Drawings

TDLS8000
Tunable Diode Laser Spectrometer

/*

LU

332

198

Ø180

33

34

17

20

Alignment flange *1

Purge port (OUT) x2
1/4NPT or Rc1/4

Flow restrictor *2

SCU cable gland
3/4NPT or M25x1.5

Purge port (IN)
1/4NPT or Rc1/4

Weight: Approx. 8 kg

*1: The alignment flange varies according to specifications. Other flanges may be added.

*2: The flow restrictors are attached in the case of type -D1, -C1, -S1, -E1, -J1, -Q1 or -R1.

Unless otherwise specified, differences in the dimensions are specified as: General tolerance = ±(Criteria of tolerance class IT18 in JIS B0401-1998)/2.

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SD 11Y01D01-01EN 1/4
1st Edition: Jun. 2015 (YK)
Unless otherwise specified, differences in the dimensions are specified as: General tolerance = ±(Criteria of tolerance class IT18 in JIS B0401-1998)/2.

**SCU**

*1: The alignment flange varies according to specifications. Other flanges may be added.

*2: The flow restrictors are attached in the case of type -D1, -C1, -S1, -E1, -J1, -Q1 or -R1.

**Maintenance space**

Weight: Approx. 8 kg
### Alignment Flange

#### Purge port (IN) x2
1 1/4NPT or Rc1/4

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**Optics Accessory code (flange)**

<table>
<thead>
<tr>
<th>Optics Accessory code</th>
<th>Hole QTY</th>
<th>Hole Q</th>
<th>Hole P.C.D</th>
<th>Thickness</th>
<th>Outside dia.</th>
<th>Distance</th>
<th>Purge port</th>
<th>Weight (kg/pc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-U2 ANSI CLASS150-2-RF(Eq.)</td>
<td>4</td>
<td>19</td>
<td>120.7</td>
<td>19.5</td>
<td>150</td>
<td>87</td>
<td>1/4NPT</td>
<td>Approx. 5</td>
</tr>
<tr>
<td>-U3 ANSI CLASS150-3-RF(Eq.)</td>
<td>4</td>
<td>19</td>
<td>152.4</td>
<td>24.3</td>
<td>190</td>
<td>92</td>
<td>1/4NPT</td>
<td>Approx. 7</td>
</tr>
<tr>
<td>-U4 ANSI CLASS150-4-RF(Eq.)</td>
<td>8</td>
<td>19</td>
<td>190.5</td>
<td>23.9</td>
<td>228.6</td>
<td>92</td>
<td>1/4NPT</td>
<td>Approx. 9</td>
</tr>
<tr>
<td>-D5 DIN PN16-DN50-D(Eq.)</td>
<td>4</td>
<td>18</td>
<td>125</td>
<td>18</td>
<td>165</td>
<td>88</td>
<td>Rc1/4</td>
<td>Approx. 3</td>
</tr>
<tr>
<td>-D8 DIN PN16-DN80-D(Eq.)</td>
<td>8</td>
<td>18</td>
<td>160</td>
<td>20</td>
<td>200</td>
<td>88</td>
<td>Rc1/4</td>
<td>Approx. 6</td>
</tr>
<tr>
<td>-J5 JIS 10K-50-FF(Eq.)</td>
<td>4</td>
<td>19</td>
<td>120</td>
<td>16</td>
<td>155</td>
<td>84</td>
<td>Rc1/4</td>
<td>Approx. 5</td>
</tr>
<tr>
<td>-J8 JIS 10K-80-FF(Eq.)</td>
<td>8</td>
<td>19</td>
<td>150</td>
<td>18</td>
<td>185</td>
<td>88</td>
<td>Rc1/4</td>
<td>Approx. 6</td>
</tr>
</tbody>
</table>

Note: When Optic accessory code is “-LA”, refer to below drawing.
When Optic accessory code is “-FC”, refer to the drawings of YC8000 (SD11Y01D01-21JA).

- **LAO (Large Aperture Optics); Optics Accessory code “-LA”**
  - This accessory is only for SCU side. For LU side, the Alignment flange ANSI CLASS150-4-RF (Eq.) will be mounted.
  - When piping is Rc1/4, a conversion adopter will be attached on the Alignment flange of the LU side.

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**Installation for process side**

- **Weight**: Approx. 14 kg

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**SD 11Y01D01-01EN 3/4**

## Wiring Diagram

### Laser Unit (LU)

<table>
<thead>
<tr>
<th>Terminal A</th>
<th>Earth terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC</td>
<td></td>
</tr>
<tr>
<td>MS-1</td>
<td></td>
</tr>
<tr>
<td>MS-2</td>
<td></td>
</tr>
<tr>
<td>VO</td>
<td></td>
</tr>
</tbody>
</table>

Connect to shield wire terminal (Both side of cable)

### Sensor Control Unit (SCU)

<table>
<thead>
<tr>
<th>Terminal B</th>
<th>Earth terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0-1</td>
<td></td>
</tr>
<tr>
<td>A0-2</td>
<td></td>
</tr>
<tr>
<td>AI-1</td>
<td></td>
</tr>
<tr>
<td>AI-2</td>
<td></td>
</tr>
<tr>
<td>DI-1</td>
<td></td>
</tr>
<tr>
<td>DI-2</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td></td>
</tr>
<tr>
<td>FAULTC</td>
<td></td>
</tr>
<tr>
<td>AOE</td>
<td></td>
</tr>
</tbody>
</table>

- Isolated 4-20mA Output
- Isolated 4-20mA Output With HART
- 4-20mA Input for Pressure Transmitter
- 4-20mA Input for Temperature Transmitter
- Digital Input
- Digital Output for Fault
- Digital Output for Programmable DO
- Power Supply 24V DC
- 24V DC Output for YH8000 Power

### Terminal A

Connect to shield wire terminal (Both side of cable)

### Terminal B

Connect to shield wire terminal (Both side of cable)

### Terminal C

Connect to shield wire terminal (Both side of cable)