

## SmartLine® VersaFlow Vortex 200 VM21 Size 1/2" to 4" Sandwich Design

## Model Selection Guide

Model Selection Guide  
36-VM-16-04 Issue 4

Honeywell Proprietary

- Secondary pressure containment around sensor
- Easily drained and easy to clean
- Regardless of type of installation and external factors
- Excellent zero stability
- Low energy consumption, low operating and installation costs
- Rapid signal processing even with product and temperature changes and sudden changes in density
- Modular electronics concept: electronics and sensor easy to replace
- Data redundancy: accurate plug & play replacement of electronics



List Price equals the sum of prices for all selections

### 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. An Asterisk (\*) denotes availability.

Table	I	II	III	IV	V	VI	VII	VIII
VM21	- 4F	-	-	-	-	-	-	-

KEY NUMBER	Description	Selection	Availability
VM21		VM21	↓
<b>TABLE I</b>			
Instrument Code		4F	*
<b>TABLE II</b>			
<b>General Information</b>			
Sensor Material	316LSS	1	*
<b>TABLE III</b>			
<b>a. Flange Connection size</b>	DN 15 / 1/2"	2	a
	DN 25 / 1"	4	b
	DN 40 / 1 1/2"	6	c
	DN 50 / 2"	7	d
	DN 80 / 3"	A	e
	DN 100 / 4"	B	f
<b>b. Pressure Class</b>	PN 10 EN 1092-1	- 2 -	*
	PN 16 EN 1092-1	- 3 -	*
	PN 25 EN 1092-1	- 4 -	*
	PN 40 EN 1092-1	- 5 -	*
	PN 63 EN 1092-1	- 6 -	*
	PN 100 EN 1092-1	- 7 -	*
	ASME 150 lb	- A -	*
	ASME 300 lb	- B -	*
	ASME 600 lb	- D -	*
<b>c. Flange faces</b>	Sandwich	- 0 -	*
<b>d. Sensor Size</b>	DN 15 / 1/2" C Conical Pick-up	- - 2 - -	*
	DN 25 / 1" C Conical Pick-up	- - 3 - -	*
	DN 25 / 1" C Conical Pick-up	- - 4 - -	*
	DN 40 / 1 1/2"	- - 5 - -	*
	DN 50 / 2"	- - 6 - -	*
	DN 80 / 3"	- - 7 - -	*
	DN 100 / 4"	- - A - -	*
		- - 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.

TABLE IV

		Selection	Availability
<b>a. Pressure sensor options</b>	None	0 ---	*
	pressure sensor max. 1 bar	1 ---	*
	pressure sensor max. 2 bar	2 ---	*
	pressure sensor max. 4 bar	3 ---	*
	pressure sensor max. 6 bar	4 ---	*
	pressure sensor max. 10 bar	5 ---	*
	pressure sensor max. 16 bar	6 ---	*
	pressure sensor max. 25 bar	7 ---	*
	pressure sensor max. 40 bar	8 ---	*
	pressure sensor max. 60 bar	A ---	*
	pressure sensor max. 100 bar	B ---	*
	pressure sensor max. 1 bar with isolation valve	C ---	*
	pressure sensor max. 2 bar with isolation valve	D ---	*
	pressure sensor max. 4 bar with isolation valve	E ---	*
	pressure sensor max. 6 bar with isolation valve	F ---	*
	pressure sensor max. 10 bar with isolation valve	G ---	*
	pressure sensor max. 16 bar with isolation valve	H ---	*
	pressure sensor max. 25 bar with isolation valve	K ---	*
	pressure sensor max. 40 bar with isolation valve	L ---	*
	pressure sensor max. 60 bar with isolation valve	M ---	*
pressure sensor max. 100 bar with isolation valve	N ---	*	
<b>b. Gasket material pressure sensor</b>	None	_ 0 _ _	*
	FPM	_ 1 _ _	*
	FFKM	_ 2 _ _	*
<b>c. Approval</b>	None	_ _ 0 _	*
	ATEX II2 G - Ex ia	_ _ 1 _	*
	ATEX II2 G - Ex d	_ _ 2 _	*
	ATEX II3 G - Ex nA	_ _ 3 _	*
	ATEX II2 D - Ex tb	_ _ 4 _	*
	IECEX II2 G - Ex ia	_ _ 5 _	*
	IECEX II2 G - Ex d	_ _ 6 _	*
	IECEX II3 G - Ex nA	_ _ 7 _	*
	IECEX II2 D - Ex tb	_ _ 8 _	*
	QPS IS Class I US/C AEx i	_ _ A _	*
	QPS XP Class I US/C AEx d	_ _ B _	*
	QPS NI Class I US/C AEx nA	_ _ C _	*
	QPS DIP Class II US/C AEx tb	_ _ D _	*
	QPS non-Ex (Ordinary Loc.) US and CAN	_ _ E _	*
<b>d. Converter housing</b>	Standard aluminum	_ _ _ 1	*
	Aluminum, silicone free (Non Ex and Exi only)	_ _ _ 4	i
	Aluminum with weather protection cover (Compact Version)	_ _ _ 7	o

**Be certain to select pressure sensor in accordance with pressure requirements on customer's application data sheet**

TABLE V

<b>a. System design and Cable length</b>	Compact without cable	0 ---	*
	5 m / 16 ft.	1 ---	*
	10 m / 32 ft.	2 ---	*
	15 m / 49 ft.	3 ---	*
	20 m / 65 ft.	4 ---	*
	25 m / 82 ft.	5 ---	*
	30 m / 98 ft.	6 ---	*
	35 m / 114 ft.	7 ---	*
	40 m / 131 ft.	8 ---	*
	45 m / 147 ft.	A ---	*
	50 m / 164 ft.	B ---	*
	5 m / 16 ft. UV-Resistant	E ---	*
	10 m / 32 ft. UV-Resistant	F ---	*
	15 m / 49 ft. UV-Resistant	G ---	*
	20 m / 65 ft. UV-Resistant	H ---	*
	25 m / 82 ft. UV-Resistant	K ---	*
	30 m / 98 ft. UV-Resistant	L ---	*
	35 m / 114 ft. UV-Resistant	M ---	*
	40 m / 131 ft. UV-Resistant	N ---	*
45 m / 147 ft. UV-Resistant	P ---	*	
50 m / 164 ft. UV-Resistant	R ---	*	
<b>b. Display</b>	With	_ 1 _ _	*
<b>c. Cable connection</b>	without	_ _ 0 _	*
	1pc. M20 x 1,5 grey	_ _ 1 _	*
	2pc. M20 x 1,5 grey	_ _ 2 _	*
	3pc. M20 x 1,5 grey	_ _ 3 _	*
	1pc. M20 x 1,5 blue	_ _ 4 _	*
	2pc. M20 x 1,5 blue	_ _ 5 _	*
	3pc. M20 x 1,5 blue	_ _ 6 _	*
	1 Stk. M20x1,5 brass Ex-d/t/nA	_ _ 7 _	*
	2 Stk. M20x1,5 brass Ex-d/t/nA	_ _ 8 _	*
	3 Stk. M20x1,5 brass Ex-d/t/nA	_ _ A _	*
	1pc. M20 x 1,5 s.s. Ex-d/t	_ _ E _	*
	2pc. M20 x 1,5 s.s. Ex-d/t	_ _ F _	*
	3pc. M20 x 1,5 s.s. Ex-d/t	_ _ G _	*
	1pc. 1/2" NPT	_ _ H _	*
	2pc. 1/2" NPT	_ _ K _	*
	3pc. 1/2" NPT	_ _ L _	*
	1pc. G 1/2	_ _ M _	*
2pc. G 1/2	_ _ N _	*	
3pc. G 1/2	_ _ P _	*	
<b>d. Software version</b>	Standard; uncompensated for gases, steam and liquids + saturated steam compensation	_ _ _ 0	m
	Standard + gross/net heat for saturated steam and water	_ _ _ 1	m
	Standard + steam + gross/net heat for saturated steam and superheated steam	_ _ _ 2	n
	Standard + steam + gross/net heat for saturated and superheated steam + gases + FAD	_ _ _ 3	n

TABLE VI

		Selection	Availability
a. Programming language	English	1 _ _	*
	German	2 _ _	*
	French	3 _ _	*
	Italian	4 _ _	*
	Turkish	5 _ _	*
	Spanish	6 _ _	*
	Slovenian	A _ _	*
	Czech	B _ _	*
	Danish	H _ _	*
	Polish	K _ _	*
	Swedish	M _ _	*
	Chinese	T _ _	*
Russian	U _ _	*	
b. Communication	HART (Pactware Communication)	0 _ _	*
c. Identification	None	0 _ _	*
	stainless steel tag 40 x 20 mm	1 _ _	*
	stainless steel tag 120 x 46 mm	2 _ _	*
	cardboard 90 x 45 mm	3 _ _	*
	stainless steel tag 40 x 20 mm + cardboard	4 _ _	*
	stainless steel tag 120 x 46 mm + cardboard	5 _ _	*

TABLE VII

a. General confirmation	None Certificate of compliance 2.1 acc. EN 10204	0 _ _	*
b. Calibration	3 point calibration certificate 5 point calibration certificate	0 _ _	*
c. Pressure test	None	0 _ _	*
	Pressure test + inspection certificate 3.1	1 _ _	*

TABLE VIII

a. Material test / Certificates	None	0 _ _ _	*
	list of material certificates of pressure bearing metal parts with copies of 3.1 material certificates	1 _ _ _	*
	Material according to NACE MR 0175/ ISO 15156	4 _ _ _	*
	PMI of pressure bearing metal parts + 3.1 certificate	7 _ _ _	*
b. Hardness test	list of material certificates of pressure bearing metal parts with copies of 3.1 material certificates + PMI	B _ _ _	*
	None	0 _ _ _	*
c. Cleaning	Hardness test of pressure bearing parts +3.1 certificate	1 _ _ _	*
	None	0 _ _	*
	Final clean. "Standard" + 2.1 CoC	K _ _	*
	Final clean. "Standard" + 3.1 insp. Cert.	L _ _	*
	F. clean. f. oxygen services + 2.1 CoC	N _ _	*
d. X-ray and dye penetration test	F. clean. f. oxygen services + 3.1 insp. Cert.	P _ _	*
	None	0 _ _	*
	X-ray on pressurized weldings	4 _ _	*
e. Manual	Dye penetration test on pressurized weldings	5 _ _	*
	German	1 _ _ _	*
	English	2 _ _ _	*
	French	4 _ _ _	*

**Certificates**

General arrangement drawing (Contact Honeywell for price and availability)
Inspection & test plan ITP (Contact Honeywell for price and availability)
Welding procedure, welding plan, welder qualification (Contact Honeywell for price and availability)
X-ray test of pressure bearing weldings (See Table VIII)
Dye penetration test of pressure bearing weldings (See Table VIII)
Stress Calculation (Contact Honeywell for price and availability)

**RESTRICTIONS**

Restriction Letter	Table	Available only with	Not Available with	
		Selection	Table	Selection
a	III d	___ 2 , ___ 3		
b	III d	___ 4 , ___ 5		
c	III d	___ 6		
d	III d	___ 7		
e	III d	___ A		
f	III d	___ B		
m	IV a	0 _ _ _		
n			IV a	0 _ _ _
i	IV c	__ 0 __ 1 __ 5 __ A __ E _		
o	V a	0 _ _ _		