

This compact plug-in converter (isolator) receives two analog input and outputs a signal in proportion to their product or quotient.
For example, WSP-MLS/DIS can be used for the calculation of temperature correction of viscosity or density.

Features

- ★ Dielectric strength of 2000Vac between input, output and power supply
- ★ Both AC and DC power supply are available
- ★ Long operating time
- ★ Easy maintenance by plug-in structure
- ★ CE approved

Ordering code

WSP- [] - [] - []

| Code | Model |
|------|------------|
| MLS | Multiplier |
| DIS | Divider |

| Code | Input | Input Resistance |
|------|---|------------------|
| 10 | 0 to 10mVdc | 1MΩ |
| 11 | 0 to 100mVdc | 1MΩ |
| 12 | 0 to 1Vdc | 1MΩ |
| 13 | 0 to 5Vdc | 1MΩ |
| 14 | 1 to 5Vdc | 1MΩ |
| 15 | 0 to 10Vdc | 1MΩ |
| 16 | 0 to 50mVdc | 1MΩ |
| 17 | 0 to 60mVdc | 1MΩ |
| 32 | 0 to 1mAdc | 50Ω |
| 33 | 0 to 10mAdc | 50Ω |
| 34 | 0 to 16mAdc | 50Ω |
| 35 | 0 to 20mAdc | 50Ω |
| 36 | 4 to 20mAdc | 50Ω |
| 99 | Contact us for other than the above | |
| *1 | Full Scale Range: Current input 1mA to 20mA Voltage input 10mV to 10V | |

| Code | Output | Allowable Load |
|------|---|----------------|
| A | 4 to 20mAdc | 750Ω or less |
| D | 0 to 1mAdc Accuracy ±1.6% FS | 15kΩ or less |
| G | 0 to 20mAdc | 750Ω or less |
| H | 1 to 5Vdc | 2.5kΩ or more |
| L | 0 to 1Vdc | 500Ω or more |
| N | 0 to 5Vdc | 2.5kΩ or more |
| P | 0 to 10Vdc | 10kΩ or more |
| S | Contact us for other than the above | |
| *1 | Current output 20mA or less Voltage output 10V or less | |

| Code | Test Report |
|------|------------------|
| X | None |
| T | With Test report |

| Code | Power Supply |
|------|----------------------------|
| A | 100 to 240Vac ±10% 50/60Hz |
| D | 24Vdc ±10% |
| 8 | 100 to 120Vdc ±10% |

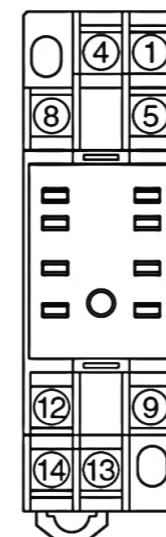
K1 = 100
K2 = 100
* K1, K2 is the factory settings.
It can't be changed after shipment.

* 1...CE approval do not adapt input range code 99 and output range code S.

Specifications

| | |
|------------------------------------|--|
| Equation | <p><Multiplier> Output = (K1/100 x Input 1) x (K2/100 x Input 2) K1, K2 : Specified in the range of 0.1-100.0% (standard 100%)</p> <p><Divider> Output = (K2/100 x Input 2) / (K1/100 x Input 1) But, K1/100 x Input 1 > K2/100 x Input 2 K1, K2 : Specified in the range of 0.1-100.0% (standard 100%)</p> |
| Accuracy | <p>Multiplier : ±0.1% FS (at 23°C) Divider : ±0.2% FS (at 23°C) *99, S code depends on span</p> |
| Response time | Approx. 100ms (0 to 90%) |
| Allowable load resistance | <p>Current output 15V or less of voltage drop</p> <p>Voltage output Load current 2mA or less For 1V FS or less of output the current is 1mA or less</p> |
| Zero & span adjustment | ±10% FS (Front switch) |
| Operating temperature | -5 to +55°C |
| Operating relative humidity | 90% or less (non-condensing) |
| Temperature coefficient | ±0.015% FS of span per °C |
| Isolation | Between input, output, and power supply |
| Insulation resistance | 100MΩ or more with a 500Vdc megger Between input, output, and power supply terminal |
| Dielectric strength | 2000Vac for 1 minute |
| Power consumption | <p>A : 100 to 240Vac ±10% Approx. 5.5VA D : 24Vdc ±10% Approx. 100mA 8 : 100 to 120Vdc ±10% Approx. 25mA</p> |
| Power supply variation | ±0.1% FS (within the range of rated voltage) |
| Dimensions | 84(H) X 23(W) X 106.5(D)mm |
| Weight | Approx. 150g |
| Structure | Plug-in |
| Connection | M3 SEMS screw part of the base socket |
| Material of terminal screw | Chromated iron |
| Case color and material | Ivory, heat-resistant ABS resin(94V-0) |
| Applicable Directive | EN61326-1, EN61010-1, EN IEC 63000 Installation category : II, Pollution degree : 2 |
| Mounting | DIN rail or wall surface |

Terminal connections



| No | Signal | Description |
|----|--------------------------------|--------------|
| 1 | No.1 INPUT(+) | No.1 Input |
| 4 | No.1 INPUT(-) No.2 INPUT(-) | |
| 5 | No.2 INPUT(+) | No.2 Input |
| 8 | NC | |
| 9 | OUTPUT(+) | Output |
| 12 | OUTPUT(-) | |
| 13 | POWER U(+) | Power Supply |
| 14 | POWER V(-) | |

* Specification is subject to change without notice