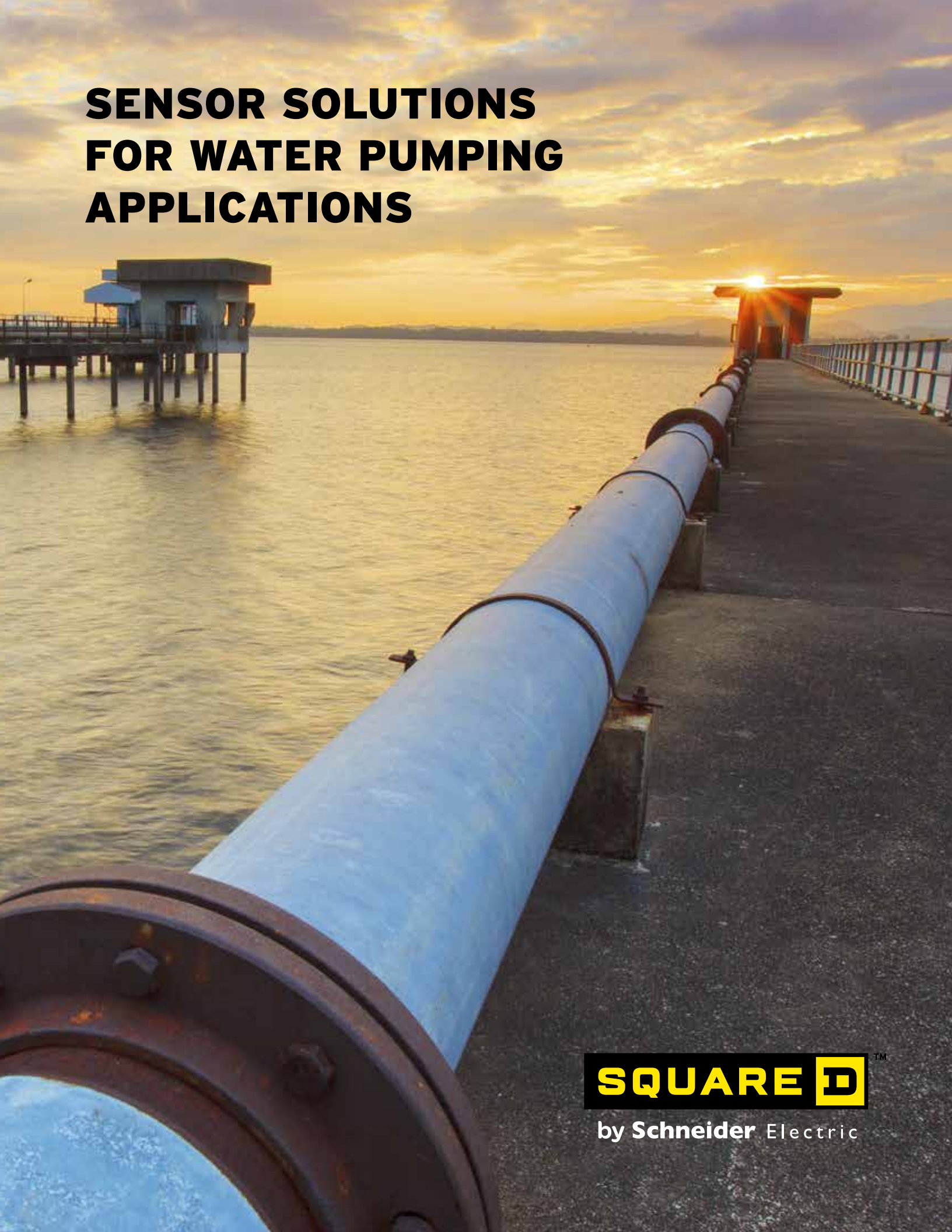


# SENSOR SOLUTIONS FOR WATER PUMPING APPLICATIONS



**SQUARE**  <sup>TM</sup>

by Schneider Electric

# A LEGACY OF INNOVATIVE DETECTION SOLUTIONS.

## **The birth of a brand**

The Detroit Fuse and Manufacturing Company, which was originally incorporated in 1903 as the McBride Manufacturing Company, is credited with the creation of the Square D logo. Their enclosed switches and other products were marked with a capital 'D' (for Detroit Fuse) inside a square. The products bearing this logo became so highly recognized and sought after that the company changed its name to Square D Company in 1917.

## **A reputation of dependability**

Over time, the Square D brand and its iconic logo became synonymous with safety, reliability, and the innovation built into their electrical distribution and control products, including the extensive Limit and Pressure Switch lines. Over 100 years later, the Square D brand lives on and is complemented by other dependable brands such as Telemecanique Sensors, making Schneider Electric a worldwide leader in Limit and Pressure Switch technology.

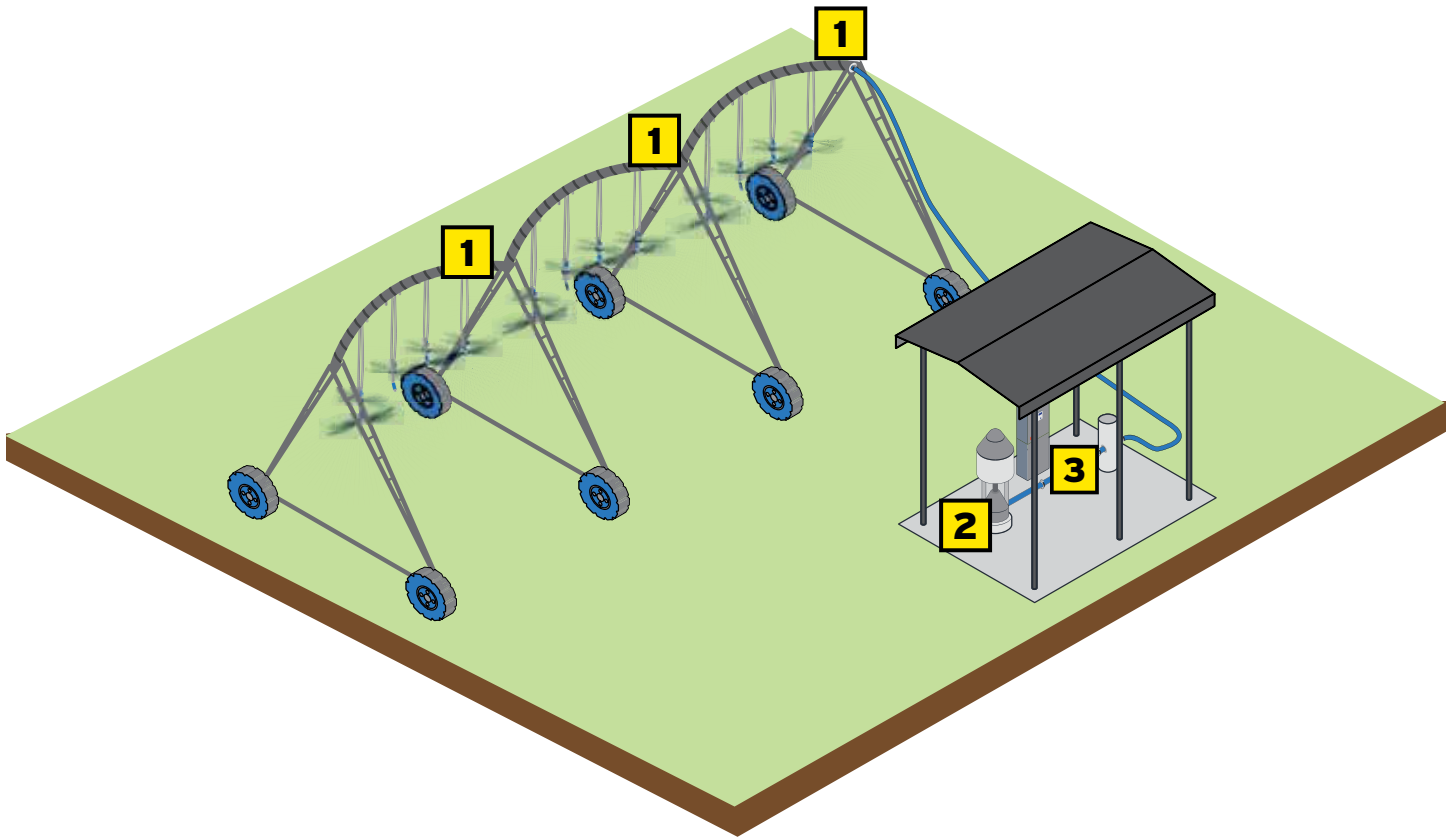
## **A continuing spirit of innovation**

Today, the Square D and Telemecanique Sensors brands are two of the core strengths of the Schneider Electric global offer. The same commitment to safety, reliability, and ingenuity that launched the Square D brand back in the early 1900s is still perpetuated today by those who have inherited and are building upon that rich, successful history.

For your Water Pumping application detection needs, look no further: Reliable classic solutions...advanced contemporary solutions...all from ONE sensor resource!



# IRRIGATION



## **1** Metallic Miniature Limit Switch

Controls the movement of the watering system

9007MS/ML



## **2** Commercial Water Pressure Switch

Controls pressure and powered water pumps

9013FSG



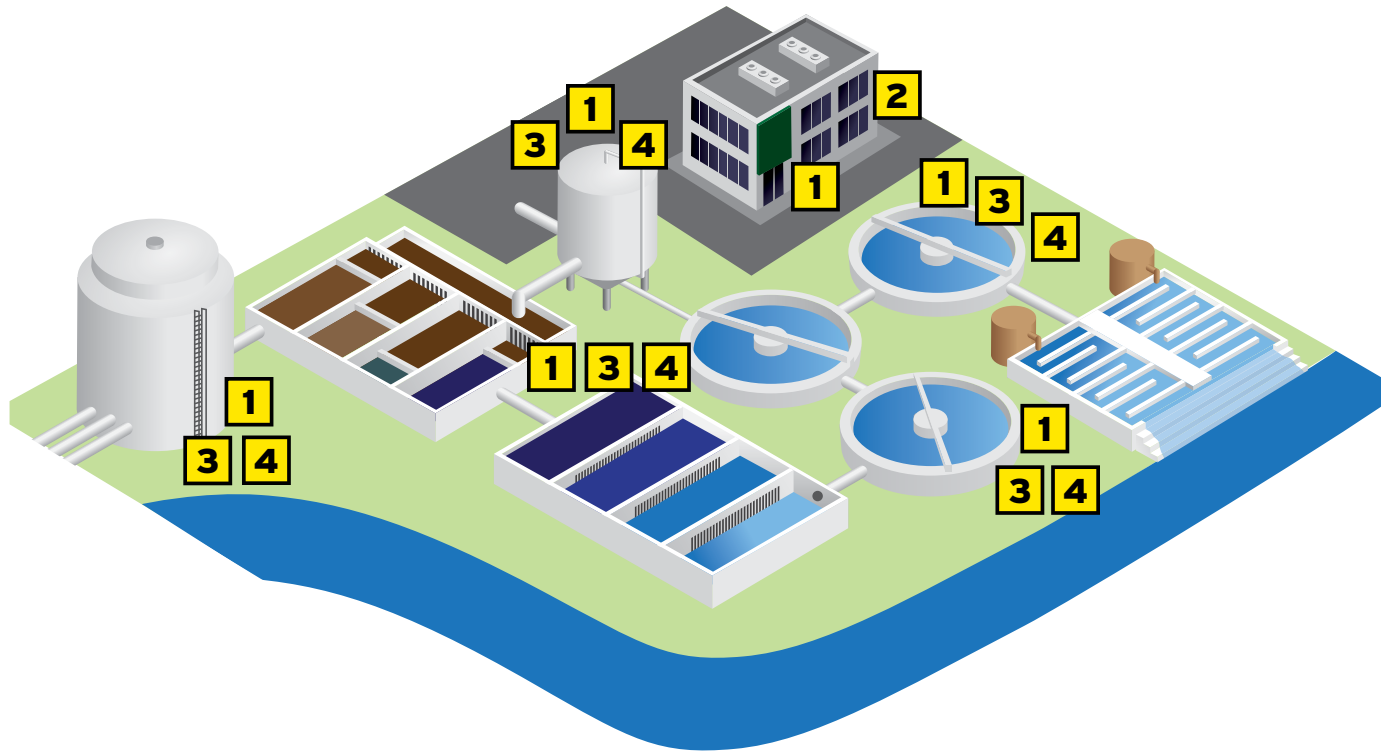
## **3** Pressure Sensor

Monitors water pressure

XMLP



# WATER/WASTEWATER



## 1 Float Switch

Detects water level to control the pump

9036, 9037, or 9038



## 2 Industrial Pressure Switch

Monitors and controls system pressure

9012G



## 3 Pressure Sensor

Monitors water pressure

XMLP



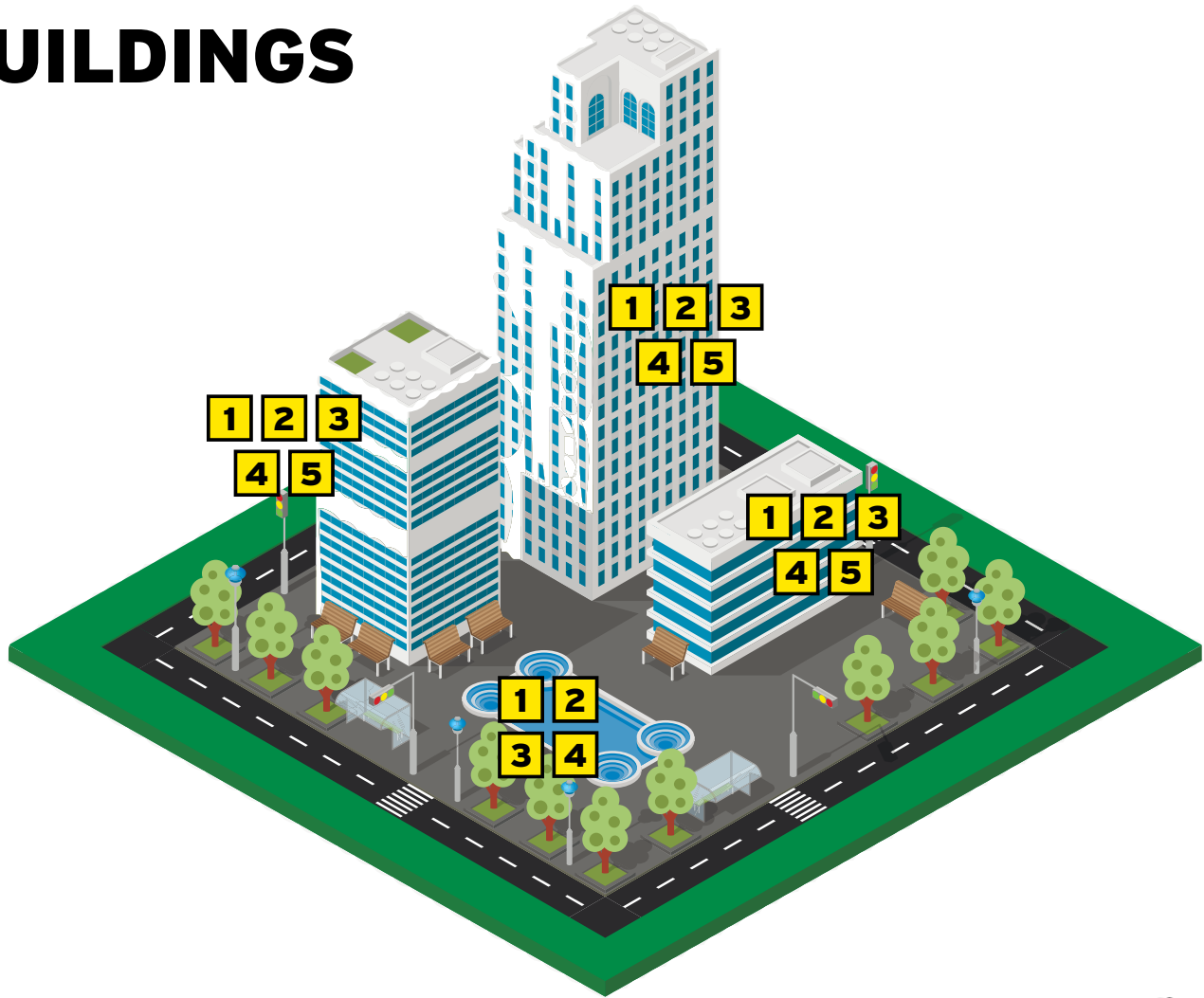
## 4 Commercial Water Pressure Switch

Controls pressure and powered water pumps

9013FSG



# BUILDINGS



## 1 Float Switch

Detects water level to control the pump

9036, 9037, or 9038



## 2 Industrial Pressure Switch

Monitors and controls system pressure

9012G



## 3 Pressure Sensor

Monitors water pressure

XMLP



## 4 Commercial Water Pressure Switch

Controls pressure and powered water pumps

9013FSG



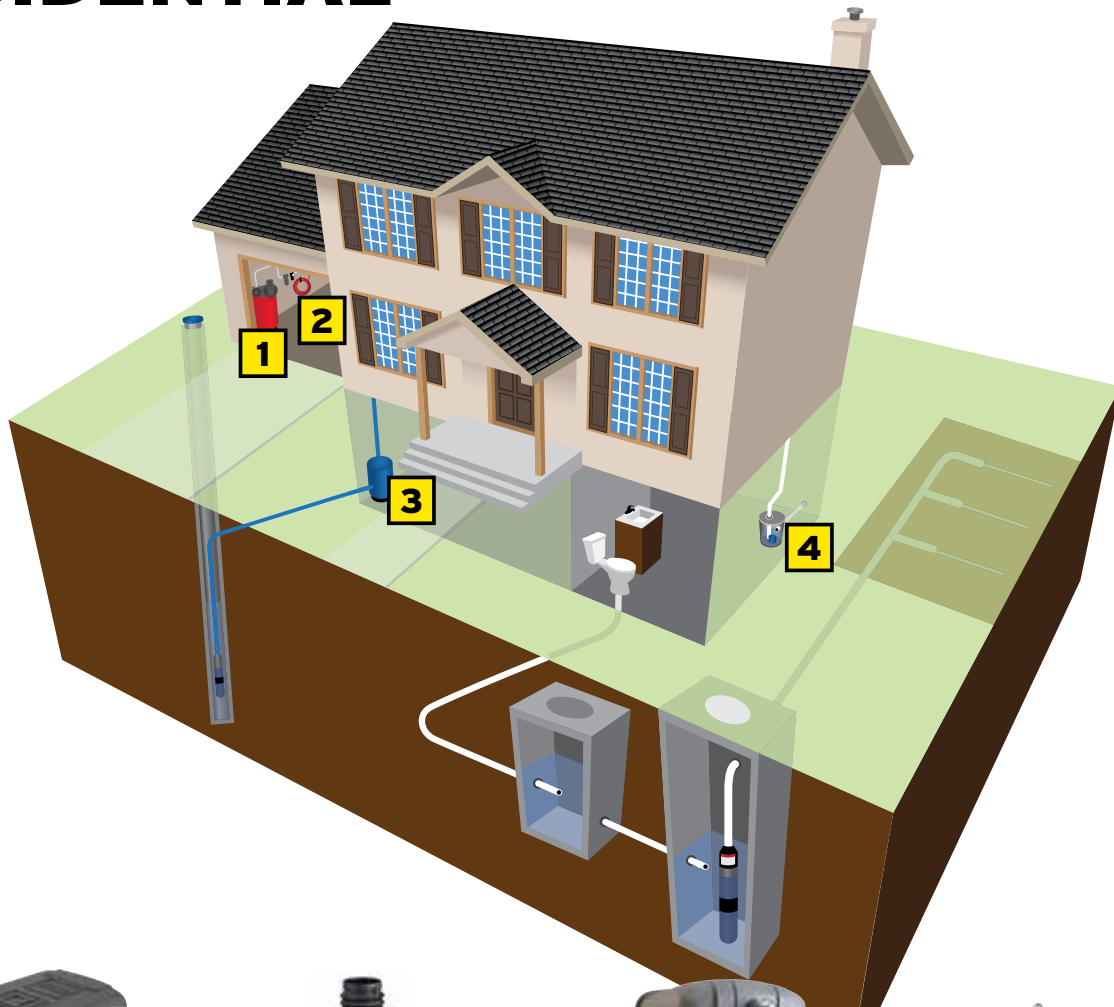
## 5 Commercial Air Compressor Switch

Controls air compressors and HVAC systems

9013FHG



# RESIDENTIAL



**1** Commercial Air Compressor Switch

Controls electrically driven air compressors

9013FHG



**2** Pressure Sensor

Monitors water pressure

XMLP



**3** Commercial Water Pressure Switch

Controls pressure and powered water pumps

9013FSG



**4** Float Switch

Detects water level to control the pump

9036, 9037, or 9038



# CHOOSE THE PRODUCT BEST-SUITED FOR YOUR APPLICATION

## Limit Switches

Since the creation of the first Square D brand fuse switch over 100 years ago, the Square D logo has meant quality, consistent performance, and durability. Our 9007 series of Square D Limit Switches are the perfect solution for controlling the movement of irrigation systems and many other water pumping application machine movements.



	Top Plunger	
	Form C	Form Z
<b>Silver</b>	9007MS01S0100	9007ML01S0100
<b>Gold</b>	9007MS01G0100	

	Parallel Roller Plunger	
	Form C	Form Z
<b>Silver</b>	9007MS02S0100	9007ML02S0100
<b>Gold</b>	9007MS02G0100	

	Rotary Lever, CW+CCW	
	Form C	Form Z
<b>Silver</b>	9007MS04S0100	9007ML04S0100
<b>Gold</b>	9007MS04G0100	

Other configurations are available: see [www.tesensors.com](http://www.tesensors.com)

## Commercial Water Pressure Switches

As the leader in pressure switches for the water and well industry for over 75 years, Schneider Electric's Square D brand provides the best in product quality, availability and service. Our 9013FSG switch is the industry's "gold standard" of water pressure switches and has made Square D synonymous with reliability. The 9013FSG switch is the ideal solution for starting or stopping a water pump.



Function	9013FSG2J20	9013FSG2J21	9013FSG2J24	9013FSG2J21M4	9013FSG2J24M4
<b>Cut-in</b>	20 psi	30 psi	40 psi	30 psi	40 psi
<b>Cut-out</b>	40 psi	50 psi	60 psi	50 psi	60 psi
<b>Optional features</b>	-	-	-	w/Low Pressure cut-off	w/Low Pressure cut-off

Other configurations are available: see [www.tesensors.com](http://www.tesensors.com)

The new Telemecanique Sensors XMLP Pressure sensor is optimized for those designing and building pumping equipment. Designed with a compact, stainless steel housing, this robust and durable pressure sensor is ideal for monitoring water pressure. The XMLP is NSF 61 certified for use with drinking water.

Specifications below are for models with 1/4"-18NPT Male fluid entry. For more options of fluid entry, output and size, visit [www.tesensors.com](http://www.tesensors.com)



Analog output	0...100psi	0...150psi	0...300psi	0...600psi	0...1000psi	0...2000psi	0...3000psi	0...6000psi
<b>4-20mA</b>	XMLP100PD230	XMLP150PD230	XMLP300PD230	XMLP600PD230	XMLP1K0PD230	XMLP2K0PD230	XMLP3K0PD230	XMLP6K0PD230
<b>0-10V</b>	XMLP100PD730	XMLP150PD730	XMLP300PD730	XMLP600PD730	XMLP1K0PD730	XMLP2K0PD730	XMLP3K0PD730	XMLP6K0PD730
<b>0.5-4.5V</b>	XMLP100PD130	XMLP150PD130	XMLP300PD130	XMLP600PD130	XMLP1K0PD130	XMLP2K0PD130	XMLP3K0PD130	XMLP6K0PD130

## Float Switches

As a market leader in water pressure monitoring and control, Square D offers a complete line of float switches to detect the rise or fall of liquid levels in various types of containers. Our offer includes switches for open tank applications (9036), closed tank applications (9037) and mechanical alternators (9038).



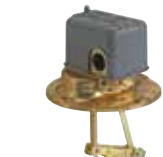
Float Switches - Open Tank	General Purpose		Heavy Duty	
Contact Action	Close on Liquid Rise	Open on Liquid Rise	Close on Liquid Rise	Open on Liquid Rise
<b>NEMA 1 Enclosure</b>	9036DG2	9036DG2R	9036GG2	9036GG2R
<b>NEMA 4 Enclosure</b>	9036DW31	9036DW31R	9036GW1	9036GW1R



Open Tank Float Accessory Kits	Pedestal Style	Plastic Center Hole Float	Aluminum rod, with float stops	Complete with float and rod assembly	5' Brass rod, tapped at top #304SS
<b>NEMA 1 Enclosure</b>	9036FG30	9049A60	9049A61	9036FGCP	9049A6

Float Switches - Closed Tank Flange Mounted				
Post Length	2.63 inches		4.69 inches	
Water Level Change	Minimum	Maximum	Minimum	Maximum
<b>NEMA 1 Enclosure</b>	9037EG8	9037EG9	9037EG10	9037EG13
<b>NEMA 4 Enclosure</b>	9037EW8	9037EW9	9037EW10	9037EW13

Float Switches - Screw In Bushing						
<b>Offset and water level change</b>	90° offset 6 - 11.5 in.	90° offset 6 - 11.5 in.	90° offset 4.25 - 8.25 in.	90° offset 4.25 - 8.25 in.	45° offset 2 - 5 in.	45° offset 2 - 5 in.
<b>Float position</b>	Left	Right	Left	Right	Left	Right
<b>NEMA 1 Enclosure</b>	9037HG32	9037HG31	9037HG30	9037HG39	9037HG34	9037HG33
<b>NEMA 4 Enclosure</b>	9037HW32	9037HW31	9037HW30	9037HW39	9037HW34	9037HW33





Mechanical Alternators - 9038	Open and Sump Tank	Screw In Bushing		
Float position, Water Level Change min/max inches		Right 6.5 - 13 in.	Left 6.5 - 13 in.	Left 4.75 - 9.25 in.
NEMA 1 Enclosure	9038AG1	9038CG31	9038CG32	9038CG36
NEMA 4 Enclosure	9038AW1	9038CW31	9038CW32	9038CW36
NEMA 7 & 9 Enclosure	9038AR1	9038CR31	9038CR32	9038CR36



Float Kits	#304SS Float	#316SS Float	#304SS Float	#316SS Float
Diameter / Length	3.62 Diameter 4.5 Length	3.62 Diameter 4.5 Length	2.5 Diameter 7 Length	2.5 Diameter 7 Length
Float Kits	9049EF1	9049EF2	9049HF3	9049HF4

## Industrial Pressure Switches

Schneider Electric offers a range of Industrial Pressure Switches control circuit rated for pneumatic and hydraulic systems. A variety of products are available that include open style, NEMA 1, 4, and 7 & 9 enclosures; single stage, dual stage, and differential switches. These switches are used to interface pneumatic or hydraulic systems with electrical control systems. Rugged, robust construction provides a long life and years of uninterrupted, worry-free service. Adjustable differential and diaphragm actuated. NEMA 4, 4X 13 Enclosure.



Range on Decreasing Pressure	Adjustable Differential Approx at Mid-Range	Max Pressure	SPDT	DPDT
0.2 - 10	0.6 - 2	100 psi	9012GAW1	9012GAW21
1.0 - 40	1.6 - 8	100 psi	9012GAW2	9012GAW22
1.5 - 75	3.5 - 15	240 psi	9012GAW4	9012GAW24
3.0 - 150	6.0 - 30	475 psi	9012GAW5	9012GAW25



Range on Decreasing Pressure	Adjustable Differential Approx at Mid-Range	Max Pressure	NEMA 1 Enclosure	Open Style
0.2 - 10	0.4 - 0.9	100 psi	9012GNG1	9012GNO1
1.0 - 40	1.2 - 3.6	100 psi	9012GNG3	9012GNO3
1.5 - 75	2.2 - 6.6	240 psi	9012GNG4	9012GNO4
3.0 - 150	4.2 - 13.2	475 psi	9012GNG5	9012GNO5

## Commercial Air Compressor Switches

Pumptrol Air Compressor switches from Square D are ideal for controlling air compressors and HVAC systems. These reliable switches are factory set with cut-out pressure settings of 100, 125 or 150 psi. Fixed differential.



Function	9013FHG2J27	9013FHG12J52M1X	9013FHG14J52M1X
Cut-in	80 psi	95 psi	95 psi
Cut-out	100 psi	125 psi	125 psi
Optional features		Auto-Off Lever Pressure release valve	Auto-Off Lever Pressure release valve 1/4" 4-way flange

Other configurations are available: see [www.tesensors.com](http://www.tesensors.com)

## Other Pressure Control Solutions

The new **XMLR** compact switch from Telemecanique Sensors makes machine pressure control Simply easy!

**Easy to install** - The XMLR is one of the most compact pressure switches on the market. The installation requires minimum time and effort. The body of the switch, after mounting on the fluid entry, can be rotated. The display can be reversed to ensure easy reading from any position.

**Easy to set up** - The ergonomic design of OsiSense XMLR sets the new standard for configuration ease – the intuitive menu can be navigated easily using only two pushbuttons.

**Easy to maintain** - At each power on, all segments of the OsiSense XMLR display briefly light up. This allows the operator to quickly confirm that the display is operating correctly.

Are you looking for an easy way to read and control pressure data when the conduit is hidden from view?

Discover the new **ZMLP**, designed with the same benefits as the XMLR. This easy-to-use display can be linked to a separate pressure transmitter, delivering a clear view of accurate pressure information even if the conduit runs in a hard-to-access location. A solution for virtually every machine configuration!



1-888-SQUARED

Discover our complete offer: [www.tesensors.com](http://www.tesensors.com) or contact your local sales agency

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