



SmartLine®

# VersaFlow TWM 9000

## Electromagnetic Flow Converter

### MM90 Basic I/O

Model Selection Guide

36-MM-16-05

Issue 23

Section: 14

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Effective Date: October 1, 2021

## Model Selection Guide with Price Data

Honeywell Proprietary

#### Electromagnetic Flow Converter

- 3 x 100% diagnostics of application, accuracy and instrument
- Quick and easy to install and operate due to HMI
- One converter for all applications
- Exceeds requirements VDI / VDE/ WIB 2650 and NAMUR NE 107
- Integrated temperature and conductivity measurement

#### Instructions

Select the desired key number. The arrow to the right marks the selection available.  
Make the desired selections from Tables I through VII using the column below the proper arrow. A dot ( • ) denotes availability.

Table	I	II	III	IV	V	VI	VII	VIII	IX
MM90	4	-	-	-	-	-	-	-	-

List Price equals the sum of prices for all selections made.

#### KEY NUMBER

#### Description

#### Selection Availability

MM90

MM90 ↓

#### TABLE I

**Flow Sensor** | Flow Converter

4 •

#### TABLE II

**Type** | TWM 9000 C  
TWM 9000 F  
TWM 9000 R  
TWM 9000 W

4 •  
H •  
L •  
N •

#### TABLE III

**Power Supply** | 12 - 24 V DC (12 - 24 V DC)  
24 V DC/AC (19 - 29 V)  
100 - 230 VAC (85 - 250 VAC, 50/60 Hz)

1 •  
4 •  
A •

#### TABLE IV

**Hazardous Area Approvals** | None - non Ex  
EEx zone 1 (terminal compartment "d" - C)  
EEx zone 1 (terminal compartment "e" - C, F)  
FM Class 1 DIV 2  
CSA Class 1 DIV 2

0 •  
1 r  
2 s  
5 q  
C q

#### TABLE V

**Cable connection** | 3 x 1/2" NPT  
3 x PF 1/2"  
3 x M20 x 1.5  
Terminal strip

**Operating manual/ Language** | German | german operating language  
English US | english US operating language  
French | french operating language  
None | german operating language  
None | english GB operating language  
None | french operating language

4\_ •  
5\_ •  
6\_ •  
B\_ a  
\_1 •  
\_3 •  
\_4 •  
\_5 •  
\_6 •  
\_7 •

#### TABLE VI

**Custody Transfer** | Without  
Water, NMI OIML R49 - non EU ( C & F only )\*\*  
Water, MI-001 - EU ( C, F & W only )\*\*

0\_ •  
1\_ t  
5\_ u

**Process Diagnostics** | Standard  
Batch controlling BC

\_0 •  
\_4 •

The minimum value of orders acceptable for Honeywell is USD 500. Handling fee is the amount of the difference between USD 500 and the actual purchase price.

**TABLE VII**

<b>Converter Housing</b>	Standard	1	•
	Stainless steel 1.4408	2	<b>b</b>
	Aluminum, custody transfer: sealed	3	<b>v</b>
	Stainless steel 1.4408, custody transfer: sealed	4	<b>v</b>

**TABLE VIII**

No Selection		V _ _ _	•
Communications	Basic IO (CO + PO + 2* status)	_ 1 _ _	•
1st IO Module	None, no module possible	_ _ 0 _	•
2nd IO Module	None, no module possible	_ _ _ 0	•

**TABLE IX**

Reference Method	Standard	0 _ _	•
	Virtual reference	1 _ _	•
Tagplate	Standard, none	_ 0 _	•
	316 / 1.4401 tagplate (120 x 46mm) 4 lines 25 characters per line max.	_ 2 _	<b>d</b>
	316 / 1.4401 tagplate (67 x 25mm) 4 lines 25 characters per line max.	_ 3 _	<b>d</b>
No Selection		_ _ 0	•

**RESTRICTIONS**

Restriction Letter	Table	Available only with	Not available with	
		Selection	Table	Selection
<b>a</b>	II	L		
<b>b</b>	II	4, H		
<b>c</b>	V	B_		
<b>d</b>	II	H, L, N		
<b>q</b>	II	4, H		
	V	4_, 6_		
<b>r</b>	II	4		
<b>s</b>	II	4, H		
<b>t</b>	II	4, H		
	VII	3, 4		
<b>u</b>	II	4, H, N		
	VII	3, 4		
<b>v</b>	II	4, H		
	VI	1_, 5_		

Housing Table		Housing Material	
		Standard	Stainless steel 1.4408
	Table VII	1,3	2,4
Converter	Table II	<b>USD</b>	<b>USD</b>
TWM 9000 C	4		
TWM 9000 F	H		
TWM 9000 R	L		
TWM 9000 W	N		

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