

ISM 5.0 Insertion Electromagnetic Meter

Approximate shipping weight: 6 lbs / 2.7 kg

Model

Please configure model on next page

STANDARD FEATURES:

Quad-electrode sensor

Watertight, airtight, dust-proof cast aluminum electronics enclosure

Analog output – selectable 4-20mA, 0-5V or 0-10V

Frequency output – 0-500Hz, for remote display option

Pulse output – scalable

Power input – 20-28VDC or 20-28VAC

Signal cable length – 25 ft (7.6 m) multi-conductor, submersible

NIST traceable calibration certificate

1 Manual - Installation and Operation





ISM 5.0 Insertion Electromagnetic Meter

Model

ISM 5.0 - - -

FLOW DIRECTION

Standard – Single Direction		A
Bi-directional with 2 pulse outputs and flow direction relay		B

POWER INPUT

Standard - 20-28VDC / 20-28VAC		1
--------------------------------	--	---

METER LENGTH (bottom of enclosure to bottom of sensor)

Standard - 20" (508mm) for 3-16" (DN 80-400) nominal pipes		A
24" (610mm) for 18-72" (DN 450-1800) nominal pipes		B
Custom		C

OPTIONS AND ACCESSORIES

Separate additional length signal cable, submersible PVC jacketed, multi-conductor

Code	Description	
25 MXC	25 ft (7.6 m) length	
50 MXC	50 ft (15 m) length	
100 MXC	100 ft (30 m) length	

Grounding Rings and Probes

Code	Description	
HTGP2	1 Pair of Hot Tap Stainless Steel Grounding Probes (requires installation kit for each ground probe, ordered separately - see Options and Accessories section)	
HTGP1	1 (single) Hot Tap Stainless Steel Grounding Probe (requires installation kit for each ground probe, ordered separately - see Options and Accessories section)	
GR3	3" Pair of Grounding Rings, ANSI Class 150	
GR4	4" Pair of Grounding Rings, ANSI Class 150	
GR6	6" Pair of Grounding Rings, ANSI Class 150	
GR8	8" Pair of Grounding Rings, ANSI Class 150	
GR10	10" Pair of Grounding Rings, ANSI Class 150	
GR12	12" Pair of Grounding Rings, ANSI Class 150	
GR14	14" Pair of Grounding Rings, ANSI Class 150	
GR16	16" Pair of Grounding Rings, ANSI Class 150	
GR18	18" Pair of Grounding Rings, ANSI Class 150	
GR20	20" Pair of Grounding Rings, ANSI Class 150	
GR24	24" Pair of Grounding Rings, ANSI Class 150	

Remote Displays

Code	Description	
D-100-120	Microprocessor-based rate/total display with 2 auxiliary analog inputs, and bi-directional input. 120VAC input power.	
D-100-024	Microprocessor-based rate/total display with 2 auxiliary analog inputs, and bi-directional input. 120VAC input power.	
D-100-240	Microprocessor-based rate/total display with 2 auxiliary analog inputs, and bi-directional input. 120VAC input power.	
D-100-MOD-120	Microprocessor-based rate/total display with 2 auxiliary analog inputs, plus MODBUS®-RTU RS485 or TCP/ IP serial interface. 120VAC input power	
D-100-MOD-024	Microprocessor-based rate/total display with 2 auxiliary analog inputs, plus MODBUS®-RTU RS485 or TCP/ IP serial interface. 24VAC input power	
D-100-MOD-240	Microprocessor-based rate/total display with 2 auxiliary analog inputs, plus MODBUS®-RTU RS485 or TCP/ IP serial interface. 240VAC input power	
D-1201-01-120 ^{1,2}	Display Module: 1 LCD, flow rate and/or total. 120VAC input power	
D-1201-01-024 ^{1,2}	Display Module: 1 LCD, flow rate and/or total. 24VAC input power	
D-1201-01-240 ^{1,2}	Display Module: 1 LCD, flow rate and/or total. 240VAC input power	

¹ FLOW DIRECTION = A only. Use the D-100 when FLOW DIRECTION = B

² Flow Rate and Total cannot be set for MGD and Gal x 1 Mil. Use D-100 for these requests

"STANDARD" Installation Kits (Dry Pipe Installation of Kit)

Carbon Steel Welded Pipe

Code	Kit Description	Kit Includes	
INSTL01DW-FMD	Installation kit for 3" and larger welded steel domestic water pipes (Valve & nipple comply with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1" full port bronze ball valve 1" weld-on carbon steel branch outlet 1" brass close nipple 	
INSTL01DW-FMD	Stainless steel installation kit for 31" and larger welded steel pipe	<ul style="list-style-type: none"> 1" full port SS ball valve 1" weld-on carbon steel branch outlet 1" SS close nipple 	

Copper Tube

F-STD-INSTL4	Installation kit for 3" copper tube (Complies with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1" full port bronze ball valve 1" copper street adapter with MNPT threads Copper tee with 1" outlet 	
F-STD-INSTL9	Installation kit for 4" copper tube (Complies with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1" full port bronze ball valve 1" copper street adapter with MNPT threads Copper tee with 1" outlet 	

"HOT TAP" Installation Kits (Dry or Wet Pipe Installation of Kit)

Carbon Steel Welded Pipe

Code	Kit Description	Kit Includes	
INSTL02DW-FMH	Hot tap installation kit for 3" and larger welded steel domestic water pipes (Valve, nipple & bushing comply with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1 1/4" full port bronze ball valve 1 1/4" brass close nipple 1 1/4" x 1" brass reducing bushing 1 1/4" weld-on carbon steel branch outlet 	
INSTL0006-FMH	Stainless steel hot tap installation kit for 3" and larger welded steel pipe	<ul style="list-style-type: none"> 1 1/4" full port SS ball valve 1 1/4" SS close nipple 1 1/4" x 1" SS reducing bushing 1 1/4" weld-on carbon steel branch outlet 	

Copper Tube

INSTL019A-FMH	Hot tap installation kit for Sch Std, Sch 40 or Sch 80 steel or PVC pipe (3" to 6") (Complies with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1 1/4" full port bronze ball valve 1 1/4" brass close nipple 1 1/4" x 1" brass reducing bushing Ductile iron saddle with 1 1/4" outlet 	
INSTL019B-FMH	Hot tap installation kit for Sch Std, Sch 40 or Sch 80 steel or PVC pipe (8" to 14") (Complies with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1 1/4" full port bronze ball valve 1 1/4" brass close nipple 1 1/4" x 1" brass reducing bushing Ductile iron saddle with 1 1/4" outlet 	

Copper Tube With Saddles

INSTL0022-FMH	Hot tap installation kit for 3" to 6" copper tube. (Complies with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1 1/4" full port bronze ball valve 1 1/4" brass close nipple 1 1/4" x 1" brass reducing bushing SS saddle with 1 1/4" outlet 	
---------------	--------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

HDPE/PPR Pipe

INSTL5002-FMH	Hot tap installation kit for pipe size range 3" to 42". Customer provides their own 1 1/4" female NPT pipe outlet. (Complies with NSF/ANSI 61 & 372)	<ul style="list-style-type: none"> 1 1/4" full port bronze ball valve 1 1/4" brass close nipple 1 1/4" x 1" brass reducing bushing 	
---------------	------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Stainless Steel

F-HTAP-INSTL31	Hot tap installation kit for 1 1/4" and larger welded stainless steel pipe	<ul style="list-style-type: none"> 1 1/4" full port 316 SS ball valve 1 1/4" 316 SS close nipple 1 1/4" x 1" 316 SS reducing bushing 1 1/4" weld-on 316 SS branch outlet 	
----------------	----------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Important Note: For installation in any pipe not referenced above, it is up to the installer to provide either a 1" or 1 1/4" female NPT pipe outlet so that one of the above kits can be used, or a complete valve assembly already installed on the pipe, at least 1" full-port. The ISM installs into a 1" female NPT thread, so if the existing valve assembly is larger than 1" NPT, a reducer bushing can be installed so that the meter can be inserted.