



### QSE MAG FLOWMETER

The QSE Mag Series is a dependable highly accurate electromagnetic flowmeter designed for flow and usage monitoring in commercial applications.

The Noryl® housing and flow tube offer a lightweight, easy-to-install Mag Meter that is resistant to heat (210°F / 99°C) and compatible with many water-based liquid solutions.

The QSE Mag Meter monitors flow rate and total flow in a wide variety of applications including: HVAC, Turf/ Irrigation and other water reclamation applications.

### FEATURES / BENEFITS

- Low investment and operating costs
- $\pm .5\%$  Accuracy of Reading
- Wide turndown ratio of 60:1
- Non-intrusive, no moving parts to wear out, maintenance, repair costs low and tolerates high flows without damage
- The slightly modified bore permits unobstructed flow and minimizes flow disturbances and straight pipe requirements
- 7 line sizes ( $\frac{1}{2}$ " to 4")  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1", 1- $\frac{1}{2}$ ", 2", 3", & 4"
- Housing ported with "Thermal Well Supports" for sensors (Energy Management)
- Compatible with GPI 09 Electronics Display or FLOMEC QSI I/O Board

### PRODUCT IDENTIFIER **1**

**QSE** = Electro-Magnetic Flow Meter

### SIZE **2**

**05** = 1/2"  
**07** = 3/4"  
**10** = 1"  
**15** = 1-1/2"  
**20** = 2"  
**30** = 3" (Flange only)  
**40** = 4" (Flange only)

### FITTING **3**

**NPT** = NPT (Male)  
**BSP** = BSP (Male) (Rc Thread)  
**FAP** = ANSI Flange - Polymer (3" & 4" Only)  
**FAS** = ANSI Flange - Steel (3" & 4" Only)  
**FDS** = DIN Flange - Steel (3" & 4" Only)

### ELECTRONIC CHOICE **4**

**09** = **Computer w/Integral Display & Meter Mounted Transmitter (Pulse Out)** 2-Button Computer, Field-configurable (2 Totals, 2 Cals, Rate), Coverplate Transmitter w/Pulse Out (Open Collector Square Wave)

**QB** = **Meter Mounted Transmitter (Pulse Out)**  
 Coverplate Transmitter, w/Pulse Out (Open Collector Square Wave)

### COMMUNICATION CHOICE **5**

**Q1** = **Integrates with Any Electronic Choice** QSI Module: Blue Tooth®, Coil/Digital Pulse Input, Pulse Output (Flow or Energy & Scalable), RS485 (MODbus RDU), Temperature Inputs, BTU Calculator.

Energy Use Computation Note: Energy Use Computation Requires Temperature Sensor Probes (Select Probes Below)

**Q2** = **Integrates with Any Electronic Choice** QSI Module: Blue Tooth®, Coil/Digital Pulse Input, Pulse Output (Flow or Energy & Scalable), Data Logger, Temperature Inputs, BTU Calculator.  
 Energy Use Computation Note: Energy Use Computation Requires Temperature Sensor Probes (Select Probes Below)

**Q3** = **Integrates with Any Electronic Choice** QSI Module: Blue Tooth®, Coil/Digital Pulse Input, Pulse Output (Scalable), Data Logger, 4-20mA.

**XX** = No Communication Suite

### TEMPERATURE SENSOR PROBES **6**

**1** = **Integrates with QSI Communications Choice for Energy Use Computation** (2ea) 1" Long Temperature Sensor Probes w/Cables (10 ft.) (Customer Installed), Used with 1/2" through 2" Meters

**2** = **Integrates with QSI Communications Choice for Energy Use Computation** (2ea) 2" Long Temperature Sensor Probes w/Cables (10 ft.) (Customer Installed), Used with 3" and 4" Meters

**X** = No Temperature Probes

### PACKAGING (Auto Select) **7**

**A** = 1/2" - 2" Meters

**B** = 3" Meter

**C** = 4" Meter

**1 2 3 4 5 6 7**  
 >>>> **QSE + 30 + FAP + 09 + Q1 + 2 + B**

>>>> **= QSE30FAP09Q12B = PART ORDER #**

## SPECIFICATIONS

<b>Fitting Type:</b> NPT, BSP, ANSI Flanged, DIN Flanged			
1/2" to 2" - NPT (Male), BSP (Male) (Rc Thread)			
3" & 4" ANSI Flanged - Polymer Flange			
3" & 4" ANSI Flanged - Steel Flange			
3" & 4" DIN Flanged - Steel Flange			
<b>Housing Material:</b>		Noryl®	
<b>Pipe Sizes:</b>		1/2", 3/4", 1", 1-1/2", 2", 3", 4"	
<b>Pressure Rating:</b>		150 PSI @ 73° F (10 BAR @23° C)	
<b>Flow:</b>	<b>Velocity</b>	0.25 to 15 FPS	
	1/2" (05)	0.15 - 10 GPM	0.56 - 38 LPM
	3/4" (07)	0.3 - 20 GPM	1.13 - 76 LPM
	1" (10)	0.6 - 40 GPM	2.27 - 151 LPM
	1-1/2" (15)	1.2 - 80 GPM	4.54 - 303 LPM
	2" (20)	2.25 - 150 GPM	8.5 - 568 LPM
	3" (30)	4.5 - 300 GPM	17 - 1136 LPM
	4" (40)	9 - 600 GPM	34 - 2271 LPM
<b>*Accuracy (% of Reading):</b>		±2%	±0.5%
	1/2" (05)	0.15 - 0.6 GPM / 0.56 - 2.27 LPM	0.61 - 10 GPM 2.28 - 38 LPM
	3/4" (07)	0.3 - 1.2 GPM / 0.56 - 4.54 LPM	1.21 - 20 GPM / 4.55 - 76 LPM
	1" (10)	0.6 - 2.4 GPM / 2.27 - 9.08 LPM	2.41 - 40 GPM 9.09 - 151 LPM
	1-1/2" (15)	1.2 - 4.8 GPM / 4.54 - 18.17 LPM	4.81 - 80 GPM 18.18 - 303 LPM
	2" (20)	2.25 - 9.0 GPM / 8.5 - 34.07 LPM	9.01 - 150 GPM / 34.08 - 568 LPM
	3" (30)	4.5 - 18.0 GPM / 17 - 68.14 LPM	18.01 - 300 GPM 68.15 - 1136 LPM
	4" (40)	9 - 36.0 GPM 34 - 136.28 LPM	36.01 - 600 GPM / 136.29 - 2271 LPM

## APPLICATIONS

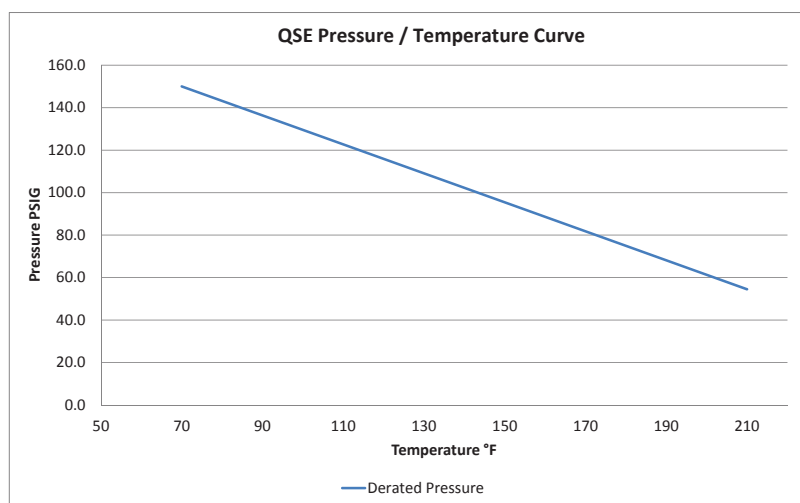
### Turf / Irrigation

- Agriculture Irrigation
- Turf Irrigation Systems
- Micro Irrigation Systems
- HVAC
- EMS (Energy Management Systems)
- BAS (Building Automation Systems)

### Institutional

- Chilled water
- Domestic water (hot and cold)
- Energy sub-metering (BTU hot and cold)
- Process (blow down, make up, boiler feed, etc.)

Operating Temperature Range:		1/2"-2": 32° F to 210° F (0° C to 99° C) 3"-4": 32° F to 180° F (0° C to 82° C)
Ambient Temperature Range:		0° F to 140° F (-18° C to 60° C)
Typical K-Factor:	1/2" (05)	4347 PPG (1158.5 PPL)
	3/4" (07)	1937 PPG (511.8 PPL)
	1" (10)	1089 PPG (287.7 PPL)
	1-1/2" (15)	484.1 PPG (127.9 PPL)
	2" (20)	400 PPG (105.7 PPL)
	3" (30)	121 PPG (32.0 PPL)
	4" (40)	68.1 PPG (18.0 PPL)
Power Supply:	Externally Powered	
	Voltage Supply (Min): 12VDC or VAC	
	Voltage Supply (Max): 36VDC or VAC	
Consumption:	Max current consumption (QSE with QSB): 75mA	
	Max current consumption (QSE with QSI): 150mA	
Wetted Materials:	Body	Noryl®
	Electrodes	316L SS
	Seals	NBR O-Rings
Frequency Range:	All Sizes	10 Hz Minimum - 1,000 Hz Maximum (with 09 Display)
		10 Hz Minimum - 3,000 Hz Maximum (with Blind Pulse Out)
Calibration Report:	Standard	
	N.I.S.T. Available	



## APPROVALS

NEMA 6P

IP68



Service & Warranty: For technical assistance, warranty replacement or repair contact your FLOMEC® or GPI® distributor:  
In North or South America: 888-996-3837 / GPI.net Outside North or South America: +61 2 9540 4433 / gpiaustralia.com.au

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