

SmartLine®
VersaFlow TWC 9400
Coriolis Mass Flow Converter
CM97 Fixed I/O

Model Selection Guide
with Price Data

Model Selection Guide
36-CM-16-52 Issue 7

Honeywell Proprietary

Modular family of converters for all applications
Industry standard outputs including NAMUR
Common hardware for all housings
Highest Process Safety
Advanced diagnostics functions
Excellent long term stability
Easy to install and configure



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	IX	X	XI
CM97	4	-	-	-	-	-	-	-	-	-	-

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

KEY NUMBER	Description	Selection	Availability	
CM97	Fixed I/O Converter	CM97	↓	
TABLE I				
No Selection	None	4	*	
TABLE II				
Type	TWC 9400 C TWC 9400 F Spare Converter Insert (Provide full model and serial number of original converter) Spare Converter Insert (supplied configured w new labels if necessary, requires original serial number)	4 H S T	* * k l	
TABLE III				
Power supply	12 - 24 V DC (12 - 24 V DC) 24 V DC/AC (19 - 29 V) 100 - 230 V AC (85-250 V AC, 50/60 Hz)	1 4 A	* * *	
TABLE IV				
Hazardous Area Approvals	None - non Ex ATEX Ex zone 1 (terminal compartment "d" - C, F) ATEX Ex zone 1 (terminal compartment "e" - C, F) cFMus Class 1, Div 1 IEC Ex (terminal compartment "d" C,F) IEC Ex (terminal compartment "e" C,F)	0 1 2 7 F G	* f g h f g	
TABLE V				
Cable Connection	Default (See Note 1) 3 x 1/2" NPT adaptors made of metal (mandatory for cFMus/option for ATEX)(3x compact/5x remote) 3 x PF 1/2" adaptors made of metal 3 x M20 x 1,5 cable glands (standard: ATEX Ex de: metal). SS316 1/2" NPT adaptors (2x compact / 4x remote) plus blanking plug	0 4 5 6 R	* * * * c	
Operating Manual/ Language	German English French Spanish Russian	german operating language english operating language french operating language spanish operating language russian operating language	_1 _2 _4 _8 _S	* * * * *
TABLE VI				
Custody Transfer	None	0	*	
Process Diagnostics	Standard	_0	*	
TABLE VII				
Converter housing	Without (for spare part electronics only) Standard St. st. 1.4404 (for Compact) St. st. 1.4404 (for Field)	0 1 2 3	* * 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 VIII

No Selection	None
Outputs Base Module	Ex-I IO: CO act. + PO pas. (Cur. Out.-active + Pulse Out.-passive)
	Ex-I IO: CO pas. + PO pas. (Cur. Out.-passive+ Pulse Out.-passive)
Outputs 1st I/O Module	None, no module possible
	Ex-I IO: CO act. + PO / CI pas. (CO-active+PO/Current Input-pas.)
	Ex-I IO: CO pas. + PO / CI pas. (CO-pas.+ PO/Current Input-pas.)
Outputs 2nd I/O Module	Without, no module possible

Selection	Availability
V _ _ _	*
_ 2 _ _	*
_ 3 _ _	*
_ _ 0 _	*
_ _ 1 _	*
_ _ 2 _	*
_ _ _ 0	*

TABLE IX

Measuring Functions	Standard (mass,density,temp.,vol.)
	Standard + Brix
	Standard + General concentration
	Standard + Baume 144.3
	Standard + Baume 145
	Standard + NaOH
	Standard + Plato
	Standard + API oil standard
Standard + Alcohol	
Manuals	Standard on CD
	Paper manuals
	Without CD or paper manuals
Remote Option Signal Cable	None required
	5m/15ft Cable is automatically selected as grey or blue depending on Ex or non Ex
	10m/30ft
	20m/60ft

0 _ _	*
1 _ _	*
2 _ _	*
3 _ _	*
4 _ _	*
5 _ _	*
6 _ _	*
A _ _	*
B _ _	*
_ 0 _	*
_ 1 _	*
_ W _	*
_ _ 0	*
_ _ 4	m
_ _ 1	m
_ _ 5	m

TABLE X

Destination	Others
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0	*
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TABLE XI

Sensors	Without (spare electronics)
	VFC 100
	VFC 200
	VFC 6000 size 08-100 Extended Stem
	VFC 1000
	VFC 6000 size 08 to 100 short stem
	VFC 6000 Size 150 to 250 Extended Stem
	VFC 6000 size 150 to 250 short stem

0	*
1	*
2	*
6	*
7	*
A	*
B	*
C	*

Note 1: For cable gland option "0" - Default:

- For non Ex: 2x plastic M20 cable glands and 1 plastic blanking plug
- For ATEX Ex d: 2 plastic transport plugs and 1 ATEX Ex d blanking plug made of metal
- For ATEX Ex de: 2 metal M20 cable glands and 1 ATEX Ex d blanking plug made of metal

RESTRICTIONS

Restriction Letter	Available only with		Not available with	
	Table	Selection	Table	Selection
a	II	4		
b	II	H		
c	IV	0		
f	II	4, H, S		
	V	0 _		
g	II	4, H, S		
	V	0 _ 6 _		
h	II	4, H, S		
	V	4 _		
k	V	0 _		
	IX	_ 0 0		
l	V	0 _		
	IX	_ 0 0		
m	II	H		

Fixed I/O (Table VIII)					
Ex-I I/O			Ex-I I/O		
1	2	3	1	2	3
2	0	0	3	0	0
	1	0		1	0
	2	0		2	0

Ex-I I/O for CT Phase shifted Pulse outputs		
1	2	3
2	1	0
2	2	0
3	1	0
3	2	0