

SmartLine® VersaFlow Mag 3000 MM30 Size 1/10" to 6"

Model Selection Gui with Price Data

Model Selection Guide
36-MM-16-13 Issue 20

Honeywell Proprietary

Easy to configure, easy to use
Hygienic/Aseptic Design, 3A and EHEDG Approved
Diameter range: DN 1/10" - 6" | DN 2.5 - 150
Process temperatures to 355°F | 180°C
Various electrode materials available
Conductivity: non water >1 uS/cm; water >20 uS/cm
Stainless Steel Sensor Housing
PFA Liner



Instructions

- 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
MM30	4	-----	--	---	--	-	-----	---

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

KEY NUMBER	Description	Selection	Availability
MM30		MM30	↓

TABLE I		
Code Flow Sensor	4	•

TABLE II			
Nominal Diameter	DN 2.5 / 1/10"	PFA	1 --- •
	DN 4 / 1/8"	PFA	2 --- •
	DN 6 / 1/4"	PFA	3 --- •
	DN 10 / 3/8"	PFA	5 --- •
	DN 15 / 1/2"	PFA	6 --- •
	DN 25 / 1"	PFA	8 --- •
	DN 40 / 1 1/2"	PFA	B --- •
	DN 50 / 2"	PFA	C --- •
	DN 65 / 2 1/2"	PFA	D --- •
	DN 80 / 3"	PFA	E --- •
	DN 100 / 4"	PFA	F --- •
	DN 125 / 5"	PFA	G --- •
DN 150 / 6"	PFA	H --- f	
Nominal Pressure	sanitary connection acc. DIN 11851 SMS 1145		---H --- •
	CLAMP acc. ISO 2852		---K --- a
	CLAMP acc. DIN 32676		---L --- •
	Tri CLAMP		---N --- b
	sanitary connection w. butt weld ends acc. DIN 11850		---P --- •
	sanitary connection w. butt weld ends acc. ISO 2037		---S --- •
sanitary flange connection acc. DIN 11864-2		---T --- •	
			---U --- b
Approvals	None		---0 --- •
	EEx zone 1 (Converter TWM 9000 C or TWM 9000 F - DN 25 / 1" - DN 80 / 3")		---1 --- s
	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	
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	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 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
Mounting material	Without	0_ •	

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 IV

		Selection	Availability
Grounding Ring	incl. L-profile O-ring EPDM incl. L-profile O-ring silicone	0 _ _ D _ _	• •
Electrodes (fixed)	St. steel DIN 1.4571 / 316 Ti (DN 2,5 / 1/10" - DN 15 / 1/2") Hastelloy C4 (DN 2,5 / 1/10" - DN 15 / 1/2") Hastelloy B2 (DN 2,5 / 1/10" - DN 15 / 1/2") Tantalum (DN 2,5 / 1/10" - DN 15 / 1/2") Titanium Platinum (wetted parts) (DN 2,5 / 1/10" - DN 15 / 1/2") Stainless steel 1.4404 / 316 L (DN 2,5 / 1/10" - DN 100/ 4") Hastelloy C22 (standard - DN 2,5 / 1/10" - DN 15 / 1/2")	_ 1 _ _ 3 _ _ 4 _ _ 5 _ _ 6 _ _ 7 _ _ A _ _ B _	• k k k • k a •
Protection class	IP 66 / 67 standard dimension IP 68 field standard dimension (only with stainless st. connection box) IP 68 factory standard dimension (only with stainless st. connection box) (Note 1)	_ _ 0 _ _ 1 _ _ 2	• e e

TABLE V

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

TABLE VI

Calibration	Standard Standard with 316 / 1.4401 tagplate (120 x 46 mm) Standard with 316 / 1.4401 tagplate (67 x 25 mm)	0 2 3	• x x
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TABLE VII

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

TABLE VIII

No Selection	None	000	•
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Note 1: IP 68 factory comes with DS/LIYCY or BTS/LIYCY cables.

RESTRICTIONS

Restriction	Table	Available only with	Not available with
a			II G _ _ , H _ _
b	II	5 _ 0 1, 5 _ 0 2, 6 _ 0 1, 6 _ 0 2,	
	V	00	
c	II	_ _ 0 1, _ _ 0 2	II 1 _ _ , 2 _ _ , 3 _ _
	V	00	
d	II	_ _ _ 1, _ _ _ 2	II 1 _ _ , 2 _ _ , 3 _ _
	IV	_ _ 0, _ _ 2	
f	V	0 0	
	IV	_ 6 _	
g	II	_ _ _ 4, _ _ _ 5, _ _ _ 6, _ _ _ A, _ _	II 1 _ _ , 2 _ _ , 3 _ _
j	II	_ _ 5 _ , _ _ C _	
k	II	1 _ _ , 2 _ _ , 3 _ _ , 5 _ _ , 6 _ _	
l	II	_ _ 0 4, _ _ 0 5, _ _ 0 6, _ _ 0 A, _ _ 0 B, _ _ 0 C	II 1 _ 0 4, 1 _ 0 5, 1 _ 0 6, 1 _ 0 A, 1 _ 0 B, 1 _ 0 C, 2 _ 0 4, 2 _ 0 5, 2 _ 0 6, 2 _ 0 A, 2 _ 0 B, 2 _ 0 C, 3 _ 0 4, 3 _ 0 5, 3 _ 0 6, 3 _ 0 A, 3 _ 0 B, 3 _ 0 C
	V	0 _	
q	II	_ _ _ 1, _ _ _ 2, _ _ _ 4, _ _ _ 6,	
	III	0 _ , C _ , D _	
	IV	_ _ 0, _ _ 2	
s	II	8 _ _ , B _ _ , C _ _ , D _ _ ,	
	III	0 _ , C _ , D _	
x	III	4 0, D 0, E 0, F 0	
y	III	0 _	II _ _ _ 1, _ _ _ 2

Conn Table:		Meter Size						
		DN	DN	DN	DN	DN	DN	DN
		3	4	6	10	15	25	40
		1/10"	1/8"	1/4"	3/8"	1/2"	1"	1 1/2"
	Table II	1 ___	2 ___	3 ___	5 ___	6 ___	8 ___	B ___
	Table II	USD	USD	USD	USD	USD	USD	USD
sanitary connection acc. DIN 11851	_ H _							
SMS 1145	_ K _							
CLAMP acc. ISO 2852	_ L _							
CLAMP acc. DIN 32676	_ N _							
Tri CLAMP	_ P _							
sanitary connection w. butt weld ends acc. DIN 11850	_ S _							
sanitary connection w. butt weld ends acc. ISO 2037	_ T _							
sanitary flange connection acc. DIN 11864-2	_ U _							

		DN	DN	DN	DN	DN	DN
		50	65	80	100	125	150
		2"	2 1/2"	3"	4"	5"	6"
	Table II	C ___	D ___	E ___	F ___	G ___	H ___
Sanitary connection acc. DIN 11851	_ H _						
SMS 1145	_ K _						
CLAMP acc. ISO 2852	_ L _						
CLAMP acc. DIN 32676	_ N _						
Tri CLAMP	_ P _						
Sanitary connection w. butt weld ends acc. DIN 11850	_ S _						
Sanitary connection w. butt weld ends acc. ISO 2037	_ T _						
Sanitary flange connection acc. DIN 11864-2	_ U _						

Cable Table:				Length (meters)								
			Table V	_ 0	_ 1	_ 2	_ 3	_ 4	_ 5	_ 6	_ 7	_ 8
Protection	Table IV	Cable	Table V	5/ Compact	10	15	20	25	30	40	50	100
IP 66 / 67	__ 0	DS	0 _									
IP 68 field	__ 1	DS	0 _									
IP 68 factory	__ 2	DS/LIYCY	0 _									
IP 66 / 67	__ 0	BTS	1 _									
IP 68 field	__ 1	BTS	1 _									
IP 68 factory	__ 2	BTS/LIYCY	1 _									
IP 68 factory	__ 2	LIYCY/LIYCY	2 _									

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Converter Table		DN	DN	DN	DN	DN	DN	DN
		3	4	6	10	15	25	40
		1/10"	1/8"	1/4"	3/8"	1/2"	1"	1 1/2"
	Table II	1 _ _ _	2 _ _ _	3 _ _ _	5 _ _ _	6 _ _ _	8 _ _ _	B _ _ _
	Table III	USD	USD	USD	USD	USD	USD	USD
Without Converter (replacement sensor only)	0 _							
TWM 1000 C	3 _							
TWM 1000 W	4 _							
TWM 9000 C	C _							
TWM 9000 F	D _							
TWM 9000 W	E _							
TWM 9000 R	F _							
		DN	DN	DN	DN	DN	DN	DN
		50	65	80	100	125	150	
		2"	2 1/2"	3"	4"	5"	6"	
	Table II	C _ _ _	D _ _ _	E _ _ _	F _ _ _	G _ _ _	H _ _ _	
Without Converter (replacement sensor only)	0 _							
TWM 1000 C	3 _							
TWM 1000 W	4 _							
TWM 9000 C	C _							
TWM 9000 F	D _							
TWM 9000 W	E _							
TWM 9000 R	F _							

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Electrode Table		DN	DN	DN	DN	DN	DN	DN
		3	4	6	10	15	25	40
		1/10"	1/8"	1/4"	3/8"	1/2"	1"	1 1/2"
	Table II	1 ___	2 ___	3 ___	5 ___	6 ___	8 ___	B ___
	Table IV	USD	USD	USD	USD	USD	USD	USD
St. steel DIN 1.4571 / 316 Ti	_ 1 _							
Hastelloy C4	_ 3 _							
Hastelloy B2	_ 4 _							
Tantalum	_ 5 _							
Titanium	_ 6 _							
Platinum (wetted parts)	_ 7 _							
Stainless steel 1.4404 / 316 L	_ A _							
Hastelloy C22	_ B _							
		DN	DN	DN	DN	DN	DN	DN
		50	65	80	100	125	150	
		2"	2 1/2"	3"	4"	5"	6"	
	Table IV	C ___	D ___	E ___	F ___	G ___	H ___	
St. steel DIN 1.4571 / 316 Ti	_ 1 _							
Hastelloy C4	_ 3 _							
Hastelloy B2	_ 4 _							
Tantalum	_ 5 _							
Titanium	_ 6 _							
Platinum (wetted parts)	_ 7 _							
Stainless steel 1.4404 / 316 L	_ A _							
Hastelloy C22	_ B _							

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.