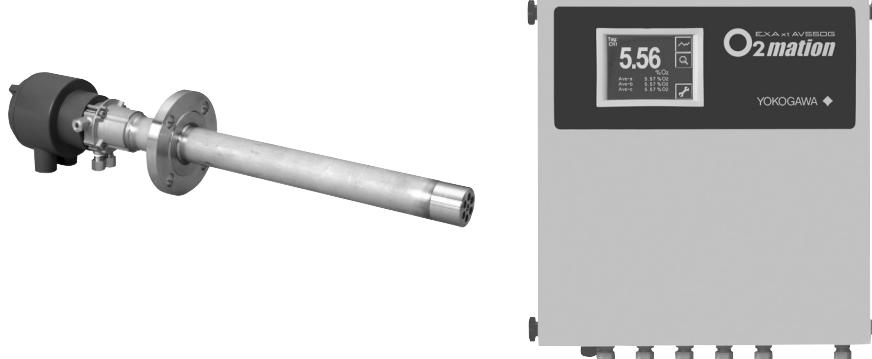


Technical Information

TI 11M12U01-01E-A

ANALYTICAL OXYGEN PRODUCT SELECTION GUIDE



■ CONTENTS

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■ OVERVIEW

The Oxygen Product Selection Guide is designed to assist you in the selection of the appropriate oxygen analyzer system for your application. To make the most appropriate selection, you will need to know a few things about your application such as temperature, pressure, flow-rate, and area rating. If you should find that your application requires equipment beyond what is shown here, please fill out the application data sheet at the back of this document and forward to your local Yokogawa representative.

To use this guide, begin with the Oxygen Analyzer selection (page 3) and follow the flow charts to build your model codes as you answer “yes” or “no” questions. Use Figure 1 below as an example.

After completing the Analyzer, Detector, Calibration Unit, Cabling, and Separate Line Item Accessories portions of the guide, you should have all the model codes required for your oxygen analyzer system. It is recommended that you review the General Specifications for the models selected to ensure that they meet your particular application requirements.

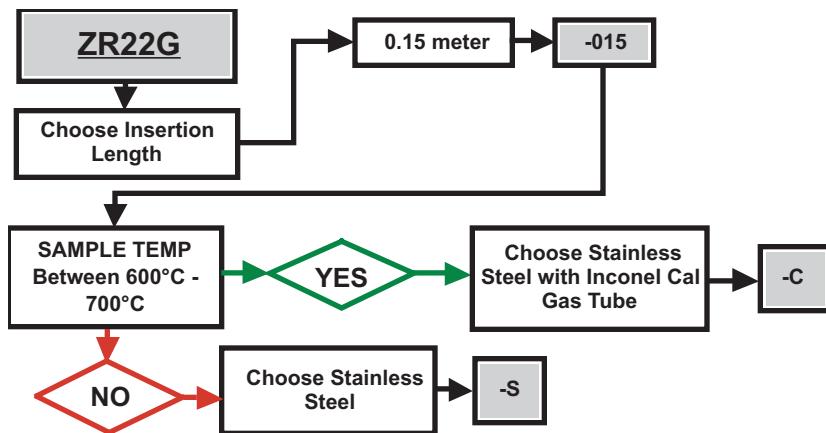
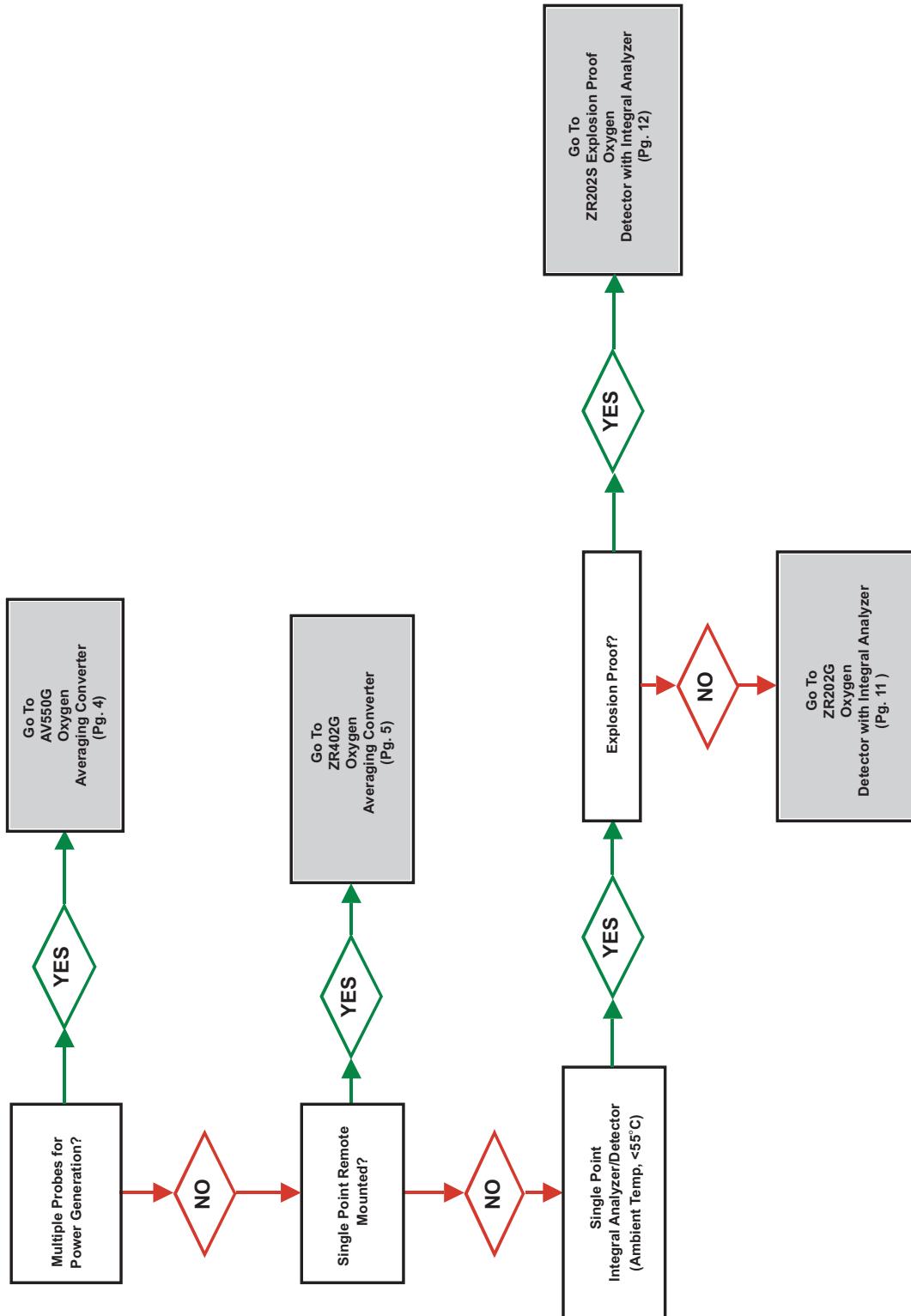


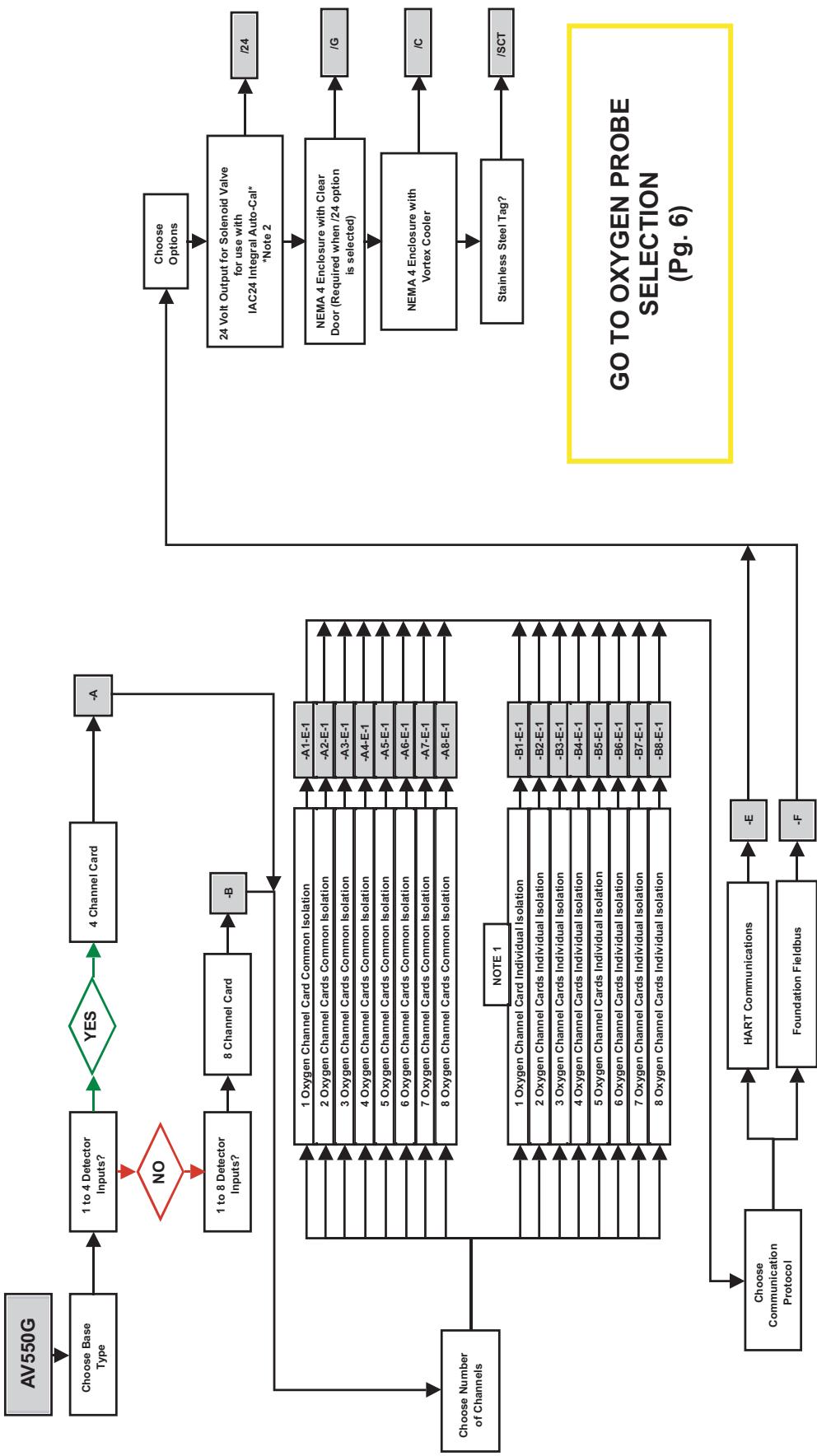
Figure 1

Where the part number would equal ZR22G-015-C
for a 0.15 meter Zirconia oxygen probe with
an inconel cal gas tube.

Oxygen Analyzer Selection Guide



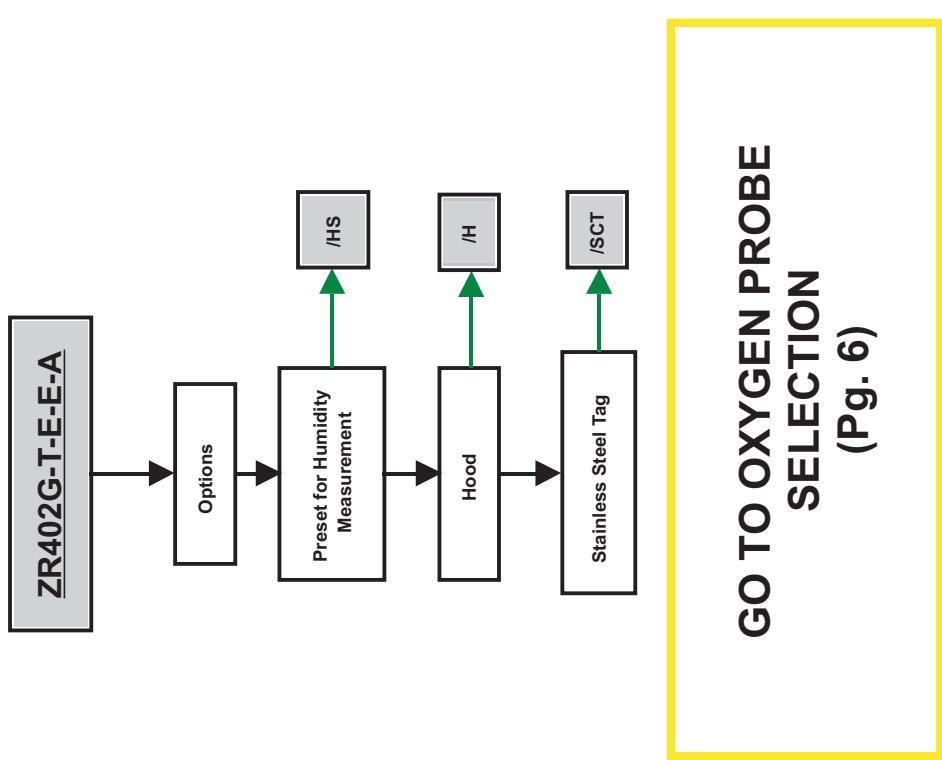
AV550G Oxygen Averaging Converter



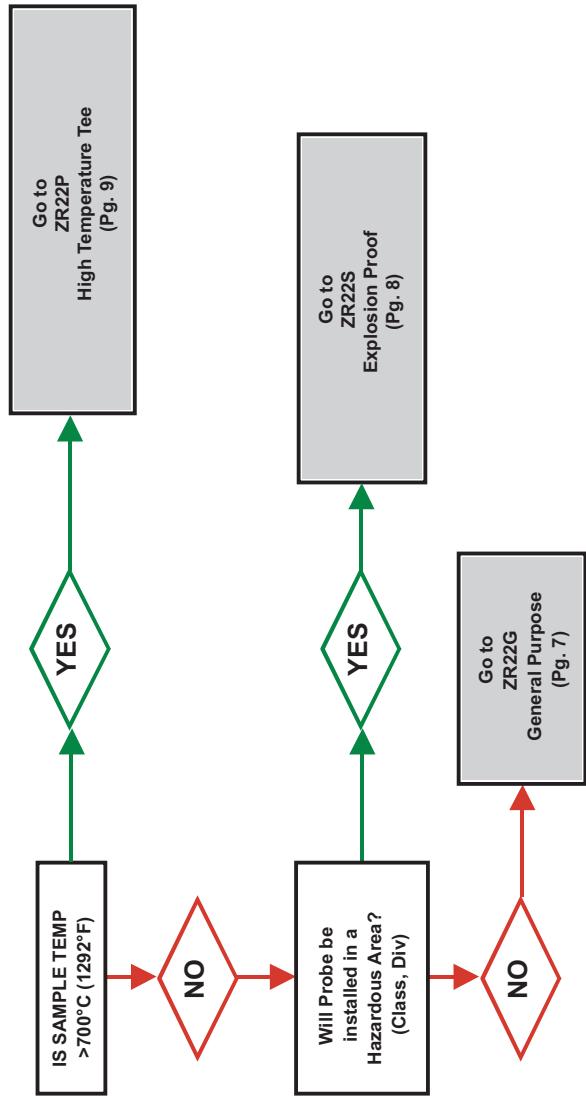
Note 1: Individual Isolation should be selected when the AV550G installation may be subjected to high levels of noise interference on the output signal(s).

Vote 2: Requires the /G option.

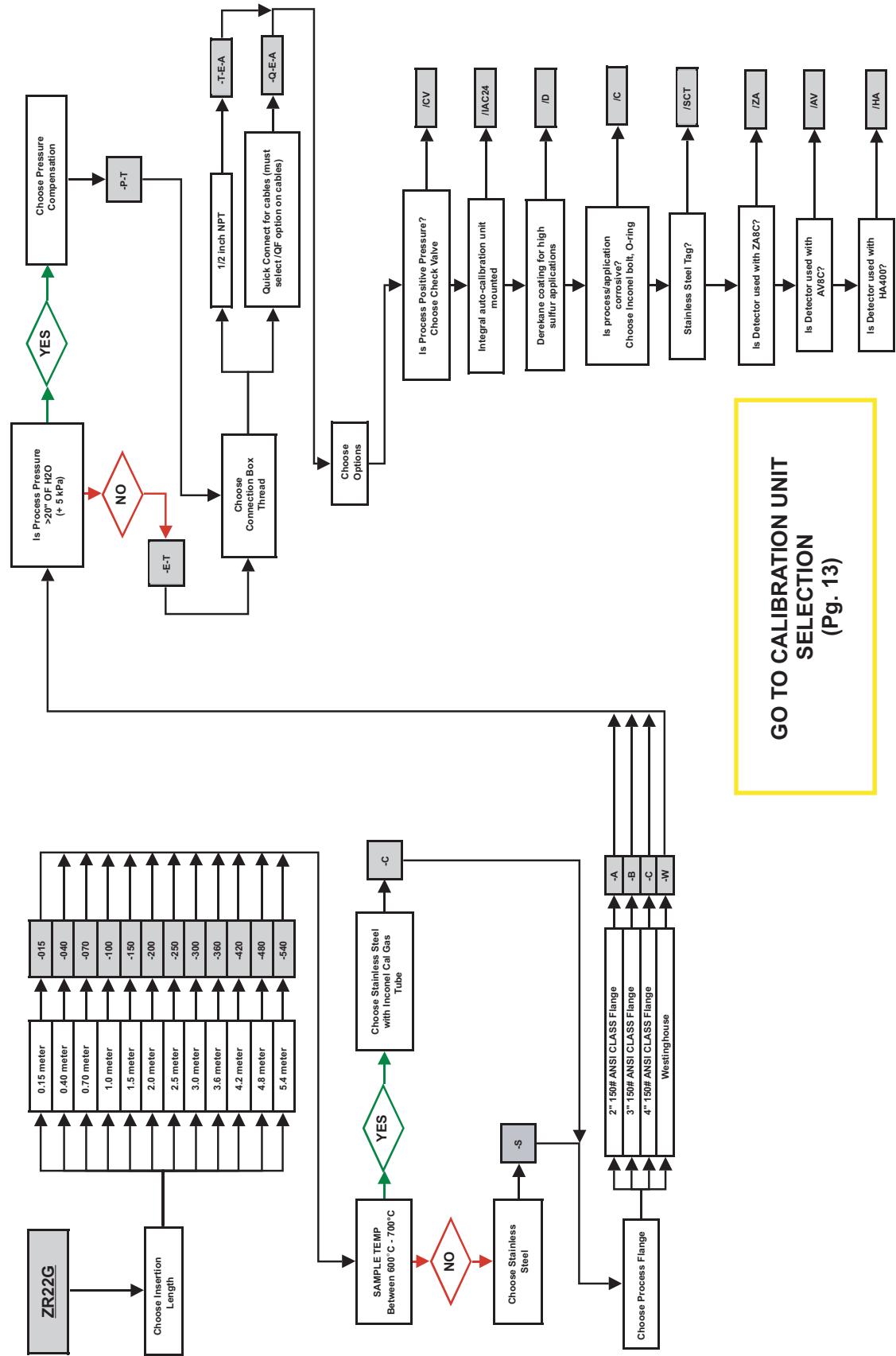
**ZR402G Single Point, Remote Mounted
Oxygen Analyzer**



Oxygen Probe Selection Guide

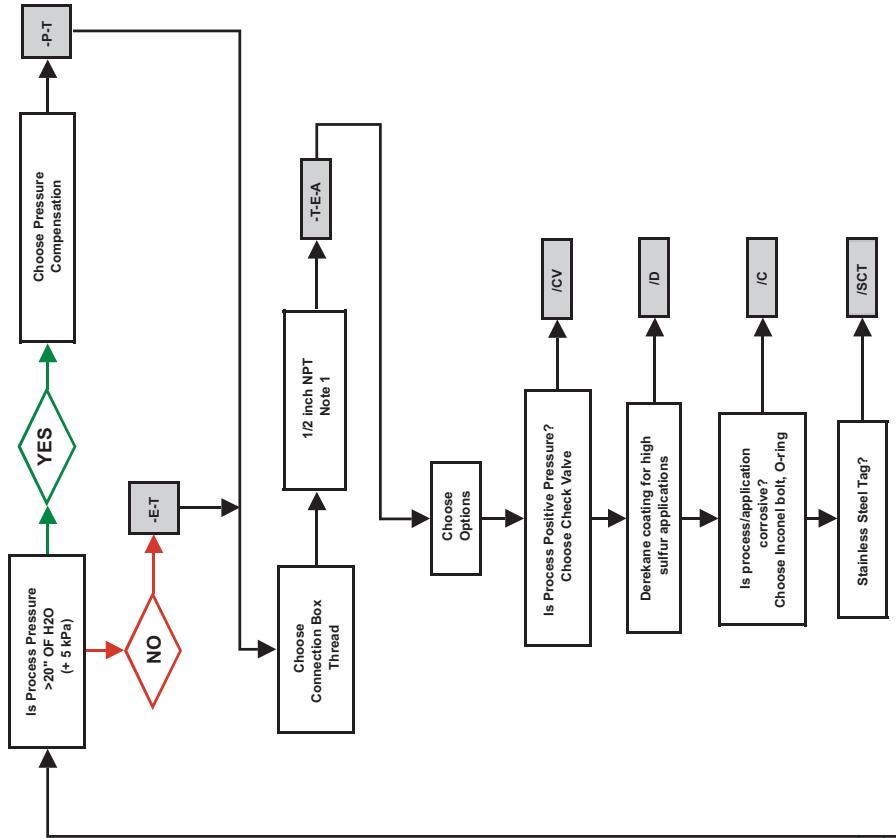
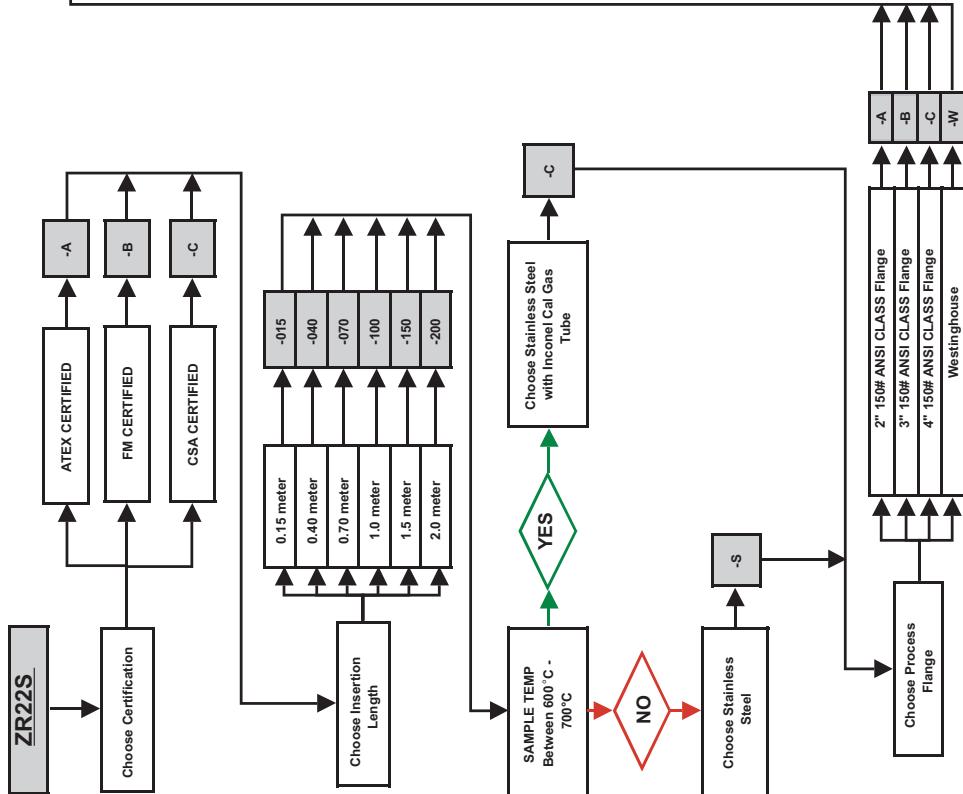


ZR22G General Purpose



**GO TO CALIBRATION UNIT
SELECTION
(Pg. 13)**

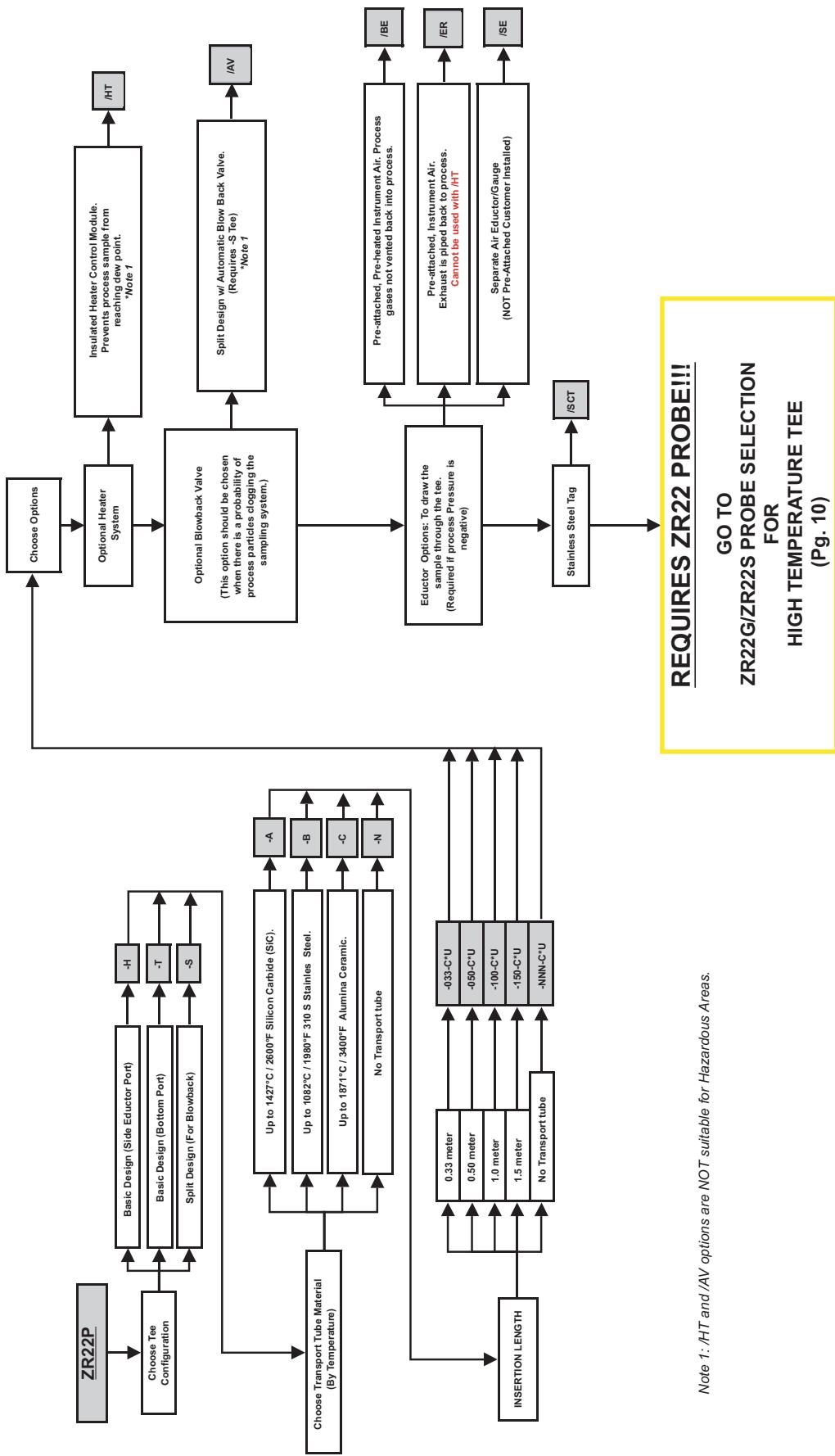
ZR22S Explosion-Proof



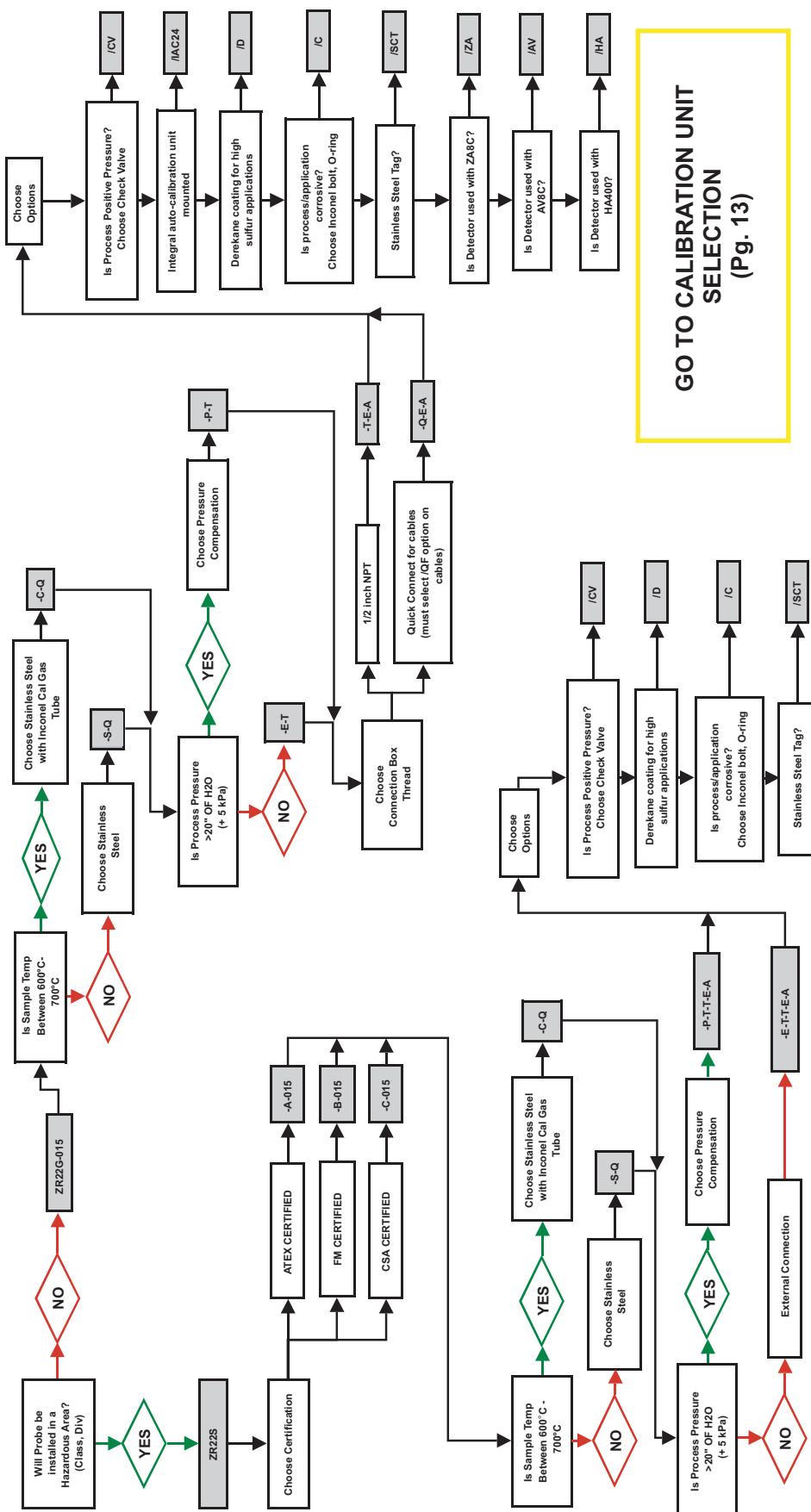
Note 1: Quick disconnects are not suitable for Hazardous Area Applications

GO TO CALIBRATION UNIT
SELECTION
(Pg. 13)

ZR22P High Temperature Tee. SAMPLE TEMP>700°C (1292°F)

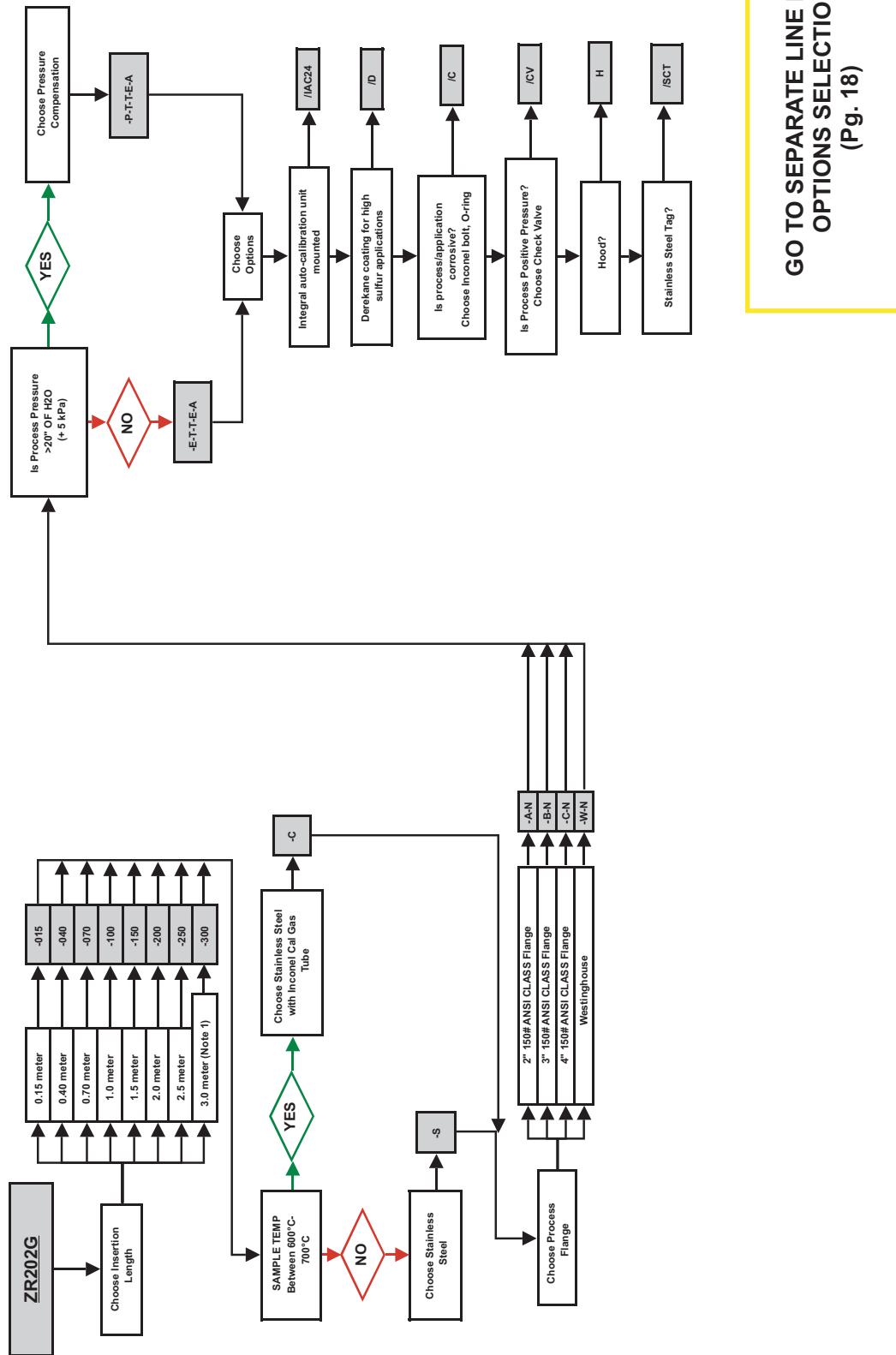


ZR22G/ZR22S Probe Selection for High Temperature Tee

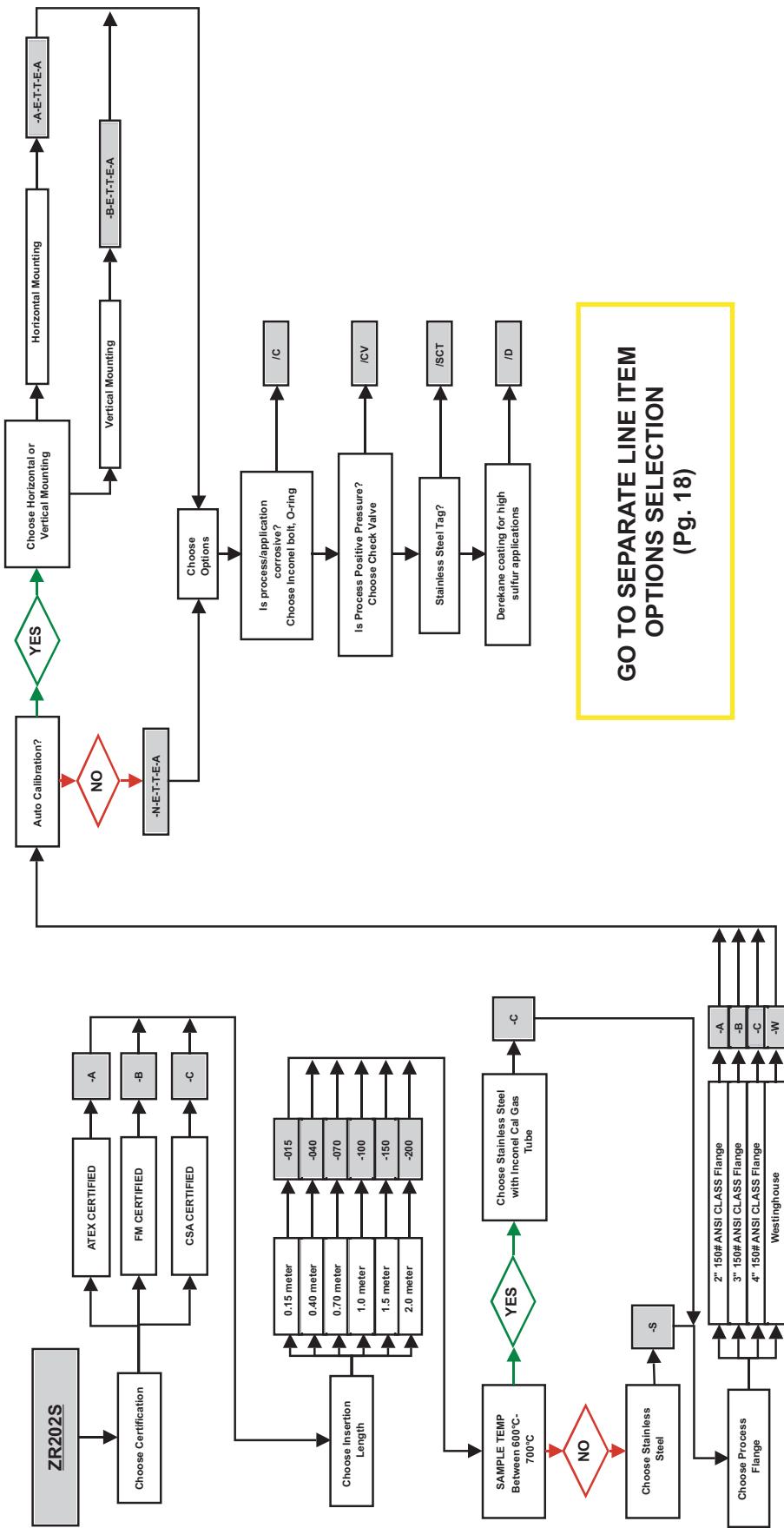


Note 1: Quick disconnects are not suitable for Hazardous Area Applications

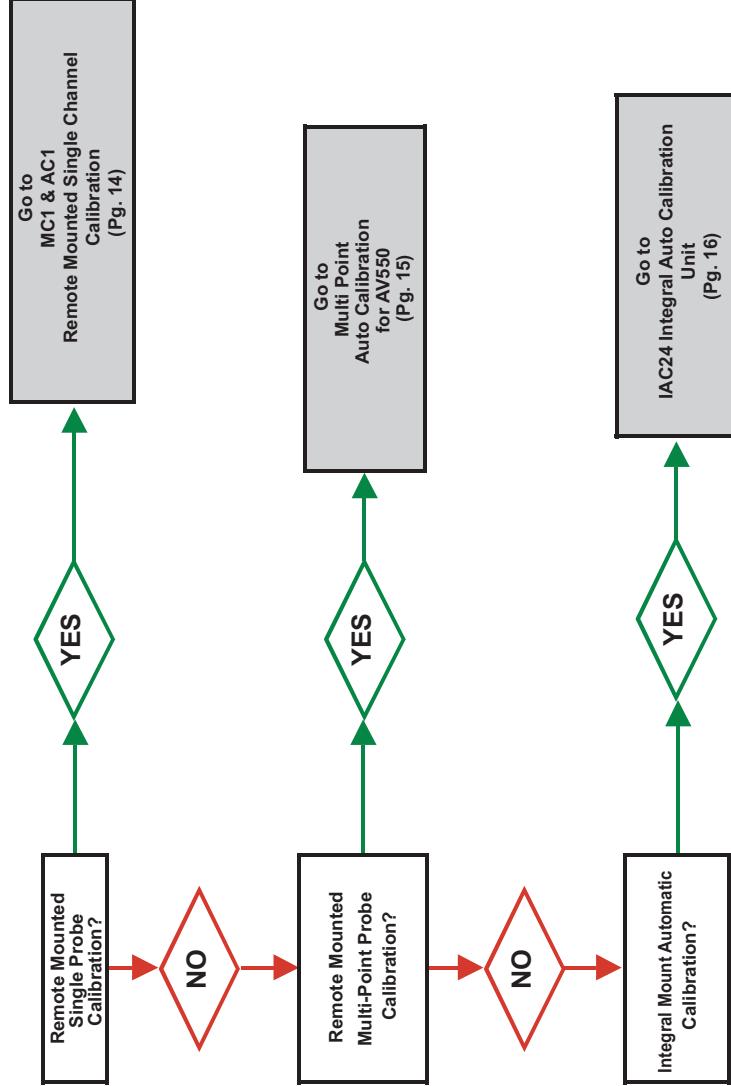
ZR202G Oxygen/Humidity Detector with Integral Analyzer



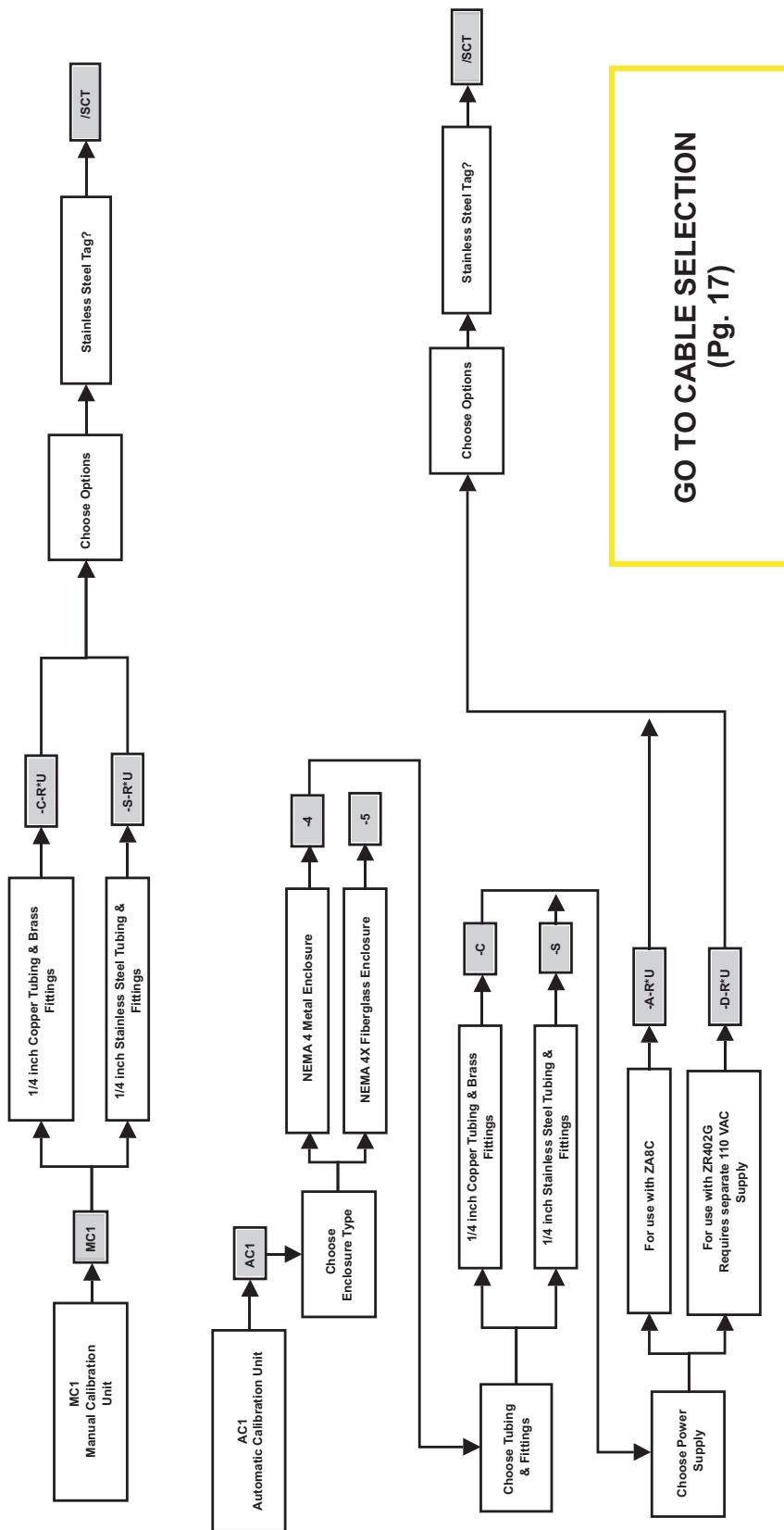
ZR202S Explosion Proof Oxygen/Humidity Detector with Integral Analyzer



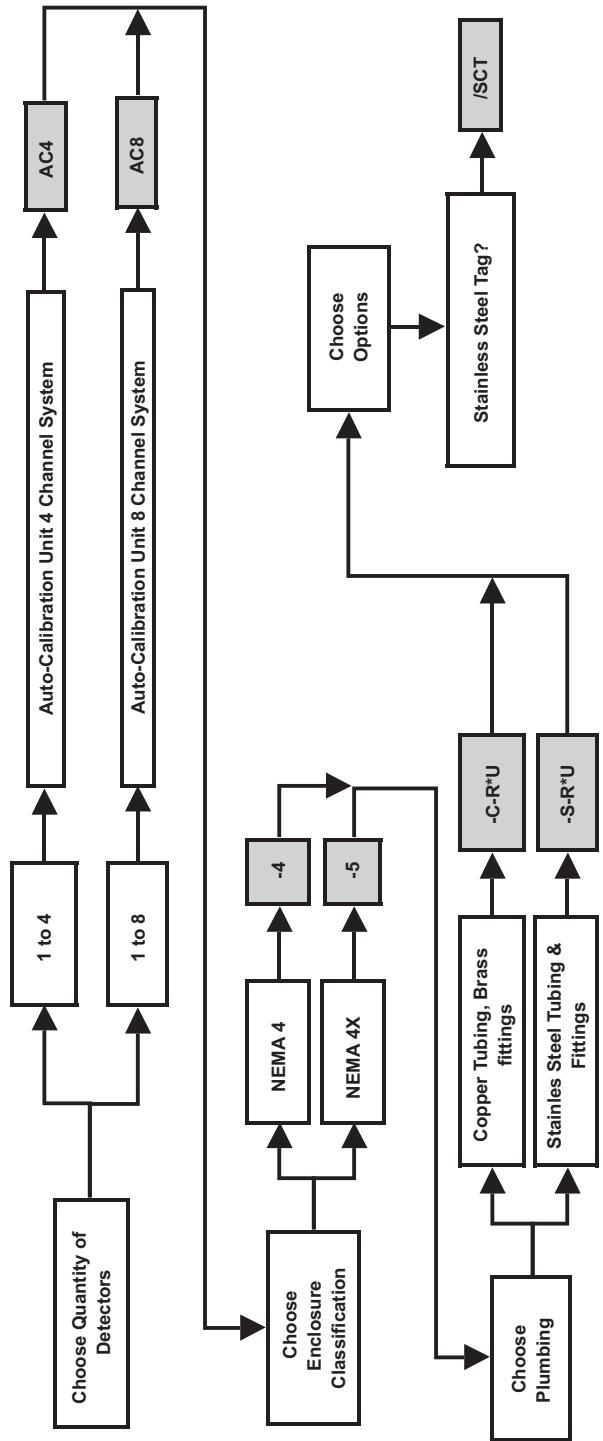
Calibration Unit Selection



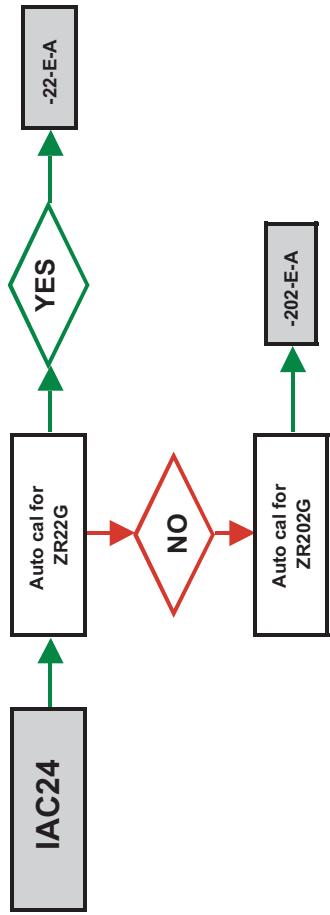
Remote Mounted Single Channel Calibration



Remote Mounted Multi Point Auto Calibration for AV550



**GO TO CABLE SELECTION
(Pg. 17)**

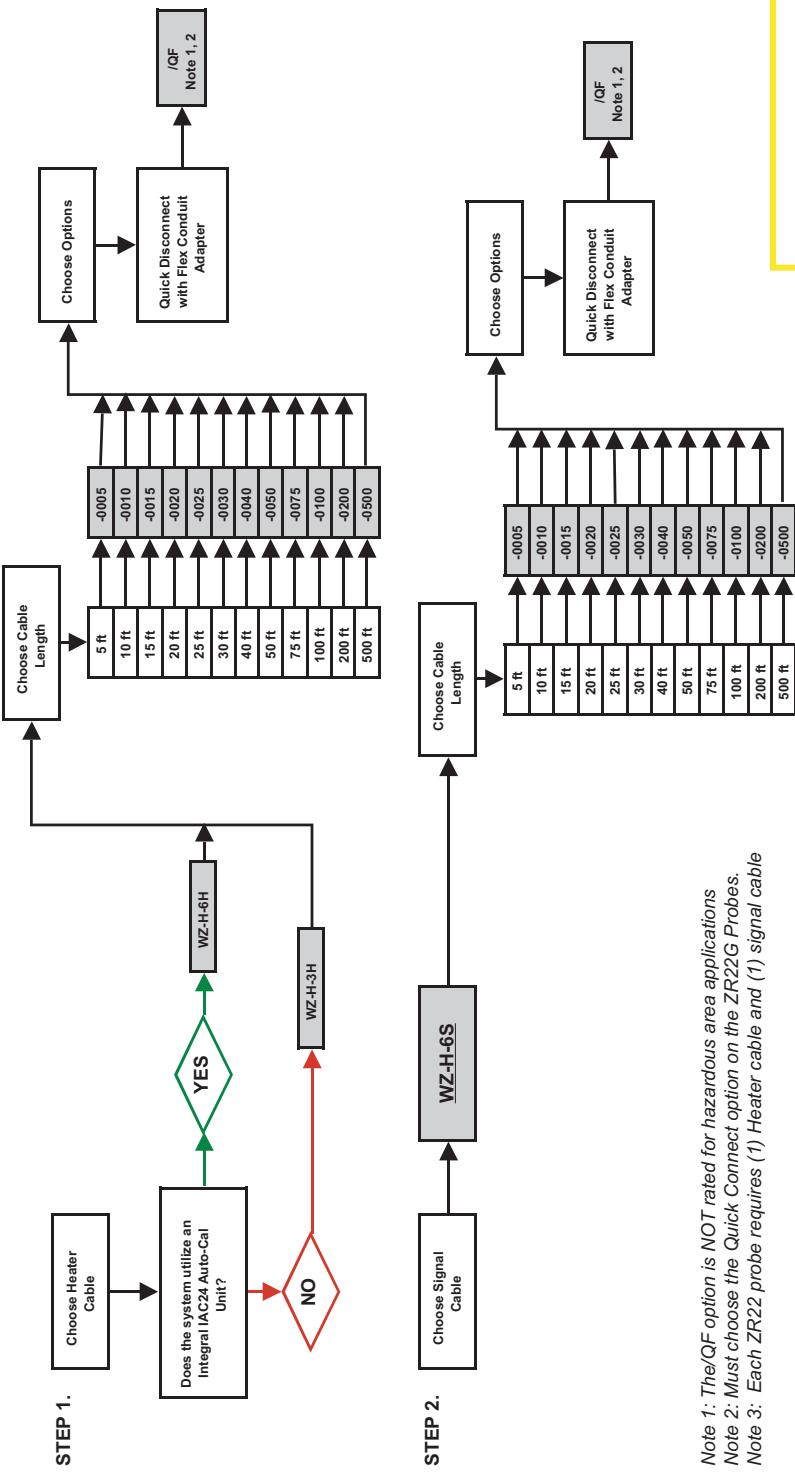
IAC24 Integral Mounted Auto Calibration Unit

Note: If the IAC24 option is selected for the ZR22G or the ZR202G, a separate IAC24 does not need to be ordered.

**GO TO CABLE SELECTION
(Pg. 17)**

ZR22 Wiring and Cabling

Note 3



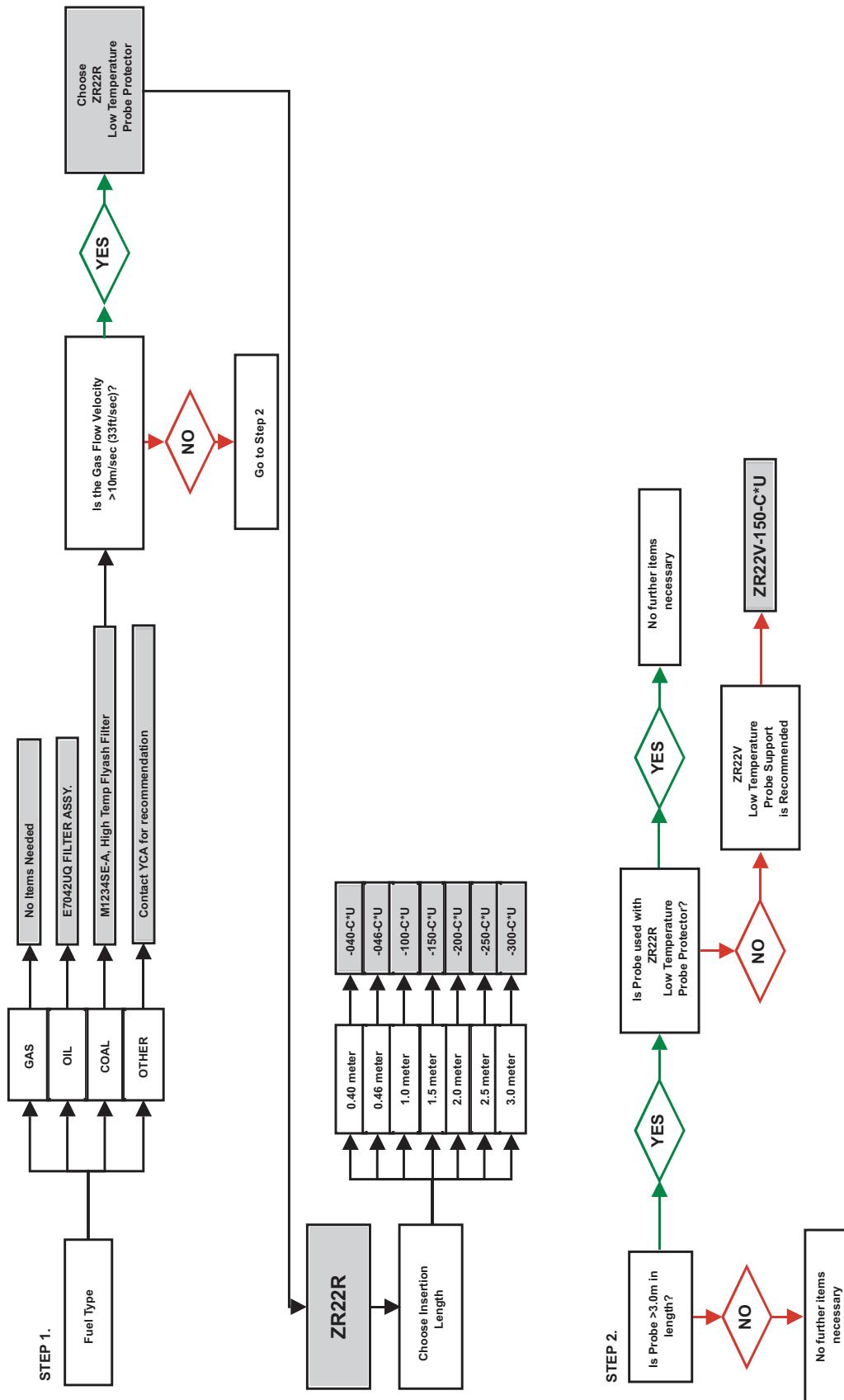
Note 1: The/QF option is NOT rated for hazardous area applications

Note 2: Must choose the Quick Connect option on the ZR22G Probes.

Note 3: Each ZR22 probe requires (1) Heater cable and (1) signal cable

**GO TO SEPARATE LINE ITEM
OPTIONS SELECTION
(Pg. 18)**

Separate Line Item Options



YOKOGAWA ◆

Customer:	<hr/>	
Tag No:	<hr/>	
Plant Name:	<hr/>	Address:
Contact:	<hr/>	<hr/>
Telephone	<hr/>	<hr/>
Email:	<hr/>	<hr/>

1. General:

Application:	<input type="checkbox"/> Boiler	<input type="checkbox"/> Furnace	<input type="checkbox"/> Explosion	<input type="checkbox"/> Other:	<hr/>
Fuel:	<input type="checkbox"/> Gas	<input type="checkbox"/> Oil	<input type="checkbox"/> Coal	<input type="checkbox"/> Other:	<hr/>
Operation Classification:	<input type="checkbox"/> Record	<input type="checkbox"/> Control	<input type="checkbox"/> Alarm	<input type="checkbox"/> Indication	<hr/>
	<input type="checkbox"/> Gen Purp	<input type="checkbox"/> FM	<input type="checkbox"/> CSA	<input type="checkbox"/> ATEX	<hr/>

2. Instrument Specifications & Process Conditions:

Description of Process:	<hr/>				Engineering Units
Sample Temperature:	Min _____	Norm _____	Max _____	<hr/>	
Sample Pressure:	Min _____	Norm _____	Max _____	<hr/>	
Oxygen Concentration:	Min _____	Norm _____	Max _____	<hr/>	
Sample Gas Flow:	Min _____	Norm _____	Max _____	<hr/>	
Dust Content:	Min _____	Norm _____	Max _____	<hr/>	
SO ₂ Content:	Min _____	Norm _____	Max _____	<hr/>	
CO/HCl/NO Content:	Min _____	Norm _____	Max _____	<hr/>	
Combustible Content:	Min _____	Norm _____	Max _____	<hr/>	
Specific Properties of Process:	<hr/>				

3. Installation Data:

Detector Location:	<input type="checkbox"/>	<input type="checkbox"/> Furnace	<input type="checkbox"/> Stack	<input type="checkbox"/> Other	<hr/>	
Mounting:	<input type="checkbox"/>	<input type="checkbox"/> Horizontal	<input type="checkbox"/> Vertical	<hr/>		
Detector Length:	<input type="checkbox"/>	<input type="checkbox"/> 0.4m	<input type="checkbox"/> 1.0m	<input type="checkbox"/> 1.5m	<input type="checkbox"/> 2.0m	<input type="checkbox"/> 3.0m
	<input type="checkbox"/>	other length: _____				
Flange:	<input type="checkbox"/>	<input type="checkbox"/> 2"	<input type="checkbox"/> 3"	<input type="checkbox"/> 4"	<hr/>	
Instrument Air Connection:	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<hr/>		
Auto Cal:	<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<hr/>		
Converter Location:	<input type="checkbox"/>	<input type="checkbox"/> Indoor	<input type="checkbox"/> Outdoor	<input type="checkbox"/>	<hr/>	
Distance of Detector to Converter:	<hr/>		ft <input type="checkbox"/>	m <input type="checkbox"/>	<hr/>	

For Yokogawa Use Only

4. Notes: Recommendation:	Recommended System(s) <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;"><input type="checkbox"/> ZR22G</td> <td style="width: 25%; text-align: center;"><input type="checkbox"/> ZR22P</td> <td style="width: 25%; text-align: center;"><input type="checkbox"/> ZR22R/V</td> <td style="width: 25%; text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> ZR202G</td> <td style="text-align: center;"><input type="checkbox"/> ZR22S</td> <td colspan="2"><hr/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> ZR402G</td> <td style="text-align: center;"><input type="checkbox"/> AV8C</td> <td style="text-align: center;"><input type="checkbox"/> AV550G</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> MC1</td> <td style="text-align: center;"><input type="checkbox"/> AC1</td> <td style="text-align: center;"><input type="checkbox"/> AC4</td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/> AC8</td> <td style="text-align: center;"><input type="checkbox"/> IAC24</td> <td colspan="2"><hr/></td> </tr> <tr> <td colspan="4" style="text-align: center;"><input type="checkbox"/> Explosion Proof</td> </tr> <tr> <td colspan="4" style="text-align: center;"><input type="checkbox"/> Non-explosion</td> </tr> </table>	<input type="checkbox"/> ZR22G	<input type="checkbox"/> ZR22P	<input type="checkbox"/> ZR22R/V	<input type="checkbox"/>	<input type="checkbox"/> ZR202G	<input type="checkbox"/> ZR22S	<hr/>		<input type="checkbox"/> ZR402G	<input type="checkbox"/> AV8C	<input type="checkbox"/> AV550G	<input type="checkbox"/>	<input type="checkbox"/> MC1	<input type="checkbox"/> AC1	<input type="checkbox"/> AC4	<input type="checkbox"/>	<input type="checkbox"/> AC8	<input type="checkbox"/> IAC24	<hr/>		<input type="checkbox"/> Explosion Proof				<input type="checkbox"/> Non-explosion			
<input type="checkbox"/> ZR22G	<input type="checkbox"/> ZR22P	<input type="checkbox"/> ZR22R/V	<input type="checkbox"/>																										
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<input type="checkbox"/> Non-explosion																													
