FLOMEC®

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

- ± .5% Accuracy of Reading

- Wide turndown ratio 0.25 to 15.0 fps (0.076 to 4.6 mps)

- 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 (½" to 4") ½", ¾", 1", 1-½", 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
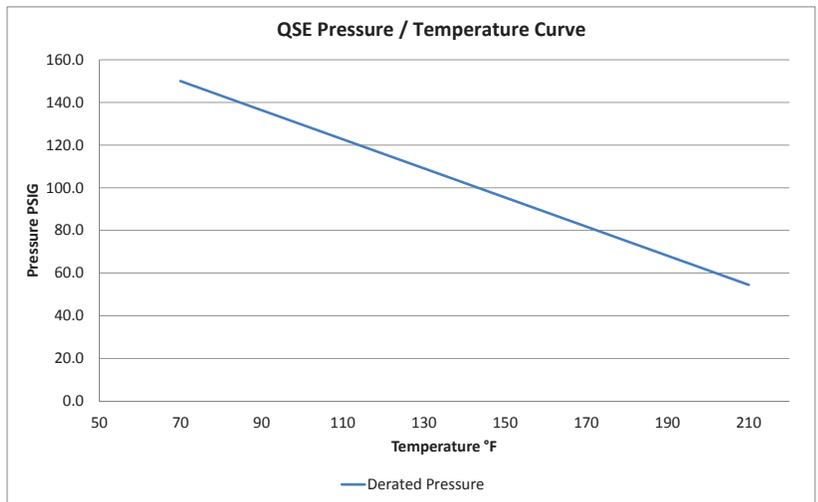
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |

>>>> QSE + 30 + FAP + 09 + Q1 + 2 + B

>>>> = QSE30FAP09Q12B = PART ORDER #

SPECIFICATIONS

Fitting Type:	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

Housing Material:	Noryl®
Pipe Sizes:	1/2", 3/4", 1", 1-1/2", 2", 3", 4"
Pressure Rating:	150 PSI @ 73° F (10 BAR @23° C)

Flow:	Velocity	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
*Accuracy (% of Reading):		±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

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)
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)
Wetted Materials:	Electrodes	316L SS
	Seals	NBR O-Rings
Frequency Range:	All Sizes	10 Hz Minimum - 1,000 Hz Maximum
Calibration Report:		Standard
		N.I.S.T. Available

QSE Pressure / Temperature Curve

(Graph: Pressure PSIG vs. Temperature °F, showing Derated Pressure line declining from approximately 150 PSIG at 70°F to approximately 55 PSIG at 210°F)

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.)

APPROVALS

NEMA 6P   IP68   C E   NSF. NSF-ISR PENDING

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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