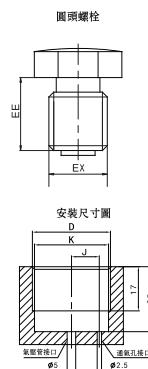
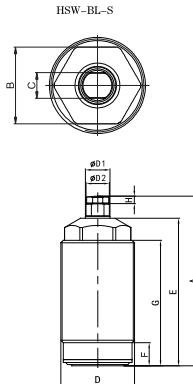
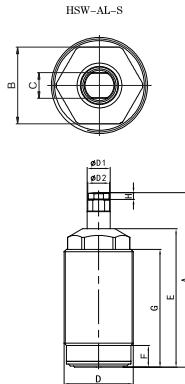


## 特性資料 Specification

| 類型Type   | HSW-26                   | HSW-30 | HSW-36 | HSW-45 |  |
|--|--------------------------|--------|--------|--------|--|
| 使用壓力範圍Range of pressure(kg/cm <sup>2</sup> )   | 4 ~ 10kg/cm <sup>2</sup> |        |        |        |  |
| 行程 Stroke(mm)  | 6.5                      | 6.5    | 8      | 8      |  |
| 活塞杆徑Bore of piston(mm)   | Φ10                      | Φ10    | Φ10    | Φ12    |  |
| 支撑力(kgf)/工作壓力(kgf/cm <sup>2</sup> )<br>Support(kgf)/Pressure of work(kgf/cm <sup>2</sup> ) | 27/5                     | 50/5   | 70/5   | 130/5  |  |
| 作動方式Acting type  | 單動式 Single acting        |        |        |        |  |



## 外形尺寸表 Dimension table

| 型號/Model | HSW-26AL-S | HSW-26BL-S | HSW-30AL-S | HSW-30BL-S | HSW-36AL-S | HSW-36BL-S | HSW-45AL-S | HSW-45BL-S |
|----------|------------|------------|------------|------------|------------|------------|------------|------------|
| A        | 68.5       | 62         | 75.5       | 69         | 81         | 73         | 95         | 87         |
| B        | 22         | 22         | 24         | 24         | 30         | 30         | 36         | 36         |
| C        | 8          | 8          | 8          | 8          | 9          | 9          | 10         | 10         |
| D        | M26x1.5    | M26x1.5    | M30x1.5    | M30x1.5    | M36x1.5    | M36x1.5    | M45x1.5    | M45x1.5    |
| E        | 54.3       | 54.3       | 60         | 60         | 64         | 64         | 76         | 76         |
| F        | 7          | 7          | 9.5        | 9.5        | 9.5        | 9.5        | 9.5        | 9.5        |
| G        | 46.8       | 46.8       | 51         | 51         | 54         | 54         | 61         | 61         |
| H        | 3          | 3          | 3          | 3          | 3          | 3          | 4          | 4          |
| J        | 9          | 9          | 11         | 11         | 13         | 13         | 16         | 16         |
| K        | 24.5       | 24.5       | 28.5       | 28.5       | 34.5       | 34.5       | 43.5       | 43.5       |
| D1       | 10         | 10         | 10         | 10         | 10         | 10         | 12         | 12         |
| D2       | 9.5        | 9.5        | 9.5        | 9.5        | 9.5        | 9.5        | 11.5       | 11.5       |
| EE       | 6          | 6          | 7          | 7          | 8          | 8          | 9          | 9          |
| EX       | M6         | M6         | M6         | M6         | M6         | M8         | M8         | M8         |

## 產品特性

能使夾具內的執行元件依次動作的氣動順序閥。

延遲時間：1~10sec 最適合于氣口數有限或不能使用電源的環境。

It can actuate multiple actuators in sequence

Delay time: 1 ~ 10sec Can be used without electric power

& best suitable when there are limited ports.

能設置在切削加工工具上的氣動順序閥。

能通過單向閥、調節閥、儲氣罐、切換閥控制氣壓流量，從而使多個執行元件依次動作。

因其緊湊且高性能的密封結構，可安裝在切削加工用夾具上使用。

Best Suited for Machining Centers

It controls the air flow by using a check valve, flow control valve, air tank, switching valve and actuate multiple actuators in sequence.

無需電氣控制

無需進行電氣控制，所以最適用于防爆環境等限制用電的環境。

Electric control is not needed

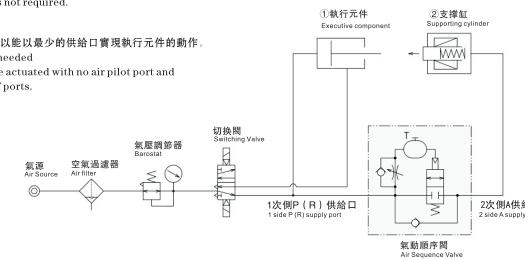
It can be installed in places where there is limited use of electricity such as explosion proof surroundings because electricity control is not required.

無需氣控供給口

無需氣控供給口，所以能以最少的供給口實現執行元件的動作。

Air pilot port is not needed

The actuators can be actuated with no air pilot port and minimum number of ports.



注意事項 \*1. 必須使用經過濾器過濾後的清潔空氣，以免異物侵入內部。

Note \*1. To protect from foreign contaminants and supply clean air that is filtered.

| 操作順序 / Operation Sequence   | 備註 / Remarks  |  |
|---|---------------|--|
|   | 氣壓ON/Air ON   | 此時：②支撐缸不動作。<br>At this moment, ②work support is not activated              |
| ①執行元件動作/① Actuator is activated.  |               |  |
| 如果氣動順序閥內的儲氣罐充滿空氣，內部切換閘就會動作。<br>Switching valve operates once the tank is full with air. |               | 延遲時間：1~10sec<br>Delayed Time: 1~10sec                                      |
| ②支撐缸動作/② Work support is activated.   |               |  |
| 夾緊結束/Locking action completed.  |               |  |
| 加工等/Machining Process   |               |  |
| 釋放時間 / Release Time   | 備註 / Remarks  |  |
|   | 氣壓OFF/Air OFF | ①執行元件和②支撐缸基本上同時釋放。<br>① Actuator ② Work support releases at the same time. |
| 釋放結束/Release action completed.  |               |  |

## 型號表示



HBWD-B(配管式)

## 規 格

| 型號 / Model No.                             | HBWD-B       |
|--|--------------|
| 最高使用壓力 / Max. Operating Pressure Mpa       | 0.6          |
| 最低動作壓力 / Min. Operating Pressure Mpa       | 0.2          |
| 耐壓 / Withstanding Pressure Mpa             | 1.5          |
| 延遲時間 / Delayed Time sec                    | 1 ~ 10       |
| 最小通路面積 / Min. Passage Area mm <sup>2</sup> | 4.0          |
| 使用溫度 / Operating Temperature °C            | 0 ~ 70       |
| 使用流體 / Usable Fluid                        | 幹燥空氣/Dry Air |
| 重量 / Mass kg                               | 0.2          |

## 注意事項

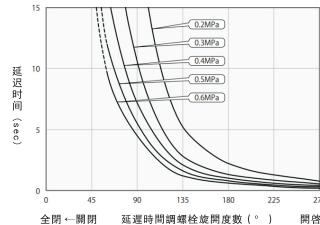
- ※1. 初始動作時的延遲時間可能因放置時間而延長。
- ※2. 可使用端口增設儲氣箱，增加容量，從而延長延遲時間。
- ※3. 如果超過設定延遲時間2次側執行元件仍未動作時，必須先將1次側供給氣壓降到零，然後再進行確認作業。
- ※4. 確認延遲時間時應先擰緊延遲時間調整螺栓部的固定螺母後再行確認。
- 1. 回路條件的影響，切換後的2次側執行元件動作過程中，有時會出現1次側壓力下降的現象。
- 2. 停止供氣(排放)之後至再次供氣，應設置5秒以上的時間差。
- 3. 1個回路內使用多臺氣動順序閥時，推薦採取串聯連接方式。

## Notes

- ※1. If unused for a long period of time, the delay is longer than initial set time.
- ※2. It can extend the time delay from tank and its capacity increases by using T port.
- ※3. If actuators on outgoing side does not operate after the time delayed setting, verify setting after pressure returns to zero.
- ※4. The confirmation for delayed time should be done after fastening the lock nut of the delayed time adjusting thread.
- 1. Depending upon circuit condition, the pressure of incoming side might descend during operation of outgoing actuators of switching valve.
- 2. Prepare time gap of more than 5 seconds until air is supplied again after air supply stops (releases).
- 3. Recommend the series connection, if the multiple valves are used in one circuit.

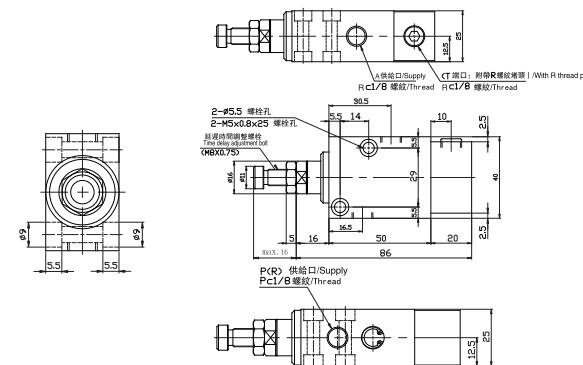
## 能力曲線圖

各使用壓力下的延遲時間調整螺栓的旋開度數與延遲時間之間的關係曲線。  
Adjusting Screw Turn Ratio and Time Delay at Various Operating Pressures



注: 注意事項

- 1. 本能力曲線圖表示延遲時間調整螺栓旋開度數 ( ° ) 與延遲時間(sec)之間的關係曲線。
- 2. 實際延遲時間因回路條件而異。(請以本能力曲線圖為參考值。)
- Notes
- 1. This graph shows the relationship of the delayed time adjusting thread opening degree and the delayed time.
- 2. Depending on the circuit condition, the actual delayed time changes.(This graph should be for referencing only.)



## 注意事項

- 實際延遲時間因回路條件而異。  
切勿过于拧紧或旋松延遲時間調整螺栓。  
否則可能會導致產品的損傷。  
Depending on the circuit condition, the actual delayed time changes.  
Do not fasten the delayed time adjusting thread too tight or do not loosen it too much.  
Components can be damaged.