

## ● Output Module

Output modules output on/off status signals to field equipment.

The output modules can be made dual-redundant respectively. They incorporate field wiring diagnostic functions, so they require no wiring diagnosis elements.

Item	Specifications
<b>Model</b>	SDV531
<b>Number of outputs</b>	8-channel, module isolation (*3)
<b>Output voltage</b>	24 V DC
<b>Output voltage drop</b>	1 V maximum
<b>External power supply rating</b>	24 V DC, 5 A minimum
<b>External power supply</b>	24 V DC +20 %/-10 % (*4) Current capacity: 5 A
<b>Maximum leak current at output off status</b>	1.6 mA
<b>Output format</b>	Current source
<b>Maximum load current</b>	0.6 A/output line (4.8 A in total output lines) (*3) (*5)
<b>Minimum load current</b>	35 mA
<b>Load resistance range</b>	40 to 685 Ω (*6)
<b>Output response time</b>	30 ms maximum
<b>Withstand voltage (*1) (*2)</b>	2 kV AC between output signal lines and system for 1 minute, 8-point input lines collectively connected (negative lines) (*7)
<b>Current consumption</b>	280 mA maximum (5 V DC) 140 mA maximum (24 V DC)
<b>Weight</b>	Approx. 0.28 kg (For pressure clamp terminal block or MIL cable) Approx. 0.34 kg (With dedicated signal cable interface adapter)
<b>External connection</b>	Pressure clamp terminal MIL cable Dedicated signal cable (AKB331, AKB651 (*8))

- \*1: These voltages show the case using the field power supply floating. When the field power supply is grounded, the system (functional) ground is connected to the field ground, which is not isolated. For the higher noise immunity, floating the field power supply is recommended.
- \*2: When the withstanding voltage of the field power supply between the secondary side and the ground is lower than the value shown in the table above, these voltages are adopted as the withstanding voltage of the field power supply.
- \*3: Number of output channels which a user can use and maximum load current are restricted in case of SDV531-L□□. Refer to "ProSafe-RS Outline of I/O Modules (for FIO)" (GS 32P06K60-01EN).
- \*4: External power supply of SDV531-S style code S1 and S2 is 24 V DC ± 5%.
- \*5: Do not exceed this value, including the case of inrush/variation of the load current.
- \*6: Resistance value of the load for both ON and OFF state, including the field wiring resistance.
- \*7: When connecting SDV531 and SED4D terminal board using AKB331 dedicated signal cable, the withstand voltage is 500 V AC (between output signal lines and system). If MIL connector cables are used, the withstand voltage depends on their cable's electrical specifications.
- \*8: AKB651 can be used for connection with SDV531-L only.