



Box Micro  
Limit Switch Box  
**BE45-BS45**



## CARATTERISTICHE FEATURES



### SEMPLICITÀ REGOLAZIONE CAMMES

La posizione degli interruttori può essere cambiata in modo semplice grazie alla presenza di cammes con zigrinatura a passo fine, che possono essere regolate manualmente ed in modo indipendente senza il bisogno di attrezzi.

### DESIGN COMPATTO

I Box della Emme Technology hanno un design compatto e dimensioni contenute, minimizzando gli ingombri complessivi dell'assieme valvola + box.

### SEMPLICITÀ DI COLLEGAMENTO

Il BE45 è dotato di una morsettiera ad 8 terminali inclinata per facilitare il cablaggio e di 2 ingressi M20x1.5 (1/2" NPT a richiesta).

### INDICATORE TRIDIMENSIONALE

L'indicatore tridimensionale OPEN/CLOSED di serie sulla serie BE45 consente una chiara lettura dello stato corrente della valvola.

### STAFFE DI MONTAGGIO

Fornita come standard, la staffa di montaggio in Acciaio Inox si adatta alla foratura NAMUR 80mm per 30mm ed altezza pignone H30mm. La staffa consente l'accoppiamento con attuatori aventi pignoni sporgenti H 20 mm grazie all'utilizzo di una prolunga in tecnopolimero.

### "QUICK SET" CAMS

The operating position of the switches can be easily changed by adjusting the high resolution spline cams manually and independently without the need for additional tools. The cams are spring backed and will not be affected by normal vibration.

### COMPACT DESIGN

The Max-Air BE45 is a very compact limit switch box, thereby allowing maintenance of a smaller valve envelope size.

### EASY WIRING

BE45 is equipped as standard with two (2) conduit entries M20x1.5 (1/2" NPT on request) and one (1) terminal strip with 8 point, angled to allow for easy wiring.

### HIGH VISIBILITY INDICATOR

The BE45 comes standard with a high visibility beacon, offering clear location of the current valve position.

### CAPTIVE COVER BOLTS

The switchbox also comes standard with stainless steel captive cover bolts.

### MOUNTING BRACKET

NAMUR 80x30 H30 stainless steel bracket supplied as standard with stainless steel fastening hardware for ease in mounting the switchbox onto the actuator. BE45 can be mounted on NAMUR H 20 actuators thru a techno polymer coupling.

## SPECIFICHE TECNICHE

Grado di protezione	IP67/NEMA4/4X
Temperatura di utilizzo	-20°C to +80°C Standard (-4°F to +176°F) -40°C +85°C (-40°F +185°F) (Opzionale)
Ingressi Cavi	2x M20x1.5 (Standard) - 2x 1/2" NPT (Opzionale)
Fine corsa	2x Interruttori SPDT contatti argentati o dorati - 2x sensori di prossimità - 2x fine corsa magnetici
Morsettiera	10 ingressi - per collegamento elettrovalvola monostabile (Standard) 10 ingressi - per collegamento elettrovalvola bistabile (Opzionale)
Finitura esterna	Verniciatura epossidica nera acciaio inossidabile (Elettrolucidato)
Peso	Alluminio LBS 0.74kg (1.62lbs) - AISI 316 1.79kg (3.94lbs)

## TECHNICAL SPECIFICATION

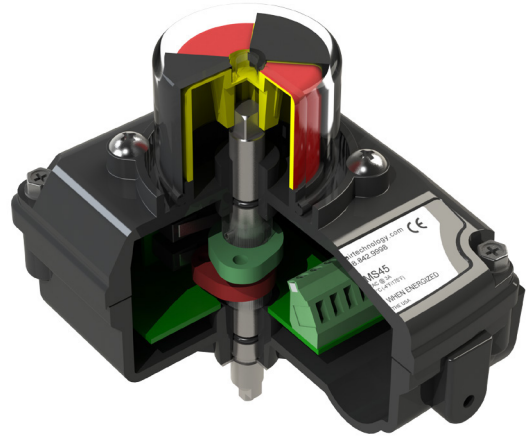
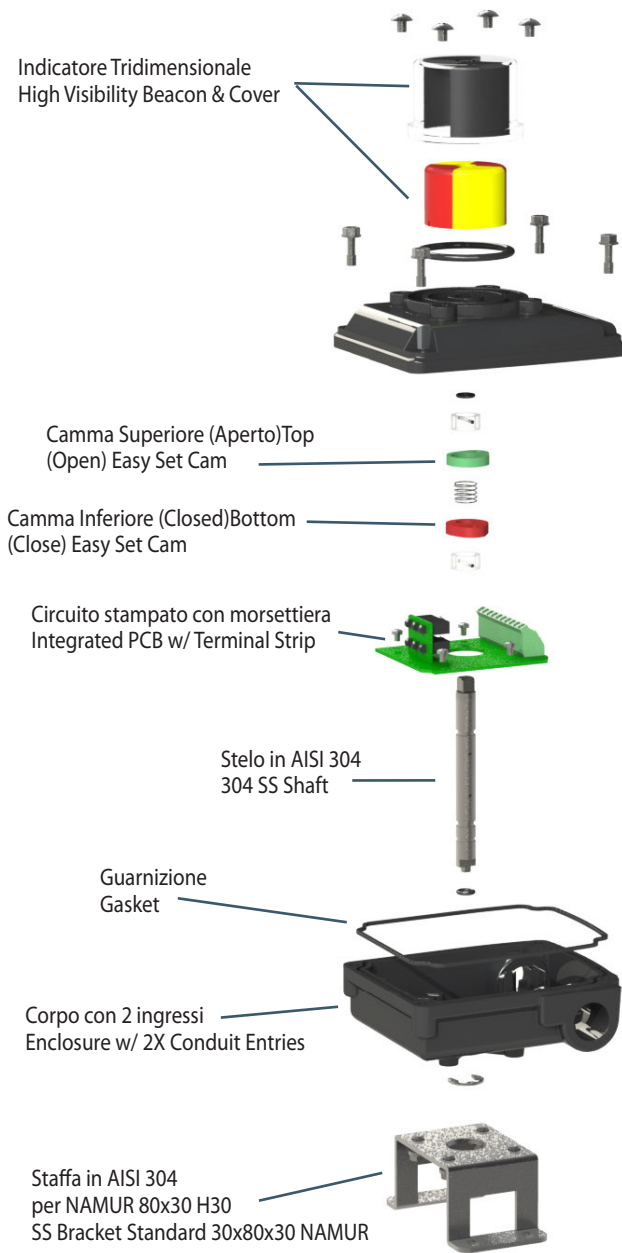
	<b>Standard</b>
Protection Rating	IP67/NEMA4/4X - Intrinsically Safe EEx ia IIC T6 (Optional)
Temperature Range	-20°C to +80°C Standard (-4°F to +176°F) -40°C to +85°C Optional (-40°F to +185°F)
Cable Entry	2x M20x1.5 (Standard) - 2x 1/2" NPT (Optional)
Switches	2x mechanical switches SPDT silver or gold plated- 2x Proximity Sensors - 2x Magnetic Switches
Terminal Strip	10 Pt. Single Coil Solenoid Valve (Standard) 10 Pt. Dual Coil Solenoid Valve (Optional)
External Coating	Black epoxy Coating ElectroPolished Stainless Steel
Weight	Aluminum LBS 0.74kg (1.62lbs) - AISI 316 1.79kg (3.94lbs)



SPECIAL INDICATORS - for Aluminium and Stainless Steel Limit switch Boxes

**Nuova staffa universale in acciaio inox - New stainless steel universal bracket**

## ESPLOSO EXPLODED VIEW



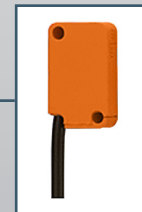
### FINE CORSA ELETTROMECCANICI MECHANICAL SWITCHES

- Omron SS-5 or SSG, SPDT, 5A 250V
- Optional Omron SS-01, SPDT, 0.1A 125VAC 30VDC,
- Gold Plated Contact



### SENSORI DI PROSSIMITÀ PROXIMITY SWITCHES

IFM & P&F  
vedi criterio di ordinazione  
see ordering code



### FINE CORSA MAGNETICI MAGNETIC SWITCHES

Reed Hamlin (Low Power, 5W Max)

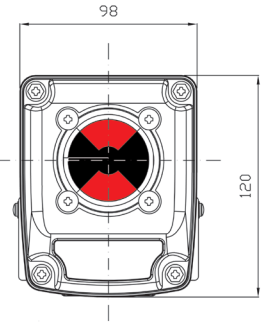
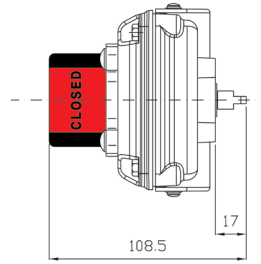
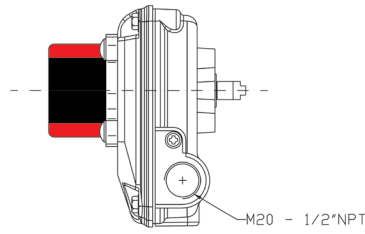
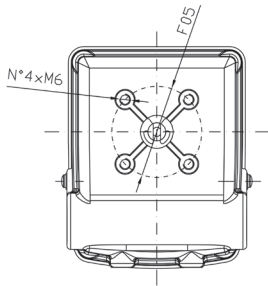


## CERTIFICATIONS & TEST PROTOCOL

CE  
ATEX II 3 D  
ATEX II 2 G D EEx ia IIC T6  
(Gold-plated contacts or EExia rated switches only)  
SIL-2 Rating  
CSA C22.2 No 14-13  
ANSI/UL 508 (17th Ed)  
CSA C22.2 No 94.1-07 / ANSI/UL 50 (12th Ed)  
CSA C22.2 No 94.2-07 / ANSI/UL 50E

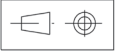
## MATERIALE / MATERIAL

Componente	Materiale	Item	Material
Scatola	Alluminio pressofuso Acciaio Inossidabile 316L	Housing	Die Cast Aluminium AISI 316L Stainless Steel
Stelo	Acciaio inox	Shaft	AISI 304 Stainless Steel (For All LSB) AISI 316 Stainless Steel (for SS LSB)
Indicatore	Policarbonato	External Indicator	Polycarbonate
Indicatore OPEN/CLOSED	ABS	Indic OPEN/CLOSED	ABS
Cam	ABS	Cams	ABS
Molla	Acciaio Inox	Spring	Stainless Steel
O ring	NBR	O Ring	NBR
Staffa	Acciaio Inox AISI 304 (per Box A.I.) Inox AISI 316 (per Box A.I.)	Bracket	AISI 304 Stainless Steel (for All LSB) AISI 316 Stainless Steel (for SS LSB)



## DIMENSIONI DIMENSIONS

DIMENSIONI IN mm.  
DIMENSIONS IN mm. ( INCHES )



## CRITERI D'ORDINAZIONE FEATURES

BE	4	5	-	2	2	0	M	0	3	X	
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### TIPO DI BOX BOX TYPE

- BE** = Box con n° 2 fine corsa elettromeccanici  
*Box with n°2 mechanical switches*
- BS** = Box con sensori di prossimità  
*Box with proximity sensors*
- BM** = Box con n° 2 fine corsa magnetici  
*Box with n°2 magnetic switches*
- MS** = Box con n° 2 fine corsa elettromeccanici CSA/UL  
*Box with n°2 mechanical switches CSA/UL*
- IS** = Box con sensori di prossimità CSA/UL  
*Box with proximity sensors CSA/UL*
- PS** = Box con n° 2 fine corsa magnetici CSA/UL  
*Box with n°2 magnetic switches CSA/UL*

### FILETTO PRESSACAVO THREAD

- 1** = 1/2" NPT
- 2** = M20x1.5

### FINECORSA SWITCHES

- 2** = Due finecorsa  
*Two switches*
- 4** = Quattro finecorsa  
*Four switches*

### MATERIALE MATERIAL

- M** = Alluminio - *Aluminum*
- 7** = Acciaio inox  
*stainless steel*

### TIPO DI INDICATORE INDICATOR TYPE

- 0** = STD, Open/Closed  
Giallo/Rosso  
*Yellow/Red*
- 2** = L port
- 3** = T port
- 4** = Freccia - *Arrow*

### STAFFA BRACKET

- 2** = Namur 80x30  
H20
- 3** = Namur 80x30  
H30 (standard)
- 6** = Staffa  
Universale  
*Universal Bracket*

### CERTIFICAZIONI CERTIFICATION

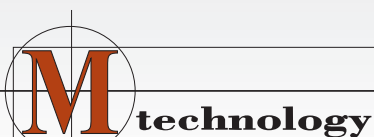
- Vuoto/Blank** =  
*zona sicura/safe area*
- X** = ATEX II 3 D

### TIPO DI FINE CORSA SWITCH TYPE

- BE/MS** = 0 Omron SS-5 or SSG, SPDT, 5A 250V - Contatti Argentati / *Silver Plated Contacts*
- S Omron SS-01, SPDT, 0.1A 125VAC 30VDC - Contatti Dorati / *Gold Plated Contacts*
- BM/PS** = 0 Hamlin (Low Power, 5W Max) - Fine Corsa Magnetici tipo REED / *Magnetic Reed*
- BS/IS** = A IFM NS5002 EEExia NAMUR (7.5-30 DC, Nominal 8.2 DC) - 2 Fili NC / *2 Wires NC*
- B IFM IS5001 DC Switch (10-36V) - 3 Fili PNP NO / *3 Wire PNP NO*
- D IFM IS5026 DC (5-36V, Programmable) - 2 Fili PNP o NPN / *2 Wire PNP or NPN*
- E IFM IS0003 AC/DC (20-140VAC/10-140VDC) - 2 Fili NO / *2 Wires NO*
- F P&F NJ2-V3-N EEExia NAMUR (8.2V) - 2 Fili NC / *2 Wire NC*
- G P&F NBB2-V3-E2 DC (10-30V, NO) - 3 Fili PNP NO / *G3 Wire PNP*
- H P&F NBB3-V3-Z4 DC (5-60V) - 2 Fili NO / *2 Wires NO*
- K P&F NBB2-V3-E3 DC (10-30V) - 3 Fili PNP NC / *3 Wire PNP NC*
- L P&F NBB2-V3-E3 DC (10-30V, NC) - 3 Fili NPN NO / *3 Wire NPN NO*
- N P&F NCB2-V3-N0 EEExia Namur (8.2V) - 2 Fili NC / *2 Wire NC*

### OPZIONI SPECIALI SPECIAL OPTIONS

- Vuoto/Blank** =  
Standard 7-8-7-8
- 1** = Scheda 7-8-7-9  
*Circuit Board*
- 2** = Scheda 7-8-9-10  
*Circuit Board*



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