

2.1

SERIE	HE-H8
M8 high speed subminiature through-beam - DC	
<ul style="list-style-type: none"> ◆ Very small dimensions (M8 housing) ◆ High switching frequency (10Hz and 50KHz) ◆ Completely amplified ◆ LED status indicator (HE serie) ◆ Red light with visible spot (HE serie) ◆ IP67 protection degree ◆ Complete protection against electrical damage ◆ Strong housing in steel 	

DIMENSIONAL DRAWING	
HE** -2A	
H8*/1	
Key	
1	Axial cable exit
2	Red LED (output state indicator HER - supply indicator HEE)
3	Cable 2(3)x0,14 mm ² , Ø3,1mm, PVC, 2m
4	Cable 1x0,14 mm ² + shield, Ø3,1mm, PVC, 2m



ORDERING SYSTEM		
H E E / 0 0 - 2 A		
serie	HE	through-beam
M8 through-beam	HE	cable exit
model	E	axial cable exit
emitter	R	output type
receiver	O	emitter
output state	A	NPN output
emitter	C	PNP output
NO output state		
NC output state		

ORDERING SYSTEM		
H 8 E / 1		
serie	H8	through-beam
M8 miniaturized through-beam	H8	model
	E	emitter
	R	fototransistor receiver 30Vdc

SPECIFICATIONS		
Model	HEE/**-2A	H8*/1
Nominal sensing distance (Sn)	150 mm	80 mm
Emission	infrared (880nm)	infrared (880nm)
Minimum object detectable	2mm	-
Repeat accuracy	10 %	-
Operating voltage	10 - 30 Vdc	5Vdc (E1), 30Vdcmx (R1)
Ripple	≤10 %	≤1 %
No-load supply current	25 mA	25 mA (E1)
Load current (nominal)	≤50 mA	≥2,5mA
Load current (maximum)	-	≤50mA, 250mW
Leakage current	≤ 0,1μA	-
Voltage drop	0,8V max.	≤ 0,2V at 2,5mA
Output type	NPN or PNP open collector - NO or NC	open collector
Switching frequency	10 KHz max.	50 KHz
Time delay before availability	100 ms	-
Supply electrical protections	polarity reversal, transient	-
Output electrical protections	short circuit (autoreset)	-
Temperature range	-25°....+50°C (without freeze)	-25°....+70°C (without freeze)
Interference to external light	1800 lux (incandescent lamp), 5500 lux (sunlight)	150 lux
Protection degree (DIN 40 050)	IEC IP67	
LED indicators	red (output state HER, supplyHEE)	-
Housing material	stainless steel	
Lenses material	PMMA	

WIRING DIAGRAMS			
emitter	HEE/*0-2A	NPN output	HEE/NO-2A PNP output HEE/PO-2A
The maximum admissible capacity C is 0,1μF, for max. output voltage and current.			
emitter	H8E/1	open collector	H8E/1
To use the H8E/1 emitter with supply voltage >5V insert a resistor in series with the supply to limit the supply current.			

CHARACTERISTIC CURVES			
HEE/**-2A	HEE/**-2A	HEE/**-2A	HEE/**-2A
H8*/1	H8*/1	H8*/1	H8*/1