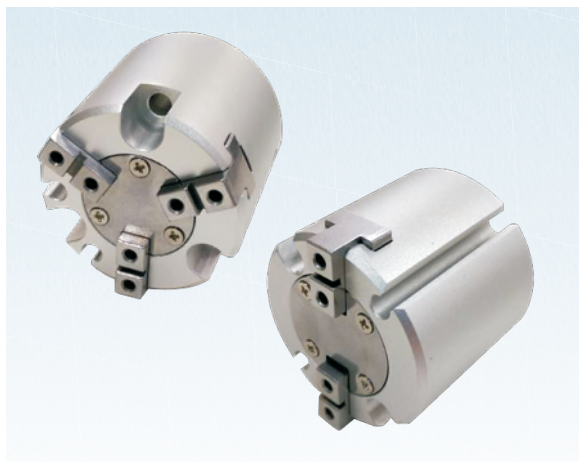
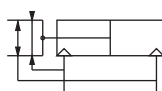


# Pinze pneumatiche (apertura parallela)

Serie HFC



## Simbolo



## Caratteristiche del prodotto

1. Struttura interna a cuneo che consente di ottenere una forza di serraggio maggiore;
2. l'estremità anteriore del pistone è dotata di ammortizzo, in modo da ridurre efficacemente il suono metallico della pinza in chiusura;
3. la parte inferiore del corpo è provvista di foro di fissaggio, che ne assicura la precisione di montaggio, e del posizionamento dopo ripetuti smontaggi;
4. elevata ripetibilità di serraggio che ne favorisce il montaggio su linee automatizzate;
5. una varietà di serie e di specifiche disponibili, usati per lo svolgimento di diverse operazioni.

## Forza di serraggio e corsa

| Modello      |        | Massima forza di serraggio per modello (N) |                   | Corsa di apertura e chiusura (Entrambe le) (mm) |
|--------------|--------|--------------------------------------------|-------------------|-------------------------------------------------|
|              |        | Forza di serraggio                         | Forza di chiusura |                                                 |
| Due dita     | HFCI16 | 23                                         | 21                | 4                                               |
|              | HFCI20 | 42                                         | 37                | 4                                               |
|              | HFCI25 | 71                                         | 63                | 6                                               |
|              | HFCI32 | 123                                        | 111               | 8                                               |
|              | HFCI40 | 195                                        | 177               | 8                                               |
|              | HFCI50 | 306                                        | 280               | 12                                              |
|              | HFCI63 | 537                                        | 502               | 16                                              |
| Tre dita     | HFCY16 | 16                                         | 14                | 4                                               |
|              | HFCY20 | 28                                         | 25                | 4                                               |
|              | HFCY25 | 47                                         | 42                | 6                                               |
|              | HFCY32 | 82                                         | 74                | 8                                               |
|              | HFCY40 | 130                                        | 118               | 8                                               |
|              | HFCY50 | 204                                        | 187               | 12                                              |
|              | HFCY63 | 359                                        | 335               | 16                                              |
| Quattro dita | HFCX16 | 12                                         | 10                | 4                                               |
|              | HFCX20 | 21                                         | 19                | 4                                               |
|              | HFCX25 | 35                                         | 31                | 6                                               |
|              | HFCX32 | 61                                         | 55                | 8                                               |
|              | HFCX40 | 97                                         | 88                | 8                                               |
|              | HFCX50 | 153                                        | 140               | 12                                              |
|              | HFCX63 | 268                                        | 251               | 16                                              |

## Specifiche

| Alesaggio(mm)                 | 16                               | 20       | 25 | 32                                | 40 | 50 | 63 |
|-------------------------------|----------------------------------|----------|----|-----------------------------------|----|----|----|
| Funzionamento                 | Doppio effetto                   |          |    |                                   |    |    |    |
| Fluido                        | Aria (filtrata a 40µm)           |          |    |                                   |    |    |    |
| Pressione di esercizio        | 0.2~0.6MPa(28~87psi)(2.0~6.0bar) |          |    | 0.15~0.6MPa(22~87psi)(1.5~6.0bar) |    |    |    |
| Temperatura di esercizio      | -10~60°C                         |          |    |                                   |    |    |    |
| Lubrificazione                | Non richiesta                    |          |    |                                   |    |    |    |
| Ripetibilit à (mm)            | ± 0.01                           |          |    |                                   |    |    |    |
| Massima frequenza di utilizzo | 120(c.p.m)                       |          |    | 60(c.p.m)                         |    |    |    |
| Sensori fine corsa ①          | DS1-H、DS1-HL                     |          |    |                                   |    |    |    |
| Filettatura                   | M3 × 0.5                         | M5 × 0.8 |    |                                   |    |    |    |

① Per i sensori fine corsa fare riferimento alle pagine 379~400.

## Codice di Ordinazione

**HFC Y 20**

**Modello**

HFC: Pinze pneumatiche (apertura parallela)

**Alesaggio**

16: Φ16mm  
20: Φ20mm  
25: Φ25mm  
32: Φ32mm  
40: Φ40mm  
50: Φ50mm  
63: Φ63mm

**Distanza tra le pinze**

I: Due dita  
Y: Tre dita  
X: Quattro dita

Nota: Il modello HFC è disponibile solamente magnetico.

## Struttura interna

| Nr. | Voce                           | Materiale                        |
|-----|--------------------------------|----------------------------------|
| 1   | Seeger                         | Acciaio armonico                 |
| 2   | O-ring                         | NBR                              |
| 3   | Testata posteriore             | Lega di alluminio                |
| 4   | Vite                           | Acciaio al carbonio              |
| 5   | Rondella tra pistone e magnete | NBR                              |
| 6   | Magnete                        | Materiale sinterizzato(Neodimio) |
| 7   | Guarnizione                    | NBR                              |
| 8   | Raschia stelo                  | NBR                              |
| 9   | Viti a testa svasata           | Acciaio inox                     |
| 10  | Testata                        | Acciaio inox                     |
| 11  | Stelo pistone                  | Acciaio inox                     |
| 12  | Dito pinza                     | Acciaio inox                     |
| 13  | Anello paracolpi               | TPU                              |
| 14  | Pistone                        | Lega di alluminio                |
| 15  | Sede magnete                   | Lega di alluminio                |
| 16  | Corpo                          | Lega di alluminio                |

Note : La forza di serraggio indicata nella tabella sopra è misurata con pressione di esercizio 0.5MPa, Φ16 ~ Φ25 punto di chiusura, L = 20mm, Φ32 ~ Φ63 punto di chiusura, L = 30mm.

Inoltre : cfr definizione di L a pagina P429.



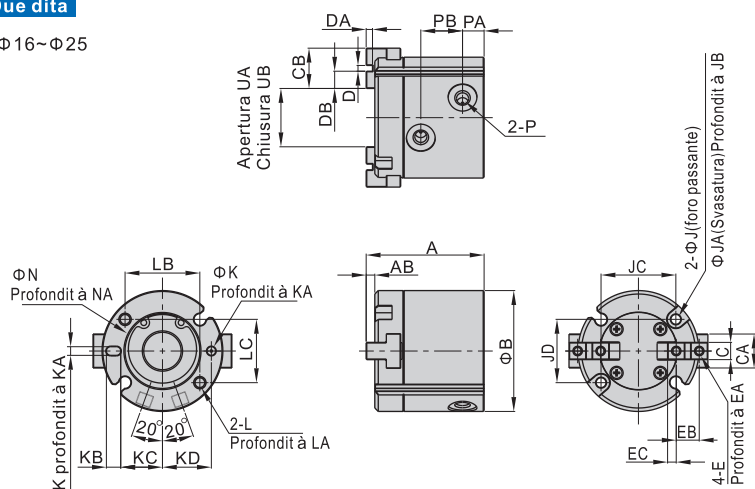
# Pinze pneumatiche (apertura parallela)

## Serie HFC

### Struttura esterna

#### Due dita

Φ16~Φ25

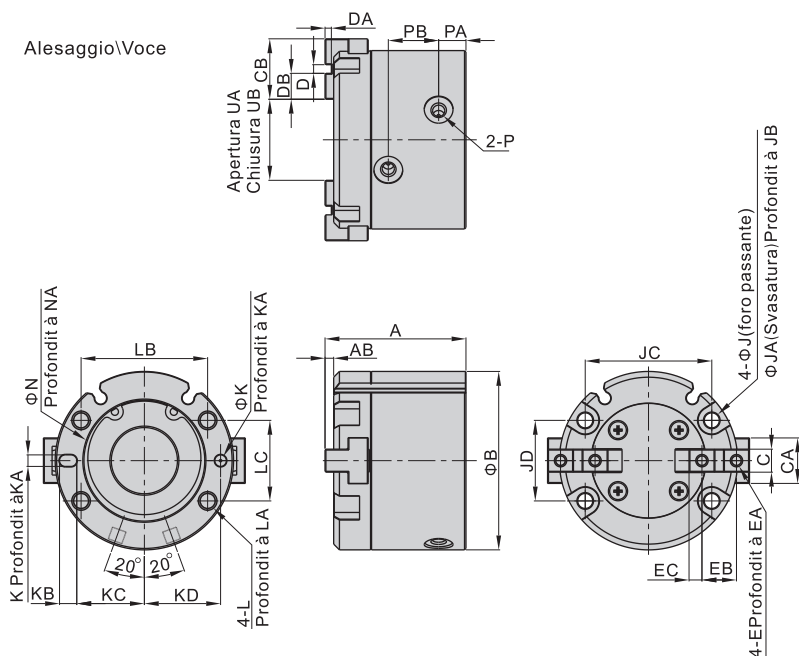


| Modello\Voce | A  | AB | B  | C                                   | CA | CB | D                                   | DA                             | DB | E      | EA | EB | EC  | J   | JA | JB | JC | JD |
|--------------|----|----|----|-------------------------------------|----|----|-------------------------------------|--------------------------------|----|--------|----|----|-----|-----|----|----|----|----|
| HFCI16       | 35 | 3  | 30 | 5 <sup>+0.01</sup> <sub>-0.03</sub> | 8  | 10 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 4  | M3×0.5 | 5  | 6  | 2   | 3.4 | 6  | 6  | 18 | 16 |
| HFCI20       | 39 | 3  | 36 | 6 <sup>+0.01</sup> <sub>-0.03</sub> | 10 | 12 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 5  | M3×0.5 | 5  | 7  | 2.5 | 3.4 | 6  | 6  | 24 | 18 |
| HFCI25       | 41 | 3  | 42 | 6 <sup>+0.01</sup> <sub>-0.03</sub> | 12 | 14 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 6  | M3×0.5 | 5  | 8  | 3   | 3.4 | 6  | 6  | 26 | 22 |

| Modello\Voce | K                                   | KA | KB | KC   | KD   | L      | LA | LB | LC | N                                | NA  | P      | PA  | PB   | UA | UB |
|--------------|-------------------------------------|----|----|------|------|--------|----|----|----|----------------------------------|-----|--------|-----|------|----|----|
| HFCI16       | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2  | 3  | 11   | 12.5 | M4×0.7 | 8  | 18 | 16 | 17 <sup>+0.05</sup> <sub>0</sub> | 1.5 | M3×0.5 | 7   | 10   | 14 | 10 |
| HFCI20       | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2  | 3  | 13   | 14.5 | M4×0.7 | 8  | 24 | 18 | 21 <sup>+0.05</sup> <sub>0</sub> | 1.5 | M5×0.8 | 7   | 13   | 16 | 12 |
| HFCI25       | 3 <sup>+0.04</sup> <sub>-0.01</sub> | 3  | 5  | 14.5 | 17   | M4×0.7 | 8  | 26 | 22 | 26 <sup>+0.05</sup> <sub>0</sub> | 1.5 | M5×0.8 | 7.5 | 14.5 | 20 | 14 |

Φ32~Φ63

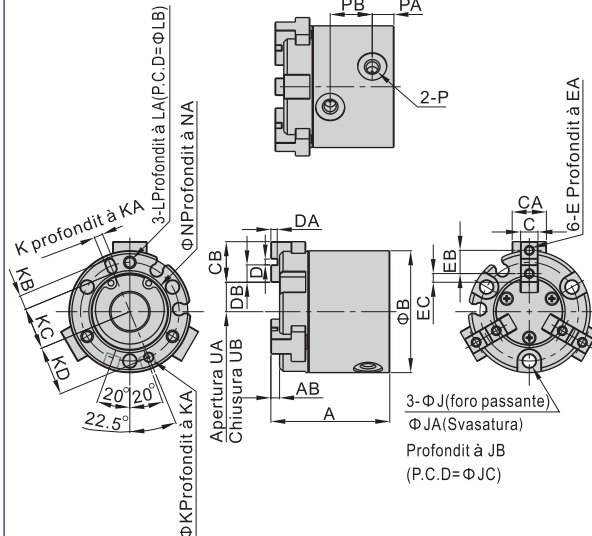
Alesaggio\Voce



| Modello\Voce | A  | AB | B  | C                                    | CA | CB | D                                   | DA                             | DB | E      | EA | EB | EC  | J   | JA  | JB | JC | JD |
|--------------|----|----|----|--------------------------------------|----|----|-------------------------------------|--------------------------------|----|--------|----|----|-----|-----|-----|----|----|----|
| HFCI32       | 45 | 3  | 55 | 8 <sup>+0.01</sup> <sub>-0.03</sub>  | 14 | 20 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 9  | M4×0.7 | 8  | 11 | 4.5 | 4.2 | 8   | 9  | 38 | 25 |
| HFCI40       | 49 | 3  | 62 | 8 <sup>+0.01</sup> <sub>-0.03</sub>  | 16 | 21 | 3 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 9  | M4×0.7 | 8  | 12 | 4.5 | 5.2 | 9.5 | 9  | 44 | 28 |
| HFCI50       | 57 | 3  | 70 | 10 <sup>+0.01</sup> <sub>-0.03</sub> | 18 | 24 | 4 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 10 | M5×0.8 | 9  | 14 | 5   | 5.2 | 9.5 | 12 | 52 | 34 |
| HFCI63       | 68 | 4  | 86 | 12 <sup>+0.01</sup> <sub>-0.03</sub> | 24 | 28 | 6 <sup>+0.04</sup> <sub>-0.01</sub> | 3 <sup>+0.2</sup> <sub>0</sub> | 11 | M5×0.8 | 9  | 17 | 5.5 | 5.2 | 9.5 | 14 | 66 | 38 |

| Modello\Voce | K                                   | KA | KB | KC   | KD   | L      | LA | LB | LC | N                                | NA  | P      | PA  | PB   | UA | UB |
|--------------|-------------------------------------|----|----|------|------|--------|----|----|----|----------------------------------|-----|--------|-----|------|----|----|
| HFCI32       | 3 <sup>+0.04</sup> <sub>-0.01</sub> | 3  | 5  | 20.5 | 23   | M5×0.8 | 10 | 38 | 25 | 34 <sup>+0.05</sup> <sub>0</sub> | 2   | M5×0.8 | 8.5 | 16   | 24 | 16 |
| HFCI40       | 4 <sup>+0.04</sup> <sub>-0.01</sub> | 4  | 6  | 23.5 | 26.5 | M6×1.0 | 12 | 44 | 28 | 42 <sup>+0.05</sup> <sub>0</sub> | 2   | M5×0.8 | 9.5 | 17.5 | 28 | 20 |
| HFCI50       | 4 <sup>+0.04</sup> <sub>-0.01</sub> | 4  | 6  | 28   | 31   | M6×1.0 | 12 | 52 | 34 | 52 <sup>+0.05</sup> <sub>0</sub> | 2   | M5×0.8 | 9.5 | 21   | 34 | 22 |
| HFCI63       | 5 <sup>+0.04</sup> <sub>-0.01</sub> | 5  | 7  | 34.5 | 38   | M6×1.0 | 12 | 66 | 38 | 65 <sup>+0.05</sup> <sub>0</sub> | 2.5 | M5×0.8 | 12  | 24   | 46 | 30 |

#### Tre dita



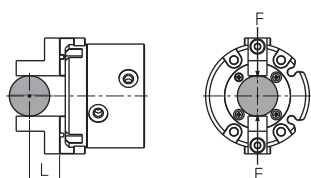
| Modello\Voce | A  | AB | B  | C                                    | CA | CB | D                                   | DA                             | DB | E      | EA |
|--------------|----|----|----|--------------------------------------|----|----|-------------------------------------|--------------------------------|----|--------|----|
| HFCY16       | 35 | 3  | 30 | 5 <sup>+0.01</sup> <sub>-0.03</sub>  | 8  | 10 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 4  | M3×0.5 | 5  |
| HFCY20       | 39 | 3  | 36 | 6 <sup>+0.01</sup> <sub>-0.03</sub>  | 10 | 12 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 5  | M3×0.5 | 5  |
| HFCY25       | 41 | 3  | 42 | 6 <sup>+0.01</sup> <sub>-0.03</sub>  | 12 | 14 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 6  | M3×0.5 | 5  |
| HFCY32       | 45 | 3  | 52 | 8 <sup>+0.01</sup> <sub>-0.03</sub>  | 14 | 20 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 9  | M4×0.7 | 8  |
| HFCY40       | 49 | 3  | 62 | 8 <sup>+0.01</sup> <sub>-0.03</sub>  | 16 | 21 | 3 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 9  | M4×0.7 | 8  |
| HFCY50       | 57 | 3  | 70 | 10 <sup>+0.01</sup> <sub>-0.03</sub> | 18 | 24 | 4 <sup>+0.04</sup> <sub>-0.01</sub> | 2 <sup>+0.2</sup> <sub>0</sub> | 10 | M5×0.8 | 9  |
| HFCY63       | 68 | 4  | 86 | 12 <sup>+0.01</sup> <sub>-0.03</sub> | 24 | 28 | 6 <sup>+0.04</sup> <sub>-0.01</sub> | 3 <sup>+0.2</sup> <sub>0</sub> | 11 | M5×0.8 | 9  |

| Modello\Voce | EB | EC  | J   | JA  | JB | JC | K                                   | KA | KB | KC   | KD   | L      |
|--------------|----|-----|-----|-----|----|----|-------------------------------------|----|----|------|------|--------|
| HFCY16       | 6  | 2   | 3.4 | 6   | 6  | 25 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2  | 3  | 11   | 12.5 | M3×0.5 |
| HFCY20       | 7  | 2.5 | 3.4 | 6   | 6  | 29 | 2 <sup>+0.04</sup> <sub>-0.01</sub> | 2  | 3  | 13   | 14.5 | M3×0.5 |
| HFCY25       | 8  | 3   | 4.5 | 8   | 9  | 34 | 3 <sup>+0.04</sup> <sub>-0.01</sub> | 3  | 5  | 14.5 | 17   | M4×0.7 |
| HFCY32       | 11 | 4.5 | 4.5 | 8   | 9  | 44 | 3 <sup>+0.04</sup> <sub>-0.01</sub> | 3  | 5  | 19.5 | 22   | M4×0.7 |
| HFCY40       | 12 | 4.5 | 5.5 | 9.5 | 9  | 53 | 4 <sup>+0.04</sup> <sub>-0.01</sub> | 4  | 6  | 23.5 | 26.5 | M5×0.8 |
| HFCY50       | 14 | 5   | 5.5 | 9.5 | 12 | 62 | 4 <sup>+0.04</sup> <sub>-0.01</sub> | 4  | 6  | 28   | 31   | M5×0.8 |
| HFCY63       | 17 | 5.5 | 6.6 | 11  | 14 | 76 | 5 <sup>+0.04</sup> <sub>-0.01</sub> | 5  | 7  | 34.5 | 38   | M6×1.0 |

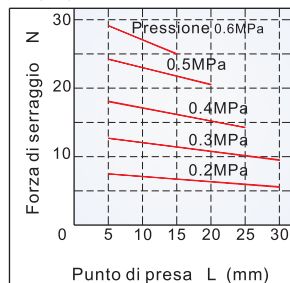
| Modello\Voce | LA | LB | N                                | NA  | P      | PA  | PB   | UA | UB |
|--------------|----|----|----------------------------------|-----|--------|-----|------|----|----|
| HFCY16       | 6  | 25 | 17 <sup>+0.05</sup> <sub>0</sub> | 1.5 | M3×0.5 | 7   | 10   | 7  | 5  |
| HFCY20       | 6  | 29 | 21 <sup>+0.05</sup> <sub>0</sub> | 1.5 | M5×0.8 | 7   | 13   | 8  | 6  |
| HFCY25       | 8  | 34 | 26 <sup>+0.05</sup> <sub>0</sub> | 1.5 | M5×0.8 | 7.5 | 14.5 | 10 | 7  |
| HFCY32       | 8  | 44 | 34 <sup>+0.05</sup> <sub>0</sub> | 2   | M5×0.8 | 8.5 | 16   | 12 | 8  |
| HFCY40       | 10 | 53 | 42 <sup>+0.05</sup> <sub>0</sub> | 2   | M5×0.8 | 9.5 | 17.5 | 14 | 10 |
| HFCY50       | 10 | 62 | 52 <sup>+0.05</sup> <sub>0</sub> | 2   | M5×0.8 | 9.5 | 21   | 17 | 11 |
| HFCY63       | 12 | 76 | 65 <sup>+0.05</sup> <sub>0</sub> | 2.5 | M5×0.8 | 12  | 24   | 23 | 15 |



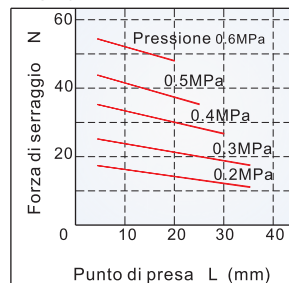
### Forza di chiusura (I tipo)



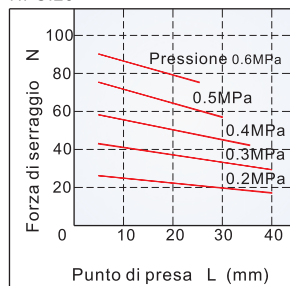
HFCI16



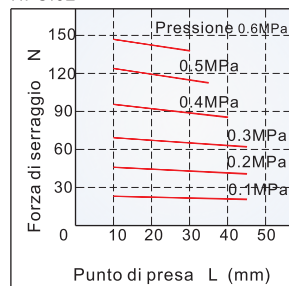
HFCI20



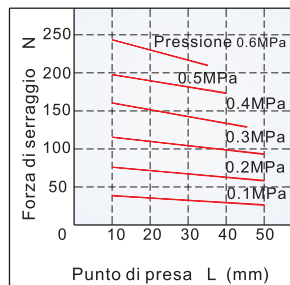
HFCI25



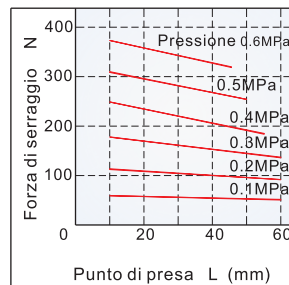
HFCI32



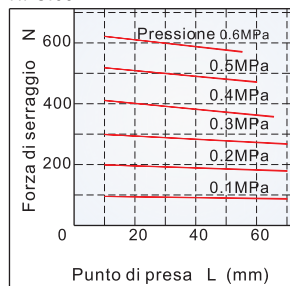
HFCI40



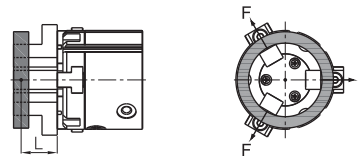
HFCI50



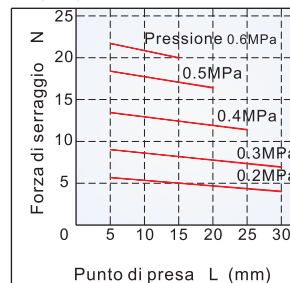
HFCI63



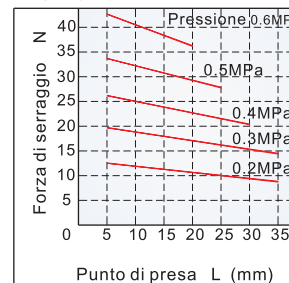
### Forza di apertura (Y tipo)



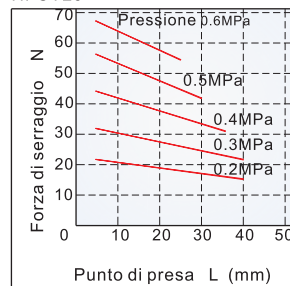
HFCY16



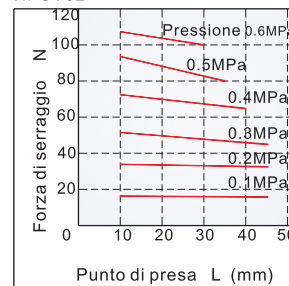
HFCY20



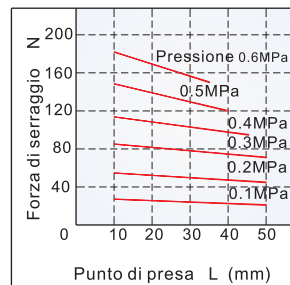
HFCY25



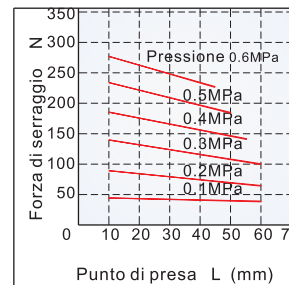
HFCY32



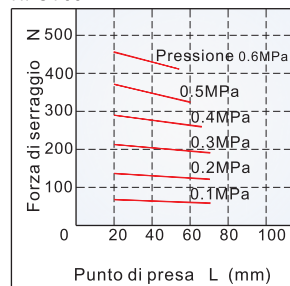
HFCY40



HFCY50

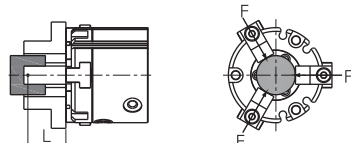


HFCY63

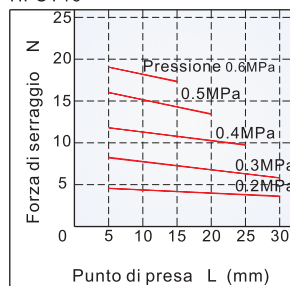




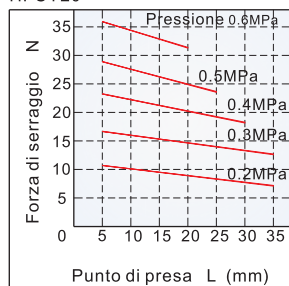
### Forza di chiusura(Y tipo)



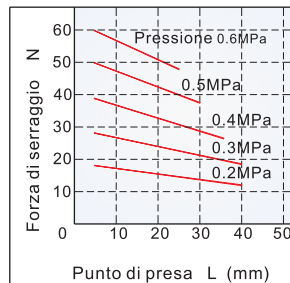
HFCY16



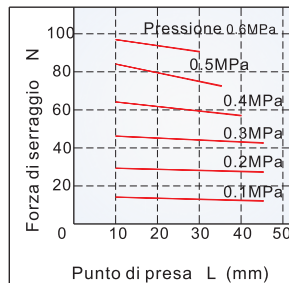
HFCY20



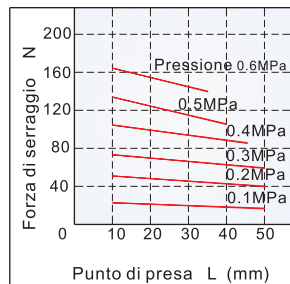
HFCY25



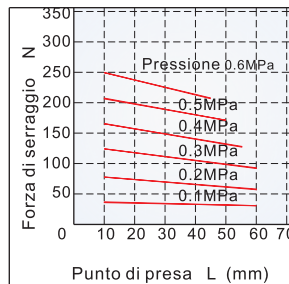
HFCY32



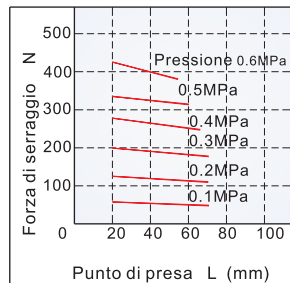
HFCY40



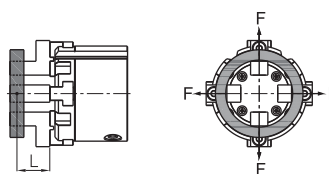
HFCY50



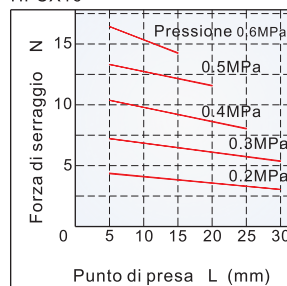
HFCY63



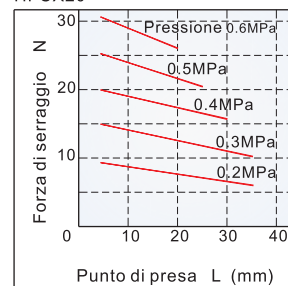
### Forza di apertura(X tipo)



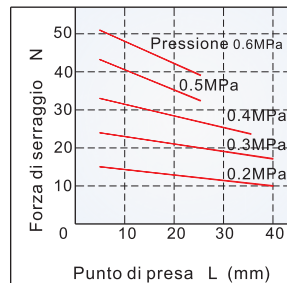
HFCX16



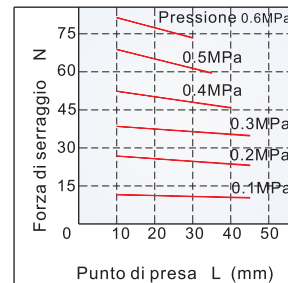
HFCX20



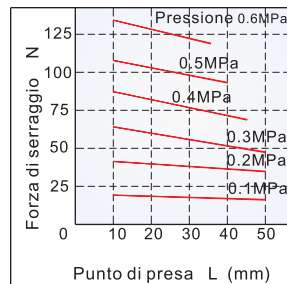
HFCX25



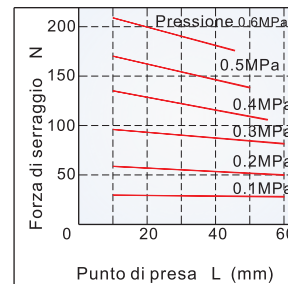
HFCX32



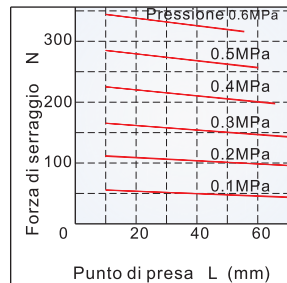
HFCX40



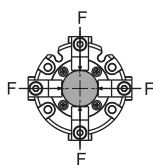
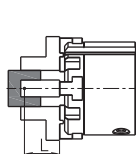
HFCX50



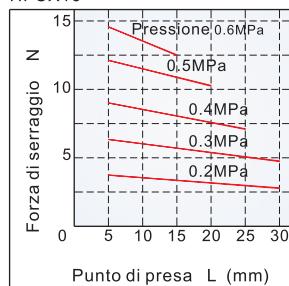
HFCX63



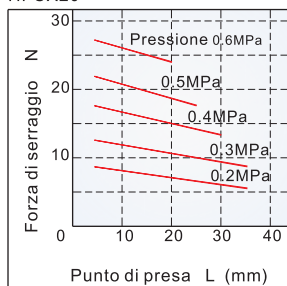
### Forza di chiusura(X tipo)



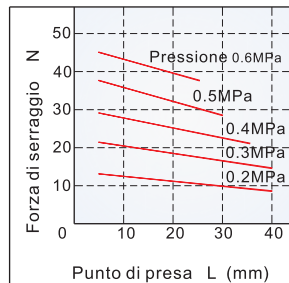
HFCX16



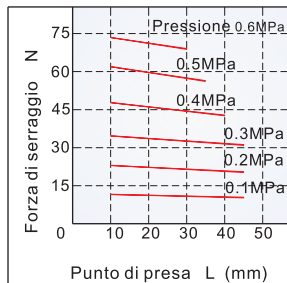
HFCX20



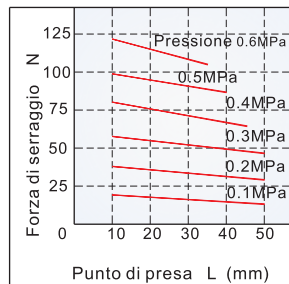
HFCX25



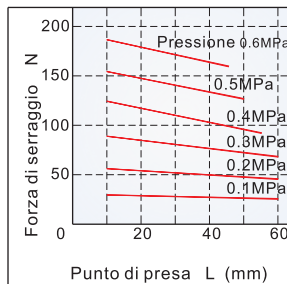
HFCX32



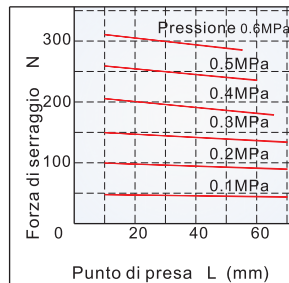
HFCX40



HFCX50



HFCX63

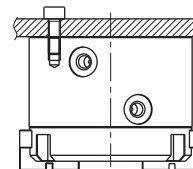


### Installazione ed utilizzo

1. In caso di improvvisa caduta di pressione, la forza applicata alle dita della pinza diminuisce ed è possibile che la pinza lasci cadere l'oggetto. Per evitare i danni alle persone o cose, è necessario installare il dispositivo di sicurezza che eviti la caduta di pressione sull'apparecchiatura.
2. Non applicare alle dita di presa un peso eccessivo o una elevata forza d'impatto.
3. In fase di installazione evitare che il prodotto subisca urti o possa cadere.
4. Quando si fissano gli accessori alle dita, fare attenzione a non applicare una forza torcente troppo elevata.
5. Diverse modalità di installazione, come mostrato in seguito.

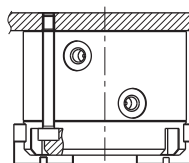
Rispettare la forza torsionometrica riportata in tabella nel fissaggio delle

### Fissaggio posteriore



| Serie        | Alesaggio | Viti di fissaggio | Forza torsionometrica massima(Nm) | Lunghezza massima delle viti (mm) | Diametro fori di fissaggio posteriori (mm) | Profondità fori di fissaggio posteriori (mm) |
|--------------|-----------|-------------------|-----------------------------------|-----------------------------------|--------------------------------------------|----------------------------------------------|
| HFCI<br>HFCX | 16        | M4 × 0.7          | 2.1                               | 8                                 | Φ17 <sup>+0.05</sup> <sub>0</sub>          | 1.5                                          |
|              | 20        | M4 × 0.7          | 2.1                               | 8                                 | Φ21 <sup>+0.05</sup> <sub>0</sub>          | 1.5                                          |
|              | 25        | M4 × 0.7          | 2.1                               | 8                                 | Φ26 <sup>+0.05</sup> <sub>0</sub>          | 1.5                                          |
|              | 32        | M5 × 0.8          | 4.3                               | 10                                | Φ34 <sup>+0.05</sup> <sub>0</sub>          | 2                                            |
|              | 40        | M6 × 1.0          | 7.3                               | 12                                | Φ42 <sup>+0.05</sup> <sub>0</sub>          | 2                                            |
|              | 50        | M6 × 1.0          | 7.3                               | 12                                | Φ52 <sup>+0.05</sup> <sub>0</sub>          | 2                                            |
| HFCY         | 63        | M6 × 1.0          | 7.3                               | 12                                | Φ65 <sup>+0.05</sup> <sub>0</sub>          | 2.5                                          |
|              | 16        | M3 × 0.5          | 0.88                              | 6                                 | Φ17 <sup>+0.05</sup> <sub>0</sub>          | 1.5                                          |
|              | 20        | M3 × 0.5          | 0.88                              | 6                                 | Φ21 <sup>+0.05</sup> <sub>0</sub>          | 1.5                                          |
|              | 25        | M4 × 0.7          | 2.1                               | 8                                 | Φ26 <sup>+0.05</sup> <sub>0</sub>          | 1.5                                          |
|              | 32        | M4 × 0.7          | 2.1                               | 8                                 | Φ34 <sup>+0.05</sup> <sub>0</sub>          | 2                                            |
|              | 40        | M5 × 0.8          | 4.3                               | 10                                | Φ42 <sup>+0.05</sup> <sub>0</sub>          | 2                                            |
|              | 50        | M5 × 0.8          | 4.3                               | 10                                | Φ52 <sup>+0.05</sup> <sub>0</sub>          | 2                                            |
|              | 63        | M6 × 1.0          | 7.3                               | 12                                | Φ65 <sup>+0.05</sup> <sub>0</sub>          | 2.5                                          |

### Montaggio anteriore foro passante

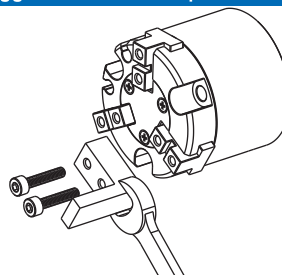


| Serie        | Alesaggio | Viti di fissaggio | Forza torsionometrica massima(Nm) |
|--------------|-----------|-------------------|-----------------------------------|
| HFCI<br>HFCX | 16        | M3 × 0.5          | 0.88                              |
|              | 20        | M3 × 0.5          | 0.88                              |
|              | 25        | M3 × 0.5          | 0.88                              |
|              | 32        | M4 × 0.7          | 2.1                               |
|              | 40        | M5 × 0.8          | 4.3                               |
|              | 50        | M5 × 0.8          | 4.3                               |
| HFCY         | 63        | M5 × 0.8          | 4.3                               |
|              | 16        | M3 × 0.5          | 0.88                              |
|              | 20        | M3 × 0.5          | 0.88                              |
|              | 25        | M4 × 0.7          | 2.1                               |
|              | 32        | M4 × 0.7          | 2.1                               |
|              | 40        | M5 × 0.8          | 4.3                               |
|              | 50        | M5 × 0.8          | 4.3                               |
|              | 63        | M6 × 1.0          | 7.3                               |

### 6. Modalità di montaggio accessori:

E' necessario prestare particolare attenzione all'installazione delle dita, deve essere utilizzata solo la chiave esagonale per fissare le dita e quindi serrare le viti, non esercitare forza esterna sul corpo del cilindro per evitare qualsiasi danneggiamento ai componenti.

### Montaggio accessori dita pneumatiche



| Alesaggio | Viti di fissaggio | Forza torsionometrica massima(Nm) |
|-----------|-------------------|-----------------------------------|
| 16        | M3 × 0.5          | 0.59                              |
| 20        | M3 × 0.5          | 0.59                              |
| 25        | M3 × 0.5          | 0.59                              |
| 32        | M4 × 0.7          | 1.4                               |
| 40        | M4 × 0.7          | 1.4                               |
| 50        | M5 × 0.8          | 2.8                               |
| 63        | M5 × 0.8          | 2.8                               |