

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Overview



Echomax XPS/XCT transducers use ultrasonic technology to measure level in a wide range of liquids and solids.

Benefits

- Integral temperature compensation
- Low ringing effect reduces blanking distance
- Foam facing for dusty applications
- Self-cleaning and low-maintenance
- Connect using only 2 wires
- Chemically resistant
- Hermetically sealed

Application

The transducers can be fully immersed, are resistant to steam and corrosive chemicals and can be installed without flanges.

The XPS series offers versions for various measuring ranges up to 40 m (130 ft) and up to a max. temperature of 95 °C (203 °F).

The XCT series can be used in applications at higher temperatures to measure level up to a distance of 12 m (40 ft) and at a max. temperature of 145 °C (293 °F).

During operation, the Echomax transducers emit acoustic pulses in a narrow beam. The level monitor measures the propagation time between pulse emission and its reflection (echo) to calculate the distance.

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Technical specifications

Input	XPS-10 (standard and F models)	XPS-15 (standard and F models)	XPS-30	XPS-40	XCT-8 (standard and sanitary models)	XCT-12
Measuring range	0.3 to 10 m (1 to 33 ft)	Standard: 0.3 to 15 m (1 to 50 ft) F: 0.45 to 15 m (1.5 to 50 ft)	0.6 to 30 m (2 to 100 ft)	0.9 to 40 m (3 to 130 ft)	0.6 to 8 m (2 to 26 ft)	0.6 to 12 m (2 to 40 ft)
Output						
Frequency	44 kHz	44 kHz	30 kHz	22 kHz	44 kHz	44 kHz
Beam angle	12°	6°	6°	6°	12°	6°
Environmental						
Location	Indoors/outdoors					
Ambient temperature	-40 to +95 °C (-40 to +203 °F)				standard: -40 to +145 °C (-40 to +293 °F) sanitary: -40 to +125 °C (-40 to +260 °F)	-40 to +145 °C (-40 to +293 °F)
Pollution degree	4					
Pressure	8 bar (120 psi)	8 bar (120 psi)	0.5 bar (7.25 psi)	0.5 bar (7.25 psi)	4 bar (60 psi): -40 to +138 °C (-40 to +280 °F) 8 bar (120 psi): -40 to +95 °C (-40 to +203 °F) Sanitary XCT-8: 0.5 bar (7.25 psi)	
Design						
Weight	0.8 kg (1.8 lbs)	1.3 kg (2.8 lbs) F: 2 kg (4.4 lbs)	4.3 kg (9.5 lbs)	8 kg (18 lbs)	0.8 kg (1.7 lbs)	1.3 kg (2.8 lbs)
Power supply	Operation of transducer only with approved Siemens Milltronics controllers					
Material	Standard, F: PVDF Option: PTFE face with flange	Standard, F: PVDF Option: PTFE face with flange	PVDF Option: PTFE face with flange	PVDF	Standard: PVDF Option: PTFE face with universal flange	
Color	Standard: blue F: gray	Standard: blue F: gray	blue	blue	white	
Process connection	Standard: 1" NPT or 1" BSP, F: 1" NPT	Standard: 1" NPT or 1" BSP, F: 1" NPT	1.5" universal thread (NPT or BSP)		1" NPT or 1" BSP	
Cable	2 wire twisted pair/braided and foil shielded 0.5 mm² (20 AWG) PVC jacket				2 wire twisted pair/braided and foil shielded 0.5 mm² (20 AWG) silicone jacket	
Separation	Max. 365 m (1200 ft)					
Certificates and approvals	Standard: CE, CSA, FM, ATEX II 2G F: FM Class I, Div 1, Groups A, B, C and D, Class II Div 1, Groups E, F and G, Class III	Standard: CE, CSA, FM, ATEX II 2G F: FM Class I, Div 1, Groups A, B, C and D, Class II Div 1, Groups E, F and G, Class III	CE, CSA, FM, ATEX II 2G 1D	CE, CSA, FM, ATEX II 2G 1D	Standard: CE, CSA, FM, ATEX II 2G Sanitary: CSA, 3A	CE, CSA, FM, ATEX II 2G

5

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Selection and Ordering data	Order No.
Echomax XPS-10 ultrasonic transducer	C) 7ML1115 -
Two-wire connection (hardware), integral temperature sensor, measuring range: min.0.30 m, max.10 m	0
Mounting thread and facing	
1" NPT (ANSI/ASME B1.20.1)	0
1" NPT (ANSI/ASME B1.20.1) with foam facing, not available with flanged versions	1
1" NPT (ANSI/ASME B1.20.1) with PTFE facing, available for flanged versions only	2
1" BSPT (EN 10226-1)	3
1" BSPT (EN 10226-1) with foam facing, not available with flanged versions	4
1" BSPT (EN 10226-1) with PTFE facing, available for flanged versions only	5
Cable length	
5 m	B
10 m	C
30 m	E
50 m	F
100 m	K
Mounting flange	
None	A
3" ANSI, 150 lbs	C
4" ANSI, 150 lbs	D
6" ANSI, 150 lbs	E
8" ANSI, 150 lbs	F
DN 80, PN 10/16	G
DN 100, PN 10/16	J
DN 150, PN 10/16	L
JIS10K3B Style	M
JIS10K4B Style	P
JIS10K6B Style	R
(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1, or JIS B 2238 standard.)	
Approvals	
ATEX II 2 GD, FM Class I Div. 2, SAA Class I Zone 1	3
CSA Class I Div. 1 ¹⁾	4

Selection and Ordering data	Order No.
Instruction manual	
Quick Start Manual, multi-language	C) 7ML1998-5QM82
Note: Due to ATEX regulations, one Quick Start Manual is included with every transducer.	
Applications Guidelines, multi-language	C) 7ML1998-5HV61
Note: The Applications Guidelines should be ordered as a separate line item on the order.	
Accessories	
Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors	PBD-45000787
Submergence shield kit	7ML1830-1BH
Easy Aimer II, NPT with 3/4" x 1" PVC coupling	7ML1830-1AQ
Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings	7ML1830-1AX
Easy Aimer 304, with stainless steel coupling	7ML1830-1AU
Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings	7ML1830-1GN
Universal Box Bracket, Mounting Kit	7ML1830-1BK
Channel Bracket, Wall Mount	7ML1830-1BL
Extended Channel Bracket, Wall Mount	7ML1830-1BM
Channel Bracket, Floor Mount	7ML1830-1BN
Extended Channel Bracket, Floor Mount	7ML1830-1BP
Bridge Channel Bracket, Floor Mount (See Mounting Brackets on page 5/114 for more information)	7ML1830-1BQ
1" NPT locknut, plastic	7ML1830-1DS
1" BSP locknut, plastic	7ML1830-1DR
Split flanges	
3", Aluminum	7ML1830-1AV
3", 304 Stainless Steel	7ML1830-1AW
Gasket Kit 3"	PBD-61007151
4", Aluminum	C) 7ML1830-1BA
4", 304 Stainless Steel	C) 7ML1830-1BB
Gasket Kit 4"	PBD-61007152
6", Aluminum	7ML1830-1BC
6", 304 Stainless Steel	7ML1830-1BD
Gasket Kit 6"	PBD-61007153
Instruction manual	7ML1998-1EP01

1) Valid with mounting thread and facing options 0, 1 and 2 only.

C) Subject to export regulations AL: N, ECCN: EAR99.

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

5

Ordering data		Order No.
Echomax XPS-10F ultrasonic transducer	C)	7ML1170 -
Two-wire connection (hardware), integral temperature sensor, measuring range: min.0.30 m, max.10 m		0
Mounting thread and facing		
1" NPT (ANSI/ASME B1.20.1)	1	
Cable length		
5 m	B	
10 m	C	
30 m	D	
50 m	E	
100 m	F	
Mounting flange, flush mount		
None	A	
3" ANSI, 150 lbs	B	
4" ANSI, 150 lbs	C	
6" ANSI, 150 lbs	D	
8" ANSI, 150 lbs	E	
(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1, or JIS B 2238 standard.)		
Approvals		
FM Class I Div. 1	1	
Instruction manual		
English	C)	7ML1998-1DU01
Note: The Instruction manual should be ordered as a separate line item on the order.		
Applications Guidelines, multi-language	C)	7ML1998-5HV61
Note: The Applications Guidelines should be ordered as a separate line item on the order.		
Accessories		
Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors		PBD-45000787
Submergence shield kit		7ML1830-1BH
Easy Aimer II, NPT with 3/4" x 1" PVC coupling		7ML1830-1AQ
Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings		7ML1830-1AX
Easy Aimer 304, with stainless steel coupling		7ML1830-1AU
Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings		7ML1830-1GN
Universal Box Bracket, Mounting Kit		7ML1830-1BK
Channel Bracket, Wall Mount		7ML1830-1BL
Extended Channel Bracket, Wall Mount		7ML1830-1BM
Channel Bracket, Floor Mount		7ML1830-1BN
Extended Channel Bracket, Floor Mount		7ML1830-1BP
Bridge Channel Bracket, Floor Mount		7ML1830-1BQ
(See Mounting Brackets on page 5/114 for more information)		
1" NPT locknut, plastic		7ML1830-1DS
1" BSP locknut, plastic		7ML1830-1DR
Split flanges		
3", Aluminum		7ML1830-1AV
3", 304 Stainless Steel		7ML1830-1AW
Gasket Kit 3"		PBD-61007151
4", Aluminum	C)	7ML1830-1BA
4", 304 Stainless Steel	C)	7ML1830-1BB
Gasket Kit 4"		PBD-61007152
6", Aluminum		7ML1830-1BC
6", 304 Stainless Steel		7ML1830-1BD
Gasket Kit 6"		PBD-61007153
Instruction manual		7ML1998-1EP01

C) Subject to export regulations AL: N, ECCN: EAR99.

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Selection and Ordering data

Order No.

Echomax XPS-15 ultrasonic transducer
Two-wire connection (hardware), integral temperature sensor, measuring range: min 0.3 m, max. 15 m

C) 7ML 1118 - 0

Mounting thread and facing

1" NPT (ANSI/ASME B1.20.1)
1" NPT (ANSI/ASME B1.20.1) with foam facing, not available with flanged versions
1" NPT (ANSI/ASME B1.20.1) with PTFE facing, available for flanged versions only
1" BSPT (EN 10226-1)
1" BSPT (EN 10226-1) with foam facing, not available with flanged versions
1" BSPT (EN 10226-1) with PTFE facing, available for flanged versions only

0
1
2
3
4
5

Cable length

5 m
10 m
30 m
50 m
100 m

B
C
E
F
K

Mounting flange

None
6" ANSI, 150lb
8" ANSI, 150lb
DN 150, PN 10/16
DN 200, PN 10/16
JIS10K 6B
JIS10K 8B
(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1, or JIS B 2238 standard.)

A
D
E
J
K
N
P

Approvals

ATEX II 2 GD, FM Class I Div. 2, SAA Class I Zone 1
CSA Class I Div. 1

3
4

Instruction manual

Quick Start Manual, multi-language
Note: Due to ATEX regulations, one Quick Start Manual is included with every transducer.
Applications Guidelines, multi-language
Note: The Applications Guidelines should be ordered as a separate line item on the order.

C) 7ML1998-5QM82
C) 7ML1998-5HV61

Accessories

Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors
Submergence Shield Kit
Universal Box Bracket, Mounting Kit
Channel Bracket, Wall Mount
Extended Channel Bracket, Wall Mount
Channel Bracket, Floor Mount
Extended Channel Bracket, Floor Mount
Bridge Channel Bracket, Floor Mount
(See Mounting Brackets on page 5/114 for more information)
1" NPT locknut, plastic
1" BSP locknut, plastic
Easy Aimer II, with PVC coupling
Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings
Easy Aimer 304 with stainless steel coupling
Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings
Split flanges
Split Flanges 6" Aluminum
Split Flanges 6" Stainless Steel
Split Flanges Gasket Kit 6"
Split Flanges Instruction manual

PBD-45000787
7ML1830-1BJ
7ML1830-1BK
7ML1830-1BL
7ML1830-1BM
7ML1830-1BN
7ML1830-1BP
7ML1830-1BQ
7ML1830-1DS
7ML1830-1DR
7ML1830-1AQ
7ML1830-1AX
7ML1830-1AU
7ML1830-1GN
7ML1830-1BE
7ML1830-1BF
PBD-61007153
7ML1998-1EP01

Selection and Ordering data

Order No.

Echomax XPS-15F ultrasonic transducer
Two-wire connection (hardware), integral temperature sensor, measuring range: min. 0.3 m, max. 15 m

C) 7ML 1171 - 0

Mounting thread and facing

1" NPT (ANSI/ASME B1.20.1)

1
B
C
D
E
F

Cable length

5 m
10 m
30 m
50 m
100 m

Mounting flange, flush mount

None
6" ANSI, 150lb
8" ANSI, 150lb
(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5, or EN 1092-1, or JIS B 2238 standard.)

A
B
C

Approvals

FM Class I Div. 1

1

Instruction manual

English
Note: The Instruction manual should be ordered as a separate line item on the order.
Applications Guidelines, multi-language
Note: The Applications Guidelines should be ordered as a separate line item on the order.

C) 7ML1998-1DU01
C) 7ML1998-5HV61

Accessories

Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors
Submergence Shield Kit
Universal Box Bracket, Mounting Kit
Channel Bracket, Wall Mount
Extended Channel Bracket, Wall Mount
Channel Bracket, Floor Mount
Extended Channel Bracket, Floor Mount
Bridge Channel Bracket, Floor Mount
(See Mounting Brackets on page 5/114 for more information)
1" NPT locknut, plastic
1" BSP locknut, plastic
Easy Aimer II, with PVC coupling
Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings
Easy Aimer 304 with stainless steel coupling
Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings
Split Flanges 6" Aluminum
Split Flanges 6" Stainless Steel
Split Flanges Gasket Kit 6"
Split Flanges Instruction manual

PBD-45000787
7ML1830-1BJ
7ML1830-1BK
7ML1830-1BL
7ML1830-1BM
7ML1830-1BN
7ML1830-1BP
7ML1830-1BQ
7ML1830-1DS
7ML1830-1DR
7ML1830-1AQ
7ML1830-1AX
7ML1830-1AU
7ML1830-1GN
7ML1830-1BE
7ML1830-1BF
PBD-61007153
7ML1998-1EP01

C) Subject to export regulations AL: N, ECCN: EAR99.

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Selection and Ordering data	Order No.
Echomax XPS-30 ultrasonic transducer Two-wire connection (hardware), integral temperature sensor, measuring range: min. 0.6 m, max. 30 m	C) 7ML 1 1 2 3 -
Mounting thread and facing 1½" BSPT (EN 10226-1)/NPT (ANSI/ASME B1.20.1) 1½" BSPT (EN 10226-1)/NPT (ANSI/ASME B1.20.1), foam facing, not available with flanged versions 1½" BSPT (EN 10226-1)/NPT (ANSI/ASME B1.20.1), PTFE facing, available for flanged versions only	0 1 2
Cable length 5 m 10 m 30 m 50 m 100 m	B C E F K
Mounting flange None Flange 6" ANSI Flange 8" ANSI Flange DN 150, PN 10/16 Flange DN 200, PN 10/16 Flange JIS10K 6B Flange JIS10K 8B (Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1, or JIS B 2238 standard.)	A D E J K N P
Approvals ATEX II 2G 1D, FM Class I Div 2, SAA	5
Instruction manual Quick Start Manual, multi-language Note: Due to ATEX regulations, one Quick Start Manual is included with every transducer. Applications Guidelines, multi-language Note: The Applications Guidelines should be ordered as a separate line item on the order.	C) 7ML1998-5QM82 C) 7ML1998-5HV61
Accessories Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors 1½" BSP locknut, plastic Easy Aimer II NPT 1½" Galvanized Easy Aimer II NPT 1½" with Stainless Steel coupling Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings	PBD-45000787 7ML1830-1DP 7ML1830-1AN 7ML1830-1AT 7ML1830-1AX 7ML1830-1GN

C) Subject to export regulations AL: N, ECCN: EAR99.

Selection and Ordering data	Order No.
Echomax XPS-40 ultrasonic transducer Two-wire connection (hardware), integral temperature sensor, measuring range: min. 0.9 m, max. 40 m	C) 7ML 1 1 2 7 -
Mounting thread and facing 1½" BSPT (EN 10226-1)/NPT (ANSI/ASME B1.20.1) 1½" BSPT (EN 10226-1)/NPT (ANSI/ASME B1.20.1), foam facing	0 1
Cable length 5 m 10 m 30 m 50 m 100 m	B C E F K
Mounting flange None	A
Approvals ATEX II 2G 1D, FM Class I Div 2, SAA	5
Instruction manual Quick Start Manual, multi-language Note: Due to ATEX regulations, one Quick Start Manual is included with every transducer. Applications Guidelines, multi-language Note: The Applications Guidelines should be ordered as a separate line item on the order.	C) 7ML1998-5QM82 C) 7ML1998-5HV61
Accessories Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors 1½" BSP locknut, plastic Easy Aimer II NPT 1½" Galvanized Easy Aimer II NPT 1½" with Stainless Steel coupling Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings	PBD-45000787 7ML1830-1DP 7ML1830-1AN 7ML1830-1AT 7ML1830-1AX 7ML1830-1GN

C) Subject to export regulations AL: N, ECCN: EAR99.

5

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Selection and Ordering data

Order No.

Echomax XCT-8 ultrasonic transducer

C) 7ML1132 -

Two-wire connection (hardware), integral temperature sensor, measuring range: min. 0.45 m, max. 8 m

Mounting thread and facing

1" NPT (ANSI/ASME B1.20.1)

1" NPT (ANSI/ASME B1.20.1), PTFE facing (only for flange versions S, T, U and V)

1" BSPT (EN 10226-1)

1" BSPT (EN 10226-1), PTFE facing (only for flange versions S, T, U and V)

Cable length

1 m

5 m

10 m

30 m

50 m

100 m

Mounting flange

None

3" ANSI, 150lb

4" ANSI, 150lb

6" ANSI, 150lb

DN 80, PN 10/16

DN 100, PN 10/16

DN 150, PN 10/16

JIS10K 3B

JIS10K 6B

JIS10K 4B

(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1 or JIS B 2238 standard.)

3" universal¹⁾

4" universal²⁾

6" universal³⁾

4" sanitary flange

Approvals

ATEX II 2G, FM Class I, Div. 2, SAA

CSA Class I Div. 1, available with mounting thread and facing option 0

3A Sanitary (only with 4" sanitary flange, option V)

Selection and Ordering data

Order No.

Instruction manual

Quick start manual, multi-language

Note: Due to ATEX regulations, one Quick start manual is included with every transducer.

XCT-8 with Sanitary Flange, multi-language

Note: This manual should be ordered as a separate line item with Mounting Option V.

Applications Guidelines, multi-language

Note: The Applications Guidelines should be ordered as a separate line item on the order.

Accessories

Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors

Submersible Hood

Universal Box Bracket, Mounting Kit

Channel Bracket, Wall Mount

Extended Channel Bracket, Wall Mount

Channel Bracket, Floor Mount

Extended Channel Bracket, Floor Mount

Bridge Channel Bracket, Floor Mount
(See Mounting Brackets on page 5/114 for more information)

1" NPT locknut, plastic

1" BSP locknut, plastic

Easy Aimer 304 with stainless steel coupling

Sanitary, 4" mounting clamp

Sanitary, isolating gasket

Split flanges

3", Aluminum

3", 304 Stainless Steel

Gasket Kit 3"

4", Aluminum

4", 304 Stainless Steel

Gasket Kit 4"

6", Aluminum

6", 304 Stainless Steel

Gasket Kit 6"

Instruction manual

C) Subject to export regulations AL: N, ECCN: EAR99.

1) Universal fits 3" ANSI, DN80, JIS 10K3B style

2) Universal fits 4" ANSI, DN100, JIS 10K4B style

3) Universal fits 6" ANSI, DN150, JIS 10K6B style

SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

Echomax XPS and XCT

Selection and Ordering data

Order No.

Echomax XCT-12 ultrasonic transducer

Two-wire connection (hardware), integral temperature sensor, measuring range: min. 0.45 m, max. 12 m

Mounting thread and facing

1" NPT (ANSI/ASME B1.20.1)
1" NPT (ANSI/ASME B1.20.1), PTFE facing, available for flange options U only
1" BSPT (EN 10226-1)
1" BSPT (EN 10226-1), PTFE facing, available for flange options U only

Cable length

1 m
5 m
10 m
30 m
50 m
100 m

Mounting flange

None
6" ANSI, 150 lbs
8" ANSI, 150 lbs
DN 150, PN 10/16
DN 200, PN 10/16
JIS10K 6B
JIS10K 8B
(Note: Flange bolting patterns and facings dimensionally correspond to the applicable ASME B16.5 or EN 1092-1 or JIS B 2238 standard.)
6" universal for 6" ANSI, DIN 150 or JIS 10K6B style

Approvals

ATEX II 2G, FM Class I, Div. 2, SAA
CSA Class I, Div. 1, available with process connection and facing option 0 or 2 only

Instruction manual

Quick Start Manual, multi-language
Note: Due to ATEX regulations, one Quick Start Manual is included with every transducer.
Applications Guidelines, multi-language
Note: The Applications Guidelines should be ordered as a separate line item on the order.

Accessories

Tag, stainless steel with hole, 12 x 45 mm (0.47 x 1.77"), one text line for fastening on sensors
Submergence Shield Kit
Universal Box Bracket, Mounting Kit
Channel Bracket, Wall Mount
Extended Channel Bracket, Wall Mount
Channel Bracket, Floor Mount
Extended Channel Bracket, Floor Mount
Bridge Channel Bracket, Floor Mount
(See Mounting Brackets on page 5/114 for more information)
1" NPT locknut, plastic
1" BSP locknut, plastic
Easy Aimer 304 with stainless steel coupling
Easy Aimer II, Aluminum with M20 adapter and 1" and 1½" BSP aluminum couplings
Easy Aimer 304, with M20 adapter and 1" and 1½" BSP 304 SS couplings
Split Flanges 6" Aluminum
Split Flanges 6" Stainless Steel
Split Flanges Gasket Kit 6"
Split Flanges Instruction manual

C) 7ML 1136 -

0

0

1

2

3

A

B

C

E

F

K

A

D

E

J

K

N

P

U

3

4

C) 7ML1998-5QM82

C) 7ML1998-5HV61

PBD-45000787

7ML1830-1BJ

7ML1830-1BK

7ML1830-1BL

7ML1830-1BM

7ML1830-1BN

7ML1830-1BP

7ML1830-1BQ

7ML1830-1DS

7ML1830-1DR

7ML1830-1AU

7ML1830-1AX

7ML1830-1GN

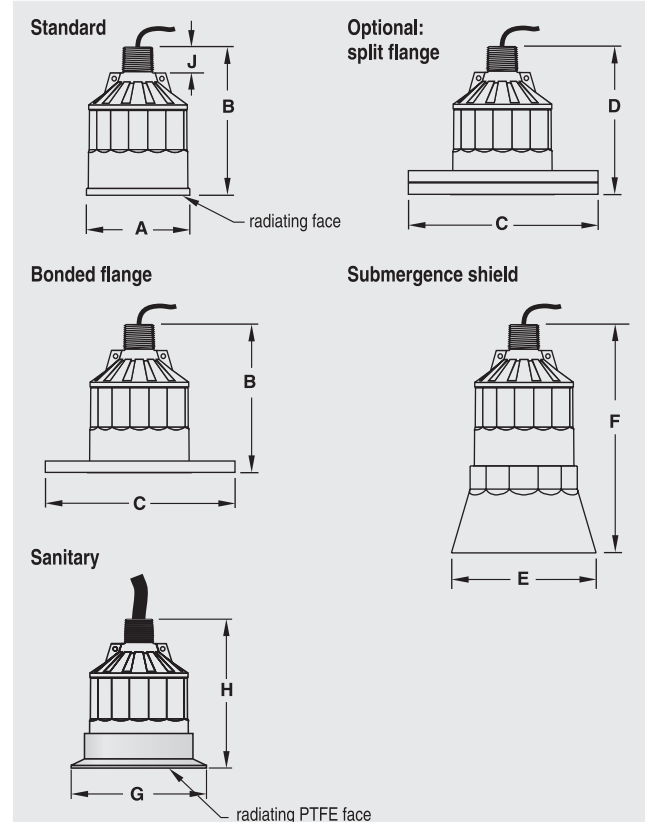
7ML1830-1BE

C) 7ML1830-1BF

PBD-61007153

7ML1998-1EP01

Dimensional drawings



XPS and XCT ultrasonic transducer dimensions

Version				
Dimen.	XPS-10	XPS-15	XPS-30	XPS-40
A	88 mm (3.464")	121 mm (4.764")	175 mm (6.890")	206 mm (8.110")
B	122 mm (4.803")	132 mm (5.197")	198 mm (7.795")	229 mm (9.016")
C	According to ANSI, DIN and JIS			n/a
D	128 mm (5.039")	138 mm (5.433")	204 mm (8.031")	n/a
E	124 mm (4.882")	158 mm (6.220")	n/a	n/a
F	152 mm (5.984")	198 mm (7.795")	n/a	n/a
J	28 mm (1.1")	28 mm (1.1")	28 mm (1.1")	28 mm (1.1")

Version		
Dimen.	XCT-8	XCT-12
A	88 mm (3.464")	121 mm (4.764")
B	122 mm (4.803")	132 mm (5.197")
C	According to ANSI, DIN and JIS	
D	128 mm (5.039")	138 mm (5.433")
E	n/a	n/a
F	n/a	n/a
G	sanitary version: 119 mm (4.68")	n/a
H	sanitary version: 122 mm (4.8")	n/a
J	28 mm (1.1")	28 mm (1.1")

C) Subject to export regulations AL: N, ECCN: EAR99.

Refer to page 5/113 for split flanges for XCT-12/XPS-15 transducers.

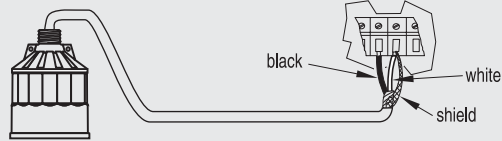
SITRANS L Level instruments

Continuous measurement - Ultrasonic transducers

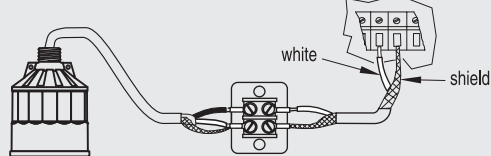
Echomax XPS and XCT

Schematics

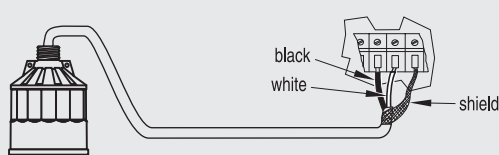
Direct Connection



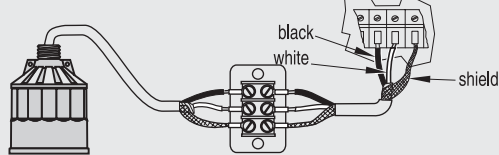
Coaxial Connection



3 Terminal Direct*



3 Terminal Extension*



* For SITRANS LUC500, MultiRanger 100/200, HydroRanger 200

Mounting

Make particularly sure that the radiating face of the transducer is protected from damage. Mount the transducer so that it is above the maximum material level by at least the blanking value. On liquid applications, the transducer must be mounted so that the axis of transmission is perpendicular to the liquid surface. On solids applications, a Milltronics Easy Aimer should be used to facilitate aiming the transducer. Consider the optional temperature sensor when mounting the transducer.

Interconnection

Do not route cable openly or near high voltage or current runs, contactors and SCR control drives. For optimum isolation against electrical noise, run cable separately in a grounded metal conduit. Seal all thread connections to prevent ingress of moisture.

XPS and XCT ultrasonic sensor connections