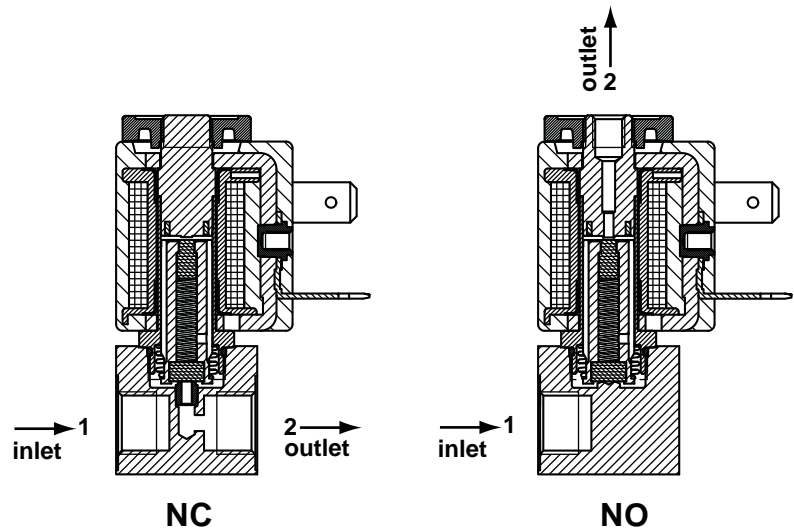


N series **2/2 - G1/8 - body: aluminium** **N2B-A** page 1/2

direct operated solenoid valves

coil 22 mm

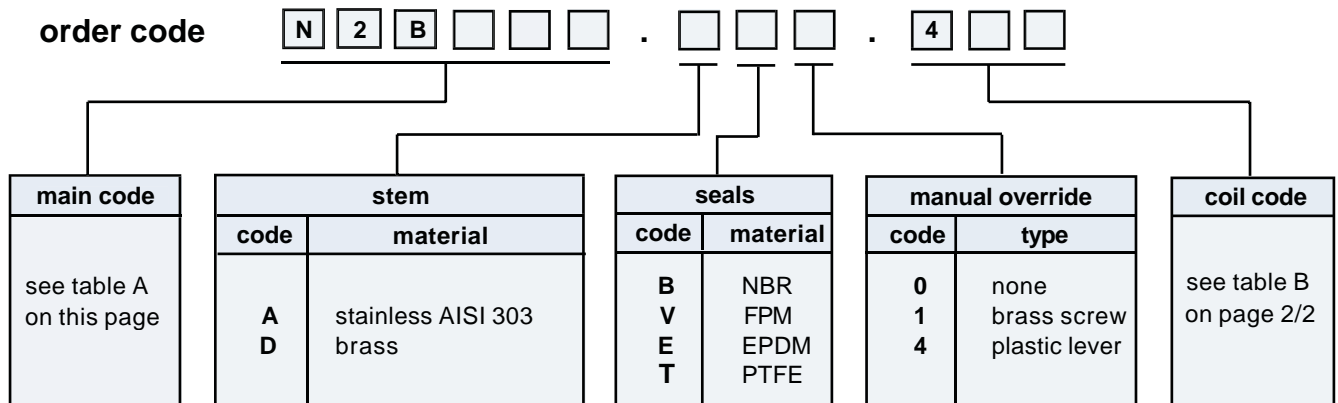
| general information | |
|--------------------------|-----------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 5- 8 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM, EPDM, PTFE* |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code | |
|-------------------------------------|--------|------------|-----|----------------------|---------|---------|---------------|----------------------|----------------------|---------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol. | | |
| 2/2 normally closed (NC) | | 1.0 | 0.4 | 0 | - | 35 | - | 9 | 7.5 | N2B110 |
| | | 1.0 | 0.4 | 0 | 20 | - | 5 | - | - | N2B610 |
| | | 1.2 | 0.5 | 0 | - | 26 | - | 9 | 7.5 | N2B112 |
| | | 1.2 | 0.5 | 0 | 15 | - | 5 | - | - | N2B612 |
| | | 1.6 | 1.1 | 0 | - | 15 | - | 9 | 7.5 | N2B116 |
| | | 1.6 | 1.1 | 0 | 7.5 | - | 5 | - | - | N2B616 |
| | | 2.0 | 1.5 | 0 | - | 9 | - | 9 | 7.5 | N2B120 |
| | | 2.0 | 1.5 | 0 | 4.5 | - | 5 | - | - | N2B620 |
| 2/2 normally open (NO) | | 1.2 | 0.5 | 0 | - | 12 | - | 9 | 7.5 | N2B212 |
| | | 1.2 | 0.5 | 0 | 12 | - | 5 | - | - | N2B712 |
| | | 1.6 | 1.1 | 0 | - | 10 | - | 9 | 7.5 | N2B216 |
| | | 1.6 | 1.1 | 0 | 10 | - | 5 | - | - | N2B716 |
| | | | | | | | | | | |

*l/min. of water with ΔP of 1 bar



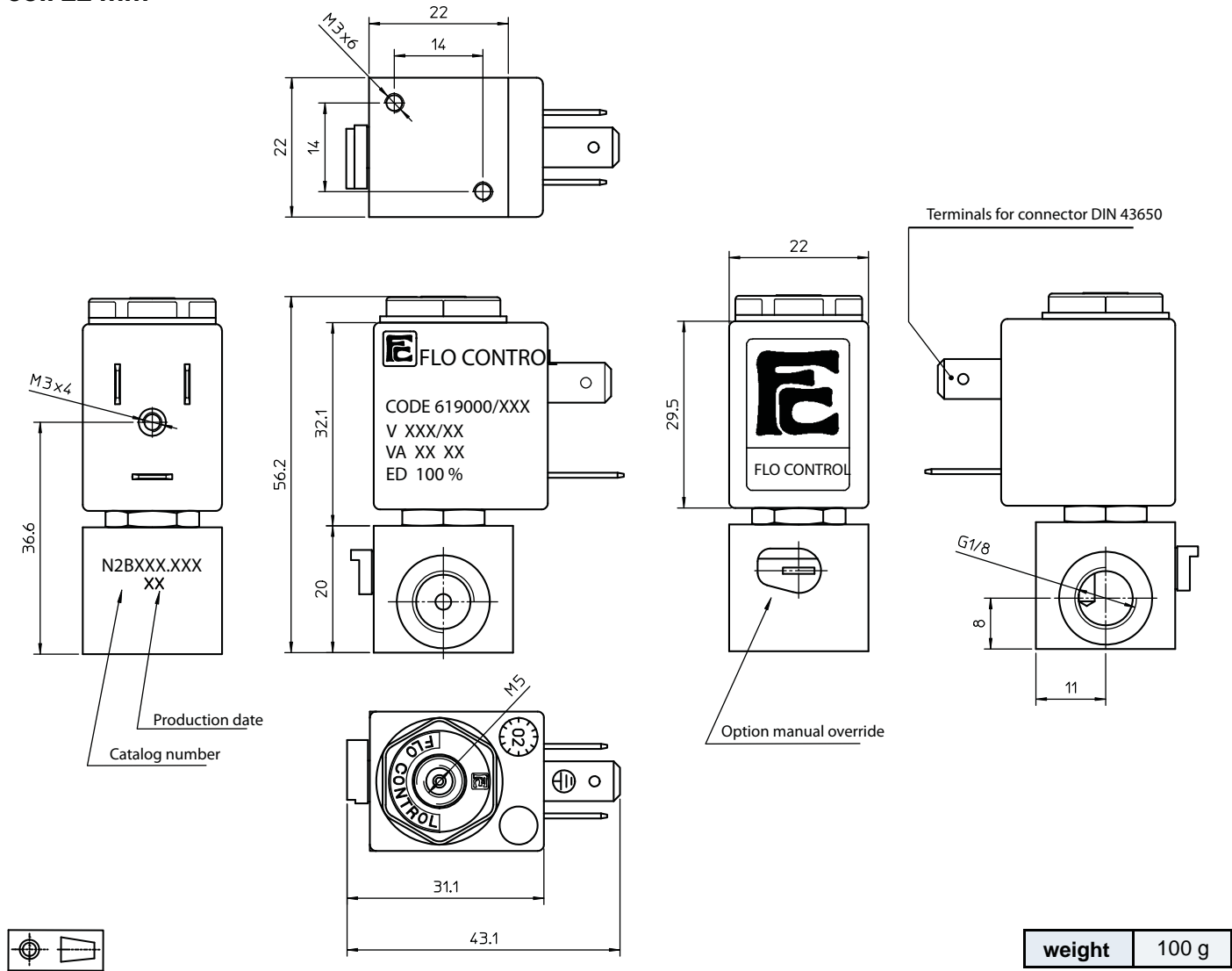
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



| | |
|---------------|-------|
| weight | 100 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 6 | - | - | 461 |
| | 12 | - | - | 466 |
| | 24 | 411 | 444 | 471 |
| | 48 | 416 | - | 476 |
| | 110 | 421 | - | 481 |
| | 115 | - | 453 | - |
| | 220 | 431 | - | 491 |
| | 230 | 457 | 459 | - |

| coil specification | |
|------------------------------|----------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% to +15% of nominal voltage |
| power consumption | AC 7,5 VA - DC 5 Watt |
| electrical connection | DIN 43650/B (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10030 |
|-------------|--------|

FLO CONTROL

Solenoid Valves

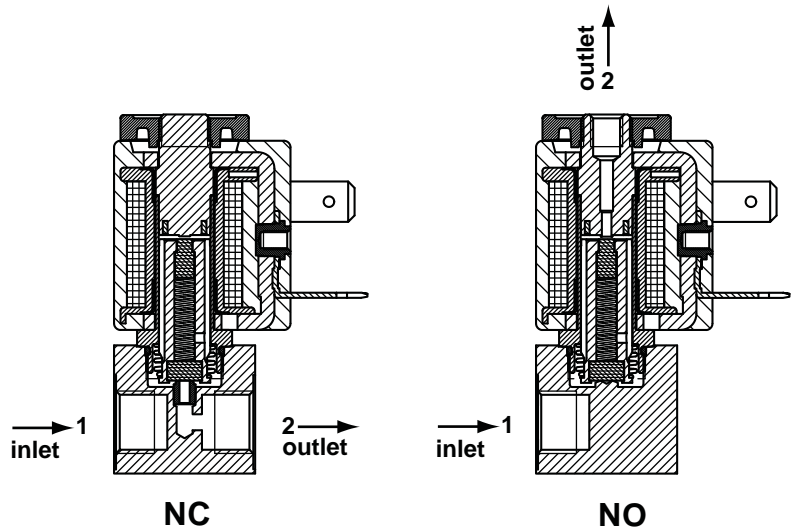


| | | |
|-----------------|------------------------------------|-----------------------|
| N series | 2/2 - G1/8 - body: AISI 303 | N2B-S page 1/2 |
|-----------------|------------------------------------|-----------------------|

direct operated solenoid valves

coil 22 mm

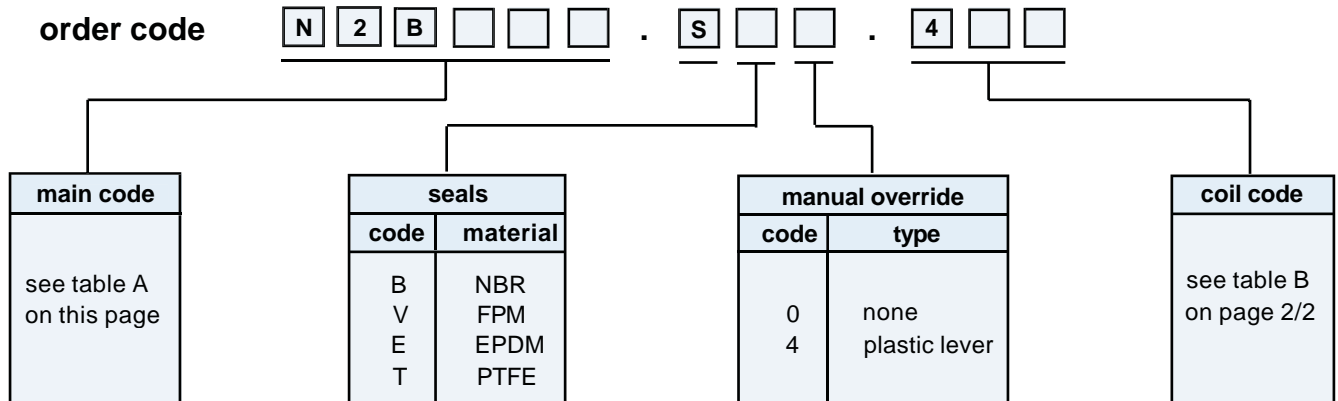
| general information | |
|--------------------------|-----------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 5- 8 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM, EPDM, PTFE* |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code | |
|---|--------|------------|-----|----------------------|---------|---------|---------------|---------|----------------------|---------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC | | |
| | | | | | | | | inr. | | hol. |
| 2/2 normally closed (NC) | | 1.0 | 0.4 | 0 | - | 35 | - | 9 | 7.5 | N2B110 |
| | | 1.0 | 0.4 | 0 | 20 | - | 5 | - | - | N2B610 |
| | | 1.2 | 0.5 | 0 | - | 26 | - | 9 | 7.5 | N2B112 |
| | | 1.2 | 0.5 | 0 | 15 | - | 5 | - | - | N2B612 |
| | | 1.6 | 1.1 | 0 | - | 15 | - | 9 | 7.5 | N2B116 |
| | | 1.6 | 1.1 | 0 | 7.5 | - | 5 | - | - | N2B616 |
| | | 2.0 | 1.5 | 0 | - | 9 | - | 9 | 7.5 | N2B120 |
| | | 2.0 | 1.5 | 0 | 4.5 | - | 5 | - | - | N2B620 |
| | | 2.4 | 2.0 | 0 | - | 5 | - | 9 | 7.5 | N2B124 |
| | 2.4 | 2.0 | 0 | 4 | - | 5 | - | - | N2B624 | |
| 2/2 normally open (NO) | | 1.2 | 0.5 | 0 | - | 12 | - | 9 | 7.5 | N2B212 |
| | | 1.2 | 0.5 | 0 | 12 | - | 5 | - | - | N2B712 |
| | | 1.6 | 1.1 | 0 | - | 10 | - | 9 | 7.5 | N2B216 |
| | | 1.6 | 1.1 | 0 | 10 | - | 5 | - | - | N2B716 |
| | | | | | | | | | | |

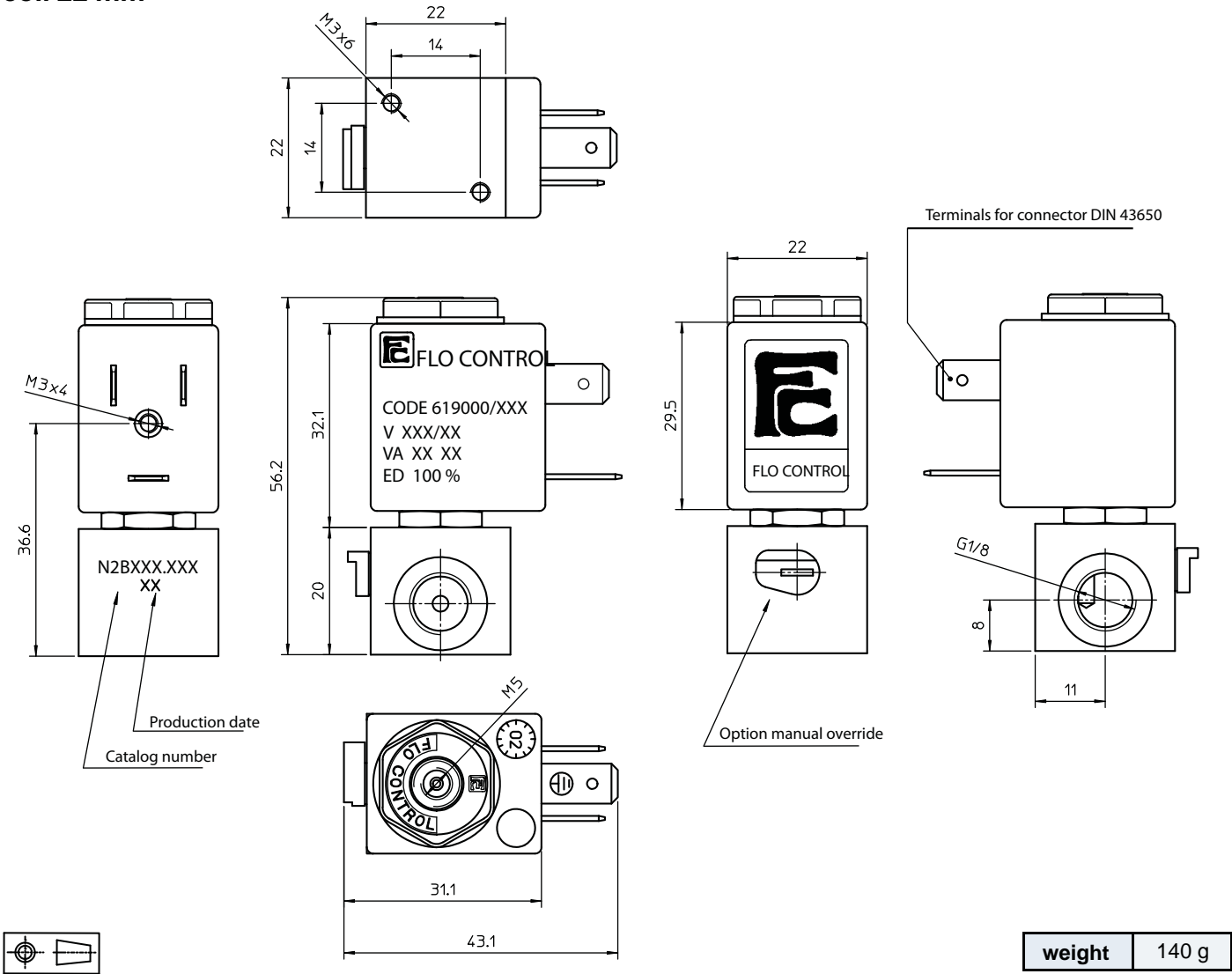
*l/min. of water with ΔP of 1 bar



FLO CONTROL
Solenoid Valves



direct operated solenoid valves
coil 22 mm



| | |
|---------------|-------|
| weight | 140 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 6 | - | - | 461 |
| | 12 | - | - | 466 |
| | 24 | 411 | 444 | 471 |
| | 48 | 416 | - | 476 |
| | 110 | 421 | - | 481 |
| | 115 | - | 453 | - |
| | 220 | 431 | - | 491 |
| | 230 | 457 | 459 | - |

| coil specification | |
|------------------------------|----------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% to +15% of nominal voltage |
| power consumption | AC 7,5 VA - DC 5 Watt |
| electrical connection | DIN 43650/B (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10030 |
|-------------|--------|

FLO CONTROL
Solenoid Valves

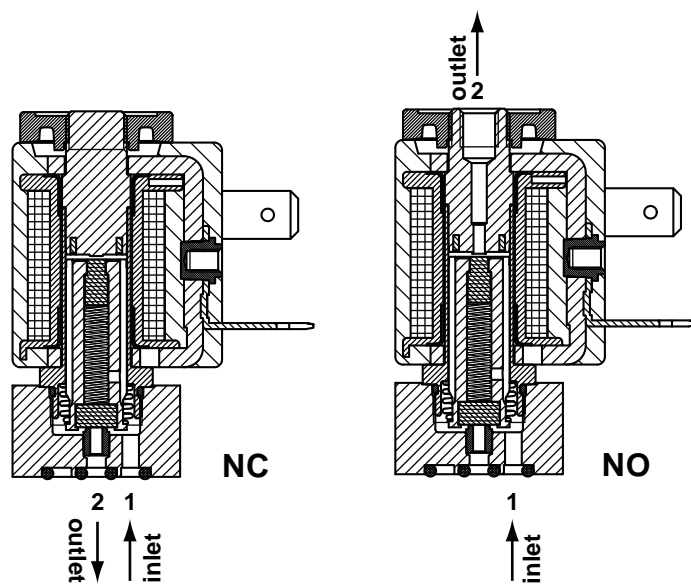


| | | |
|-----------------|--|-----------------------|
| N series | 2/2 - sub-base mounting - body: aluminium | N2P-A page 1/4 |
|-----------------|--|-----------------------|

direct operated solenoid valves

coil 22 mm

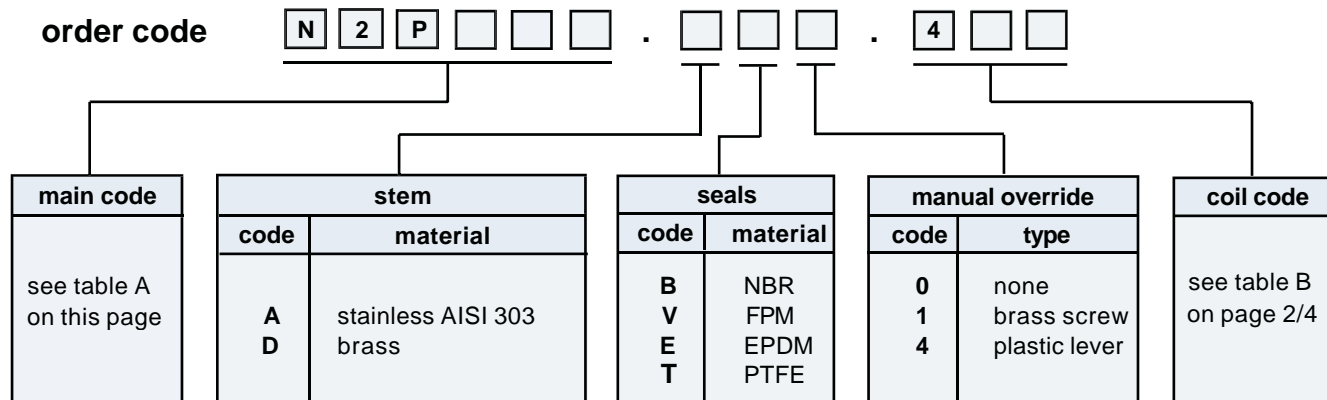
| general information | |
|--------------------------|---------------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 5- 8 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM, EPDM, PTFE* |
| dimensions | see page 2/4, 3/4 and 4/4 |
| coil data | see page 2/4 |
| connector data | see page 2/4 |
| sub-base | see page 3/4 and 4/4 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code | |
|-------------------------------------|--------|------------|-----|----------------------|---------|---------|---------------|---------|----------------------|---------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC | | |
| | | | | | | | | inr. | | hol. |
| 2/2 normally closed (NC) | | 1.2 | 0.5 | 0 | - | 26 | - | 9 | 7.5 | N2P112 |
| | | 1.2 | 0.5 | 0 | 15 | - | 5 | - | - | N2P612 |
| | | 1.6 | 1.1 | 0 | - | 15 | - | 9 | 7.5 | N2P116 |
| | | 1.6 | 1.1 | 0 | 7.5 | - | 5 | - | - | N2P616 |
| 2/2 normally open (NO) | | 1.2 | 0.5 | 0 | - | 12 | - | 9 | 7.5 | N2P212 |
| | | 1.2 | 0.5 | 0 | 12 | - | 5 | - | - | N2P712 |
| | | 1.6 | 1.1 | 0 | - | 10 | - | 9 | 7.5 | N2P216 |
| | | 1.6 | 1.1 | 0 | 10 | - | 5 | - | - | N2P716 |

*l/min. of water with ΔP of 1 bar

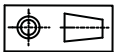
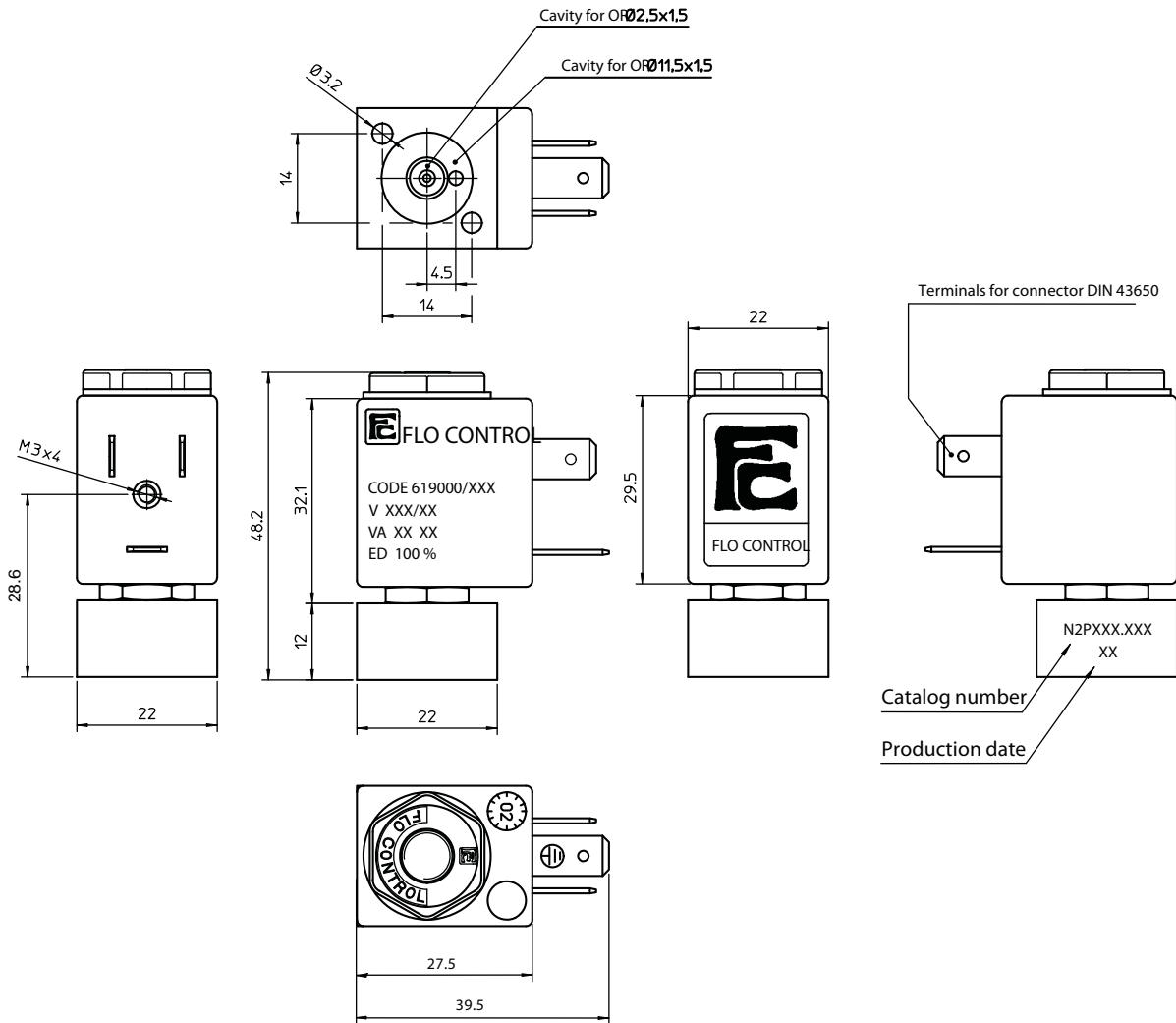


FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm


| | |
|---------------|-------|
| weight | 100 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 6 | - | - | 461 |
| | 12 | - | - | 466 |
| | 24 | 411 | 444 | 471 |
| | 48 | 416 | - | 476 |
| | 110 | 421 | - | 481 |
| | 115 | - | 453 | - |
| | 220 | 431 | - | 491 |
| | 230 | 457 | 459 | - |

| coil specification | |
|-----------------------|----------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% to +15% of nominal voltage |
| power consumption | AC 7,5 VA - DC 5 Watt |
| electrical connection | DIN 43650/B (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10030 |
|-------------|--------|

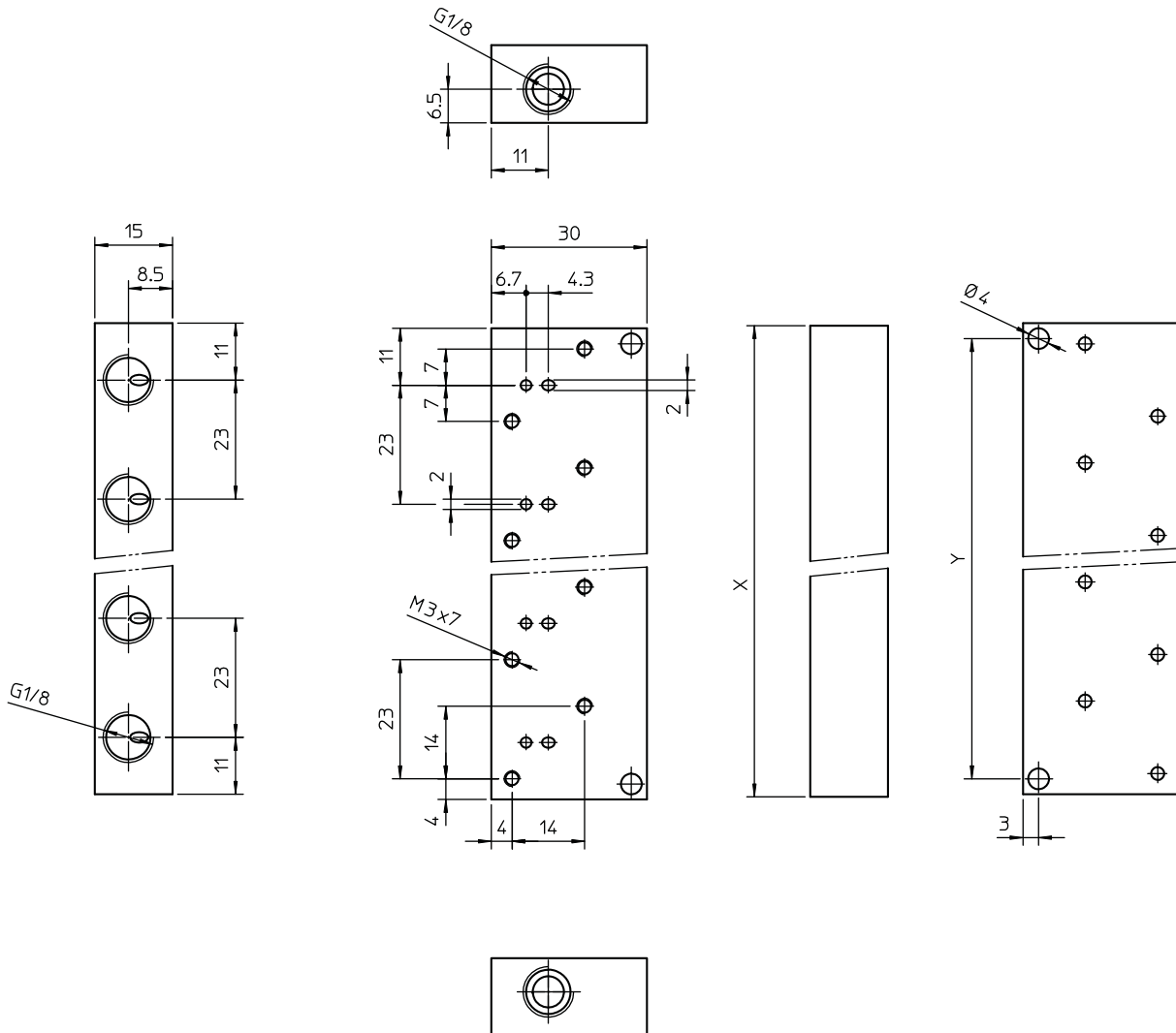
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



| order code | stations | X (mm) | Y (mm) | weight (g) |
|-------------|----------|--------|--------|------------|
| ZZ11.B1.28A | 1 | 22 | 16 | 21 |
| ZZ11.B2.28A | 2 | 45 | 39 | 44 |
| ZZ11.B3.28A | 3 | 68 | 62 | 68 |
| ZZ11.B4.28A | 4 | 91 | 85 | 90 |
| ZZ11.B5.28A | 5 | 114 | 108 | 114 |
| ZZ11.B6.28A | 6 | 137 | 131 | 138 |

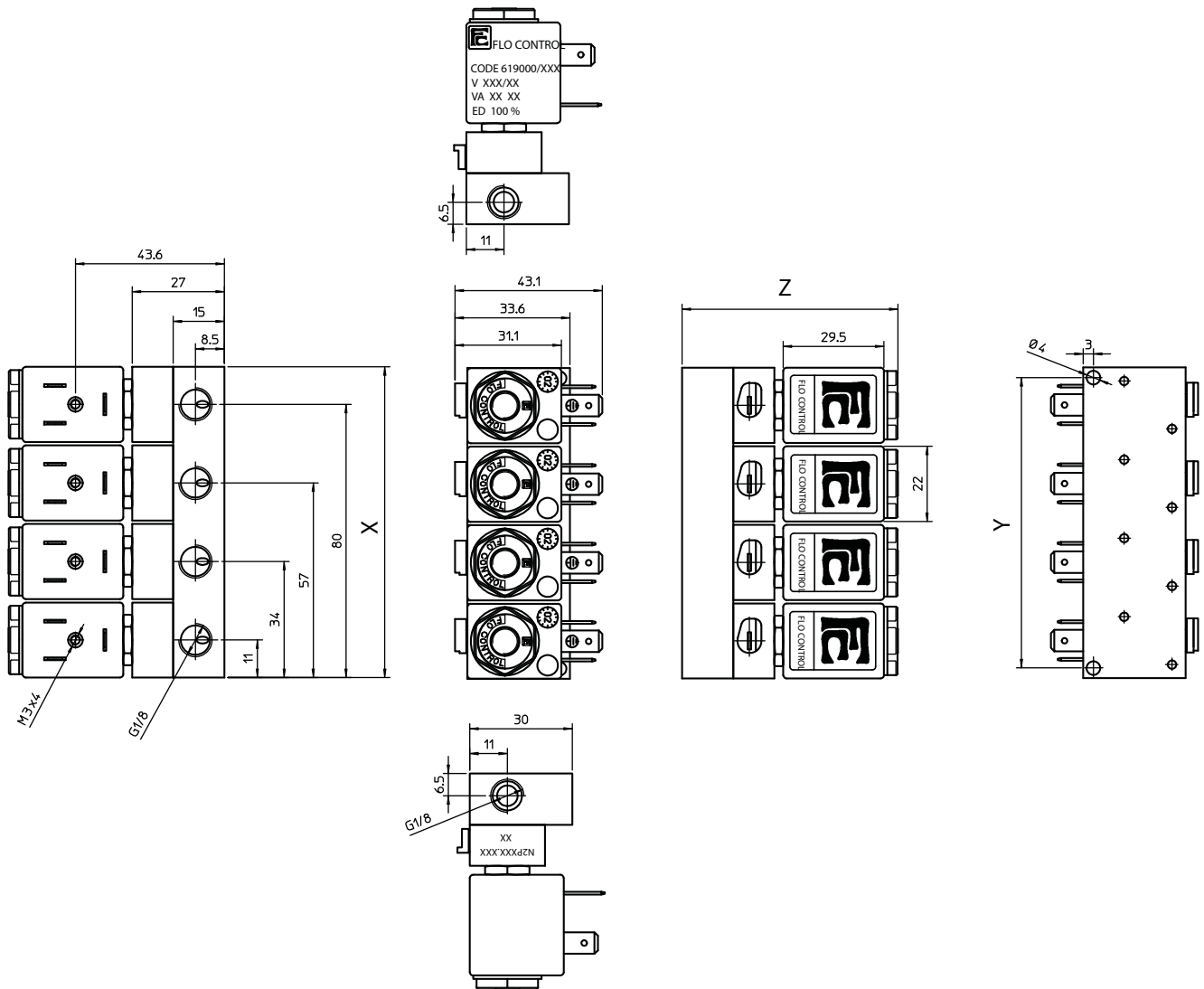
-M3 screws order code Z11010 (two each valves station) must be ordered separately

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm



dimensions assembled manifolds

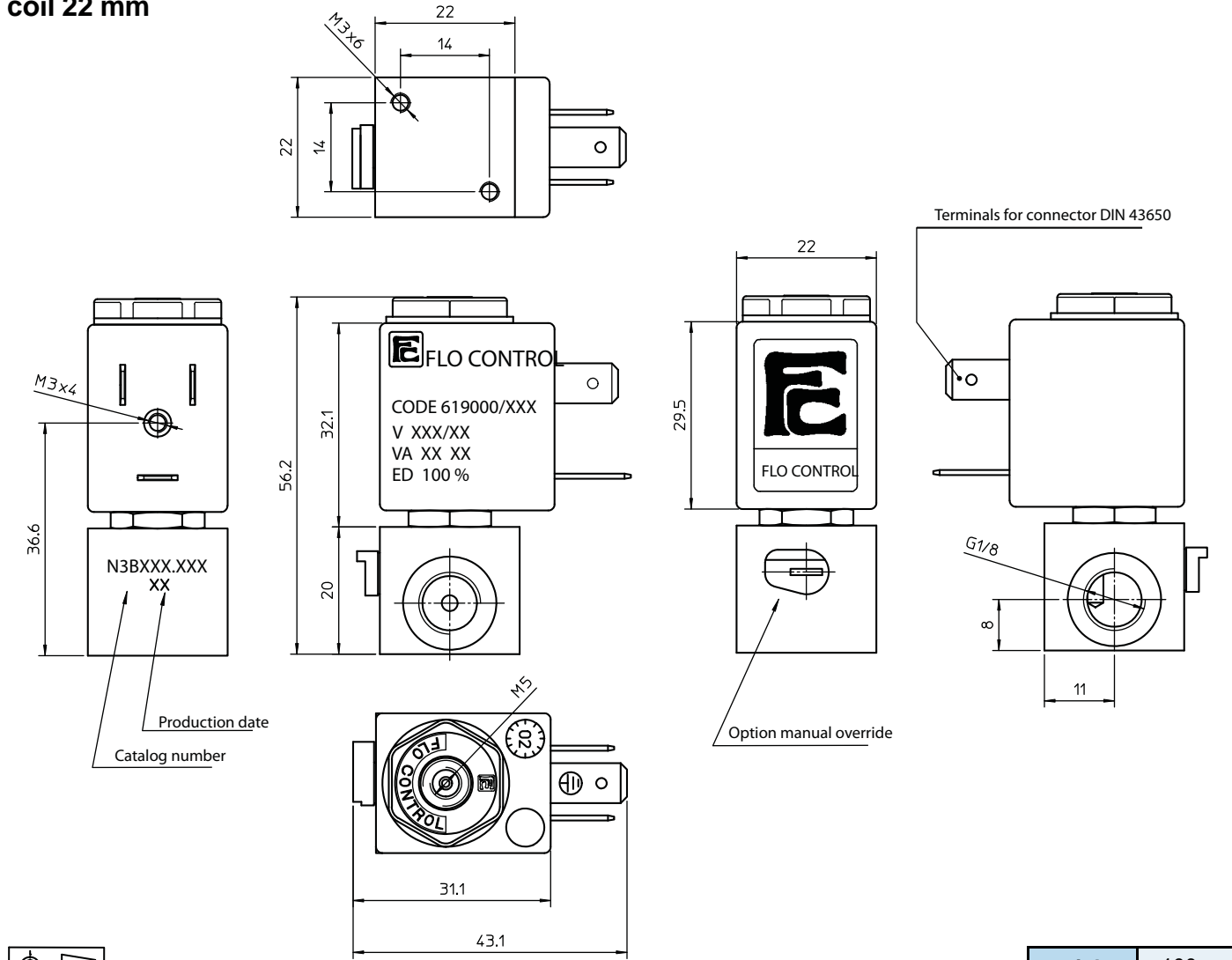
| order code | stations | X (mm) | Y (mm) | Z (mm) | weight (g) |
|--|----------|--------|--------|--------|------------|
| parts have to be ordered separately: valves see page 1/4 bases see page 3/4 screws see page 3/4 | 1 | 22 | 16 | 63.2 | 121 |
| | 2 | 45 | 39 | 63.2 | 244 |
| | 3 | 68 | 62 | 63.2 | 368 |
| | 4 | 91 | 85 | 63.2 | 490 |
| | 5 | 114 | 108 | 63.2 | 614 |
| | 6 | 137 | 131 | 63.2 | 738 |

FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm



weight 100 g

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 6 | - | - | 461 |
| | 12 | - | - | 466 |
| | 24 | 411 | 444 | 471 |
| | 48 | 416 | - | 476 |
| | 110 | 421 | - | 481 |
| | 115 | - | 453 | - |
| | 220 | 431 | - | 491 |
| | 230 | 457 | 459 | - |

| coil specification | |
|-----------------------|----------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% to +15% of nominal voltage |
| power consumption | AC 7,5 VA - DC 5 Watt |
| electrical connection | DIN 43650/B (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

code Z10030

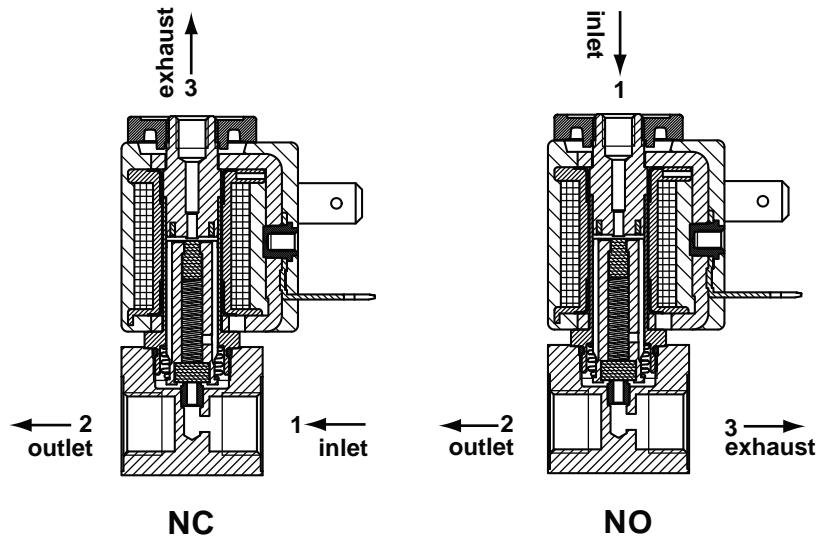
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

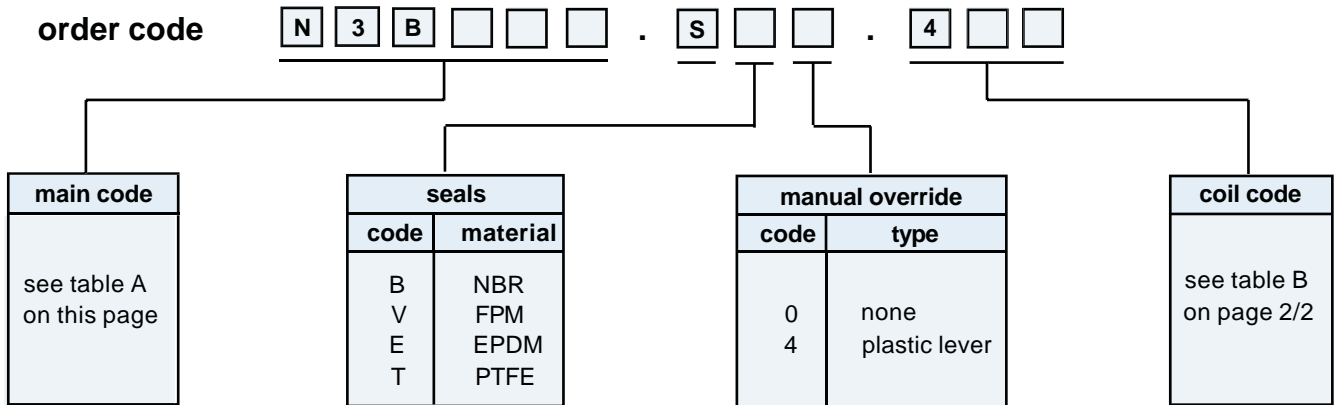
| general information | |
|---------------------------|-----------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 5 - 8 ms |
| mounting | in any position |
| seal materials, standard* | NBR, FPM, EPDM, PTFE* |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

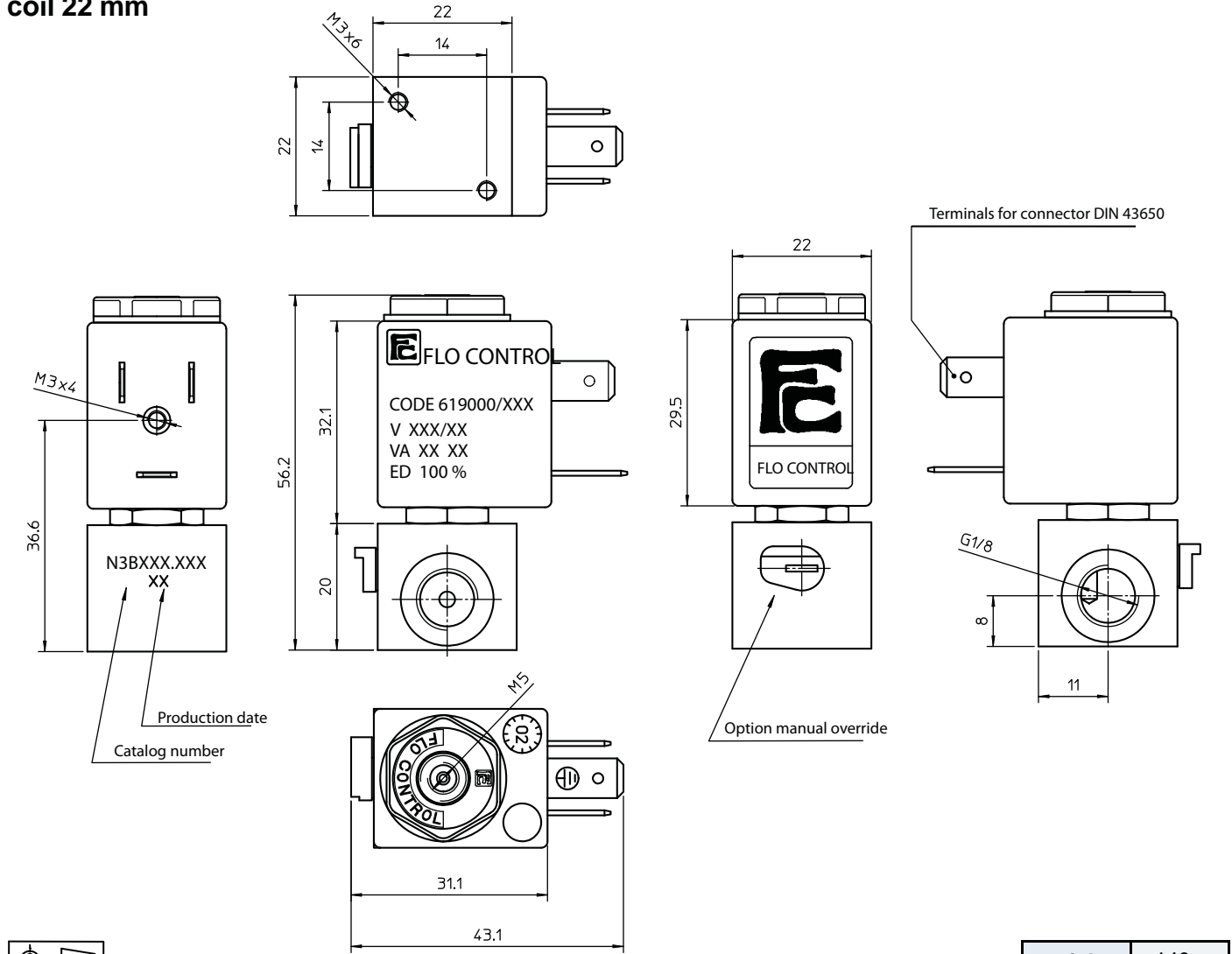
| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code | |
|-------------------------------------|--------|------------|-----|----------------------|---------|---------|---------------|----------------------|----------------------|--------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol. | | |
| 3/2 normally closed (NC) | | 1.2 | 0.5 | 0 | - | 10 | - | 9 | 7.5 | N3B112 |
| | | 1.2 | 0.5 | 0 | 10 | - | 5 | - | - | N3B612 |
| | | 1.6 | 1.1 | 0 | - | 7 | - | 9 | 7.5 | N3B116 |
| | | 1.6 | 1.1 | 0 | 7 | - | 5 | - | - | N3B616 |
| | | 2.0 | 1.5 | 0 | 5.6 | - | 5 | - | - | N3B620 |
| | | 2.4 | 2.0 | 0 | 2.5 | - | 5 | - | - | N3B624 |
| 3/2 normally open (NO) | | 1.2 | 0.5 | 0 | - | 10 | - | 9 | 7.5 | N3B212 |
| | | 1.2 | 0.5 | 0 | 10 | - | 5 | - | - | N3B712 |
| | | 1.6 | 1.1 | 0 | - | 7 | - | 9 | 7.5 | N3B216 |
| | | 1.6 | 1.1 | 0 | 7 | - | 5 | - | - | N3B716 |
| | | 2.0 | 1.5 | 0 | 3 | - | 5 | - | - | N3B720 |
| | | 2.4 | 2.0 | 0 | 1.5 | - | 5 | - | - | N3B724 |

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 22 mm



| | |
|---------------|-------|
| weight | 140 g |
|---------------|-------|

| | TABLE B | | | |
|--|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 6 | - | - | 461 |
| | 12 | - | - | 466 |
| | 24 | 411 | 444 | 471 |
| | 48 | 416 | - | 476 |
| | 110 | 421 | - | 481 |
| | 115 | - | 453 | - |
| | 220 | 431 | - | 491 |
| | 230 | 457 | 459 | - |

| coil specification | |
|-----------------------|----------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% to +15% of nominal voltage |
| power consumption | AC 7,5 VA - DC 5 Watt |
| electrical connection | DIN 43650/B (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10030 |
|-------------|--------|

FLO CONTROL

Solenoid Valves

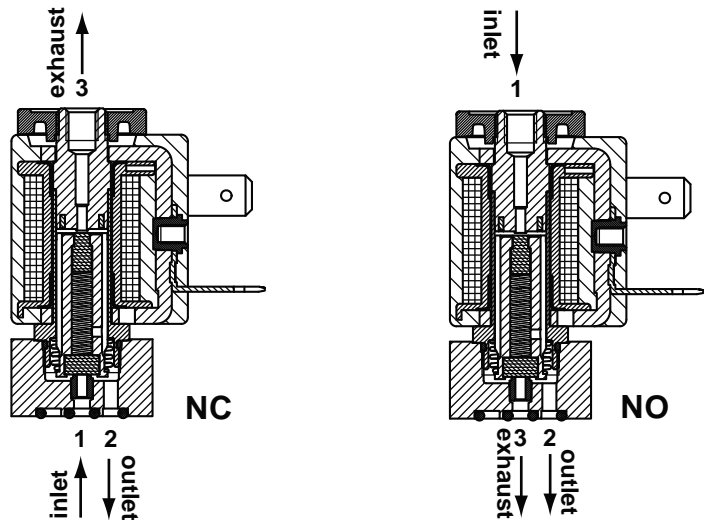


| | | |
|-----------------|---|----------------|
| N series | 3/2 - sub-base mounting - body: aluminium | N3P-A page 1/4 |
|-----------------|---|----------------|

direct operated solenoid valves

coil 22 mm

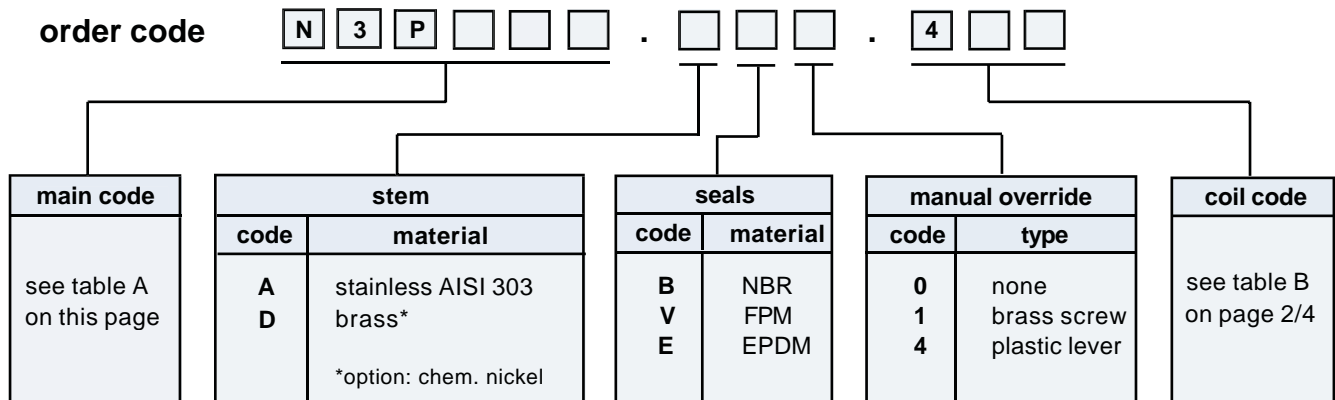
| general information | |
|---------------------------|-----------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 5 - 8 ms |
| mounting | in any position |
| seal materials, standard* | NBR, FPM, EPDM, PTFE* |
| dimensions | see page 2/4 |
| coil data | see page 2/4 |
| connector data | see page 2/4 |
| sub-base | see page 3/4 and 4/4 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code | |
|-------------------------------------|--------|------------|-----|----------------------|---------|---------|---------------|---------|----------------------|--------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC | | |
| | | | | | | | | inr. | | hol. |
| 3/2 normally closed (NC) | | 1.2 | 0.5 | 0 | - | 10 | - | 9 | 7.5 | N3P112 |
| | | 1.2 | 0.5 | 0 | 10 | - | 5 | - | - | N3P612 |
| | | 1.6 | 1.1 | 0 | - | 7 | - | 9 | 7.5 | N3P116 |
| | | 1.6 | 1.1 | 0 | 7 | - | 5 | - | - | N3P616 |
| | | | | | | | | | | |
| 3/2 normally open (NO) | | 1.2 | 0.5 | 0 | - | 10 | - | 9 | 7.5 | N3P212 |
| | | 1.2 | 0.5 | 0 | 10 | - | 5 | - | - | N3P712 |
| | | 1.6 | 1.1 | 0 | - | 7 | - | 9 | 7.5 | N3P216 |
| | | 1.6 | 1.1 | 0 | 7 | - | 5 | - | - | N3P716 |
| | | | | | | | | | | |

*l/min. of water with ΔP of 1 bar



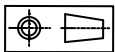
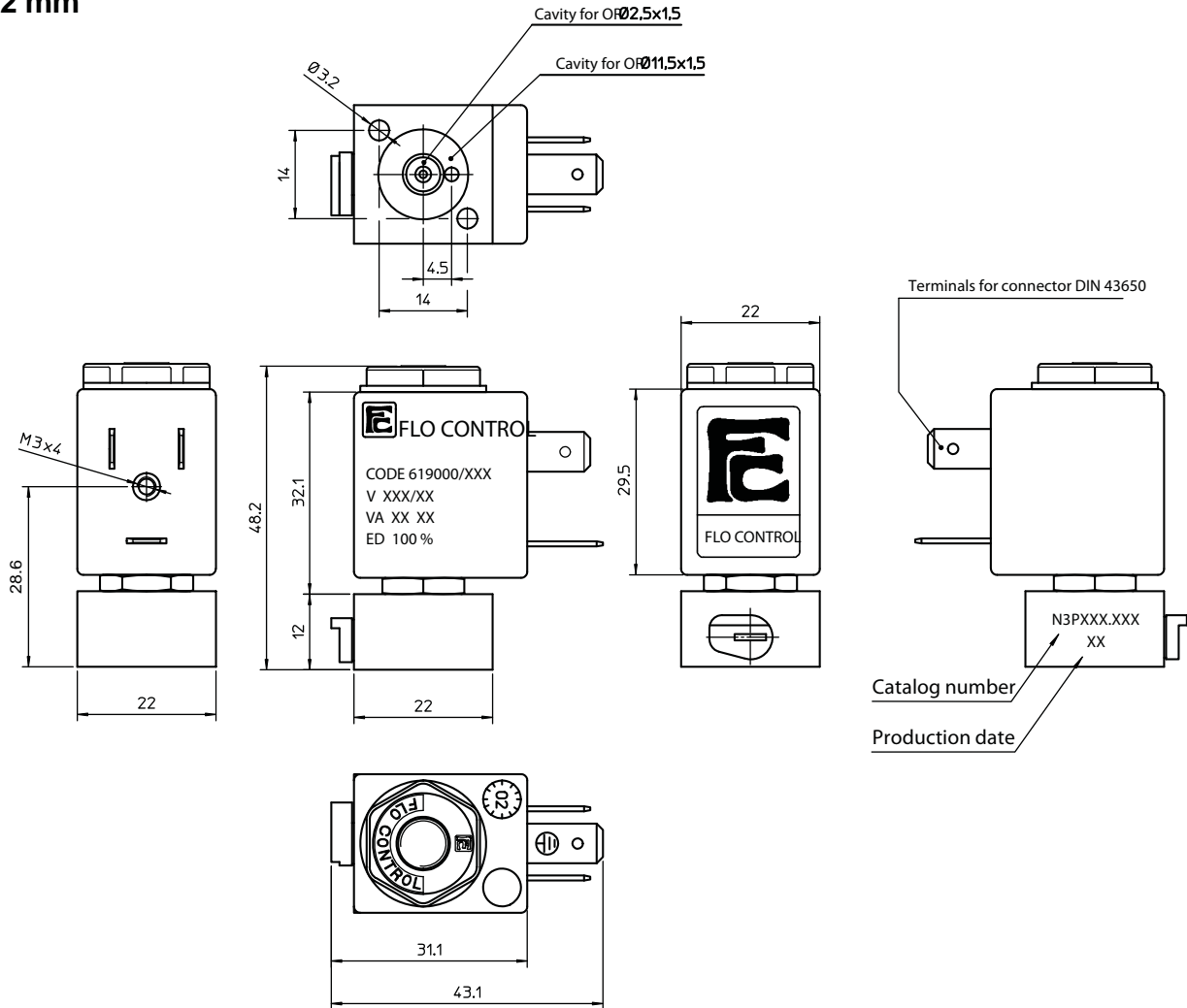
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



| | |
|---------------|-------|
| weight | 100 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 6 | - | - | 461 |
| | 12 | - | - | 466 |
| | 24 | 411 | 444 | 471 |
| | 48 | 416 | - | 476 |
| | 110 | 421 | - | 481 |
| | 115 | - | 453 | - |
| | 220 | 431 | - | 491 |
| | 230 | 457 | 459 | - |

| coil specification | |
|------------------------------|----------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% to +15% of nominal voltage |
| power consumption | AC 7,5 VA - DC 5 Watt |
| electrical connection | DIN 43650/B (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

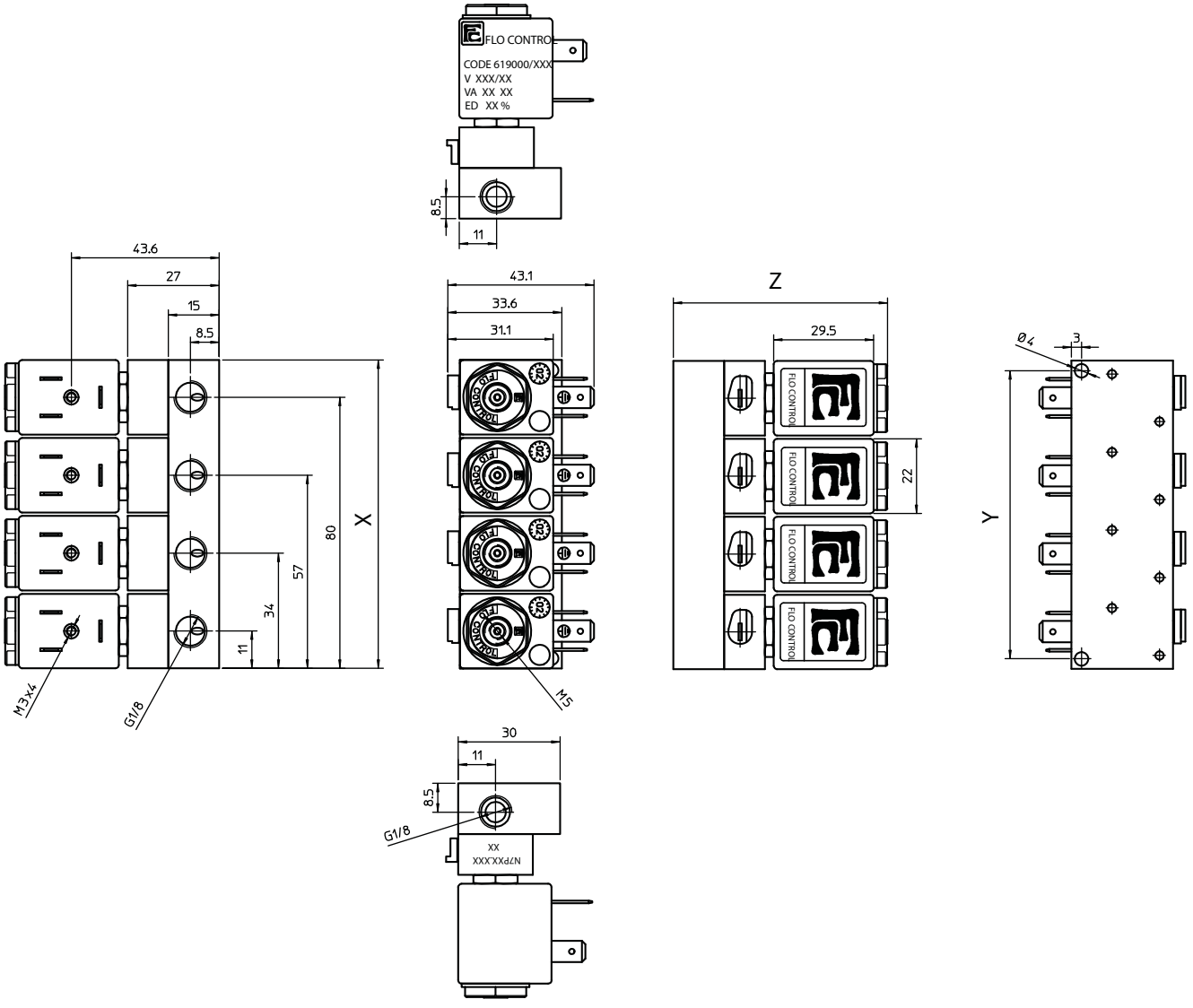
| | |
|-------------|--------|
| code | Z10030 |
|-------------|--------|

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm



dimensions assembled manifolds

| order code | stations | X (mm) | Y (mm) | Z (mm) | weight (g) |
|---|----------|--------|--------|--------|------------|
| parts have to be ordered separately: valves see page 1/4 bases see page 3/4 srews see page 3/4 | 1 | 22 | 16 | 63.2 | 121 |
| | 2 | 45 | 39 | 63.2 | 244 |
| | 3 | 68 | 62 | 63.2 | 368 |
| | 4 | 91 | 85 | 63.2 | 490 |
| | 5 | 114 | 108 | 63.2 | 614 |
| | 6 | 137 | 131 | 63.2 | 738 |

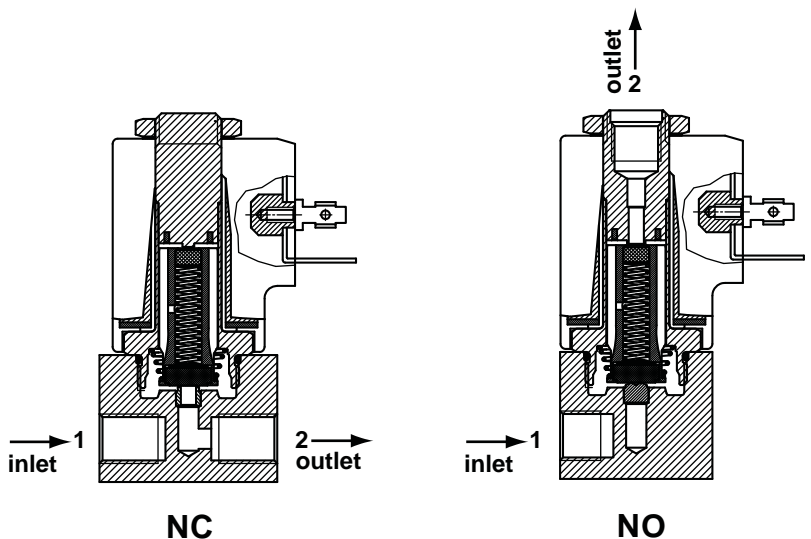
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 31 mm

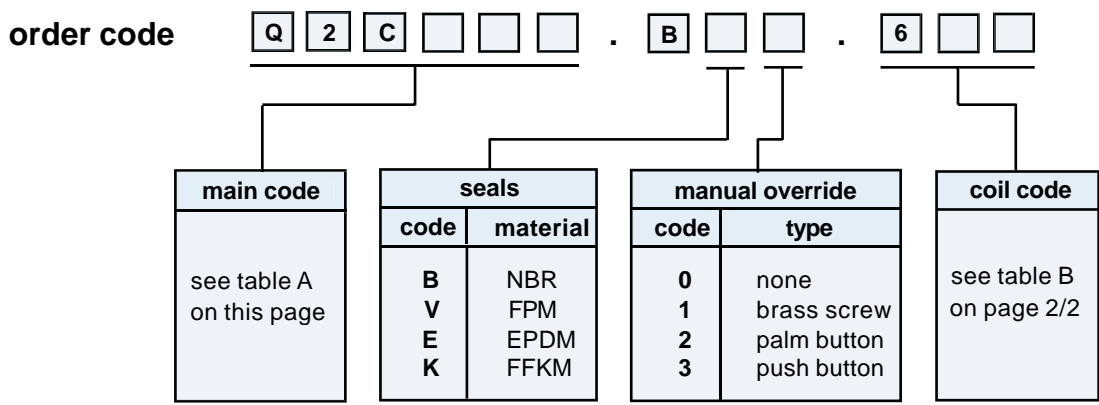
| general information | |
|--------------------------|----------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 6 - 18 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM, EPDM, FFKM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

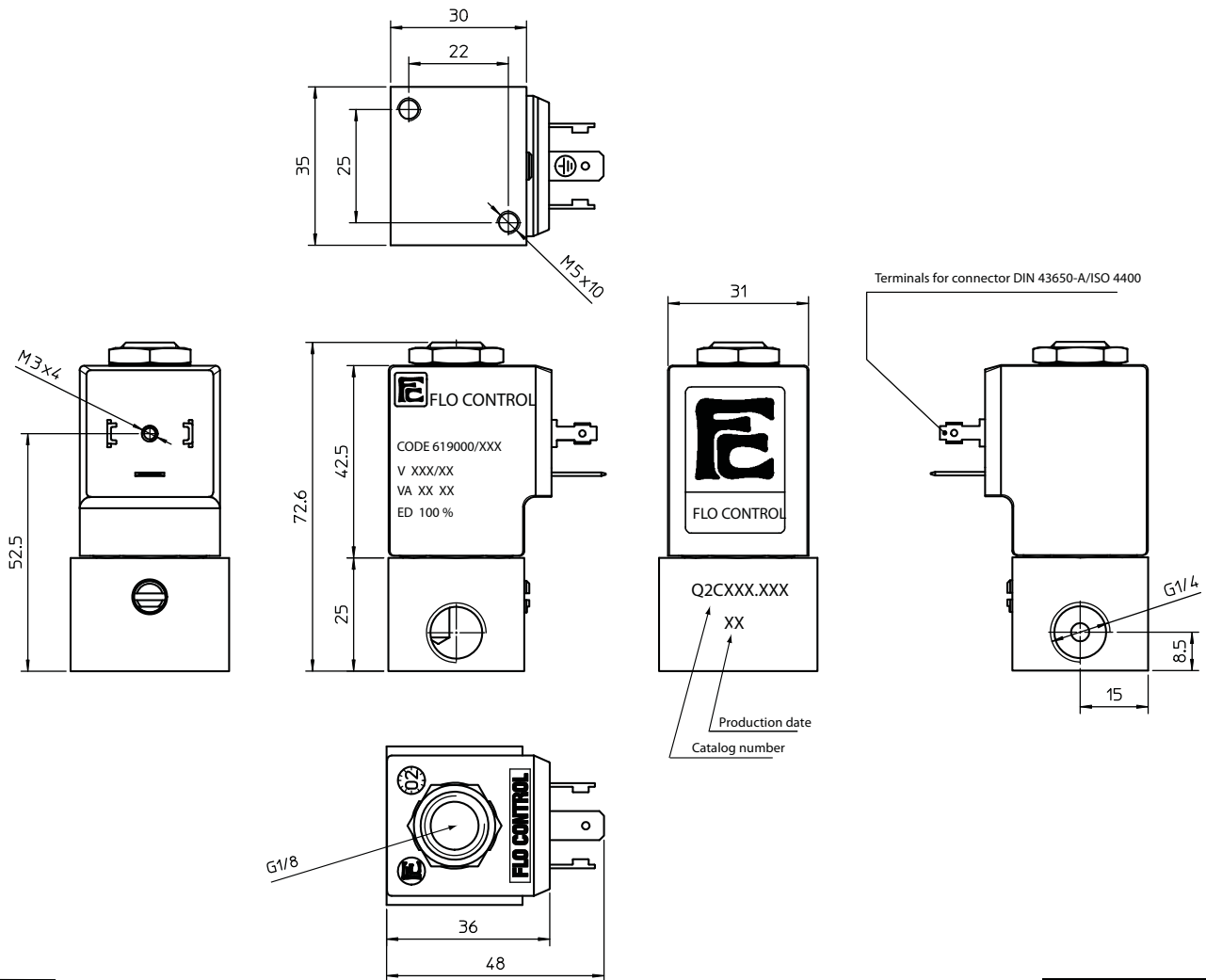
| function | symbol | orif. mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A | | |
|-------------------------------------|--------|----------|-----|----------------------|---------|---------|---------------|-----------|---------------|---------------|---------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. inr. | AC hol. | main code | |
| | | | | | | | | | | AC | DC |
| 2/2 normally closed (NC) | | 0.8 | 0.5 | 0 | 60 | 80 | 10 | 21.5 | 13.5 | Q2C108 | Q2C608 |
| | | 1.2 | 1.3 | 0 | 45 | 70 | 10 | 21.5 | 13.5 | Q2C112 | Q2C612 |
| | | 1.6 | 1.7 | 0 | 35 | 60 | 10 | 21.5 | 13.5 | Q2C116 | Q2C616 |
| | | 2.4 | 3.5 | 0 | 15 | 30 | 10 | 21.5 | 13.5 | Q2C124 | Q2C624 |
| | | 3.0 | 4.5 | 0 | 10 | 18 | 10 | 21.5 | 13.5 | Q2C130 | Q2C630 |
| | | 4.0 | 7.5 | 0 | 3 | 8 | 10 | 21.5 | 13.5 | Q2C140 | Q2C640 |
| | 6.0 | 12.0 | 0 | 0.7 | 2.5 | 10 | 21.5 | 13.5 | Q2C160 | Q2C660 | |
| 2/2 normally open (NO) | | 0.8 | 0.5 | 0 | 40 | 40 | 10 | 21.5 | 13.5 | Q2C208 | Q2C708 |
| | | 1.2 | 1.1 | 0 | 35 | 35 | 10 | 21.5 | 13.5 | Q2C212 | Q2C712 |
| | | 1.6 | 1.4 | 0 | 20 | 20 | 10 | 21.5 | 13.5 | Q2C216 | Q2C716 |
| | | 2.4 | 3.0 | 0 | 10 | 10 | 10 | 21.5 | 13.5 | Q2C224 | Q2C724 |
| | | 3.0 | 3.5 | 0 | 8 | 8 | 10 | 21.5 | 13.5 | Q2C230 | Q2C730 |

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 31 mm



weight 330 g

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|-----------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10031 |
|-------------|--------|

FLO CONTROL

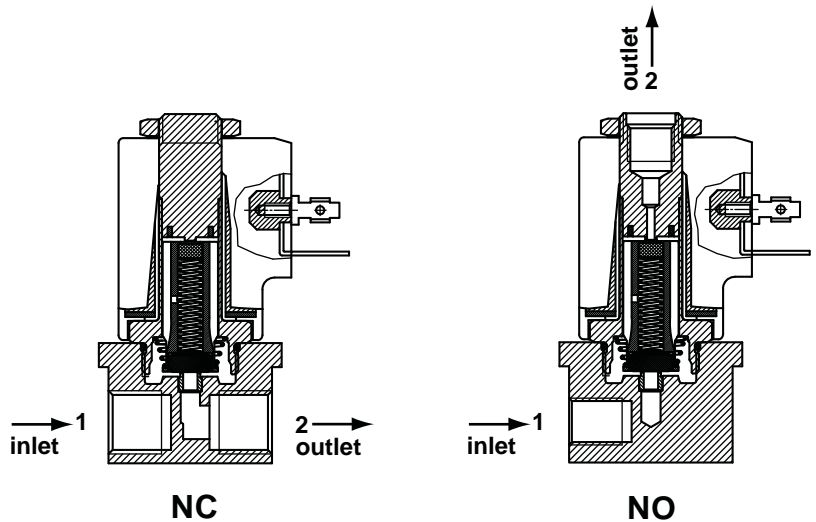
Solenoid Valves



direct operated solenoid valves

coil 31 mm

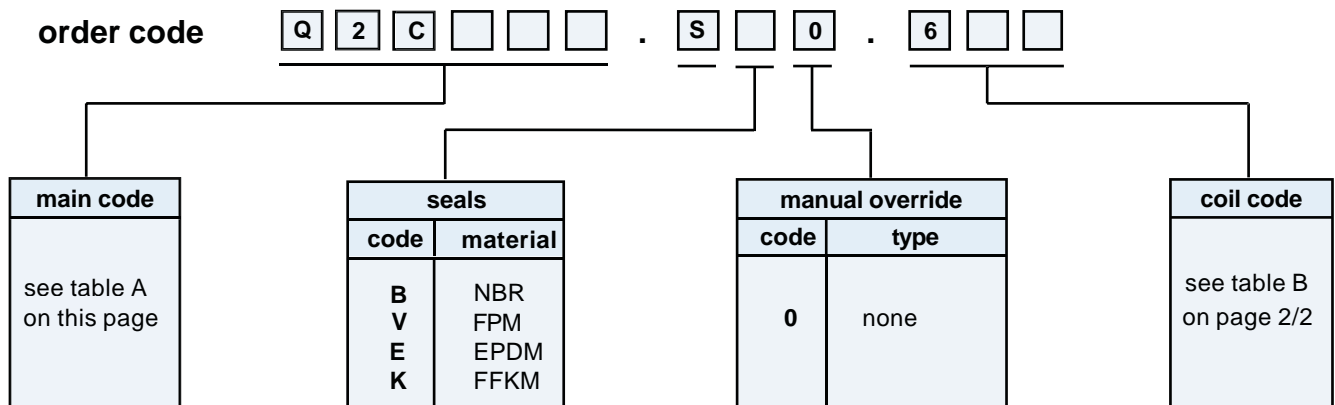
| general information | |
|--------------------------|----------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 6 - 18 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM, EPDM, FFKM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



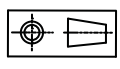
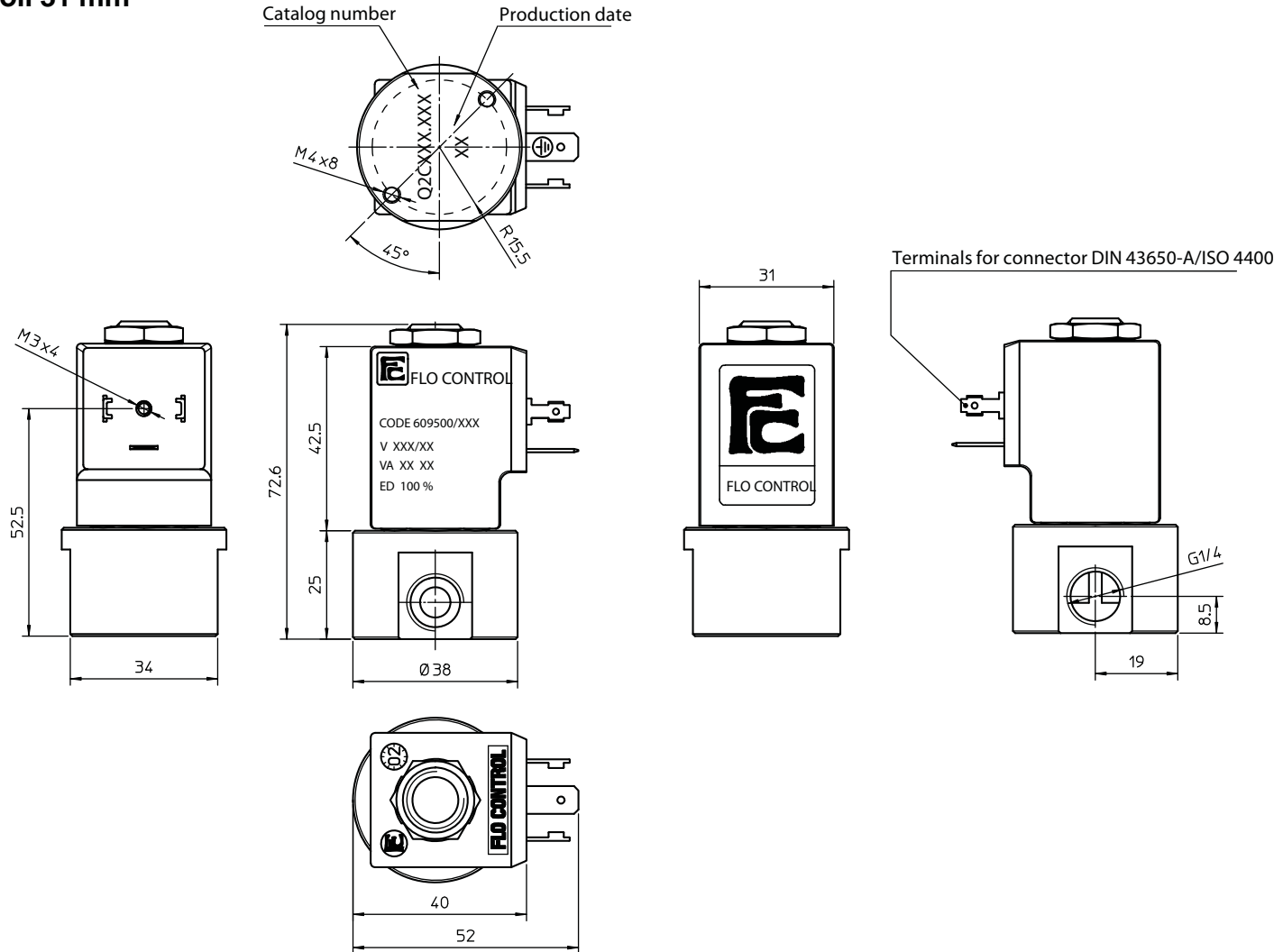
* other seal materials on request

| function | symbol | orif. mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A | |
|-------------------------------------|--------|----------|------|----------------------|---------|---------|---------------|---------|---------|---------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC | | main code |
| | | | | | | | | inr. | hol | |
| 2/2 normally closed (NC) | | 0.8 | 0.5 | 0 | 60 | 80 | 10 | 21.5 | 13.5 | Q2C108 |
| | | 1.2 | 1.3 | 0 | 45 | 70 | 10 | 21.5 | 13.5 | Q2C112 |
| | | 1.6 | 1.7 | 0 | 35 | 60 | 10 | 21.5 | 13.5 | Q2C116 |
| | | 2.4 | 3.5 | 0 | 15 | 30 | 10 | 21.5 | 13.5 | Q2C124 |
| | | 3.0 | 4.5 | 0 | 10 | 18 | 10 | 21.5 | 13.5 | Q2C130 |
| | | 4.0 | 7.5 | 0 | 3 | 8 | 10 | 21.5 | 13.5 | Q2C140 |
| | | 6.0 | 12.0 | 0 | 0.7 | 2.5 | 10 | 21.5 | 13.5 | Q2C160 |
| 2/2 normally open (NO) | | 0.8 | 0.5 | 0 | 40 | 40 | 10 | 21.5 | 13.5 | Q2C208 |
| | | 1.2 | 1.1 | 0 | 35 | 35 | 10 | 21.5 | 13.5 | Q2C212 |
| | | 1.6 | 1.4 | 0 | 20 | 20 | 10 | 21.5 | 13.5 | Q2C216 |
| | | 2.4 | 3.0 | 0 | 10 | 10 | 10 | 21.5 | 13.5 | Q2C224 |
| | | 3.0 | 3.5 | 0 | 8 | 8 | 10 | 21.5 | 13.5 | Q2C230 |
| | | | | | | | | | | |

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves
coil 31 mm



| | |
|---------------|-------|
| weight | 420 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|------------------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10031 |
|-------------|--------|

FLO CONTROL

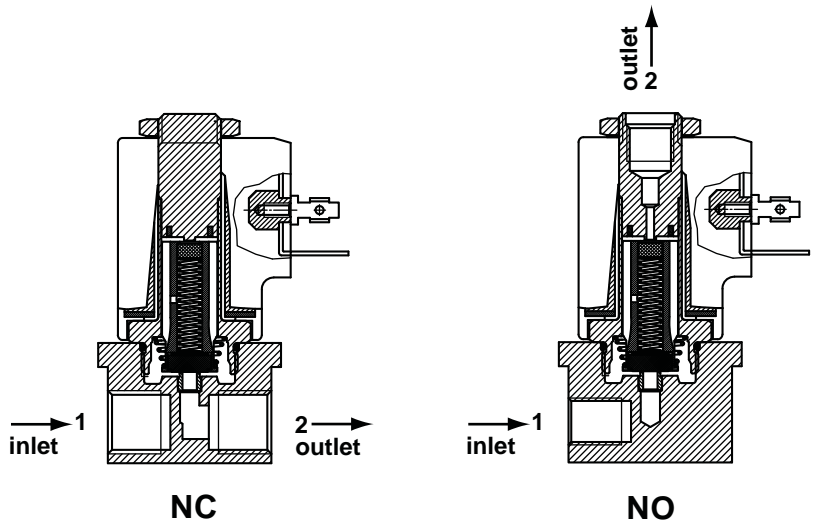
Solenoid Valves



direct operated solenoid valves

coil 31 mm

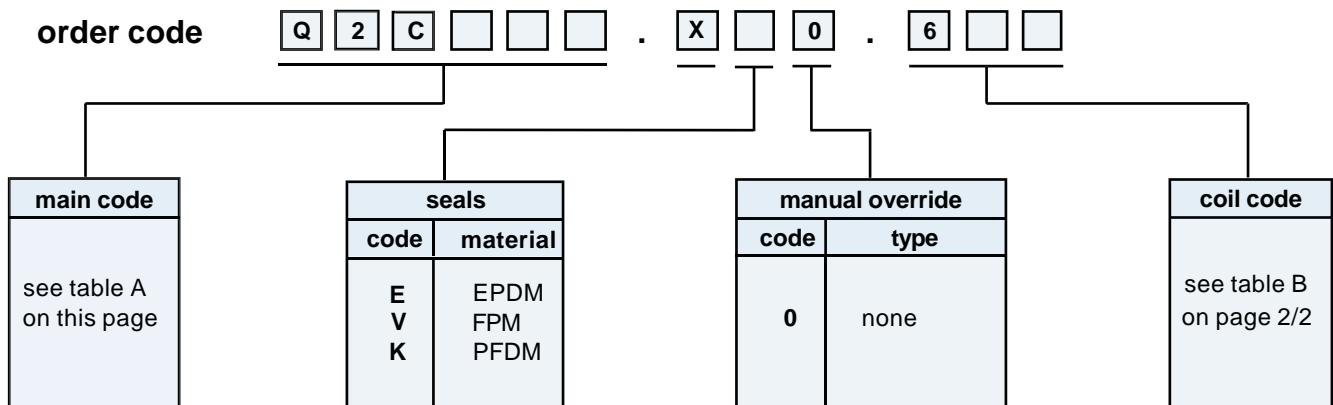
| general information | |
|--------------------------|------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 6 - 18 ms |
| mounting | in any position |
| standard seal materials* | EPDM, FPM, PFFPM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orif. mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code |
|-------------------------------------|--------|----------|------|----------------------|---------|---------|---------------|---------------------|----------------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol | |
| 2/2 normally closed (NC) | | 1.6 | 1.7 | 0 | 35 | 60 | 10 | 21.5 13.5 | Q2C116 |
| | | 2.4 | 3.5 | 0 | 15 | 30 | 10 | 21.5 13.5 | Q2C124 |
| | | 3.0 | 4.5 | 0 | 10 | 18 | 10 | 21.5 13.5 | Q2C130 |
| | | 4.0 | 7.5 | 0 | 3 | 8 | 10 | 21.5 13.5 | Q2C140 |
| | | 6.0 | 12.0 | 0 | 0.7 | 2.5 | 10 | 21.5 13.5 | Q2C160 |
| 2/2 normally open (NO) | | 1.6 | 1.4 | 0 | 20 | 20 | 10 | 21.5 13.5 | Q2C216 |
| | | 2.4 | 3.0 | 0 | 10 | 10 | 10 | 21.5 13.5 | Q2C224 |
| | | 3.0 | 3.5 | 0 | 8 | 8 | 10 | 21.5 13.5 | Q2C230 |

*l/min. of water with ΔP of 1 bar

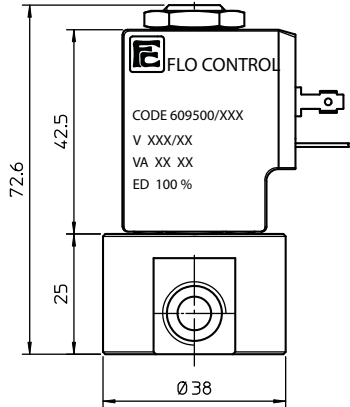
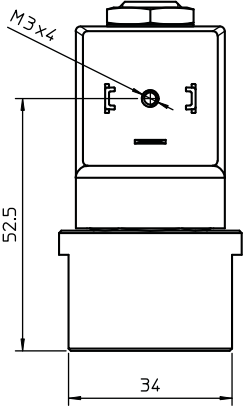
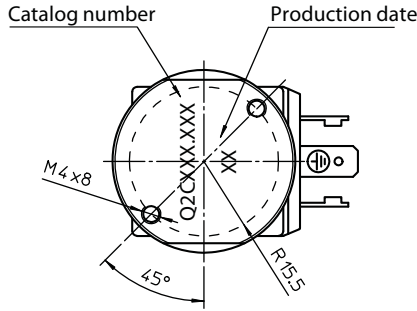


FLO CONTROL
Solenoid Valves

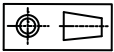
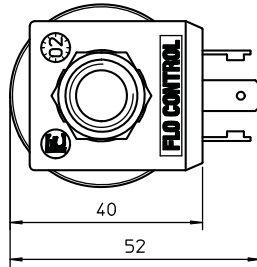
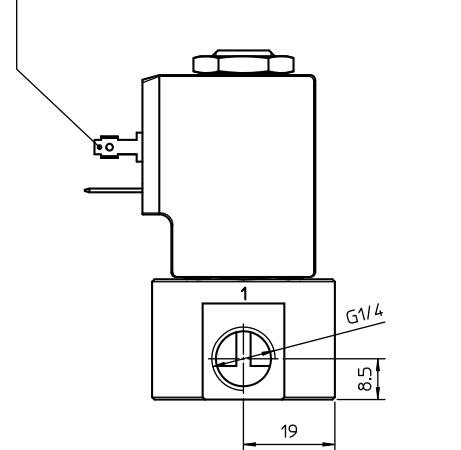


direct operated solenoid valves

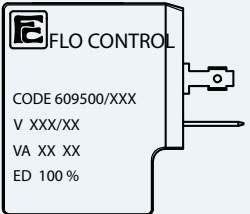
coil 31 mm



Terminals for connector DIN 43650-A/ISO 4400



weight 420 g

| coil code | TABLE B | | | |
|---|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
|  <p>CODE 609500/XXX V XXX/XX VA XX XX ED 100 %</p> | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|-----------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

code Z10031

FLO CONTROL

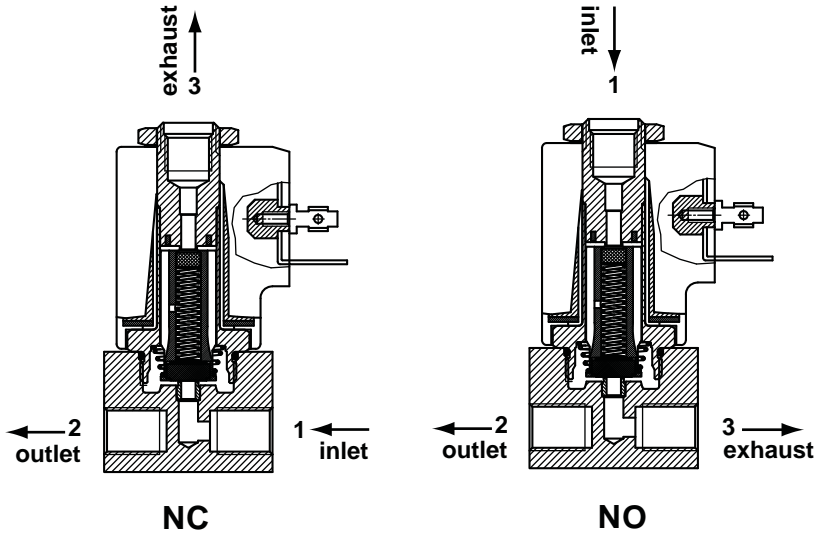
Solenoid Valves



| | | |
|----------|--------------------------|----------------|
| Q series | 3/2 - G1/4 - body: brass | Q3C-B page 1/2 |
|----------|--------------------------|----------------|

direct operated solenoid valves
coil 31 mm

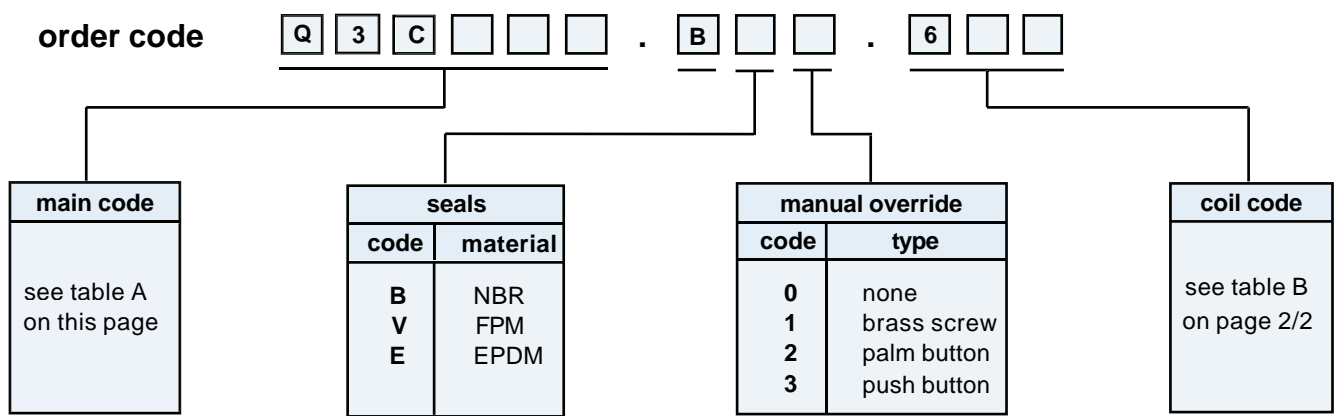
| general information | |
|--------------------------|------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 6 - 18 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM, EPDM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orif. mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code |
|-------------------------------------|--------|----------|-----|----------------------|---------|---------|---------------|---------------------|----------------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol | |
| 3/2 normally closed (NC) | | 0.8 | 0.5 | 0 | 30 | 30 | 10 | 21.5 13.5 | Q3C108 |
| | | 1.2 | 1.3 | 0 | 25 | 25 | 10 | 21.5 13.5 | Q3C112 |
| | | 1.6 | 1.7 | 0 | 15 | 15 | 10 | 21.5 13.5 | Q3C116 |
| | | 2.4 | 3.5 | 0 | 10 | 10 | 10 | 21.5 13.5 | Q3C124 |
| | | 3.0 | 4.5 | 0 | 6 | 6 | 10 | 21.5 13.5 | Q3C130 |
| | | | | | | | | | |
| 3/2 normally open (NO) | | 0.8 | 0.5 | 0 | 20 | 20 | 10 | 21.5 13.5 | Q3C208 |
| | | 1.2 | 1.1 | 0 | 15 | 15 | 10 | 21.5 13.5 | Q3C212 |
| | | 1.6 | 1.4 | 0 | 10 | 10 | 10 | 21.5 13.5 | Q3C216 |
| | | 2.4 | 3.0 | 0 | 6 | 6 | 10 | 21.5 13.5 | Q3C224 |
| | | 3.0 | 3.5 | 0 | 4.5 | 4.5 | 10 | 21.5 13.5 | Q3C230 |
| | | | | | | | | | |

*l/min. of water with ΔP of 1 bar

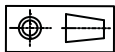
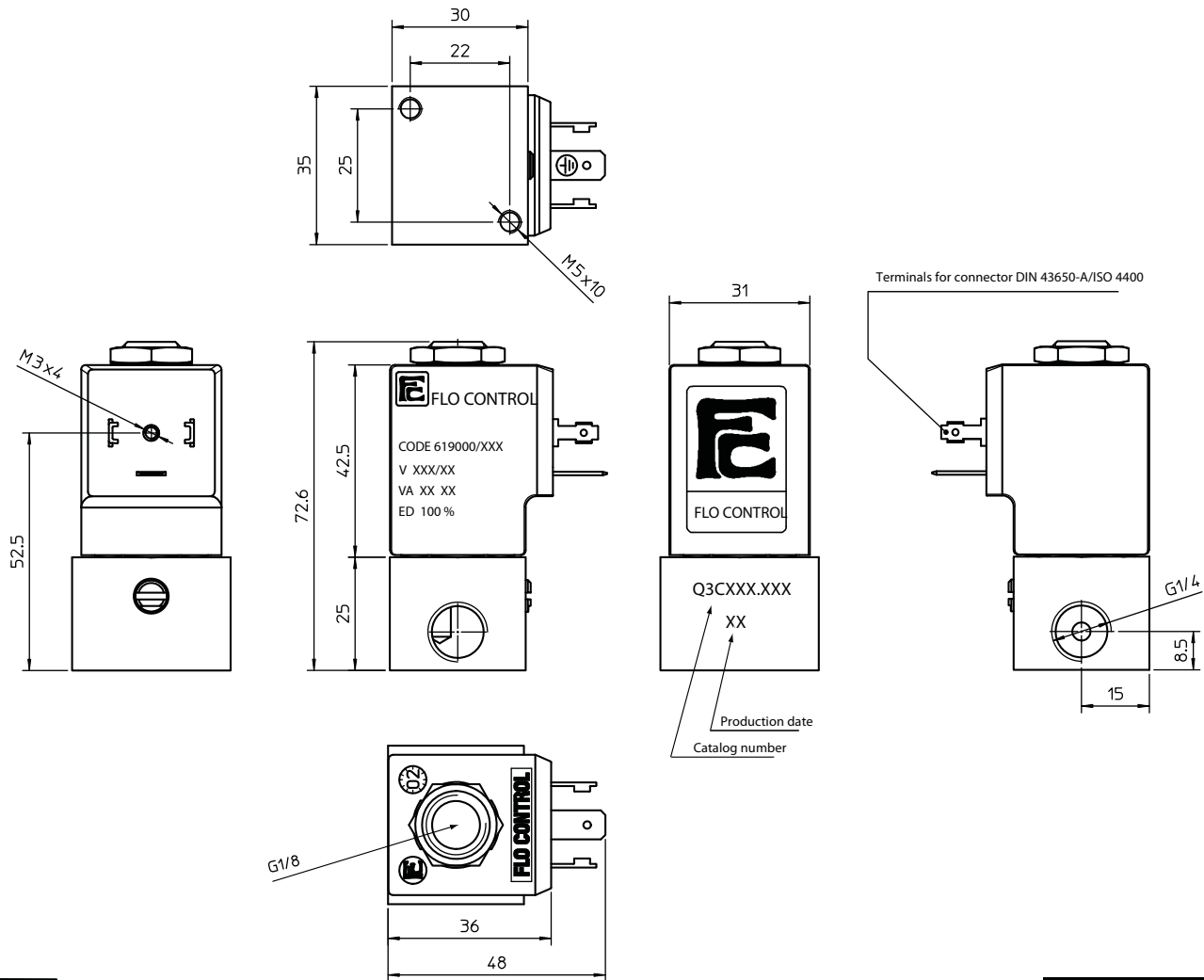


FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 31 mm



| | |
|---------------|-------|
| weight | 330 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|------------------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10031 |
|-------------|--------|

FLO CONTROL

Solenoid Valves

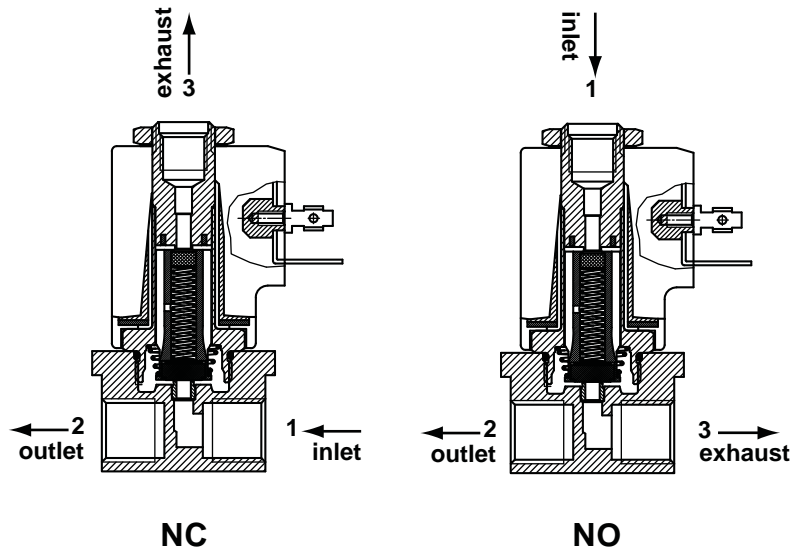


direct operated solenoid valves

coil 31 mm

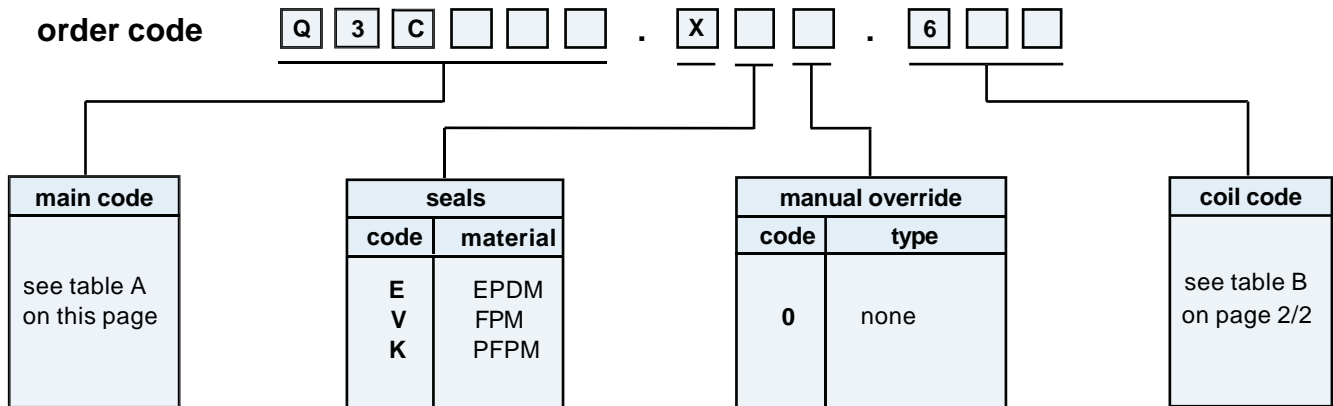
| general information | |
|--------------------------|------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 6 - 18 ms |
| mounting | in any position |
| standard seal materials* | EPDM, FPM, PFPM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |

* other seal materials on request



| function | symbol | orif. mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A main code | |
|-------------------------------------|--------|----------|-----|----------------------|---------|---------|---------------|---------|----------------------|-----|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC | | |
| | | | | | | | | inr. | | hol |
| 3/2 normally closed (NC) | 0.8 | 0.5 | 0 | 30 | 30 | 10 | 21.5 | 13.5 | Q3C108 | |
| | 1.2 | 1.3 | 0 | 25 | 25 | 10 | 21.5 | 13.5 | Q3C112 | |
| | 1.6 | 1.7 | 0 | 15 | 15 | 10 | 21.5 | 13.5 | Q3C116 | |
| | 2.4 | 3.5 | 0 | 10 | 10 | 10 | 21.5 | 13.5 | Q3C124 | |
| | 3.0 | 4.5 | 0 | 6 | 6 | 10 | 21.5 | 13.5 | Q3C130 | |
| 3/2 normally open (NO) | 0.8 | 0.5 | 0 | 20 | 20 | 10 | 21.5 | 13.5 | Q3C208 | |
| | 1.2 | 1.1 | 0 | 15 | 15 | 10 | 21.5 | 13.5 | Q3C212 | |
| | 1.6 | 1.4 | 0 | 10 | 10 | 10 | 21.5 | 13.5 | Q3C216 | |
| | 2.4 | 3.0 | 0 | 6 | 6 | 10 | 21.5 | 13.5 | Q3C224 | |
| | 3.0 | 3.5 | 0 | 4.5 | 4.5 | 10 | 21.5 | 13.5 | Q3C230 | |

*l/min. of water with ΔP of 1 bar



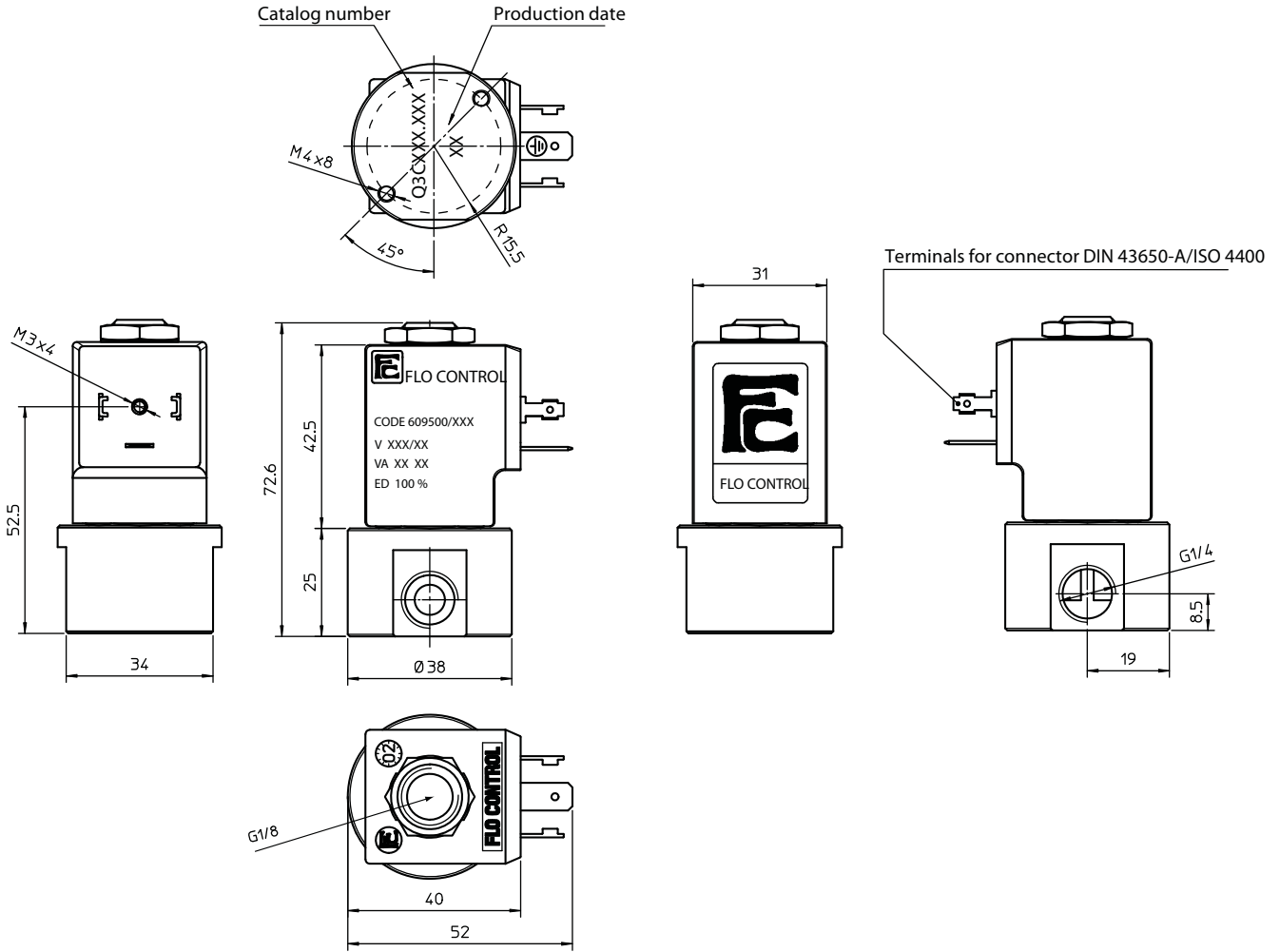
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



| | |
|---------------|-------|
| weight | 420 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|------------------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10031 |
|-------------|--------|

FLO CONTROL

Solenoid Valves

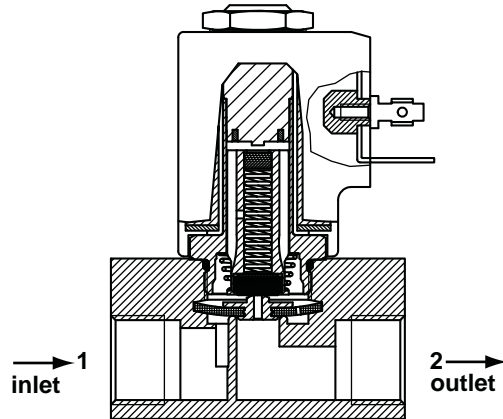


U series 2/2 - G3/8 - body: aluminium U2D-A page 1/2

pilot operated solenoid valves

coil 31 mm

| general information | |
|--------------------------|------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 10 - 18 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM EPDM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A | | |
|---------------------------------|--------|------------|-----|----------------------|---------|---------|---------------|-------------------------|-----------|--------------|---------------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol. | main code | | |
| 2/2 normally closed (NC) | | | | | | | | | | | |
| | | | | 8.0 | 16.0 | 0.5 | 12 | 12 | 10 | 21.5 13.5 | U2D180 |

*l/min. of water with ΔP of 1 bar

order code

U 2 D . A 0 . 6

main code
see table A on this page

| seals | |
|-------|----------|
| code | material |
| B | NBR |
| V | FPM |
| E | EPDM |

coil code
see table B on page 2/2

FLO CONTROL

Solenoid Valves



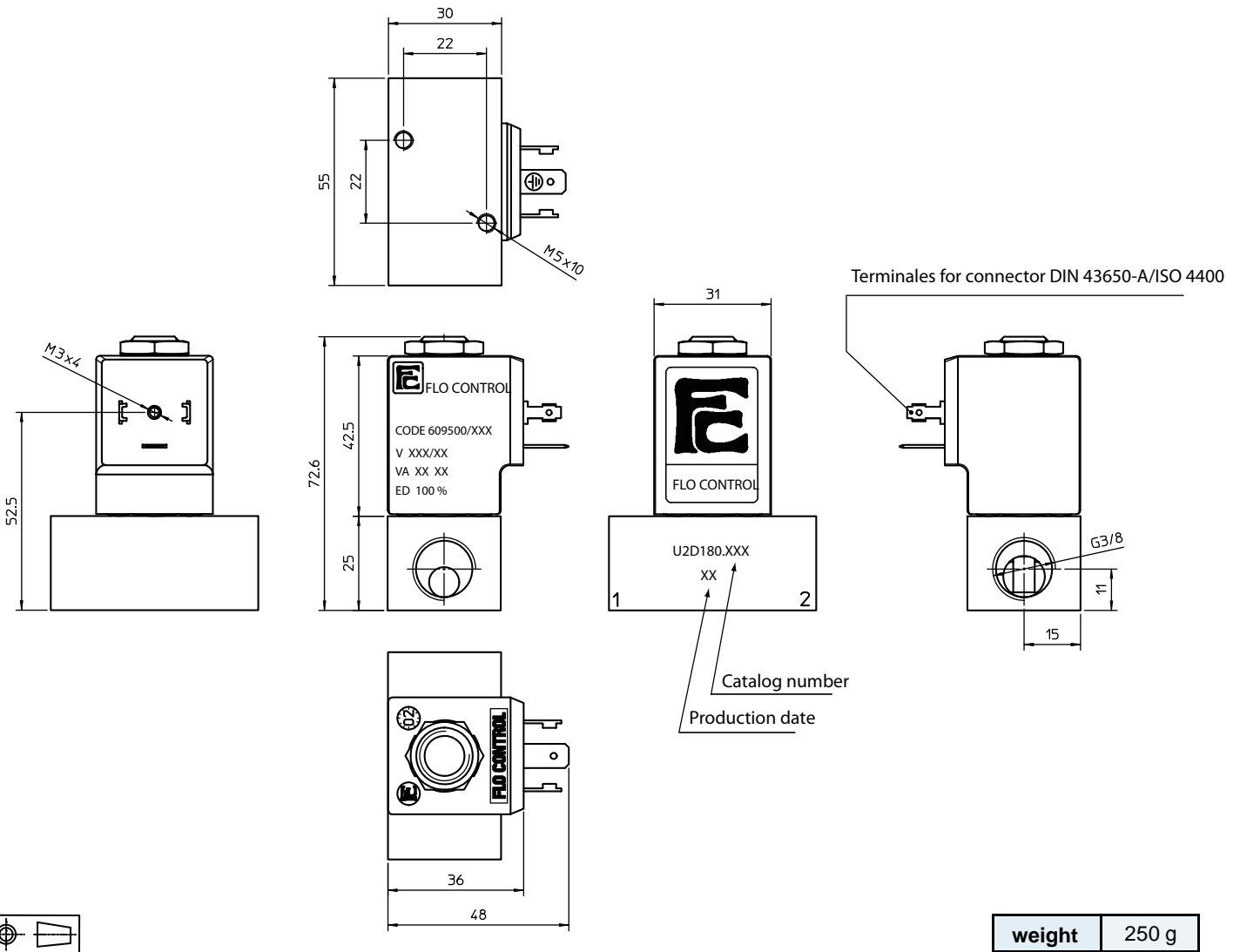
U series

2/2 - G3/8 - body: aluminium

U2D-A page 2/2

pilot operated solenoid valves

coil 31 mm



weight 250 g

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|-----------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10031 |
|-------------|--------|

FLO CONTROL
Solenoid Valves

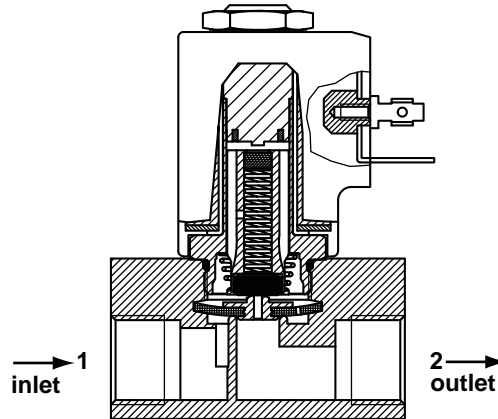


U series 2/2 - G3/8 - body: brass U2D-B page 1/2

pilot operated solenoid valves

coil 31 mm

| general information | |
|--------------------------|------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 10 - 18 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM EPDM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A | |
|--------------------------|--------|------------|------|----------------------|---------|---------|---------------|-------------------------|-----------|--------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol. | main code | |
| 2/2 normally closed (NC) | | 8.0 | 16.0 | 0.5 | 12 | 12 | 10 | 21.5 | 13.5 | U2D180 |
| | | | | | | | | | | |

*l/min. of water with ΔP of 1 bar

order code

U 2 D . B 0 . 6

main code
see table A on this page

| seals | |
|-------|----------|
| code | material |
| B | NBR |
| V | FPM |
| E | EPDM |

coil code
see table B on page 2/2

FLO CONTROL

Solenoid Valves



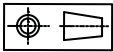
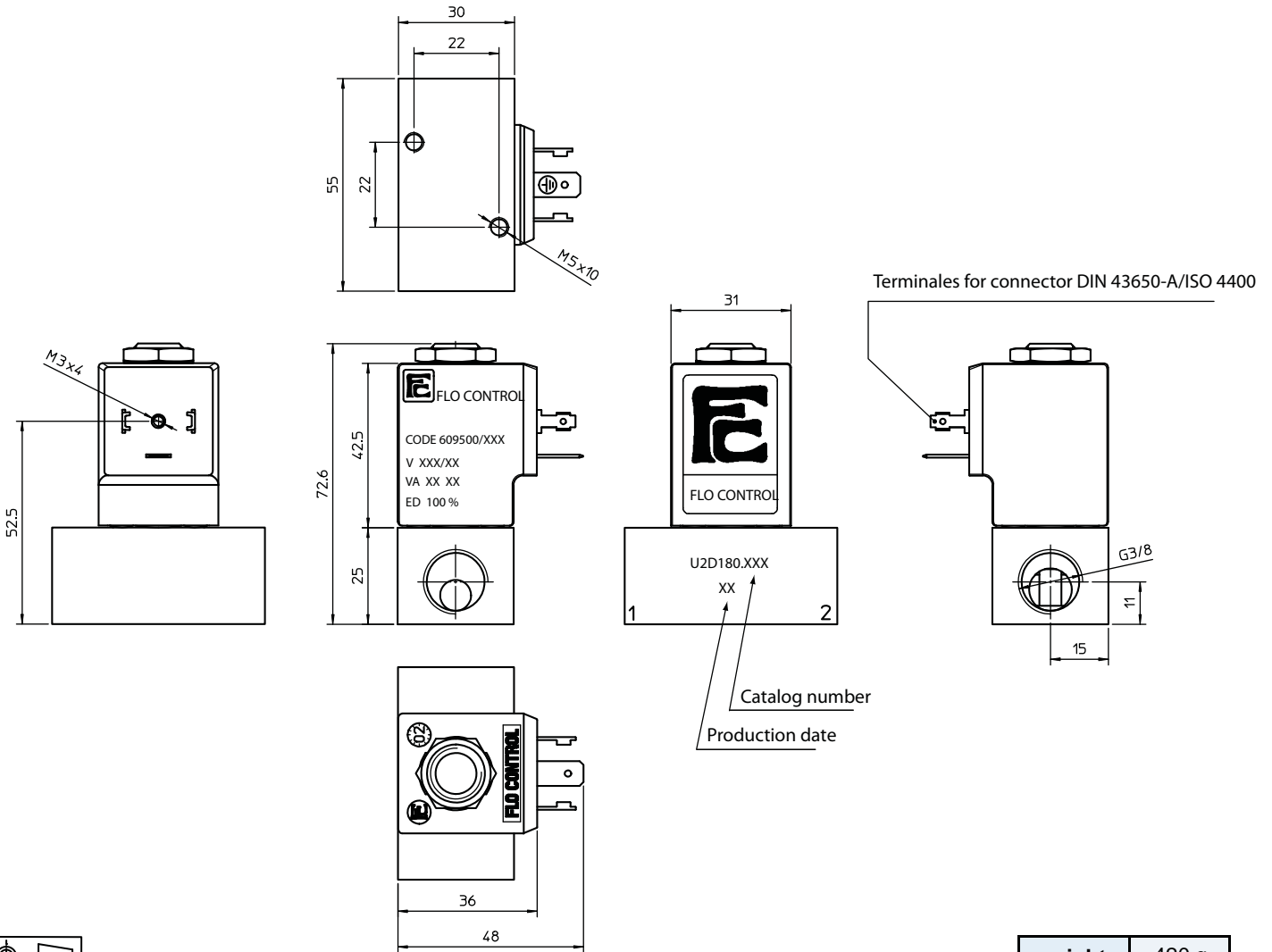
U series

2/2 - G3/8 - body: brass

U2D-B page 2/2

pilot operated solenoid valves

coil 31 mm



weight 420 g

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|-----------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

code Z10031

FLO CONTROL

Solenoid Valves

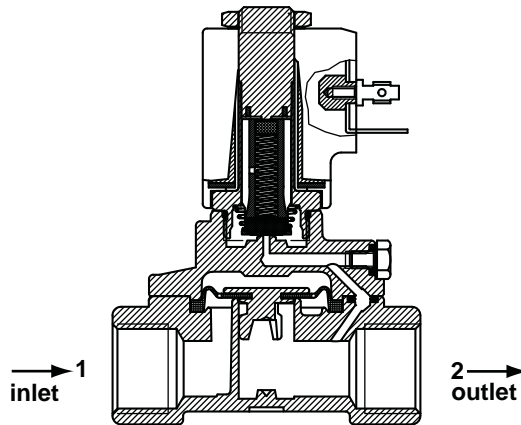


| | | |
|----------|--------------------------|----------------|
| U series | 2/2 - G1/2 - body: brass | U2E-B page 1/2 |
|----------|--------------------------|----------------|

pilot operated solenoid valves

coil 31 mm

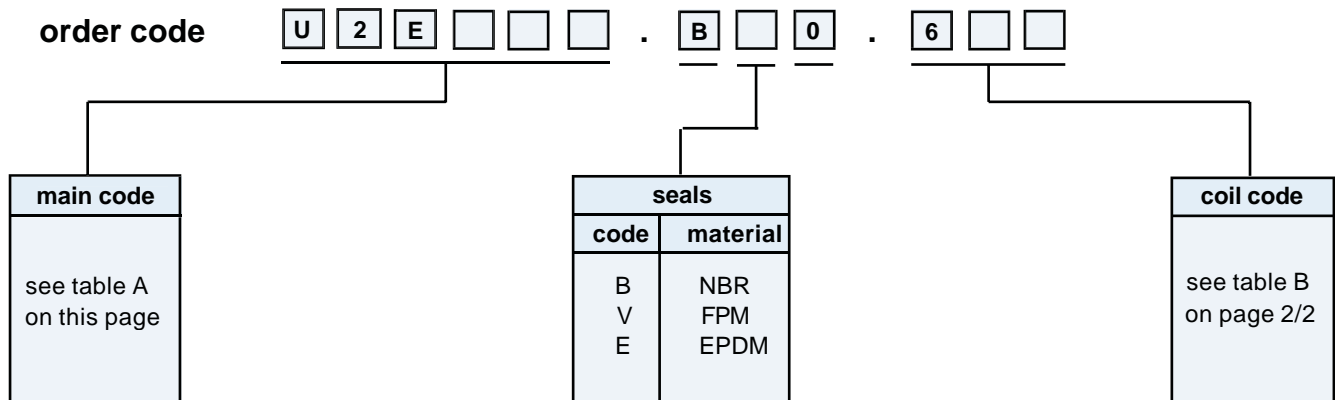
| general information | |
|--------------------------|------------------|
| ambient temperature | - 10°C to + 50°C |
| response time | 10 - 18 ms |
| mounting | in any position |
| standard seal materials* | NBR, FPM EPDM |
| dimensions | see page 2/2 |
| coil data | see page 2/2 |
| connector data | see page 2/2 |



* other seal materials on request

| function | symbol | orifice mm | *Kv | pressure range (bar) | | | nominal power | | TABLE A | |
|--------------------------|--------|------------|-----|----------------------|---------|---------|---------------|----------------------|-----------|--------|
| | | | | min. | max. DC | max. AC | Watt DC | V.A. AC inr. hol. | main code | |
| 2/2 normally closed (NC) | | 13.0 | 35 | 0.5 | 12 | 12 | 10 | 21.5 | 13.5 | U2E113 |
| | | | | | | | | | | |

*l/min. of water with ΔP of 1 bar

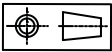
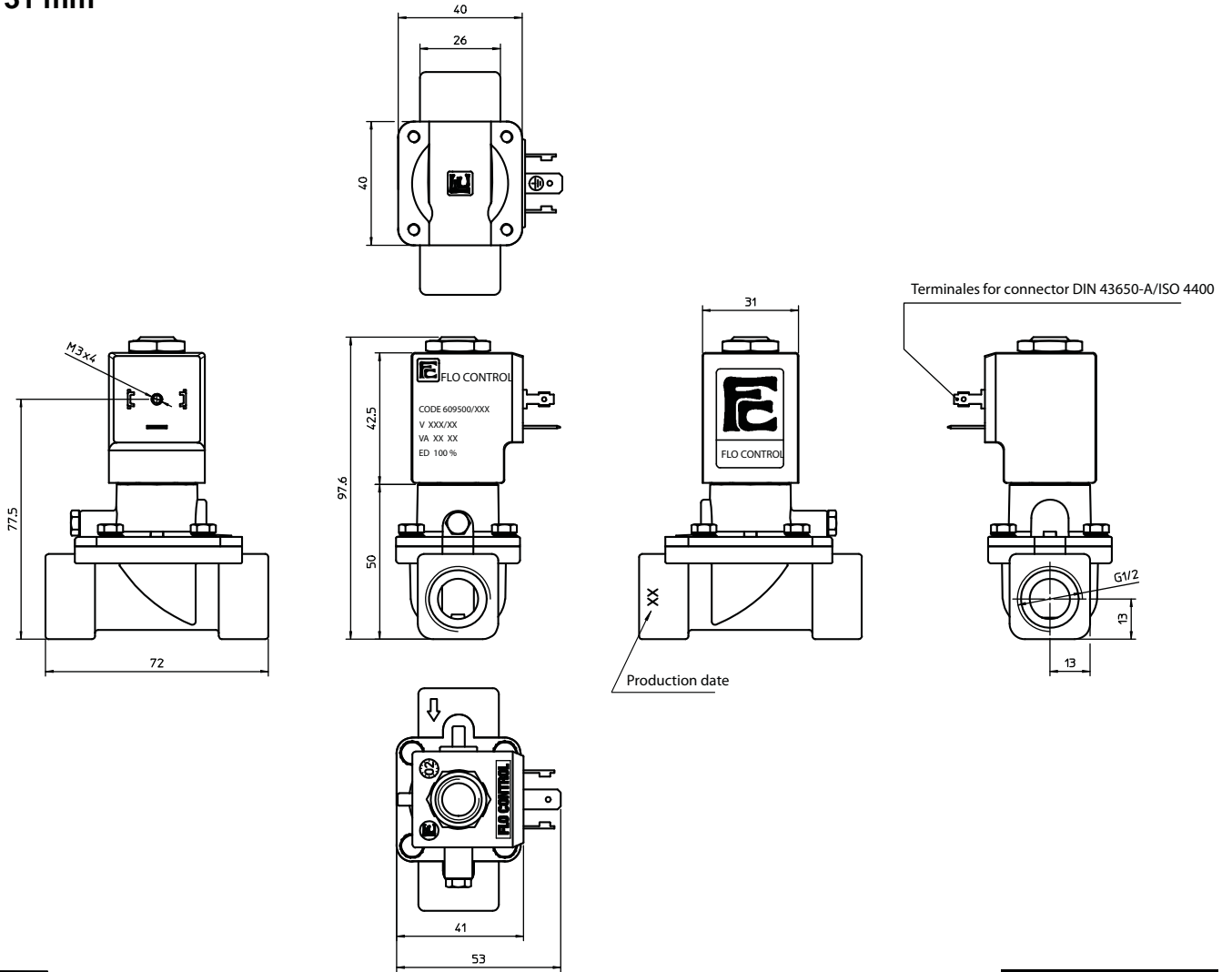


FLO CONTROL

Solenoid Valves



pilot operated solenoid valves
coil 31 mm



| | |
|---------------|-------|
| weight | 510 g |
|---------------|-------|

| coil code | TABLE B | | | |
|-----------|-----------|---------|---------|------|
| | *voltages | code | | |
| | | ~ 50 Hz | ~ 60 Hz | = DC |
| | 12 | - | - | 666 |
| | 24 | 611 | 644 | 671 |
| | 48 | 616 | - | 676 |
| | 110 | 621 | - | 681 |
| | 115 | - | 653 | - |
| | 220 | 631 | - | - |
| | 230 | 638 | 659 | - |
| | 380 | 640 | - | - |

| coil specification | |
|------------------------------|-------------------------------|
| wire insulation | class H180° C |
| encapsulation | class F155° C |
| encapsulation mat. | nylon |
| energising duration | 100% at +20° C ambient |
| voltage tolerance | - 10% +15% of nominal voltage |
| *power consumption | AC 13,5 VA - DC 10 Watt |
| electrical connection | DIN 43650/A (2P+ earth) |
| cable connection | Pg 9 (for cable dia. 6-8mm) |
| protection class | IP 65 (with connector) |

* other voltages and wattages on request

connector (not included, must be ordered separately)

| | |
|-------------|--------|
| code | Z10031 |
|-------------|--------|

FLO CONTROL
 Solenoid Valves

