NAMUR Interface 3/5 Port Solenoid Valve
IP67 Compliant, Hygienic Design Type

**VFN2120N-X23/-X36**

- Hygienic design is adopted
  - Resin body with less concaves. Direct cleaning of valve is possible (IP67)
- 3 port/5 port available
  - Function plate realized 3/5 port selectable
- Low power consumption
  - Power consumption: 0.5 W
- Port threads: NPT1/4, G1/4 available

**How to Order**

- **Voltage**
  - 24 VDC
- **Manual**
  - Nil: Push type
  - B: Locking type (Tool required)
  - C: Locking type (Manual type)
  - X23: Vertical entry to piping port
  - X36: Horizontal entry to piping port
- **1/3/5 port thread size**
  - 1/4"
- **1/3/5 port thread type**
  - N: NPT
  - F: G
- **Mounting thread type**
  - Nil: UNF10-32 thread
  - M: M5 x 0.8 thread
  - N: No mounting thread (for UNF10-32)
  - MN: No mounting thread (for M5 x 0.8)
- **CE-compliant**
  - Nil
  - Q: CE-compliant
- **Valve specifications**
  - A: 3 port (Coil side: A port)
  - B: 5 port (Coil side: B port)
  - C: 3 port (Coil side: B port)
  - D: 5 port (Coil side: A port)
- **Electrical entry**
  - X23: Vertical entry to piping port
  - X36: Horizontal entry to piping port
- **Check valve**
  - Nil: Available
  - 0: Not available
Standard Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve construction</td>
<td>Rubber seal</td>
</tr>
<tr>
<td>Fluid</td>
<td>Air</td>
</tr>
<tr>
<td>Operating pressure range</td>
<td>0.15 to 0.9 MPa</td>
</tr>
<tr>
<td>Ambient and fluid temperature</td>
<td>−10 to +60°C</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Not required</td>
</tr>
<tr>
<td>Manual override</td>
<td>Push type/Locking type (tool required)/locking type (manual type)</td>
</tr>
<tr>
<td>Enclosure</td>
<td>Equivalent to IP67</td>
</tr>
<tr>
<td>Thread port size</td>
<td>1/4&quot;</td>
</tr>
<tr>
<td>Flow rate characteristics (Cv/Effective area)</td>
<td>0.8/11 mm²</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>24 VDC</td>
</tr>
<tr>
<td>Allowable voltage fluctuation</td>
<td>−15 to +10% of rated voltage</td>
</tr>
<tr>
<td>Type of coil insulation</td>
<td>Class B</td>
</tr>
<tr>
<td>Power consumption</td>
<td>0.5 W</td>
</tr>
</tbody>
</table>

Replacement Parts

1. **Mounting screw**
   - Model: AXT842-30-19A-2
   - Type: UNF10-32
   - Contents: With washer/A set of 10 screws
   - Model: AXT842-30-19A-3
   - Type: M5 x 0.8

2. **Check valve**
   - Model: AXT842-30-17A
   - Contents: A set of 10 pcs.

3. **Function plate assembly**
   - Model: AXT842-30-10A
   - Valve specifications: 3 port (Coil side: A port)
   - Model: AXT842-30-10B
   - Valve specifications: 5 port (Coil side: B port)
   - Model: AXT842-30-10C
   - Valve specifications: 3 port (Coil side: B port)
   - Model: AXT842-30-10D
   - Valve specifications: 5 port (Coil side: A port)

* Valve specifications can be freely changed by changing the function plate.

Options

**Throttle valve spacer**

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Mounting screw type</th>
<th>Body material</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>AXT842-30-22A-1</td>
<td>UNF10-32</td>
<td>Stainless steel</td>
<td>O-ring for interface (2 pcs.)</td>
</tr>
<tr>
<td>AXT842-30-22A-2</td>
<td>M5 x 0.8</td>
<td></td>
<td>Mounting screw for spacer (2 pcs.)</td>
</tr>
<tr>
<td>AXT842-30-24A-1</td>
<td>UNF10-32</td>
<td>Aluminum (Black anodized)</td>
<td></td>
</tr>
<tr>
<td>AXT842-30-24A-2</td>
<td>M5 x 0.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dimensions

Adjusting screw for throttle (A side/B side)

Fully closed

Fully opened

Adjusting screw for throttle (A side/B side)

2 x O-ring

Mounting screw

Check valve

Function plate assembly

73.8

46.8

9

20.4

32

36.9

24
Dimensions

Electrical entry: Vertical  VFN2120N-X23A

Symbol

Function plate
(AXT842-30-10-A)

M12 connector pin arrangement

Pin no.
1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

M12 connector

2 x Check valve (3/5 port)

Manual override

1(P) port

3(R2) port

5(R1) port

4(A) port

2(B) port

2 x UNF#10-32, M5 x 0.8 mounting screw

Electrical entry: Vertical  VFN2120N-X23B

Symbol

Function plate
(AXT842-30-10-B)

M12 connector pin arrangement

Pin no.
1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

M12 connector

2 x Check valve (3/5 port)

Manual override

1(P) port

3(R2) port

5(R1) port

4(A) port

2(B) port

2 x UNF#10-32, M5 x 0.8 mounting screw

NAMUR Interface 3/5 Port Solenoid Valve
IP67 Compliant, Hygienic Design Type VFN2120N-X23/-X36

Dimensions

Electrical entry: Vertical  VFN2120N-X23A

Symbol

Function plate
(AXT842-30-10-A)

M12 connector pin arrangement

Pin no.
1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

M12 connector

2 x Check valve (3/5 port)

Manual override

1(P) port

3(R2) port

5(R1) port

4(A) port

2(B) port

2 x UNF#10-32, M5 x 0.8 mounting screw

Electrical entry: Vertical  VFN2120N-X23B

Symbol

Function plate
(AXT842-30-10-B)

M12 connector pin arrangement

Pin no.
1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

M12 connector

2 x Check valve (3/5 port)

Manual override

1(P) port

3(R2) port

5(R1) port

4(A) port

2(B) port

2 x UNF#10-32, M5 x 0.8 mounting screw
Dimensions

Electrical entry: Vertical  VFN2120N-X23C

Function plate
(AXT842-30-10-G)

Symbol

Locking type manual (tool required)

Manual override

2 x UNF#10-32, M5 x 0.8 mounting screw

M12 connector pin arrangement

Pin no.
1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

Electrical entry: Vertical  VFN2120N-X23D

Function plate
(AXT842-30-10-D)

Symbol

Locking type manual (tool required)

Manual override

2 x UNF#10-32, M5 x 0.8 mounting screw

M12 connector pin arrangement

Pin no.
1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used
Dimensions

Electrical entry: Horizontal VFN2120N-X36A

Symbol

Function plate

M12 connector pin arrangement

1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

Manual override

Locking type (Manual type)

Locking type (Tool required)

2 x Check valve (3/5 port)

Electrical entry: Horizontal VFN2120N-X36B

Symbol

Function plate

M12 connector pin arrangement

1: Not used
2: Not used
3: COM.
4: SOL.A
5: Not used

Manual override

Locking type (Manual type)

Locking type (Tool required)

2 x Check valve (3/5 port)
Dimensions

Electrical entry: Horizontal VFN2120N-X36C

Symbol

M12 connector pin arrangement

Function plate (AXT842-30-10-C)

Manual override

OFF

Locking type (Manual type)

ON

C type

OFF

Locking type (Tool required)

ON

B type

Manual override

Electrical entry: Horizontal VFN2120N-X36D

Symbol

M12 connector pin arrangement

Function plate (AXT842-30-10-D)

Manual override

OFF

Locking type (Manual type)

ON

C type

OFF

Locking type (Tool required)

ON

B type

Manual override