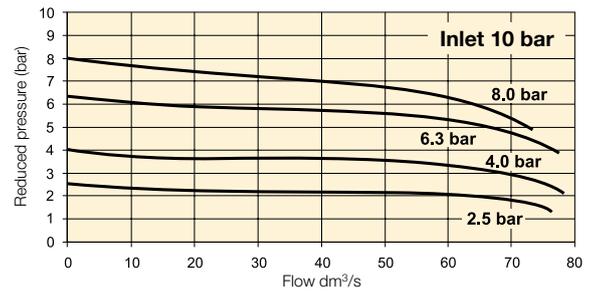
**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

Flow Charts

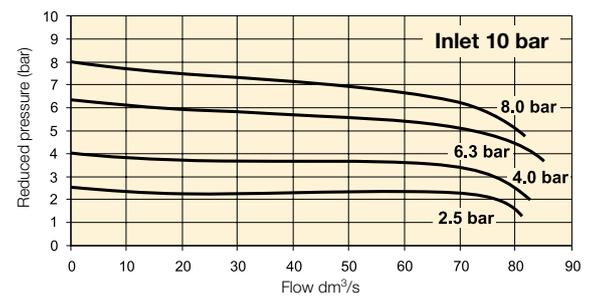
1/4 Filter/Regulator



3/8 Filter/Regulator



1/2 Filter/Regulator



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P32KA00BGM
Metal bowl / Sight gauge manual drain	P32KA00BSM
Auto drain	P32KA00DA
5µ particle filter element	P32KA00ESE
Panel mount nut - Aluminium	P32KA00MM
Panel mount nut - Plastic	P32KA00MP
Angle Bracket (fits to panel mount threads)	P32KA00MR
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB

Gauges

50mm (2") Round 1/4" center back mount

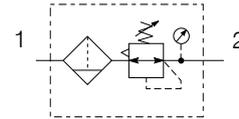
for units ordered without square gauge

0-60 PSIG / 0-4 bar / 0-0.4 MPa	P6G-ERB2040
0-160 PSIG / 0-11 bar / 0-1.1 MPa	P6G-ERB2110
0-300 PSIG / 0-20 bar / 0-2 MPa	P6G-ERB2200

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Standard Filter / Regulator P33

Symbols



- Integral 1/2 or 3/4 ports (BSPP & NPT)
- High efficiency 5 micron element as standard
- Excellent water removal efficiency
- Robust but lightweight aluminium construction
- Positive bayonet latch to ensure correct & safe fitting
- Secondary pressure ranges 2, 4, 8 & 17 bar
- Secondary aspiration plus balanced poppet provides quick response and accurate pressure regulation.

Options:

P 33	E A			E				N		P
Thread type		Port size		Drain type		Element		Adjustment range		Mounting
BSPP	1	1/2	4	Manual drain	M	5µ Element	E	With round gauge		Plastic panel mount nut
NPT	9	3/4	6	Auto drain	A			Without gauge		P
				Relief		Bowl type		2 bar; 30 psi; 0.2 MPa		
				Relieving		Poly bowl with bowl guard		4 bar; 60 psi; 0.4 MPa		Z
				Non relieving		Metal bowl with sight glass		8 bar; 125 psi; 0.8 MPa		M
								17 bar; 250 psi; 1.7 MPa		G
								2 bar; 30 psi; 0.2 MPa		J
								4 bar; 60 psi; 0.4 MPa		Y
								8 bar; 125 psi; 0.8 MPa		L
								17 bar; 250 psi; 1.7 MPa		N
										H

Port size	Description	Order Code	Flow dm ³ /s *	(scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/2"	8 bar (125 psi) Relieving - Poly bowl - Manual drain	P33EA14EGMBNGP	90	(191)	10 (150)	282 (11.0)	73 (2.9)	73 (2.9)
1/2"	8 bar (125 psi) Relieving - Poly bowl - Auto drain	P33EA14EGABNGP	90	(191)	10 (150)	291 (11.44)	73 (2.9)	73 (2.9)
1/2"	8 bar (125 psi) Relieving - Metal bowl sight glass - Manual drain	P33EA14ESMBNGP	90	(191)	17 (250)	282 (11.0)	73 (2.9)	73 (2.9)
1/2"	8 bar (125 psi) Relieving - Metal bowl sight glass - Auto drain	P33EA14ESABNGP	90	(191)	17 (250)	291 (11.44)	73 (2.9)	108 (4.27)
3/4"	8 bar (125 psi) Relieving - Poly bowl - Manual drain	P33EA16EGMBNGP	98	(208)	10 (150)	282 (11.0)	73 (2.9)	108 (4.27)
3/4"	8 bar (125 psi) Relieving - Poly bowl - Auto drain	P33EA16EGABNGP	98	(208)	10 (150)	291 (11.44)	73 (2.9)	108 (4.27)
3/4"	8 bar (125 psi) Relieving - Metal bowl sight glass - Manual drain	P33EA16ESMBNGP	98	(208)	17 (250)	282 (11.00)	73 (2.9)	73 (2.9)
3/4"	8 bar (125 psi) Relieving - Metal bowl sight glass - Auto drain	P33EA16ESABNGP	98	(208)	17 (250)	291 (11.44)	73 (2.9)	73 (2.9)

* flow with 10 bar (145 psig) inlet pressure, 6.3 bar (91.3 psig) set pressure and 1 bar (14.5 psig) pressure drop.

Specifications

Flow Capacity*	1/2	90 dm ³ /s (191 scfm)
	3/4	98 dm ³ /s (208 scfm)
Operating Temperature	Plastic Bowl	-25°C (-13°F) to 52°C (125°F)
	Metal Bowl	-25°C (-13°F) to 65.5°C (150°F)
Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Standard Filtration	5 Micron	
Useful Retention**	85 cm ³ (2.8 US oz.)	
Adjusting Range	0-2 bar (30 psi)	
Pressure	0-4 bar (60 psi)	
	0-8 bar (125 psi)	
	0-17 bar (250 psi)	
Port Size	BSPP / NPT	1/2, 3/4
Gauge Port (2 ea.)	BSPP / NPT	1/4
Weight	0.85 kg (1.87 lbs)	

* Inlet pressure 10 bar. Secondary pressure 6.3 bar.

** Useful retention refers to volume below the quiet zone baffle.

Air quality:

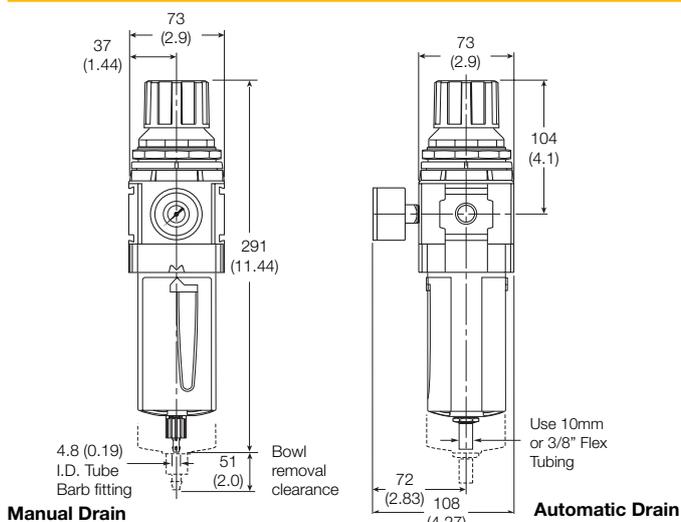
Within ISO 8573-1: 1991 Class 3 (Particulates)

Within ISO 8573-1: 2001 Class 6 (Particulates)

Materials of Construction

Body	Aluminium	
Adjustment Knob	Acetal	
Body Cap	ABS	
Element Retainer / Baffle	Acetal	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Filter Element	Sintered Polyethylene	
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Springs	Main Regulating / Valve	Steel / S.S.
Valve Assembly	Brass / Nitrile	
Diaphragm Assembly	Nitrile / Zinc	
Panel Nut	Acetal	
Sight Gauge	Metal Bowl	Polycarbonate

Dimensions

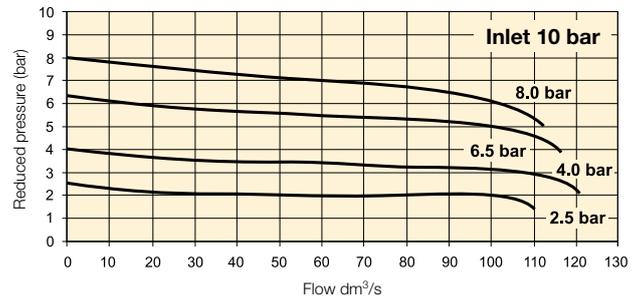


⚠ WARNING

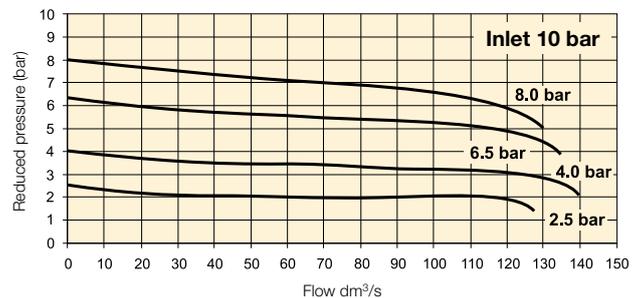
**Product rupture can cause serious injury.
Do not connect regulator to bottled gas.
Do not exceed maximum primary pressure rating.**

Flow Charts

1/2 Filter/Regulator



3/4 Filter/Regulator



Repair and Service Kits

Plastic bowl / Bowl guard manual drain	P33KA00BGM
Metal bowl / Sight gauge manual drain	P33KA00BSM
Auto drain	P33KA00DA
5µ particle filter element	P33KA00ESE
Panel mount nut - Aluminium	P33KA00MM
Panel mount nut - Plastic	P33KA00MP
Angle Bracket (fits to panel mount threads)	P33KA00MR
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB

Gauges

50mm (2") Round 1/4" center back mount

for units ordered without square gauge

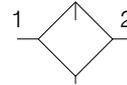
0-60 PSIG / 0-4 bar / 0-0.4 MPa	P6G-ERB2040
0-160 PSIG / 0-11 bar / 0-1.1 MPa	P6G-ERB2110
0-300 PSIG / 0-20 bar / 0-2 MPa	P6G-ERB2200

For best performance, regulated pressure should always be set by increasing the pressure up to the desired setting.

Mini Lubricator - P31

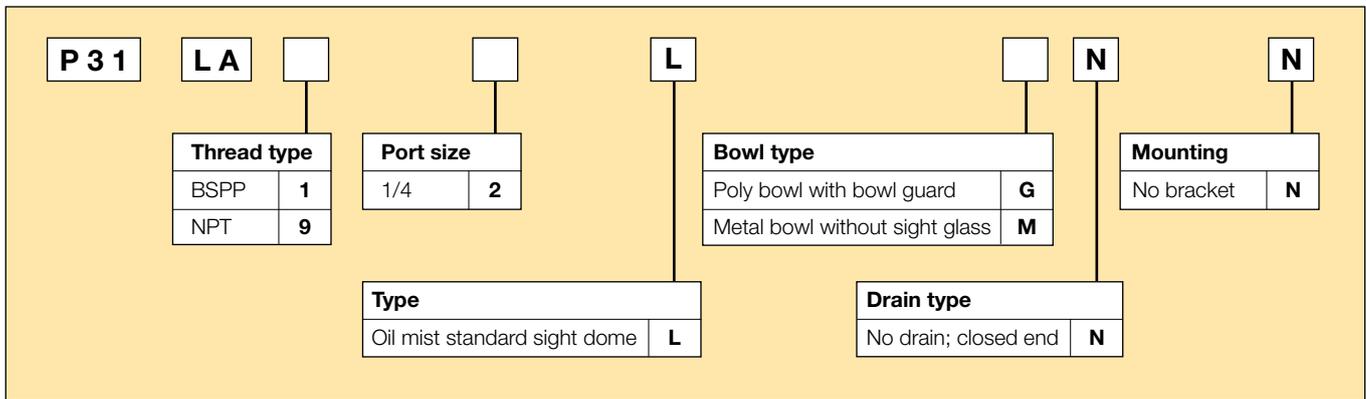


Symbols



- Integral 1/4 ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Proportional oil delivery over a wide range of air flows.
- Finger tip ratchet control for precise oil drip rate adjustment

Options:



Port size	Description	Order Code	Flow dm ³ /s (scfm) * *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	Poly bowl - No drain	P31LA12LGNN	13 (28)	10 (150)	147.5 (5.8)	40 (1.58)	42.7 (1.68)
1/4"	Metal bowl - No drain	P31LA12LMNN	13 (28)	17 (250)	147.5 (5.8)	40 (1.58)	42.7 (1.68)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

Specifications

Flow Capacity*	1/4	13 dm ³ /s (28 scfm)
Operating Temperature	Plastic Bowl	-10°C (14°F) to 52°C (125°F)
	Metal Bowl	-10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Useful Retention		18 cm ³ (0.6 US oz.)
Port Size	BSP / NPT	1/4
Weight		0.13 kg (0.29 lbs)

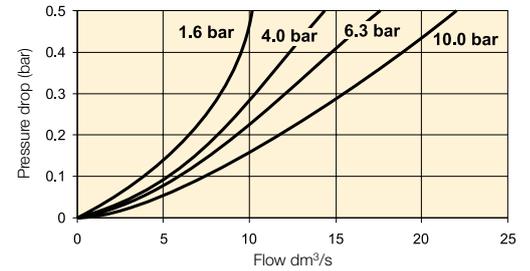
* Inlet pressure 6.3 bar. Pressure drop 0.34 bar.

Materials of Construction

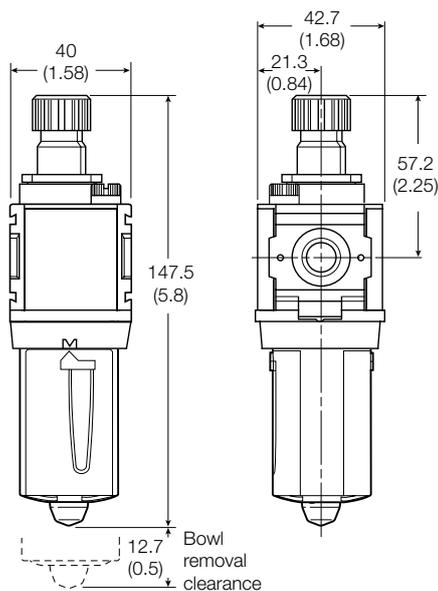
Body	Aluminium	
Body Cap	ABS	
Bowl	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Sight Dome	Polycarbonate	
Suggested Lubricant	ISO / ASTM VG32	
Pick-up Filter	Sintered Bronze	

Flow Charts

1/4 Lubricator



Dimensions



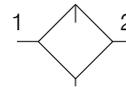
Repair and Service Kits

Plastic bowl / Bowl guard no drain	P31KA00BGN
Metal bowl / w/o sight gauge no drain	P31KA00BMN
Drip control assembly	P32KA00PG
C-Bracket (fits to body)	P31KA00MW
T-Bracket with body connector	P31KA00MT
Body connector	P31KA00CB
Lubricator Oil - VG15:ISO 3448 - 100ml	P3XKA00PPA
Lubricator Oil - VG32 - 1 litre	P3YKA00PPBB

Compact Lubricator - P32



Symbols



- Integral 1/4, 3/8 or 1/2 ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Proportional oil delivery over a wide range of air flows.
- Finger tip ratchet control for precise oil drip rate adjustment
- Fill from top under system pressure

Options:

P 3 2	L A			L		N	N
Thread type		Port size		Bowl type		Mounting	
BSPP	1	1/4	2	Poly bowl with bowl guard	G	No bracket	N
NPT	9	3/8	3	Metal bowl with sight glass	S		
		1/2	4				
Type				Drain type			
Oil mist standard sight dome				No drain; closed end			
				L			N

Port size	Description	Order Code	Flow dm ³ /s *	(scfm) *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/4"	Poly bowl - No drain	P32LA12LGNN	18	(38)	10 (150)	211 (8.3)	60 (2.36)	60 (2.36)
1/4"	Metal bowl - No drain	P32LA12LSNN	18	(38)	17 (250)	211 (8.3)	60 (2.36)	60 (2.36)
3/8"	Poly bowl - No drain	P32LA13LGNN	32	(68)	10 (150)	211 (8.3)	60 (2.36)	60 (2.36)
3/8"	Metal bowl - No drain	P32LA13LSNN	32	(68)	17 (250)	211 (8.3)	60 (2.36)	60 (2.36)
1/2"	Poly bowl - No drain	P32LA14LGNN	47	(100)	10 (150)	211 (8.3)	60 (2.36)	60 (2.36)
1/2"	Metal bowl - No drain	P32LA14LSNN	47	(100)	17 (250)	211 (8.3)	60 (2.36)	60 (2.36)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

Specifications

Flow Capacity*	1/4	18 dm ³ /s (38 scfm)
	3/8	32 dm ³ /s (68 scfm)
	1/2	47 dm ³ /s (100 scfm)
Operating Temperature	Plastic Bowl	-10°C (14°F) to 52°C (125°F)
	Metal Bowl	-10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Useful Retention		121 cm ³ (4.09 US oz.)
Port Size	BSPP / NPT	1/4, 3/8, 1/2
Weight		0.31 kg (0.68 lbs)

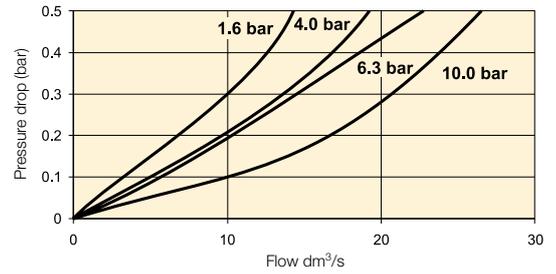
*Inlet pressure 6.3 bar. Pressure drop 0.34 bar.

Materials of Construction

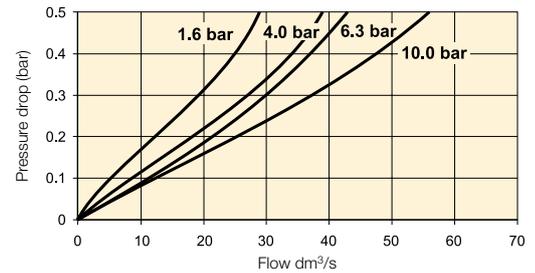
Body	Aluminium	
Body Cap	ABS	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Sight Dome	Polycarbonate	
Sight Gauge	Metal Bowl	Polycarbonate
Suggested Lubricant	ISO / ASTM VG32	
Pick-up Filter	Sintered Bronze	

Flow Charts

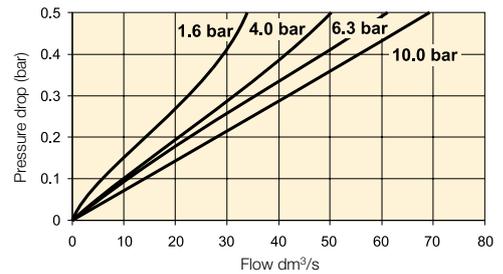
1/4 Lubricator



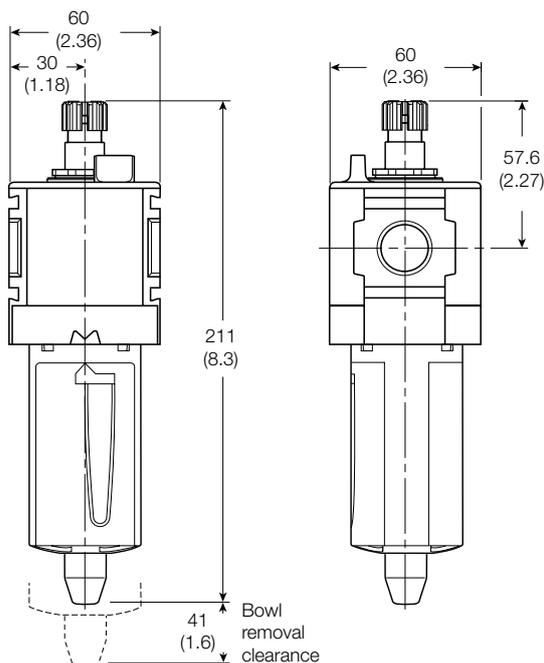
3/8 Lubricator



1/2 Lubricator



Dimensions



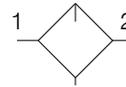
Repair and Service Kits

Plastic bowl / Bowl guard no drain	P32KA00BGN
Metal bowl / Sight gauge no drain	P32KA00BSN
Drip control assembly	P32KA00PG
L-Bracket (fits to body)	P32KA00ML
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB
Lubricator Oil - VG15:ISO 3448 - 100ml	P3XKA00PPA
Lubricator Oil - VG32 - 1 litre	P3YKA00PPBB

Standard Lubricator - P33

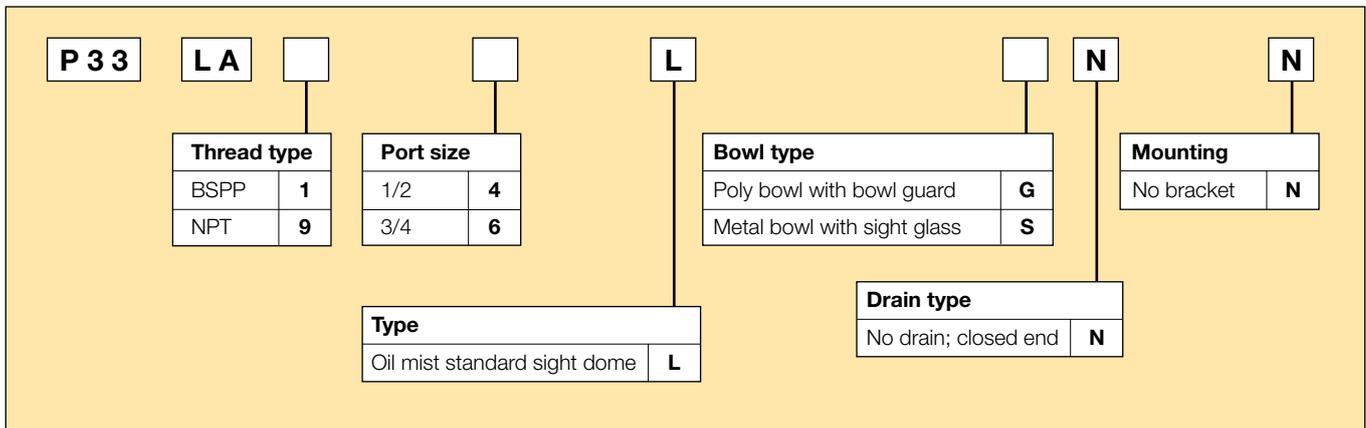


Symbols



- Integral 1/2 or 3/4 ports (BSPP & NPT)
- Robust but lightweight aluminium construction
- Proportional oil delivery over a wide range of air flows.
- Finger tip ratchet control for precise oil drip rate adjustment
- Fill from top under system pressure

Options:



Port size	Description	Order Code	Flow dm ³ /s (scfm) * *	Max bar (psi)	Height mm (Inches)	Width mm (Inches)	Depth mm (Inches)
1/2"	Poly bowl - No drain	P33LA14LGNN	48 (102)	10 (150)	237.6 (9.35)	73 (2.9)	73 (2.9)
1/2"	Metal bowl - No drain	P33LA14LSNN	48 (102)	17 (250)	237.6 (9.35)	73 (2.9)	73 (2.9)
3/4"	Poly bowl - No drain	P33LA16LGNN	68 (144)	10 (150)	237.6 (9.35)	73 (2.9)	73 (2.9)
3/4"	Metal bowl - No drain	P33LA16LSNN	68 (144)	17 (250)	237.6 (9.35)	73 (2.9)	73 (2.9)

* flow with 6.3 bar (91.3 psig) inlet pressure and 0.34 (4.9 psig) pressure drop.

Specifications

Flow Capacity*	1/2	48 dm ³ /s (102 scfm)
	3/4	68 dm ³ /s (144 scfm)
Operating Temperature	Plastic Bowl	-10°C (14°F) to 52°C (125°F)
	Metal Bowl	-10°C (14°F) to 65.5°C (150°F)
Max Supply Pressure	Plastic Bowl	10 bar (150 psi)
	Metal Bowl	17 bar (250 psi)
Useful Retention		181 cm ³ (6.1 US oz.)
Port Size	BSPP / NPT	1/2, 3/4
Weight		0.47 kg (1.04 lbs)

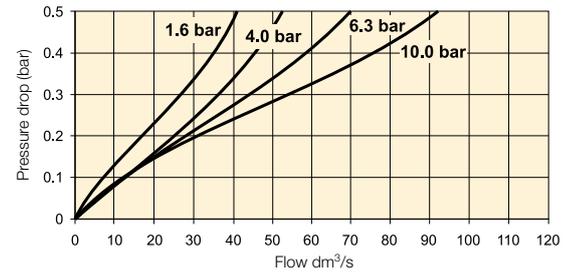
* Inlet pressure 6,3 bar. Pressure drop 0,34 bar.

Materials of Construction

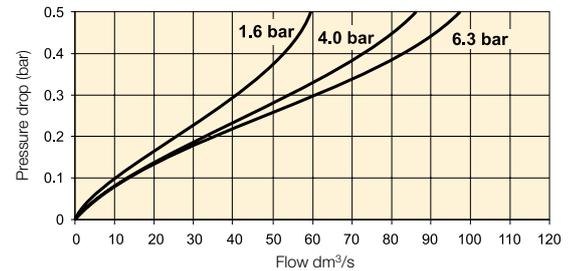
Body	Aluminium	
Body Cap	ABS	
Bowls	Plastic Bowl	Polycarbonate
	Metal Bowl	Aluminium
Seals	Plastic Bowl	Nitrile
	Metal Bowl	Nitrile
Sight Dome	Polycarbonate	
Sight Gauge	Metal Bowl	Polycarbonate
Suggested Lubricant	ISO / ASTM VG32	
Pick-up Filter	Sintered Bronze	

Flow Charts

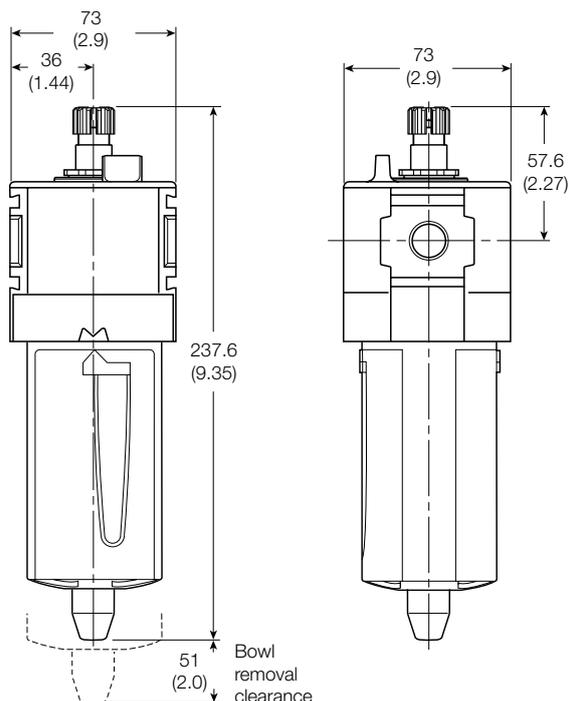
1/2 Lubricator



3/4 Lubricator



Dimensions



Repair and Service Kits

Plastic bowl / Bowl guard no drain	P33KA00BGN
Metal bowl / Sight gauge no drain	P33KA00BSN
Drip control assembly	P32KA00PG
L-Bracket (fits to body)	P33KA00ML
T-Bracket (fits to body connector)	P32KA00MB
T-Bracket with body connector	P32KA00MT
Body connector	P32KA00CB
Lubricator Oil - VG15:ISO 3448 - 100ml	P3XKA00PPA
Lubricator Oil - VG32 - 1 litre	P3YKA00PPBB

- Very fast response times
- Accurate output pressure
- Micro parameter settings
- Selectable I/O parameters
- Quick, full flow exhaust
- LED display indicates output pressure
- No air consumption in steady state
- Multiple mounting options
- Protection to IP65
- P31P flows to 19 dm³/s (40 scfm)
- P32P flows to 57 dm³/s (120 scfm)



P31PA Series
Bottom exhaust

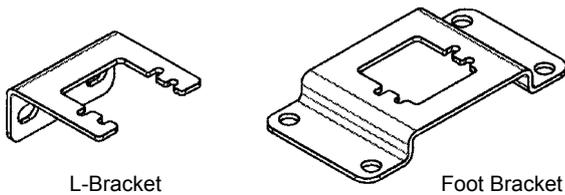
P32PA Series
Bottom exhaust

Order Key

P 3	PA	2	1 A
Port size	Thread type	Pressure Range	Output Signal
Global Mini (1/4") 1	BSPP 1	0 - 2 bar Z	Digital, PNP 1) D
Global Compact (1/2") 2	NPT 9	0 - 7 bar S	PNP or 0-10V 2) P
		0 - 10 bar D	NPN or 0-10V 3) N
Port size		Power supply	4-20mA fixed 4) M
Global Mini (1/4") 2		24 volts 2	
Global Compact (1/2") 4		Control Signal	Input connector
		0-10 V V	M12 (4 pin) 1
		4-20 mA A	
Version		* When the supply voltage is lost the unit will automatically exhaust the regulated pressure to 0 bar (atmospheric pressure)	
Bottom ported exhaust NC A		1) Digital PNP output only, no analogue output selectable	
Bottom ported forced exhaust (NO) * E		2) Digital PNP and analogue 0-10V outputs selectable, by means of parameter 6. (Factory default 0-10V)	
Side ported exhaust NC B		3) Digital NPN and analogue 0-10 V outputs selectable by means of parameter 6. (Factory default 0-10V)	
Side ported forced exhaust (NO) * C		4) Analogue 4-20mA output only.	
		Note: On all analogue outputs the F.S. value can be adjusted by means of parameter 8	

P31P Mounting brackets

Order Code	Description
P3HKA00ML	L-Bracket mounting kit
P3HKA00MC	Foot bracket mounting kit

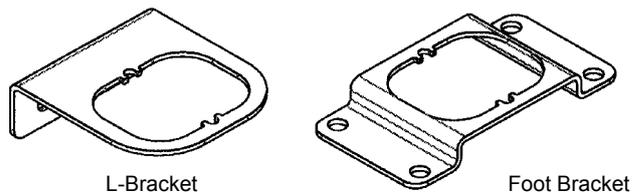


L-Bracket

Foot Bracket

P32P Mounting brackets

Order Code	Description
P3KKA00ML	L-Bracket mounting kit
P3KKA00MC	Foot bracket mounting kit



L-Bracket

Foot Bracket

Cables

Order Code	Description
P8L-MC04A2A-M12	2 mtr. cable with moulded straight M12x1 connector
P8L-MC04R2A-M12	2 mtr. cable with moulded 90 degree M12x1 connector.

Note:
These brackets fit both Proportional Regulators and Combined Soft Start & Dump Valves.
Dimensions see page: 61

Technical information

Pneumatics

Working medium

Compressed air or inert gasses, filtered to min. 40µ, lubricated or non-lubricated, dried or un-dried, pressure dewpoint 3-5°C.

Supply pressure

Max. Operating Pressure:
 2 bar unit: 3 bar (43.5 PSI)
 7 bar unit: 10.5 bar (152 PSI)
 10 bar unit: 10.5 bar (152 PSI)
 Min. Operating Pressure P2 Pressure + 0,5 bar (7.3 PSI)

Pressure control range

Available in three pressure ranges, 0-2 bar, 0-7 bar or 0-10 bar. Pressure range can be changed through the software at all times. (parameter 19)

Temperature range

0°C up to +50°C (32°F up to 122°F)

Weights:

P31P = 0.291 kg (0.64 lbs)
 P32P = 0.645 kg (1.42 lbs)

Air consumption

No consumption in stable regulated situation.

Display

The regulator is provided with a digital display, indicating the output pressure, either in BAR or PSI. The factory setting is as indicated on the label, can be changed through to software at all times (parameter 14).

Electronics

Supply voltage

24 VDC +/- 10%

Power consumption

Max. 1.1W with unloaded signal outputs

Control signals

The electronic pressure regulator can be externally controlled through an analogue control signal of either 0-10V or 4-20mA.(parameter 4).

Output signals

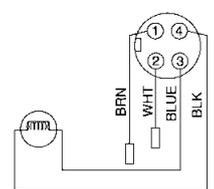
As soon as the output pressure is within the signal band a signal is given of 24V DC, PNP Ri = 1 kOhm Outside the signal band this connection is 0V.

Connections

(In case of output signal (option D))

Central M12 connector 4-pole

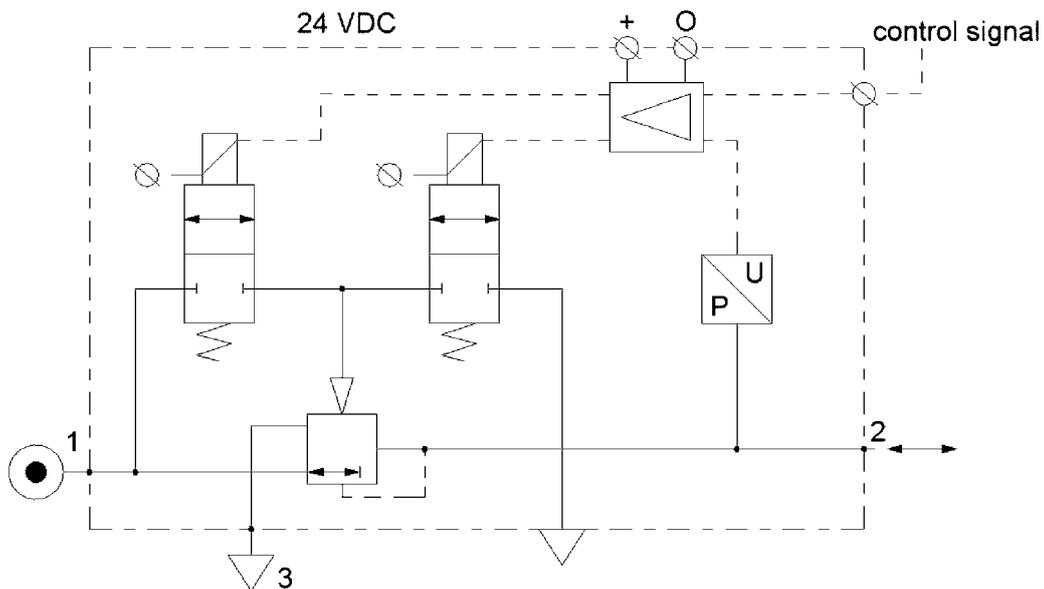
ISO 20401
 4-Pin Micro
 (Top cover)



The electrical connections are as follows:

Pin no.	Function	Colour
1	24V supply	Brown
2	0 to 10 V control signal Ri = 100 kOhm	White
2	4 to 20mA control signal Ri = 500 Ohm	White
3	0V (GND) supply	Blue
4	24V alarm output signal	Black

Schematic



Technical information

Dead band : The dead band is preset at 1,3% F.S. (parameter 13)

Accuracy : Linearity: = < 0,3% F.S.

Proportional band : The proportional band is preset at 10% F.S.

Fail safe operation :

After interrupting the **power supply** the present output pressure is maintained at approximately the same level.
After switching on the power supply again the pressure can be adjusted immediately by giving a new control signal.

Full exhaust : Complete exhaust of the regulator is defined as $P_2 \leq 1\%$ F.S.

Degree of protection: IP 65

Full scale (F.S.)

For 2 bar versions this will 2 bar, for the 7 and 10 bar version full scale will be 10 bar.

EU conformity : CE: standard

EMC: according to directive 89/336/EEC

The new pressure regulator is in accordance with:

- EN 61000-6-1:2001**
- EN 61000-6-2:2001**
- EN 61000-6-3:2001**
- EN 61000-6-4:2001**

These standards ensure that this unit meets the highest level of EMC protection.

Mounting position : Preferably vertically, with the cable gland on top.

Materials: P31P & P32P

- Magnet CoreSteel
- Solenoid Valve PoppetFPM
- Solenoid Valve Housing Techno Polymer
- Regulator Body (P31P & P32P versions) Aluminium
- Regulator Top HousingNylon
- Valve HeadBrass & NBR
- Remaining Seals NBR

Advanced functionality

Pilot valve protection

When the required output pressure can not be achieved because of a lack of input pressure the unit will open fully and will display NoP. Approximately every 10 seconds the unit will retry. The output pressure will then be approximately equal to the inlet pressure. As soon as the input pressure is back on the required level, the normal control function follows.

Safety exhaust

Should the **control signal** fall below 0,1 volts the valve will automatically dump downstream system pressure .

Fail safe

When the **supply voltage** drops, the electronic control reverts to the fail safe mode. The last known output pressure is maintained at approximately the same level depending upon air consumption. The digital display indicates the last known pressure setting. When the supply voltage is reinstated to the correct level, the valve moves from the fail safe mode and the output pressure immediately follows the control signal requirement. The display indicates the actual output pressure.

Input protection

The unit has built-in protection against failure and burnout resulting from incorrect input value, typically:

The 24v DC supply is incorrectly connected to the setpoint input, the display will show 'OL', as an overload indication. The unit will need to be rewired and when correctly connected will operate normally.

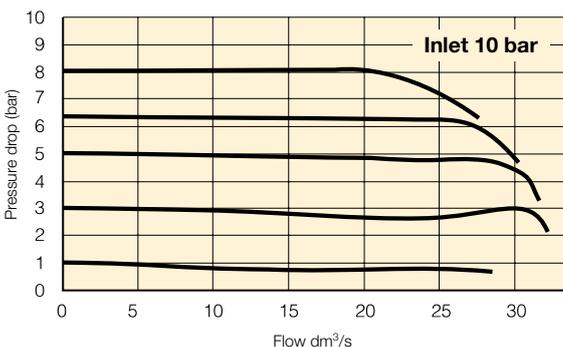
The overload indicator 'OL' will also appear should the wrong input value be applied or the wrong input value be programmed: 4 - 20m instead of 0 - 10V. To correct this a different set point value should be input or the unit reprogrammed to correct the set point value acceptance. (via parameter 4).

Response time	P31P	P32P
2 to 4 bar	25 msecs	35 msecs
1 to 6 bar	55 msecs	135 msecs
4 to 2 bar	70 msecs	85 msecs
6 to 1 bar	80 msecs	225 msecs

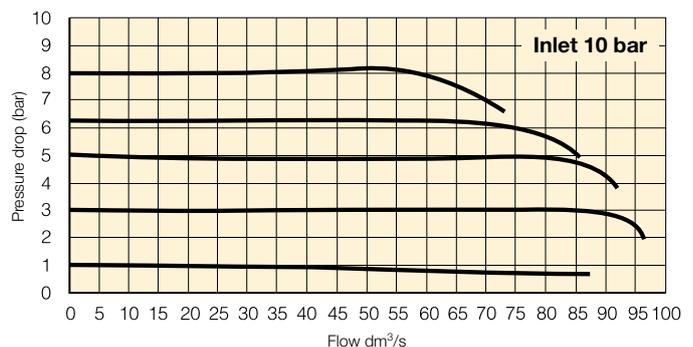
To fill volume of:
100cm³ - P31P
330cm³ - P32P
connected to the outlet of the regulator.

Flow Charts

P31P Regulator 1/4" Ports



P32P Regulator 1/2" Ports



How to change parameters

Pressing the Accept key “acc” for more than 3 seconds, will activate parameter change mode. The user can then select the parameters by pressing up or down key. (display will show Pxx). When parameter number is correct, pressing accept again will enter parameter number.(display will show parameter value).

Pressing the up or down key will change the parameter itself. (display will flash indicating parameter editing mode). Pressing the accept key will accept the new parameter value. (all digits will flash whilst being accepted).

After releasing all keys , the next parameter number will be presented on the display. (you may step to the next parameter). When no key is pressed, after 3 seconds the display will show the actual output pressure.

When the unit is initially powered up allow approximately 10 seconds for the unit to “boot-up” before changing parameter settings.

Only parameter numbers 0, 4, 6, 8, 9, 14, 18, 19, 20, 12, 13 and 21 are accessible to edit. All other parameters are fixed.

Manual mode

When keys DOWN and UP are pressed during startup, (connecting to the 24V power supply) manual mode is activated. This means that the user is able to in/decrease the output pressure of the regulator, by pressing the UP or DOWN key. During this action the display will blink, indicating that the manual mode is activated. After powering up again, the unit will revert back to normal mode.

Back to Factory Setting

After start up. (Power is on)
 Entering this value in parameter 0 will store the calibrated factory data into the working parameters.
 (Default calibration data is used)

Parameter Number 0 – Reset Back to Factory Settings

Step	1	2	3	4	5	
Press	3-6 seconds					
Until Display Reads			Flashing Decimal	Flashing Decimal	Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 0	Displays current parameter value.	Edits parameter. 3 = standard factory settings. If other than 3, use Up or Down Arrow and accept 3	Accepts and saves new parameter setting.	Sequences to next parameter.

Set Control Signal

Parameter Number 4 – Set Control Signal in Volts or Milliamps

Step	1	2	3	4	5	
Press	3-6 seconds					
Until Display Reads			Flashing Decimal	Flashing Decimal	Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 4	Displays current parameter value. 1 = V 0 = mA	Edits parameter	Accepts and saves new parameter setting.	Sequences to next parameter.

Parameter Number 6 – Set output signal

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value 0, 1 or 2)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 06	Displays current parameter value. 1 =m factory default for P3H with analog options	Edits parameter 0 = digital (NPN or PNP) 1= analog 0 .. 10 V 2 = analog 4...20 mA	Accepts and saves new parameter setting.	Sequences to next parameter.

Parameter Number 8 – Adjust span analog output signal

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal (for 2 bar versions value = 92)	 Flashing Decimal (value between 0 and 130)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 8	Displays current parameter value.	Edits parameter	Accepts and saves new parameter setting and implements the new analog signal span	Sequences to next parameter.

Adjust Digital Display

If necessary, adjustments can be made to the digital display readout in order to match to an external pressure gauge.

Parameter Number 9 – Adjust Displayed Pressure

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 9	Displays current digital display.	Use up or down arrows and accept, to match the readout to an external pressure gauge.	Accepts and saves new parameter setting.	Sequences to next parameter.

Set Pressure Scale

Units with NPT port threads are supplied with a factory set PSI pressure scale. Use parameter 14 to change scale to bar.

Parameter Number 14 – Set Pressure Scale in PSI or bar

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 14	Display current parameter value. 1 = PSI 0 = bar 2 = Mpa	Edits parameter	Accepts and saves new parameter setting.	Sequences to next parameter.

Preset Minimum Pressure

If there is a need for a pre-set minimum pressure, use parameter 18. (Note: preset pressure is affected by % P19.)

Parameter Number 18 – Set Minimum Preset Pressure

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value between 0 and 200)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 18	Displays current parameter value. Incremental value is: 2 bar unit: x 2 mbar x % P19 10 bar unit: x 10 mbar x % P19	Edits parameter	Accepts and saves new parameter setting.	Sequences to next parameter.

Set Pressure Correction

Pressure correction allows the user to set a maximum pressure as a percentage of secondary pressure F.S.

Example: If F.S. is 10 bar, set parameter 19 to 50 for maximum preset pressure of 5 bar.

Pressure correction also affects the minimum preset pressure in parameter 18.

Example: If F.S. is 10 bar and parameter 18 is set to a value of 100 (1 bar), and parameter 19 is set to 50%, then the actual minimum preset pressure seen is 0.5 bar.

Parameter Number 19 – Set Maximum Preset Pressure

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value between 0 and 100)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 19	Displays current parameter value. Incremental value is % of F.S.	Edits parameter	Accepts and saves new parameter setting.	Sequences to next parameter.

Behavior Control

The regulation speed of the pressure regulator can be modified by means of one parameter. (P 20)

The value in this parameter has a range from 0-5. A higher value indicates slower regulation speed, but will be more stable.

Parameter Number 20 – Set Behavior Control

Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value between 0 and 5)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 20	Displays current parameter value.	Edits parameter 0 = custom set* 1 = fastest (narrow proportional band) 2 = fast 3 = normal 4 = slow 5 = slowest (proportional band is broad)	Accepts and saves new parameter setting.	Sequences to next parameter.

*When the value 0 is entered, you are able to create your own custom settings true parameters 12, 13 and 21.

Fine Settings

Set Proportional Band

Proportional band is used for setting the reaction sensitivity of the regulator. The displayed value is X 10 mbar and has a range between 50 (0.5 bar) and 250 (2.5 bar).

Parameter Number 12 – Set Proportional Band (P20 Must be Set to 0)						
Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value between 50 and 250)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 12	Displays current parameter value. Incremental value is X 10 mbar.	Edits parameter	Accepts and saves new parameter setting.	Sequences to next parameter.

Set Deadband

Deadband is the minimum limit of accuracy at which the regulator is set for normal operation. The displayed value is X 10 mbar and has a range between 2 (20 mbar) and 40 (400 mbar).

Parameter Number 13 – Set Deadband (P20 Must be Set to 0)						
Step	1	2	3	4	5	
Press 	 3-6 seconds					
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value between 4 and 40)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 13	Displays current parameter value. Incremental value is X 10 mbar.	Edits parameter	Accepts and saves new parameter setting.	Sequences to next parameter.

Proportional Effect

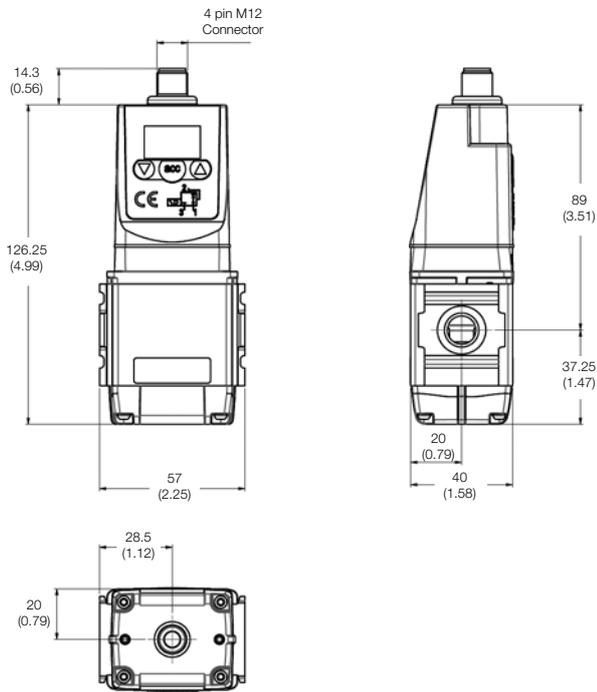
Parameter Number 21 – Set Proportional Effect (P20 Must be Set to 0)

Step	1	2	3	4	5	
Press 	 3-6 seconds			 or 		
Until Display Reads			 Flashing Decimal	 Flashing Decimal (value between 5 and 100)	 Flashing	
Description	Accesses changeable parameters	Accesses parameter no. 21	Displays current parameter value.	Edits parameter 5 = fastest regulation 100 = slowest regulation	Accepts and saves new parameter setting.	Sequences to next parameter.

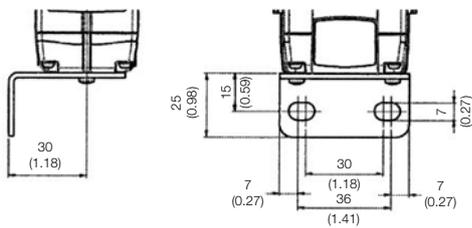
Parameter Number 39 – Displays Current Software Version

Step	1	2	3	
Press 	 3-6 seconds			
Until Display Reads			 Flashing Decimal	
Description	Accesses parameters	Accesses parameter no. 39	Displays current parameter value. XXX = current software version	

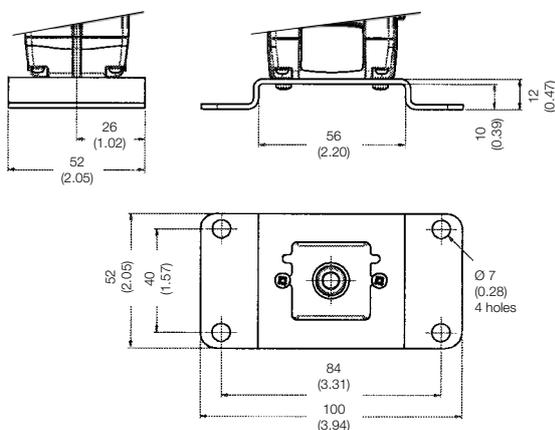
P31P



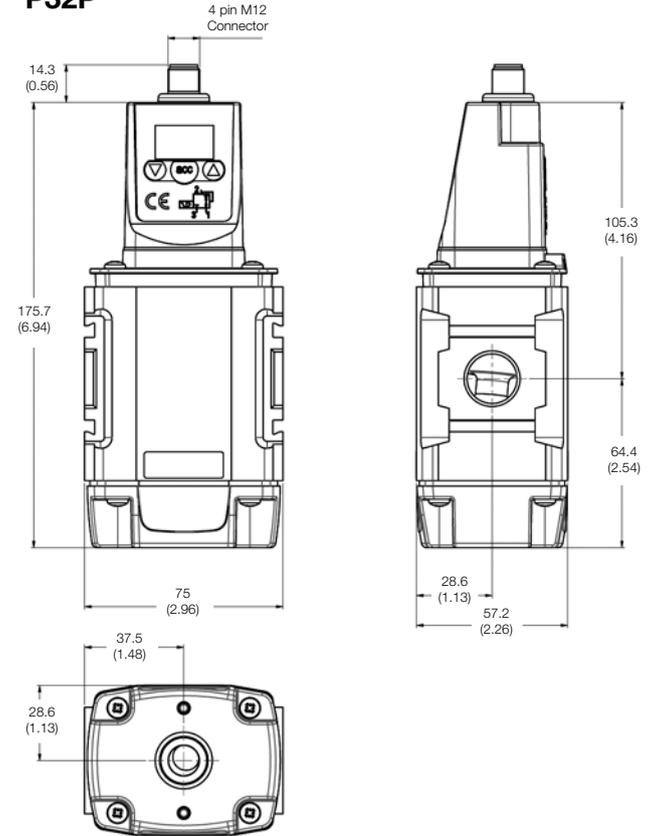
L-Bracket



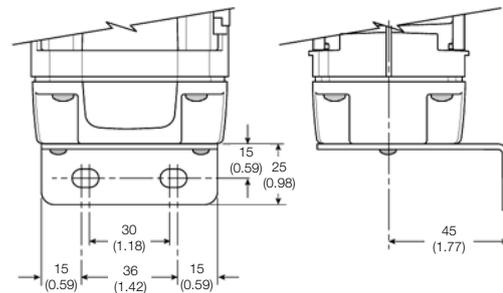
Foot Bracket



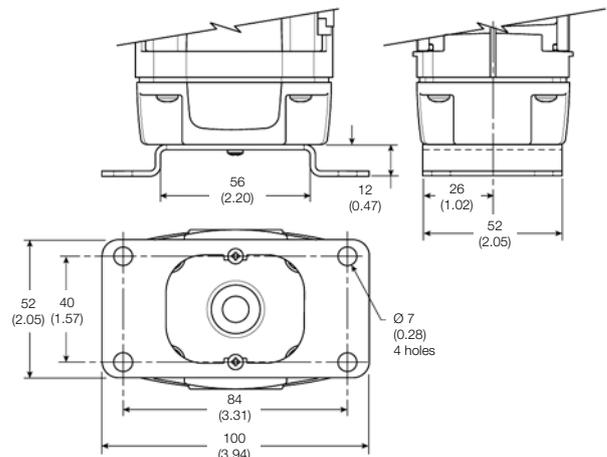
P32P



L-Bracket



Foot Bracket

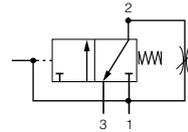


Dimensions are in mm (Inches)

Combined Soft Start Dump Valve and Remote Operated Dump Valve



Symbols



- Modular design with 1/4" or 1/2" integral ports (BSPP or NPT)
- Provides for the safe introduction of pressure
- The 3-way, 2-position function automatically dumps downstream pressure on the loss of pilot signal
- Adjustable slow start
- Solenoid or air pilot options
- High flow & exhaust capability
- Silencer included

Parker Global Series Combined Soft Start/Dump Valves, provide for the safe introduction of pressure to machines or systems. Soft Start/Dump Valves when set, allow the pressure to gradually build to the set point before fully opening to deliver full flow at line pressure.

The controlled introduction of pressure can be an important safety factor and prevent damage to tooling when air pressure is introduced at machine or system start up.

To maintain these units in the open position a pilot supply to the air pilot operated version or an electrical signal to the solenoid operated version must be maintained. The valve will automatically dump when the holding signal is removed.

Options:

P 3		T A						N	Solenoid type only	
Mini (1/4")	1	Mini (1/4")	2	External air pilot	P	None (For P32 series - operator is fitted to valve)	0	Solenoid / coil not fitted	000	
Compact (1/2")	2	Compact (1/2")	4	Solenoid pilot	S	15mm (P31 series only)	C	24V DC non locking manual override	2CN	
						30mm CNOMO coil (form connection)	A			
BSPP (G)	1			15mm solenoid (P31 only)	G	30mm CNOMO coil (M12 connection)	D			
NPT	9			30mm solenoid	C					
				Threaded air pilot	P					

Note:
P32 unit used for both P32 & P33 series

Compact combined soft start dump valve

Port size	Description	Order Code	Flow dm ³ /s (scfm)	Max bar (psi)	Height mm	Width mm	Depth mm	Weight
1/4	Solenoid operated (not included)	P31TA12SGN0000	17 (36)	10 (150)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37kg (0.8lbs)
1/4	24VDC Solenoid & cable plug	P31TA12SGNC2CN	17 (36)	10 (150)	166* (6.5)	57 (2.2)	40 (1.5)	0.41kg (0.9lbs)
1/4	Air pilot operated	P31TA12PPN	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37kg (0.8lbs)
1/2	Solenoid operated (not included)	P32TA14SCN0000	46 (97)	10 (150)	162.5* (6.3)	88 (3.4)	57.2 (2.2)	0.87kg (1.9lbs)
1/2	24VDC 30mm coil & cable plug incl.	P32TA14SCNA2CN	46 (97)	10 (150)	227.5* (8.9)	88 (3.4)	57.2 (2.2)	0.91kg (2.0lbs)
1/2	Air pilot operated	P32TA14PPN	46 (97)	17 (250)	162.5*(6.3)	75 (2.9)	57.2 (2.2)	0.87kg (1.9lbs)

* Includes exhaust silencer. Flow with 6.3 bar inlet and 1 bar pressure drop.

Technical Information

Fluid:	Compressed air
Max pressure Solenoid operated:	10 bar (150 psi)
Max pressure Air Pilot operated:	17 bar (250 psi)
Min operating pressure:	3 bar (44 psi)
Temperature Solenoid operated:	-10°C (14°F) to 50° C (122°F)
Temperature Air Pilot operated:	-20°C (-4°F) to 80° C (176°F)
Air Pilot port:	1/8"
Exhaust port:	P31 - 1/4" / P32 - 1/2"

Typical flow with 6.3bar inlet pressure and 1 bar pressure drop:	P31	17 dm ³ /s (36 scfm)
	P32	46 dm ³ /s (97 scfm)

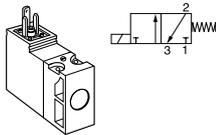
* Air supply must be dry enough to avoid ice formation at temperatures below +2°C
Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

Material Specification

Body:	Aluminium
Body cover:	Polyester
Seals:	Nitrile NBR

P31 Series only - Solenoids 15mm NC, standard flow DIN 1.2W / 1.6 VA

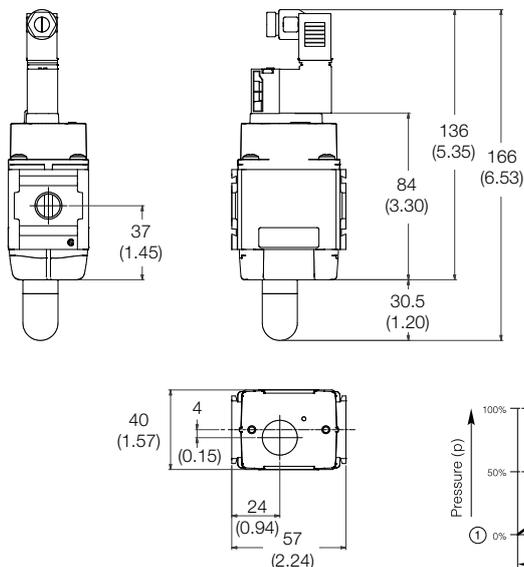
Voltage	Weight g	Order code
12 VDC	38	P2E-KV32B1
24 VDC	38	P2E-KV32C1
48 VDC	38	P2E-KV32D1
24 VAC 50 Hz	38	P2E-KV31C1
48 VAC 50/60 Hz	38	P2E-KV34D1
115 VAC 50 Hz/ 120 VAC 60 Hz	38	P2E-KV31F1
230 VAC 50 Hz/ 240 VAC 60 Hz	38	P2E-KV31J1



For cable plugs (connectors) see page 69.

Dimensions (mm)

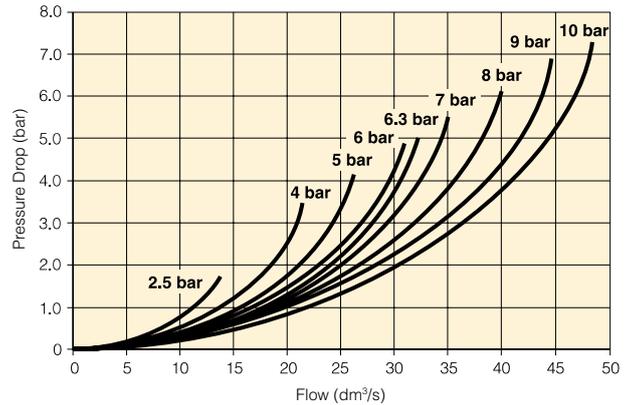
P31



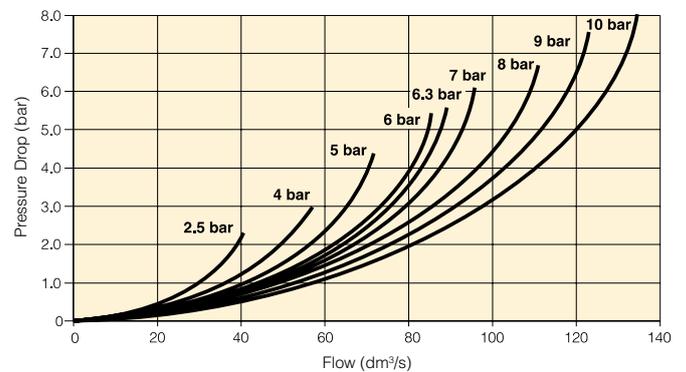
For mounting brackets see page 52

Flow characteristics

1/4 Soft Start & Dump Valve



1/2 Soft Start & Dump Valve



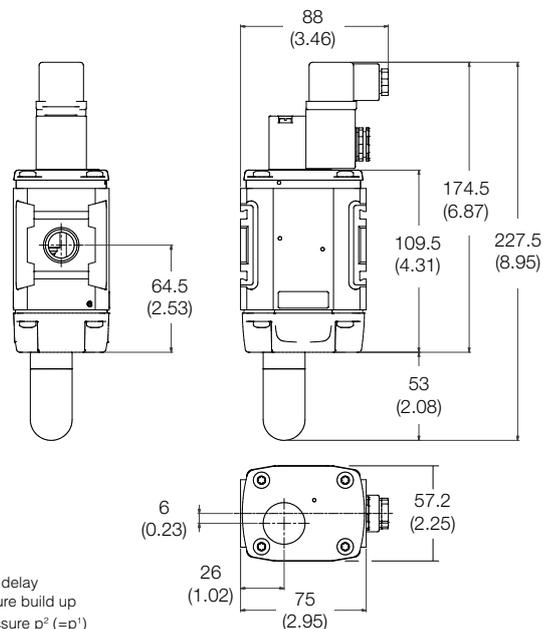
P32 Series

For other solenoid operators and cable plugs (connectors) see pages 68 to 69.

Mounting brackets

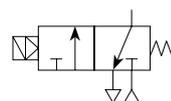
Description	Order code P31P	Order code P32P
L-Bracket mounting kit	P3HKA00ML	P3KKA00ML
Foot bracket mounting kit	P3HKA00MC	P3KKA00MC

P32



Remote Operated Dump Valve

Symbols



- Modular design with 1/4" or 1/2" integral ports (BSPP or NPT)
- The 3-way, 2-position function automatically dumps downstream pressure on the loss of pilot signal
- Solenoid or air pilot options
- High flow & exhaust capability
- Silencer included

Remotely operated dump valves automatically shut off upstream pressure and exhaust the downstream pressure when the pilot pressure is released.

To maintain these units in the open position a pilot supply to the air pilot operated version or an electrical signal to the solenoid operated version must be maintained. The valve will automatically dump when the holding signal is removed.

Options:

P 3		D A					N	Solenoid type only	
Mini (1/4")	1	Mini (1/4")	2	External air pilot	P	None (For P32 Series - operator is fitted to valve)	0	Solenoid / coil not fitted	000
Compact (1/2")	2	Compact (1/2")	4	Solenoid pilot	S	15mm (P31 series only)	C	24V DC non locking manual override	2CN
BSPP (G)	1	15mm solenoid (P31 only)	G			30mm CNOMO coil (form connection)	A		
NPT	9	30mm solenoid	C			30mm CNOMO coil (M12 connection)	D		
		Threaded air pilot	P						

Note:
P32 unit used for both P32 & P33 series

Remote operated dump valve

Port size	Description	Order Code	Flow dm ³ /s (scfm)	Max bar (psi)	Height mm	Width mm	Depth mm	Weight
1/4	Solenoid operated (not included)	P31DA12SGN0000	17 (36)	10 (150)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37kg (0.8lbs)
1/4	24VDC Solenoid & cable plug	P31DA12SGNC2CN	17 (36)	10 (150)	166* (6.5)	57 (2.2)	40 (1.5)	0.41kg (0.9lbs)
1/4	Air pilot operated	P31DA12PPN	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37kg (0.8lbs)
1/2	Solenoid operated (not included)	P32DA14SCN0000	51 (108)	10 (150)	162.5* (6.3)	75 (2.9)	57.2 (2.2)	0.69kg (1.5lbs)
1/2	24VDC 30mm coil & cable plug incl.	P32DA14SCNA2CN	51 (108)	10 (150)	227.5* (8.9)	75 (2.9)	57.2 (2.2)	0.91kg (2.0lbs)
1/2	Air pilot operated	P32DA14PPN	51 (108)	17 (250)	162.5*(6.3)	75 (2.9)	57.2 (2.2)	0.69kg (1.5lbs)

* Includes exhaust silencer.



Technical Information

Fluid:	Compressed air	
Max pressure Solenoid operated:	10 bar (150 psi)	
Max pressure Air Pilot operated:	17 bar (250 psi)	
Min operating pressure:	3 bar (44 psi)	
Temperature Solenoid operated:	-10°C (14°F) to 50°C (122°F)	
Temperature Air Pilot operated:	-20°C (-4°F) to 80°C (176°F)	
Air Pilot port:	1/8"	
Exhaust port:	P31 - 1/4" / P32 - 1/2"	
Typical flow with 6.3bar inlet pressure and 1 bar pressure drop:	P31	17 dm ³ /s (36 scfm)
	P32	51 dm ³ /s (108 scfm)

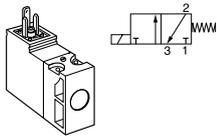
* Air supply must be dry enough to avoid ice formation at temperatures below +2°C
Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

Material Specification

Body:	Aluminium
Body cover:	Polyester
Seals:	Nitrile NBR

P31 Series only - Solenoids 15mm NC, standard flow DIN 1.2W / 1.6 VA

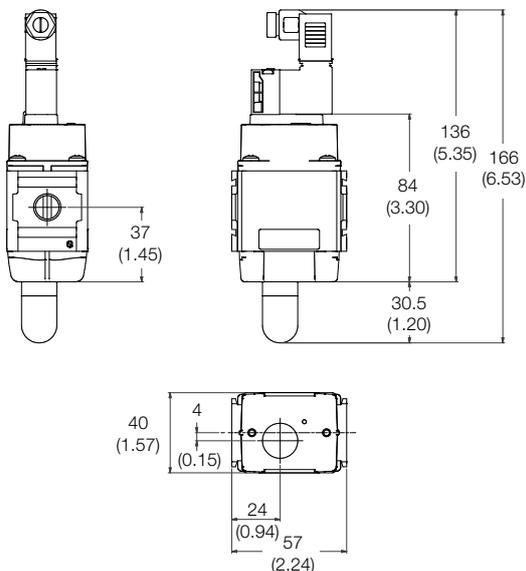
Voltage	Weight g	Order code
12 VDC	38	P2E-KV32B1
24 VDC	38	P2E-KV32C1
48 VDC	38	P2E-KV32D1
24 VAC 50 Hz	38	P2E-KV31C1
48 VAC 50/60 Hz	38	P2E-KV34D1
115 VAC 50 Hz/ 120 VAC 60 Hz	38	P2E-KV31F1
230 VAC 50 Hz/ 240 VAC 60 Hz	38	P2E-KV31J1



For cable plugs (connectors) see page 69.

Dimensions (mm)

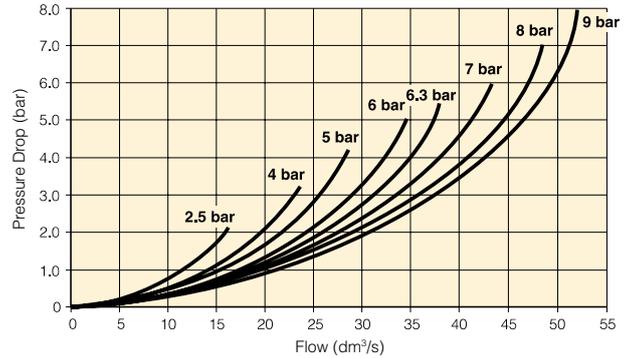
P31



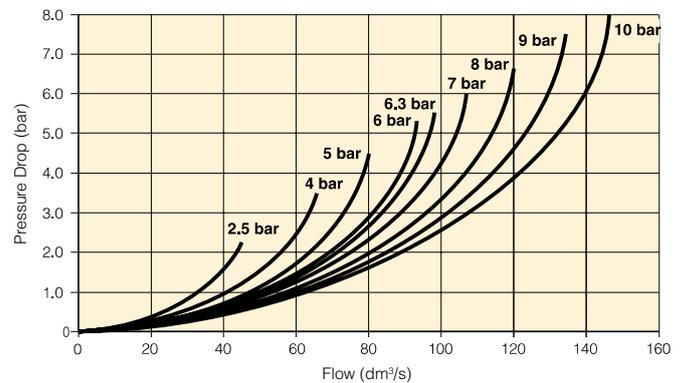
For mounting brackets see page 52

Flow characteristics

1/4 Remote Dump Valve



1/2 Remote Dump Valve



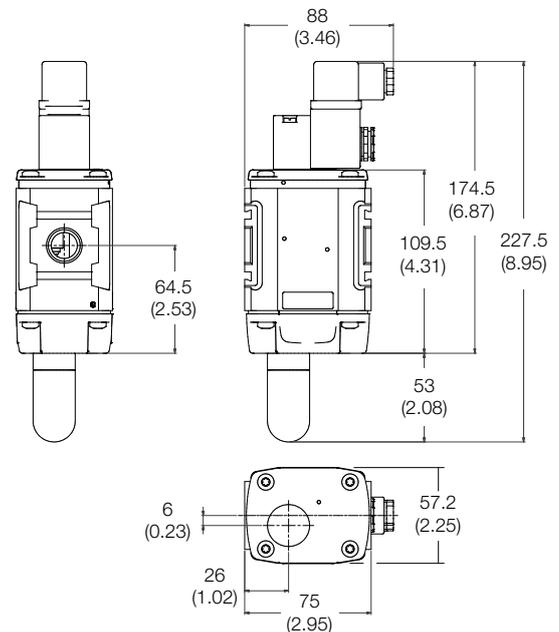
P32 Series

For other solenoid operators and cable plugs (connectors) see pages 68 to 69.

Mounting brackets

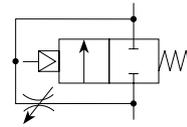
Description	Order code P31P	Order code P32P
L-Bracket mounting kit	P3HKA00ML	P3KKA00ML
Foot bracket mounting kit	P3HKA00MC	P3KKA00MC

P32



Soft Start Valve

Symbols



- Modular design with 1/4" or 1/2" integral ports (BSPP or NPT)
- The 2-way, 2-position function provides for the safe introduction of pressure
- Adjustable slow start
- Solenoid or air pilot options
- High flow
- Silencer included

Parker Global Series Soft Start Valves, provide for the safe introduction of pressure to machines or systems. Soft Start Valves, allow the pressure to gradually build to the set point before fully opening to deliver full flow at line pressure.

The controlled introduction of pressure can be an important safety factor and prevent damage to tooling when air pressure is introduced at machine or system start up.

Note: Soft Start Valves must be installed downstream of a 3/2 valve with exhaust capability

Options:

P	3		S	A						N					Solenoid type only	
Mini (1/4")	1	Mini (1/4")	2	External air pilot	P	None	0	Solenoid / coil not fitted	000							
Compact (1/2")	2	Compact (1/2")	4	Solenoid pilot	S	15mm (P31 series only)	C	24V DC non locking manual override	2CN							
BSPP (G)	1			Internal air pilot	Y	30mm CNOMO coil (form connection)	A									
NPT	9			Internal pilot	0	30mm CNOMO coil (M12 connection)	D									
				15mm solenoid (P31 only)	G											
				30mm solenoid	C											
				Threaded air pilot	P											

Note:
P32 unit used for both P32 & P33 series

Soft start valve

Port size	Description	Order Code	Flow dm ³ /s (scfm)	Max bar (psi)	Height mm	Width mm	Depth mm	Weight
1/4	Solenoid operated (not included)	P31SA12SGN0000	17 (36)	10 (150)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37kg (0.8lbs)
1/4	24VDC Solenoid & cable plug	P31SA12SGNC2CN	17 (36)	10 (150)	166.0 (6.5)	57 (2.2)	40 (1.5)	0.41kg (0.9lbs)
1/4	External air pilot (1/8 threaded)	P31SA12PPN	17 (36)	17 (250)	115.6 (4.5)	57 (2.2)	40 (1.5)	0.37kg (0.8lbs)
1/2	Solenoid operated (not included)	P32SA14SCN0000	48 (101)	10 (150)	162.5 (6.3)	88 (3.4)	57.2 (2.28)	0.87kg (1.5lbs)
1/2	24VDC 30mm coil & cable plug	P32SA14SCNA2CN	48 (101)	10 (150)	227.5 (8.9)	88 (3.4)	57.2 (2.28)	0.90kg (2.0lbs)
1/2	Internal air pilot operated	P32SA14Y0N	48 (101)	17 (250)	162.5 (6.3)	75 (2.9)	57.2 (2.28)	0.90kg (2.0lbs)
1/2	External air pilot (1/8 threaded)	P32SA14PPN	48 (101)	17 (250)	162.5 (6.3)	75 (2.9)	57.2 (2.28)	0.87kg (1.5lbs)

Technical Information

Fluid:	Compressed air	
Max pressure Solenoid operated:	10 bar (150 psi)	
Max pressure Air Pilot operated:	17 bar (250 psi)	
Min operating pressure:	3 bar (44 psi)	
Temperature Solenoid operated:	-10°C (14°F) to 50° C (122° F)	
Temperature Air Pilot operated:	-20°C (-4°F) to 80° C (176° F)	
Air Pilot port:	1/8"	
Typical flow with 6.3bar inlet pressure and 1 bar pressure drop:	P31	17 dm ³ /s (36 scfm)
	P32	48 dm ³ /s (97 scfm)

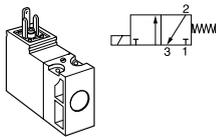
* Air supply must be dry enough to avoid ice formation at temperatures below +2°C
Snap pressure: Full flow when downstream pressure reaches 50% of the inlet pressure

Material Specification

Body:	Aluminium
Body cover:	Polyester
Seals:	Nitrile NBR

P31 Series only - Solenoids 15mm NC, standard flow DIN 1.2W / 1.6 VA

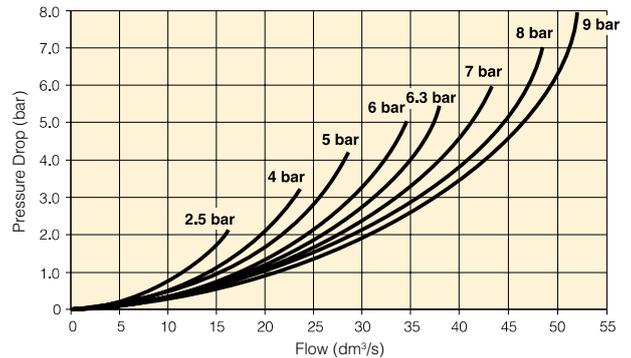
Voltage	Weight g	Order code
12 VDC	38	P2E-KV32B1
24 VDC	38	P2E-KV32C1
48 VDC	38	P2E-KV32D1
24 VAC 50 Hz	38	P2E-KV31C1
48 VAC 50/60 Hz	38	P2E-KV34D1
115 VAC 50 Hz/	38	P2E-KV31F1
120 VAC 60 Hz		
230 VAC 50 Hz/	38	P2E-KV31J1
240 VAC 60 Hz		



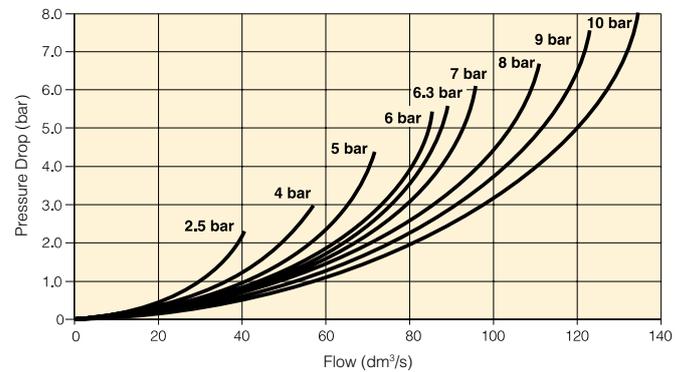
For cable plugs (connectors) see page 69.

Flow characteristics

1/4 Soft Start Valve



1/2 Soft Start Valve



P32 Series

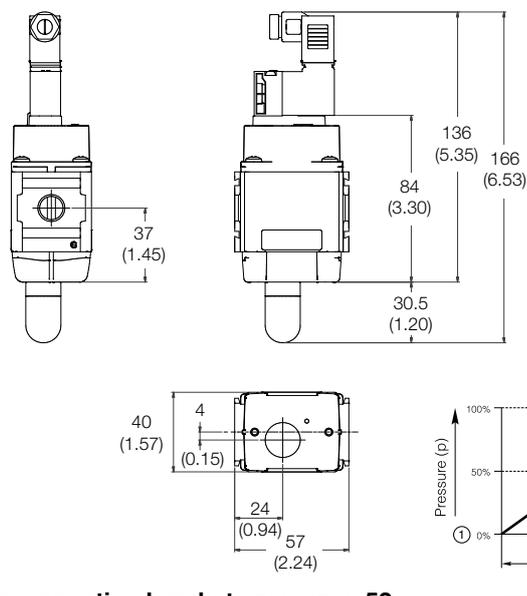
For other solenoid operators and cable plugs (connectors) see pages 68 to 69.

Mounting brackets

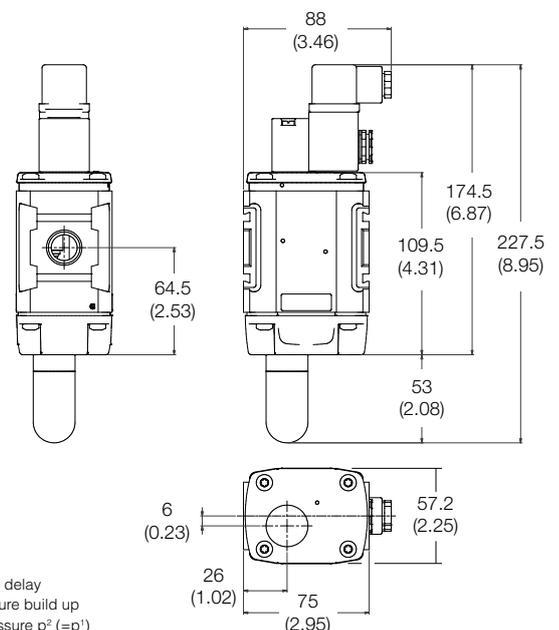
Description	Order code P31P	Order code P32P
L-Bracket mounting kit	P3HKA00ML	P3KKA00ML
Foot bracket mounting kit	P3HKA00MC	P3KKA00MC

Dimensions (mm)

P31



P32

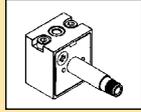


For mounting brackets see page 52



Solenoid operator - CNOMO

Order key

P	2	F	P	2	3	N	4	B	
Operator Type			Pressure / Temp			Manual / Override			
2 CNOMO 22 x 30 Plastic			N 10 bar / -10°C to +50°C			B Non locking - monostable - Flush - Brass			

Technical data - Solenoid operators, coil combinations

	NC Normal Operator with 30 x 30 standard coil	NC Normal Operator with 22 x 30 standard coil
Working pressure	0 to 10 bar	0 to 10 bar
Ambient temperature	-10 °C to 60 °C (1)	-10 °C to 60 °C (1)
Orifice	1.3/1.5mm	1.3/1.5mm
Flow Qn	0.84 dm ³ /s	0.84 dm ³ /s
Power (DC)	2.7W	4.8W
Power (AC)	4.9VA	8.5VA
Voltage tolerance	+/- 10%	+/- 10%
Duty cycle	100%	100%
Insulation class	F	F
Electric connection	Form A	Industrial B
Protection	IP65	IP65
Shock & Vibration	1g	1g
Approval	UL/CSA	
Working media	All neutral media such as compressed air and inert gases.	

(1) limited to 50°C if use with 100% duty cycle

Transients

Interrupting the current through the solenoid coil produces momentary voltage peaks which, under unfavourable conditions, can amount to several hundred times the rated operating voltage. Normally, these transients do not cause problems, but to achieve the maximum life of relays in the circuit (and particularly of transistors, thyristors and integrated circuits) it is desirable to provide protection by means of voltage-dependent resistors (varistors). All connectors/cable plugs EN175301-803 with LED's include this type of circuit protection.

Materials

Pilot Valve

Body:	Polyamide
Armature tube:	Brass
Plunger & core:	Corrosion resistant Cr-Ni steel
Seals:	FKM (Viton™)
Screws:	Stainless steel

Coil

Encapsulation material:	Thermoplastic as standard Duroplast for M12 connection
-------------------------	---

Solenoid coils with Din A or Industrial B connection

Voltage	30mm x 30mm Order code DIN A Standard	Weight (Kg)	22mm x 30mm Order code Industrial B standard	Weight (Kg)
Direct current				
12V DC	P2FCA445	0.105	P2FCB445	0.093
24V DC	P2FCA449	0.105	P2FCB449	0.093
48V DC	P2FCA453*	0.105	P2FCB451	0.093
Alternative current				
12V 50/60Hz	P2FCA440	0.105	P2FCB440	0.093
24V 50/60Hz	P2FCA442	0.105	P2FCB442	0.093
48V 50/60Hz	P2FCA469#	0.105		
110V 50Hz, 120V 60Hz	P2FCA453*	0.105	P2FCB453	0.093
230V 50Hz, 230V 60Hz	P2FCA457	0.105	P2FCB457	0.093

* P2FCA453 is compatible with 110 V AC and 48 V DC

P2FCA469 is 24 V DC 6.8W or 48 V 50Hz 9.9 VA

Solenoid coils with M12 connection

Voltage	Order code Form A 30 x 30	W (Kg)	Order code Form B 22 x 30	W (Kg)
Direct current				
24V DC	P2FC6419	0.065	P2FC7419	0.065

Spare Solenoid Operators

Solenoid pilot operator CNOMO NC

Description	Order code Non-lock manual override	Weight (Kg)
Standard duty	P2FNP23N4B	0.065

Note.

Solenoid pilot operators are fitted to the Global range. Order the above part numbers for spares. The operators are supplied with mounting screws and interface 'O' rings.

Coils and connectors must be ordered separately.

Spare Solenoid Nuts

Valves requiring captured exhaust should be fitted with plastic knurled nut

Order code	P2FNP
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Valves with vented exhaust are fitted with diffuser plastic nut

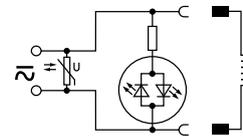
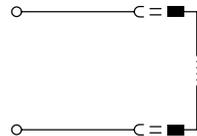
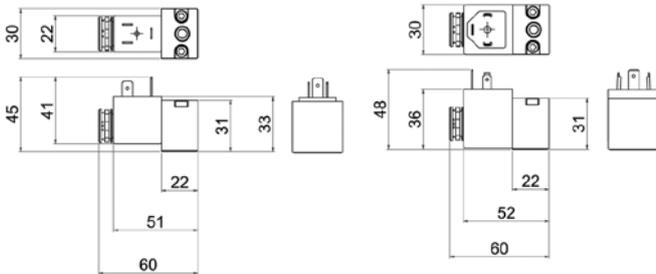
Order code	P2FND
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Solenoid Connectors / Cable Plugs EN175301-803

	Description	Order code 15mm Form C ISO15217	Order code 22mm Form B Industrial	Order code 30mm Form A ISO4400
With large headed screw suitable for mounting in inaccessible or recess position 	Standard IP65	P8C-C		
	24V DC LED and protection IP65	P8C-C26C		
	110V AC LED and protection IP65	P8C-C21E		
With standard screw 	Standard IP65 without flying lead	P8C-D	3EV10V10	3EV290V10
	With LED and protection 24V AC/DC	P8C-D26C	3EV10V20-24	3EV290V20-24
	With LED and protection 110V AC	P8C-D21E	3EV10V20-110	3EV290V20-110
	With LED and protection 230V AC		3EV10V20-230	3EV290V20-230
With cable 	Standard with 2m cable IP65	P8L-C2		
	Standard with 5m cable IP65	P8L-C5		
	24V AC/DC, 2m cable LED and protection IP65	P8L-C226C		
	24V AC/DC, 5m cable LED and protection IP65	P8L-C526C	3EV10V20-24L5	3EV290V20-24L5
	24V AC/DC, 10m cable LED and protection IP65	P8L-CA26C		
	110V AC/DC, 2m cable LED and protection IP65	P8L-C221E		
	110V AC/DC, 5m cable LED and protection IP65	P8L-C521E	3EV10V20-110L5	3EV290V20-110L5
	230V AC, 5m cable LED and protection IP65		3EV10V20-230L5	3EV290V20-230L5

Solenoid Coil & Cable Plug Dimensions (mm)

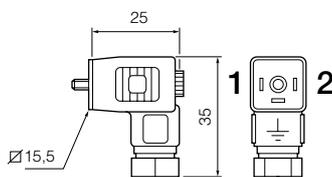
P2F - CNOMO - 22 x 30mm



P8C-C	P8C-D26C	P8L-C226C
P8C-D	P8C-D21E	P8L-C526C
P8L-C2	P8C-C26C	P8L-CA26C
P8L-C5	P8C-C21E	P8L-C221E
3EV10V10		P8L-C521E
	3EV10V20-24	3EV10V20-24L5
	3EV10V20-110	3EV10V20-110L5
	3EV10V20-230	3EV10V20-230L5

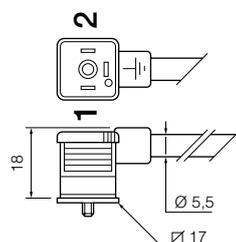
Form C
Cable plugs

P8C-C
P8C-C26C
P8C-C21E
P8C-D
P8C-D26C
P8C-D21E



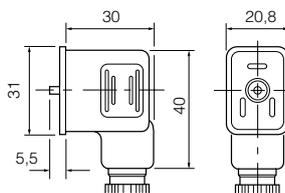
Form C
Cable plugs

P8L-C2
P8LC5
P8L-C226C
P8L-C526C
P8L-CA26C
P8L-C221E
P8L-C521E



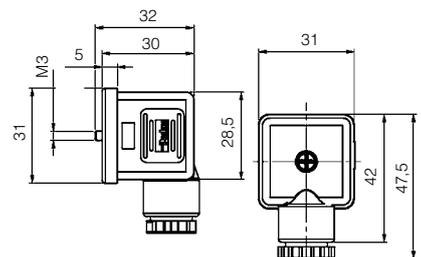
Form B
Cable plugs

3EV10V10

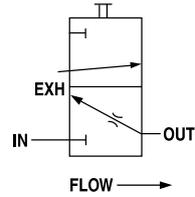


Form A
Cable plugs

3EV290V10



Safety Lockout Valves



Features

The Safety Lockout valve is a manually operated, slide-type, 2-position, 3-way valve. In the closed position, downstream air pressure is exhausted to atmosphere. The valve slide can be locked in the closed position with a customer supplied padlock. The Safety Lockout valves conform to OSHA #29 CFR part 1910 – control of hazardous energy source (lockout / tagout).

Ordering Information

Model Type	Port Size	Thread type	Safety Lockout Valve Flow from left to right
P31	1/4	BSPP	P31VA12LSAN
P32	1/4	BSPP	P32VA12LSAN
	3/8	BSPP	P32VA13LSAN
	1/2	BSPP	P32VA14LSAN
P33	1/2	BSPP	P33VA14LSAN
	3/4	BSPP	P33VA16LSAN

Model Type	Port Size	Thread type	Safety Lockout Valve Flow from right to left
P32	1/4	BSPP	P32VA12LSBN
	3/8	BSPP	P32VA13LSBN
	1/2	BSPP	P32VA14LSBN
P33	1/2	BSPP	P33VA14LSBN
	3/4	BSPP	P33VA16LSBN

For thread type: NPT **9**

Specifications

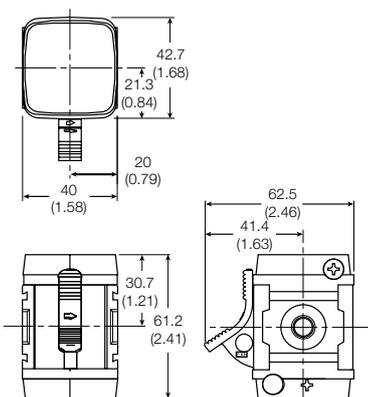
Operating Temperature	P31	-10°C (14°F) to 65.5°C (150°F)	
	P32/P33	-25°C (-13°F) to 65.5°C (150°F)	
Max Supply Pressure	10 bar (150 psi)		
Port Size	BSPP / NPT	1/4, 3/8, 1/2, 3/4	
Weight	P31:	0.30 kg (0.66 lbs)	
	P32:	0.34 kg (0.74 lbs)	
	P33:	0.41 kg (0.90 lbs)	
Flow Capacity	P31:	1/4	47 dm ³ /s (100 scfm)
		3/8	66 dm ³ /s (141 scfm)
	P32:	1/4	66 dm ³ /s (141 scfm)
		1/2	128 dm ³ /s (272 scfm)
	P33:	1/2	136 dm ³ /s (290 scfm)
		3/4	140 dm ³ /s (300 scfm)

Materials of Construction

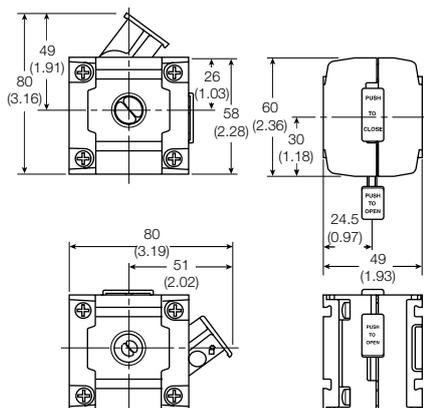
Body	Zinc
Blade	Acetal
Seals	Nitrile

Dimensions

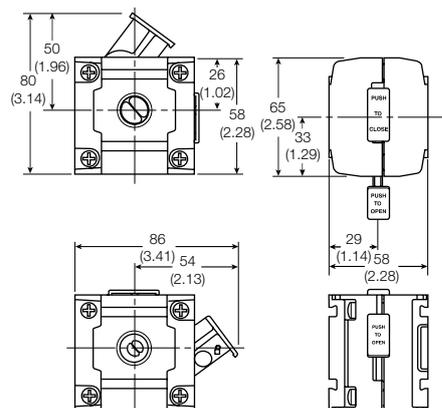
P31



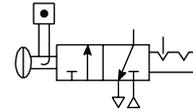
P32



P33



Modular Ball Valve



Features

The Modular Ball Valves provide shut off line pressure with a non-sticking 90° turn handle to prevent unauthorised adjustment. When the inlet pressure is turned off the downstream air pressure vents through the exhaust port. The padlock slide may be assembled on either side. It is recommended that this is assembled after mounting.

Note: This padlock slide is a permanent assembly and may not be removed later

Ordering Information

Model type	Port size	Thread type	Flow dm ³ /s (scfm)	Modular Ball Valve Flow from left to right
P31	1/4"	BSP	20 (42.4)	P31VA12LBNN
P32	3/8"	BSP	90 (190.7)	P32VA13LBNN
	1/2"	BSP	122 (258.5)	P32VA14LBNN
P33	1/2"	BSP	265 (561.5)	P33VA14LBNN
	3/4"	BSP	320 (678)	P33VA16LBNN

For thread type: BSP 1
NPT 9

Specifications

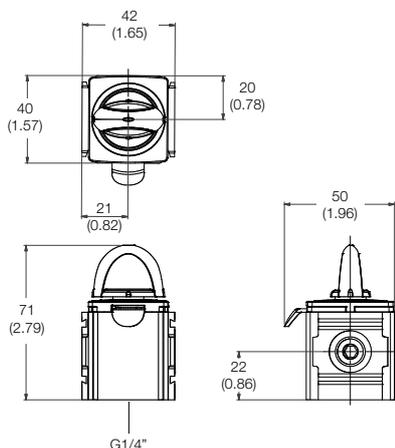
Max Operating Temperature	-20°C (-4°F) to 80°C (176°F)	
Max Supply Pressure	17 bar (245 psig)	
Port Size	BSP / BSPT / NPT	1/4, 3/8, 1/2, 3/4
Weight	P31:	0.19 kg (0.41 lbs)
	P32:	0.47 kg (1.00 lbs)
	P33:	0.80 kg (1.70 lbs)

Materials of Construction

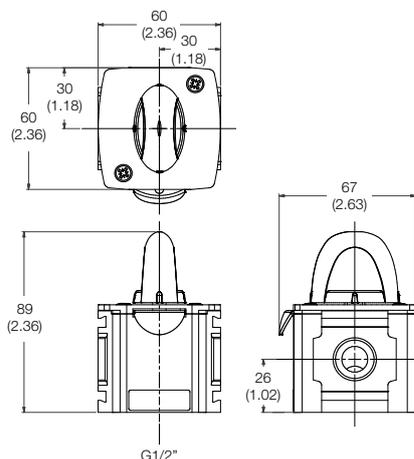
Body	Aluminium
Seals	PTFE
Ball	P31 Brass
	P32 / P33 Chrome plated brass

Dimensions

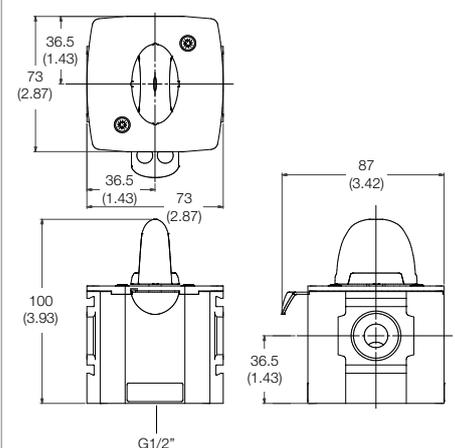
P31



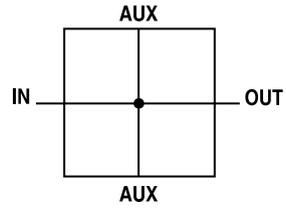
P32



P33



Manifold Blocks



Features

- Available in 1/4, 1/2 & 3/4 threaded inlet / outlet ports
- Two additional top and bottom auxiliary ports standard
- Can be mounted anywhere in the FRL system
- Includes one pipe plug

Ordering Information

Model Type	In / Out Port Size	Auxiliary Port Size Top	Auxiliary Port Size Bottom	Thread Type	Order Code
P31	1/4"	1/4"	1/4"	BSPP	P31MA12022N
P32	1/2"	1/4"	1/2"	BSPP	P32MA14024N
P33	3/4"	1/4"	1/2"	BSPP	P33MA16024N

For thread type: BSPP **1**
NPT **9**

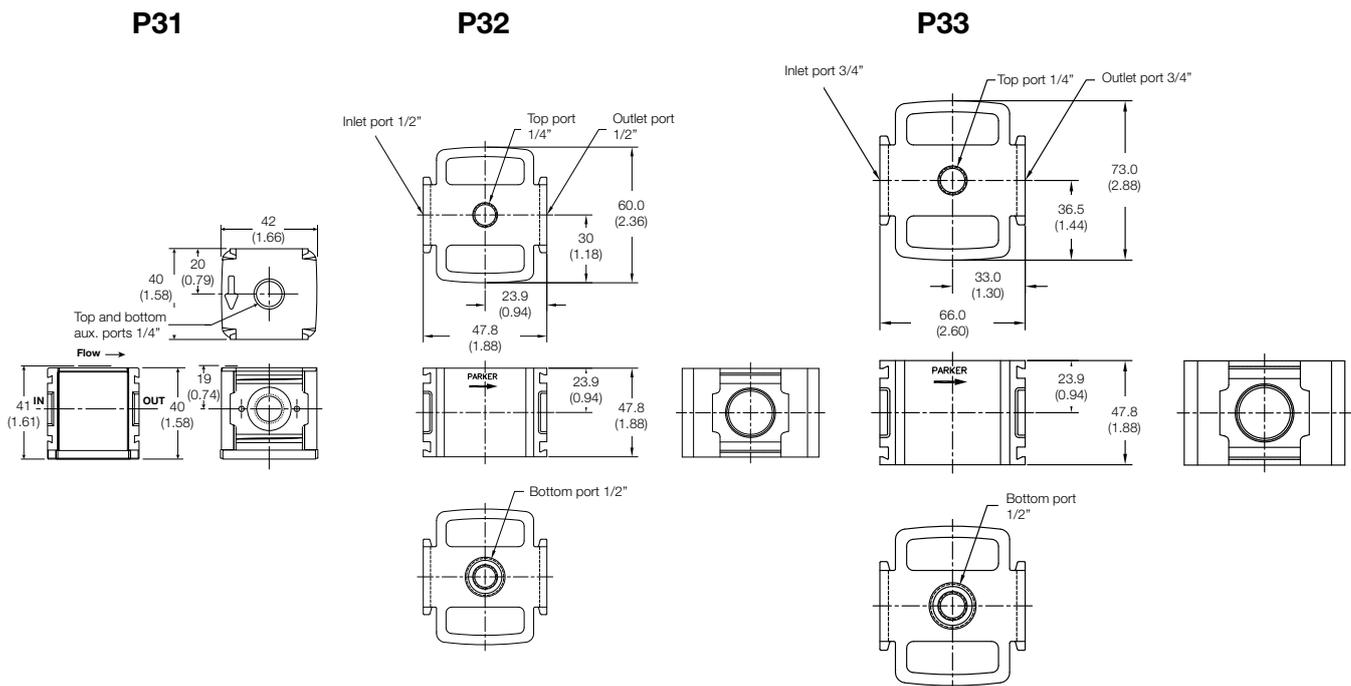
Specifications

Max Operating Temperature	65.5°C (150°F)
Max Supply Pressure	20.7 bar (300 psi)
Weight	P31: 0.19 kg (0.26 lbs) P33: 0.34 kg (0.42 lbs)

Materials of Construction

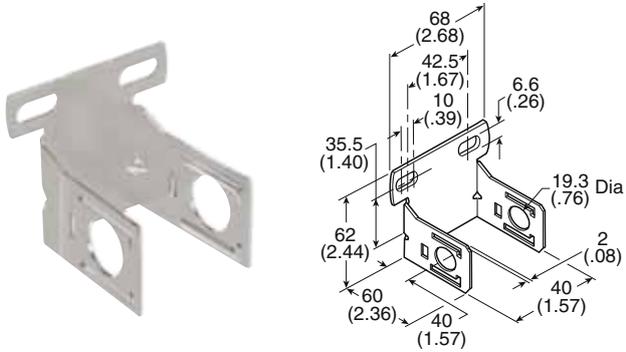
Body Aluminium

Dimensions

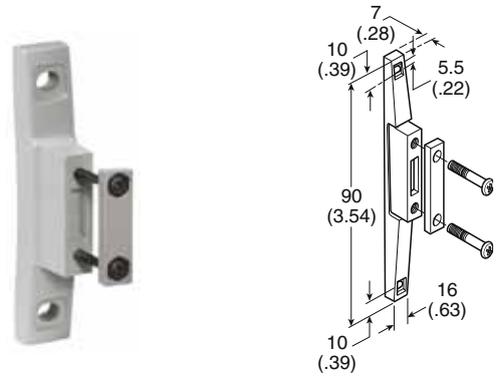


Accessories - P31 Series

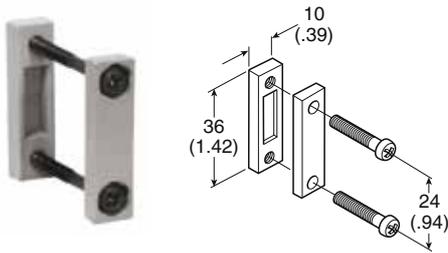
C-Bracket
(Fits to filter and lubricator body)
P31KA00MW



T-Bracket w/ Body Connector
P31KA00MT



Body Connector
(O-ring not shown)
P31KA00CB



Port Block Kit
 1/4 NPT P31KA92CP
 3/8 NPT P31KA93CP
 G 1/4 P31KA12CP
 G 3/8..... P31KA13CP



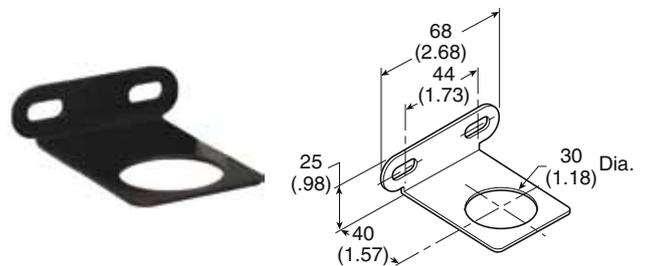
Body Connector 'O' ring Kit
 Pack of 5 P31KA00CY



Port Block Kit w/ T-Bracket
 1/4 NPT P31KA92CN
 3/8 NPT P31KA93CN
 G 1/4 P31KA12CN
 G 3/8..... P31KA13CN

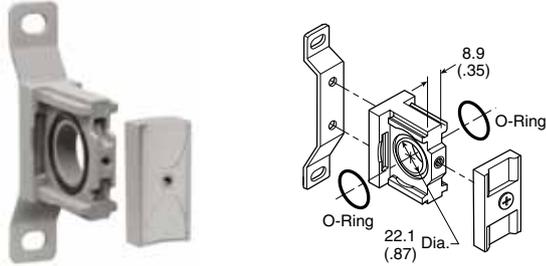


Angle Bracket
(Fits to regulator and filter/regulator body)
P31KA00MR

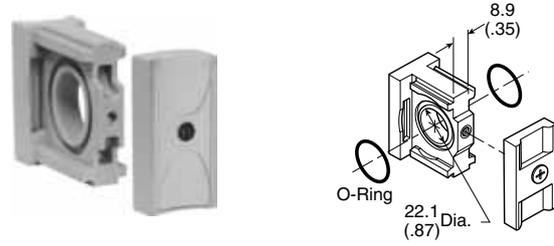


Accessories - P32 Series

T-Bracket w/ Body Connector
P32KA00MT



Body Connector
P32KA00CB



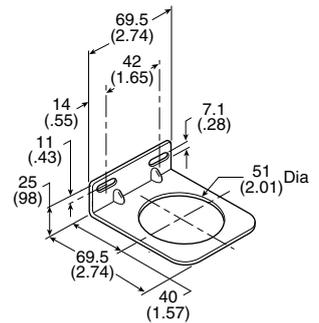
Body Connector 'O' ring Kit
 Pack of 5 **P32KA00CY**



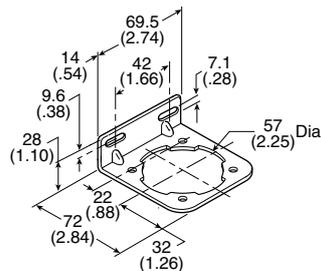
Port Block Kit
 1/4 NPT..... **P32KA92CP**
 3/8 NPT..... **P32KA93CP**
 1/2 NPT..... **P32KA94CP**
 3/4 NPT..... **P32KA96CP**
 G 1/4 **P32KA12CP**
 G 3/8..... **P32KA13CP**
 G 1/2..... **P32KA14CP**
 G 3/4..... **P32KA16CP**



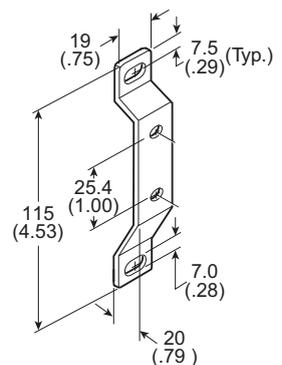
Angle Bracket
P32KA00MR



L-Bracket
 (Fits to filter and lubricator body)
P32KA00ML



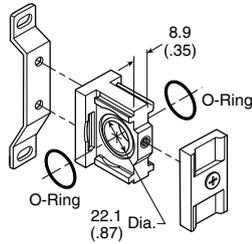
T-Bracket
 (fits to body connector or port block)
P32KA00MB



Accessories - P33 Series

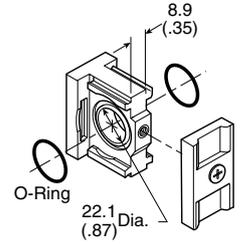
T-Bracket w/ Body Connector

P32KA00MT



Body Connector

P32KA00CB



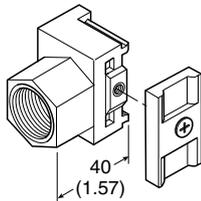
Body Connector 'O' ring Kit

Pack of 5 P32KA00CY



Port Block Kit

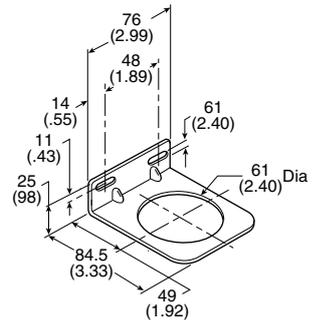
- 1/4 NPT..... P32KA92CP
- 3/8 NPT..... P32KA93CP
- 1/2 NPT..... P32KA94CP
- 3/4 NPT..... P32KA96CP
- G 1/4 P32KA12CP
- G 3/8..... P32KA13CP
- G 1/2..... P32KA14CP
- G 3/4..... P32KA16CP



Angle Bracket

(Fits to regulator and filter/regulator bonnet)

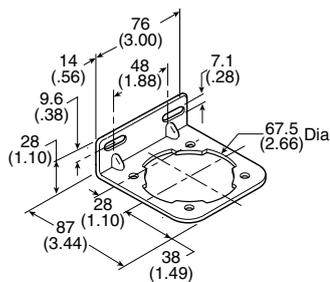
P33KA00MR



L-Bracket

(Fits to filter and lubricator body)

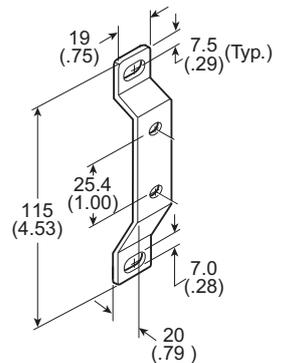
P33KA00ML



T-Bracket

(fits to body connector or port block)

P32KA00MB



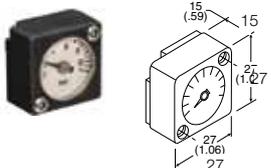
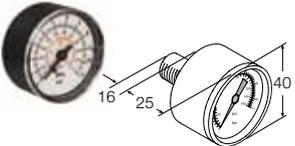
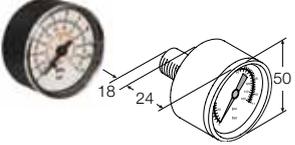
Accessories Kits

Series	Description	Order Code	
P31 P32 P33	Panel Mount Nut (Plastic)	P31KA00MP P32KA00MP P33KA00MP	
P31 P32 P33	Panel Mount Nut (Aluminium)	P31KA00MM P32KA00MM P33KA00MM	
P31 P32 P33	5µ Element Kit	P31KA00ESE P32KA00ESE P33KA00ESE	
P31 P32 P33	40µ Element Kit	P31KA00ESG P32KA00ESG P33KA00ESG	
P31 P32 P33	1µ Element Kit	P31KA00ES9 P32KA00ES9 P33KA00ES9	
P31 P32 P33	0.01µ Element Kit	P31KA00ESC P32KA00ESC P33KA00ESC	
P31 P32 P33	Adsorber Element Kit	P31KA00ESA P32KA00ESA P33KA00ESA	
P32 / P33	Auto Drain Kit	P32KA00DA	
P32 / P33	Differential Pressure Indicator Kit	P32KA00RQ	
P31 P32 P33	Fill Plug Kit	P31KA00PL P32KA00PL P33KA00PL	
P31 P32 P33	Drip Control Assembly Kit	P31KA00PG P32KA00PG P33KA00PG	

Accessories Kits

Series	Description	Order Code	
P31 P32 P33	Plastic Bowl with Bowl Guard & Manual Drain	P31KA00BGM P32KA00BGM P33KA00BGM	
P31	Plastic Bowl with Bowl Guard & Pulse Drain	P31KA00BGB	
P32 P33	Plastic Bowl with Bowl Guard & Auto Drain	P32KA00BGA P33KA00BGA	
P31	Metal Bowl without Sight Gauge & Pulse Drain	P31KA00BMB	
P32 P33	Metal Bowl with Sight Gauge & Manual Drain	P32KA00BSM P33KA00BSM	
P32 P33	Metal Bowl with Sight Gauge & Auto Drain	P32KA00BSA P33KA00BSA	
P31 P32 P33	Lubricator - Plastic Bowl with Bowl Guard & Close End	P31KA00BGN P32KA00BGN P33KA00BGN	
P31 P32 P33	Lubricator - Metal Bowl Without Sight Gauge, No Drain Lubricator - Metal Bowl With Sight Gauge, No Drain Lubricator - Metal Bowl With Sight Gauge, No Drain	P31KA00BMN P32KA00BSN P33KA00BSN	

Accessories Kits

Series	Description			Order Code	
P31	Square Flush Mounting Gauge Kit	0-4 bar 0-10 bar		K4511SCR04B K4511SCR11B	
P31	40mm Round Gauge	0-30 psi / 0-2 bar 0-60 psi / 0-4.1 bar 0-160 psi / 0-10 bar	1/8" 1/8" 1/8"	P3D-KAB1AYN P3D-KAB1ALN P3D-KAB1ANN	
P32 / P33	50mm Round Gauge	0-60 psi / 0-4.1 bar 0-160 psi / 0-10 bar 0-300 psi / 0-20 bar	1/4" 1/4" 1/4"	P6G-ERB2040 P6G-ERB2110 P6G-ERB2200	

Parker Worldwide

Europe, Middle East, Africa

AE – United Arab Emirates, Dubai

Tel: +971 4 8127100
parker.me@parker.com

AT – Austria, Wiener Neustadt

Tel: +43 (0)2622 23501-0
parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt

Tel: +43 (0)2622 23501 900
parker.easteurope@parker.com

AZ – Azerbaijan, Baku

Tel: +994 50 2233 458
parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles

Tel: +32 (0)67 280 900
parker.belgium@parker.com

BY – Belarus, Minsk

Tel: +375 17 209 9399
parker.belarus@parker.com

CH – Switzerland, Etoy

Tel: +41 (0)21 821 87 00
parker.switzerland@parker.com

CZ – Czech Republic, Klecany

Tel: +420 284 083 111
parker.czechrepublic@parker.com

DE – Germany, Kaarst

Tel: +49 (0)2131 4016 0
parker.germany@parker.com

DK – Denmark, Ballerup

Tel: +45 43 56 04 00
parker.denmark@parker.com

ES – Spain, Madrid

Tel: +34 902 330 001
parker.spain@parker.com

FI – Finland, Vantaa

Tel: +358 (0)20 753 2500
parker.finland@parker.com

FR – France, Contamine s/Arve

Tel: +33 (0)4 50 25 80 25
parker.france@parker.com

GR – Greece, Athens

Tel: +30 210 933 6450
parker.greece@parker.com

HU – Hungary, Budapest

Tel: +36 1 220 4155
parker.hungary@parker.com

IE – Ireland, Dublin

Tel: +353 (0)1 466 6370
parker.ireland@parker.com

IT – Italy, Corsico (MI)

Tel: +39 02 45 19 21
parker.italy@parker.com

KZ – Kazakhstan, Almaty

Tel: +7 7272 505 800
parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal

Tel: +31 (0)541 585 000
parker.nl@parker.com

NO – Norway, Asker

Tel: +47 66 75 34 00
parker.norway@parker.com

PL – Poland, Warsaw

Tel: +48 (0)22 573 24 00
parker.poland@parker.com

PT – Portugal, Leca da Palmeira

Tel: +351 22 999 7360
parker.portugal@parker.com

RO – Romania, Bucharest

Tel: +40 21 252 1382
parker.romania@parker.com

RU – Russia, Moscow

Tel: +7 495 645-2156
parker.russia@parker.com

SE – Sweden, Spånga

Tel: +46 (0)8 59 79 50 00
parker.sweden@parker.com

SK – Slovakia, Banská Bystrica

Tel: +421 484 162 252
parker.slovakia@parker.com

SL – Slovenia, Novo Mesto

Tel: +386 7 337 6650
parker.slovenia@parker.com

TR – Turkey, Istanbul

Tel: +90 216 4997081
parker.turkey@parker.com

UA – Ukraine, Kiev

Tel +380 44 494 2731
parker.ukraine@parker.com

UK – United Kingdom, Warwick

Tel: +44 (0)1926 317 878
parker.uk@parker.com

ZA – South Africa, Kempton Park

Tel: +27 (0)11 961 0700
parker.southafrica@parker.com

North America

CA – Canada, Milton, Ontario

Tel: +1 905 693 3000

US – USA, Cleveland

Tel: +1 216 896 3000

Asia Pacific

AU – Australia, Castle Hill

Tel: +61 (0)2-9634 7777

CN – China, Shanghai

Tel: +86 21 2899 5000

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Tel: +852 2428 8008

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Tel: +91 22 6513 7081-85

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Tel: +81 (0)3 6408 3901

KR – South Korea, Seoul

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NZ – New Zealand, Mt Wellington

Tel: +64 9 574 1744

SG – Singapore

Tel: +65 6887 6300

TH – Thailand, Bangkok

Tel: +662 186 7000 99

TW – Taiwan, Taipei

Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires

Tel: +54 3327 44 4129

BR – Brazil, Sao Jose dos Campos

Tel: +55 800 727 5374

CL – Chile, Santiago

Tel: +56 2 623 1216

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Tel: +52 81 8156 6000

European Product Information Centre

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL, IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

Parker Hannifin Ltd

Pneumatic Division Europe
The Collins Centre,
Lichfield South, Wall Island,
Birmingham Road, Lichfield.
WS14 0QP United Kingdom
Tel.: +44 (0) 1543 483800
Fax: +44 (0) 1543 483801
www.parker.com

