Air System Essentials

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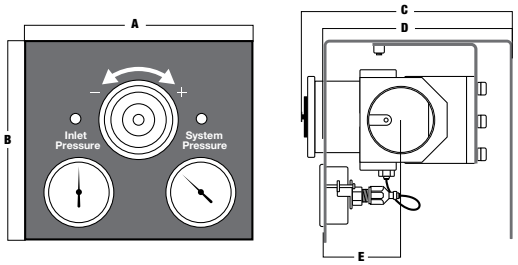
ENERGY EFFICIENCY, SAFETY AND ENVIRONMENTAL COMPLIANCE

Optiflo Flow Controllers – Less Waste, Maximum Efficiency >>>

WHAT IS OPTIFLO? Optiflo flow controllers utilize advanced technology designed to optimize your compressed air usage. Every air system, no matter how good, has leaks. When reducing an air system's working pressure, the volume of air lost through leakage is dramatically reduced. The reduction in lost air volume directly relates to power savings on the running of your air compressor and increases your bottom line.

Even tools benefit. Air tools are designed to work at specific pressures, so ensuring the correct pressure to your tools will optimize their performance, increase life and reduce maintenance, all in addition to preventing wasted energy.

Installing an Optiflo flow controller in your system will not only provide considerable power savings but also increase the life expectancy of your compressor and radically reduce maintenance costs. Minimizing lost air volume will reduce the amount of time your compressor has to run. The less it runs the longer its life expectancy and the less maintenance it will require.



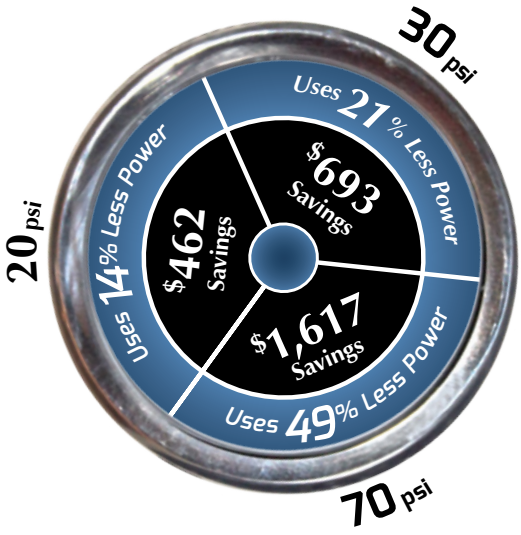
Inlet Size	Max Flow	A	B	C	D	E	Weight
1/2”	75 scfm	8.11”	7.28”	8.57”	7.36”	1.89”	8.4 lbs
1”	200 scfm					2.21”	10.45 lbs
2”	1000 scfm					2.78”	14.65 lbs

Inlet Size	Frame Color	Left to Right Flow Part Number	Right to Left Flow Part Number	Max Flow
1/2"	Green	OP-75-GRN-LR	OP-75-GRN-RL	75 scfm
	Blue	OP-75-BLU-LR	OP-75-BLU-RL	
	Black	OP-75-BLK-LR	OP-75-BLK-RL	
1"	Green	OP-200-GRN-LR	OP-200-GRN-RL	200 scfm
	Blue	OP-200-BLU-LR	OP-200-BLU-RL	
	Black	OP-200-BLK-LR	OP-200-BLK-RL	
2"	Green	OP-1000-GRN-LR	OP-1000-GRN-RL	1000 scfm
	Blue	OP-1000-BLU-LR	OP-1000-BLU-RL	
	Black	OP-1000-BLK-LR	OP-1000-BLK-RL	

Specs for All Sizes: Maximum Inlet Pressure: 300 psig, Control Range: 0-160 psig, Temp Range: -4˚F to +176˚F, Sensitivity: 0.2% of full span, Repeatability: ± 0.5% of full span

Calculate the Savings with Optiflo

- For every 10psi reduction in distributed air pressure, 7% energy savings will be realized.
- For example, a typical 15hp air compressor running 3,000 hours annually. At 10¢/kwH the cost to run the compressor is $3,300 annually. How much can you lower the distributed pressure?
- Use the dial below to find the annual electricity saved.



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Lockable Exhausting Valves

Improve the safety in your facility by making lock-out/tag-out easy and reliable. This manually operated valve can be used to prevent accidents caused by residual pressure in pneumatic lines. When closed, in the exhaust position, this valve will release the downstream air pressure through the bottom exhaust port.

OSHA lockout ready with cast lock tabs

Exhausting for safe air system maintenance

Optional muffler available to silence the exhaust

Compact design for tight spaces when connecting to equipment

Easy to read SUP for supply and EXH for exhaust modes

Part #	Thread Size	CFM	Exhaust Muffler
IV-50	1/2” F x 1/2” F	168	SIL-03
IV-75	3/4” F x 3/4” F	236	SIL-04
IV-100	1” F x 1” F	383	SIL-04

OSHA STANDARD for safety control, OSHA rules require energy sources for certain equipment be turned off or disconnected and that the device either be locked or labeled with a warning tag

Mini Ball Valves

Compact Design — perfect for use on manifolds and air outlets

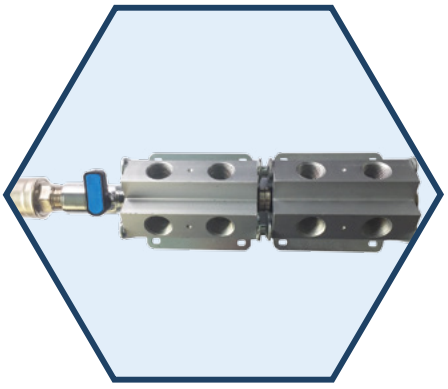
Nickel plated brass body

Part #	Thread Size
86310-06-06	3/8” M x 3/8” F
86300-08-08	1/2” F x 1/2” F
86310-08-08	1/2” M x 1/2” F
86310-12-12	3/4” M x 3/4” F

Ultra-flex Manifolds

- **Aluminum body**
- **2 or 4 x 1/2” NPTF outlet ports versions**
- **1/2” or 3/4” NPTF inlet**
- **Includes mounting bracket that allows for multiple port orientation**
- **Easily connected to create larger manifolds using 82280N-08-08**
- **Drain port makes condensate removal easy with petcock, drip leg or drain valve**

Complete drop assembly shown in vertical orientation with electronic timer drain, 90900-04, to remove condensate. This installation also features universal quick couplers and the gauge kit to monitor point of use air pressure.



Manifold connected in series to create 8 port manifold block using hex nipple, 82280N-08-08.

Manifold installed in horizontal orientation. Unique bracket design also enables rotation of the outlets by 45^0, such that the ports could be parallel and perpendicular to the wall if desired.

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Safety Double Outlets

- Nickel plated brass body with mounting bracket.
- 2 outlet ports 1/2” NPTF
- 1/2” or 3/4” NPTF inlet

Part Number	Inlet (NPT)	Outlets (NPT)	Drain Port (NPT)
90601-MFD	1/2”	4 x 1/2”	1/2”
90602-MFD	3/4”		
90601-2-MFD	1/2”	2 x 1/2”	1/2”
90601-2-MFD	3/4”		
90633-08-08	1/2”	2 x 1/2” @ 45°	None
90633-12-08	3/4”		

Air Outlet Accessories

Timer Drain

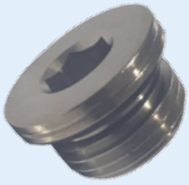
Add this electronic timer drain to the outlet manifold to remove condensate from the distribution system.

90900-04, 90900-08

Zero Loss Drain

Adding a zero loss drain to your drop will remove condensate without wasting any compressed air.

ZLD-200



Manifold Plug

Close any ports on the manifold for use at a later time.

90610-08-NPT

1/2” Petcock Drain

Manual drain port to easily drain condensate from the air system.

90260-PTC-08

1/2” Nipple w/ Hex

Connects manifolds in series making 6, 8, or more port manifolds

82280N-08-08

Gauge Kit

Provides point of use pressure reading.

90601-G

Part Number	Thread Size	Interchange Size
90621-08	1/2” NPTM	1/4”
90622-08	1/2” NPTF	

Safety Coupler

Enhance the safety of every workstation. The Safety Coupler reduces the risk of whipping hose accidents. Perfect for installations on air outlets that supply hoses to prevent disconnection injuries.

- Allows user to release energy before removing plug to prevent whipping hoses.
- Fits industrial 1/4” interchange plugs.
- Meets ISO 4414 standards

Working Pressure: -14 to 217psi (-0.99 to 15bar)

Temperature Range: -4˚ to 176˚F (-20˚ to 80˚C)

Media: Compressed Air, Vacuum, Inert Gas

Body: Nickel Plated Brass

Sleeve: Technopolymeric

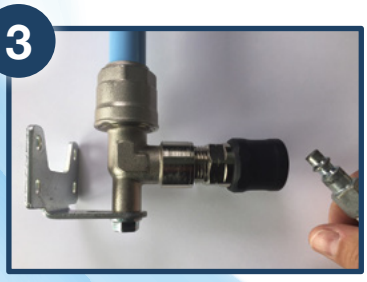
1

Slide sleeve to disconnect and exhaust air.

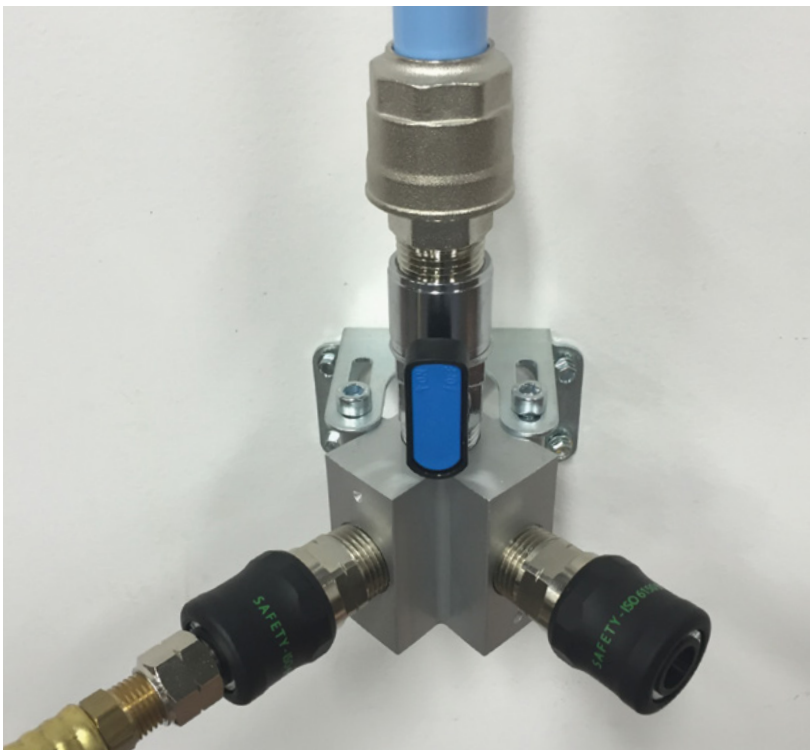
2

Air exhausts. Plug is captured.

3



Safely remove plug from coupler.



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Universal Quick Couplers

- Fits industrial and automotive ¼" Interchange plugs
- Nickel plated brass body
- 4 point stainless steel locking balls provide superior durability
- Working Pressure 0 to 232psi (0 to 16bar)
- Temperature Range: -4˚ to 176˚F (-20˚ to 80˚C)

	Thread	Part Number
Male NPT	1/4"	80191-04
	3/8"	80191-06
	1/2"	80191-08

	Thread	Part Number
Female NPT	1/4"	80192-04
	3/8"	80192-06
	1/2"	80192-08

	Barb	Part Number
Hose Barb	1/4"	80193-04
	3/8"	80193-06
	1/2"	80193-08

Coupler Plug

- ¼" Industrial Style Interchange (style M, type 16)
- Hardened steel for durability

	Thread	Part Number
Male NPT	1/4"	80221-04
	3/8"	80221-06
	1/2"	80221-08

	Thread	Part Number
Female NPT	1/4"	80222-04
	3/8"	80222-06
	1/2"	80222-08

	Barb	Part Number
Hose Barb	1/4"	80223-04
	3/8"	80223-06
	1/2"	80223-08

Y-Adapter

- 1/2" outlet adapter to easily add a hose connection to existing outlet

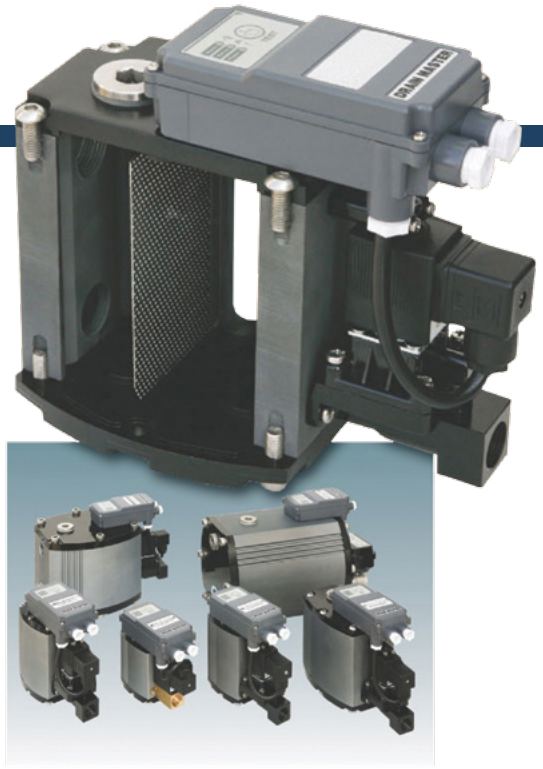
Inlets	Outlets	Part Number
1/2" NPTM	2 x 1/2" NPTF	802600-08-08

Hex Nipples, Reducer Nipples & Bushings

- Nickel plated brass close pipe nipples are perfect for maintaining a clean and non-corrosive air system

Description	Size	Part Number
Reducer Nipple w/ Hex	1/2" NPTM x 1/4" NPTM	81180N-08-04
Reducer Nipple w/ Hex	1/2" NPTM x 3/8" NPTM	81180N-08-06
1/2" Nipple w/ Hex	1/2" NPTM x 1/2" NPTM	82280N-08-08
Reducer Nipple w/ Hex	3/4" NPTM x 1/2" NPTM	81180N-12-08
3/4" Nipple w/ Hex	3/4" NPTM x 3/4" NPTM	81180N-12-12
Reducer Nipple w/ Hex	1" NPTM x 3/4" NPTM	81180N-16-12
1" Nipple w/ Hex	1" NPTM x 1" NPTM	81180N-16-16

Description	Size	Part Number
Bushing w/ Hex	1/2" NPTM x 1/4" NPTF	82280N-08-04
Bushing w/ Hex	1/2" NPTM x 3/8" NPTF	82280N-08-06
Bushing w/ Hex	3/4" NPTM x 1/2" NPTF	82280N-12-08
Bushing w/ Hex	1" NPTM x 3/4" NPTF	82280N-16-12



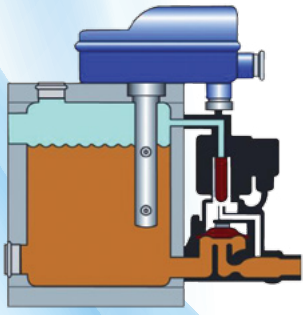
Zero Loss Auto Drain Valves

The ZLD provides the most cost effective way to drain condensate from your compressed air equipment and distribution system. ZLD drains are the only valve in its class that has a built in particulate strainer to prevent the discharge valve from clogging. High quality electronics allow for local and remote monitoring of drain functionality.

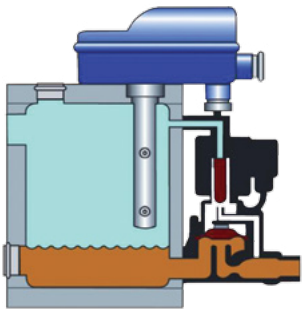
- Dependable condensate removal
- Maintenance free level sensors
- Stainless Steel internal strainer
- State of the art electronics with local and remote monitoring capability
- Intelligent fail safe operating functionality
- Compact design to fit in compressor rooms
- 90-260v /1/60 • Operating pressure 12 to 232psi

Part Number	Drain Inlet	Drain Outlet	Height	Recommended Sizing based on Compressor Capacity
ZLD-200	1 x 1/2" NPTF	1/2" NPTF	6"	Up to 200 cfm
ZLD-500	2 x 1/2" NPTF		7.1"	200-500 cfm
ZLD-2000			7.2"	500-2000 cfm
ZLD-5000	3 x 3/4" NPTF		7.7"	2000-5000 cfm
ZLD-18000			8.2"	5000-18000 cfm
ZLD-53000	4 x 3/4" NPTF 1" NPTF		9.3"	18000-53000 cfm

Energy Saving Operation



When condensate level reaches the high level sensor, the solenoid valve is activated and the condensate is discharged.



As the level of condensate reduces, it reaches the low level sensor, which signals the valve to close. NO AIR IS LOST!

APPROVED FOR ENERGY REBATES IN MOST STATES

ASK YOUR ENERGY PROVIDER HOW TO APPLY

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Electronic Time Drain Valves

Condensate poses a serious threat to compressed air systems. Failure to carryout regular draining will result in serious equipment damage and costly system disruption. The IDV guarantees regular uninterrupted condensate drainage from your compressed air systems. Inlet power of 24-240v 50/60Hz required.

Simple controls to set frequency and duration of drain opening

Indicator light illuminates when valve is open

Large drain orifice prevents nuisance drain blockages

Test button to check for proper functioning and condensate flow

Ball valve for safe maintenance of strainer

Easy cleaning access with included stainless steel strainer

Part Number	Inlet	Outlet
90900-04	1/2” NPTM w/ Strainer	1/4” NPTF
90900-08		1/2” NPTF

Petcock Drain

Simple and easy way to remove condensate or de-energize a portion of the distribution system.

90260-PTC-04	1/4” NPT
90260-PTC-08	1/2” NPT

Water Remover

Protect important and sensitive equipment and tools from condensate contamination from the compressed air distribution line.

The Water Remover filters water from the compressed air stream by passing the air through a coalescing process to form water droplets, which are then removed from the air stream and discharged through the automatic drain valve.

- Removes 99%+ of water droplets from the compressed air
- Normally open float drain automatically discharges condensate
- Sight glass to allow visual inspection for proper operation
- Long life filtration element

Mounting Bracket

Install your Water Remover with ease *(optional)*

Part Number	Thread	Flow Rate	Mounting Bracket	Replacement Element
WR-50	1/2”	53	BA-3	EL-WR-50
WR-75	3/4”	78	BA-4	EL-WR-75
WR-100	1”	131	BA-5	EL-WR-100
WR-150	1-1/2”	212	BA-6	EL-WR-150
WR-200	2”	424	BA-7	EL-WR-200

Condensate Catcher

Safely and easily collect and dispose of remote condensate

Mounting Bracket

Clean and easy emptying of Condensate Catcher *(optional)*

Part Number	Description
CCI-AST	5 Condensate Catchers with 10ft tubing, connectors (1/8”, 1/4”, 1/2”), and tube clips
CC-MB	Condensate Catcher mounting bracket
CC-YT-KIT	Y and T adapter fitting kit to connect multiple filter outlets to a single Condensate Catcher
CC-TUBE100	100 ft of tubing for plumbing filters/water removers to Condensate Catcher

Opticlean
Oil / Water Separators
>>>

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THE NEED FOR OPTICLEAN: Oil-injected air compressor condensate is known to contain carryover oil at levels in excess of the allowable amounts or limits in almost all regions of the world. The EPA has strict standards about the disposal of these oils that get mixed with water during the compression process due to concerns about waste water treatment and ground water contamination. The fines for non-compliance can be severe!

Federal regulations restrict contaminants to less than 40 ppm for compressor condensate. However local codes may be even more strict. Typical compressor condensate has 500-3000 ppm of contaminants.

When properly sized and installed Opticlean can reduce the contaminants in your compressor condensate to less than 10 ppm, for the life of the unit.

The Opticlean system has been designed to provide the most cost effective means of removing virtually all hydrocarbons through an ACTIVE FILTRATION process. This approach utilizes a molecular sieve that removes the hydrocarbons from the condensate stream. Utilizing a natural substrate that is modified to create an ionic charge, the system attracts the hydrocarbons to active sites and bonds the hydrocarbons to the natural substrate. This active filtration helps achieve a higher utilization of the media bed providing an industry leading capacitance. Due to the bonding of the hydrocarbons to the substrate, temperature variations and vibration will not dislodge the hydrocarbons from the substrate.

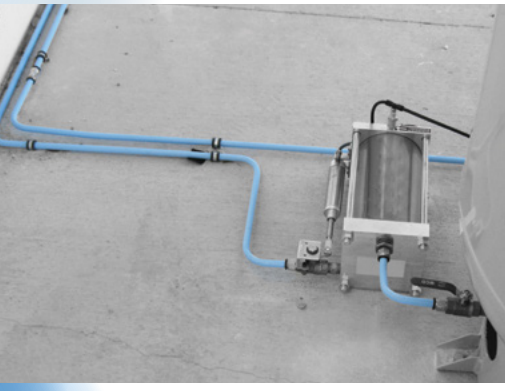
- Advanced molecular filtration
- Internal decompression chamber
- Simple and fast installation
- Sleek design with minimal footprint
- Industry leading capacitance
- Laboratory tested, field proven results
- Less than 10 ppm for life of product
- Maintenance free life cycle

Model	System Flow Rate*	Inlet Ports	Height	Width/ Depth	Max Flow	Min/ Max Temp	Dry Weight	Saturated Weight
OPC250	200 cfm	4 x 1/4”	22”	11”	1.5 GPM	33˚F to 125˚F	41 lb	60 lb
OPC400	400 cfm	6 x 1/4”	25”	15”	2 GPM		110 lb	175 lb
OPC750	750 cfm	6 x 1/4”	34”	19”	4 GPM		220 lb	325 lb
OPC1500	1500 cfm	6 x 1/4”	38”	23”	6 GPM		400 lb	600 lb

**12 month life expectancy compressed air system cfm based on 8000 hours annual compressed air system run time.*

QuickFit
14mm Aluminum Piping System
>>>

IDEAL FOR CONDENSATE MANAGEMENT



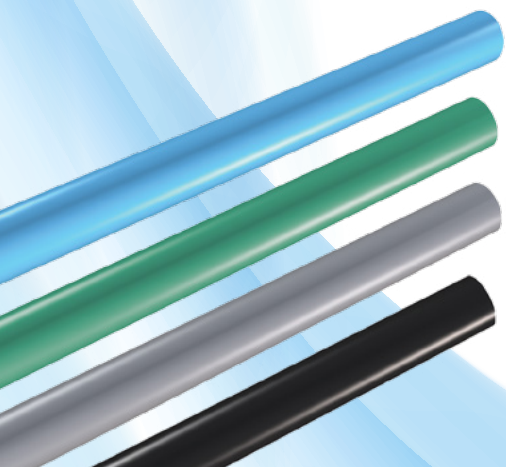
Quick-Fit by Infinity is designed with many industries in mind. It is ideal for simple home garage users, high-tech machine builders, conveyor manufacturers and more. The unique features of Quick-Fit are its lightweight marine grade aluminum tubing which will never corrode, and its solid brass nickel plated fittings. When the two components are combined you achieve an unparalleled quality in a system which can be installed in literally seconds. Using nothing more than a simple tube cutter and deburring tool, even the most complex systems can be installed in a fraction of the time of traditional piping systems.

Once installed you will be amazed at your system's appearance, which will enhance all applications. Its lightweight design enables Quick-Fit to be installed anywhere, with no special mounting requirements. Quick-Fit truly is in a class of it's own. Highest quality, durability, flexibility and all at an affordable cost.

> Instant push-connect design
> Guaranteed leak free
> Strong/durable metal system
> Non-corrosive components
> Simple and fast installation
> Unique flexibility

Quick-Fit Tubing Technical Data
>>>

Inlet Size	Tubing Length	CFM @ 100 psi	CFM @ 150 psi	CFM @ 200 psi	CFM @ 220 psi	Max Working Pressure	Temp Range °F
14mm	8 ft	21	26	30	34	220 psi	-4° to +176°



MARINE GRADE ALUMINUM

Frame Color	Quantity	Part Number
Blue	10 pk	9000-14-BLUE-PK10
	20 pk	9000-14-BLUE-PK20
Green	10 pk	9000-14-GREEN-PK10
	20 pk	9000-14-GREEN-PK20
Grey	10 pk	9000-14-GREY-PK10
	20 pk	9000-14-GREY-PK20
Black	10 pk	9000-14-BLACK-PK10
	20 pk	9000-14-BLACK-PK20

QuickFit System Parts >>>

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Male Thread Connectors	
14mm x 3/8" NPT Male	90011-14-06
14mm x 1/2" NPT Male	90011-14-08

Straight union	
14mm x 14mm	90040-14

90° Elbow	
14mm x 14mm	90130-14

90° Swivel Elbow	
14mm x 3/8" NPT Male	90130-14-06
14mm x 1/2" NPT Male	90130-14-08

Equal Tee	
14mm x 14mm	90230-14

Swivel Tee	
14mm x 3/8" NPT Male	90230-14-06
14mm x 1/2" NPT Male	90230-14-08

Plug, Plastic	
14mm	90610-14
Inserts into Quick-Fit fittings to plug line.	

Stem to Tube Adapter	
14mm x 1/4" Tube	90626-14-04
14mm x 3/8" Tube	90626-14-06

Condensate Line Installation Kit	
80 ft / 4 Drain Connection	OPK-IK1
160 ft / 4 Drain Connection	OPK-IK2
240 ft / 4 Drain Connection	OPK-IK3

2-Hole Outlet Manifold	
2 Hole Manifold	90601-2-MFD
1/2" Inlet and Base: 2 x 1/2" Outlets	

4-Hole Outlet Manifold	
4-Hole Manifold	90601-MFD
1/2" Inlet and Base: 4 x 1/2" Outlets	

Manifold Plug	
1/2" NPT with O Ring Seal	90610-08-NPT

Ball Valves (Tube Connection)	
14mm x 14mm	90700-14
14mm x 1/2" NPT Male	90700-14-08

Ball Valves (NPT)	
3/8" Male x 3/8" Female	86310-06-06
1/2" Female x 1/2" Female	86300-08-08
1/2" Male x 1/2" Female	86310-08-08

Brackets	
Hanging/Strut, 14mm, 10pk	90810-14-PK10
Flush Wall, 14mm, 10pk	90810-14-PK10-W
Hanging/Strut tapped for 1/4" rod and fits Standard Strut. Supplied in packs of 10.	

Wall Spacer	
1/2" Deep Wall Spacer	90710-SP-PK10
Supplied in packs of 10. Tapped for 1/4" rod.	

Tool, Tube Cutter	
Tube Cutter	90870

Deburring Tool	
Deburring Tool	90880

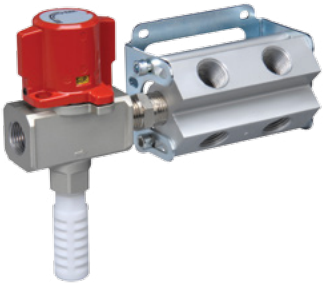
Point of Use Solutions
>>>

DRI Package

- Includes lockable exhausting valve, muffler, water remover, 4 port manifold and mounting bracket
- Fully assembled
- Perfect for multiple hose connections where water in the air lines has been an issue.

Part Number	Flow	Inlet Size	Outlets
DRI-50	53 cfm	1/2" NPTF	4 x 1/2" NPTF
DRI-75	78 cfm	3/4" NPTF	

IVM Unit



- Includes lockable exhausting valve, 4 port manifold and mounting bracket
- Fully assembled
- Ideal for air drops that supply equipment that require frequent maintenance that requires de-energizing and lock-out tag-out.

Part Number	Flow	Inlet Size	Outlets
IVM-50	168 cfm	1/2" NPTF	4 x 1/2" NPTF
IVM-75	236 cfm	3/4" NPTF	

IVWR Package

- Includes lockable exhausting valve, water remover and mounting bracket
- Fully assembled
- Perfect for isolating and removing water from compressed air branches with multiple drops.

Part Number	Flow	Port Size
IVWR-50	53 cfm	1/2" NPTF
IVWR-75	78 cfm	3/4" NPTF
IVWR-100	131 cfm	1" NPTF

WRM Package

- Includes water remover, 4 port manifold and mounting bracket
- Fully assembled
- Simple solution to eliminate water from damaging tools or equipment.

Part Number	Flow	Inlet Size	Outlets
WRM-50	53 cfm	1/2" NPTF	4 x 1/2" NPTF
WRM-75	78 cfm	3/4" NPTF	

Notes
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