

## ITEM 100194 HBA-100194

Description	Technical data	Accessories	Downloads
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### Features

- › Handwheel 100 pulses, wear-free magnetic detent mechanism
- › 1 enabling switch, 3-stage, 2 NO contacts each
- › Tamper-proof EMERGENCY STOP device according to EN 13850, dual-channel
- › 1 selector switch with 6 positions (X, Y, Z, 4, 5, 6)
- › 1 selector switch with 5 positions (0, 1, 10, 100, 1000)
- › 3 membrane pushbuttons, 1 NO contact each

### Approvals



### Mechanical values and environment

Material	Polycarbonate
Weight	
	Net 1,3 kg

Ambient temperature	0 ... 50 °C
Atmospheric humidity (condensation not permissible)	max.80 % rH
Degree of protection	
IEC529	IP65 <sup>[1]</sup>
Acc. to Nema	205-12 <sup>[2]</sup>
Resilience to vibration	
Vibrations (3 axes)	DIN/IEC 68-2-6
Shock (3 axes)	DIN/IEC 68-2-27
Connection	Plug connector <sup>[3]</sup>
Cable length	
coiled	3,5 m <sup>[4]</sup>
Detent positions per revolution	
Handwheel	100 <sup>[5]</sup>

### Electrical connection ratings

Operating voltage DC	
Handwheel	5 V DC -5% ... 5%
Utilization category according to EN 60947-5-1	
DC-13	30V DC / 1A
Switching voltage	
Enabling switch	max.AC/DC 42 V
Selector switch	max.15 V
Membrane keypad	max.AC 25 V
Membrane keypad	max.DC 42 V
Switching current	
Enabling switch	max.100 mA
Selector switch	max.20 mA
Membrane keypad	max.100 mA <sup>[6]</sup>
EMC protection requirements	
Acc. to CE	EN 61000-6-2, EN 61000-6-4
Type of output	
Handwheel	RS422
Connecting cable	28x0.14mm <sup>2</sup> <sup>[7]</sup>
Pulses per revolution	
Handwheel	2x100
Breaking capacity (VA)	
Enabling switch	max.0,25 VA
Selector switch	max.0,2 VA
Membrane keypad	max.1 VA <sup>[8]</sup>

### Controls and indicators

Control/indicator	1
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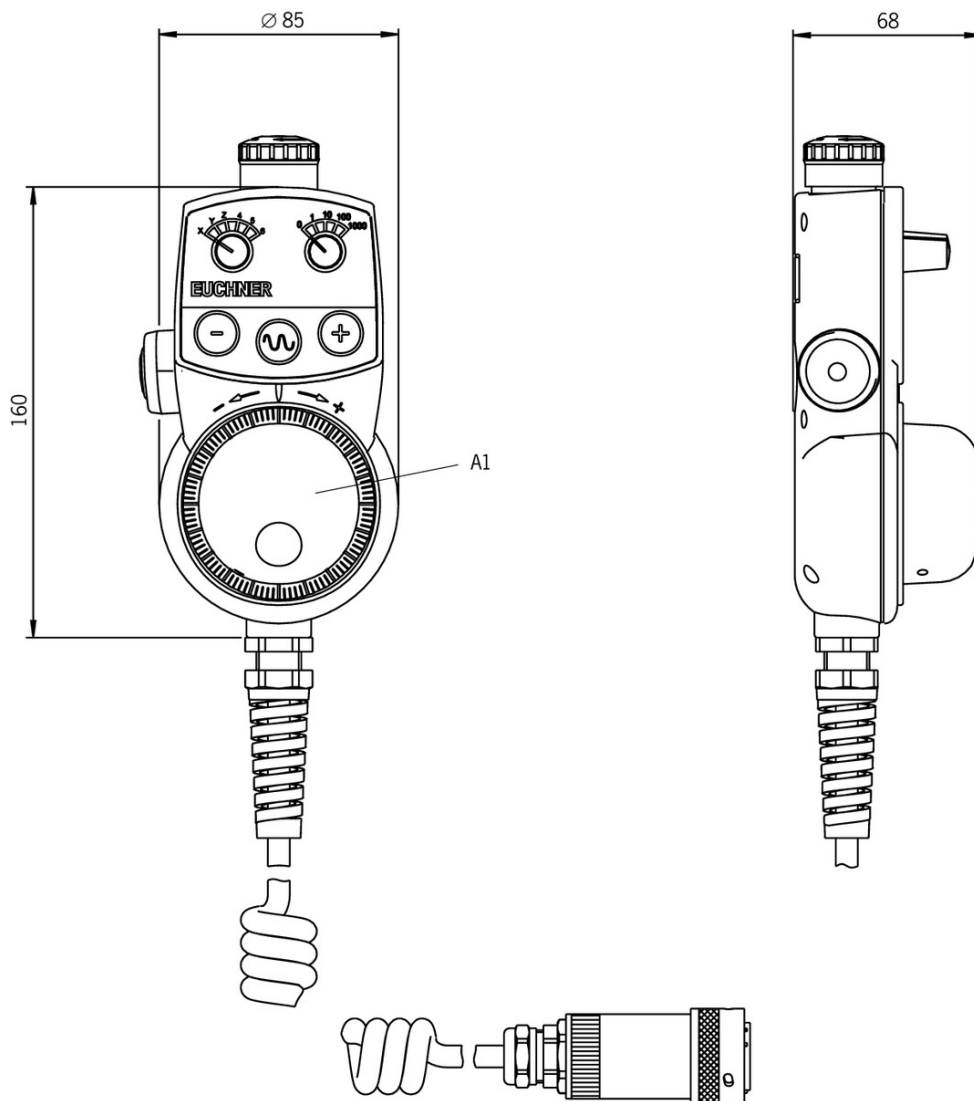
Version	Emergency stop
Switching element	2 positively driven contacts
Special features	-
Color	Red-yellow
Item	See data sheets
Control/indicator	1
Version	Enabling switches, 3-stage
Switching element	2 NO contacts
Special features	-
Color	Black
Item	See data sheets
Control/indicator	1
Version	Selector switch
Switching element	6-stage, Gray coded, detent angle 22.5°
Special features	-
Color	Black knob with marking
Item	See data sheets
Control/indicator	1
Version	Handwheel
Switching element	-
Special features	-
Color	Black plastic adjusting wheel
Item	See data sheets
Control/indicator	1
Version	Selector switch
Switching element	5-stage, Gray coded, detent angle 22.5°
Special features	-
Color	Black knob with marking
Item	See data sheets
Control/indicator	3
Version	Membrane key
Switching element	1 NO contact each
Special features	Labeled
Color	-
Item	See data sheets

### Miscellaneous





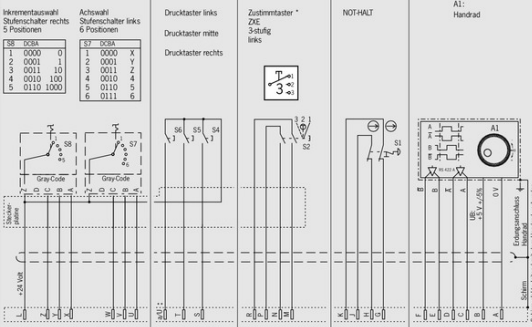
Color	Housing	Gray RAL 7040
For the approval according to UL the following applies		Operation only with UL class 2 power supply, or equivalent measures

- [1, 2] On the front
- [3] 28-pin, metal version
- [4] Extended
- [5] Magnetic detent mechanism
- [6, 8] Common connection
- [7] Screened

**Dimension drawing**



# Circuit plan

Ausführung/Artikel	Merkmale					Best. Nr.																										
	2 Stufenschalter 5 und 6 Positionen	3 Folien- drucktaster je 1 Schließer	1 Zustimmaster ZXE 3-stufig	NOT-HALT- Einrichtung	Handrad 100 Impulse																											
HBA - 100 186 			●		●	100 186																										
HBA - 100 212 	●		●	●	●	100 212																										
HBA - 100 213 		●	●	●	●	100 213																										
HBA - 100 194 	●	●	●	●	●	100 194																										
<b>Verdrahtungsplan</b>	 <p>Inkrementauswahl Stufenschalter rechts 5 Positionen</p> <table border="1"> <tr><th>SE</th><th>DOBA</th></tr> <tr><td>1</td><td>0000 0</td></tr> <tr><td>2</td><td>0001 1</td></tr> <tr><td>3</td><td>0011 10</td></tr> <tr><td>4</td><td>0010 100</td></tr> <tr><td>5</td><td>0110 1000</td></tr> </table> <p>Achtwahl Stufenschalter links 8 Positionen</p> <table border="1"> <tr><th>S7</th><th>DOBA</th></tr> <tr><td>1</td><td>0000 X</td></tr> <tr><td>2</td><td>0001 Y</td></tr> <tr><td>3</td><td>0011 Z</td></tr> <tr><td>4</td><td>0010 4</td></tr> <tr><td>5</td><td>0110 5</td></tr> <tr><td>6</td><td>0111 6</td></tr> </table> <p>Drucktaster links Drucktaster mitte Drucktaster rechts</p> <p>Zustimmaster * ZXE 3-stufig links</p> <p>NOT-HALT</p> <p>A1: Handrad</p> <p>* Schaltwegdiagramm siehe Seite 6 ** Steckerkontakt U bei HBA - 100 213 (Steckerkontakt a bei HBA - 100 194 (Steckerkontakt b bei HBA - 100 194</p>					SE	DOBA	1	0000 0	2	0001 1	3	0011 10	4	0010 100	5	0110 1000	S7	DOBA	1	0000 X	2	0001 Y	3	0011 Z	4	0010 4	5	0110 5	6	0111 6	
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## Mounting accessories

### Holder for HBA



**072828** HALTER HBA072828

#### Features

- › Plastic holder
- › gray



**100221** HALTER HBA-100221

#### Features

- › Plastic holder
- › Black



**072935** HALTER HBA M

#### Features

- › Plastic holder
- › gray
- › Handwheel can be operated in the holder



## 109979 HALTER HBA-109979

### Features

- › Plastic holder
- › Black
- › Handwheel can be operated in the holder

## Function expansion

### Flange connector, 28-pin

**074385** 28POL/METALLAUSFUEHRUNG-074385

### 28-pin short-circuit plug

**083458** 28POL/METALLAUSFUEHRUNG-083458

## Instructions

### Betriebsanleitung Elektronisches HBA-Handrad mit magnetischer Rastung

	Doc. no.	Version	Language	Download
Betriebsanleitung Elektronisches HBA-Handrad mit magnetischer Rastung Mode d'emploi de la manivelle électronique pour pupitre portable HBA avec crantage magnétique Istruzioni di impiego volante elettronico per HBA con autoritenuta magnetica Operating instructions for electronic HBA handwheel with magnetic detent	105823	02-04/09	   	0.6 MB
Manual de instrucciones del volante HBA electrónico con parada magnética	105823	02-04/09		0.2 MB
Návod k použití – elektronické ruční kolečko HBA s magnetickou aretací	105823	02-04/09		0.2 MB
Инструкция по эксплуатации электронного маховичка HBA с магнитной фиксацией	105823	02-04/09		0.3 MB







### Návod k použití ručních ovladačů HBA

	Doc. no.	Version	Language	Download
Betriebsanleitung Handbediengeräte HBA Mode d'emploi des pupitres portables HBA Istruzioni di impiego dispositivi di comando manuale HBA Operating instructions for hand-held pendant stations HBA	2072850	07-03/18	   	0.8 MB

Manual de instrucciones de las botoneras HBA	2072850	07-03/18		 0.2 MB
Návod k použití ručních ovladačů HBA	2072850	07-03/18		 0.3 MB
Инструкция по эксплуатации ручных устройств управления HBA	2072850	07-03/18		 0.4 MB







## Catalogs

### Handbediengeräte/Handräder Hand-Held Pendant Stations/Handwheels Pupitres portables/Manivelles







	Doc. no.	Version	Language	Download
Handbediengeräte/Handräder	098619	08-09/17		 3.0 MB
Pupitres portables/Manivelles	111529	08-09/17		 3.0 MB
Hand-Held Pendant Stations/Handwheels	099443	08-09/17		 3.0 MB

## Declaration of conformity

### EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità EU declaration of conformity	2109732	05-08/16	    	 0.2 MB

### EU-Konformitätserklärung

	Doc. no.	Version	Language	Download
EU-Konformitätserklärung EU declaration of conformity Declaración UE de conformidad Déclaration UE de conformité Dichiarazione di conformità	2105755	08-03/17	    	 0.2 MB

## CAD data

CAD data for this item on TraceParts