

## Care and Maintenance of Gas Density Systems

Yokogawa's gas density analyzer systems are robust low maintenance industrial devices. Paying attention to a couple of considerations during installation will decrease the maintenance requirements of these devices even more.

### Installation Considerations

The sample gas pressure needs to be regulated to no higher than 70 psig.

The sample gas temperature needs to be no higher than 50°C (122°F).

A coalescing filter should be installed upstream of the detector to remove particulates and moisture.

The flow of the sample gas should be controlled at 0.6 LPM.

**NOTE:** Yokogawa can provide a sample flow panel for hydrogen cooled generators that will regulate the pressure and flow as well as filter the sample gas. (Part number M1233ZM)

### Cleaning the Detector

The gas density detector is very resilient against the normal sources of contamination: dust and oil misting. If a process upset results in the detector being "slugged" with a large amount of oil or water, the detector can be cleaned on site and the measurement restored.

Flow 99% pure isopropyl alcohol through the detector to remove the contaminate. Do not use "rubbing alcohol" which can contain 30% water. This would result in an extended drying time.

Flow clean dry instrument air or nitrogen through the detector until the unit is dry (the reading becomes stable).

Calibrate the unit and return to service.

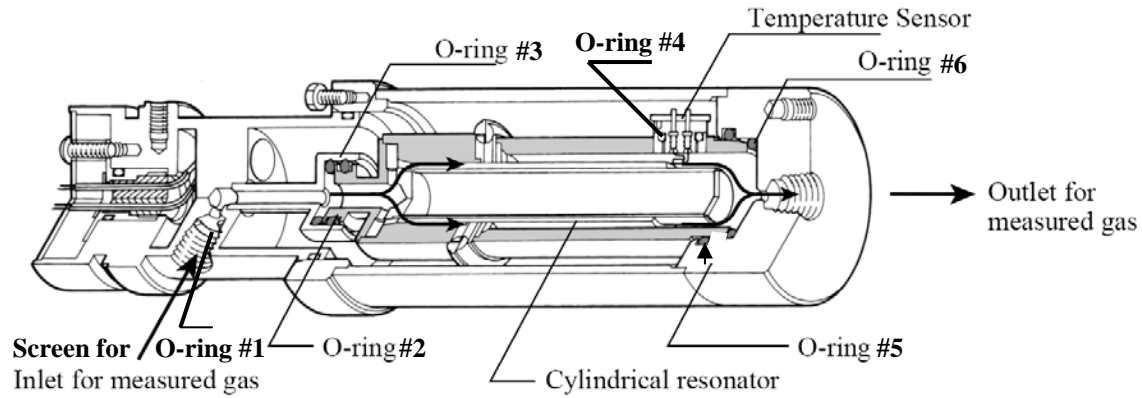
### Spare Parts

The Yokogawa gas density analyzer system does not normally require spare parts. It has no consumable items. If the internal o-rings of the detector are damaged, we recommend that the unit be sent to an authorized Yokogawa service center for repair. If circumstances demand that the o-rings be replaced on site, please contact the Yokogawa Technical Assistance Center at 1-800-7378 for instructions.

For the M1233ZM sample flow panel, we have spares available for the filter, pressure regulator, and flow meters.

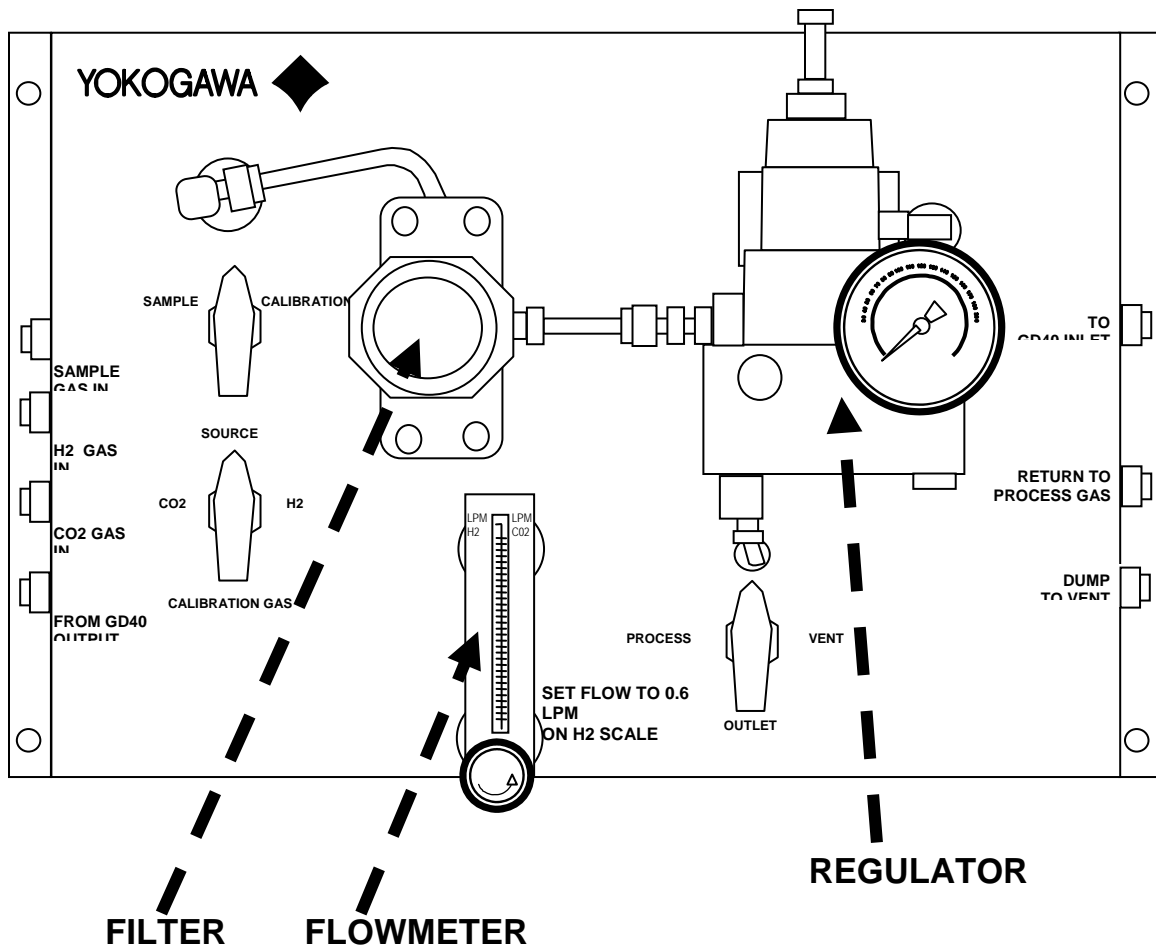
Please see the illustrations below for parts identification.

**GD40 Gas Density Detector**



<u>Item</u>	<u>Part Number</u>
Inlet Screen	K9213FS
O-RING #1	Y9010EV
O-RING #2, #3	K9213MM (QTY OF 2)
O-RING #4	Y9111XA
O-RING #5	K9213MN
O-RING #6	K9213MP

**M1233ZM SAMPLE FLOW PANEL FOR HYDROGEN COOLED GENERATOR APPLICATIONS**



<u>Item</u>	<u>Part Number</u>
FILTER (COMPLETE)	M1233ZR-0
FILTER ELEMENT	M1233ZR-02
DUAL SCALE FLOWMETER	M1233ZQ
PRESSURE REGULATOR	M1233ZP