

## VS18 / VS26 series Valve Islands

### Installation and Maintenance Instructions



For further information, scan this QR code or visit [www.norgren.com](http://www.norgren.com)



For detailed instructions the following documents and data files can be downloaded from our website: <https://www.norgren.com>

VS18 - Data Sheet: en 5.1.250

VS26 - Data Sheet: en 5.1.350

VS18/VS26 - Multipole and Fieldbus Operation & Service Manual: IM1/en 5.1.250/350

VS18/VS26 - PROFINET Operation and Service Manual: IM2/en 5.1.250/350

VS18/VS26 - EtherNet/IP Operation and Service Manual: IM3/en 5.1.250/350

VS18/VS26 - IO-Link Operation & Service Manual: 7303763000000006

VS18/VS26 - ATEX Installation Instr.: 7503662000000000 (PN/EIP), 7503767000000000 (IO-Link)

VS18/VS26 - Device description files (EDS, GSD, IODD...)

Alternatively, please contact your local IMI Precision Engineering Technical Support.

#### TECHNICAL DATA

Medium: Compressed air, filtered (40 µm), lubricated or non-lubricated

Maximum operating pressure:

10 bar: VS\*\*S models and VS\*\*G solenoid pilot actuated valves with internal pilot supply

16 bar: VS\*\*G solenoid pilot actuated valves with external pilot supply

Ambient temperature: -15°C ... +50°C (Consult our technical service for use below +2°C)

Alternatively, please contact your local IMI Precision Engineering Technical Support

#### SAFETY NOTES

- Always switch off the air supply and unplug all electrical connections before performing any maintenance.
- Ensure the machine is in a safe condition before operating manual overrides.
- All VS18/VS26 24V DC products are designed to be used with a protective extra low voltage (PELV) power supply (UL class II power supply only).
- All VS18/VS26 115V AC products correspond to the protection class I. Connection of the protective earth (PE) ground is required.

#### INSTALLATION DATA

- Please review all ATEX data and notes in the operating and service manual as well as the ATEX installation instructions to eliminate any risks, allowing for safe function of the valve island.
- Lubrication:** Valves will function reliably when they are supplied with clean dry air either lubricated or non-lubricated. If the air supply is lubricated, then lubrication must be supplied for the life of the product.
- Vibration:** In applications where there is significant vibration, the axis of the spool (longitudinal axis of the valve) should be at 90° to the direction of the motion.
- Tightening torque:** To avoid damaging the product, please make sure that the maximum torque values are not exceeded. The maximum torques are specified in the maintenance and instruction booklet.

#### PORT IDENTIFICATION:

Function	Port
Main/internal pilot air supply	1
Exhaust	3 + 5
Outlet	2 + 4
External pilot air supply (if used)	12/14
Collected exhaust of pilot valves	82/84

#### PIN ASSIGNMENT MULTIPOLE CONNECTORS:

##### M23 19-pin

Pin no.	Wire colour	Socket	Pilot	Station
1	white	Solenoid 8-a	14	8
2	green/Brown	Solenoid 6-a	14	6
3	green	Solenoid 4-a	14	4
4	yellow	Solenoid 2-b	12	2
5	grey	Solenoid 2-a	14	2
6	blue (thick)	Common	-	-
7	white/Grey	Solenoid 1-b	12	1
8	red	Solenoid 3-b	12	3
9	black	Solenoid 5-b	12	5
10	violet	Solenoid 7-b	12	7
11	grey/pink	Solenoid 7-a	14	7
12	yellow/green	Earth	-	-
13	white/green	Solenoid 6-b	12	6
14	brown/green	Solenoid 4-b	12	4
15	white/yellow	Solenoid 1-a	14	1
16	yellow/brown	Solenoid 3-a	14	3
17	pink	Solenoid 5-a	14	5
18	red/blue	Solenoid 8-b	12	8
19	brown (thick)	not used	-	-

##### D-Sub 9-pin\*1)

Pin no.	Wire colour	Socket	Pilot	Station
1	white	Solenoid 1-a	14	1
2	brown	Solenoid 2-a	14	2
3	green	Solenoid 3-a	14	3
4	yellow	Solenoid 4-a	14	4
5	grey	Solenoid 1-b	12	1
6	pink	Solenoid 2-b	12	2
7	blue	Solenoid 3-b	12	3
8	red	Solenoid 4-b	12	4
9	black	Common	-	-

##### D-Sub 15-pin\*1)

Pin no.	Wire colour	Socket	Pilot	Station
1	white	Solenoid 1-a	14	1
2	brown	Solenoid 2-a	14	2
3	green	Solenoid 3-a	14	3
4	yellow	Solenoid 4-a	14	4
5	grey	Solenoid 5-b	14	5
6	pink	Solenoid 6-b	14	6
7	blue	Solenoid 7-b	14	7
8	red	Solenoid 1-b	12	1
9	black	Solenoid 2-b	12	2
10	violet	Solenoid 3-b	12	3
11	grey/pink	Solenoid 4-b	12	4
12	red/blue	Solenoid 5-b	12	5
13	white/green	Solenoid 6-b	12	6
14	brown/green	Solenoid 7-b	12	7
15	white	Solenoid 1-a	-	-

#### D-Sub 25-pin\*1)

Pin no.	Wire colour	Socket	Pilot	Station
1	white	Solenoid 1-a	14	1
2	brown	Solenoid 2-a	14	2
3	green	Solenoid 3-a	14	3
4	yellow	Solenoid 4-a	14	4
5	grey	Solenoid 5-a	14	5
6	pink	Solenoid 6-a	14	6
7	blue	Solenoid 7-a	14	7
8	red	Solenoid 8-a	14	8
9	black	Solenoid 9-a	14	9
10	violet	Solenoid 10-a	14	10
11	grey/pink	Solenoid 11-a	14	11
12	red/blue	Solenoid 12-a	14	12
13	white/green	Common	-	-
14	brown/green	Solenoid 1-b	12	1
15	white/yellow	Solenoid 2-b	12	2
16	yellow/brown	Solenoid 3-b	12	3
17	white/grey	Solenoid 4-b	12	4
18	grey/brown	Solenoid 5-b	12	5
19	white/pink	Solenoid 6-b	12	6
20	pink/brown	Solenoid 7-b	12	7
21	white/blue	Solenoid 8-b	12	8
22	brown/blue	Solenoid 9-b	12	9
23	white/red	Solenoid 10-b	12	10
24	brown/red	Solenoid 11-b	12	11
25	white/yellow	Solenoid 12-b	12	12

#### D-Sub 44-pin\*1)

Pin no.	Wire colour	Socket	Pilot	Station
1	white	Solenoid 1-a	14	1
2	brown	Solenoid 2-a	14	2
3	green	Solenoid 3-a	14	3
4	yellow	Solenoid 4-a	14	4
5	grey	Solenoid 5-a	14	5
6	pink	Solenoid 6-a	14	6
7	blue	Solenoid 7-a	14	7
8	red	Solenoid 8-a	14	8
9	black	Solenoid 9-a	14	9
10	violet	Solenoid 10-a	14	10
11	grey/pink	Solenoid 11-a	14	11
12	red/blue	Solenoid 12-a	14	12
13	white/green	Solenoid 13-a	14	13
14	brown/green	Solenoid 14-a	14	14
15	white/yellow	Solenoid 15-a	14	15
16	yellow/brown	Solenoid 1-b	12	1
17	white/grey	Solenoid 2-b	12	2
18	grey/brown	Solenoid 3-b	12	3
19	white/pink	Solenoid 4-b	12	4
20	pink/brown	Solenoid 5-b	12	5
21	white/blue	Solenoid 6-b	12	6
22	brown/blue	Solenoid 7-b	12	7
23	white/red	Solenoid 8-b	12	8
24	brown/red	Solenoid 9-b	12	9
25	white/yellow	Solenoid 10-b	12	10
26	brown/black	Solenoid 11-b	12	11
27	grey/green	Solenoid 12-b	12	12
28	yellow/grey	Solenoid 13-b	12	13
29	pink/green	Solenoid 14-b	12	14
30	yellow/pink	Solenoid 15-b	12	15
31	green/blue	Solenoid 16-a	14	16

#### D-Sub 44-pin\*1)- follow-up

Pin no.	Wire colour	Socket	Pilot	Station
32	yellow/blue	Solenoid 16-b	12	16
33	-	not used	-	-
34	-	not used	-	-
35	-	not used	-	-
36	-	not used	-	-
37	-	not used	-	-
38	-	not used	-	-
39	-	not used	-	-
40	-	not used	-	-
41	-	not used	-	-
42	-	not used	-	-
43	blue/black *2)	Common	-	-
44	red/black *2)	Common	-	-

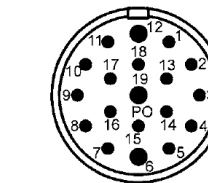
\*1) Colour code according to IEC60757.

\*2) The IMI Norgren D-Sub 44-pin cables do not have 44 wires, but only 34 wires. Therefore, the wires associated with pins 1 through 32 are according to IEC60757, wires 43 and 44 differ from the standard and are coloured in green/black and yellow/black.

For Fieldbus and Industrial Ethernet data please refer to data sheets and maintenance and instruction booklet!

#### PIN ASSIGNMENT MULTIPOLE CONNECTORS:

M23 19-pin (male) - Looking into node connectors



D-Sub 9-pin (male-connector)



D-Sub 15-pin (male-connector)



D-Sub 25-pin (male-connector)



D-Sub 44-pin (male-connector)

