

# ISO\*STAR - ATEX version (SXE, SXP) 5/2 & 5/3

## Solenoid and pilot actuated glandless spool valves



- > Sub-base mounted, ISO 5599-1 sizes 1, 2 or 3
- > Specially coated glandless spool and sleeve for long trouble-free life
- > Integral flow regulators available on ISO 1 and 2 sizes for cylinder speed control
- > These solenoid valves are applicable in Ex protection class
- ATEX (categories II 2 GD and II 3 GD) and other international approvals
- > Manual override as standard
- > Impulse actuated bistable valve with detent mechanism
- > Wide range of sub-bases and accessories



Approval depends on magnetic system, see pages 4!

### Technical features

#### Medium:

Compressed air, 40 µm filtered, lubricated or non-lubricated

#### Operation:

Glandless spool valve, solenoid pilot or air pilot actuated

#### Mounting:

On sub-bases

#### Sizes:

ISO 1, 2 and 3

#### Maximum operating pressure:

10 bar (145 psi) solenoid pilot actuated valves

16 bar (232 psi) air pilot actuated valves and solenoid pilot actuated valves with external pilot supply.

Details of minimum and maximum pilot pressure see overleaf

#### Ambient/Media temperature:

-15 ... +50°C (+5 ... +122°F)

air pilot and solenoid pilot actuated valves.

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

#### Materials

Body: die-cast aluminium

Spool & sleeve: hard anodised aluminium with special PTFE coating

Seals: NBR

Locking plate: die-cast zinc

Screws: steel, blue zinc coated

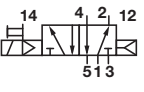
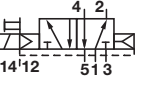
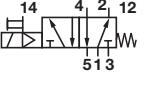
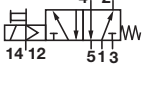
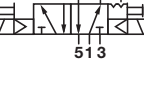
Plastic parts: POM

Flow regulators: brass

### Maximum suggested torque

| Valve size | Thread size | Maximum suggested torque |
|------------|-------------|--------------------------|
| ISO 1      | M5          | 3.1 Nm                   |
| ISO 2      | M6          | 3.5 Nm                   |
| ISO 3      | M8          | 5.6 Nm                   |

## 5/2 Solenoid pilot actuated valves – 10 bar models

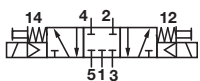
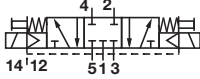
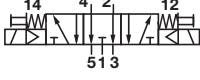
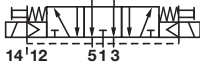
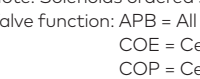
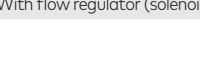
| Symbol                                                                              | Port size | Flow regulator | Actuation           | Pilot supply | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model End solenoid actuated valves |
|-------------------------------------------------------------------------------------|-----------|----------------|---------------------|--------------|--------------|--------------------------|----------------------|-------------|-------------|------------------------------------|
|    | 1         | —              | Solenoid/air spring | Internal     | 1230         | 1 ... 10                 | —                    | 0,33        | 1           | SXE9573-170-0#K                    |
|                                                                                     | 2         | —              | Solenoid/air spring | Internal     | 2450         | 1 ... 10                 | —                    | 0,59        | 1           | SXE9574-170-0#K                    |
|                                                                                     | 3         | —              | Solenoid/air spring | Internal     | 4400         | 1 ... 10                 | —                    | 0,85        | 1           | SXE9575-170-0#K                    |
|                                                                                     | 1         | Built-in       | Solenoid/air spring | Internal     | 1230         | 1 ... 10                 | —                    | 0,33        | 1           | SXE9573-180-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/air spring | Internal     | 2450         | 1 ... 10                 | —                    | 0,59        | 1           | SXE9574-180-0#K                    |
|                                                                                     | 3         | —              | Solenoid/air spring | Internal     | 4400         | 1 ... 10                 | —                    | 0,85        | 1           | SXE9575-180-0#K                    |
|    | 1         | —              | Solenoid/air spring | External *3) | 1230         | -0,9 ... 16              | 1 ... 10             | 0,33        | 1           | SXE9573-175-0#K                    |
|                                                                                     | 1         | Built-in       | Solenoid/air spring | External *3) | 1230         | -0,9 ... 16              | 1 ... 10             | 0,33        | 1           | SXE9573-185-0#K                    |
|                                                                                     | 2         | —              | Solenoid/air spring | External *3) | 2450         | -0,9 ... 16              | 1 ... 10             | 0,59        | 1           | SXE9574-175-0#K                    |
|                                                                                     | 3         | —              | Solenoid/air spring | External *3) | 4400         | -0,9 ... 16              | 1 ... 10             | 0,85        | 1           | SXE9575-175-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/air spring | External *3) | 2450         | -0,9 ... 16              | 1 ... 10             | 0,59        | 1           | SXE9574-185-0#K                    |
|                                                                                     | 3         | —              | Solenoid/air spring | External *3) | 4400         | -0,9 ... 16              | 1 ... 10             | 0,85        | 1           | SXE9575-185-0#K                    |
|    | 1         | —              | Solenoid/spring     | Internal     | 1230         | 1,8 ... 10               | —                    | 0,33        | 1           | SXE9573-171-0#K                    |
|                                                                                     | 2         | —              | Solenoid/spring     | Internal     | 2450         | 1,8 ... 10               | —                    | 0,59        | 1           | SXE9574-171-0#K                    |
|                                                                                     | 3         | —              | Solenoid/spring     | Internal     | 4400         | 1,8 ... 10               | —                    | 0,85        | 1           | SXE9575-171-0#K                    |
|                                                                                     | 1         | Built-in       | Solenoid/spring     | Internal     | 1230         | 1,8 ... 10               | —                    | 0,33        | 1           | SXE9573-181-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/spring     | Internal     | 2450         | 1,8 ... 10               | —                    | 0,59        | 1           | SXE9574-181-0#K                    |
|                                                                                     | 3         | —              | Solenoid/spring     | Internal     | 4400         | 1,8 ... 10               | —                    | 0,85        | 1           | SXE9575-181-0#K                    |
|    | 1         | —              | Solenoid/spring     | External *3) | 1230         | -0,9 ... 16              | 1,8 ... 10           | 0,33        | 1           | SXE9573-176-0#K                    |
|                                                                                     | 2         | —              | Solenoid/spring     | External *3) | 2450         | -0,9 ... 16              | 1,8 ... 10           | 0,59        | 1           | SXE9574-176-0#K                    |
|                                                                                     | 3         | —              | Solenoid/spring     | External *3) | 4400         | -0,9 ... 16              | 1,8 ... 10           | 0,85        | 1           | SXE9575-176-0#K                    |
|                                                                                     | 1         | Built-in       | Solenoid/spring     | External *3) | 1230         | -0,9 ... 16              | 1,8 ... 10           | 0,33        | 1           | SXE9573-186-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/spring     | External *3) | 2450         | -0,9 ... 16              | 1,8 ... 10           | 0,59        | 1           | SXE9574-186-0#K                    |
|                                                                                     | 3         | —              | Solenoid/spring     | External *3) | 4400         | -0,9 ... 16              | 1,8 ... 10           | 0,85        | 1           | SXE9575-186-0#K                    |
|   | 1         | —              | Solenoid/solenoid   | Internal     | 1230         | 2 ... 10                 | —                    | 0,45        | 2           | SXE0573-150-0#K                    |
|                                                                                     | 2         | —              | Solenoid/solenoid   | Internal     | 2450         | 2 ... 10                 | —                    | 0,72        | 2           | SXE0574-150-0#K                    |
|                                                                                     | 3         | —              | Solenoid/solenoid   | Internal     | 4400         | 2 ... 10                 | —                    | 0,96        | 2           | SXE0575-150-0#K                    |
|                                                                                     | 1         | Built-in       | Solenoid/solenoid   | Internal     | 1230         | 2 ... 10                 | —                    | 0,45        | 2           | SXE0573-160-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid   | Internal     | 2450         | 2 ... 10                 | —                    | 0,72        | 2           | SXE0574-160-0#K                    |
|                                                                                     | 3         | —              | Solenoid/solenoid   | Internal     | 4400         | 2 ... 10                 | —                    | 0,96        | 2           | SXE0575-160-0#K                    |
|  | 1         | —              | Solenoid/solenoid   | External *3) | 1230         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE0573-155-0#K                    |
|                                                                                     | 2         | —              | Solenoid/solenoid   | External *3) | 2450         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE0574-155-0#K                    |
|                                                                                     | 3         | —              | Solenoid/solenoid   | External *3) | 4400         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE0575-155-0#K                    |
|                                                                                     | 1         | Built-in       | Solenoid/solenoid   | External *3) | 1230         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE0573-165-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid   | External *3) | 2450         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE0574-165-0#K                    |
|                                                                                     | 3         | —              | Solenoid/solenoid   | External *3) | 4400         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE0575-165-0#K                    |

# Insert code for manual override: 0 = push and turn to lock; 1 = push only

\*3) External pilot supply for ISO1 at port 14 only; ISO2 and ISO3 at port 12 or 14 (unconnected port 12 or 14 has to be plugged).

Note: Solenoids ordered separately - models see page 4

### 5/3 Solenoid pilot actuated valves – 10 bar models

| Symbol                                                                              | Port size | Flow regulator | Actuation         | Function | Pilot supply | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model End solenoid actuated valves |
|-------------------------------------------------------------------------------------|-----------|----------------|-------------------|----------|--------------|--------------|--------------------------|----------------------|-------------|-------------|------------------------------------|
|    | 1         | –              | Solenoid/solenoid | APB      | Internal     | 1320         | 2 ... 10                 | –                    | 0,45        | 2           | SXE9673-150-0#K                    |
|                                                                                     | 2         | –              | Solenoid/solenoid | APB      | Internal     | 2520         | 2 ... 10                 | –                    | 0,72        | 2           | SXE9674-150-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | APB      | Internal     | 4650         | 2 ... 10                 | –                    | 0,96        | 2           | SXE9675-150-0#K                    |
|    | 1         | Built-in       | Solenoid/solenoid | APB      | Internal     | 1320         | 2 ... 10                 | –                    | 0,45        | 2           | SXE9673-160-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid | APB      | Internal     | 2520         | 2 ... 10                 | –                    | 0,72        | 2           | SXE9674-160-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | APB      | External *3) | 4650         | 2 ... 10                 | –                    | 0,96        | 2           | SXE9675-150-0#K                    |
|    | 1         | –              | Solenoid/solenoid | APB      | External *3) | 1320         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE9673-155-0#K                    |
|                                                                                     | 2         | –              | Solenoid/solenoid | APB      | External *3) | 2520         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE9674-155-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | APB      | External *3) | 4650         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE9675-155-0#K                    |
|    | 1         | Built-in       | Solenoid/solenoid | APB      | External *3) | 1320         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE9673-165-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid | APB      | External *3) | 2520         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE9674-165-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | APB      | External *3) | 4650         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE9675-155-0#K                    |
|   | 1         | –              | Solenoid/solenoid | COE      | Internal     | 1320         | 2 ... 10                 | –                    | 0,45        | 2           | SXE9773-150-0#K                    |
|                                                                                     | 2         | –              | Solenoid/solenoid | COE      | Internal     | 2520         | 2 ... 10                 | –                    | 0,72        | 2           | SXE9774-150-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COE      | Internal     | 4650         | 2 ... 10                 | –                    | 0,96        | 2           | SXE9775-150-0#K                    |
|  | 1         | Built-in       | Solenoid/solenoid | COE      | Internal     | 1320         | 2 ... 10                 | –                    | 0,45        | 2           | SXE9773-160-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid | COE      | Internal     | 2520         | 2 ... 10                 | –                    | 0,72        | 2           | SXE9774-160-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COE      | External *3) | 4650         | 2 ... 10                 | –                    | 0,96        | 2           | SXE9775-150-0#K                    |
|  | 1         | –              | Solenoid/solenoid | COE      | External *3) | 1320         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE9773-155-0#K                    |
|                                                                                     | 2         | –              | Solenoid/solenoid | COE      | External *3) | 2520         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE9774-155-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COE      | External *3) | 4650         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE9775-155-0#K                    |
|  | 1         | Built-in       | Solenoid/solenoid | COE      | External *3) | 1320         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE9773-165-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid | COE      | External *3) | 2520         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE9774-165-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COE      | External *3) | 4650         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE9775-155-0#K                    |
|  | 1         | –              | Solenoid/solenoid | COP      | Internal     | 1320         | 2 ... 10                 | –                    | 0,45        | 2           | SXE9873-150-0#K                    |
|                                                                                     | 2         | –              | Solenoid/solenoid | COP      | Internal     | 2520         | 2 ... 10                 | –                    | 0,72        | 2           | SXE9874-150-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COP      | Internal     | 4650         | 2 ... 10                 | –                    | 0,96        | 2           | SXE9875-150-0#K                    |
|  | 1         | Built-in       | Solenoid/solenoid | COP      | Internal     | 1320         | 2 ... 10                 | –                    | 0,45        | 2           | SXE9873-160-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid | COP      | Internal     | 2520         | 2 ... 10                 | –                    | 0,72        | 2           | SXE9874-160-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COP      | External *3) | 4650         | 2 ... 10                 | –                    | 0,96        | 2           | SXE9875-150-0#K                    |
|  | 1         | –              | Solenoid/solenoid | COP      | External *3) | 1320         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE9873-155-0#K                    |
|                                                                                     | 2         | –              | Solenoid/solenoid | COP      | External *3) | 2520         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE9874-155-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COP      | External *3) | 4650         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE9875-155-0#K                    |
|  | 1         | Built-in       | Solenoid/solenoid | COP      | External *3) | 1320         | -0,9 ... 16              | 2 ... 10             | 0,45        | 2           | SXE9873-165-0#K                    |
|                                                                                     | 2         | Built-in       | Solenoid/solenoid | COP      | External *3) | 2520         | -0,9 ... 16              | 2 ... 10             | 0,72        | 2           | SXE9874-165-0#K                    |
|                                                                                     | 3         | –              | Solenoid/solenoid | COP      | External *3) | 4650         | -0,9 ... 16              | 2 ... 10             | 0,96        | 2           | SXE9875-155-0#K                    |

# Insert code for manual override: 0 = push and turn to lock; 1 = push only

\*3) External pilot supply for ISO1 at port 14 only; ISO2 and ISO3 at port 12 or 14 (unconnected port 12 or 14 has to be plugged).

Note: Solenoids ordered separately - models see page 4

Valve function: APB = All Ports Blocked

COE = Centre Open Exhaust

COP = Centre Open Pressure

### Option selector (solenoid actuated valves)

**SXE★★7★-1★-0★K**

| Valve function                             | Substitute        | Manual override                                          | Substitute        |
|--------------------------------------------|-------------------|----------------------------------------------------------|-------------------|
| 5/2 solenoid/solenoid, bistable valve      | <b>05</b>         | Push and turn to lock (standard)                         | <b>0</b>          |
| 5/2 solenoid/spring, monostable valve      | <b>95</b>         | Push only                                                | <b>1</b>          |
| 5/3 - APB                                  | <b>96</b>         | <b>Pilot supply</b>                                      | <b>Substitute</b> |
| 5/3 - COE                                  | <b>97</b>         | Internal (double solenoid or single solenoid/air spring) | <b>0</b>          |
| 5/3 - COP                                  | <b>98</b>         | Internal (single solenoid valve, mechanical spring)      | <b>1</b>          |
| <b>ISO size</b>                            | <b>Substitute</b> | External (double solenoid or single solenoid/air spring) | <b>5</b>          |
| ISO 1                                      | <b>3</b>          | External (single solenoid valve, mechanical spring)      | <b>6</b>          |
| ISO 2                                      | <b>4</b>          |                                                          |                   |
| ISO 3                                      | <b>5</b>          |                                                          |                   |
| <b>Integrated flow control</b>             | <b>Substitute</b> |                                                          |                   |
| Without flow regulator (double solenoid)   | <b>5</b>          |                                                          |                   |
| With flow regulator (double solenoid)      | <b>6</b>          |                                                          |                   |
| Without flow regulator (solenoid & spring) | <b>7</b>          |                                                          |                   |
| With flow regulator (solenoid & spring)    | <b>8</b>          |                                                          |                   |

## Solenoid actuators - ordered separately

|                                                                                  | Voltage       | Power consumption | Rated current | Ex-Protection | IP-Protection class (to EN 60529)                              | Temperature Ambient/Fluid (°C) | Electrical connection                 | Weight                                                | Dimension | Circuit diagram | Model     |           |           |
|----------------------------------------------------------------------------------|---------------|-------------------|---------------|---------------|----------------------------------------------------------------|--------------------------------|---------------------------------------|-------------------------------------------------------|-----------|-----------------|-----------|-----------|-----------|
|                                                                                  |               | (mA)              |               |               | Ex-Protection (ATEX-Category)                                  |                                |                                       | (kg)                                                  | No        | No              | Current   | Old       |           |
|  | 24 V d.c.*)   | 207               | 5,0 W         | II2G<br>II2D  | Ex mb IIC T4 Gb<br>Ex mb tb T130°C Db                          | -15 ... +50                    | Cable<br>H05V2V2-F 3G1<br>Length: 3 m | 0,3                                                   | 13        | 14              | 306002400 | TM3902-AT |           |
|                                                                                  | 48 V d.c.*)   | 98                | 4,7 W         |               |                                                                |                                |                                       |                                                       |           | 14              | 306004800 | —         |           |
|                                                                                  | 110 V d.c.*)  | 45                | 5,0 W         |               |                                                                |                                |                                       |                                                       |           | 14              | 306011000 | —         |           |
|                                                                                  | 24 V a.c. *)  | 192               | 4,6 VA        |               |                                                                |                                |                                       |                                                       |           | 15              | 306102450 | —         |           |
|                                                                                  | 48 V a.c. *)  | 98                | 4,7 VA        |               |                                                                |                                |                                       |                                                       |           | 15              | 306104850 | —         |           |
|                                                                                  | 110 V a.c. *) | 41                | 4,5 VA        | 15            | 306111050                                                      |                                |                                       |                                                       |           | TM3947-AT       |           |           |           |
|                                                                                  | 230 V a.c. *) | 22                | 5,1 VA        | 15            | 306123050                                                      |                                |                                       |                                                       |           | TM3948-AT       |           |           |           |
|                                                                                  | 24 V d.c.*)   | 115               | 2,8 W         | 14            | 306202400                                                      |                                |                                       |                                                       |           | TM2002-AT       |           |           |           |
|                                                                                  | 48 V d.c.*)   | 38                | 1,9 W         | 14            | 306204800                                                      |                                |                                       |                                                       |           | —               |           |           |           |
|                                                                                  | 110 V d.c.*)  | 23                | 2,6 W         | 14            | 306211000                                                      |                                |                                       |                                                       |           | —               |           |           |           |
|                                                                                  | 24 V a.c. *)  | 121               | 2,9 VA        | 15            | 306302450                                                      |                                |                                       |                                                       |           | TM2042-AT       |           |           |           |
|                                                                                  | 48 V a.c. *)  | 54                | 2,6 VA        | 15            | 306304850                                                      |                                |                                       |                                                       |           | TM2045-AT       |           |           |           |
|                                                                                  | 110 V a.c. *) | 21                | 2,3 VA        | 15            | 306311050                                                      |                                |                                       |                                                       |           | TM2047-AT       |           |           |           |
|                                                                                  | 230 V a.c. *) | 9                 | 2,1 VA        | 15            | 306323050                                                      |                                |                                       |                                                       |           | TM2048-AT       |           |           |           |
|  | 24 V d.c.     | 84                | 2,0 W         | II3G<br>II3D  | Ex nA IIC T5 Gc<br>Ex tc IIIC T95° Dc<br>IP65 (with connector) |                                | -15 ... +50                           | With special connector<br>DIN EN 175301-803<br>Form A | 0,3       | 12              | 1         | 304602400 | TM1702-AT |
|                                                                                  | 24 V 50Hz     | 166               | 4,0 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304702450 | TM1742-AT |
|                                                                                  | 24 V 60Hz     | 127               | 3,1 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304702450 | TM1742-AT |
|                                                                                  | 110 V 50Hz    | 36                | 4,0 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304711050 | TM1746-AT |
|                                                                                  | 110 V 60Hz    | 28                | 3,1 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304711050 | TM1746-AT |
|                                                                                  | 120 V 60Hz    | 33                | 4,0 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304711050 | TM1746-AT |
|                                                                                  | 230 V 50Hz    | 18                | 4,0 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304723050 | TM1748-AT |
|                                                                                  | 230 V 60Hz    | 14                | 3,1 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304723050 | TM1748-AT |
|                                                                                  | 240 V 60Hz    | 15                | 3,5 W         |               |                                                                |                                |                                       |                                                       |           |                 |           | 304723050 | TM1748-AT |

\*) With AC voltage a system frequency of 50...60 Hz is permitted with DC voltage a max ripple of 20% is permitted

Standard voltage tolerance +/-10%.

The maximum permitted ambient temperature of solenoids with a single coil is 40°C with battery installation and 50°C in the case of single installation.

Detail information in Operating instructions for solenoids Type 3046, 3047: 750347400000050.03.13

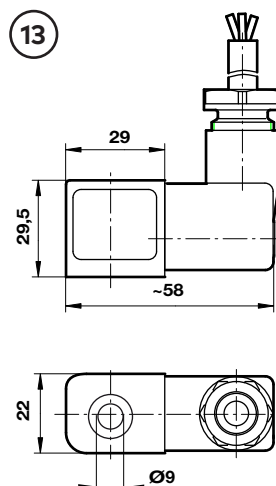
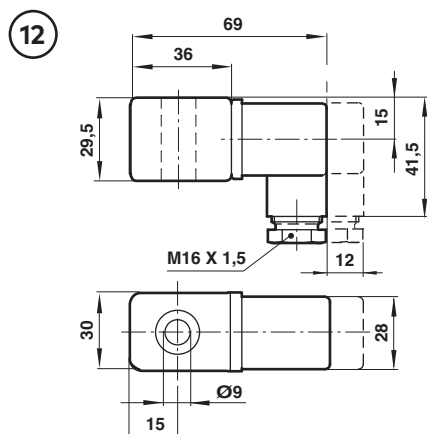
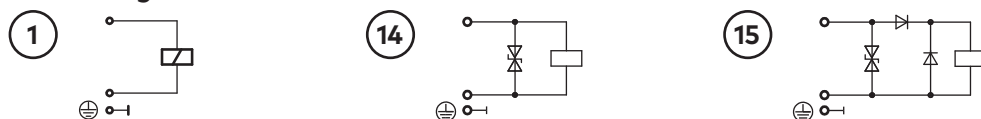
Detail information in Operating instructions for solenoids Type 306x: 750347300000050.01.13

Further version on request.

## Approvals

| Model | Approvals<br>ATEX  | IECEX | FM | Datasheet    |
|-------|--------------------|-------|----|--------------|
| 306x  | PTB 03 ATEX 2015 X | —     | —  | N/en 7.1.560 |

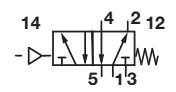
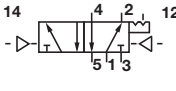
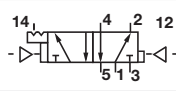
## Circuit diagramm



Dimensions in mm  
Projection/First angle

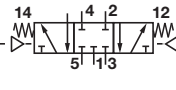
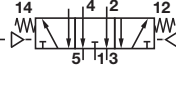
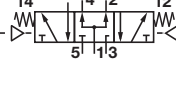


## 5/2 air pilot actuated valves

| Symbol                                                                            | Port size | Flow regulator | Actuation   | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model          |
|-----------------------------------------------------------------------------------|-----------|----------------|-------------|--------------|--------------------------|----------------------|-------------|-------------|----------------|
|  | 1         | –              | Air/spring  | 1230         | -0,9 ... 16              | 1,8 ... 16           | 0,21        | 5           | SXP9573-170-00 |
|                                                                                   | 2         | –              | Air/spring  | 2450         | -0,9 ... 16              | 1,8 ... 16           | 0,45        | 5           | SXP9574-170-00 |
|                                                                                   | 3         | –              | Air/spring  | 4400         | -0,9 ... 16              | 1,8 ... 16           | 0,72        | 5           | SXP9575-170-00 |
|                                                                                   | 1         | Built-in       | Air/spring  | 1230         | -0,9 ... 16              | 1,8 ... 16           | 0,21        | 5           | SXP9573-180-00 |
|                                                                                   | 2         | Built-in       | Air/spring  | 2450         | -0,9 ... 16              | 1,8 ... 16           | 0,45        | 5           | SXP9574-180-00 |
|                                                                                   | 3         | Built-in       | Air/spring  | 4400         | -0,9 ... 16              | 1,8 ... 16           | 0,72        | 5           | SXP9575-180-00 |
|  | 1         | –              | Air/air     | 1230         | -0,9 ... 16              | 2 ... 16             | 0,30        | 6           | SXP0573-170-00 |
|                                                                                   | 2         | –              | Air/air     | 2450         | -0,9 ... 16              | 2 ... 16             | 0,50        | 6           | SXP0574-170-00 |
|                                                                                   | 3         | –              | Air/air     | 4400         | -0,9 ... 16              | 2 ... 16             | 0,72        | 6           | SXP0575-170-00 |
|                                                                                   | 1         | Built-in       | Air/air     | 1230         | -0,9 ... 16              | 2 ... 16             | 0,30        | 6           | SXP0573-180-00 |
|                                                                                   | 2         | Built-in       | Air/air     | 2450         | -0,9 ... 16              | 2 ... 16             | 0,50        | 6           | SXP0574-180-00 |
|                                                                                   | 3         | Built-in       | Air/air     | 4400         | -0,9 ... 16              | 2 ... 16             | 0,72        | 6           | SXP0575-180-00 |
|  | 1         | –              | Air/air *2) | 1230         | -0,9 ... 16              | 2 ... 16             | 0,30        | 6           | SXP1573-170-00 |
|                                                                                   | 2         | –              | Air/air *2) | 2450         | -0,9 ... 16              | 2 ... 16             | 0,50        | 6           | SXP1574-170-00 |
|                                                                                   | 3         | –              | Air/air *2) | 4400         | -0,9 ... 16              | 2 ... 16             | 0,72        | 6           | SXP1575-170-00 |

\*2) Pilot side 14 priority

## 5/3 air pilot actuated valves

| Symbol                                                                              | Port size | Flow regulator | Actuation | Function | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model          |
|-------------------------------------------------------------------------------------|-----------|----------------|-----------|----------|--------------|--------------------------|----------------------|-------------|-------------|----------------|
|   | 1         | –              | Air/air   | APB      | 1230         | -0,9 ... 16              | 1,8 ... 16           | 0,25        | 6           | SXP9673-170-00 |
|                                                                                     | 2         | –              | Air/air   | APB      | 2450         | -0,9 ... 16              | 1,8 ... 16           | 0,58        | 6           | SXP9674-170-00 |
|                                                                                     | 3         | –              | Air/air   | APB      | 4400         | -0,9 ... 16              | 1,8 ... 16           | 0,8         | 6           | SXP9675-170-00 |
|                                                                                     | 1         | Built-in       | Air/air   | APB      | 1230         | -0,9 ... 16              | 1,8 ... 16           | 0,25        | 6           | SXP9673-180-00 |
|                                                                                     | 2         | Built-in       | Air/air   | APB      | 2450         | -0,9 ... 16              | 1,8 ... 16           | 0,58        | 6           | SXP9674-180-00 |
|                                                                                     | 3         | Built-in       | Air/air   | APB      | 4400         | -0,9 ... 16              | 1,8 ... 16           | 0,8         | 6           | SXP9675-180-00 |
|  | 1         | –              | Air/air   | COE      | 1230         | -0,9 ... 16              | 2 ... 16             | 0,25        | 6           | SXP9773-170-00 |
|                                                                                     | 2         | –              | Air/air   | COE      | 2450         | -0,9 ... 16              | 2 ... 16             | 0,58        | 6           | SXP9774-170-00 |
|                                                                                     | 3         | –              | Air/air   | COE      | 4400         | -0,9 ... 16              | 2 ... 16             | 0,80        | 6           | SXP9775-170-00 |
|                                                                                     | 1         | Built-in       | Air/air   | COE      | 1230         | -0,9 ... 16              | 2 ... 16             | 0,25        | 6           | SXP9773-180-00 |
|                                                                                     | 2         | Built-in       | Air/air   | COE      | 2450         | -0,9 ... 16              | 2 ... 16             | 0,58        | 6           | SXP9774-180-00 |
|                                                                                     | 3         | Built-in       | Air/air   | COE      | 4400         | -0,9 ... 16              | 2 ... 16             | 0,80        | 6           | SXP9775-180-00 |
|  | 1         | –              | Air/air   | COP      | 1230         | -0,9 ... 16              | 2 ... 16             | 0,25        | 6           | SXP9873-170-00 |
|                                                                                     | 2         | –              | Air/air   | COP      | 2450         | -0,9 ... 16              | 2 ... 16             | 0,58        | 6           | SXP9874-170-00 |
|                                                                                     | 3         | –              | Air/air   | COP      | 4400         | -0,9 ... 16              | 2 ... 16             | 0,80        | 6           | SXP9875-170-00 |
|                                                                                     | 1         | Built-in       | Air/air   | COP      | 1230         | -0,9 ... 16              | 2 ... 16             | 0,25        | 6           | SXP9873-180-00 |
|                                                                                     | 2         | Built-in       | Air/air   | COP      | 2450         | -0,9 ... 16              | 2 ... 16             | 0,58        | 6           | SXP9874-180-00 |
|                                                                                     | 3         | Built-in       | Air/air   | COP      | 4400         | -0,9 ... 16              | 2 ... 16             | 0,80        | 6           | SXP9875-180-00 |

Valve function: APB = All Ports Blocked,  
COE = Centre Open Exhaust,  
COP = Centre Open Pressure

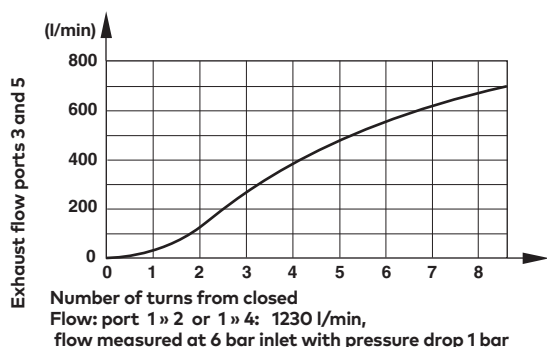
## Option selector (air pilot actuated valves)

| Valve function                                        | Substitute | Integrated flow control | Substitute |
|-------------------------------------------------------|------------|-------------------------|------------|
| 5/2 pilot/pilot, bistable valve                       | 05         | Without                 | 7          |
| 5/2 pilot/pilot, bistable valve with side 14 priority | 15         | With                    | 8          |
| 5/2 pilot/spring, monostable valve                    | 95         |                         |            |
| 5/3 - APB                                             | 96         |                         |            |
| 5/3 - COE                                             | 97         |                         |            |
| 5/3 - COP                                             | 98         |                         |            |
| ISO size                                              | Substitute |                         |            |
| ISO 1                                                 | 3          |                         |            |
| ISO 2                                                 | 4          |                         |            |
| ISO 3                                                 | 5          |                         |            |

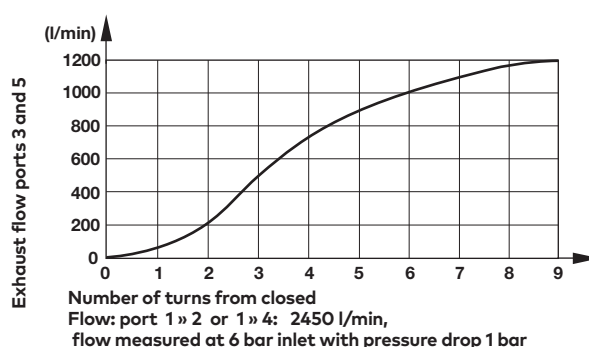
SXP★7★-1★0-00

## Exhaust flow characteristics for valves with integral flow regulators

ISO 1



ISO 2



## ATEX permissible accessories

Following accessories of the ISO\*STAR series are applicable in Ex zones 1, 2, 21 and 22:

Sub-bases, end plates and blanking disc - VDMA 24345 sub-base options

|          | Single station sub-base, Form A side ported |                | Single station sub-base Form B bottom ported |  | Modular sub-base Form C |            | Form D End plates |            | Blanking disc for VDMA sub-bases *1) |            |
|----------|---------------------------------------------|----------------|----------------------------------------------|--|-------------------------|------------|-------------------|------------|--------------------------------------|------------|
| ISO size | Page 8                                      |                | Page 8                                       |  | Page 8                  |            | Page 8            |            | Page 9                               |            |
|          | ISO G thread                                | NPT thread     | ISO G thread                                 |  | ISO G thread            | NPT thread | ISO G thread      | NPT thread | ISO G thread                         | NPT thread |
| 1        | M/P19126 (1/4)                              | C/P19126 (1/4) | M/P19125 (1/4)                               |  | CQM/22152/3/21          | 239-238B   | CQM/22152/3/22    | 239-289B   | FP 8382                              | 239-251    |
| 2        | M/P19132 (3/8)                              | C/P19132 (3/8) | M/P19131 (3/8)                               |  | CQM/22253/3/21          | 239-242B   | CQM/22253/3/22    | 239-291B   | FP 8482                              | 239-252    |
| 3        | M/P19138 (1/2)                              | C/P19138 (1/2) | M/P19137 (1/2)                               |  | CQM/22354/3/21          | 239-246B   | CQM/22354/3/22    | 239-293B   | FP 8582                              | 239-253    |

## Universal sub-base options for ISO G parallel threads only

|          | Modular base with side, end and bottom ports open |  | Universal end plate, all ports blocked |  | Universal end plate, side ports open |  | Transition plate from ISO 1 » ISO 2 |  | Blanking disk for ISO 1 and ISO 2 |  |
|----------|---------------------------------------------------|--|----------------------------------------|--|--------------------------------------|--|-------------------------------------|--|-----------------------------------|--|
| ISO size | Page 10                                           |  | Page 10                                |  | Page 10                              |  | Page 10                             |  | Page 10                           |  |
| 1        | CQM/22152/3/27 (G1/4)                             |  | CQM/22152/28 (G1/4)                    |  | CQM/22152/3/31 (G1/4)                |  | CQM/22152/3/29                      |  | M/P43173                          |  |
| 2        | CQM/22253/3/27 (G3/8)                             |  | CQM/22153/28 (G3/8)                    |  | CQM/22253/3/31 (G3/8)                |  | CQM/22152/3/29                      |  | M/P43174                          |  |

## Accessories for ISO G parallel and NPT threads

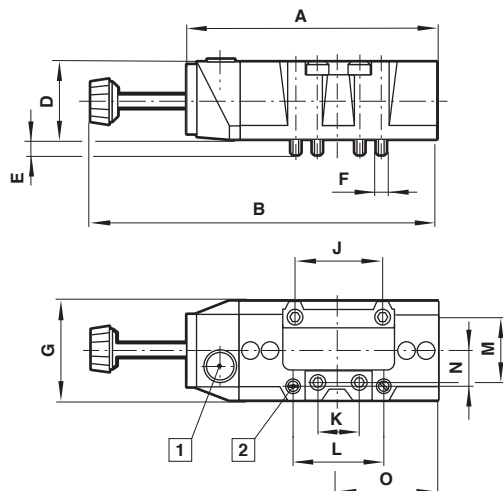
|          | Blanking plate for VDMA and universal sub-bases |  | Transition plate for VDMA sub-bases |  | Flow regulator plate, ports 3 and 5 regulated |  |
|----------|-------------------------------------------------|--|-------------------------------------|--|-----------------------------------------------|--|
| ISO size | Page 9                                          |  | Page 9                              |  | Page 13                                       |  |
| 1        | CQM/22152/3/23                                  |  | CQM/22152/3/24 (1 » 2)              |  | —                                             |  |
| 2        | CQM/22253/3/23                                  |  | CQM/22253/3/24 (2 » 3)              |  | —                                             |  |
| 3        | CQM/22354/3/23                                  |  | FP8570 (1 » 3)                      |  | CQM/22354/3/26                                |  |

## Sandwich plates - ISO size 1

|          | Single pressure regulator plate, port 1 regulated |  | Single pressure regulator plate, port 1 regulated |  | Single pressure regulator plate, port 2 regulated |  | Single pressure regulator plate, port 4 regulated |  | Double pressure regulator plate, port 2 & 4 regulated |  |
|----------|---------------------------------------------------|--|---------------------------------------------------|--|---------------------------------------------------|--|---------------------------------------------------|--|-------------------------------------------------------|--|
| ISO size | Page 11                                           |  | Page 11                                           |  | Page 11                                           |  | Page 11                                           |  | Page 12                                               |  |
| 1        | V71010-KB1 (Regulator on side 14)                 |  | V71011-KB1 (Regulator on side 12)                 |  | V71012-KB2                                        |  | V71012-KB3                                        |  | V71012-KB4                                            |  |

### SXE 957\*-A models Single end solenoid pilot valves

1



### Single end solenoid pilot valves

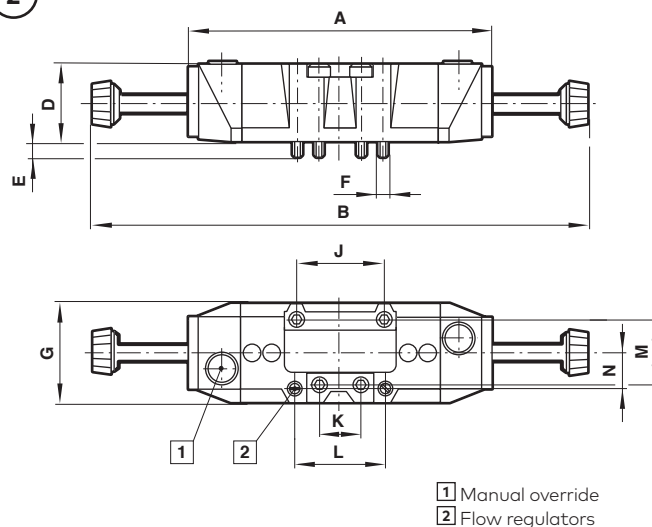
| ISO size | A   | B   | D  | E    | F    | G    | H             | J  |
|----------|-----|-----|----|------|------|------|---------------|----|
| 1        | 107 | 144 | 33 | 7,5  | M5   | 42   | 22            | 36 |
| 2        | 135 | 173 | 42 | 8    | M6   | 55   | 22            | 48 |
| 3        | 158 | 197 | 43 | 11,5 | M8   | 62,5 | 22            | 64 |
| ISO size | K   | L   | M  | N    | O    | kg   | Model         |    |
| 1        | 18  | 38  | 28 | 15   | 42   | 0,33 | SXE 9573-A... |    |
| 2        | 24  | 48  | 38 | 20   | 53   | 0,59 | SXE 9574-A... |    |
| 3        | 32  | -   | 48 | -    | 65,5 | 0,85 | SXE 9575-A... |    |

### SXE 057\*-A and SXE9\*7\*-A models Double end solenoid pilot valves

Dimensions in mm  
Projection/First angle



2

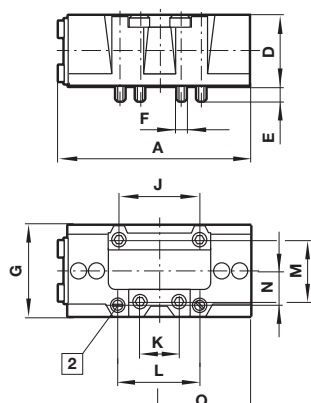


### Double end solenoid pilot valves

| ISO size | A   | B   | D  | E    | F    | G                           | H  | J  | K  |
|----------|-----|-----|----|------|------|-----------------------------|----|----|----|
| 1        | 129 | 204 | 33 | 7,5  | M5   | 42                          | 22 | 36 | 18 |
| 2        | 163 | 239 | 42 | 8    | M6   | 55                          | 22 | 48 | 24 |
| 3        | 185 | 263 | 43 | 11,5 | M8   | 62,5                        | 22 | 64 | 32 |
| ISO size | L   | M   | N  | O    | kg   | Model                       |    |    |    |
| 1        | 38  | 28  | 15 | 42   | 0,45 | SXE 0573-A..., SXE 973-A... |    |    |    |
| 2        | 48  | 38  | 20 | 53   | 0,72 | SXE 0574-A..., SXE 974-A... |    |    |    |
| 3        | -   | 48  | -  | 65,5 | 0,96 | SXE 0575-A..., SXE 975-A... |    |    |    |

### SXP957\* models Single air pilot valve

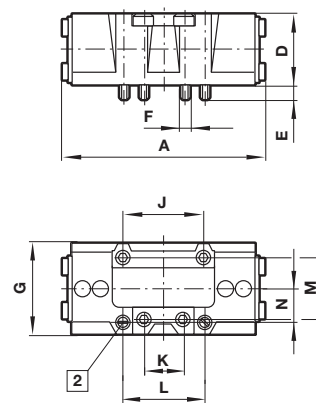
5



| ISO size | A    | D  | E    | F  | G    | J  | K  | M  | kg  | Model          |
|----------|------|----|------|----|------|----|----|----|-----|----------------|
| 1        | 92,5 | 33 | 7,5  | M5 | 42   | 36 | 18 | 28 | 0,3 | SXP9573-170-00 |
| 2        | 118  | 42 | 7    | M6 | 55,5 | 48 | 24 | 38 | 0,5 | SXP9574-170-00 |
| 3        | 134  | 43 | 11,5 | M8 | 62,5 | 64 | 32 | 48 | 0,7 | SXP9575-170-00 |

### SXP057\*, SXP967\*, SXP977\* models Double air pilot valve

6



| ISO size | A    | D  | E    | F  | G    | J  | K  | M  | kg  | Model          |
|----------|------|----|------|----|------|----|----|----|-----|----------------|
| 1        | 88,5 | 33 | 7,5  | M5 | 42   | 36 | 18 | 28 | 0,2 | SXP0573-170-00 |
| 1        | 92,5 | 33 | 7,5  | M5 | 42   | 36 | 18 | 28 | 0,3 | SXP973-170-00  |
| 2        | 111  | 42 | 7    | M6 | 55,5 | 48 | 24 | 38 | 0,4 | SXP0574-170-00 |
| 2        | 118  | 42 | 7    | M6 | 55,5 | 48 | 24 | 38 | 0,5 | SXP974-170-00  |
| 3        | 134  | 43 | 11,5 | M8 | 62,5 | 64 | 32 | 48 | 0,7 | SXP0575-170-00 |
| 3        | 134  | 43 | 11,5 | M8 | 62,5 | 64 | 32 | 48 | 0,7 | SXP975-170-00  |



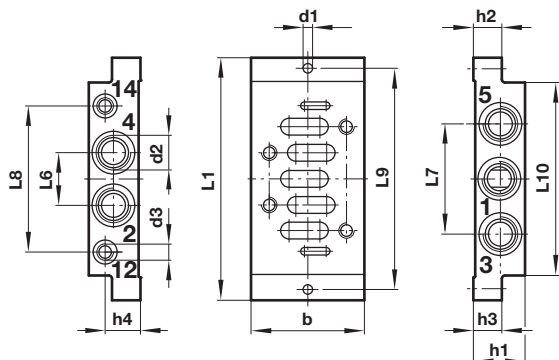
## Sub-bases and end plates

Dimensions in mm  
Projection/First angle



### VDMA 24345 sub-base options

#### Single station sub-base side ported (Form A) for ISO G and NPT threads



| ISO size | b  | d1  | d2   | d3   | h1 | h2 | h3          | Model    |
|----------|----|-----|------|------|----|----|-------------|----------|
| 1        | 48 | 5,5 | 1/4" | 1/8" | 32 | 10 | 10,5 (21,5) | #/P19126 |
| 2        | 57 | 6,6 | 3/8" | 1/8" | 40 | 13 | 14 (26)     | #/P19132 |
| 3        | 71 | 6,6 | 1/2" | 1/8" | 32 | 18 | 18          | #/P19138 |

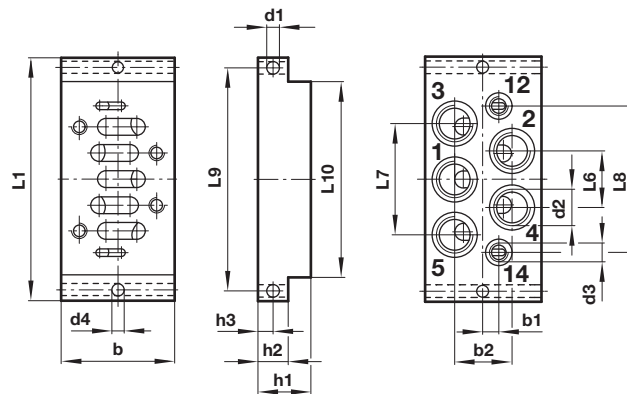
| ISO size | h4   | L1  | L6 | L7 | L8 | L9  | L10 | kg   | Model    |
|----------|------|-----|----|----|----|-----|-----|------|----------|
| 1        | 23,5 | 110 | 24 | 43 | 58 | 98  | 84  | 0,16 | #/P19126 |
| 2        | 30   | 124 | 30 | 56 | 74 | 112 | 95  | 0,28 | #/P19132 |
| 3        | 22   | 149 | 32 | 68 | 90 | 136 | 119 | 0,36 | #/P19138 |

( ) Dimension for ports 3 and 5.

# Insert 'M' for ISO G parallel or 'C' for NPT threads

### Single station sub-base

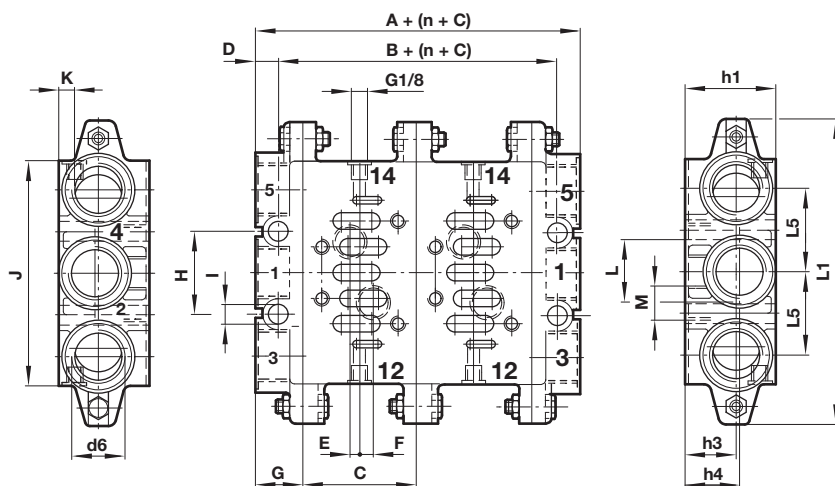
#### bottom ported (Form B) for ISO G and NPT threads



| ISO size | b  | b1 | b2 | d1  | d2   | d3   | d4   | h1 | Model    |
|----------|----|----|----|-----|------|------|------|----|----------|
| 1        | 46 | 7  | 23 | 5,5 | 1/4" | 1/8" | 5,5  | 30 | #/P19125 |
| 2        | 56 | 8  | 27 | 6,6 | 3/8" | 1/8" | 6,6  | 35 | #/P19131 |
| 3        | 71 | 10 | 34 | 6,6 | 1/2" | 1/8" | 6,69 | 32 | #/P19137 |

| ISO size | h2 | h3  | L1  | L6 | L7 | L8 | L9  | L10 | kg   | Model    |
|----------|----|-----|-----|----|----|----|-----|-----|------|----------|
| 1        | 10 | 5   | 110 | 23 | 46 | 62 | 98  | 84  | 0,19 | #/P19125 |
| 2        | 13 | 6,5 | 124 | 28 | 56 | 73 | 112 | 95  | 0,32 | #/P19131 |
| 3        | 18 | 9   | 149 | 34 | 68 | 90 | 136 | 119 | 0,40 | #/P19137 |

### Modular sub-bases (Form C) and end plates (Form D) for ISO G and NPT threads



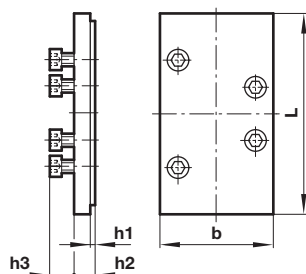
| ISO size | A  | B  | C  | D  | E   | F   | G  | H  | I  | kg   | Model ISO G thread | Model NPT thread |
|----------|----|----|----|----|-----|-----|----|----|----|------|--------------------|------------------|
| 1        | 44 | 22 | 43 | 11 | 1,5 | 7,5 | 22 | 28 | 7  | 0,24 | CQM/22152/3/21     | 239-238B         |
| 2        | 52 | 26 | 56 | 13 | 5   | 6   | 26 | 35 | 9  | 0,36 | CQM/22253/3/21     | 239-242B         |
| 3        | 60 | 30 | 71 | 15 | 6   | 8   | 30 | 52 | 12 | 0,72 | CQM/22354/3/21     | 239-246B         |

| ISO size | J   | K   | L  | M    | h1 | h3 | h4 | L1  | L5 | d6   | kg   | Model ISO G thread | Model NPT thread |
|----------|-----|-----|----|------|----|----|----|-----|----|------|------|--------------------|------------------|
| 1        | 85  | 8,5 | 26 | G1/4 | 46 | 21 | 24 | 110 | 28 | 3/8" | 0,22 | CQM/22152/3/22     | 239-289B         |
| 2        | 100 | 9   | 30 | G3/8 | 47 | 22 | 24 | 135 | 28 | 1/2" | 0,34 | CQM/22253/3/22     | 239-291B         |
| 3        | 140 | 10  | 38 | G1/2 | 56 | 31 | 34 | 190 | 52 | 1"   | 0,66 | CQM/22354/3/22     | 239-293B         |



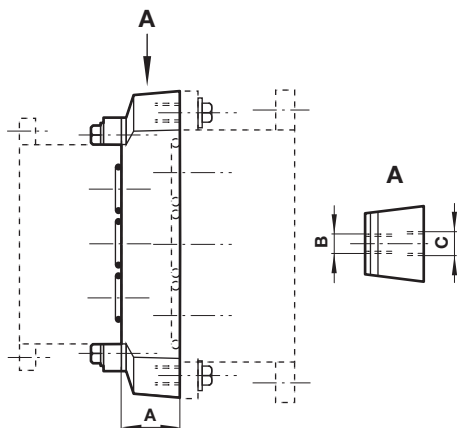
## Blanking plate for VDMA & universal sub-bases with ISO G and NPT threads

Dimensions in mm  
Projection/First angle



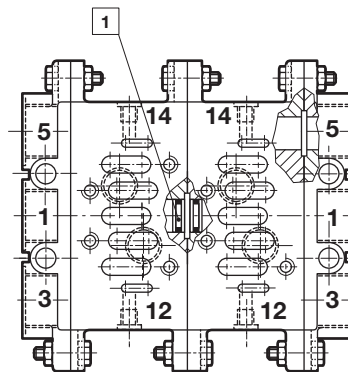
| ISO size | b  | L   | h1  | h2   | h3   | kg   | Model          |
|----------|----|-----|-----|------|------|------|----------------|
| 1        | 42 | 80  | 2   | 14   | 11   | 0,05 | CQM/22152/3/23 |
| 2        | 55 | 85  | 2,5 | 12,5 | 13,5 | 0,09 | CQM/22253/3/23 |
| 3        | 70 | 106 | 2,5 | 12,5 | 15,5 | 0,26 | CQM/22354/3/23 |

## Transition plate from ISO 1 » ISO 2, ISO 2 » ISO 3 and ISO 1 » ISO 3 for VDMA sub-bases for ISO G and NPT threads



| ISO size | A  | B  | C  | kg   | Model          |
|----------|----|----|----|------|----------------|
| 1 » 2    | 25 | M5 | M6 | 0,35 | CQM/22152/3/24 |
| 2 » 3    | 40 | M6 | M8 | 0,65 | CQM/22253/3/24 |
| 1 » 3    | 34 | M5 | M8 | 0,90 | FP8570         |

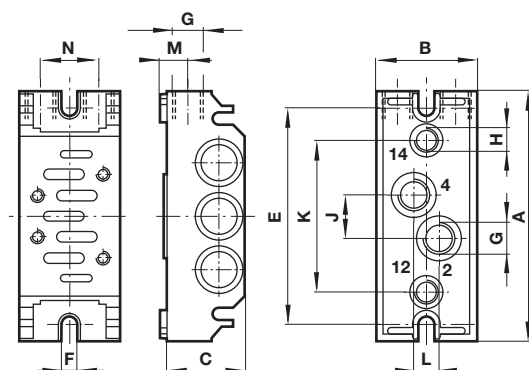
## Blanking disc FP8382, FP8482 & FP8582 for ISO G thread 239-251, 239-252 & 239-253 for NPT thread



1 Blanking disc; FP8\*82 or 239-25\*

## Universal sub-base options for ISO G threads only

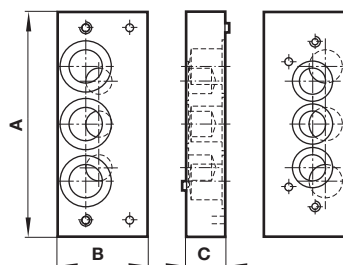
### Modular base with side, end and bottom ports open



| ISO size | A   | B  | C  | E   | F   | G    | H    | J  | K  | L  | M  | N  | kg   | Model          |
|----------|-----|----|----|-----|-----|------|------|----|----|----|----|----|------|----------------|
| 1        | 106 | 43 | 36 | 92  | 5,5 | G1/4 | G1/8 | 18 | 64 | 11 | 12 | 28 | 0,16 | CQM/22152/3/27 |
| 2        | 120 | 56 | 43 | 102 | 6,5 | G3/8 | G1/8 | 24 | 68 | 19 | 15 | 38 | 0,35 | CQM/22253/3/27 |

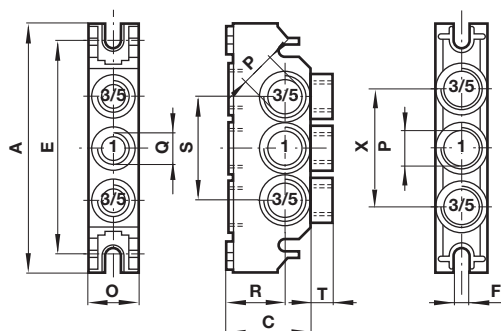
### Transition plate from ISO 1 » ISO 2

Dimensions in mm  
Projection/First angle



| ISO size | A   | B  | C  | kg   | Model          |
|----------|-----|----|----|------|----------------|
| 1 2      | 114 | 46 | 20 | 0,23 | CQM/22152/3/29 |

### Universal end plate, all ports blocked

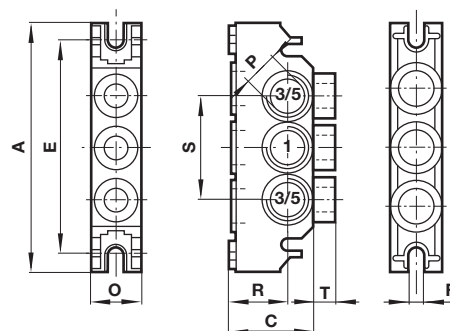


| ISO size | A   | C  | E   | F   | O  | P    | Q    | R  | S  | T | X  | kg   | Model          |
|----------|-----|----|-----|-----|----|------|------|----|----|---|----|------|----------------|
| 1        | 106 | 36 | 92  | 5,5 | 22 | G3/8 | G1/4 | 25 | 44 | 9 | 50 | 0,13 | CQM/22152/3/28 |
| 2        | 120 | 46 | 102 | 6,5 | 29 | G1/2 | G1/4 | 31 | 58 | 7 | 58 | 0,23 | CQM/22253/3/28 |

Drill dimensions for opening ports

|      |      |
|------|------|
| G1/4 | Ø 8  |
| G3/8 | Ø 15 |
| G1/2 | Ø 15 |

### Universal end plate, side ports open



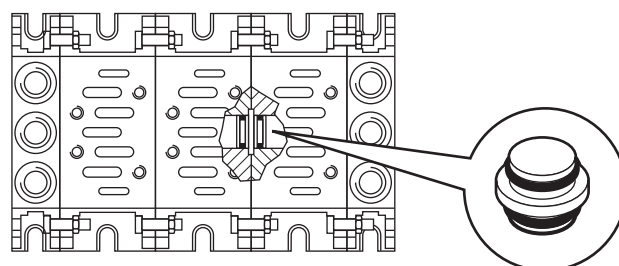
| ISO size | A   | C  | E   | F   | O  | P    | Q    | R  | S  | T | X  | kg   | Model          |
|----------|-----|----|-----|-----|----|------|------|----|----|---|----|------|----------------|
| 1        | 106 | 36 | 92  | 5,5 | 22 | G3/8 | G1/4 | 25 | 44 | 9 | 50 | 0,13 | CQM/22152/3/31 |
| 2        | 120 | 46 | 102 | 6,5 | 29 | G1/2 | G1/4 | 31 | 58 | 7 | 58 | 0,23 | CQM/22253/3/31 |

Drill dimensions for opening ports

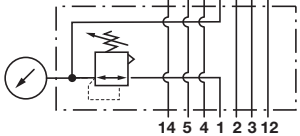
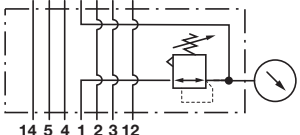
|      |      |
|------|------|
| G1/4 | Ø 8  |
| G3/8 | Ø 15 |
| G1/2 | Ø 15 |

### Blanking disc for ISO 1 and ISO 2 universal sub-bases

| ISO size | kg   | Model    |
|----------|------|----------|
| 1        | 0,01 | M/P43173 |
| 2        | 0,03 | M/P43174 |



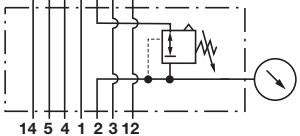
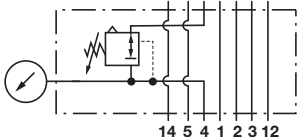
### Sandwich single pressure regulator plate with pressure regulator on port 1

| Symbol                                                                            | ISO size | Regulator on side | Operation                                        | Inlet pressure max. (bar) | Pressure range (bar) | Weight (kg) | Model      |
|-----------------------------------------------------------------------------------|----------|-------------------|--------------------------------------------------|---------------------------|----------------------|-------------|------------|
|  | 1        | 14                | Membrane pressure regulator with relieving valve | 16                        | 0,5 ... 12           | 0,6         | V71010-KB1 |
|  | 1        | 12                | Membrane pressure regulator with relieving valve | 16                        | 0,5 ... 12           | 0,6         | V71011-KB1 |

Application:  
Pressure of port 1 can be regulated individually by using this intermediate plate.

Note:  
Adjustment knob has push to lock feature.

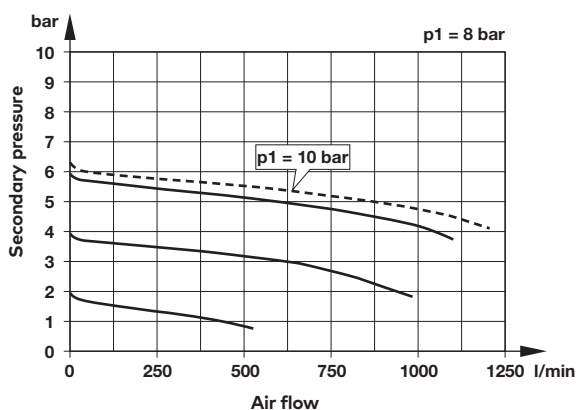
### Sandwich single pressure regulator plate with pressure regulator on port 2 or port 4

| Symbol                                                                              | ISO size | Regulated port | Operation                                        | Inlet pressure max. (bar) | Pressure range (bar) | Weight (kg) | Model      |
|-------------------------------------------------------------------------------------|----------|----------------|--------------------------------------------------|---------------------------|----------------------|-------------|------------|
|    | 1        | 2              | Membrane pressure regulator with relieving valve | 16                        | 0,5 ... 12           | 0,39        | V71012-KB2 |
|  | 1        | 4              | Membrane pressure regulator with relieving valve | 16                        | 0,5 ... 12           | 0,39        | V71012-KB3 |

Application:  
Pressure of port 2 and 4 can be regulated individually by using this intermediate plate.

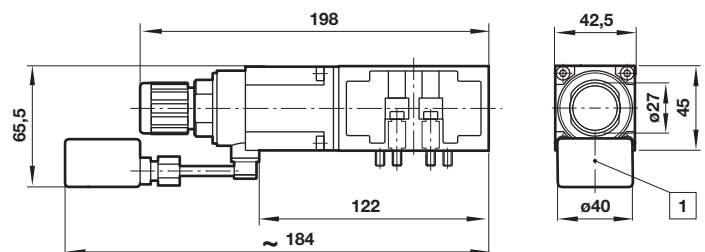
Note:  
Adjustment knob has push to lock feature.

### Flow characteristics (inlet pressure: 8 bar)



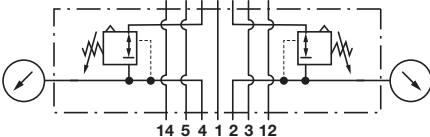
### Dimensions

Dimensions in mm  
Projection/First angle



1 Gauge

## Sandwich double pressure regulator plate with double pressure regulator on port 2 and 4

| Symbol                                                                           | ISO size | Regulated port | Operation                                        | Inlet pressure max. (bar) | Pressure range (bar) | Weight (kg) | Model      |
|----------------------------------------------------------------------------------|----------|----------------|--------------------------------------------------|---------------------------|----------------------|-------------|------------|
|  | 1        | 2 and 4        | Membrane pressure regulator with relieving valve | 16                        | 0,5 ... 12           | 0,39        | V71012-KB4 |

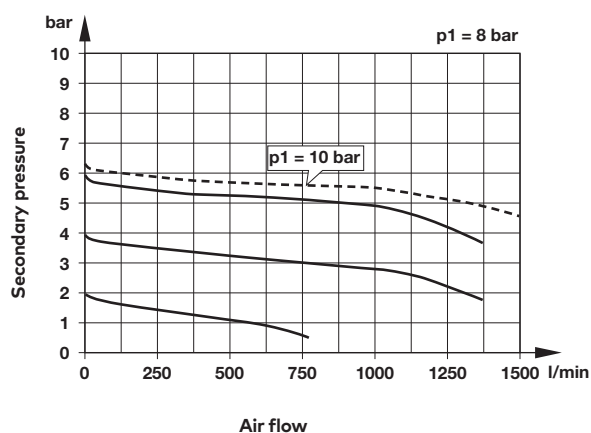
### Application:

Pressure of ports 2 and 4 can be regulated individually by using one of the intermediate plates.

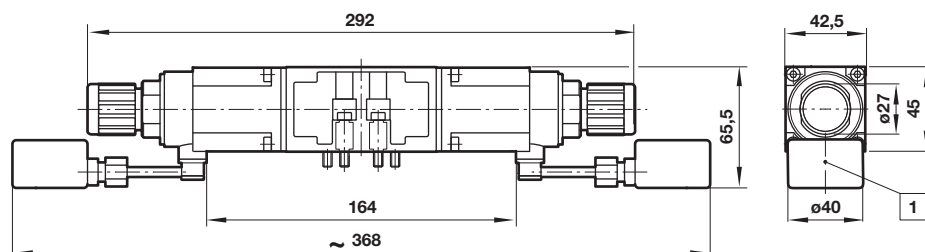
### Note:

Adjustment knob has push to lock feature.

## Flow characteristics (inlet pressure: 8 bar)



## Dimensions

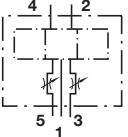


Dimensions in mm  
Projection/First angle



1 Gauge

## Flow regulator plate

| Symbol                                                                            | ISO size | Regulated port | Operation        | Inlet pressure max. (bar) | Weight (kg) | Model          |
|-----------------------------------------------------------------------------------|----------|----------------|------------------|---------------------------|-------------|----------------|
|  | 3        | 3 and 5        | Piston regulator | -0,9 ... 16               | 0,86        | CQM/22354/3/26 |

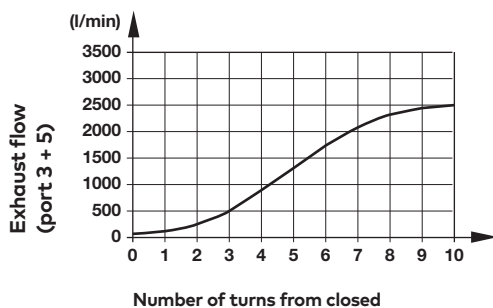
### Application:

Regulation of exhaust ports 3 and 5 allows easy cylinder speed control.

### Note:

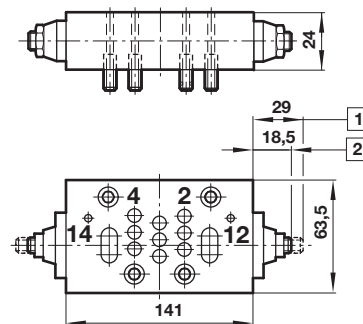
The regulator screw can be locked with the lock nut.

## Flow characteristics (inlet pressure: 8 bar)



## Dimensions

Dimensions in mm  
Projection/First angle



## Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under **»Technical features/data«**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.