

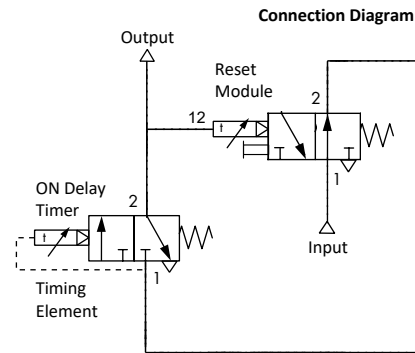
Pneumatic Rest Module Instructions

For 51.020.35.00 + ATEX Variant

Smooth functionality and reliable timing can only be guaranteed if the instructions within this document are strictly followed.

Automatic reset modules are used alongside ON delay timers to create continuous pneumatic pulsed output signals from 0.2 to 2 seconds. The ON delay timer (timing element) separates these pulsed output signals for automatic repeat timed intervals.

The pneumatic reset module is set by adjusting the front rotary knob. Please note that the preset roll display has no incremented markings, only a wedge-shaped mark on the roll display and for this reason, the setting point cannot be exactly defined.



Automatic reset timers generate output signals that repeat while air is connected as shown in the connection diagram above. Removal of air at the input, as shown in the connection diagram, resets the timing element and the reset module.

Installation & Mounting

Reset modules can be built into the front panel of equipment. Panel cut-out: 45mm (+0.6) x 22.2mm (+0.3) and secured in place with a fixing clip. Please ensure the panel cut-out is large enough that the reset module is not placed under mechanical tension or strain when built in. Additionally, a panel frame, part number 1499512, provides a wider aperture giving a professional looking finish to panels. Panel frames are used individually or with protective covers.

Pneumatic Connections

Reset Modules are provided with threaded M5 connections. Please ensure a tight seal is provided by fully inserting tubing and by tightening threads sufficiently providing a proper seal. We recommend the use of self-sealing fittings, this is a fitting that incorporates an NBR sealing ring. We do not recommend the use of thread sealing compounds. Due to the close proximity of ports we recommend a cylindrical shape fitting.

50010N-04-05 M5 to 4mm o/d tube
50010N-06-05 M5 to 6mm o/d tube



Timing Reset

Automatic reset by air removal to the reset module (input port 1) when following the connection diagram. Air supply to the to the timing element is interrupted by pulling the rotary knob on the reset module. This resets the timing element to its initial value.

Environment

Not suitable for external or harsh environments. Protect from corrosion. General advice is to house within an enclosure or control panel with suitable protection rating or use a protective cover. See accessories.

Air Quality

Clean, dry and oil free air to instrument quality standards. Please note that at low operating/ambient temperatures air filters alone will not be sufficient. Air dryers are recommended to achieve low moisture dew point.

Exhaust

Compressed air will exhaust from this device as part of the operating sequence. This could be sufficient volume and pressure to create risk or introduce problems within an enclosure.

Safety & Warnings

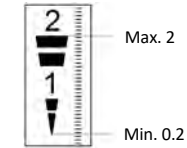
Only competent qualified persons should install, mount, attach hoses, initially operate, maintain, test and disassemble this product. Never disconnect power lines or service the device when the system is powered. This product should only be used for its intended purpose and within the limits and conditions as described. When cleaning or servicing the product, to avoid electrostatic discharges, use a damp anti-static cloth.

Impulse Automation Limited
United Kingdom
Company Registration 665193

Pneumatic Reset Module Instructions Continued

Technical Data

Pressure range:	2 to 6 bar
Pick-up pressure:	1.2 +/- 0.4 bar
Drop-out pressure:	0.3 +/- 0.2 bar
Pulse length:	Min. 30ms
Reset time:	Min. 200 ms
Service Life:	5 million cycles
IP rating:	IP40 when connected. IP55 when using a polycarbonate transparent cover.
Temperature range:	0°C to +60°C
Medium temperature:	Maximum 30°C (compressed air temperature)
Housing:	Plastic material



Note: Settings outside the permissible range could cause malfunction.

Reset Module Product Selection

Order Code (No ATEX)	Order Code (+ ATEX)	Time Range	Repeatability
51.020.35.00	57.020.35.EX	0.2 to 2 seconds	+/- 0.3 s

ON Delay Timer Product Selection - Timing Element

Order Code (No ATEX)	Order Code (+ ATEX)	Function & Time Range	Repeatability	Setting Accuracy
51.020.33.00	57.020.33.EX	ON delay - 0.2 to 3 seconds	+/- 0.1 s	+/- 0.3 s
51.020.03.00	57.020.03.EX	ON delay - 2 to 30 seconds	+/- 0.3 s	+/- 0.6 s
51.020.34.00	57.020.34.EX	ON delay - 8 to 120 seconds	+/- 1.2 s	+/- 3.0 s
51.020.30.00	57.020.30.EX	ON delay - 20 to 300 seconds	+/- 3.0 s	+/- 6.0 s

Accessories

Order Code	Description	Comments
1499512	Panel frame 52mm x 52mm cut-out	Provided with 2 x M4 screws
1405613	Hinged cover with rotary knob	Select 1499512 with this accessory
1405614	Hinged cover with lock and key	Select 1499512 with this accessory

ATEX

As well as standard timing devices which are intrinsically safe, we offer ATEX fully certified, CE-marked pneumatic timing products that comply with the ATEX directives for use within category M2 and group II, zones 1 and 21. See product selection.

ATEX reset module product (57.020.35.EX) conforms to the following standards:

Standard	Classification	Issued
EN ISO 80079-36	Ex II 2G Ex h IIB T4 Gb (0°C ≤ Ta ≤ +60°C)	2016
EN ISO 80079-37	Ex II 2D Ex h IIIB T120°C Db (0°C ≤ Ta ≤ +60°C)	
	Ex I M2 Ex h I Mb (0°C < Ta < 60°C)	

Our declaration of conformity can be downloaded from <https://www.impulseautomation.co.uk/downloads>

Warning: ATEX products should never be used in Zone 0 or Zone 20, as defined in IEC 60079-10-1:2015 and IEC 60079-10-2:2015.

The system builder is responsible for ensuring that the final system meets any hazardous zone, EX or ATEX requirements.

Disclaimer

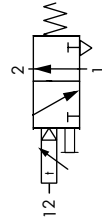
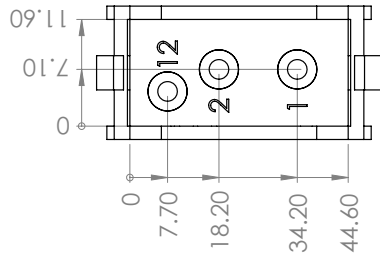
Impulse Automation Limited accepts no responsibility for the application of this product.

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website: www.impulseautomation.co.uk

Instructions

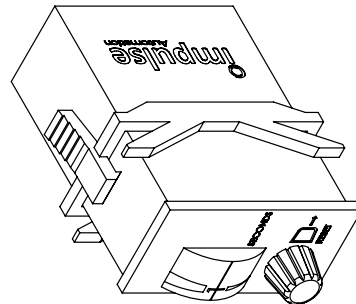
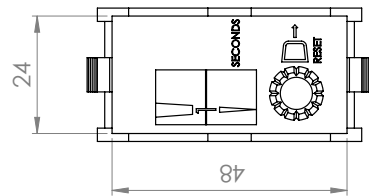
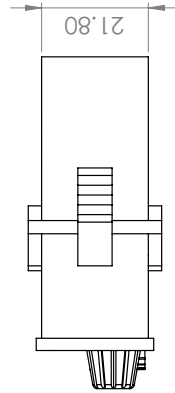
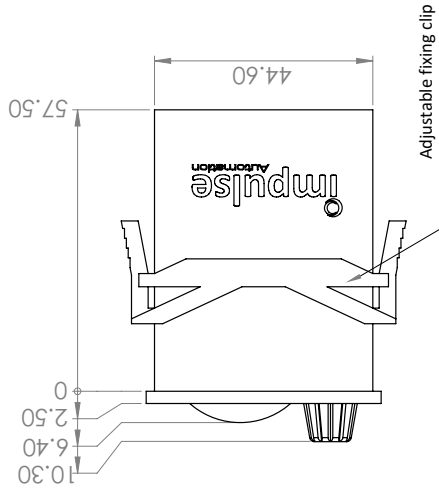
Pneumatic Reset Module

+ ATEX Model



This product is intended for use with ON delay timers as shown in this document. See connection diagram.

Pneumatic Reset Module Drawings



The information shown within these pages is for guidance purposes only. No liability is accepted for errors or omissions. The designer or user is solely responsible for safely and correctly using the parts, assemblies or equipment described. Please always refer to our website for latest updated instruction information. This instruction manual is not available in other languages