

FNM-320 Conventionele sirenes

www.boschsecurity.nl



BOSCH

Technologie voor het leven



- ▶ Volume tot 112 dB(A)
- ▶ Kunnen worden gebruikt in extreme omgevingscondities
- ▶ Voor 12 VDC en 24 VDC
- ▶ Beveiliging tegen ompoling
- ▶ Verkrijgbaar voor opbouw- en inbouwbekebeling

De FNM-320 Sirenes zijn akoestische signaalgevers met een geluidsvormer.

Basisfuncties

De geïntegreerde geluidstransducer biedt een keuze van 32 toonvarianten, waaronder verschillende sirenetonen, diverse signalen voor brandalarm (bijv. de DIN-toon conform EN 457 / DIN 33404) en andere speciale modulaties.

De tonen worden ingesteld met een 5-pins DIP-switch in de signaalgever. Bij een geselecteerd toontype wordt het tweede toontype ingeschakeld als de tweede ingang wordt geactiveerd. Een extra schakelaar biedt nog twee instellingen: volledig vermogen of een demping van 10 dB(A).

Afhankelijk van het type toon, het ingestelde volume en de bedrijfsspanning, varieert het geluidsdrukkniveau tot een maximum van 112 dB(A).

Bewaakte aansluiting op brandmeldcentrales is mogelijk.

Met de bajonetsluiting is eenvoudige montage mogelijk.

Certificaten en goedkeuringen



























































































Regio	Certificiëring
Duitsland	VdS G 210036 FNM-320 Serie
	VdS G 210037 FNM-320-LEDSRD
Europa	CE FNM-320-SRD, FNM-320-FRD, FNM-320-SWH, FNM-320-FWH
	CE FNM-320LED-SRD
	CPD 0832-CPD-1374 FNM-320-SRD_FN-320-SWH_FNM-320-FRD_FNM-320-FWH
	CPD 0832-CPD-1375 FNM-320-LEDSRD
Polen	CNBOP 1182/2012 FNM-320

Installatie/configuratie

- Het apparaat kan worden aangesloten op de volgende centrales:
 - FPA-5000/FPA-1200 met NZM 0002 A of FLM-420-NAC
 - BZ 500 LSN, UEZ 1000 LSN, UEZ 2000 LSN, UGM 2020
- Er zijn dubbele schroefklemmen voor doorlussen van de spanning.





























































































- FNM-320LED-SRD is niet gecertificeerd conform EN 54-23. Het zwaailicht is niet geschikt om gebruikt te worden voor brandalarmen binnen de EU.
- De conform EN 54-3 goedgekeurde tonen staan weergegeven in de laatste kolommen van de toontabellen. De geluidsdrumniveaus worden gemeten bij 28 of 15 VDC, bij maximaal volume en bij de luidste signaalgever. Alle overige geluidsdrumniveaus worden op een as op 1 m genomen en niet geverifieerd door derden.

Tonentabel FNM-320-SRD/-SWH/-FRD/-FWH

								12/24VDC		EN54-3
								mA	dB(A)	15/28VDC dB(A)
1	14	11111		800 & 970Hz	2Hz (250ms ~ 250ms)	  BS	6/13	95/101	*	
2	14	11110		800 & 970Hz	7Hz (7/s)	  BS	8/12	94/100	*	
3	14	11101		800 & 970Hz	1Hz (1/s)	  BS	6/12	95/102	92/95	
4	14	11100		2850Hz			16/32	99/105	*	
5	4	11011		2400 ~ 2850Hz	7Hz		16/32	103/109	*	
6	4	11010		2400 ~ 2850Hz	1Hz		16/32	105/112	*	
7	14	11001		500 ~ 1200Hz	3s 0.5s  3s 0.5s  ...	  NEN	6/12	97/103	93/97	
8	14	11000		1200 ~ 500Hz	1Hz	  DIN	7/15	96/102	93/94	
9	4	10111		2400 & 2850Hz	2Hz (250ms ~ 250ms)		15/31	99/105	*	
10	14	10110	- - -	970Hz	0.5Hz (1s  1s 		5/8	95/101	*	
11	4	10101		800 & 970Hz	1Hz (500ms ~ 500ms)	  BS	6/12	95/101	*	
12	4	10100	- - -	2850Hz	0.5Hz (1s  1s 		9/17	99/105	*	
13	14	10011	- - -	970Hz	0.8Hz (250ms  1s 		3/5	94/101	*	
14	14	10010		970Hz		  BS	7/14	95/101	93/95	
15	14	10001		554 & 440Hz	100ms ~ 400ms	  NFS	8/17	96/102	*	
16	16	10000	- - -	660Hz	3.3Hz (150ms  150ms 	 	4/6	94/100	*	
17	17	01111	- - -	660Hz	0.28Hz (1.8s  1.8s 	 	4/7	95/101	*	
18	18	01110	- - -	660Hz	0.05Hz (6.5s  13s 	 	3/6	95/101	*	
19	19	01101		660Hz		 	5/10	95/101	*	
20	20	01100		554 & 440Hz	0.5Hz (1s  1s 	 	7/16	96/102	*	
21	21	01011	- - -	660Hz	1Hz (500ms ~ 500ms)	 	4/6	94/101	*	
22	14	01010	- - -	2850Hz	4Hz (150ms  100ms 		12/27	98/104	*	
23	14	01001		800 ~ 970Hz	50Hz	  BS	6/12	93/100	*	
24	4	01000		2400 ~ 2850Hz	50Hz		15/32	102/108	*	
25	25	00111	- - - - -	970Hz	3 x 500ms 1.5s  3 x 500ms...	ISO 8201	4/7	95/101	*	
26	26	00110		800 ~ 970Hz	3 x 500ms 1.5s  3 x 500ms...	ISO 8201	4/6	95/102	*	
27	27	00101		970 & 800Hz	3 x 500ms 1.5s  3 x 500ms...	ISO 8201	3/6	94/101	*	
28	10	00100		800 & 970Hz	2Hz (250ms ~ 250ms)	  BS	6/12	95/101	*	
29	988Hz	00011		990 & 650Hz	2Hz (250ms ~ 250ms)	  BS	10/20	99/105	93/96	
30	510Hz	00010		510 & 610Hz	2Hz (250ms ~ 250ms)	  BS	8/16	94/100	91/92	
31	14	00001		300 ~ 1200Hz	1Hz		10/14	98/103	*	
32	510Hz	00000		510 & 610Hz	1Hz (500ms ~ 500ms)	  BS	8/16	95/100	*	

Tolerantie geluidsdrumniveau is ±3 db(A).

Tonentabel FNM-320LED-SRD

					@20 °C				
								mA	dB(A)
1	14	11111		800 & 970Hz	2Hz (250ms ~ 250ms)	  BS	19	100	*
2	14	11110		800 & 970Hz	7Hz (7/s)	  BS	19	101	*
3	14	11101		800 & 970Hz	1Hz (1/s)	  BS	19	101	95
4	14	11100		2850Hz			33	110	*
5	4	11011		2400 ~ 2850Hz	7Hz		31	110	*
6	4	11010		2400 ~ 2850Hz	1Hz		31	110	*
7	14	11001		500 ~ 1200Hz	3s 0.5s  3s 0.5s  ...	  NEN	21	98	97
8	14	11000		1200 ~ 500Hz	1Hz	  DIN	17	98	94
9	4	10111		2400 & 2850Hz	2Hz (250ms ~ 250ms)		31	109	*
10	14	10110		970Hz	0.5Hz (1s  1s 		13	100	*
11	4	10101		800 & 970Hz	1Hz (500ms ~ 500ms)	  BS	19	100	*
12	4	10100		2850Hz	0.5Hz (1s  1s 		25	109	*
13	14	10011		970Hz	0.8Hz (250ms  1s 		9	96	*
14	14	10010		970Hz		  BS	21	101	95
15	14	10001		554 & 440Hz	100ms ~ 400ms	  NFS	13	93	*
16	16	10000		660Hz	3.3Hz (150ms  150ms 	 	10	86	*
17	17	01111		660Hz	0.28Hz (1.8s  1.8s 	 	13	88	*
18	18	01110		660Hz	0.05Hz (6.5s  13s 	 	15	88	*
19	19	01101		660Hz		 	15	89	*
20	20	01100		554 & 440Hz	0.5Hz (1s  1s 	 	14	96	*
21	21	01011		660Hz	1Hz (500ms ~ 500ms)	 	11	87	*
22	14	01010		2850Hz	4Hz (150ms  100ms 		23	109	*
23	14	01001		800 ~ 970Hz	50Hz	  BS	19	101	*
24	4	01000		2400 ~ 2850Hz	50Hz		26	110	*
25	25	00111		970Hz	3 x 500ms 1.5s  3 x 500ms...	ISO 8201	15	99	*
26	26	00110		2850Hz	3 x 500ms 1.5s  3 x 500ms...	ISO 8201	21	108	*
27	27	00101		4000Hz			36	83	*
28	10	00100		800 & 970Hz	2Hz (250ms ~ 250ms)	  BS	18	100	*
29	33	00011		990 & 650Hz	2Hz (250ms ~ 250ms)	  BS	22	99	96
30	35	00010		510 & 610Hz	2Hz (250ms ~ 250ms)	  BS	16	96	92
31	31	00001		300 ~ 1200Hz	1Hz		22	96	*
32	32	00000		4000Hz			36	83	*

Meegeleverde onderdelen

Aantal	Componenten
1	Akoestische signaalgever, rood of wit
1	Sokkel-, opbouw- of inbouwmontage

Technische specificaties

Elektrische specificaties

Bedrijfsspanning	9- 30 VDC
Max. stroomverbruik	

- FNM-320-SRD/-SWH/-FRD/-FWH

33mA

- FNM-320LED-SRD

36mA

Bewaking Pol. omkeren

Mechanische specificaties

Afmetingen (B x H)

- FNM-320-FRD/-FWH Ø 93 x 63 mm
- FNM-320-SRD/-SWH Ø 93 x 91 mm
- FNM-320LED-SRD Ø 93 x 107 mm

Gewicht	
• FNM-320-SRD/-SWH/-FRD/-FWH	250g
• FNM-320LED-SRD	300g
Materiaal van behuizing	ABS V0, PC
Kleur	Rood, RAL 3001 Wit, RAL 9010

Omgevingseisen

Toegestane bedrijfstemperatuur	
• FNM-320-SRD/-SWH/-FRD/-FWH	-25- 70 °C
• FNM-320LED-SRD	-10- 55 °C
Toegestane rel. vochtigheid	EN 54-3
Beschermingsklasse conform EN 60529	
• FNM-320-FRD/-FWH	IP 54 *
• FNM-320-SRD/-SWH	IP 65 *
• FNM-320LED-SRD	IP 65 *

* Specificatie van de fabrikant, niet geverifieerd door derden.

Speciale productkenmerken

Max. geluidsdruk	
• Bij 12 V	105 ± 3 dB(A)
• Bij 24 V	112 ± 3 dB(A)
FNM-320LED-SRD	
• Lichtproductie	> 0,5 cd
• Flitssnelheid	1 Hz

Bestelinformatie

FNM-320-SRD Sirene rood, opbouwmontage

met geluidsvormer, geschikt voor gebruik in extreme omgevingscondities

Opdrachtnummer **FNM-320-SRD**

FNM-320-FRD Sirene rood, inbouwmontage

met geluidsvormer, geschikt voor gebruik in extreme omgevingscondities

Opdrachtnummer **FNM-320-FRD**

FNM-320-SWH Sirene wit, opbouwmontage

met geluidsvormer, geschikt voor gebruik in extreme omgevingscondities

Opdrachtnummer **FNM-320-SWH**

FNM-320-FWH Sirene wit, opbouwmontage

met geluidsvormer, geschikt voor gebruik in extreme omgevingscondities

Opdrachtnummer **FNM-320-FWH**

FNM-320LED-SRD Sirene rood met LED, opbouwmontage

met geluidsvormer en geïntegreerde LED, geschikt voor gebruik in extreme omgevingscondities

Opdrachtnummer **FNM-320LED-SRD**

Vertegenwoordigd door:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany:
Bosch Sicherheitssysteme GmbH
Robert-Bosch-Ring 5
85630 Grasbrunn
Germany
www.boschsecurity.com