




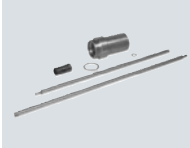

Flowmeter SONOKIT accessories and spare parts


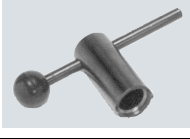
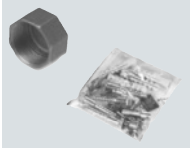
Accessories

Potting kit for SONO 3200 terminal housing

Description	Order No.	
Submersible kit for transducers SONO 3200, IP68 10 m (32.81 ft) w.g. rating	FDK:085L2403	

Tools for SONO 3200 transducers and SONOKIT

Description	Order No.	
Extraction tool for replacement of SONO 3200 O-ring transducers under pressure (hot-tap) For transducer length:		
• Up to 160 mm (6.3")	FDK:085B5333	
• Up to 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 (typically for hot-tapping) For use on pipe sizes in the range DN 300 to DN 1200.	FDK:085B5393	

Description	Order No.	
Alignment rods-set for DN 100 ... 650 (4" ... 26"), Ø = 25 mm, L = 500 mm, 3 pcs.	A5E02609214	
Alignment rods-set for DN 700 ... 1900 (28" ... 76"), Ø = 25 mm, L = 500 mm, 6 pcs.	A5E02609215	
Alignment rods-set for DN 2000 ... 4000 (80" ... 160"), Ø = 25 mm, L = 500 mm, 10 pcs.	A5E02609216	
Spanner key for transducer mounting type SONO 3200 O-ring type	A5E02609218	
Tool set with various mounting/spare parts SONOKIT installation	A5E02609219	

Cable connection boxes

(For the connection of individual transducer cables with the FUS060 transducer cables)

Description	Order No.
Junction box for coaxial cable	
• IP68 metal box for 2 coaxial cables	FDK:085B1360
• IP68 metal box for 4 coaxial cables	FDK:085B1361
• IP68 EEx e plastic box for 2 coaxial cables, no ATEX approval	FDK:085B1362
• IP68 EEx e plastic box for 4 coaxial cables, no ATEX approval	FDK:085B1363



Spare parts

Transducer SONO 3200 spare parts, complete transducer with 1/2"-NPT cable glands

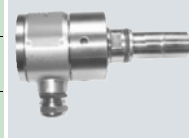
Transducer type	Material	Gasket	Pressure rating	Terminal housing	Approval	Temperature range [°C (°F)]	Length [mm (inch)]	Order No.
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	160 (6.3)	A5E00839476
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 ¹⁾ (-4 ... +392)	160 (6.3)	A5E00839435^{F)}
O-ring	316 SS	O-ring	PN 40	Plastic PA 6.6		-20 ... +100 (-4 ... +212)	230 (9.41)	A5E00839477
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 ¹⁾ (-4 ... +392)	230 (9.41)	A5E00839437^{F)}



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

Transducer SONO 3200 spare parts, complete transducer with M20 cable glands

Transducer type	Material	Gasket	Pressure rating	Terminal housing	Approval	Temperature range [°C (°F)]	Length [mm (inch)]	Order No.
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 ¹⁾ (-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	Ex d ²⁾	-20 ... +180 (-4 ... +356)	160 (6.3)	FDK:085B5452
O-ring	316 SS	O-ring	PN 40	316 SS	Ex i ³⁾	-10 ... +190 (14 ... 374)	160 (6.3)	A5E00836462
O-ring	316 SS	O-ring	PN 40	316 SS		-20 ... +200 ²⁾ (-4 ... +392)	230 (9.41)	FDK:085B5459



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

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

³⁾ For systems with FUS060 ATEX IIC 2G Ex dem [ia/ib] T6/T4/T3

Transducer SONO 3200 spare parts, transducer terminal housing with M20 cable glands


Type	Order No.
Material: PA 6.6, Temperature range: -20 ... +100 °C (-4 ... +212 °F)	FDK:085B5501
Material: AISI 316, Temperature range: -20 ... +200 °C (-4 ... +392 °F)	FDK:085B5504
Material: AISI 316, Ex d ¹⁾ , Temperature range: -20 ... +180 °C (-4 ... +356 °F)	FDK:085B5505
Material: AISI 316, Ex i ²⁾ , Temperature range: -10 ... +190 °C (14 ... 374 °F)	A5E00835255^{F)}




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

²⁾ For systems with FUS060 ATEX IIC 2G Ex dem [ia/ib] T6/T4/T3

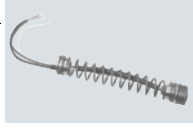
Transducer SONO 3200 spare parts, transducer housing with 1/2"-NPT cable glands

Type	Order No.	
Material: PA 6.6, Temperature range: -20 ... +100 °C (-4 ... +212 °F)	A5E00839460	
Material: AISI 316, Temperature range: -20 ... +200 °C (-4 ... +392 °F)	A5E00839427	


Transducer SONO 3200 spare parts transducer body with insert as well as insert only

Temperature range [°C (°F)]	Gasket	Length [mm (inch)]	Order No.	
-20 ... +200 (-4 ... +392)	O-ring	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	


F) Subject to export regulations AL: 91999, ECCN: N.

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


Transducer SONO 3200 gasket

Type	Pressure rating	Material	Temperature range [°C (°F)]	Order No.	
Gasket O-ring (3 pcs. for O-ring transducers)	PN 40	FKM	-20 ... +200 (-4 ... +392)	FDK:085B1089	

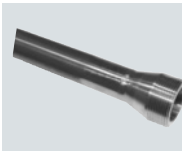
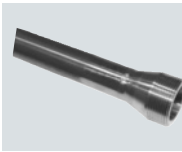
Cables for SONOKIT SONO 3200 transducers with FUS060

Description	Length [m (ft)]	Order No.	
Coaxial cable for FUS060, (75 Ω, max. 70 °C (158 °F), black PVC) (2 pcs.)	3 (9.84)	A5E00875101	
	15 (49.21)	A5E00861432	
	30 (98.43)	A5E01278662	
	60 (196.85)	A5E01278682	
	90 (295.28)	A5E01278687	
High temp. coaxial cable for FUS060; with 0.3 m brown PTFE high temp. transducer part, max. 200 °C (392 °F) and black PVC transmitter part with SMB plug, max. 70 °C (158 °F); (impedance 75 Ω) (2 pcs.)	120 (393.70)	A5E01278698	
	3 (9.84)	A5E00875105	
	15 (49.21)	A5E00861435	
	30 (98.43)	A5E01196952	

Cables for SONOKIT SONO 3200 transducers with FUS080

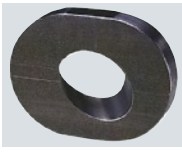
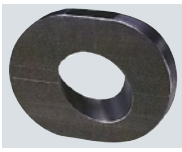
Description	Length [m (ft)]	Order No.	
Coaxial cable for FUS080, (75 Ω, max. 70 °C (158 °F), black PVC) (2 pcs.)	15 (49.21)	A5E02478541	
	30 (98.43)	A5E02478751	

Transducer holder for SONOKIT SONO 3200 transducers

Description	Order No.	
1-track (each incl. 1 pc.)		
• 160 mm (6.3") stainless steel 45°, DN 100 ... DN 150 (4" ... 6")	FDK:085L1103	
• 160 mm (6.3") carbon steel 45°, DN 100 ... DN 150 (4" ... 6")	FDK:085L1102	
• 230 mm (9.1") for concrete pipe 60°, DN 600 ... DN 2400 (24" ... 96")	FDK:085L1107	
• 160 mm (6.3") stainless steel 60°, DN 200 ... DN 2400 (8" ... 96")	FDK:085L1105	
• 160 mm (6.3") carbon steel 60°, DN 200 ... DN 2400 (8" ... 96")	FDK:085L1104	
2-track (each incl. 1 pc.)		
• 230 mm (9.1") for concrete pipe 60°, DN 600 ... DN 4000 (24" ... 160")	FDK:085L1111	
• 160 mm (6.3") stainless steel 60°, DN 200 ... DN 4000 (8" ... 160")	FDK:085L1109	
• 160 mm (6.3") carbon steel 60°, DN 200 ... DN 4000 (8" ... 160")	FDK:085L1108	

The other transducer holder parts are either completely in stainless steel for the concrete and stainless steel pipes (AISI 316L/1.4404 or similar). For carbon pipes the part welded onto the pipe is in carbon steel (St.37 or similar). Thread part is stainless steel (AISI 316L/1.4404 or similar).

Mounting plate for SONOKIT SONO 3200 transducers

Description	Order No.	
1-track (each incl. 1 pc.)		
• Stainless steel plate, 45°, DN 100 ... DN 150 (4" ... 6")	FDK:085L1113	
• Carbon steel plate, 45°, DN 100 ... DN 150 (4" ... 6")	FDK:085L1112	
• Stainless steel plate, 60°, DN 200 ... DN 2400 (8" ... 96")	FDK:085L1115	
• Carbon steel plate, 60°, DN 200 ... DN 2400 (8" ... 96")	FDK:085L1114	
2-track (each incl. 1 pc.)		
• Stainless steel plate, 60°, DN 200 ... DN 4000 (8" ... 160")	FDK:085L1119	
• Carbon steel plate, 60°, DN 200 ... DN 4000 (8" ... 160")	FDK:085L1118	

The mounting plates are either in stainless steel (AISI 316L/1.4404 or similar) or carbon steel (St.37 or similar).

SONO 3200 cable glands

Type/ description	Tempera- ture range [°C (°F)]	Appr	Order No.	
black PA plastic, cable Ø 5 ... 13 mm	-20 ... 100 (-4 ... +212)		A5E02246304	
½" NPT gray PA plastic, cable Ø 5 ... 9 mm	-20 ... 100 (-4 ... +212)		A5E02246309	
½" NPT chrome-plated brass, cable Ø 5 ... 9 mm	-40 ... 100 (-40 ... +212)		A5E02246258	
M20 stainless steel, cable Ø 4 ... 6 mm	-25 ... 200 (-13 ... +392)	Ex i	A5E02246194	
M20 stainless steel, cable Ø 5 ... 8 mm	-60 ... 180 (-76 ... +356)	Ex d	A5E02246311	