

Draeger Instruments Rust Automation Currently Services

Sensors

- Electrochemical - (EC)
- Catalytic Bead - (CAT Ex)
- Point Infrared – (PIR)
- Infrared – (IR)

Transmitters

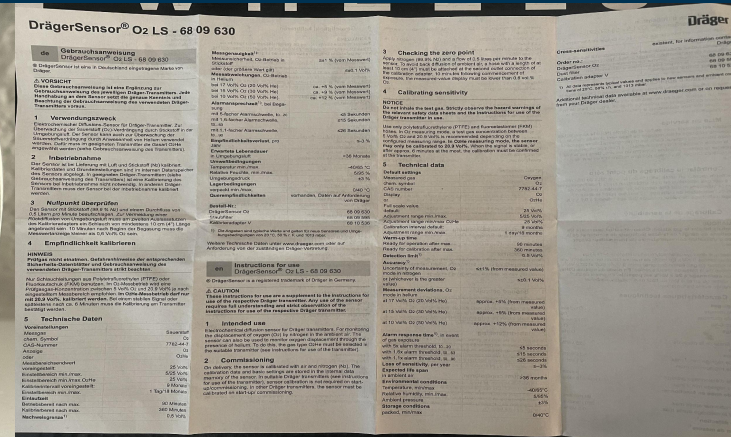
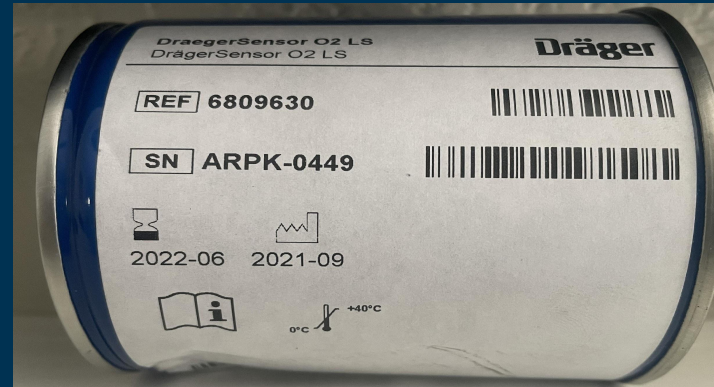
- Polytron 2000 Transmitter
- Polytron 3000 Transmitter
- Polytron 5000 Transmitter
- PointGard 2000 Transmitter
- PIR 7x00 Transmitter
- Polytron 8xx0 Transmitter
- Polytron 7000 Transmitter
- Polytron Pulsar (Open Path Gas Detection)

Controllers

- Regard 7000 Controller
- Regard 39x0 Controller

Electrochemical Sensors (EC)

- Currently there are 32 different EC sensors.
- EC sensors are interchangeable between a variety of transmitters.
- Sensors are shipped in a “can” as shown and come with factory specs and calibration paperwork.
- The “can” will have the manufacturing date shown and date for approximately ¼ service life left. **NOTE: Calibration does not extend service life.**
- Included in the paperwork is information concerning sensor calibration procedures, warm-up time, service life and individual sensor specifications.
- Some transmitters have the ability to read how much sensor life is left and last calibration date.
- Sensor service life is greatly affected by the environment they are installed in, and gases being detected.



Quote considerations for Electrochemical Sensors (EC)

- Does the customer know how old the sensors are?
- When was last known calibration and maintenance performed?
- Depending on what type of sensor warm-up time can be a 5 minutes to 12 plus hours. Customer needs to know if sensors are not preinstalled and powered, they will be billed for the waiting time.
- What documentation is the customer expecting?
- The colder the environment the longer calibration will take.
- Are sensors and transmitters readily accessible?
- Are customer's gas bottles **C-10 CONNECTION COMPATIBLE?**
- Are gasses on site properly documented and not expired.
- How many times have gases on hand been used last thing we want is to run out?

This is the most common cal/test adaptor for EC sensors. Cap fits over the bottom of sensor. Jon and Mike both have these.



C-10 connection that Draeger Regulator screws into.



Quick Reference EC Sensors Guide from Draeger

These are the current EC sensors from Draeger.

Sensor/Transmitter Gas and Max Range	Part Number	Sensor Type	Factory Cal Gas	Cal Kit P/N	Cal Gas P/N	End User Cal Possible?	Cal possible in Houston?	Cal Cert included?*
DrägerSensor® Cl2 Chlorine 0-50 ppm	6809665	EC	Chlorine	4594553	4594964	Yes	Yes	No
DrägerSensor® CO 0-1000 ppm	6809605	EC	Carbon Monoxic	4594620	4520128	Yes	Yes	No
DrägerSensor® CO LS Carbon Monoxide 0-5000 ppm	6809620	EC	Carbon Monoxic	4594620	4520128	Yes	Yes	No
DrägerSensor® CO LH Carbon Monoxide 0-300 ppm	6812570	EC	Carbon Monoxic	4594620	4520128	Yes	Yes	No
DrägerSensor® COCl2 Phosgene 0-20 ppm	6809930	EC	Phosgene		N/A	No	Yes	Yes
DrägerSensor® H2 0-3000 ppm	6809685	EC	Hydrogen	4594620	4594628	Yes	Yes	No
DrägerSensor® H2O2 HC Hydrogen Peroxide 0-7000 pp	6809675	EC	Hydrogen Perox	4594620	4597049	No, SO2 bump test	Yes	Yes
DrägerSensor® H2O2 LC Hydrogen Peroxide 0-300 ppn	6809705	EC	Hydrogen Perox	4594620	4597050	No, SO2 bump test	Yes	Yes
DrägerSensor® H2S Hydrogen Sulfide 0-100 ppm	6810435	EC	Hydrogen Sulfid	4594620	4502155	Yes	Yes	No
DrägerSensor® H2S HC Hydrogen Sulfide 0-1000 ppm	6809710	EC	Hydrogen Sulfid	4594620	4502183	Yes	Yes	No
DrägerSensor® H2S LC Hydrogen Sulfide 0-100 ppm	6809610	EC	Hydrogen Sulfid	4594620	4502155	Yes	Yes	No
DrägerSensor® HCl Hydrogen Chloride 0-100 ppm	6809640	EC	Hydrogen Cyani	4594553	4594626	Yes	Yes	No
DrägerSensor® HCN Hydrogen Cyanide 0-50 ppm	6809650	EC	Hydrogen Cyani	4594553	4594962	Yes	Yes	No
DrägerSensor® HCN LC Hydrogen Cyanide 0-50 ppm	6813200	EC	Hydrogen Cyani	4594553	4594962	Yes	Yes	No
DrägerSensor® PH3/AsH3 Phosphine/Arsine 0-10 ppm	6809695	EC	Phosphine	4594620	4597057	Yes	Yes	No
DrägerSensor® Hydride 0-20 ppm	6809635	EC	Phosphine	4594620	4597057	Yes	Yes	No
DrägerSensor® Hydride SC 0-0.5 ppm	6809980	EC	Phosphine	4594620	4597057	Yes	Yes	No
DrägerSensor® N2H4 Hydrazine	6810180	EC	Hydrazine	4594620	4594957	No, NH3 bump test	No	Yes
DrägerSensor® NH3 HC Ammonia 0-1000 ppm	6809645	EC	Ammonia	4594553	4594958	Yes	Yes	No
DrägerSensor® NH3 TH Ammonia 0-10000 ppm	6800055	EC	Ammonia	4594553	4594958	Yes	Yes	No
DrägerSensor® NH3 LC Ammonia 0-300 ppm	6809680	EC	Ammonia	4594553	4594957	Yes	Yes	No
DrägerSensor® NH3 TL Ammonia 0-300 ppm	6813095	EC	Ammonia	4594553	4594957	Yes	Yes	No
DrägerSensor® NH3 FL Ammonia 0-300 ppm	6813260	EC	Ammonia	4594553	4594957	Yes	Yes	No
DrägerSensor® NO LC Nitric Oxide 0-200 ppm	6809625	EC	Nitric Oxide	4594620	4552020	Yes	Yes	No
DrägerSensor® NO2 Nitrogen Dioxide 0-100 ppm	6809655	EC	Nitrogen Dioxide	4594620	4594959	Yes	Yes	No
DrägerSensor® NO2 LC Nitrogen Dioxide 0-20 ppm	6813205	EC	Nitrogen Dioxide	4594620	4594977	Yes	Yes	No
DrägerSensor® O2 Oxygen 0-100% Vol	6809720	EC	Oxygen	4594620	4510058	Yes	Yes	No
DrägerSensor® O2 LS Oxygen 0-25% Vol	6809630	EC	Oxygen	4594620	4510058	Yes	Yes	No
DrägerSensor® O3 Ozone 0-5 ppm	6810290	EC	Ozone	4594620	4594977	No, NO2 bump test	No	Yes
DrägerSensor® OV1 Organic Vapors 0-200 ppm	6810740	EC	Ethylene Oxide	4594620	4520128	Yes, CO crosscal	Yes	No
DrägerSensor® OV2 Organic Vapors 0-100 ppm	6810745	EC	Ethylene Oxide	4594620	4520128	Yes, CO crosscal	Yes	No
DrägerSensor® SO2 Sulfur Dioxide 0-10 ppm	6809660	EC	Sulfur Dioxide	4594620	4597050	Yes	Yes	Yes

Examples of Transmitters with EC sensors

NOTE: Explanation of Draeger's Numbering System will be covered in a following slide.



Pointgard 2100



Polytron 5100

Polytron 2000 Housing will be GREY



Polytron 3000 Housing will be BLACK



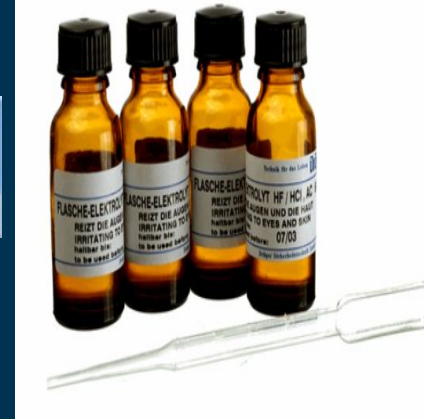
Polytron 7000 with remote EC sensor



Polytron 8100

Acidic Compound Electrochemical Sensor (Only one that Draeger offers)

- Acidic Compound EC Sensor is the odd ball of the EC Sensor offerings.
- Sensor can be used with a variety of transmitters.
- Requires its own style of calibration adaptor as depicted below.
- Also, sensor requires electrolyte to be added during calibration or servicing.
- Customer will need to order both electrolyte and correct calibration gas.



Sensor/Transmitter Gas and Max Range	Part Number	Sensor Type	Factory Cal Gas	Cal Kit P/N	Cal Gas P/N	End User Cal Possible?	Cal possible in Houston?	Cal Cert included?*
DrägerSensor® AC Acidic Compounds	6810595	EC	Hydrogen	4594553	4594626	Yes	No	No

INFO NOTE: Jon and I have no formal training on these sensors.

Catalytic Bead Sensors (CAT Ex)

• Currently 13 different CAT Ex sensors. **More to come waiting on pictures from Draeger**

• Sensors have no internal memory consider them to be a “dumb sensor”.

• CAT Ex sensors are interchangeable between a variety of transmitters.

• Sensors are shipped in a “can” as shown and come with factory specs and calibration paperwork.



• The “can” will have the manufacturing date shown and date for approximately ¼ service life left.

NOTE: Calibration does not extend service life.

• Included in the paperwork is information concerning sensor calibration procedures, warm-up time, service life and individual sensor specifications.

• Sensor service life is greatly affected by the environment they are installed in, and gases being detected.

• Do not zero with nitrogen will freeze sensor

Quote considerations for Catalytic Bead Sensors (CAT Ex)

- Does the customer know how old the sensors are? CAT Ex have a service life of generally 3 yrs.
- Sensors of this type can be in explosive areas. What hazards and conditions should we expect?
- When was last known calibration and maintenance performed?
- Depending on what type of sensor warm-up time is 10 minutes to 4 hours.
- What documentation is the customer expecting?
- The colder the environment the longer calibration will take.
- Are sensors and transmitters readily accessible?
- Are customer's gas bottles **C-10 CONNECTION COMPATABLE?**
- Are gasses on site properly documented and not expired.
- How many times have gases on hand been used last thing we want is to run out?

This is the most common Cal/test adaptor for CAT Ex sensors. Cap fits over the bottom of sensor. Jon and Mike both have these.



C-10 connection that Draeger Regulator screws into.



Quick Reference CAT Ex Sensors Guide from Draeger

These are the current CAT Ex sensors from Draeger.

Sensor/Transmitter Gas and Max Range	Part Number	Sensor Type	Factory Cal Gas	Cal Kit P/N	Cal Gas P/N	End User Cal Possible?	Cal possible in Houston?	Cal Cert included?*
Polytron 5200 CAT d A 0-100% LEL	8344150	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5200 CAT d A Relay 0-100% LEL	8344151	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5200 CAT d S 0-100% LEL	8344152	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5200 CAT d S Relay	8344153	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5200 CAT e A	8344154	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5200 CAT e A Relay	8344155	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8200 CAT d A 4-20/HART	8344439	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8200 CAT d A 4-20/HART Relay	8344440	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8200 CAT d S 4-20/HART	8344448	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8200 CAT d S 4-20/HART Relay	8344449	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8200 CAT e A 4-20/HART	8344457	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8200 CAT e A 4-20/HART Relay	8344458	Cat Bead	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor Ex PR M DQ 0-100% LEL	6814140	Cat Bead	not calibrated	4594620	4557019	Yes, with transmitt	Yes, with transm	No
DrägerSensor Ex HT M DQ 0-100% LEL	6814145	Cat Bead	not calibrated	4594620	4557019	Yes, with transmitt	Yes, with transm	No
DrägerSensor Ex PR NPT DQ 0-100% LEL	6814150	Cat Bead	not calibrated	4594620	4557019	Yes, with transmitt	Yes, with transm	No
DrägerSensor Ex LC M, DQ 0-100% LEL	6810350	Cat Bead	not calibrated	4594620	4557019	Yes, with transmitt	Yes, with transm	No
EX-Sensor LC NPT 0-10% LEL	6810675	Cat Bead	not calibrated	4594620	4557019	Yes, with transmitt	Yes, with transm	No

Examples of Transmitters with CAT Ex Sensors



Polytron 5200



Polytron 8200

PointGuard 2200



NOTE: Explanation of Draeger's Numbering System will be covered in a following slide.

Point Infrared Sensors (PIR) and Infrared Sensors (IR)

- Currently there are 25 different PIR sensors.
- Currently there are 37 different IR sensors.
- These sensors are grouped together because they are practically identical in operation.
- PIR & IR sensors are interchangeable between a variety of transmitters.
- These function much like a common household smoke detector.
- Typical lifetime is >15 years.
- Included in the paperwork is information concerning sensor calibration procedures, warm-up time, service life and individual sensor specifications.
- Sensor response time is faster than EC, CAT Ex and AC.



Quote considerations for PIR and IR Sensors

- When was last known calibration and maintenance performed?
- Sensor warm up time is generally 1 to 5 minutes.
- Are sensors equipped with a **FLOW CELL?**
- What documentation is the customer expecting?
- Are sensors and transmitters readily accessible?
- Are customer's gas bottles **C-10 CONNECTION COMPATABLE?**
- Are gasses on site properly documented and not expired.
- How many times have gases on hand been used last thing we want is to run out?



Flow Cell

Flow Cell Identified by two pipe barbs

NOTE: Depending on location of instrument does customer have long enough hoses to reach Flow Cell?

Cal. Adaptor A.K.A. "Football"

NOTE: "Football" is shared at this time between Jon and Mike.



C-10 connection that Draeger Regulator screws into.

Quick Reference Guide PIR Sensors from Draeger

These are the current PIR sensors from Draeger.

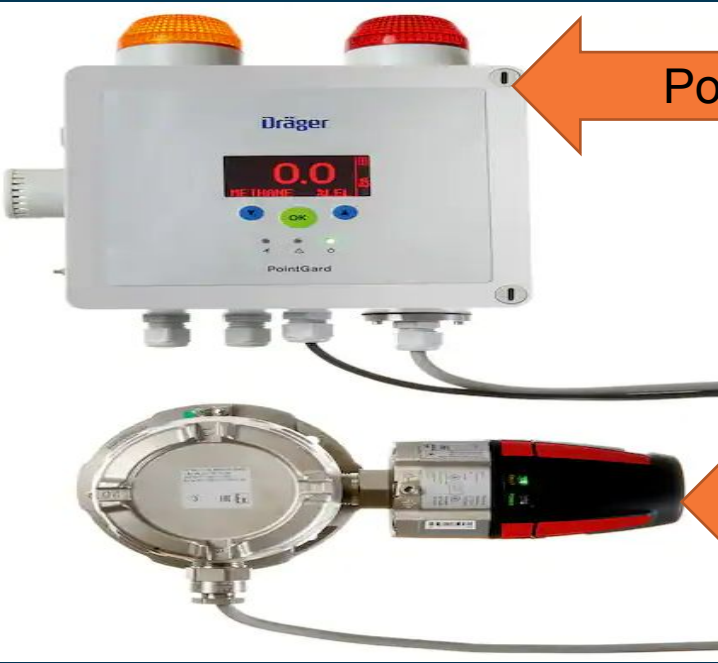
Sensor/Transmitter Gas and Max Range	Part Number	Sensor Type	Factory Cal Gas	Cal Kit P/N	Cal Gas P/N	End User Cal Possible?	Cal possible in Houston?	Cal Cert included?*
Dräger PIR 7000 Typ 334 (NPT)	6811822	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (NPT)	6811832	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (NPT) HART	6811552	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (M25) HART	6811550	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (NPT) HART Complete incl. Ex d junction box Al	6813030	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (NPT) HART Complete incl. Ex d junction box SS	6813035	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (M25) HART Complete incl. EEx e junction box	6811817	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (M25)	6811825	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 334 (M25)	6811820	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (NPT) HART	6811562	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (M25) HART	6811560	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (NPT) HART Complete incl. Ex d junction box Al	6813040	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (NPT) HART Complete incl. Ex d junction box SS	6813045	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (M25) HART Complete incl. EEx e junction box	6811819	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 7000 Typ 340 (M25)	6811830	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Dräger PIR 3000 (M25)	6810810	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Dräger PIR 3000 (NPT)	6811080	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Dräger PIR 3000 Complete Set EEx e (incl. junction box)	6811160	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Dräger PIR 3000 Complete Set EEx e2 (incl. größerer bc	6811270	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Dräger PIR 3000 Complete Set EEx d (incl. junction box)	6811180	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Dräger PIR 7200 (M25) HART Complete inkl. Ex e Junction box	6812290	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Dräger PIR 7200 (NPT) HART Complete Set d Alu, inkl. Ex d Junction box	6813050	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Dräger PIR 7200 (NPT) HART Complete Set d SS316, inkl. Ex d Junction box	6813055	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Dräger PIR 7200 (NPT) HART	6811572	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Dräger PIR 7200 (M25) HART 0-30%	6811570	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes

Quick Reference Guide IR Sensors from Draeger

These are the current IR sensors from Draeger.

Sensor/Transmitter Gas and Max Range	Part Number	Sensor Type	Factory Cal Gas	Cal Kit P/N	Cal Gas P/N	End User Cal Possible?	Cal possible in Houston?	Cal Cert included?*
Polytron 5310 IR d A 0-100% LEL	8344370	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5310 IR d A Relay 0-100% LEL	8344371	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 5720 IR d A 0-30%	8344200	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 5720 IR d A Relay 0-30%	8344201	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 5720 IR d S Relay 0-30%	8344203	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 5700 IR 334 d A	8344220	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 5700 IR 334 d A Relay	8344221	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 5700 IR 334 d S	8344222	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 5700 IR 340 d A	8344240	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Polytron 8310 IR d A 4-20/HART	8344807	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8310 IR d A 4-20/HART Relay	8344808	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8310 IR e A 4-20/HART	8344825	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8310 IR e A 4-20/HART Relay	8344826	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
Polytron 8720 IR d A 4-20/HART 0-30%	8344709	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 8720 IR d A 4-20/HART Relay 0-30%	8344710	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 8720 IR e A 4-20/HART 0-30%	8344727	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 8720 IR e A 4-20/HART Relay 0-30%	8344728	Infrared	Carbon Dioxide	4594620+6811610	4595194	Yes	Yes	Yes
Polytron 8700 IR 334 d A 4-20/HART	8344601	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 334 d A 4-20/HART Relay	8344602	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 334 d S 4-20/HART	8344610	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 334 d S 4-20/HART Relay	8344611	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 334 e A 4-20/HART	8344619	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 334 e A 4-20/HART Relay	8344620	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 334 e S 4-20/HART	8344628	Infrared	Methane	4594620+6811610	4557019	Yes	Yes	Yes
Polytron 8700 IR 340 d A 4-20/HART	8344637	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Polytron 8700 IR 340 d A 4-20/HART Relay	8344638	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Polytron 8700 IR 340 e A 4-20/HART	8344655	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
Polytron 8700 IR 340 e A 4-20/HART Relay	8344656	Infrared	Propane	4594620+6811610	4594624	Yes	Yes	Yes
DrägerSensor IR (M25)	6811100	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR (NPT)	6811110	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR Complete Set EEx e (incl. junction box)	6811165	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR Complete Set EEx e2 (incl. Bigger box)	6811265	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR Complete Set EEx d (incl. junction box)	6811185	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR (Polytron 5310/8310, Polytron FX CSA)	6811901	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR (Polytron FX)	6811111	Infrared	Methane	4594620	4557019	Yes	Yes	Yes
DrägerSensor IR (Polytron 2 XP Ex)	6811300	Infrared	Methane	4594620	4557019	Yes	Yes	Yes

Examples of Transmitters with PIR and IR Sensors



PointGuard 2700



Polytron 8700

Transmitter & Sensor always are separate



PIR 7000

Polytron 5720



Examples of Transmitters with PIR and IR Sensors

DSIR Sensor

- This is essentially an IR/PIR sensor with a different sensor housing or body.
- Is used with either a Polytron 5000/8000 Transmitter.
- The calibration adaptor is different and shown below.

Polytron 8310

DSIR Sensor

Cal. Adaptor



Draeger Sensor Transmitter Matrix

(This is how the combined Sensor and Transmitter model numbers are determined)

**Slide Under Construction Waiting on
Information from Draeger**

Currently Offered Draeger Transmitters Identification

Polytron 2000



Polytron 3000



Polytron 7000



PIR 7000



PointGard 2000



Polytron 5000



Polytron 8000

Draeger Regard 39x0 and 7000 Controllers

Controller Basics

- Controllers do have the ability to both send and receive signals to and from multiple transmitter/sensor combinations.
- Controllers can also control relays, horns and lights.
- Regard 39x0 is the older of the two.
- Regard 7000 is the newest model.

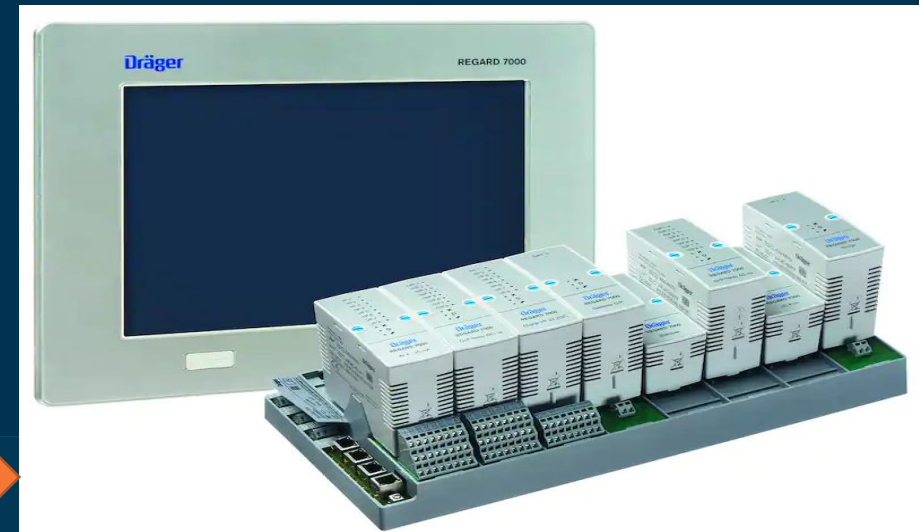
Regard 39x0



Commissioning Considerations

- Coordination far in advance with the customer is paramount!
- Customer will need to provide in explicit detail what transmitters, sensors, horns, strobe lights and relays that will be used.
- Electrician and controls specialist shall be present.
- Highly recommend time is allotted for system checkouts and trouble shooting.
- Quote on the high side after each the customers needs have been addressed. We can always adjust the quote after the fact.
- Highly recommend both Jon and Mike work this type of commissioning.

Regard 7000



Polytron Pulsar Open Path Gas Detection System

Polytron Pulsar Basics

- Sensors detect gas passing across two established points.
- Functionality is just like a garage door closing sensors. If the beam is blocked the door remains open or stops closing.
- System requires pairs of transmitters and receivers in a 1:1 ratio.

Service and Commissioning

- Alignment of the transmitter and receivers is the key to functionality. Depending on location and ease of access will determine if this is a one- or two-person job. These distances are generally range from 20-200 feet apart.
- Calibration terminology should be used cautiously as no test gas is used. After pairs are properly aligned. The use of a specific filter simulating a gas is placed over the lens to test the system.

INFO NOTE: As of 2/7/23 Draeger's website is stating "End of Sales" for this equipment.



Older Draeger Instruments Jon and Mike have seen in the field. We have had no training formal training on instruments shown.

Polytron FX



Polytron 2 XP



Polytron 2



Polytron IR



CCS 3000 Controller



DraegerGard 8/16 Controller

