

SENSOR SELECTION GUIDE

No matter what the monitoring application is, Franklin Electric offers a sensor solution tailored to the specific requirements of each application.



Does your application require the need to tell the difference between fuel and water?

Discriminating Sensors are able to detect and send an alarm signal if the presence of liquid is detected and can also differentiate between hydrocarbons and non-hydrocarbons.

Does your application only require the need to detect any type of liquid?

Non-Discriminating Sensors are able to detect and send an alarm signal if the presence of liquid is detected.

What type of EVO™ are you connecting to?

Select the appropriate sensor model number that's compatible with your EVO™ using the chart below.

										
Sensor	Discriminating Dispenser Sump Sensor	Discriminating Turbine Sump Sensor	Discriminating Magnetostrictive Sump Sensor	Universal Liquid Sensor	Universal Hydrostatic Sensor	Electro-Optic Interstitial Sensor	Discriminating Interstitial Sensor	Hydrostatic Interstitial Sensor	Corrosion Detection Sensor	Desiccant Pack Sensor
Discriminating Capability	✓	✓	✓				✓			
Non-Discriminating				✓	✓	✓		✓		
Turbine Sump Applications		✓	✓	✓					✓	✓
Dispenser Sump Applications	✓		✓	✓					✓	
Tank Interstitial Space Applications					✓	✓	✓	✓		
Tank Ullage Applications									✓	
Position Sensitive (Tamper Protection)			✓							
Hydrostatic Monitoring Capability					✓			✓		
EVO™ 200 / 400 Model Number	FMP-DDS-UD	FMP-DTS-U	TSP-DMS	FMP-ULS	FMP-UHS	FMP-EIS-U	FMP-DIS-U	FMP-HIS-U FMP-HIS-XL-U	FMP-CDS-U	FMP-DPS-U
EVO™ 550 / 5000 Model Number*	FMP-DDS	FMP-DTS	TSP-DMS	FMP-ULS	FMP-UHS	FMP-EIS	FMP-DIS	FMP-HIS FMP-HIS-XL	--	--
EVO™ 600 / 6000 Model Number*	FMP-DDS-UD FMP-DDS	FMP-DTS-U FMP-DTS	TSP-DMS	FMP-ULS	FMP-UHS	FMP-EIS-U FMP-EIS	FMP-DIS-U FMP-DIS	FMP-HIS-U FMP-HIS-XL-U FMP-HIS FMP-HIS-XL	FMP-CDS-U	FMP-DPS-U
Typical Application	Dispenser sump applications requiring discriminating capabilities	Turbine sump applications requiring discriminating capabilities	Containment sump applications requiring discriminating capabilities with tamper protection regulations in place	Containment sump and steel double wall tank applications	Brine-filled double wall containment sump and tank applications	Dry double wall steel and wrap-around fiberglass tank applications	Dry double wall steel and wrap-around fiberglass tank applications requiring discriminating capabilities	Brine-filled double wall tank applications requiring high brine vs. low brine detection	Monitoring for corrosive environments	Monitoring remaining life of the Desiccant Pack(s)

EVO™ 600/6000, EVO™ 550/5000 may support additional sensors. Sensors with “-U” that are used with the EVO™ 600/6000 wire to either a Universal Device Protocol Module (FMP-UDP9) or a Probe Module (TS-PRB). FMP-DDS, FMP-TDS, FMP-EIS, FMP-DIS, FMP-HIS and FMP-HIS-XL all require a 3-Wire Sensor Module (TS-3WSNS).

DISCRIMINATING DISPENSER SUMP SENSOR (DDS)

The DDS is a discriminating dispenser sump sensor that detects the presence of liquid and hydrocarbons in dispenser containment sumps.

HIGHLIGHTS

- Uses magnetic float switches to detect liquid at two levels.
- Innovative polymer strip detects hydrocarbons along sensor.
- Compatible with common fuels and chemicals.
- Detects liquid at 1½" (38 mm) from base.
- Digitally encoded status information sent from microcomputer to the EVO™ console.
- Alarms to indicate liquid in sump, hydrocarbon detected, sump full, and sensor malfunction.
- Variety of mounting methods possible depending on location. Bracket provided for quick installation.
- An additional wire connection is available for adding a 2-wire simple apparatus to the FMP-DDS-UD sensor.
 - Software in the EVO™ Series will recognize the additional simple apparatus and monitor both inputs.

ORDERING INFORMATION

Model	Description
FMP-DDS-UD	Discriminating dispenser sump sensor with simple apparatus connection (EVO™ 200/400, EVO™ 600/6000)
FMP-DDS	Discriminating dispenser sump sensor (EVO™ 550/5000, EVO™ 600/6000)
TSP-KS	Unistrut™ mounting kit

Note: The FMP-DDS-UD communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB). The FMP-DDS communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 3-Wire Sensor Module (TS-3WSNS).



DISCRIMINATING TURBINE SUMP SENSOR (DTS)

The DTS is a discriminating turbine sump sensor that detects the presence of liquid and hydrocarbons in tank containment sumps.

HIGHLIGHTS

- Uses magnetic float switches to detect liquid at two levels.
- Innovative polymer strip detects hydrocarbons along sensor.
- Compatible with common fuels and chemicals.
- Detects liquid at 1½" (38 mm) from base.
- Digitally encoded status information sent from microcomputer to the EVO™ console.
- Alarms to indicate liquid in sump, hydrocarbon detected, sump full, and sensor malfunction.

ORDERING INFORMATION

Model	Description
FMP-DTS-U	Discriminating turbine sump sensor (EVO™ 200/400, EVO™ 600/6000)
FMP-DTS	Discriminating turbine sump sensor (EVO™ 550/5000, EVO™ 600/6000)
TSP-KS	Unistrut™ mounting kit

Note: The FMP-DTS-U communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB). The FMP-DTS communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 3-Wire Sensor Module (TS-3WSNS).



DISCRIMINATING MAGNETOSTRICTIVE SENSOR (DMS)

The DMS sensor is a fast-acting, discriminating sensor that utilizes magnetostrictive position measurement technology to provide reliable monitoring of dispenser pans and containment sumps. Utilizing one float to measure water level and one float to measure product level, the DMS allows for the system to have programmable water and product alarm points. The DMS also has anti-tamper capability that notifies the system if the sensor is moved from its installed position.

HIGHLIGHTS

- Utilizes proven magnetostrictive technology.
- Water warning, water alarm, and product alarm.
- Tamper protection feature will alarm if sensor is moved from installed position.
- Alarms and recovers quickly when liquids are present.



ORDERING INFORMATION

Model	Description
TSP-DMS-12	Discriminating magnetostrictive sensor, monitors 12" (305 mm) of liquid & measures 22" (559 mm) in length (all EVO™ Series)
TSP-DMS-24	Discriminating magnetostrictive sensor, monitors 24" (610 mm) of liquid & measures 34" (864 mm) in length (all EVO™ Series).
TSP-KS	Unistrut™ mounting kit

Note: The TSP-DMS communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the Probe Module (TS-PRB).

UNIVERSAL LIQUID SENSOR (ULS)

Based on float-switch technology and made of chemically-resistant materials, the ULS is a low-cost sensor that can be installed in sumps, dispenser pans, steel double wall tanks or other locations where the presence of liquid indicates a leak has occurred.

HIGHLIGHTS

- Highly reliable float technology and closed output circuit ensures that leaks are detected.
- Chemical-resistant materials assure compatibility with most liquids.
- ½" NPT thread is provided on the compression gland fitting attached to the sensor's cable, allowing it to be suspended from standard electrical boxes and fittings. The sensor may be positioned vertically by adjusting cable length.
- For steel interstitial tanks, ULS is lowered into the opening provided on the tank and is suspended by optional TSP-KI2 installation kit. Other mounting methods available depending upon application and location.



ORDERING INFORMATION

Model	Description
FMP-ULS	Universal liquid sump sensor (all EVO™ Series)
TSP-ULS	Universal liquid sump sensor (for use with S940 only)
TSP-KI2	Interstitial sensor riser cap kit for 2" (51 mm) riser pipes

Note: The FMP-ULS communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9). The FMP-ULS also communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 2-Wire Sensor Module (TS-2WSNS) or the 3-Wire Sensor Module (TS-3WSNS).

UNIVERSAL HYDROSTATIC SENSOR (UHS)

The UHS uses float switch technology to continuously monitor liquid-filled double wall containment sumps and tanks. Normally submerged, the single float UHS will provide an indication if there is a loss of monitoring liquid.

HIGHLIGHTS

- Highly reliable float technology and closed output circuit ensures that leaks are detected.
- Chemical-resistant materials.
- The sensor can be installed into the reservoir of a liquid filled double wall containment sump. The sensor must be installed in a vertical position at a level where it is normally submerged.
- The UHS sensor will alert if the liquid level drops below the bottom of the sensor.



ORDERING INFORMATION

Model	Description
FMP-UHS	Universal hydrostatic sensor (all EVO™ Series)
TSP-UHS	Universal hydrostatic sensor (for use with S940 only)
HM-KIT	Hydrostatic monitoring installation kit. Includes: flexible brine tube, sensor housing clamp, sensor housing, sensor cap, and hardware

Note: The FMP-UHS communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9). The FMP-UHS also communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 2-Wire Sensor Module (TS-2WSNS) or the 3-Wire Sensor Module (TS-3WSNS).

ELECTRO-OPTIC INTERSTITIAL SENSOR (EIS)

Utilizing electro-optic technology and made of chemically-resistant polysulfone plastic, the EIS may be installed in sumps, double wall tanks, or other locations where the presence of liquid indicates a leak has occurred.

HIGHLIGHTS

- Highly accurate electro-optic technology and closed output circuit ensures that leaks are detected.
- Chemical-resistant materials.
- Can be installed in fiberglass or steel double wall tanks.
- Utilizes light-emitting diodes and prisms to indicate if a leak has occurred.
- For fiberglass tanks, the EIS is pulled into the interstitial space using a “fish” string or wire. For steel interstitial tanks, the EIS is lowered directly to the bottom of the interstitial space through a 2" NPT fitting provided for that purpose on the tank. Optional installation kits are available which include a riser cap and other parts required to complete installation.



ORDERING INFORMATION

Model	Description
FMP-EIS-U	Electro-optic interstitial sensor (EVO™ 200/400, EVO™ 600/6000)
FMP-EIS	Electro-optic interstitial sensor (EVO™ 550/5000, EVO™ 600/6000)
TSP-KI2	Interstitial sensor riser cap kit for 2" riser pipes
TSP-KW4	Interstitial sensor riser cap kit for 4" riser pipes

Note: The FMP-EIS-U communicates with EVO™ 600/ 6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB). The FMP-EIS communicates with the EVO™ 600/6000, EVO™ 550/5000 using the 3-Wire Sensor Module (TS-3WSNS).

HORIZONTAL FLOAT SWITCH SENSOR (HFS)

The HFS is a 2-wire, non-discriminating liquid sensor designed for liquid detection in dry fiberglass tank interstitial spaces.

HIGHLIGHTS

- Highly reliable magnetic-float/reed-switch technology.
- Chemical-resistant materials.
- Easily fits tight interstitial spaces.
- Rounded design makes it easy to remove for cleaning and reinstall after an alarm condition has been triggered or for maintenance and testing.
- For fiberglass tanks, the sensor is pulled into the interstitial space using a “fish” string wire. Optional installation kits are available which include a riser cap and other parts required to complete the installation.



ORDERING INFORMATION

Model	Description
FMP-HFS2	Horizontal float switch sensor (EVO™ 550/5000, EVO™ 600/6000)
TSP-KI2	Interstitial sensor riser cap kit for 2" riser pipes
TSP-KW4	Interstitial sensor riser cap kit for 4" riser pipes

Note: The FMP-HFS2 communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 2-Wire Sensor Module (TS-2WSNS) or the 3-Wire Sensor Module (TS-3WSNS). The FMP-HFS2 cannot communicate with the Universal Device Protocol Module (FMP-UDP9) or the Probe Module (TS-PRB).

DISCRIMINATING INTERSTITIAL SENSOR (DIS)

The DIS installs in the interstitial space of steel and fiberglass double wall tanks and sumps and detects the presence of various liquids in tanks as well as sumps and other locations.

HIGHLIGHTS

- Uses light beam traveling through probe to determine if sensor is wet.
- Microprocessor inside sensor interprets readings and communicates data to the EVO™ Series.
- Fail-safe digital communications with built-in alarm if sensor malfunctions.
- Alarms indicate petroleum present, water present, and sensor malfunction.
- For fiberglass tanks, the DIS is pulled into the interstitial space using a “fish” string or wire.
- For steel interstitial tanks, the DIS is lowered directly to the bottom of the interstitial space through a 2" NPT fitting provided for that purpose on the tank. Optional installation kits are available which include a riser cap and other parts required to complete installation.



ORDERING INFORMATION

Model	Description
FMP-DIS-U	Discriminating interstitial sensor (EVO™ 200/ 400, EVO™ 600/6000)
FMP-DIS	Discriminating interstitial sensor (EVO™ 550/5000, EVO™ 600/6000)
TSP-KI2	Interstitial sensor riser cap kit for 2" riser pipes
TSP-KW4	Interstitial sensor riser cap kit for 4" riser pipes

The FMP-DIS-U communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB). The FMP-DIS communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 3-Wire Sensor Module (TS-3WSNS).

HYDROSTATIC INTERSTITIAL SENSOR (HIS)

The HIS detects leaks in double wall tanks where the interstitial space is filled with a liquid brine solution. The polyester, Nitrile, and epoxy construction is compatible with all types of brine.



HIGHLIGHTS

- Versatile sensor for virtually all fiberglass double wall tanks equipped for hydrostatic leak detection.
- Microcomputer monitors liquid at varying levels within tanks and relays digitally encoded status information via the fail-safe sensor digital communication system to an EVO™, alerting of any alarm conditions.
- For installation, lower the HIS to the bottom of the brine reservoir of double wall tank. The normal brine level should reside half way up the sensor. Sensors include the TSP-KV4 vented 4" riser cap.

Note: The FMP-HIS-U/ FMP-HIS-XL-U communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB). The FMP-HIS/ FMP-HIS-XL communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 3-Wire Sensor Module (TS-3WSNS).

**One TSP-KV4 is already included with each HIS or HIS-XL sensor.*

ORDERING INFORMATION

Model	Description
FMP-HIS-U	Hydrostatic interstitial sensor, 11" (EVO™ 200/400, EVO™ 600/6000)
FMP-HIS-XL-U	Hydrostatic interstitial sensor, 21" (EVO™ 200/400, EVO™ 600/6000)
FMP-HIS	Hydrostatic interstitial sensor, 11"* (EVO™ 550/5000, EVO™ 600/6000)
FMP-HIS-XL	Hydrostatic interstitial sensor, 21"* (EVO™ 550/5000, EVO™ 600/6000)
TSP-KV4*	Hydrostatic sensor vented riser pipe cap kit for 4" riser pipes

HIGH PRODUCT LEVEL SENSOR (HLS)

The HLS level sensor is an overfill prevention switch that may be adjusted to operate over a wide range of levels. The HLS is based on float-switch technology and is made of chemical-resistant materials to assure compatibility with most liquids.



HIGHLIGHTS

- Each sensor is supplied with jacketed cable 5' in length.
- The normally-closed output circuit provides supervised operation, ensuring that broken wires and similar failures will not go undetected.
- A small magnetically-activated read switch is located inside the body of the sensor. Tiny magnets are positioned inside a lightweight float which is free to move up and down along the shaft so that the magnets are below the read switch. When the sensor is immersed in liquid, the float rises and the magnet activates the read switch, signaling to the EVO™ that the high limit has been reached.

Note: The FMP-HLS communicates with the EVO™ 550/5000 and EVO™ 600/6000 using the 2-Wire Sensor Module (TS-2WSNS) or the 3-Wire Sensor Module (TS-3WSNS). The FMP-HLS cannot communicate with the Universal Device Protocol Module (FMP-UDP9) or the Probe Module (TS-PRB).

ORDERING INFORMATION

Model	Description
TSP-HLS-15	High product level sensor, 15" long, installed in tank (EVO™ 550/5000, EVO™ 600/6000)
TSP-HLS-15/SS	High product level sensor, stainless steel 15" long, installed in tanks containing alternative fuels (EVO™ 550/5000, EVO™ 600/6000)
TSP-HLS-30	High product level sensor, 30" long, installed in tank (EVO™ 550/5000, EVO™ 600/6000)
TSP-HLS-30/SS	High product level sensor, stainless steel 30" long, installed in tanks containing alternative fuels (EVO™ 550/5000, EVO™ 600/6000)

CORROSION CONTROL™ CORROSION DETECTION SENSOR (CDS)

As part of the Corrosion Control™ System the Corrosion Detection Sensor (CDS) provides automated notification of a corrosive environment in the tank ullage space. This notification helps keep the fuel system running at peak performance and avoid costly maintenance, equipment replacement, downtime, and system failure caused by excessive corrosion.

HIGHLIGHTS

- Detects the presence of corrosion on a sacrificial sample and provides an alarm.
- Protects the tank ullage from the formation of corrosion which can lead to fuel system deterioration.
- Displays a level reading for corrosion index via the EVO™ with programmable alarm types including:
 - Corrosive Environment Present
 - Corrosion Sensor Sample Error
 - Corrosion Sample Needs Replacement
- Compatible with all blends of gasoline, diesel, and Ethanol.
- EVO™ Series compatibility:
 - EVO™ 200/400
 - EVO™ 600/6000



ORDERING INFORMATION

Corrosion Control™ Corrosion Detection Sensor

Model	Description
FMP-CDS-U	Corrosion Detection Sensor (EVO™ 200/400, EVO™ 600/6000)
FMSP-RDS1	Replacement detection screen, qty 1
FMSP-RDS10	Replacement detection screen, qty 10

Note: The FMP-CDS-U communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB).

CORROSION CONTROL™ DESICCANT PACK SENSOR (DPS)

As part of the Corrosion Control™ System, the Desiccant Pack Sensor provides remote monitoring of the remaining life of the Desiccant Pack via an EVO™ for efficient maintenance. The Desiccant Pack absorbs humidity from the sump environment before it turns into corrosion-causing moisture.

HIGHLIGHTS

- The Desiccant Pack Sensor provides the percent of remaining life of the Desiccant Pack.
- The Desiccant Pack Sensor hangers allow for multiple mounting options and can accommodate 1, 2, or 4 Desiccant Packs.
- EVO™ Series compatibility:
 - EVO™ 200/400
 - EVO™ 600/6000
- EVO™ data displayed:
 - Desiccant % remaining.
 - Sensor status (Ok, Desiccant Near Saturation, Desiccant Saturated - Service Needed, Desiccant Missing, Desiccant Sensor Overload).
 - Trend (Active Drying - Desiccant is actively absorbing water from environment or Passive Drying - Desiccant is holding required humidity level).



ORDERING INFORMATION

Model	Description
FMP-DPS-U	Desiccant Pack Sensor with single and multi-pack hanger and installation kit
407750906	Corrosion Control™ Desiccant Pack, includes (6) packs and (6) cable ties

Note: The FMP-DPS-U communicates with EVO™ 600/6000 using the Universal Device Protocol Module (FMP-UDP9) or Probe Module (TS-PRB).

SENSOR INSTALLATION ACCESSORIES

INTERSTITIAL SENSOR RISER CAP INSTALLATION KIT

Installation kit for installing the sensors in dry interstitial spaces with 2" (5 cm) riser pipe openings. The cap is compression-fit into the riser pipe via the use of a lever.

HIGHLIGHTS

- Supplied with a cord grip and butt splices for wiring connections.
- Provided with security holes that fit a padlock to prevent unauthorized access into the riser pipe.

ORDERING INFORMATION

Model	Description
TSP-KI2	Interstitial sensor riser cap kit for 2" (5 cm) riser pipes



HYDROSTATIC SENSOR VENTED RISER CAP INSTALLATION KIT

Vented installation kit for use with the FMP-HIS-U or FMP-HIS-XL-U sensor installed in a 4" (10 cm) reservoir opening on double wall fiberglass tanks. The cap is compression-fit into the riser pipe via the use of a lever.

HIGHLIGHTS

- Supplied with a cord grip and butt splices for wiring connections.
- Provided with security holes that fit a padlock to prevent unauthorized access into the riser pipe.

ORDERING INFORMATION

Model	Description
TSP-KV4	Hydrostatic sensor vented riser cap kit for 4" (10 cm) riser pipes



INTERSTITIAL RISER CAP INSTALLATION KIT

Installation kit for installing sensors in a dry tank interstitial with a 4" (10 cm) riser. The interstitial/monitoring cap is compression-fit into the riser pipe via the use of a lever.

HIGHLIGHTS

- Supplied with a cord grip and butt splices for wiring connections.
- Provided with security holes that fit a padlock to prevent unauthorized access into the riser pipe.

ORDERING INFORMATION

Model	Description
TSP-KW4	Interstitial pipe riser cap kit for 4" (10 cm) riser pipes



UNISTRUT® MOUNTING KIT

Installation kit for installing the DDS, DTS, and DMS sensors in sumps.

HIGHLIGHTS

- Easily customized to fit virtually any sump by cutting the Unistrut® assembly to desired length.
- Provided with 2", 3", and 4" pipe clamps for mounting to sump piping.
- Sensor location easily adjusted by the unique sliding feature of the Unistrut® assembly.

ORDERING INFORMATION

Model	Description
TSP-KS	Unistrut® mounting kit



DIRECT BURIAL SPLICE CONNECTOR KITS

For direct burial cable applications or when weatherproof junction boxes are not used.

HIGHLIGHTS

Each direct burial splice connector kit includes a receptacle, three splice connectors, and epoxy for the dispensing tool.

ORDERING INFORMATION

Model	Description
TSP-DB1	One direct burial splice connector kit
TSP-DB10	Pack of 10 direct burial splice connector kits
TSP-DBTOOL	Epoxy dispensing tool



SPLICE CONNECTORS

Save time and ensure accurate wire connections with splice connectors. Available in either 22-14 AWG (blue) or 26-19 AWG (red) options, both splice connector models employ a specially designed wire insulation displacement contact to make a reliable electrical connection to each wire.

HIGHLIGHTS

- Three ports accept two or three conductors for splicing.
- Includes a factory-installed sealant to protect against corrosion and seal out moisture.
- Self-stripping, flame retardant, and moisture resistant.

ORDERING INFORMATION

Model	Description
TSP-KW30	22-14 AWG (blue) splice connectors, 30 pack
FMP-CON30	26-19 AWG (red) compact splice connectors, 30 pack



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DC400 DISPENSING CUTOFF SYSTEM

The DC400 dispensing cutoff system is a stand-alone, solid state two-part system which includes a controller and sensor, designed to automatically shut down product flow if liquid is detected inside containment spaces. Ideal for retrofit applications, the DC400 allows for easy compliance with new and evolving regulations, without the added expenses of shutting down your site to break concrete for new conduit and wiring installation. The DC400 can be mounted inside any turbine sump to provide complete pump shut down or mounted directly into dispenser sumps, allowing only the affected dispenser to be shut down as liquid is detected.

HIGHLIGHTS

- Automatically stops fuel from dispensing in the event of liquid detection.
- Easily installed in either turbine or dispenser sumps.
- Ideal for retrofit applications as system connects to existing turbine or dispenser wiring, eliminating the need to pull new wires or break concrete.

Application

Containment sump liquid detection resulting in dispensing cutoff.*

Installation

- Simply mount the 404-4 controller inside any containment sump and connect it to the existing turbine or dispenser wiring. (Dispenser installations require an electrical junction box with an open conduit hub).
- Connect the liquid sensor using the supplied watertight splice kit. Suspend it so it is just touching the bottom of the containment sump.

Note: Not for use with 3-phase motors or Variable Frequency Drive installations.

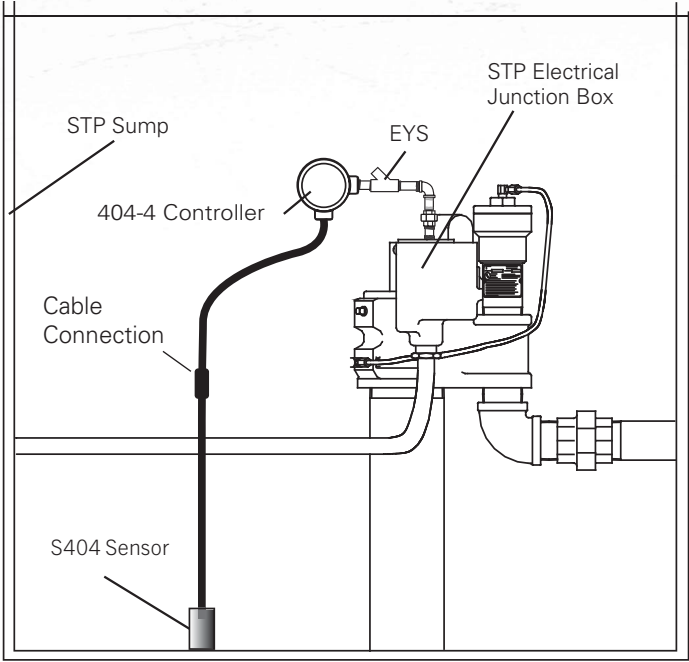
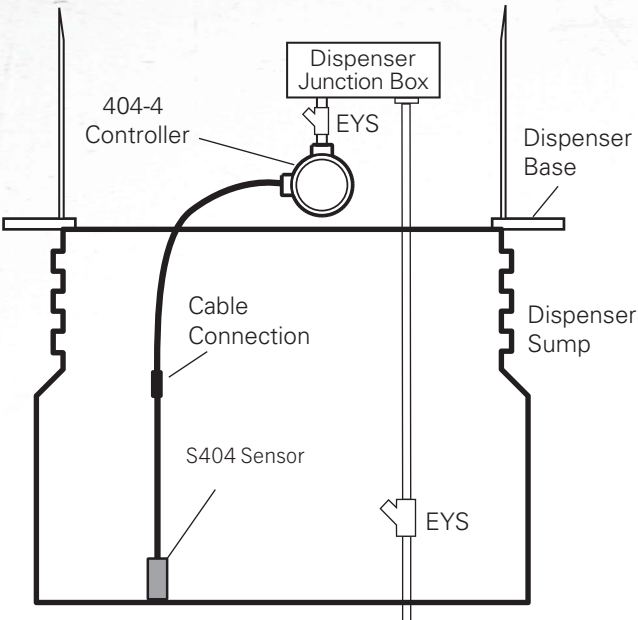


SPECIFICATIONS

404-4 Controller	Compatible with S404 liquid sensor*
404-4 Controller dimensions	6.6" x 6.2" x 3.2"
404-4 Input power	90-250 VAC, 50/60 Hz, 0.25 A
404-4 Relay contacts	12A, 2 hp @ 250 VAC, 12A, 1.5 hp @ 120 VAC
Operating temperature	-4° F to 140° F (-20° C to +60° C)
Enclosures	All sensors intrinsically safe, controller explosion-proof
Detection time	<1 second
S404 Sensor minimum detectable water limit	0.98" (25 mm)
Capabilities	– Cutoff power to submersible pumps or dispensers when liquid is detected in containment sumps. – Automatic reset on liquid removal.

**Previous versions of the 404-4, S406, and S404 are not compatible. Both the controller and sensor must be replaced if either requires it. Core credit available for legacy items.*

SPECIFICATIONS CONTINUED



ORDERING INFORMATION

Model	Description
DC404	S404 liquid sensor and controller
DC404C	S404 liquid sensor and controller for Canadian applications
TS-FE	FE PETRO® STP electric junction box adapter
TS-RJ	Red Jacket™ STP electric junction box adapter
TS-RJQ	Red Jacket™ Quantum™ STP electric junction box adapter

Note: Electric junction box adapters are for STP installations.

DC400 Replacement Parts

Model	Description
404-4	Controller
404-4C	Controller for Canadian applications
S404	Float switch sensor

Note: Replacement parts not compatible with legacy DC400 systems. Both controller and sensor must be replaced. Order DC404 system to replace legacy components.