

**Safety Integrity Level (SIL)
Self-certification**

Authority as per IEC 61508-I Table-5

Certificate

509622-C01

EIC-P hereby confirms that

Series 342 Filter/ Regulator

ASCO Numatics India

Assessed according to IEC 61508 Part 1, 2 and Meets requirements providing

Systematic Integrity : SIL 2 Capable

Random Integrity:

For a standalone device with pressure guage:

Type A device: SIL2 @ HFT=0

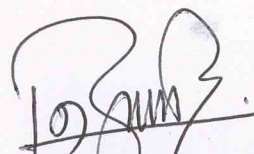
* SFF values indicate Product is SIL3@HFT=0 capable but self certified to SIL2 as per IEC 61508-I Table-5

*For a filter/regulator used in a final element assembly:
SIL must be verified for the specific application*

For details refer to assessment report. **509622-R01**

EICP, 27th July 2015


Evaluating Assessor
Dinesh Lonkar


Certifying Assessor
Vijay Jawade

Revision	Issue Date	Evaluating Assessor	Certifying Assessor	ECN No.
-	27 th July 2015	Dinesh Lonkar	Vijay Jawade	257358

Declaration of conformity

Manufacturer: 1) ASCO NUMATICS
57 Kundrathur Main Road, Gerugambakkam
Chennai- 602 101 India

2) ASCO Numatics (Sirai SRL)
Via Strada per Cernusco, 19
20060 Bussero (MI) – ITALY.

3) ASCO Valve (Shanghai) Co Ltd.
No. 480 Xin Miao San Road, Xin Qiao, Song Jiang District,
Shanghai 201612, China

Product Type: Series 342 Filter/Regulator

Reference Drawing: 505367 Rev-

Versions (Catalogue number) 342A8009
342A800A
342A800B
342A800C
342A8209
342A820A
342A820B
342A820C
342A8409
342A840A
342A840B
342A840C

Above device is suitable for the use in a safety-related application under the condition of the Intended usage and the consideration of the enclosed safety instructions manual.

Safety function:

Device to filter/regulate the fluid to required pressure level same shall be displayed on the pressure gauge Mounted directly on the filter regulator.

The functional safety is given according to IEC 61508 with the following data:

Operation Mode	Low Demand Mode
Type of sub-system	A

Failure rates according to IEC 61508	FIT				PFDavg (Failure/Demand)
	λ_{sd}	λ_{su}	λ_{dd}	λ_{du}	
Filter/ Regulator with pressure gauge	240	27.9	475	118	5.17e-04

FIT= 1failure/10⁹ hours ETT- Energized to Trip DTT-De- Energized to Trip

- Note:
1. above values are generated using EXIDA software FMEDA V 7.1.18 tool
 2. PFDavg calculations are performed for single (1oo1) architecture.
 3. Proof test interval (Ti) = 1 Year =8760 hrs.
 4. The valve is an individual component. It is part of a final element system

*- covers Initial Product catalogue description Letters