Honeywell

SmartLine®

VersaFlow Mag 4000

MM 41 Size 1/2" to 6"

Model Selection Guide

Easy to configure, easy to use
Chemically resistant to alkaline solutions and acids
Diameter range: 1/10" - 120" / DN 2.5 - 3000
Standard liners: PFTE, PFA, ETFE
Various electrode materials available
Conductivity: non water >1 uS/cm; water >20 uS/cm
Process temperature up to 356^{0}F / 180^0 C
Hazardous area versions available

Instructions

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

Table	I	II	III	IV	V	VI	VII	VIII
MM41	4	_ _ _ _	_	_ _ _ _ _	_ _	_ _	_ _ _ _	_ _ _ _

KEY NUMBER	Description	Selection	Availabi
MM41		MM41	↓

TABLE I - Code Flow Sensor

Flow Sensor	4	•

TABLE II

Nominal Diameter	DN 10 / 3/8"	PTFE	Flanges 1/2"	1 _ _ _	•
	DN 15 / 1/2"	PTFE		2 _ _ _	•
	DN 20 / 3/4"	PTFE		3 _ _ _	•
	DN 25 / 1"	PFA		4 _ _ _	•
	DN 32 1 1/4"	PFA		5 _ _ _	•
	DN 40 / 1 1/2"	PFA		6 _ _ _	•
	DN 50 / 2"	PFA		7 _ _ _	•
	DN 65	PFA		8 _ _ _	•
	DN 80 / 3"	PFA		A _ _ _	•
	DN 100 / 4"	PFA		B _ _ _	•
	DN 125 5"	PFA		C _ _ _	•
	DN 150 / 6"	PFA		D _ _ _	•
Nominal Pressure	PN 16 EN 1092-1			_ 3 _ _	**h**
	PN 25 EN 1092-1			_ 4 _ _	**h**
	PN 40 EN 1092-1			_ 5 _ _	•
	ASME B 16.5 150 lb RF			_ A _ _	•
	ASME B 16.5 300 lb RF			_ B _ _	**t**
	JIS 20 K			_ M _ _	**a**
	JIS 10 K		(DN 50 / 2" - DN 150 / 6")	_ N _ _	**b**
Approvals	None			_ _ 0 _	•
	EEx zone 1		(Converter TWM 9000 C or F & TWM 1000 C or W)	_ _ 1 _	**p**
	EEx zone 2		(Converter TWM 9000 C or TWM 9000 F)	_ _ 3 _	
	FM Class 1 DIV 2		(Converter TWM 9000 C or TWM 9000 F)	_ _ 5 _	**q**
	CSA GP			_ _ A _	
	CSA Class 1 DIV 2		(Converter TWM 9000 C or TWM 9000 F)	_ _ C _	**q**
	NEPSI zone 1		(Converter TWM 9000 C or TWM 9000 F)	_ _ D _	**s**
System design	Compact with aluminum converter housing		at converter cable mounting	_ _ _ 1	•
	Compact with stainless steel converter housing		at converter cable mounting	_ _ _ 2	•
	Separate with aluminum connection box		1/2" NPT cable mounting	_ _ _ 4	•
	Separate with aluminum connection box		PF 1/2 cable mounting	_ _ _ 5	•
	Separate with aluminum connection box		M20 x 1.5 cable mounting	_ _ _ 6	•
	Separate with stainless steel connection box		1/2" NPT cable mounting	_ _ _ A	•
	Separate with stainless steel connection box		PF 1/2 cable mounting	_ _ _ B	•
	Separate with stainless steel connection box		M20 x 1.5 cable mounting	_ _ _ C	•

TABLE III - Converter model

Converter model	Without Converter (replacement sensor only)		**Requires a separate MSG # to be entered. Either: MM90 MSG # 36-MM-16-05; MM91 MSG # 36-MM-16-06; MM92 MSG # 36-MM-16-07; or MM95 MSG # 36-MM-16-12**	0	**g**
	TWM 1000 C	(compact design)		3	**c**
	TWM 1000 W	(wall mount version, DS Cable Only)		4	**l**
	TWM 9000 C	(compact design)		C	**d**
	TWM 9000 F	(field mount version)		D	**g**
	TWM 9000 W	(wall mount version)		E	**g**
	TWM 9000 R	(rack mount version)		F	**g**

TABLE IV

Lining	Standard			0 _ _ _ _	**f**
	PTFE - Provided for protection rings	(DN 15/1/2" - 20/3/4")		2 _ _ _ _	**n**
	PFA - provided for protection rings	(DN 25/1" - 150/6")		S _ _ _ _	**n**
Electrodes (fixed)	Stainless steel DIN 1.4571 - 316 Ti			_ 1 _ _ _	•
	Stainless steel DIN 1.4401 - 316			_ 2 _ _ _	•
	Hastelloy B2			_ 4 _ _ _	•
	Tantalum			_ 5 _ _ _	•
	Titanium			_ 6 _ _ _	•
	Platinum			_ 7 _ _ _	•
	Hastelloy C22	(standard)		_ B _ _ _	•
	Low noise (aluminumoxide) - Base HC22			_ N _ _ _	•
	Low noise (aluminumoxide) - Base DIN 1.4571 - 316 Ti			_ U _ _ _	•
Construction of electrodes	Fixed			_ _ 1 _ _	•
Flange Material/ Housing Material	Carbon steel St 37-C22 / A 105 flange material/Steel Housing			_ _ _ 1 _	•
	Stainless steel DIN 1.4404 - 316 L flange material/Steel Housing			_ _ _ 3 _	•
	Carbon steel St 37-C22 / A 105 flange material / DIN 1.4301 - 304 housing material			_ _ _ A _	**e**
Protection class	IP 66 / 67	standard dimension		_ _ _ _ 0	•
	IP 68 field	standard dimension (only with stainless st. connection box)		_ _ _ _ 1	**e**
	IP 68 factory	standard dimension (only with stainless st. connection box)	**(Note 1)**	_ _ _ _ 2	**e**
	IP 66 / 67	ISO 13359		_ _ _ _ 3	•
	IP 68 field	ISO 13359 (only with stainless st. connection box)		_ _ _ _ 4	**e**
	IP 68 factory	ISO 13359 (only with stainless st. connection box)	**(Note 1)**	_ _ _ _ 5	**e**

TABLE V

Cable	WithTWM Compact converter, no cable / Other converters receive a separate Double Shielded (DS) Cable	0 _	•
	Separate BTS	1 _	•
	Separate LIYCY (only for FM / CSA Class 1 DIV 2)	2 _	**j**
	Without Cable (replacement sensor only)	Y _	**y**
Cable length	Compact - none / separate - 5 m - 15 ft	_ 0	•
	10 m - 30 ft	_ 1	•
	15 m - 45 ft	_ 2	•
	20 m - 60 ft	_ 3	•
	25 m - 75 ft	_ 4	•
	30 m - 90 ft	_ 5	•
	40 m - 120 ft	_ 6	•
	50 m - 150 ft	_ 7	•
	100 m - 300 ft	_ 8	•
	Without Cable (replacement sensor only)	_ Y	**y**

TABLE VI

Calibration	Standard		0 _	•
	Standard with 304 / 1.4301 tagplate (67 x 25 mm) 6 lines, 24 characters		1 _	•
	Standard with 316 / 1.4401 tagplate (67 x 25 mm) 6 lines, 24 characters		3 _	•
	Custody transfer		A _	**v**
	Custody Transfer with 304 / 1.4301 tagplate (67 x 25 mm) 6 lines, 24 characters		B _	**v**
	Custody Transfer with 316 / 1.4401 tagplate (67 x 25 mm) 6 lines, 24 characters		D _	**v**
Ring	None		_ 0	•
	Ring #1	1.4571 - 316 Ti material	_ 1	•
	Ring #1	Hastelloy C4 material	_ 2	**m**
	Ring #1	Tantalum material	_ 4	**m**
	Ring #1	Titanium material	_ 5	**m**
	Ring #3	1.4571 - 316 Ti material	_ A	•
	Protection ring #2	1.4571 - 316 Ti material	_ H	•
	Protection ring #2	Hastelloy C22 material	_ R	**m**
	Protection ring #2	Titanium material	_ N	**m**

TABLE VII

No Selection	None	0 V _ _	•
Construction requirements	Standard	_ _ 0 _	•
QA / QC	Standard	_ _ _ 0	•

TABLE VIII

No Selection	None	0000	•

Note 1: IP 68 factory comes with DS/LIYCY or BTS/LIYCY cables.

RESTRICTIONS

Restriction Letter	Table	Available only with Selection	Not available with Table	Not available with Selection
a			II	**1 _ _ _, 2 _ _ _**
	IV	_ _ _ 1 _		
b	II	7 _ _ _, 8 _ _ _, A _ _ _, B _ _ _, C _ _ _, D _ _ _		
	IV	_ _ _ 1 _		
c	II	_ _ 0 1, _ _ 0 2, _ _ 1 1, _ _ 1 2		
	V	0 0		
d	II	_ _ _ 1, _ _ _ 2		
	V	0 0		
e	II	_ _ _ A, _ _ _ B, _ _ _ C		
f			VI	_ H, _ R, _ N
g	II	_ _ _ 4, _ _ _ 5, _ _ _ 6, _ _ _ A, _ _ _ B, _ _ _ C		
h	II	8 _ _ _, B _ _ _, C _ _ _, D _ _ _		
j	II	_ _ 5 _, _ _ C _		
	IV	_ _ _ _ 2, _ _ _ _ 5		
l	II	_ _ 0 4, _ _ 0 5, _ _ 0 6, _ _ 0 A, _ _ 0 B, _ _ 0 C, _ _ 1 4, _ _ 1 5, _ _ 1 6, _ _ 1 A, _ _ 1 B, _ _ 1 C		
	V	0 _		
m	II	4 _ _ _, 5 _ _ _, 6 _ _ _		
	II	_ 5 _ _, _ A _ _, _ M _ _		
	OR	**OR**		
	II	7 _ _ _, A _ _ _		
	II	_ 5 _ _, _ A _ _, _ N _ _		
	OR	**OR**		
	II	8 _ _ _, B _ _ _, C _ _ _, D _ _ _		
	II	_ 3 _ _, _ A _ _, _ N _ _		
n	VI	_ H, _ R, _ N		
p	II	_ _ _ 1, _ _ _ 2		
	III	3, C		
	OR	**OR**		
	II	_ _ _ 4, _ _ _ 5, _ _ _ 6, _ _ _ A, _ _ _ B, _ _ _ C		
	III	0, 4, D		
q	II	_ _ _4, _ _ _ 6, _ _ _ A, _ _C		
	III	0, D		
	IV	_ _ _ _ 0, _ _ _ _ 2		
	OR	**OR**		
	II	_ _ _1, _ _ _ 2		
	III	C		
	IV	_ _ _ _ 0, _ _ _ _ 2		
	V	0 0		
s	II	_ _ _ 1, _ _ _ 2		
	III	C		
	OR	**OR**		
	II	_ _ _ 4, _ _ _ 5, _ _ _ 6, _ _ _ A, _ _ _ B, _ _ _ C		
	III	0, D		
t			II	8 _ _ _, C _ _ _
v	III	C, D, E	II	1 _ _ _ , 2 _ _ _ , 3 _ _ _
y	III	0	II	_ _ _ 1, _ _ _ 2