

# **Reliable gas density indication**

- Compact design and many options allow easy installation
- Optional switches provide fast and accurate notification of low gas levels with control capability
- Corrosion resistant materials ensure long life

## **Product Summary**

Description Provides mechanical local indication for monitoring SF6 gas density. Automatically compensates for gas pressure changes due to ambient temperature. Optional alarm or limit control with microswitches or combination of indication and switching.

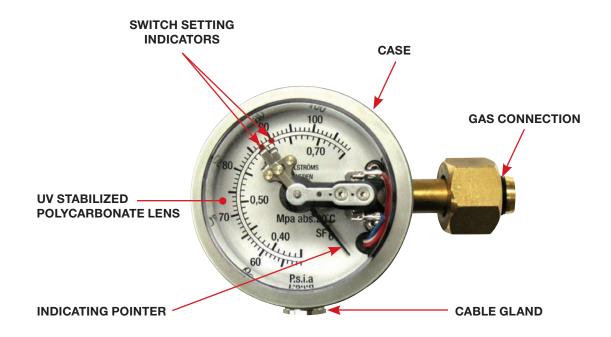
Application For gas density monitoring applications that require local indication with optional switches for alarm or limit control in compact design.





### **QUALITROL**® 149 & AKM 47209 compact SF6 gas density monitors

Reliable gas density indication	<ul> <li>2.5 in (63.5 mm) dial face with many standard and custom displays for clear indication of the SF6 gas density</li> <li>Temperature compensated indication provides more accurate monitoring of gas levels within tank</li> <li>Measurement accuracy within ±2% of full scale</li> <li>Some models feature a red (low pressure) and green (acceptable pressure) dial face for quick SF6 gas level assessment</li> </ul>
Compact design and many options allow easy installation	<ul> <li>Small profile allows for easy placement onto circuit breakers or other SF6 gas filled equipment</li> <li>149-203 features a swivel design that allows mounting on top, bottom or side of equipment</li> <li>Several standard mounting styles and sizes offer a perfect fit for many applications</li> </ul>
Optional switches provide fast and accurate notification of low gas levels with control capability	<ul> <li>Contact switches are available on AKM 47209 and QUALITROL 149 series</li> <li>Contact triggers when density level drops to a predefined value</li> </ul>
Corrosion resistant materials ensure long life	<ul> <li>Stainless steel and brass external parts offer protection from harsh environmental conditions</li> <li>Vented case and UV stabilized polycarbonate lens prevent moisture from accumulating under the lens, keeping the face clear for maximum viewing</li> </ul>







#### **TECHNICAL SPECIFICATIONS**

Mechanical	Mounting	Units available for top, bottom or side mounting
	Standard dial ranges	"Normal" - "Low Density" (10 psi nominal), 0-80 psi (0-0.55 MPa), 0-100 psi (0-0.7 MPa), 0-145 psi (0-1 MPa), 10-160 psi (0-1.1 MPa), 1-1.1 Mpa (1-11 bar)
	Tank connection	7/16"-20 SAE/MS, 7/8"-14, 1/4" NPT, M30x2 (internal thread), many optional thread sizes available, consult factory
	Accuracy	+/- 2% of max scale value for fill pressure within full temperature range
Dimensions	Dial diameter	Approx. 2.5 in (63.5 mm)
Materials	als Case	Stainless steel
-	Gas connection	Brass
	Lens	UV stabilized polycarbonate
Environmental	Operating temperatures	-20 to +150°F (-5 to +65°C) or -40°F to +158°F (-40°C to +70°C)
	Shock resistance	Withstands vertical accelerations of up to 50 g's
	Protection class	IP54 protection class according to IEC529
Electrical	Switch type	NO or NC (SPST on request)
	Switch setting	145 psi (0.20 MPa at 20°C reference) (standard), customer specified
	Number of switches	1 (47209) or 2 (149-202, 149-205)
	Cable length	23.6 in (600 mm)
	Electrical connections	Quick connect terminals
	Switch rating (47209)	0.15A @ 110 VDC - L/R = 10 ms inductive load
	Switch rating (149-202, 149-205)	0.3A @ 220 VDC - L/R = 10 ms inductive load
	Dielectric strength	2000 VAC for one minute

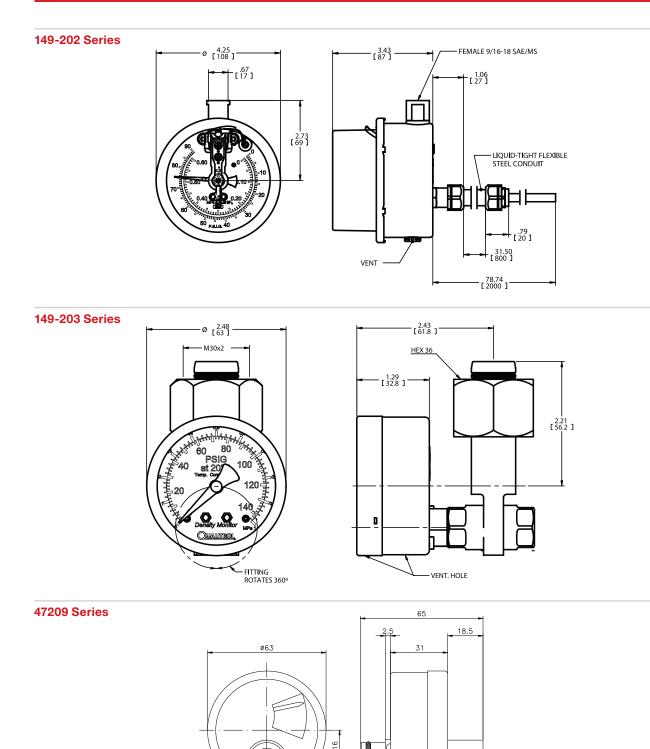


#### Don't see what you need?

QUALITROL regularly creates models with special customer requirements. Contact your local sales representative or QUALITROL Application Engineer to review your special requirements.

## QUALITROL<sub>®</sub> 149 & AKM 47209 compact SF6 gas density monitors





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Cable gland

0-ring 16.1x1.6



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