

TECHNICAL FEATURES

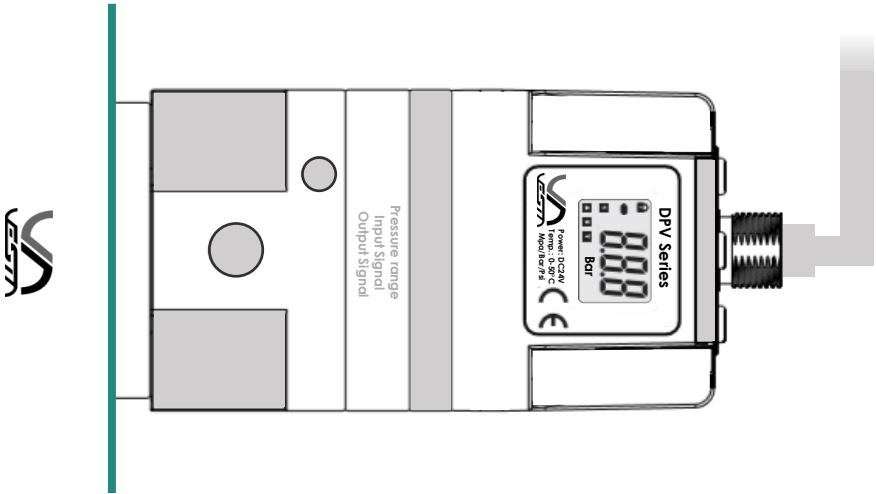
Pressure range: 0,05÷1, 0,05÷5, 0,05÷9 Bar
Maximum inlet pressure: 10 Bar
Minimum inlet press.: set pressure + 1 Bar
Ambient temperature: 0-50°C
Protection class: IP65

Power Supply	Voltage Current	DC: 24V ±10% DC 24V: ≤ 0,12A
Input Signal	Current Voltage	DC 4~20mA, DC 0~20mA DC 0~5V, DC 0~10V
Input Impedance	Current Voltage	≤ 250 KΩ - 6,5 KΩ
Output Signal	Analogue Switch	DC 1~5V (impedance 1KΩ or more) DC 4-20mA (impedance 250 Ω or less) NPN, PNP: 30mA
Linearity		1% F.S.
Hysteresis		0,5% F.S.
Repeatability		0,5% F.S.
Temperature Drift		2% F.S.
Display	Accuracy Unit	2% F.S. Mpa, Bar, PSI

Note: for optimal use, filtered air (5µ) not lubricated

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OPERATION MANUAL



To ensure safety, be sure to observe ISO 4414, JIS B 8370 and other safety practices while operating DPV regulators.

C. Before machinery / equipment is restarted, ensure safety before applying power.

B. When equipment is to be removed perform the following actions: top supplied air, exhaust the residual pressure, verify the release of air, turn the power off and confirm safety before performing maintenance.

A. Inspection and maintenance of machinery / equipment should only be performed once safety of personnel and equipment is confirmed.

Do not service machinery / equipment or attempt to remove components until safety is confirmed.

⚠ Always ensure that air-ports are connected correctly following the IN and OUT port indications on the product.

Only trained personnel should operate pneumatically operated machinery and equipment. Compressed air can be dangerous if an operator is unfamiliar with it. Assembly, handling or repair of pneumatic systems should be performed by trained and experienced operators.

view to giving due consideration to any possibility of equipment failure when configuring a system.

should continuously review the suitability of all items specified, referring to the latest catalogue information with a

determined the compatibility of the system. This person

assurance will be the responsibility of the person who has

its specifications. The expected performance and safety

WARNINGS

any of the following conditions:

Contact VESTA Automation if DPV regulators are to be used in

applications, or safety equipment.

emergency stop circuits, clutch and brake circuit in press

energy, railway, air navigation, vehicles, medical

specifications, or if product is used outdoors.

safety analysis.

effects on people, property, or animals requiring special

with atomic

equipment, food and beverages, recreation equipment,

in conjunction with

specifications, or if product is used outdoors.

DISCLAIMER

component failure.

removal of parts, as this can lead to malfunction and

part of VESTA Automation as manufacturer.

subject to change without prior notice or any obligation on the

partially applicable to special models. This operation manual is

shipment from the factory. Avoid careless disassembly or

This product is adjusted for each specification at the time of

WIRING INSTRUCTIONS

POWER & INPUT SIGNAL

Power supply

Input signal (analog)

OUTPUT SIGNAL

Analog output

NPN output

PNP output

FUNCTION SETTING

Unlock keys and press [S] key for 2 seconds to access all functions:

F01: Unit Setting (MPa, Bar, PSI)

100 → F01 → MPa → 68.7 → PSI

Select F01, press [S] key, to unit setting.
Select Bar, MPa, psi by using [▼] [▲] keys, and press [S] key to save data.

F02: Input signal adjustment setting

100 → F02 → n-1 → 00 → n-2 → 00 → 100

Select F02, press [S] key, enter into the input signal adjustment setting.
M-1: blanking 0-30% of initial input range.
M-2: slope adjustment (P1: 0-30%, P2: 50-100%) of input value.

F03: Gain level Setting (SLO: quick reaction → SL9: high stability)

100 → F03 → 51.0 → 51.9

Select F03, press [S] key to enter Gain setting (Sensitivity Level).
Select SLO-SL9 by using [▼] [▲] keys and press [S] to save data.

F04: Zero Clear setting (to correct initial pressure)

100 → F04 → 0CL → CLR

Select F04, press [S] key, to "Zero clear" setting.
Press both [▼] [▲] keys until CLR displayed (adjustable range within 5% F.S.)

F05: Initialize setting

100 → F05 → in 1 → don

Select F05, press [S] key to Initialize setting.
Press both [▼] [▲] keys until DON is displayed (return to pressure display is automatic).

SETTING METHOD

Press [▼] key until [a] disappears to access settings:

100 → 100

ANALOG INPUT SIGNAL SETTING: MINIMUM AND MAXIMUM PRESSURE

100 → F-1 → 000 → F-2 → 900

100 → 900 → P-2 → 000 → P-1

SETTING PROCEDURE

1. Unlock keys and press [S] key
2. Set the minimum pressure F-1 by using [▼] [▲] keys
3. Press [S] key to save data
4. Set the maximum pressure F-2 by using [▼] [▲] keys
5. Press [S] key to save data (P-1/P-2 only used in switch out products)
6. Set the pressure P-1 by using [▼] [▲] keys
7. Press [S] key to save data
8. Set the pressure P-2 by using [▼] [▲] keys
9. Press [S] key to save data and return to pressure display.

NOTES

1. F-1 is adjustable in a range from 0% to 90% of the rated value.
2. F-2 is adjustable in a range from 10% to 100% of the rated value.
3. (F-2)-(F-1) ≥ 10% F.S.
4. P-1 < P-2 in Window comparator mode
5. P-1 > P-2 in Hysteresis mode.
6. P-1-P-2=0 in Out of range mode.

WINDOW COMPARATOR MODE

HYSTERESIS MODE

OUT OF RANGE MODE

PRESET PRESSURE SETTING

100 → 1 → P-1 → 000 → 2 → P-2 → 200

100 → 800 → 3 → P-4 → 400 → 4 → P-3

SETTING PROCEDURE

1. Unlock keys and press [S] key
2. Set the pressure P-1 by using [▼] [▲] keys
3. Press [S] key to save data
4. Set the pressure P-2 by using [▼] [▲] keys
5. Press [S] key to save data
6. Set the pressure P-3 by using [▼] [▲] keys
7. Press [S] key to save data
8. Set the pressure P-4 by using [▼] [▲] keys
9. Press [S] key to save data and return to pressure display.

ERROR MESSAGES & ACTIONS

NO.	DISPLAY	ERROR TYPE	ACTIONS
1	E-1	Input signal exceeds the rated value range.	Reset input signal to within the rated range
2	E-2	Solenoid valve failure	Contact customer service for maintenance
3	E-3	Out of range error of zero clear	Error operate, recheck, please operate "zero clear" with in the range of 5% F.S..
4	E-4	Air line failure	Please check if first pressure is supplied and if EXH side and pilot exhaust are blocked.