

## PLC FLOW CONTROL SYSTEM (PLCFC)

Minimizes compressed air use for blowoff, cooling, cleaning, conveying, drying and static control applications to dramatically save on compressed air use.

### WHAT IS IT - REASONS TO USE

The Nex Flow™ user-friendly PLC flow control system (PLCFC) for compressed air is truly advanced and uses the most modern technology available today and can be used as a stand alone unit or interfaced with other automated systems. The PLCFC is a PLC based system - not just a simple, sensor and timer. The PLCFC combines a photo electric sensor to turn on the air when the target passes the sensor and to turn off the air when it leaves the sensor. (The unit is set to have a 2 second delay after it leaves the sensor but turns on instantaneously when it sees the target). We can supply an optional timer if the customer wants to set the unit to turn off based on time rather than using the sensor to turn it off.

Some competitive units only offer a simple on-off with timer that does not really optimize the air use if the timer is set wrong and leaves the system running far longer than necessary. We can control not only solenoid valves for on-off but can control any electrical devices such as motors, fans, conveyor motors that carry the parts, etc. Also, our systems which come complete with one sensor, can operate with up to eight sensors (not just optical, but proximity switches and other kinds of sensing devices) for a multiple of independent tasks. Each task can be programmed. Nex Flow™ can offer the service of special programming according to customer needs.

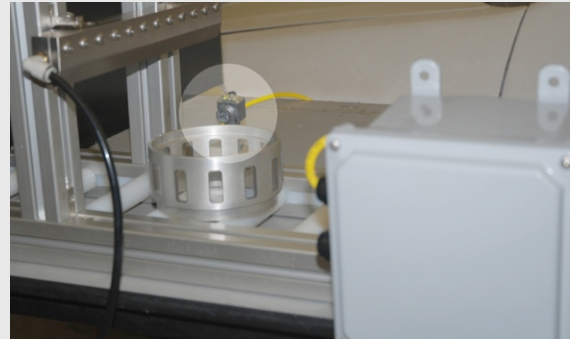
In addition, you have a choice of any one of two types of sensors - a 500 mm sensing range diffuse type (no reflector needed) or a 3000 mm sensing range reflector type - all depending on the need. Other special sensors can be supplied on request such as laser sensors.

All this comes in a simple package at almost the same cost as the competition!

The system can be programmed to suit any special application the customer may have for blowoff systems, other automation applications or it can be tied into existing automated systems.

It is easily connected for either 110V or 220V making it suitable for worldwide use. The package is designed for all types of industrial environments including wash downs. This rugged unit is easy to install in tight places and is flexible and easy to use.

A stainless steel Silent X-Stream™ Air Blade™ Air Knife is turned on and off automatically as the part to be dried passes under it.



### ADVANTAGES:

- ▶ Easy to install and hook up - 110V to 220V
- ▶ Suitable for NEMA 4/IP56 environments
- ▶ Compact sensor for mounting in tight spaces
- ▶ Optional timer if desired - unit comes preset for tight on-off control for best results in saving air - a true optimizer
- ▶ Box has four mounting lugs for easy mounting
- ▶ Choice of sensors for use up to 3000 mm (10 feet)
- ▶ Sensors withstand water, dust, oil and coolant
- ▶ Sensors have superior immunity to noise and Inductive loads

**THE BEST CHOICE FOR OPTIMIZING YOUR OPERATION AND SAVING COMPRESSED AIR**

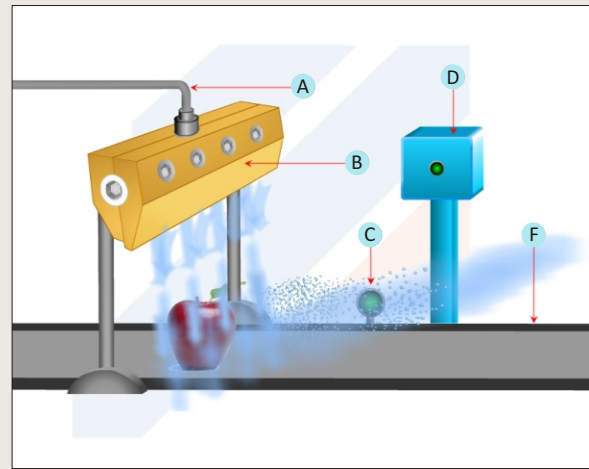


Photoelectric sensor withstands dirt and water - two types of sensors are available, diffuse type or reflector type



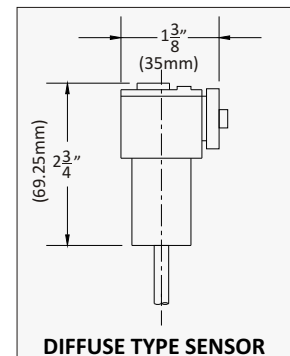
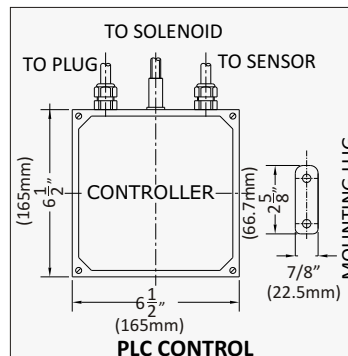
**PLCFC - HOW IT WORKS**

**PLC Flow Control Systems (PLCFC)** - The PLCFC combines a photo electric sensor to turn on the air when the target passes the sensor and to turn off the air when it leaves the sensor. (The unit is set to have a 2 second delay after it leaves the sensor but turns on instantaneously when it sees the target). In one example using an Air Knife, compressed air enters at point (A) into the Air Knife (B) only when the sensor (C) sees the target. The PLCFC is located at point (D). The target part (E) passes the sensor activating a solenoid to turn on the air flow to the Air Knife. The target travels on the conveyor (F). Two seconds after the target has passed the sensor, the air supply is turned off conserving energy. Different sensors are available for different applications and the units can be programmed for special applications.



**APPLICATIONS :**

- ▶ Parts dust and debris blowoff
- ▶ Drying of parts
- ▶ Cleaning of parts before packaging
- ▶ Filing operations
- ▶ Cooling hot parts
- ▶ Static elimination & cleaning of plastic parts

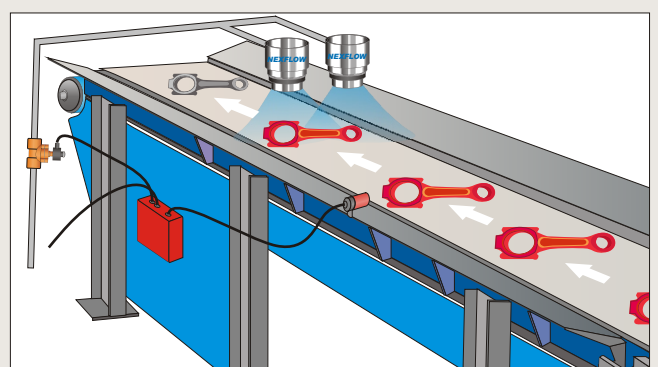


**PLC FLOW CONTROLLER SYSTEM**

PART NO.	DESCRIPTION
90055-40D	40 SCFM SYSTEM (includes one diffuse type sensor)
90055-40R	40 SCFM SYSTEM (includes one reflector type sensor)
90055-100D	100 SCFM SYSTEM (includes one diffuse type sensor)
90055-100R	100 SCFM SYSTEM (includes one reflector type sensor)
90055-200D	200 SCFM SYSTEM (includes one diffuse type sensor)
90055-200R	200 SCFM SYSTEM (includes one reflector type sensor)
90055-350D	350 SCFM SYSTEM (includes one diffuse type sensor)
90055-350R	350 SCFM SYSTEM (includes one reflector type sensor)

**PLCFC APPLICATION -** Compressed air use is reduced by 70% utilizing the PLCFC. Two Air Amplifiers used to cool castings only operate when the sensor “SEES” the castings and shuts them off two seconds after the castings are cooled. No timers need to be set.

Air Amplifiers cool the castings as they move along a conveyor. The sensor detects the part to turn on the amplifiers. The air turns off after 2 seconds after the castings have passed - an ideal “Plug and Play” solution to save compressed air.



**SMART N CLEVER™ OPTIMIZATION PRODUCTS**

