

QPGo.X/P

4" complete solution made by ZDS hydraulic part, DRP-Dry Running Protection (on request), 2-wire single-phase oil-cooled O2 motor and supply cable (different lengths available). These Complete Solutions, manufactured to ISO 9001 standards, are available up to the maximum delivery of 11.000 l/h and 220 m head. The O2 motor does not require a start and run control box, as the capacitor is built into it. The DRP is an electronic device that guarantees optimal protection of the pump against dry-running and other possible installations faults or operation failures. In case of water shortage, the DRP stops the pump immediately when water drops below the DRP and it restarts the pump automatically a short time after the water rises above the DRP. Unlike traditional solutions, there is no need for additional cables, sensors or control boxes. The QPGo.X/P Complete Solutions are designed to be used in applications for lifting, distribution, and pressurisation in civil and industrial water systems, garden irrigation system, filling of pressure vessels and tanks, fire-fighting systems and washing systems, drainage systems, fountains supply.

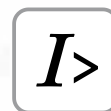
AUTOMATIC PROTECTIONS



Dry-running*



Thermal
Protection



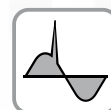
Overload



Too Frequent
Starts/Stops*



Low Voltage*



Voltage
Peaks*

- ✓ 2-wire single-phase oil-cooled O2 motor
- ✓ DRP – Dry Running Protection *
(on request)
- ✓ Maximum immersion depth: 100m
- ✓ Maximum delivery (Q): 11.000 l/h

PROTECTIONS DESCRIPTION

1) Protection against dry running and lack of water in the well

The DRP completely protects the QPGo.X/P.DRP Complete Solution against lack of water in the well, without the aid of other equipment (probes, cables, sensors, control panels etc.). In case of dry running, the DRP automatically stops the pump. When the water level is restored in the well, the DRP restarts the pump after a programmed cycle time.

2) Thermal protection

The thermal protection system stops the QPGo.X/P Complete Solution in case of overheating. This can happen because of: the high temperature of the pumped liquid; when the minimum distance between the pump installed and the well bottom isn't respected; when the pump is installed in well/tanks bigger than 4" without a proper cooling system; when the pump works in shut-off.

3) Overload protection

In case the QPGo.X/P Complete Solution is partially or totally blocked, is protected against overload.

4) Protection against leaks in the installation and too frequent starts and stops

The DRP protects the QPGo.X/P.DRP Complete Solution against leaks in the piping system (also when the pressure tank is exhausted or its membrane is damaged, or when there is a defective pressure switch) and too frequent starts and stops (for example if the tank is too small for the system). In such cases, to avoid potential damages, the DRP makes the pump enter the stand-by mode.

5) Protection against low voltage

The DRP protects the QPGo.X/P.DRP Complete Solution against low voltage, that can damage the motor. Low voltage can occur, for example, if the section of the power cable is not adequate considering the motor power and the distance between the plug and the pump itself; or if a generator is faulty or undersized for the pump.

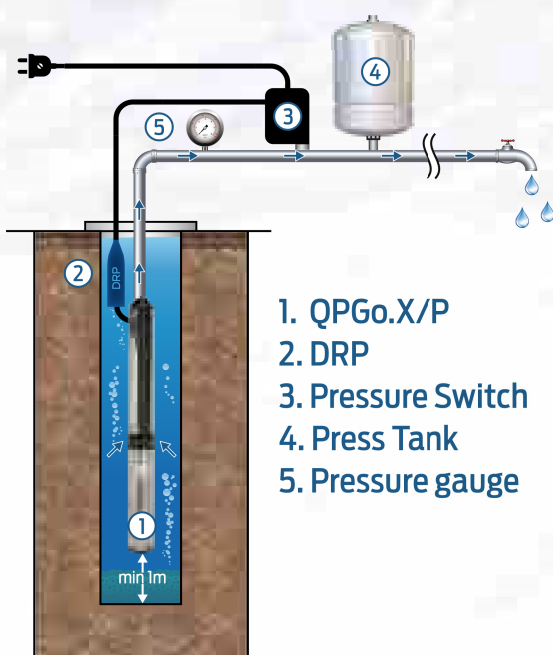
6) Protection against voltage peak

The DRP protects the QPGo.X/P.DRP Complete Solution against voltage peaks, which can be caused by electric abnormalities in the supply network or by other various electrical interferences. It reduces overvoltage, keeping the correct operating voltage range.



* technopolymer version

INFORMATION ON PROPER INSTALLATION



- The correct pump must be selected considering the delivery pressure and the characteristics of the plant.
- During installation of a submersible pump, it is necessary to verify if the power supply voltage is correct.
- The correct pump operation is guaranteed when the power cable section is correctly selected, considering the motor power and the distance between the pump and the plug itself.
- If you are using a generator with an internal combustion engine, it is necessary that the generator's power measured in kW (in continuous delivery) is three times the rated power in kW of the submersible pump.
- To guarantee automatic operation mode (the pump starts and stops when open and close the tap) it is necessary to connect a pressure switch and a pressure tank of the correct size, if the plant is not already provided with them.
- We recommend to install a proper cooling jacket in installations bigger than 10 cm, to guarantee the correct motor cooling flow.
- The maximum quantity of sand allowed in the pumped water is 120g/m³.
- The DRP must NOT be used with a frequency inverter.
- DRP doesn't work with demineralized water (such as rain water).
- DRP must not be used as a float.
- The DRP must be immersed in the same water as the pump in order to ensure continuity between the DRP and the pump casing.
- In order to reset the electronic protections, disconnect the pump power, wait 10 seconds, then plug it in again.
- In order to reset the thermal protection, disconnect the pump power, wait that the correct working temperature parameters are restored, then plug it in again.

02 2-wire single-phase motor,

INTEGRATED CAPACITOR

For Hydraulic performance see
pump curves on pages 10 – 14.

Cable material according to drinking water regulations
(Wras, ACS Approved) available on request.

02 SINGLE-PHASE ZDS OIL-COOLED MOTOR, WITH (✓) OR WITHOUT DRP AND STAINLESS STEEL VERSION HYDRAULIC PART

Model	Shaft Power		P.C.*	C.C.**		V	Hydraulic data (n=2850 min ⁻¹)								DRP ✓	Cable 1.5m		Cable 15m		Cable 30m		Cable 45m	
	kW	HP		I _n (A)	m ³ /h l/min		0	0.6	1.5	2.4	4.2	6.0	11.4	Code		Code	Code	Code	Code	Code			
							0	10	25	40	70	100	190										
QPGo.X.1-8	0.25	0.33	0.59	2.9 3.0	220 230	Total head in meters = H= dynamic total pressure	50.2	44.4	18					✓	197200108S	197200108S1	197200108S2	UPON REQUEST					
QPGo.X.1-12	0.37	0.50	0.72	3.3 3.5	220 230		75.4	66.6	27					✓	197200112S	197200112S1	197200112S2		197200112S3				
															197200112L	197200112L1	197200112L2		197200112L3				
QPGo.X.1-18	0.55	0.75	0.95	4.4 4.6	220 230		113	99.9	40.5					✓	197200118S	197200118S1	197200118S2		197200118S3				
															197200118L	197200118L1	197200118L2		197200118L3				
QPGo.X.1-25	0.75	1.00	1.24	5.8 6.1	220 230		157	138.8	56.3					✓	197200125S	197200125S1	197200125S2		197200125S3				
															197200125L	197200125L1	197200125L2		197200125L3				
QPGo.X.1-36	1.10	1.50	1.66	7.8 8.0	220 230		226.1	199.8	81					✓	197200136S	197200136S1	197200136S2		197200136S3				
															197200136L	197200136L1	197200136L2		197200136L3				
QPGo.X.2-5	0.25	0.33	0.59	2.9 3.0	220 230		32	31.2	26.2	17					✓	197200205S	197200205S1	197200205S2	UPON REQUEST				
																197200205L	197200205L1	197200205L2					
QPGo.X.2-8	0.37	0.50	0.73	3.3 3.5	220 230		51.2	49.9	41.9	27.2					✓	197200208S	197200208S1	197200208S2		197200208S3			
																197200208L	197200208L1	197200208L2		197200208L3			
QPGo.X.2-12	0.55	0.75	0.97	4.4 4.6	220 230		76.8	74.9	62.9	40.8					✓	197200212S	197200212S1	197200212S2		197200212S3			
																197200212L	197200212L1	197200212L2		197200212L3			
QPGo.X.2-16	0.75	1.00	1.27	5.8 6.1	220 230		102.4	99.8	83.8	54.4					✓	197200216S	197200216S1	197200216S2		197200216S3			
																197200216L	197200216L1	197200216L2		197200216L3			
QPGo.X.2-24	1.10	1.50	1.70	7.8 8.0	220 230		153.6	149.8	125.8	81.6					✓	197200224S	197200224S1	197200224S2		197200224S3			
																197200224L	197200224L1	197200224L2		197200224L3			
QPGo.X.3-6	0.37	0.50	0.70	3.3 3.5	220 230		33.3		30.4	27	13.7				✓	197200306S	197200306S1	197200306S2	UPON REQUEST				
																197200306L	197200306L1	197200306L2					
QPGo.X.3-9	0.55	0.75	0.93	4.4 4.6	220 230		50		45.6	40.5	20.6				✓	197200309S	197200309S1	197200309S2		197200309S3			
																197200309L	197200309L1	197200309L2		197200309L3			
QPGo.X.3-13	0.75	1.00	1.24	5.8 6.1	220 230		72.2		65.9	58.5	29.8				✓	197200313S	197200313S1	197200313S2		197200313S3			
						197200313L										197200313L1	197200313L2		197200313L3				
QPGo.X.3-19	1.10	1.50	1.66	7.8 8.0	220 230	105.5		96.3	85.5	43.5				✓	197200319S	197200319S1	197200319S2		197200319S3				
															197200319L	197200319L1	197200319L2		197200319L3				
QPGo.X.5-4	0.37	0.50	0.72	3.3 3.5	220 230	24.5			22	18.5	12.1			✓	197200504S	197200504S1	197200504S2	UPON REQUEST					
															197200504L	197200504L1	197200504L2						
QPGo.X.5-6	0.55	0.75	0.95	4.4 4.6	220 230	36.8			33	27.7	25			✓	197200506S	197200506S1	197200506S2	UPON REQUEST					
															197200506L	197200506L1	197200506L2						
QPGo.X.5-8	0.75	1.00	1.23	5.8 6.1	220 230	49.1			44	37	33.3			✓	197200508S	197200508S1	197200508S2		197200508S3				
															197200508L	197200508L1	197200508L2		197200508L3				
QPGo.X.5-13	1.10	1.50	1.70	7.8 8.0	220 230	79.7			71.5	60.1	54.2			✓	197200513S	197200513S1	197200513S2		197200513S3				
															197200513L	197200513L1	197200513L2		197200513L3				
QPGo.X.8-6	0.75	1.00	5.50	5.8 6.1	220 230	38.4				29	25	5		✓	197200806S	197200806S1	197200806S2	UPON REQUEST					
															197200806L	197200806L1	197200806L2						
QPGo.X.8-8	1.10	1.50	6.90	7.8 8.0	220 230	51.2				39	33	7		✓	197200808S	197200808S1	197200808S2		197200808S3				
															197200808L	197200808L1	197200808L2		197200808L3				

Total head in meters = H = dynamic total pressure

*Power Consumption, **Current Consumption
- Codes finishing with S are with DRP - Codes finishing with L are without DRP

Technical Specifications:

- **O2 motor range:** 0,37 - 1,1 kW
- 220-230V / 50Hz
- **Voltage tolerance 50 Hz from nominal:** +6% / -10% U_N
- **Degree of protection:** IP68
- **Insulation:** Cl. F
- **Rated ambient temperature:** 40° C

- **Required cooling flow:** min 8cm/sec
- **Max starts/h:** 150, equally distributed
- **Mounting:** vertical to horizontal, shaft upwards
- **Maximum immersion depth:** 100 m
- **Outlet diameter:** 1" ¼ G-F, 2" G-F
- **Allowed range of water PH:** 6,4-8,0
- **Protection requirements:** EN 60947-4-1

O2 SINGLE-PHASE ZDS OIL-COOLED MOTOR, WITH (✓) OR WITHOUT DRP AND TECHNOPOLYMER VERSION HYDRAULIC PART

Model	Shaft Power		P.C.*	C.C.**		V	Hydraulic data (n=2850 min ⁻¹)							DRP ✓	Cable 1.5m		Cable 15m		Cable 30m		Cable 45m	
	kW	HP		I _N (A)	m ³ /h l/min		0	0.6	1.5	2.4	4.2	6.0	Code		Code	Code	Code	Code	Code			
							0	10	25	40	70	100										
QPGo.P.1-8	0.25	0.33	0.59	2.9	220	Total head in meters = H= dynamic total pressure	50.2	44.4	18					✓	197300108S	197300108S1		197300108S2	UPON REQUEST			
				3.0	230										197300108L	197300108L1	197300108L2					
QPGo.P.1-12	0.37	0.50	0.72	3.3	220		75.4	66.6	27					✓	197300112S	197300112S1	197300112S2		197300112S3			
				3.5	230										197300112L	197300112L1	197300112L2		197300112L3			
QPGo.P.1-18	0.55	0.75	0.95	4.4	220		113	99.9	40.5					✓	197300118S	197300118S1	197300118S2		197300118S3			
				4.6	230										197300118L	197300118L1	197300118L2		197300118L3			
QPGo.P.1-25	0.75	1.00	1.24	5.8	220		157	138.8	56.3					✓	197300125S	197300125S1	197300125S2		197300125S3			
				6.1	230										197300125L	197300125L1	197300125L2		197300125L3			
QPGo.P.2-5	0.25	0.33	0.59	2.9	220		32	31.2	26.2	17					✓	197300205S	197300205S1	197300205S2	UPON REQUEST			
				3.0	230											197300205L	197300205L1	197300205L2				
QPGo.P.2-8	0.37	0.50	0.73	3.3	220		51.2	49.9	41.9	27.2					✓	197300208S	197300208S1	197300208S2		197300208S3		
				3.5	230											197300208L	197300208L1	197300208L2		197300208L3		
QPGo.P.2-12	0.55	0.75	0.97	4.4	220		76.8	74.9	62.9	40.8					✓	197300212S	197300212S1	197300212S2		197300212S3		
				4.6	230											197300212L	197300212L1	197300212L2		197300212L3		
QPGo.P.2-16	0.75	1.00	1.27	5.8	220		102.4	99.8	83.8	54.4					✓	197300216S	197300216S1	197300216S2		197300216S3		
				6.1	230											197300216L	197300216L1	197300216L2		197300216L3		
QPGo.P.2-24	1.10	1.50	1.70	7.8	220		153.6	149.8	125.8	81.6					✓	197300224S	197300224S1	197300224S2		197300224S3		
				8.0	230											197300224L	197300224L1	197300224L2		197300224L3		
QPGo.P.3-6	0.37	0.50	0.70	3.3	220		33.3		30.4	27	13.7				✓	197300306S	197300306S1	197300306S2	UPON REQUEST			
				3.5	230											197300306L	197300306L1	197300306L2				
QPGo.P.3-9	0.55	0.75	0.93	4.4	220		50		45.6	40.5	20.6				✓	197300309S	197300309S1	197300309S2		197300309S3		
				4.6	230											197300309L	197300309L1	197300309L2		197300309L3		
QPGo.P.3-13	0.75	1.00	1.24	5.8	220		72.2		65.9	58.5	29.8				✓	197300313S	197300313S1	197300313S2		197300313S3		
				6.1	230											197300313L	197300313L1	197300313L2		197300313L3		
QPGo.P.3-19	1.10	1.50	1.66	7.8	220		105.5		96.3	85.5	43.5				✓	197300319S	197300319S1	197300319S2		197300319S3		
				8.0	230											197300319L	197300319L1	197300319L2		197300319L3		
QPGo.P.5-4	0.37	0.50	0.72	3.3	220		24.5			22	18.5	12.1			✓	197300504S	197300504S1	197300504S2	UPON REQUEST			
				3.5	230											197300504L	197300504L1	197300504L2				
QPGo.P.5-6	0.55	0.75	0.95	4.4	220		36.8			33	27.7	25			✓	197300506S	197300506S1	197300506S2	UPON REQUEST			
				4.6	230											197300506L	197300506L1	197300506L2				
QPGo.P.5-8	0.75	1.00	1.23	5.8	220		49.1			44	37	33.3			✓	197300508S	197300508S1	197300508S2		197300508S3		
				6.1	230											197300508L	197300508L1	197300508L2		197300508L3		
QPGo.P.5-13	1.10	1.50	1.70	7.8	220		79.7			71.5	60.1	54.2			✓	197300513S	197300513S1	197300513S2		197300513S3		
				8.0	230											197300513L	197300513L1	197300513L2		197300513L3		