

- Compact Level Transmitter
- Measuring range 0,2 ... 15 m
- 4-20 mA, 2-wire
- 6-digit programming and display module

Technical features:

Compact ultrasonic sensor with 2 wire connection
 Easy programming with magnet or SAP200-programmer
 optional HART-protocol available.
 QUEST- Technique for qualified echo suppressing
 ATEX-Certificates for several types

Technical data:

Transducer material:	PP, PVDF, PTFE, Stainless steel 1.4571
Housing:	PBT, fiber glass reinforced, Aluminium, powder paint coated
Process temperature:	PP = -20°C ... +70°C PVDF and PTFE = -20°C ... +80°C Stainless steel = -30°C ... +100°C (120°C/2h)
Ambient temperature:	PBT-housing = -25°C ... +70°C Aluminium-housing = -30°C ... +70°C
Pressure (absolute):	0,5 ... 3 bar Stainless steel = 0,9 ... 1,1 bar
Seals:	PP-Version = EPDM; all others FPM
IP protection:	Sensor: IP68, Housing: IP67
Power supply:	galv. isolated, surge protection
Accuracy:	±0,2 % of meas. value, 0,05% of range
Resolution:	depending of meas. distance, <2m = 1 mm 2 ... 5 m = 2 mm 5 ... 10m = 5 mm >10 m = 10 mm
Output signal:	4 ... 20 mA, galv. isolated, 2-wire
Programmer SAP200:	6-digit, alphanumeric display, HART-Protocoll
Connection:	2x Pg16 or 2x ½", NPT 19 ... 14 mm cable cross section 0,5 ... 1,5 mm² wire cross section
Hazardous area approvals:	
Intrinsically safety level:	II 1/2 G EEx ia IIB T6 Ci ≤ 15 nF, Li ≤ 299 µH, Ui ≤ 30V, Ii ≤ 140 mA, Pi ≤ 1W
Supply:	Uo < 30V, Io < 140 mA, Po < 1W UN 12 ...30V
Process temperature:	PP = -20°C ... +70°C PVDF = -20°C ... +80°C SS = -30°C ... +100°C
Ambient temperature:	PBT-Housing = -25°C ... +70°C Aluminium-housing = -30°C ... +70°C



EchoTREK Serie 2



Programmer
SAP200

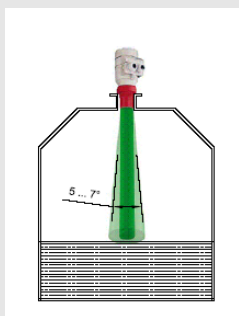
Type key:

Type	SE□-39 □-□ SG□-39 □-□	SE□-38 □-□ SG□-38 □-□	SE□-37 □-□ SG□-37 □-□	SE□-36 □-□ SG□-36 □-□	SE \varnothing -34 \varnothing - \varnothing SG \varnothing -34 \varnothing - \varnothing
Transducer	PP or PVDF	PP or PVDF	PP or PVDF	PP or PVDF	PP or PVDF
Meas. distance max.	4 m	6 m	8 m	10 m	15 m
Meas. distance min.	0,2 m	0,25 m	0,35 m	0,35 m	0,45 m
Total beam angle (-3 dB)	6°	5°	7°	5°	5°
Frequency	80 kHz	80 kHz	50 kHz	60 kHz	40 kHz
Process connection	1 1/2"	2"	2"	Flange	Flange

Type	SE□-39 □-□ SG□-39 □-□	SE□-38 □-□ SG□-38 □-□	SE□-37 □-□ SG□-37 □-□	SE□-36 □-□ SG□-36 □-□	SE \varnothing -34 \varnothing - \varnothing SG \varnothing -34 \varnothing - \varnothing
Transducer	PTFE	PTFE	PTFE	SS	SS
Meas. distance max.	3 m	5 m	6 m	7 m	12 m
Meas. distance min.	0,2 m	0,25 m	0,35 m	0,4 m	0,55 m
Total beam angle (-3 dB)	6°	5°	7°	5°	5°
Frequency	80 kHz	80 kHz	50 kHz	60 kHz	40 kHz
Process connection	1 1/2"	2"	2"	Flange	Flange

EchoTREK S □ □ - 3 □ □ - □

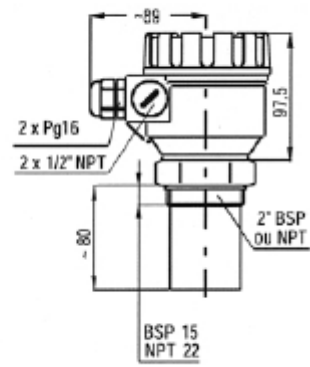
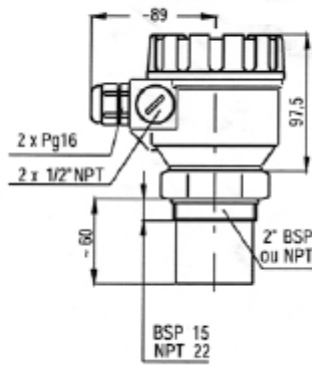
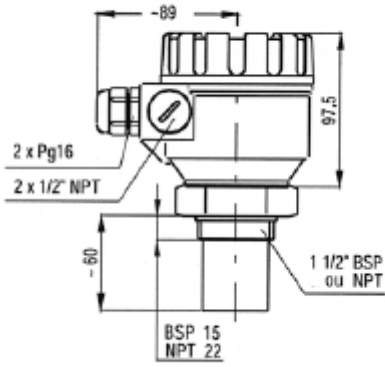
Type	C	Sensor/ Housing	C	Meas. range	C	Process connect.	C	Output	C
EchoTREK	E	PP/Alu	A	12 / 15 m	4	BSP	0	4-20 mA Logger	1
EchoTREK with SAP 200	G	PVDF/Alu	B	7 / 10 m	6	NPT	N	4-20 mA	2
		PTFE/Alu	T	6 / 8 m	7	DN80 PP	2	4-20 mA HART + Logger	3
		SS/Alu	S	4 / 6 m	8	DN 100 PP	3	4-20 mA HART	4
		PP/PBT	P	3 / 4 m	9	DN 125 PP	4	4-20 mA Logger +Ex	5
		PVDF/ PBT	V			DN 150 PP	5	4-20 mA + Ex	6
		PTFE/ PBT	F			DN 200 PP	6	4-20 mA HART, Logger+ Ex	7
		SS/ PBT	M			200 mm bracket	K	4-20 mA HART + Ex	8
						500 mm bracket	L		
						700 mm bracket	M		



Total beam angle = 5 ... 7°

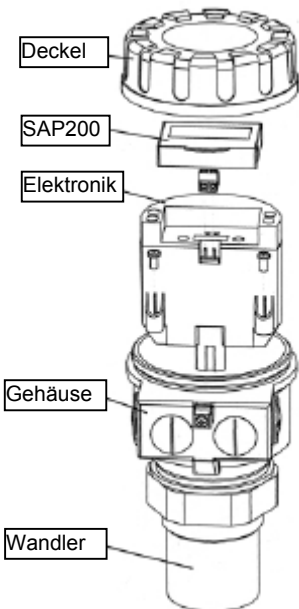
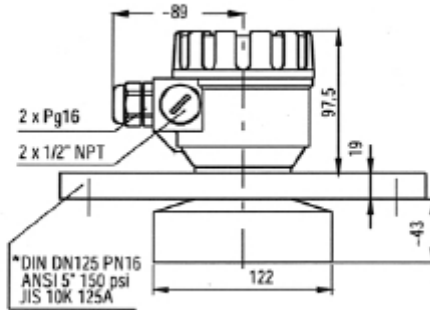
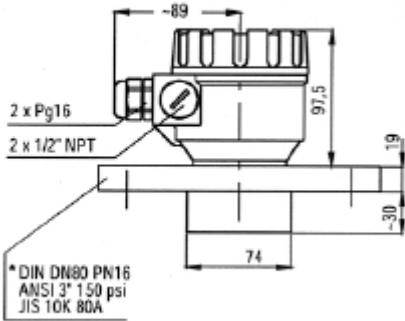
Dimensions:

EchoTREK S □□-39□□ / PP, PVDF, PTFE EchoTREK S □□-38□□ / PP, PVDF, PTFE EchoTREK S □□-37□□ / PP, PVDF, PTFE



EchoTREK S □□-36□□ / PP, PVDF

EchoTREK S □□-34 □□ / PP, PVDF



EchoTREK S □□S-36 □□ / SS

e EchoTREK S □□S-34 □□ / SS e

