

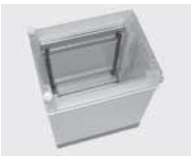
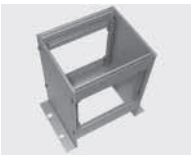
Spare part

SONO 3000 transmitter, available standard versions

Description	Version	Enclosure	Supply	Order No.	Symbol
SONO 3000 transmitter for compact and wall mounting	1 current output	IP67 (NEMA 4X/6)	115 ... 230 V AC 50/60 Hz	7ME3150-1AA10-1AA0	
	1 frequency/pulse output		24 V AC/DC	7ME3150-1AA20-1AA0	
	1 relay output	Fibre glass reinforced polyamid			
SONO 3000 transmitter for 19" rack and panel mounting	1 current output	IP00	115/230 V AC 50/60 Hz	7ME3150-2CA10-1AA0	
	1 frequency/pulse output		24 V AC/DC	7ME3150-2CC10-1AA0	
	1 relay output				
	3 current outputs	IP00	115/230 V AC 50/60 Hz	7ME3150-2CC10-1AA0	
	2 frequency/pulse outputs		24 V AC/DC	7ME3150-2CC20-1AA0	
SONO 3000 transmitter 19" insert assembly complete with wall mounting enclosure	1 current output	IP65 (NEMA 4)	115/230 V AC 50/60 Hz	7ME3150-2EA10-1AA0	
	1 frequency/pulse output		24 V AC/DC	7ME3150-2EC10-1AA0	
	1 relay output	ABS plastic			
	3 current outputs	IP65 (NEMA 4)	115/230 V AC 50/60 Hz	7ME3150-2EC10-1AA0	
	2 frequency/pulse outputs		24 V AC/DC	7ME3150-2EC20-1AA0	
SONO 3000 transmitter Ex-d separate wall mounting, EEx de [ia/ib] IIC T5 ... T6, no ATEX approval, cable gland PG 13.5	1 current output	IP65 (NEMA 4)	24 V AC/DC	7ME3150-2FA22-1AA0	
	1 frequency/pulse output				
	1 relay output	AISI 316/Duplex			

Accessories/Spare parts

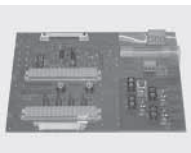
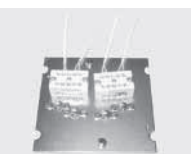
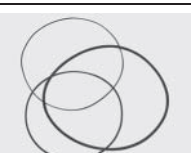
Accessories for SONO 3000 transmitter

Description	Order No.	Symbol
Wall mounting kit for 7ME3150-1AA10-1AA0 and 7ME3150-1AA20-1AA0, Using 4 x coaxial sensor cables, Wall brackets, PG 13.5 cable glands.	FDK: 085F5027	
Wall mounting kit for 7ME3150-1AA10-1AA0 and 7ME3150-1AA20-1AA0, Using 4 x coaxial sensor cables, Wall brackets, M20 cable glands (available from January 2006).	FDK: 085F5028	
Front of panel mounting kit for 19" insert (28TE), IP20 (NEMA 1) enclosure in ABS plastic for front and panel mounting	FDK: 083F3087	
Back of panel mounting kit for 19" insert (28TE), IP00 enclosure in aluminium	FDK: 083F3084	

SENSORPROM memory unit for all transmitters

Description	Order No.	Symbol
SENSORPROM memory unit for SONOFLO When ordering: Inform on sensor Order No. and Serial No.	FDK: 085B5329	

Spare parts for SONO 3000 transmitter

Description	Order No.	Symbol
SONO 3000 EEx-d insert, no ATEX	FDK: 085F5210	
SONO 3000 19" back print for IP65 (NEMA 4) wall mounting 230 V version	FDK: 085F5327	
SONO 3000 assembly plate for coax connections	FDK: 085L1023	
SONO 3000 assembly base plate	FDK: 085L1015	
SONO 3000 EEx-d, front glas incl. frame	FDK: 085U2109	
SONO 3000 EEx-d, gaskets for transmitter housing	FDK: 085U2002	

Spare parts/accessories

Description	Bestell-Nr.
SONO 3000 CT transmitter, IP67 (NEMA 4X/6) (incl. wall mounting kit) ¹⁾²⁾	7ME3150-2AA10-1AC0
SONO 3000 CT transmitter, IP65 (NEMA 4) ¹⁾²⁾	7ME3150-2EA10-1AC0
SONO 3000 CT transmitter, IP65 (NEMA 4), 24 V AC/DC ¹⁾	7ME3150-2AA10-1AC0
SONO 3000 CT transmitter, IP20 (NEMA 1) ²⁾	7ME3150-2DA10-1AC0
Coax cable with transducer connection	
1x 10 m	FDK:085L2400
1x 20 m	FDK:085L2401
1x 30 m	FDK:085L2402

1) All transmitters have 1 current output, 1 frq/pulse output and 1 relay each.

2) 115/230 V AC, 50 ... 60 Hz

Important:

Due to CT-requirements exchange of one of the above components requires new verification of the entire system at authorised laboratories.

SONO 3100

SONO 3200 transducer complete unit with PG 13.5 cable glands

Transducer type	Material	Gasket	Pressure rating	Terminal housing	Approval	Temperature range [°C(°F)]	Length [mm (inch)]	Order No.	Symbol
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	50 (1.97)	FDK:085B5306	
O-ring	316 SS	O-ring ²⁾	PN 40	316 SS		-20 ... +200 (-4 ... +392)	50 (1.97)	FDK:085B5300	
O-ring	316 SS	O-ring ²⁾	PN 40	316 SS	EExd ¹⁾	-20 ... +200 (-4 ... +392)	50 (1.97)	FDK:085B5312	
Flange	316 SS	Graphite	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	88 (3.47)	FDK:085B5411	
Flange	316 SS	Graphite	PN 40	316 SS		-20 ... +200 (-4 ... +392)	88 (3.47)	FDK:085B5321	
Flange	316 SS	Graphite	PN 40	316 SS	EExd ¹⁾	-20 ... +200 (-4 ... +392)	88 (3.47)	FDK:085B5425	
Flange	316 SS	Graphite	PN 160	316 SS	EExd ¹⁾	-20 ... +200 (-4 ... +392)	88 (3.47)	FDK:085B5432	
Flange	316 SS	Aluminium	PN 40	316 SS		-200...+100 (-328 ... +212)	88 (3.47)	FDK:085B5416	

1) No ATEX

2) Chemical resistant O-ring

SONO 3200 transducer complete unit with M20 cable glands (available from January 2006)

Transducer type	Material	Gasket	Pressure rating	Terminal housing	Approval	Temperature range [°C(°F)]	Length [mm (inch)]	Order No.	Symbol
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	50 (1.97)	FDK:085B5453	
O-ring	316 SS	O-ring ⁴⁾	PN 40	316 SS		-20 ... +200 (-4 ... +392)	50 (1.97)	FDK:085B5450	
O-ring	316 SS	O-ring ⁴⁾	PN 40	316 SS	EExd ²⁾	-20 ... +200 (-4 ... +392)	50 (1.97)	FDK:085B5451	
Flange	316 SS	Graphite	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	88 (3.47)	FDK:085B5461	
Flange	316 SS	Graphite	PN 40	316 SS		-20 ... +200 (-4 ... +392)	88 (3.47)	FDK:085B5462	
Flange	316 SS	Graphite	PN 40	316 SS	EExd ²⁾	-20 ... +200 (-4 ... +392)	88 (3.47)	FDK:085B5463	
Flange	316 SS	Graphite	PN 160	316 SS	EExd ²⁾	-20 ... +200 (-4 ... +392)	88 (3.47)	FDK:085B5465	
Flange	316 SS	Aluminium	PN 40	316 SS		-200...+100 (-328 ... +212)	88 (3.47)	FDK:085B5471	

SONO 3200 transducer insert

Temperature range [°C]	Length [mm (inch)]	Order No.	Symbol
-20...+200 (-4 ... +392)	50 (1.97)	FDK:085B1411	
-20...+200 (-4 ... +392)	88 (3.47)	FDK:085B1459	

SONO 3200 transducer (Transducer body with insert)

Temperature range [°C]	Gasket	Pressure rating	Length [mm (inch)]	Order No.	Symbol
-20...+200 (-4 ... +392)	O-ring ⁴⁾	PN 40	50 (1.97)	FDK:085B1405	
-20...+200 (-4 ... +392)	Graphite	PN 40	88 (3.47)	FDK:085B1464	
-20 ... +200 (-4 ... +392)	Graphite	PN 160	88 (3.47)	FDK:085B5512	

SONOKIT

SONO 3200 transducer complete unit with PG13.5 cable glands

Transducer type	Material	Gasket	Pressure rating	Terminal housing	Approval	Temperature range [°C(°F)]	Length [mm (inch)]	Order No.	Symbol
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	160 (6.3)	FDK:085B5307	
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 ³⁾ (-4 ... +392)	160 (6.3)	FDK:085B5301	
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	230 (9.41)	FDK:085B5308	
O-ring	316 SS	O-ring ⁴⁾	PN 40	316 SS	EEx d ¹⁾	-20 ... +200 (-4 ... +392)	160 (6.3)	FDK:085B5313	
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 (-4 ... +392)	230 (9.41)	FDK:085B5319	

1) No ATEX

2) ATEX (Ex) IIC 2G EEx d IIC T3 ... T6

3) 316 SS housing for -20 ... +200 °C (-4 ... +392 °F) but cable glands only for -20 ... +100 (-4 ... +212 °F)

4) Chemical resistant O-ring

SONO 3200 transducer complete unit with M20 cable glands (available from January 2006)

Transducer type	Material	Gasket	Pressure rating	Terminal housing	Approval	Temperature range [°C(°F)]	Length [mm (inch)]	Order No.	Symbol
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	160 (6.3)	FDK:085B5454	
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 ²⁾ (-4 ... +392)	160 (6.3)	FDK:085B5455	
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	230 (9.41)	FDK:085B5458	
O-ring	316 SS	O-ring	PN 40	316 SS	EEx d ¹⁾	-20 ... +200 (-4 ... +392)	160 (6.3)	FDK:085B5452	
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 ²⁾ (-4 ... +392)	230 (9.41)	FDK:085B5459	

SONO 3200 transducer insert

Temperature range [°C]	Length [mm (inch)]	Order No.	Symbol
-20 ... +200 (-4 ... +392)	90 (3.54)	FDK:085B1100	
-20 ... +200 (-4 ... +392)	160 (6.3)	FDK:085B1419	
-20 ... +200 (-4 ... +392)	230 (9.41)	FDK:085B1420	

SONO 3200 transducer (Transducer body with insert)

Temperature range [°C]	Gasket	Length [mm (inch)]	Order No.	Symbol
-20 ... +200 (-4 ... +392)	O-ring	90 (3.54)	FDK:085B1101	
-20 ... +200 (-4 ... +392)	O-ring ³⁾	160 (6.3)	FDK:085B1406	
-20 ... +200 (-4 ... +392)	O-ring	160 (6.3)	FDK:085B5510	
-20 ... +200 (-4 ... +392)	O-ring	230 (9.41)	FDK:085B5511	

Terminal housing with PG 13.5 cable glands

Type	Order No.	Symbol
Material: PA 6.6, Temperature range: -20 ... +100 °C (-4 ... +212)	FDK:085B1403	
Material: AISI 316, Temperature range: -20 ... +200 °C (-4 ... +392)	FDK:085B1402	

Terminal housing with M20 cable glands (available from January 2006)

Type	Order No.	Symbol
Material: PA 6.6, Temperature range: -20 ... +100 °C (-4 ... +212)	FDK:085B5501	
Material: AISI 316, Temperature range: -20 ... +200 °C (-4 ... +392)	FDK:085B5504	
Material: AISI 316, Temperature range: -20 ... +200 °C (-4 ... +392) ¹⁾	FDK:085B5505	

Transducer SONO 3200 gasket

Type	Pressure rating	Material	Temperature range [°C (°F)]	Order No.
Gasket O-ring (3 pcs. for complete transducer)	PN 40	FFKM ³⁾ /FKM	-20...+200 (-4 ... +392)	FDK:085B1089
Gasket flange	PN 40/160	Graphite	-20...+200 (-4 ... +392)	FDK:085B1080
Gasket and 12 mm bolts and nuts for flange transducers	PN 40	Graphite, 316 SS	-20...+200 (-4 ... +392)	FDK:085B1083
Gasket and 16 mm bolts and nuts for flange transducers	PN 160	Graphite, 316 SS	-20...+200 (-4 ... +392)	FDK:085B1084
Gasket cryogenics	PN 40	Aluminium, O-ring	-200...+100 (-328 ... +212)	FDK:633L0047

1) ATEX (Ex) IIC 2G EEx d IIC T3 ... T6

2) 316 SS housing for -20 ... +200 °C (-4 ... +392 °F) but cable glands only for -20 ... +100 (-4 ... +212 °F)

3) Chemical resistant O-ring

Potting kit

Type/description	Order No.	Symbol
Potting kit, IP68, 10 m (289 ft) w.g. rating	FDK: 085L2403	

Tools

Type/description	Order No.	Symbol
Extraction tool for replacement of SONO 3200 O-ring transducers under pressure (hot-tap), Transducer length:		
• 50 mm (1.97")	FDK: 085B5331	
• 160 mm (6.3")	FDK: 085B5333	
• 230 mm (9.1")	FDK: 085B5335	
Angle measurement tool for SONOKIT	FDK:085B5330	
Hot-tap drilling tool for SONOKIT	FDK:085B5392	
Alignment tool for SONOKIT	FDK:085B5393	

Cables

Type/description	Order No.	Symbol
Standard 75 Ω coax cable, $T_{\max} = 75\text{ }^{\circ}\text{C}$		
• 15 m (49.2 ft)	FDK: 085B1373	
• 30 m (98.4 ft)	FDK: 085B1374	
• 60 m (196.8 ft)	FDK: 085B1375	
• 100 m (328 ft)	FDK: 085B1376	
Teflon 75 Ω coax cable, $T_{\max} = 200\text{ }^{\circ}\text{C}$ (392 $^{\circ}\text{F}$)		
• 5 m (16.4 ft)	FDK: 085B1378	
• 15 m (49.2 ft)	FDK: 085B1397	

Transducer holder

Type/description	Order No.
1-track	
• 230 mm for concrete pipe 60°, DN 600 ... DN 4000	FDK:085L1656
• 160 mm stainless steel 60°, DN 300 ... DN 4000	FDK:085L1105
• 160 mm carbon steel 60°, DN 300 ... DN 4000	FDK:085L1104
2-track	
• 230 mm for concrete pipe 60°, DN 600 ... DN 4000	FDK:085L1111
• 160 mm stainless steel 60°, DN 300 ... DN 4000	FDK:085L1109
• 160 mm carbon steel 60°, DN 300 ... DN 4000	FDK:085L1108

The part which is welded onto the pipe is either stainless steel or carbon steel.

Cable connection boxes

Type/description	Order No.	Symbol
Junction box for coax cable		
• IP68 metal box for 2 coax cables	FDK: 085B1360	
• IP68 metal box for 4 coax cables	FDK: 085B1361	
• IP68 EEx-e plastic box for 2 coax cables, no ATEX approval	FDK: 085B1362	
• IP68 EEx-e plastic box for 4 coax cables, no ATEX approval	FDK: 085B1363	

Cable glands

Type	Material	Temperature range [°C(°F)]	Approval	Order No.
PG 13.5	Chrome plated brass	-20 ... +100 (-4 ... +212)		FDK:085B1381
PG 13.5	Stainless steel	-20 ... +200 (-4 ... +392)		FDK:085B1385
PG 13.5	Stainless steel	-20 ... +200 (-4 ... +392)	Ex d ³⁾	FDK:085B1387
M20 ²⁾	Plastic	-40 ... +100 (-40 ... +212)		FDK:085B1317
M20 ²⁾	Chrome plated brass	-20 ... +100 (-4 ... +212)		FDK:085B1394
M20 ²⁾	Stainless steel	-20 ... +200 (-4 ... +392)		FDK:085B1399
M20 ²⁾	Stainless steel	-20 ... +200 (-4 ... +392)	Ex d ¹⁾	FDK:085B1315

1) ATEX approved

2) Available from January 2006

3) No ATEX

Mounting plate

Type/description	Order No.
1-track	
• 160 mm, stainless steel, 60°, DN 300 ... DN 4000	FDK:085L1115
• 160 mm, carbon steel, 60°, DN 300 ... DN 4000	FDK:085L1114
2-track	
• 160 mm, stainless steel, 60°, DN 300 ... DN 4000	FDK:085L1119
• 160 mm, carbon steel, 60°, DN 300 ... DN 4000	FDK:085L1118

The mounting plates are either completely in stainless steel or carbon steel.

Calculator SITRANS FUE950

Type/description	Order No.
<u>Accessories for calculator</u>	
Data/pulse input module	FDK:087H0111
Data/pulse output module	FDK:087H0110
M-bus slave module/input module	FDK:087H0109
Infrared optical head for data acquisition	FDK:087H0108¹⁾
Brackett for SITRANS FUE950 wall mounting (12 pcs)	FDK:087H0117
INFOLOG complete with cable and SW for SONOCELL	FDK:085L1960
Flash and disc for INFOLOG for SONOCELL/SONO 3301	FDK:085L1961
Cable for data aquisition PC/D-sub 9F/3 wire	FDK:087H0121
INFOLOG for SITRANS FUE950 complete, flash, SW for data transfer, 0-modem cable for data transfer	FDK:087H0124
Flash & disk for INFOLOG for SITRANS FUE950, english version	FDK:087H0125
0-modem cable for data transfer to PC from INFOLOG	FDK:087H0126
Verification equipment for calculator	FDK:087H0122
3.6 V DC-cell for SITRANS FUE950	FDK:087H0113¹⁾
230 V AC supply module for SITRANS FUE950	FDK:087H0114¹⁾
24 V AC supply module for SITRANS FUE950	FDK:087H0115¹⁾
3.0 V battery CR 2032 for SITRANS FUE950 (10 pcs.)	FDK:087H0116¹⁾
Re-programming tool (complete set)	FDK:087H0134
<u>Pocket for temperature sensor Pt500 (2 pcs.)</u>	
Brass pocket G½B x 40 mm (PN 16)	FDK:087H0104
Brass pocket G½B x 85 mm (PN 16)	FDK:087H0105
Brass pocket G½B x 120 mm (PN 16)	FDK:087H0106
Stainless steel pocket G½B x 85 mm (PN 25)	FDK:087H0100
Stainless steel pocket G½B x 120 mm (PN 25)	FDK:087H0101
Stainless steel pocket G½B x 155 mm (PN 25)	FDK:087H0102
Stainless steel pocket G½B x 210 mm (PN 25)	FDK:087H0103

1) Also for SONOCELL

Please also see www.siemens.com/SITRANSForordering for practical examples of ordering.