PQN Series Gas Detectors Datasheet

Trustworthy Certification
PROSENSE "PQN" Series fixed gas detectors are certified with ATEX/IECEx/ UKEX and SIL2.

Ex-proof Safety
The continuous measurement of toxic and explosive gases is done safely in hazardous areas thanks to the ex-proof housing.

Performance Approval
It complies with the measurement performance criteria in accordance with the IEC EN 60079-29-1 standard.

Functional Safety
Prosense promotes SIL approved products to reduce safety risks associated with increasingly complicated systems as malfunctioning equipment could pose a potential risk. Prosense PQ Series is certified by TUV Rheinland as SIL2 and SIL3 functional safety level.

Robust and Durable
SS316 stainless steel sensor head performs perfectly under harsh environmental conditions with the IP65/ IP66 protection class.

Accurate Readings
Pellistor, Electrochemical, PID, and Infrared sensors undoubtedly provide an accurate and sensitive measurement.

Ready to Operate
4-20mA Analog and Modbus RS485 RTU outputs are provided onboard to operate properly without any additional setup.

Easy Maintenance
PQN Series detectors allow sensor replacement with pre-calibrated sensor head thanks to the Procell technology.

Automatic Calibration
Detector calibration can be done automatically via preset values recorded in detector software once calibration requirements are provided.

Pellistor-Saver Mode
Detectors power off the sensor in high gas concentration in order to properly secure the operational lifetime of Pellistor sensor.

Auto Analog Signal Calibration and Monitoring
PQN Series detectors continuously check the analog output signal level to match the measurement level before promptly transferred to the panel. PQN Series adjusts the signal level in case of any deviation and generates fault signal when the adjustment fails.

Zero Suppression
Adjusting, the detector can show a certain measurement level as 0 (zero) to avoid unnecessary concerns.

Simple External Equipment Control
Optional relay module enables you to use it as an independent gas detection system with two arbitrarily adjustable concentration alarms and one fault alarm.

Continuous Self-Test
The detectors check itself continuously to make sure it operates perfectly and indicates a fault in case of any failure.

Adjustable Parameters
All parameters can be easily changed according to the application requirements or facility standards.

Maintenance via Software
Prosense provides software to maintain your active system easily and calibrate the gas detectors properly via computer.

Remote Display
Depending on the application requirements, a screen can be placed separately.

Applications
- *Process Industry*
- *Water Treatment*
- *Chemical Industry*
- *Food and Medicine Facilities*
- *Metal Industry*
- *Gas Distribution Stations*
- *Laboratories*

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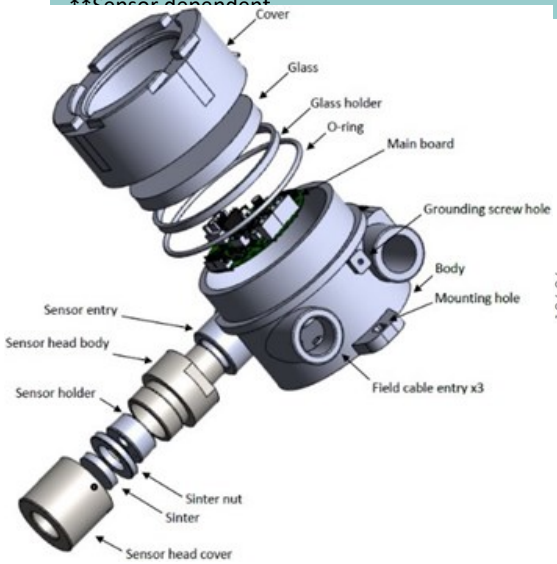
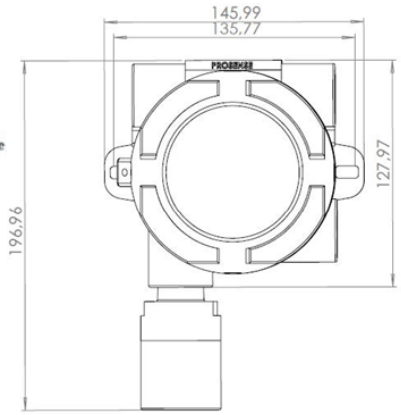
Specifications	PQN-XY36	PQN-XY35	PQN-XY34	PQN-XY33	PQN-XY31
Sensing Element	PID	Pellistor	Electrochemical	Infrared	Semi-Conductor
Output Signal	4-20mA Analog and Modbus RS485 RTU				
Sensor Warm-up Time	60sec				
Response Time (T90)	<30sec*	<15sec	<30sec**	<30sec	<15sec
Accuracy	%±2				
Operating Temperature	-40°C ~ +70°C **				
Humidity	0~ 100%RH **				
Input	Min 10VDC - Max 32VDC - Nominal 24VDC				
Event logging	Records alarm, fault and maintenance events up to 250 logs				
Power Consumption	Max. 4W				
Optional Relay Outputs	2 Alarm Relays (NO/NC adjustable) 1 Fault Relay (NO)				
Cable Entry	3x 1/2"NPT Standard / 3x3/4"NPT / 3xM20				
IP Rating	IP65/IP66 Optional IP66 (Sensor Head)				
Junction Box	Epoxy Painted Die-Cast Aluminum / 316 Stainless Steel				
Sensor Head	316L Stainless Steel				
Dimensions/Weight	196,96x145,99x112mm / 2100gr				
ATEX Marking	II 2G Ex db IIC T6 Gb II 2G Ex mb db IIC T6 Gb I M2 Ex db I Mb				
Hazardous Class	Zone 1 - Zone 2 - M2				
Certificates	•ExVeritas 18 ATEX 0371X • IECEx EXV 18.0021X • FTZU 18 ATEX 0086 • ExVeritas 21UKEX0878X •Functional Safety : TUV Rheinland- 968/FSP 2091.00/21				
Standards	• IEC EN 60079-0 • IEC EN 60079-1 •IEC EN 60079-18 • IEC EN 60079-29-1				

*When set to continuous measurement.
**Sensor dependent





Optional Modules

- **PQ-3R+:** 2 Alarms and 1 Fault (NO/NC adjustable) relay output card
- **P-IP66:** 316L Stainless steel sensor head adaptor to increase IP rating
- **PQN-SS:** Stainless Steel Junction box
- **P-GTA:** Ceiling mount collecting
- **P-ASU:** Prosense sampling unit
- **PQ-DISP:** Remote Display
- **PQ-PD05:** PQ Series Hand Terminal

For more information please contact with info@prosense.com.tr

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XY	Gas	Product Code	Sensor Type	Measuring Range*
30	LPG	PQN – 3035	Pellistor	0-100%LEL
30	LPG	PQN – 3033	Infrared	0-100%LEL
31	Methane	PQN – 3135	Pellistor	0-100%LEL
31	Methane	PQN – 3133	Infrared	0-100%LEL
32	Petrol Vapours	PQN – 3235	Pellistor	0-100%LEL
32	Petrol Vapours	PQN – 3233	Infrared	0-100%LEL
33	n-Butane	PQN – 3335	Pellistor	0-100%LEL
33	n-Butane	PQN – 3333	Infrared	0-100%LEL
34	Propane	PQN – 3435	Pellistor	0-100%LEL
34	Propane	PQN – 3433	Infrared	0-100%LEL
35	Hexane	PQN – 3535	Pellistor	0-100%LEL
35	Hexane	PQN – 3533	Infrared	0-100%LEL
36	Hydrogen	PQN – 3635	Pellistor	0-100%LEL
37	Pentane	PQN – 3735	Pellistor	0-100%LEL
37	Pentane	PQN – 3733	Infrared	0-100%LEL
38	Toluene	PQN – 3835	Pellistor	0-100%LEL
39	Methyl Alcohol	PQN – 3935	Pellistor	0-100%LEL
40	Heptane	PQN – 4035	Pellistor	0-100%LEL
41	Octane	PQN – 4135	Pellistor	0-100%LEL
42	Ethyl Alcohol	PQN – 4235	Pellistor	0-100%LEL
43	Iso Propanol	PQN – 4335	Pellistor	0-100%LEL
44	Carbon monoxide	PQN – 4434	Electrochemical	0-300ppm
44	Carbon monoxide	PQN – 4434/B	Electrochemical	0-500ppm
44	Carbon monoxide	PQN – 4434/C	Electrochemical	0-1000ppm
44	Carbon monoxide	PQN – 4435	Pellistor	0-100%LEL
45	Acetone	PQN – 4535	Pellistor	0-100%LEL
46	Methyl Ethyl Ketone	PQN – 4635	Pellistor	0-100%LEL
47	Ethyl Acetate	PQN – 4735	Pellistor	0-100%LEL
48	Ammonia	PQN – 4834	Electrochemical	0-100ppm
48	Ammonia	PQN – 4834/B	Electrochemical	0-1000ppm
48	Ammonia	PQN – 4835	Pellistor	0-100%LEL
49	Ethylene	PQN – 4935	Pellistor	0-100%LEL
50	Acetic Acid	PQN – 5035	Pellistor	0-100%LEL
51	Butyl Acetate	PQN – 5135	Pellistor	0-100%LEL
52	Cyclo Hexane	PQN – 5235	Pellistor	0-100%LEL
53	Cyclo Pentane	PQN – 5335	Pellistor	0-100%LEL
54	Dioxane	PQN – 5435	Pellistor	0-100%LEL
55	Ethane	PQN – 5535	Pellistor	0-100%LEL
56	Butyl Alcohol	PQN – 5635	Pellistor	0-100%LEL
57	Styrene	PQN – 5735	Pellistor	0-100%LEL
58	Propylene	PQN – 5835	Pellistor	0-100%LEL

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XY	Gas	Product Code	Sensor Type	Measuring Range*
59	Xylene	PQN – 5935	Pellistor	0-100%LEL
60	Acetylene	PQN – 6035	Pellistor	0-100%LEL
61	Benzene	PQN – 6135	Pellistor	0-100%LEL
62	Ethylene Oxide	PQN – 6234	Electrochemical	0-20ppm
63	Vinyl Acetate	PQN – 6335	Pellistor	0-100%LEL
64	Hydrogen Sulfide	PQN – 6434	Electrochemical	0-100ppm
65	Oxygen	PQN – 6534	Electrochemical	0-25%VOL
66	Sulphur Dioxide	PQN – 6634	Electrochemical	0-10ppm
67	Nitric Oxide	PQN – 6734	Electrochemical	0-250ppm
68	Nitrogen Dioxide	PQN – 6834	Electrochemical	0-30ppm
69	Chlorine	PQN – 6934	Electrochemical	0-10ppm
70	Hydrocarbon	PQN – 7035	Pellistor	0-100%LEL
70	Hydrocarbon	PQN – 7033	Infrared	0-100%LEL
71	Carbon Dioxide	PQN – 7133	Infrared	0-5000ppm
71	Carbon Dioxide	PQN – 7133/B	Infrared	0-5%VOL
72	Freon	PQN – 7231	Semiconductor	0-2000ppm
73	JP8 Fuel	PQN – 7335	Pellistor	0-100%LEL
74	Formaldehyde	PQN – 7434	Electrochemical	0-10ppm
74	Formaldehyde	PQN – 7435	Pellistor	0-100%LEL
75	Hydrogen Cyanide	PQN – 7534	Electrochemical	0-25ppm
76	Hydrogen Peroxide	PQN – 7634	Electrochemical	0-300ppm
77	Nonane	PQN – 7735	Pellistor	0-100%LEL
78	Acetaldehyde	PQN – 7835	Pellistor	0-100%LEL
79	Hydrogen Chloride	PQN – 7934	Electrochemical	0-25ppm
81	VOC	PQN – 8136	PID	0-100ppm
82	Ozone	PQN – 8234	Electrochemical	0-1ppm
83	Hydrofluoric Acid(HF)	PQN – 8334	Electrochemical	0-10ppm
84	Phosphine	PQN – 8434	Electrochemical	0-10ppm
85	Isobutylene	PQN – 8535	Pellistor	0-100%LEL

** Please consult Prosense sales team for specific measuring ranges and other gases those are not listed here.*
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Prosense gas detectors are fully tested and calibrated before delivery. Gas detectors must always be routinely controlled and calibrated regarding EN 60079-29-2.

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