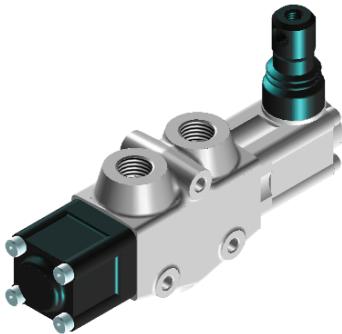


# HC SVM/E Series

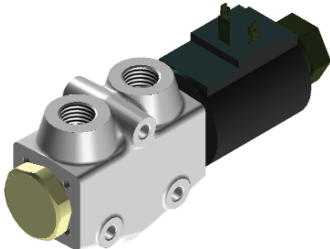
Solenoid Operated Selector Valves



SELECTOR VALVES



SVM  
manual



SVE  
electrical

Working conditions

- OPERATING TEMPERATURE . . . .from -25° to + 80° C
- KINEMATIC VISCOSITY . . . . .from 10 to 460 mm²/s
- MAX. CONTAMINATION LEVEL . . . .NAS 1638 classe 9  
(19/16 ISO-4406)
- RECOMMENDED FILTRATION LEVEL . . . . . 10 75

Leakage

- HC-SVM = 8 12 cc/min                      HC-SVE = 18 22 cc/min
- (Test conditions)
- FLUID VISCOSITY . . . . .30 Cst
  - FLUID TEMPERATURE . . . . .50° C
  - PRESSURE . . . . .1450 psi

Fluid compatability

| TYPE OF FLUID<br>(Oil and Solution)     | TEMP. (C°) |      | GASKET |          |
|-----------------------------------------|------------|------|--------|----------|
|                                         | min        | max  | NBR    | VITON(*) |
| Mineral oil<br>HPL (DIN 51524)          | -25        | +80  | •      | •        |
| Oil in water<br>emulsion HFA(*)         | +5         | +55  | •      | •        |
| Water in oil<br>emulsion HFB(*)         | +5         | +55  | •      |          |
| Polyglycol-based<br>aqueous sol. HFC(*) | -25        | +60  | •      |          |
| Ester of phosphoric<br>acid HCD(*)      | -20        | +150 | •      |          |

(\*) : for this application, please contact our technical sales office.  
NBR : nitrile rubber compatible with mineral-bases oils ASTM 1.  
VITON : fluorinated elastomer for use at high temperature, compatible with fluids ASTM 1 and ASTM 3.

Unit of measure - Conversion factors

| Systems / Unit | METRIC              | BSP                |
|----------------|---------------------|--------------------|
| LENGTH         | 1 mm = 0,0394 in    | 1 in = 25,4 mm     |
| MASS           | 1 kg = 2,205 lb     | 1 lb = 0,4536 kg   |
| FORCE          | 1 Nm = 0,1020 kgf   | 1 kgf = 9,8067 Nm  |
| VOLUME         | 1 l = 0,2200 gal UK | 1 gal UK = 4,546 l |
|                | 1 i = 0,2642 gal US | 1 gal US = 3,785 l |
| PRESSURE       | 1 bar = 100000 Pa   | 1 Pa = 0,00001 bar |
|                | 1 bar = 14,5 psi    | 1 psi = 0.0689 bar |

If using selector valves HC-SV with different technical specifications or with special functions that are not shown in our catalogue, you are kindly requested to contact our technical and sales departement.

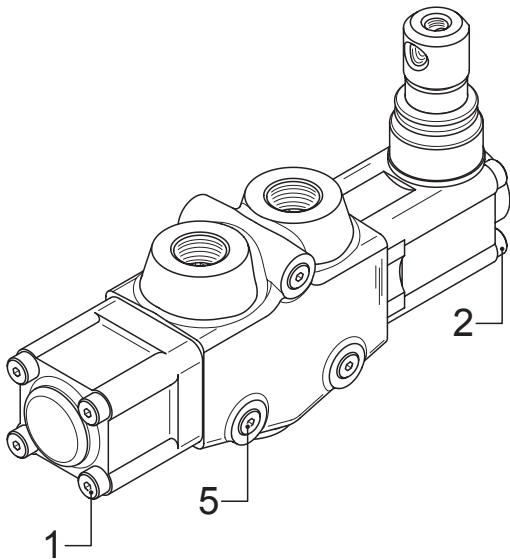
# HC SVM/E Series

Solenoid Operated Selector Valves

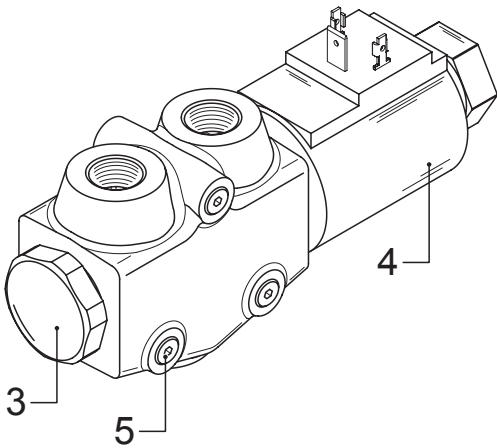


## CLAMPING TORQUE

MANUAL SELECTOR VALVES



ELECTRICAL SELECTOR VALVES



### General clamping torque

| POSITION | DESCRIPTION                   | CLAMPING TORQUE (Nm) |     |     |     |      |      |     |     |
|----------|-------------------------------|----------------------|-----|-----|-----|------|------|-----|-----|
|          |                               | 053                  | 056 | 083 | 086 | 123  | 126  | 206 | 306 |
| 1        | bearing screw                 | 3,5                  | 3,5 | 3,5 | 3,5 | 10,4 | 10,4 | 26  | 26  |
| 2        | cap screw                     | 3,5                  | 3,5 | 3,5 | 3,5 | 10,4 | 10,4 | 26  | 26  |
| 3        | plug return spring / drainage | 85                   | 85  | 85  | 85  | 85   | 85   |     |     |
| 4        | solenoid                      | 20                   | 20  | 20  | 20  | 20   | 20   |     |     |
| 5        | fix screw                     | M6                   | M6  | M8  | M8  | M12  | M12  | M15 | M15 |
|          |                               | 10                   | 10  | 12  | 12  | 15   | 15   | 30  | 30  |

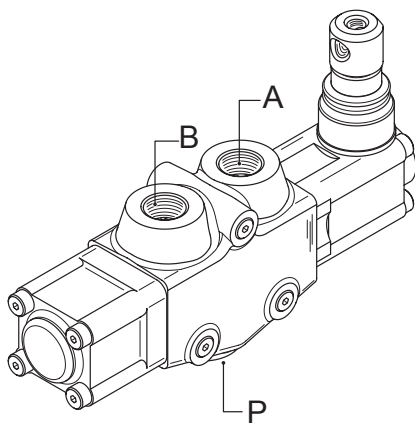
# HC SVM/E Series

Solenoid Operated Selector Valves

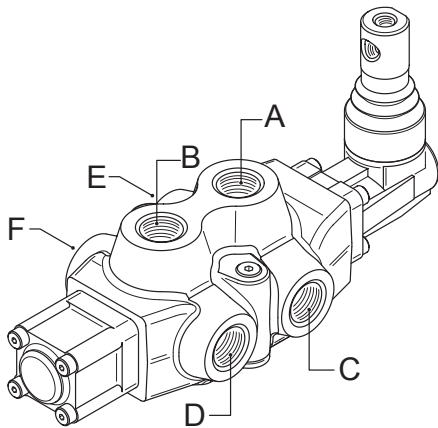


## DIMENSIONS

SELECTOR VALVES 3-WAY



SELECTOR VALVES 6-WAY



| PORTS   | (METRIC)<br>ISO - 262 | (BSP)<br>ISO - 228 | (UN - UNF)<br>ISO - 725 | (SAE 6000)<br>COD. 62 |
|---------|-----------------------|--------------------|-------------------------|-----------------------|
| Ports A | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |
| Ports B | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |
| Ports C | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |
| Ports D | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |
| Ports E | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |
| Ports F | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |
| Ports P | M01 - M02 - M03       | G03 - G04 - G05    | U03 - U04 - U05         | S35 - S36 - S37 - S38 |

### Metric thread (ISO-262)

M 18x1,5

M01

M 22x1,5

M02

M 27x2

M03

### BSP thread (ISO-228)

3/8"

G03

1/2"

G04

3/4"

G05

### UN-UNF thread (ISO-725)

3/4"-16 UNF

U03

7/8"-14 UNF

U04

1 1/4"-16-12 UN

U05

### SAE 6000 thread (Cod. 62)

1" (MA)

S35

1" (UNC)

S36

1" 1/4 (MA)

S37

1" 1/4 (UNC)

S38

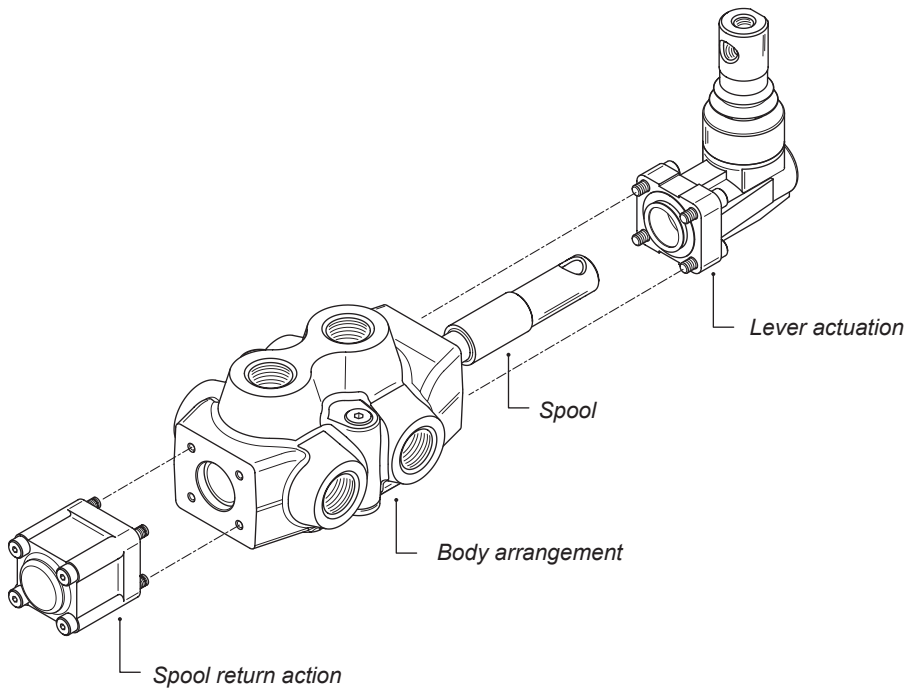
# HC SVM/E Series

Solenoid Operated Selector Valves



## EXAMPLE OF ORDER CODE

|            |            |            |            |            |            |
|------------|------------|------------|------------|------------|------------|
| HC-SVM086  | W025A      | H001       | F0400      | DB         | G04        |
| <b>A</b>   | <b>B</b>   | <b>C</b>   | <b>D</b>   | <b>E</b>   | <b>F</b>   |
| pag. 2.182 | pag. 2.185 | pag. 2.186 | pag. 2.187 | pag. 2.188 | pag. 2.188 |



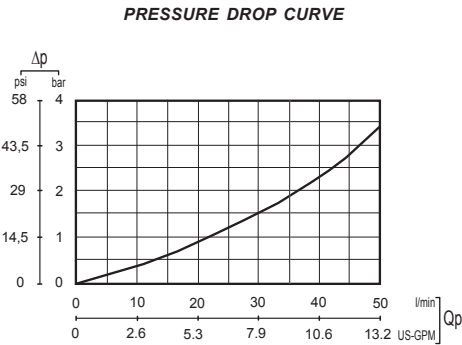
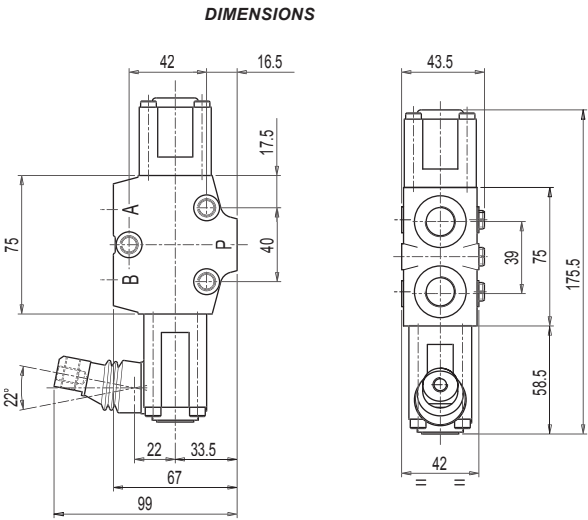
|                                        |                                            |
|----------------------------------------|--------------------------------------------|
| <b>A PRODUCT TYPE</b>                  | <b>D SPOOL RETURN ACTION SPOOL</b>         |
| SVM = type .....pag. 2.182             | F0400 = spool return action ....pag. 2.187 |
| 086 = model .....pag. 2.182            |                                            |
| <b>B SPOOL TYPE</b>                    | <b>E BODY ARRANGEMENT</b>                  |
| W025A = spool type .....pag. 2.185     | DB = circuit type .....pag. 2.188          |
| <b>C SPOOL ACTUATION TYPE</b>          | <b>F BODY THREAD</b>                       |
| H001 = spool actuation .....pag. 2.186 | G04 = thread .....pag. 2.188               |

# HC SVM/E Series

Solenoid Operated Selector Valves

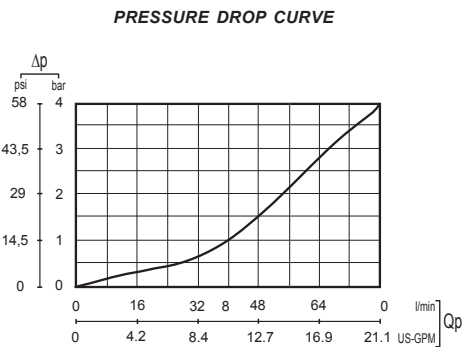
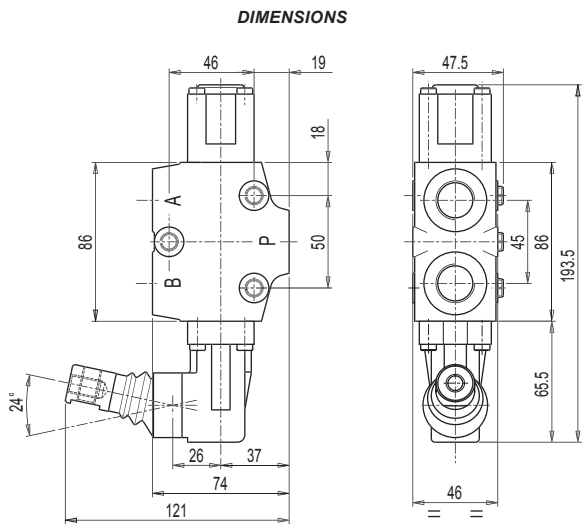


## DIMENSIONS AND TYPICAL CURVES



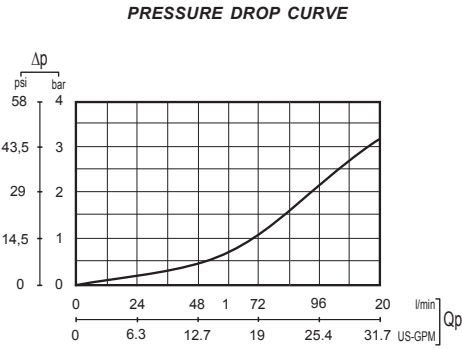
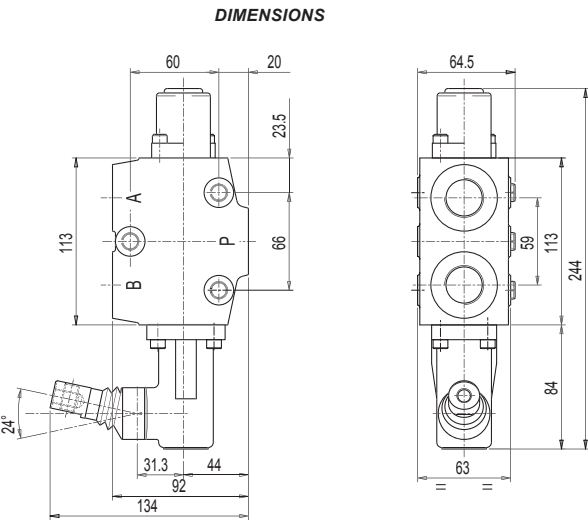
**DESCRIPTION**  
Nominal flow 50 l/m  
Max pressure 350 bar

**ORDERING CODE**  
**SVM053**



**DESCRIPTION**  
Nominal flow 80 l/m  
Max pressure 350 bar

**ORDERING CODE**  
**SVM083**



**DESCRIPTION**  
Nominal flow 120 l/m  
Max pressure 350 bar

**ORDERING CODE**  
**SVM123**

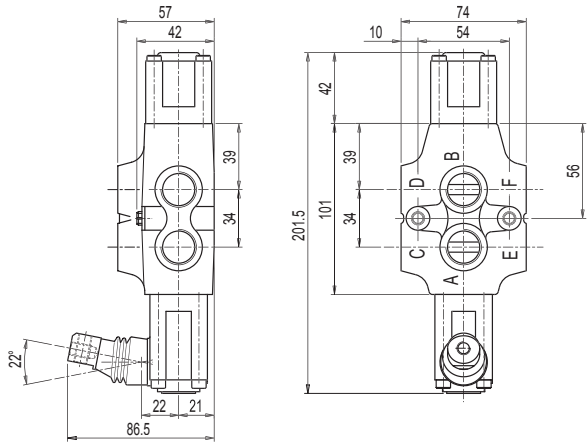
# HC SVM/E Series

Solenoid Operated Selector Valves

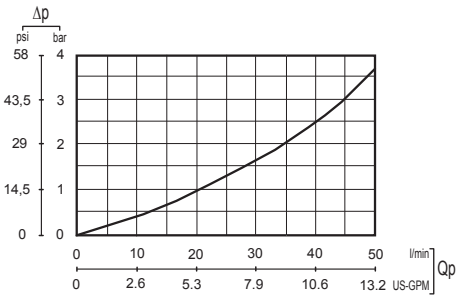


## DIMENSIONS AND TYPICAL CURVES

DIMENSIONS



PRESSURE DROP CURVE



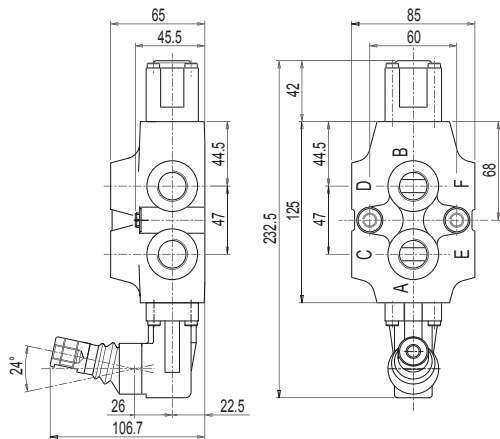
DESCRIPTION

Nominal flow 50 l/m  
Max pressure 350 bar

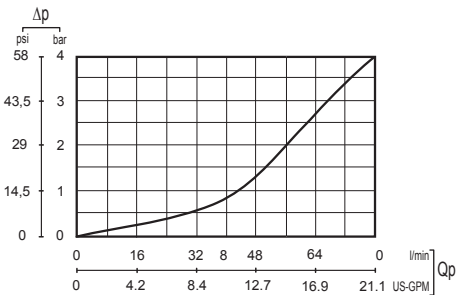
ORDERING CODE

**SVM056**

DIMENSIONS



PRESSURE DROP CURVE



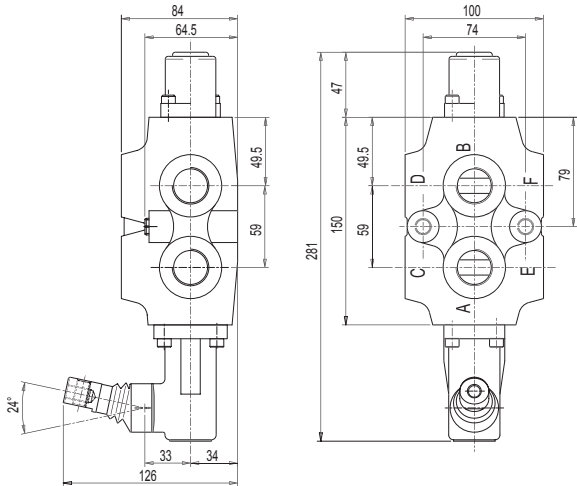
DESCRIPTION

Nominal flow 80 l/m  
Max pressure 350 bar

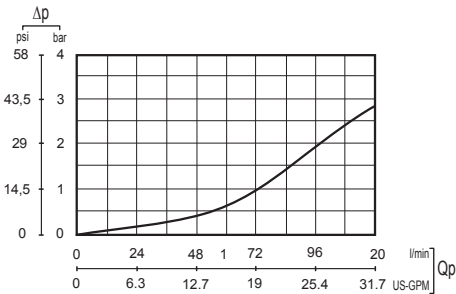
ORDERING CODE

**SVM086**

DIMENSIONS



PRESSURE DROP CURVE



DESCRIPTION

Nominal flow 120 l/m  
Max pressure 350 bar

ORDERING CODE

**SVM126**

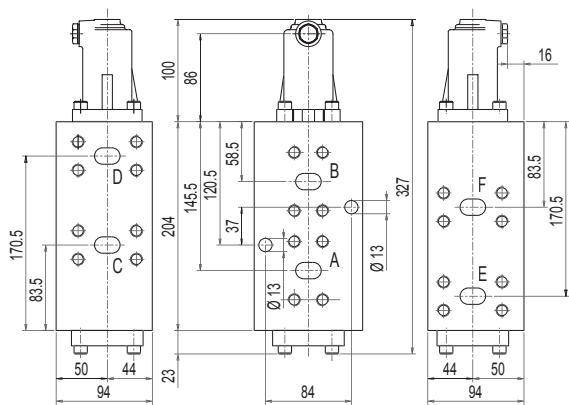
# HC SVM/E Series

Solenoid Operated Selector Valves

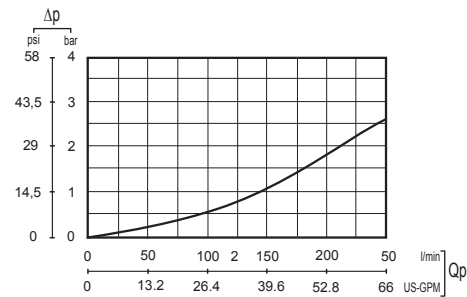


## DIMENSIONS AND TYPICAL CURVES

DIMENSIONS



PRESSURE DROP CURVE



DESCRIPTION

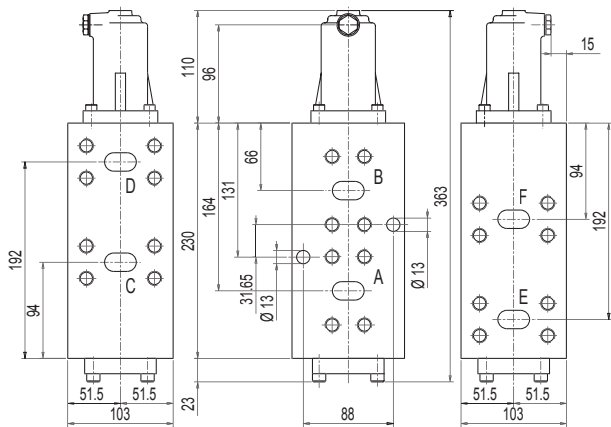
Nominal flow 250 l/m

Max pressure 350 bar

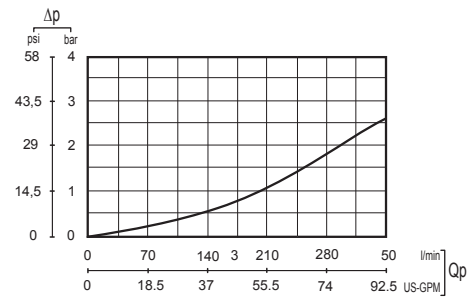
ORDERING CODE

**SVM206**

DIMENSIONS



PRESSURE DROP CURVE



DESCRIPTION

Nominal flow 350 l/m

Max pressure 350 bar

ORDERING CODE

**SVM306**

# HC SVM/E Series

Solenoid Operated Selector Valves



## SPOOLS

| CIRCUIT | DESCRIPTION CIRCUIT + CODE                                   | MODEL                           |
|---------|--------------------------------------------------------------|---------------------------------|
|         | 3 way ports<br>connected in central position<br><b>W022A</b> | 053 056 083 086 123 126 206 306 |
|         | 3 way ports<br>closed in 1 position<br><b>W023A</b>          | 053 056 083 086 123 126 206 306 |
|         | 3 way ports<br>closed in central position<br><b>W024A</b>    | 053 056 083 086 123 126 206 306 |
|         | 6 way ports<br>connected in central position<br><b>W025A</b> | 053 056 083 086 123 126 206 306 |
|         | 6 way ports<br>closed in central position<br><b>W026A</b>    | 053 056 083 086 123 126 206 306 |

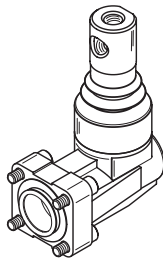
# HC SVM/E Series

Solenoid Operated Selector Valves



## SPOOL ACTION

LAYOUT



DESCRIPTION + CODES

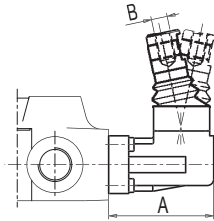
*Protected lever*

**H001**

*Protected lever rotated 180°*

**H002**

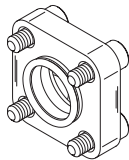
DIMENSIONAL DRAWING



DIMENSIONS

|   | 053  | 056  | 083  | 086  | 123 | 126 | 206 | 306 |
|---|------|------|------|------|-----|-----|-----|-----|
| A | 58,5 | 58,5 | 65,5 | 65,5 | 83  | 83  |     |     |
| B | M8   | M8   | M10  | M10  | M10 | M10 |     |     |

LAYOUT

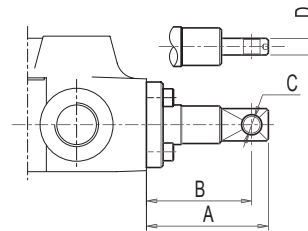


DESCRIPTION + CODES

*Control without lever*

**H004**

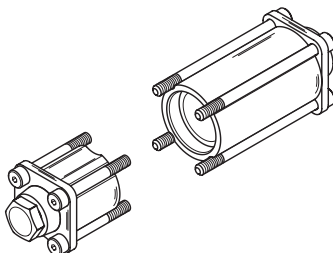
DIMENSIONAL DRAWING



DIMENSIONS

|   | 053  | 056  | 083  | 086  | 123  | 126  | 206 | 306 |
|---|------|------|------|------|------|------|-----|-----|
| A | 52,5 | 52,5 | 58,5 | 58,5 | 79,5 | 79,5 |     |     |
| B | 43,5 | 43,5 | 50,5 | 50,5 | 67   | 67   |     |     |
| C | 6    | 6    | 8    | 8    | 8    | 8    |     |     |
| D | 8    | 8    | 8    | 8    | 8    | 8    |     |     |

LAYOUT



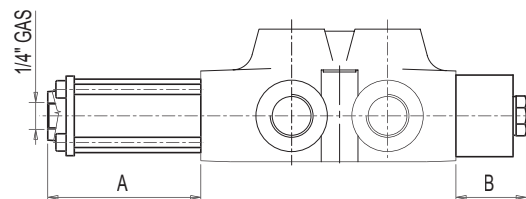
DESCRIPTION + CODES

*Hydraulic control*

*Leave out the spool return action code.*

**H005**

DIMENSIONAL DRAWING



DIMENSIONS

|   | 053 | 056 | 083  | 086  | 123  | 126  | 206 | 306 |
|---|-----|-----|------|------|------|------|-----|-----|
| A | 75  | 75  | 75   | 75   | 77   | 77   | 23  | 23  |
| B | 45  | 45  | 34,5 | 34,5 | 42,5 | 42,5 | 100 | 110 |

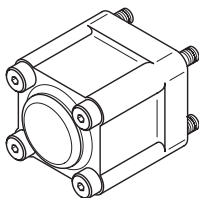
# HC SVM/E Series

Solenoid Operated Selector Valves

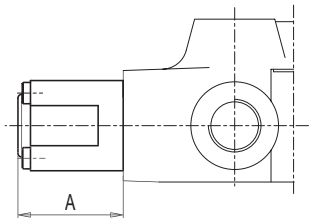


## SPOOL RETURN ACTION

LAYOUT



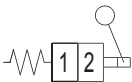
DIMENSIONAL DRAWING



DESCRIPTION

2 position spring/centred in 1  
(standard)

CIRCUIT

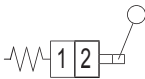


CODE **F0400**

DIMENSIONS

|   | 053 | 056 | 083 | 086 | 123 | 126 | 206 | 306 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|
| A | 42  | 42  | 42  | 42  | 55  | 55  |     |     |

2 position  
spring/centred in 2



CODE **F0410**

|   | 053 | 056 | 083 | 086 | 123 | 126 | 206 | 306 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|
| A | 42  | 42  | 42  | 42  | 55  | 55  |     |     |

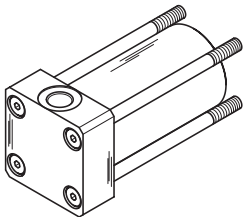
2 position  
detent in 1-2



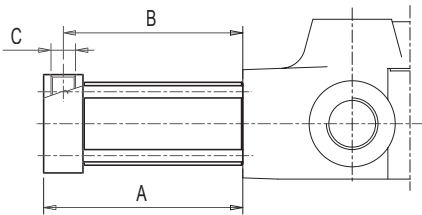
CODE **F0420**

|   | 053 | 056 | 083 | 086 | 123 | 126 | 206 | 306 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|
| A | 42  | 42  | 42  | 42  | 55  | 55  |     |     |

LAYOUT



DIMENSIONAL DRAWING



DESCRIPTION

Pneumatic control  
ON-OFF

CIRCUIT



CODE **F0430**

DIMENSIONS

|   | 053  | 056  | 083  | 086  | 123  | 126  | 206 | 306 |
|---|------|------|------|------|------|------|-----|-----|
| A | 77,5 | 77,5 | 81   | 81   | 89,5 | 89,5 |     |     |
| B | 69,5 | 69,5 | 73   | 73   | 81   | 81   |     |     |
| C | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" |     |     |

Pneumatic control  
ON-OFF rotated 180°



CODE **F0440**

Operating pressure 2 - 3,5 bar

# HC SVM/E Series

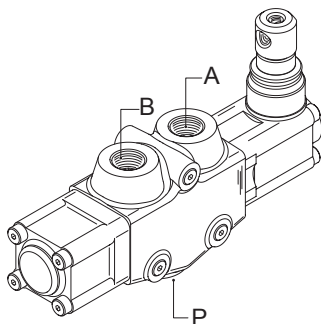
Solenoid Operated Selector Valves



## BODY ARRANGEMENT

### Threads available

DIMENSIONS



DESCRIPTION

Service ports A-B-P way circuit

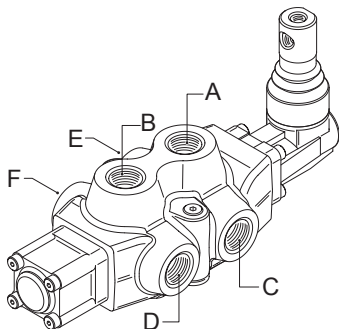
THREAD ORDERING CODES

|     |     |     |     |
|-----|-----|-----|-----|
| 053 | M01 | G03 | U03 |
| 083 | M02 | G04 | U04 |
| 123 | M03 | G05 | U05 |

ORDERING CODES

DA

DIMENSIONS



DESCRIPTION

Service ports A-B-C-D-E-F way circuit

THREAD ORDERING CODES

|     |     |     |     |
|-----|-----|-----|-----|
| 056 | M01 | G03 | U03 |
| 086 | M02 | G04 | U04 |
| 126 | M03 | G05 | U05 |
| 206 | S35 | S36 |     |
| 306 | S37 | S38 |     |

ORDERING CODES

DB

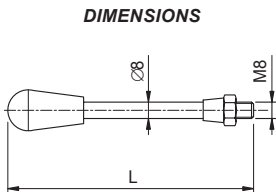
# HC SVM/E Series

Solenoid Operated Selector Valves



## FEATURES

### Lever identification



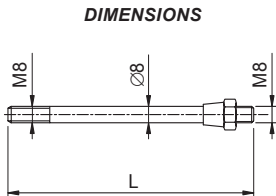
**DESCRIPTION**  
*Lever with knob*

**AVAILABLE LENGTH**

**L (mm) = 135 - 210 - 295**  
**L (in) = 5,3 - 8,3 - 11,6**

**ORDERING CODES**

**ZA**



**DESCRIPTION**  
*Lever without knob*

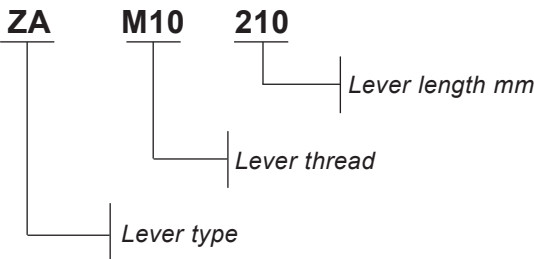
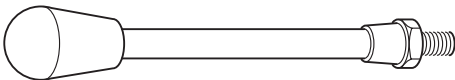
**AVAILABLE LENGTH**

**L (mm) = 180 - 230**  
**L (in) = 7,1 - 9,1**

**ORDERING CODES**

**ZB**

### Order example



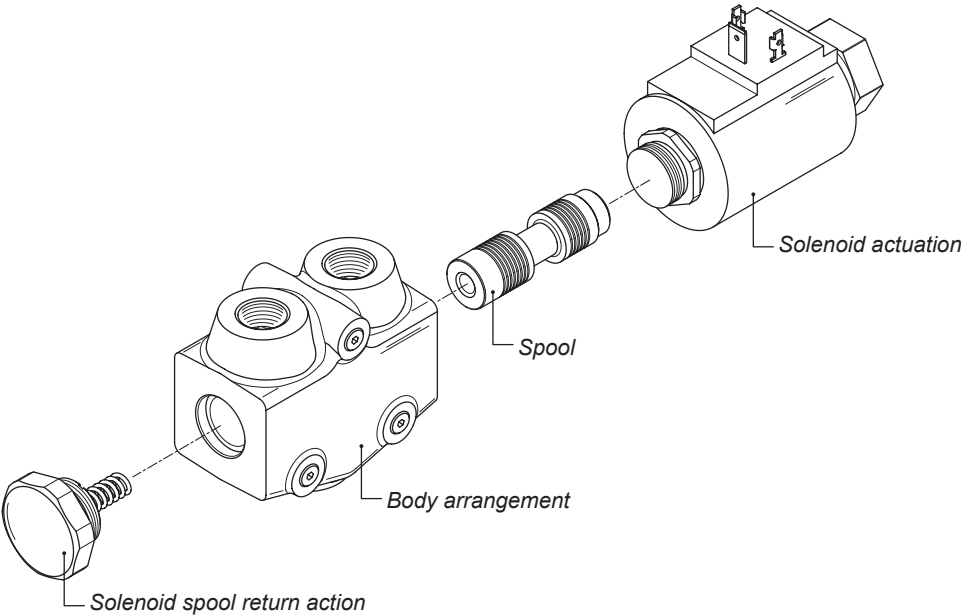
# HC SVM/E Series

Solenoid Operated Selector Valves



## EXAMPLE OF ORDER CODE

|            |            |            |            |            |
|------------|------------|------------|------------|------------|
| HC-SVE056  | W029E      | H338       | DD         | G04        |
| <b>A</b>   | <b>B</b>   | <b>C</b>   | <b>D</b>   | <b>E</b>   |
| pag. 2.191 | pag. 2.193 | pag. 2.194 | pag. 2.195 | pag. 2.195 |



|                                                                                                                               |                                                                |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| <b>A PRODUCT TYPE</b><br>SVE = type .....pag. 2.191<br>056 = model .....pag. 2.191                                            | <b>D BODY ARRANGEMENT</b><br>DB = circuit type .....pag. 2.195 |
| <b>B SPOOL TYPE</b><br>W029A = spool type .....pag. 2.193                                                                     | <b>E BODY THREAD</b><br>G04 = thread .....pag. 2.195           |
| <b>C SPOOL ACTUATION TYPE</b><br>H338= spool actuation.....pag. 2.194<br><b>NOTE:</b> leave out the spool return action code. |                                                                |

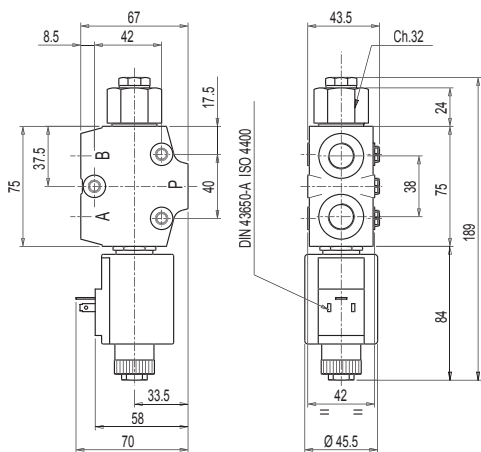
# HC SVM/E Series

Solenoid Operated Selector Valves

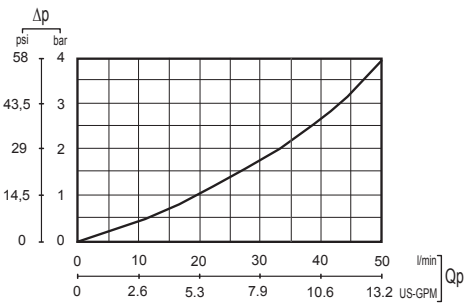


## DIMENSIONS AND TYPICAL CURVES

DIMENSIONS



PRESSURE DROP CURVE



DESCRIPTION

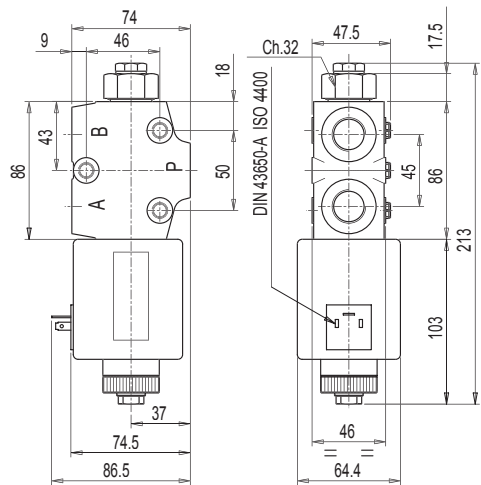
Nominal flow 30 l/m

Max pressure 350 bar

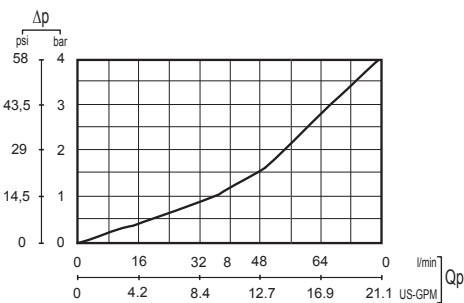
ORDERING CODE

**SVE053**

DIMENSIONS



PRESSURE DROP CURVE



DESCRIPTION

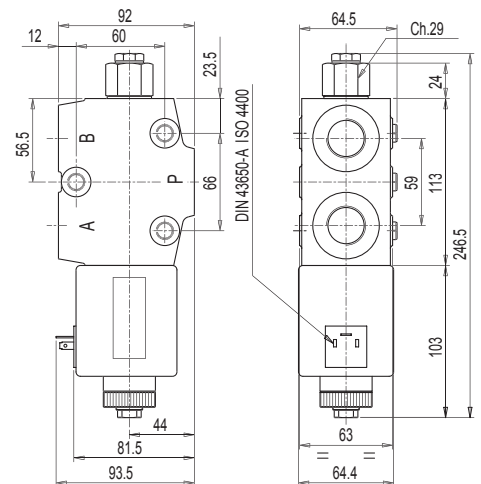
Nominal flow 860 l/m

Max pressure 350 bar

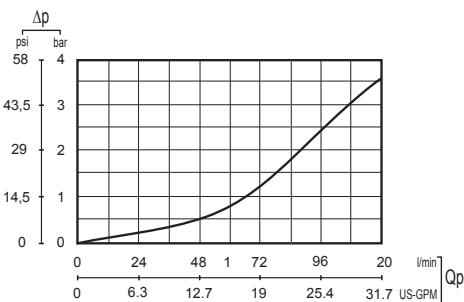
ORDERING CODE

**SVE083**

DIMENSIONS



PRESSURE DROP CURVE



DESCRIPTION

Nominal flow 100 l/m

Max pressure 350 bar

ORDERING CODE

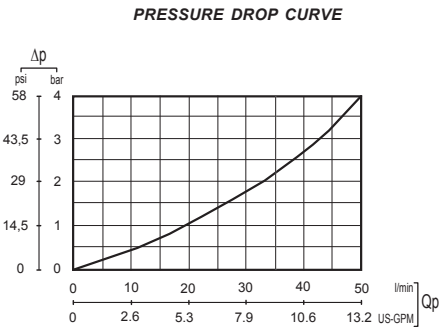
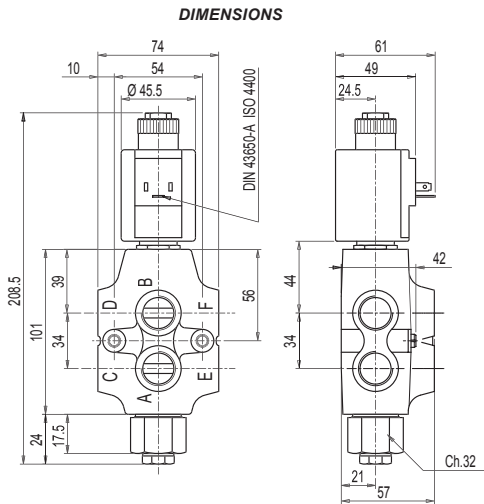
**SVE123**

# HC SVM/E Series

Solenoid Operated Selector Valves



## DIMENSIONS AND TYPICAL CURVES

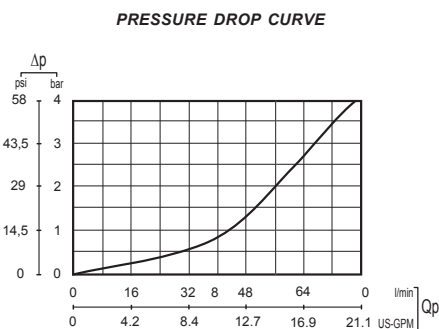
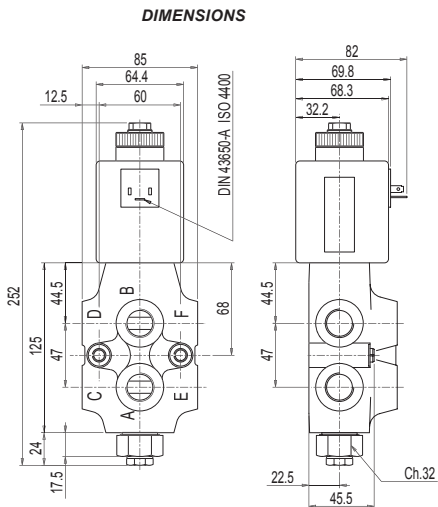


**DESCRIPTION**

Nominal flow 30 l/m  
Max pressure 350 bar

**ORDERING CODE**

**SVE056**

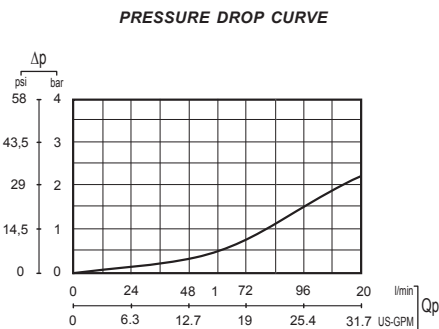
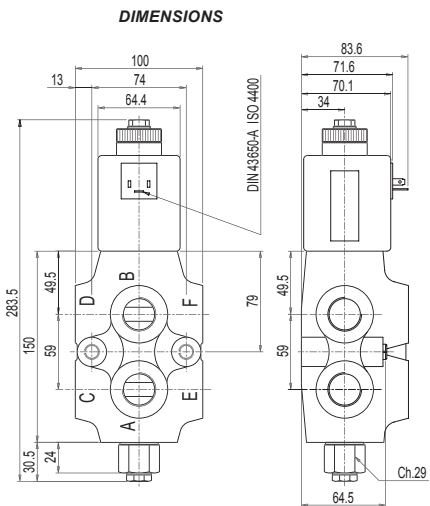


**DESCRIPTION**

Nominal flow 60 l/m  
Max pressure 350 bar

**ORDERING CODE**

**SVE086**



**DESCRIPTION**

Nominal flow 100 l/m  
Max pressure 350 bar

**ORDERING CODE**

**SVE126**

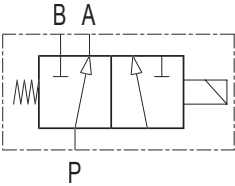
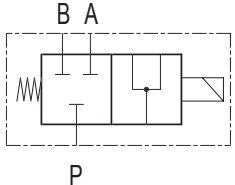
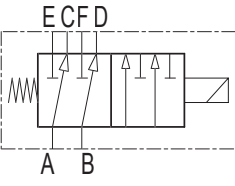
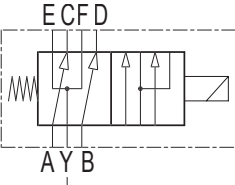
# HC SVM/E Series

Solenoid Operated Selector Valves



## SPOOLS AND SPOOL ACTION

### Spool Identification

| CIRCUIT                                                                             | DESCRIPTION CIRCUIT + CODE                                                                                               | MODEL                           |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|    | 3 way<br><i>P in port A</i><br><b>W027A</b>                                                                              | 053 056 083 086 123 126 206 306 |
|    | 3 way<br><i>P A B normally closed</i><br><b>W028A</b>                                                                    | 053 056 083 086 123 126 206 306 |
|  | 6 way<br><i>A (B) normally in port C (D)</i><br><b>W029A</b>                                                             | 053 056 083 086 123 126 206 306 |
|  | 6 way <i>A (B) normally in port C (D).</i><br><i>E connected to F.</i><br><i>E F ports in Y drainage</i><br><b>W030A</b> | 053 056 083 086 123 126 206 306 |

ONLY COMPATIBLE WITH H340-H341 CONTROLS

# HC SVM/E Series

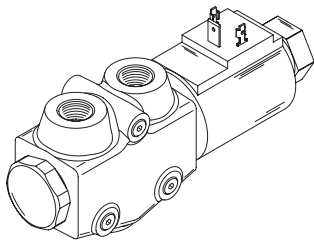
Solenoid Operated Selector Valves



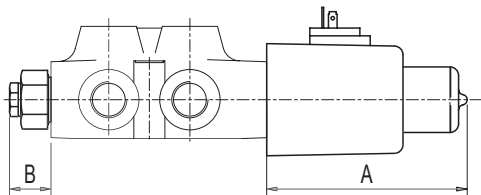
## SPOOLS AND SPOOL ACTION

### Spool action identification

LAYOUT



DIMENSIONAL DRAWING



DESCRIPTION + CODES

Solenoid 12 VDC  
without drainage

**H338**

DIMENSIONS

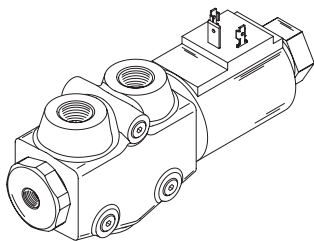
|   | 053  | 056  | 083 | 086 | 123   | 126   | 206 | 306 |
|---|------|------|-----|-----|-------|-------|-----|-----|
| A | 90   | 90   | 116 | 116 | 116,5 | 116,5 |     |     |
| B | 30,5 | 30,5 | 24  | 24  | 30,5  | 30,5  |     |     |

Solenoid 24 VDC  
without drainage

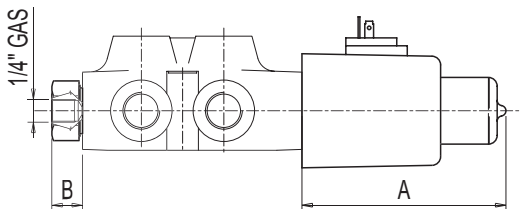
**H339**

Max operating pressure 160 bar

LAYOUT



DIMENSIONAL DRAWING



DESCRIPTION + CODES

Solenoid 12 VDC  
with drainage

**H340**

DIMENSIONS

|   | 053 | 056 | 083  | 086  | 123   | 126   | 206 | 306 |
|---|-----|-----|------|------|-------|-------|-----|-----|
| A | 90  | 90  | 116  | 116  | 116,5 | 116,5 |     |     |
| B | 24  | 24  | 17,5 | 17,5 | 24    | 24    |     |     |

Solenoid 24 VDC  
with drainage

**H341**

Max operating pressure 350 bar

# HC SVM/E Series

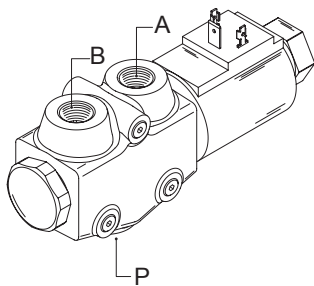
Solenoid Operated Selector Valves



## BODY ARRANGEMENT

### Threads available

DIMENSIONS



DESCRIPTION

Service ports A-B-P way circuit

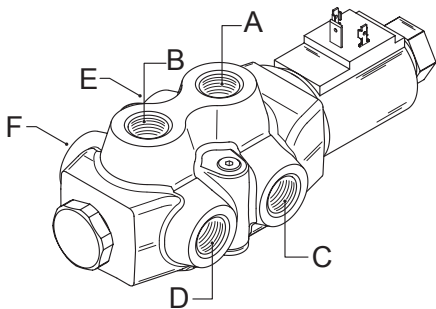
THREAD ORDERING CODES

|     |     |     |     |
|-----|-----|-----|-----|
| 053 | M01 | G03 | U03 |
| 083 | M02 | G04 | U04 |
| 123 | M03 | G05 | U05 |

ORDERING CODES

|    |
|----|
| DC |
|----|

DIMENSIONS



DESCRIPTION

Service ports A-B-C-D-E-F way circuit

THREAD ORDERING CODES

|     |     |     |     |
|-----|-----|-----|-----|
| 056 | M01 | G03 | U03 |
| 086 | M02 | G04 | U04 |
| 126 | M03 | G05 | U05 |

ORDERING CODES

|    |
|----|
| DD |
|----|