



# GS-71P5

Power-to-lock Standard type PNP Standard cable 5 m



\*Please note that accessories depicted in the image are for illustrative purposes only and may not be included with the product.

## Specifications

|                                        |                                |             |                                                                                                                                                                                                                            |
|----------------------------------------|--------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model                                  |                                |             | GS-71P5                                                                                                                                                                                                                    |
| Lock type                              |                                |             | Power-to-lock type                                                                                                                                                                                                         |
| Type                                   |                                |             | Standard type                                                                                                                                                                                                              |
| Response time                          | Lock                           | Lock→Unlock | 320 ms*1*2                                                                                                                                                                                                                 |
|                                        |                                | Unlock→Lock | 220 ms*1*2*3                                                                                                                                                                                                               |
| Lock                                   | Locking force (Fzh)            |             | Min. 2,000 N                                                                                                                                                                                                               |
|                                        | Alignment tolerance of lock    |             | ±2 mm ±0.08"                                                                                                                                                                                                               |
|                                        | Mechanical life-span           |             | 1 million cycles or more (with door operation speed of 1 m/s)                                                                                                                                                              |
|                                        | Acceptable operation frequency |             | 1 Hz*4                                                                                                                                                                                                                     |
|                                        | Door radius                    |             | Min. 250 mm 9.84"                                                                                                                                                                                                          |
|                                        | Auxiliary release              |             | Front, back *5                                                                                                                                                                                                             |
| Cascading                              |                                |             | Max. 25 units                                                                                                                                                                                                              |
| Control output (OSSD output)           | Output                         |             | Transistor outputs × 2                                                                                                                                                                                                     |
|                                        | Max. load current              |             | Max. 150 mA                                                                                                                                                                                                                |
|                                        | Residual voltage (during ON)   |             | Max 2.5 V (with a cable length of 5 m 16.40')                                                                                                                                                                              |
|                                        | OFF state voltage              |             | Max 2.0 V (with a cable length of 5 m 16.40')                                                                                                                                                                              |
|                                        | Leakage current                |             | Max. 0.5 mA                                                                                                                                                                                                                |
|                                        | Max. capacitive load           |             | 2.2 µF                                                                                                                                                                                                                     |
|                                        | Load wiring resistance         |             | Max. 2.5 Ω                                                                                                                                                                                                                 |
| AUX (Non-safety related output)        | Output                         |             | Transistor output                                                                                                                                                                                                          |
|                                        | Number of outputs              |             | 1                                                                                                                                                                                                                          |
|                                        | Max. load current              |             | 50 mA                                                                                                                                                                                                                      |
|                                        | Residual voltage (during ON)   |             | Max 2.5 V (with a cable length of 5 m 16.40')                                                                                                                                                                              |
| External input (Short-circuit current) | Safety input                   |             | Approx.1.5 mA × 2                                                                                                                                                                                                          |
|                                        | Reset/EDM input                |             | -                                                                                                                                                                                                                          |
|                                        | Lock control input             |             | Approx. 2.5 mA × 1                                                                                                                                                                                                         |
|                                        | OSSD operation switching input |             | -                                                                                                                                                                                                                          |
| Applicable Standards (Safety)          |                                |             | EN 61508, IEC 61508(SIL2/SIL3)<br>EN 62061, IEC62061(SIL CL2/SIL CL3)<br>EN ISO13849-1: 2015(PLd, Category 2/PLe, Category 4)<br>EN ISO14119(Type4)<br>IEC 60947-5-3, EN 60947-5-3<br>UL 61010-1, CAN/CSA-C22.2 No.61010-1 |
| Protection circuit                     |                                |             | Reverse current protection, short-circuit protection and surge protection for each output                                                                                                                                  |
| Power supply                           | Power voltage                  |             | 24 V DC ±20 % (Ripple P-P 10 % or less, Class2)                                                                                                                                                                            |
|                                        | Power consumption              |             | 3.4 W*6                                                                                                                                                                                                                    |

|                          |                               |       |                                                                                                             |
|--------------------------|-------------------------------|-------|-------------------------------------------------------------------------------------------------------------|
| Environmental resistance | Enclosure rating              |       | IP65/67(IEC60529), IP69K(ISO 20653) (TÜV SÜD certified), Enclosure Type 3/4X/12/13 (NEMA250)                |
|                          | Operating ambient temperature |       | -20°C to +55C° -4°F to 131°F (No freezing)                                                                  |
|                          | Operating relative humidity   |       | 5% to 95%RH                                                                                                 |
|                          | Storage temperature           |       | -25°C to +70°C -13°F to 158°F (No freezing)*7                                                               |
|                          | Storage relative humidity     |       | 5% to 95%RH                                                                                                 |
|                          | Vibration resistance          |       | 10 to 55 Hz, Double amplitude 2.0 mm 0.08", 5 minutes in each of the X, Y, and Z directions (IEC 60947-5-3) |
|                          | Shock resistance              |       | 30 G in X, Y, Z directions 6 times each axis (IEC 60947-5-3)                                                |
| Material                 | Sensor main unit              | Case  | SUS304, PPS, PBT, PAR, PA66, NBR                                                                            |
|                          |                               | Lock  | Aluminum alloy, Zinc die cast (Nickel chrome plating)                                                       |
|                          |                               | Cable | PVC                                                                                                         |
|                          | Actuator                      | Case  | PPS, PBT, NBR                                                                                               |
|                          |                               | Lock  | Aluminum alloy, SUS303                                                                                      |
| Weight                   |                               |       | Approx. 560 g                                                                                               |

\*1 Risk time according to IEC60947-5-3 is 150 ms + 2 ms × (number of units cascaded -1).

\*2 If the OSSD operation is open/close link mode, Detect→ Not detect: 20 ms + 2 ms × (number of units cascaded -1), Not detect → Detect: 30 ms + 25 ms × (number of units cascaded -1)

\*3 430 ms when locked at the same time the actuator is detected.

\*4 Acceptable door operation frequency is 3 Hz if the OSSD operation is open/close link mode. In that case, operation distance is Sao(OFF→ ON) = 3 mm 0.12", Sar(OFF→ ON) = 10.5 mm 0.41".

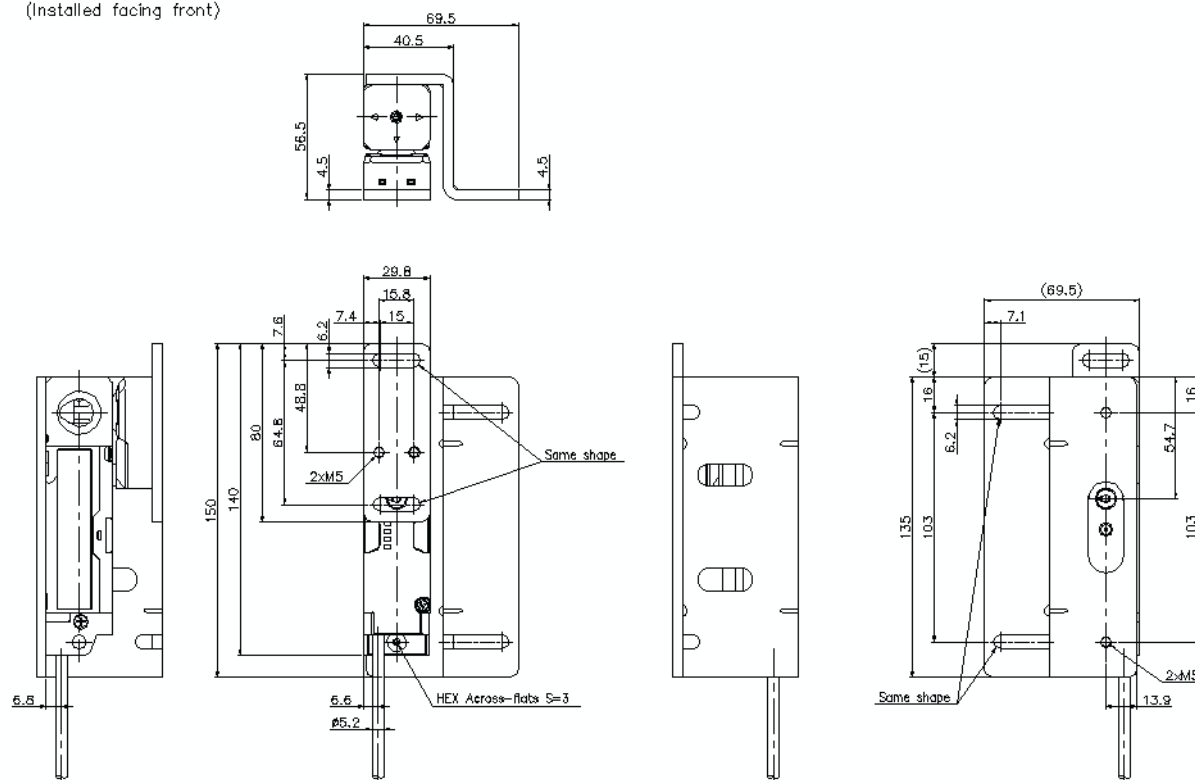
\*5 Do not apply excessive torque (0.45N·m or higher).

\*6 Power consumption temporarily increases (Max. 10.5 W, Approx. 0.2 s) when the lock control input(s) is(are) turned ON. After that, current consumption will be within the specification.

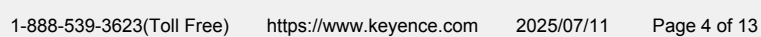
\*7 When stored for a long period of time, please store it at a temperature of 55°C 131°F or lower.

\* Download CAD file or product manual for larger image/text and more detail.

Sensor + Actuator  
(Installed facing front)

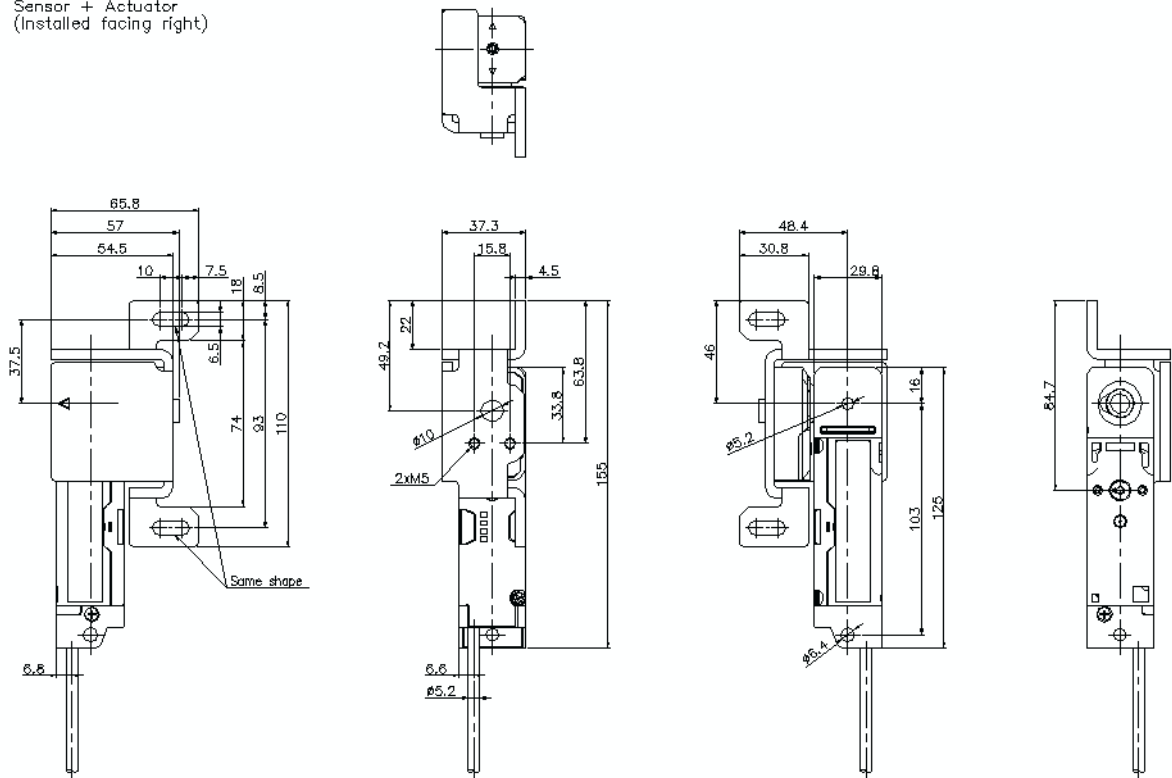


Sensor + Actuator  
(Installed facing front)

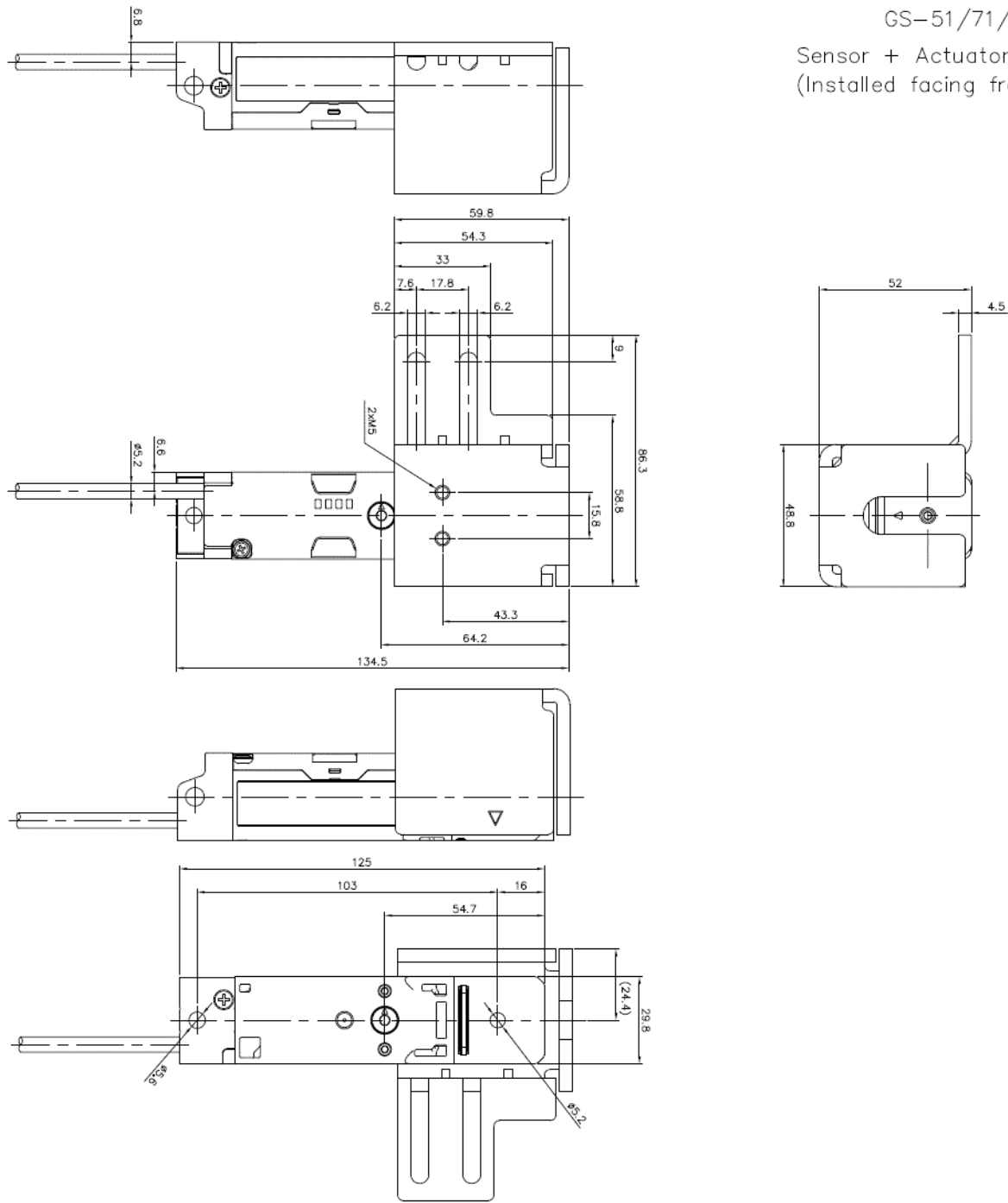


GS-51P5/51N5/51P10/51N10/71P5/71N5/71P10/71N10+GS-B33

Sensor + Actuator  
(Installed facing right)

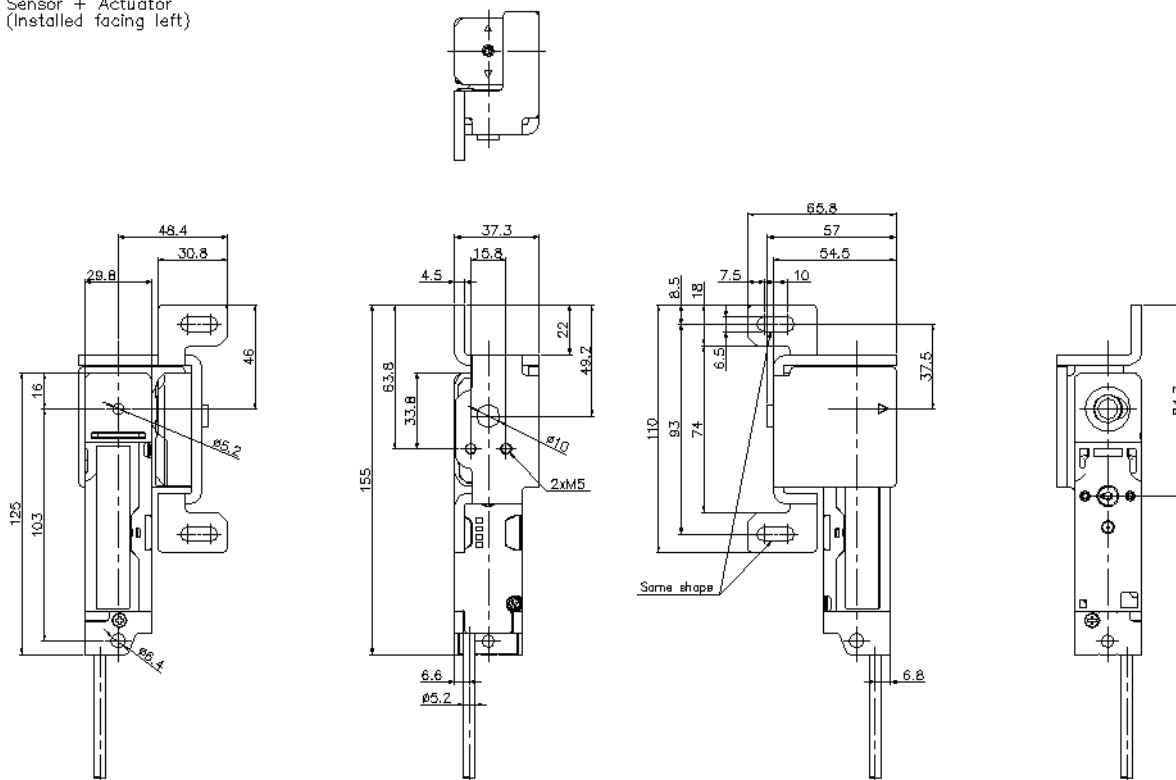


GS-51/71/B41  
Sensor + Actuator  
(Installed facing front)



## GS-51P5/51N5/51P10/51N10/71P5/71N5/71P10/71N10+GS-B43

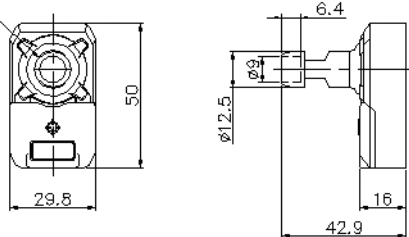
Sensor + Actuator  
(Installed facing left)



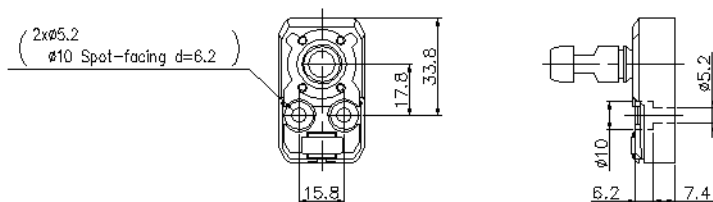
## GS-51P5/51N5/51P10/51N10/71P5/71N5/71P10/71N10

## Actuator

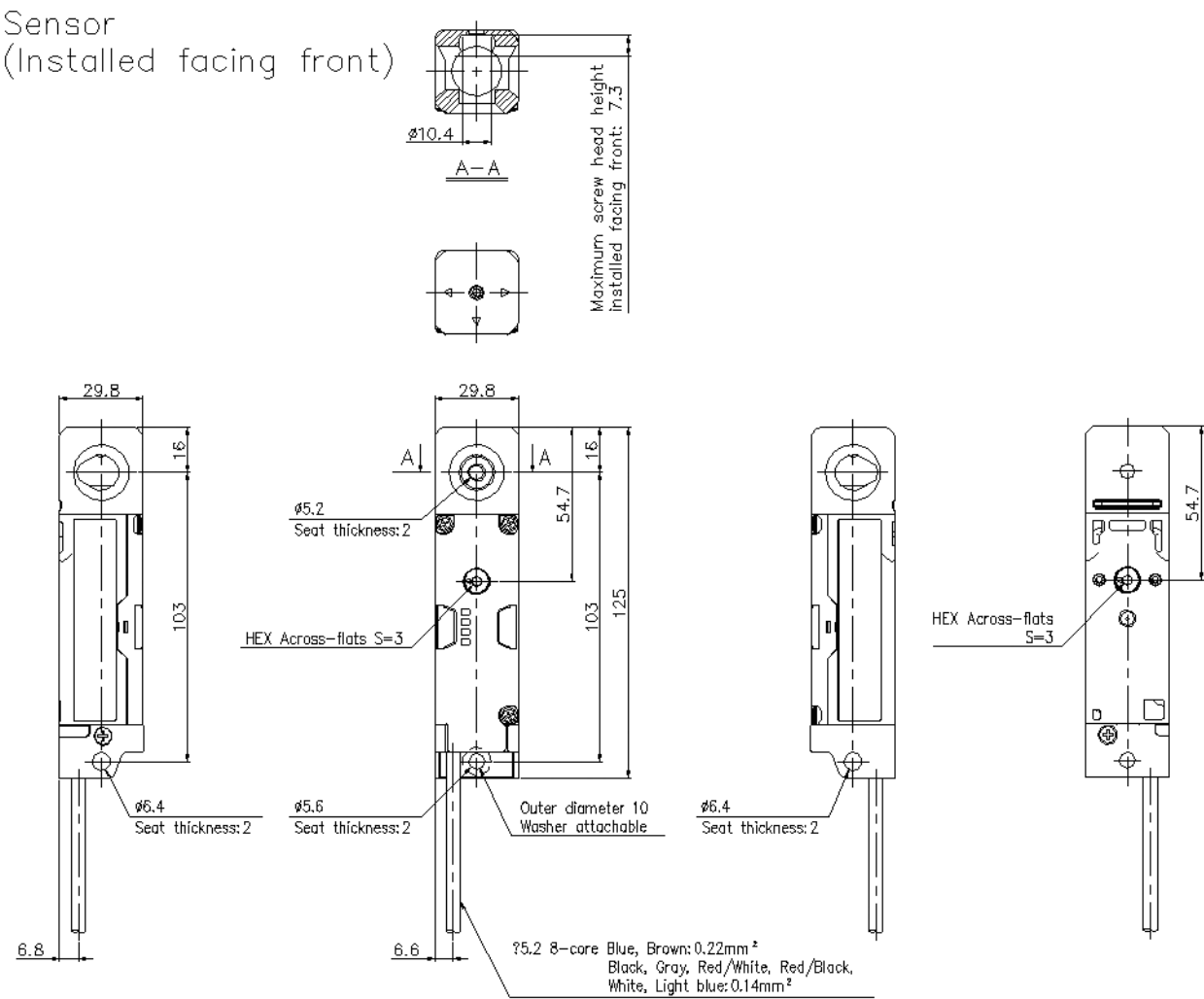
Upper, lower, left, and  
right range of bolt motion: 2



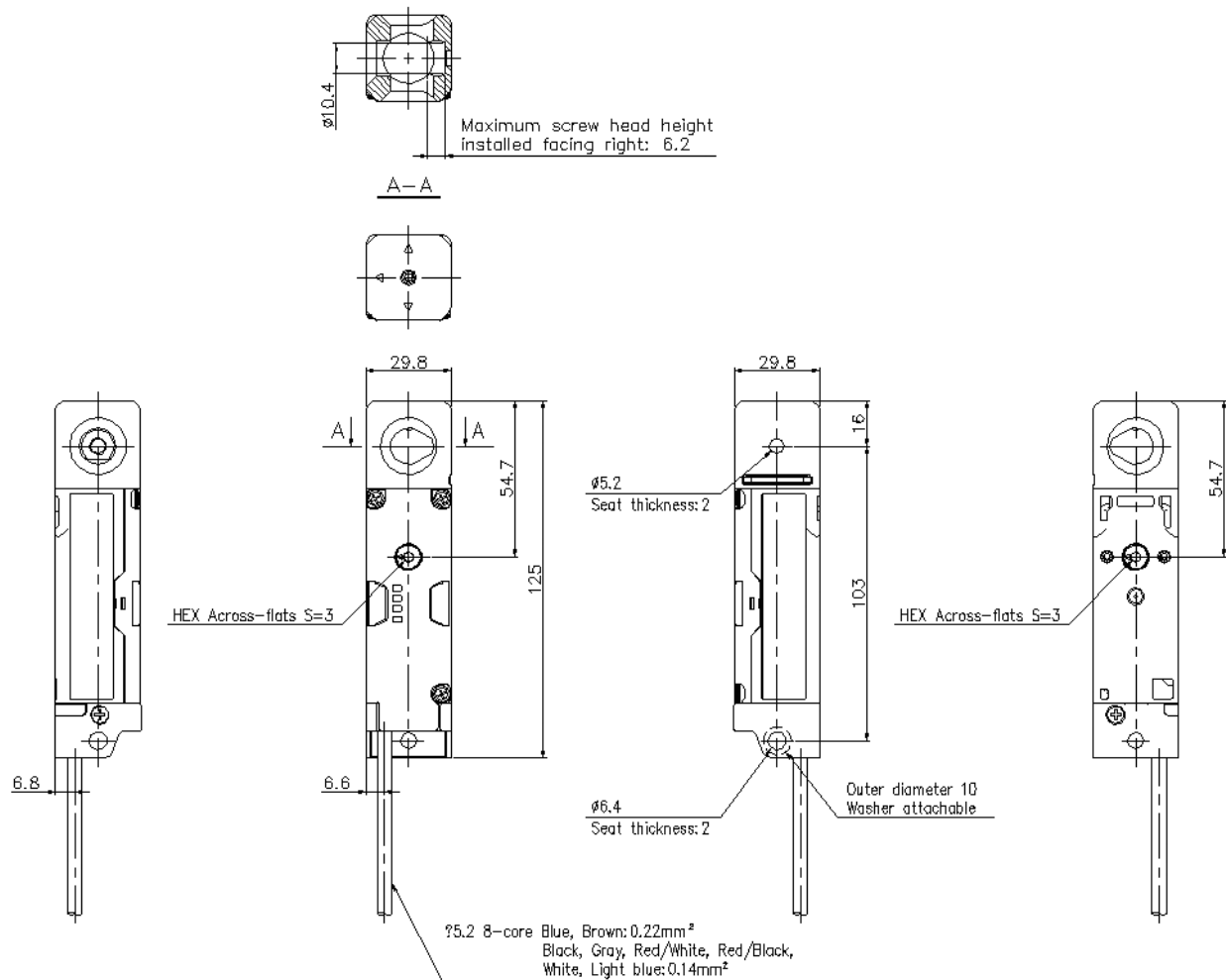
## Without the cover



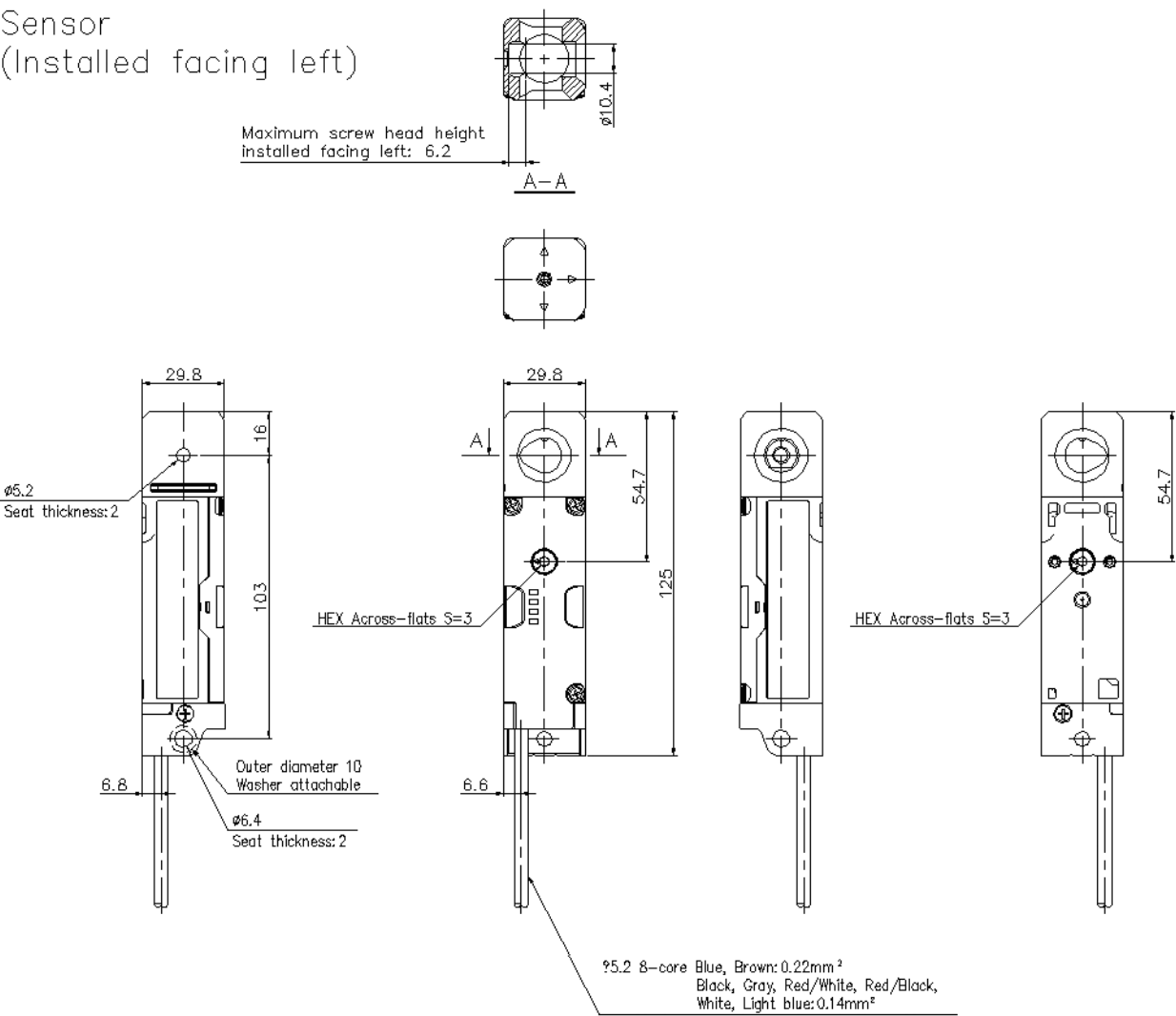
Sensor  
(Installed facing front)



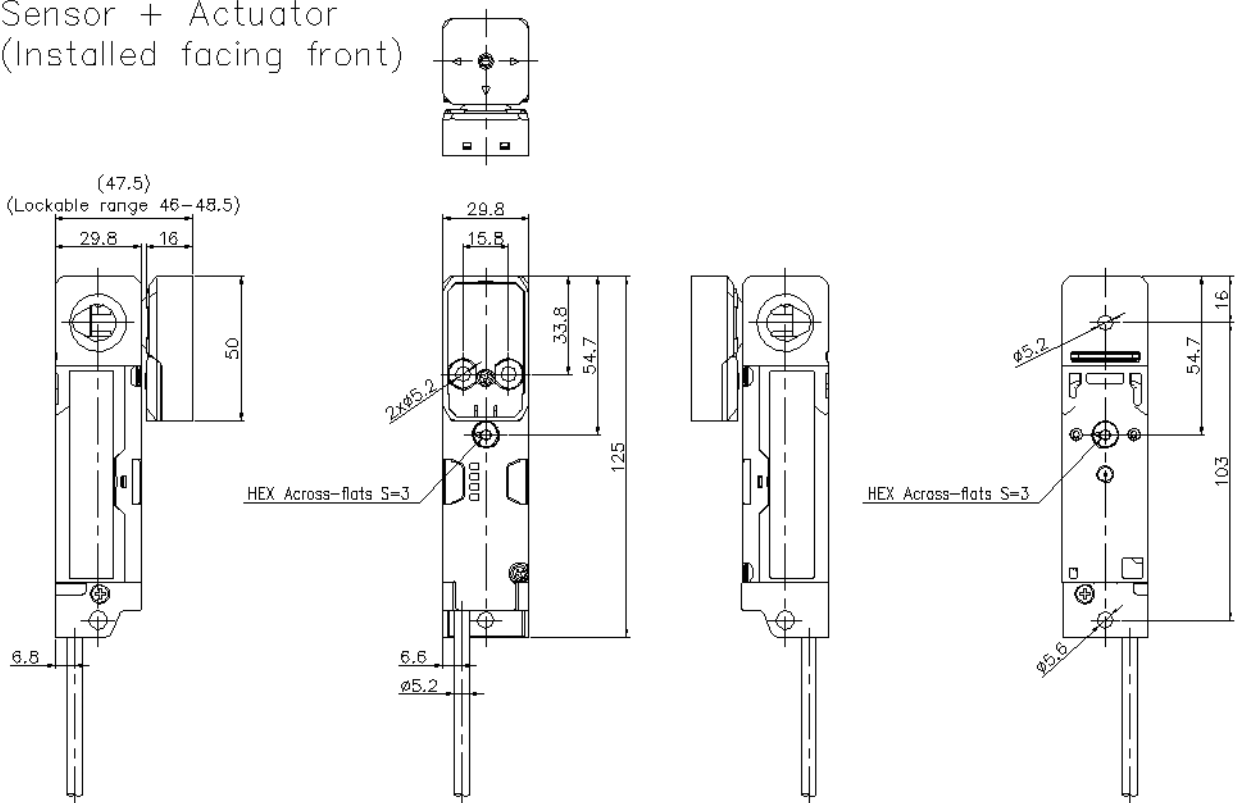
Sensor  
(Installed facing right)



Sensor  
(Installed facing left)



Sensor + Actuator  
(Installed facing front)



Sensor + Actuator  
(Installed facing right)

