

·与MH2系列相比,高度约缩小1/3,不仅减小空间,而且减低弯矩,则精度提高。  
·每个缸径的开闭行程都有长、中、短3种。

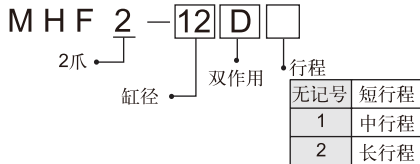


### 共同规格

|               |                    |         |    |    |
|---------------|--------------------|---------|----|----|
| 缸径(mm)        | 8                  | 12      | 16 | 20 |
| 动作方式          | 双作用                |         |    |    |
| 使用流体          | 空气                 |         |    |    |
| 使用压力范围(MPa)   | 0.15~0.7           | 0.1~0.7 |    |    |
| 环境和流体温度       | -10~60°C(未冻结)      |         |    |    |
| 重复精度(mm)      | ±0.05*             |         |    |    |
| 最高使用频度(c.p.m) | 短行程、中行程:120,长行程:60 |         |    |    |
| 磁性开关型号        | 无触点                | 2线      |    |    |
|               |                    | 3线NPN   |    |    |
|               |                    | D-M9BL  |    |    |
|               |                    | D-M9NL  |    |    |

\*在不受偏载时,手指上若有偏载,由于齿隙的影响,最大为±0.05mm。

### 型号表示方法

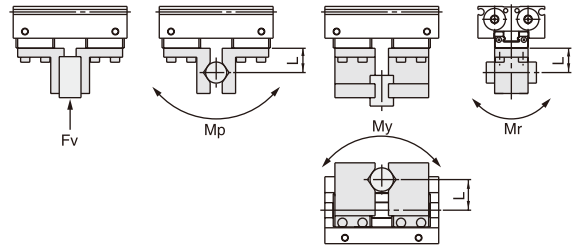


| 动作方式 | 型号        | 缸径(mm) | 每个气爪有效夹持力(N) | 夹持力* | 打开/关闭行程(两侧)(mm) | 质量(g) | 流通能力(cm <sup>3</sup> ) |       |
|------|-----------|--------|--------------|------|-----------------|-------|------------------------|-------|
|      |           |        |              |      |                 |       | 气爪打开侧                  | 气爪关闭侧 |
| 双作用  | MHF2-8D   | 8      | 19           | 19   | 8               | 65    | 0.7                    | 0.6   |
|      | MHF2-8D1  |        |              |      | 16              | 85    | 1.1                    | 1.0   |
|      | MHF2-8D2  |        |              |      | 32              | 120   | 2.0                    | 1.9   |
|      | MHF2-12D  | 12     | 48           | 48   | 12              | 155   | 1.9                    | 1.6   |
|      | MHF2-12D1 |        |              |      | 24              | 190   | 3.3                    | 3.0   |
|      | MHF2-12D2 |        |              |      | 48              | 275   | 6.1                    | 5.8   |
|      | MHF2-16D  | 16     | 90           | 90   | 16              | 350   | 4.9                    | 4.1   |
|      | MHF2-16D1 |        |              |      | 32              | 445   | 8.2                    | 7.4   |
|      | MHF2-16D2 |        |              |      | 64              | 650   | 14.9                   | 14.0  |
|      | MHF2-20D  | 20     | 141          | 141  | 20              | 645   | 8.7                    | 7.3   |
|      | MHF2-20D1 |        |              |      | 40              | 850   | 15.1                   | 13.7  |
|      | MHF2-20D2 |        |              |      | 80              | 1,225 | 28.0                   | 26.6  |

\*压力为0.5MPa,夹持点距离为20mm时。

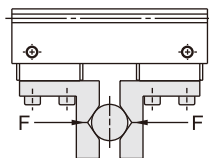
### 订货举例

- 所需缸径:8,短行程  
正确型号:MHF2-8D
- 所需缸径:16,中行程,需磁性开关  
正确型号:MHF2-16D1  
D-M9BL  
1个气爪  
2个磁性开关



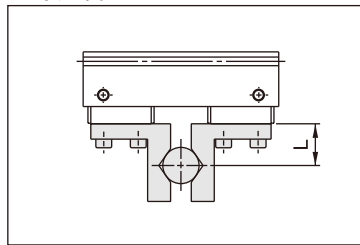
| 型号        | 允许垂直负荷 Fv (N) | 最大允许力矩      |               |               |
|-----------|---------------|-------------|---------------|---------------|
|           |               | 弯矩 Mp (N·m) | 偏移力矩 My (N·m) | 回转力矩 Mr (N·m) |
| MHF2-8D□  | 58            | 0.26        | 0.26          | 0.53          |
| MHF2-12D□ | 98            | 0.68        | 0.68          | 1.4           |
| MHF2-16D□ | 176           | 1.4         | 1.4           | 2.8           |
| MHF2-20D□ | 294           | 2           | 2             | 4             |

### 有效夹持力(1)

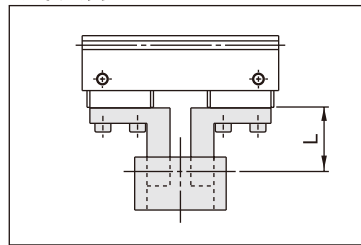


表示有效的夹持力

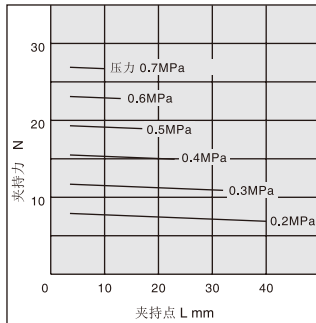
### 外部夹持



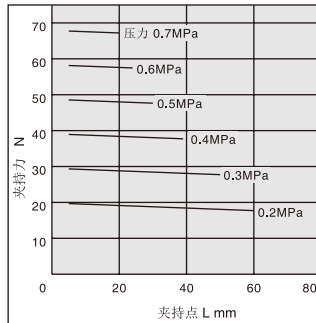
### 内部夹持



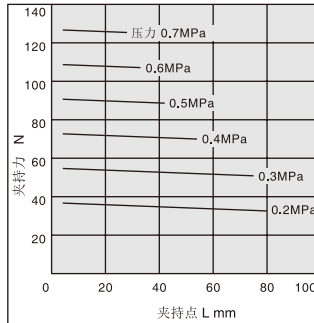
MHF2-8D□



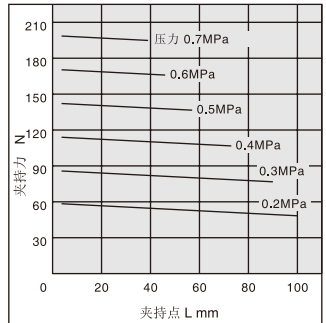
MHF2-12D□



MHF2-16D□



MHF2-20D□

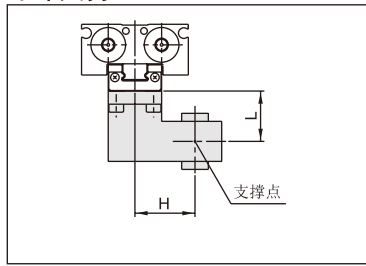


# 薄型气爪：MHF2系列

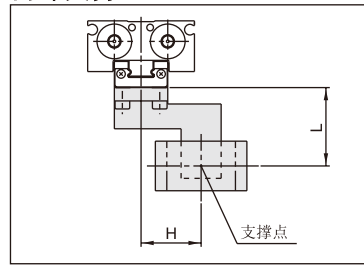
## 有效夹紧力(2)

表示有效的夹紧力

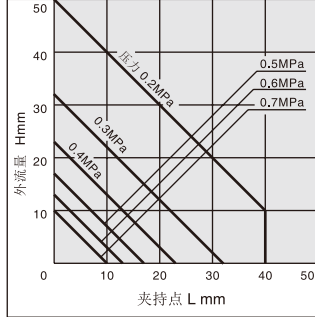
外部夹持



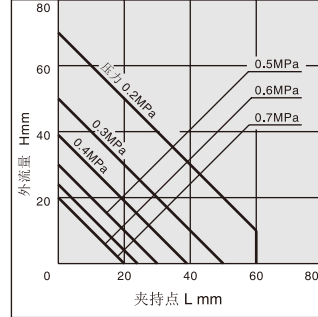
内部夹持



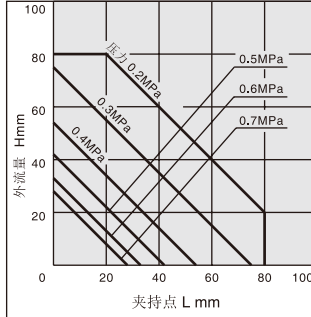
MHF2-8D□



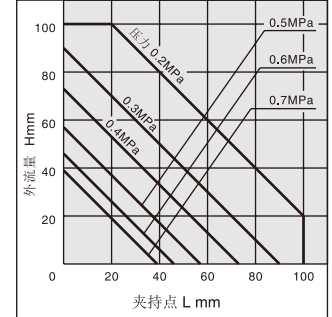
MHF2-12D□



MHF2-16D□

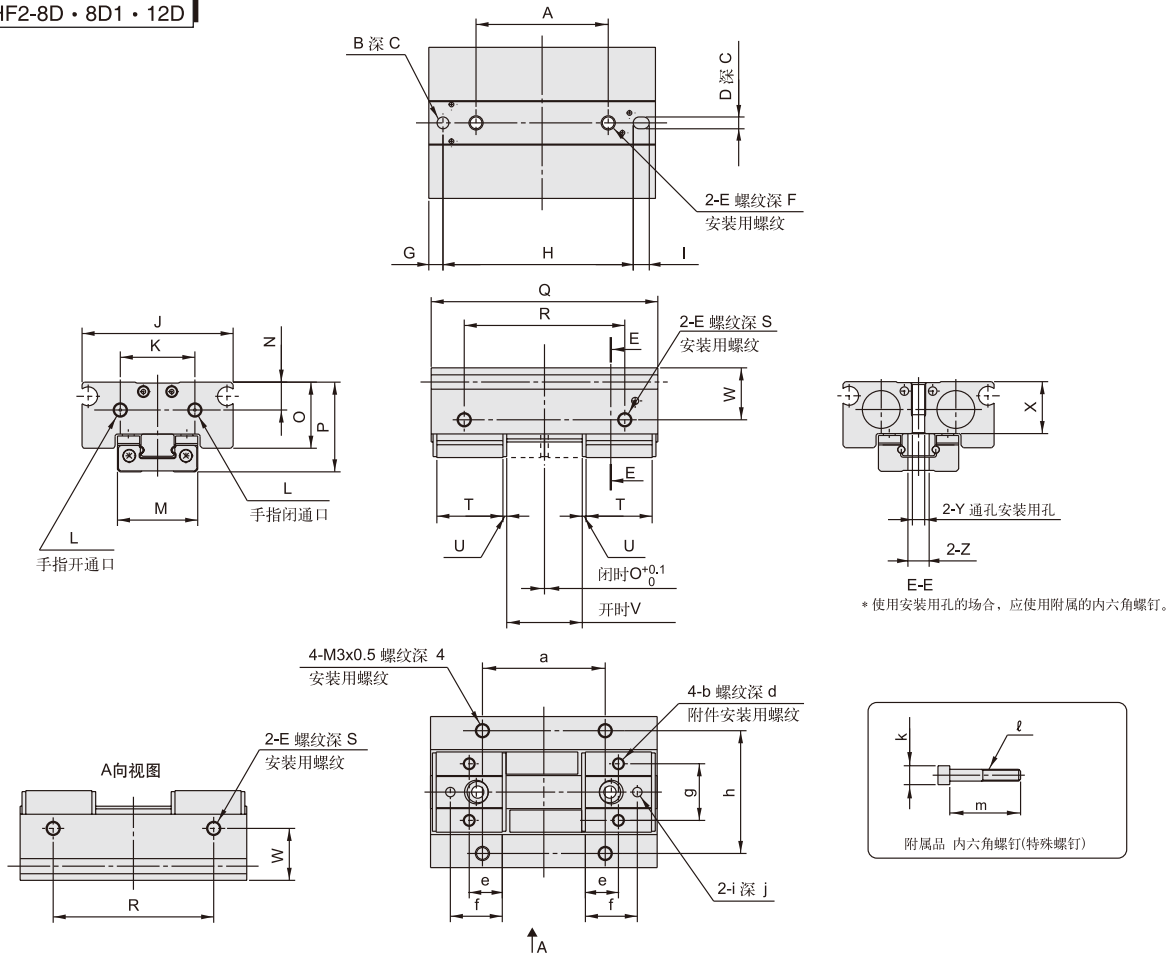


MHF2-20D□



## 外形尺寸图 (毫米)

MHF2-8D · 8D1 · 12D

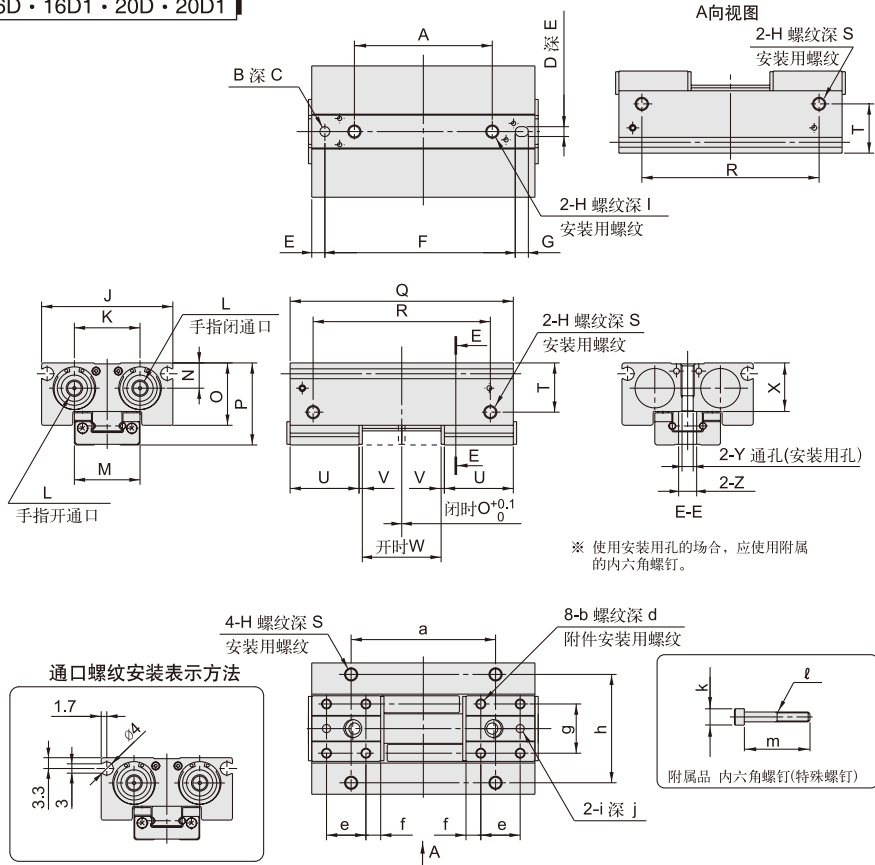


| 型号       | A  | B                                    | C   | D                                    | E        | F  | G | H    | I   | J  | K    | L        | M                               | N   | O  | P  | Q  | R  | S | T  | U   | V                | W  | X    | Y    | Z    | a  | b           | d | e | f  | g  | h  | i                                     | j   | k  | l           | m  |
|----------|----|--------------------------------------|-----|--------------------------------------|----------|----|---|------|-----|----|------|----------|---------------------------------|-----|----|----|----|----|---|----|-----|------------------|----|------|------|------|----|-------------|---|---|----|----|----|---------------------------------------|-----|----|-------------|----|
| MHF2-8D  | 16 | ∅25H9 <sup>+0.025</sup> <sub>0</sub> | 2.5 | ∅25H9 <sup>+0.025</sup> <sub>0</sub> | M3 x 0.5 | 7  | 3 | 28.3 | 3.4 | 32 | 15.8 | M3 x 0.5 | 17 <sup>+0.1</sup> <sub>0</sub> | 5.9 | 14 | 19 | 36 | 22 | 4 | 12 | 0.8 | 8 <sup>±1</sup>  | 11 | 11   | ∅2.6 | ∅4.5 | 14 | M2.5 x 0.45 | 3 | 6 | 10 | 12 | 26 | ∅2H9 <sup>+0.025</sup> <sub>0</sub>   | 2   | ∅4 | M2.5 x 0.45 | 15 |
| MHF2-8D1 | 28 | ∅25H9 <sup>+0.025</sup> <sub>0</sub> | 2.5 | ∅25H9 <sup>+0.025</sup> <sub>0</sub> | M3 x 0.5 | 7  | 3 | 40.3 | 3.4 | 32 | 15.8 | M3 x 0.5 | 17 <sup>+0.1</sup> <sub>0</sub> | 5.9 | 14 | 19 | 48 | 34 | 4 | 14 | 0.8 | 16 <sup>±1</sup> | 11 | 11   | ∅2.6 | ∅4.5 | 26 | M2.5 x 0.45 | 3 | 7 | 11 | 12 | 26 | ∅2H9 <sup>+0.025</sup> <sub>0</sub>   | 2   | ∅4 | M2.5 x 0.45 | 15 |
| MHF2-12D | 26 | ∅3H9 <sup>+0.030</sup> <sub>0</sub>  | 3   | ∅3H9 <sup>+0.025</sup> <sub>0</sub>  | M4 x 0.7 | 10 | 4 | 42   | 4   | 40 | 20   | M5 x 0.8 | 20 <sup>+0.1</sup> <sub>0</sub> | 7.7 | 19 | 25 | 52 | 38 | 5 | 18 | 1   | 12 <sup>±1</sup> | 15 | 14.8 | ∅3.4 | ∅5.5 | 28 | M3 x 0.5    | 4 | 9 | 14 | 15 | 33 | ∅2.5H9 <sup>+0.025</sup> <sub>0</sub> | 2.5 | ∅5 | M3 x 0.5    | 20 |

# 薄型气爪：MHF2系列

## 外形尺寸图（毫米）

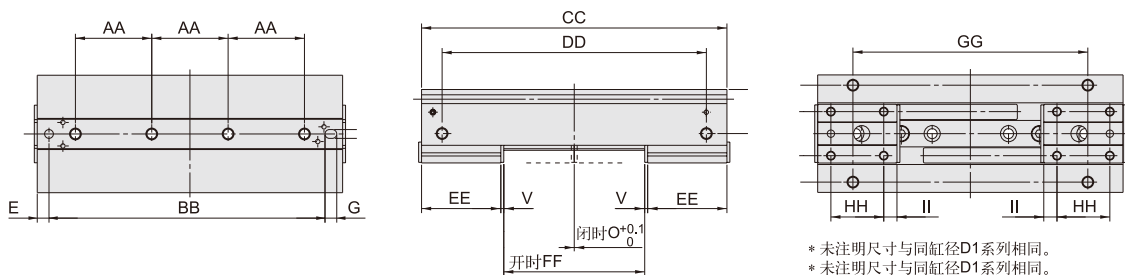
MHF2-12D1 · 16D · 16D1 · 20D · 20D1



| 型号        | A  | B                                   | C | D                                   | E | F    | G | H        | I  | J  | K  | L      | M                               | N    | O  | P  | Q   | R  | S   | T  | U  | V   |
|-----------|----|-------------------------------------|---|-------------------------------------|---|------|---|----------|----|----|----|--------|---------------------------------|------|----|----|-----|----|-----|----|----|-----|
| MHF2-12D1 | 42 | ∅3H9 <sup>+0.030</sup> <sub>0</sub> | 3 | ∅3H9 <sup>+0.025</sup> <sub>0</sub> | 4 | 58   | 4 | M4 x 0.7 | 10 | 40 | 20 | M5x0.8 | 20 <sup>0</sup> <sub>-0.1</sub> | 7.7  | 19 | 25 | 68  | 54 | 5   | 15 | 21 | 1   |
| MHF2-16D  | 38 | ∅4H9 <sup>+0.030</sup> <sub>0</sub> | 3 | ∅4H9 <sup>+0.030</sup> <sub>0</sub> | 6 | 57.5 | 5 | M5 x 0.8 | 12 | 50 | 26 | M5x0.8 | 27 <sup>0</sup> <sub>-0.1</sub> | 10.6 | 24 | 33 | 72  | 52 | 5.5 | 20 | 25 | 1.2 |
| MHF2-16D1 | 60 | ∅4H9 <sup>+0.030</sup> <sub>0</sub> | 3 | ∅4H9 <sup>+0.030</sup> <sub>0</sub> | 3 | 79.5 | 5 | M5 x 0.8 | 12 | 50 | 26 | M5x0.8 | 27 <sup>0</sup> <sub>-0.1</sub> | 10.6 | 24 | 33 | 94  | 74 | 5.5 | 20 | 29 | 1.2 |
| MHF2-20D  | 38 | ∅5H9 <sup>+0.030</sup> <sub>0</sub> | 4 | ∅5H9 <sup>+0.030</sup> <sub>0</sub> | 4 | 71   | 6 | M6 x 1   | 15 | 62 | 33 | M5x0.8 | 32 <sup>0</sup> <sub>-0.1</sub> | 13   | 30 | 41 | 86  | 56 | 6   | 25 | 31 | 1.2 |
| MHF2-20D1 | 66 | ∅5H9 <sup>+0.030</sup> <sub>0</sub> | 4 | ∅5H9 <sup>+0.030</sup> <sub>0</sub> | 6 | 99   | 6 | M6 x 1   | 15 | 62 | 33 | M5x0.8 | 32 <sup>0</sup> <sub>-0.1</sub> | 13   | 30 | 41 | 114 | 84 | 6   | 25 | 36 | 1.2 |

| 型号        | W                | X    | Y    | Z    | a  | b        | d | e  | f   | g  | h  | i                                     | j   | k  | ℓ        | m  |
|-----------|------------------|------|------|------|----|----------|---|----|-----|----|----|---------------------------------------|-----|----|----------|----|
| MHF2-12D1 | 24 <sup>±1</sup> | 14.8 | ∅3.4 | ∅5.5 | 44 | M3 x 0.5 | 4 | 12 | 4.5 | 15 | 33 | ∅2.5H9 <sup>+0.025</sup> <sub>0</sub> | 2.5 | ∅5 | M3 x 0.5 | 20 |
| MHF2-16D  | 16 <sup>±1</sup> | 20   | ∅4.3 | ∅7.5 | 36 | M4 x 0.7 | 4 | 15 | 5   | 20 | 43 | ∅3H9 <sup>+0.025</sup> <sub>0</sub>   | 3   | —  | —        | —  |
| MHF2-16D1 | 32 <sup>±1</sup> | 20   | ∅4.3 | ∅7.5 | 58 | M4 x 0.7 | 4 | 18 | 5.5 | 20 | 43 | ∅3H9 <sup>+0.025</sup> <sub>0</sub>   | 3   | —  | —        | —  |
| MHF2-20D  | 20 <sup>±1</sup> | 25   | ∅5.2 | ∅10  | 40 | M4 x 0.7 | 4 | 16 | 7.5 | 24 | 52 | ∅3H9 <sup>+0.025</sup> <sub>0</sub>   | 3   | —  | —        | —  |
| MHF2-20D1 | 40 <sup>±1</sup> | 25   | ∅5.2 | ∅10  | 68 | M4 x 0.7 | 4 | 20 | 8   | 24 | 52 | ∅3H9 <sup>+0.025</sup> <sub>0</sub>   | 3   | —  | —        | —  |

MHF2-8D2 · 12D2 · 16D2 · 20D2



| 型号        | AA | BB    | CC  | DD  | EE | FF               | GG  | HH | II  |
|-----------|----|-------|-----|-----|----|------------------|-----|----|-----|
| MHF2-8D2  | 17 | 64.3  | 72  | 58  | 18 | 32 <sup>±1</sup> | 50  | 8  | 5   |
| MHF2-12D2 | 26 | 94    | 104 | 90  | 27 | 48 <sup>±1</sup> | 80  | 18 | 4.5 |
| MHF2-16D2 | 36 | 127.5 | 142 | 122 | 37 | 64 <sup>±1</sup> | 106 | 26 | 5.5 |
| MHF2-20D2 | 42 | 159   | 174 | 144 | 46 | 80 <sup>±1</sup> | 128 | 30 | 8   |