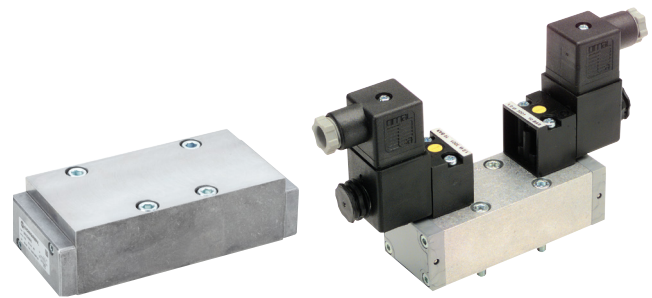


- > **Sub-base mounted, ISO 5599-1 sizes 1, 2, 3 and 4**
- > **Steel reinforced main seals**
- > **16 bar and 10 bar CNOMO solenoid pilots with locking or non-locking manual override**
- > **Low power coils (1,5 W)**
- > **Wide range of sub-bases and accessories**



Technical features

Medium:

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

Operation:

Spool valve, solenoid pilot or air pilot actuated

Mounting:

On sub-bases

Sizes:

ISO 1, 2, 3 and 4

Maximum operating pressure:

Solenoid pilot actuated valves
10 bar (145 psi)

Air pilot actuated valves and solenoid pilot actuated valves

16 bar (232 psi)

Details of minimum and maximum pilot pressure see overleaf

Ambient/Media temperature:

Solenoid pilot actuated valves
-10 ... +50°C (+14 ... +122°F)

Air pilot actuated valves
-10 ... +80°C (+14 ... +176°F)

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

Materials:

Body: aluminium alloy, die cast aluminium

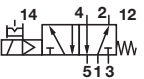
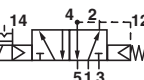
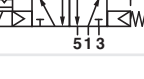
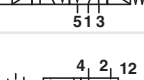
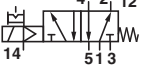
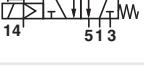
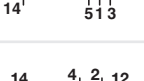

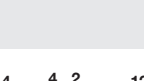

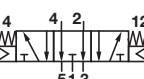
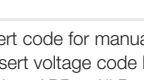
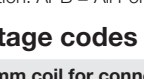



Spool: light alloy aluminium

Seals: NBR

Electrical details for solenoid operators

| | | | |
|---|---------------------------------|------------------------|--------|
| Voltage tolerance | ± 10% | | |
| Rating | 100% continuous duty | | |
| Inlet orifice | 1,0 mm | | |
| Electrical connection (corresponding to chosen coil) | EN 175301-803 - Form A, 30 mm | | |
| | EN 175301-803 - Form B, 22 mm | | |
| | Industrial Standard, 22 mm | | |
| Solenoid coil | May be rotated at 90° intervals | | |
| Manual override | 10 bar version | Turn to lock (plastic) | # = 60 |
| | | Push only (brass) | # = 61 |
| | 16 bar version | Turn to lock (plastic) | # = 80 |
| | | Push only (brass) | # = 81 |
| Protection class | IP 65 (with sealed plug) | | |

5/2 Solenoid pilot actuated valves – 10 bar models

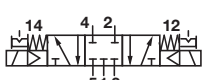
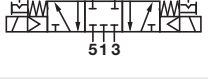
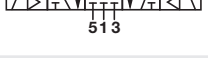
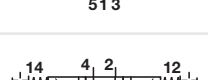
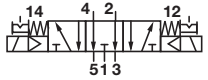
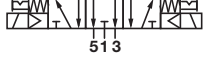
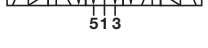
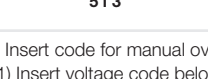
| Symbol | ISO size | Operator/return | Pilot supply | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model |
|---|----------|-------------------------|--------------|--------------|--------------------------|----------------------|-------------|-------------|---------------------|
|  | 1 | Solenoid/spring | Internal | 1200 | 2 ... 10 | — | 0,45 | 1 | UM/22152/122/6#/*1) |
|  | 2 | Solenoid/spring and air | Internal | 2130 | 2,5 ... 10 | — | 0,70 | 3 | UM/22253/172/6#/*1) |
|  | 3 | Solenoid/spring and air | Internal | 4150 | 2,5 ... 10 | — | 1,00 | 3 | UM/22354/172/6#/*1) |
|  | 4 | Solenoid/spring and air | Internal | 5660 | 2,5 ... 10 | — | 1,27 | 3 | UM/22456/172/6#/*1) |
|  | 1 | Solenoid/spring | External | 1200 | -0,9 ... 16 | 2,3 *2) ... 10 | 0,45 | 1 | UM/22152/22/6#/*1) |
|  | 2 | Solenoid/spring | External | 2130 | -0,9 ... 16 | 1,8 *2) ... 10 | 0,70 | 3 | UM/22253/22/6#/*1) |
|  | 3 | Solenoid/spring | External | 4150 | -0,9 ... 16 | 1,8 *2) ... 10 | 1,00 | 3 | UM/22354/22/6#/*1) |
|  | 4 | Solenoid/spring | External | 5660 | -0,9 ... 16 | 1,8 *2) ... 10 | 1,27 | 3 | UM/22456/22/6#/*1) |
|  | 1 | Solenoid/ solenoid | Internal | 1200 | 2 ... 10 | — | 0,59 | 2 | UM/22152/123/6#/*1) |
|  | 2 | Solenoid/ solenoid | Internal | 2130 | 2 ... 10 | — | 0,84 | 4 | UM/22253/123/6#/*1) |
|  | 3 | Solenoid/ solenoid | Internal | 4150 | 2 ... 10 | — | 1,14 | 4 | UM/22354/123/6#/*1) |
|  | 4 | Solenoid/ solenoid | Internal | 5660 | 2 ... 10 | — | 1,41 | 4 | UM/22456/123/6#/*1) |
|  | 1 | Solenoid/ solenoid | External | 1200 | -0,9 ... 16 | 2,3 *2) ... 10 | 0,59 | 2 | UM/22152/23/6#/*1) |
|  | 2 | Solenoid/ solenoid | External | 2130 | -0,9 ... 16 | 1,5 *2) ... 10 | 0,84 | 4 | UM/22253/23/6#/*1) |
|  | 3 | Solenoid/ solenoid | External | 4150 | -0,9 ... 16 | 1,5 *2) ... 10 | 1,14 | 4 | UM/22354/23/6#/*1) |
|  | 4 | Solenoid/ solenoid | External | 5660 | -0,9 ... 16 | 1,5 *2) ... 10 | 1,41 | 4 | UM/22456/23/6#/*1) |

Insert code for manual override: 0 = turn to lock, 1 = push only

*1) Insert voltage code below. Standard are: '13J' for 24 V d.c. or '19J' for 240 V a.c.

*2) plus (0,1 x supply pressure)

5/3 Solenoid pilot actuated valves – 10 bar models


| Symbol | ISO size | Function | Operator/return | Pilot supply | Flow (l/min) | Operating pressure (bar) | Weight (kg) | Drawing No. | Model |
|--|----------|----------|--------------------|--------------|--------------|--------------------------|-------------|-------------|----------------------|
|  | 1 | APB | Solenoid/ solenoid | Internal | 660 | 2,5 ... 10 | 0,59 | 2 | UM/22152/6123/6#/*1) |
|  | 2 | APB | Solenoid/ solenoid | Internal | 1520 | 2,8 ... 10 | 0,84 | 4 | UM/22253/6123/6#/*1) |
|  | 3 | APB | Solenoid/ solenoid | Internal | 3750 | 2,8 ... 10 | 1,14 | 4 | UM/22354/6123/6#/*1) |
|  | 4 | APB | Solenoid/ solenoid | Internal | 5490 | 2,8 ... 10 | 1,41 | 4 | UM/22456/6123/6#/*1) |
|  | 1 | COE | Solenoid/ solenoid | Internal | 660 | 2,5 ... 10 | 0,59 | 2 | UM/22162/6123/6#/*1) |
|  | 2 | COE | Solenoid/ solenoid | Internal | 1520 | 2,8 ... 10 | 0,84 | 4 | UM/22263/6123/6#/*1) |
|  | 3 | COE | Solenoid/ solenoid | Internal | 3750 | 2,8 ... 10 | 1,14 | 4 | UM/22364/6123/6#/*1) |
|  | 4 | COE | Solenoid/ solenoid | Internal | 5490 | 2,8 ... 10 | 1,41 | 4 | UM/22466/6123/6#/*1) |


Insert code for manual override: 0 = turn to lock, 1 = push only


*1) Insert voltage code below. Standard are: '13J' for 24 V d.c. or '19J' for 240 V a.c.

Function: APB = All Ports Blocked; COE = Centre Open Exhaust

Voltage codes and spare coils for 10 bar models

| 22 mm coil for connector interface acc. to industrial standard | | | | |
|--|--------------------|-------------------|--------------|------|
| | Voltage | Power Inrush/Hold | Model | Code |
|  | 12 V d.c. | 2 W | QM/48/12J/21 | 12J |
| | 24 V d.c. | 2 W | QM/48/13J/21 | 13J |
| | 24 V 50/60 Hz | 4/2,5 VA | QM/48/14J/21 | 14J |
| | 48 V 50/60 Hz | 4/2,5 VA | QM/48/16J/21 | 16J |
| | 110/120 V 50/60 Hz | 4/2,5 VA | QM/48/18J/21 | 18J |
| | 220/240 V 50/60 Hz | 6/5,0 VA | QM/48/19J/21 | 19J |

| 22 mm coil for connector interface acc. EN 175 301-803, form B | | | | |
|---|--------------------|-------------------|-------------|------|
| | Voltage | Power Inrush/Hold | Model | Code |
|  | 12 V d.c. | 2 W | V10626-A12L | 12L |
| | 24 V d.c. | 2 W | V10626-A13L | 13L |
| | 24 V 50/60 Hz | 4/2,5 VA | V10626-A14L | 14L |
| | 48 V 50/60 Hz | 4/2,5 VA | V10626-A16L | 16L |
| | 110/120 V 50/60 Hz | 4/2,5 VA | V10626-A18L | 18L |
| | 220/240 V 50/60 Hz | 6/5,0 VA | V10626-A19L | 19L |

| 30 mm coil for connector interface acc. EN 175 301-803, form A | | | | |
|--|--------------------|-------------------|-------------|------|
| | Voltage | Power Inrush/Hold | Model | Code |
|  | 12 V d.c. | 1,5 W | V10633-A22N | 22N |
| | 24 V d.c. | 1,5 W | V10633-A23N | 23N |
| | 24 V 50/60 Hz | 3/2 VA | V10633-A24N | 24N |
| | 48 V 50/60 Hz | 3/2 VA | V10633-A26N | 26N |
| | 110/120 V 50/60 Hz | 3/2 VA | V10633-A28N | 28N |
| | 220/240 V 50/60 Hz | 3/2 VA | V10633-A29N | 29N |

Connector plugs - ordered separately

| Industrial standard 22 mm 2-pole + PE | 22 mm, EN 175301-803 (DIN 43650 B) Form B 2-pole + PE | 30 mm, EN 175301-803 (DIN 43650 B) Form A 2-pole + PE |
|---|---|---|
|  |  |  |
| 0657868 | 0680003 | 0570275 |

**Option selector
(solenoid actuated valves)**

UM/22****/*****/***/****

| ISO size | Substitute |
|------------------------------------|------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| Valve function | Substitute |
| 5/2 monostable & bistable, 5/3 APB | 5 |
| 5/3 COE only | 6 |
| Port size | Substitute |
| ISO 1 (1/4") | 2 |
| ISO 2 (3/8") | 3 |
| ISO 3 (1/2") | 4 |
| ISO 4 (3/4") | 6 |

| Voltage code | Substitute |
|---|------------|
| For voltage code see tables on page 2 and 3 | |
| Manual override | Substitute |
| Push and turn | 0 |
| Push only | 1 |
| Pressure | Substitute |
| 10 bar | 6 |
| 16 bar | 8 |
| Valve function | Substitute |
| 5/2 Solenoid/spring, external pilot, monostable | 22 |
| 5/2 Solenoid/Solenoid, external pilot, bistable | 23 |
| 5/2 Solenoid/spring, internal pilot, monostable | 122 |
| 5/2 Solenoid/Solenoid, internal pilot, bistable | 123 |
| 5/2 Solenoid/airspring & spring, internal pilot, monostable | 172 |
| 5/3 - APB & COE Solenoid/Solenoid, internal pilot, monostable | 6123 |

5/2 Air pilot actuated valves – 16 bar models

| Symbol | ISO size | Operator/return | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model |
|--------|----------|-----------------|--------------|--------------------------|----------------------|-------------|-------------|-------------|
| | 1 | Air/spring | 1200 | -0,9 ... 16 | 2,3 *2) ... 16 | 0,34 | 6 | UM/22152/40 |
| | 2 | Air/spring | 2130 | -0,9 ... 16 | 1,8 *2) ... 16 | 0,60 | 6 | UM/22253/40 |
| | 3 | Air/spring | 4150 | -0,9 ... 16 | 2,8 *2) ... 16 | 1,00 | 6 | UM/22354/40 |
| | 4 | Air/spring | 5660 | -0,9 ... 16 | 1,8 *2) ... 16 | 1,30 | 6 | UM/22456/40 |
| | 1 | Air/air | 1200 | -0,9 ... 16 | 1,0 *2) ... 16 | 0,34 | 5 | UM/22152/3 |
| | 2 | Air/air | 2130 | -0,9 ... 16 | 1,5 *2) ... 16 | 0,50 | 5 | UM/22253/3 |
| | 3 | Air/air | 4150 | -0,9 ... 16 | 1,5 *2) ... 16 | 0,90 | 5 | UM/22354/3 |
| | 4 | Air/air | 5660 | -0,9 ... 16 | 1,5 *2) ... 16 | 1,20 | 5 | UM/22456/3 |

*2) plus (0,1 x supply pressure)

Standard version

5/3 Air pilot actuated valves – 16 bar models

| Symbol | ISO size | Function | Operator/return | Flow (l/min) | Operating pressure (bar) | Pilot pressure (bar) | Weight (kg) | Drawing No. | Model |
|--------|----------|----------|-----------------|--------------|--------------------------|----------------------|-------------|-------------|-------------|
| | 1 | APB | Air/air | 660 | -0,9 ... 16 | 2,3 *2) ... 16 | 0,34 | 5 | UM/22152/63 |
| | 2 | APB | Air/air | 1520 | -0,9 ... 16 | 2,8 *2) ... 16 | 0,50 | 5 | UM/22253/63 |
| | 3 | APB | Air/air | 3750 | -0,9 ... 16 | 2,8 *2) ... 16 | 0,90 | 5 | UM/22354/63 |
| | 4 | APB | Air/air | 5490 | -0,9 ... 16 | 2,8 *2) ... 16 | 1,20 | 5 | UM/22456/63 |
| | 1 | COE | Air/air | 660 | -0,9 ... 16 | 2,3 *2) ... 16 | 0,34 | 5 | UM/22162/63 |
| | 2 | COE | Air/air | 1520 | -0,9 ... 16 | 2,8 *2) ... 16 | 0,50 | 5 | UM/22263/63 |
| | 3 | COE | Air/air | 3750 | -0,9 ... 16 | 2,8 *2) ... 16 | 0,90 | 5 | UM/22364/63 |
| | 4 | COE | Air/air | 5490 | -0,9 ... 16 | 2,8 *2) ... 16 | 1,20 | 5 | UM/22466/63 |

*2) plus (0,1 x supply pressure)

Function: APB = All Ports Blocked; COE = Centre Open Exhaust

**Option selector
(pilot actuated valves)**

UM/22****/***

| ISO size | Substitute |
|------------------------------------|------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| Valve function | Substitute |
| 5/2 monostable & bistable, 5/3 APB | 5 |
| 5/3 COE only | 6 |

| Valve function | Substitute |
|---|------------|
| 5/2 Air/air, bistable | 3 |
| 5/2 Air/air, bistable, priority port 14 | 33 |
| 5/2 Air/spring, monostable | 40 |
| 5/3 - APB & COE Air/air, monostable | 63 |
| Port size | Substitute |
| ISO 1 (1/4") | 2 |
| ISO 2 (3/8") | 3 |
| ISO 3 (1/2") | 4 |
| ISO 4 (3/4") | 6 |