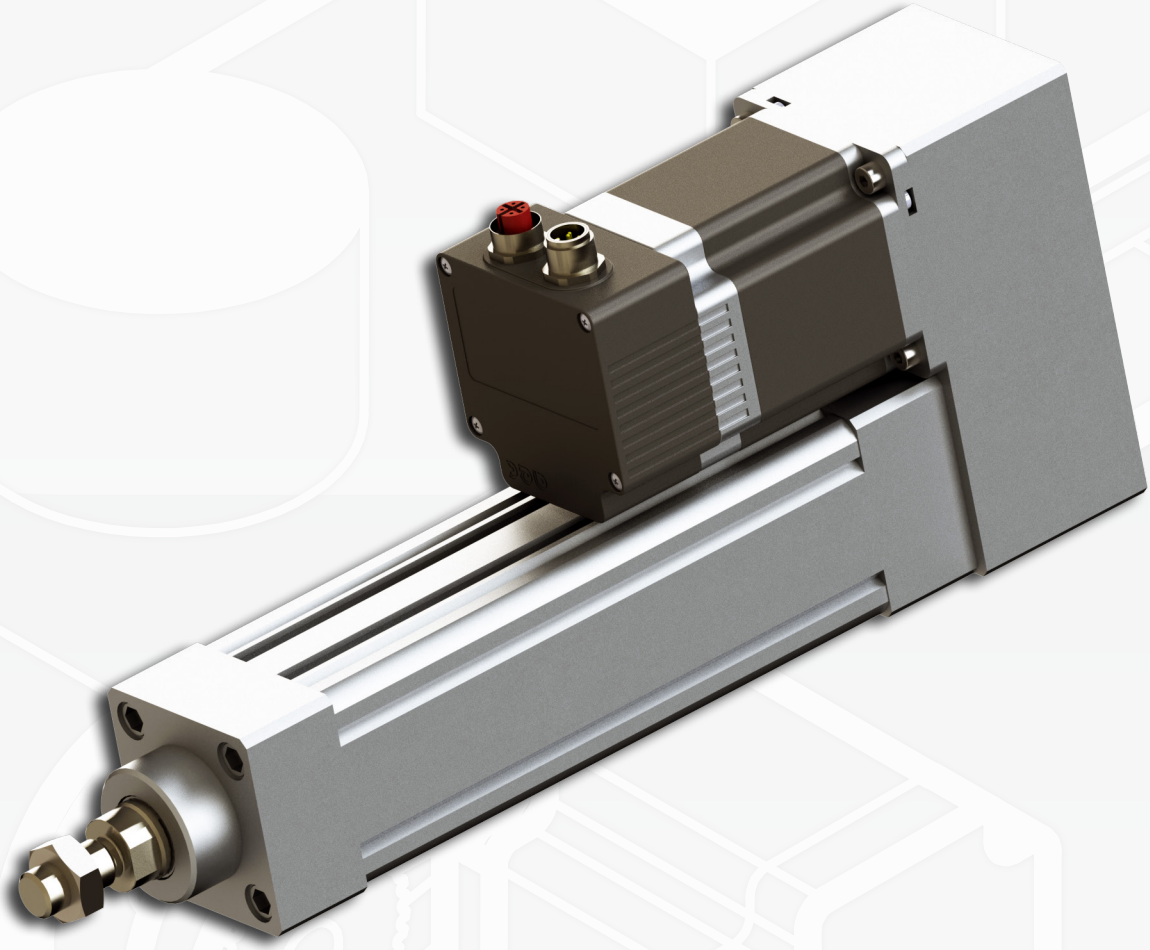
# Cilindri elettrici

Cilindri elettrici - IElectricCylinder



Drives & Motors

Modbus RTU Modbus TCP CANopen EtherCAT PROFIBUS PROFINET

# IEC025xxx
*Servo electric cylinder stage*

## Motori abbinabili * / *Matching motors **

| Motor | A |
|---|---|
| **M42SH33-Txx** | 55,54 |
| **M42SH47-Txx** | 69,90 |
| **M42SH60-Txx** | 81,70 |

*Curve di coppia a pag.12
*Torque curves on page 12*

## Specifications

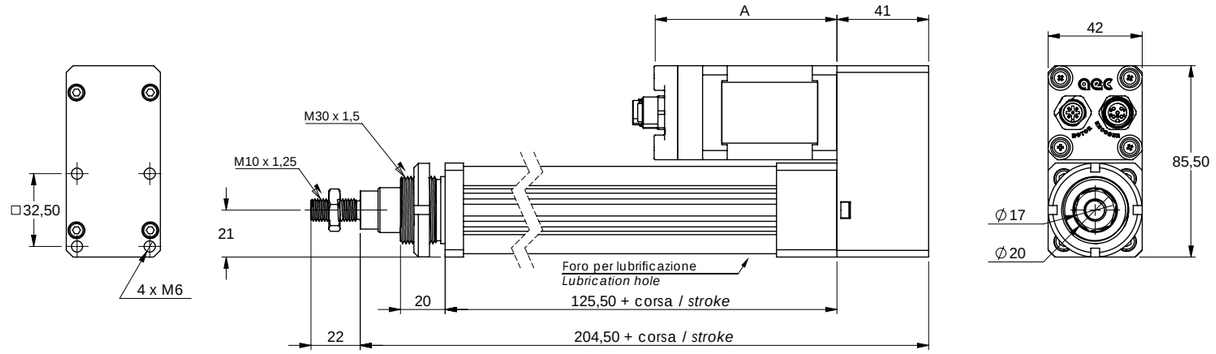
| Modello *Model* | Passo vite *Screw pitch* | Tipo vite *Screw type* | Max carico dinamico * *Max dynamic load** | Max carico statico * *Max static load** | Antirotazione *Anti-rotation* | Precisione di posizionamento *Positioning accuracy* | Ripetibilità *Repeatability* | Gioco assiale massimo *Maximum backlash* | Forza max spinta/tiro *Max push/pull force* |
|---|---|---|---|---|---|---|---|---|---|
| | *mm* | | *N* | *N* | | *mm* | *mm* | *mm* | *N* |
| **IEC025***xxx* | *10* | ricircolo di sfere *ballscrew* | 2500 | 3900 | ● | ±0,02 | ±0,01 | ±0,02 | 210 |

* Massimo carico applicabile al cilindro, indipendente dalla coppia del motore
** Maximum load applicable to the cylinder, independent from the torque of the motor*

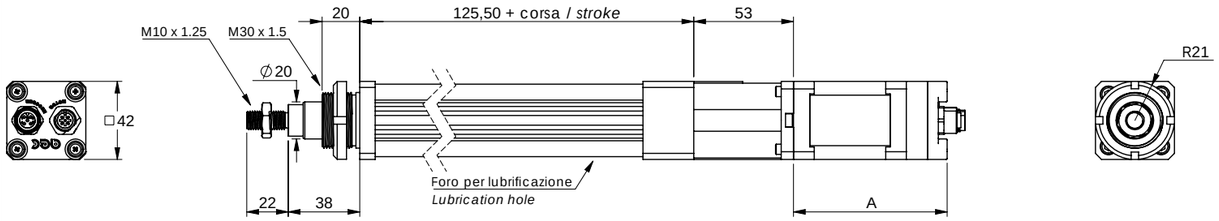
● = Standard • *Standard*
○ = Su richiesta • *On request*

## Mechanical dimensions

### Montaggio motore rinviato
*Gear parallel transmission*




### Montaggio motore diretto
*In line direct transmission*

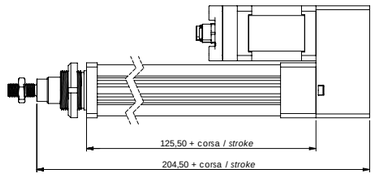



Le dimensioni sono espresse in mm. • *Dimensions are in mm.*

## Masse dei cilindri / *Mass of cylinders*

| Motor | CILINDRO DIRETTO Massa corsa 0 (gr) | CILINDRO RIVIATO Massa corsa 0 (gr) | Massa per mm di corsa (gr/mm) |
|---|---|---|---|
| **M42SH33-Txx** | 635 | 1110 | 3,5 |
| **M42SH47-Txx** | 725 | 1200 | |
| **M42SH60-Txx** | 905 | 1380 | |

## Corse cilindri / *Cylinder strokes*

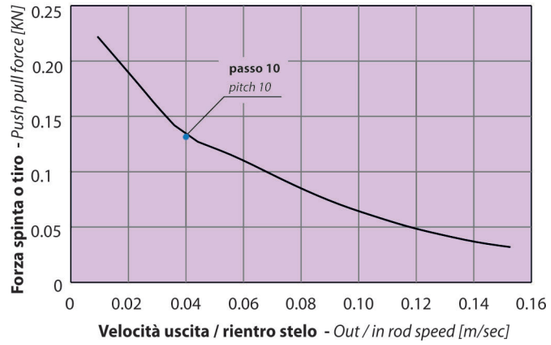



| 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | altre • *others* |
|---|---|---|---|---|---|---|---|---|
| ● | ● | ● | ● | ● | ● | ● | ● | ○ |

● = Standard • *Standard* / ○ = Su richiesta • *On request*

## Grafico forza / velocità – *Force / speed graphs*

Motore M42SH60 - Tensione di alimentazione 24Vdc

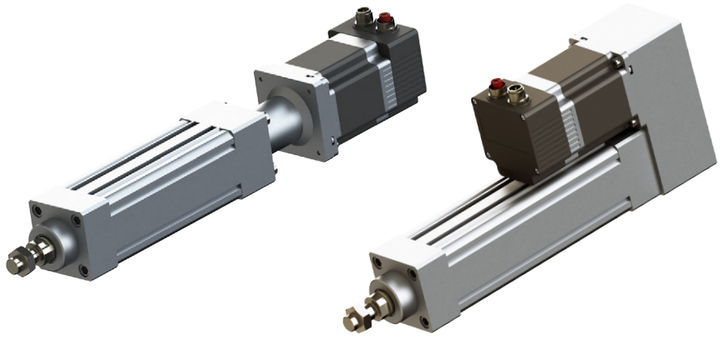


# IEC040xxx
## *Servo electric cylinder stage*

**MOTORI ABBINABILI ***
***MATCHING MOTORS ****

| Motor | A |
|---|---|
| **M60SH65-Txx** | 97 |
| **M60SH86-Txx** | 118 |

*Curve di coppia a pag.12
*Torque curves on page 12*



## Specifications

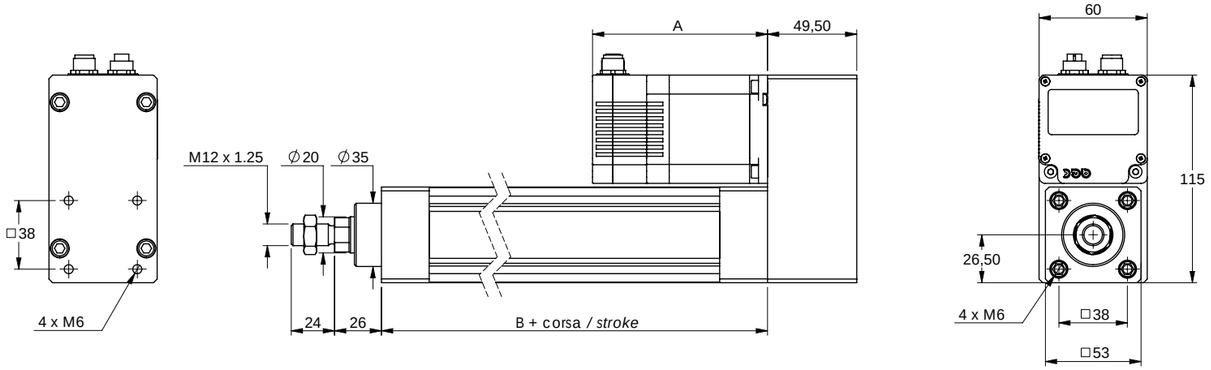
| Modello *Model* | Passo vite *Screw pitch* | Tipo vite *Screw type* | Max carico dinamico * *Max dynamic load * | Max carico statico * *Max static load * | Antirotazione *Anti-rotation* | Precisione di posizionamento *Positioning accuracy* | Ripetibilità *Repeatability* | Gioco assiale massimo *Maximum backlash* | Forza max spinta/tiro *Max push/pull force* |
|---|---|---|---|---|---|---|---|---|---|
| | *mm* | | *N* | *N* | | *mm* | *mm* | *mm* | *N* |
| **IEC040050** | *5* | ricircolo di sfere *ballscrew* | 2650 | 4600 | ● | ±0,02 | ±0,01 | ±0,02 | 1600 |
| **IEC040120** | *12* | ricircolo di sfere *ballscrew* | 5600 | 6800 | ● | ±0,02 | ±0,01 | ±0,02 | 650 |

* Massimo carico applicabile al cilindro, indipendente dalla coppia del motore
** Maximum load applicable to the cylinder, independent from the torque of the motor*

● = Standard • *Standard*
○ = Su richiesta • *On request*

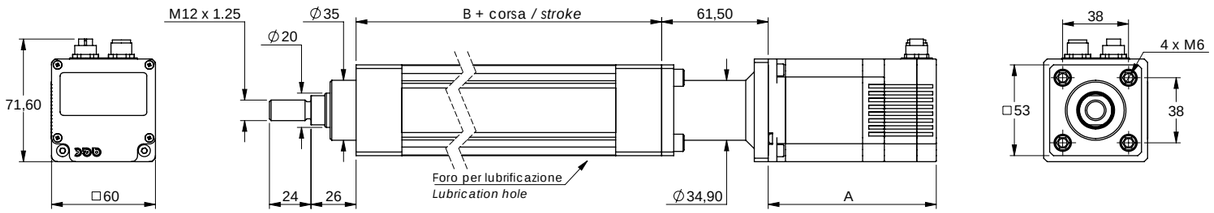
## Mechanical dimensions

### Montaggio motore rinviato
*Gear parallel transmission*




| Passo della vite *Screw pitch* | B |
|---|---|
| **5** | 129,50 |
| **12** | 140 |

### Montaggio motore diretto
*In line direct transmission*

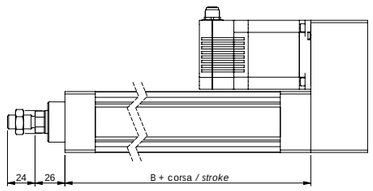



Le dimensioni sono espresse in mm. • *Dimensions are in mm.*

## Masse dei cilindri / *Mass of cylinders*

| Motor | CILINDRO DIRETTO Massa corsa 0 (gr) | CILINDRO RIVIATO Massa corsa 0 (gr) | Massa per mm di corsa (gr/mm) |
|---|---|---|---|
| **M60SH65-Txx** | 2490 | 3160 | 4,6 |
| **M60SH86-Txx** | 2690 | 3360 | |

## Corse cilindri / *Cylinder strokes*

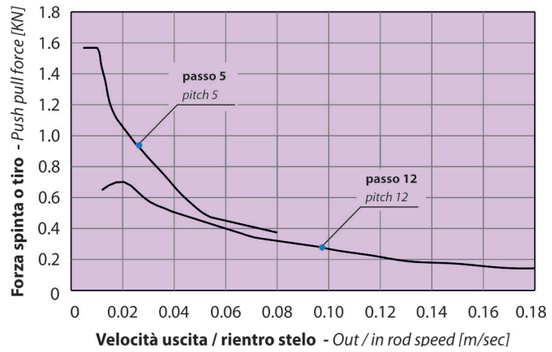



| 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | altre • *others* |
|---|---|---|---|---|---|---|---|---|
| ● | ● | ● | ● | ● | ● | ● | ● | ○ |

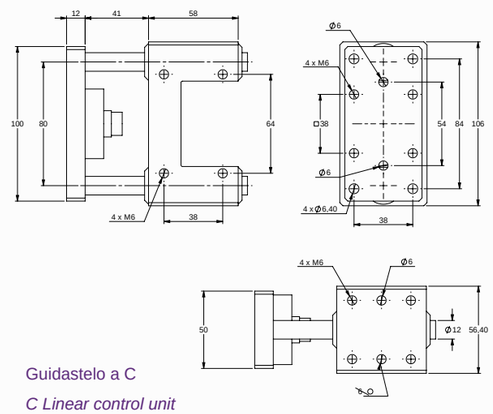
● = Standard • *Standard* / ○ = Su richiesta • *On request*

## Grafico forza / velocità – *Force / speed graphs*

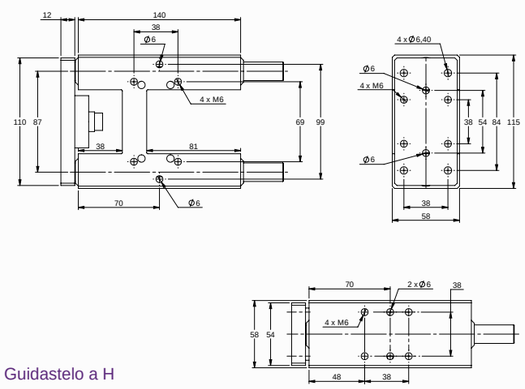
Motore M60SH86 - Tensione di alimentazione 60Vdc




## ACCESSORI GUIDASTELO • *OPTIONAL LINEAR CONTROL UNIT*




Guidastelo a C
*C Linear control unit*



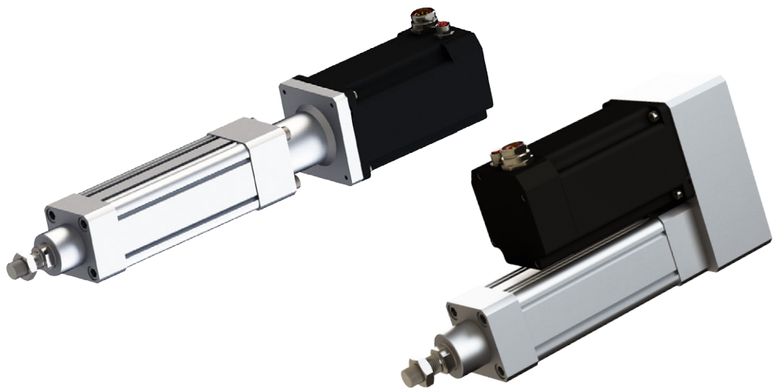

Guidastelo a H
*H Linear control unit*

# IEC050xxx
## *Servo electric cylinder stage*

### MOTORI ABBINABILI * / *MATCHING MOTORS **

| Motor | A |
|---|---|
| **M86SH80-Txx** | 115 |
| **M86SH96-Txx** | 133 |
| **M86SH118-Txx** | 152 |
| **M86SH156-Txx** | 191 |

*Curve di coppia a pag.12
*Torque curves on page 12*



### Specifications

| Modello *Model* | Passo vite *Screw pitch* | Tipo vite *Screw type* | Max carico dinamico * *Max dynamic load ** | Max carico statico * *Max static load ** | Antirotazione *Anti-rotation* | Precisione di posizio-namento *Positioning accuracy* | Ripetibilità *Repeata-bility* | Gioco assiale massimo *Maximum backlash* | Forza max spinta/tiro *Max push/ pull force* |
|---|---|---|---|---|---|---|---|---|---|
| | *mm* | | *N* | *N* | | *mm* | *mm* | *mm* | *N* |
| **IEC050050** | *5* | ricircolo di sfere *ballscrew* | 12000 | 14000 | ● | ±0,02 | ±0,01 | ±0,02 | 5000 |
| **IEC050100** | *10* | ricircolo di sfere *ballscrew* | 10000 | 14000 | ● | ±0,02 | ±0,01 | ±0,02 | 3300 |
| **IEC050160** | *16* | ricircolo di sfere *ballscrew* | 10000 | 14000 | ● | ±0,02 | ±0,01 | ±0,02 | 2000 |

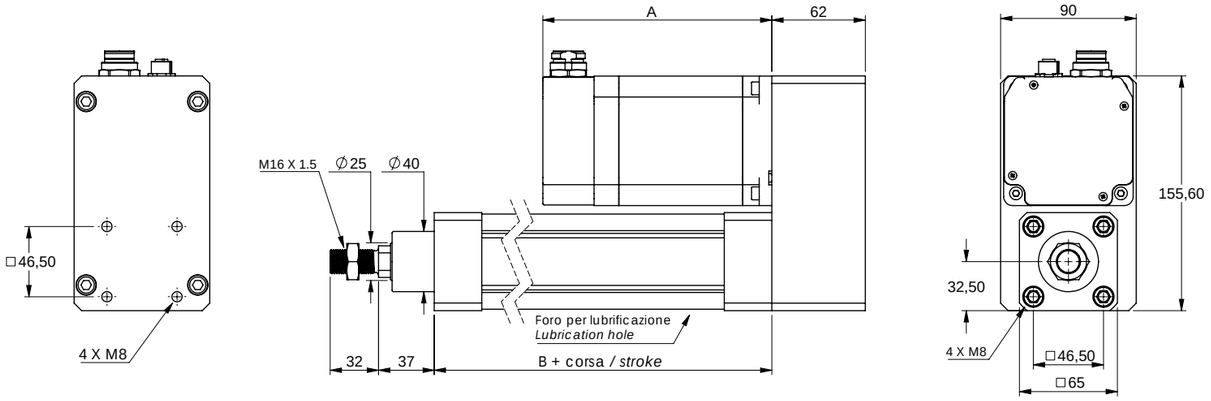
* Massimo carico applicabile al cilindro, indipendente dalla coppia del motore
** Maximum load applicable to the cylinder, independent from the torque of the motor*

● = Standard • *Standard*
○ = Su richiesta • *On request*

### Mechanical dimensions

**Montaggio motore rinviato**

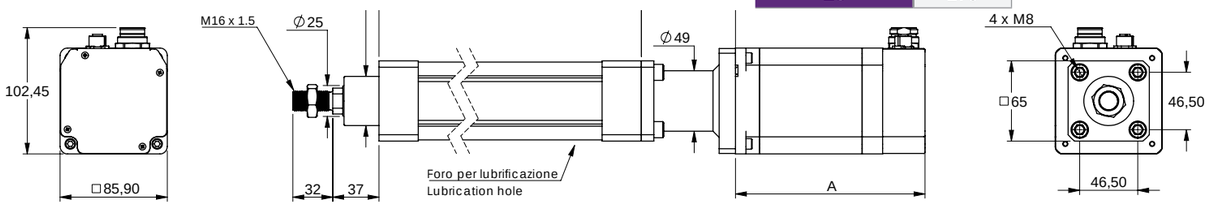
*Gear parallel transmission*




| Passo della vite *Screw pitch* | B |
|---|---|
| **5** | 165 |
| **10** | 170 |
| **16** | 176 |

**Montaggio motore diretto**

*In line direct transmission*

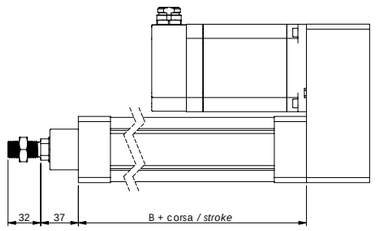



Le dimensioni sono espresse in mm. • *Dimensions are in mm.*

### Masse dei cilindri / *Mass of cylinders*

| Motor | CILINDRO DIRETTO Massa corsa 0 (gr) | CILINDRO RIVIATO Massa corsa 0 (gr) | Massa per mm di corsa (gr/mm) |
|---|---|---|---|
| **M86SH80-Txx** | 5080 | 6930 | 6,8 |
| **M86SH96-Txx** | 5680 | 7530 | |
| **M86SH118-Txx** | 6580 | 8430 | |
| **M86SH156-Txx** | 8180 | 10030 | |

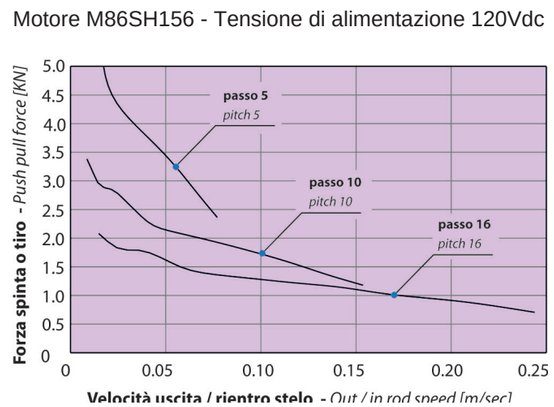
### Corse cilindri / *Cylinder strokes*



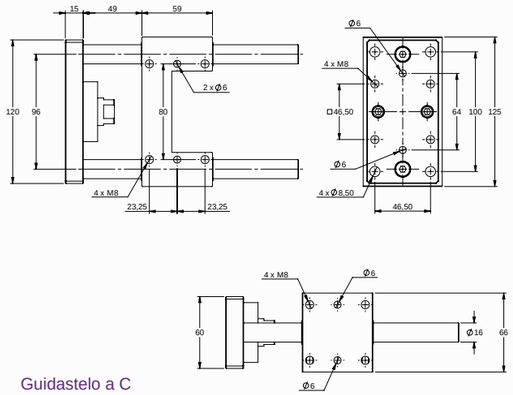

| 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | altre • *others* |
|---|---|---|---|---|---|---|---|---|
| ● | ● | ● | ● | ● | ● | ● | ● | ○ |

● = Standard • *Standard* / ○ = Su richiesta • *On request*

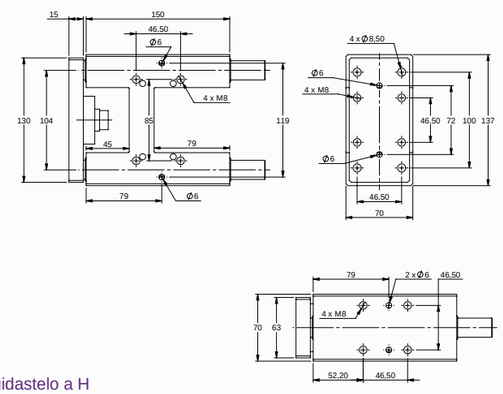
### Grafico forza / velocità – *Force / speed graphs*




### ACCESSORI GUIDASTELO • *OPTIONAL LINEAR CONTROL UNIT*




Guidastelo a C
*C Linear control unit*



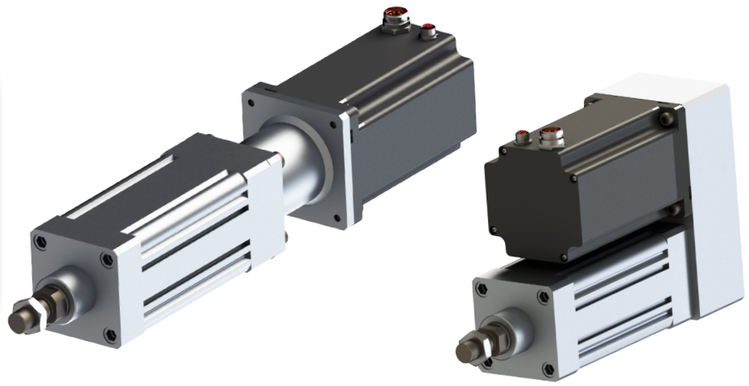

Guidastelo a H
*H Linear control unit*

# IEC080xxx
*Servo electric cylinder stage*

**MOTORI ABBINABILI ***
*MATCHING MOTORS **

| Motor | A |
|---|---|
| **M110SH99-Txx** | 129 |
| **M110SH150-Txx** | 180 |
| **M110SH201-Txx** | 231 |

*Curve di coppia a pag.12
*Torque curves on page 12*



## Specifications

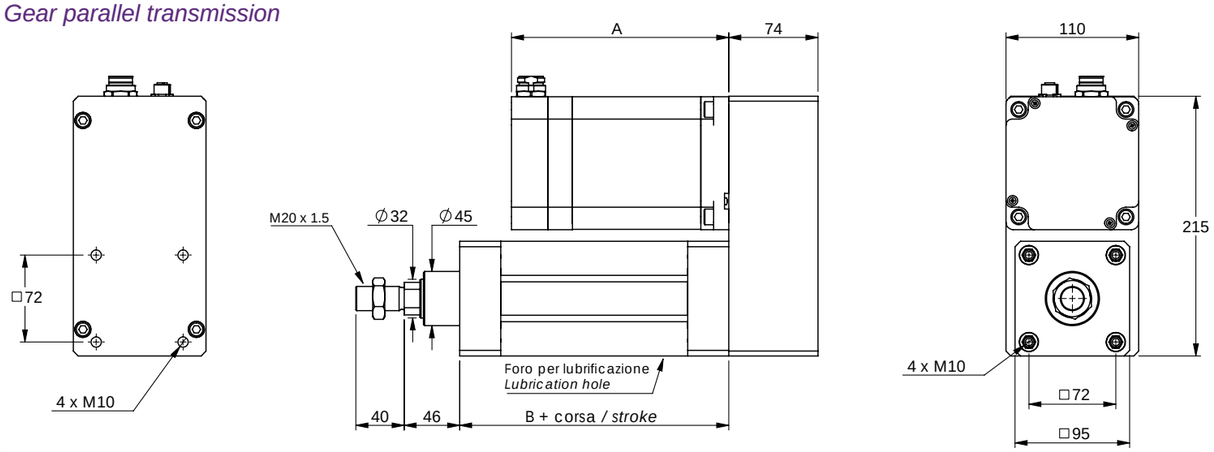
| Modello *Model* | Passo vite *Screw pitch* | Tipo vite *Screw type* | Max carico dinamico * *Max dynamic load ** | Max carico statico * *Max static load ** | Antirotazione *Anti-rotation* | Precisione di posizionamento *Positioning accuracy* | Ripetibilità *Repeatability* | Gioco assiale massimo *Maximum backlash* | Forza max spinta/tiro *Max push/pull force* |
|---|---|---|---|---|---|---|---|---|---|
| | *mm* | | *N* | *N* | | *mm* | *mm* | *mm* | *N* |
| **IEC080050** | *5* | ricircolo di sfere *ballscrew* | 15000 | 20000 | ● | ±0,02 | ±0,01 | ±0,02 | 12000 |
| **IEC080100** | *10* | ricircolo di sfere *ballscrew* | 10000 | 20000 | ● | ±0,02 | ±0,01 | ±0,02 | 5800 |
| **IEC080200** | *20* | ricircolo di sfere *ballscrew* | 13000 | 20000 | ● | ±0,02 | ±0,01 | ±0,02 | 2500 |

* Massimo carico applicabile al cilindro, indipendente dalla coppia del motore
** Maximum load applicable to the cylinder, independent from the torque of the motor*

● = Standard • *Standard*
○ = Su richiesta • *On request*

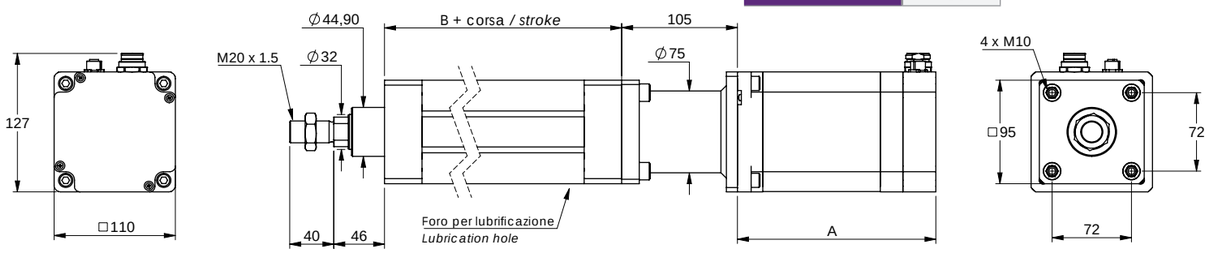
## Mechanical dimensions

### Montaggio motore rinviato
*Gear parallel transmission*




| Passo della vite *Screw pitch* | B |
|---|---|
| **5** | 173 |
| **10** | 178 |
| **20** | 188 |

### Montaggio motore diretto
*In line direct transmission*

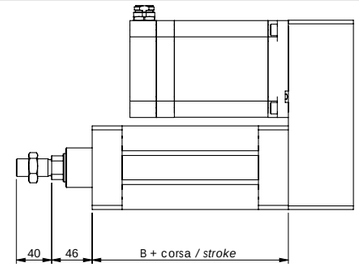



Le dimensioni sono espresse in mm. • *Dimensions are in mm.*

## Masse dei cilindri / *Mass of cylinders*

| Motor | CILINDRO DIRETTO Massa corsa 0 (gr) | CILINDRO RIVIATO Massa corsa 0 (gr) | Massa per mm di corsa (gr/mm) |
|---|---|---|---|
| **M110SH99-Txx** | 11250 | 13200 | 12,5 |
| **M110SH150-Txx** | 14650 | 16600 | |
| **M110SH201-Txx** | 17950 | 19900 | |

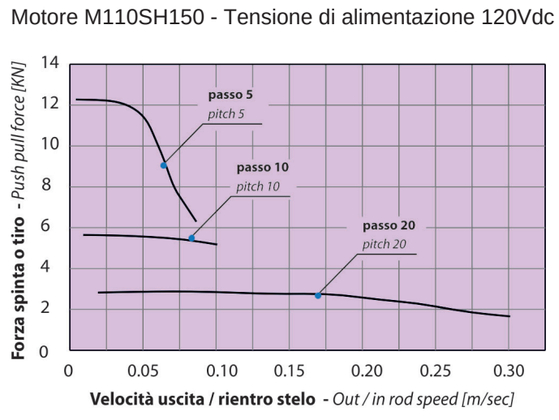
## Corse cilindri / *Cylinder strokes*



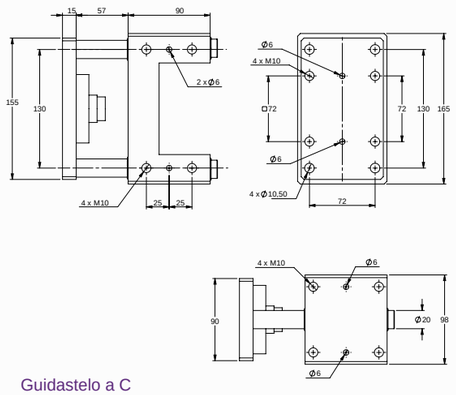

| 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | altre • *others* |
|---|---|---|---|---|---|---|---|---|
| ● | ● | ● | ● | ● | ● | ● | ● | ○ |

● = Standard • *Standard* / ○ = Su richiesta • *On request*

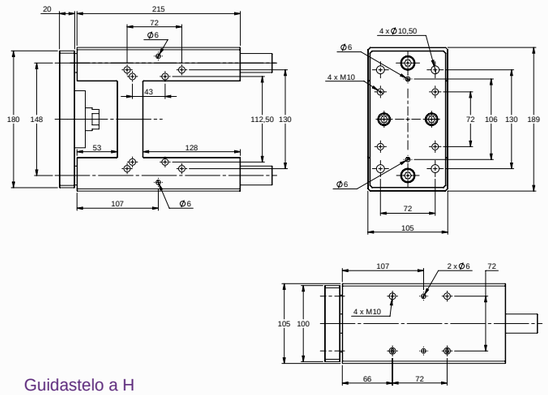
## Grafico forza / velocità – *Force / speed graphs*




## ACCESSORI GUIDASTELO • *OPTIONAL LINEAR CONTROL UNIT*




Guidastelo a C
*C Linear control unit*



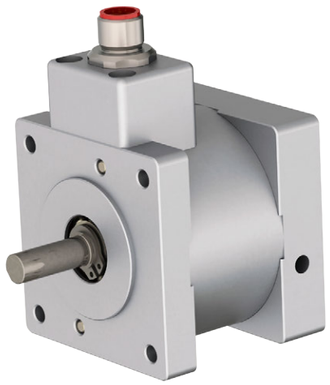

Guidastelo a H
*H Linear control unit*

# Accessori

## Freni elettromagnetici • *Electromagnetic brakes*

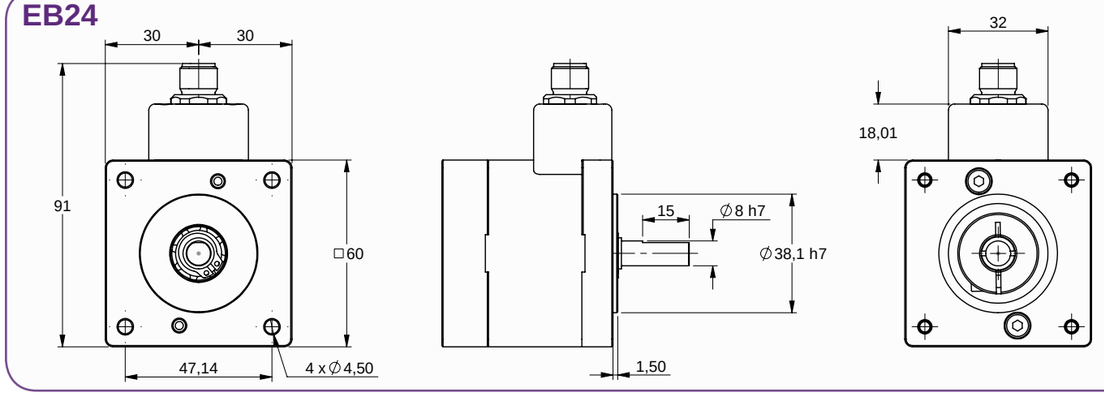
L'EB24 e l'EB34 sono dei freni elettromagnetici monodisco negativo, chiusi a pressione di molle e dotati di flangia NEMA per un montaggio in linea, semplice e rapido. Vengono utilizzati per funzionamento a secco come freno di sicurezza o di stazionamento.

| Caratteristiche | | EB24 | EB34 | U.M. |
|---|---|---|---|---|
| Coppia di frenatura | | 1,5 | 3,0 | Nm |
| Max coppia in uscita | | 5 | 13 | Nm |
| Max forza assiale applicabile | | 5 | 10 | N |
| Max forza radiale applicabile | | 5 | 10 | N |
| Tempo intervento | Inserzione | 10 | 17 | ms |
| | Disinserzione | 21 | 35 | ms |
| Velocità massima | | 3000 | 3000 | RPM |
| Inerzia | | 9 | 70 | $gcm^2$ |
| Temperatura di esercizio | | -10 .. +90 | -10 .. +90 | °C |
| Temperatura di ambiente | | -10 .. +60 | -10 .. +60 | °C |
| Umidità di lavoro (senza condensa) | | max 95% | max 95% | %HR |
| Peso | | 750 | 1850 | g |
| Alimentazione | | 24 | 24 | $V_{dc}$ |
| Potenza | | 15 | 24 | W |

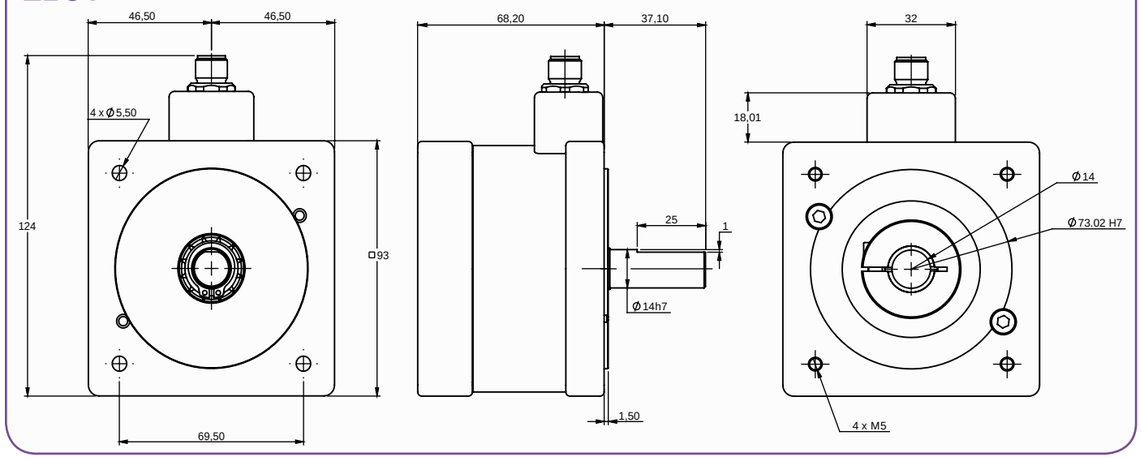


### Dimensioni meccaniche

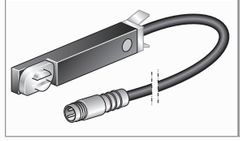
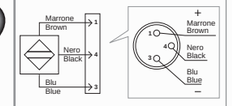
**EB24**




**EB34**




## Sensori di fine corsa • *Limit switches*

| Tipo • *Type* | Circuito • *Circuit* | Modello • *Model* | *Codice • Code* |
|---|---|---|---|
|  |   | Sensore effetto Hall H | SENH-C-M8 |

## Codice d'ordine • *Ordering code*

**IEC** XXX XXX XXXX XX XXX XX XX

**Modello** • *Model*

| | |
|---|---|
| Alesaggio 25 • *Bore 25* | 025 |
| Alesaggio 40 • *Bore 40* | 040 |
| Alesaggio 50 • *Bore 50* | 050 |
| Alesaggio 80 • *Bore 80* | 080 |

**Passo vite** • *Screw pitch*

| | |
|---|---|
| p = 5 mm | 050 |
| p = 10 mm | 100 |
| p = 12 mm | 120 |
| p = 16 mm | 160 |
| p = 20 mm | 200 |

**Corsa** • *Stroke*

| | |
|---|---|
| 50 mm | 0050 |
| 100 mm | 0100 |
| 150 mm | 0150 |
| 200 mm | 0200 |
| 250 mm | 0250 |
| 300 mm | 0300 |
| 350 mm | 0350 |
| 400 mm | 0400 |
| Altre corse su richiesta • Other strokes on request | .... |

**Unità di guida**
*Linear control unit*

| | |
|---|---|
| CB | "C" con bronzine • *with brass bearing* |
| HB | "H" con bronzine • *with brass bearing* |
| HR | "H" con cuscinetti a sfera • *with ball bushing* |

**Freno elettromagnetico** • *Electomagnetic brake*

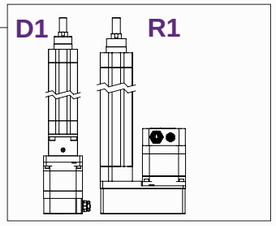
| | |
|---|---|
| BC | Uscita connettore (solo EB34) • *Connector output (only EB34)* |
| BF | Uscita cavi • *Wires output* |

**Codice motore** • *Motor code*

Mxx

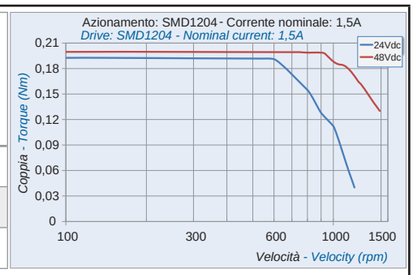
**Accoppiamento motore** • *Motor coupling*

D1 R1

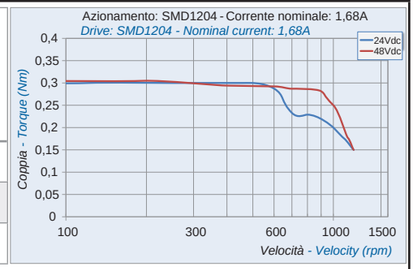


# Tabella motori

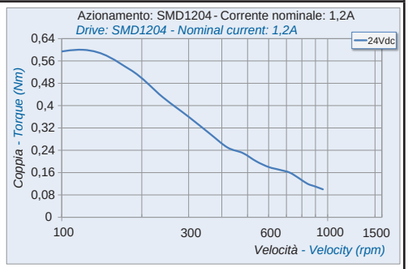
| M42SH33-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M42SH33-T-C | M117 | 1,5 A | 0,23 Nm | - | - |
| M42SH33-TO0512P24C | M140 | 1,5 A | 0,23 Nm | Push-pull | 512 |
| M42SH33-TO0512L05C | M130 | 1,5 A | 0,23 Nm | Line-driver | 512 |



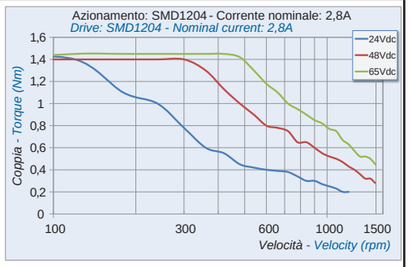

| M42SH47-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M42SH47-T-C | M111 | 1,68 A | 0,44 Nm | - | - |
| M42SH47-TO0512P24C | M141 | 1,68 A | 0,44 Nm | Push-pull | 512 |
| M42SH47-TO0512L05C | M131 | 1,68 A | 0,44 Nm | Line-driver | 512 |



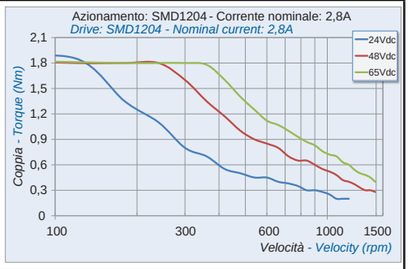

| M42SH60-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M42SH60-T-C | M112 | 1,2 A | 0,8 Nm | - | - |
| M42SH60-TO0512P24C | M142 | 1,2 A | 0,8 Nm | Push-pull | 512 |
| M42SH60-TO0512L05C | M132 | 1,2 A | 0,8 Nm | Line-driver | 512 |



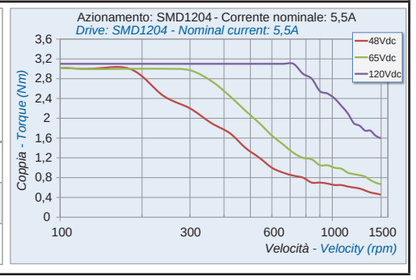

| M60SH65-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M60SH65-T-C | M02 | 2,8 A | 2,1 Nm | - | - |
| M60SH65-TO0512P24C | M90 | 2,8 A | 2,1 Nm | Push-pull | 512 |
| M60SH65-TO0512L05C | M81 | 2,8 A | 2,1 Nm | Line-driver | 512 |



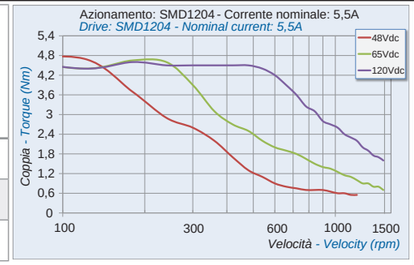

| M60SH86-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M60SH86-T-C | M06 | 2,8 A | 3,1 Nm | - | - |
| M60SH86-TO0512P24C | M91 | 2,8 A | 3,1 Nm | Push-pull | 512 |
| M60SH86-TO0512L05C | M82 | 2,8 A | 3,1 Nm | Line-driver | 512 |



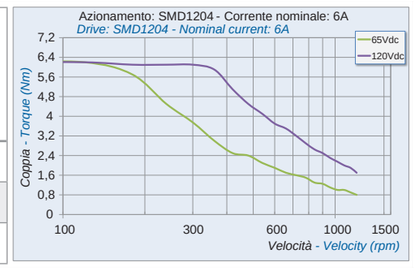

| M86SH80-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M86SH80-T-C | M15 | 5,5 A | 4,6 Nm | - | - |
| M86SH80-TO0512P24C | M92 | 5,5 A | 4,6 Nm | Push-pull | 512 |
| M86SH80-TO0512L05C | M83 | 5,5 A | 4,6 Nm | Line-driver | 512 |



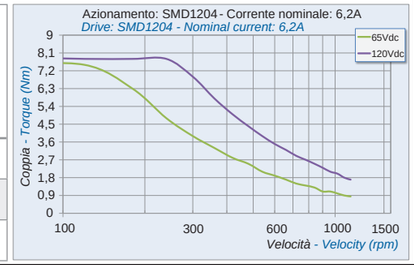

| M86SH96-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M86SH96-T-C | M216 | 5,6 A | 6,5 Nm | - | - |
| M86SH96-TO0512P24C | M217 | 5,6 A | 6,5 Nm | Push-pull | 512 |
| M86SH96-TO0512L05C | M218 | 5,6 A | 6,5 Nm | Line-driver | 512 |



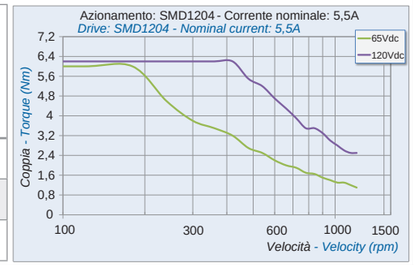

| M86SH118-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M86SH118-T-C | M18 | 6,0 A | 8,7 Nm | - | - |
| M86SH118-TO0512P24C | M93 | 6,0 A | 8,7 Nm | Push-pull | 512 |
| M86SH118-TO0512L05C | M84 | 6,0 A | 8,7 Nm | Line-driver | 512 |



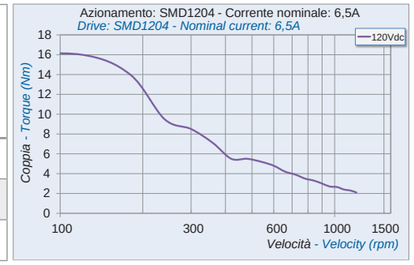

| M86SH156-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M86SH156-T-C | M22 | 6,2 A | 12,8 Nm | - | - |
| M86SH156-TO0512P24C | M94 | 6,2 A | 12,8 Nm | Push-pull | 512 |
| M86SH156-TO0512L05C | M85 | 6,2 A | 12,8 Nm | Line-driver | 512 |



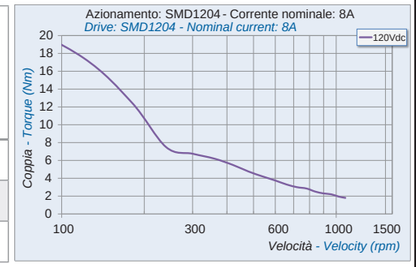

| M110SH99-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M110SH99-T-C | M32 | 5,5 A | 11,2 Nm | - | - |
| M110SH99-TO0512P24C | M95 | 5,5 A | 11,2 Nm | Push-pull | 512 |
| M110SH99-TO0512L05C | M86 | 5,5 A | 11,2 Nm | Line-driver | 512 |




| M110SH150-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M110SH150-T-C | M36 | 6,5 A | 22 Nm | - | - |
| M110SH150-TO0512P24C | M96 | 6,5 A | 22 Nm | Push-pull | 512 |
| M110SH150-TO0512L05C | M87 | 6,5 A | 22 Nm | Line-driver | 512 |




| M110SH201-Tx | Codice motore *Motor code* | Corrente di fase *Phase current* | Coppia di mantenimento *Holding torque* | Encoder *Encoder* | Impulsi/giro encoder *Encoder pulse/revolution* |
|---|---|---|---|---|---|
| M110SH201-T-C | M40 | 8,0 A | 30 Nm | - | - |
| M110SH201-TO0512P24C | M97 | 8,0 A | 30 Nm | Push-pull | 512 |
| M110SH201-TO0512L05C | M88 | 8,0 A | 30 Nm | Line-driver | 512 |




Curve di coppia realizzate con torsiometro AEP mod. MRT250NM

*The torque curves are made with AEP torque transducer mod. MRT250NM*

# Cavi a posa mobile

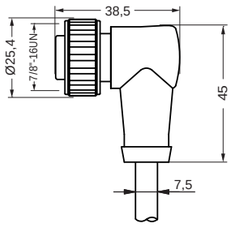
## Cavo motori serie M86SH ed M110SH con connettore 7/8" precablato

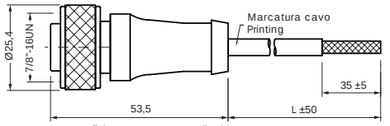
| Modello - *model* | Nr. conduttori<br>nr. of wires | Sezione<br>*Section* | Caratteristiche<br>*Characteristics* | Materiale guaina<br>*Sheat material* | Materiale isolante<br>*Insulation material* | Diametro esterno<br>*Outer diameter* | Lunghezza<br>*Length* |
|---|---|---|---|---|---|---|---|
| | N | mm² | | | | mm | m |
| CONV05FDR78C04SU100 | 4 + 1 | 1,00 | UL-CSA 300 V 80°C | PUR | PP 9Y | 7,4 | 4 |
| CONV05FDR78C12SU100 | 4 + 1 | 1,00 | UL-CSA 300 V 80°C | PUR | PP 9Y | 7,4 | 12 |

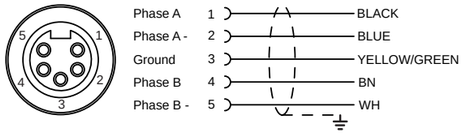
**CONV05Fxx78CxxSU100**

Cavo motore preassemblato
7/8" 5 vie femmina

*7/8" 5 ways female*
*preassembled motor cable*

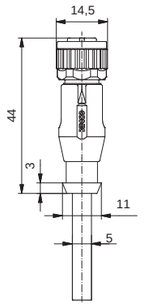


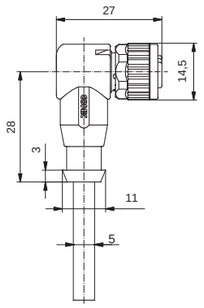




## Cavo motori serie M42SH/M57SH/M60SH con connettore M12 precablato

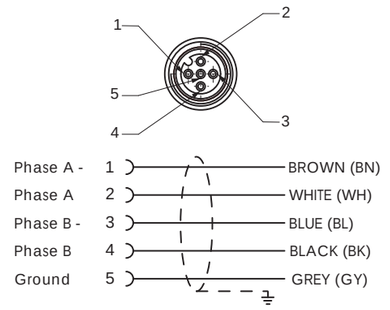
| Modello - *model* | Connettore<br>*Connector* | Nr. conduttori<br>*nr. of wires* | Sezione<br>*Section* | Caratteristiche<br>*Characteristics* | Materiale guaina<br>*Sheat material* | Materiale isolante<br>*Insulation material* | Diametro esterno<br>*Outer diameter* | Lunghezza<br>*Length* |
|---|---|---|---|---|---|---|---|---|
| | | N | mm² | | | | mm | m |
| CONV05FM12C04SU034 | Dritto | 5 | 0,34 | UL20549 | PUR | PP 9Y | 5,8 | 4 |
| CONV05FDRM12C12SU034 | Dritto | 5 | 0,34 | UL20549 | PUR | PP 9Y | 5,8 | 12 |
| CONV05F90M12C04SU034 | Angolato | 5 | 0,34 | UL20549 | PUR | PP 9Y | 5,8 | 4 |



Dritto

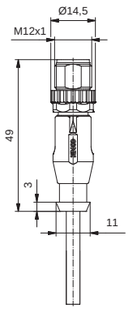


Angolato

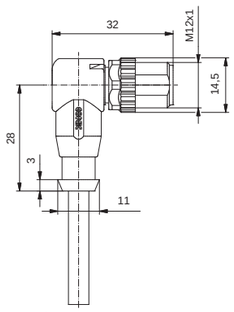



## Cavo encoder Push Pull *con connettore M12 precablato*

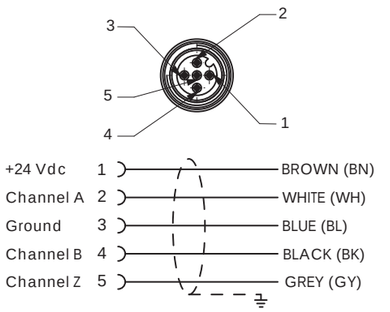
| Modello - *model* | Connettore<br>*Connector* | Nr. conduttori<br>*nr. of wires* | Sezione<br>*Section* | Caratteristiche<br>*Characteristics* | Materiale guaina<br>*Sheat material* | Materiale isolante<br>*Insulation material* | Diametro esterno<br>*Outer diameter* | Lunghezza<br>*Length* |
|---|---|---|---|---|---|---|---|---|
| | | N | mm² | | | | mm | m |
| CONV05MDRM12C04SU025 | Dritto | 5 | 0,25 | UL20549 | PUR | PP 9Y | 5,5 | 4 |
| CONV05MDRM12C12SU025 | Dritto | 5 | 0,25 | UL20549 | PUR | PP 9Y | 5,5 | 12 |
| CONV05M90M12C04SU025 | Angolato | 5 | 0,25 | UL20549 | PUR | PP 9Y | 5,5 | 4 |



Dritto

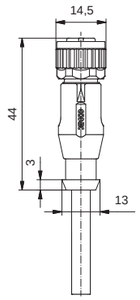


Angolato

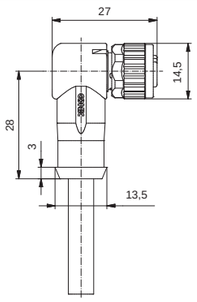



## Cavo encoder Line Driver *con connettore M12 precablato*

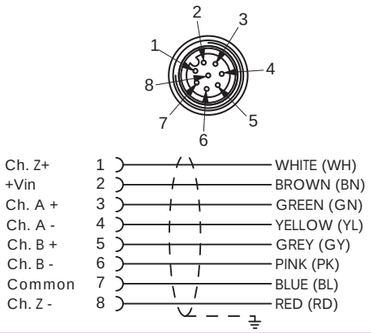
| Modello - *model* | Connettore<br>*Connector* | Nr. conduttori<br>*nr. of wires* | Sezione<br>*Section* | Caratteristiche<br>*Characteristics* | Materiale guaina<br>*Sheat material* | Materiale isolante<br>*Insulation material* | Diametro esterno<br>*Outer diameter* | Lunghezza<br>*Length* |
|---|---|---|---|---|---|---|---|---|
| | | N | mm² | | | | mm | m |
| CONV08FDRM12C04SU025 | Dritto | 8 | 0,25 | UL20549 | PUR | PP 9Y | 6,4 | 4 |
| CONV08FDRM12C12SU025 | Dritto | 8 | 0,25 | UL20549 | PUR | PP 9Y | 6,4 | 12 |
| CONV08F90M12C04SU025 | Angolato | 8 | 0,25 | UL20549 | PUR | PP 9Y | 6,4 | 4 |



Dritto



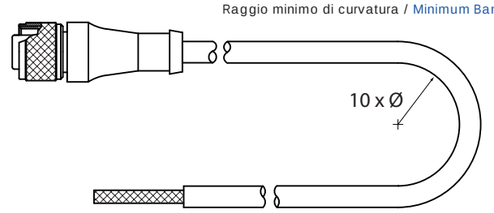
Angolato




| SPECIFICHE | UM | CONV05Fxx78CxxSU100 | CONV05FxxM12CxxSU034 | CONV05MxxM12CxxSU025 | CONV08FxxM12CxxSU025 |
|---|---|---|---|---|---|
| Temperatura posa mobile / Dynamic laying temperature | °C | -30 .. +80 | -25 .. +80 | -25 .. +80 | -25 .. +80 |
| Temperatura posa fissa / Static laying temperature | °C | -30 .. +80 | -25 .. +80 | -25 .. +80 | -25 .. +80 |
| Formazione sezione / Stranding | N x mm | cl 6 | 32 x 0,10 | 42 x 0,10 | 32 x 0,10 |
| Raggio di curvatura / Banding radius min | mm | 10 x Ø | 10 x Ø | 10 x Ø | 10 x Ø |
| Tensione nominale / Nominale voltage | V | 300 | 300 | 300 | 300 |
| Tensione di prova / Testing voltage | V | 2000 | 2000 | 2000 | 2000 |
| Note materiale guaina / Sheat material notes | | Halogen free | Halogen free | Halogen free | Halogen free |
| Note materiale isolante / Insulation material notes | | Halogen free | Halogen free | Halogen free | Halogen free |
| Colore / Colour | | Black | Black | Black | Black |

| SIGLA | DESCRIZIONE |
|---|---|
| BK | Nero / *Black* |
| BN | Marrone / *Brown* |
| BU | Blu / *Blue* |
| GN | Verde / *Green* |
| GY | Grigio / *Grey* |
| PK | Rosa / *Pink* |
| RD | Rosso / *Red* |
| YE | Giallo / *Yellow* |
| WH | Bianco / *White* |

Raggio minimo di curvatura / Minimum Banding Radius




Ø = Diametro esterno del cavo / External cable diameter

## Attuatori lineari

- *Assi lineari a vite senza fine*
- *Assi lineari a cinghia*
- *Cilindri elettrici ISO*
- *Pick and Place*

## Attuatori rotativi

- *Tavole rotanti programmabili autoportanti*
- *Cambio formato*
- *Orientamento pezzi*

## Sistemi di trasporto

- *Nastri di trasporto a passo variabile*
- *Rulliere a velocità controllata*
- *Motoriduttori a gioco ridotto*

## Sistemi di svolgimento

- *Applicatori di etichette*
- *Svolgitori a passo costante e variabile*
- *Sfogliatori*

**AEC s.r.l.**
*Via Zambon, 33/A • 36051 Creazzo (VI) • Tel. +39 0444 370088*
*info@aec-smd.it • www.aec-smd.it*