

Technical News Bulletin

Cham, August 2010

New Standard Cartridge **59-27241 NC blue** - **59-27242 NO**

1 Introduction

Since the introduction of electro pneumatic valve blocks, cartridges have been used to operate the pneumatic mechanisms on IS machines. From the earliest days, Emhart Glass has provided plastic cartridges 191-7705 (normally closed) and 191-7704 (normally open) for dry air applications, and aluminium cartridges 191-8274 (NC) and 191-8273 (NO) for oily air conditions.

Over the past 30 years, working condition specifications have changed, as have demands for reducing valve sticking to support improved reliability, increased air throughput for higher speeds, faster reaction times and longer operating life.

2 Description

The new Standard Cartridge fulfils all the desired improvements and works in all environments (dry and oily air). In addition the double sealed piston prevents any leakage (important for safety), a newly designed seat valve replaces the lip seal, and operating characteristics are independent of wear. Constant friction levels prevent sticking and guarantee high repeatability and a long life time. The spring does not restrict the air throughput, thus giving up to 100% more air flow.



Superseded ...

by Standard Cartridge **59-27241 NC** and **59-27242 NO**

3 Application

The new Standard Cartridge outperforms the plastic cartridges 191-7705 NC and 191-7704 NO, and the aluminium cartridges 191-8274 NC and 191-8273 NO.

The Standard Cartridges supersede all previous cartridges, as a one-to-one replacement, functioning in any Emhart Glass type electro-pneumatic valve blocks.



21 Line EPVB



26 Line EPVB



Conveyor



NIS PCM

Remark (except previous 21 Line Valve Block) :

Pilot pressure must be about 0.4 bar (6 psi) higher than high pressure (HP) 3.1 bar (45 psi), to a maximum of 4 bar (58 psi) - see utility specification for IS 200-1760 and NIS 400-51157

4 Operating Experience

The Cartridge Valves have been through one of the most rigorous testing regimes of any item produced by Emhart Glass, both within our own Research Center and with several glass plants operating under a wide variety of operating conditions.

5 Features and Benefit

- Compact high precision full aluminium design => lifetime
- Seat valve, wear independent low friction => response and repeatability
- Constant friction design => consistent operations
- Dual piston sealing => no air leakage (safety)
- No metal to metal guiding (bushing) => lifetime
- For oily and dry air => one for all applications
- Large openings => increase air through put
- Spring not restricting air flow => up to 100% more flow
- Fits all Machines NIS, AIS, IS, SIS => one standard cartridge

6 Availability

The Standard Cartridge 59-27241 NC and 59-27242 NO are available and supersedes the plastic and aluminium cartridges, which are in transition to be obsolete. Group 5 of the Solenoid Valve 210-499-00 NC and 210-498-00 NO includes the Standard Cartridge.