

Selection and Ordering data		Order-No.	Ord. code	Selection and Ordering data		Order-No.	Ord. code
SITRANS FUS1010 Standard clamp-on				SITRANS FUS1010 Standard clamp-on			
• IP65 (NEMA 4X)	F) ◆	7ME3530-		• IP65 (NEMA 4X)	F) ◆	7ME3530-	
• IP65 (NEMA 7) compact	F)	7ME3531-		• IP65 (NEMA 7) compact	F)	7ME3531-	
• IP66 (NEMA 7) wall mounted	F)	7ME3532-		• IP66 (NEMA 7) wall mounted	F)	7ME3532-	
• IP66 (NEMA 7) with display window	F)	7ME3533-		• IP66 (NEMA 7) with display window	F)	7ME3533-	
		0 -				0 -	
Number of channels/ultrasonic beams				RTD temperature sensor			
Single channel	◆	1		(includes mounting hardware for pipes between 1.5" and 24" outer diameter)			
Dual channel / Dual beam		2		No RTDs	◆	0	
Special: Four channel / Four Beam (NEMA 4X and NEMA 7 wall mount only)		9	H 1 A	1x standard clamp-on RTD		1	
Flowmeter functions and I/O configurations				2x standard clamp-on RTD		2	
includes graphic or digital display and Reflexor capability for all except IP65 (NEMA 7) compact units				1x submersible clamp-on RTD		3	
IP65 (NEMA 4X) and IP66 (NEMA 7 wall mounted) units				2x submersible clamp-on RTD		4	
• Type 1 Standard	◆	A		Special (for insert style RTDs), describe RTD length, thermowell and lagging		9	N 1 Y
- 2x 0 ... 10 V				1x Insertion style RTD with thermowell and lagging		9	N 1 A
- 2x 4 ... 20 mA				2x Insertion style RTD with thermowell and lagging		9	N 1 B
- 2x pulse output							
- 4x relay C type				Transducer for channel 1			
• Type 3 option adder		C		(includes pipe mounting kit and spacer bar for indicated max. OD listed) See „Transducer selection charts“ for specifications.			
- UniMass capability with 2x RTD input and				no transducer		A	
- 4x 4 ... 20 mA analog input				A2 universal to 3"/track mount		B	
IP65 (NEMA 7) compact units				B3 universal to 5"/track mount	◆	C	
• Type 1 Standard		D		C3 universal to 13"/mounting frame	◆	D	
- 1x 4 ... 20 mA (Loop) and 1x status (open collector) per channel				D3 universal to 24"/mounting frame	◆	E	
- 1x pulse output for single channel units only				E2 universal to 48"/mounting frame	◆	F	
• Type 3 option adder		F		A1H (high precision) to 3"/track mount		G	
- UniMass capability with 1 RTD input and				A2H (high precision) to 3"/track mount		H	
- 1x analog input per channel				A3H (high precision) to 3"/track mount		J	
• Other version (Expanded I/O and/or Mercury wetted relays)		Z	J 1 Y	B1H (high precision) to 5"/track mount		K	
Add order code and plain text.				B2H (high precision) to 5"/track mount	◆	L	
• Type 3 with Mercury wetted relays		Z	J 1 A	C1H (high precision) to 24"/mounting frame		M	
• Type 3 with expanded I/Os (4 additional 4 ... 20 mA outputs) and form C relay		Z	J 1 B	C2H (high precision) to 24"/mounting frame	◆	N	
• Type 3 with expanded I/Os and Mercury wetted relays		Z	J 1 C	D1H (high precision) to 48"/mounting frame	◆	P	
				D2H (high precision) to 48"/mounting frame		Q	
Meter power options				D4H (high precision) to 48"/mounting frame		R	
90 ... 240 V AC	◆	A		Doppler to 12" with strap kit (not for IP65 (NEMA 7))	◆	S	
9 ... 36 V DC (except compact NEMA 7)		B		Other versions (different size, mount, type or pipe larger than DN 1200 (48"), or corrosion resistant), add Order code and plain text.		Z	P 1 Y
9 ... 36 V DC negative GND (compact only)		J		High temperature transducer size 2 for up to 230 °C (446 °F) (30 to 200 mm diam. (1.18 to 7.67 inch diam.))		Z	P 1 A
9 ... 36 V DC positive GND (compact only)		K		High temperature transducer size 3 for up to 230 °C (446 °F) (150 to 610 mm diam. (5.90 to 24 inch diam.))		Z	P 1 B
Communication options				High temperature transducer size 4 for up to 230 °C (446 °F) (400 to 1200 mm diam. (15.75 to 47.25 inch diam.))		Z	P 1 C
RS232 (standard)		0		High temperature range HP transducer size B1H for temperatures up to 104 °C (220 °F)		Z	P 1 K
MODBUS (dedicated only, excludes NEMA 7 compact)		1		High temperature range HP transducer size B2H for temperatures up to 104 °C (220 °F)		Z	P 1 L
Special: Dial up Modem (dedicated only, excludes compact NEMA 7), max. 9600 Baud Dial up Modem		9	L 1 Y	High temperature range HP transducer size C1H for temperatures up to 104 °C (220 °F)		Z	P 1 M
				High temperature range HP transducer size C2H for temperatures up to 104 °C (220 °F)		Z	P 1 N
				High temperature range HP transducer size D1H for temperatures up to 104 °C (220 °F)		Z	P 1 P
				High temperature range HP transducer size D2H for temperatures up to 104 °C (220 °F)		Z	P 1 Q
				High temperature range HP transducer size D4H for temperatures up to 104 °C (220 °F)		Z	P 1 R

◆ Mainstream products (delivery time 4 to 6 weeks)

Selection and Ordering data		Order-No.	Ord. code	Selection and Ordering data		Order code
SITRANS FUS1010 Standard clamp-on				Further designs		
• IP65 (NEMA 4X)	F) ◆	7ME3530-		Please add „Z“ to Order No. and specify Order code(s).		
• IP65 (NEMA 7) compact	F)	7ME3531-		Cable assembly for transducers (add for No. of channels) See „Transducer cable selection chart“		
• IP66 (NEMA 7) wall mounted	F)	7ME3532-		Cable assembly for RTDs (add for No. of RTDs) See „RTD cable selection chart“		
• IP66 (NEMA 7) with display window	F)	7ME3533-		Cable termination kit (for one cable pair)		
 0 -				• Termination for standard, plenum and armored transducer cable	T01	
Transducer for channel 2 (includes pipe mounting kit for indicated max. OD listed) See „Transducer selection charts“ for specifications.				• Termination for submersible transducer cable	T11	
no transducer			A	• RTD cable termination kit for standard RTD	T21	
A2 universal to 3"/track mount			B	• RTD cable termination kit for submersible RTD	T31	
B3 universal to 5"/track mount ◆			C	• Insert RTD cable termination kit	T41	
C3 universal to 13"/mounting frame ◆			D	Languages (Meter, Labels and Documentation), English (default)		
D3 universal to 24"/mounting frame ◆			E	• German ◆	B10	
E2 universal to 48"/mounting frame ◆			F	• French	B12	
A1H (high precision) to 3"/track mount			G	• Spanish	B13	
A2H (high precision) to 3"/track mount			H	• Italian	B14	
A3H (high precision) to 3"/track mount			J	Wet flow transfer calibration (priced for 1 pipe calibration)		
B1H (high precision) to 5"/track mount			K	• 6 point up to 4 inch (DN 100)	D10	
B2H (high precision) to 5"/track mount ◆			L	• 6 point up to 5 to 8 inch (DN 125 to DN 200)	D11	
C1H (high precision) to 24"/mounting frame			M	• 6 point up to 10 to 12 inch (DN 250 to DN 300)	D12	
C2H (high precision) to 24"/mounting frame ◆			N	• 6 point up to 14 to 16 inch (DN 350 to DN 400)	D13	
D1H (high precision) to 48"/mounting frame ◆			P	• 6 point up to 18 to 20 inch (DN 450 to DN 500)	D14	
D2H (high precision) to 48"/mounting frame			Q	• 6 point up to 22 to 24 inch (DN 550 to DN 600)	D15	
D4H (high precision) to 48"/mounting frame			R	• 6 point up to 26 to 30 inch (DN 650 to DN 750)	D16	
Doppler to 12" with chain or strap kit (not for IP65 (NEMA 7)) ◆			S	• 6 point up to 32 to 36 inch (DN 800 to DN 900)	D17	
Other versions (different size, mount, type or pipe larger than DN 1200 (48"), or corrosion resistant), add Order code and plain text.			Z	Tag name plate		
High temperature transducer size 2 for up to 230 °C (446 °F) (30 to 200 mm diam. (1.18 to 7.67 inch diam.))			Z	• Stainless steel tag with 3.2 mm (0.13 inch) character size (26 characters max.)	Y17	
High temperature transducer size 3 for up to 230 °C (446 °F) (150 to 610 mm diam. (5.90 to 24 inch diam.))			Z	• Stainless steel tag with 3.2 mm (0.13 inch) character size (68 characters max.)	Y19	
High temperature transducer size 4 for up to 230 °C (446 °F) (400 to 1200 mm diam. (15.75 to 47.25 inch diam.))			Z	◆ Mainstream products (delivery time 4 to 6 weeks)		
High temperature range HP transducer size B1H for temperatures up to 104 °C (220 °F)			Z			
High temperature range HP transducer size B2H for temperatures up to 104 °C (220 °F)			Z			
High temperature range HP transducer size C1H for temperatures up to 104 °C (220 °F)			Z			
High temperature range HP transducer size C2H for temperatures up to 104 °C (220 °F)			Z			
High temperature range HP transducer size D1H for temperatures up to 104 °C (220 °F)			Z			
High temperature range HP transducer size D2H for temperatures up to 104 °C (220 °F)			Z			
High temperature range HP transducer size D4H for temperatures up to 104 °C (220 °F)			Z			
Approvals						
FM/CSA ◆			1			
ATEX			2			
INMETRO (Brazil)			3			
Special ATEX EEx m add Order code and plain text: Length of integral cable:			9	R 1 Y		

MLFB example

Application example

A clamp-on meter is required for a 12" carbon steel jet fuel line, with a wass thickness of 12.7 mm (0.5"). Meter electronics is to be located in a Class I Div 2 area only 18 m (60 ft) from the pipe-line. 12 V DC power is available at the site.

Dual beam operation is desired for improved accuracy and re-dundant measurement.

MLFB Order No.: **7ME3530-2AB00-0QQ1-Z**
K03 + K03

Selection and Ordering data	Order-No.	Ord. code
FUS1010 meter family	7 ME 3 5 3	0 -
IP65 (NEMA 4X) enclosure	0	
Dual Beam	2	
Standard I/O option	A	
9 ... 36 V DC power option	B	
RS232 Standard	0	
No RTD required	0	
Transducer code for path 1	Q	
Transducer code for path 2	Q	
FM approval required	1	
30 m (100 ft) transducer cable for path 1		K 0 3
30 m (100 ft) transducer cable for path 2		K 0 3

Transducer selection charts

Universal transducers for any pipe material					
Transducer	Order Code	Outer diameter range (mm)		Outer diameter range (inches)	
Size code		min.	max.	min.	max.
A2	B	12.7	50.8	0.5	2
B3	C	19	127	0,75	5
C3	D	51	305	2	12
D3	E	203	610	8	24
E2	F	254	6096	10	240

High precision transducers for steel pipe with outer diameter/wall thickness ratio >10					
Transducer	Order Code	Pipe wall (mm)		Pipe wall (inches)	
Size code		min.	max.	min.	max.
A1H	G	0.64	1.02	0.025	0.04
A2H	H	1.02	1.52	0.04	0.06
A3H	J	1.52	2.03	0.06	0.08
B1H	K	2.03	3.05	0.08	0.12
B2H	L	3.05	4.06	0.12	0.16
C1H	M	4.06	5.84	0.16	0.23
C2H	N	5.84	8.13	0.23	0.32
D1H	P	8.13	11.18	0.32	0.44
D2H	Q	11.18	15.75	0.44	0.62
D4H	R	15.75	31.75	0.62	1.25

Transducer cable selection chart

Cable length m (ft)	Standard (PVC jacket) -40...+80 °C (-40...+176 °F)	Submersible (polyethylene jacket) -40...+80 °C (-40...+176 °F)	Plenum Rated (teflon jacket) -40...+200 °C (-40...+392 °F)	Armored -40...+80 °C (-40...+176 °F)
Order code				
6 (20)	K01	K11	K21	K31
15 (50)	K02	K12	K22	K32
30 (100)	K03	K13	K23	K33
46 (150)	K04	K14	K24	K34
61 (200)	K05	K15	K25	K35
91 (300)	K06	K16	K26	K36

RTD cable selection chart

RTD cable codes for length and type		
Cable length m (ft)	Standard (teflon wrapped) -40 ... +200 °C (-40 ... +392 °F)	Submersible (extruded jacket) -40 ... +200 °C (-40 ... +392 °F)
Order code		
6 (20)	R01	R11
15 (50)	R02	R12
30 (100)	R03	R13
46 (150)	R04	R14
61 (200)	R05	R15
91 (300)	R06	R16