













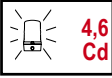







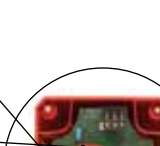
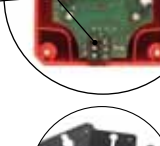


Multi Tone Alarm Sounders „A” with Light Indicator

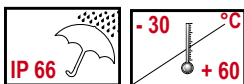
	Size 1		Size 2	Size 3	Size 4
					
	 max 103 dB 8 tones	 max 108 dB 32 tones	 max 113 dB 32 tones	 max 120 dB 63 tones	 max 127 dB 63 tones
Multi tone alarm sounder + LED steady/flashing light indicator	ADS-P  1,5 Cd	ADS-T  1,5 Cd	ADM  2,3 Cd	ADL  3 Cd	ADX  3 Cd
Multi tone alarm sounder + LED strobe light indicator (2 strobe patterns)			ACM  4,6 Cd	ACL  6 Cd	ACX  6 Cd

Features






































- comprehensive range of visual-audible signalling products with dominant audible multi tone sounder and additional visual light indicator
- 3 tones externally switchable (ADS-T, ADM/ACM, ADL/ACL, ADX/ACX)
- for most different visual-audible signalling requirements in the industry, process control, fire/gas alarm, marine, etc.
- light indicators in most up-to-date LED technique (long lifetime, low current consumption, vibration proof):
 - LED steady/flashing light indicators or
 - LED strobe light indicators (2 strobe patterns – double/multi strobe)
- versatile installation and mounting options
- tone and light separately switchable
- tone table includes international and standardized signal tones for fire/gas alarm and other applications
- optional/customized tones/tone tables upon request
- fit for plc applications (leakage, inrush current)

Accessories / Installation Options:

- lateral cable entry on both sides with cable gland (accessory type AKV) 
- grommet from back side (included as standard) 
- metal bracket kit (accessory type AB1-AB4, for mounting of alarm sounders or beacons in specific direction, on mounting platforms, devices, etc.) 
- electrical connection via cage clamp 
- tone selection via dip switch
volume control by potentiometer (ADS-T, ADM/ACM, ADL/ACL, ADX/ACX) 
- flat gaskets for correct IP66 installation on smooth surfaces of the housing (accessory type AG1-AG4) 
- mounting kit AMK (for mounting/combination of 2 or more same size sounders or beacons) 

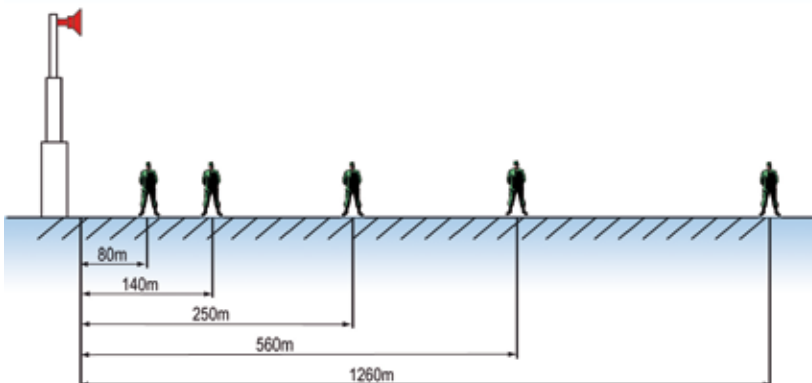


Overview Multi Tone Alarm Sounders „A“ / Beacons „Q“

Size	Multi Tone Alarm Sounders „A“	Multi Tone Alarm Sounders „A“ - Beacon „Q“	Multi Tone Alarm Sounder „A“ with Light Indicator	Beacons „Q“ with Buzzer Indicator	Beacons „Q“
1	ASS-P max. 103 dB 	ASS-P + QDS LED Steady/Flashing ASS-P + QFS ~5 J Xenon Strobe 	ADS-P LED Steady/Flashing 	QSS LED Steady/Flashing 	QDS LED Steady/Flashing 
	ASS-T max. 108 dB 	ASS-T + QDS LED Steady/Flashing ASS-T + QFS ~5 J Xenon Strobe 	ADS-T LED Steady/Flashing 	QTS ~5 J Xenon Strobe 	QFS ~5 J Xenon Strobe 
2	ASM max. 113 dB 	ASM + QDM LED Steady/Flashing 	ADM LED Steady/Flashing 	QSM LED Steady/Flashing 	QDM LED Steady/Flashing 
		ASM + QFM ~10 J Xenon Strobe 	ACM LED Strobe 	QTM ~10 J Xenon Strobe 	QFM ~10 J Xenon Strobe 
3	ASL max. 120 dB 	ASL + QDL LED Steady/Flashing 	ADL LED Steady/Flashing 	QSL LED Steady/Flashing 	QDL LED Steady/Flashing 
		ASL + QBL LED Strobe 	ACL LED Strobe 	QCL LED Strobe 	QBL LED Strobe 
4	ASX max. 127 dB 	ASX + QDX LED Steady/Flashing 	ADX LED Steady/Flashing 	QSX LED Steady/Flashing 	QDX LED Steady/Flashing 
		ASX + QBX LED Strobe 	ACX LED Strobe 	QCX LED Strobe 	QBX LED Strobe 



Signal Recognition



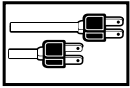
The sound pressure decreases depending on the distance between sounder and hearer (see also table „reduction of sound pressure over distance“ in the AUER catalogue).

The illustration shows the maximum distance at which a minimum sound pressure of 65 dB is achieved.

Assumptions here are ideal environmental conditions (wind, rain, humidity, fog, etc) as well as type and frequency of tone used. The directive efficiency of the sounder increases with an increasing tone frequency.

Sounder Type	Max. sound pressure level dB (A) in 1 m	Effective range of signal recognition (min. 65 dB) in m	Approx. area of signal recognition (min. 65 dB) in m ²
ASS-P	103	80	20.000
ASS-T	108	140	62.000
ASM	113	250	200.000
ASL	120	560	1.000.000
ASX	127	1.260	5.000.000

Multi Tone Alarm Sounders „A” with Light Indicator



Technical data

Type	ADS-P Size 1	ADS-T Size 1	ADM Size 2	ADL Size 3	ADX Size 4	ACM Size 2	ACL Size 3	ACX Size 4
Housing	polycarbonate							
Housing colour	Multi tone sounder red RAL 3000, Light-indicator black							
Lens colour	amber, red, clear, blue, green, yellow							
Mounting	sound outlet horizontal or downwards							
Terminals	up to 2,5 mm ² single wire							
Cable entry	grommet from back, 5-10 mm							
Cable conduit	cable gland M20x1,5 from side, 5-12 mm (accessory)							
Duty cycle factor	100%							
Tone type selection	by DIP switch							
Number of tones	8	32	32	63	63	32	63	63
Tone frequency	500-4600 Hz	150-2900 Hz		150-3100 Hz				
Alarm stages	---	3 externally switchable						
Sound pressure	max. 103 dB	max. 108 dB	max. 113 dB	max. 120 dB	max. 127 dB	max. 113 dB	max. 120 dB	max. 127 dB
Volume control	by potentiometer				---	by potentiometer		---
Light source	LED							
Life time (light source)	~ 100.000 h							
Type of light	steady or flashing					LED strobe (double or multi-strobe)		
Flashing/Strobe frequency	~ 1 Hz					1,7 / 1,0 Hz		
Light intensity*	1,5 Cd	1,5 Cd	2,3 Cd	3 Cd	3 Cd	4,6 Cd	6 Cd	6 Cd
Temperature range	-30 °C to +60 °C							
Relative humidity	90% at 20 °C							
Weight	0,31 kg	0,31 kg	0,66 kg	2,28 kg	3,58 kg	0,66 kg	2,28 kg	3,58 kg

* valid for clear lenses

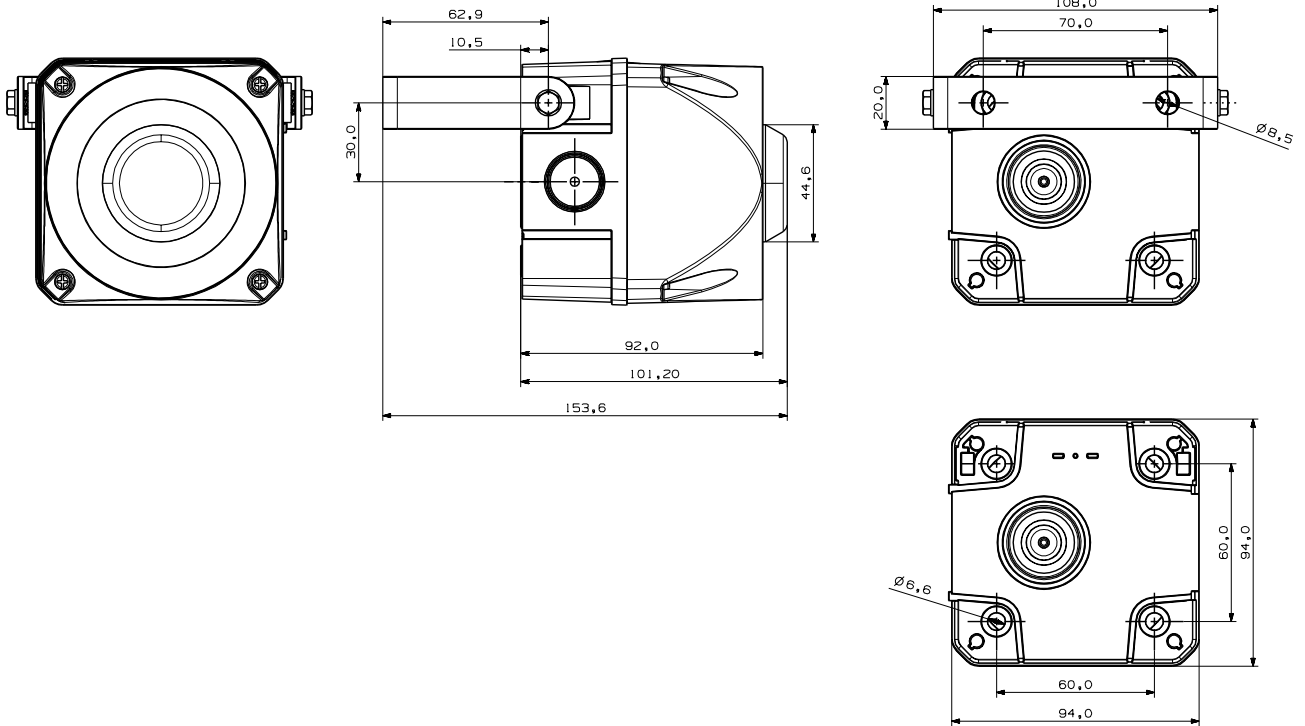
ADS-P/ADS-T



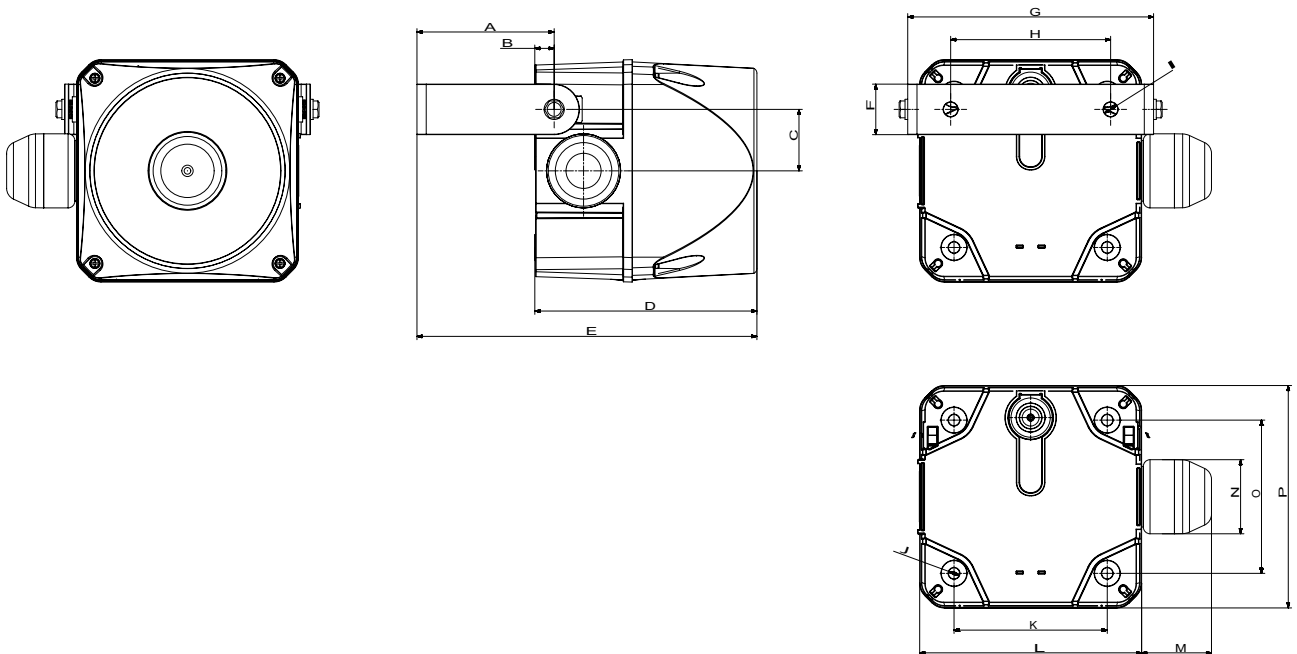
ADM



ADS-P/ADS-T (Size 1)



ADM/ACM (Size 2), ADL/ACL (Size 3), ADX/ACX (Size 4)










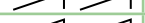
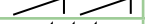




























	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Size 2	81,5	11,5	36,5	132	202	30	146	95	8,5	6,5	91	132	41,5	44	91	132
Size 3	105,5	18,5	55	169	256	40	206	112	8,5	6,5	124	183	55,5	64	124	183
Size 4	138,3	16,8	63	217	339	50	248	140	8,5	6,5	167	228	55,5	64	167	228


















Measuring unit mm

Multi Tone Alarm Sounders „A” with Light Indicator

— LED steady light
- - - LED flashing light

Tone table						ADS-T	ADM	ADL	ADX			
						max		max	max	max	STAGE 2	STAGE 3
STAGE 1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	dB		dB	dB	dB	S2	S3
Tone 01	continuous	660 Hz	—————		Swedish alarm	101	—	108			tone 16	tone 12
Tone 02	continuous	1000 Hz	—————		PFEER toxic gas	103	—	109			tone 16	tone 25
Tone 03	continuous	2400 Hz	—————			108	—	113			tone 21	tone 17
Tone 04	intermittent	420 Hz	- - - - -	0,625 s on / 0,625 s off	Australian alert AS1670	101	- - - -	105			tone 21	tone 01
Tone 05	intermittent	660 Hz	- - - - -	1,8 s on - 1,8 s off	Swedish alarm	102	- - - -	107			tone 21	tone 01
Tone 06	intermittent	660 Hz	- - - - -	0,15 s on / 0,15 s off	Swedish alarm	102	- - - -	107			tone 16	tone 01
Tone 07	intermittent	970 Hz	- - - - -	1 s on, 1 s off	PFEER Alarm, BS5839-1:2002	101	- - - -	109			tone 18	tone 01
Tone 08	intermittent	970 Hz (950)	- - - - -	0,5 s on/0,5 s off x 3 then 1,5 s off	ISO 8201 low tone, US Temporal	101	- - - -	109			tone 16	tone 03
Tone 09	intermittent	800 Hz	- - - - -	0,25 s on / 1 s off		102	- - - -	107			tone 27	tone 03
Tone 10	intermittent	700 Hz	- - - - -	0,15 s on / 0,15 s off, total 1 min.	Swedish alarm SS 031711	103	- - - -	107			tone 18	tone 02
Tone 11	intermittent	720 Hz	- - - - -	0,7 s on / 0,3 s off	Industrial Alarm Germany	103	- - - -	108			tone 02	tone 29
Tone 12	intermittent	2400 Hz	- - - - -	0,5 s on / 0,5 s off		108	- - - -	113			tone 03	tone 01
Tone 13	intermittent	2850 Hz	- - - - -	0,5 s on/0,5 s off x 3 then 1,5 s off	ISO 8201 high tone, US Temporal	100	- - - -	110			tone 03	tone 17
Tone 14	alternating	440 - 554 Hz		0,4 s (440Hz) / 0,1 s (554Hz)	AFNOR France, NFS 32-001	103	—	106			tone 16	tone 01
Tone 15	alternating	554 - 440 Hz		1 Hz	Swedish alarm	103	—	106			tone 01	tone 16
Tone 16	alternating	800 - 1000 Hz		2 Hz		103	—	109			tone 02	tone 09
Tone 17	alternating	2400 - 2900 Hz		2 Hz		108	—	113			tone 03	tone 01
Tone 18	alternating	1000 - 2000 Hz		1 Hz	Singapore	105	—	110			tone 02	tone 03
Tone 19	sweeping	500 - 1500 Hz		10 Hz		102	—	109			tone 02	tone 01
Tone 20	sweeping	150 - 1000 Hz		rising 10 s, 40 s on, falling 10 s	Industrial Alarm Germany	103	—	109			tone 01	tone 29
Tone 21	continuous	400 Hz	—————	simulated horn		99	—	104			tone 16	tone 02
Tone 22	sweeping	500 - 1200 Hz		rising in 3,75 s / 0,25 off	Australian evacuation AS 2220	106	—	109			tone 02	tone 09
Tone 23	sweeping	500 - 1200 Hz		rising in 3,5 s / 0,5 s off	Netherlands NEN 2575:2000	106	—	109			tone 02	tone 09
Tone 24	sweeping	500 - 1200 Hz		0,5 s on/0,5 s off x 3 / 1,5 s off	Australian AS1670 evacuation	105	—	109			tone 02	tone 09
Tone 25	sweeping	1200 - 500 Hz		1 Hz	Evacuation Germany DIN 33404-3	106	—	109			tone 02	tone 32
Tone 26	sweeping	500 - 1200 Hz		0,3 Hz		106	—	109			tone 01	tone 32
Tone 27	sweeping	1400 - 1600 Hz		rising in 1 s/falling in 0,5 s	NFC 48-265	101	—	111			tone 02	tone 09
Tone 28	sweeping	2400 - 2900 Hz		1 Hz		108	—	113			tone 17	tone 03
Tone 29	bell					105	—	109			tone 16	tone 02
Tone 30	slow rise	500 - 2400 Hz		siren rising in 3 s, then cont. 2400 Hz		108	—	113			tone 16	tone 01
Tone 31	slow rise	300 - 1200 Hz		siren rising in 3 s, then cont. 1200 Hz		103	—	110			tone 16	tone 01
Tone 32	chime	970 - 800 Hz		repeating ding-dong, 1 Hz		102	—	109			tone 29	tone 01
Tone 33	continuous	340 Hz	—————			X		X			tone 16	tone 03
Tone 34	continuous	500 Hz	—————			X		X			tone 16	tone 03
Tone 35	continuous	825 Hz	—————			X		X			tone 16	tone 03
Tone 36	continuous	1500 Hz	—————			X		X			tone 18	tone 02
Tone 37	continuous	2850 Hz	—————			X		X			tone 21	tone 01
Tone 38	intermittent	660 Hz	- - - - -	0,5 s on - 0,5 s off	Swedish alarm	X		X			tone 02	tone 32
Tone 39	intermittent	680 Hz	- - - - -	0,875 s on-0,675 s off		X		X			tone 03	tone 32
Tone 40	intermittent	950 Hz	- - - - -	1 s on, 1 s off		X		X			tone 02	tone 32
Tone 41	intermittent	1000 Hz	- - - - -	1 s on, 1 s off	PFEER general alarm	X		X			tone 16	tone 03
Tone 42	intermittent	800 Hz	- - - - -	4 ms on, 4 ms off		X		X			tone 58	tone 03
Tone 43	intermittent	825 Hz	- - - - -	0,5 s on, 0,5 s off		X		X			tone 16	tone 03
Tone 44	intermittent	825 Hz	- - - - -	2,5 s on, 2,5 s off x 7, then 7 s pulse	IMO SOLAS III/50+SOLAS III/6,4	X		X			tone 17	tone 02
Tone 45	alternating	440 - 554 Hz		1 Hz		X		X			tone 16	tone 01
Tone 46	alternating	825 - 1075 Hz		1 Hz		X		X			tone 48	tone 02
Tone 47	alternating	825 - 1025 Hz		2 Hz		X		X			tone 48	tone 03
Tone 48	alternating	2500 - 3100 Hz		0,5 Hz		X		X			tone 60	tone 03
Tone 49	alternating	2400 - 2850 Hz		2 Hz		X		X			tone 12	tone 03
Tone 50	alternating	500 - 900 Hz		2 Hz		X		X			tone 41	tone 02
Tone 51	alternating	1200 - 1400 Hz		25 Hz		X		X			tone 41	tone 02
Tone 52	sweeping	300 - 1200 Hz		1 Hz		X		X			tone 03	tone 32
Tone 53	sweeping	500 - 1000 Hz		0,15 Hz		X		X			tone 41	tone 02
Tone 54	sweeping	500 - 1200 Hz		3 Hz		X		X			tone 41	tone 02
Tone 55	sweeping	700 - 1500 Hz		0,3 Hz		X		X			tone 16	tone 02
Tone 56	sweeping	800 - 1000 Hz		7 Hz		X		X			tone 16	tone 02
Tone 57	sweeping	800 - 1000 Hz		50 Hz		X		X			tone 16	tone 02
Tone 58	sweeping	2400 - 2900 Hz		7 Hz		X		X			tone 17	tone 03
Tone 59	sweeping	2400 - 2900 Hz		50 Hz		X		X			tone 17	tone 03
Tone 60	sweeping	2400 - 2900 Hz		3 Hz		X		X			tone 17	tone 03
Tone 61	slow rise	0 - 800 Hz		siren rising 3 s, then cont 800 Hz		X		X			tone 16	tone 01
Tone 62	chime	554 - 440 Hz		repeating ding-dong, 1 Hz		X		X			tone 29	tone 01
Tone 63	chime	554 - 440 Hz		single ding-dong		X		X			tone 29	tone 01

LED steady light 

Tone table ADS-P						
STAGE 1 S1	Tone type	Frequency Hz	Pictogram	Repeat rate	Specific application	Max dB 
Tone 01	continuous	4600 Hz				103 
Tone 02	continuous	1600 Hz				99 
Tone 03	intermittent	4600 Hz		250 ms on, 250 ms off		103 
Tone 04	intermittent	1600 Hz		250 ms on, 250 ms off		99 
Tone 05	sweeping	1200 - 500 Hz		1 Hz	evacuation Germany DIN 33404-3	96 
Tone 06	sweeping	500 - 1200 Hz		rising in 3 s, 0,5 s off	Netherlands NEN 2575:2000	98 
Tone 07	alternating	800 - 1000 Hz		2 Hz		94 
Tone 08	sweeping	500 - 1500 Hz		10 Hz		94 



Order data

Type	Denomination	Max. sound pressure (dB A)	Nominal voltage (V)	Voltage range (V)	Nominal current (A)	Order No. Housing red
ADS-P	Multi tone alarm sounder size 1 with LED steady/flashing indicator 8 tones	max. 103	24 V AC/DC	+/- 10%	0,12	875 06C 405
			110/120 V AC		0,065	875 06C 310
			230/240 V AC		0,065	875 06C 313
ADS-T	Multi tone alarm sounder size 1 with LED steady/flashing indicator 32 tones	max. 108	24 V AC/DC	+/- 10%	0,16	875 16C 405
			110/120 V AC		0,05	875 16C 310
			230/240 V AC		0,025	875 16C 313
ADM	Multi tone alarm sounder size 2 with LED steady/flashing indicator 32 tones	max. 113	24 V AC/DC	+/- 10%	0,190	875 26C 405
			110/120 V AC		0,072	875 26C 310
			230/240 V AC		0,052	875 26C 313
ADL	Multi tone alarm sounder size 3 with LED steady/flashing indicator 63 tones	max. 120	24-48 V AC/DC	+/- 10%	0,60	875 36C 408
			110/120 V AC		0,13	875 36C 310
			230/240 V AC		0,09	875 36C 313
ADX	Multi tone alarm sounder size 4 with LED steady/flashing indicator 63 tones	max. 127	24-48 V AC/DC	+/- 10%	1,16	875 46C 408
			110/120 V AC		0,25	875 46C 310
			230/240 V AC		0,14	875 46C 313
ACM	Multi tone alarm sounder size 2 with LED strobe light indicator 32 tones	max. 113	24 V AC/DC	+/- 10%	0,26	875 66C 405
			110/120 V AC		0,074	875 66C 310
			230/240 V AC		0,054	875 66C 313
ACL	Multi tone alarm sounder size 3 with LED strobe light indicator 63 tones	max. 120	24-48 V AC/DC	+/- 10%	0,7	875 76C 408
			110/120 V AC		0,14	875 76C 310
			230/240 V AC		0,1	875 76C 313
ACX	Multi tone alarm sounder size 4 with LED strobe light indicator 63 tones	max. 127	24-48 V AC/DC	+/- 10%	1,25	875 86C 408
			110/120 V AC		0,25	875 86C 310
			230/240 V AC		0,14	875 86C 313

Accessories

Type	Denomination	Order No.
AMK	Mounting kit for combinations of multi tone alarm sounders „A“ and/or beacons „Q“	874 010 900
AG1	Flat gasket for size 1 multi tone alarm sounders „A“ and/or beacons „Q“	874 021 900
AG2	Flat gasket for size 2 multi tone alarm sounders „A“ and/or beacons „Q“	874 022 900
AG3	Flat gasket for size 3 multi tone alarm sounders „A“ and/or beacons „Q“	874 023 900
AG4	Flat gasket for size 4 multi tone alarm sounders „A“ and/or beacons „Q“	874 024 900
AB1	Metal bracket kit for size 1 multi tone alarm sounders „A“ and/or beacons „Q“	874 031 900
AB2	Metal bracket kit for size 2 multi tone alarm sounders „A“ and/or beacons „Q“	874 032 900
AB3	Metal bracket kit for size 3 multi tone alarm sounders „A“ and/or beacons „Q“	874 033 900
AB4	Metal bracket kit for size 4 multi tone alarm sounders „A“ and/or beacons „Q“	874 034 900
AKV	Cable gland M20x1,5 for multi tone alarm sounders „A“ and/or beacons „Q“	698 800 026