air Work sensor

model CEA

model CEA08-5

model CEA08-35

Specifications

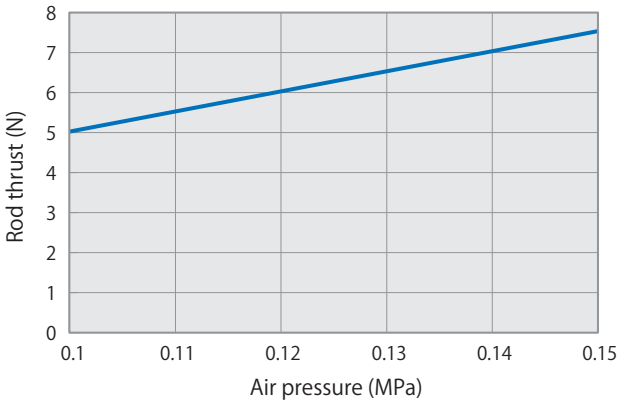
	Size		Stroke
CEA	08	–	5
			35

Model		CEA08-5	CEA08-35
Stroke	mm	5	35
Rod diameter	mm	8	
Air pressure range	MPa	0.10–0.15	
Recommended sensor model		ISA3-G series manufactured by SMC GPS2-05, GPS3-E series manufactured by CKD	
Operating temperature	℃	0–70	
Mass	g	45	65
Recommended tightening torque of mounting screws*1	N·m	3.6	

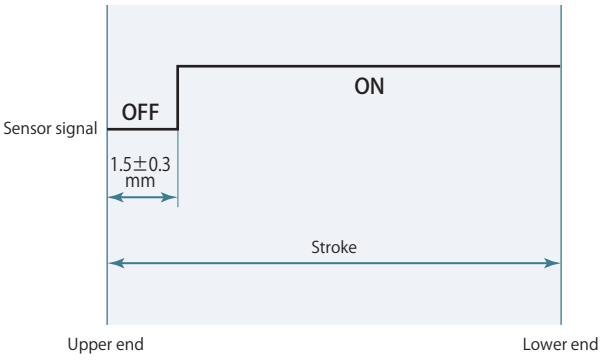
● Fluid used : Air*2 ● Oil supply : Not required

*1 : ISO R898 class 12.9 *2 : Supply the dry and filtered air. Particulate size 5 μm or less is recommended.

Rod theory thrust



Air sensor triggering point



- The table indicates the theory thrust at air sensor ON.
- The force goes lower when air sensor OFF.
- Minimum 1.5 times of theory thrust force should be loaded to push the rod down.
- Refer to the sensor supplier's instruction manual for the details of setting.
- Sensing performance such as detectable time and pressure differs depending on the supplier and model number of the sensor. Select the right model referring to sensor's application and characteristics.
- Use a solenoid valve with needle for air sensor unit and control it supplying air all the time in order to eliminate intrusion of chips or coolant.

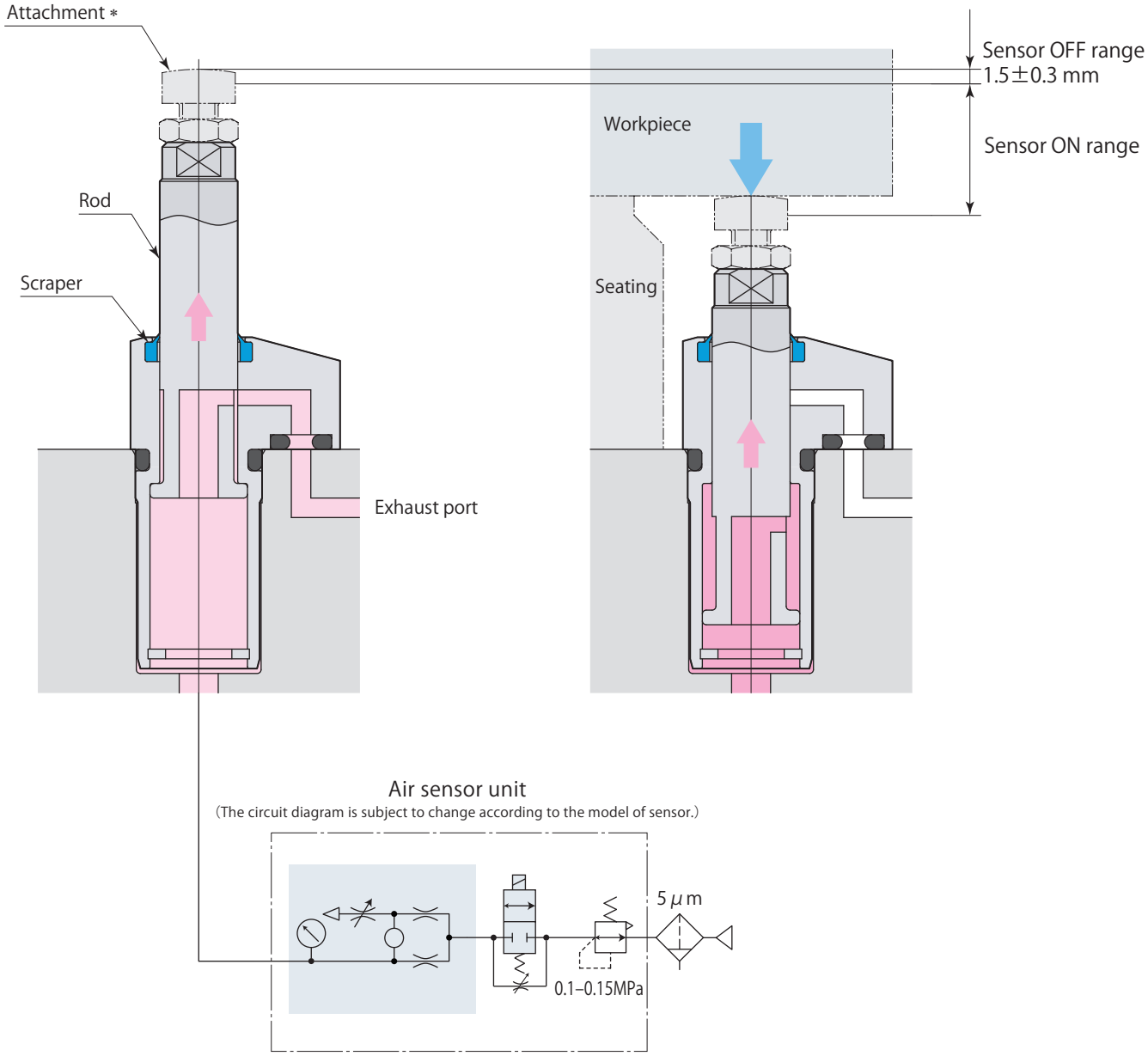
Sensor OFF

The rod goes up by means of air from the sensor.

Air sensor opens to exhaust air when the rod goes up to the air sensor OFF range.

Sensor ON

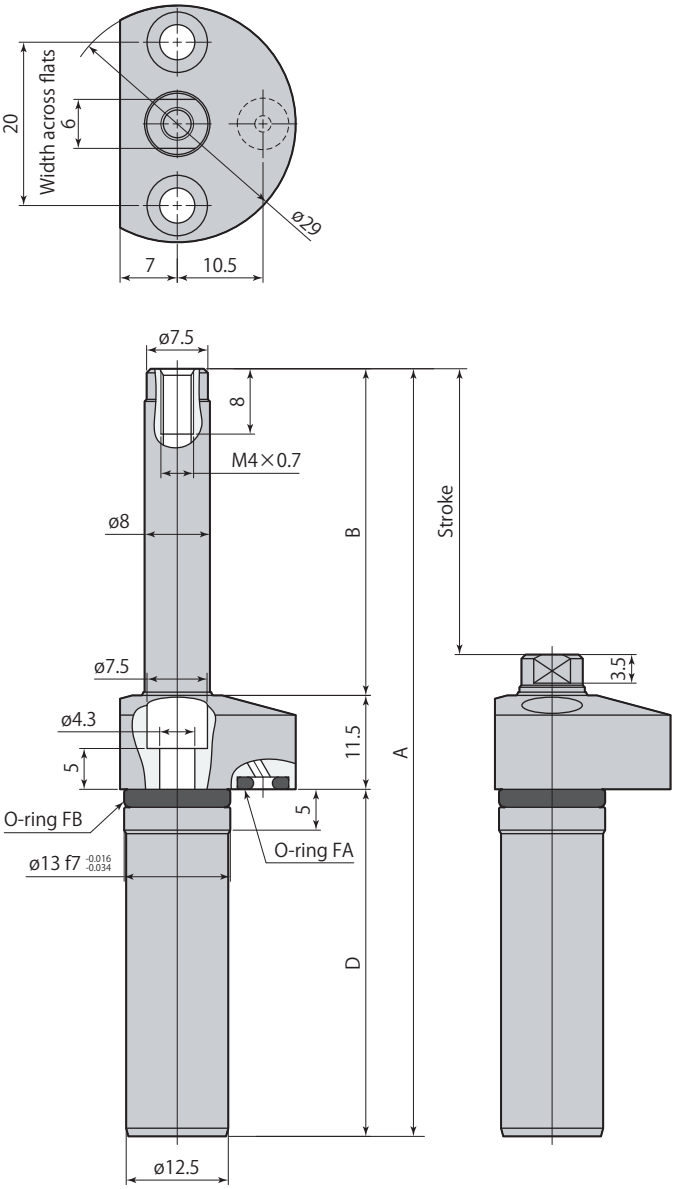
The rod goes down to sensor ON range by the top load like a workpiece and blocks the sensing air then air sensor can detect the load.



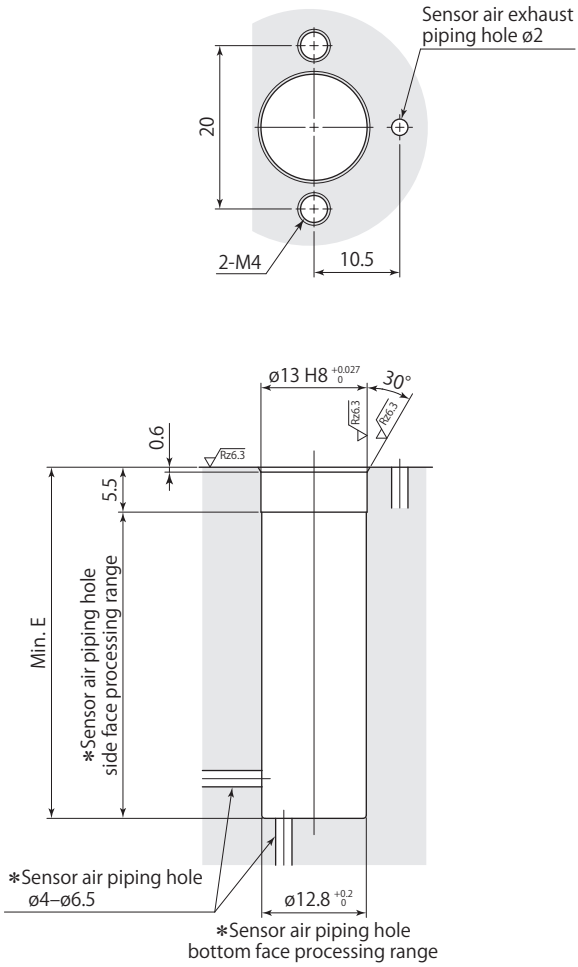
*: Attachment is not included. The attachment should be less than 10g when manufacturing by the user.

- Do not apply side load (thrust force) to the rod.
- Exhaust port must be opened to atmosphere. Also the port should be protected from chips or coolant oil.
- The slight air leakage from scraper may be seen but it causes no problem on product performance.

Dimensions



Mounting details



*: Sensor air piping hole must be made on either side or bottom face.

mm

Model	CEA08-5	CEA08-35
Stroke	5	35
A	34	94
B	10	40
D	12.5	42.5
E	13	43
O-ring FA (fluorocarbon hardness Hs90)	P3	
O-ring FB (fluorocarbon hardness Hs90)	AS568-012	

● Mounting screws are not included