

FLO CONTROL®

multi media solenoid valves



cost-effective quality
from Italy

SOLENOID VALVES FOR

2/2 – 3/2 NC, NO AND UN

A series



3/2 NC – SUB-BASE

B series



3/2 NC – SUB-BASE – ALUMINIUM

INTERNALS

FLO CONTROL valves are designed as multi media valves. All internal metal parts are made of stainless steel, to handle most fluids and gases.

B series



3/2 NC – SUB-BASE – ALUMINIUM

FLO CONTROL

QUALITY

B series



3/2 NC – G1/8 – ALUMINIUM

APPLICATIONS

pilots for pneumatic valves
gas analyzers
welding machines
coffee machines
medical equipments
dental equipments
diesel power engines
industrial washing machines
industrial ironing machines
oil and gas burners
etc.

N series



3/2 NC – CNOMO BASE – ALUMINIUM

AIR-GAS-WATER-OIL AND M

UNIVERSAL • M5 TO G1/2 • STAINLESS STEEL, BRASS

N series



3/2 NC - M5 - BRASS

PRESSURE

FLO CONTROL solenoid valves are designed to work with vacuum and pressure up to 80 bar.

SEALS

Standard Nitrile (Buna N).
Optional Viton, EPDM, Neoprene,
Teflon, Rulon, Kalrez, etc.

N series



3/2 NC - G1/8 - S. STEEL

FLO CONTROL

N series



3/2 NC - G1/8 - BRASS

P series



2/2 NC - G1/8 - BRASS

VOLTAGES

FLO CONTROL valves are supplied for most common voltages.
On request coils with special voltages and wattages are available.

TESTS

All FLO CONTROL valves are individually tested. Single parts are inspected and specific tests are applied to the valves during the assembling cycle. This procedure ensures reliable operation.

ON CORROSIVE FLUIDS

BRASS AND ALUMINIUM

Q series



2 NC - CNOMO BASE - ALUMINIUM

Q series



3/2 NC - G1/4 - ALUMINIUM

SPECIALS

A wide range of standard models is available to satisfy many application requirements. FLO CONTROL engineers have a great deal of experience in designing valves according to special customer's specifications.

Q series



3/2 NC - G1/4 - S. STEEL

SERVICE

FLO CONTROL

Q series



2 NC - SUB-BASE - ALUMINIUM

Q series



3/2 NC - G1/4 - BRASS

ACCESSORIES

A wide range of accessories and options are available:
manual override
electrical connectors
flow regulators
etc.

AIR - GAS - AND FLUIDS

STAINLESS STEEL, BRASS AND ALUMINIUM

Q series



3/2 NC - SUB-BASE - BRASS

RELIABILITY

We have twenty years experience in designing and manufacturing quality solenoid valves with exceptional reliability.

Q series



3/2 NC - SUB-BASE - BRASS

Q series



2/2 NC - DISCHARGE VALVE

FLO CONTROL

FLEXIBILITY

U series



2/2 NC - G3/8 - BRASS

DISTRIBUTION

FLO CONTROL solenoid valves are worldwide available through qualified stocking distributors.

U series



2/2 NC - G1/2 - BRASS

SPECIAL VALVES FOR CORROSIVE MEDIA

2/2 - 3/2 NC, NO AND UNIVERSAL - G1/8 AND G1/4



316 STAINLESS STEEL SOLENOID VALVES

Unique new series of direct operated solenoid valves for corrosive media. For the parts that need to be magnetized during operation, a new stainless steel alloy with anti-corrosive capabilities similar to AISI 316 is used. This makes it possible, to apply this type of valve, instead of diaphragm or other indirect valves. Longer life, improved reliability, higher maximum operating pressure and faster response time are some of the advantages.

Direct operated valves are also more cost-effective and smaller. A wide range of seal materials can be offered. For alternating current, a special gold plated or silver shading ring is used. We designed these valves to serve the chemical, petrochemical, medical, food and pharmaceutical equipment markets.

Available are the usual body ported and flange types, but also specials can be offered.

datasheets - FLO CONTROL

Coil mm width	Function	Operator	M5	G1/8	G1/4	G3/8	G1/2	subbase	modular	alu	brass	AISI 303	AISI 316	plastic	PDF
15	2/2							•			•				A2M-B
15	3/2							•			•				A3M-B
22	2/2	•													N20-O
22	2/2		•							•					N2A-A
22	2/2		•								•				N2A-B
22	2/2		•									•			N2A-S
22	2/2			•						•					N2B-A
22	2/2			•							•				N2B-B
22	2/2			•								•			N2B-S
22	2/2			•									•		N2B-X
22	2/2							•		•					N2M-A
22	2/2							•		•					N2P-A
22	2/2							•			•				N2P-B
22	2/2							•				•			N2P-S
22	2/2								•	•					NxS-A
22	2/2								•		•				NxS-B
22	2/2								•			•			NxS-S
22	3/2	•													N30-O
22	3/2		•							•					N3A-A
22	3/2		•								•				N3A-B
22	3/2		•									•			N3A-S
22	3/2			•						•					N3B-A
22	3/2			•							•				N3B-B
22	3/2			•								•			N3B-S
22	3/2			•									•		N3B-X
22	3/2							•		•					N3M-A
22	3/2							•		•					N3P-A
22	3/2							•			•				N3P-B
22	3/2							•				•			N3P-S
22	3/2								•	•					NxS-A
22	3/2								•		•				NxS-B
22	3/2								•			•			NxS-S
22	2/2 PM		•							•					N6A-A
22	2/2 PM		•								•				N6A-B
22	2/2 PM			•						•					N6B-A
22	2/2 PM			•							•				N6B-B
22	2/2 PM							•		•					N6P-A
22	2/2 PM							•			•				N6P-B
22	2/2 PM								•	•					NxS-A
22	2/2 PM								•		•				NxS-B
22	2/2 PM								•			•			NxS-S
22	3/2 PM		•							•					N7A-A
22	3/2 PM		•								•				N7A-B
22	3/2 PM			•						•					N7B-A
22	3/2 PM			•							•				N7B-B
22	3/2 PM							•		•					N7P-A
22	3/2 PM							•			•				N7P-B

Coil mm width	Function	Operator	M5	G1/8	G1/4	G3/8	G1/2	subbase	modular	alu	brass	AISI 303	AISI 316	plastic	PDF
22	3/2 PM								•	•					NxS-A
22	3/2 PM								•		•				NxS-B
22	3/2 PM								•			•			NxS-S
22	2/2			•							•				P2B-B
31	2/2	•													Q20-O
31	2/2			•						•					Q2B-A
31	2/2			•							•				Q2B-B
31	2/2			•								•			Q2B-S
31	2/2				•					•					Q2C-A
31	2/2				•						•				Q2C-B
31	2/2				•							•			Q2C-S
31	2/2				•								•		Q2C-X
31	2/2					•					•				Q2D-B
31	2/2						•				•				Q2E-B
31	2/2							•		•					Q2Q-A
31	2/2							•			•				Q2R-B
31	2/2			•	•	•	•							•	Q5x-P
31	3/2	•													Q30-O
31	3/2			•						•					Q3B-A
31	3/2			•						•					Q3B-AD
31	3/2			•						•					Q3B-AU
31	3/2			•							•				Q3B-B
31	3/2			•							•				Q3B-BD
31	3/2			•							•				Q3B-BU
31	3/2			•								•			Q3B-S
31	3/2				•					•					Q3C-A
31	3/2				•					•					Q3C-AD
31	3/2				•					•					Q3C-AU
31	3/2				•						•				Q3C-B
31	3/2				•						•				Q3C-BD
31	3/2				•						•				Q3C-BU
31	3/2				•							•			Q3C-S
31	3/2				•							•			Q3C-SD
31	3/2				•							•			Q3C-SU
31	3/2				•								•		Q3C-X
31	3/2				•								•		Q3C-XD
31	3/2				•								•		Q3C-XU
31	3/2							•		•					Q3M-A
31	3/2							•		•					Q3P-A
31	3/2							•		•					Q3Q-A
31	3/2							•			•				Q3R-B

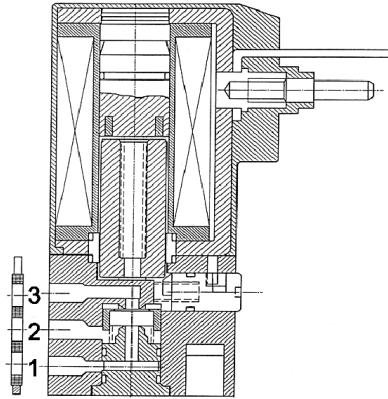
Coil mm width	Function	Operator	M5	G1/8	G1/4	G3/8	G1/2	subbase	modular	alu	brass	AISI 303	AISI 316	plastic	PDF
31	2/2 PM •														Q60-0
31	2/2 PM			•						•					Q6B-A
31	2/2 PM			•							•				Q6B-B
31	2/2 PM				•					•					Q6C-A
31	2/2 PM				•						•				Q6C-B
31	2/2 PM				•							•			Q6C-S
31	2/2 PM							•		•					Q6Q-A
31	2/2 PM							•			•				Q6R-B
31	3/2 PM •														Q70-0
31	3/2 PM			•						•					Q7B-A
31	3/2 PM			•							•				Q7B-B
31	3/2 PM				•					•					Q7C-A
31	3/2 PM				•						•				Q7C-B
31	3/2 PM				•							•			Q7C-S
31	3/2 PM							•		•					Q7M-A
31	3/2 PM							•		•					Q7P-A
31	3/2 PM							•		•					Q7Q-A
31	3/2 PM							•			•				Q7R-B
31	2/2				•	•	•				•				Q90-B
31	2/2					•				•					U2D-A
31	2/2					•					•				U2D-B
31	2/2						•				•				U2E-B
31	2/2 PM						•				•				U6E-B

direct operated solenoid valves

coil 15 mm

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

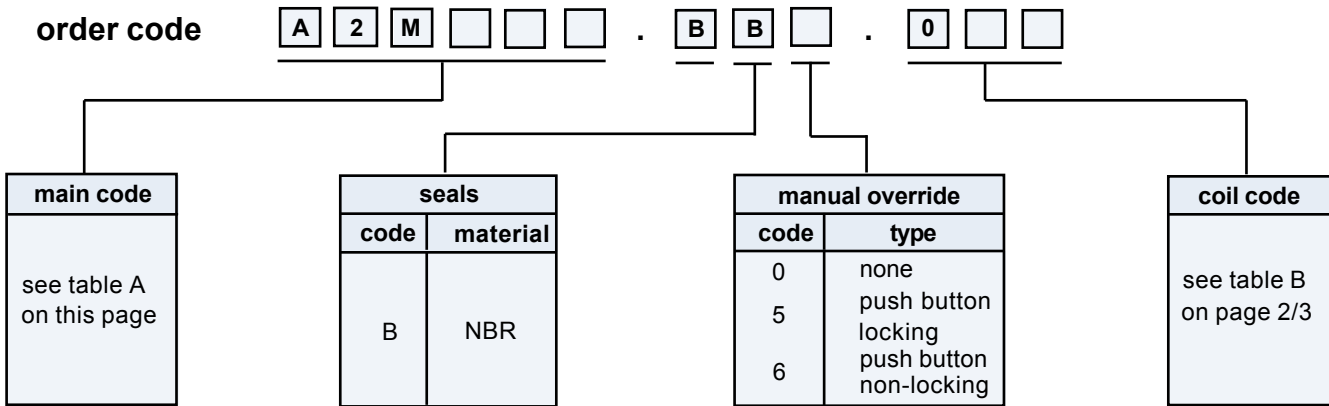
inlet port for:
 normally open 3
 normally closed 1



* other seal materials on request

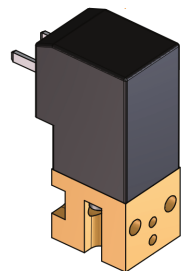
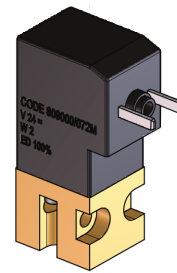
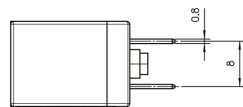
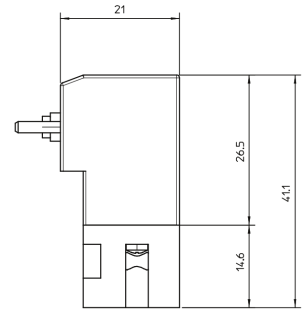
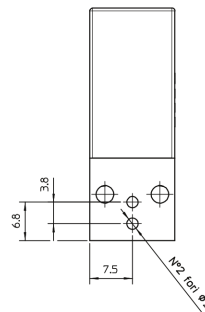
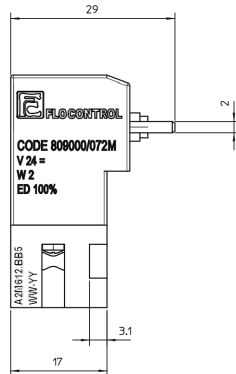
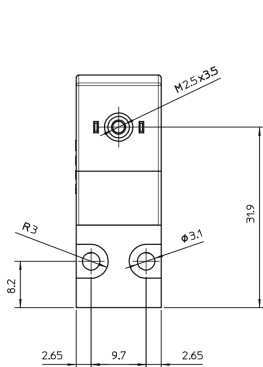
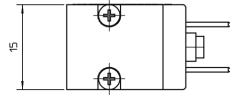
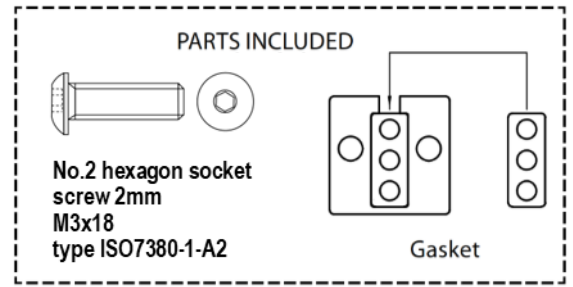
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.	
2/2 normally closed (NC) 		0.8	0.28	0	10	-	1	-	A2M608
		1.2	0.40	0	10	-	1.5	-	A2M612
		1.5	0.55	0	5	-	2	-	A2M615
2/2 normally open (NO) 		0.8	0.28	0	10	-	1	-	A2M708
		1.2	0.40	0	10	-	1.5	-	A2M712
		1.5	0.55	0	5	-	2	-	A2M715

*l/min. of water with ΔP of 1 bar

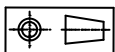


direct operated solenoid valves

coil 15 mm



weight 55 g



coil code	TABLE B				
	*voltages	*	code		
			= DC		
			1 W	1.5 W	2 W
	12	-	067	066	068
	24	-	070	071	073

coil specification	
wire insulation	class H180° C
encapsulation	class H180° C
encapsulation mat.	Crastin
energising duration	100% at 20° C ambient
voltage variation	- 10% +15% of nom. volt.
power consumption	DC 1 - 1.5 - 2 Watt
electrical connection	AMP 2.8 x 0.5 (2P+ earth)
cable connection	Pg 7 (for cable dia. 4-6mm)
protection class	IP 65 (with connector)

* other voltages and wattages on request

connector (not included, must be ordered separately)

code Z10029

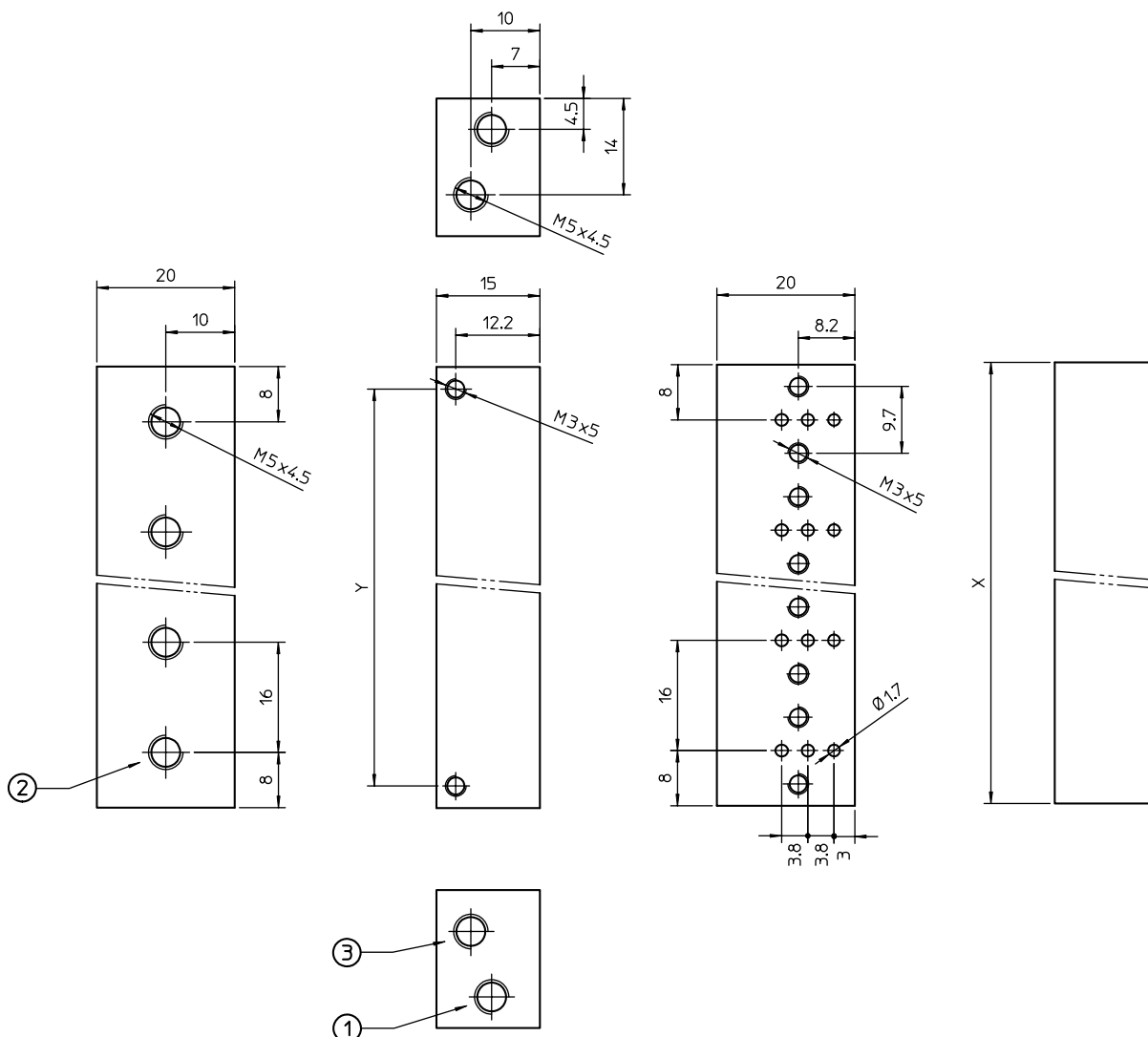
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 15 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.A01.08A	1	16	9.6	12
ZZ11.A02.08A	2	32	25.6	24
ZZ11.A03.08A	3	48	41.6	36
ZZ11.A04.08A	4	64	60.6	48
ZZ11.A05.08A	5	80	73.6	60
ZZ11.A06.08A	6	96	89.6	72

- gasket and two screws supplied with each valve
- bases for more than 6 valves on request

FLO CONTROL

Solenoid Valves

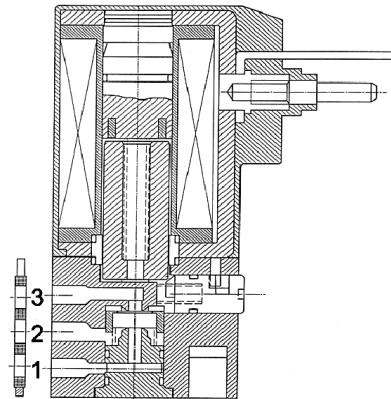


direct operated solenoid valves

coil 15 mm

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

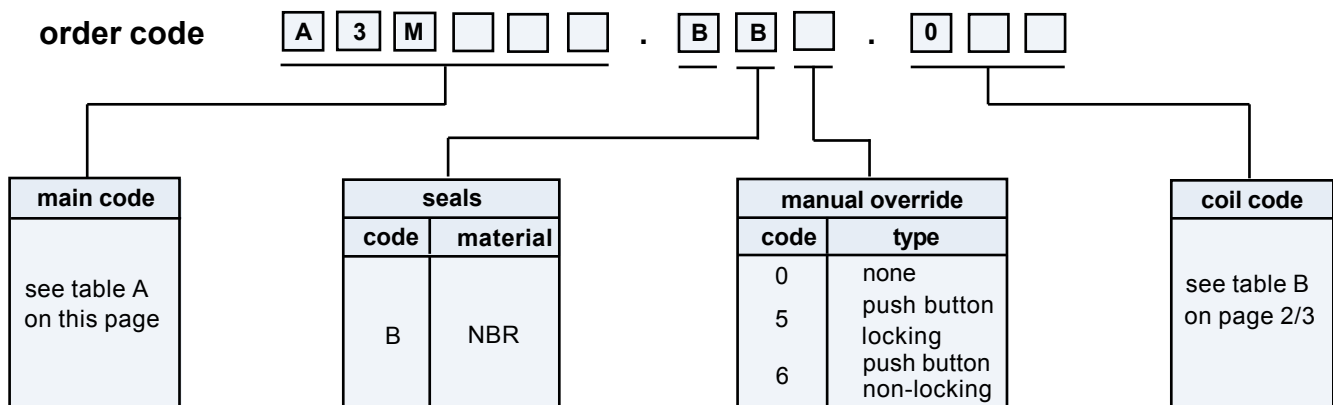
inlet port for:
normally open 3
normally closed 1



* other seal materials on request

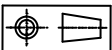
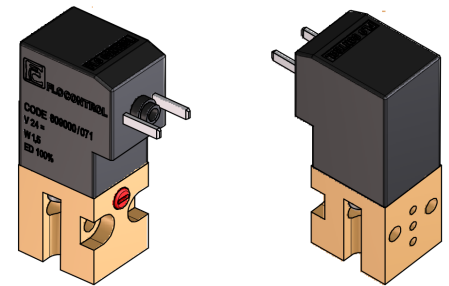
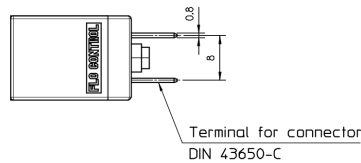
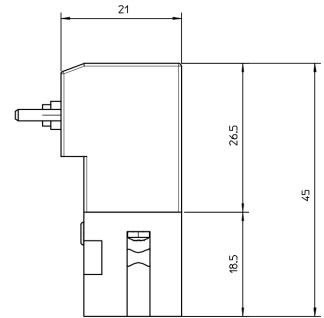
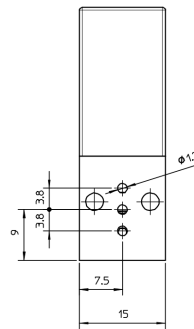
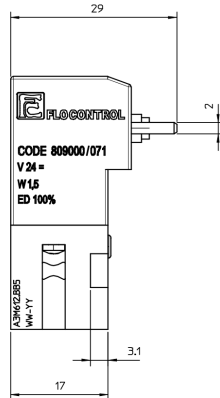
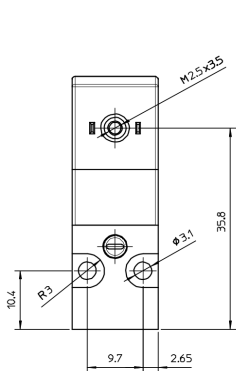
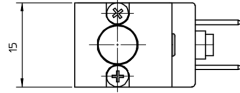
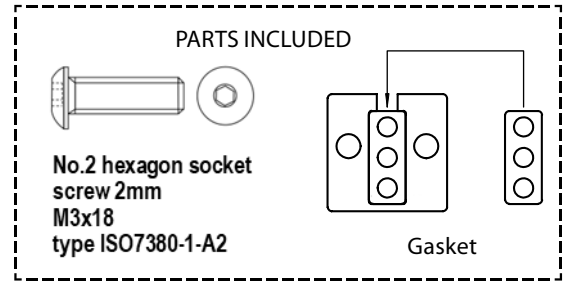
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.		
3/2 normally closed (NC) 		0.8	0.28	0	10	-	1	-	-	A3M608
		1.1	0.37	0	10	-	1.5	-	-	A3M611
		1.2	0.40	0	9	-	1.5	-	-	A3M612
		1.5	0.55	0	5	-	2	-	-	A3M615
3/2 normally open (NO) 		0.8	0.28	0	10	-	1	-	-	A3M708
		1.2	0.40	0	10	-	1.5	-	-	A3M712
		1.5	0.55	0	5	-	2	-	-	A3M715

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 15 mm



weight	60 g
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coil code	TABLE B				
	*voltages	*	code		
			= DC		
			1 W	1.5 W	2 W
	12	-	067	066	068
	24	-	070	071	073

coil specification	
wire insulation	class H180° C
encapsulation	class H180° C
encapsulation mat.	Crastin
energising duration	100% at 20° C ambient
voltage variation	- 10% +15% of nom. volt.
power consumption	DC 1 - 1.5 - 2 Watt
electrical connection	AMP 2.8 x 0.5 (2P+ earth)
cable connection	Pg 7 (for cable dia. 4-6mm)
protection class	IP 65 (with connector)

* other voltages and wattages on request

connector (not included, must be ordered separately)

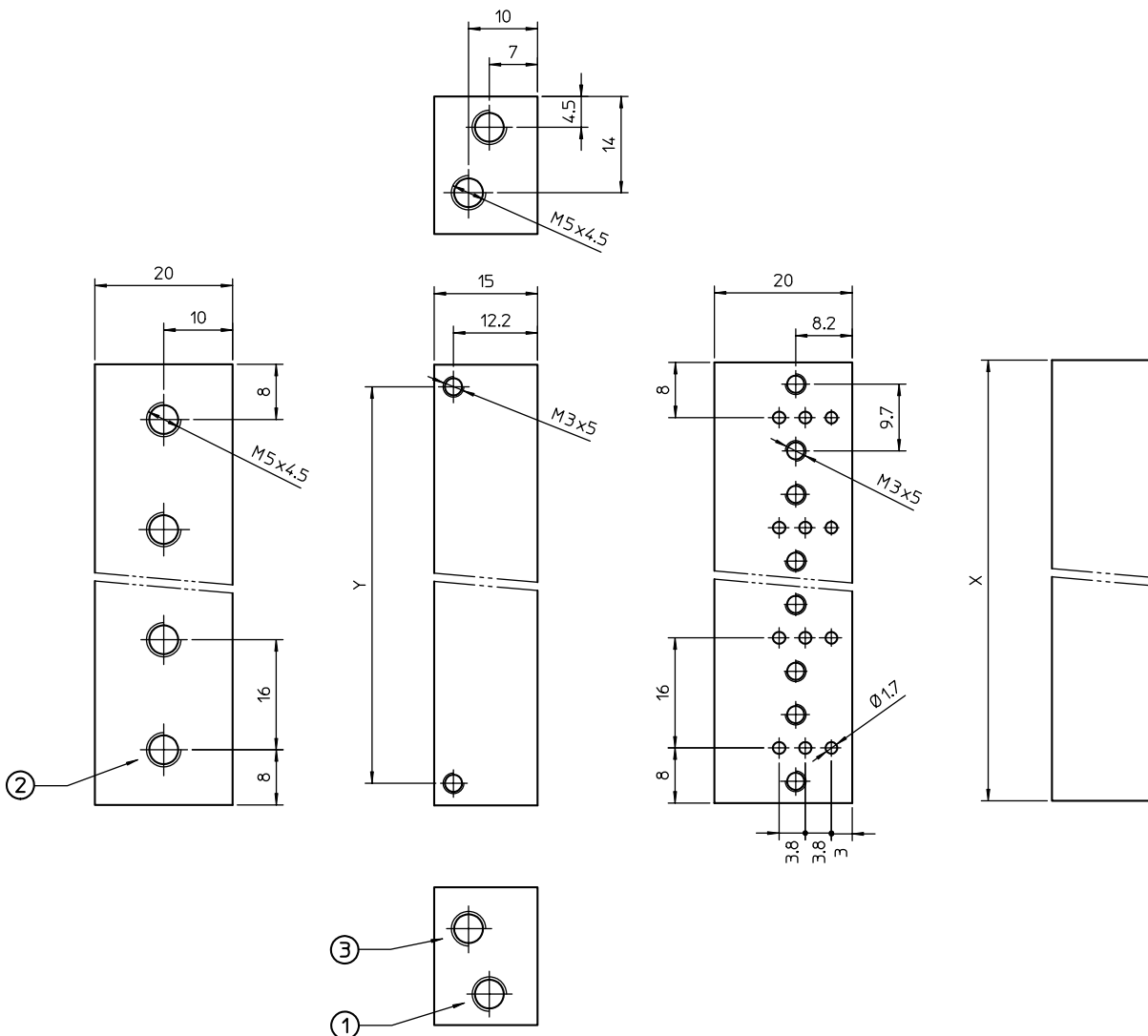
code	Z10029
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FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 15 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.A01.08A	1	16	9.6	12
ZZ11.A02.08A	2	32	25.6	24
ZZ11.A03.08A	3	48	41.6	36
ZZ11.A04.08A	4	64	60.6	48
ZZ11.A05.08A	5	80	73.6	60
ZZ11.A06.08A	6	96	89.6	72

- gasket and two screws supplied with each valve
- bases for more than 6 valves on request

FLO CONTROL

Solenoid Valves

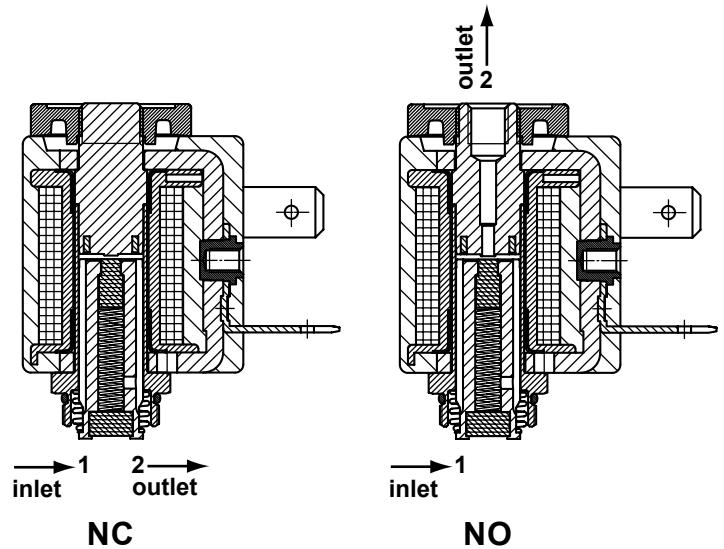


direct operated solenoid valves

coil 22 mm

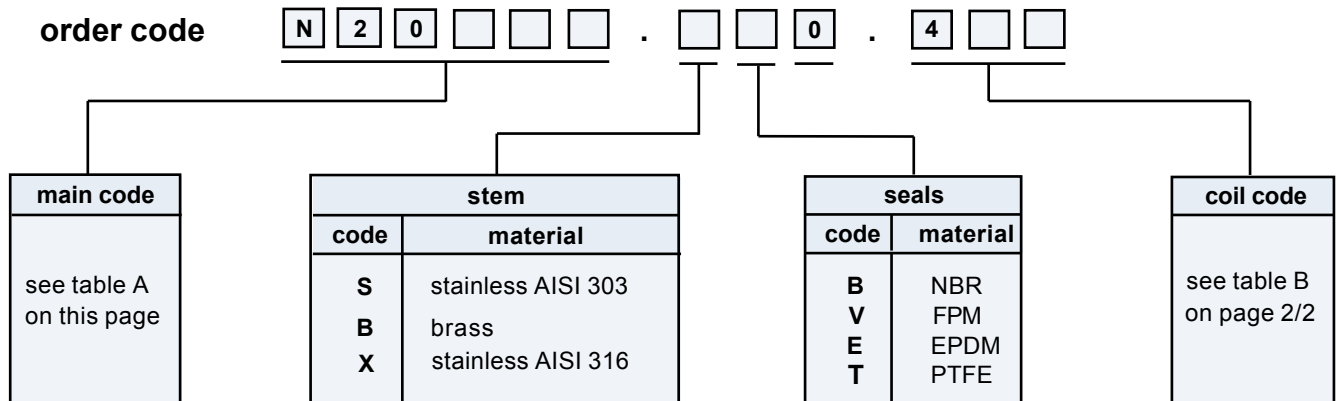
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request



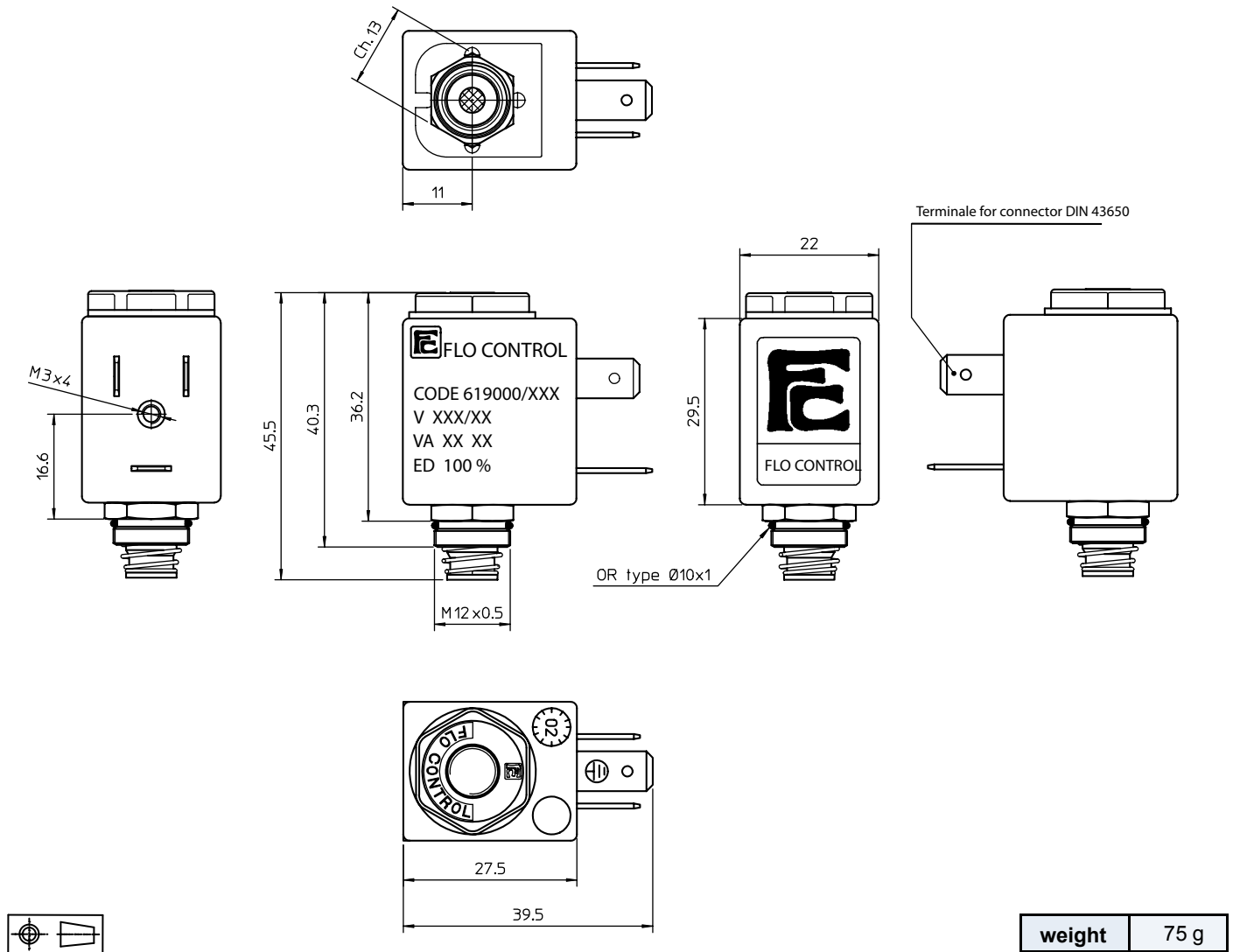
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
2/2 normally closed (NC) 		1.2	0.5	0	-	26	-	9	7.5	N20116
		1.2	0.5	0	15	-	5	-	-	N20616
		1.6	1.1	0	-	15	-	9	7.5	N20116
		1.6	1.1	0	8	-	5	-	-	N20616
		2.0	1.5	0	-	9	-	9	7.5	N20116
		2.0	1.5	0	4.5	-	5	-	-	N20616
		2.4	2.0	0	-	8	-	9	7.5	N20124
		2.4	2.0	0	4	-	5	-	-	N20624
2/2 normally open (NO) 		1.2	0.5	0	-	12	-	9	7.5	N20212
		1.2	0.5	0	12	-	5	-	-	N20712
		1.6	1.1	0	-	10	-	9	7.5	N20216
		1.6	1.1	0	10	-	5	-	-	N20716
		2.0	1.5	0	4.5	-	5	-	-	N20720
		2.4	2.0	0	3	-	5	-	-	N20724

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 22 mm



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
------	--------

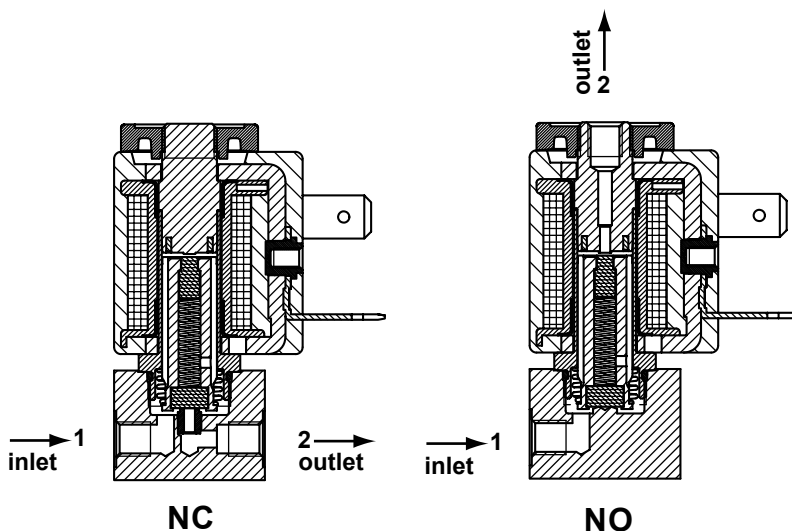
FLO CONTROL
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

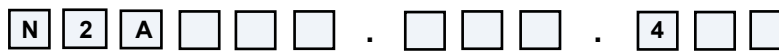


* other seal materials on request

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	N2A110	
	1.0	0.4	0	20	-	5	-	-	N2A610	
	1.2	0.5	0	-	26	-	9	7.5	N2A112	
	1.2	0.5	0	15	-	5	-	-	N2A612	
	1.6	1.1	0	-	15	-	9	7.5	N2A116	
	1.6	1.1	0	7.5	-	5	-	-	N2A616	
	2.0	1.5	0	-	9	-	9	7.5	N2A120	
	2.0	1.5	0	4.5	-	5	-	-	N2A620	
2/2 normally open (NO) 	1.2	0.5	0	-	12	-	9	7.5	N2A212	
	1.2	0.5	0	12	-	5	-	-	N2A712	
	1.6	1.1	0	-	10	-	9	7.5	N2A216	
	1.6	1.1	0	10	-	5	-	-	N2A716	

*l/min. of water with ΔP of 1 bar

order code



main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	A	stainless AISI 303	B	NBR	0	none	see table B on page 2/2
	D	brass	V	FPM	1	brass screw	
			E	EPDM	4	plastic lever	
			T	PTFE			

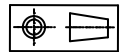
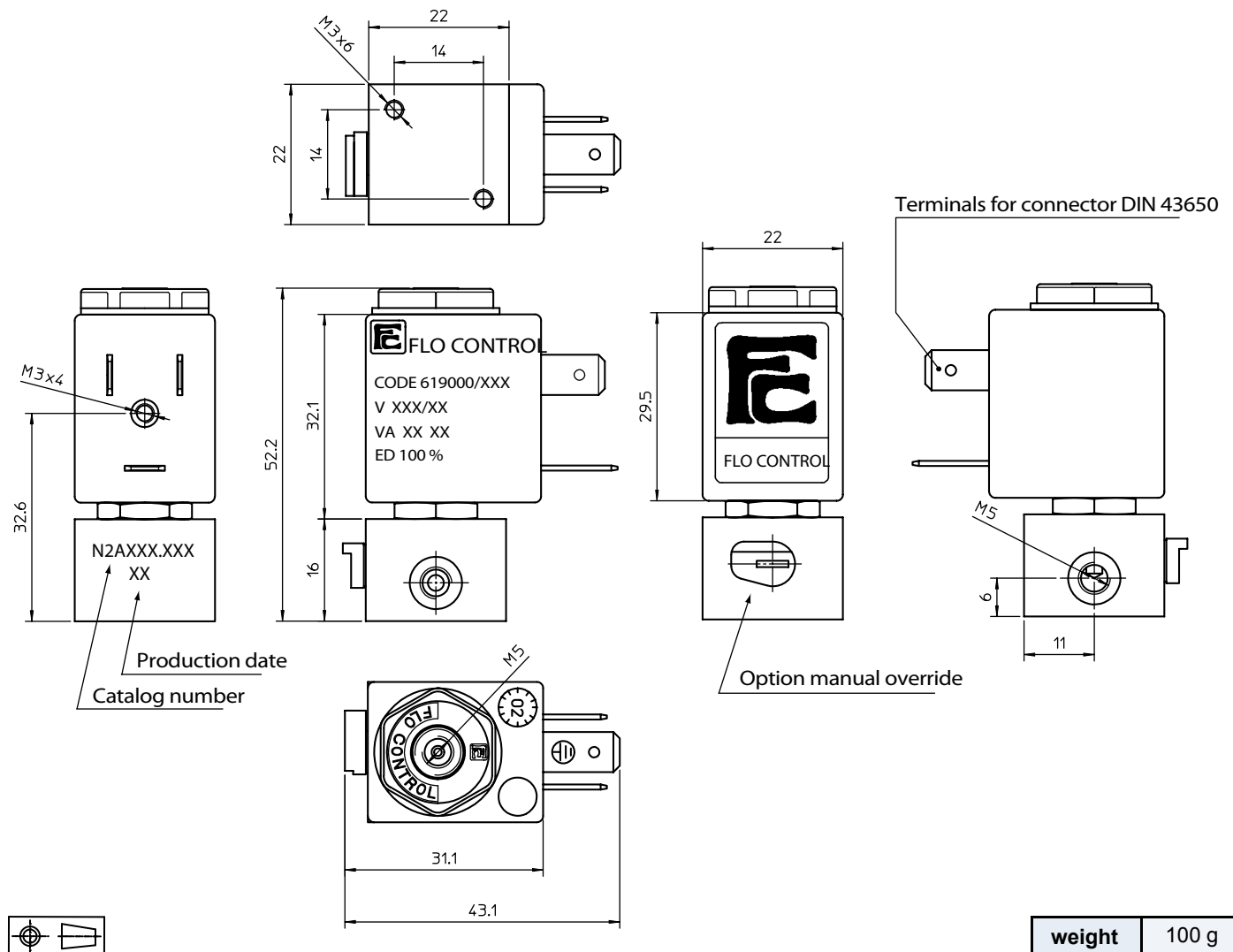
FLO CONTROL

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

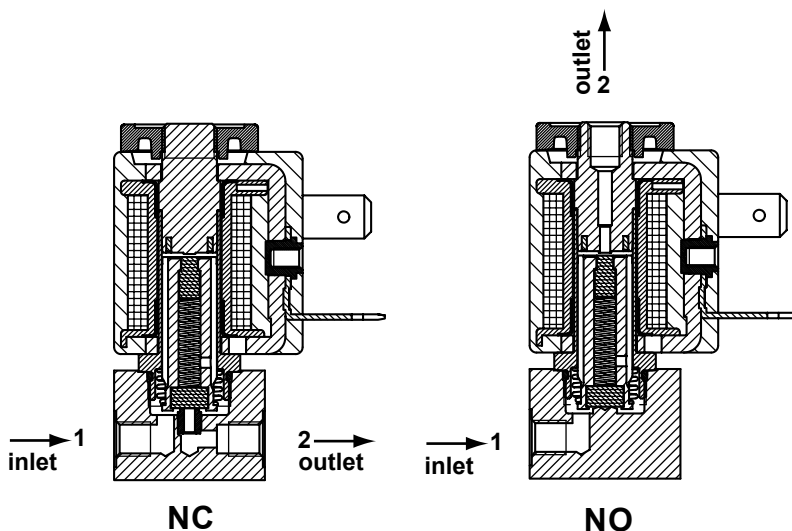
Solenoid Valves



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
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	N2A110	
	1.0	0.4	0	20	-	5	-	-	N2A610	
	1.2	0.5	0	-	26	-	9	7.5	N2A112	
	1.2	0.5	0	15	-	5	-	-	N2A612	
	1.6	1.1	0	-	15	-	9	7.5	N2A116	
	1.6	1.1	0	7.5	-	5	-	-	N2A616	
	2.0	1.5	0	-	9	-	9	7.5	N2A120	
	2.0	1.5	0	4.5	-	5	-	-	N2A620	
2/2 normally open (NO) 	1.2	0.5	0	-	12	-	9	7.5	N2A212	
	1.2	0.5	0	12	-	5	-	-	N2A712	
	1.6	1.1	0	-	10	-	9	7.5	N2A216	
	1.6	1.1	0	10	-	5	-	-	N2A716	

*l/min. of water with ΔP of 1 bar

order code



main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	B C	stainless AISI 303 brass	B V E T	NBR FPM EPDM PTFE	0 1 4	none brass screw plastic lever	see table B on page 2/2

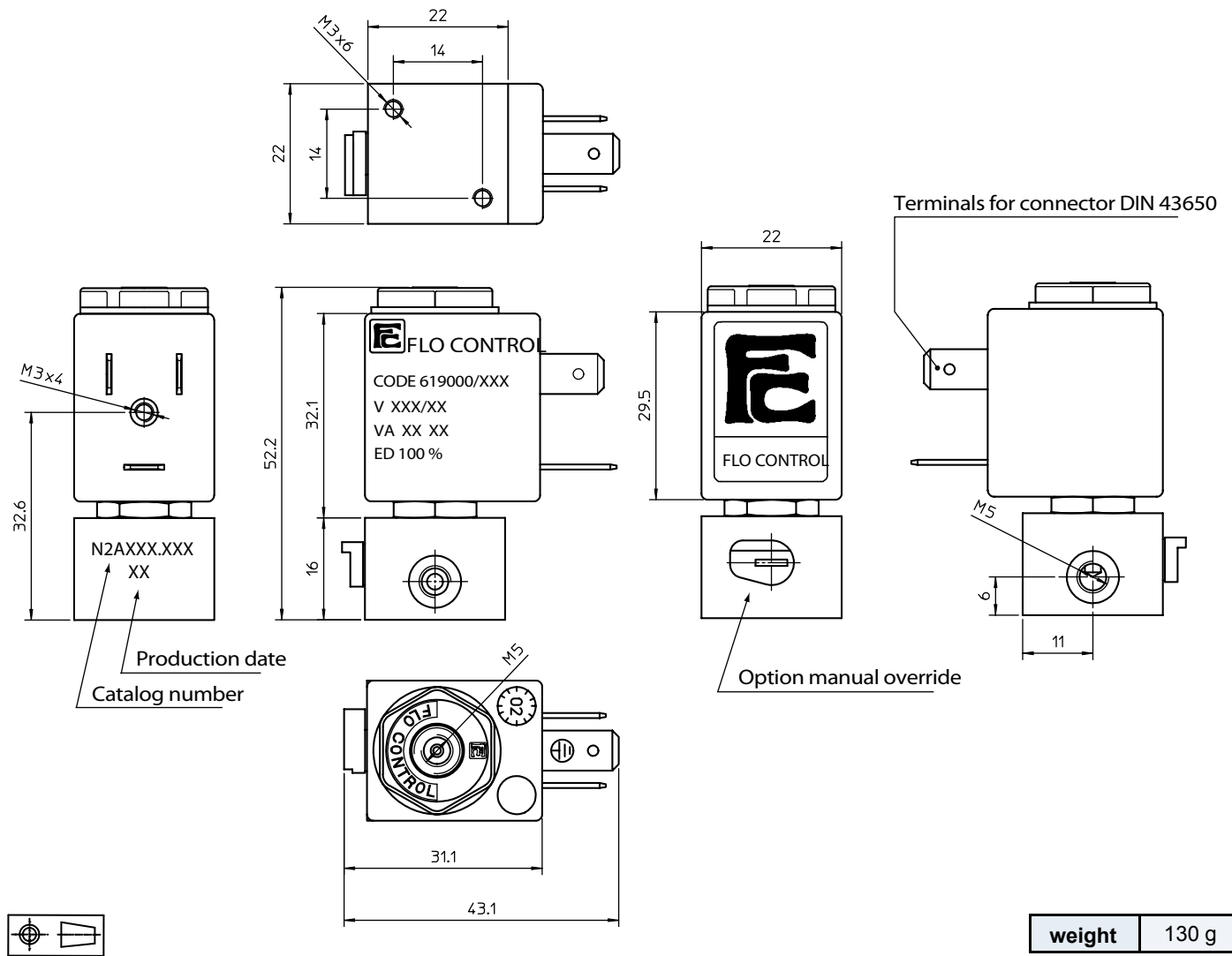
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



weight	130 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
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FLO CONTROL

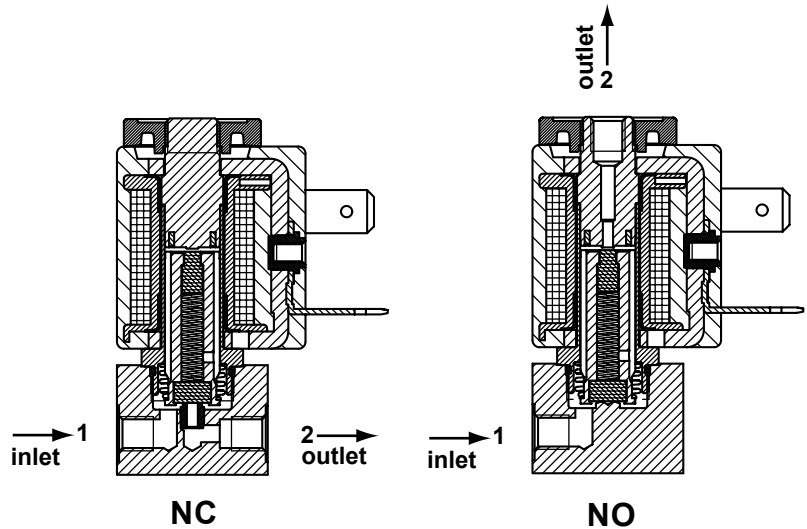
Solenoid Valves



direct operated solenoid valves

coil 22 mm

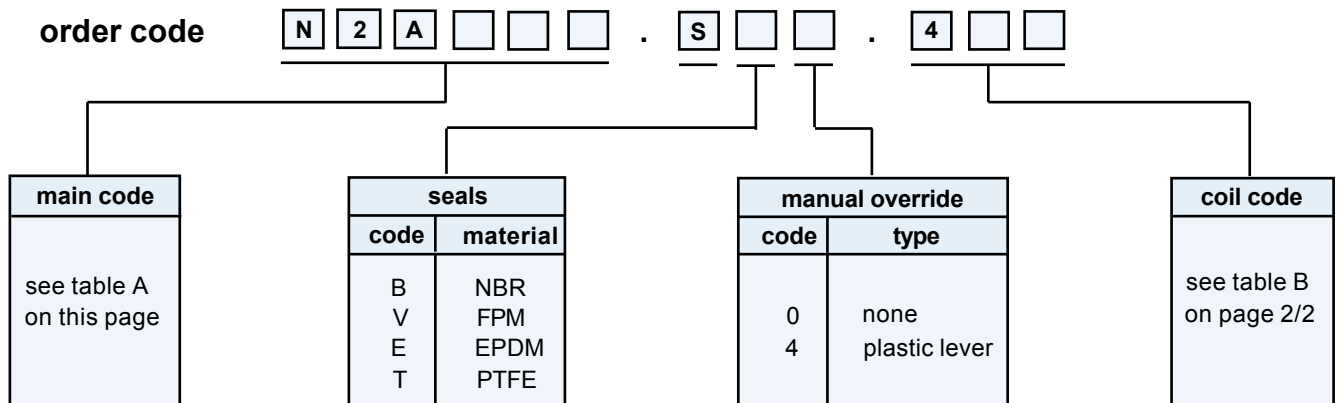
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

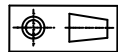
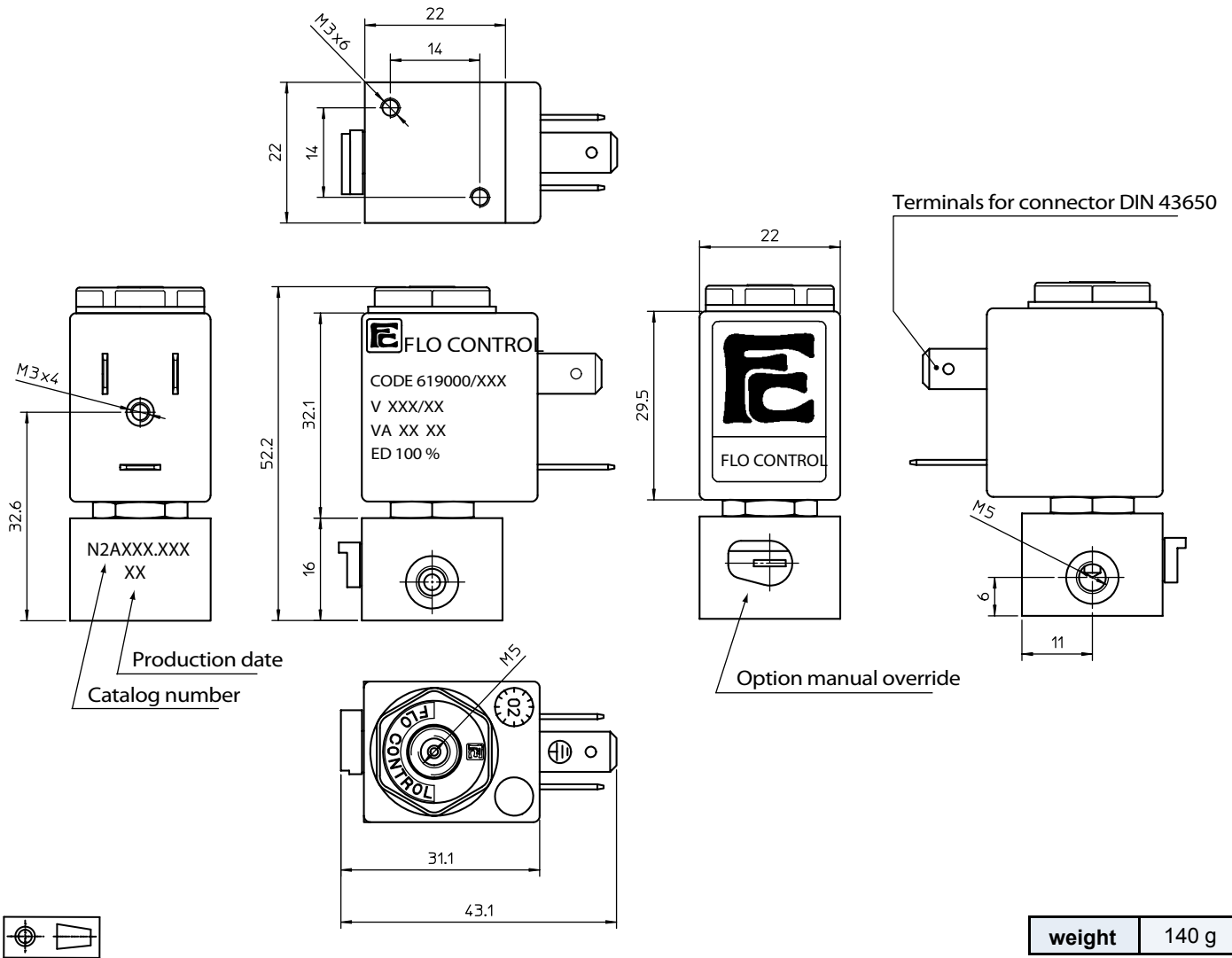
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.		
2/2 normally closed (NC) 		1.0	0.4	0	-	35	-	9	7.5	N2A110
		1.0	0.4	0	20	-	5	-	-	N2A610
		1.2	0.5	0	-	26	-	9	7.5	N2A112
		1.2	0.5	0	15	-	5	-	-	N2A612
		1.6	1.1	0	-	15	-	9	7.5	N2A116
		1.6	1.1	0	7.5	-	5	-	-	N2A616
		2.0	1.5	0	-	9	-	9	7.5	N2A120
		2.0	1.5	0	4.5	-	5	-	-	N2A620
2/2 normally open (NO) 		1.2	0.5	0	-	12	-	9	7.5	N2A212
		1.2	0.5	0	12	-	5	-	-	N2A712
		1.6	1.1	0	-	10	-	9	7.5	N2A216
		1.6	1.1	0	10	-	5	-	-	N2A716

*l/min. of water with ΔP of 1 bar



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
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FLO CONTROL

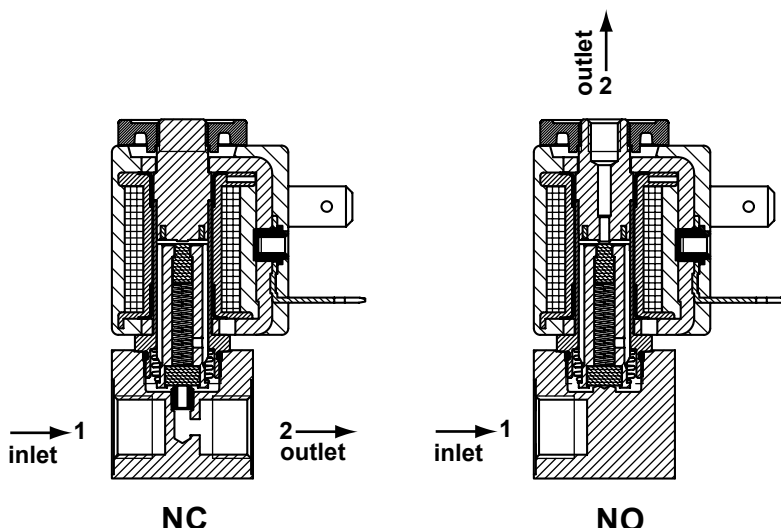
Solenoid Valves



direct operated solenoid valves

coil 22 mm

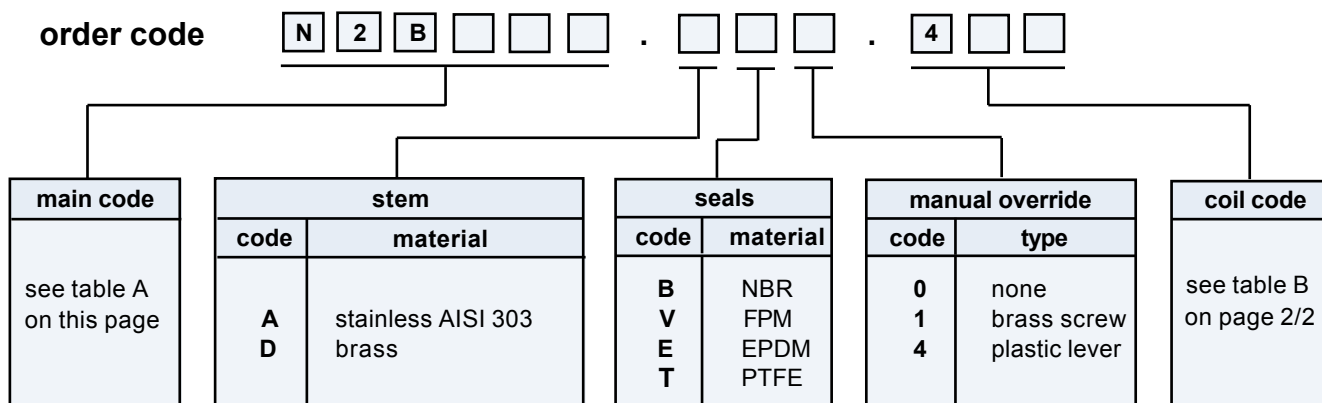
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

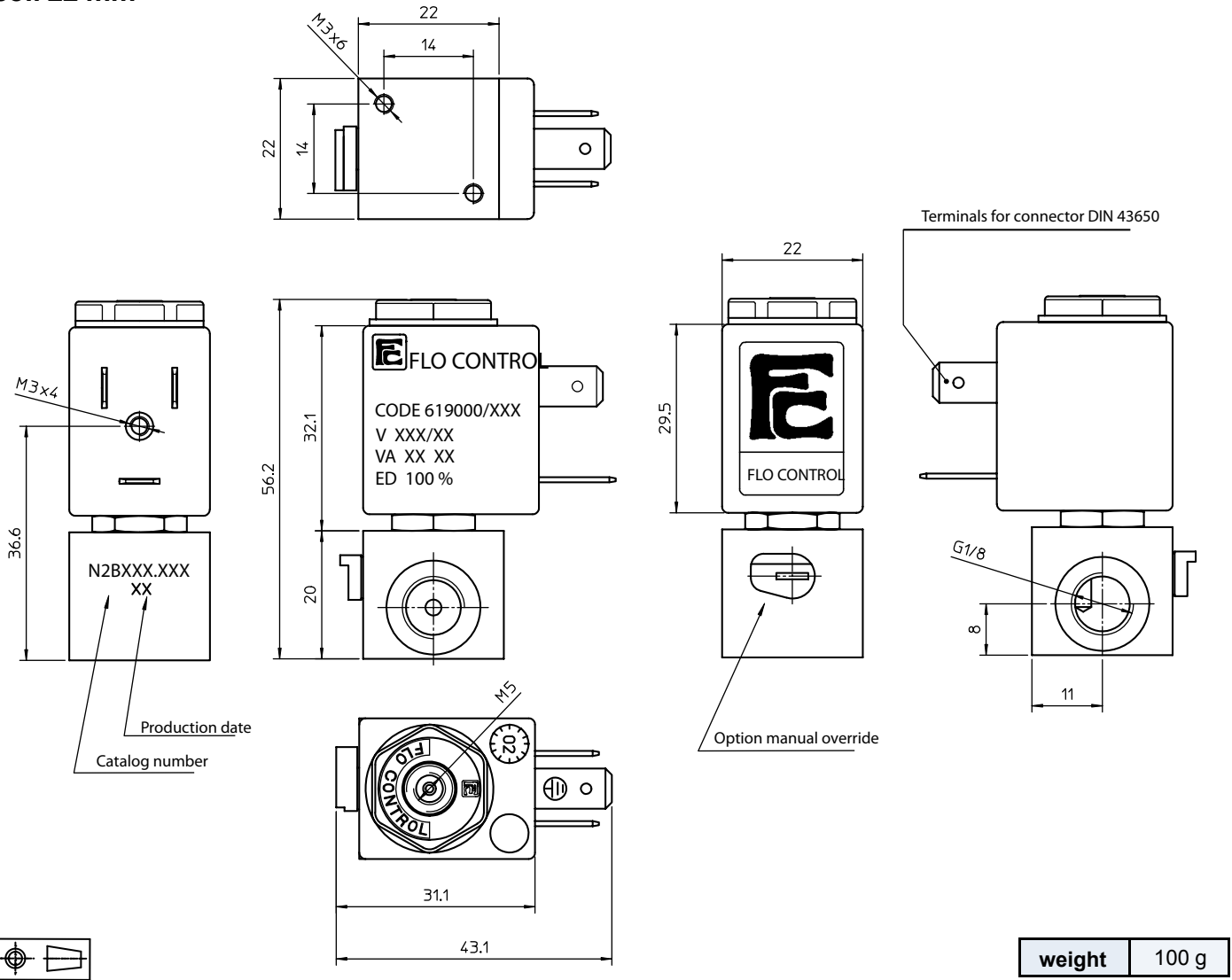
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.		
2/2 normally closed (NC) 		1.0	0.4	0	-	35	-	9	7.5	N2B110
		1.0	0.4	0	20	-	5	-	-	N2B610
		1.2	0.5	0	-	26	-	9	7.5	N2B112
		1.2	0.5	0	15	-	5	-	-	N2B612
		1.6	1.1	0	-	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



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
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FLO CONTROL

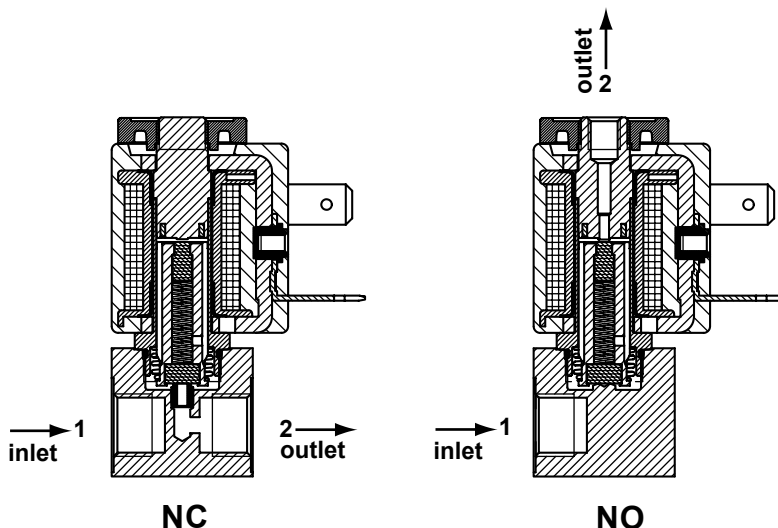
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/3 and 3/3
coil data	see page 2/3 and 3/3
connector data	see page 2/3

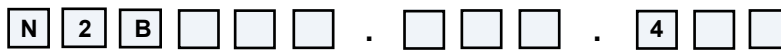


* other seal materials on request

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
		2.0	1.5	0	4.5	-	5	-	-	N2B720
		2.4	2.0	0	3	-	5	-	-	N2B724

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

stem	
code	material
B	stainless AISI 303
C	brass

seals	
code	material
B	NBR
V	FPM
E	EPDM
T	PTFE

manual override	
code	type
0	none
1	brass screw
4	plastic lever

coil code
see table B on page 2/3

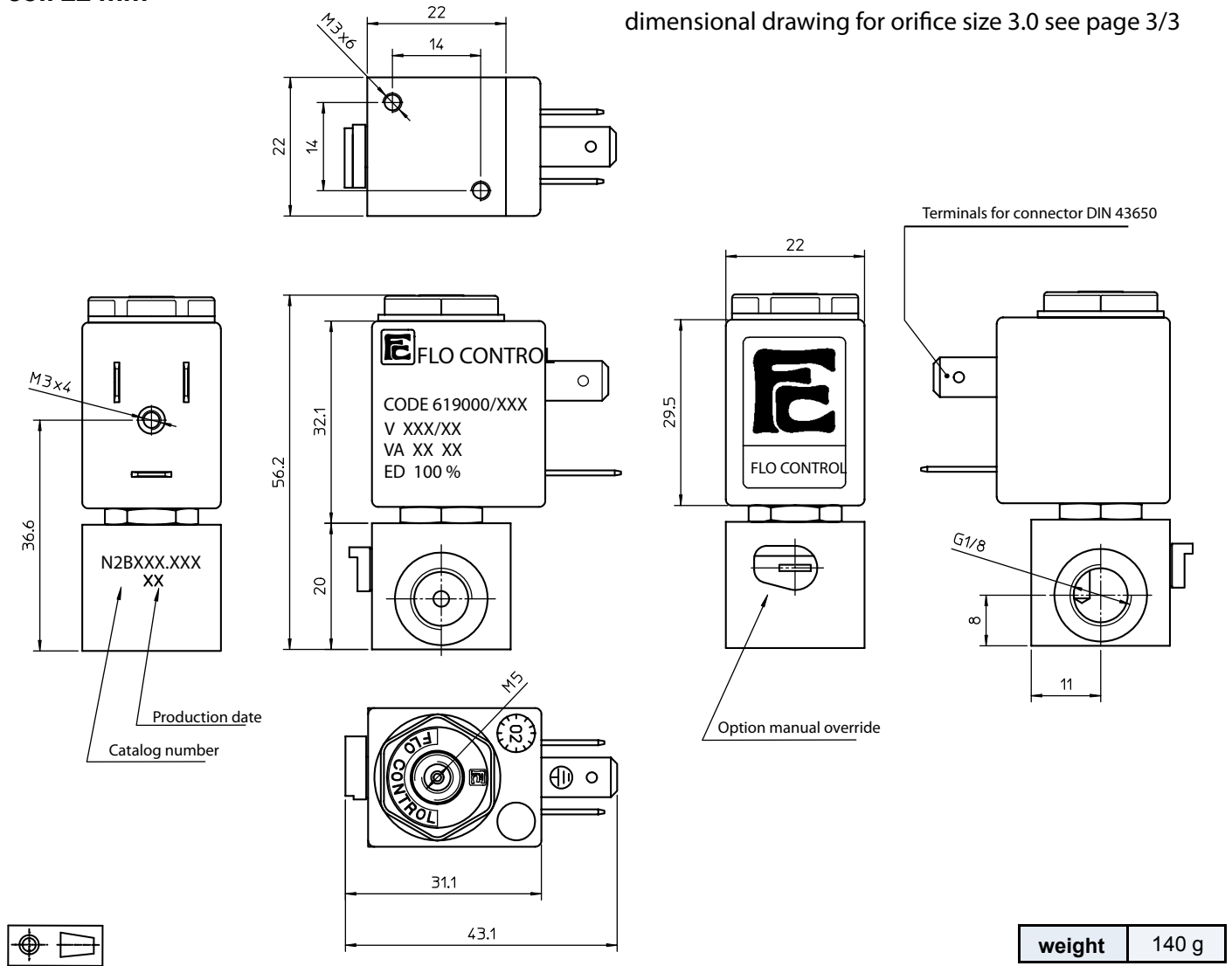


direct operated solenoid valves

coil 22 mm

dimensional drawings for orifice size 1.0 - 1.2 - 1.6 - 2.0 and 2.4

dimensional drawing for orifice size 3.0 see page 3/3



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

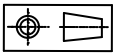
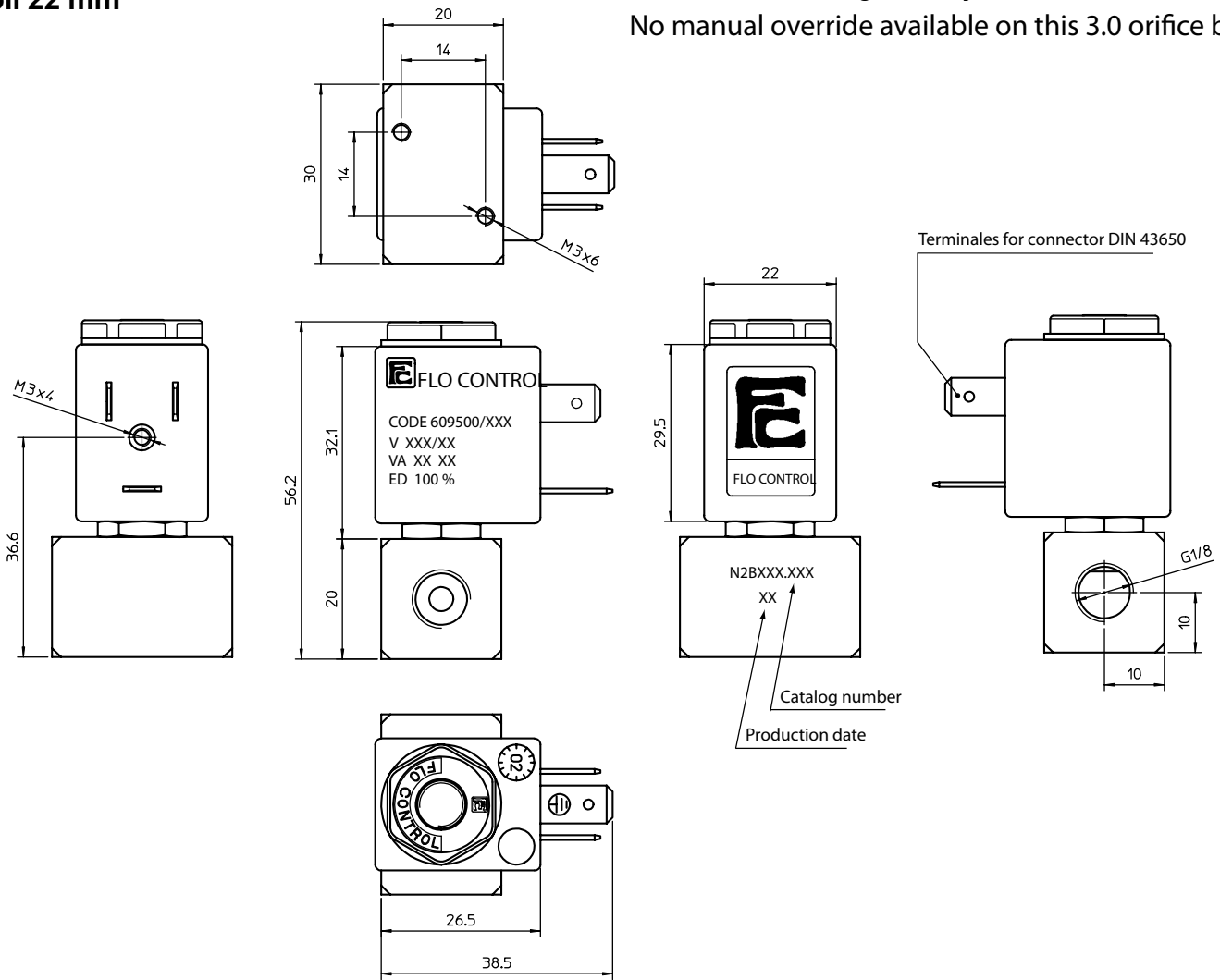
FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm

Dimensional drawing for body with orifice size 3.0 only.
No manual override available on this 3.0 orifice body.



weight	160 g
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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
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FLO CONTROL

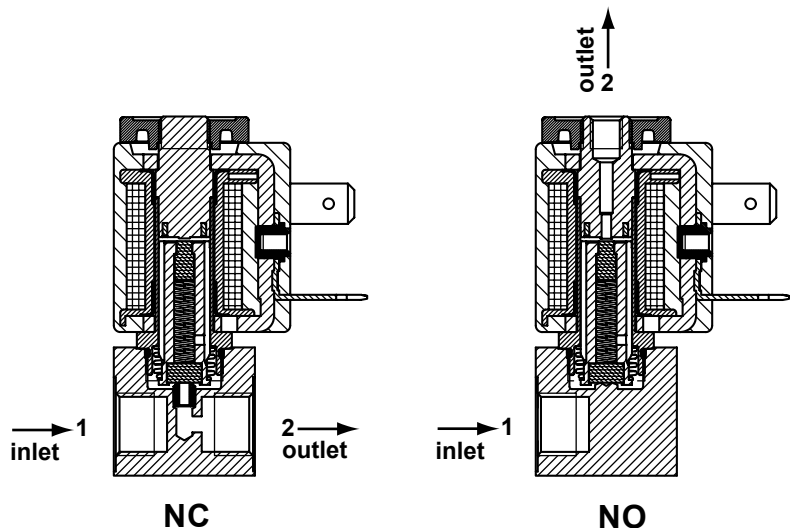
Solenoid Valves



direct operated solenoid valves

coil 22 mm

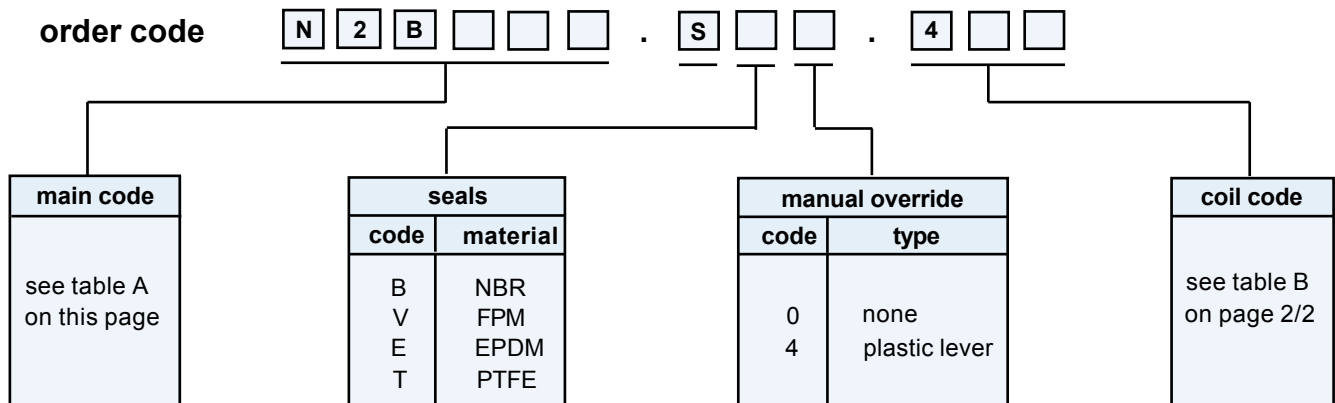
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

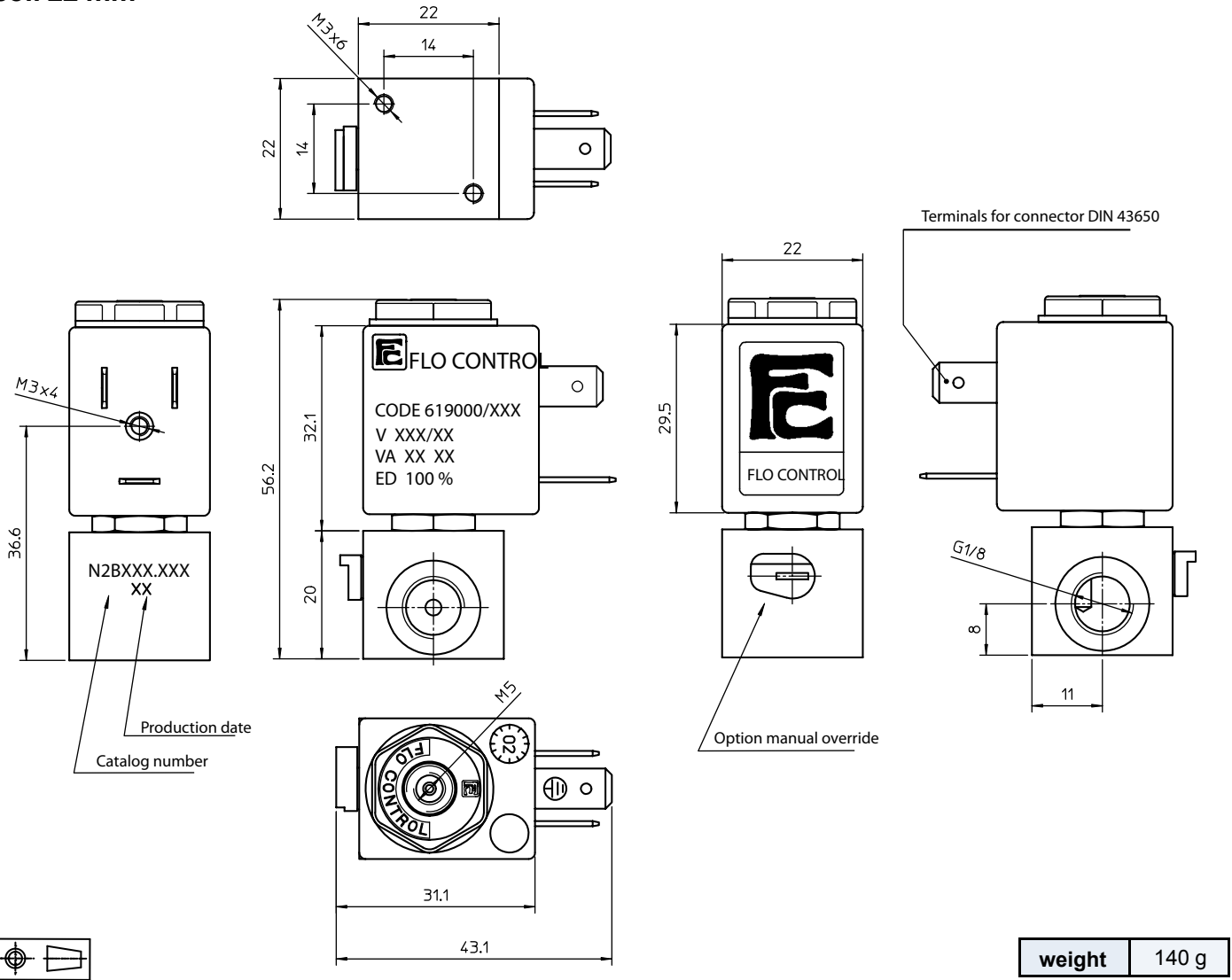
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
2/2 normally closed (NC) 	1.0	0.4	0	-	35	-	9	7.5	N2B110	
	1.0	0.4	0	20	-	5	-	-	N2B610	
	1.2	0.5	0	-	26	-	9	7.5	N2B112	
	1.2	0.5	0	15	-	5	-	-	N2B612	
	1.6	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



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
-------------	--------

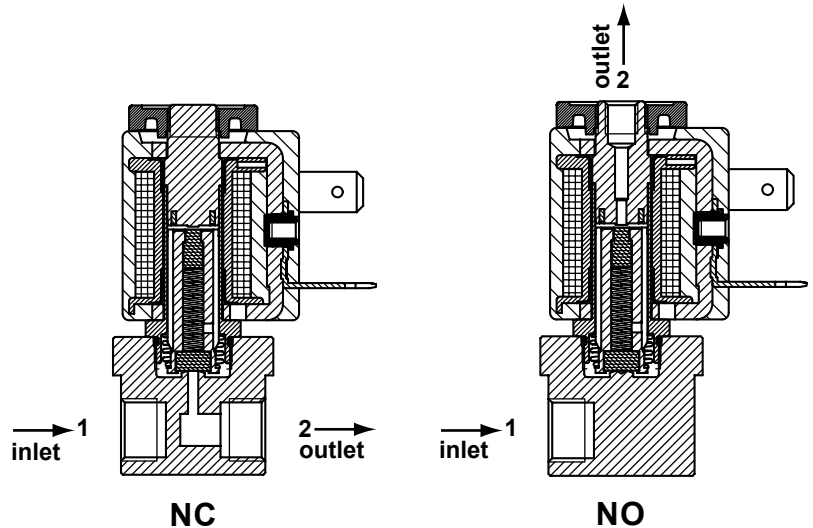
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

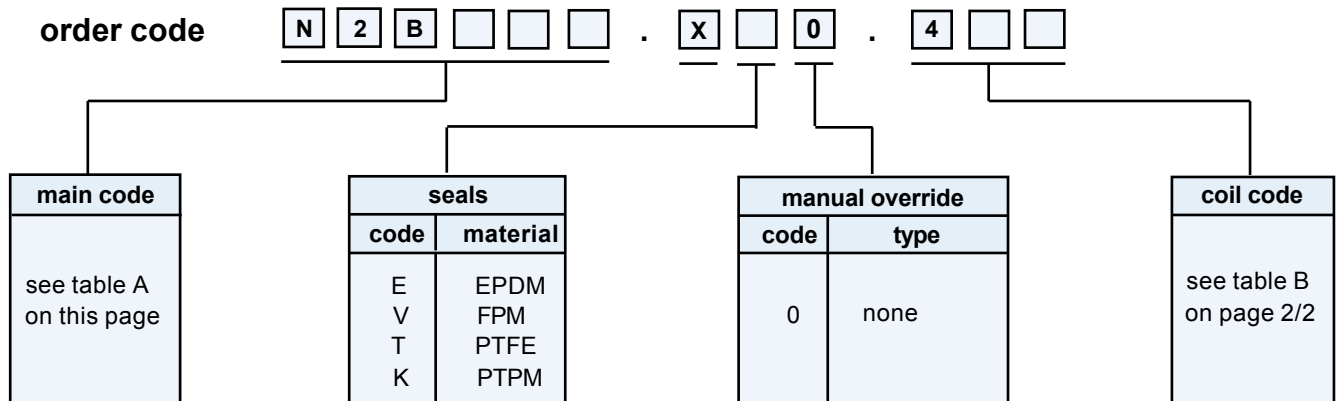
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	PFPM, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

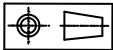
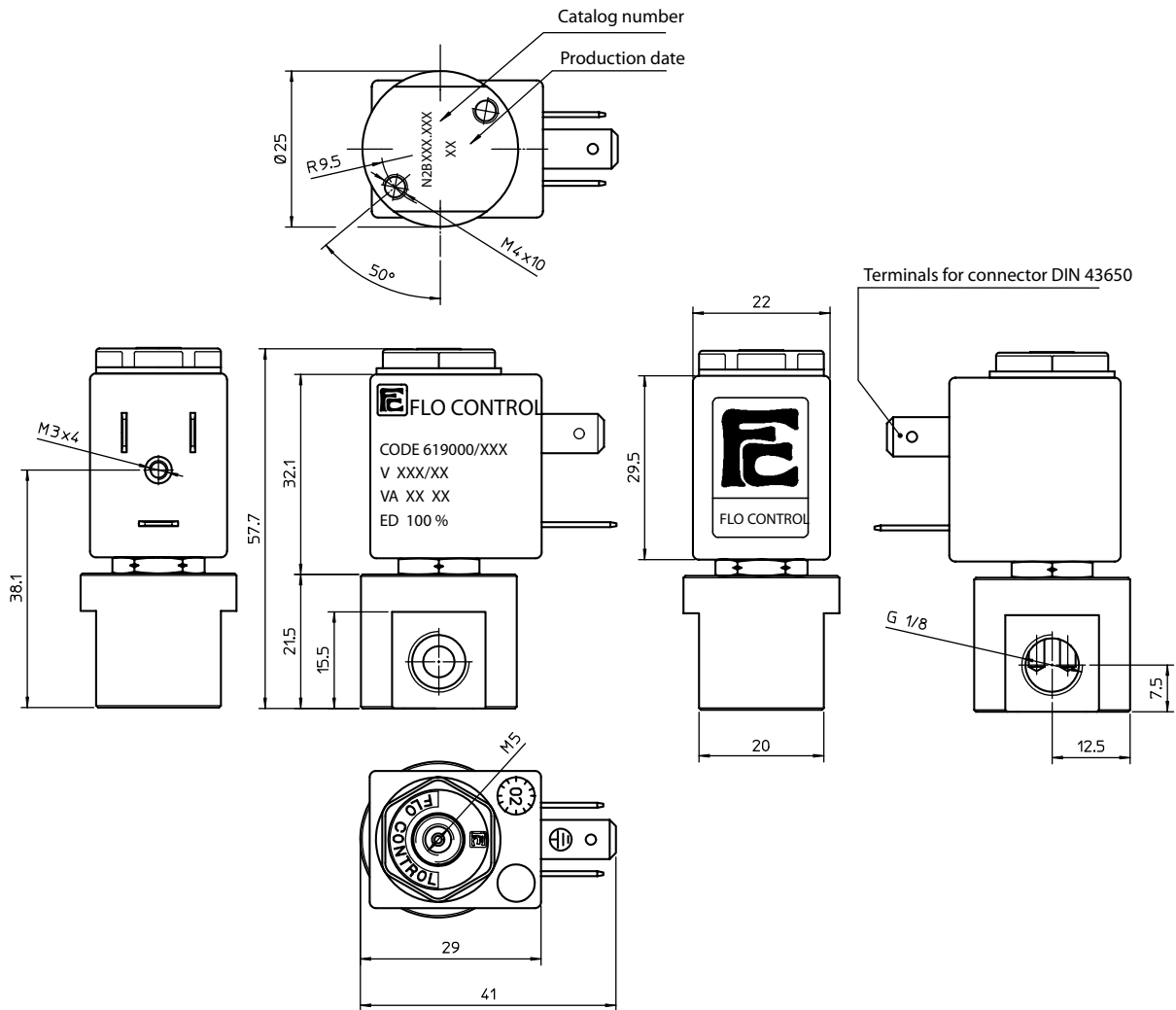
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
2/2 normally closed (NC) 	1.2	0.5	0	-	26	-	9	7.5	N2B112	
	1.2	0.5	0	15	-	5	-	-	N2B612	
	1.6	1.1	0	-	15	-	9	7.5	N2B116	
	1.6	1.1	0	7.5	-	5	-	-	N2B616	
	2.4	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



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

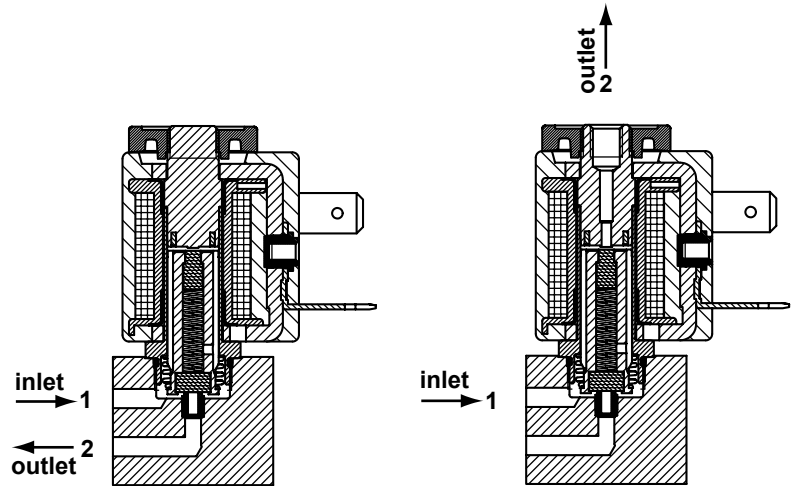


direct operated solenoid valves

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

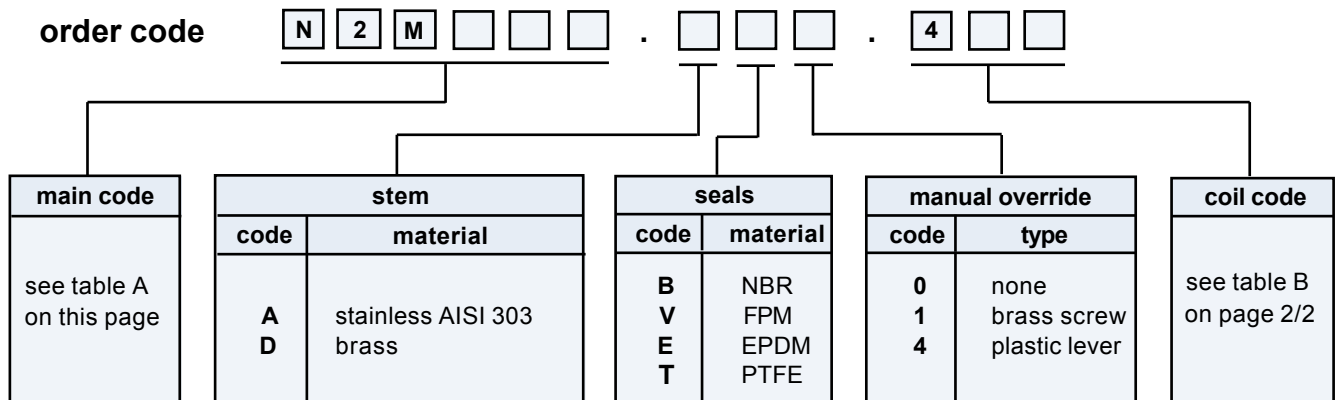


NC

NO

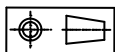
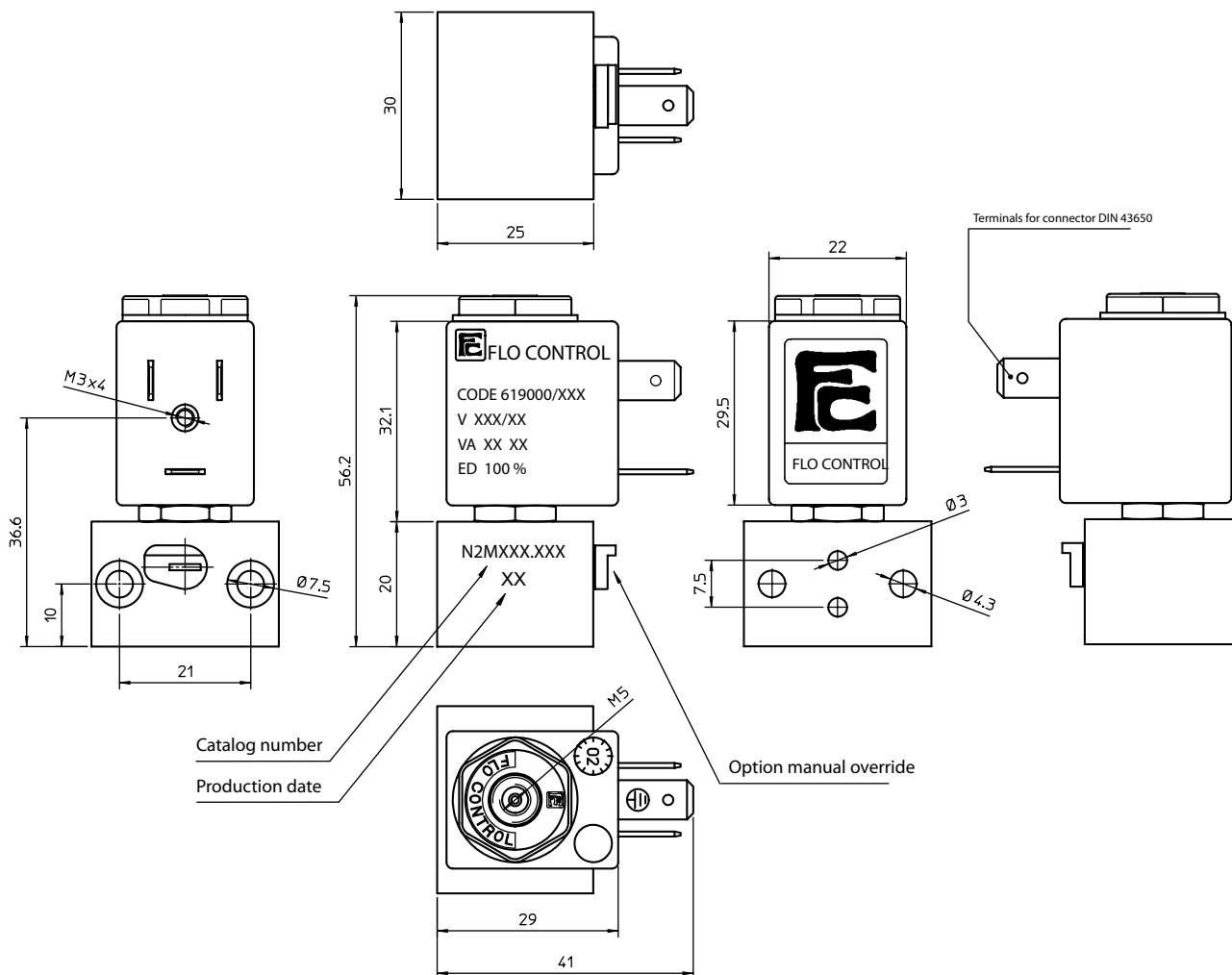
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
2/2 normally closed (NC) 		1.2	0.5	0	-	26	-	9	7.5	N2M112
		1.2	0.5	0	15	-	5	-	-	N2M612
		1.6	1.1	0	-	15	-	9	7.5	N2M116
		1.6	1.1	0	7.5	-	5	-	-	N2M616
2/2 normally open (NO) 		1.2	0.5	0	-	12	-	9	7.5	N2M212
		1.2	0.5	0	12	-	5	-	-	N2M712
		1.6	1.1	0	-	10	-	9	7.5	N2M216
		1.6	1.1	0	10	-	5	-	-	N2M716

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 22 mm



weight	115 g
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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
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FLO CONTROL

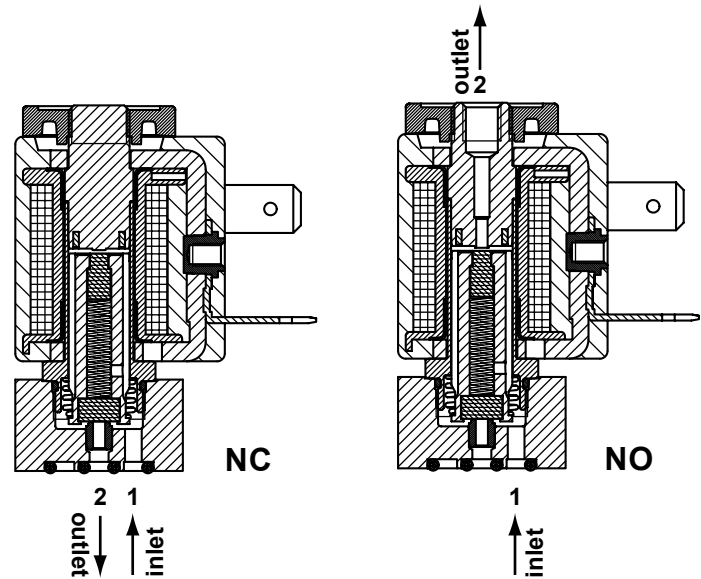
Solenoid Valves



direct operated solenoid valves

coil 22 mm

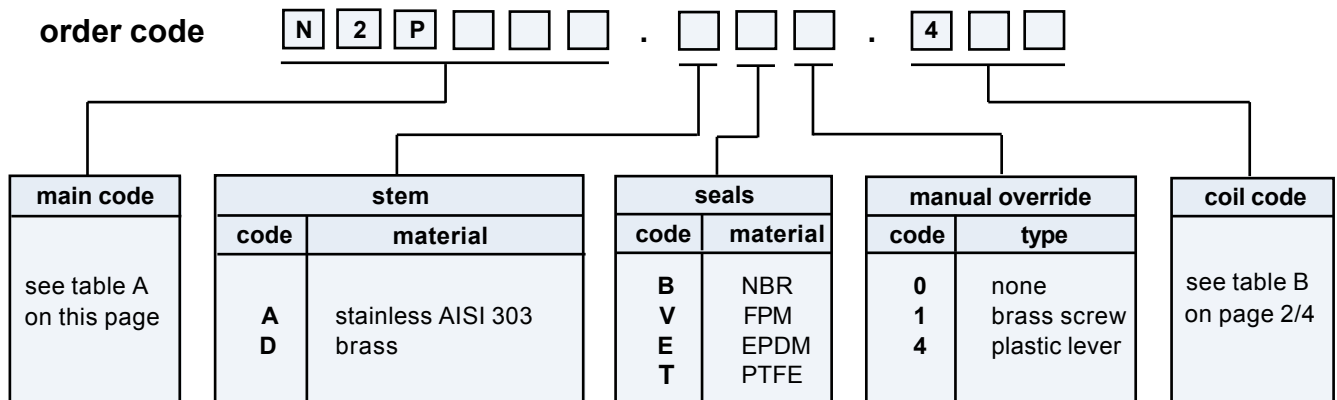
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/4, 3/4 and 4/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4



* other seal materials on request

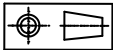
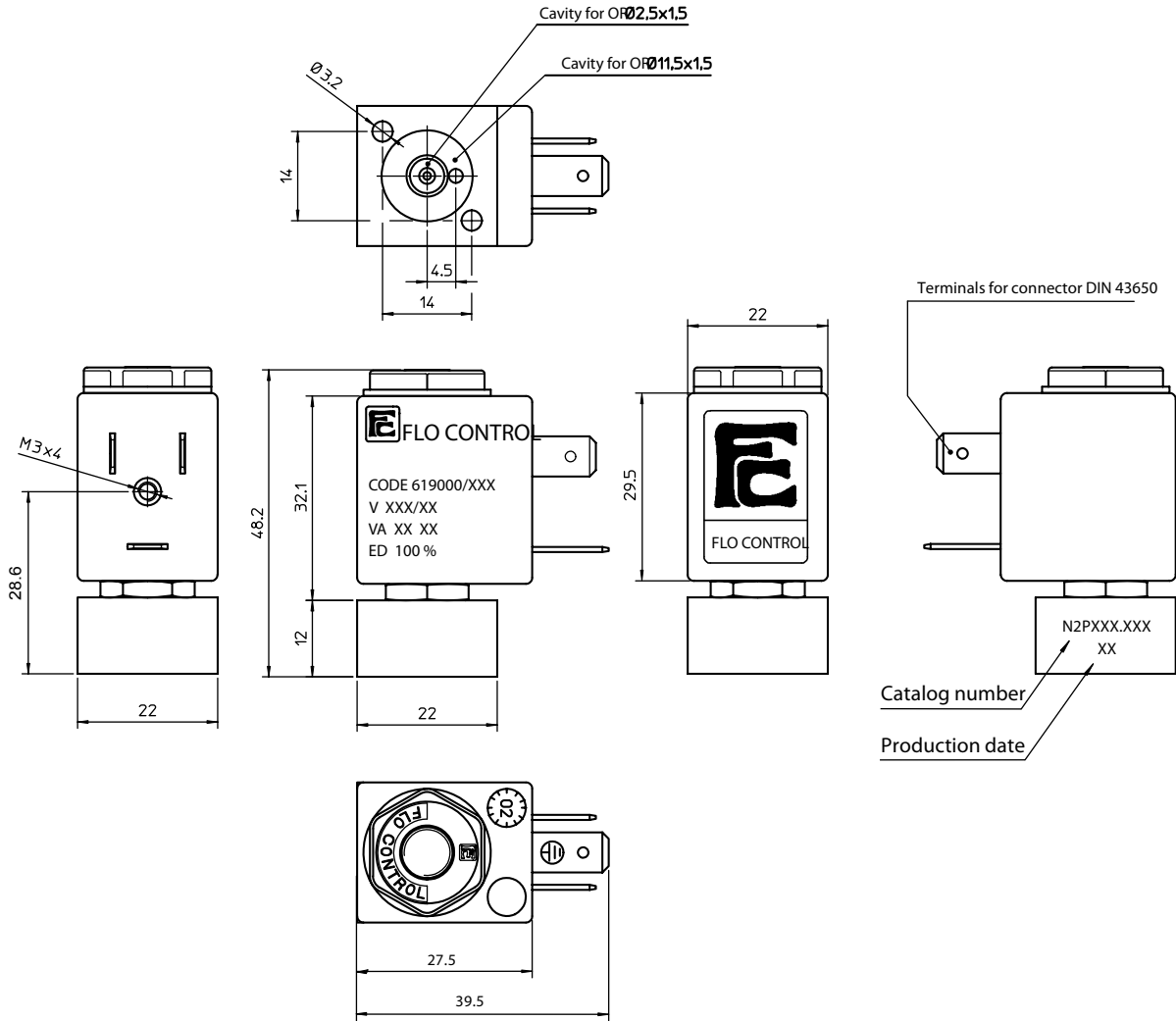
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
2/2 normally closed (NC) 		1.2	0.5	0	-	26	-	9	7.5	N2P112
		1.2	0.5	0	15	-	5	-	-	N2P612
		1.6	1.1	0	-	15	-	9	7.5	N2P116
		1.6	1.1	0	7.5	-	5	-	-	N2P616
2/2 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



direct operated solenoid valves

coil 22 mm



weight	100 g
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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
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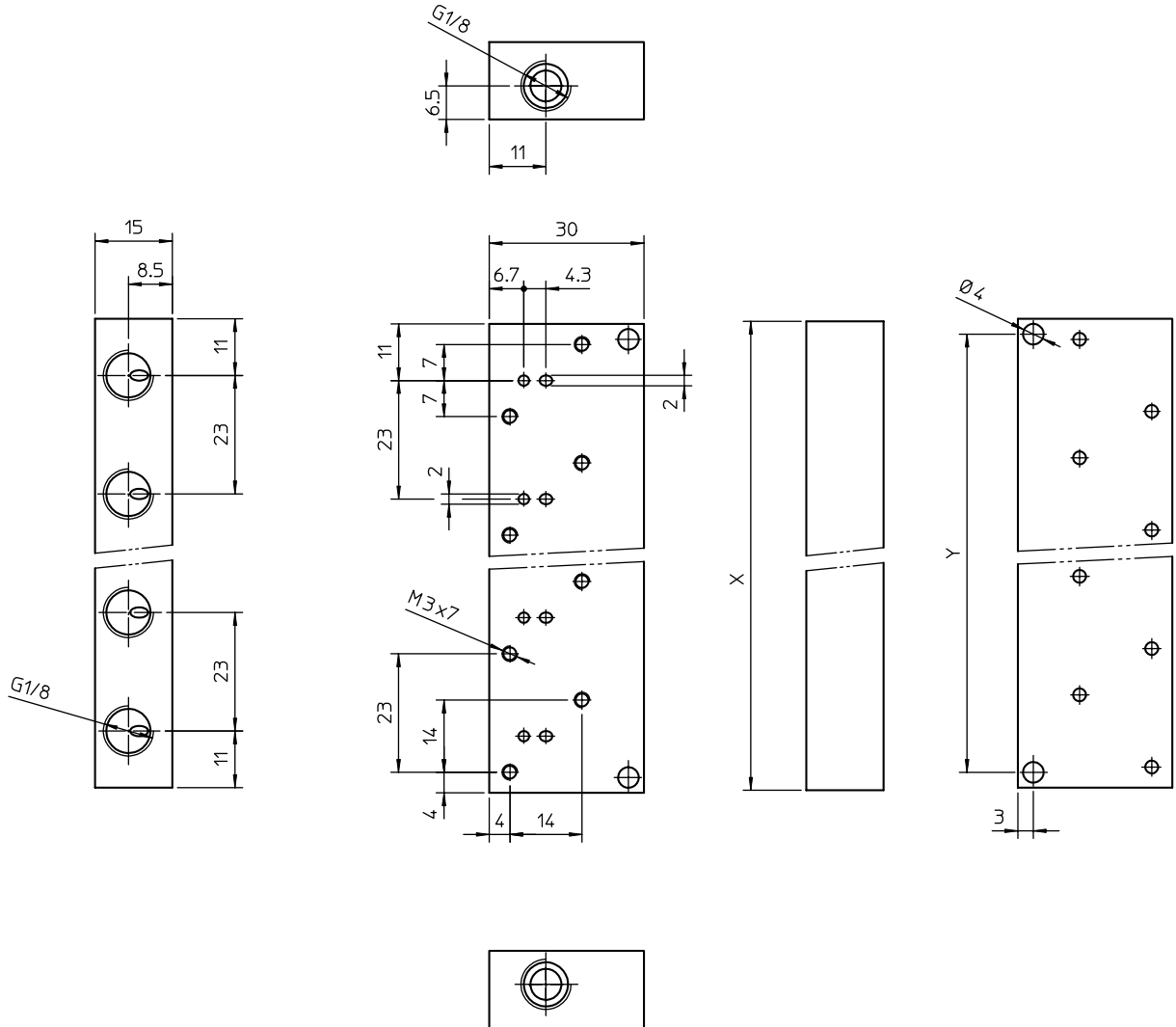
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

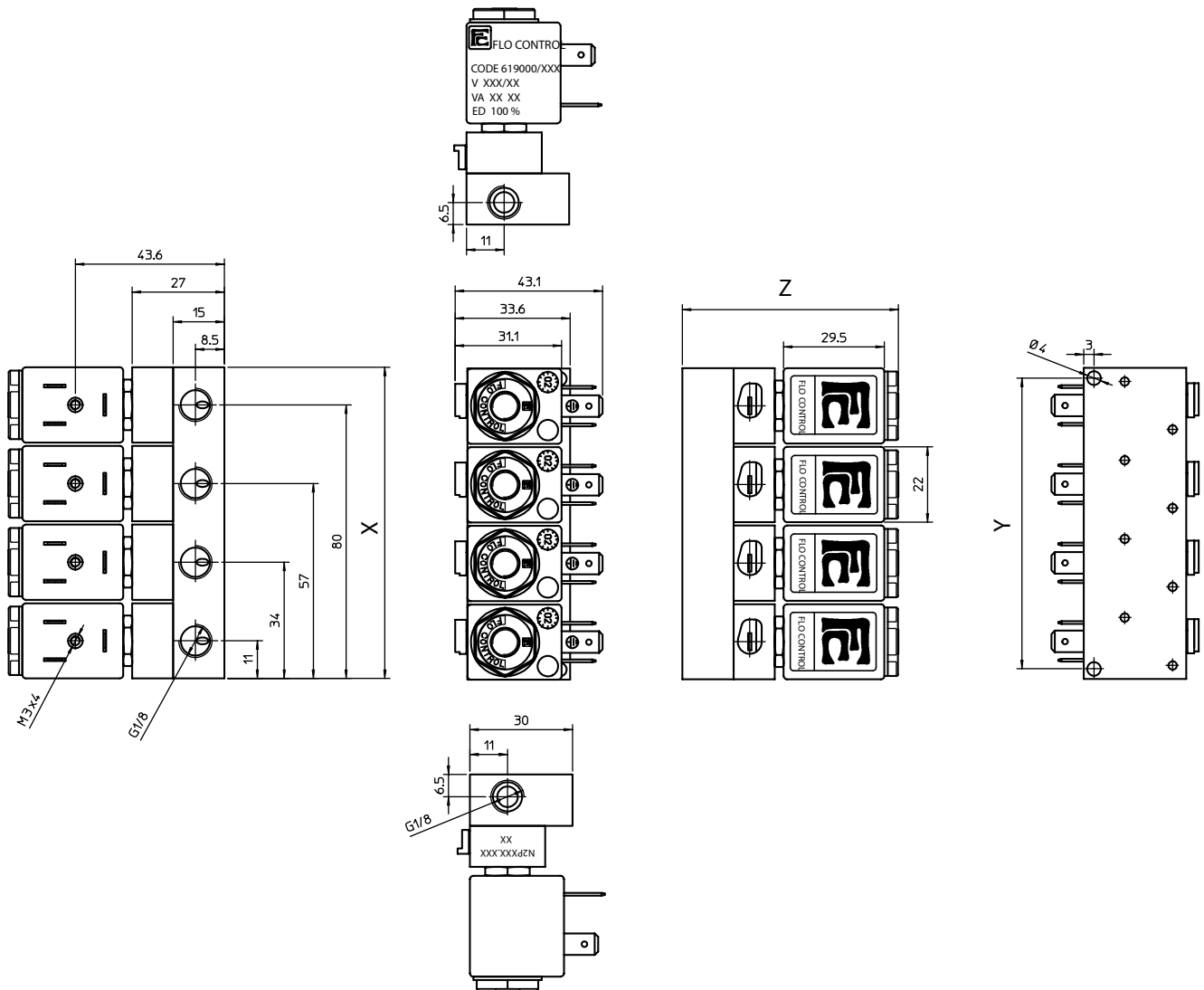
coil 22 mm



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

direct operated solenoid valves
coil 22 mm



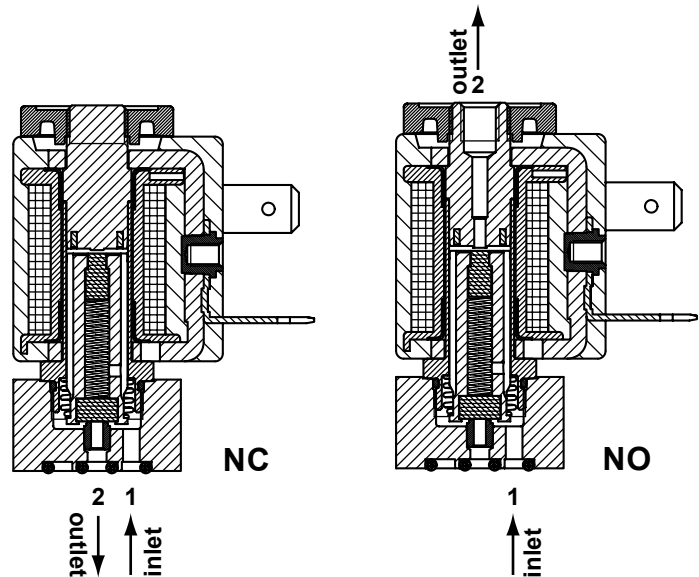
dimensions assembled manifolds

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

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

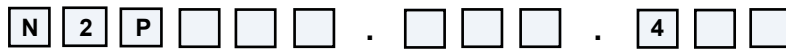


* other seal materials on request

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

order code

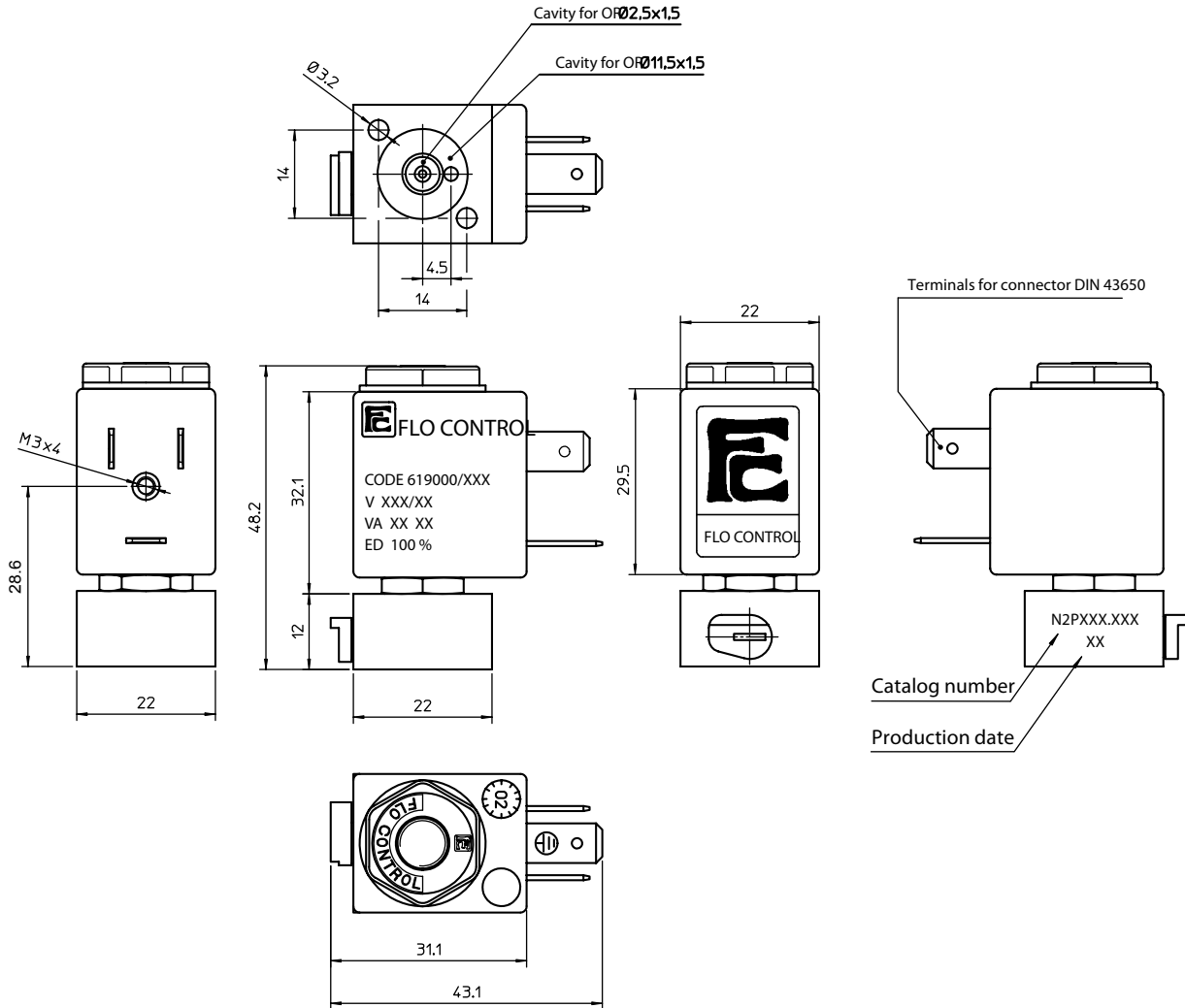


main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	B	stainless AISI 303	B	NBR	0	none	see table B on page 2/4
	C	brass	V	FPM	1	brass screw	
			E	EPDM	4	plastic lever	
			T	PTFE			



direct operated solenoid valves

coil 22 mm



weight 110 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

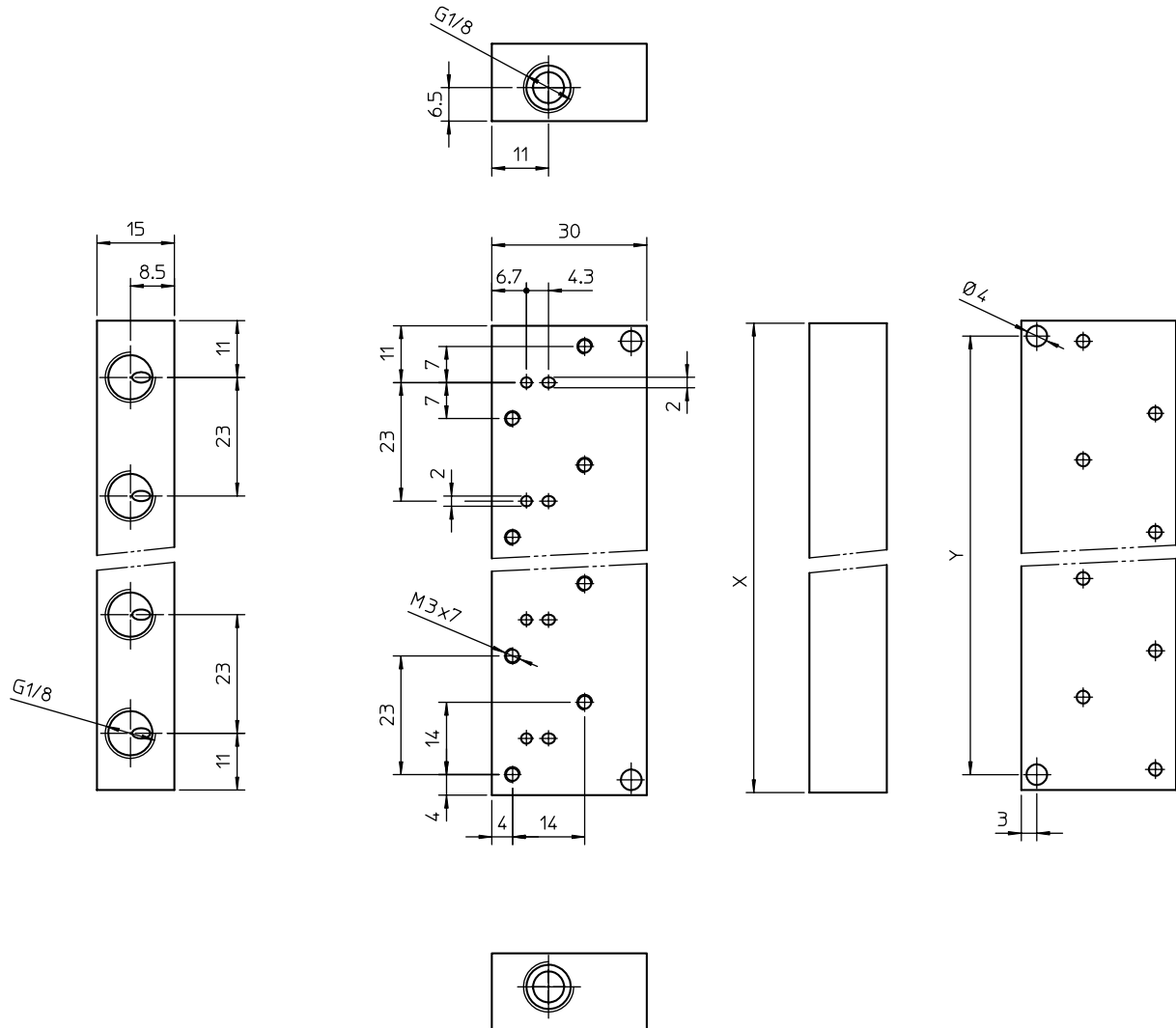
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm

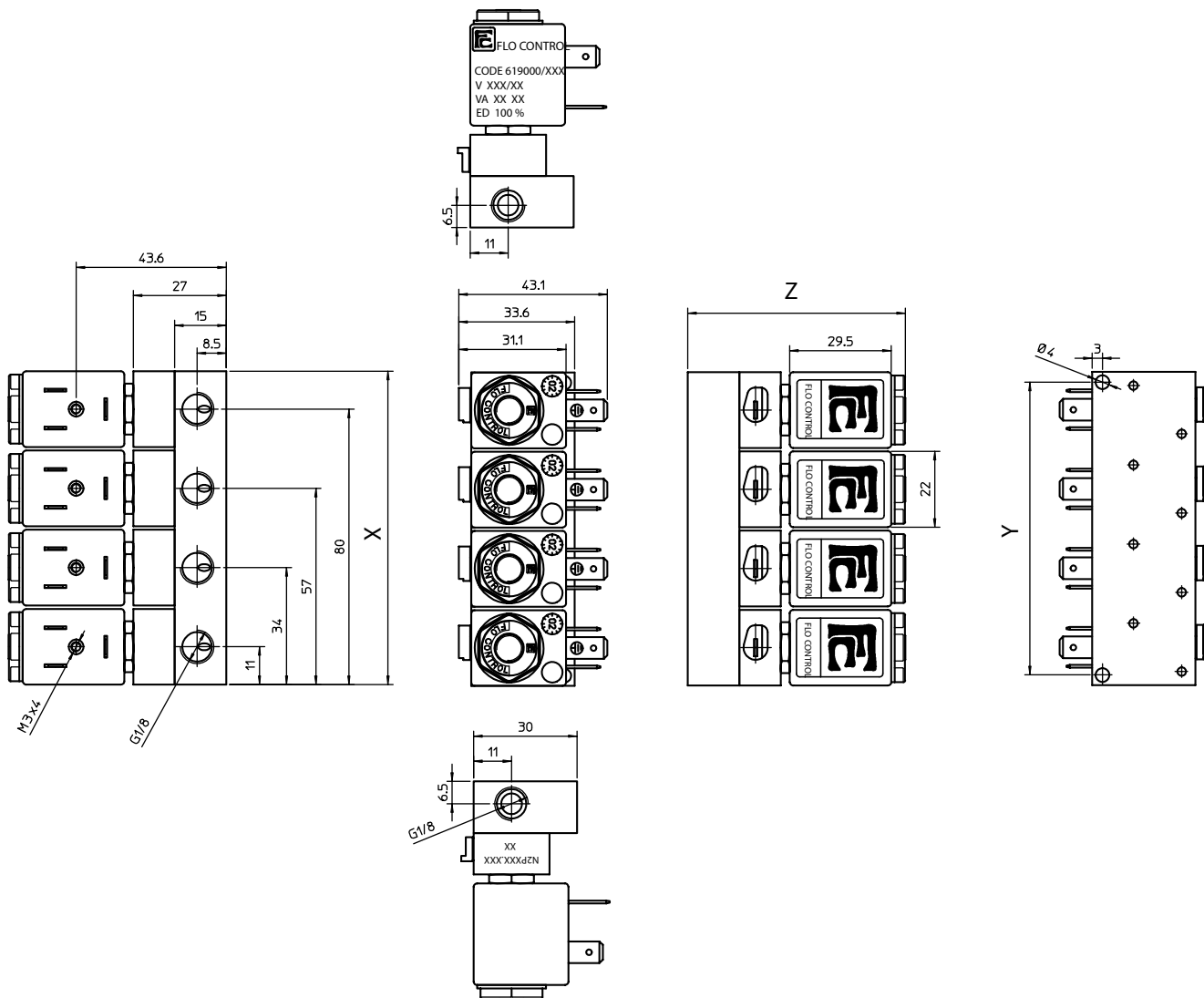


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.B1.28B	1	22	16	65
ZZ11.B2.28B	2	45	39	132
ZZ11.B3.28B	3	68	62	210
ZZ11.B4.28B	4	91	85	280
ZZ11.B5.28B	5	114	108	350
ZZ11.B6.28B	6	137	131	430

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

direct operated solenoid valves

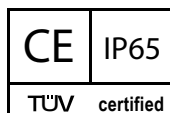
coil 22 mm



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	175
	2	45	39	63.2	352
	3	68	62	63.2	540
	4	91	85	63.2	720
	5	114	108	63.2	900
	6	137	131	63.2	1090

FLO CONTROL
Solenoid Valves

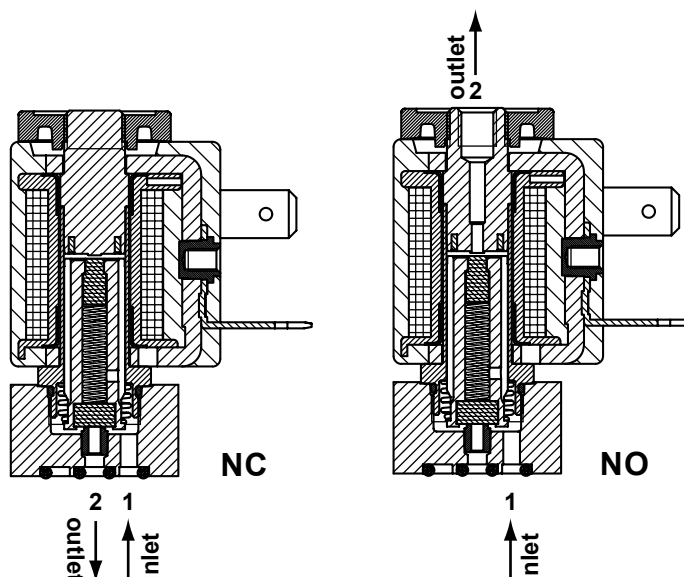


direct operated solenoid valves

coil 22 mm

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

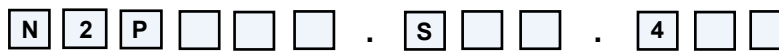
* other seal materials on request



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) 		1.2	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

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
T	PTFE

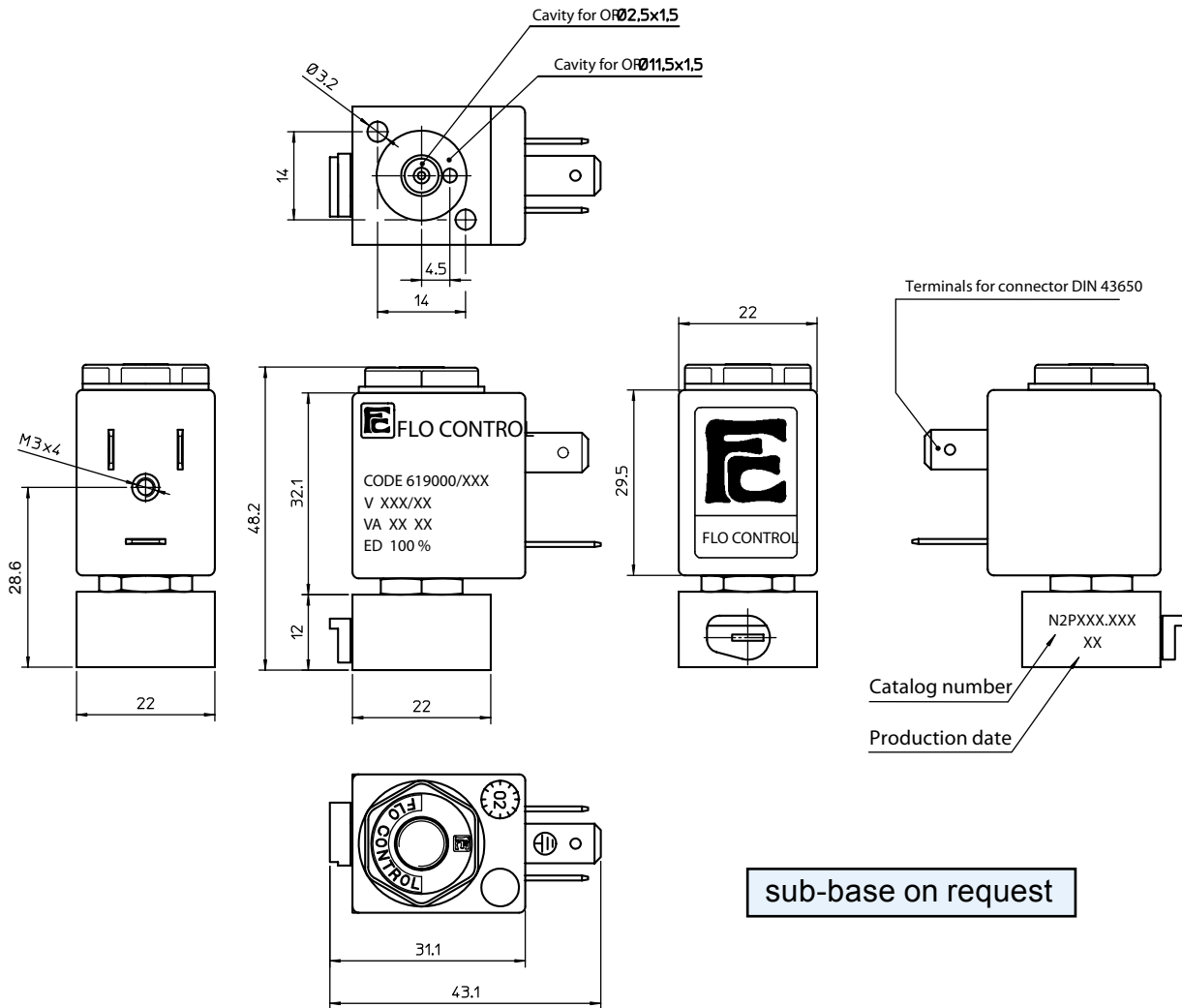
manual override	
code	type
0	none
4	plastic lever

coil code
see table B on page 2/2

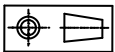


direct operated solenoid valves

coil 22 mm



sub-base on request



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



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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	AC	DC	AC
2/2 normally closed (NC) 		1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112
		1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116
		2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120
		2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124
2/2 normally open (NO) 		1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212
		1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216
		2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220
		2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC	AC	DC	AC
3/2 normally closed (NC) 		1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112
		1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116
		2.0	1.5	0	5	-	5	-	-	N3S620	-
		2.4	2.0	0	4	-	5	-	-	N3S624	-
3/2 normally open (NO) 		1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212
		1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216

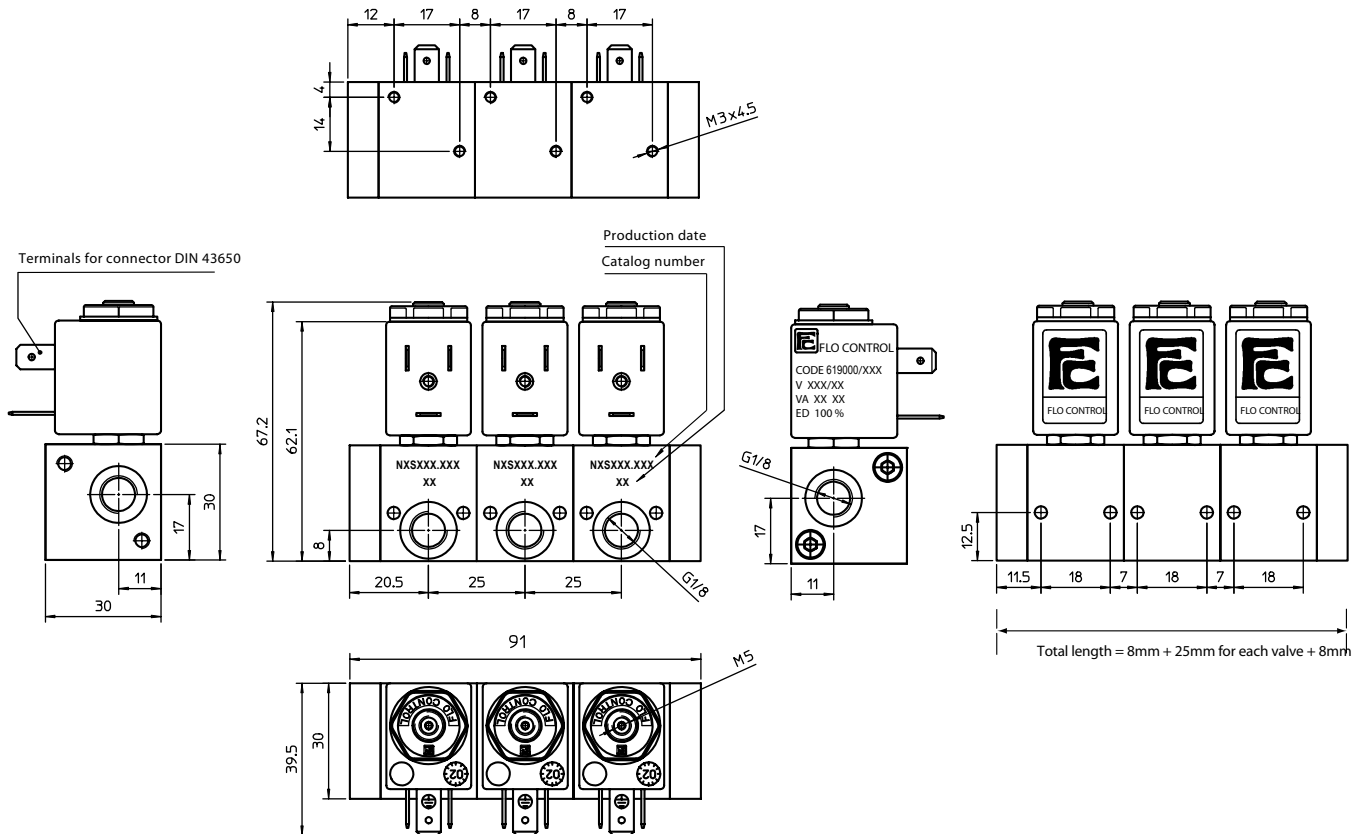
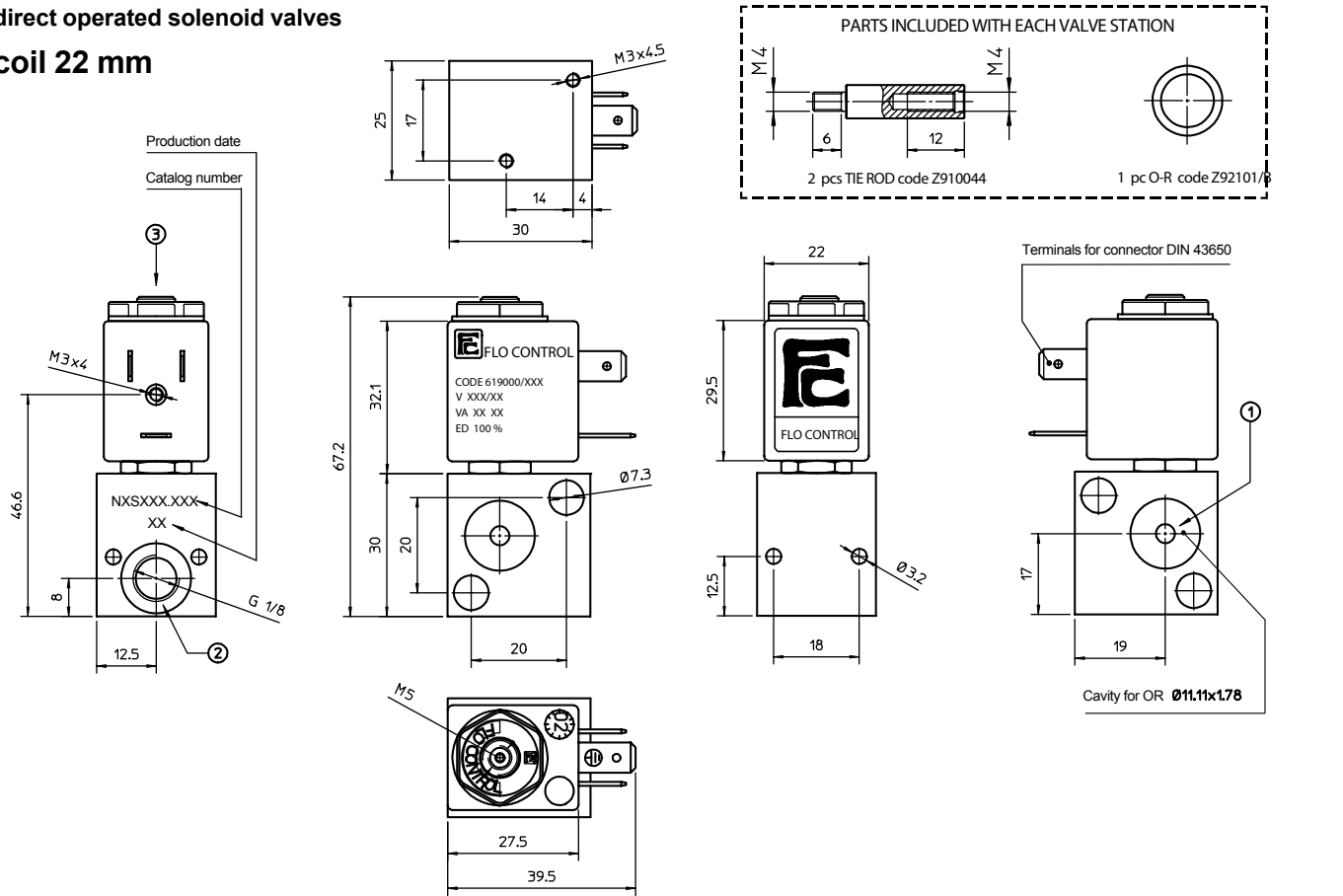
*l/min. of water with ΔP of 1 bar

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm

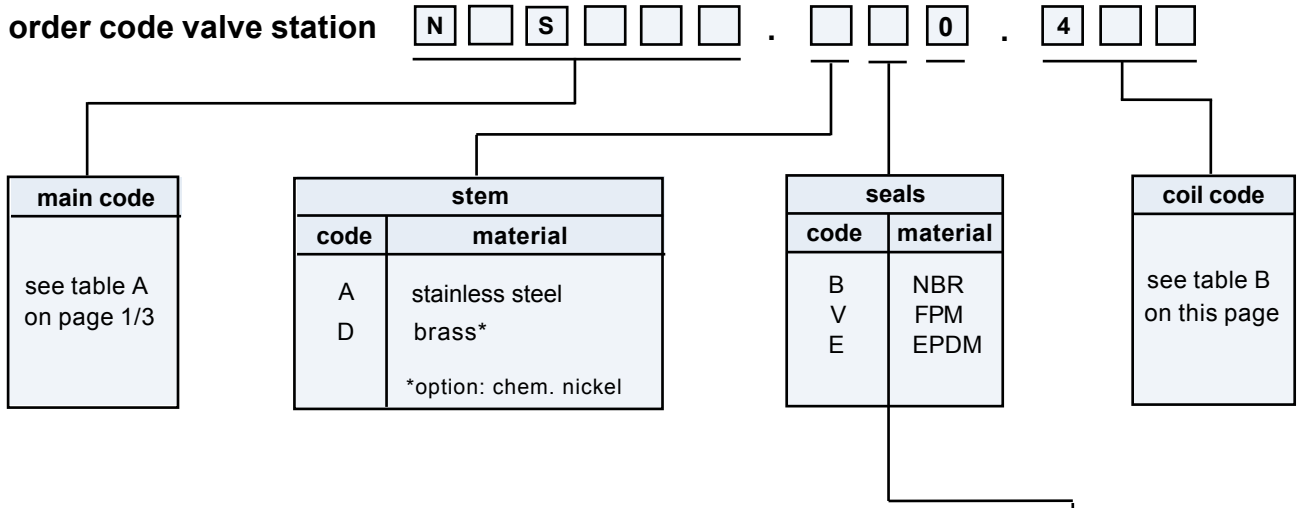


FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm



order code mounting kit (one per complete system) : **Z** **1** **1** **2** **5** **0** .

(2x G1/8 end plates)

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
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FLO CONTROL
Solenoid Valves



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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		DC	AC
								inr.	hol.		
2/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112	
	1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116	
	2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120	
	2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124	
2/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212	
	1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216	
	2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220	
	2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224	

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		DC	AC
								inr.	hol.		
3/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112	
	1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116	
	2.0	1.5	0	5	-	5	-	-	N3S620	-	
	2.4	2.0	0	4	-	5	-	-	N3S624	-	
3/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212	
	1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216	

*l/min. of water with ΔP of 1 bar

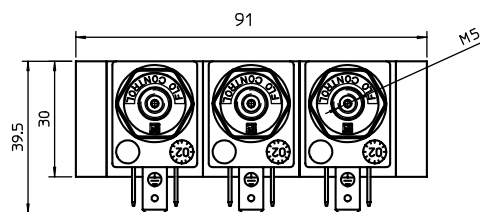
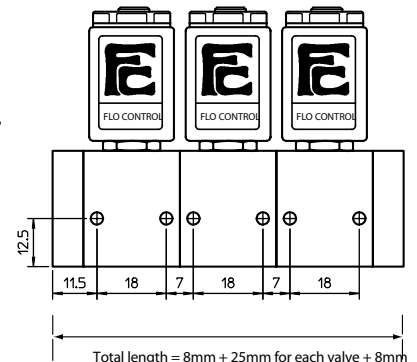
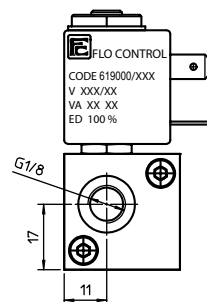
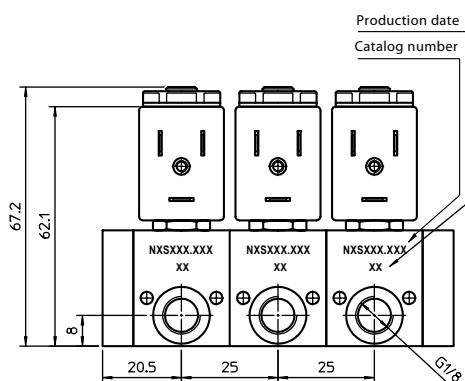
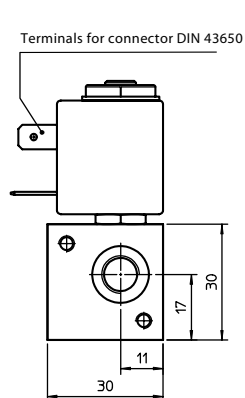
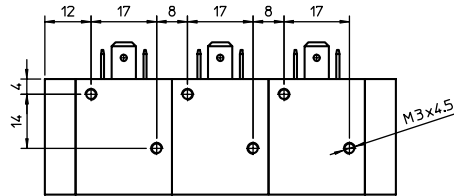
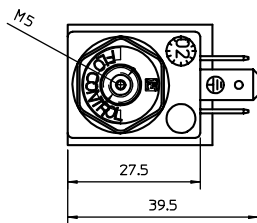
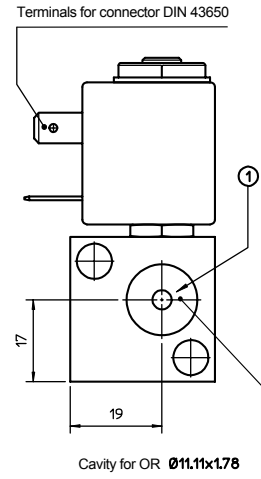
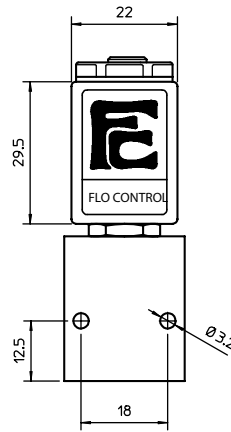
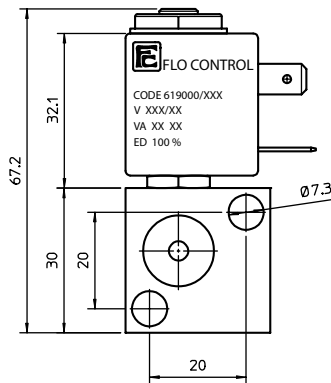
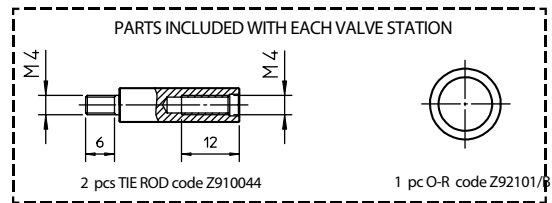
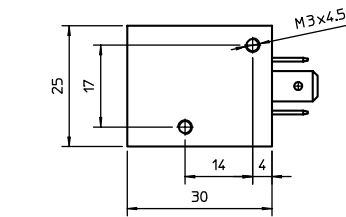
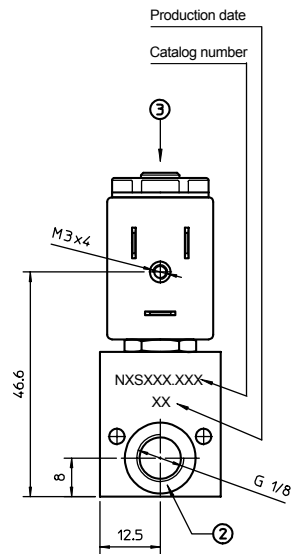
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

order code valve station

N **S** . **0** . **4**

main code
see table A on page 1/3

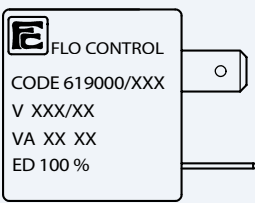
stem	
code	material
B	stainless steel
C	brass*
*option: chem. nickel	

seals	
code	material
B	NBR
V	FPM
E	EPDM

coil code
see table B on this page

order code mounting kit (one per complete system) :
(2x G1/8 end plates)

Z **1** **1** **2** **5** **2** .

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



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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	AC	DC	AC
2/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112	
	1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116	
	2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120	
	2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124	
2/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212	
	1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216	
	2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220	
	2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224	

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC	AC	DC	AC
3/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112	
	1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116	
	2.0	1.5	0	5	-	5	-	-	N3S620	-	
	2.4	2.0	0	4	-	5	-	-	N3S624	-	
3/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212	
	1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216	

*l/min. of water with ΔP of 1 bar

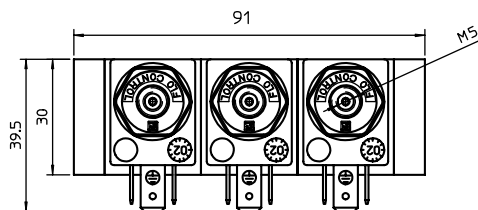
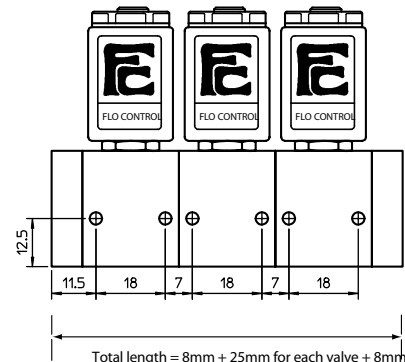
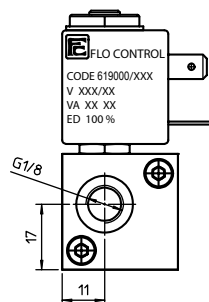
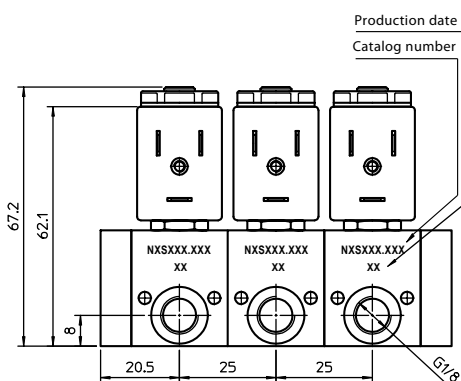
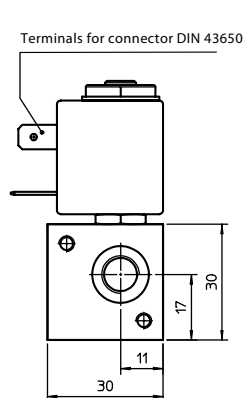
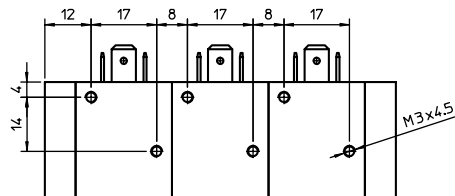
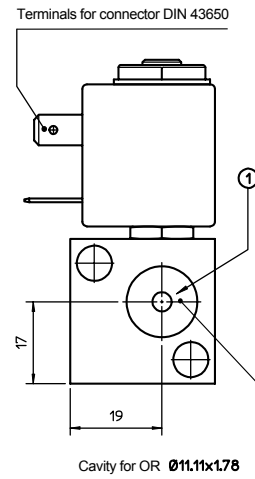
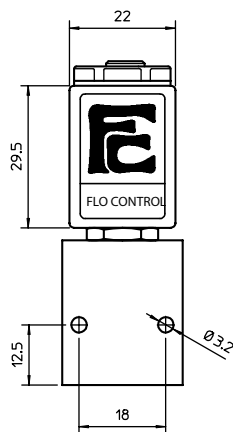
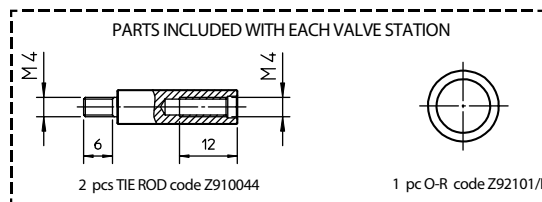
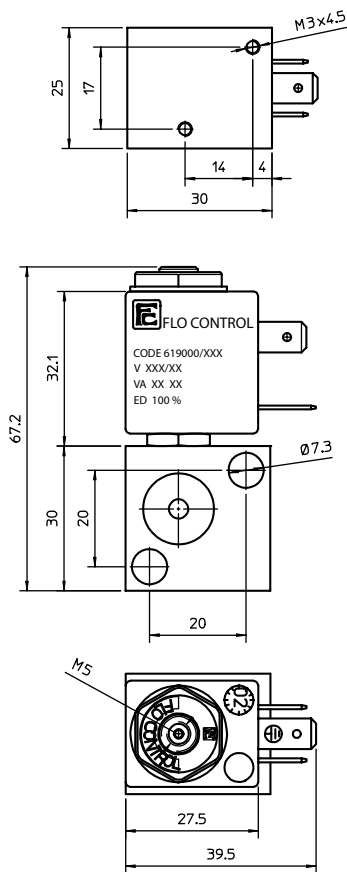
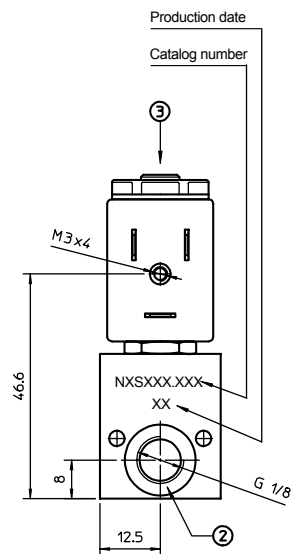
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



FLO CONTROL

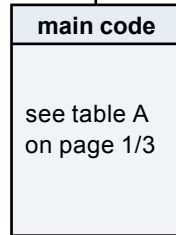
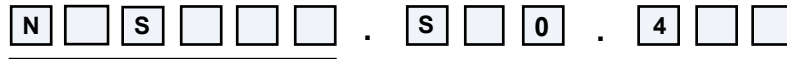
Solenoid Valves



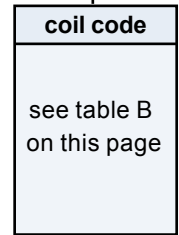
direct operated solenoid valves

coil 22 mm

order code valve station



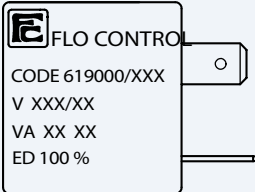
seals	
code	material
B	NBR
V	FPM
E	EPDM



order code mounting kit (one per complete system) :
(2x G1/8 end plates)



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
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FLO CONTROL

Solenoid Valves

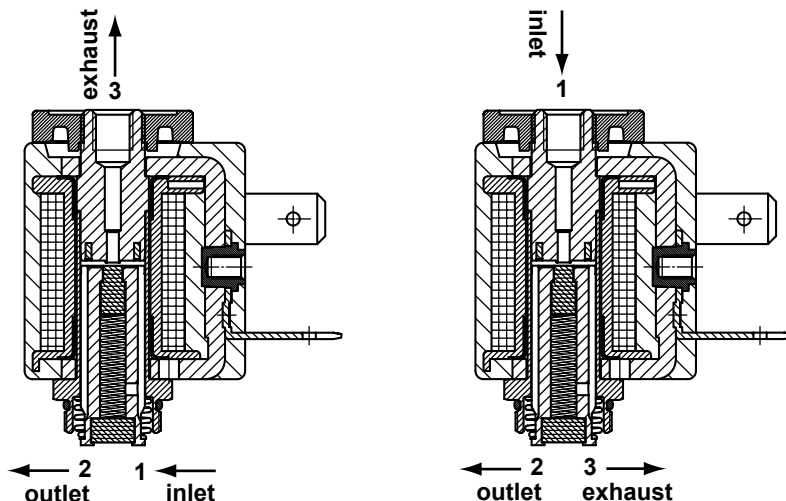


direct operated solenoid valves

coil 22 mm

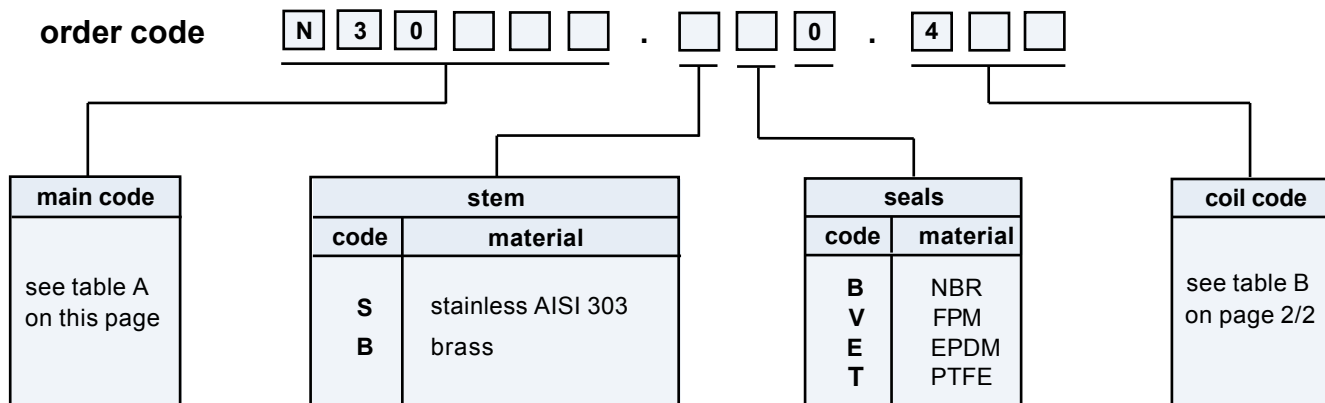
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request



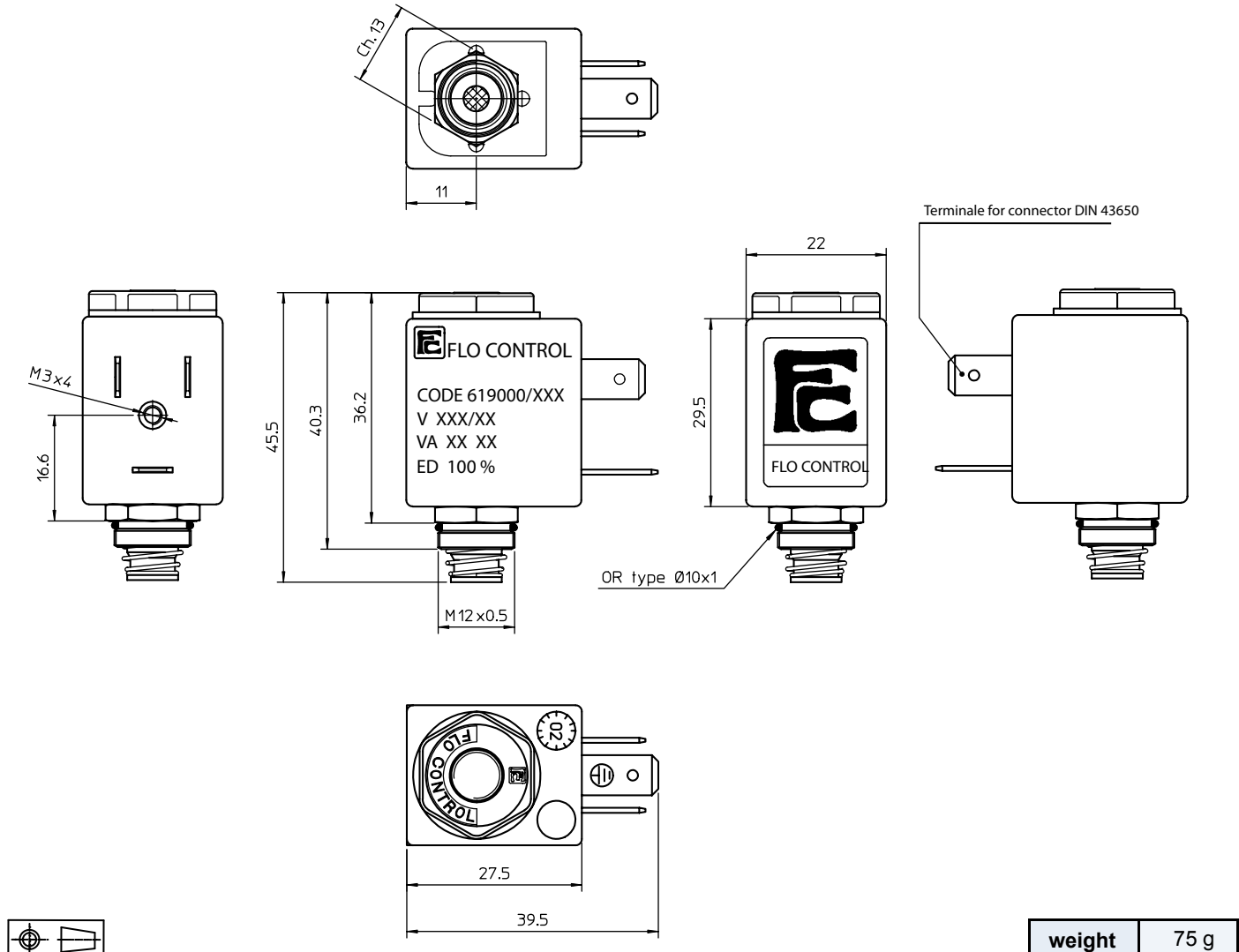
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.		
3/2 normally closed (NC) 		1.2	0.5	0	-	10	-	9	7.5	N30112
		1.2	0.5	0	10	-	5	-	-	N30612
		1.6	1.1	0	-	7	-	9	7.5	N30116
		1.6	1.1	0	7	-	5	-	-	N30616
		2.0	1.5	0	5.6	-	5	-	-	N30620
		2.4	2.0	0	2.5	-	5	-	-	N30624
3/2 normally open (NO) 		1.2	0.5	0	-	10	-	9	7.5	N30212
		1.2	0.5	0	10	-	5	-	-	N30712
		1.6	1.1	0	-	7	-	9	7.5	N30216
		1.6	1.1	0	7	-	5	-	-	N30716
		2.0	1.5	0	3	-	5	-	-	N30720
		2.4	2.0	0	1.5	-	5	-	-	N30724

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 22 mm



weight	75 g
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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
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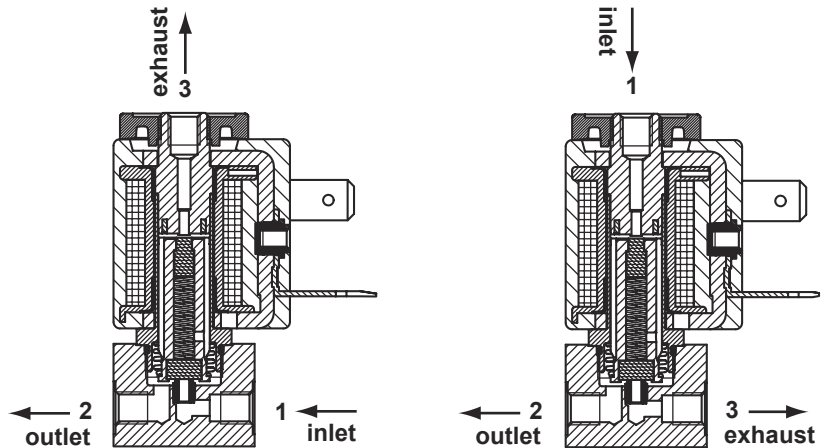
FLO CONTROL
Solenoid Valves



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

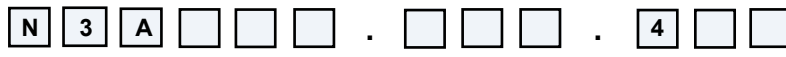


* other seal materials on request

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	N3A112
		1.2	0.5	0	10	-	5	-	-	N3A612
		1.6	1.1	0	-	7	-	9	7.5	N3A116
		1.6	1.1	0	7	-	5	-	-	N3A616
3/2 normally open (NO) 		1.2	0.5	0	-	10	-	9	7.5	N3A212
		1.2	0.5	0	10	-	5	-	-	N3A712
		1.6	1.1	0	-	7	-	9	7.5	N3A216
		1.6	1.1	0	7	-	5	-	-	N3A716

*l/min. of water with ΔP of 1 bar

order code

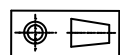
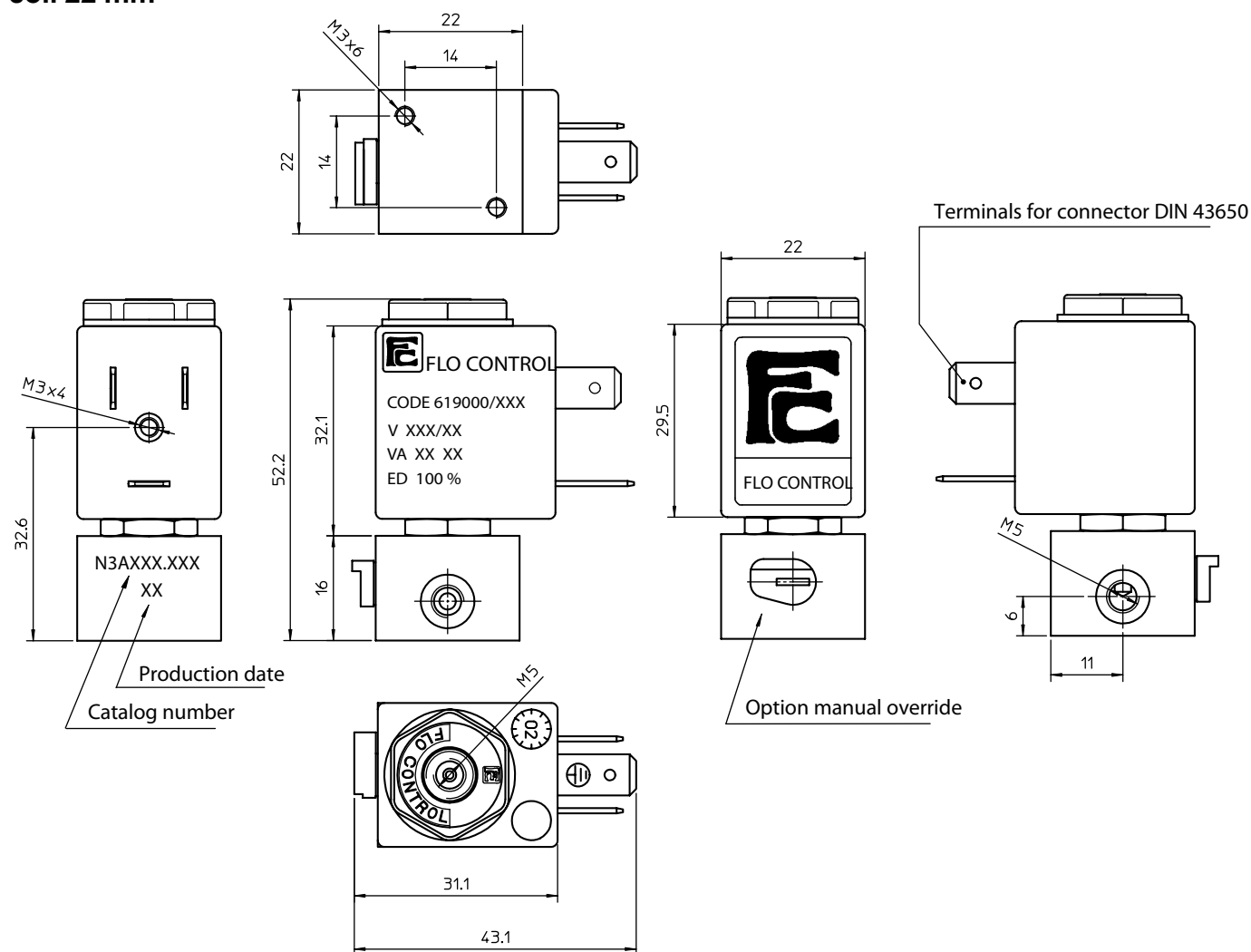


main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	A	stainless AISI 303	B	NBR	0	none	see table B on page 2/2
	D	brass*	V	FPM	1	brass screw	
		*option: chem. nickel	E	EPDM	4	plastic lever	
			T	PTFE			



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

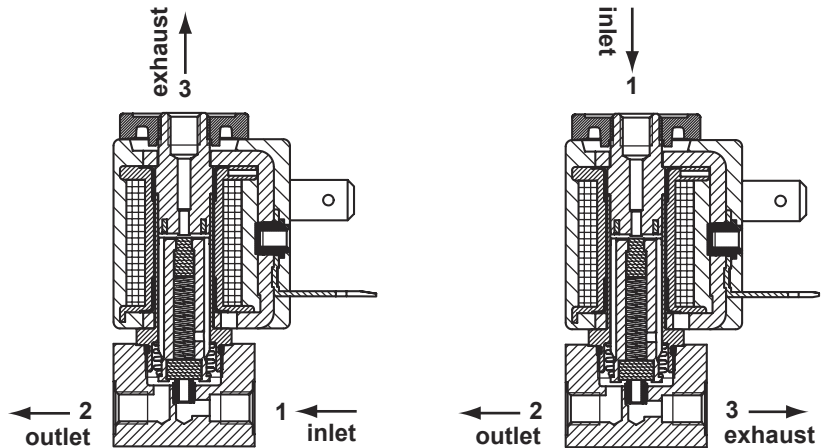
Solenoid Valves



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

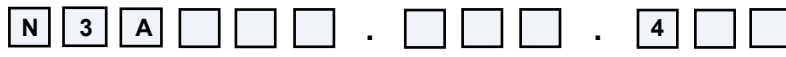
NC

NO

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	N3A112
		1.2	0.5	0	10	-	5	-	-	N3A612
		1.6	1.1	0	-	7	-	9	7.5	N3A116
		1.6	1.1	0	7	-	5	-	-	N3A616
3/2 normally open (NO) 		1.2	0.5	0	-	10	-	9	7.5	N3A212
		1.2	0.5	0	10	-	5	-	-	N3A712
		1.6	1.1	0	-	7	-	9	7.5	N3A216
		1.6	1.1	0	7	-	5	-	-	N3A716

*l/min. of water with ΔP of 1 bar

order code

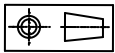
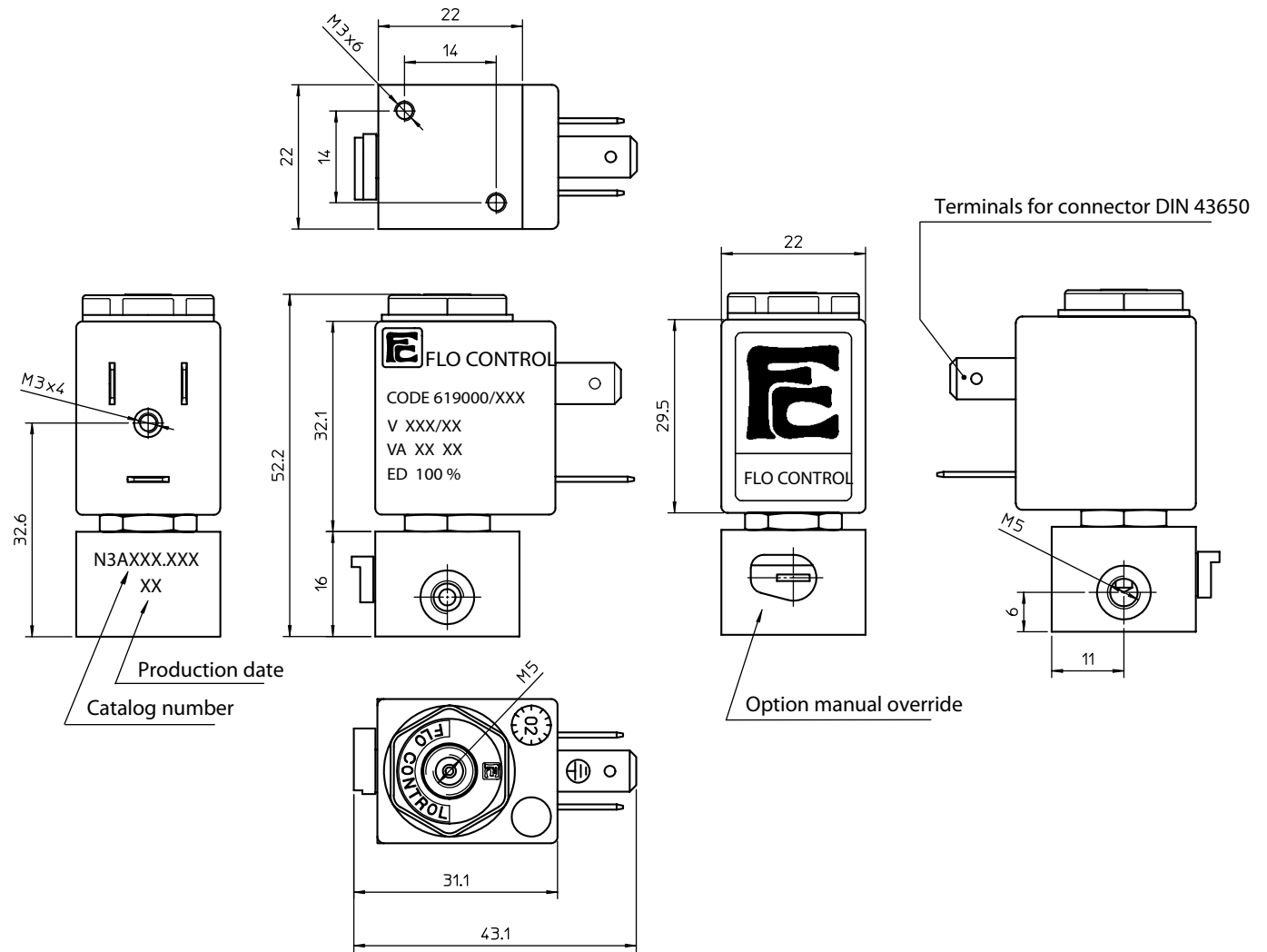


main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	B	stainless AISI 303	B	NBR	0	none	see table B on page 2/2
	C	brass*	V	FPM	1	brass screw	
		*option: chem. nickel	E	EPDM	4	plastic lever	
			T	PTFE			



direct operated solenoid valves

coil 22 mm



weight 130 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

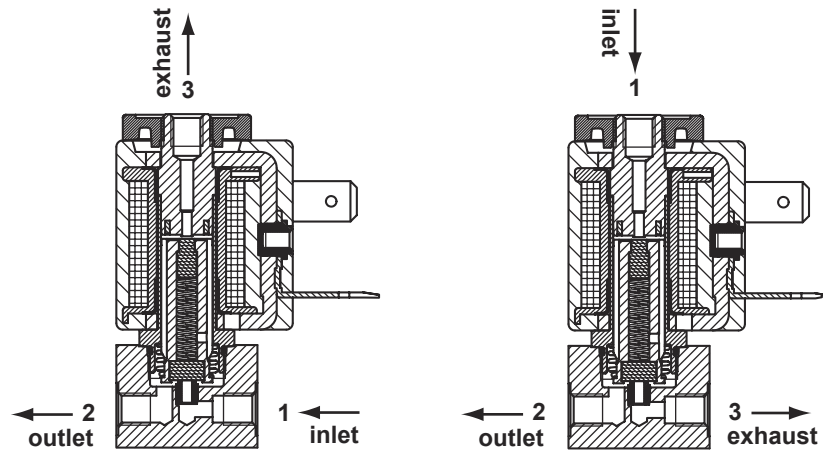
Solenoid Valves



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

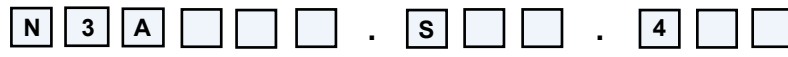
NC

NO

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	N3A112
		1.2	0.5	0	10	-	5	-	-	N3A612
		1.6	1.1	0	-	7	-	9	7.5	N3A116
		1.6	1.1	0	7	-	5	-	-	N3A616
3/2 normally open (NO) 		1.2	0.5	0	-	10	-	9	7.5	N3A212
		1.2	0.5	0	10	-	5	-	-	N3A712
		1.6	1.1	0	-	7	-	9	7.5	N3A216
		1.6	1.1	0	7	-	5	-	-	N3A716

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
T	PTFE

manual override	
code	type
0	none
4	plastic lever

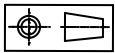
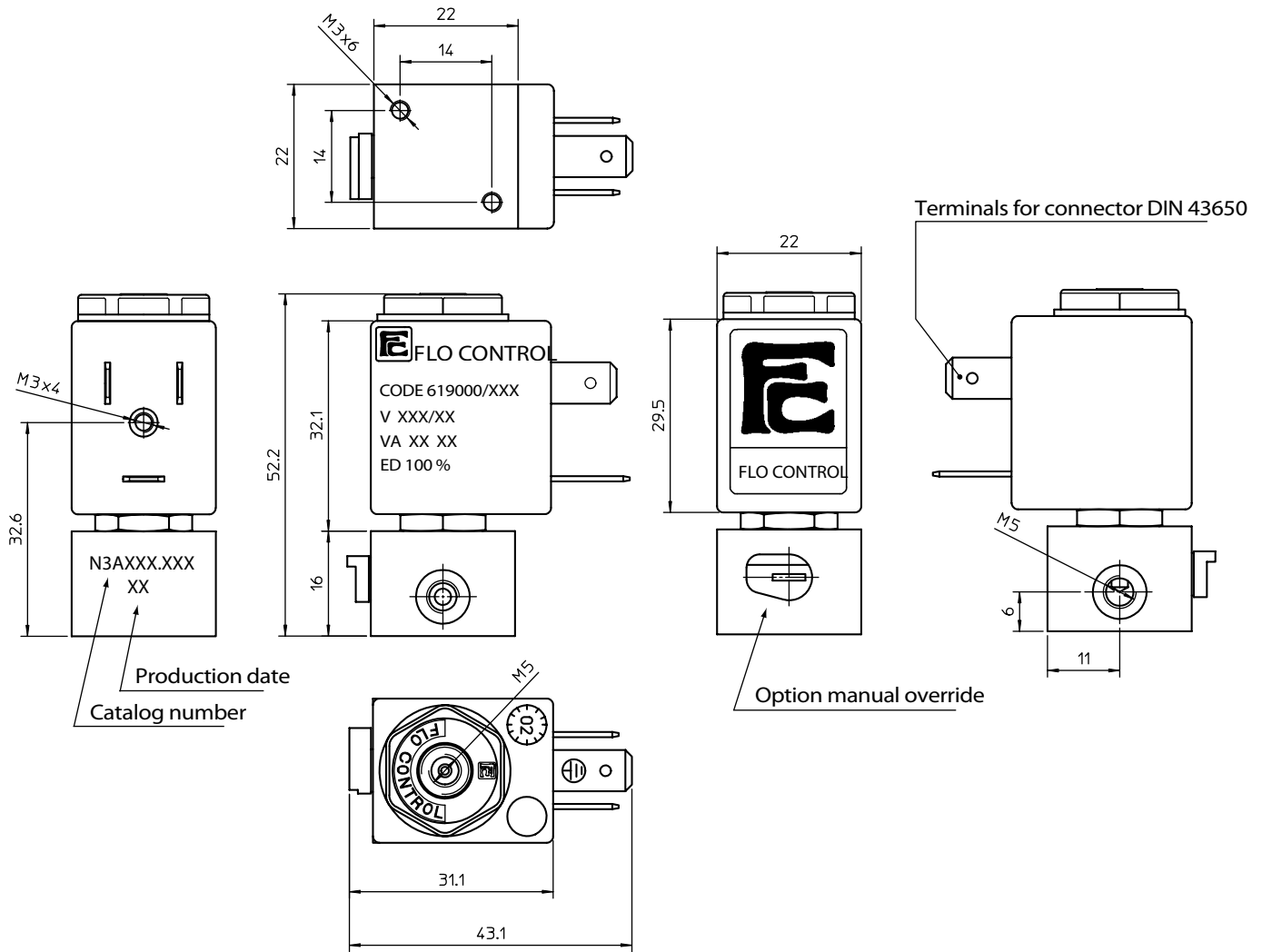
coil code
see table B on page 2/2

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm



weight	130 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
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FLO CONTROL

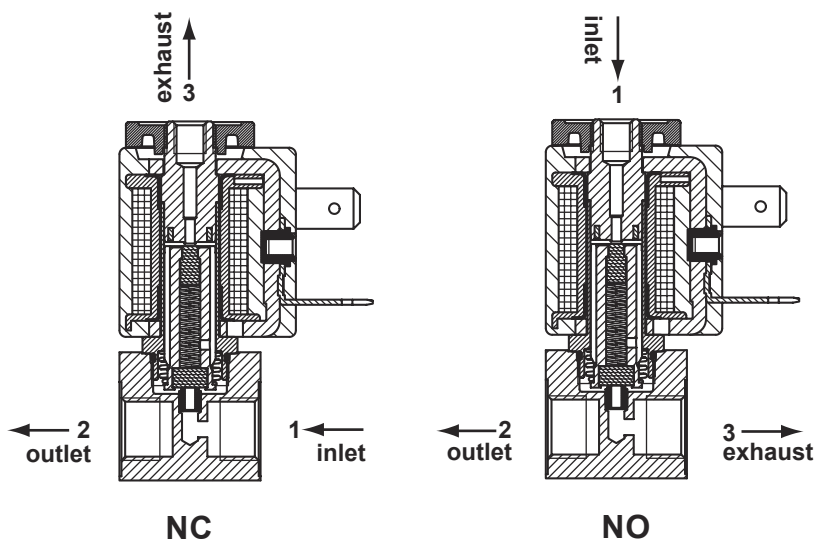
Solenoid Valves



direct operated solenoid valves

coil 22 mm

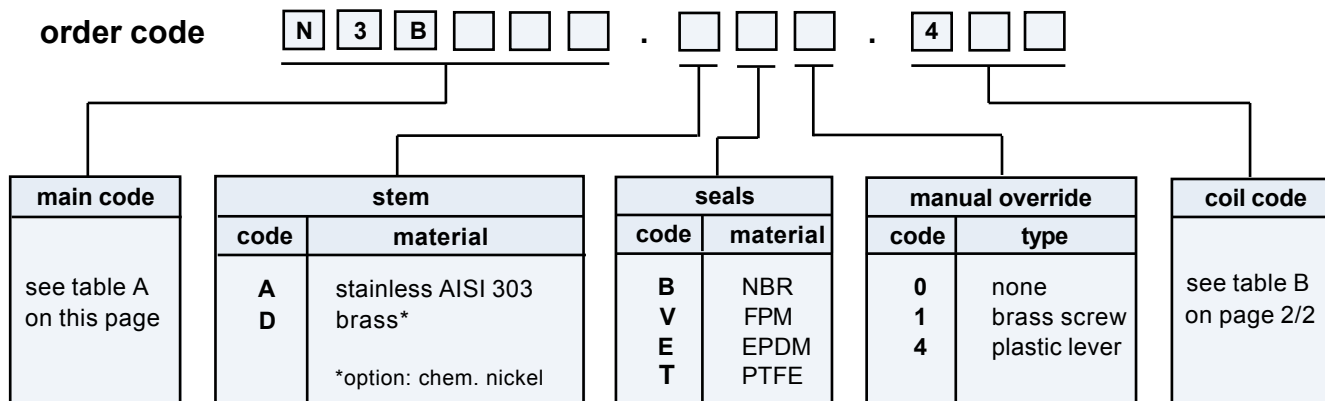
general information	
ambient temperature	- 10°C to + 50°C
response time	5 - 8 ms
mounting	in any position
seal materials, standard*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

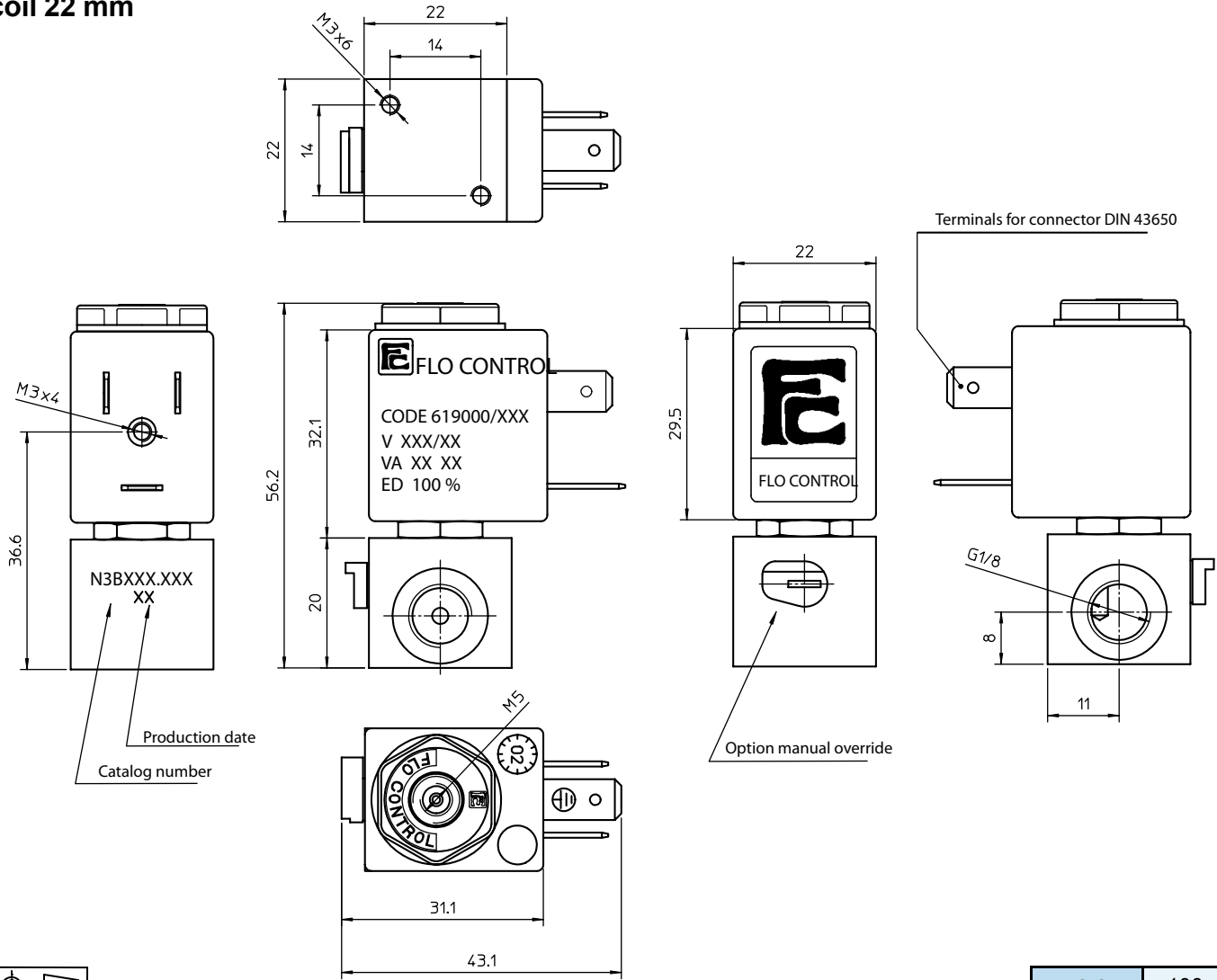
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								intr.		hol.
3/2 normally closed (NC) 		1.2	0.5	0	-	10	-	9	7.5	N3B112
		1.2	0.5	0	10	-	5	-	-	N3B612
		1.6	1.1	0	-	7	-	9	7.5	N3B116
		1.6	1.1	0	7	-	5	-	-	N3B616
		2.0	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 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

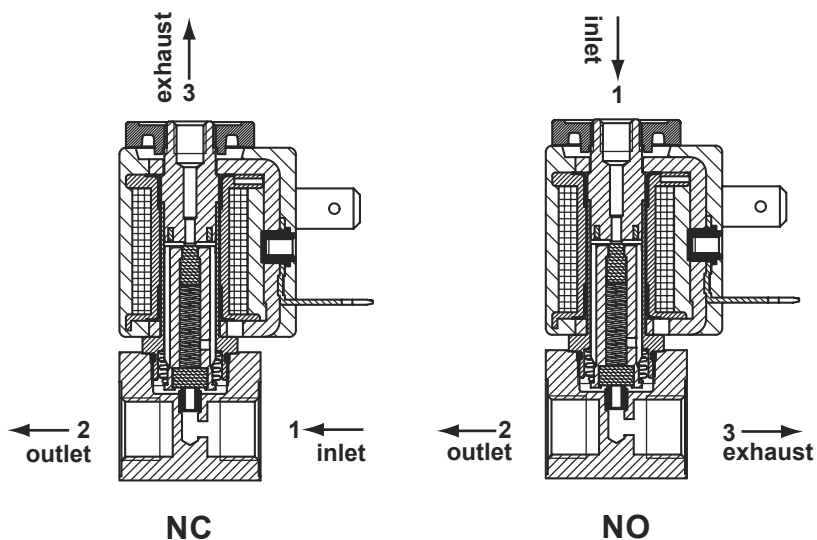
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

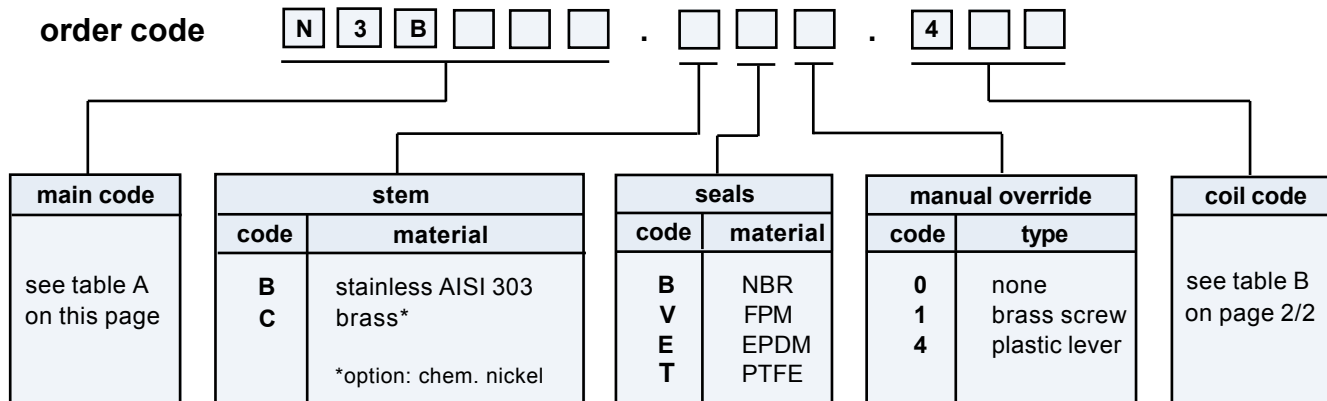
general information	
ambient temperature	- 10°C to + 50°C
response time	5 - 8 ms
mounting	in any position
seal materials, standard*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

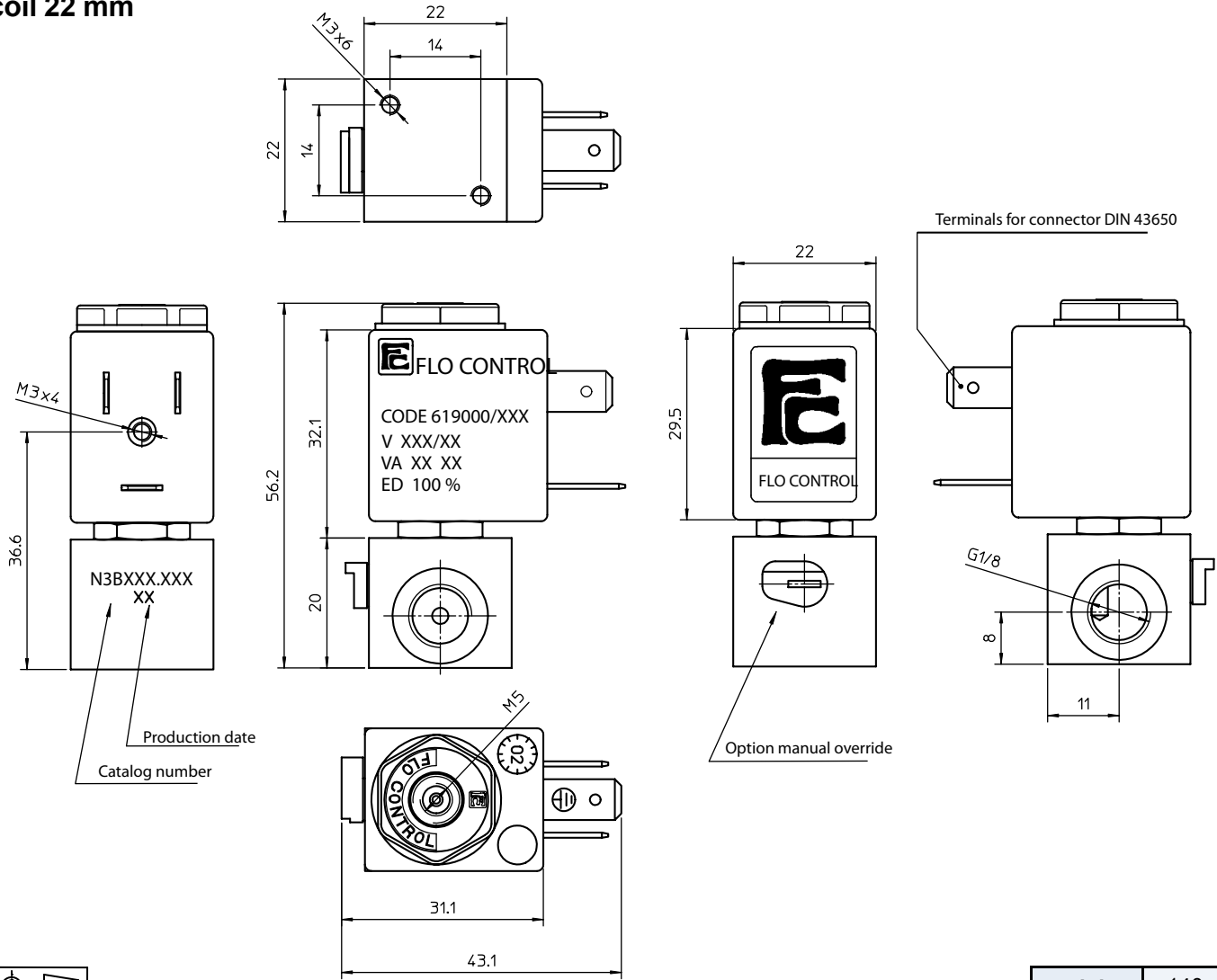
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
3/2 normally closed (NC) 	1.2	0.5	0	-	10	-	9	7.5	N3B112	
	1.2	0.5	0	10	-	5	-	-	N3B612	
	1.6	1.1	0	-	7	-	9	7.5	N3B116	
	1.6	1.1	0	7	-	5	-	-	N3B616	
	2.0	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

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

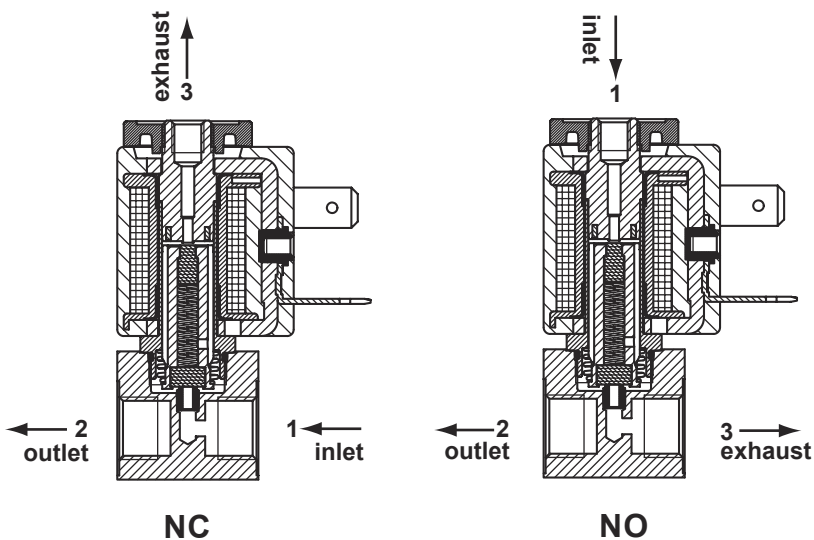
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

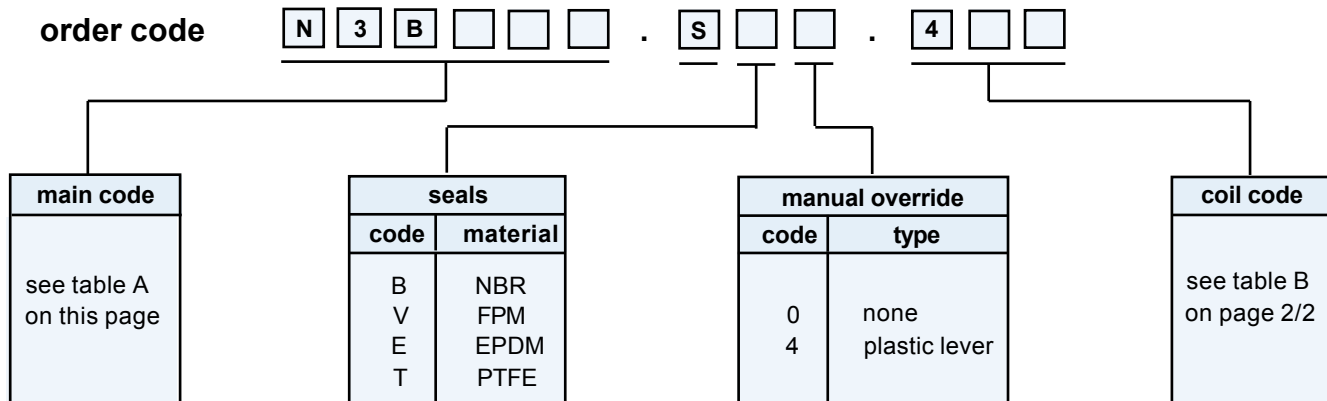
general information	
ambient temperature	- 10°C to + 50°C
response time	5 - 8 ms
mounting	in any position
seal materials, standard*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

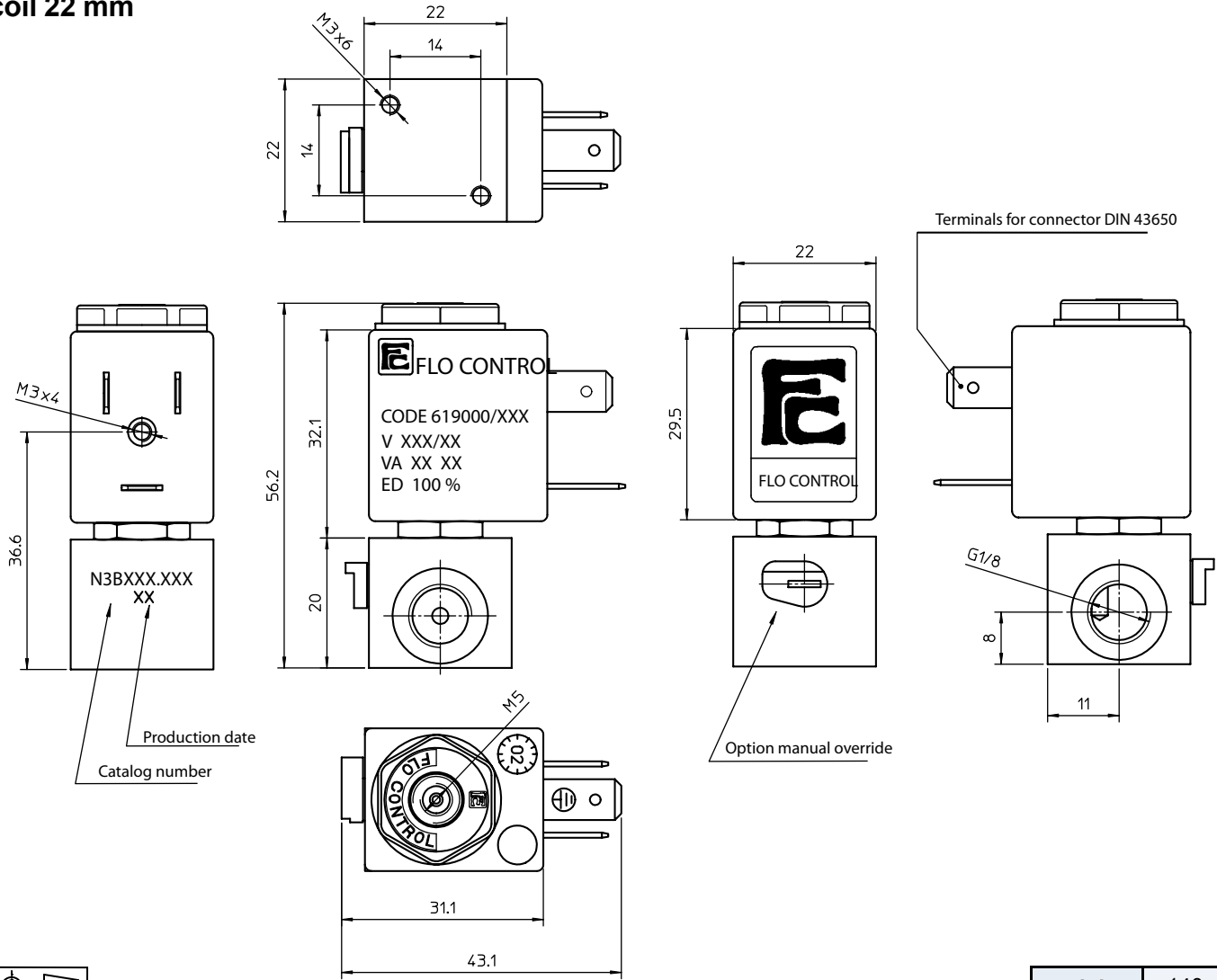
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
3/2 normally closed (NC) 		1.2	0.5	0	-	10	-	9	7.5	N3B112
		1.2	0.5	0	10	-	5	-	-	N3B612
		1.6	1.1	0	-	7	-	9	7.5	N3B116
		1.6	1.1	0	7	-	5	-	-	N3B616
		2.0	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

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

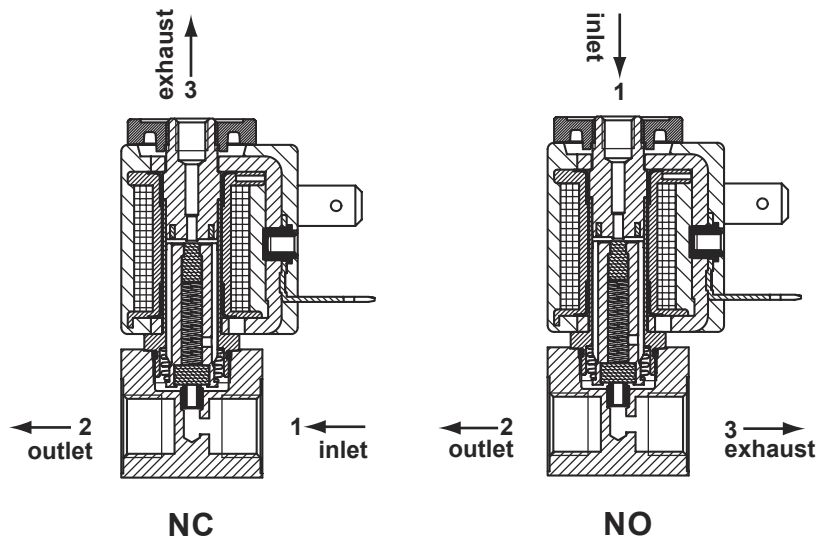
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

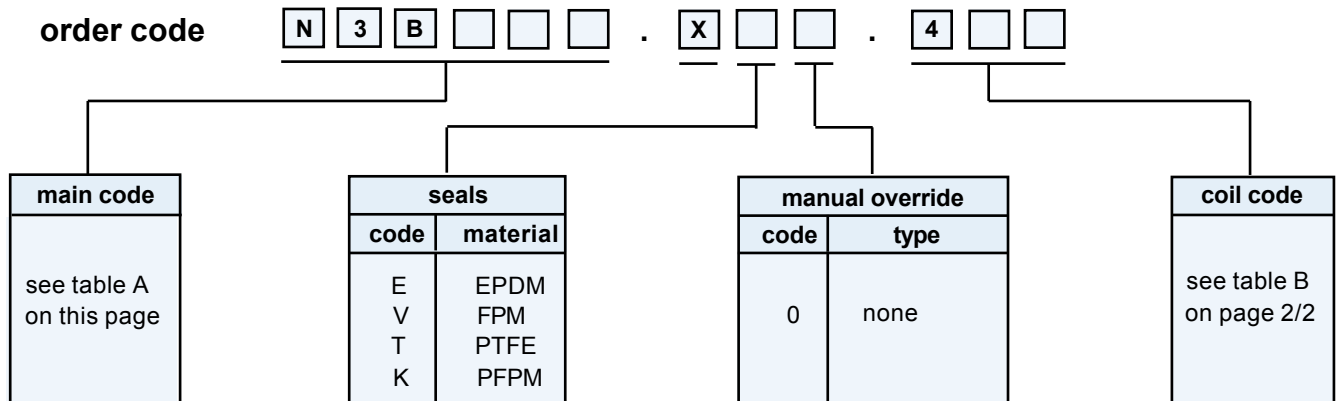
general information	
ambient temperature	- 10°C to + 50°C
response time	5 - 8 ms
mounting	in any position
seal materials, standard*	EPDM, FPM, PTFE, PFPM*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

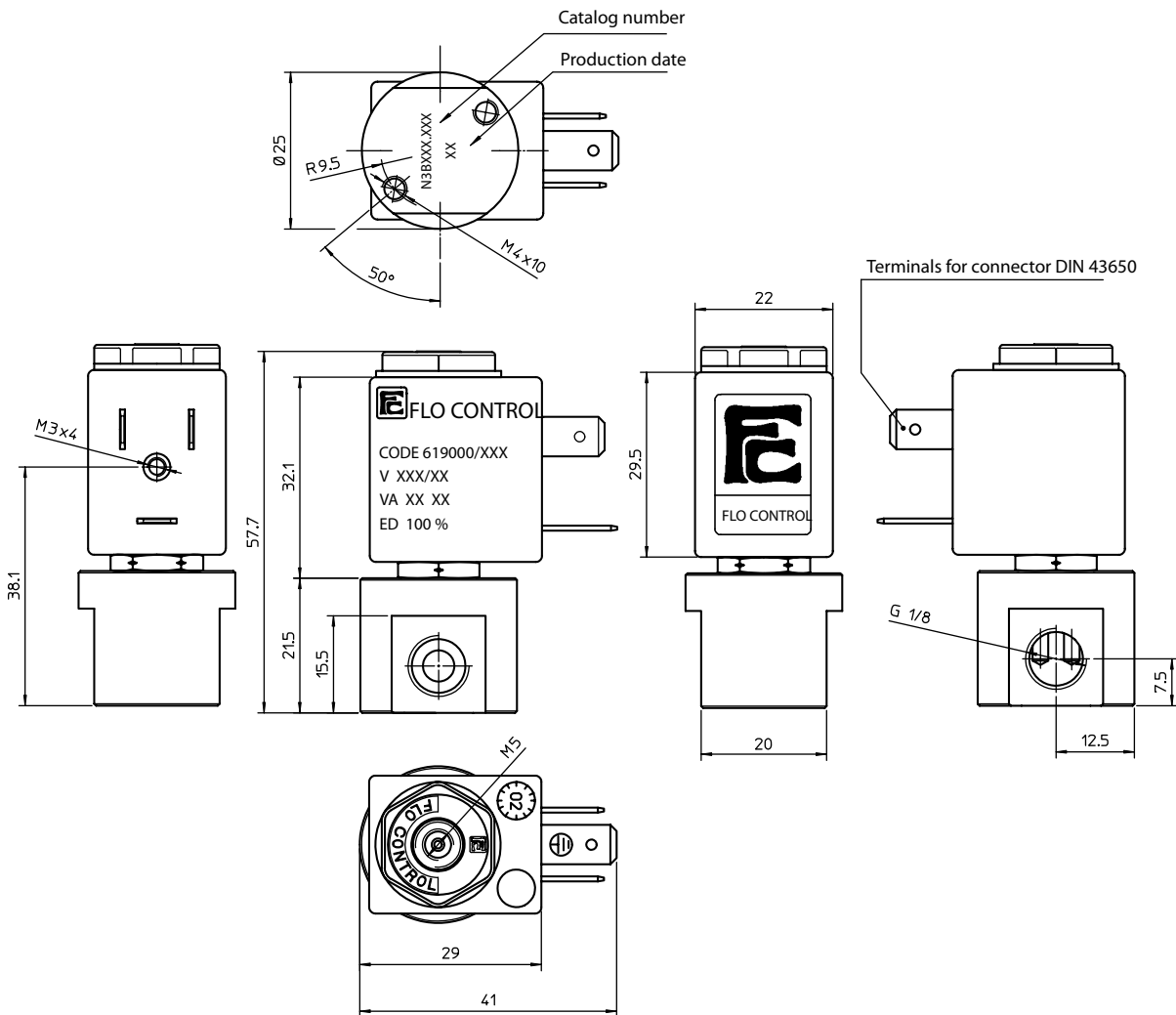
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
3/2 normally closed (NC) 		1.2	0.5	0	-	10	-	9	7.5	N3B112
		1.2	0.5	0	10	-	5	-	-	N3B612
		1.6	1.1	0	-	7	-	9	7.5	N3B116
		1.6	1.1	0	7	-	5	-	-	N3B616
3/2 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

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 22 mm



weight 140 g

coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
<p>CODE 619000/XXX V XXX/XX VA XX XX ED 100 %</p>	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

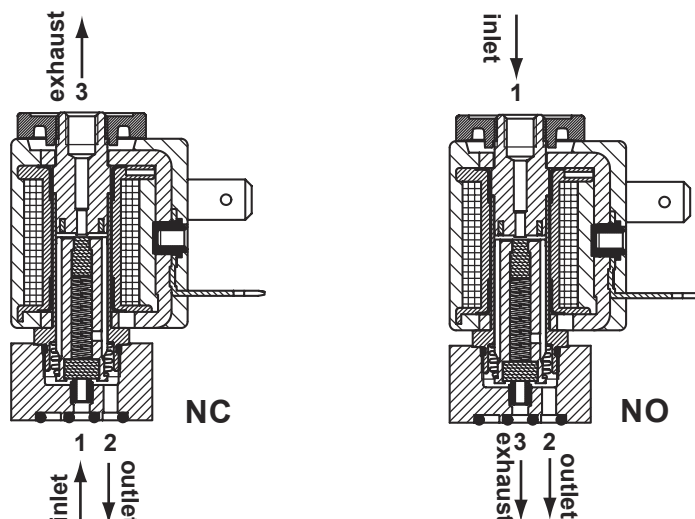
Solenoid Valves



direct operated solenoid valves

coil 22 mm

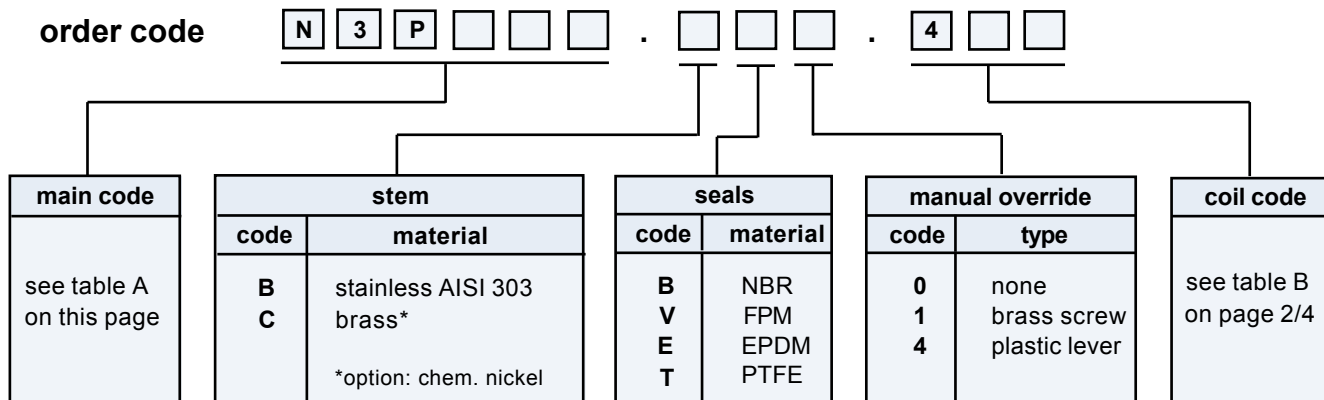
general information	
ambient temperature	- 10°C to + 50°C
response time	5 - 8 ms
mounting	in any position
seal materials, standard*	NBR, FPM, EPDM, PTFE*
dimensions	see page 2/4, 3/4 and 4/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4



* other seal materials on request

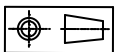
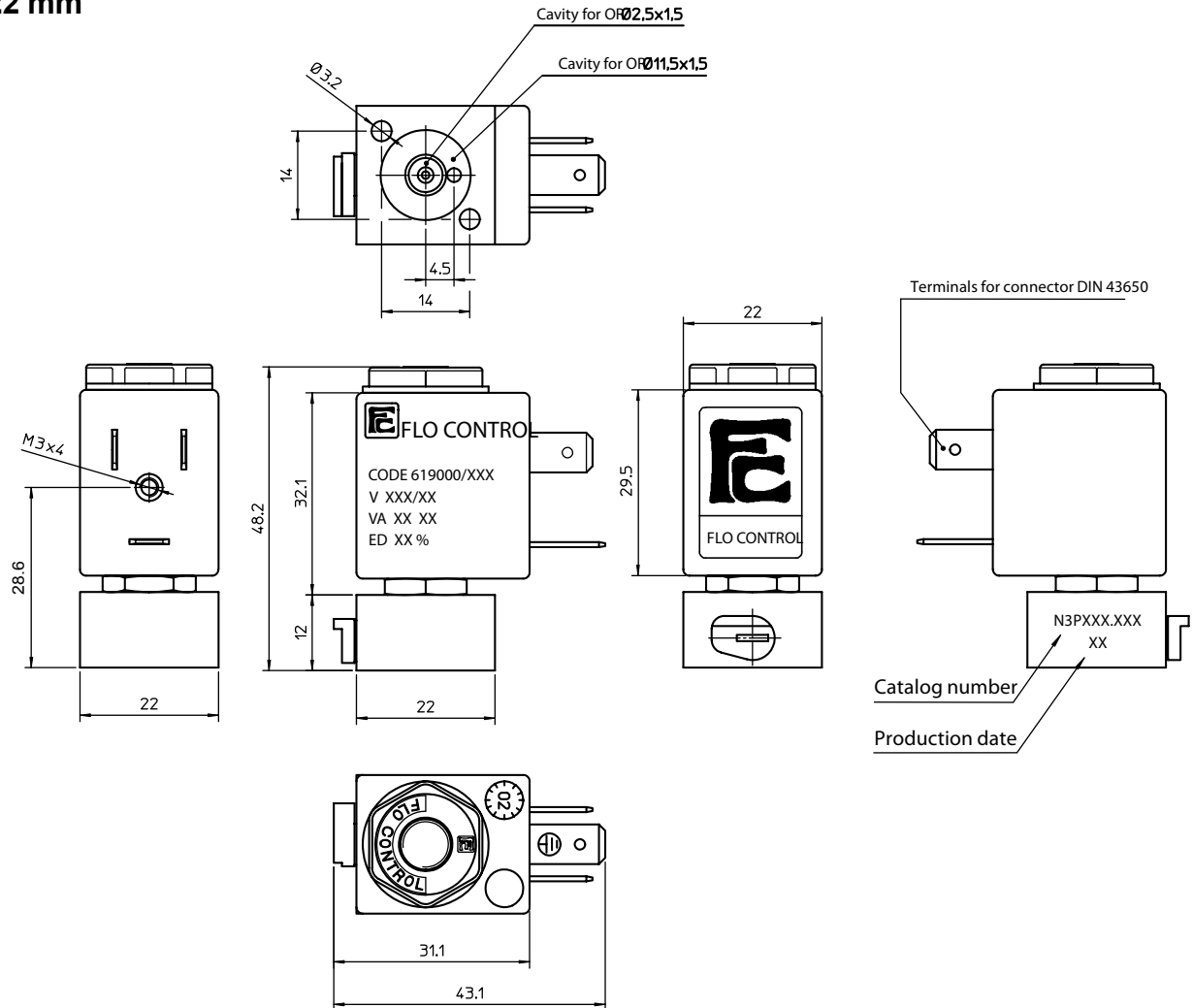
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.		
3/2 normally closed (NC) 		1.2	0.5	0	-	10	-	9	7.5	N3P112
		1.2	0.5	0	10	-	5	-	-	N3P612
		1.6	1.1	0	-	7	-	9	7.5	N3P116
		1.6	1.1	0	7	-	5	-	-	N3P616
3/2 normally 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



direct operated solenoid valves

coil 22 mm



weight	110 g
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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
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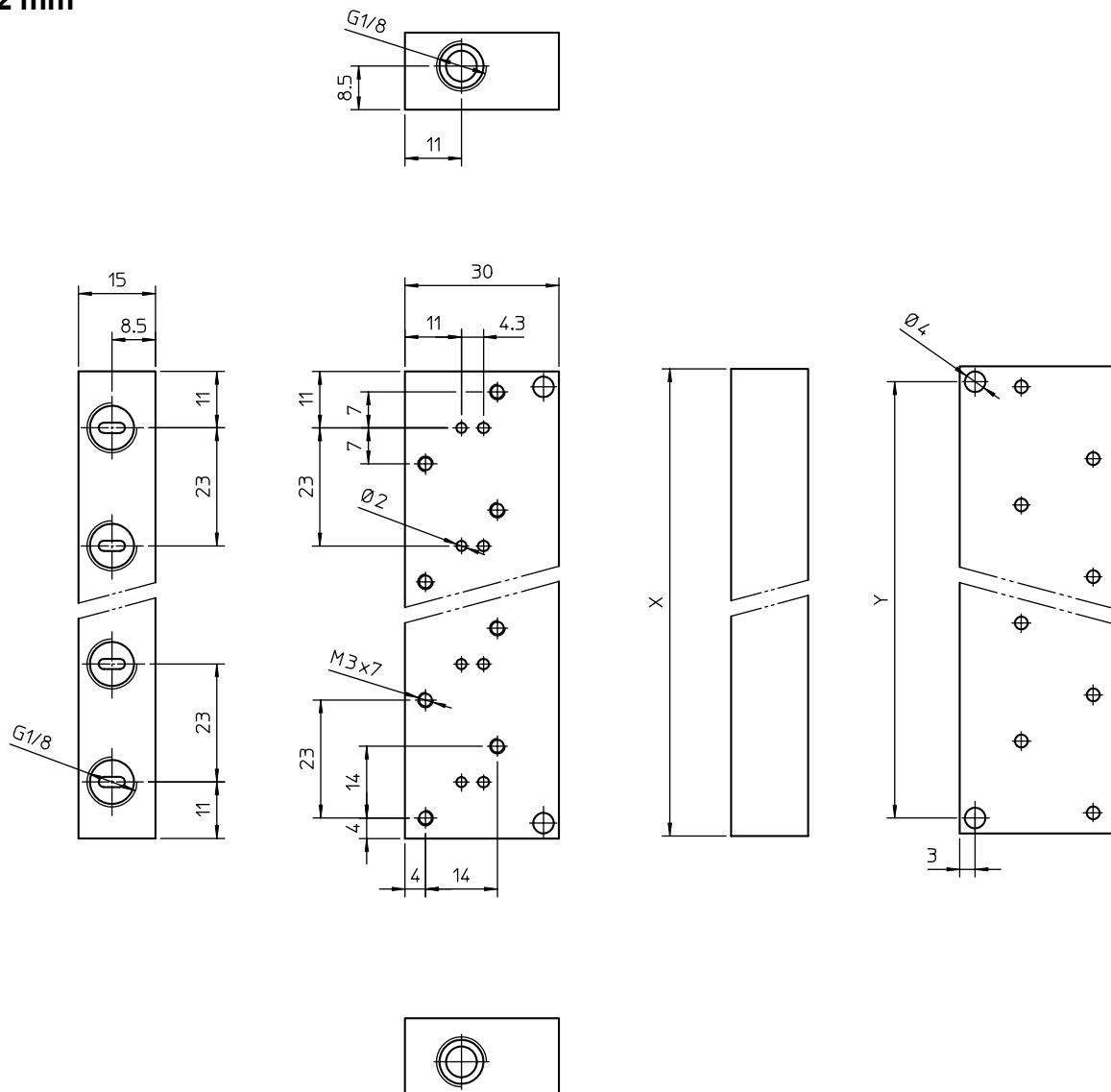
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm

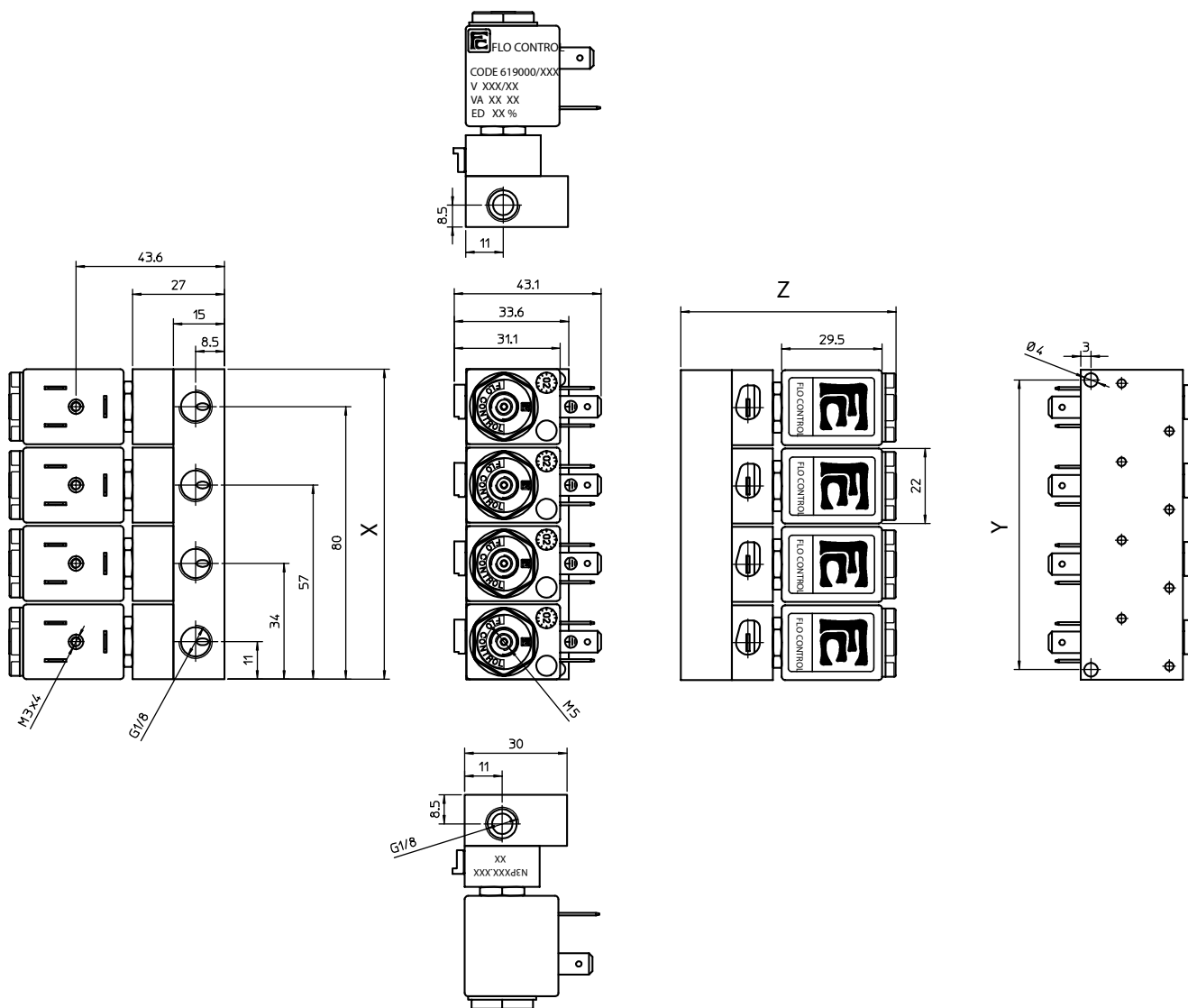


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.B1.38B	1	22	16	65
ZZ11.B2.38B	2	45	39	132
ZZ11.B3.38B	3	68	62	210
ZZ11.B4.38B	4	91	85	280
ZZ11.B5.38B	5	114	108	350
ZZ11.B6.38B	6	137	131	430

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

direct operated solenoid valves

coil 22 mm



dimensions assembled manifolds

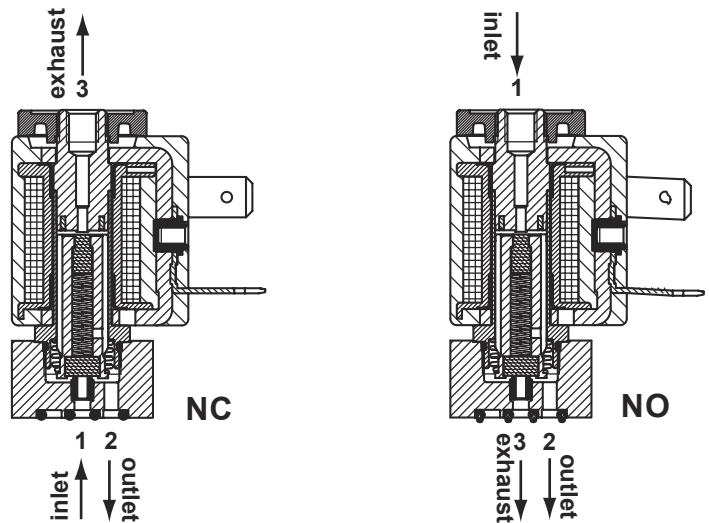
order code	stations	X (mm)	Y (mm)	Z (mm)	weight (g)
parts have to be ordered separately:	1	22	16	63.2	175
	2	45	39	63.2	352
valves see page 1/4	3	68	62	63.2	540
bases see page 3/4	4	91	85	63.2	720
srews see page 3/4	5	114	108	63.2	900
	6	137	131	63.2	1090

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

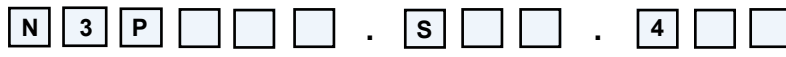
* other seal materials on request



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	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

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
T	PTFE

manual override	
code	type
0	none
4	plastic lever

coil code
see table B on page 2/2

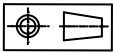
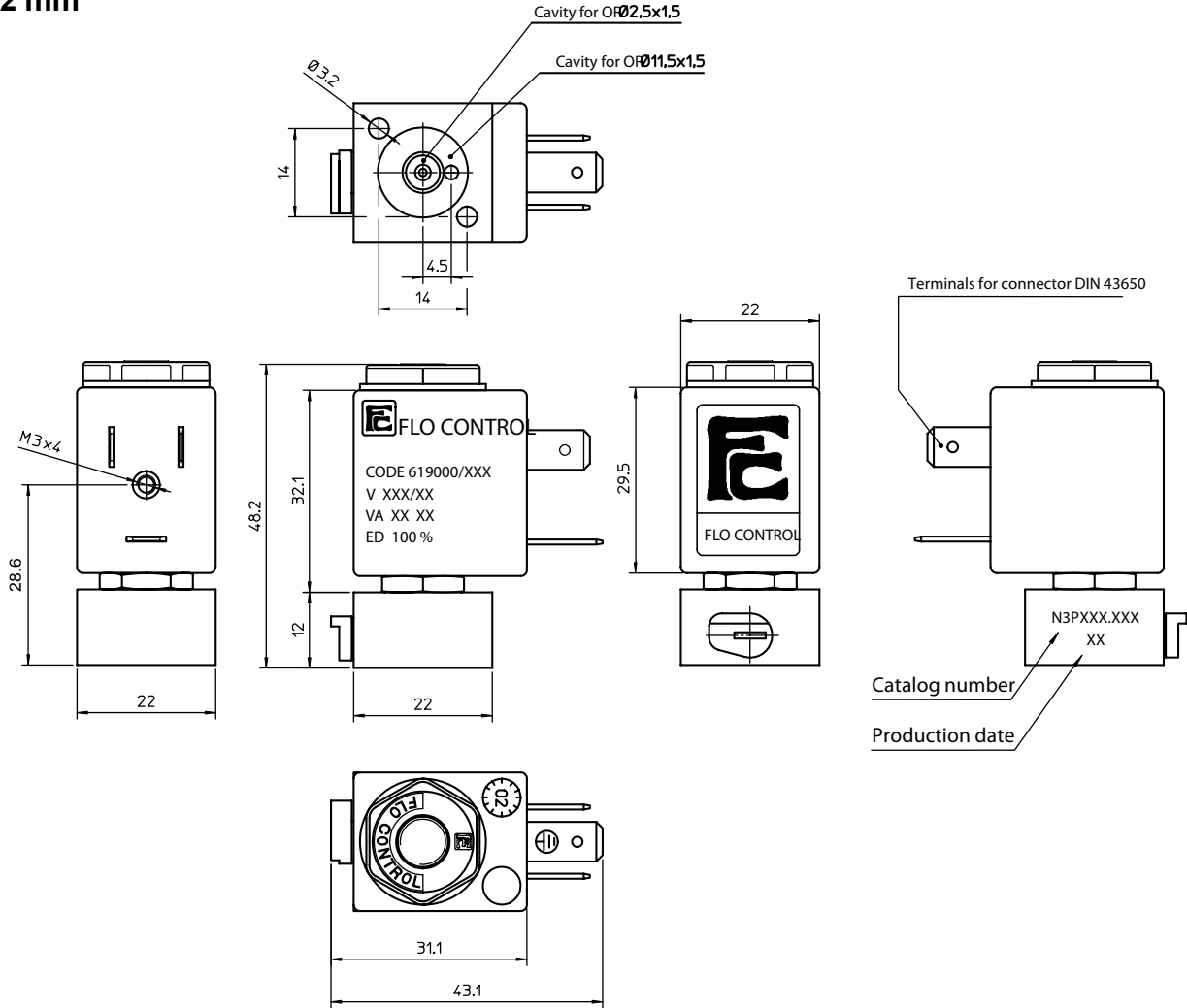
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



weight 110 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



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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	AC	DC	AC
2/2 normally closed (NC) 		1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112
		1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116
		2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120
		2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124
2/2 normally open (NO) 		1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212
		1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216
		2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220
		2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC	AC	DC	AC
3/2 normally closed (NC) 		1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112
		1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116
		2.0	1.5	0	5	-	5	-	-	N3S620	-
		2.4	2.0	0	4	-	5	-	-	N3S624	-
3/2 normally open (NO) 		1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212
		1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216

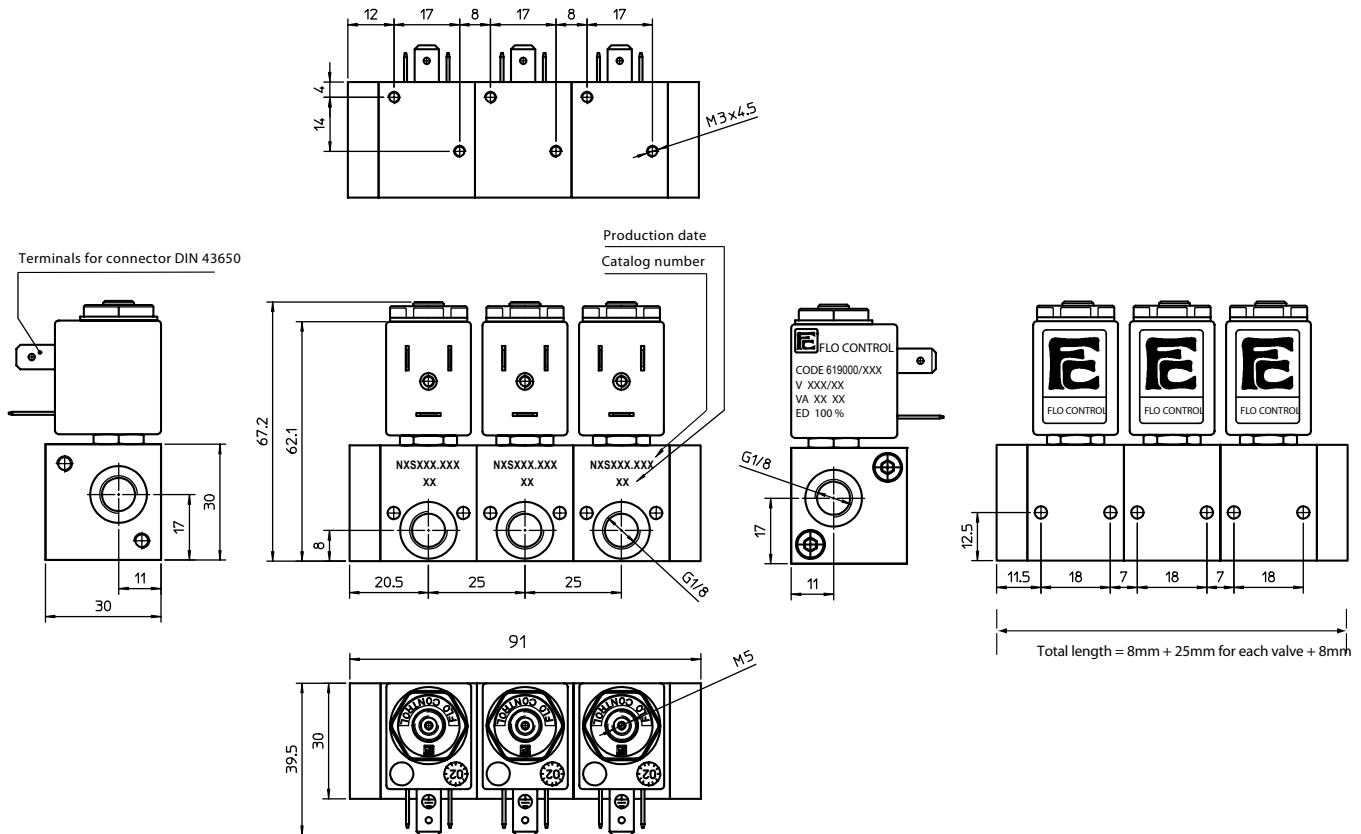
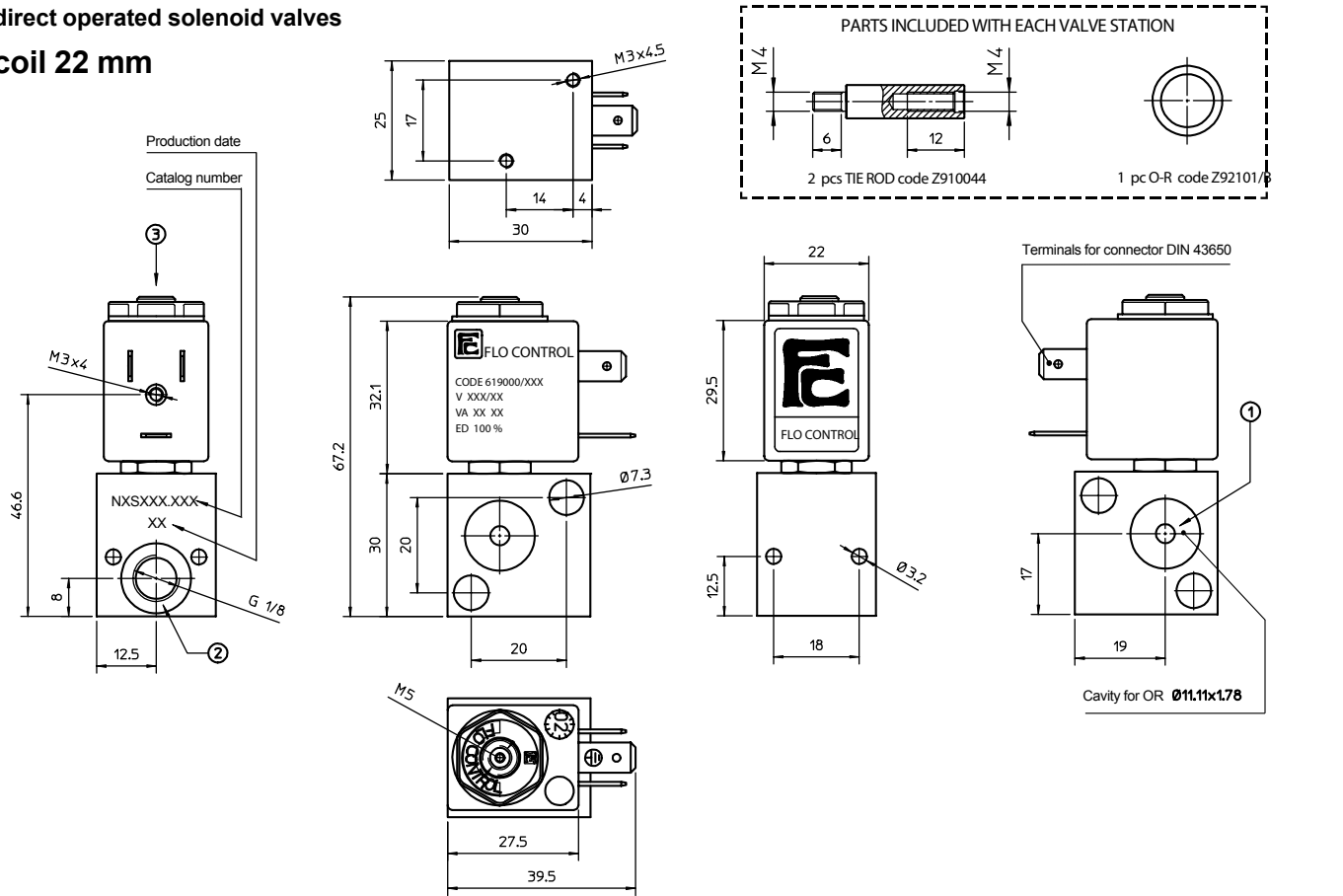
*l/min. of water with ΔP of 1 bar

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm



FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

order code valve station

N **S** . **0** . **4**

main code
see table A on page 1/3

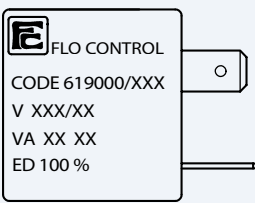
stem	
code	material
A	stainless steel
D	brass*
*option: chem. nickel	

seals	
code	material
B	NBR
V	FPM
E	EPDM

coil code
see table B on this page

order code mounting kit (one per complete system) :
(2x G1/8 end plates)

Z **1** **1** **2** **5** **0** .

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



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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	AC	DC	AC
2/2 normally closed (NC) 		1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112
		1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116
		2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120
		2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124
2/2 normally open (NO) 		1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212
		1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216
		2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220
		2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC	AC	DC	AC
3/2 normally closed (NC) 		1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112
		1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116
		2.0	1.5	0	5	-	5	-	-	N3S620	-
		2.4	2.0	0	4	-	5	-	-	N3S624	-
3/2 normally open (NO) 		1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212
		1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216

*l/min. of water with ΔP of 1 bar

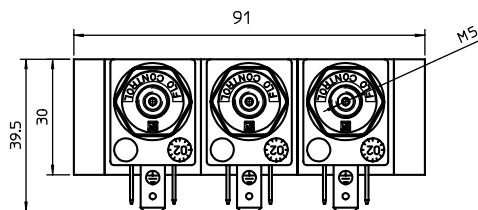
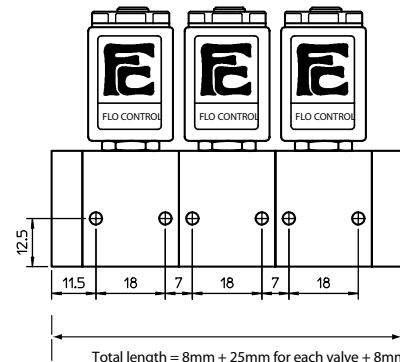
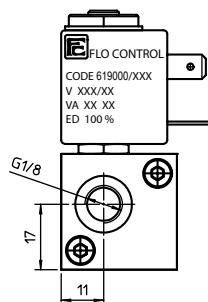
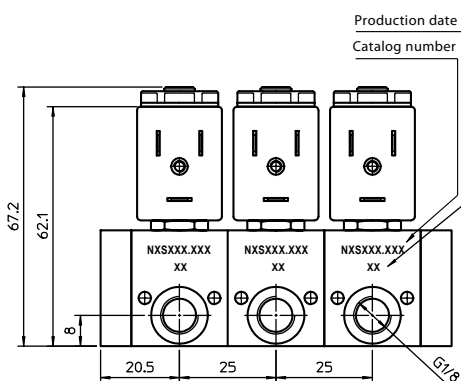
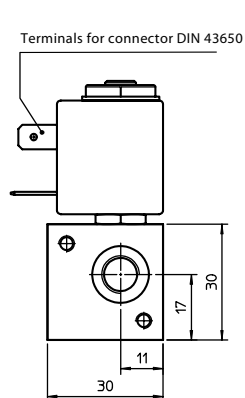
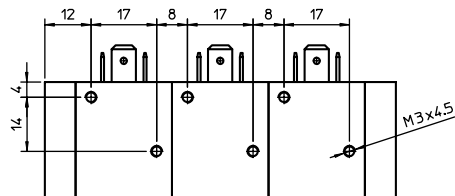
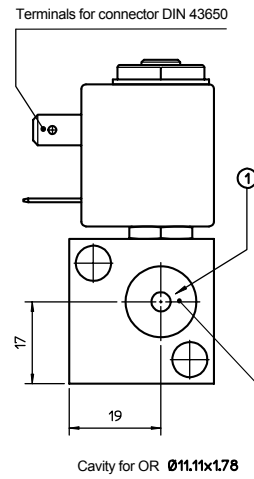
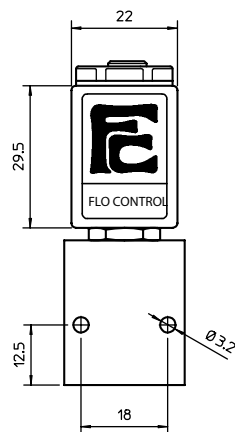
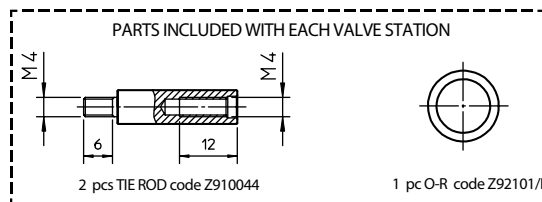
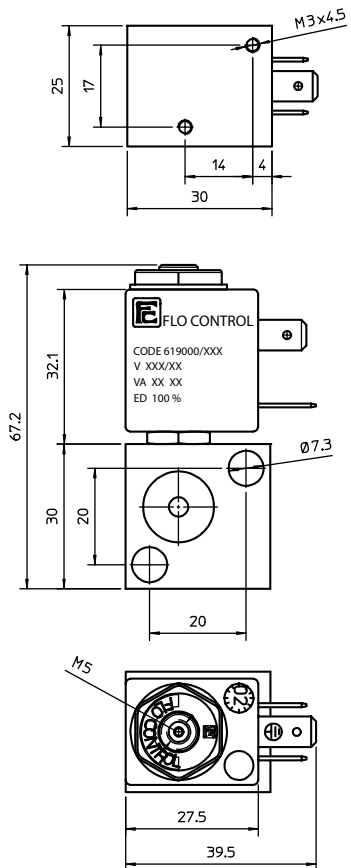
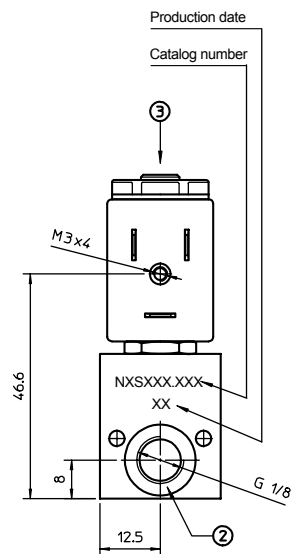
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm

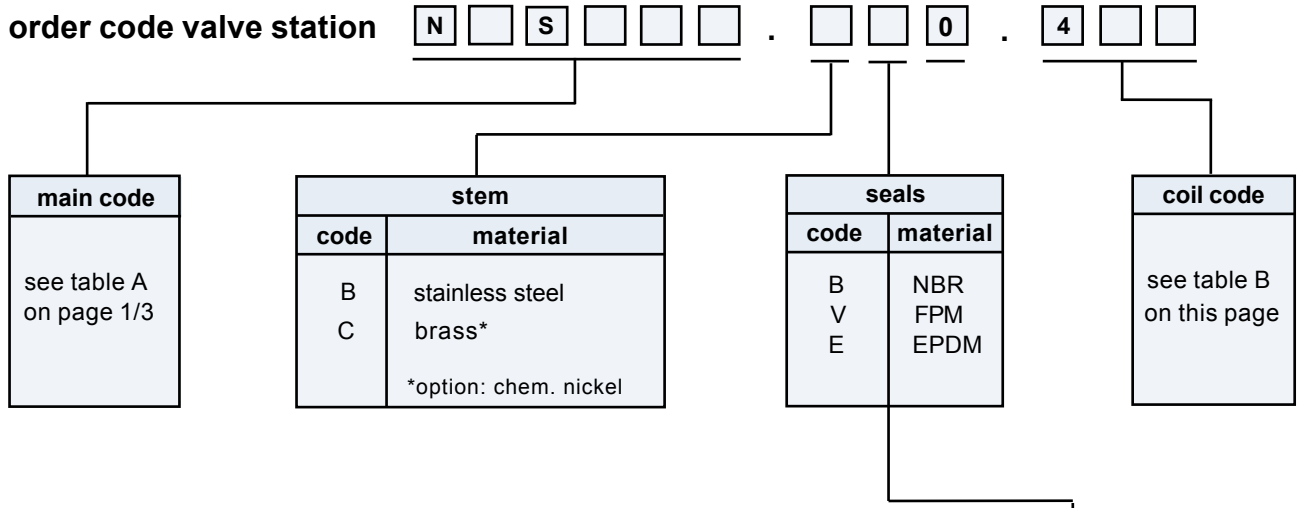


FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm



order code mounting kit (one per complete system) : **Z** **1** **1** **2** **5** **2** .

(2x G1/8 end plates)

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



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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	AC	DC	AC
2/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112	
	1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116	
	2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120	
	2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124	
2/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212	
	1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216	
	2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220	
	2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224	

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC	AC	DC	AC
3/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112	
	1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116	
	2.0	1.5	0	5	-	5	-	-	N3S620	-	
	2.4	2.0	0	4	-	5	-	-	N3S624	-	
3/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212	
	1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216	

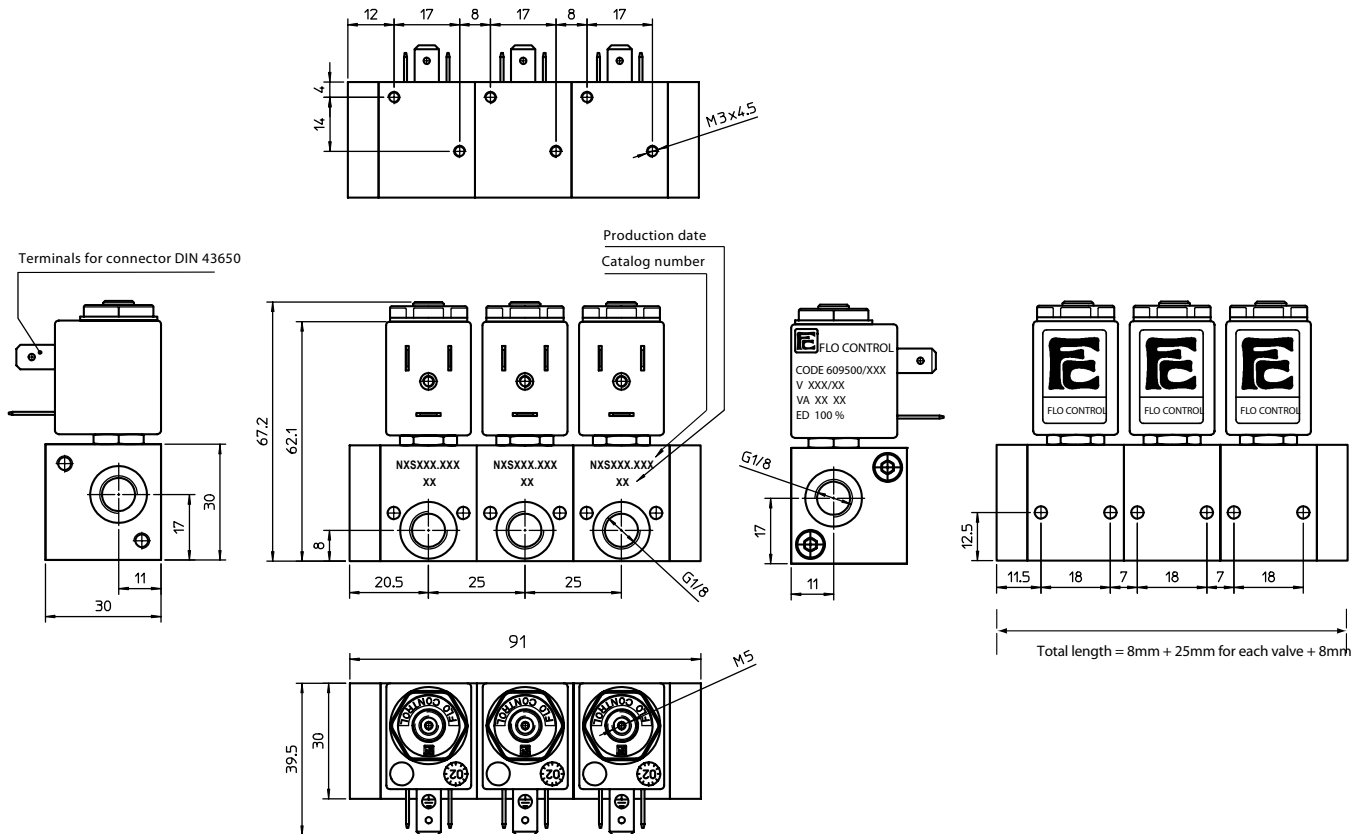
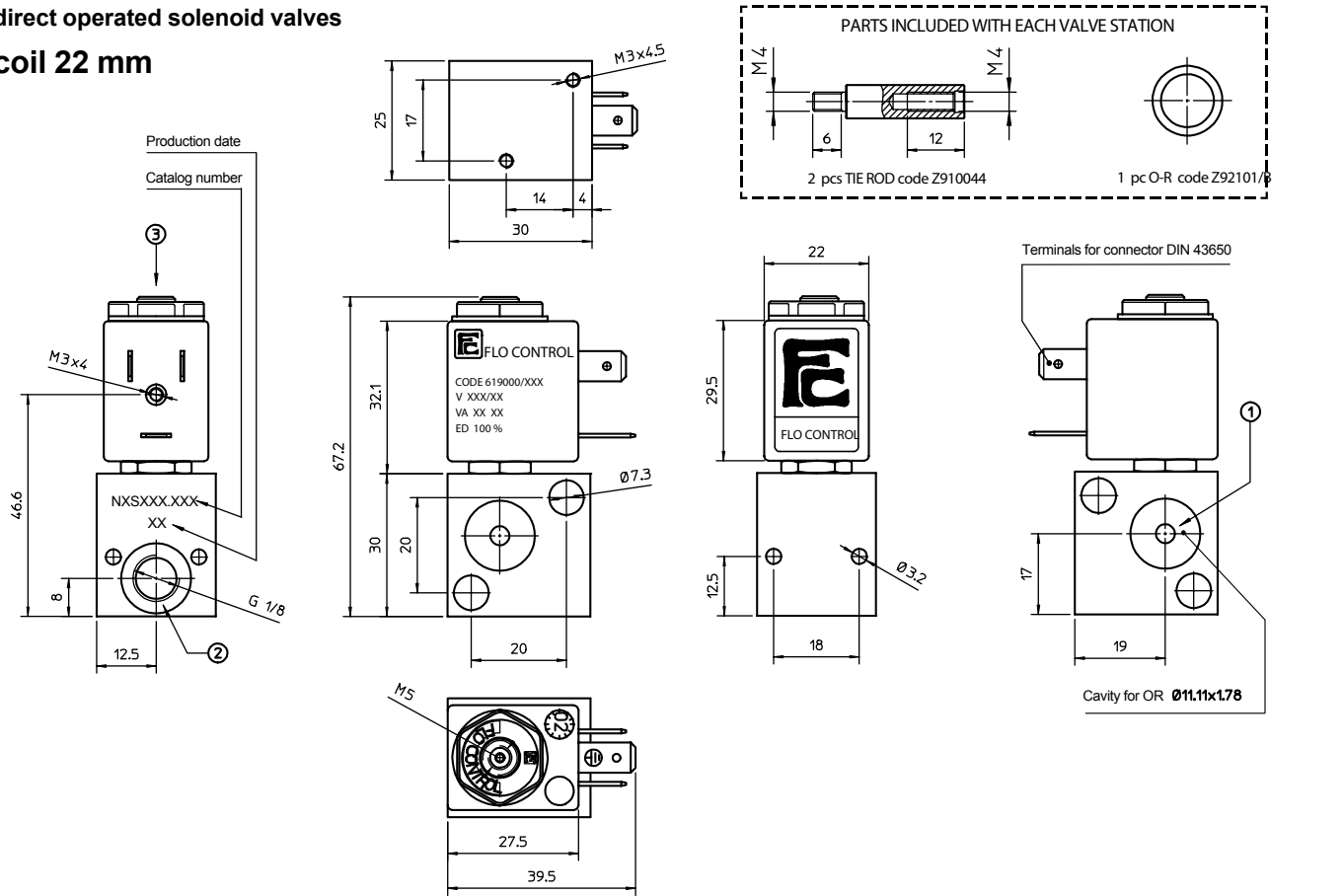
*l/min. of water with ΔP of 1 bar

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm



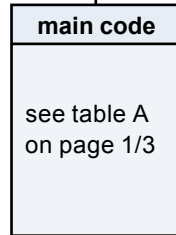
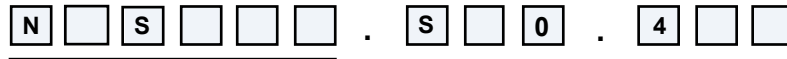
FLO CONTROL
Solenoid Valves



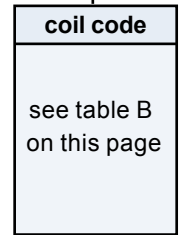
direct operated solenoid valves

coil 22 mm

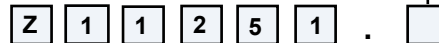
order code valve station



seals	
code	material
B	NBR
V	FPM
E	EPDM



order code mounting kit (one per complete system) :
(2x G1/8 end plates)



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
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FLO CONTROL

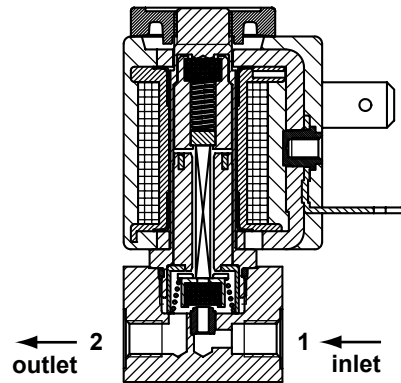
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



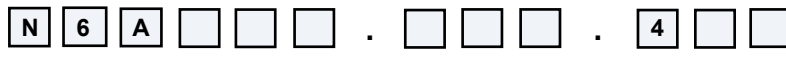
NO

* 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		main code
								inr.	hol.	
2/2 normally open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N6A212
		1.2	0.5	0	13	-	5	-	-	N6A712
		1.6	1.1	0	-	10	-	9	7.5	N6A216
		1.6	1.1	0	10	-	5	-	-	N6A716
		2.0	1.5	0	-	7	-	9	7.5	N6A220
		2.0	1.5	0	7	-	5	-	-	N6A720

*l/min. of water with ΔP of 1 bar

order code

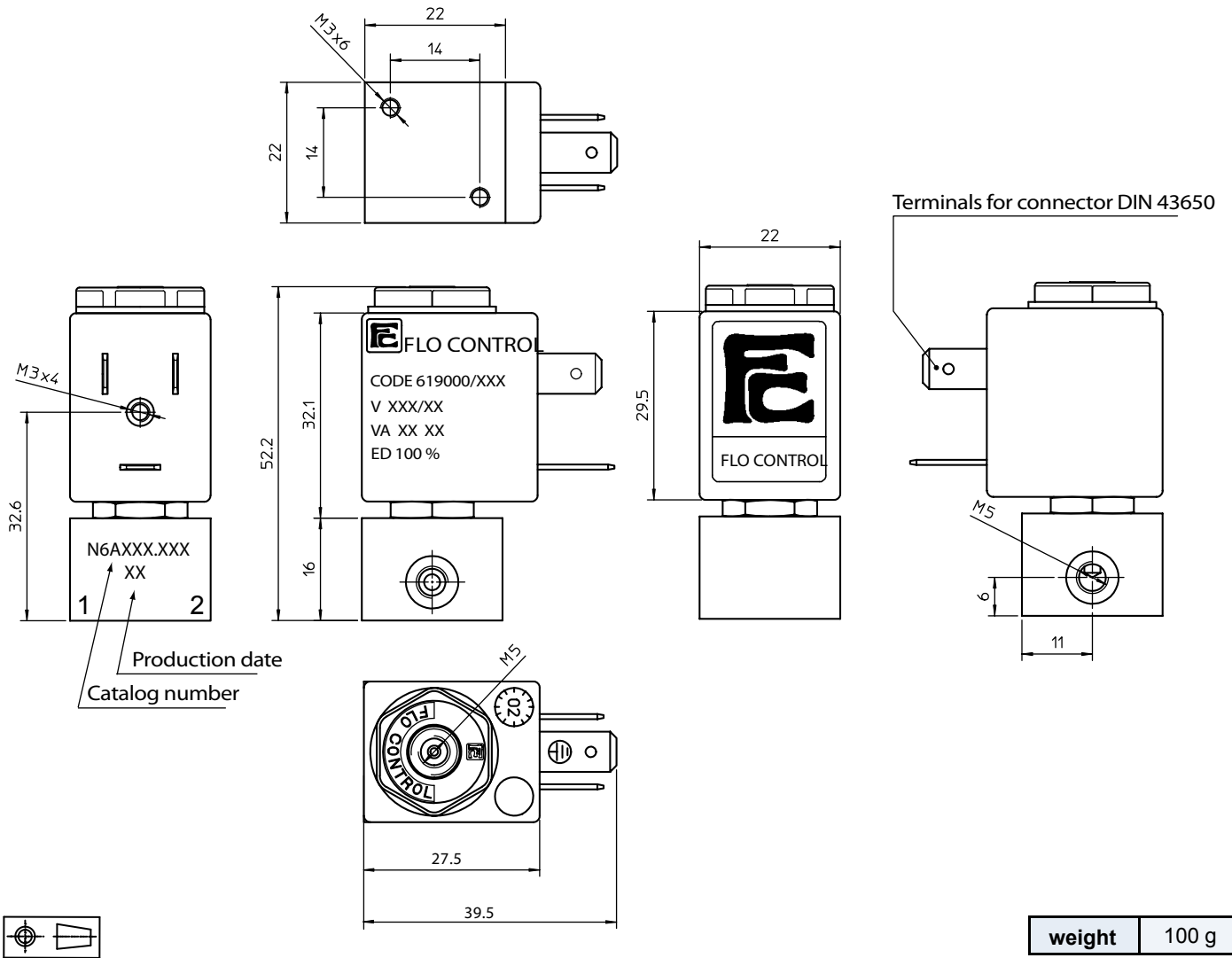


main code see table A on this page	stem		seals		manual override		coil code see table B on page 2/2
	code	material	code	material	code	type	
	D	brass* *option: chem. nickel	B V E	NBR FPM EPDM	0	none	



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

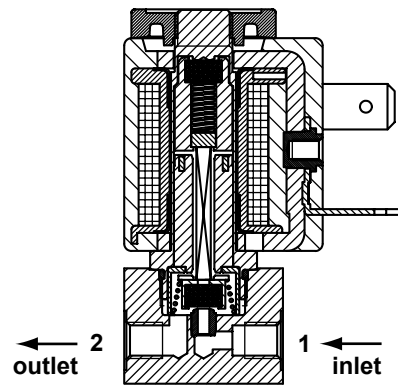
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



NO

* 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		main code
								inr.	hol.	
2/2 normally open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N6A212
		1.2	0.5	0	13	-	5	-	-	N6A712
		1.6	1.1	0	-	10	-	9	7.5	N6A216
		1.6	1.1	0	10	-	5	-	-	N6A716
		2.0	1.5	0	-	7	-	9	7.5	N6A220
		2.0	1.5	0	7	-	5	-	-	N6A720

*l/min. of water with ΔP of 1 bar

order code **N** **6** **A** . . **4**

main code	stem	seals	manual override	coil code																		
see table A on this page	<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">code</th> <th>material</th> </tr> <tr> <td style="text-align: center;">C</td> <td>brass*</td> </tr> <tr> <td></td> <td>*option: chem. nickel</td> </tr> </table>	code	material	C	brass*		*option: chem. nickel	<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">code</th> <th>material</th> </tr> <tr> <td style="text-align: center;">B</td> <td>NBR</td> </tr> <tr> <td style="text-align: center;">V</td> <td>FPM</td> </tr> <tr> <td style="text-align: center;">E</td> <td>EPDM</td> </tr> </table>	code	material	B	NBR	V	FPM	E	EPDM	<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">code</th> <th>type</th> </tr> <tr> <td style="text-align: center;">0</td> <td>none</td> </tr> </table>	code	type	0	none	see table B on page 2/2
code	material																					
C	brass*																					
	*option: chem. nickel																					
code	material																					
B	NBR																					
V	FPM																					
E	EPDM																					
code	type																					
0	none																					

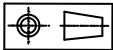
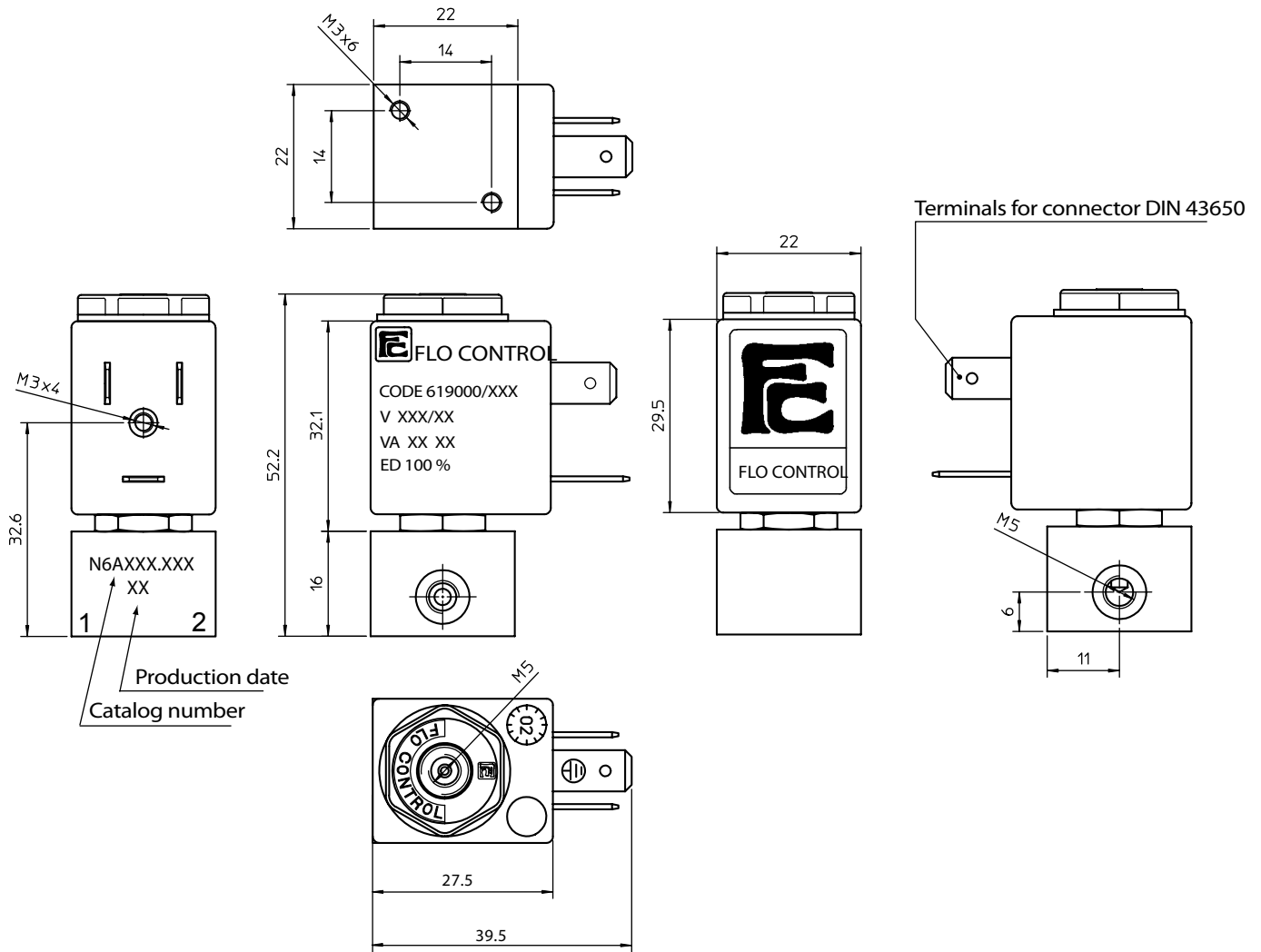
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



weight 130 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

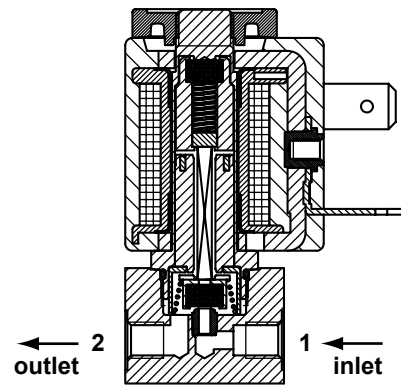
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

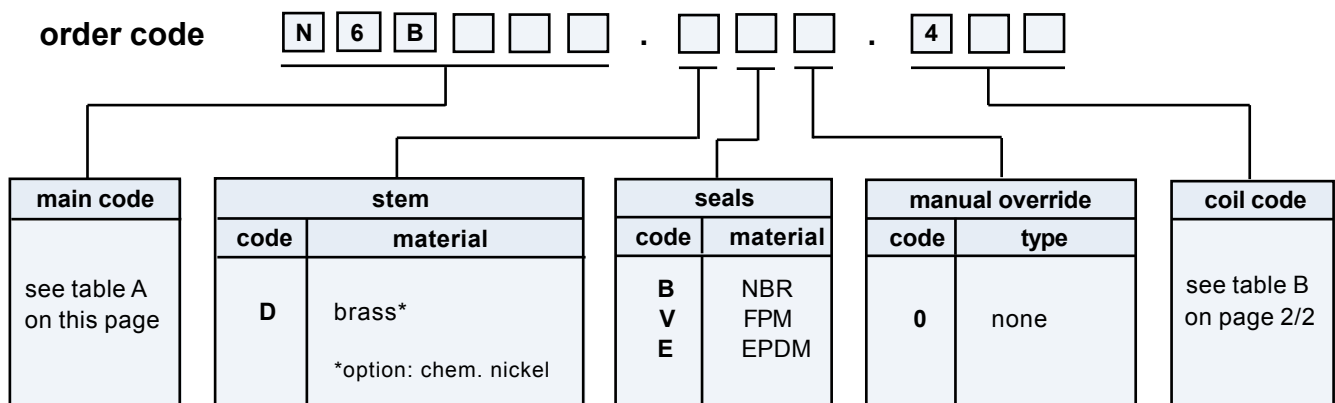


NO

* 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		main code
								inr.	hol.	
2/2 normally open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N6B212
		1.2	0.5	0	13	-	5	-	-	N6B712
		1.6	1.1	0	-	10	-	9	7.5	N6B216
		1.6	1.1	0	10	-	5	-	-	N6B716
		2.0	1.5	0	-	7	-	9	7.5	N6B220
		2.0	1.5	0	7	-	5	-	-	N6B720
		2.4	2.0	0	-	5	-	9	7.5	N6B224
		2.4	2.0	0	5	-	5	-	-	N6B724

*l/min. of water with ΔP of 1 bar



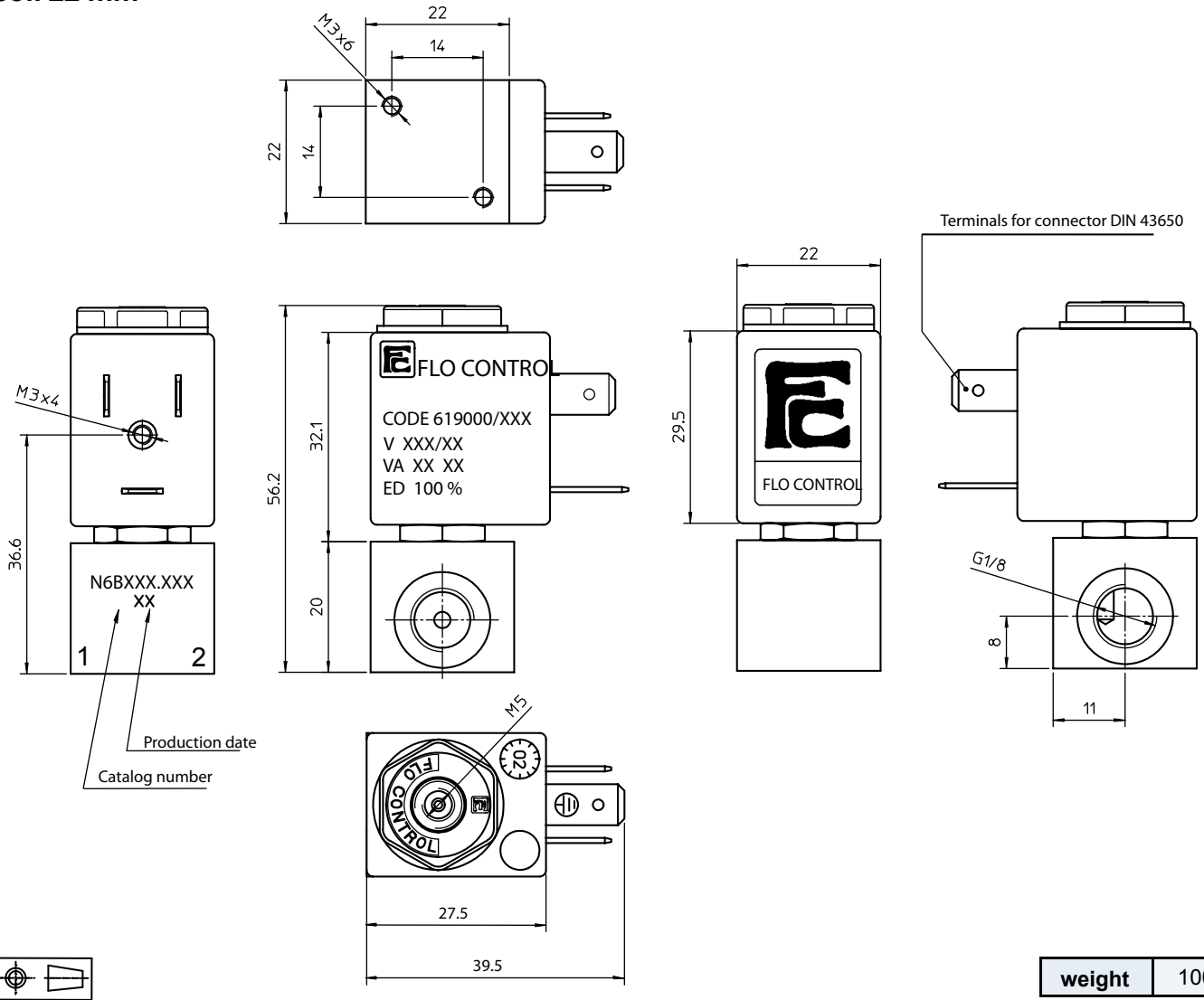
FLO CONTROL

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

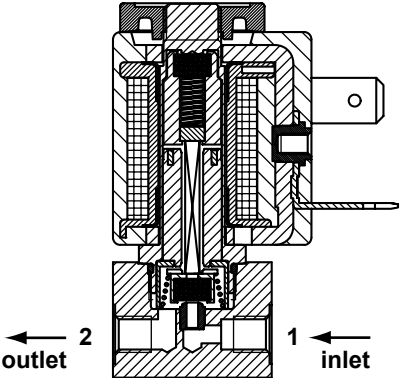
Solenoid Valves



direct operated solenoid valves

coil 22 mm

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

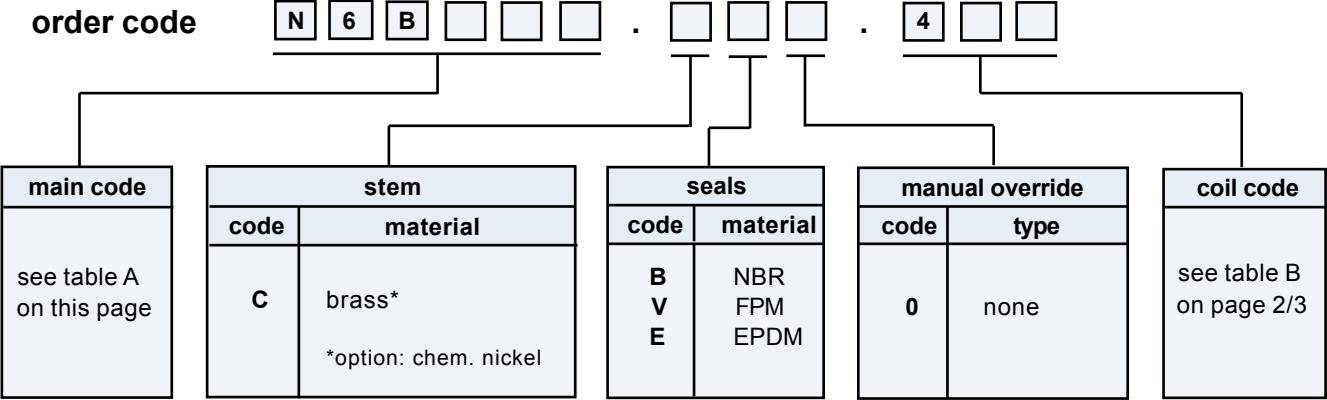


NO

* 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		main code
								inr.	hol.	
2/2 normally open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N6B212
		1.2	0.5	0	13	-	5	-	-	N6B712
		1.6	1.1	0	-	10	-	9	7.5	N6B216
		1.6	1.1	0	10	-	5	-	-	N6B716
		2.0	1.5	0	-	7	-	9	7.5	N6B220
		2.0	1.5	0	7	-	5	-	-	N6B720
		2.4	2.0	0	-	5	-	9	7.5	N6B224
		2.4	2.0	0	5	-	5	-	-	N6B724
		3.0	2.4	0	-	2	-	9	7.5	N6B230
		3.0	2.4	0	2	-	5	-	-	N6B730

*l/min. of water with ΔP of 1 bar

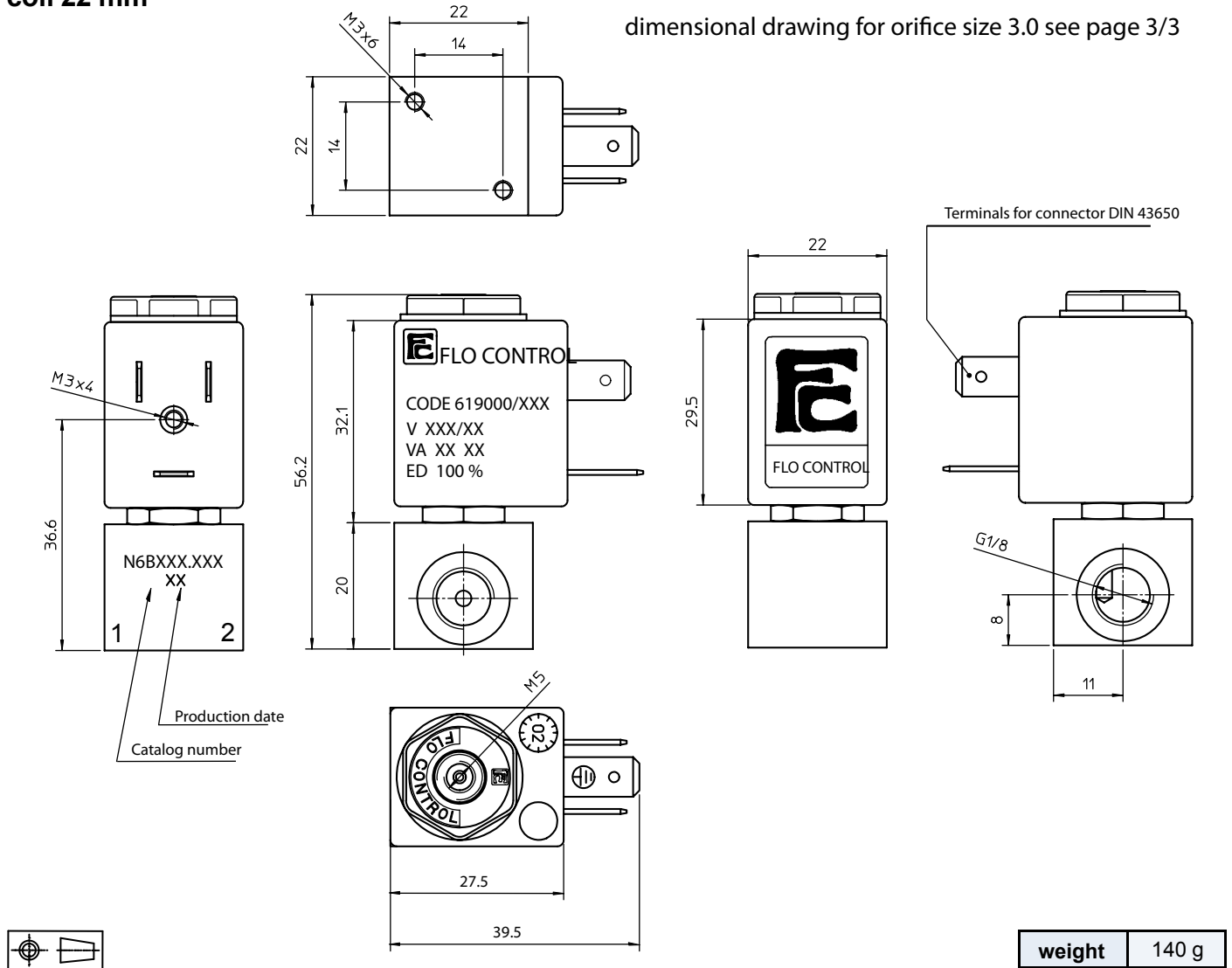


direct operated solenoid valves

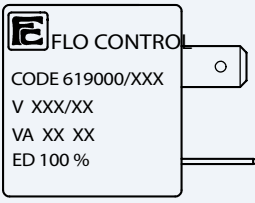
coil 22 mm

dimensional drawings for orifice size 1.2 - 1.6 - 2.0 and 2.4

dimensional drawing for orifice size 3.0 see page 3/3



weight 140 g

coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
 CODE 619000/XXX V XXX/XX VA XX XX ED 100 %	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

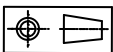
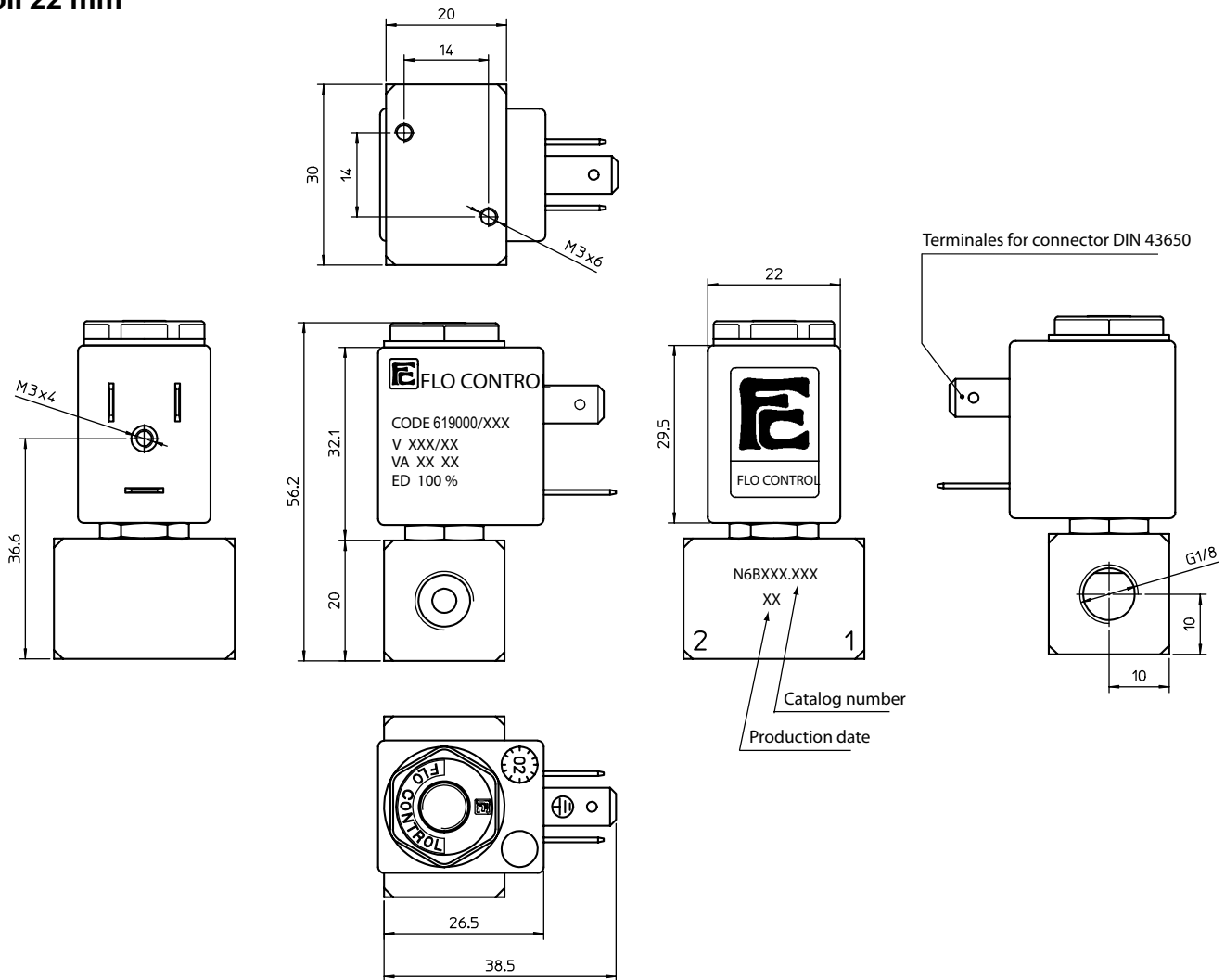
FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm

Dimensional drawing for body with orifice size 3.0 only.



weight	160 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
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FLO CONTROL

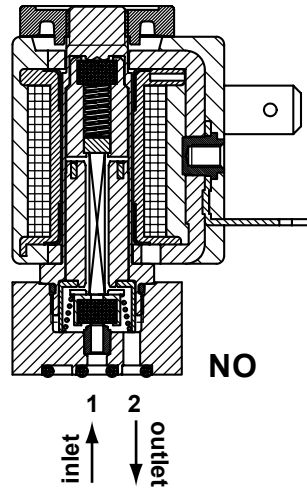
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM*
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

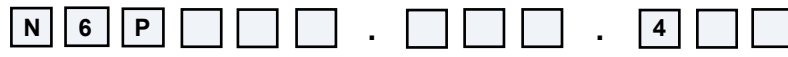


* other seal materials on request

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A	
				min.	max. DC	max. AC	Watt DC	V.A. AC		main code
								inr.	hol.	
2/2 normally open (NO) 	1.2	0.5	0	-	13	-	9	7.5	N6P212	
	1.2	0.5	0	13	-	5	-	-	N6P712	
	1.6	1.1	0	-	10	-	9	7.5	N6P216	
	1.6	1.1	0	10	-	5	-	-	N6P716	
	2.0	1.5	0	-	7	-	9	7.5	N6P220	
	2.0	1.5	0	7	-	5	-	-	N6P720	
	2.4	2.0	0	-	5	-	9	7.5	N6P224	
	2.4	2.0	0	5	-	5	-	-	N6P724	

*l/min. of water with ΔP of 1 bar

order code



main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	D	brass*	B V E	NBR FPM EPDM	0	none	see table B on page 2/4
		*option: chem. nickel					

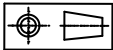
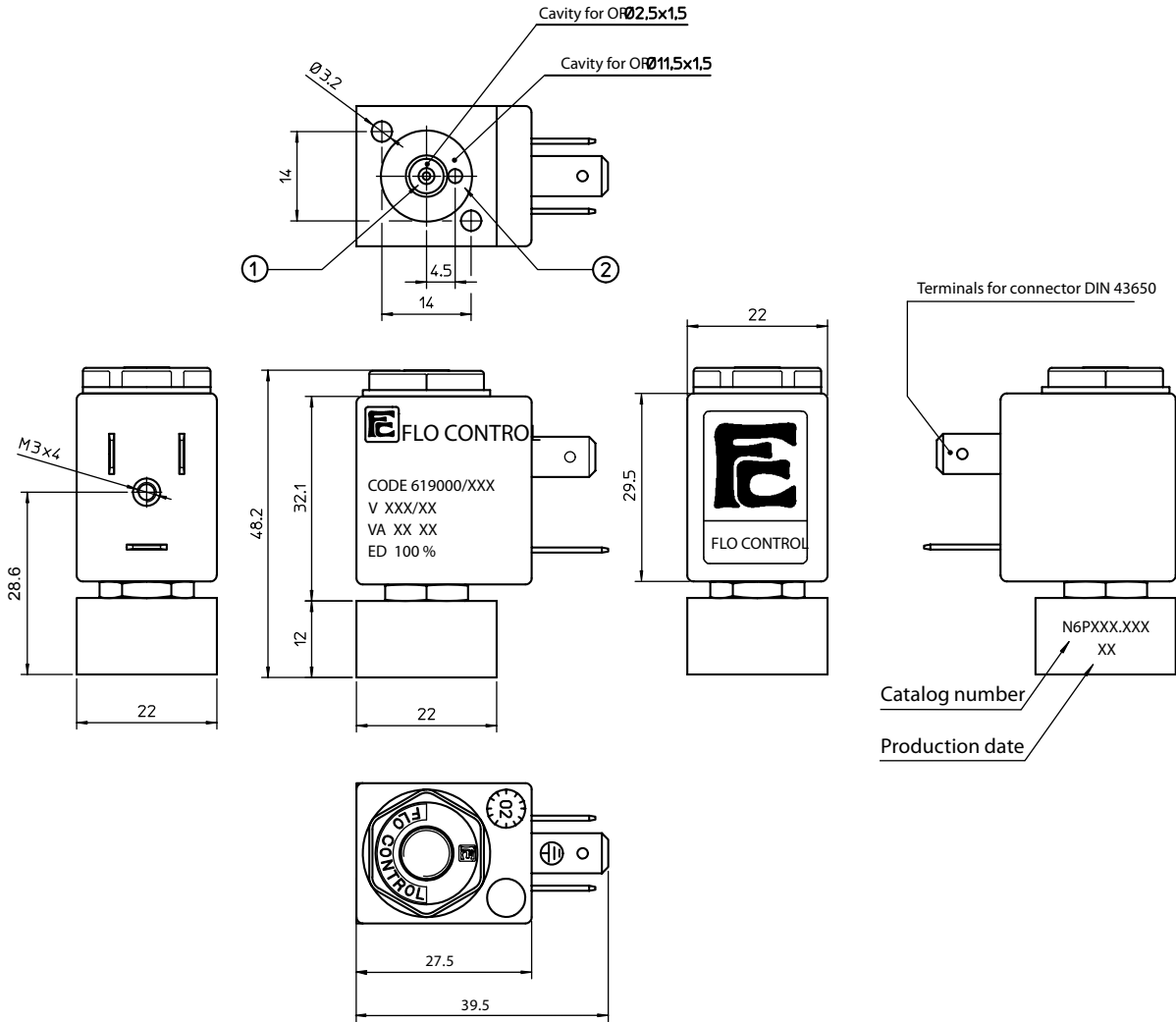
FLO CONTROL

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)

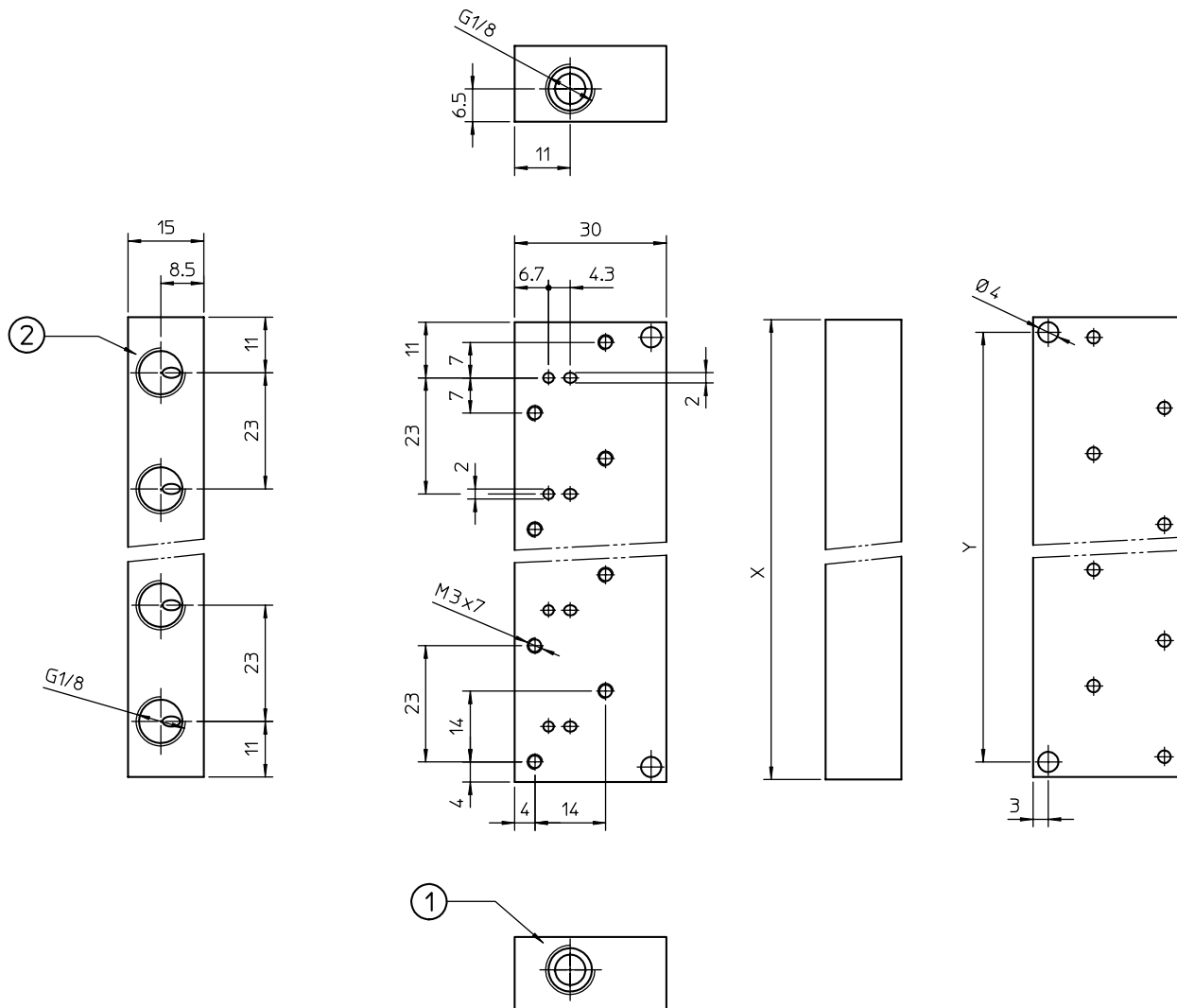
code Z10030

FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

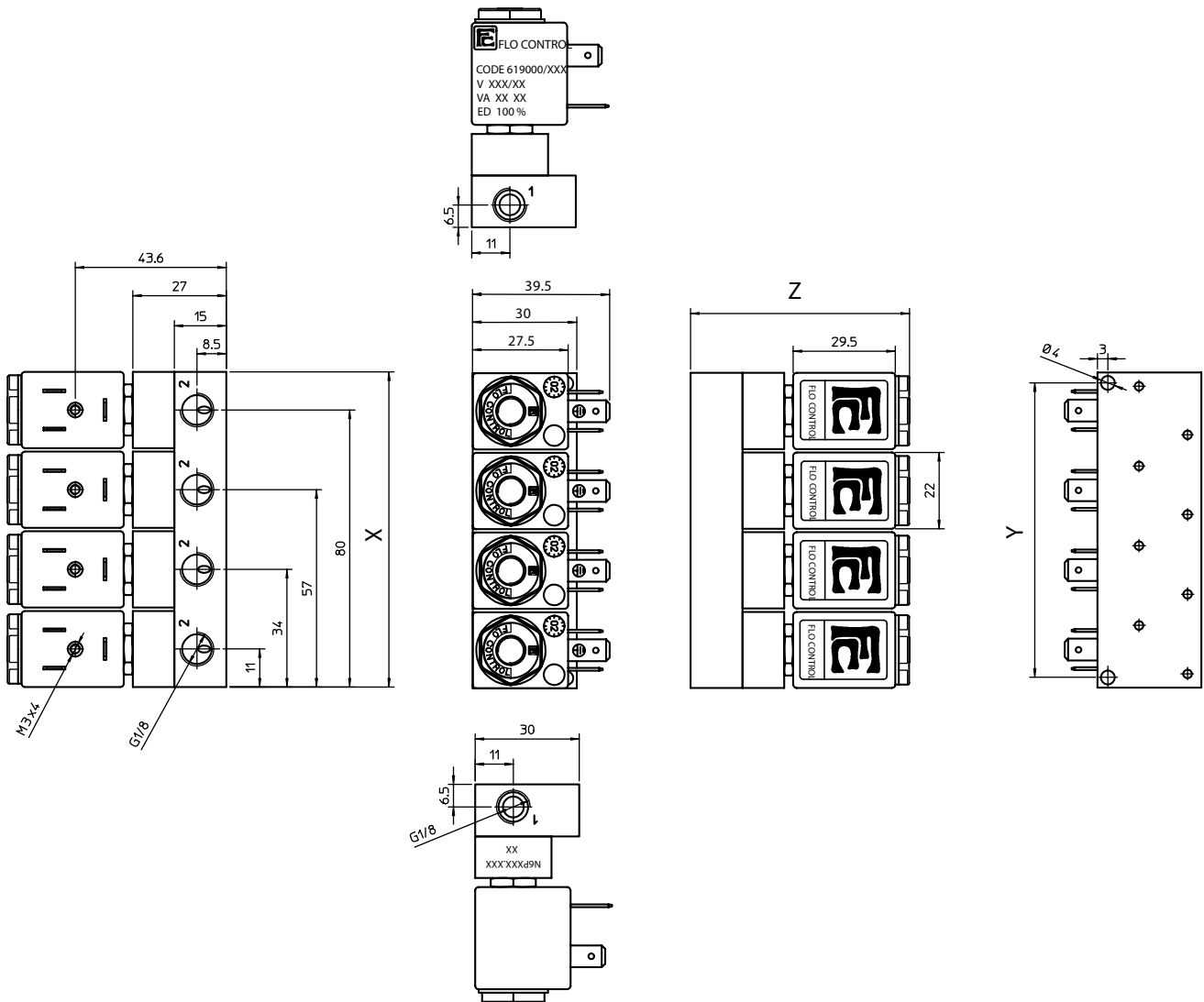


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.B1.28A	1	22	16	21
ZZ11.B2.28A	2	45	39	44
ZZ11.B3.28A	3	68	62	68
ZZ11.B4.28A	4	91	85	90
ZZ11.B5.28A	5	114	108	114
ZZ11.B6.28A	6	137	131	138

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

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:	1	22	16	63.2	121
	2	45	39	63.2	244
valves see page 1/4	3	68	62	63.2	368
bases see page 3/4	4	91	85	63.2	490
srews see page 3/4	5	114	108	63.2	614
	6	137	131	63.2	738

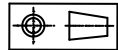
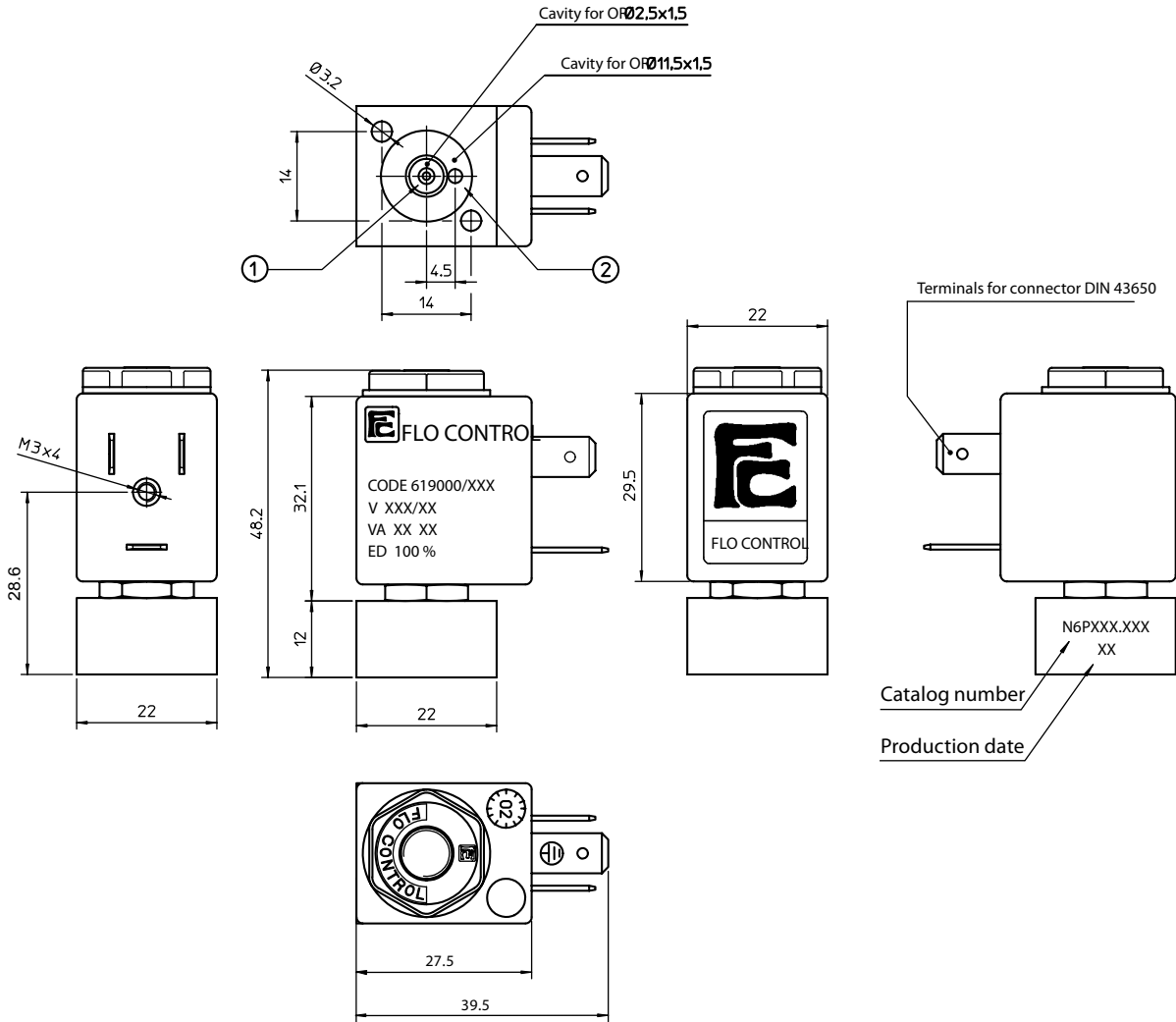
FLO CONTROL

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

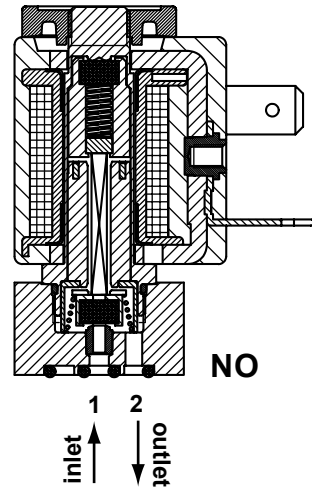
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

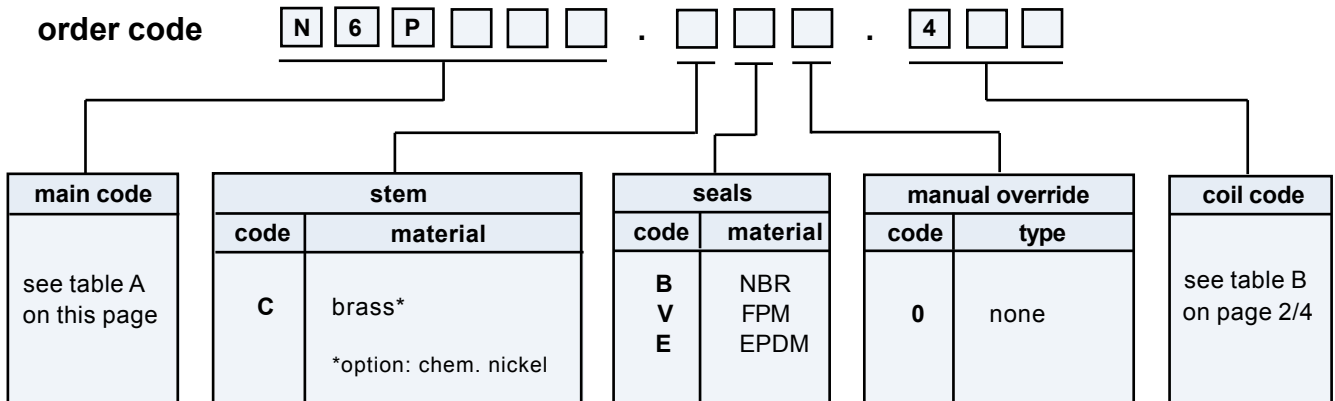
general information	
ambient temperature	- 10°C to + 50°C
response time	5- 8 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4



* other seal materials on request

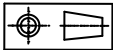
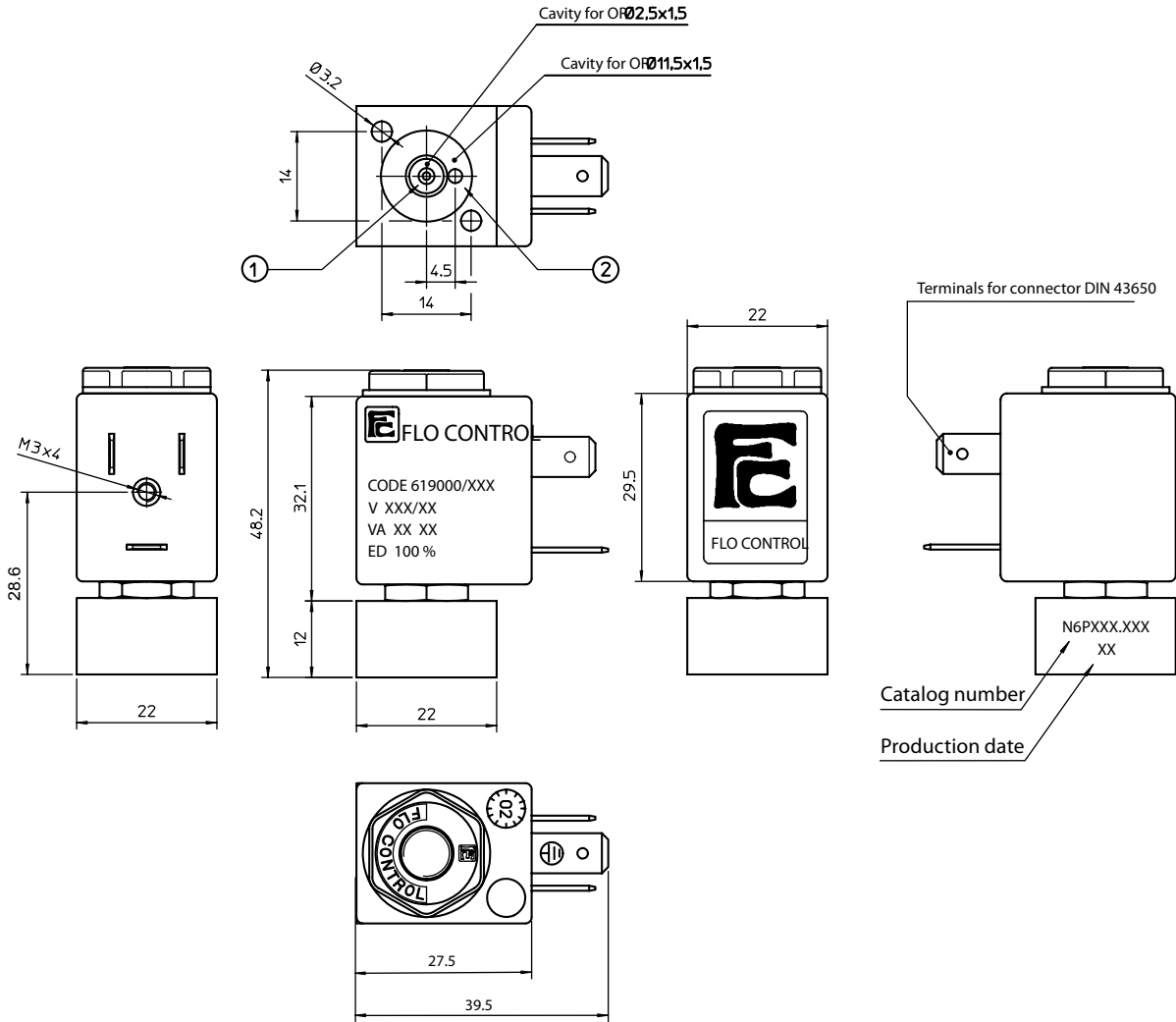
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol.
2/2 normally open (NO) 	1.2	0.5	0	-	13	-	9	7.5	N6P212	
	1.2	0.5	0	13	-	5	-	-	N6P712	
	1.6	1.1	0	-	10	-	9	7.5	N6P216	
	1.6	1.1	0	10	-	5	-	-	N6P716	
	2.0	1.5	0	-	7	-	9	7.5	N6P220	
	2.0	1.5	0	7	-	5	-	-	N6P720	
	2.4	2.0	0	-	5	-	9	7.5	N6P224	
	2.4	2.0	0	5	-	5	-	-	N6P724	

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 22 mm



weight 110 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

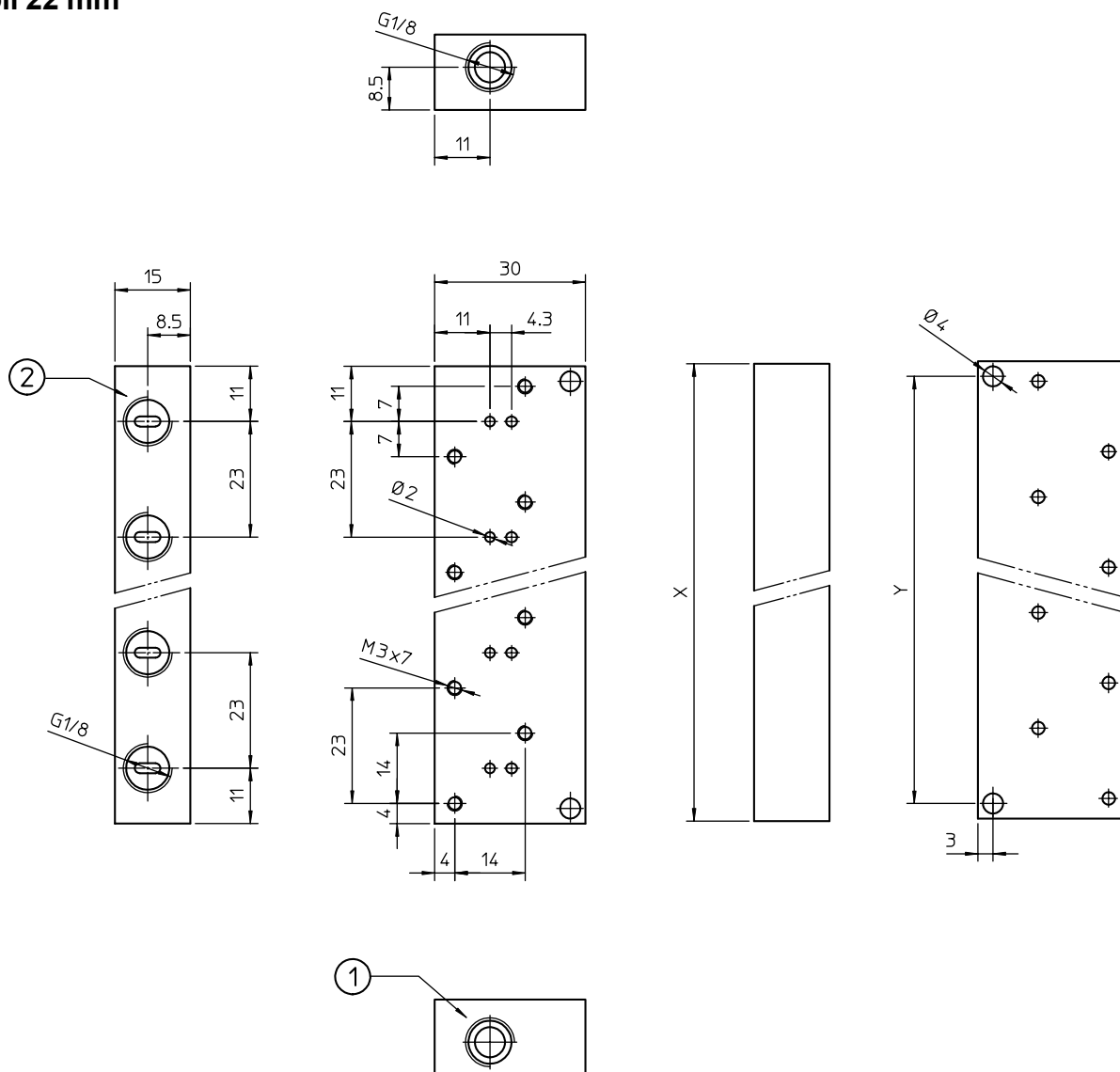
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm

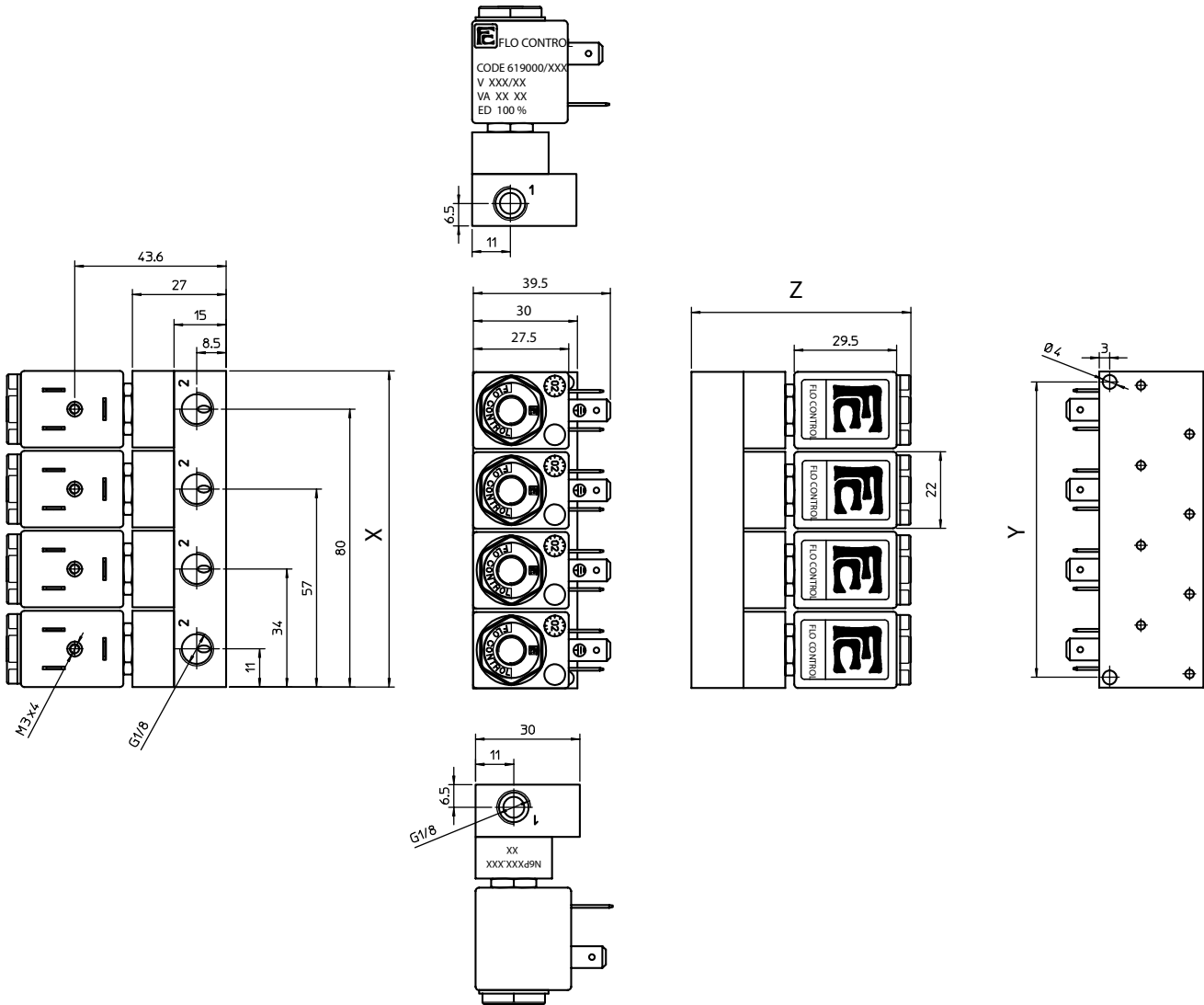


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.B1.28B	1	22	16	65
ZZ11.B2.28B	2	45	39	132
ZZ11.B3.28B	3	68	62	210
ZZ11.B4.28B	4	91	85	280
ZZ11.B5.28B	5	114	108	350
ZZ11.B6.28B	6	137	131	430

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

direct operated solenoid valves

coil 22 mm



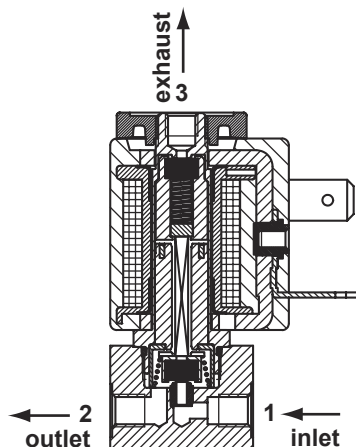
dimensions assembled manifolds

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	175
	2	45	39	63.2	352
	3	68	62	63.2	540
	4	91	85	63.2	720
	5	114	108	63.2	900
	6	137	131	63.2	1090

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*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



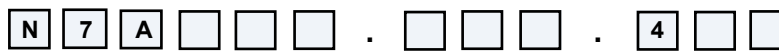
NO

* 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 open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N7A212
		1.2	0.5	0	13	-	5	-	-	N7A712
		1.6	1.1	0	-	10	-	9	7.5	N7A216
		1.6	1.1	0	10	-	5	-	-	N7A716

*l/min. of water with ΔP of 1 bar

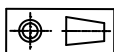
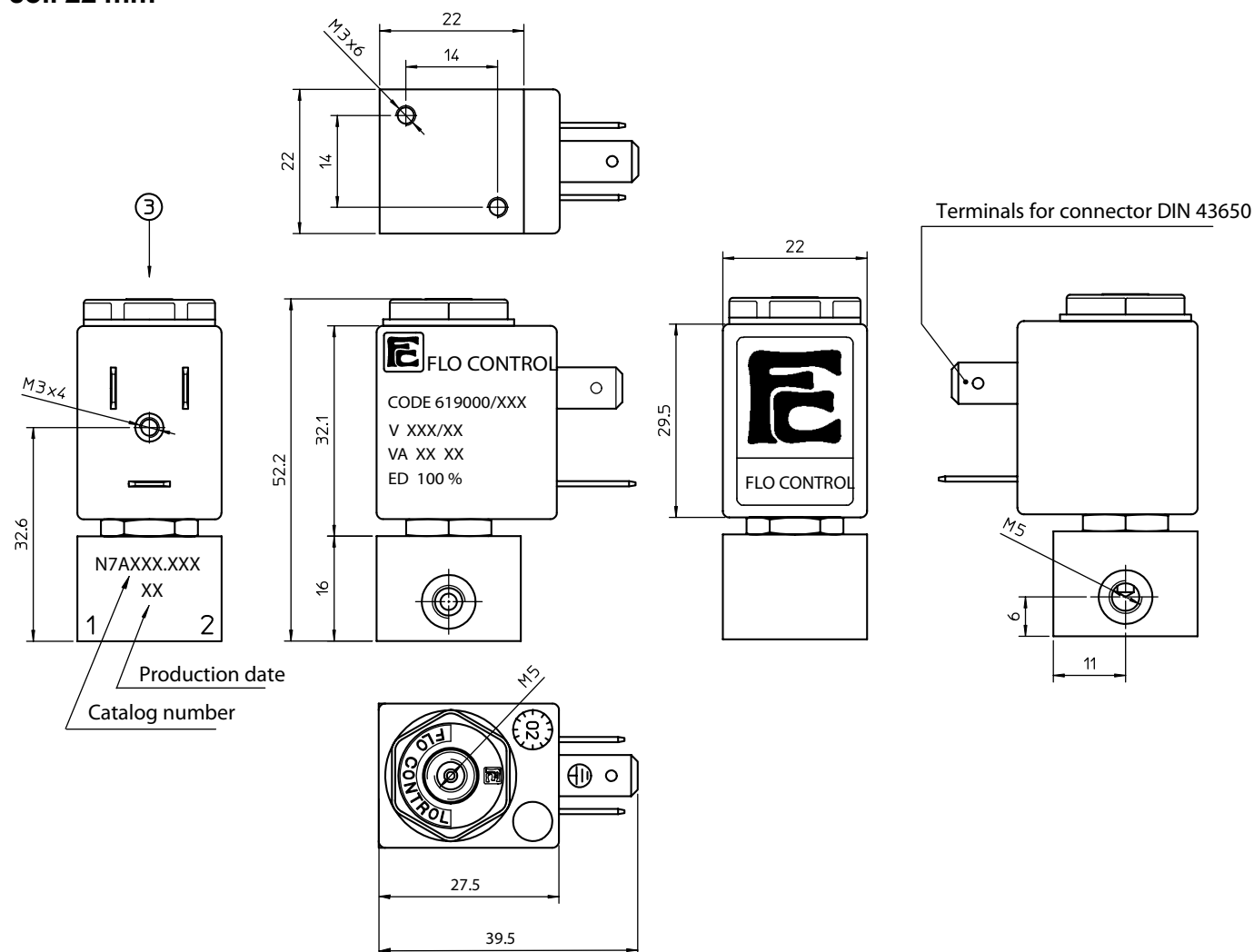
order code



main code see table A on this page	stem		seals		manual override		coil code see table B on page 2/2
	code	material	code	material	code	type	
	D	brass* *option: chem. nickel	B V E	NBR FPM EPDM	0	none	

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
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FLO CONTROL

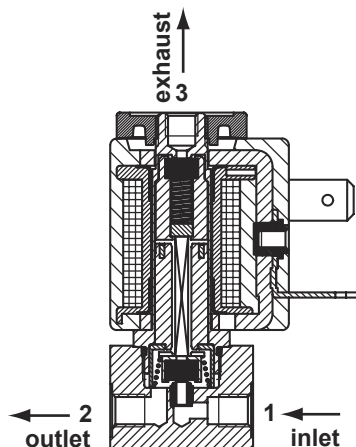
Solenoid Valves



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*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



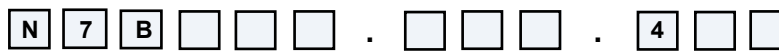
NO

* 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 open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N7A212
		1.2	0.5	0	13	-	5	-	-	N7A712
		1.6	1.1	0	-	10	-	9	7.5	N7A216
		1.6	1.1	0	10	-	5	-	-	N7A716

*l/min. of water with ΔP of 1 bar

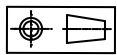
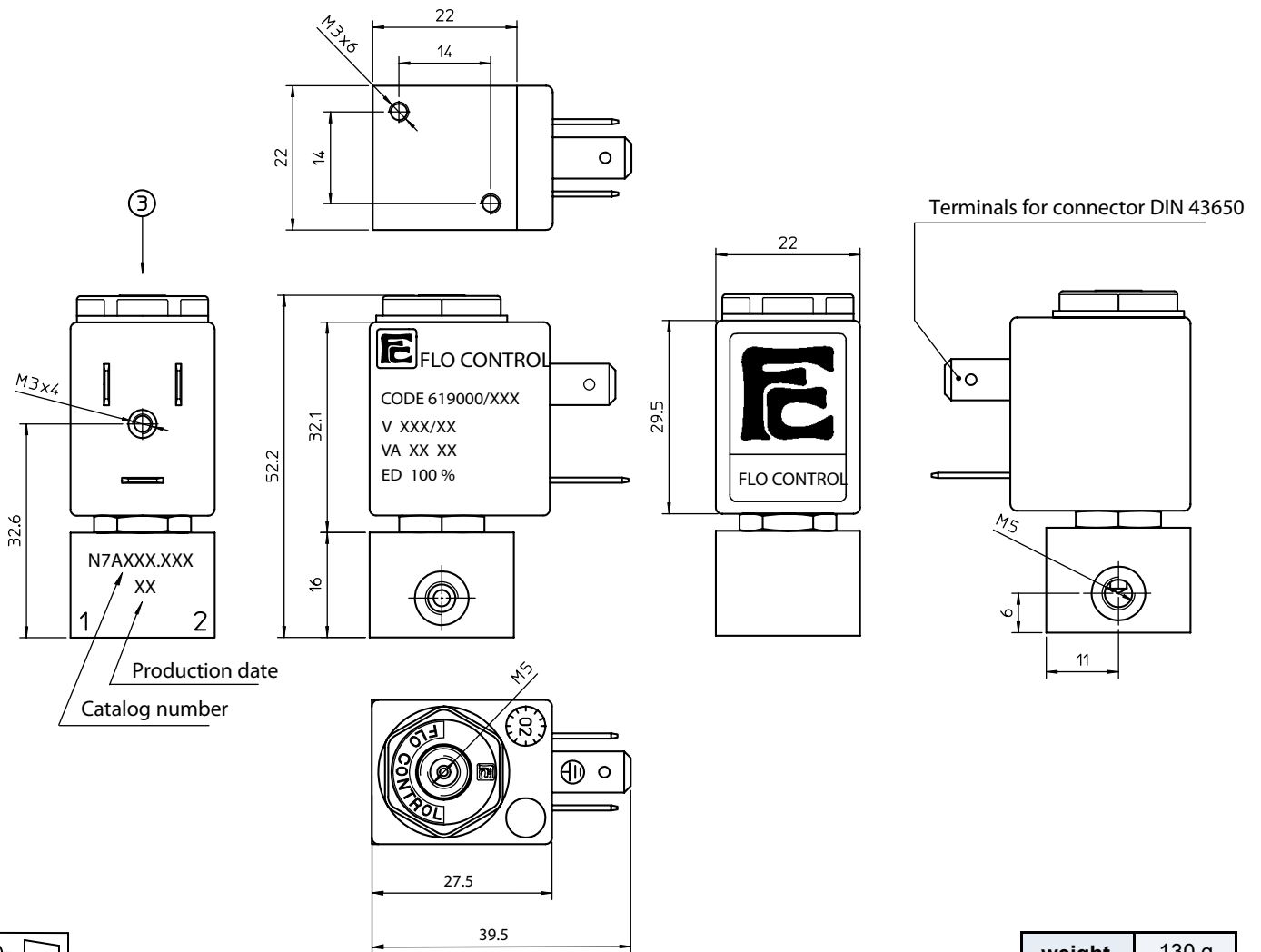
order code



main code see table A on this page	stem		seals		manual override		coil code see table B on page 2/2
	code C	material brass* *option: chem. nickel	code B V E	material NBR FPM EPDM	code 0	type none	



direct operated solenoid valves
coil 22 mm



weight 130 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

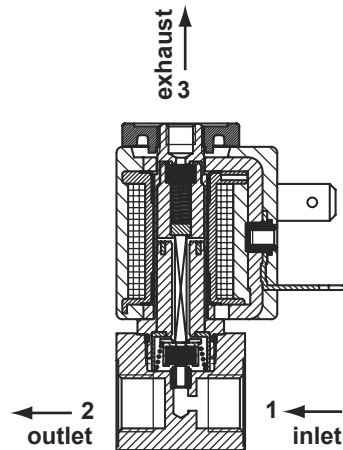
Solenoid Valves



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*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



NO

* 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 open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N7B212
		1.2	0.5	0	13	-	5	-	-	N7B712
		1.6	1.1	0	-	10	-	9	7.5	N7B216
		1.6	1.1	0	10	-	5	-	-	N7B716

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

stem	
code	material
D	brass* *option: chem. nickel

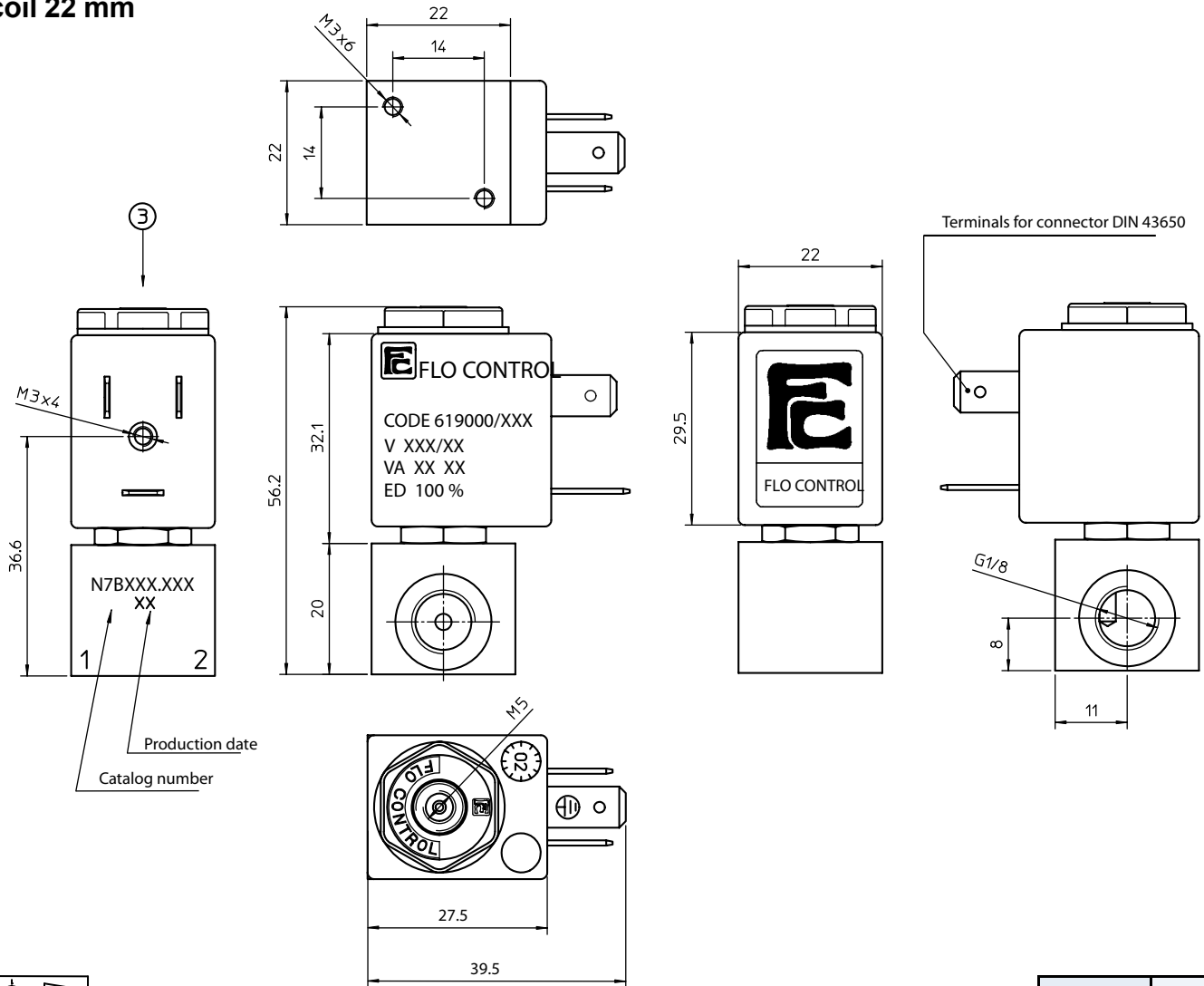
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none

coil code
see table B on page 2/2

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

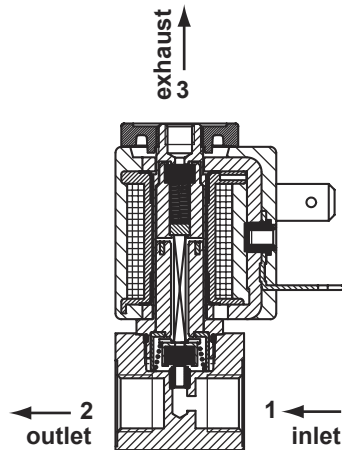
Solenoid Valves



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*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



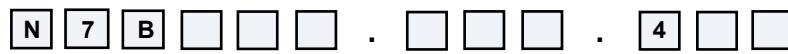
NO

* 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 open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N7B212
		1.2	0.5	0	13	-	5	-	-	N7B712
		1.6	1.1	0	-	10	-	9	7.5	N7B216
		1.6	1.1	0	10	-	5	-	-	N7B716

*l/min. of water with ΔP of 1 bar

order code

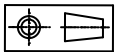
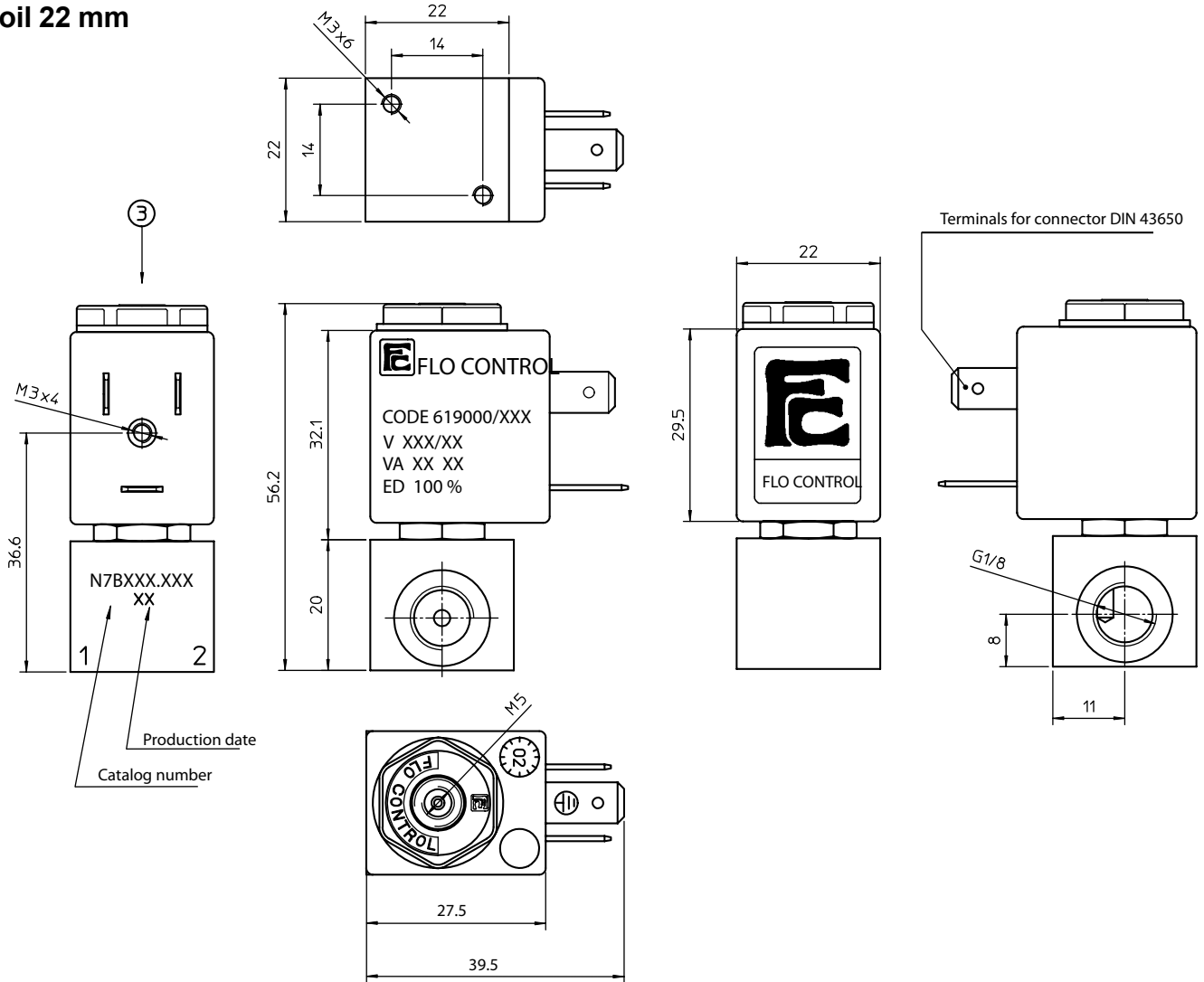


main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	C	brass* *option: chem. nickel	B V E	NBR FPM EPDM	0	none	see table B on page 2/2



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

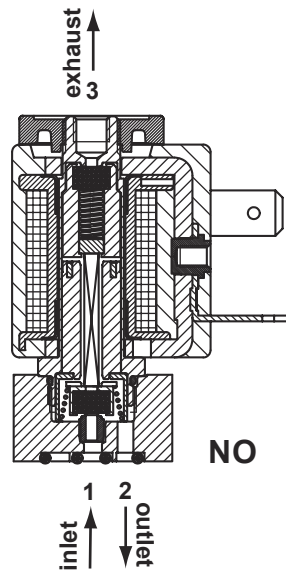
Solenoid Valves



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*
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

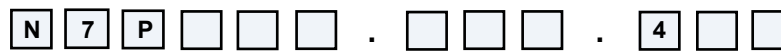


* other seal materials on request

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 open (NO) 		1.2	0.5	0	-	13	-	9	7.5	N7P212	
		1.2	0.5	0	13	-	5	-	-	N7P712	
		1.6	1.1	0	-	10	-	9	7.5	N7P216	
		1.6	1.1	0	10	-	5	-	-	N7P716	

*l/min. of water with ΔP of 1 bar

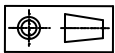
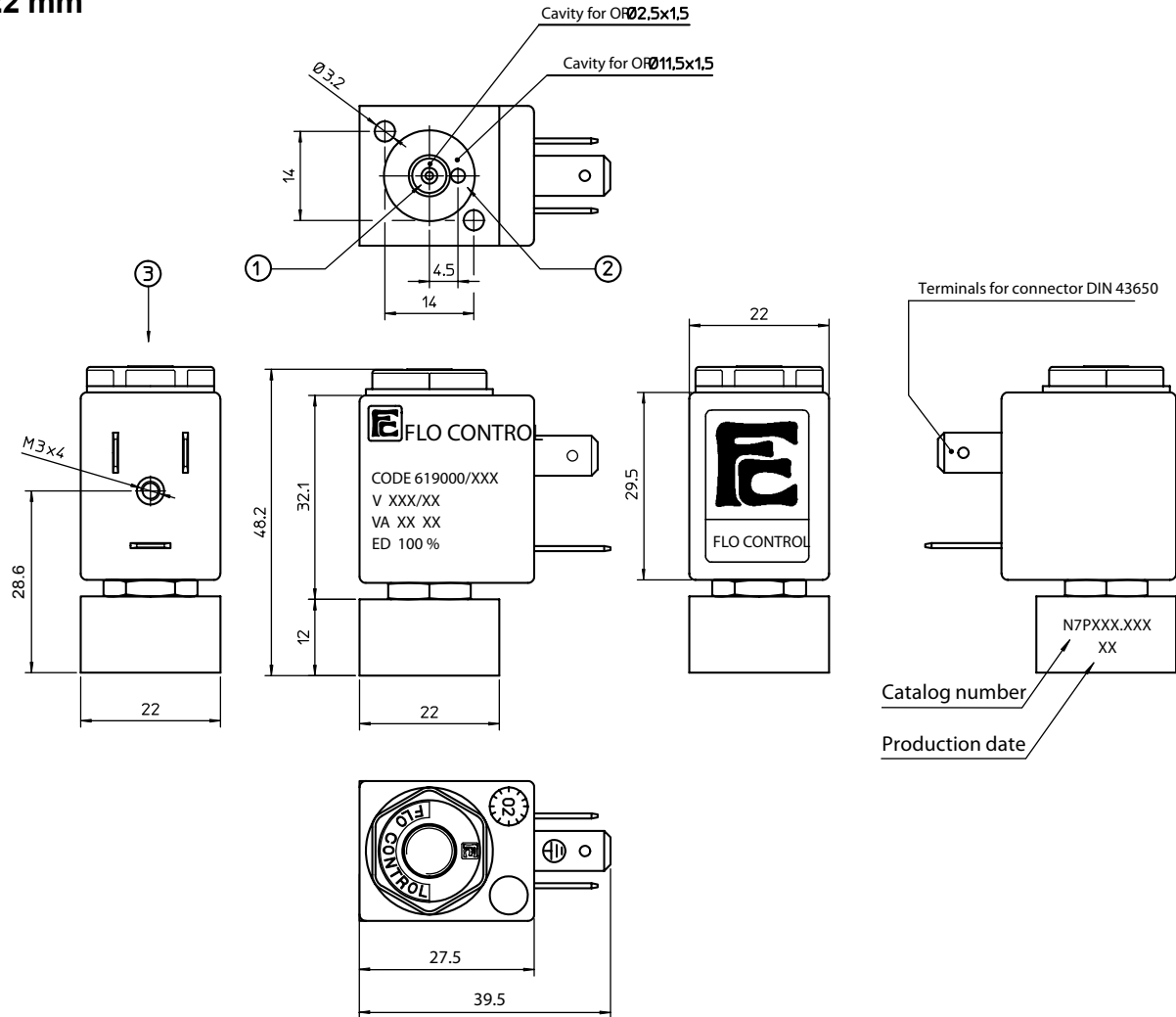
order code



main code	stem		seals		manual override		coil code
	code	material	code	material	code	type	
see table A on this page	D	brass* *option: chem. nickel	B V E	NBR FPM EPDM	0	none	see table B on page 2/4

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
-------------	--------

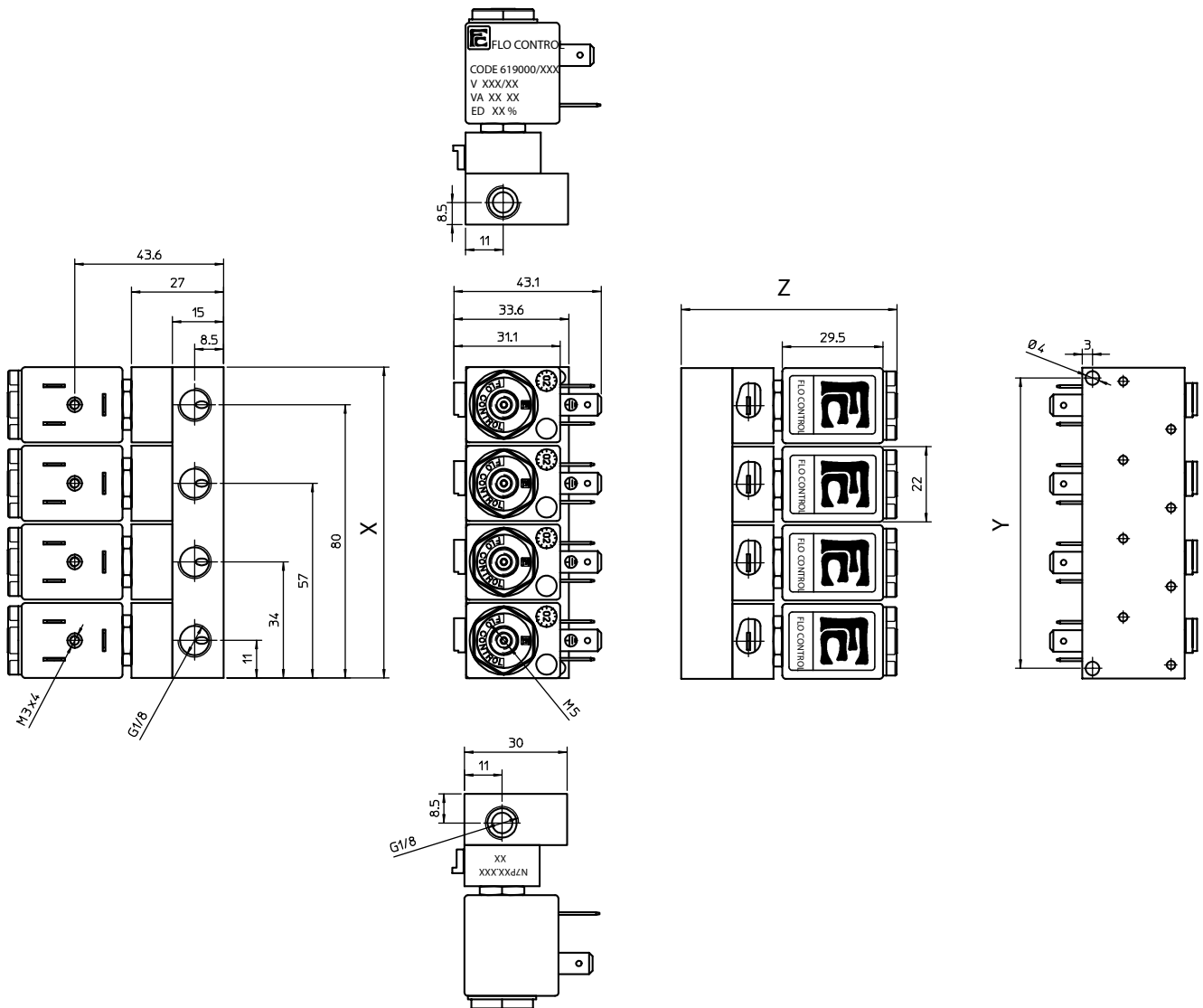
FLO CONTROL

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:	1	22	16	63.2	121
	2	45	39	63.2	244
valves see page 1/4	3	68	62	63.2	368
bases see page 3/4	4	91	85	63.2	490
srews see page 3/4	5	114	108	63.2	614
	6	137	131	63.2	738

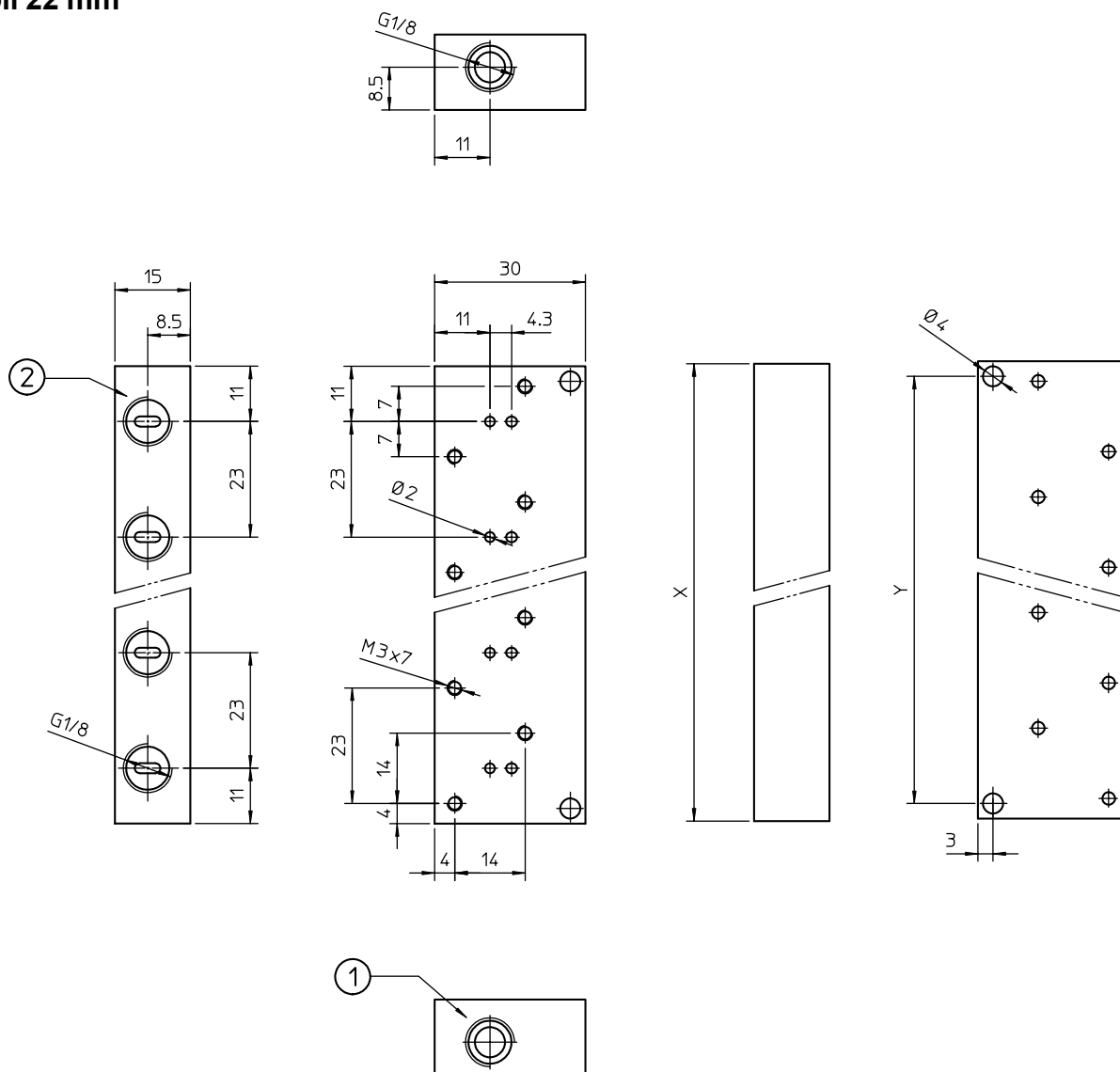
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



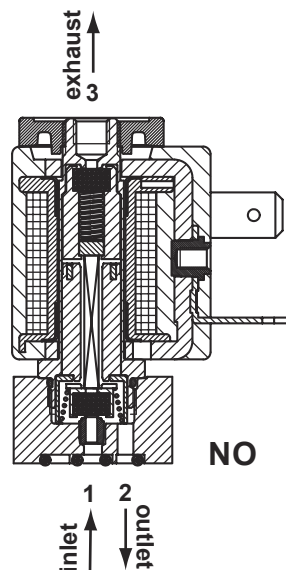
order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.B1.38A	1	22	16	21
ZZ11.B2.38A	2	45	39	44
ZZ11.B3.38A	3	68	62	68
ZZ11.B4.38A	4	91	85	90
ZZ11.B5.38A	5	114	108	114
ZZ11.B6.38A	6	137	131	138

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

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*
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

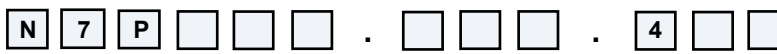


* other seal materials on request

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 open (NO) 	1.2	0.5	0	-	13	-	9	7.5	N7P212	
	1.2	0.5	0	13	-	5	-	-	N7P712	
	1.6	1.1	0	-	10	-	9	7.5	N7P216	
	1.6	1.1	0	10	-	5	-	-	N7P716	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

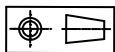
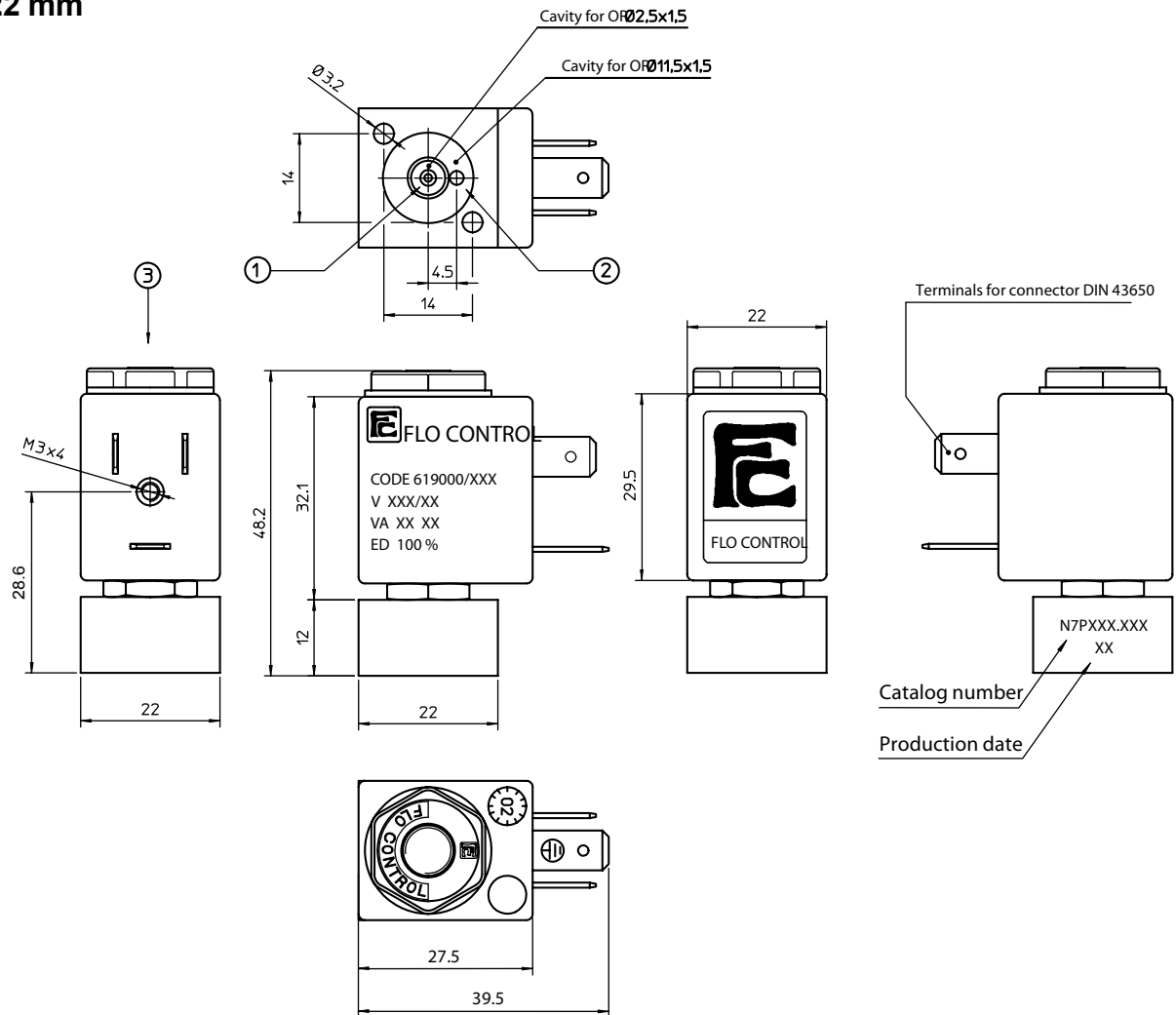
stem	
code	material
C	brass* *option: chem. nickel

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none

coil code
see table B on page 2/4

direct operated solenoid valves
coil 22 mm



weight | 110 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)

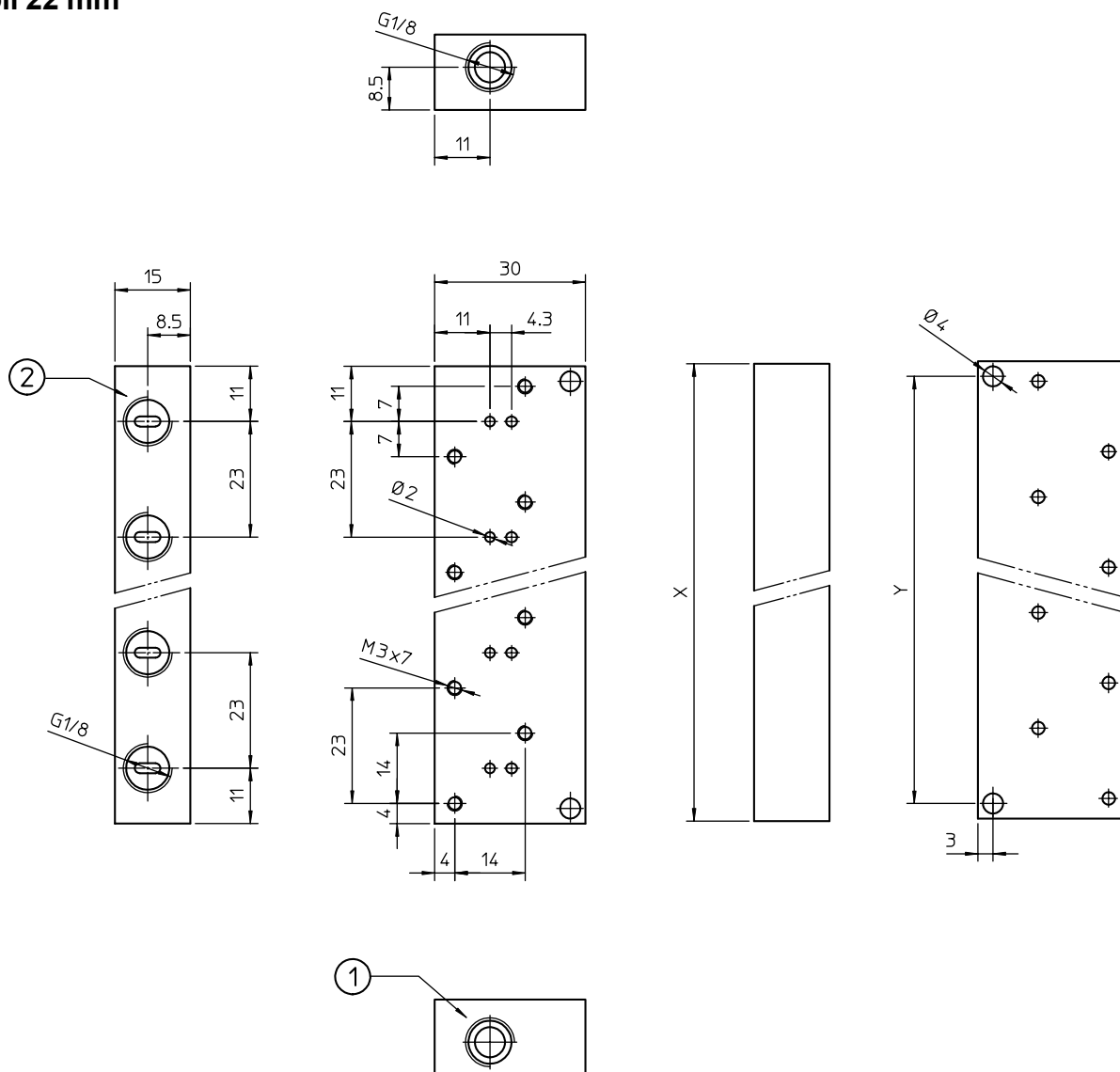
code | Z10030

FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.B1.38B	1	22	16	65
ZZ11.B2.38B	2	45	39	132
ZZ11.B3.38B	3	68	62	210
ZZ11.B4.38B	4	91	85	280
ZZ11.B5.38B	5	114	108	350
ZZ11.B6.38B	6	137	131	430

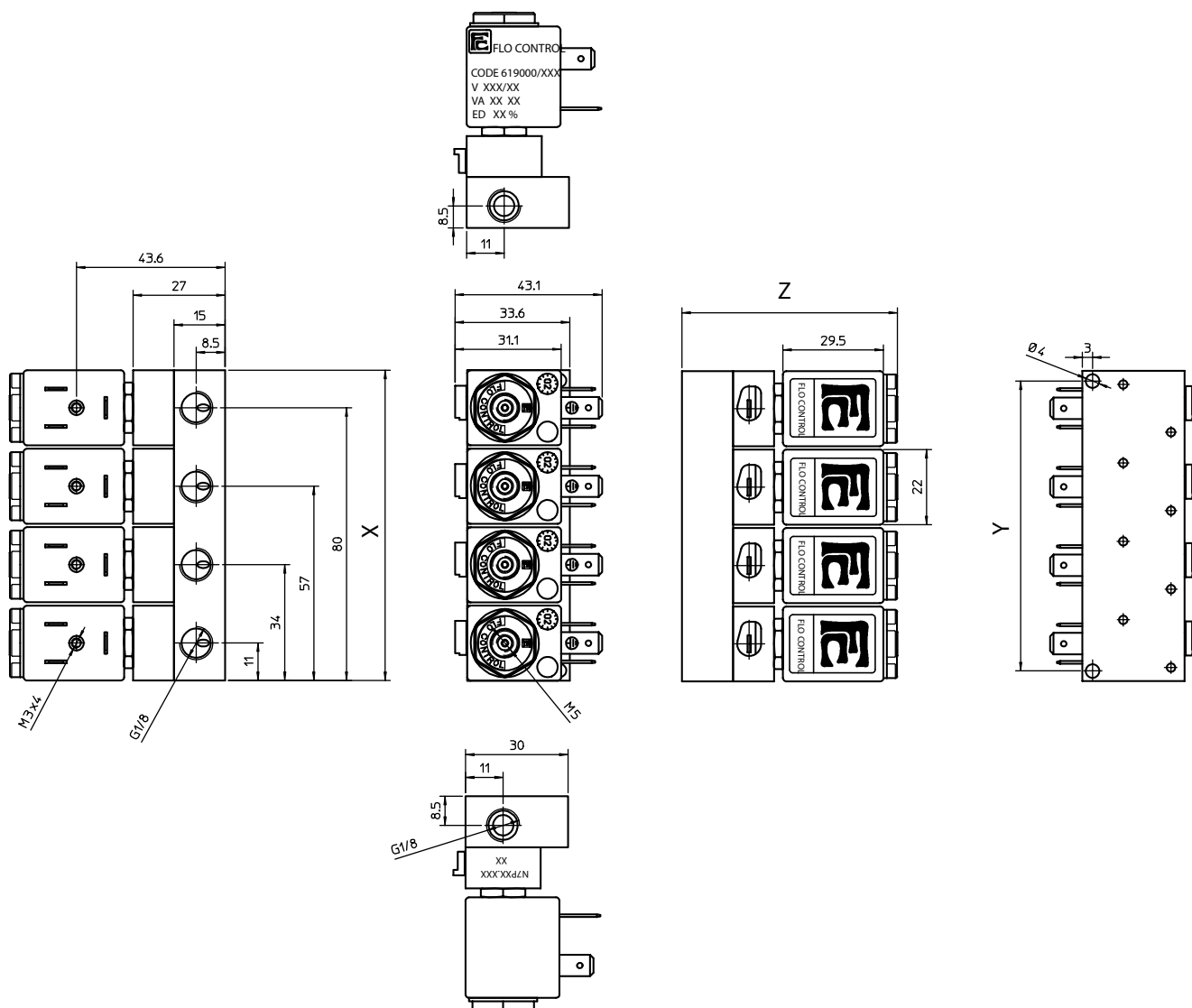
-M3 screws order code Z11010 (two each valves station) must be ordered separately

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	175
	2	45	39	63.2	352
	3	68	62	63.2	540
	4	91	85	63.2	720
	5	114	108	63.2	900
	6	137	131	63.2	1090

general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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		DC	AC
								inr.	hol.		
2/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112	
	1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116	
	2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120	
	2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124	
2/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212	
	1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216	
	2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220	
	2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224	

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		DC	AC
								inr.	hol.		
3/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112	
	1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116	
	2.0	1.5	0	5	-	5	-	-	N3S620	-	
	2.4	2.0	0	4	-	5	-	-	N3S624	-	
3/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212	
	1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216	

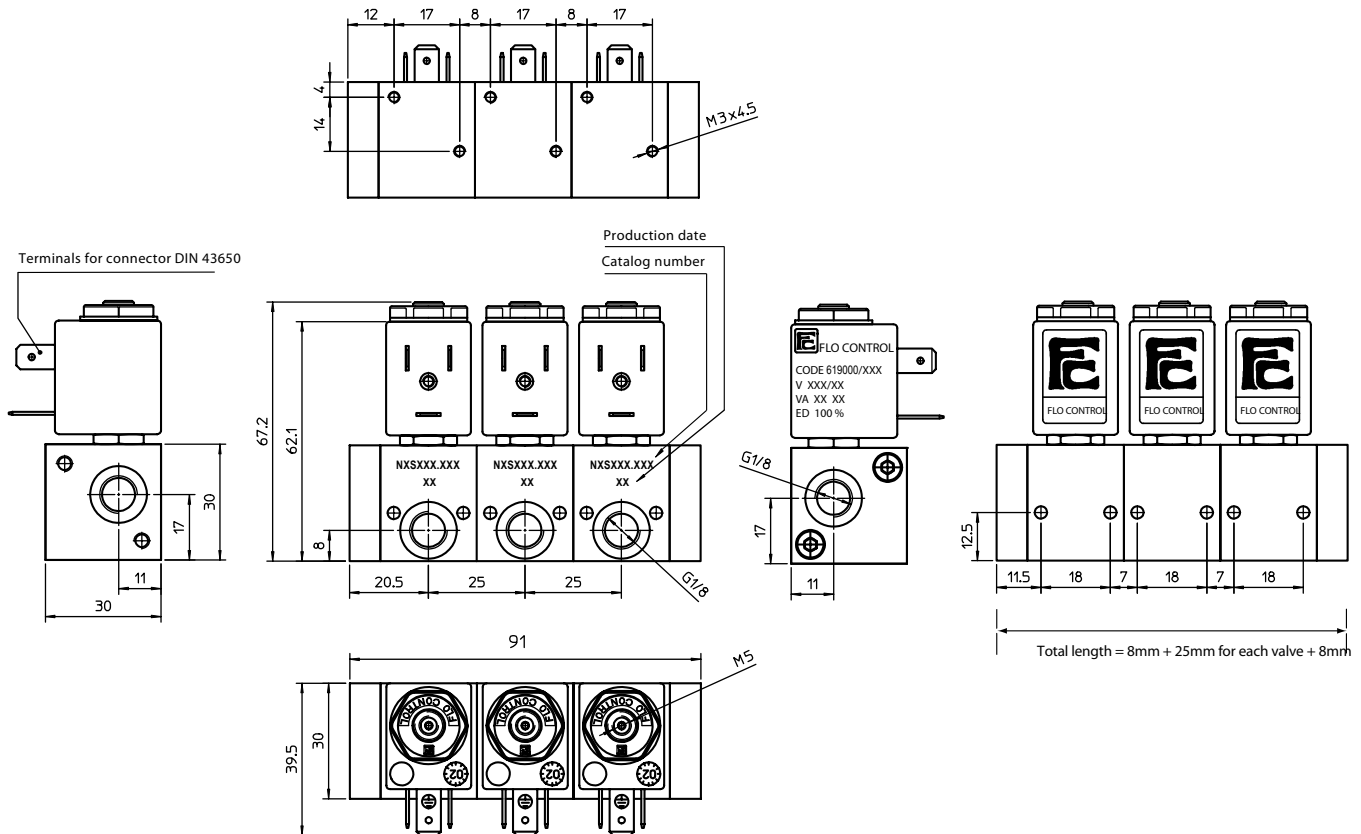
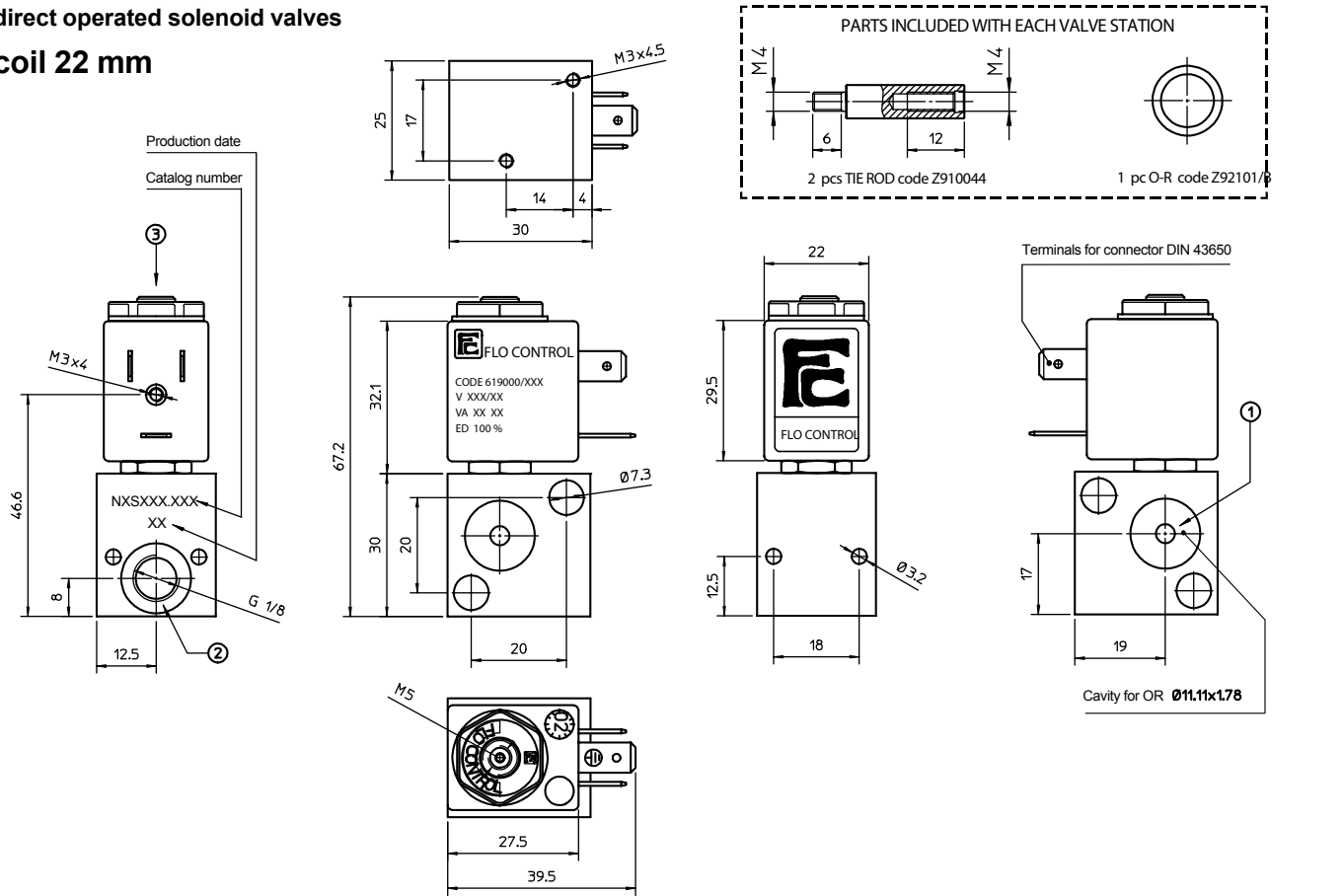
*l/min. of water with ΔP of 1 bar

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm

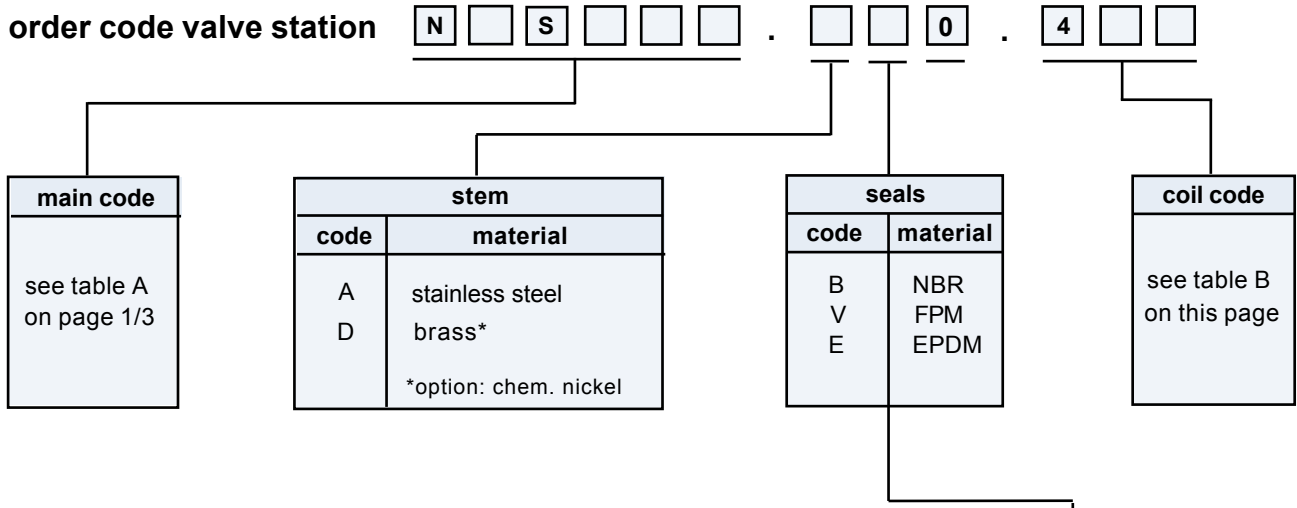


FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm



order code mounting kit (one per complete system) : **Z** **1** **1** **2** **5** **0** .

(2x G1/8 end plates)

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
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FLO CONTROL
Solenoid Valves



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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		DC	AC
								inr.	hol.		
2/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112	
	1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116	
	2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120	
	2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124	
2/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212	
	1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216	
	2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220	
	2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224	

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		DC	AC
								inr.	hol.		
3/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112	
	1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116	
	2.0	1.5	0	5	-	5	-	-	N3S620	-	
	2.4	2.0	0	4	-	5	-	-	N3S624	-	
3/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212	
	1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216	

*l/min. of water with ΔP of 1 bar

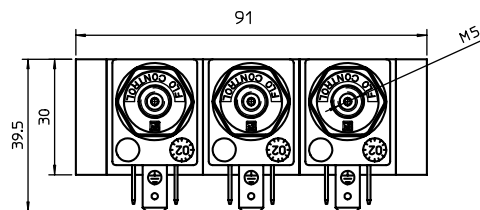
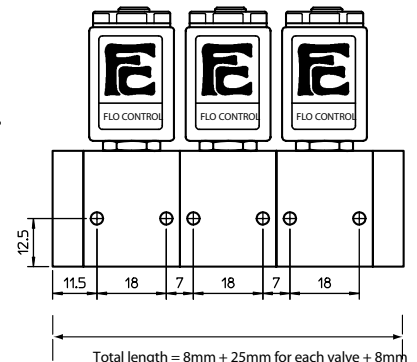
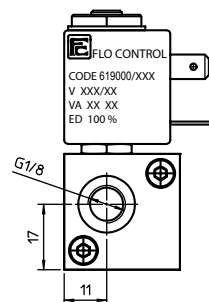
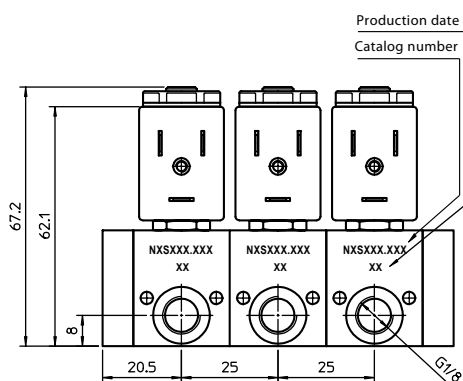
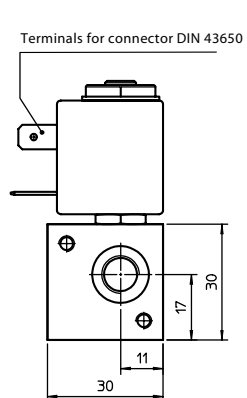
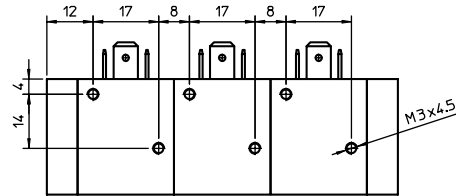
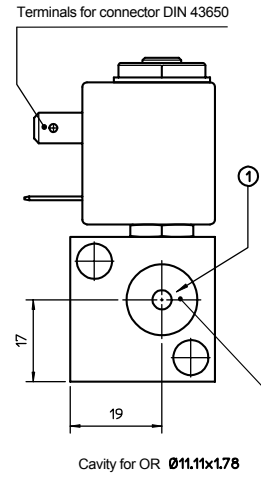
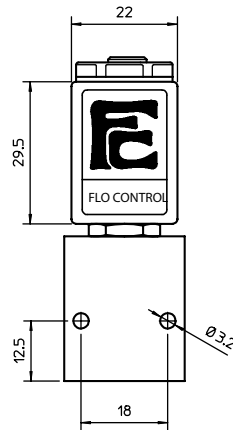
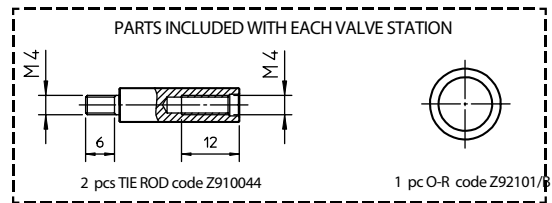
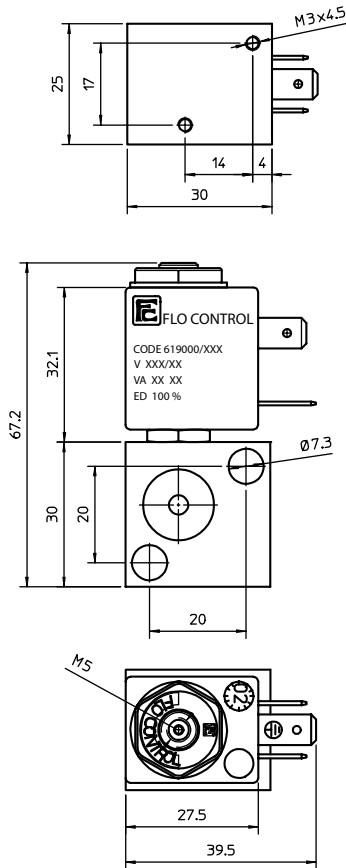
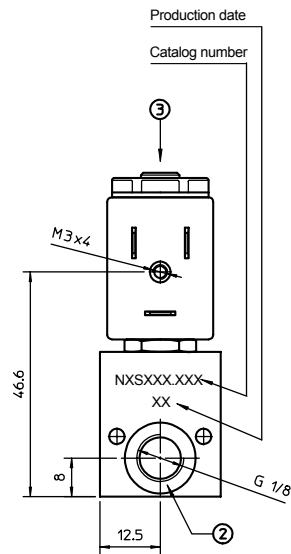
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 22 mm

order code valve station

N **S** . **0** . **4**

main code
see table A
on page 1/3

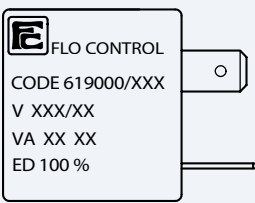
stem	
code	material
B	stainless steel
C	brass*
*option: chem. nickel	

seals	
code	material
B	NBR
V	FPM
E	EPDM

coil code
see table B
on this page

order code mounting kit (one per complete system) :
(2x G1/8 end plates)

Z **1** **1** **2** **5** **2** .

coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
 <p>FLO CONTROL CODE 619000/XXX V XXX/XX VA XX XX ED 100 %</p>	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



general information	
ambient temperature	- 10°C to + 50°C
response time	6- 15 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/3
coil data	see page 3/3
connector data	see page 3/3
order code	see page 3/3



2/2 NC, 2/2 NO, 3/2 NC and 3/2 NO mixed mountable with common inlet

* 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	AC	DC	AC
2/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N2S612	N2S112	
	1.6	1.1	0	7	7	5	9	7.5	N2S616	N2S116	
	2.0	1.5	0	5	5	5	9	7.5	N2S620	N2S120	
	2.4	2.0	0	4	4	5	9	7.5	N2S624	N2S124	
2/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N6S712	N6S212	
	1.6	1.1	0	10	10	5	9	7.5	N6S716	N6S216	
	2.0	1.5	0	7	7	5	9	7.5	N6S720	N6S220	
	2.4	2.0	0	5	5	5	9	7.5	N6S724	N6S224	

*l/min. of water with ΔP of 1 bar

function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power			TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC	AC	DC	AC
3/2 normally closed (NC) 	1.2	0.5	0	10	10	5	9	7.5	N3S612	N3S112	
	1.6	1.1	0	7	7	5	9	7.5	N3S616	N3S116	
	2.0	1.5	0	5	-	5	-	-	N3S620	-	
	2.4	2.0	0	4	-	5	-	-	N3S624	-	
3/2 normally open (NO) 	1.2	0.5	0	13	13	5	9	7.5	N7S712	N7S212	
	1.6	1.1	0	10	10	5	9	7.5	N7S716	N7S216	

*l/min. of water with ΔP of 1 bar

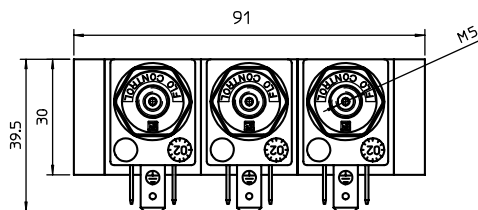
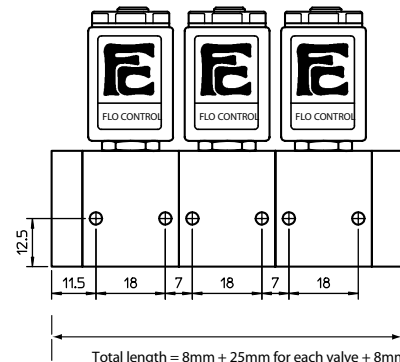
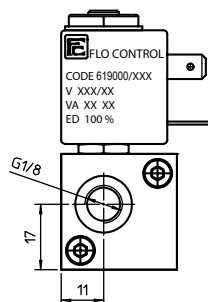
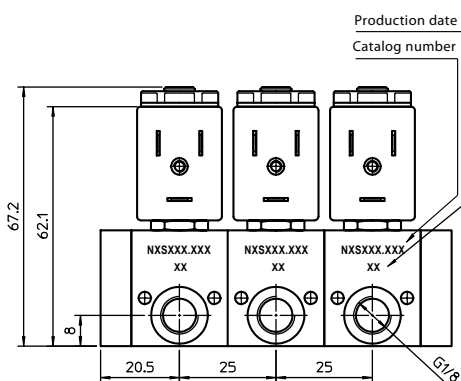
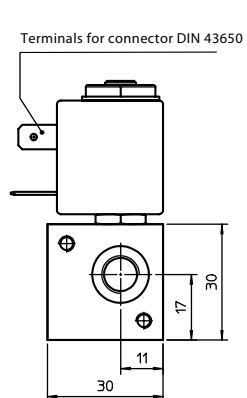
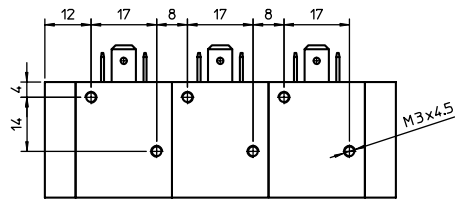
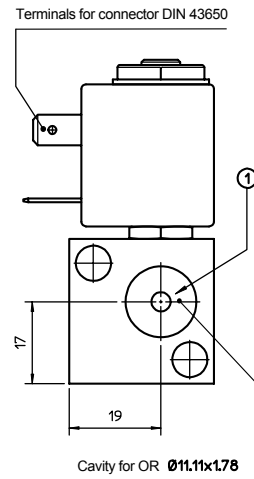
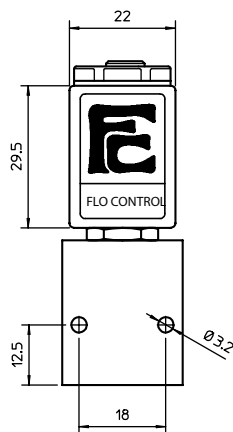
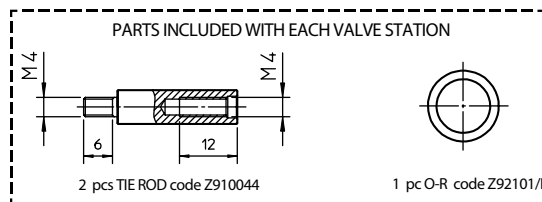
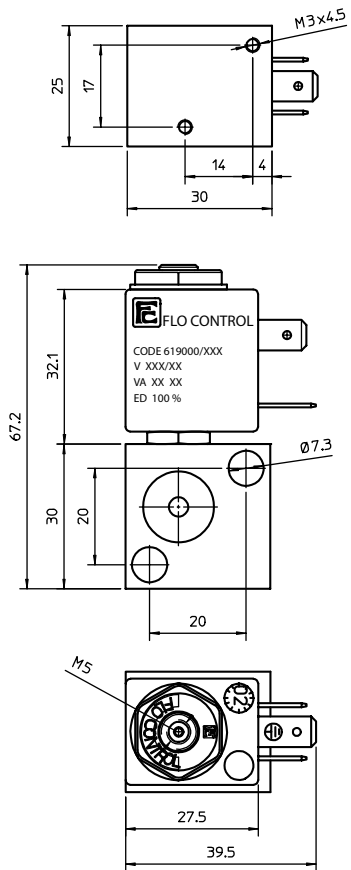
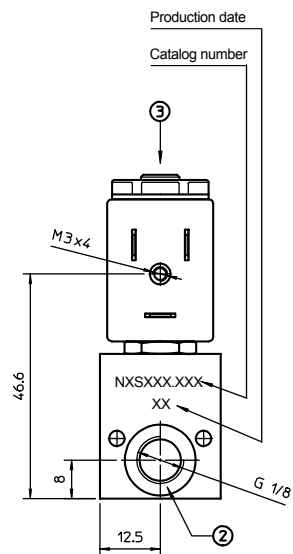
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 22 mm



FLO CONTROL

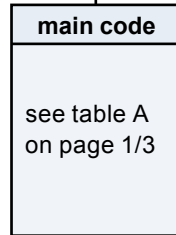
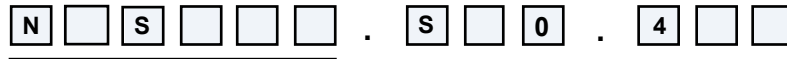
Solenoid Valves



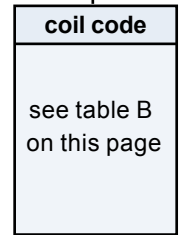
direct operated solenoid valves

coil 22 mm

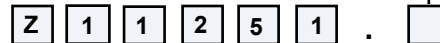
order code valve station



seals	
code	material
B	NBR
V	FPM
E	EPDM



order code mounting kit (one per complete system) :
(2x G1/8 end plates)



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
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FLO CONTROL

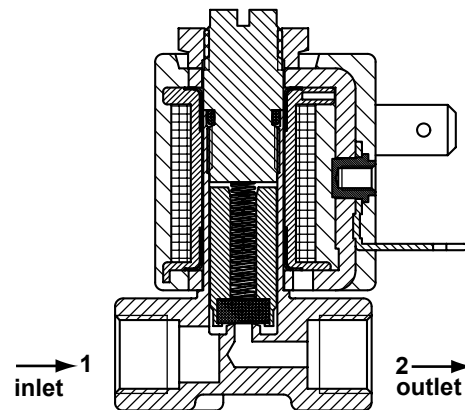
Solenoid Valves



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
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

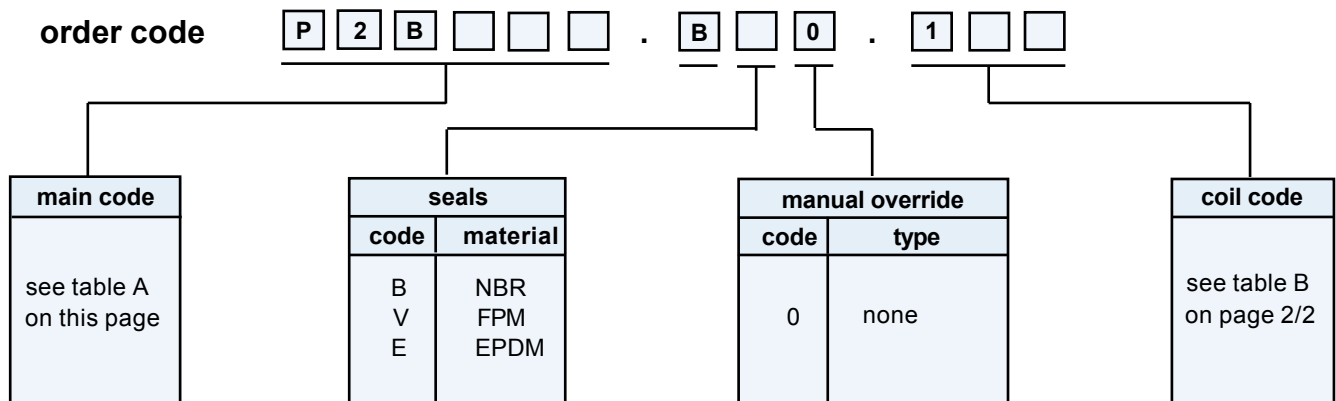


NC

* 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		main code	
								inr.	hol.		
2/2 normally closed (NC) 		1.7	1.1	0		18		9	7.5	P2B117	
		1.7	1.1	0	9		6			P2B617	
		2.2	2.0	0		9		9	7.5	P2B122	
		2.2	2.0	0	5		6			P2B622	
		3.0	3.4	0		6		9	7.5	P2B130	
		3.0	3.4	0	3		6			P2B630	

*l/min. of water with ΔP of 1 bar

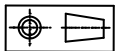
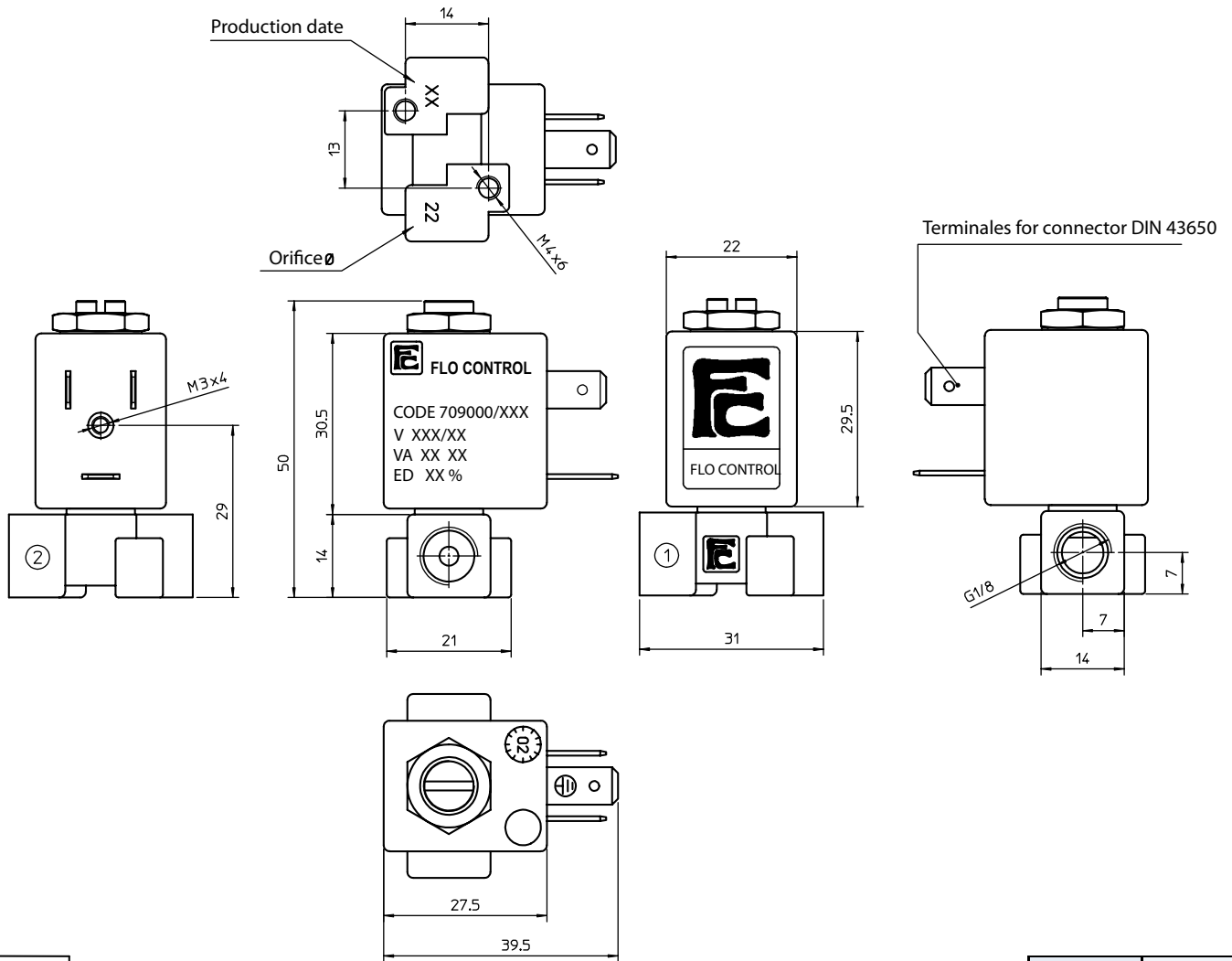


FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 22 mm



weight 120 g

coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
	6	-	-	-
	12	-	-	166
	24	111	144	171
	48	-	-	-
	110	121	-	181
	115	-	153	-
	220	131	-	-
	230	157	159	-

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 6 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

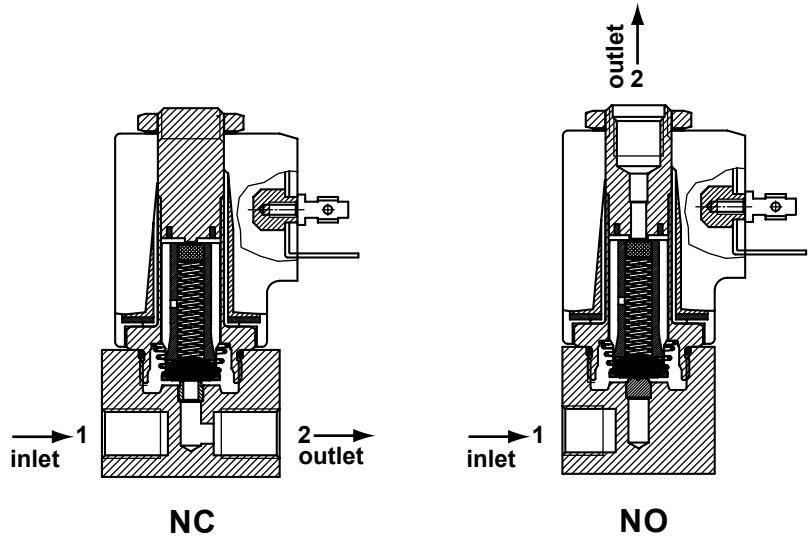
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 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

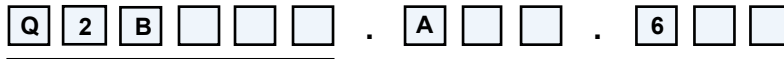


* other seal materials on request

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
2/2 normally closed (NC) 	0.8	0.5	0	60	80	10	21.5	13.5	Q2B108	
	1.2	1.3	0	45	70	10	21.5	13.5	Q2B112	
	1.6	1.7	0	35	60	10	21.5	13.5	Q2B116	
	2.4	3.5	0	15	30	10	21.5	13.5	Q2B124	
	3.0	4.5	0	10	18	10	21.5	13.5	Q2B130	
2/2 normally open (NO) 	0.8	0.5	0	40	40	10	21.5	13.5	Q2B208	
	1.2	1.1	0	35	35	10	21.5	13.5	Q2B212	
	1.6	1.4	0	20	20	10	21.5	13.5	Q2B216	
	2.4	3.0	0	10	10	10	21.5	13.5	Q2B224	
	3.0	3.5	0	8	8	10	21.5	13.5	Q2B230	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

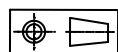
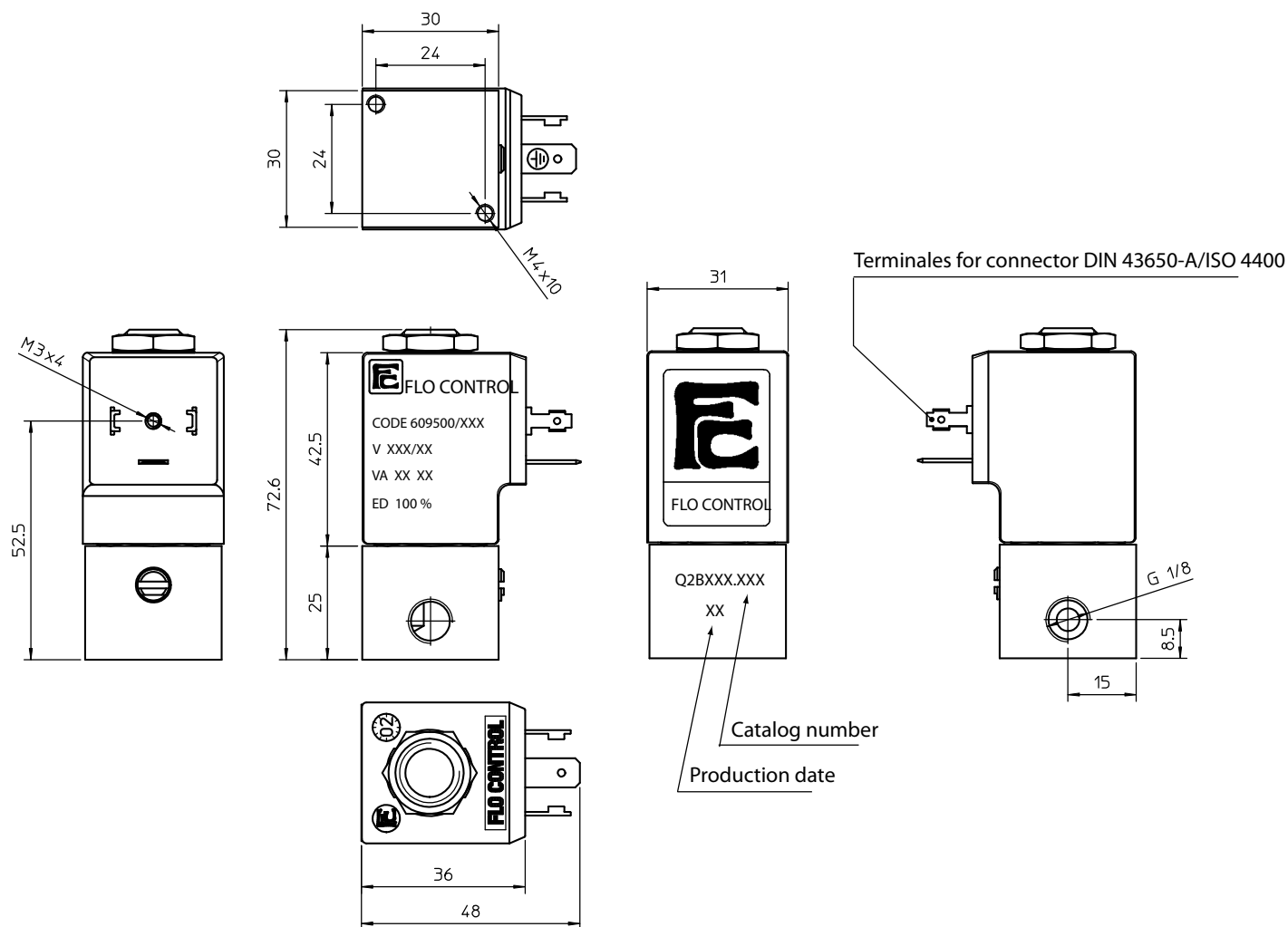
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

direct operated solenoid valves

coil 31 mm



weight	220 g
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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
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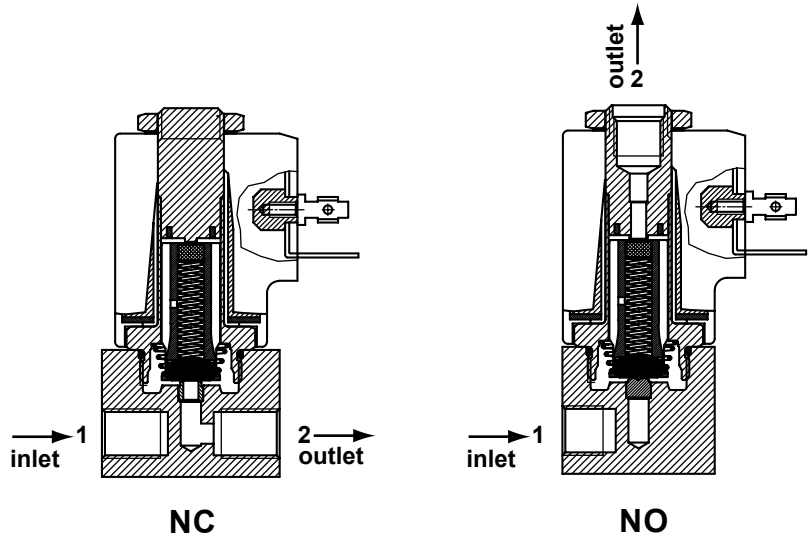
FLO CONTROL
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

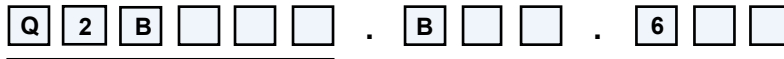


* other seal materials on request

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) 		0.8	0.5	0	60	80	10	21.5	13.5	Q2B108
		1.2	1.3	0	45	70	10	21.5	13.5	Q2B112
		1.6	1.7	0	35	60	10	21.5	13.5	Q2B116
		2.4	3.5	0	15	30	10	21.5	13.5	Q2B124
		3.0	4.5	0	10	18	10	21.5	13.5	Q2B130
2/2 normally open (NO) 		0.8	0.5	0	40	40	10	21.5	13.5	Q2B208
		1.2	1.1	0	35	35	10	21.5	13.5	Q2B212
		1.6	1.4	0	20	20	10	21.5	13.5	Q2B216
		2.4	3.0	0	10	10	10	21.5	13.5	Q2B224
		3.0	3.5	0	8	8	10	21.5	13.5	Q2B230

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

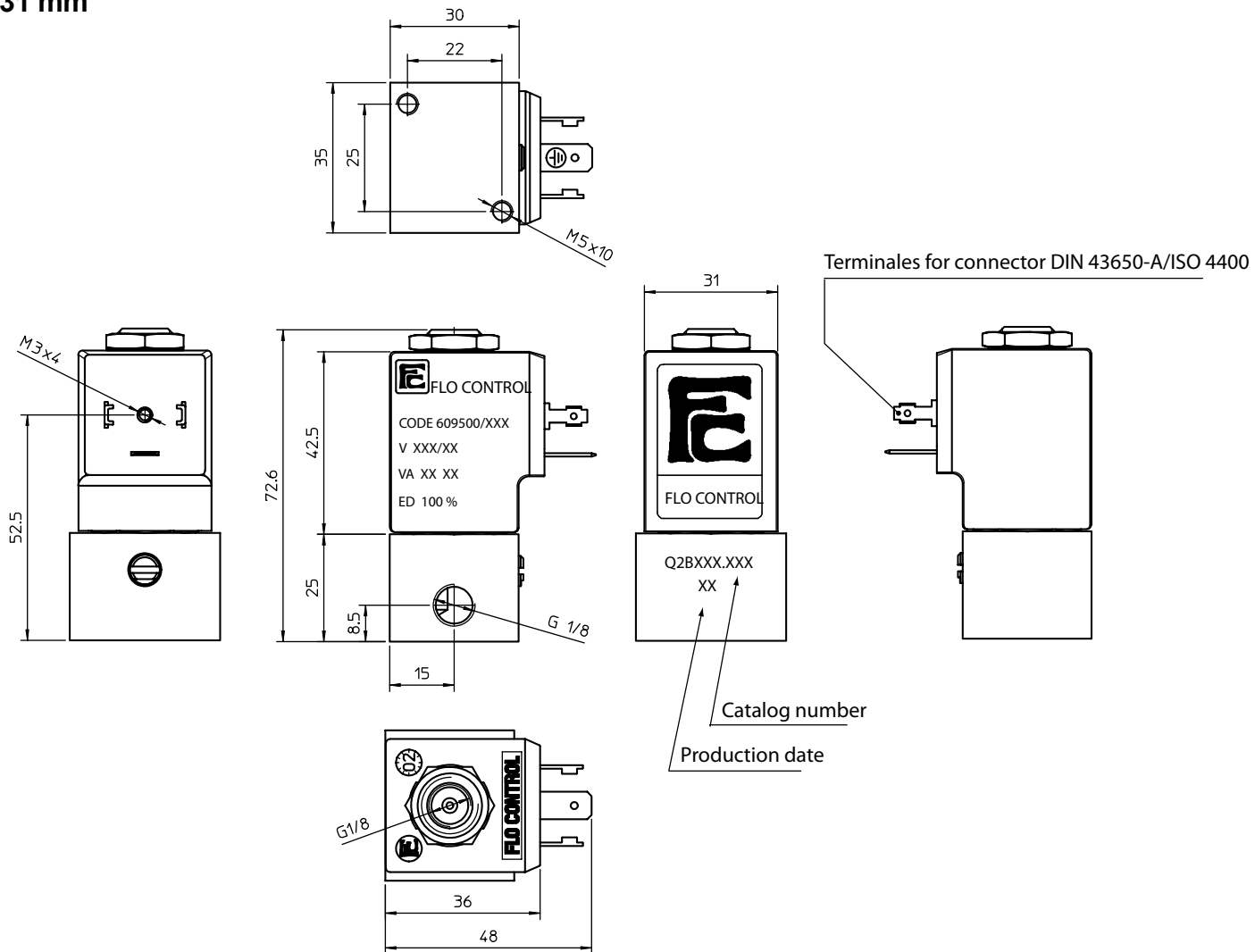
FLO CONTROL

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
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FLO CONTROL

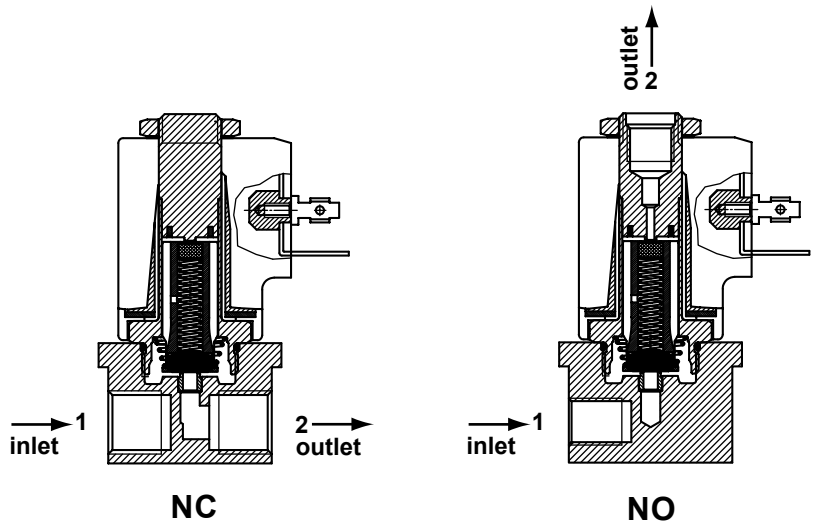
Solenoid Valves



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

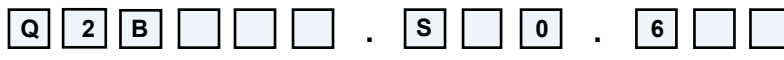


* other seal materials on request

function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol
2/2 normally closed (NC) 		0.8	0.5	0	60	80	10	21.5	13.5	Q2B108
		1.2	1.3	0	45	70	10	21.5	13.5	Q2B112
		1.6	1.7	0	35	60	10	21.5	13.5	Q2B116
		2.4	3.5	0	15	30	10	21.5	13.5	Q2B124
		3.0	4.5	0	10	18	10	21.5	13.5	Q2B130
2/2 normally open (NO) 		0.8	0.5	0	40	40	10	21.5	13.5	Q2B208
		1.2	1.1	0	35	35	10	21.5	13.5	Q2B212
		1.6	1.4	0	20	20	10	21.5	13.5	Q2B216
		2.4	3.0	0	10	10	10	21.5	13.5	Q2B224
		3.0	3.5	0	8	8	10	21.5	13.5	Q2B230

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
K	FFKM

manual override	
code	type
0	none

coil code
see table B on page 2/2

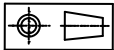
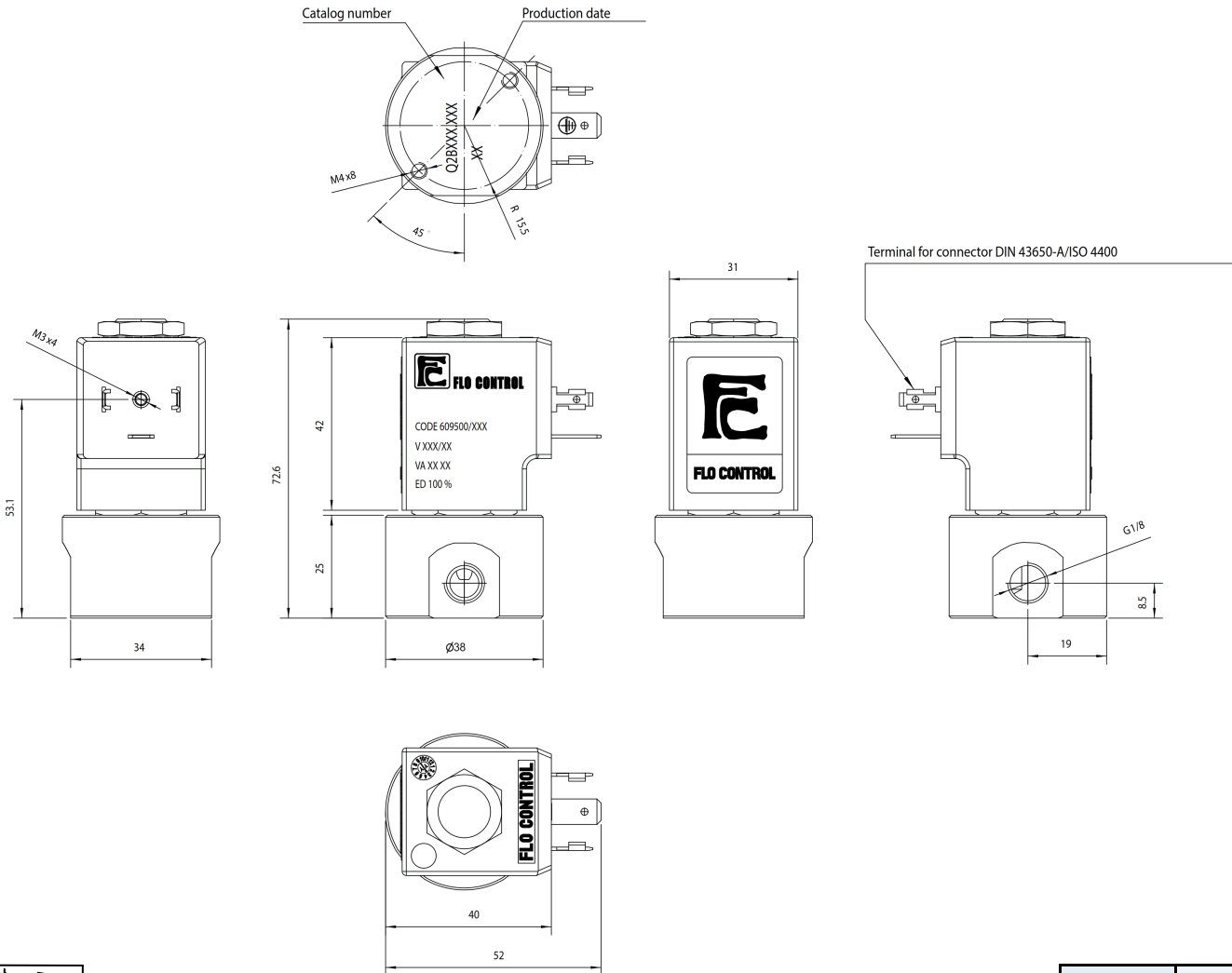
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



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

coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
<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
	220	631	653	-
	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
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FLO CONTROL

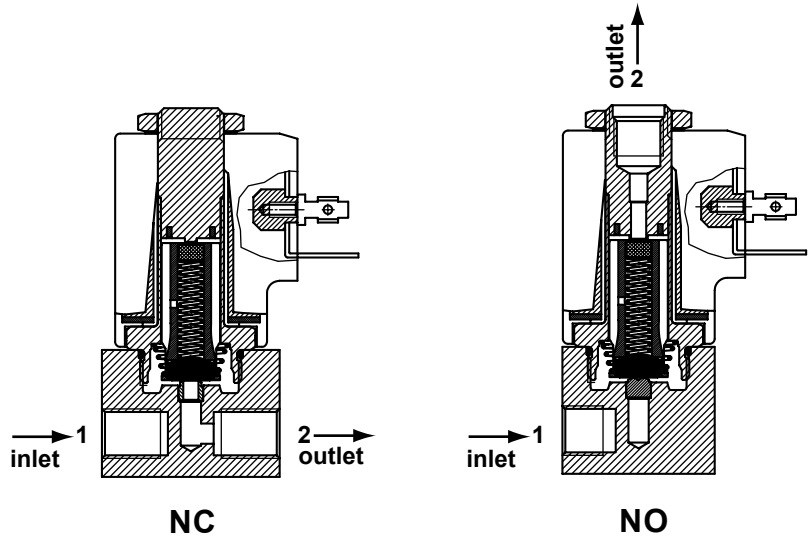
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

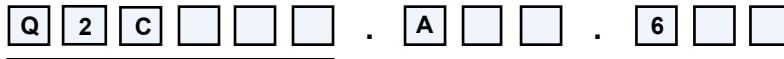


* other seal materials on request

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) 	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	
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

order code



main code
see table A on this page

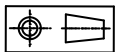
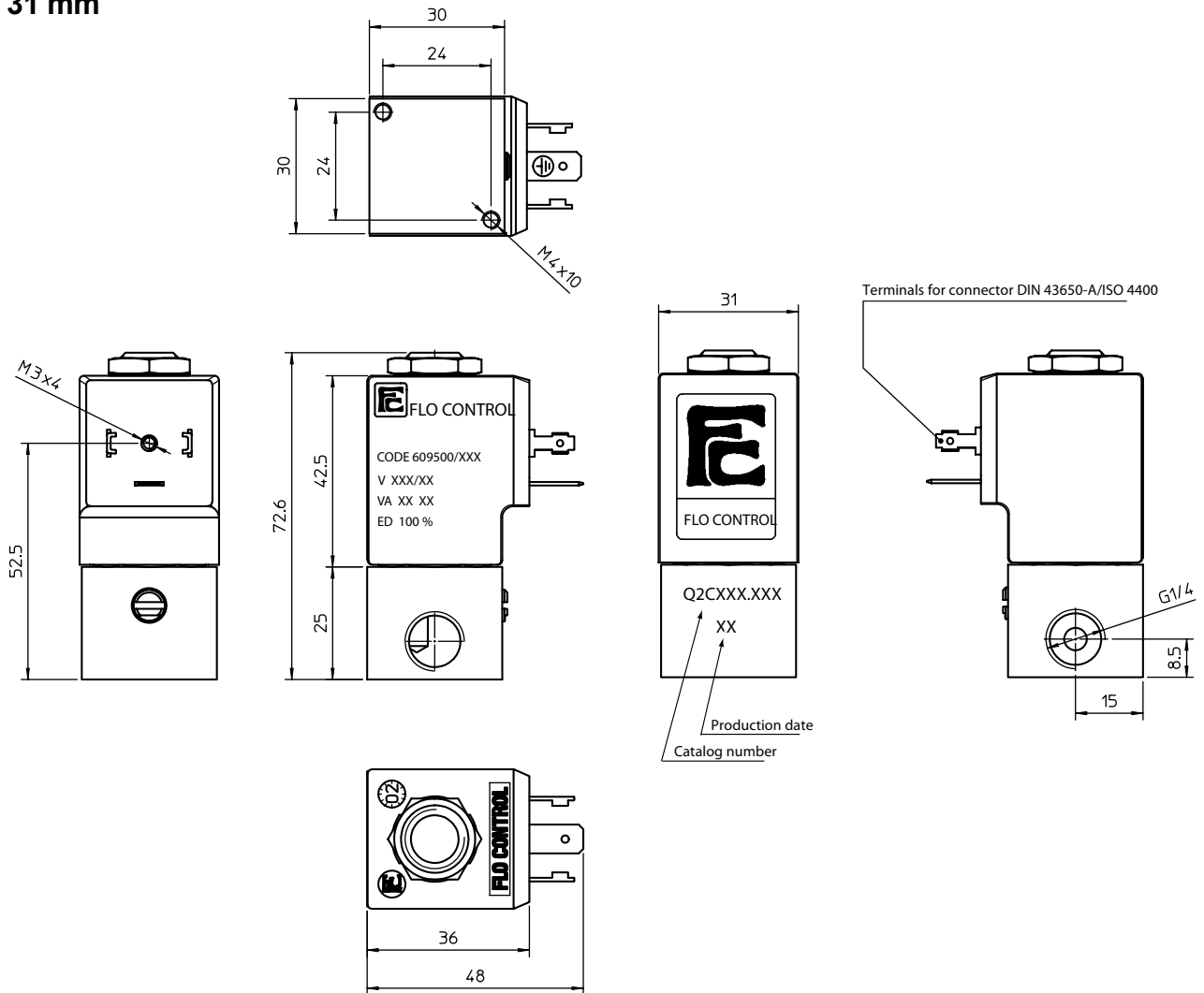
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

direct operated solenoid valves

coil 31 mm



weight 220 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

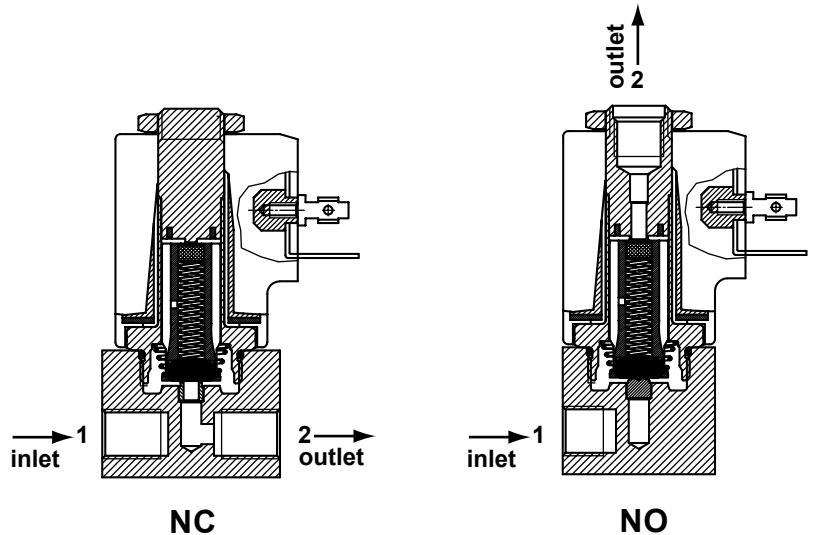
Solenoid Valves



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.		main code	
								inr.	hol.	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

order code **Q** **2** **C** **6** . .

main code see table A on this page	stem		seals		manual override		coil code see table B on page 2/2
	code	material	code	material	code	type	
	B	stainless AISI 303	B	NBR	0	none	
	D	brass	V	FPM	1	brass screw	
	E	with chem. nickel treated brass	E	EPDM	2	palm button	
			K	FFKM	3	push button	

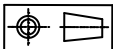
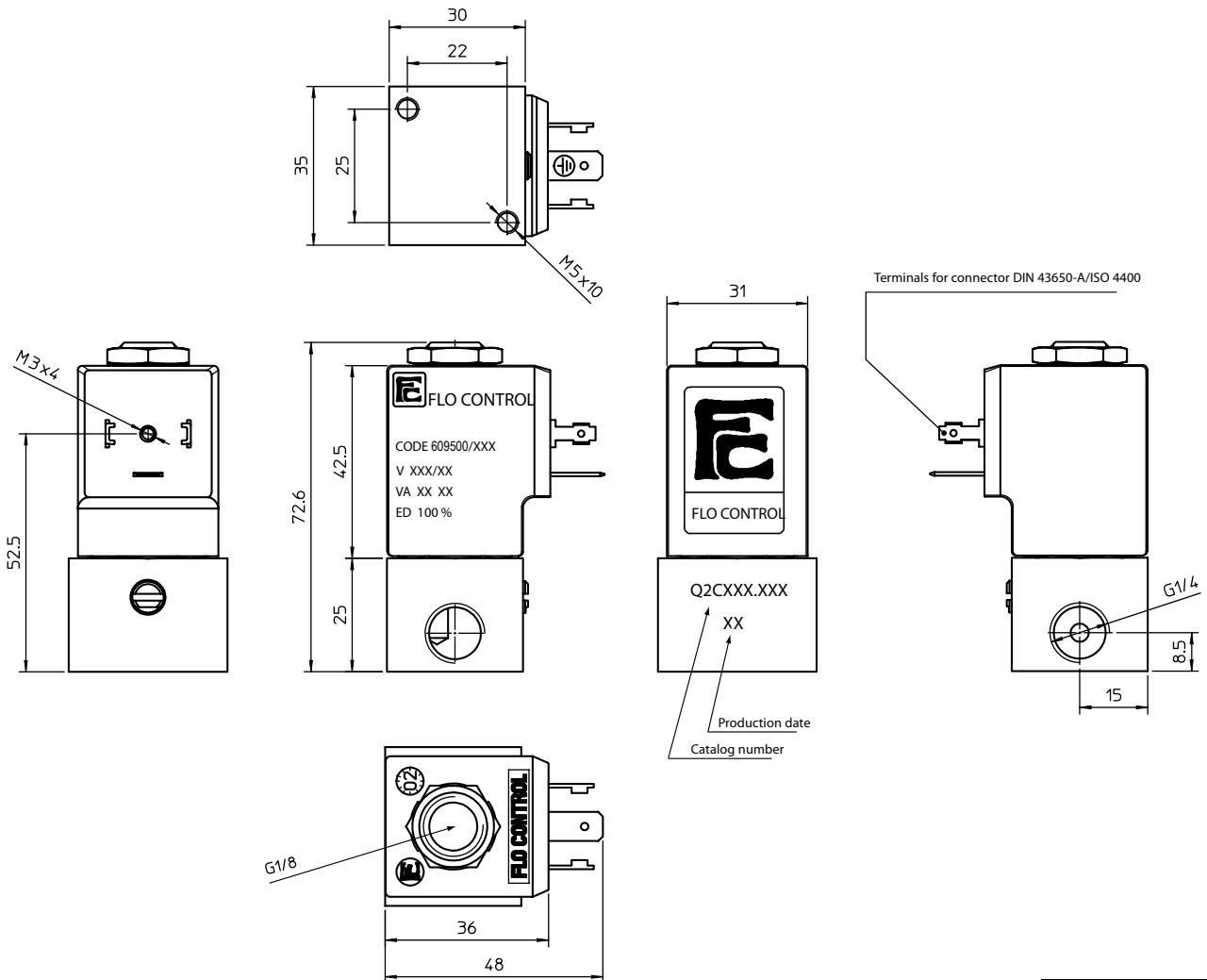
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



weight	330 g
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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
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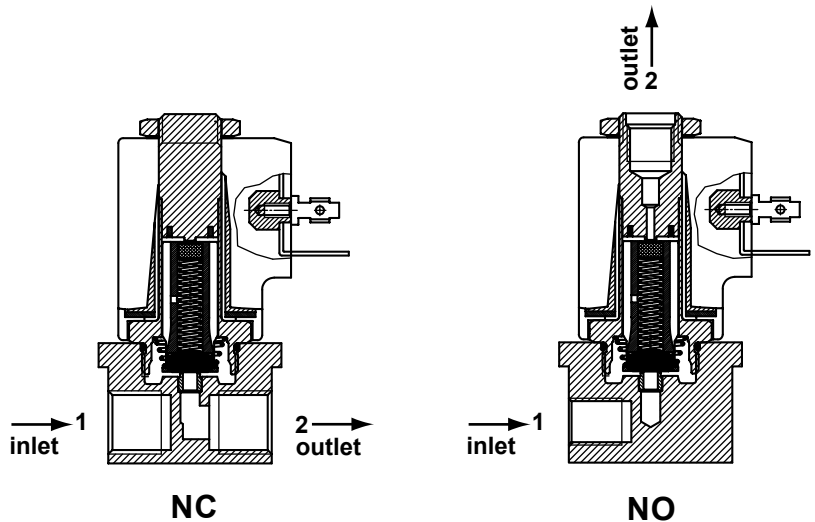
FLO CONTROL
Solenoid Valves



direct operated solenoid valves

coil 31 mm

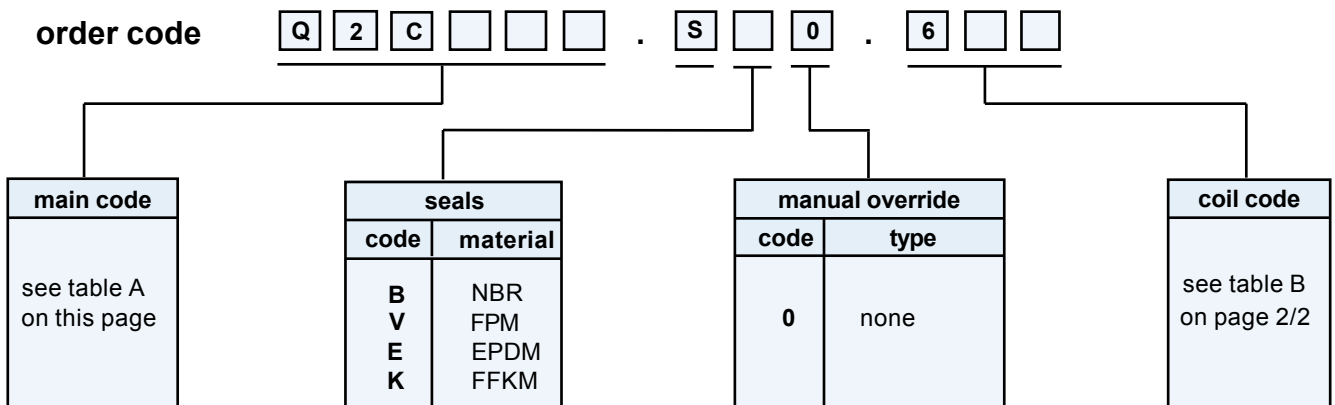
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, FFKM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* 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



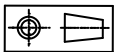
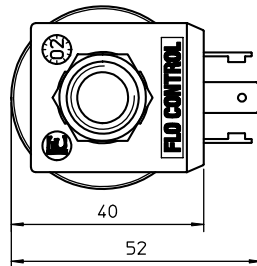
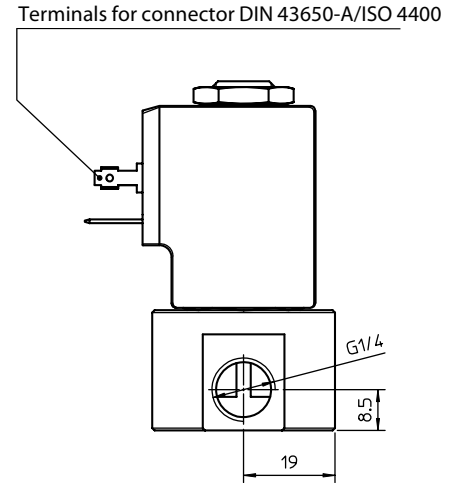
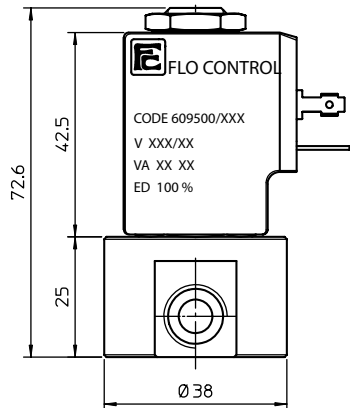
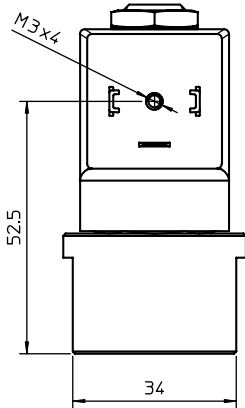
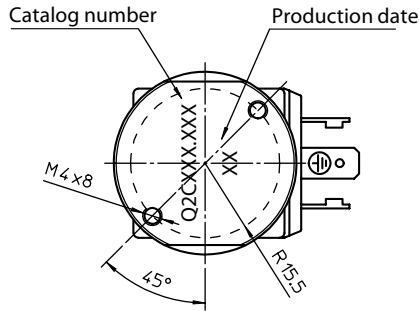
FLO CONTROL

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
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FLO CONTROL

Solenoid Valves

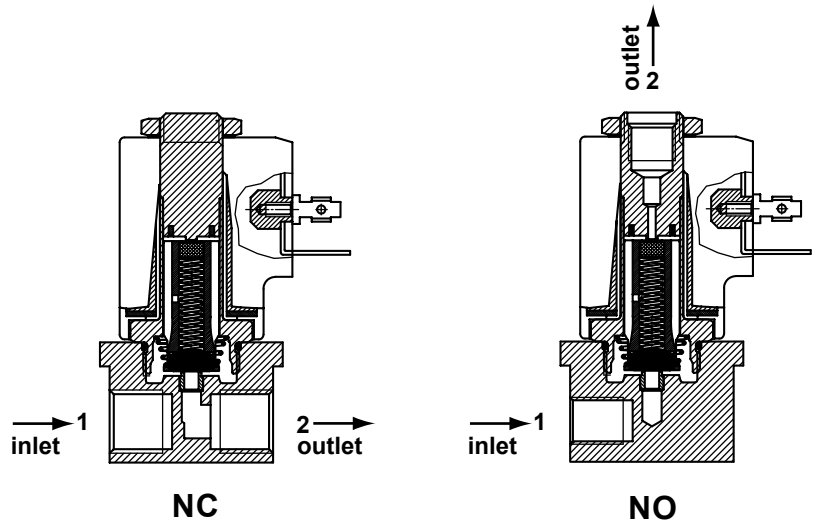


direct operated solenoid valves

coil 31 mm

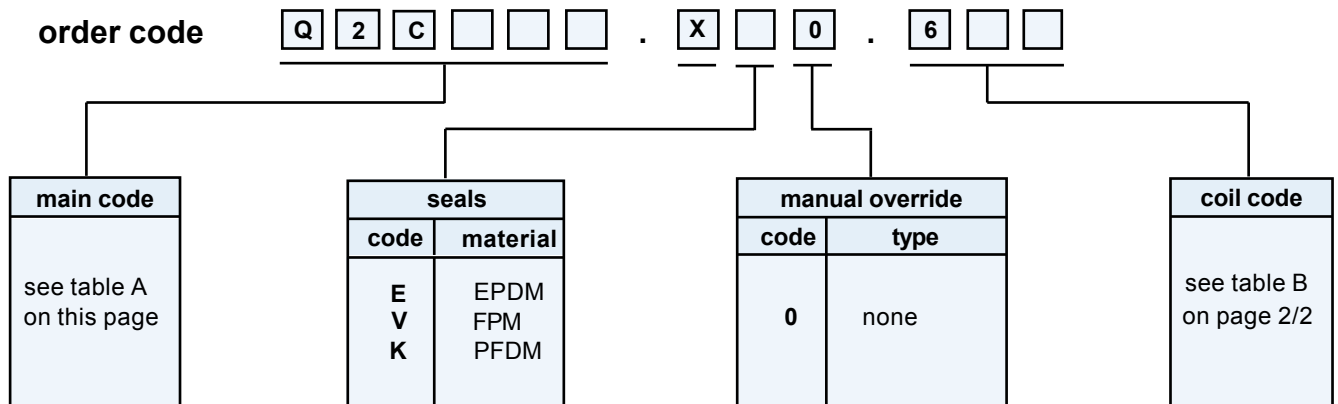
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	EPDM, FPM, PFFPM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request



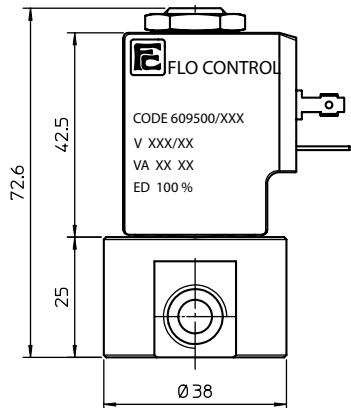
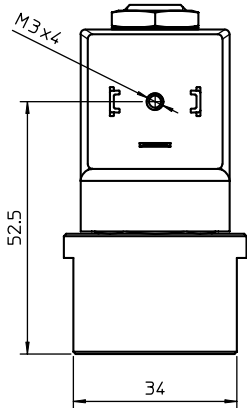
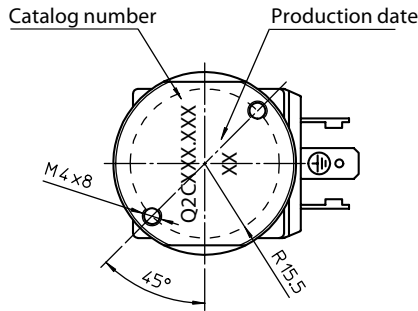
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol		
2/2 normally closed (NC) 		1.6	1.7	0	35	60	10	21.5	13.5	Q2C116
		2.4	3.5	0	15	30	10	21.5	13.5	Q2C124
		3.0	4.5	0	10	18	10	21.5	13.5	Q2C130
		4.0	7.5	0	3	8	10	21.5	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

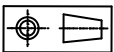
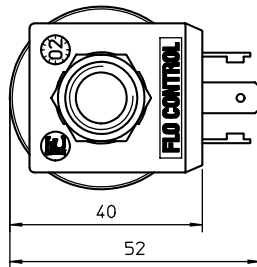
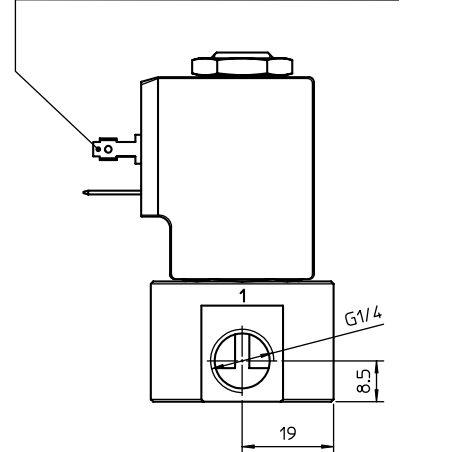


direct operated solenoid valves

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
	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
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FLO CONTROL

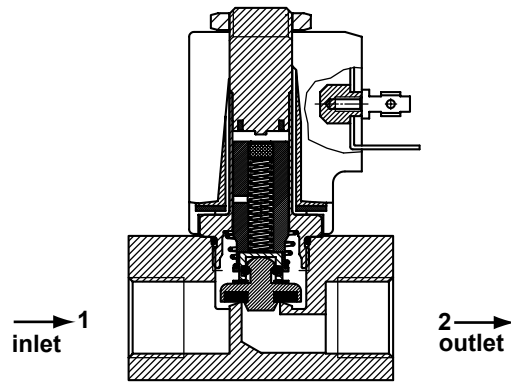
Solenoid Valves



direct operated solenoid valves

coil 31 mm

general information	
ambient temperature	- 10°C to + 50°C
response time	10 - 20 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



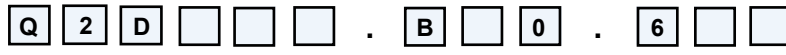
NC

* 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) 										
		8.0	16.0	0	0.5	1.0	10	21.5	13.5	Q2D180
		10.0	22.0	0	0.3	0.5	10	21.5	13.5	Q2D110

*l/min. of water with ΔP of 1 bar

order code

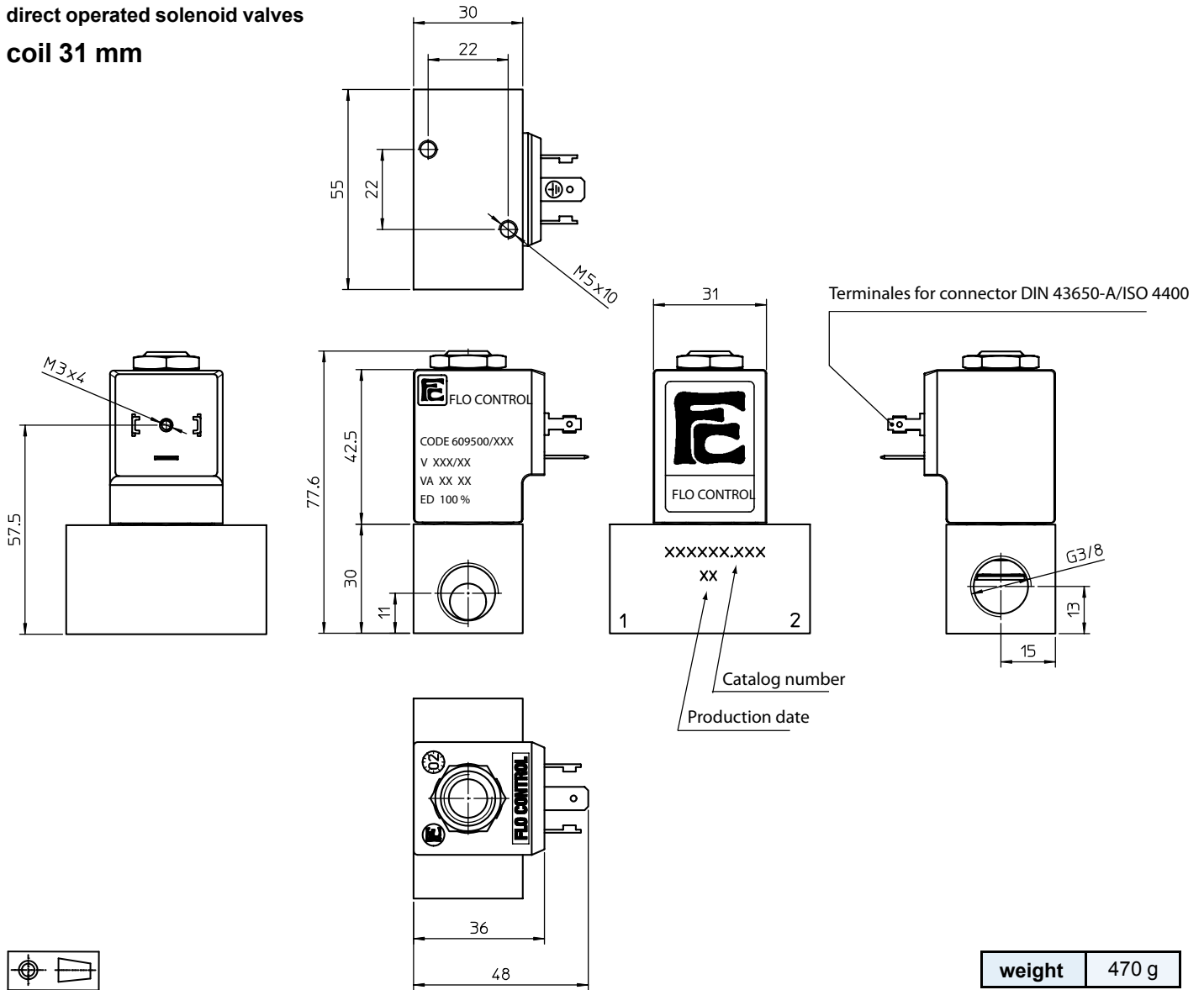


main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

coil code
see table B on page 2/2

direct operated solenoid valves
coil 31 mm



weight 470 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)

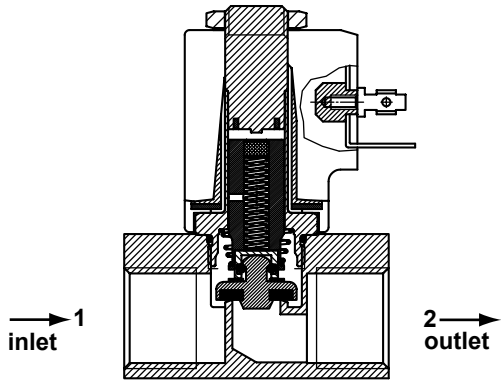
code	Z10031
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FLO CONTROL
Solenoid Valves



direct operated solenoid valves
coil 31 mm

general information	
ambient temperature	- 10°C to + 50°C
response time	10 - 20 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

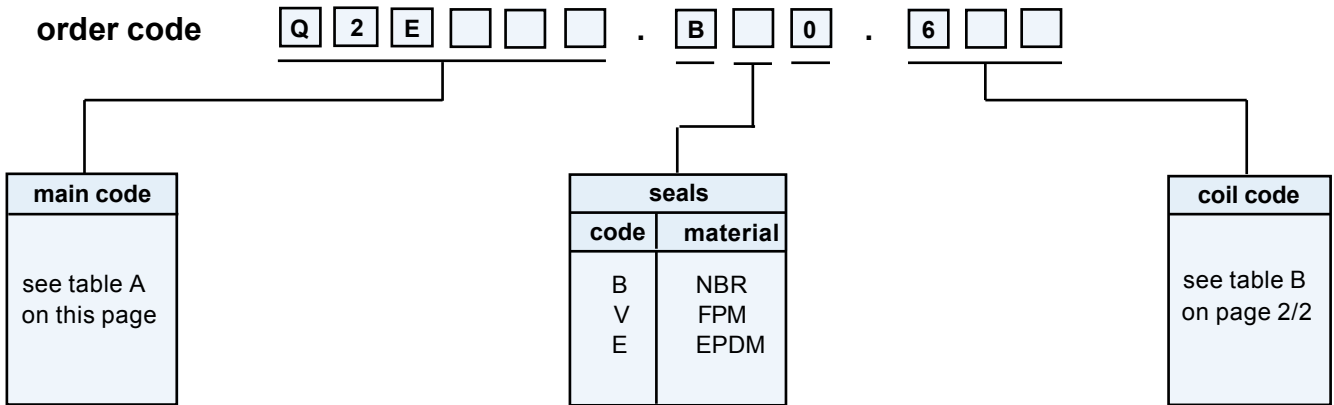


NC

* other seal materials on request

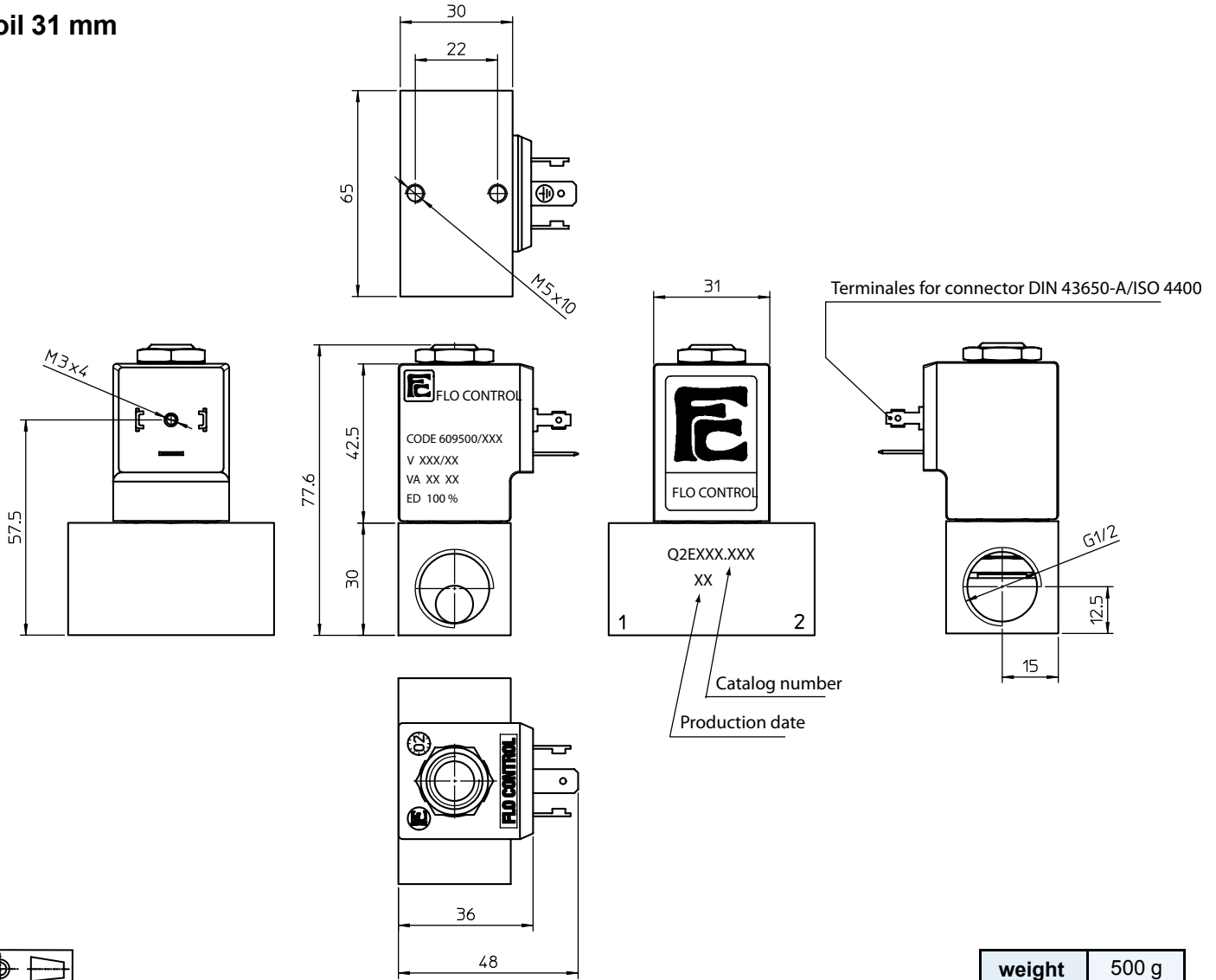
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.	
2/2 normally closed (NC) 									
		10.0	22.0	0	0.3	0.5	10	21.5	13.5

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 31 mm



weight 500 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

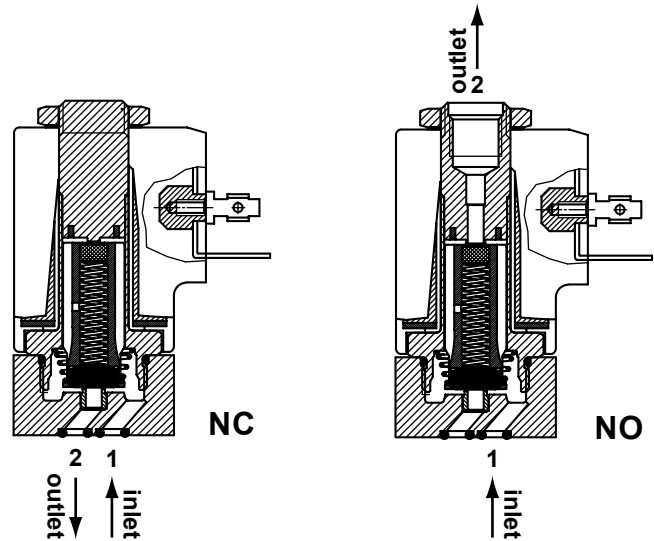
Solenoid Valves



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*
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

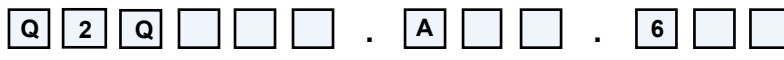


* other seal materials on request

function	symbol	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) 		0.8	0.5	0	60	80	10	21.5	13.5	Q2Q108
		1.2	1.3	0	45	70	10	21.5	13.5	Q2Q112
		1.6	1.7	0	35	60	10	21.5	13.5	Q2Q116
		2.4	3.5	0	15	30	10	21.5	13.5	Q2Q124
		3.0	4.5	0	10	18	10	21.5	13.5	Q2Q130
2/2 normally open (NO) 		0.8	0.5	0	40	40	10	21.5	13.5	Q2Q208
		1.2	1.1	0	35	35	10	21.5	13.5	Q2Q212
		1.6	1.4	0	20	20	10	21.5	13.5	Q2Q216
		2.4	3.0	0	10	10	10	21.5	13.5	Q2Q224
		3.0	3.5	0	8	8	10	21.5	13.5	Q2Q230

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/4

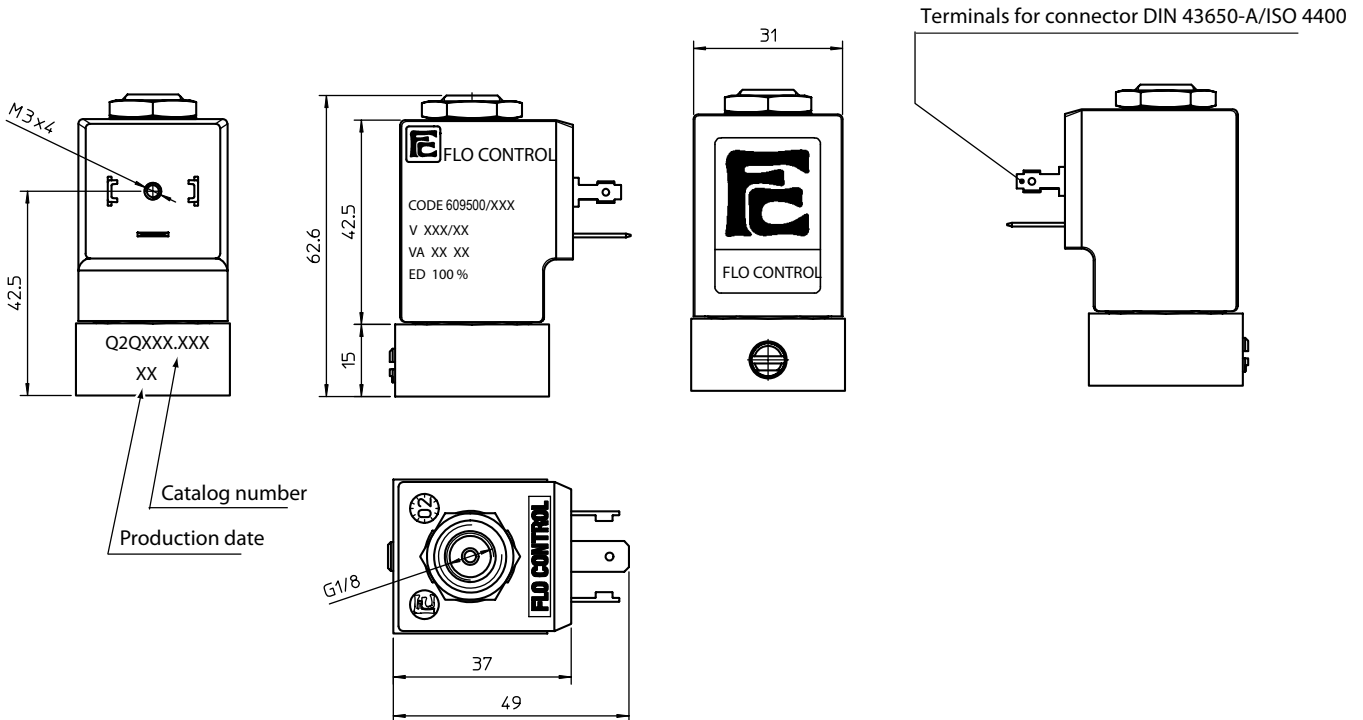
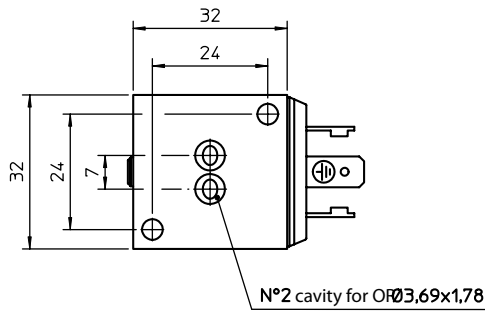
FLO CONTROL

Solenoid Valves



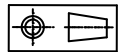
direct operated solenoid valves

coil 31 mm



Catalog number
Production date

weight 200 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

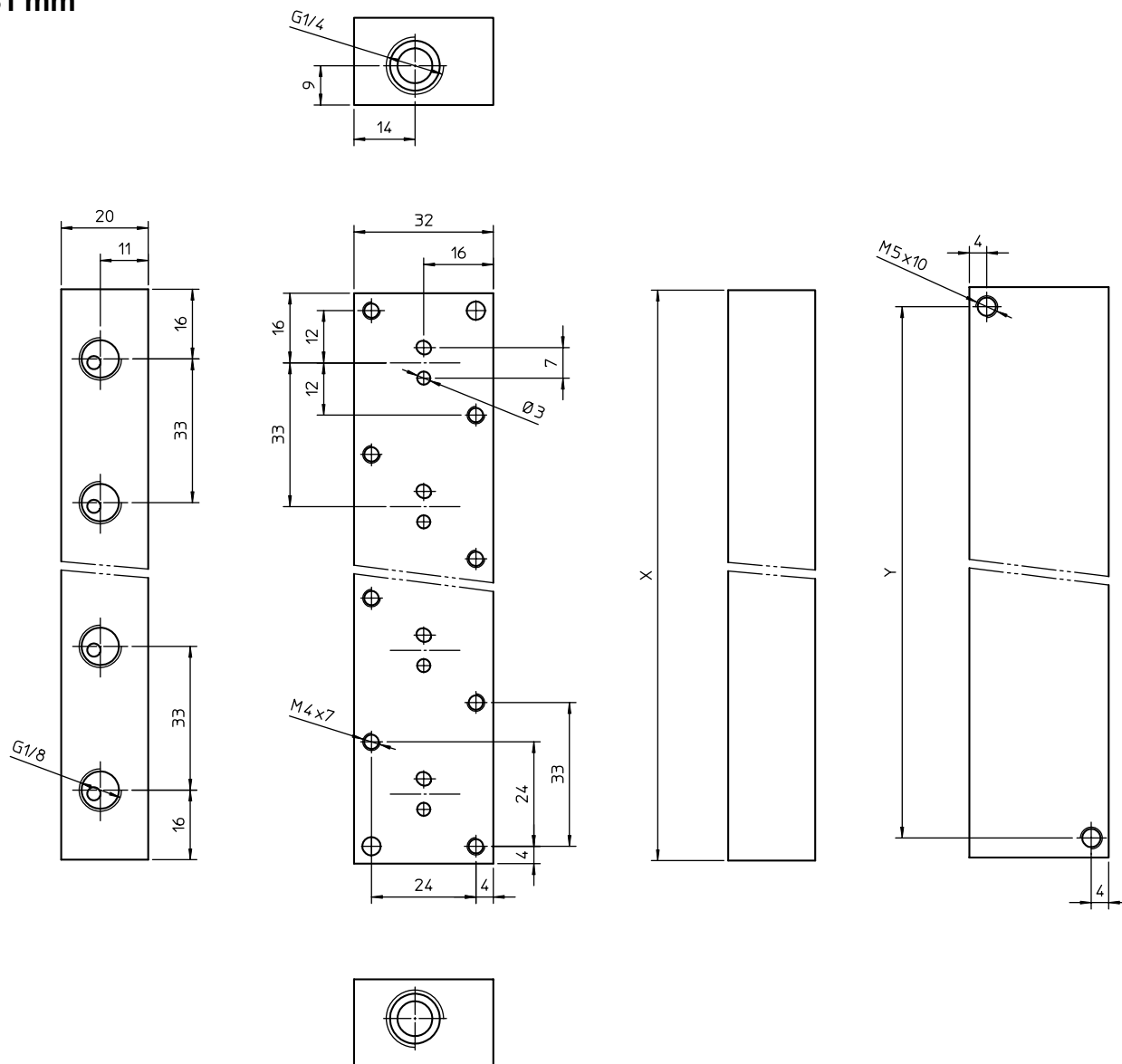
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.08A	1	32	24	45
ZZ11.Q2.08A	2	65	57	100
ZZ11.Q3.08A	3	98	90	150
ZZ11.Q4.08A	4	131	123	205
ZZ11.Q5.08A	5	164	156	260
ZZ11.Q6.08A	6	197	189	310

-M4 screws order code Z11030 (two each valves station) must be ordered separately

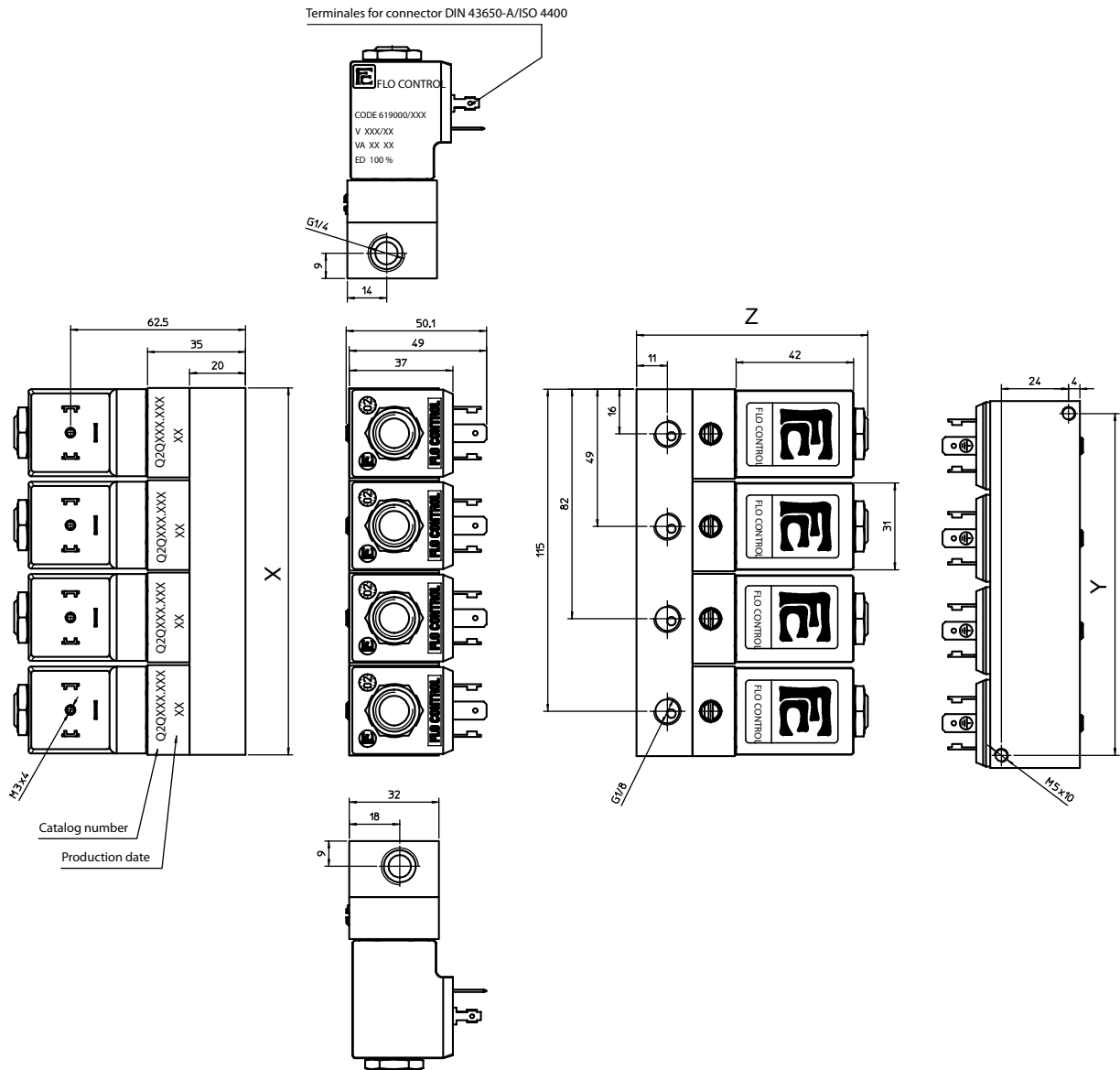
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



dimensions assembled manifolds

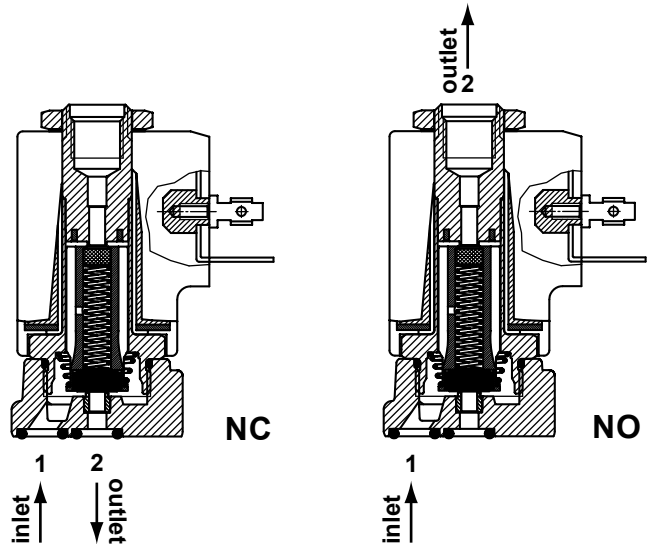
order code	stations	X (mm)	Y (mm)	Z (mm)	weight (g)
parts have to be ordered separately: valves see page 1/4 bases see page 3/4 screws see page 3/4	1	32	24	82.6	245
	2	65	57	82.6	500
	3	98	90	82.6	750
	4	131	123	82.6	1005
	5	164	156	82.6	1260
	6	197	189	82.6	1510

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 2/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4

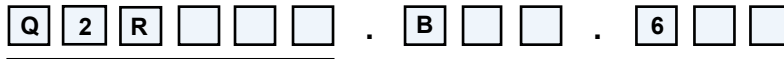
* other seal materials on request



function	symbol	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) 		0.8	0.5	0	60	80	10	21.5	13.5	Q2R108
		1.2	1.3	0	45	70	10	21.5	13.5	Q2R112
		1.6	1.7	0	35	60	10	21.5	13.5	Q2R116
		2.4	3.5	0	15	30	10	21.5	13.5	Q2R124
		3.0	4.5	0	10	18	10	21.5	13.5	Q2R130
2/2 normally open (NO) 		0.8	0.5	0	40	40	10	21.5	13.5	Q2R208
		1.2	1.1	0	35	35	10	21.5	13.5	Q2R212
		1.6	1.4	0	20	20	10	21.5	13.5	Q2R216
		2.4	3.0	0	10	10	10	21.5	13.5	Q2R224
		3.0	3.5	0	8	8	10	21.5	13.5	Q2R230

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/4

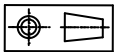
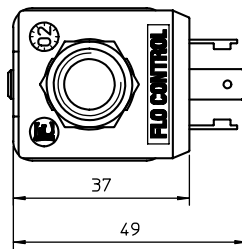
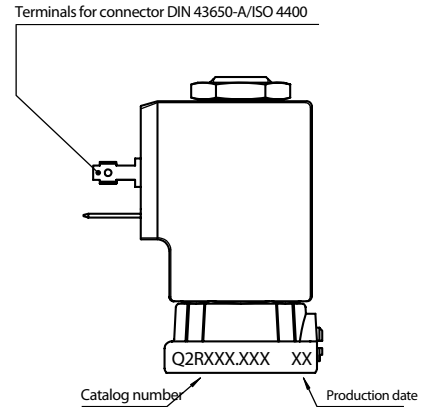
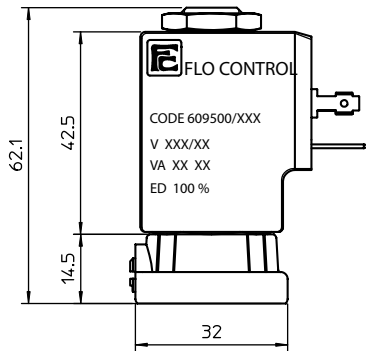
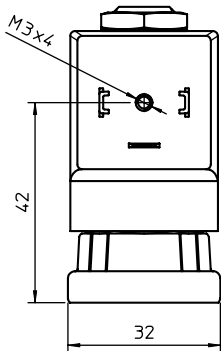
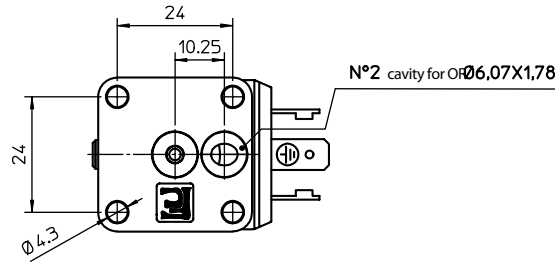
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



weight 260 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

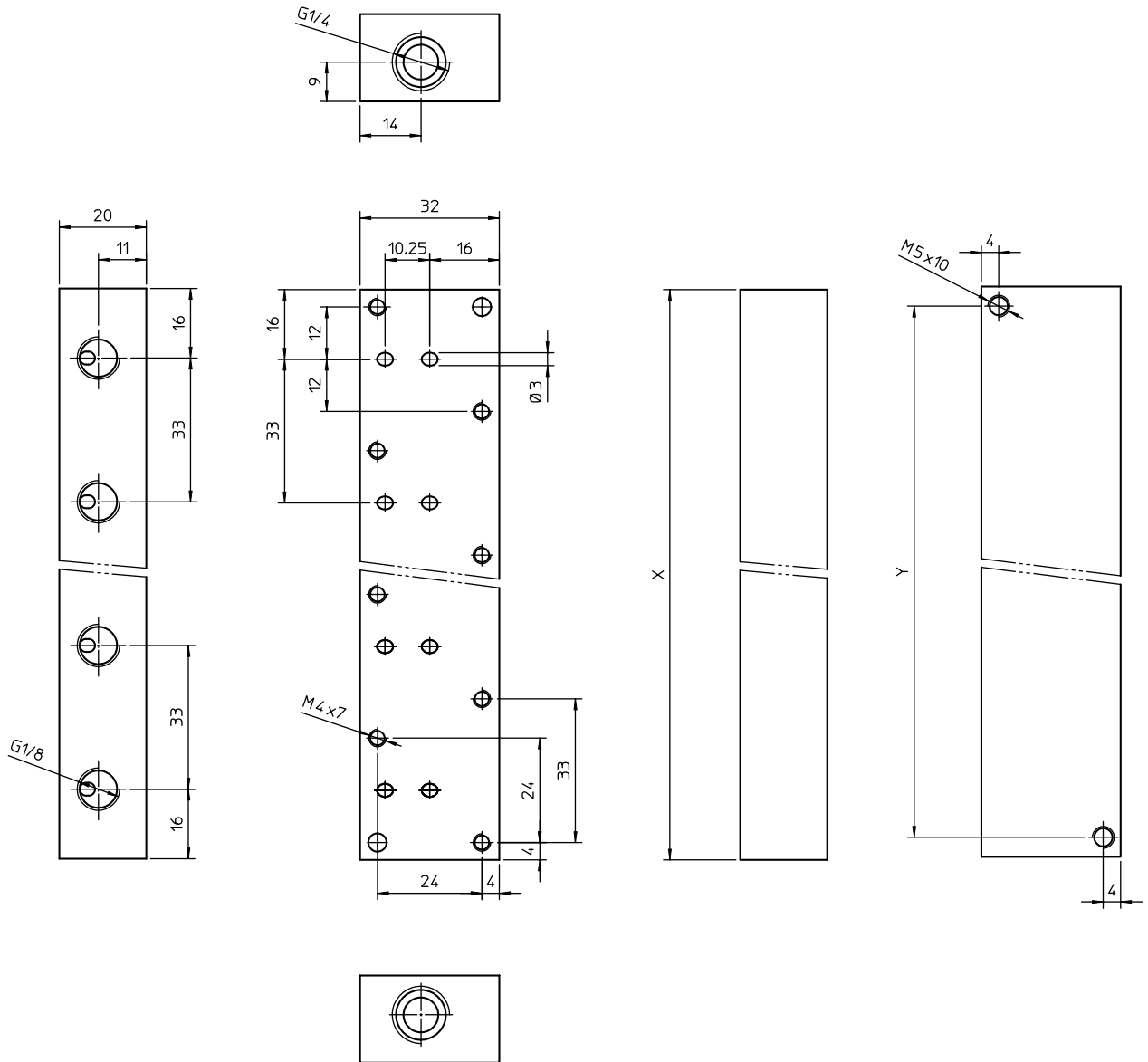
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.28B	1	32	24	135
ZZ11.Q2.28B	2	65	57	285
ZZ11.Q3.28B	3	98	90	435
ZZ11.Q4.28B	4	131	123	585
ZZ11.Q5.28B	5	164	156	735
ZZ11.Q6.28B	6	197	189	890

-M4 screws order code Z11035 (two each valves station) must be ordered separately

FLO CONTROL

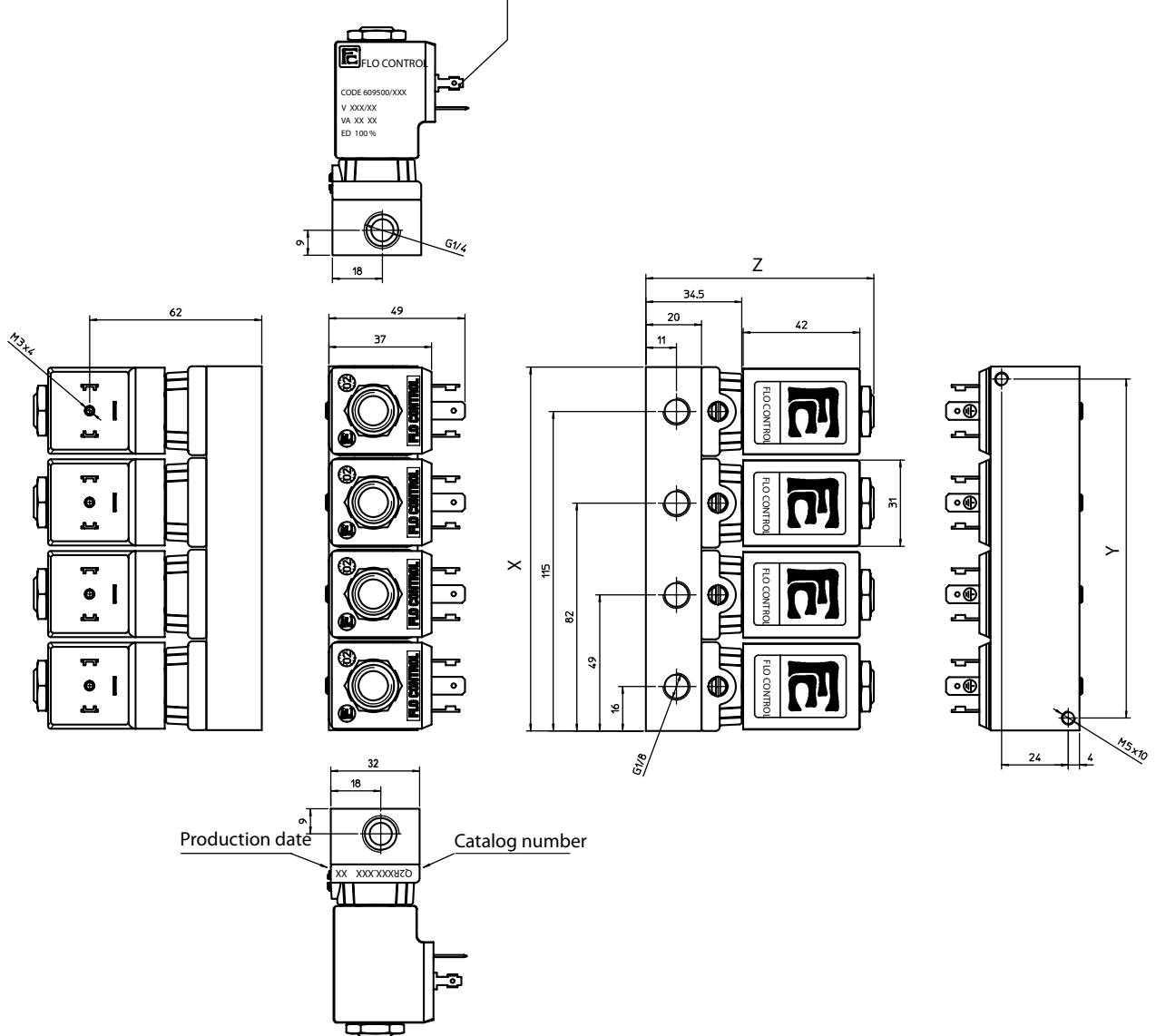
Solenoid Valves



direct operated solenoid valves

coil 31 mm

Terminals for connector DIN 43650-A/ISO 4400



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	32	24	82.1	395
	2	65	57	82.1	805
	3	98	90	82.1	1215
	4	131	123	82.1	1625
	5	164	156	82.1	2035
	6	197	189	82.1	2450

FLO CONTROL

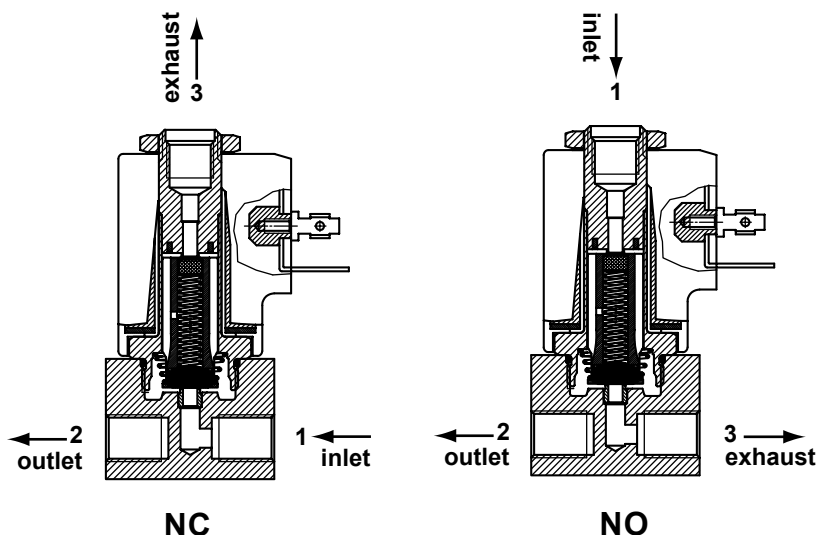
Solenoid Valves



direct operated solenoid valves

coil 31 mm

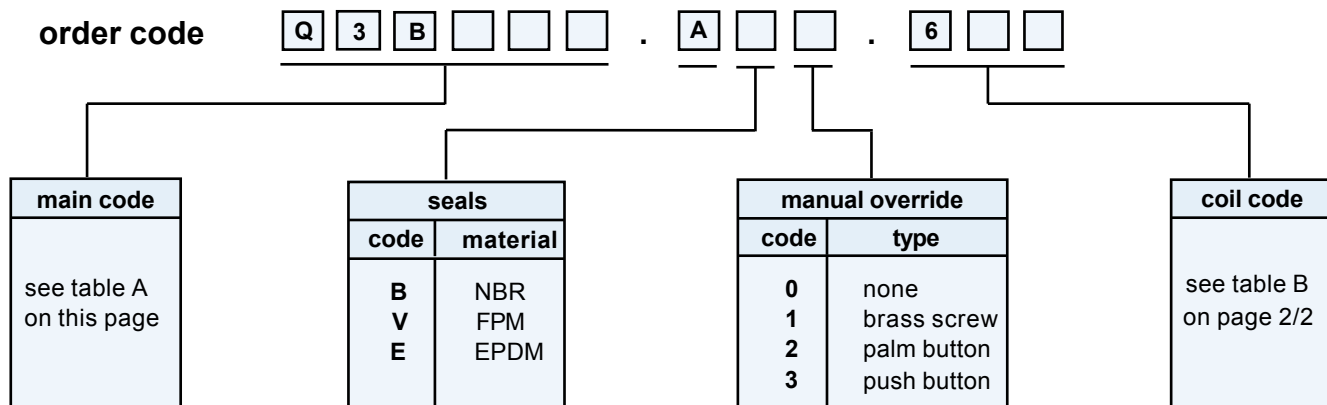
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

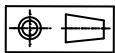
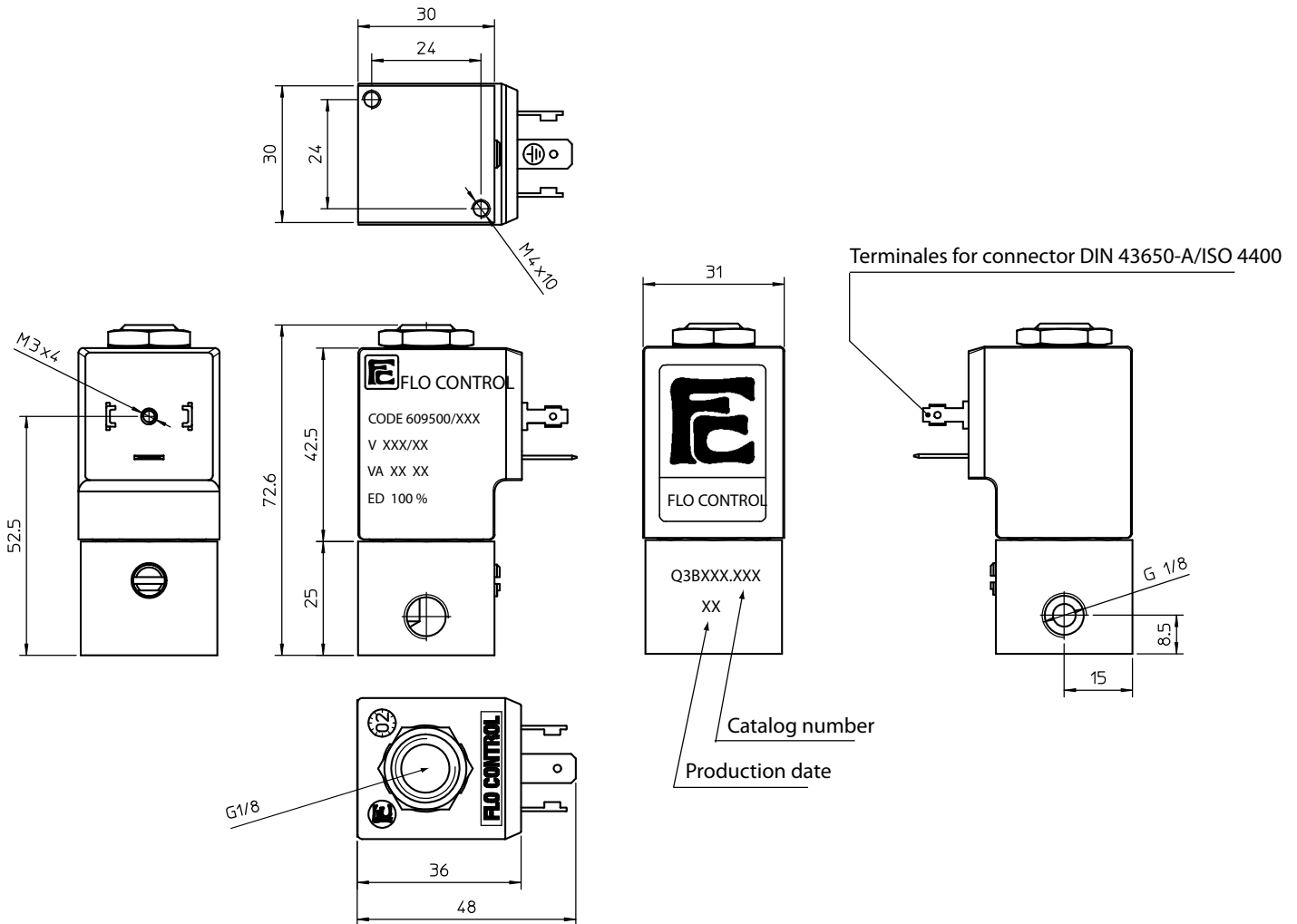
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol
3/2 normally closed (NC) 		0.8	0.5	0	30	30	10	21.5	13.5	Q3B108
		1.2	1.3	0	25	25	10	21.5	13.5	Q3B112
		1.6	1.7	0	15	15	10	21.5	13.5	Q3B116
		2.4	3.5	0	10	10	10	21.5	13.5	Q3B124
		3.0	4.5	0	6	6	10	21.5	13.5	Q3B130
3/2 normally open (NO) 		0.8	0.5	0	20	20	10	21.5	13.5	Q3B208
		1.2	1.1	0	15	15	10	21.5	13.5	Q3B212
		1.6	1.4	0	10	10	10	21.5	13.5	Q3B216
		2.4	3.0	0	6	6	10	21.5	13.5	Q3B224
		3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3B230

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves

coil 31 mm



weight	220 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

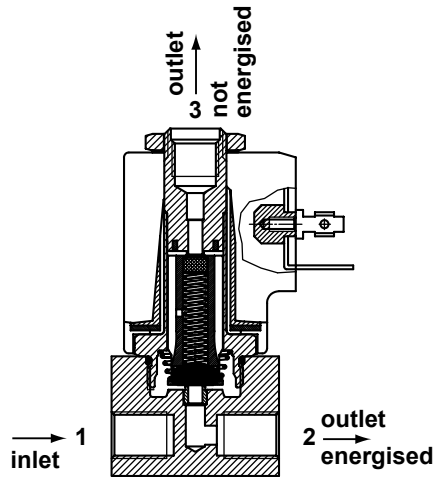
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



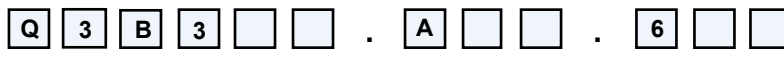
* other seal materials on request

Directional valves can be used to switch the outlet between ports 2 and 3 with all ports connected.

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 directional 	0.8	0.5	0	40	40	10	21.5	13.5	Q3B308	
	1.2	1.1	0	30	30	10	21.5	13.5	Q3B312	
	1.6	1.4	0	20	20	10	21.5	13.5	Q3B316	
	2.4	3.0	0	12	12	10	21.5	13.5	Q3B324	
	3.0	3.5	0	6	6	10	21.5	13.5	Q3B330	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

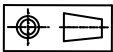
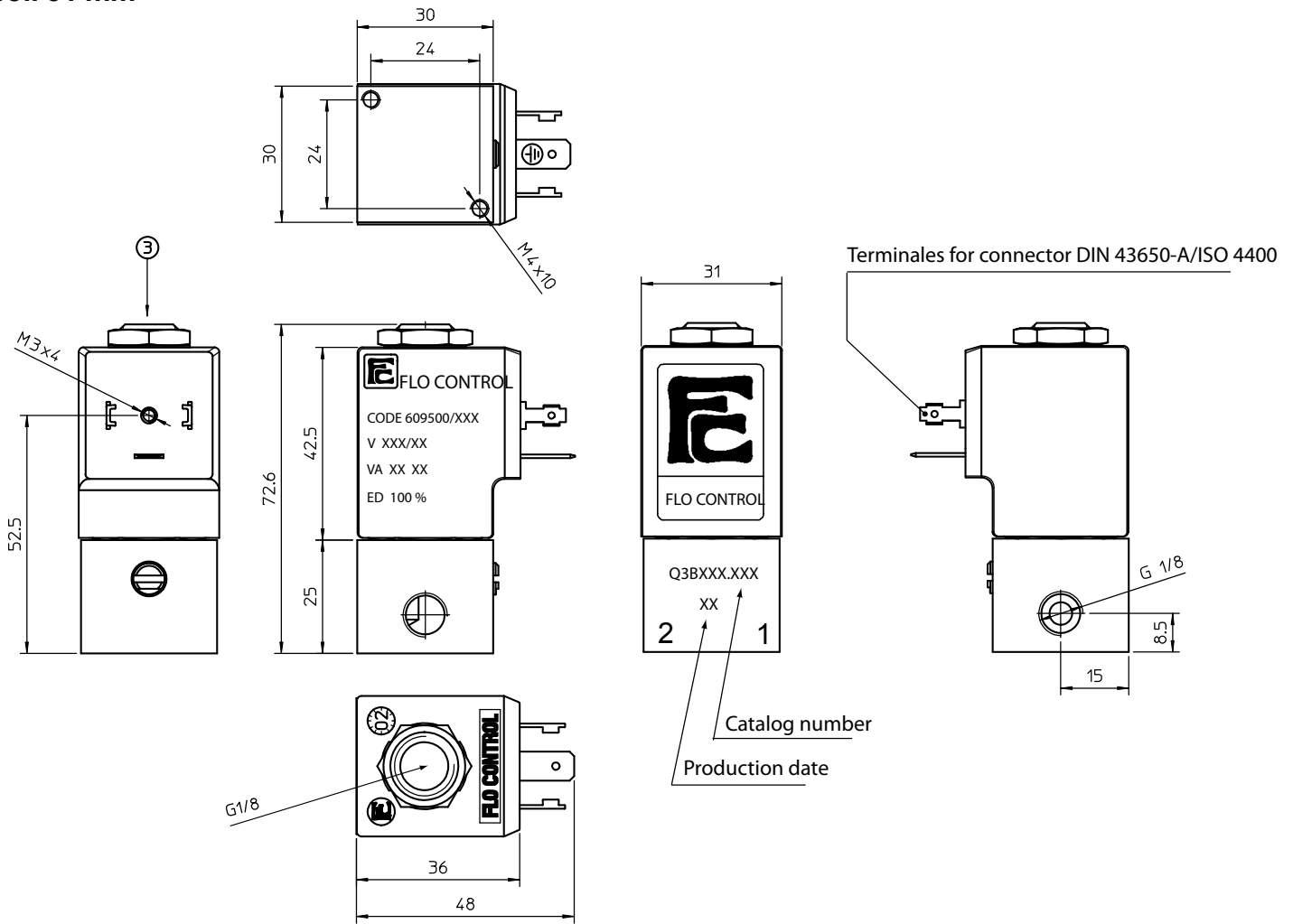
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

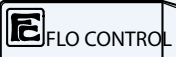
coil code
see table B on page 2/2

direct operated solenoid valves

coil 31 mm



weight 220 g

coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
 CODE 609500/XXX V XXX/XX VA XX XX ED 100 %	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
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FLO CONTROL

Solenoid Valves

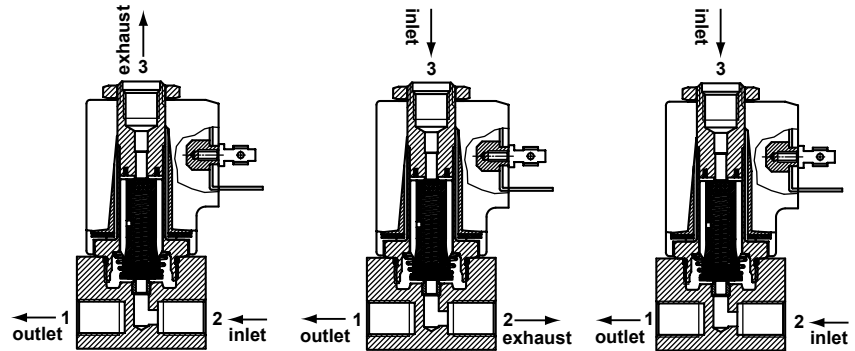


direct operated solenoid valves

coil 31 mm

Universal valves can be used in 3 different ways.
As a normally closed, as a normally open or as selector valve.

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



NC

NO

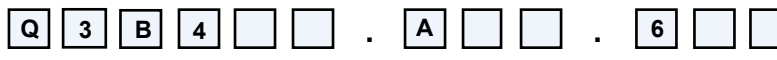
SELECTOR

* 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.	
connected as 3/2 NC 		0.8	0.5	0	18	18	10	21.5 13.5	Q3B408
		1.2	1.1	0	13	13	10	21.5 13.5	Q3B412
connected as 3/2 NO 		1.6	1.4	0	9	9	10	21.5 13.5	Q3B416
		2.4	3.0	0	5	5	10	21.5 13.5	Q3B424
connected as 3/2 selector 		3.0	3.5	0	3.5	3.5	10	21.5 13.5	Q3B430

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

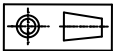
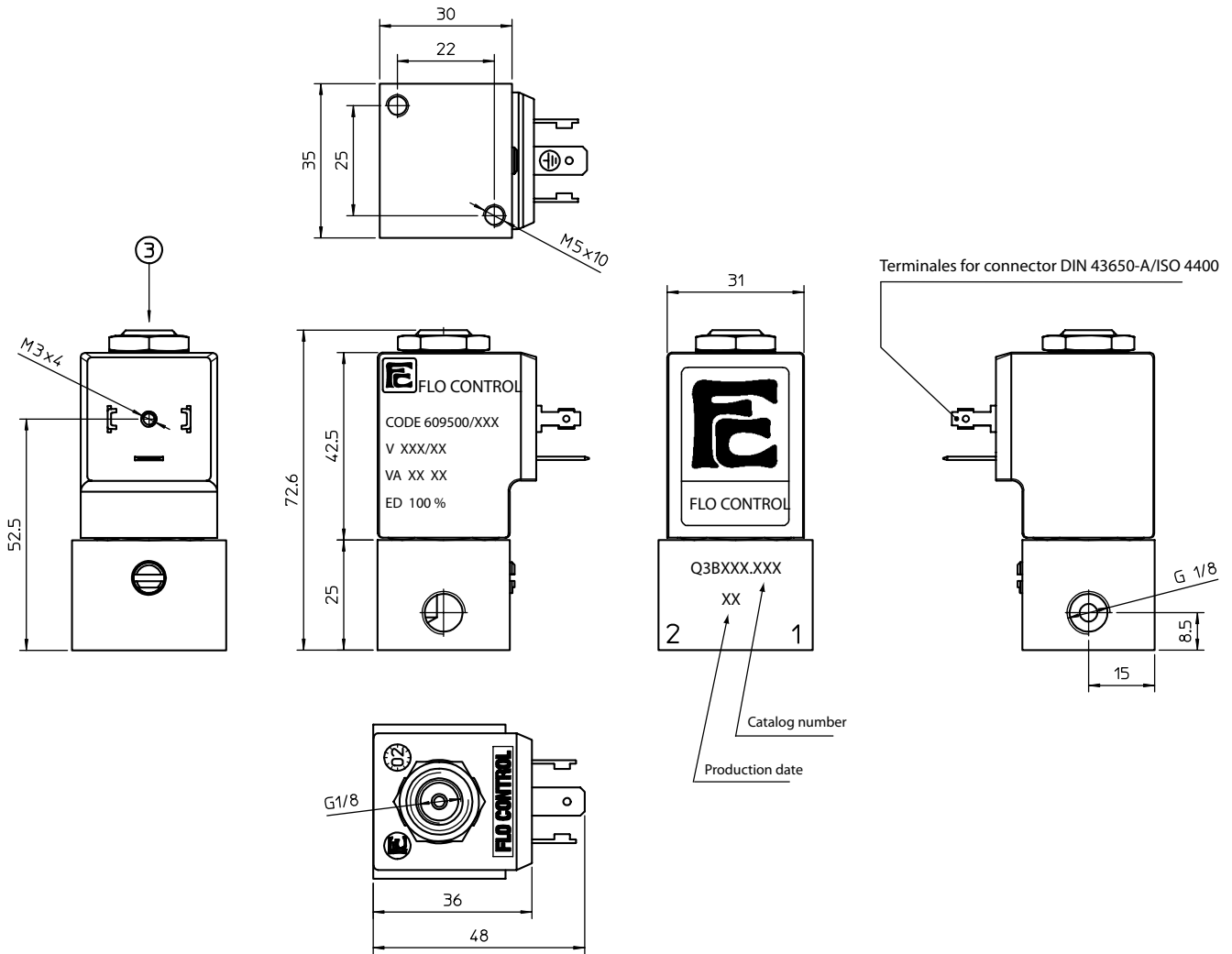
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



weight	220 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
------	--------

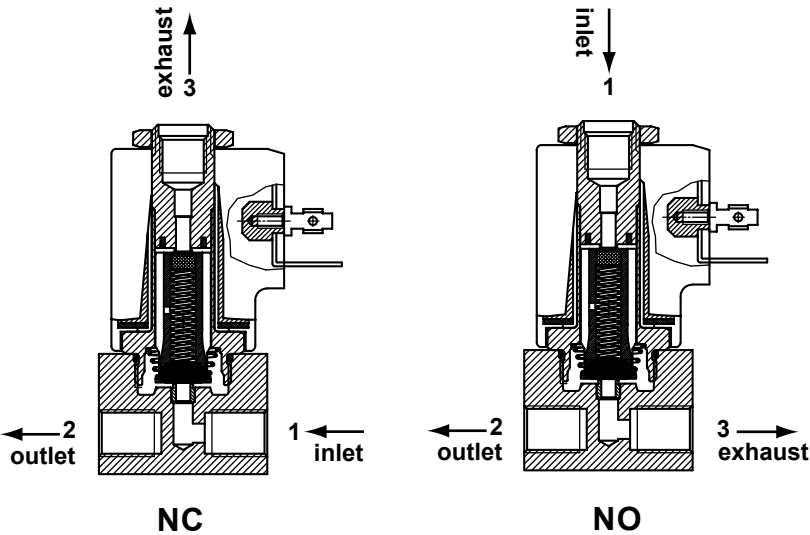
FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm

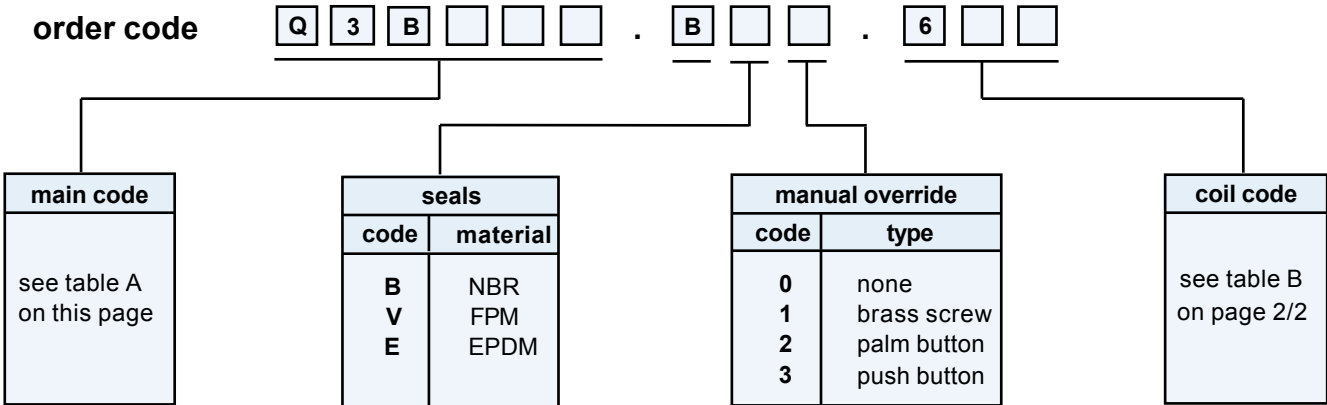
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



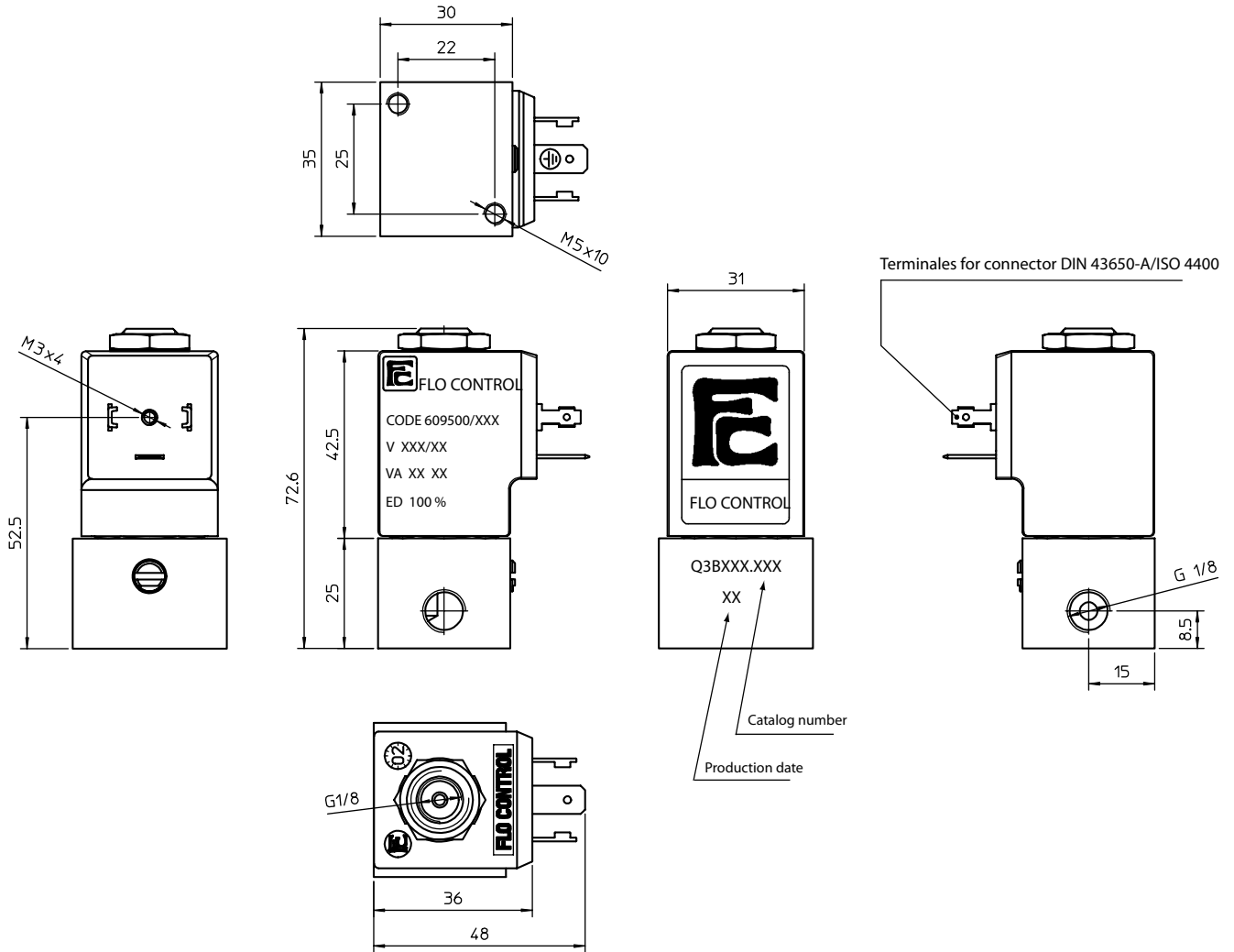
* other seal materials on request

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	Q3B108
		1.2	1.3	0	25	25	10	21.5	13.5	Q3B112
		1.6	1.7	0	15	15	10	21.5	13.5	Q3B116
		2.4	3.5	0	10	10	10	21.5	13.5	Q3B124
		3.0	4.5	0	6	6	10	21.5	13.5	Q3B130
3/2 normally open (NO) 		0.8	0.5	0	20	20	10	21.5	13.5	Q3B208
		1.2	1.1	0	15	15	10	21.5	13.5	Q3B212
		1.6	1.4	0	10	10	10	21.5	13.5	Q3B216
		2.4	3.0	0	6	6	10	21.5	13.5	Q3B224
		3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3B230

*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

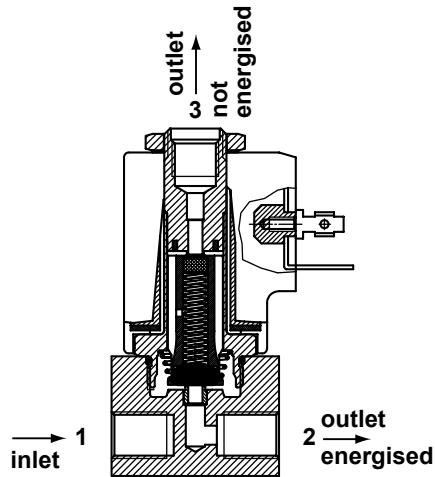
FLO CONTROL
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



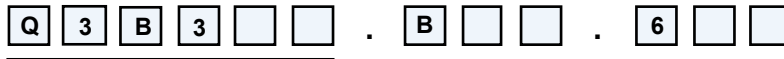
* other seal materials on request

Directional valves can be used to switch the outlet between ports 2 and 3 with all ports connected.

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 directional 	0.8	0.5	0	40	40	10	21.5	13.5	Q3B308	
	1.2	1.1	0	30	30	10	21.5	13.5	Q3B312	
	1.6	1.4	0	20	20	10	21.5	13.5	Q3B316	
	2.4	3.0	0	12	12	10	21.5	13.5	Q3B324	
	3.0	3.5	0	6	6	10	21.5	13.5	Q3B330	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

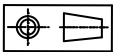
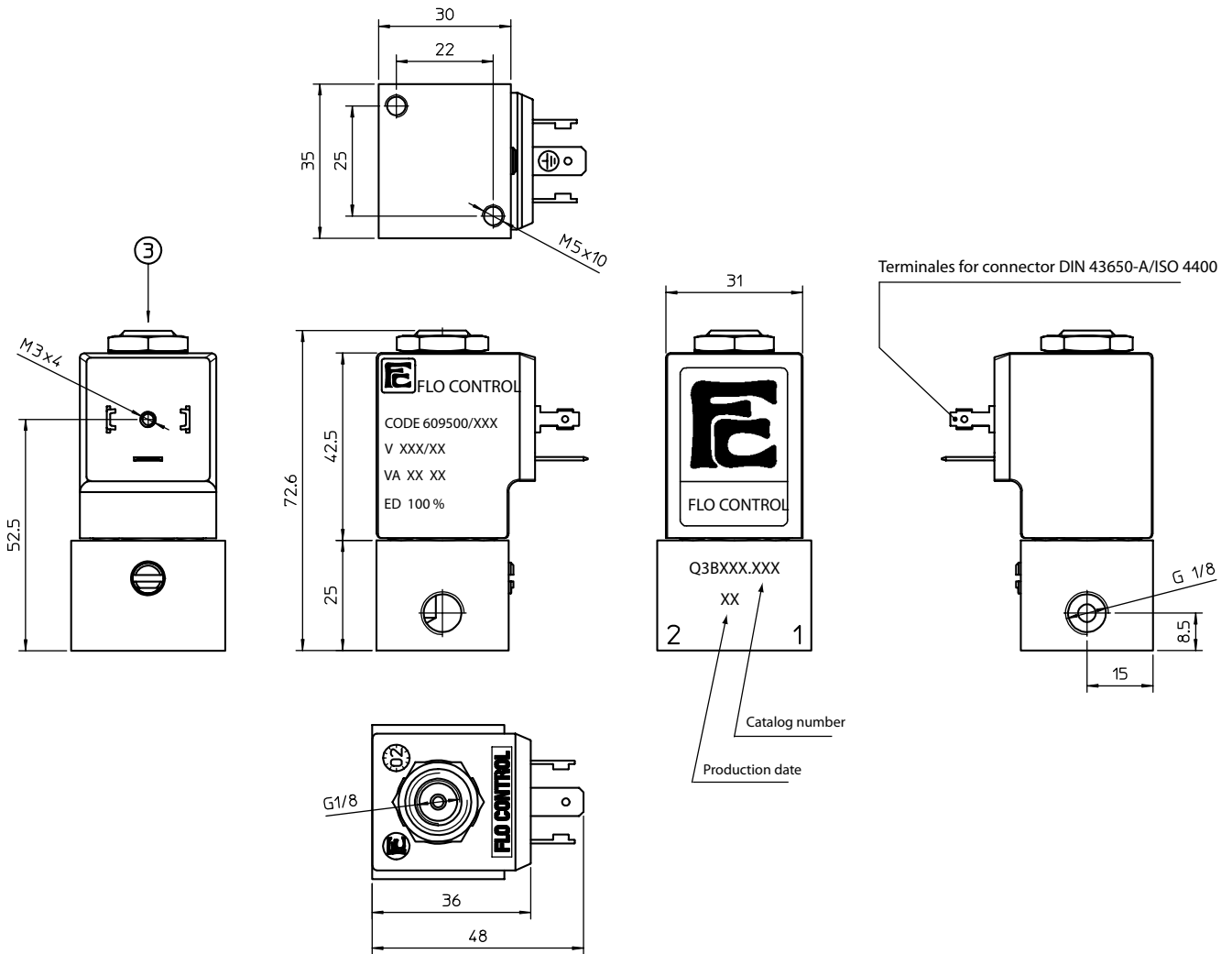
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

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

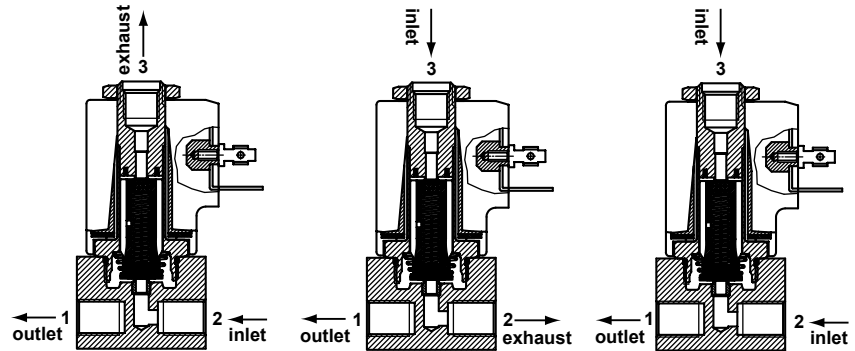


direct operated solenoid valves

coil 31 mm

Universal valves can be used in 3 different ways.
As a normally closed, as a normally open or as selector valve.

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



NC

NO

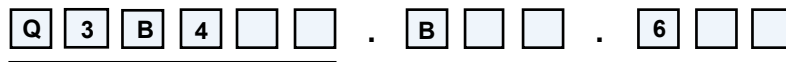
SELECTOR

* 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.	
connected as 3/2 NC 		0.8	0.5	0	18	18	10	21.5 13.5	Q3B408
connected as 3/2 NO 		1.2	1.1	0	13	13	10	21.5 13.5	Q3B412
connected as 3/2 selector 		1.6	1.4	0	9	9	10	21.5 13.5	Q3B416
		2.4	3.0	0	5	5	10	21.5 13.5	Q3B424
		3.0	3.5	0	3.5	3.5	10	21.5 13.5	Q3B430

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

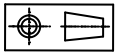
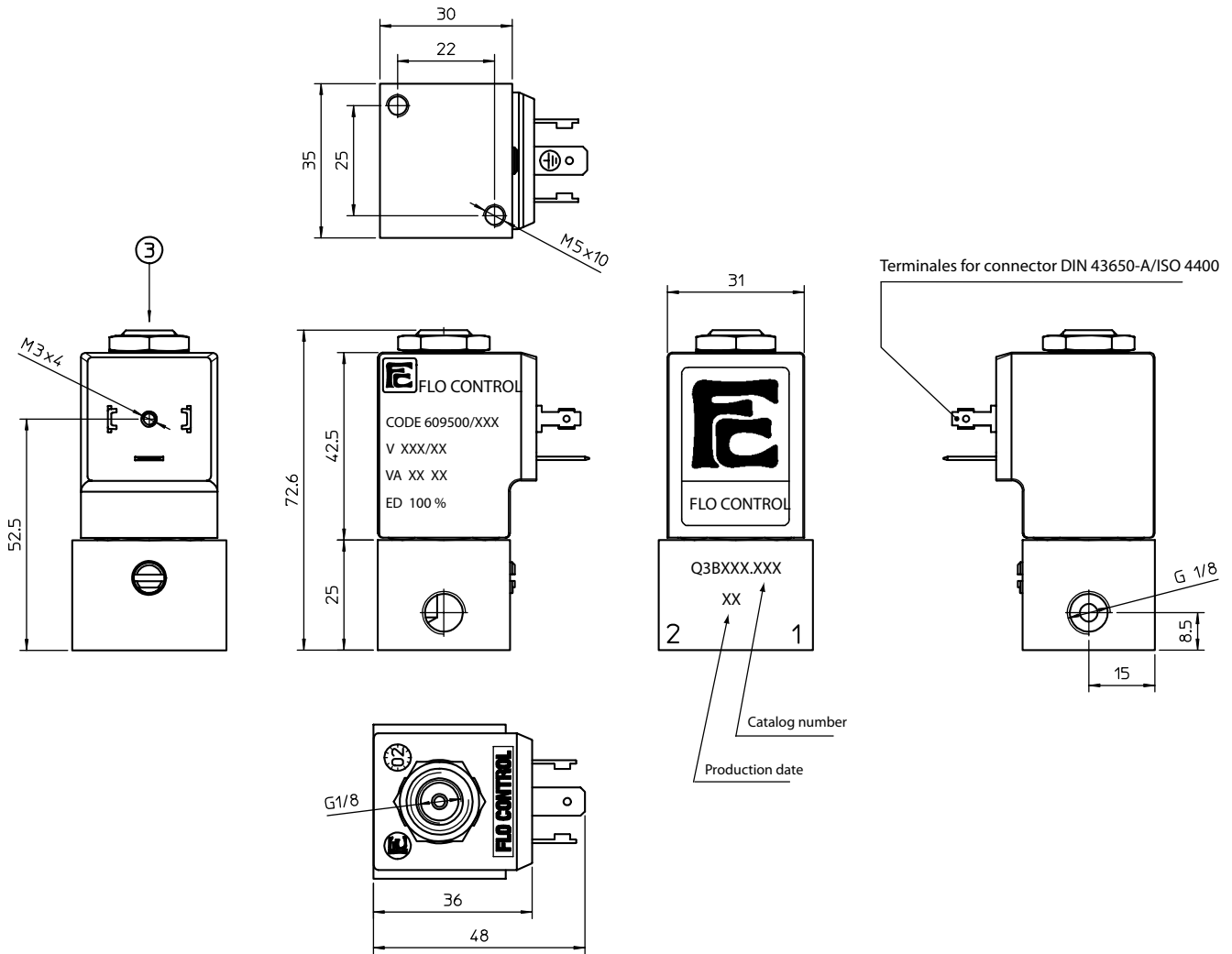
manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2



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

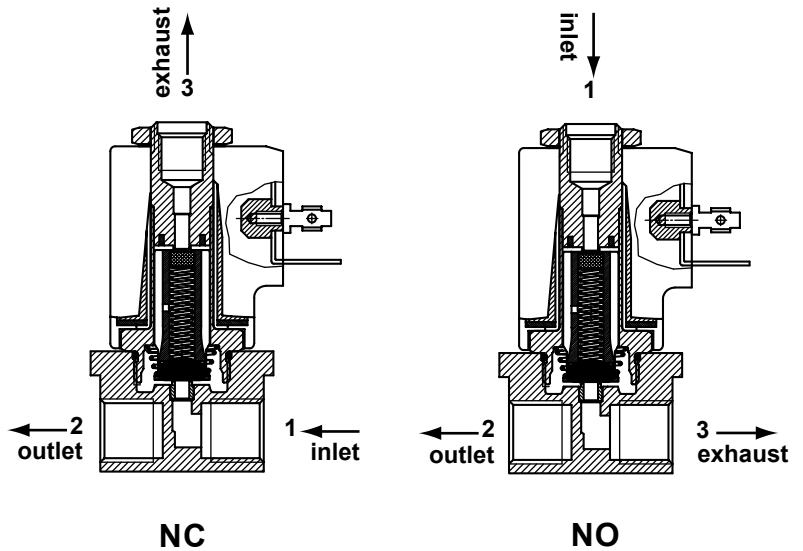


direct operated solenoid valves

coil 31 mm

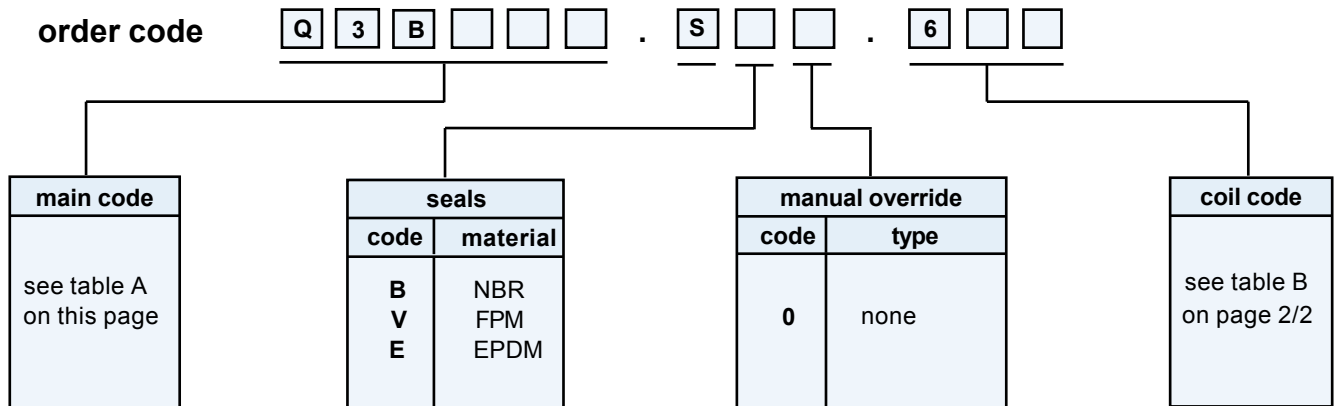
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request

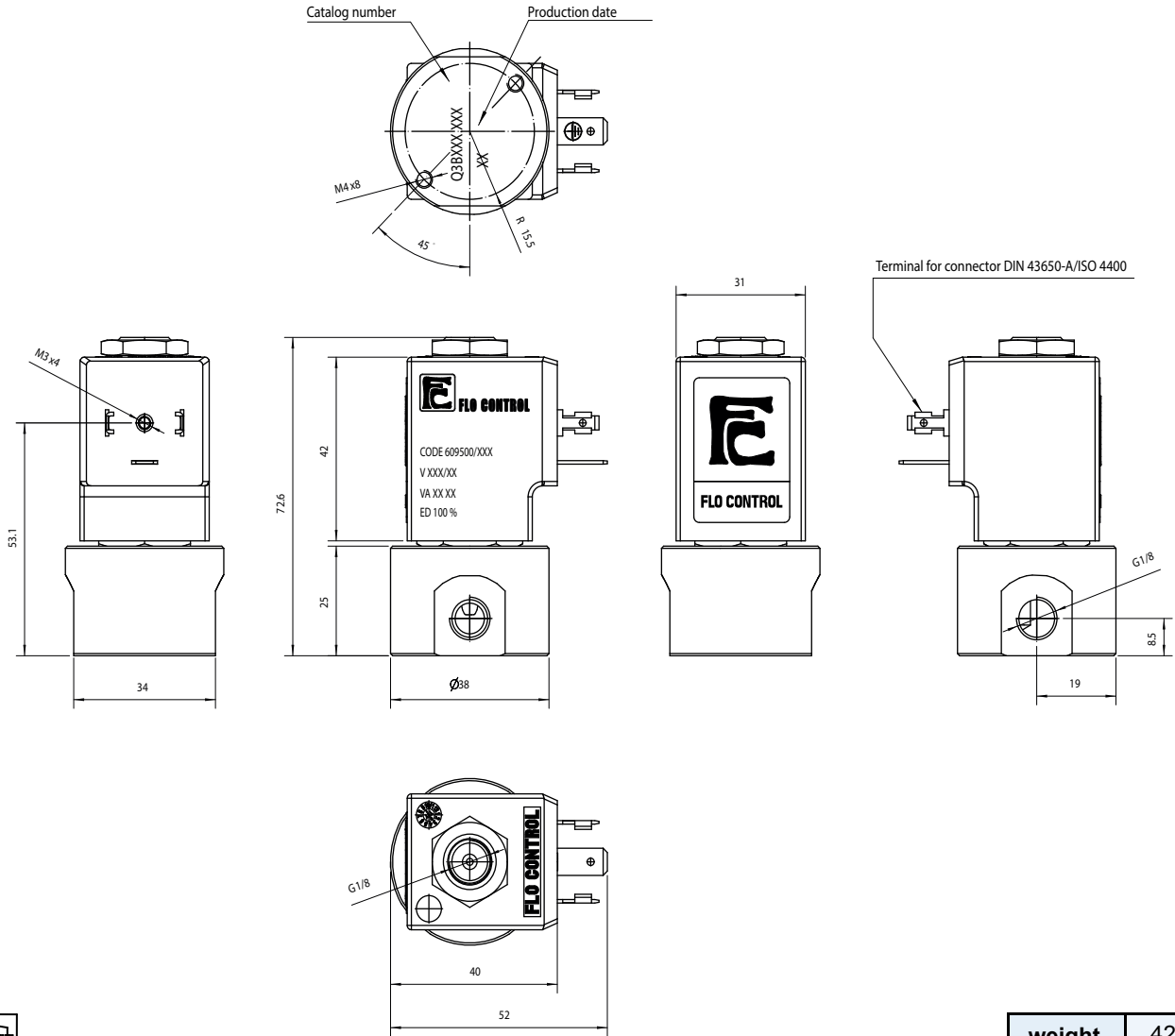


function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol
3/2 normally closed (NC) 	0.8	0.5	0	30	30	10	21.5	13.5	Q3B108	
	1.2	1.3	0	25	25	10	21.5	13.5	Q3B112	
	1.6	1.7	0	15	15	10	21.5	13.5	Q3B116	
	2.4	3.5	0	10	10	10	21.5	13.5	Q3B124	
	3.0	4.5	0	6	6	10	21.5	13.5	Q3B130	
3/2 normally open (NO) 	0.8	0.5	0	20	20	10	21.5	13.5	Q3B208	
	1.2	1.1	0	15	15	10	21.5	13.5	Q3B212	
	1.6	1.4	0	10	10	10	21.5	13.5	Q3B216	
	2.4	3.0	0	6	6	10	21.5	13.5	Q3B224	
	3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3B230	

*l/min. of water with ΔP of 1 bar



direct operated solenoid valves



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
	220	631	653	-
	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

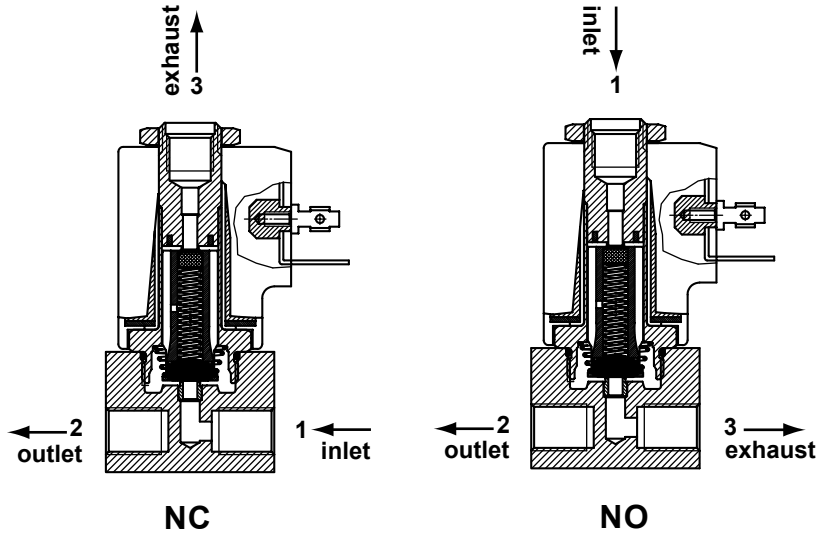
FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm

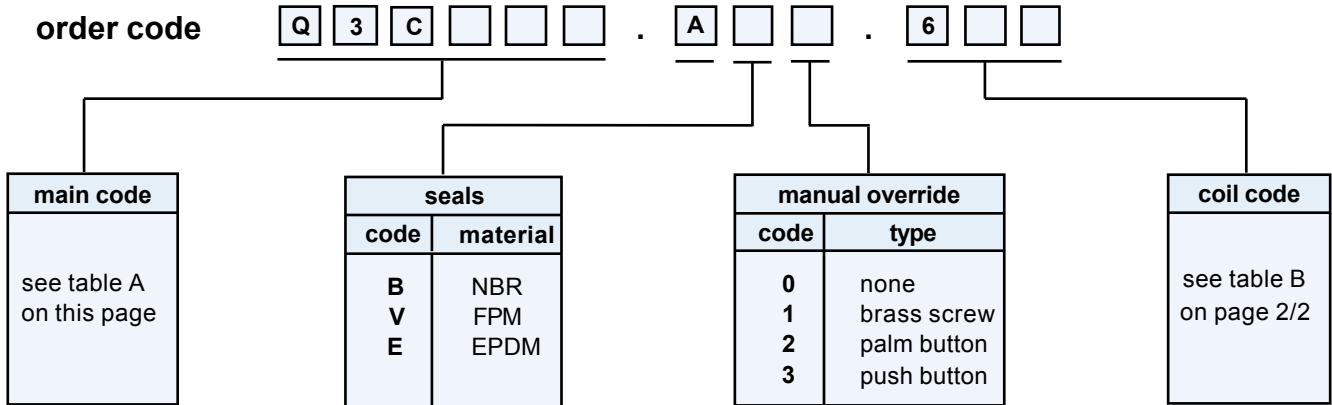
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

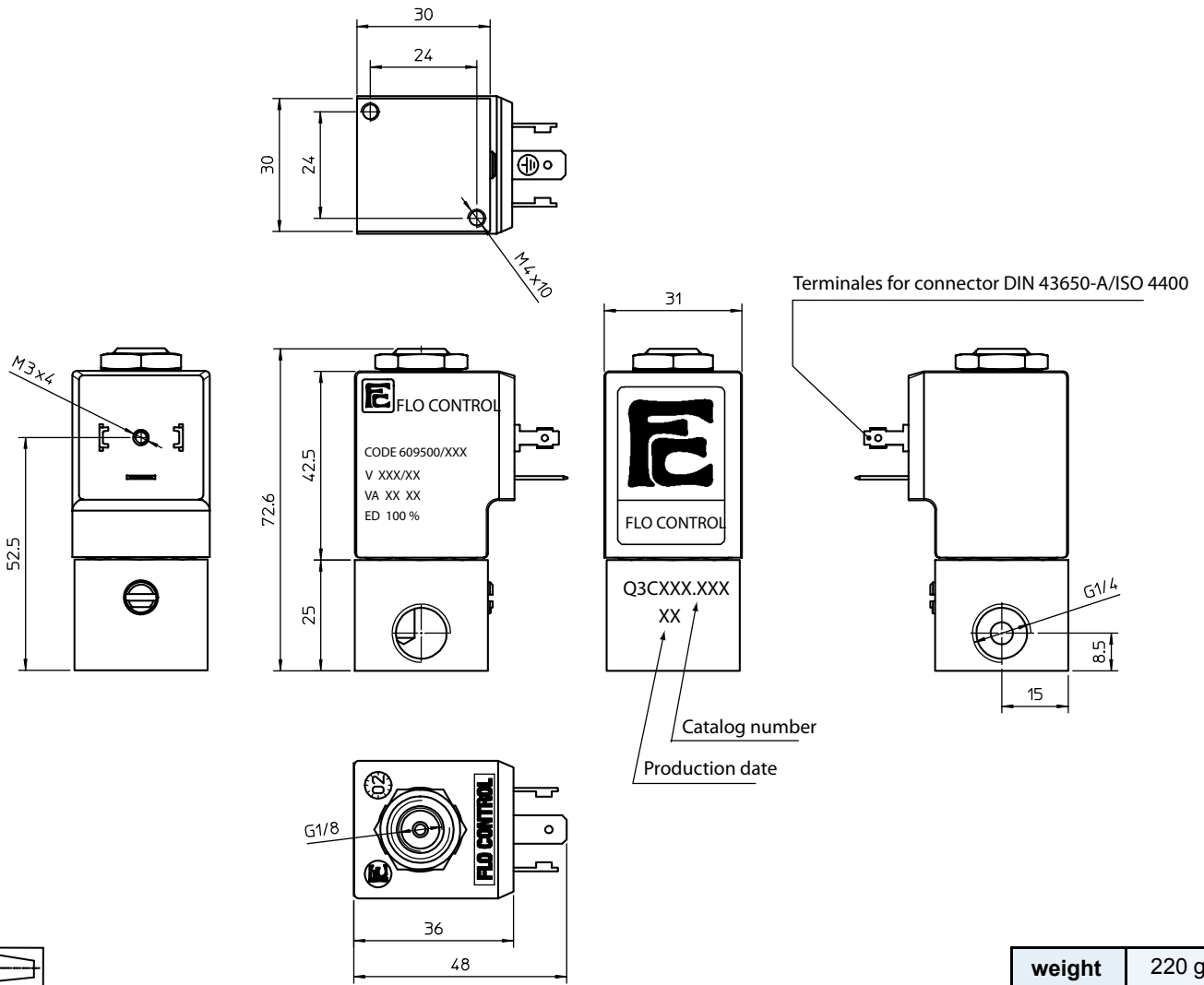
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol	
3/2 normally closed (NC) 		0.8	0.5	0	30	30	10	21.5 13.5	Q3C108
		1.2	1.3	0	25	25	10	21.5 13.5	Q3C112
		1.6	1.7	0	15	15	10	21.5 13.5	Q3C116
		2.4	3.5	0	10	10	10	21.5 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



direct operated solenoid valves

coil 31 mm



weight 220 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
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FLO CONTROL

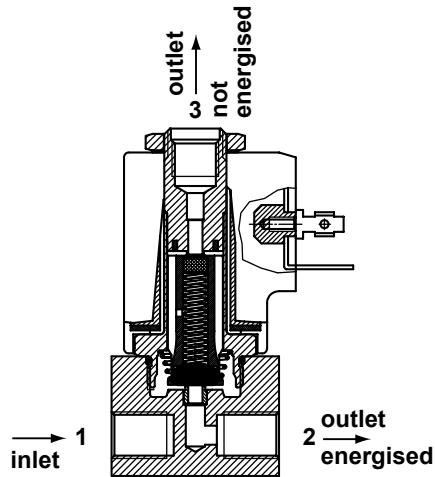
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



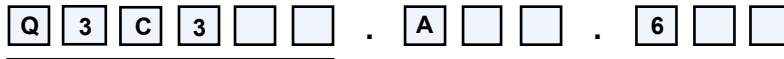
* other seal materials on request

Directional valves can be used to switch the outlet between ports 2 and 3 with all ports connected.

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 directional 	0.8	0.5	0	40	40	10	21.5	13.5	Q3C308	
	1.2	1.1	0	30	30	10	21.5	13.5	Q3C312	
	1.6	1.4	0	20	20	10	21.5	13.5	Q3C316	
	2.4	3.0	0	12	12	10	21.5	13.5	Q3C324	
	3.0	3.5	0	6	6	10	21.5	13.5	Q3C330	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

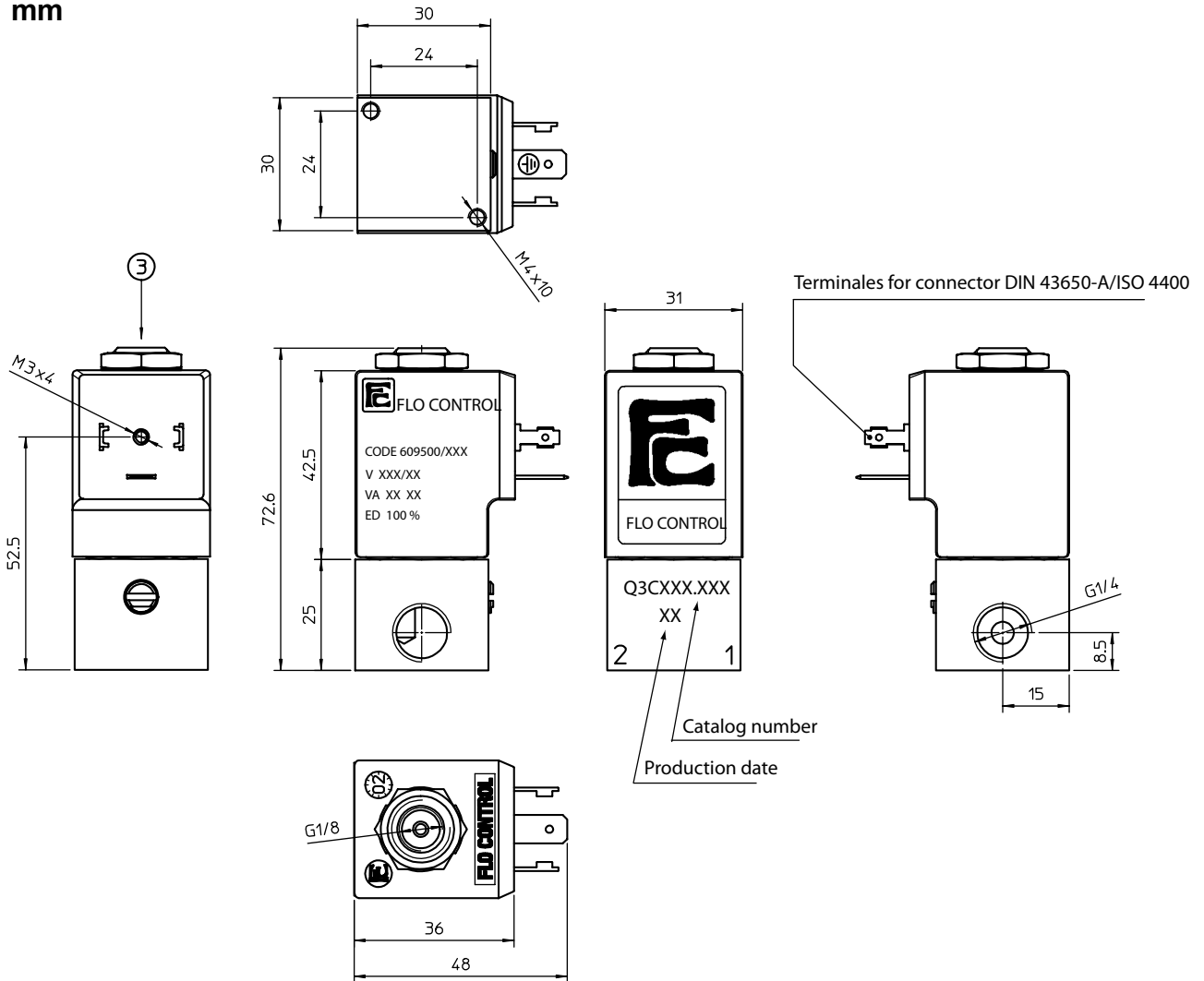
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

direct operated solenoid valves

coil 31 mm



weight 220 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
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FLO CONTROL

Solenoid Valves



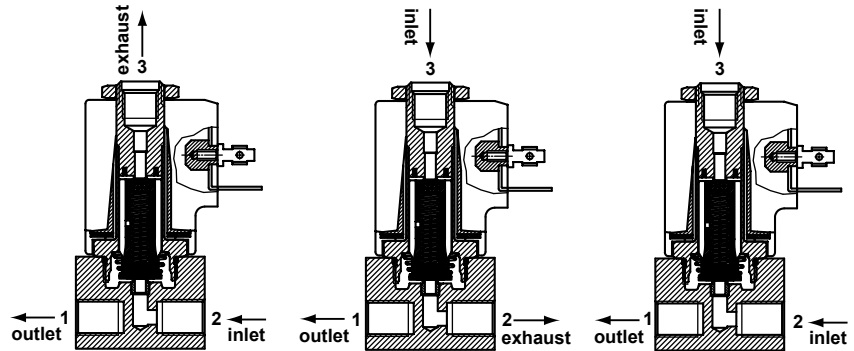
direct operated solenoid valves

coil 31 mm

Universal valves can be used in 3 different ways.

As a normally closed, as a normally open or as selector valve.

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



NC

NO

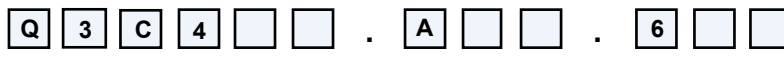
SELECTOR

* 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.	
connected as 3/2 NC 		0.8	0.5	0	18	18	10	21.5 13.5	Q3C408
		1.2	1.1	0	13	13	10	21.5 13.5	Q3C412
connected as 3/2 NO 		1.6	1.4	0	9	9	10	21.5 13.5	Q3C416
		2.4	3.0	0	5	5	10	21.5 13.5	Q3C424
connected as 3/2 selector 		3.0	3.5	0	3.5	3.5	10	21.5 13.5	Q3C430

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

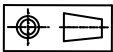
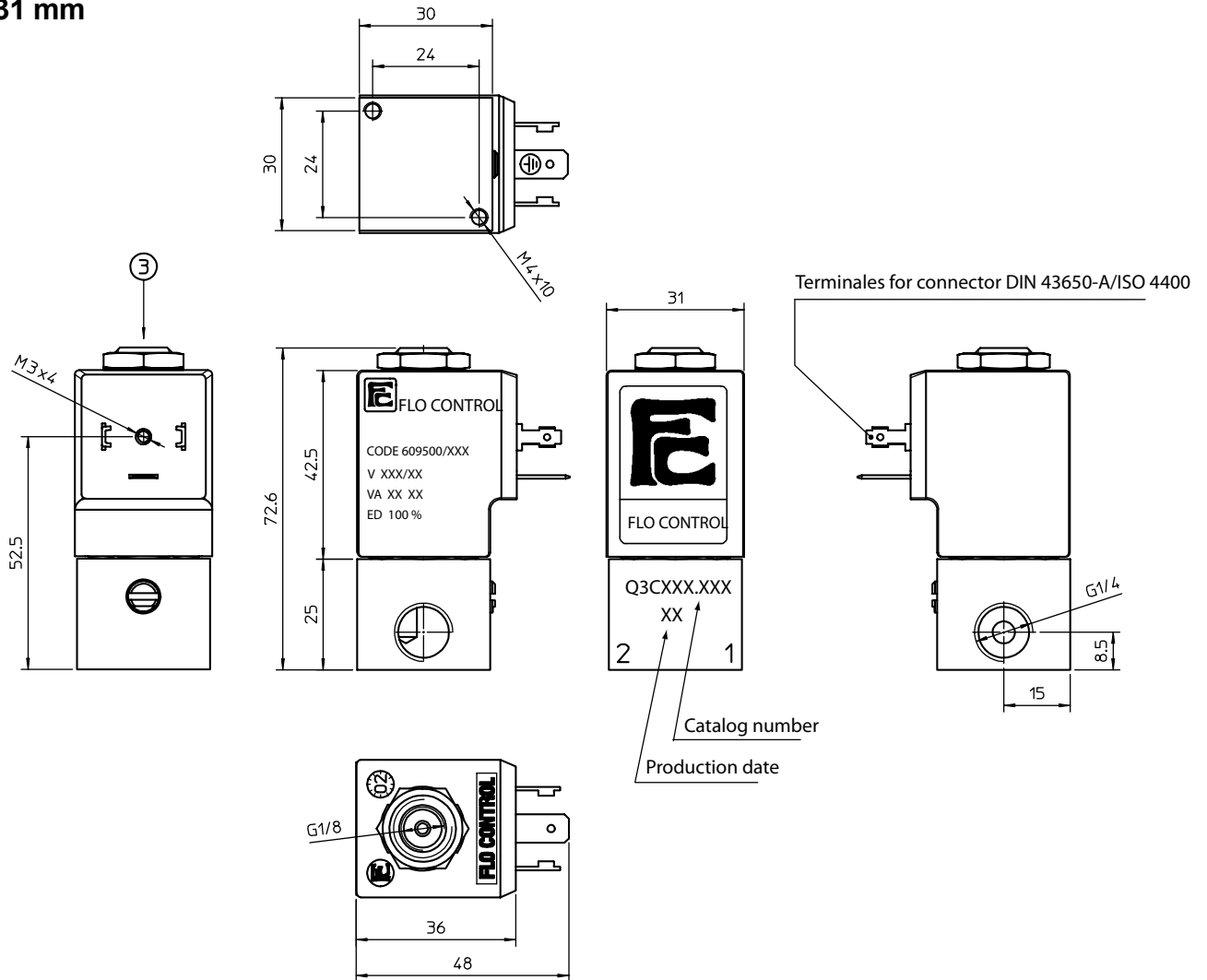
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



weight 220 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)

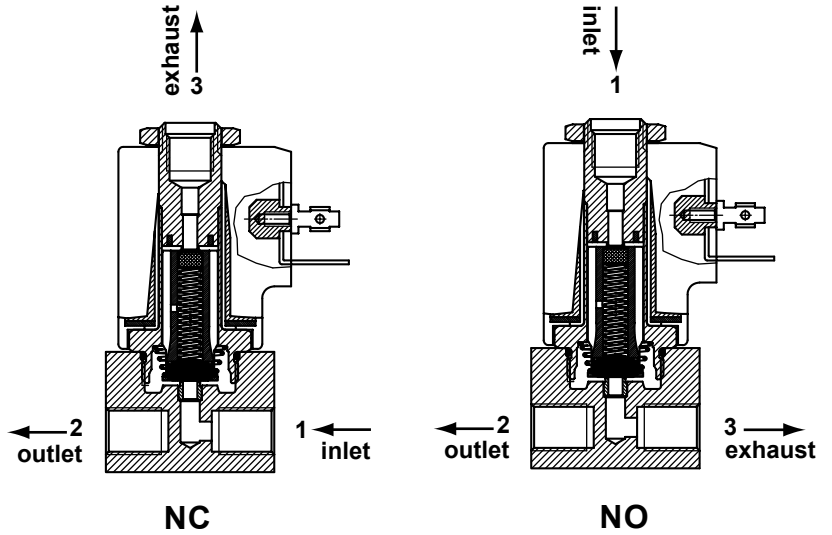
code Z10031

FLO CONTROL
Solenoid Valves



direct operated solenoid valves
coil 31 mm

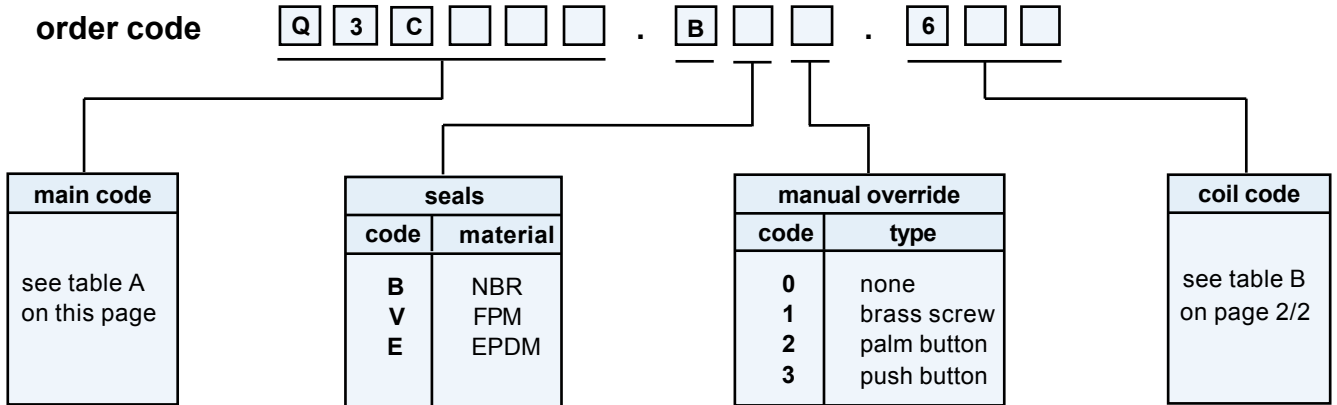
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

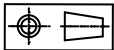
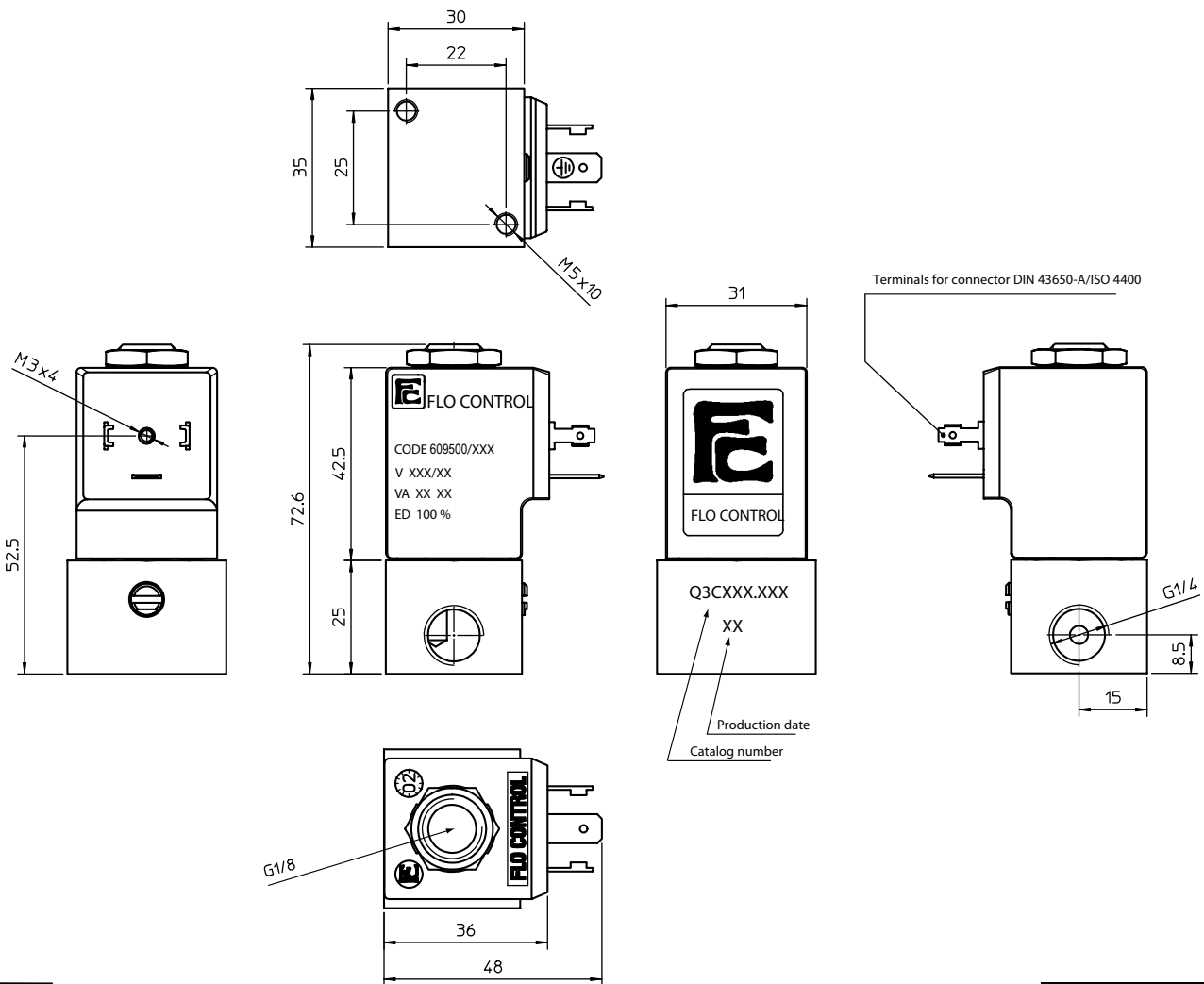
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol	
3/2 normally closed (NC) 		0.8	0.5	0	30	30	10	21.5 13.5	Q3C108
		1.2	1.3	0	25	25	10	21.5 13.5	Q3C112
		1.6	1.7	0	15	15	10	21.5 13.5	Q3C116
		2.4	3.5	0	10	10	10	21.5 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



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

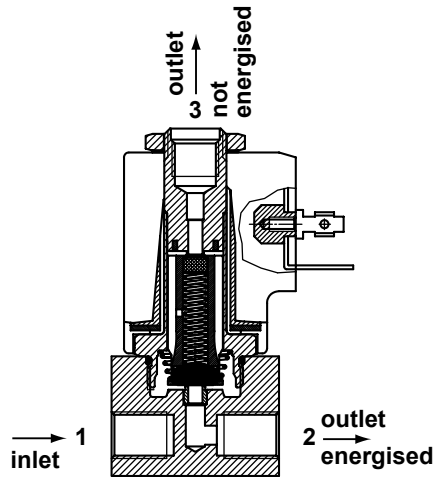
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



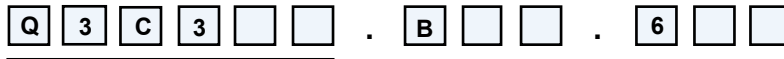
* other seal materials on request

Directional valves can be used to switch the outlet between ports 2 and 3 with all ports connected.

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 directional 	0.8	0.5	0	40	40	10	21.5	13.5	Q3C308	
	1.2	1.1	0	30	30	10	21.5	13.5	Q3C312	
	1.6	1.4	0	20	20	10	21.5	13.5	Q3C316	
	2.4	3.0	0	12	12	10	21.5	13.5	Q3C324	
	3.0	3.5	0	6	6	10	21.5	13.5	Q3C330	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

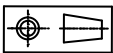
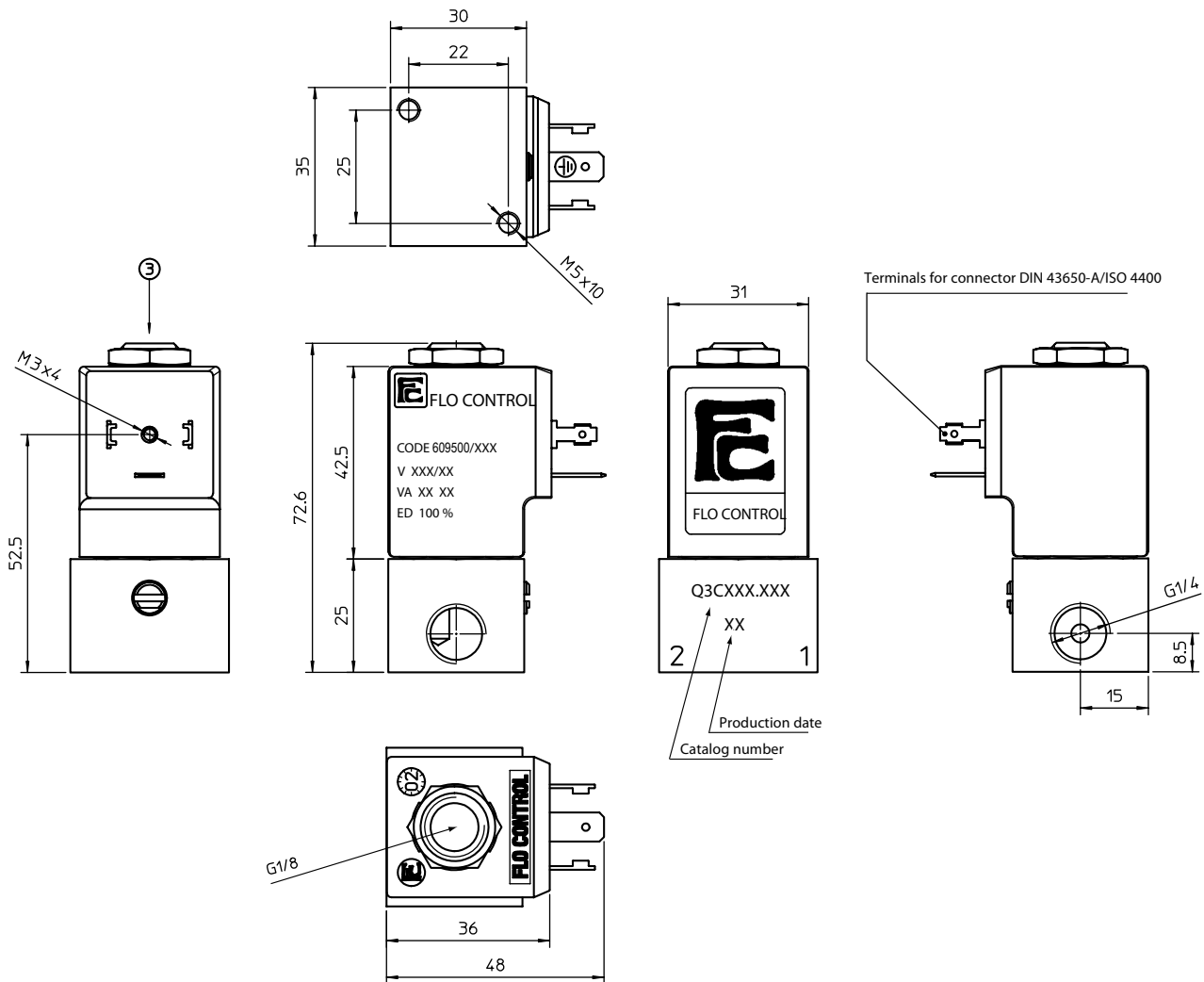
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2

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
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FLO CONTROL

Solenoid Valves

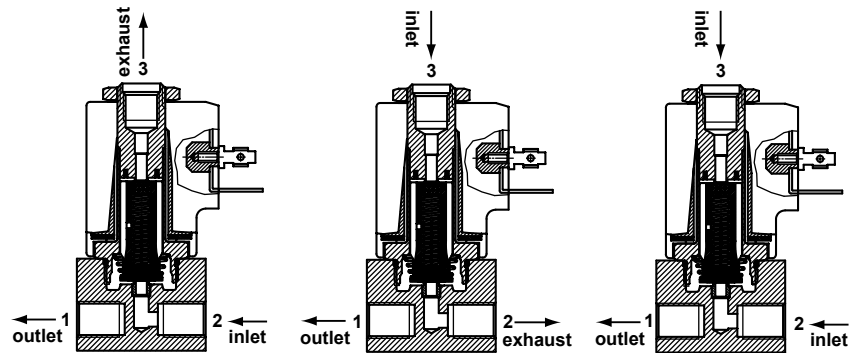


direct operated solenoid valves

coil 31 mm

Universal valves can be used in 3 different ways.
As a normally closed, as a normally open or as selector valve.

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



NC

NO

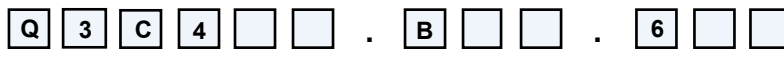
SELECTOR

* 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.	
connected as 3/2 NC 		0.8	0.5	0	18	18	10	21.5 13.5	Q3C408
		1.2	1.1	0	13	13	10	21.5 13.5	Q3C412
connected as 3/2 NO 		1.6	1.4	0	9	9	10	21.5 13.5	Q3C416
		2.4	3.0	0	5	5	10	21.5 13.5	Q3C424
connected as 3/2 selector 		3.0	3.5	0	3.5	3.5	10	21.5 13.5	Q3C430

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

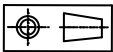
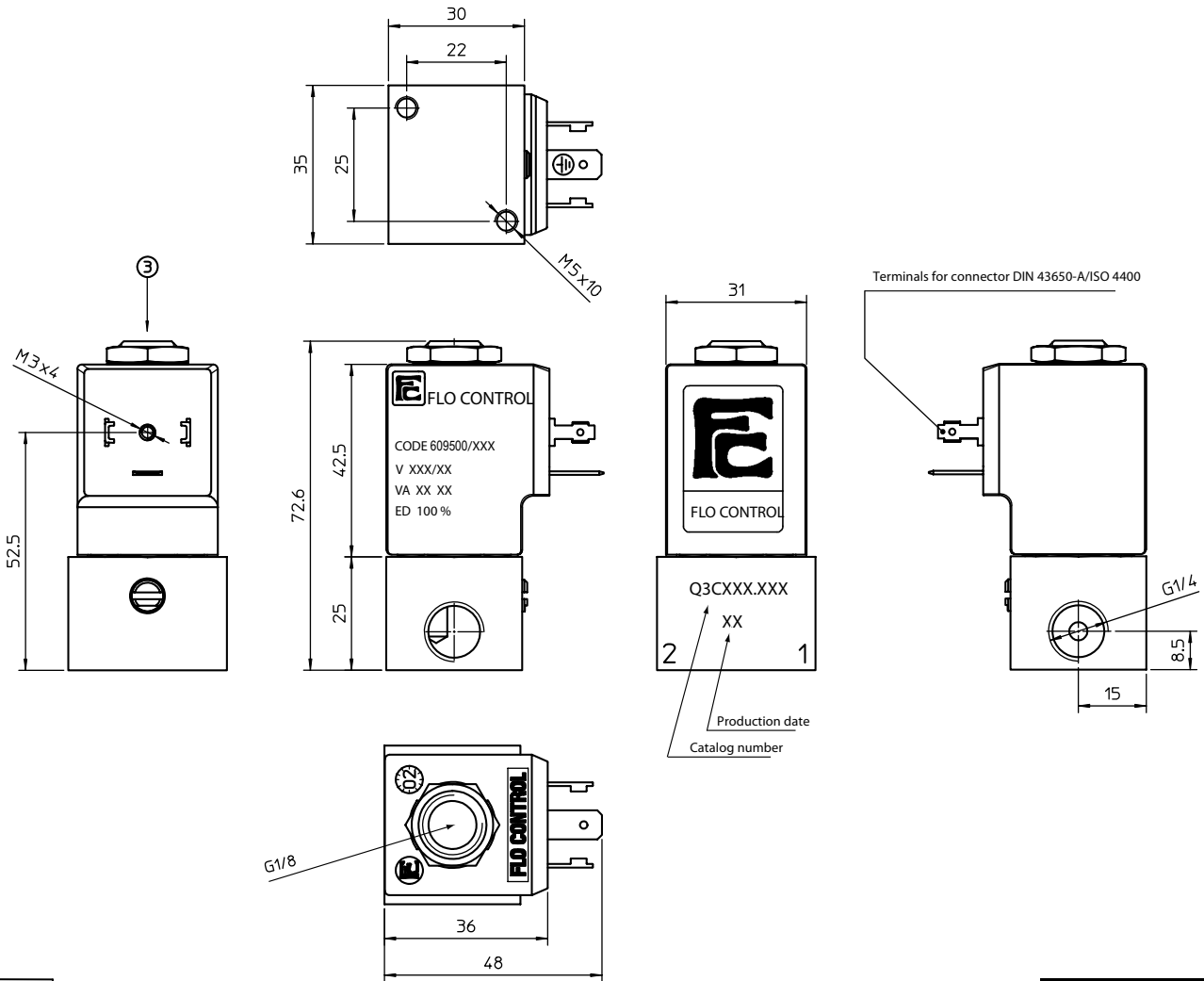
manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2



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

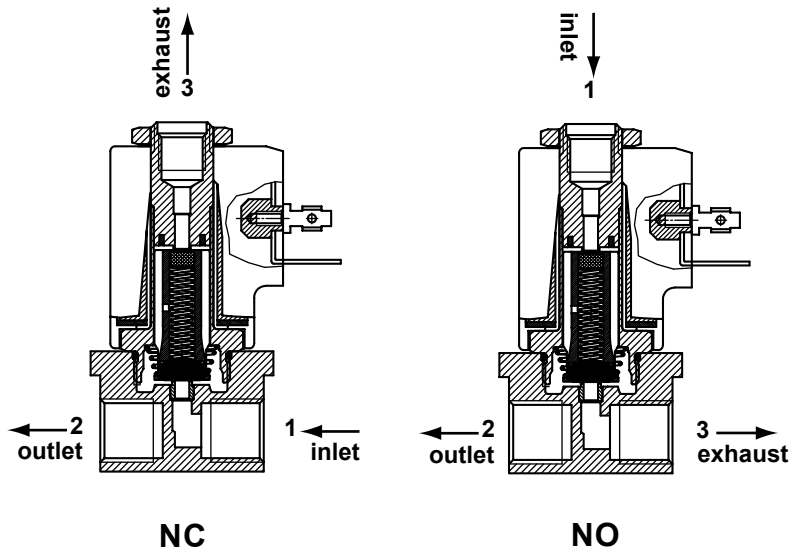


direct operated solenoid valves

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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

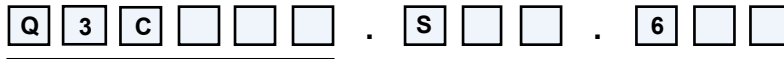
* other seal materials on request



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

order code



main code
see table A on this page

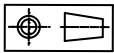
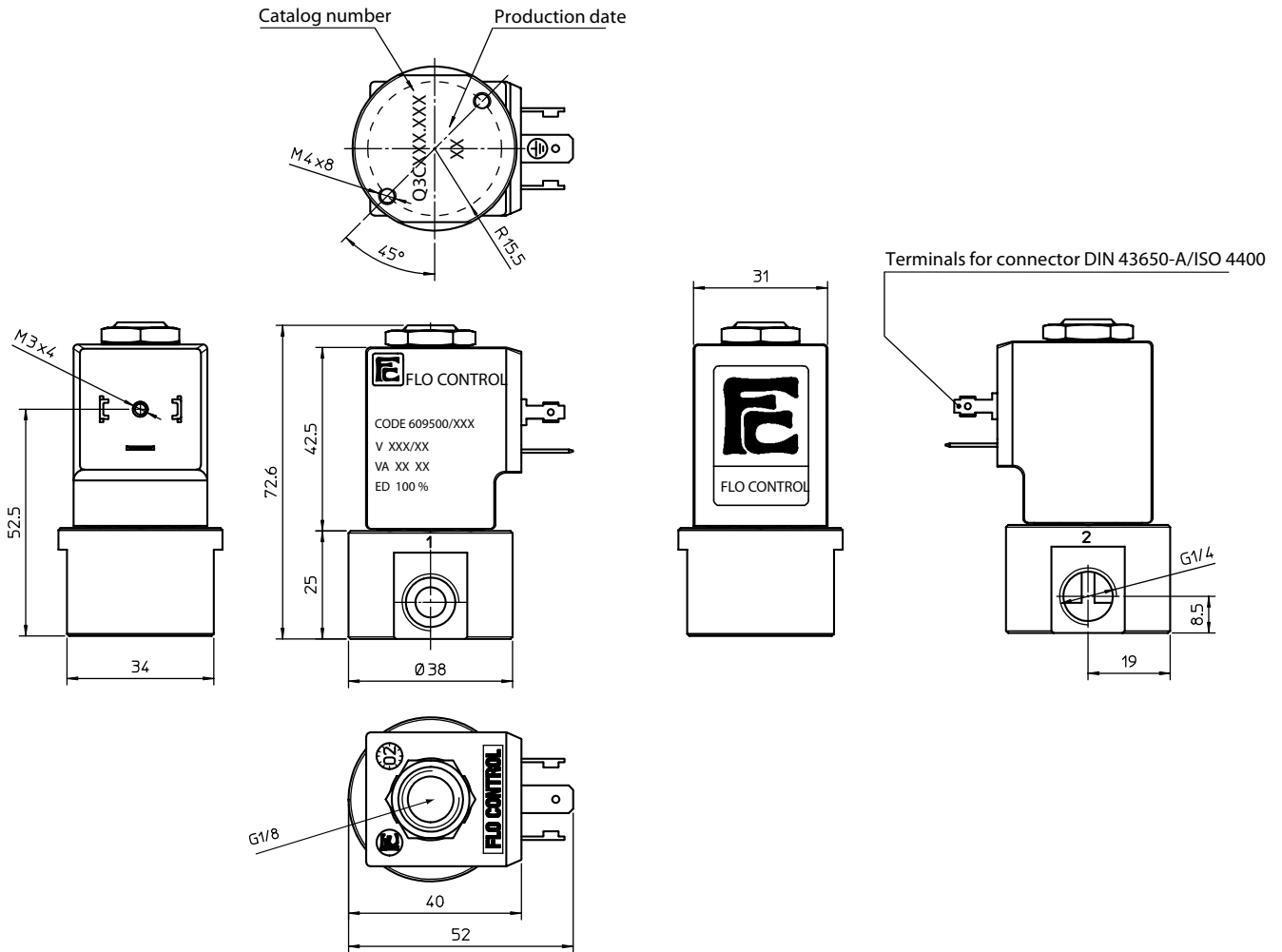
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none

coil code
see table B on page 2/2

direct operated solenoid valves

coil 31 mm



weight	420 g
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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
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FLO CONTROL

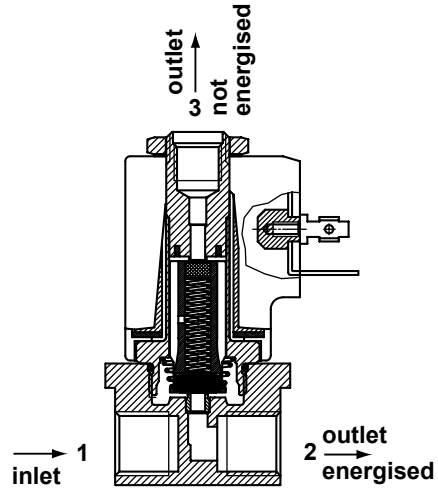
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



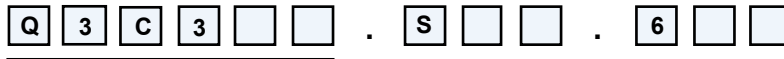
* other seal materials on request

Directional valves can be used to switch the outlet between ports 2 and 3 with all ports connected.

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 directional 		0.8	0.5	0	40	40	10	21.5 13.5	Q3C308
		1.2	1.1	0	30	30	10	21.5 13.5	Q3C312
		1.6	1.4	0	20	20	10	21.5 13.5	Q3C316
		2.4	3.0	0	12	12	10	21.5 13.5	Q3C324
		3.0	3.5	0	6	6	10	21.5 13.5	Q3C330

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none

coil code
see table B on page 2/2

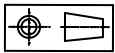
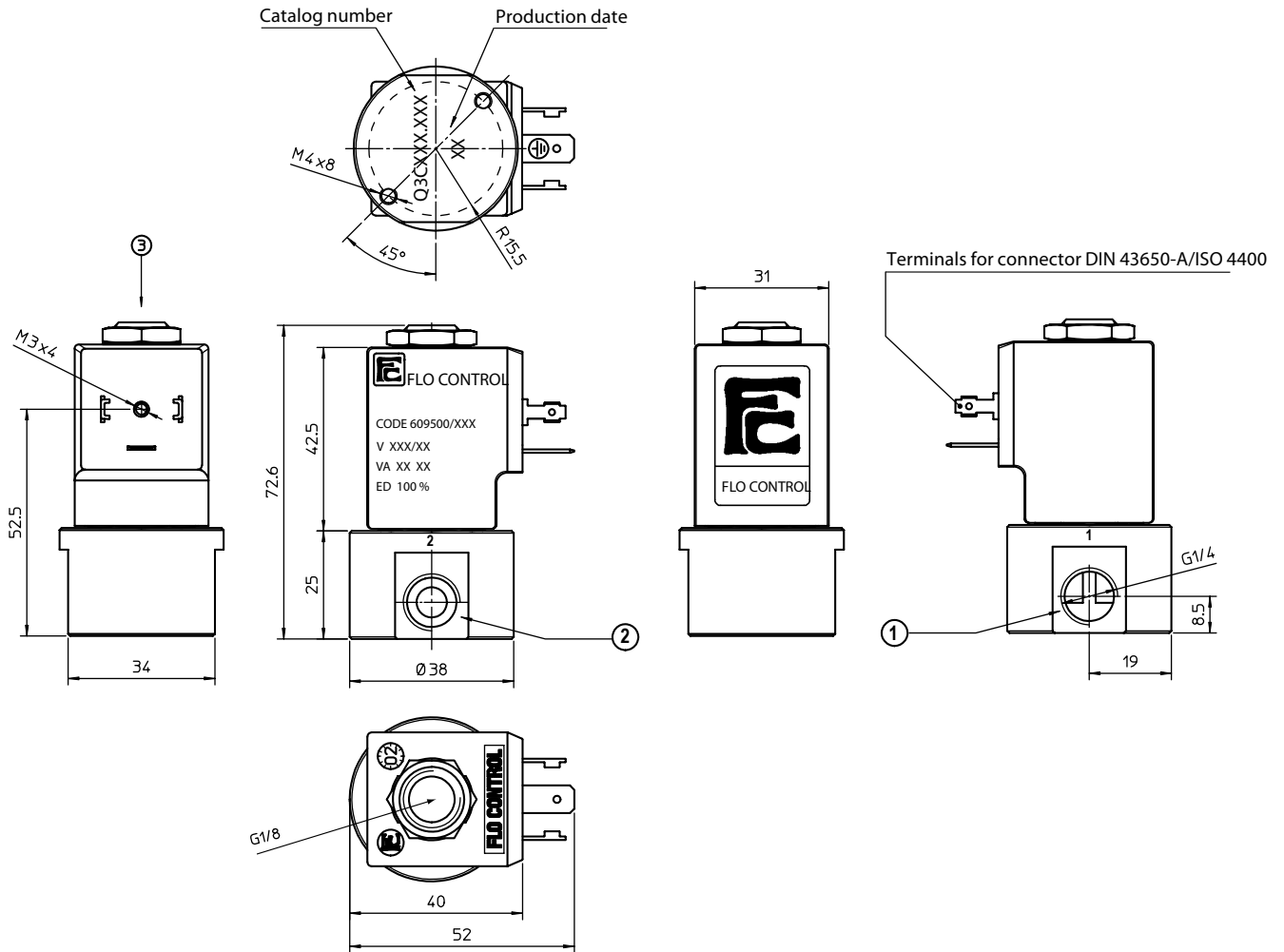
FLO CONTROL

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
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FLO CONTROL
Solenoid Valves

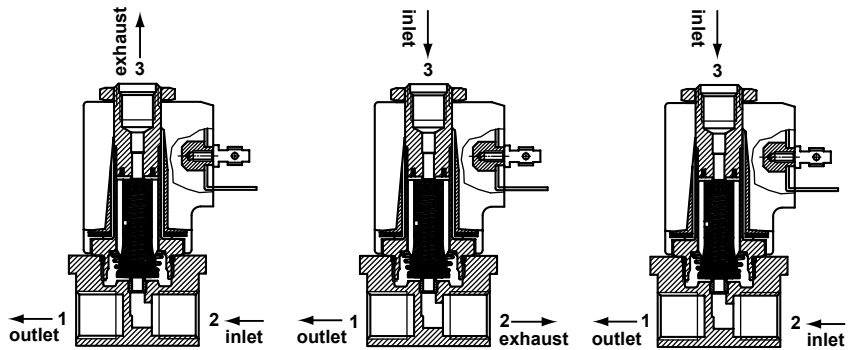


direct operated solenoid valves

coil 31 mm

Universal valves can be used in 3 different ways.
As a normally closed, as a normally open or as selector valve.

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



NC

NO

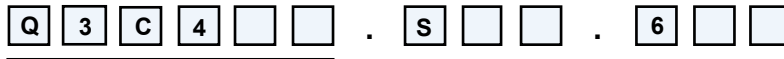
SELECTOR

* 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.
connected as 3/2 NC		0.8	0.5	0	18	18	10	21.5	13.5	Q3C408
		1.2	1.1	0	13	13	10	21.5	13.5	Q3C412
connected as 3/2 NO		1.6	1.4	0	9	9	10	21.5	13.5	Q3C416
		2.4	3.0	0	5	5	10	21.5	13.5	Q3C424
connected as 3/2 selector		3.0	3.5	0	3.5	3.5	10	21.5	13.5	Q3C430

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NRB
V	FPM
E	EPDM

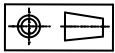
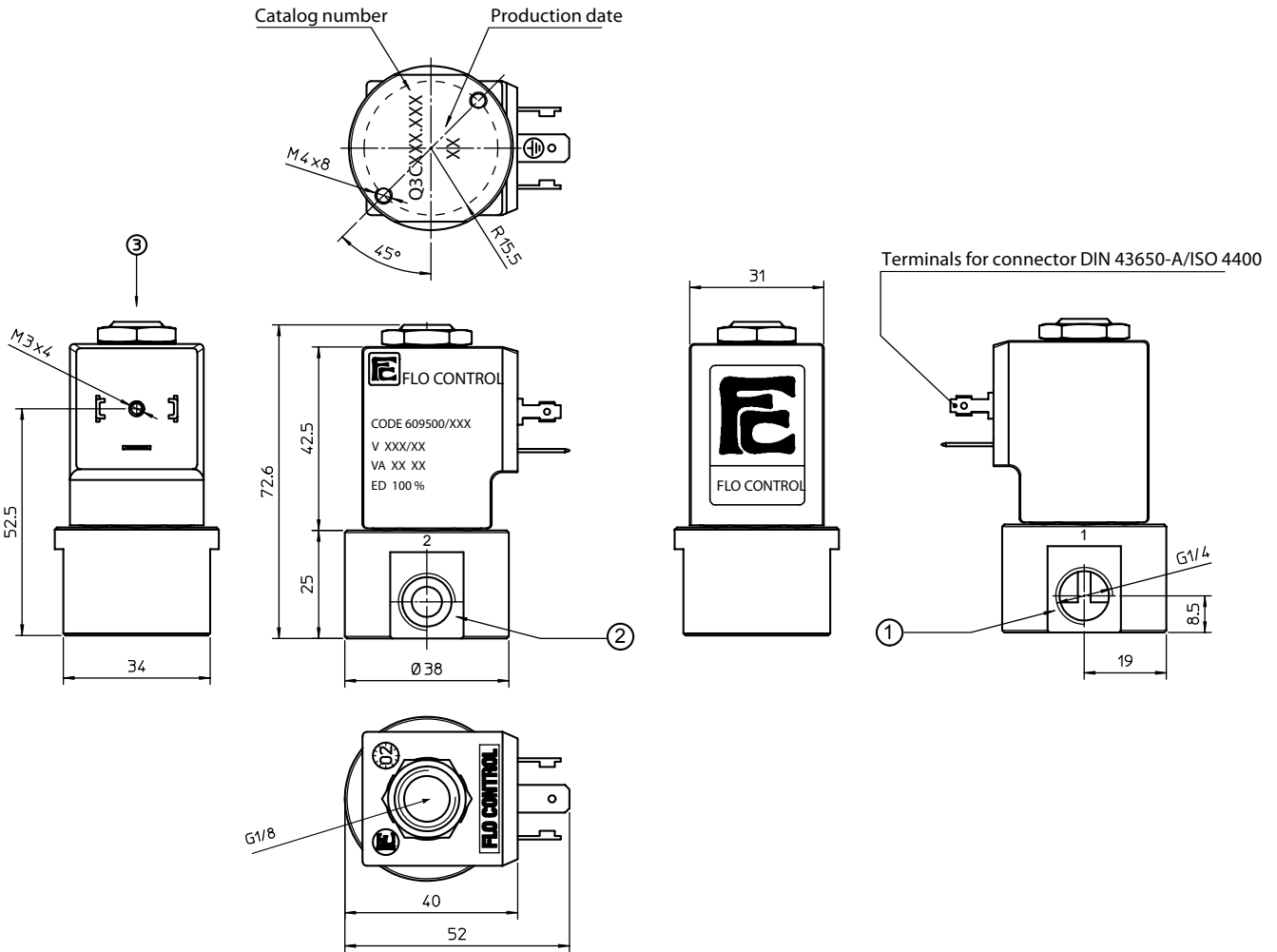
manual override	
code	type
0	none

coil code
see table B on page 2/2



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
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FLO CONTROL

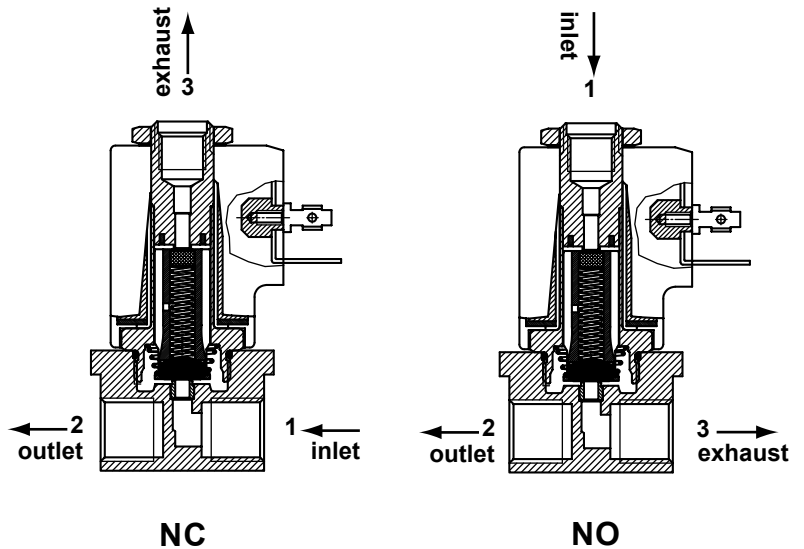
Solenoid Valves



direct operated solenoid valves

coil 31 mm

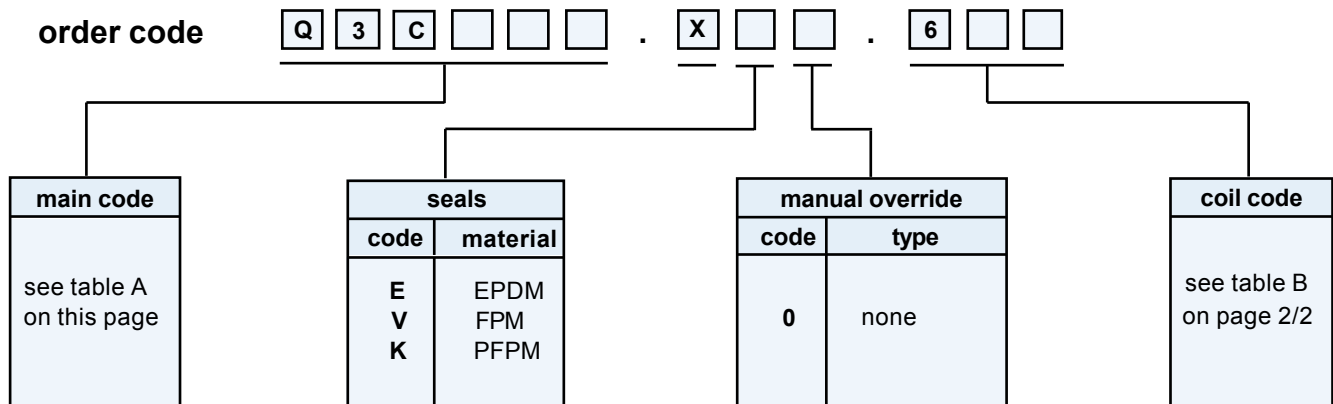
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	EPDM, FPM, PFPM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

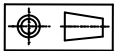
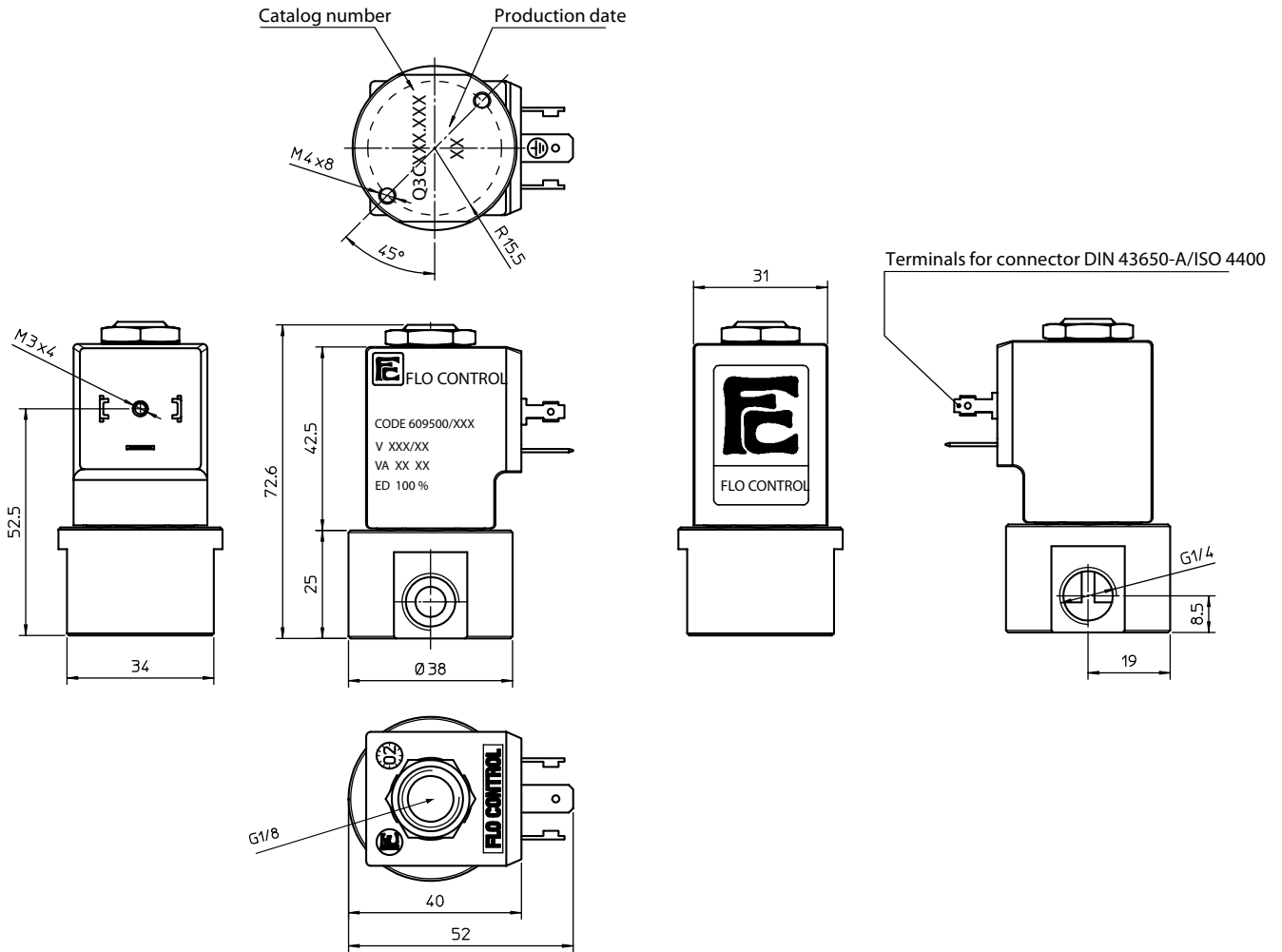
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code
				min.	max. DC	max. AC	Watt DC	V.A. AC inr. hol.	
3/2 normally closed (NC) 		0.8	0.5	0	30	30	10	21.5 13.5	Q3C108
		1.2	1.3	0	25	25	10	21.5 13.5	Q3C112
		1.6	1.7	0	15	15	10	21.5 13.5	Q3C116
		2.4	3.5	0	10	10	10	21.5 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



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
------	--------

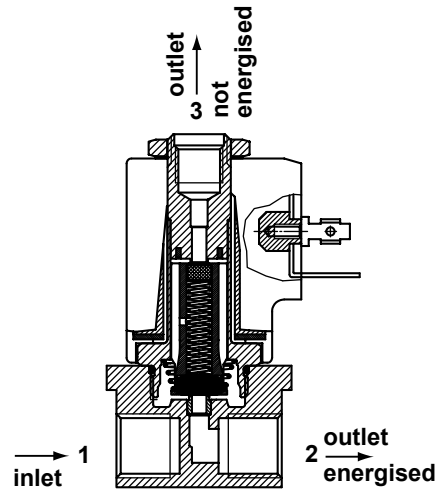
FLO CONTROL
Solenoid Valves



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



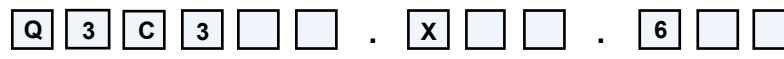
* other seal materials on request

Directional valves can be used to switch the outlet between ports 2 and 3 with all ports connected.

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 directional 	0.8	0.5	0	40	40	10	21.5	13.5	Q3C308
	1.2	1.1	0	30	30	10	21.5	13.5	Q3C312
	1.6	1.4	0	20	20	10	21.5	13.5	Q3C316
	2.4	3.0	0	12	12	10	21.5	13.5	Q3C324
	3.0	3.5	0	6	6	10	21.5	13.5	Q3C330

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

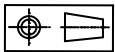
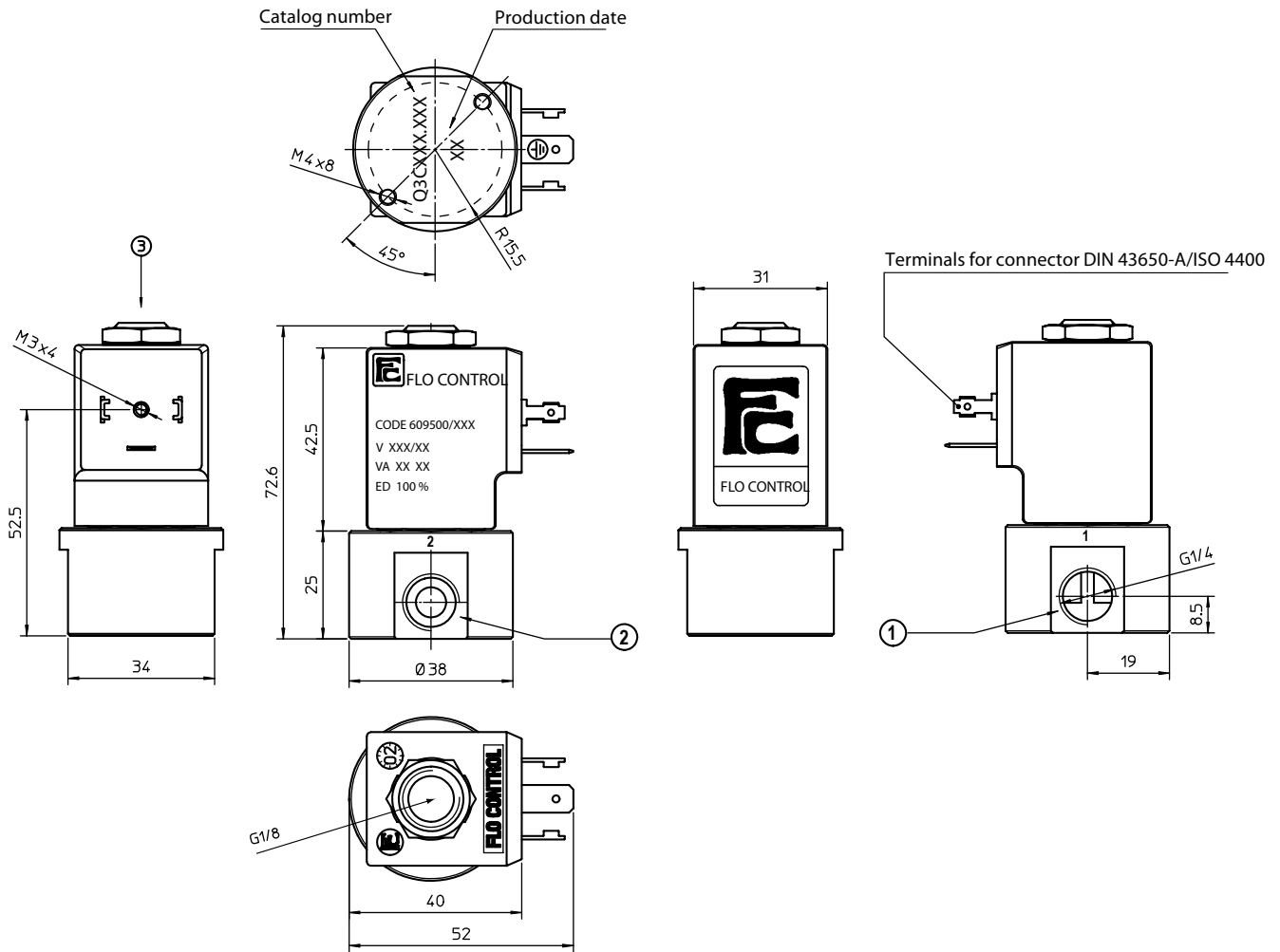
seals	
code	material
E	EPDM
V	FPM
K	PFFPM

manual override	
code	type
0	none

coil code
see table B on page 2/2

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

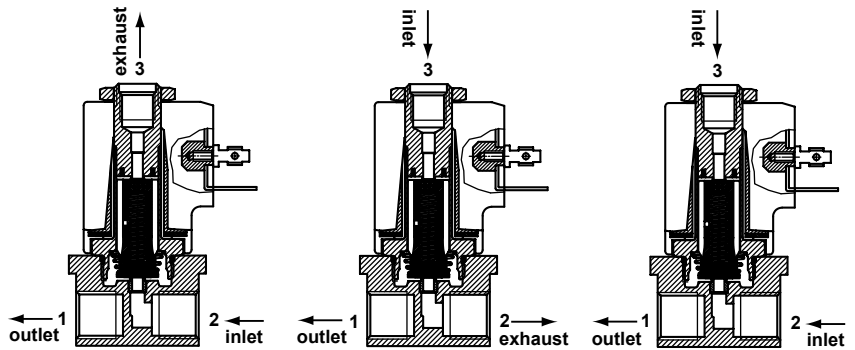


direct operated solenoid valves

coil 31 mm

Universal valves can be used in 3 different ways.
As a normally closed, as a normally open or as selector valve.

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



NC

NO

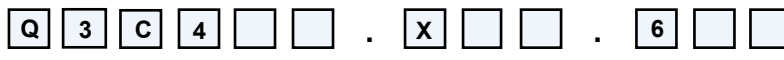
SELECTOR

* 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 inr. hol.	main code
connected as 3/2 NC 		0.8	0.5	0	18	18	10	21.5 13.5	Q3C408
		1.2	1.1	0	13	13	10	21.5 13.5	Q3C412
connected as 3/2 NO 		1.6	1.4	0	9	9	10	21.5 13.5	Q3C416
		2.4	3.0	0	5	5	10	21.5 13.5	Q3C424
connected as 3/2 selector 		3.0	3.5	0	3.5	3.5	10	21.5 13.5	Q3C430

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
K	PFPM
V	FPM
E	EPDM

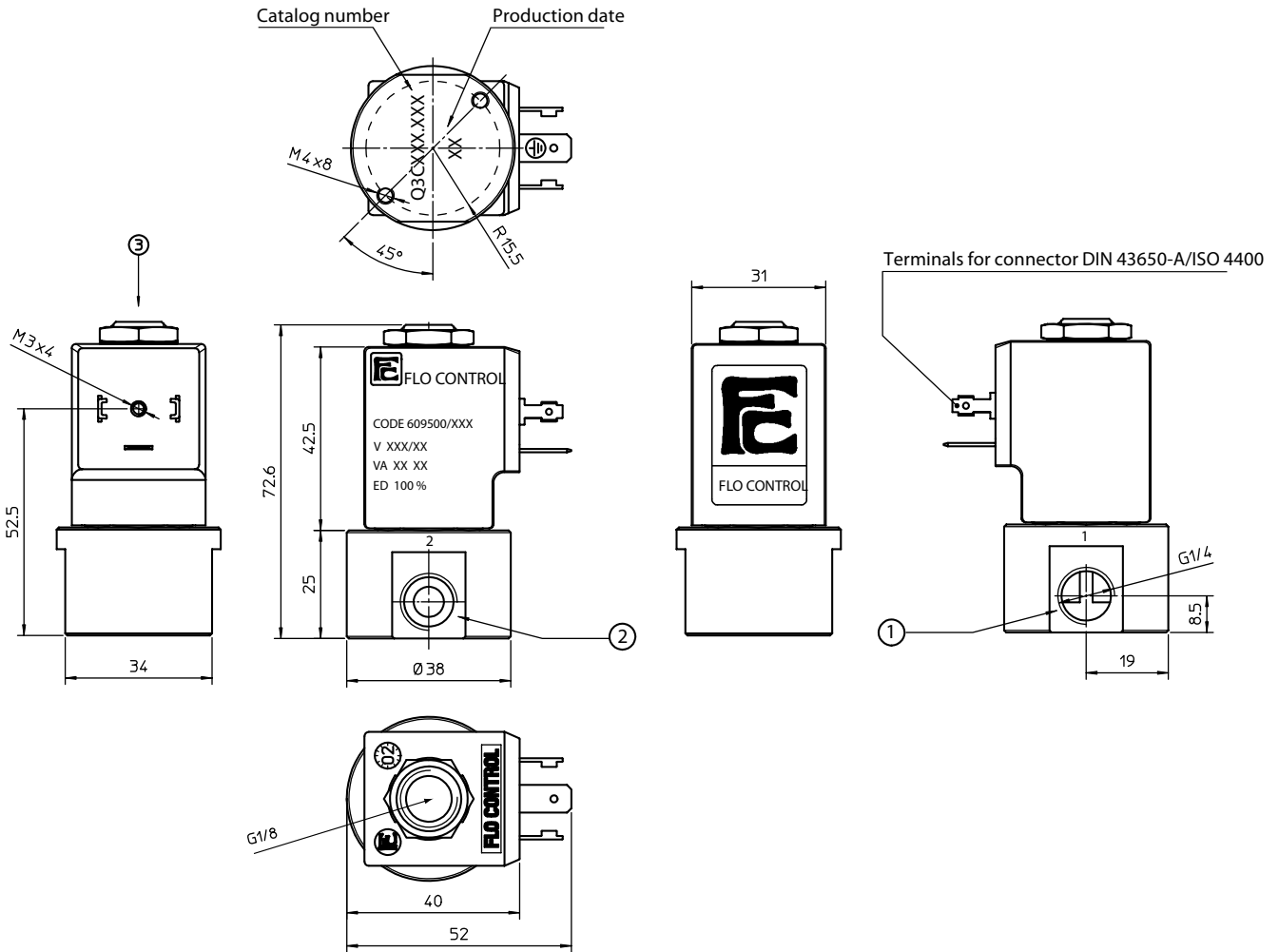
manual override	
code	type
0	none

coil code
see table B on page 2/2



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
------	--------

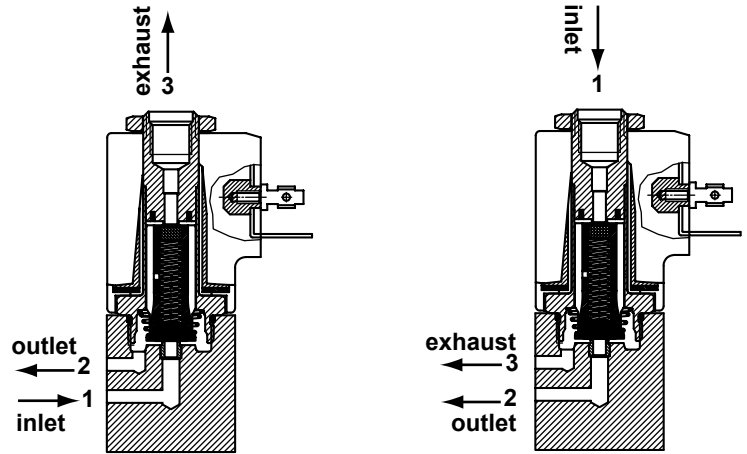
FLO CONTROL
Solenoid Valves



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*	NBR, FPM, EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



NC

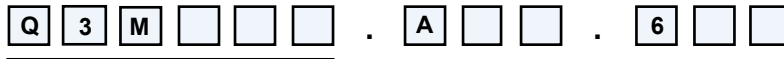
NO

* 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	Q3M108
		1.2	1.3	0	25	25	10	21.5	13.5	Q3M112
		1.6	1.7	0	15	15	10	21.5	13.5	Q3M116
		2.4	3.5	0	10	10	10	21.5	13.5	Q3M124
		3.0	4.5	0	6	6	10	21.5	13.5	Q3M130
3/2 normally open (NO) 		0.8	0.5	0	20	20	10	21.5	13.5	Q3M208
		1.2	1.1	0	15	15	10	21.5	13.5	Q3M212
		1.6	1.4	0	10	10	10	21.5	13.5	Q3M216
		2.4	3.0	0	6	6	10	21.5	13.5	Q3M224
		3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3M230

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

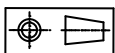
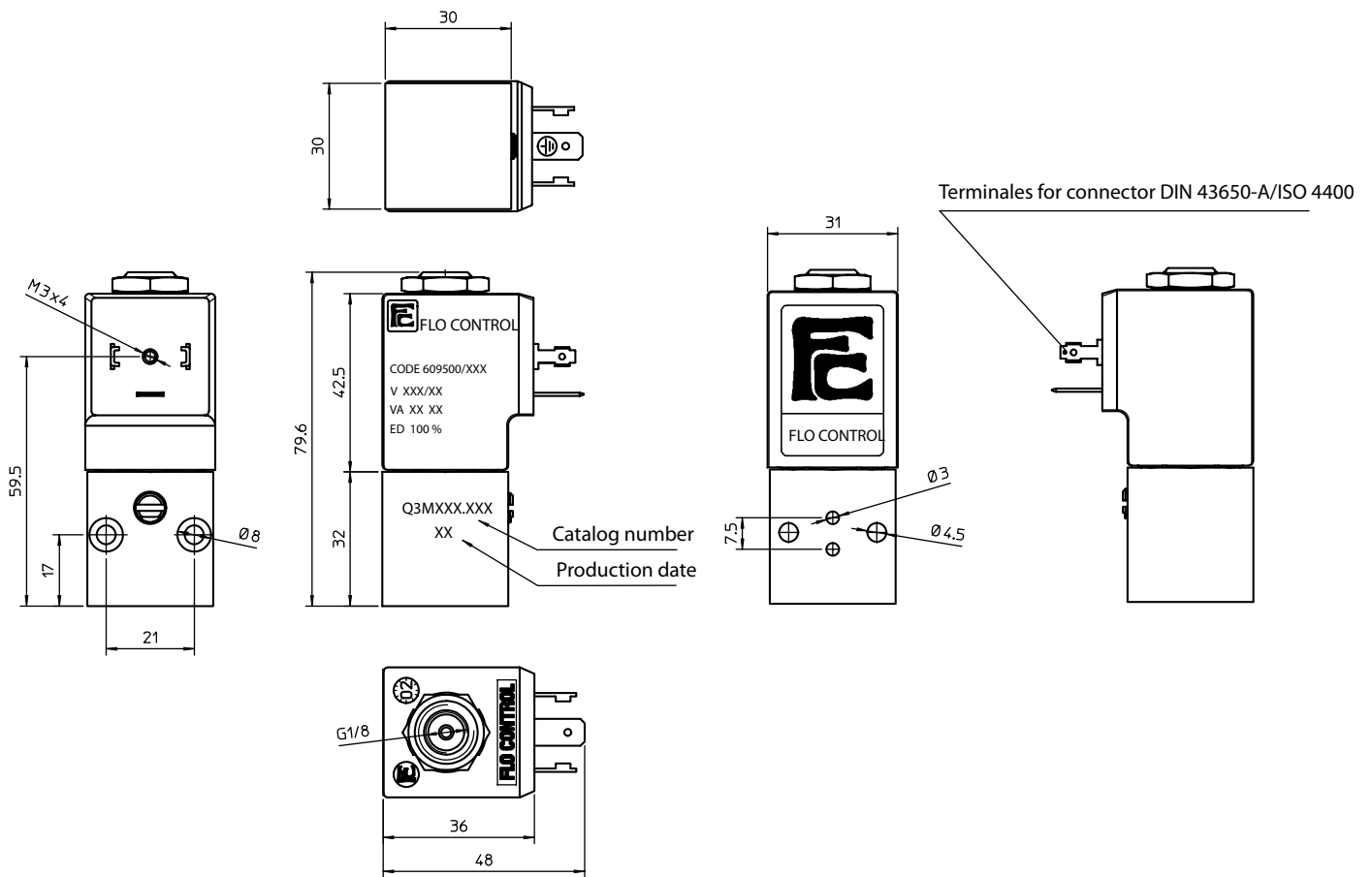
manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/2



direct operated solenoid valves

coil 31 mm



weight 230 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

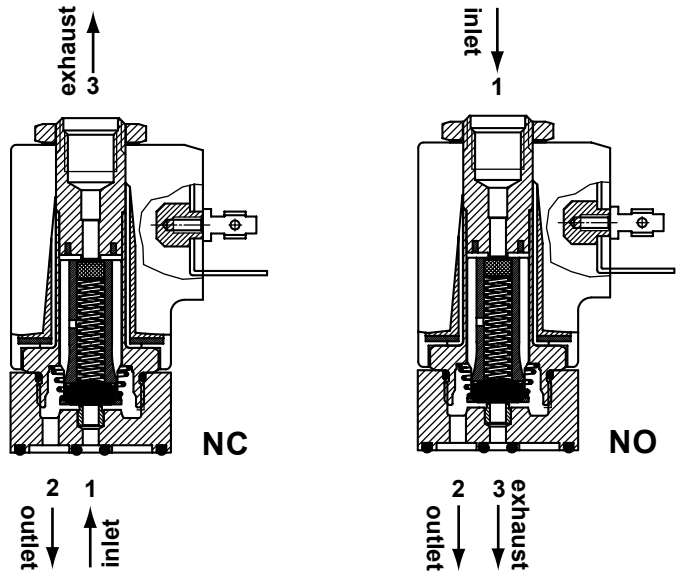


direct operated solenoid valves

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*
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

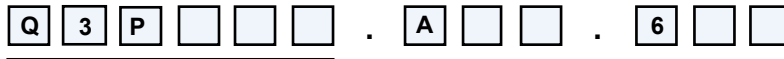
* other seal materials on request



function	symbol	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	Q3P108	
	1.2	1.3	0	25	25	10	21.5	13.5	Q3P112	
	1.6	1.7	0	15	15	10	21.5	13.5	Q3P116	
	2.4	3.5	0	10	10	10	21.5	13.5	Q3P124	
	3.0	4.5	0	6	6	10	21.5	13.5	Q3P130	
3/2 normally open (NO) 	0.8	0.5	0	20	20	10	21.5	13.5	Q3P208	
	1.2	1.1	0	15	15	10	21.5	13.5	Q3P212	
	1.6	1.4	0	10	10	10	21.5	13.5	Q3P216	
	2.4	3.0	0	6	6	10	21.5	13.5	Q3P224	
	3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3P230	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

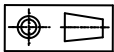
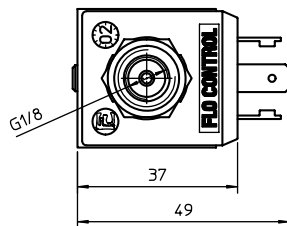
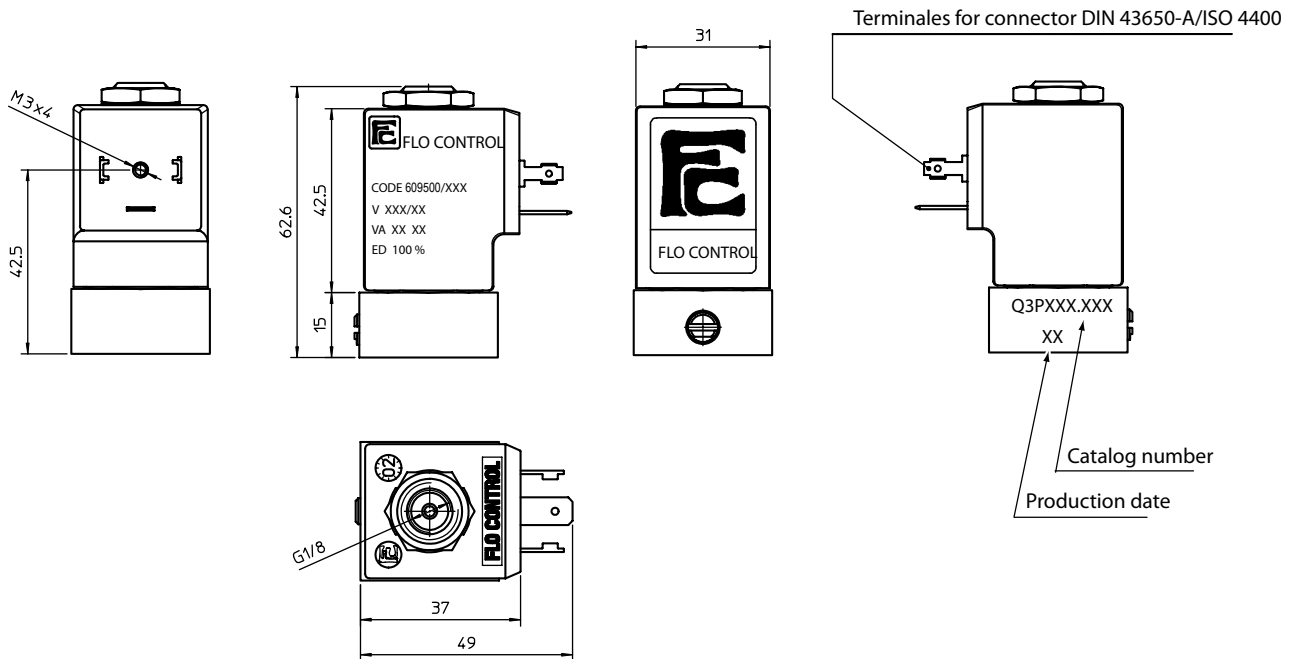
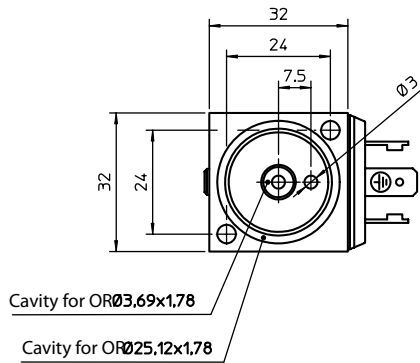
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/4

direct operated solenoid valves

coil 31 mm



weight	200 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
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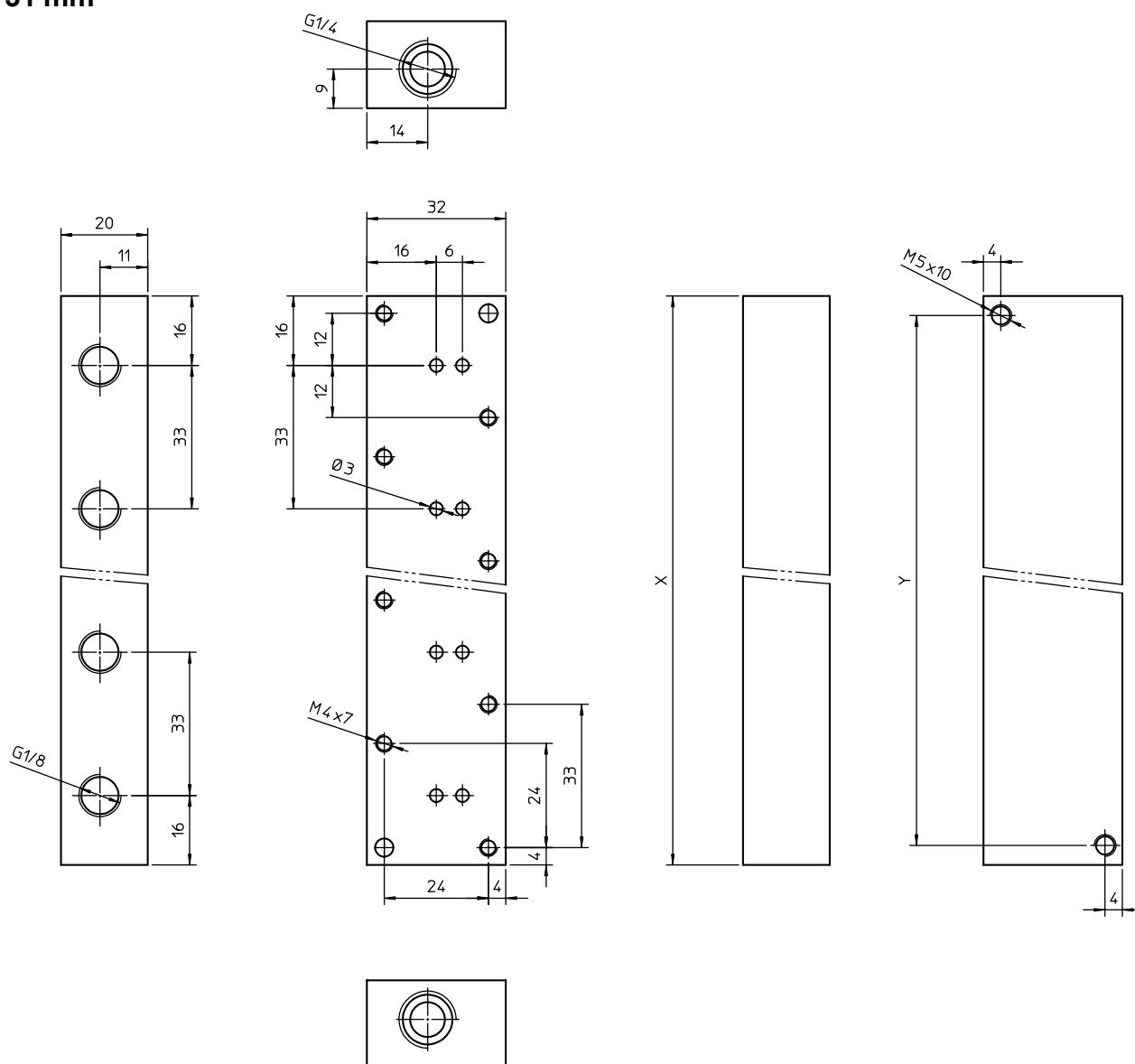
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm

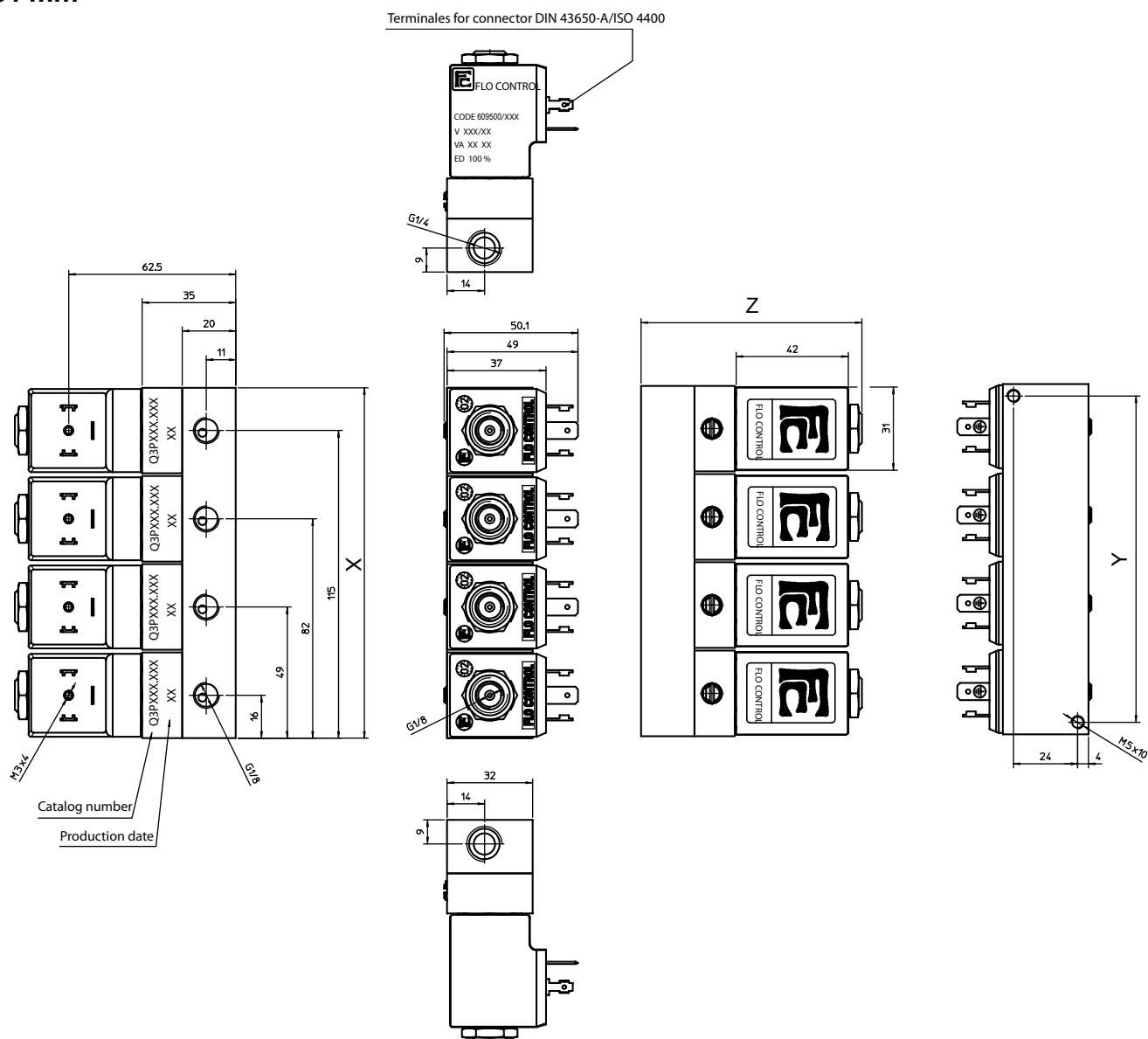


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.38A	1	32	24	45
ZZ11.Q2.38A	2	65	57	100
ZZ11.Q3.38A	3	98	90	150
ZZ11.Q4.38A	4	131	123	205
ZZ11.Q5.38A	5	164	156	260
ZZ11.Q6.38A	6	197	189	310

-M4 screws order code Z11030 (two each valve station) must be ordered separately

direct operated solenoid valves

coil 31 mm



dimensions assembled manifolds

order code	stations	X (mm)	Y (mm)	Z (mm)	weight (g)
parts have to be ordered separately:	1	32	24	82.6	245
	2	65	57	82.6	500
valves see page 1/4	3	98	90	82.6	750
bases see page 3/4	4	131	123	82.6	1005
screws see page 3/4	5	164	156	82.6	1260
	6	197	189	82.6	1510

FLO CONTROL

Solenoid Valves

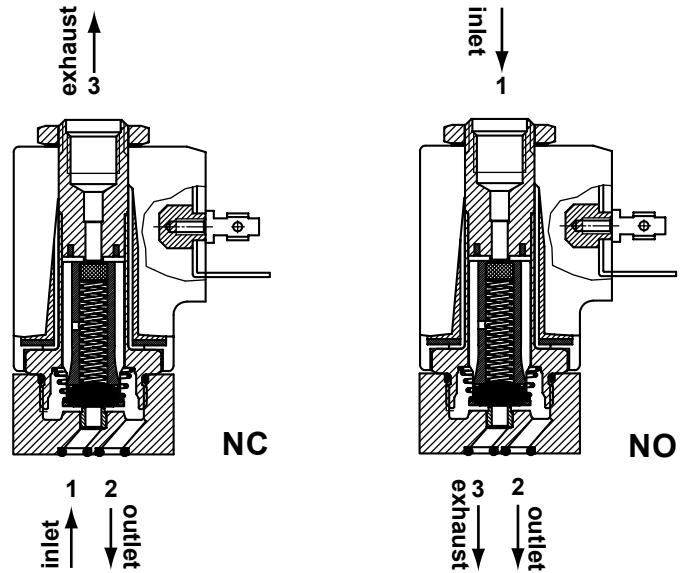


direct operated solenoid valves

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*
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

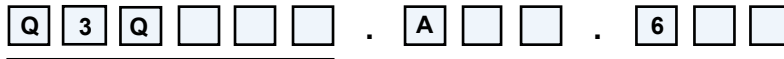
* other seal materials on request



function	symbol	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	Q3Q108
		1.2	1.3	0	25	25	10	21.5	13.5	Q3Q112
		1.6	1.7	0	15	15	10	21.5	13.5	Q3Q116
		2.4	3.5	0	10	10	10	21.5	13.5	Q3Q124
		3.0	4.5	0	6	6	10	21.5	13.5	Q3Q130
3/2 normally open (NO) 		0.8	0.5	0	20	20	10	21.5	13.5	Q3Q208
		1.2	1.1	0	15	15	10	21.5	13.5	Q3Q212
		1.6	1.4	0	10	10	10	21.5	13.5	Q3Q216
		2.4	3.0	0	6	6	10	21.5	13.5	Q3Q224
		3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3Q230

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

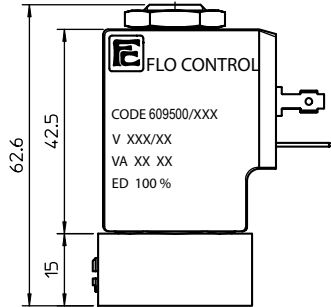
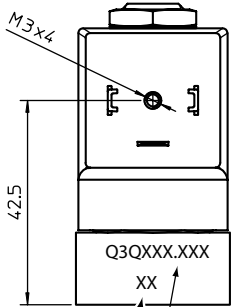
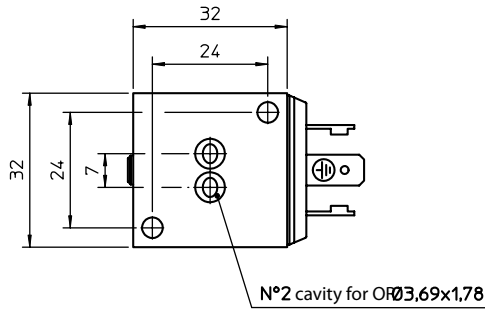
seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

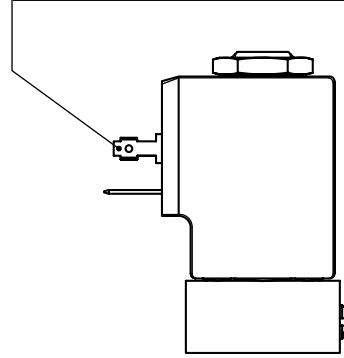
coil code
see table B on page 2/4

direct operated solenoid valves

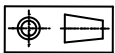
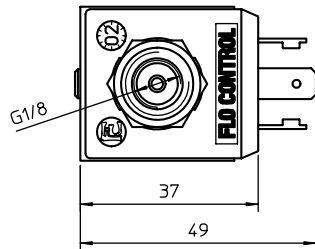
coil 31 mm



Terminals for connector DIN 43650-A/ISO 4400



Catalog number
Production date



weight	200 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
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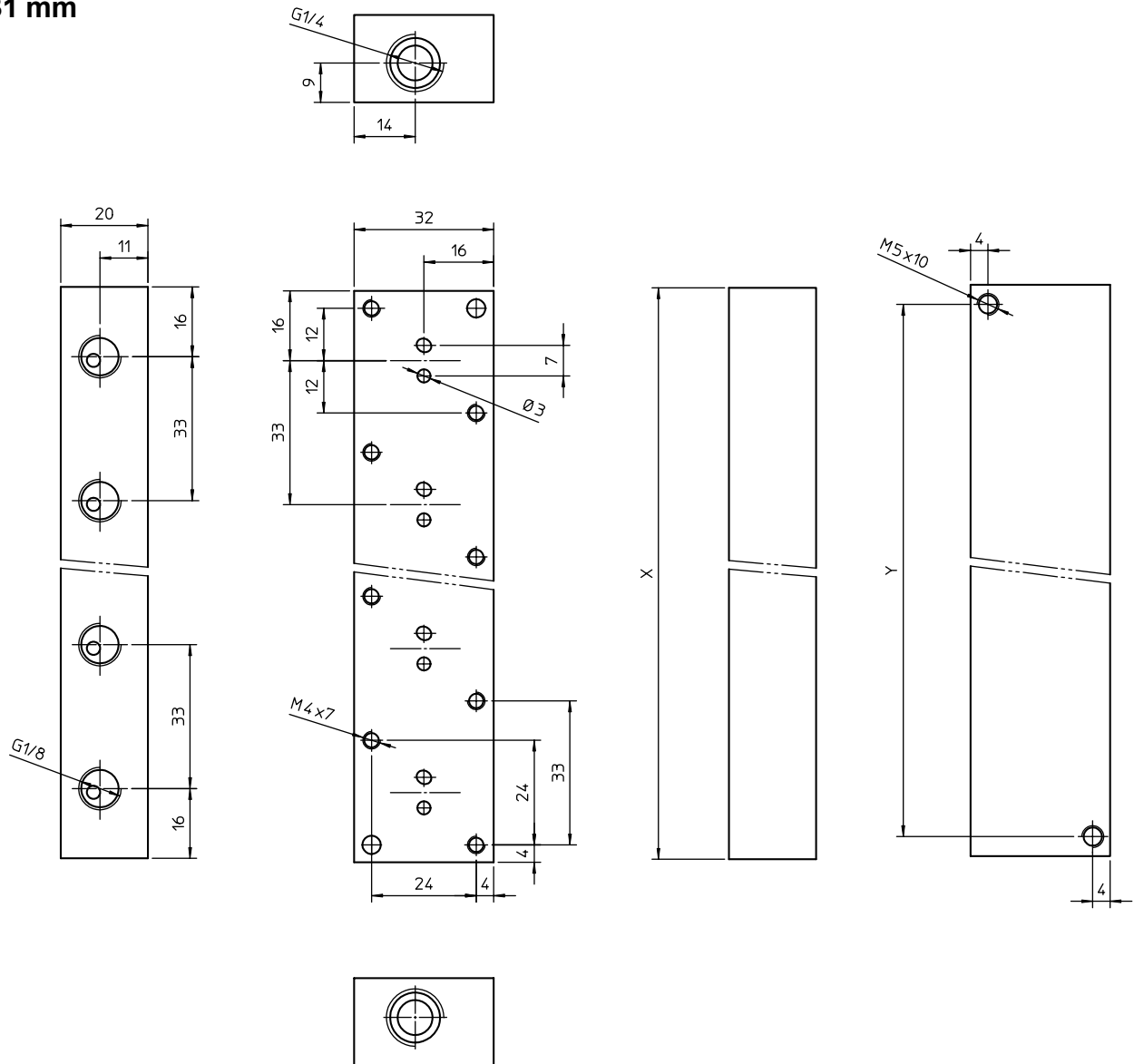
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm

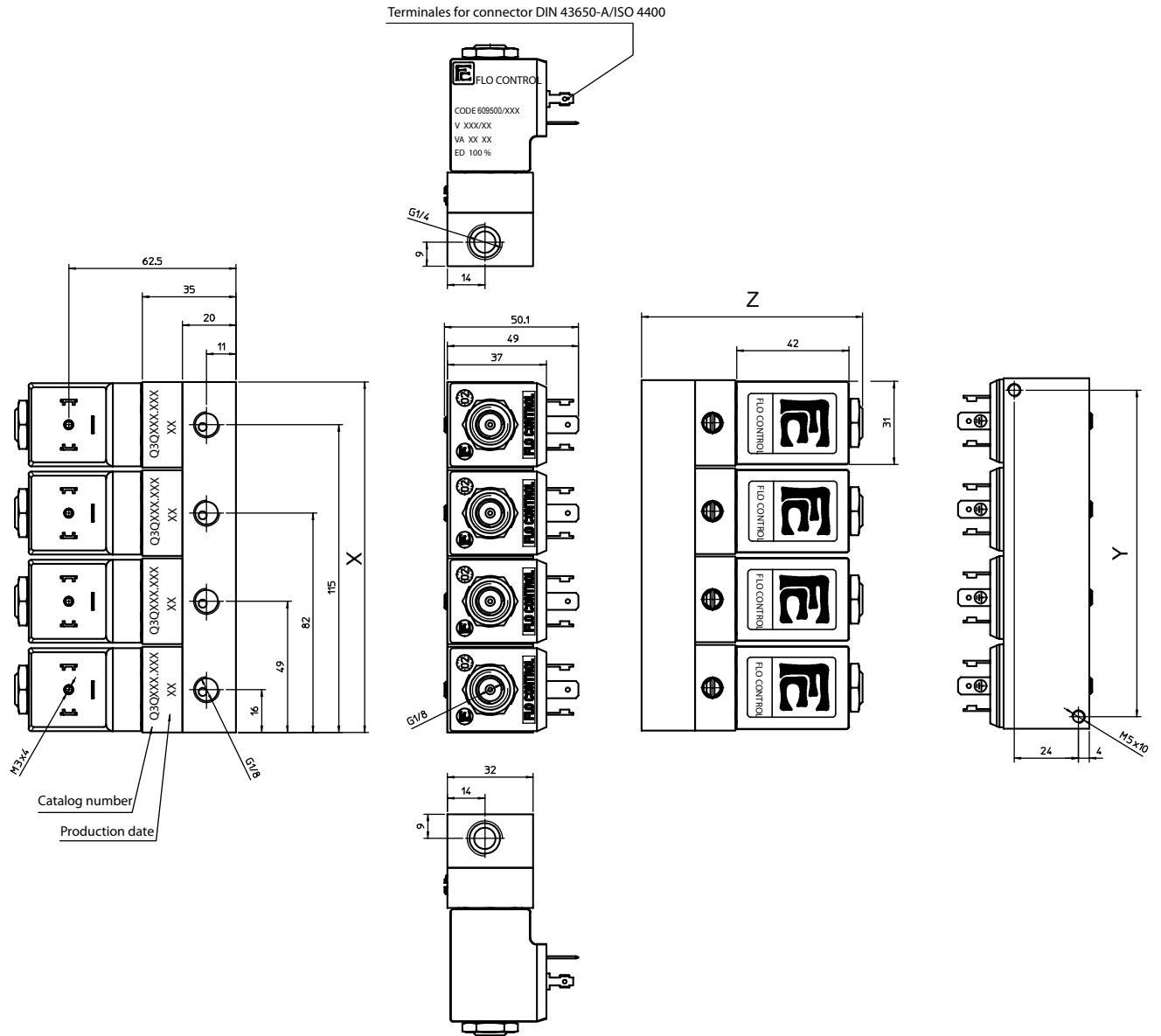


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.08A	1	32	24	45
ZZ11.Q2.08A	2	65	57	100
ZZ11.Q3.08A	3	98	90	150
ZZ11.Q4.08A	4	131	123	205
ZZ11.Q5.08A	5	164	156	260
ZZ11.Q6.08A	6	197	189	310

-M4 screws order code Z11030 (two each valve station) must be ordered separately

direct operated solenoid valves

coil 31 mm



dimensions assembled manifolds

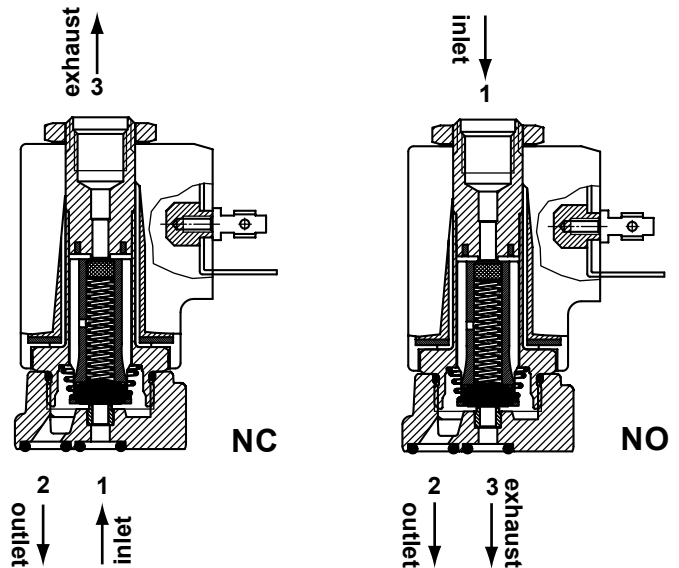
order code	stations	X (mm)	Y (mm)	Z (mm)	weight (g)
parts have to be ordered separately: valves see page 1/4 bases see page 3/4 screws see page 3/4	1	32	24	82.6	245
	2	65	57	82.6	500
	3	98	90	82.6	750
	4	131	123	82.6	1005
	5	164	156	82.6	1260
	6	197	189	82.6	1510

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 2/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 3/4

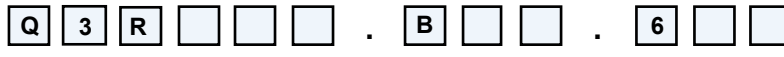
* other seal materials on request



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	Q3R108	
	1.2	1.3	0	25	25	10	21.5	13.5	Q3R112	
	1.6	1.7	0	15	15	10	21.5	13.5	Q3R116	
	2.4	3.5	0	10	10	10	21.5	13.5	Q3R124	
	3.0	4.5	0	6	6	10	21.5	13.5	Q3R130	
3/2 normally open (NO) 	0.8	0.5	0	20	20	10	21.5	13.5	Q3R208	
	1.2	1.1	0	15	15	10	21.5	13.5	Q3R212	
	1.6	1.4	0	10	10	10	21.5	13.5	Q3R216	
	2.4	3.0	0	6	6	10	21.5	13.5	Q3R224	
	3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q3R230	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

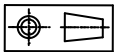
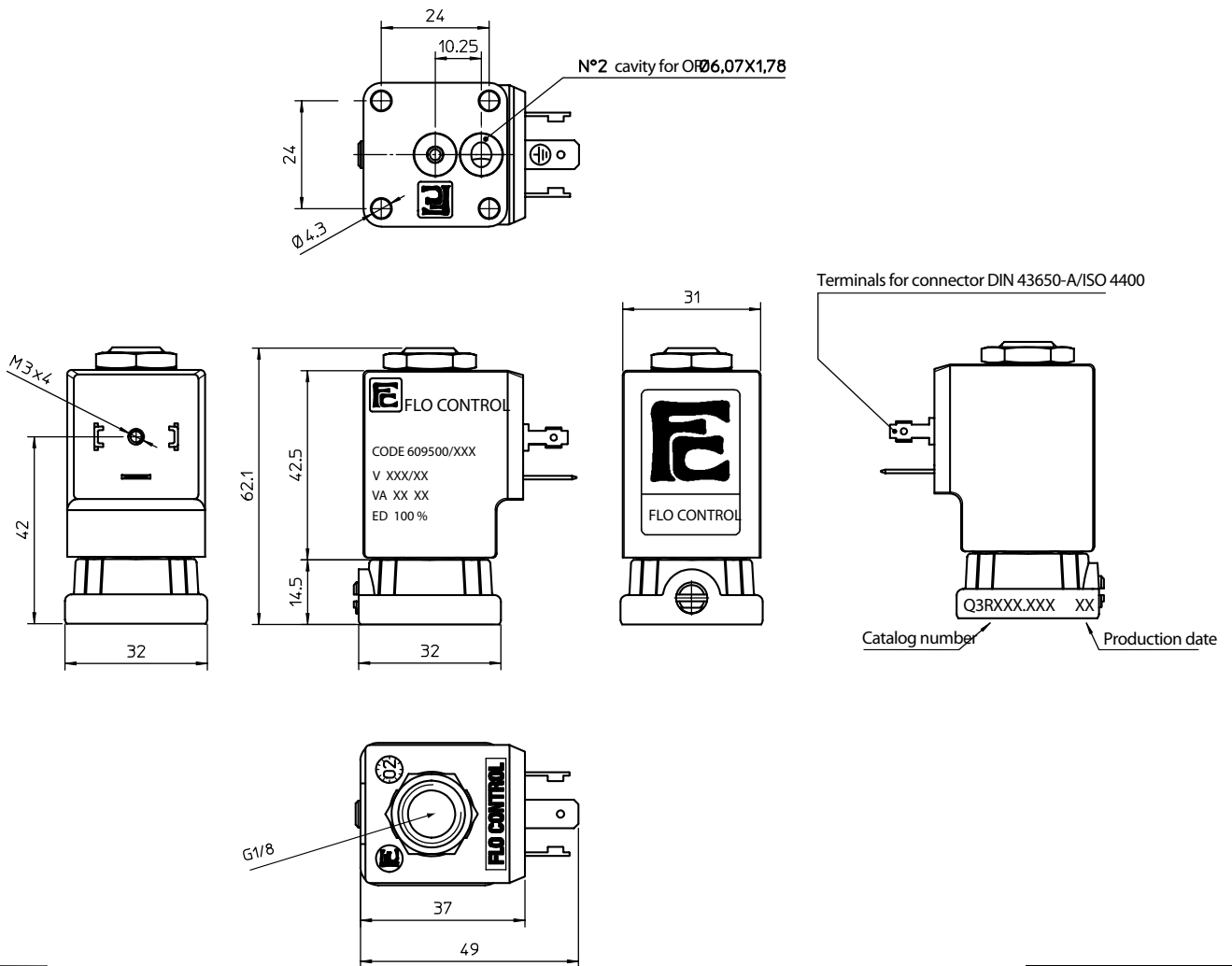
manual override	
code	type
0	none
1	brass screw
2	palm button
3	push button

coil code
see table B on page 2/4



direct operated solenoid valves

coil 31 mm



weight 260 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)

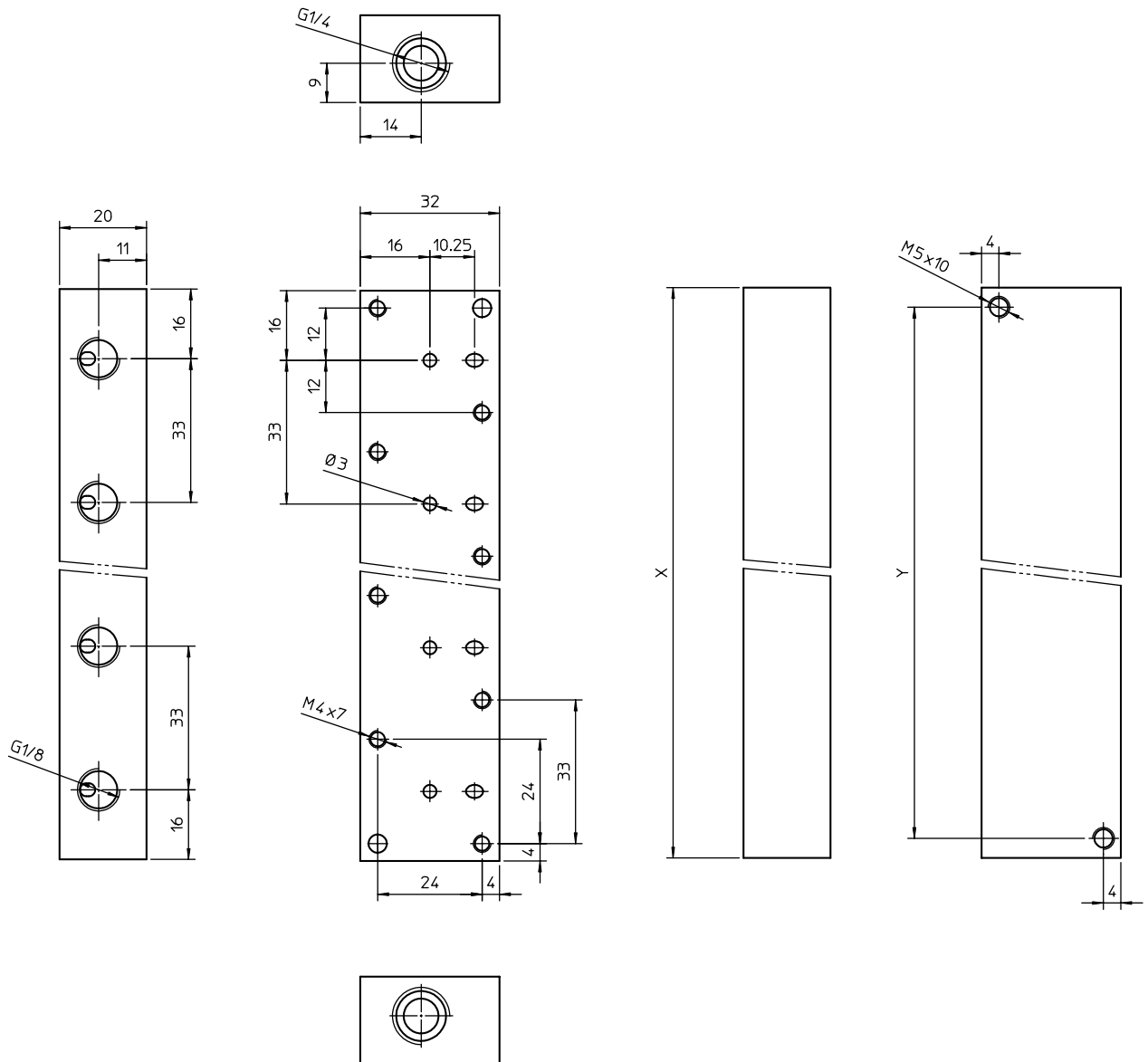
code Z10031

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm

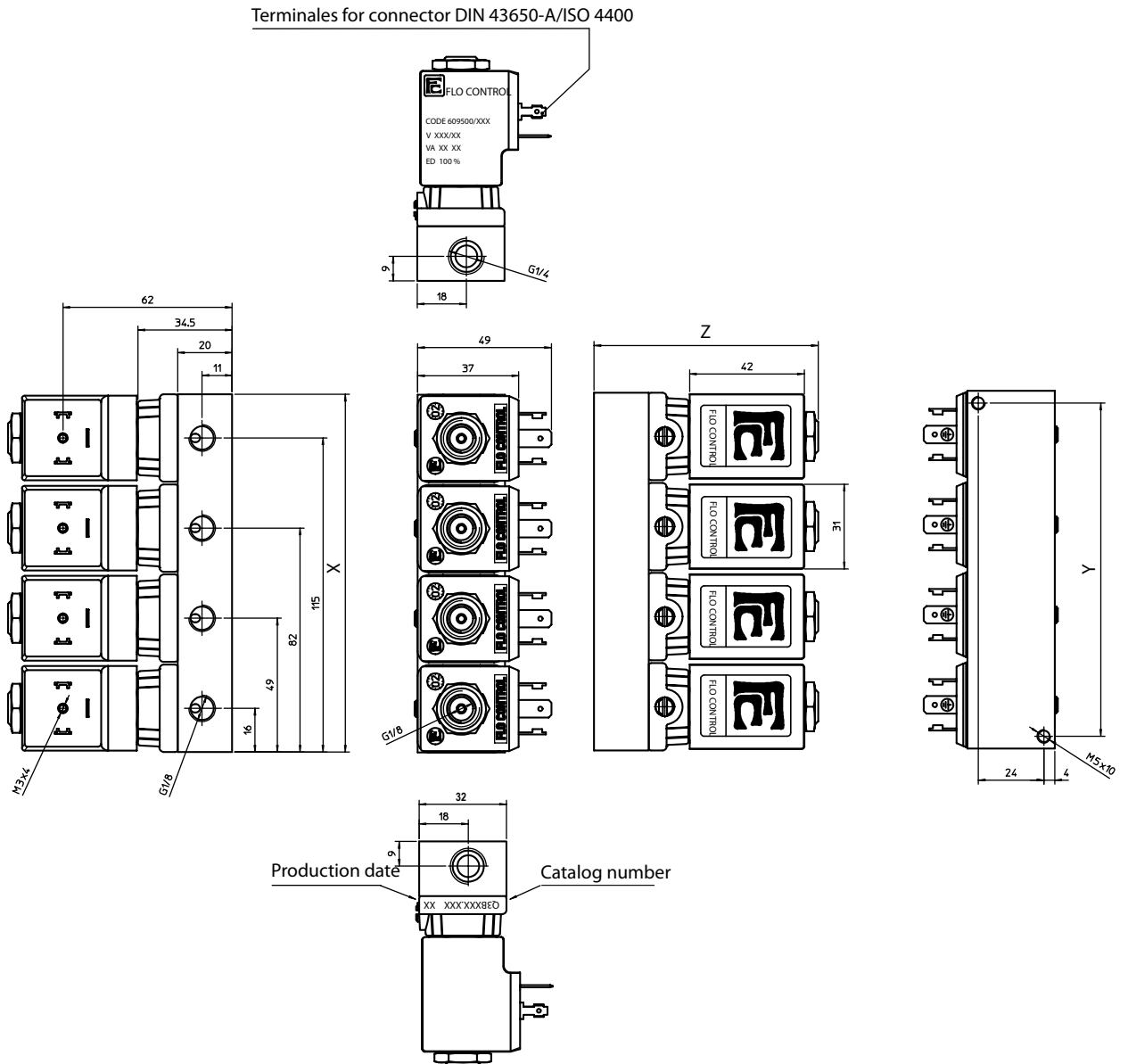


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.38B	1	32	24	135
ZZ11.Q2.38B	2	65	57	285
ZZ11.Q3.38B	3	98	90	435
ZZ11.Q4.38B	4	131	123	585
ZZ11.Q5.38B	5	164	156	735
ZZ11.Q6.38B	6	197	189	890

-M4 screws order code Z11035 (two each valve station) must be ordered separately

direct operated solenoid valves

coil 31 mm



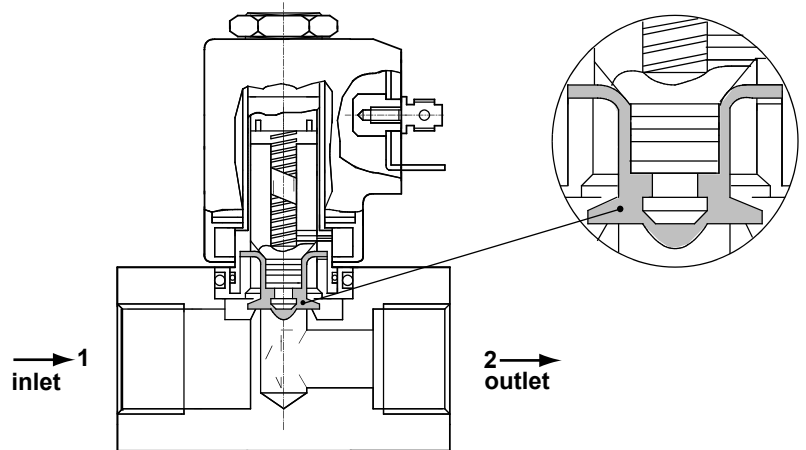
dimensions assembled manifolds

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	32	24	82.1	395
	2	65	57	82.1	805
	3	98	90	82.1	1215
	4	131	123	82.1	1625
	5	164	156	82.1	2035
	6	197	189	82.1	2450

direct operated solenoid valves

coil 31 mm

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

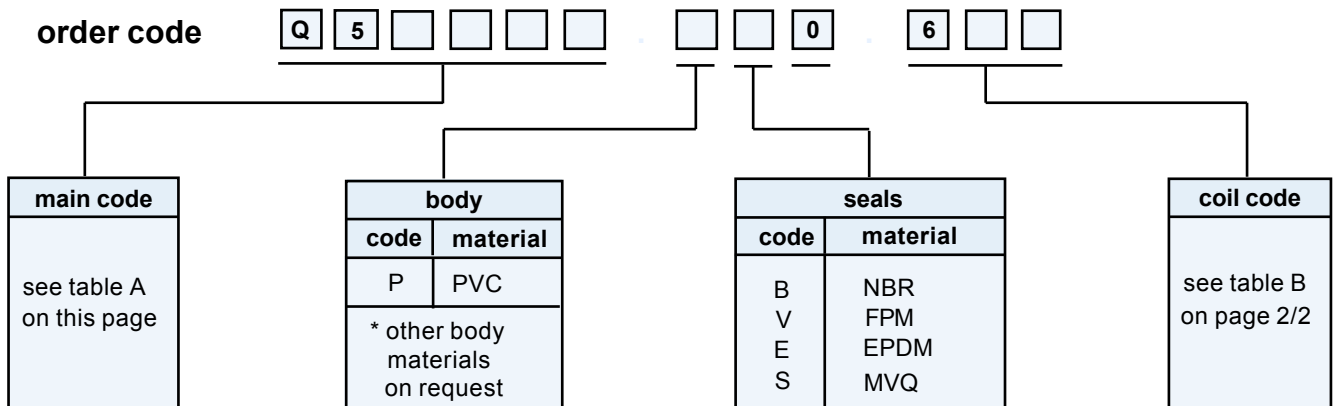


NC

* other seal materials on request

function	symbol	port size	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
					min.	max. DC	max. AC	Watt DC	V.A.		
									Inr.		Hol.
2/2 normally closed (NC) 	G1/8	3.0	3.5	0	1	1	10	21.5	13.5	Q5B130	
	G1/4	6.0	11.0	0	1	1	10	21.5	13.5	Q5C160	
	G3/8	8.0	16.0	0	0.5	0.5	10	21.5	13.5	Q5D180	
	G1/2	10.0	22.0	0	0.5	0.5	10	21.5	13.5	Q5E110	

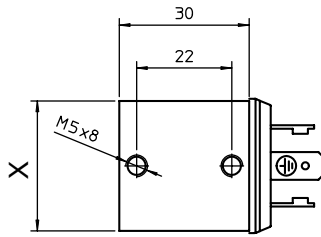
*l/min. of water with ΔP of 1 bar



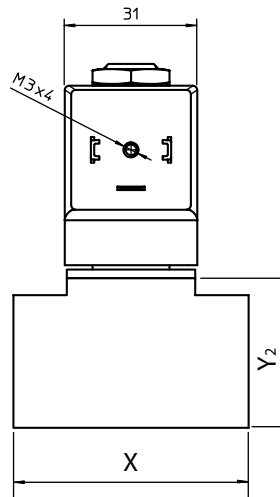
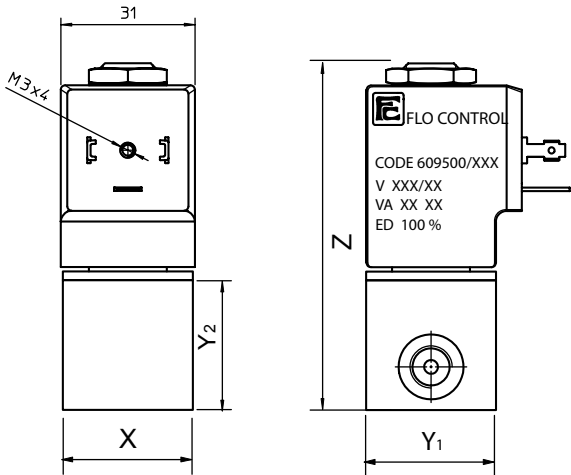
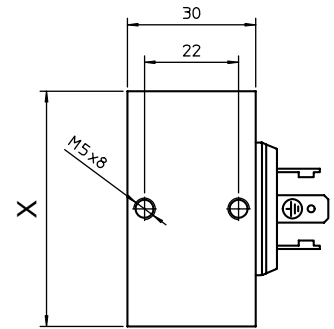
direct operated solenoid valves

coil 31 mm

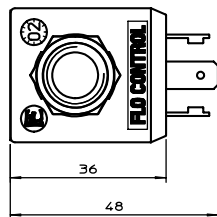
G1/8 - G1/4



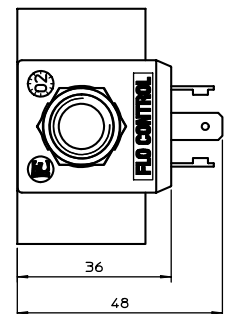
G3/8 - G1/2



port size	G1/8	G1/4
X	30	35
Y ₁	30	30
Y ₂	30	30
Z	79	79
weight g	210	210



port size	G3/8	G1/2
X	55	65
Y ₁	30	30
Y ₂	35	35
Z	84	84
weight g	230	240



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
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FLO CONTROL

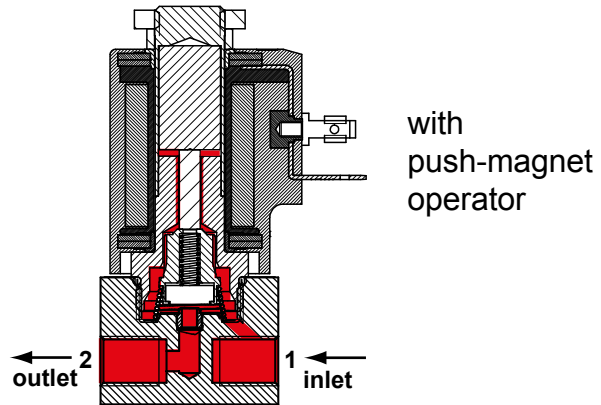
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



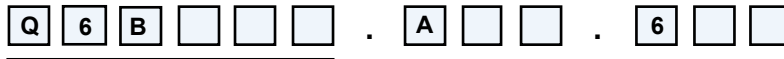
NO

* 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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q6B208	
	0.8	0.5	0	60	-	10	-	-	Q6B708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q6B212	
	1.2	1.3	0	45	-	10	-	-	Q6B712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q6B216	
	1.6	1.7	0	25	-	10	-	-	Q6B716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q6B220	
	2.0	3.0	0	16	-	10	-	-	Q6B720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q6B224	
	2.4	3.5	0	10	-	10	-	-	Q6B724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q6B230	
	3.0	4.5	0	7	-	10	-	-	Q6B730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q6B240	
	4.0	7.5	0	3.5	-	10	-	-	Q6B740	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

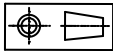
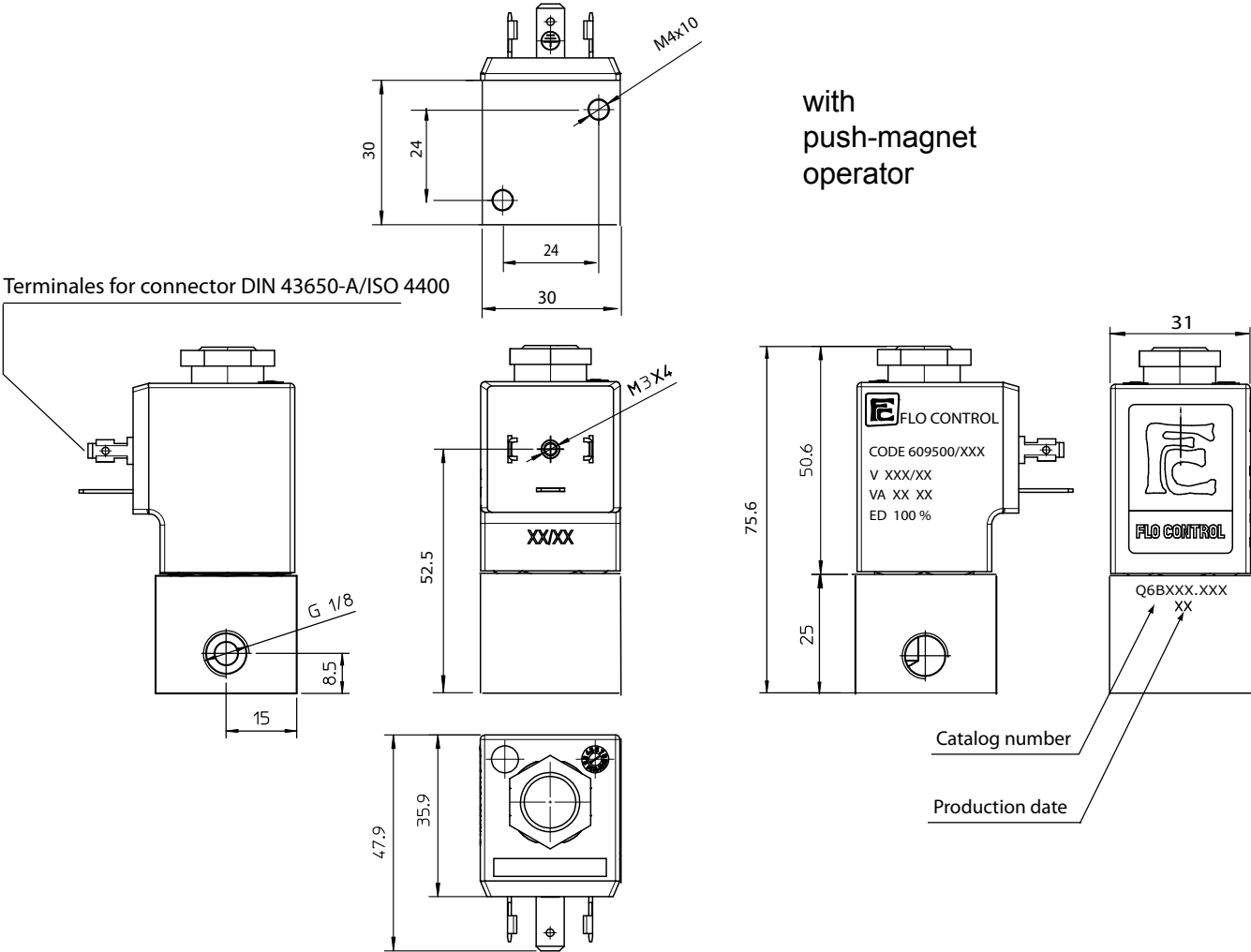
coil code
see table B on page 2/2

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm



weight	235 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
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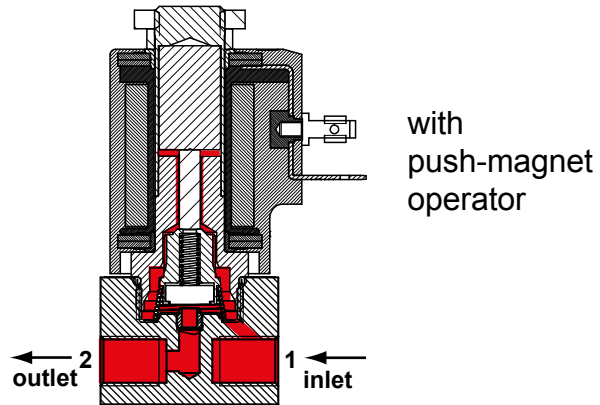
FLO CONTROL
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

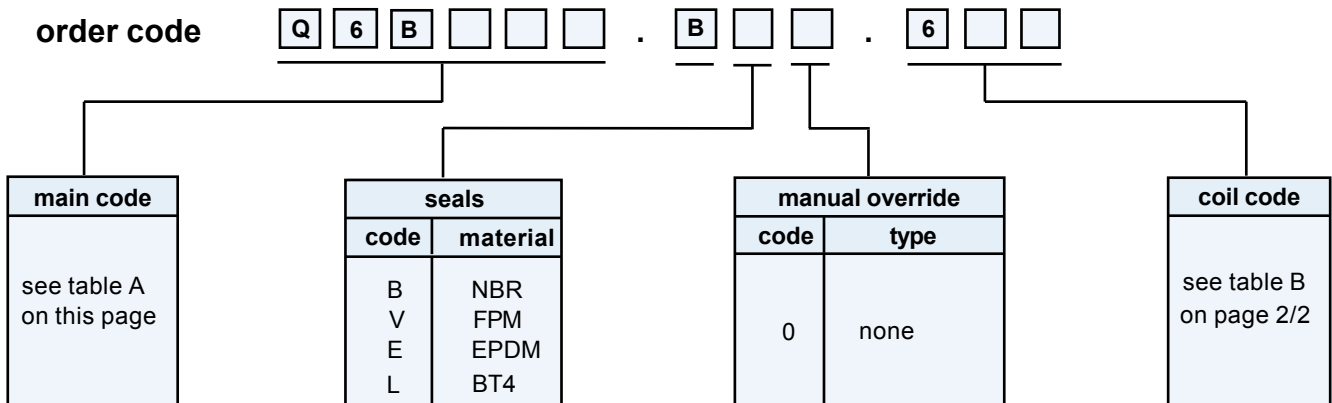


* other seal materials on request

NO

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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q6B208	
	0.8	0.5	0	60	-	10	-	-	Q6B708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q6B212	
	1.2	1.3	0	45	-	10	-	-	Q6B712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q6B216	
	1.6	1.7	0	25	-	10	-	-	Q6B716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q6B220	
	2.0	3.0	0	16	-	10	-	-	Q6B720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q6B224	
	2.4	3.5	0	10	-	10	-	-	Q6B724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q6B230	
	3.0	4.5	0	7	-	10	-	-	Q6B730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q6B240	
	4.0	7.5	0	3.5	-	10	-	-	Q6B740	

*l/min. of water with ΔP of 1 bar

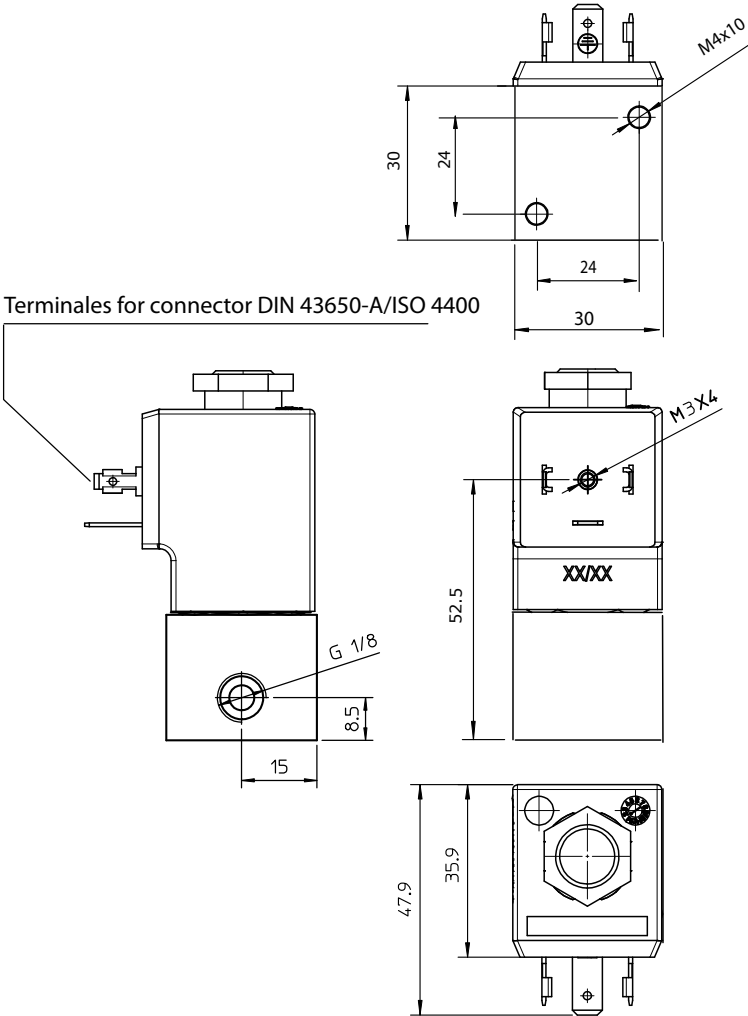


FLO CONTROL

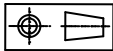
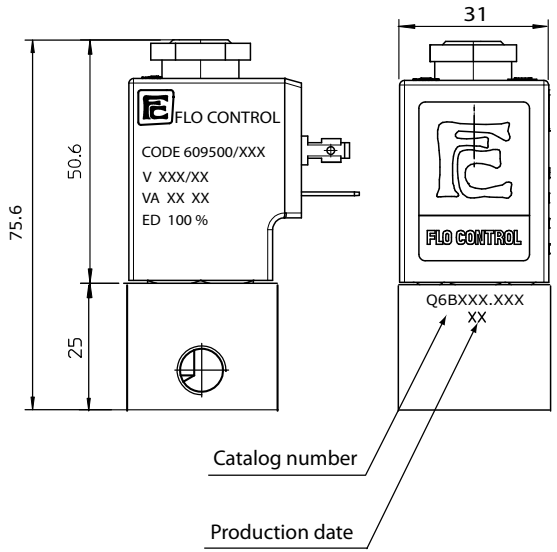
Solenoid Valves



direct operated solenoid valves
coil 31 mm



with
push-magnet
operator



weight	345 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
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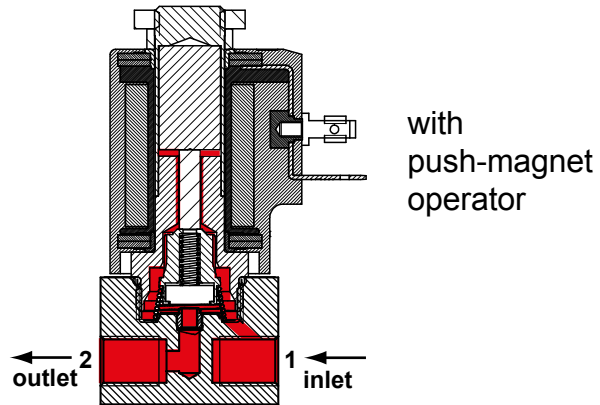
FLO CONTROL
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



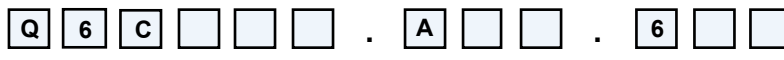
NO

* 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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q6C208	
	0.8	0.5	0	60	-	10	-	-	Q6C708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q6C212	
	1.2	1.3	0	45	-	10	-	-	Q6C712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q6C216	
	1.6	1.7	0	25	-	10	-	-	Q6C716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q6C220	
	2.0	3.0	0	16	-	10	-	-	Q6C720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q6C224	
	2.4	3.5	0	10	-	10	-	-	Q6C724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q6C230	
	3.0	4.5	0	7	-	10	-	-	Q6C730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q6C240	
	4.0	7.5	0	3.5	-	10	-	-	Q6C740	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

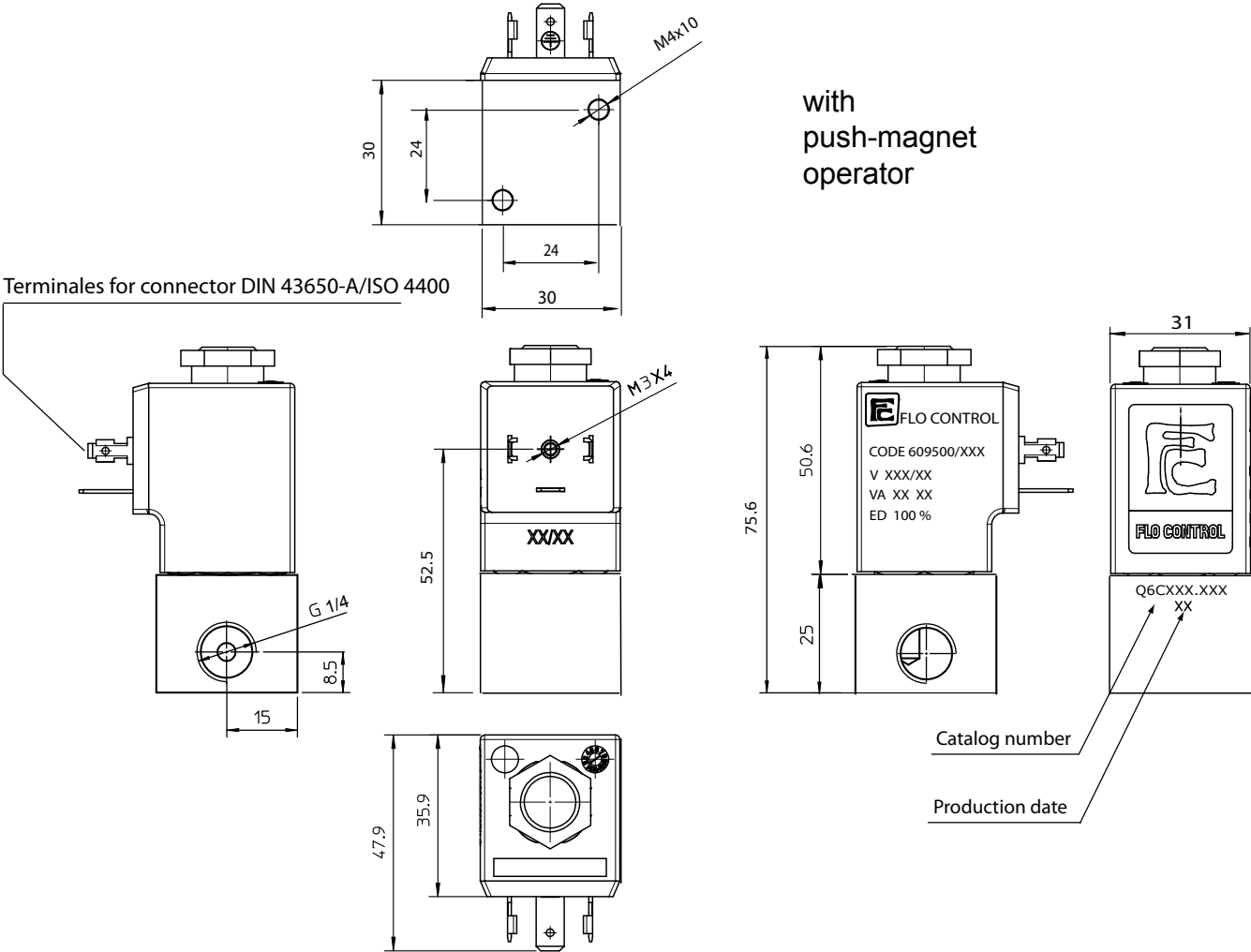
coil code
see table B on page 2/2

FLO CONTROL

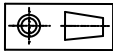
Solenoid Valves



direct operated solenoid valves
coil 31 mm



with
push-magnet
operator



weight	235 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
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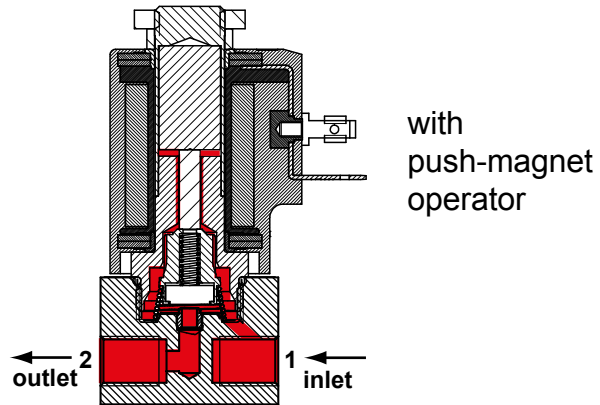
FLO CONTROL
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



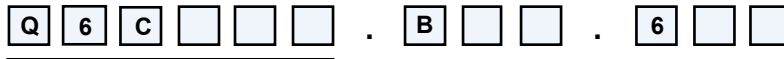
NO

* 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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q6C208	
	0.8	0.5	0	60	-	10	-	-	Q6C708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q6C212	
	1.2	1.3	0	45	-	10	-	-	Q6C712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q6C216	
	1.6	1.7	0	25	-	10	-	-	Q6C716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q6C220	
	2.0	3.0	0	16	-	10	-	-	Q6C720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q6C224	
	2.4	3.5	0	10	-	10	-	-	Q6C724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q6C230	
	3.0	4.5	0	7	-	10	-	-	Q6C730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q6C240	
	4.0	7.5	0	3.5	-	10	-	-	Q6C740	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

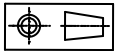
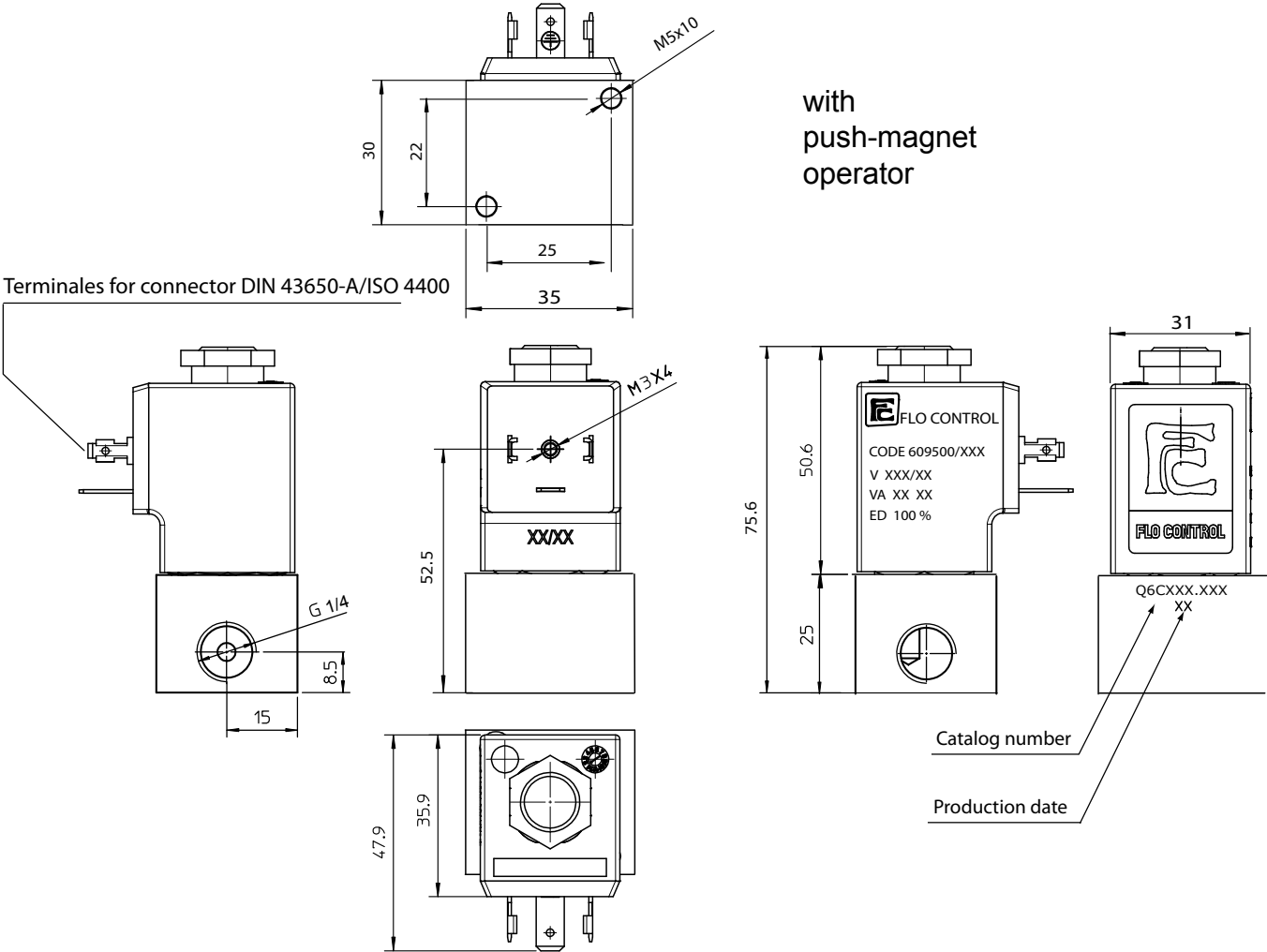
coil code
see table B on page 2/2

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm



weight	345 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
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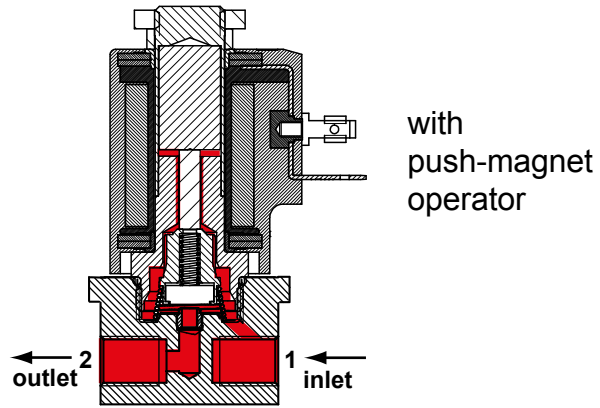
FLO CONTROL
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



with push-magnet operator

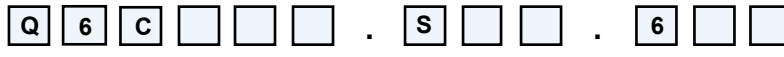
NO

* 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 open (NO) 		0.8	0.5	0	-	60	-	21.5	13.5	Q6C208
		0.8	0.5	0	60	-	10	-	-	Q6C708
		1.2	1.3	0	-	45	-	21.5	13.5	Q6C212
		1.2	1.3	0	45	-	10	-	-	Q6C712
		1.6	1.7	0	-	25	-	21.5	13.5	Q6C216
		1.6	1.7	0	25	-	10	-	-	Q6C716
		2.0	3.0	0	-	16	-	21.5	13.5	Q6C220
		2.0	3.0	0	16	-	10	-	-	Q6C720
		2.4	3.5	0	-	10	-	21.5	13.5	Q6C224
		2.4	3.5	0	10	-	10	-	-	Q6C724
		3.0	4.5	0	-	7	-	21.5	13.5	Q6C230
		3.0	4.5	0	7	-	10	-	-	Q6C730
		4.0	7.5	0	-	3.5	-	21.5	13.5	Q6C240
		4.0	7.5	0	3.5	-	10	-	-	Q6C740

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/2

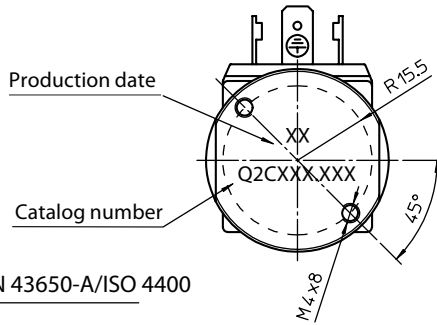
FLO CONTROL

Solenoid Valves



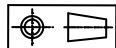
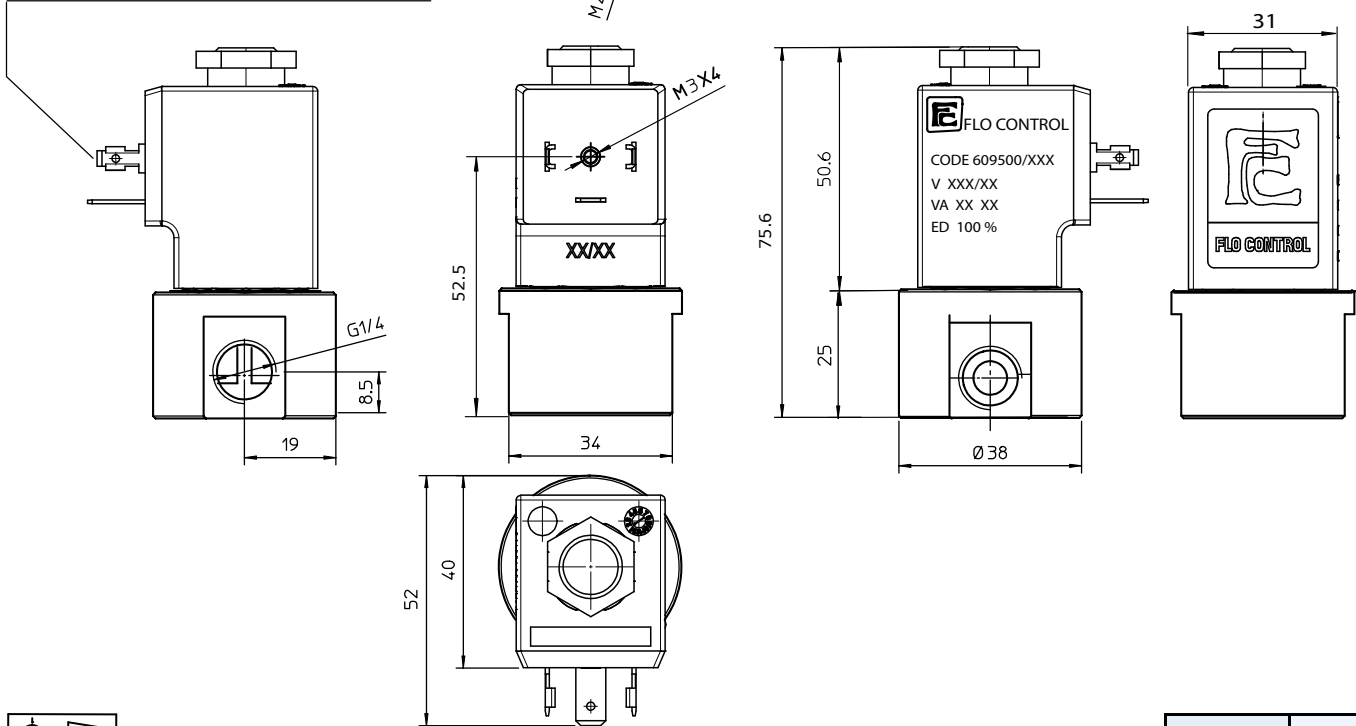
direct operated solenoid valves

coil 31 mm



with
push-magnet
operator

Terminals for connector DIN 43650-A/ISO 4400



weight	435 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
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FLO CONTROL

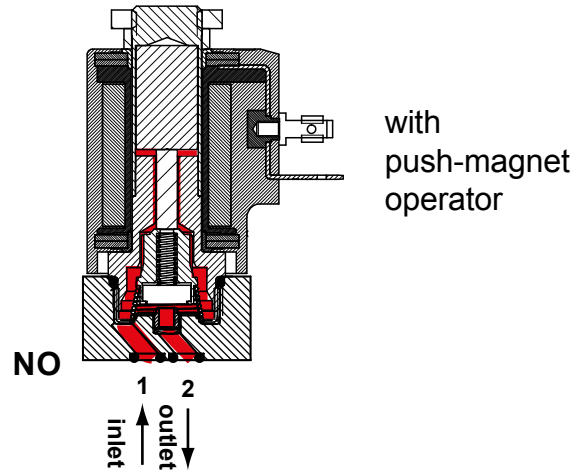
Solenoid Valves



direct operated solenoid valves

coil 31 mm

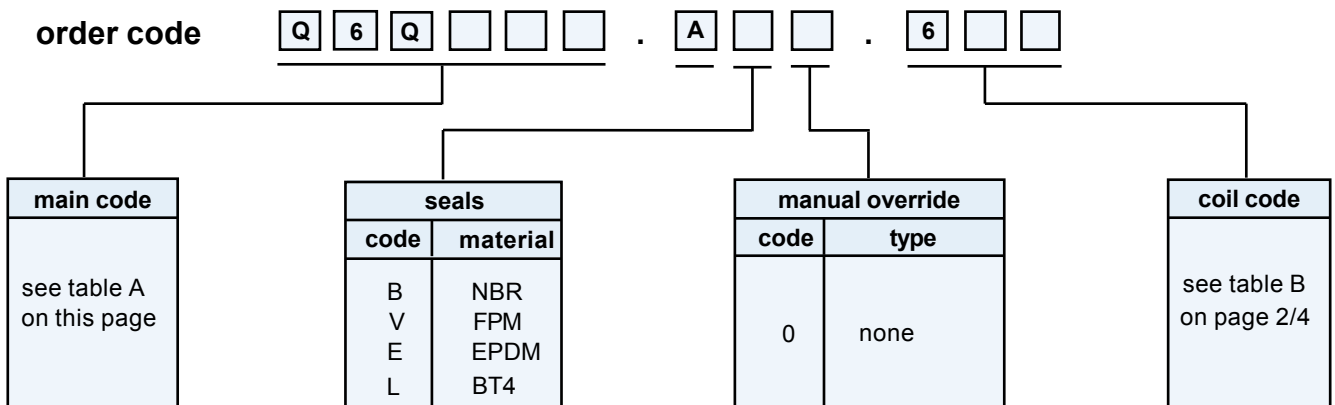
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM*
dimensions	see page 2/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4



* other seal materials on request

function	symbol	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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q6Q208	
	0.8	0.5	0	60	-	10	-	-	Q6Q708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q6Q212	
	1.2	1.3	0	45	-	10	-	-	Q6Q712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q6Q216	
	1.6	1.7	0	25	-	10	-	-	Q6Q716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q6Q220	
	2.0	3.0	0	16	-	10	-	-	Q6Q720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q6Q224	
	2.4	3.5	0	10	-	10	-	-	Q6Q724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q6Q230	
	3.0	4.5	0	7	-	10	-	-	Q6Q730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q6Q240	
	4.0	7.5	0	3.5	-	10	-	-	Q6Q740	

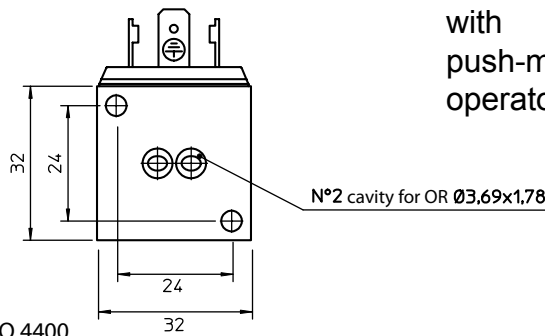
*l/min. of water with ΔP of 1 bar



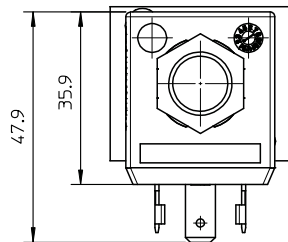
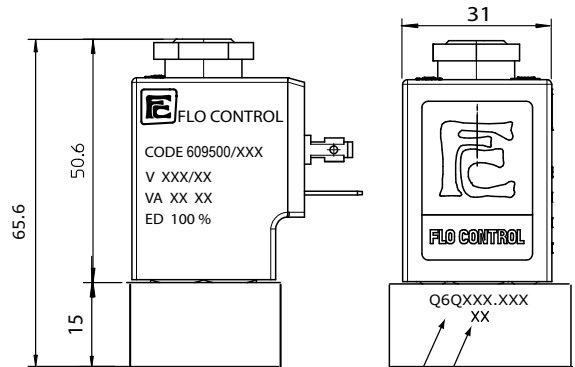
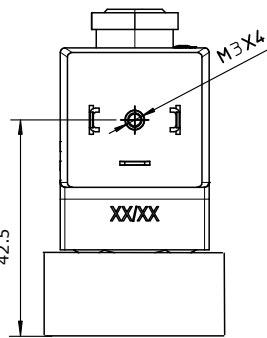
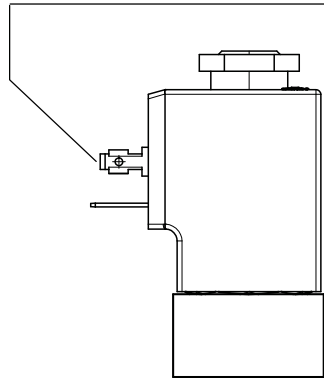
direct operated solenoid valves

coil 31 mm

with
push-magnet
operator

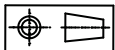


Terminals for connector DIN 43650-A/ISO 4400



Catalog number

Production date



weight	215 g
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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
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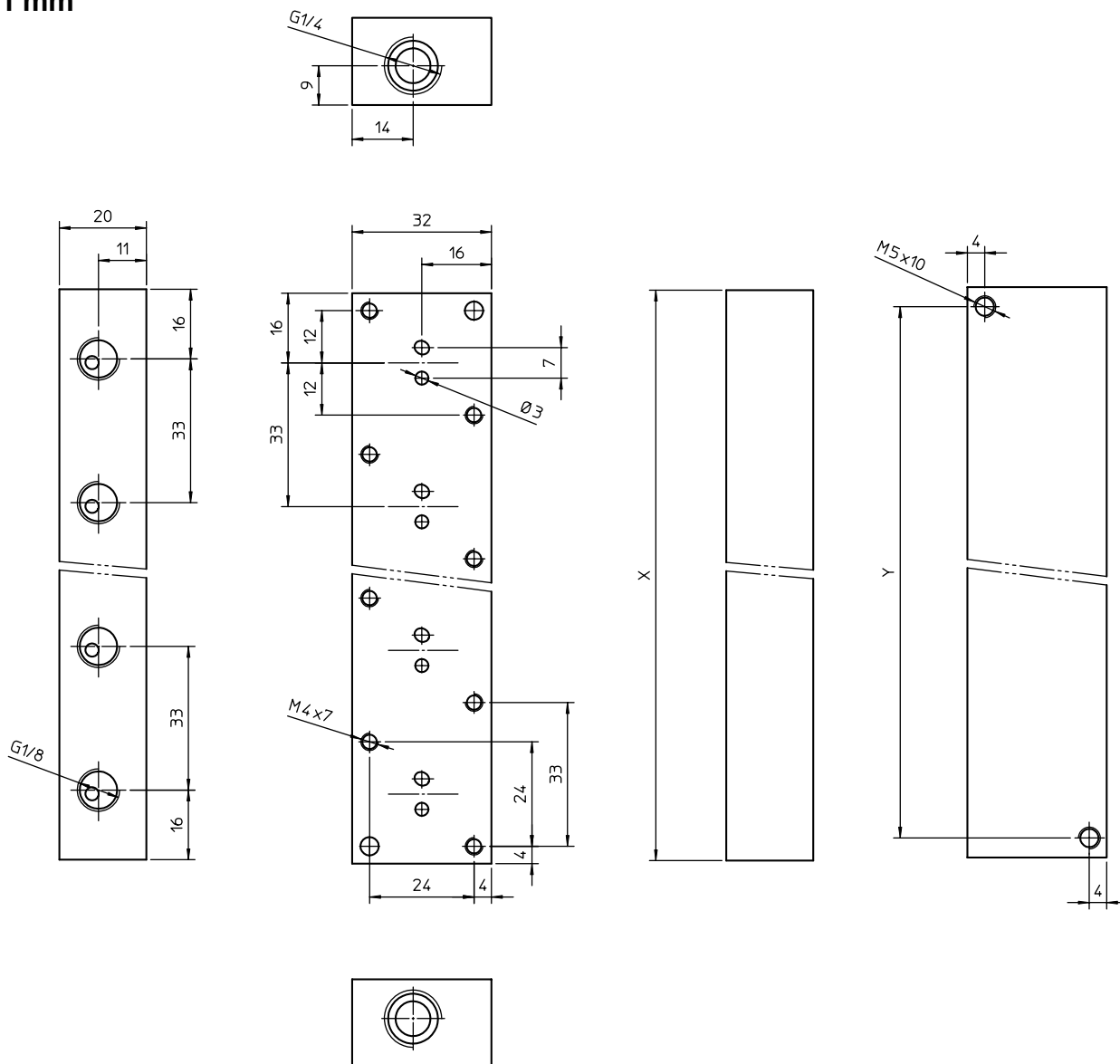
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.08A	1	32	24	45
ZZ11.Q2.08A	2	65	57	100
ZZ11.Q3.08A	3	98	90	150
ZZ11.Q4.08A	4	131	123	205
ZZ11.Q5.08A	5	164	156	260
ZZ11.Q6.08A	6	197	189	310

-M4 screws order code Z11030 (two each valves station) must be ordered separately

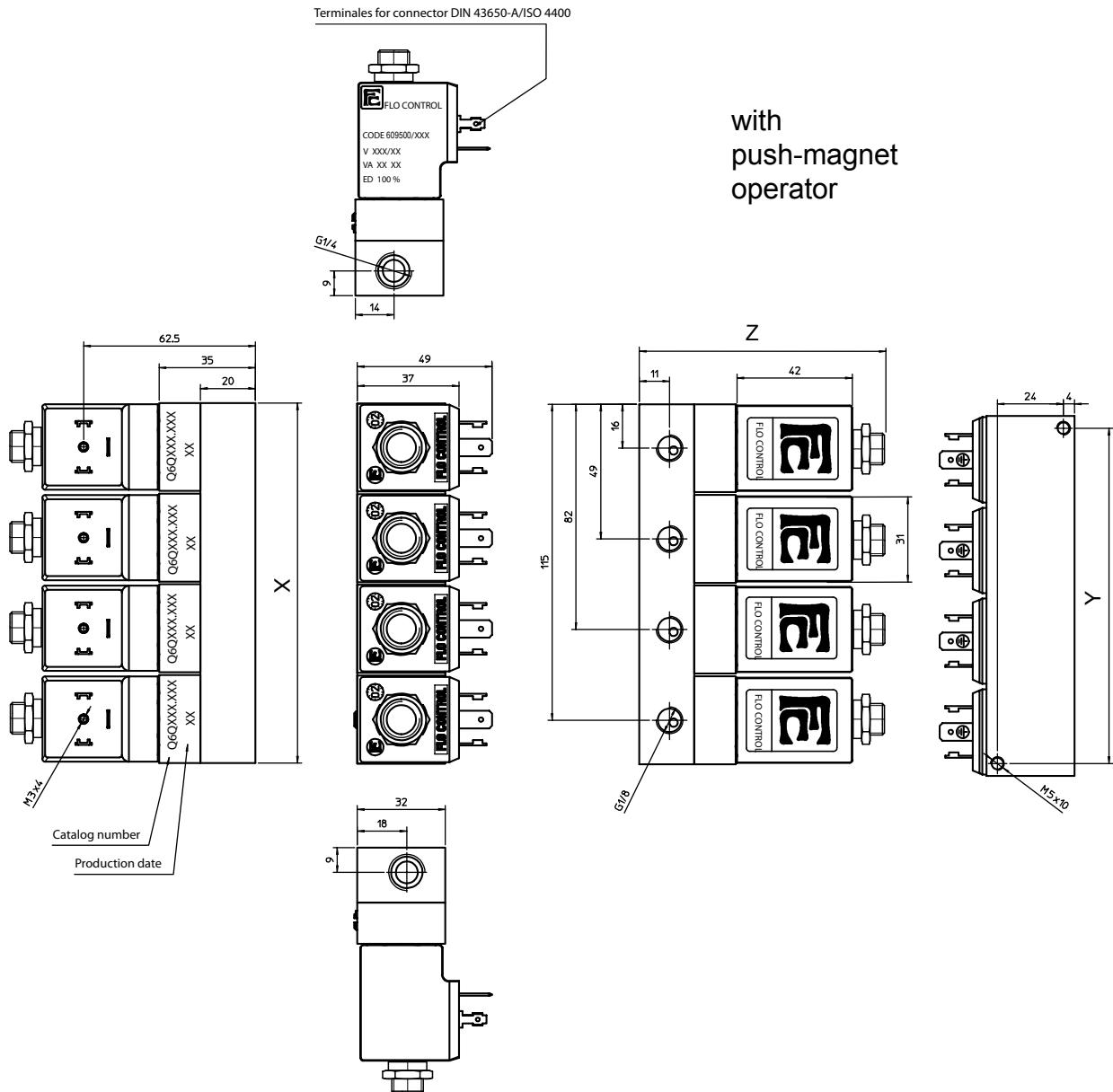
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 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	32	24	85.6	260
	2	65	57	85.6	530
	3	98	90	85.6	795
	4	131	123	85.6	1065
	5	164	156	85.6	1335
	6	197	189	85.6	1600

FLO CONTROL

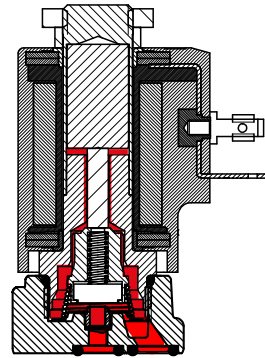
Solenoid Valves



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*
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



with push-magnet operator

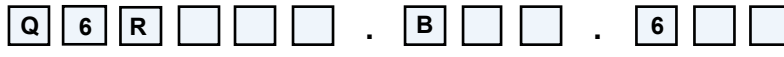


* other seal materials on request

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 open (NO) 		0.8	0.5	0	-	60	-	21.5	13.5	Q6R208
		0.8	0.5	0	60	-	10	-	-	Q6R708
		1.2	1.3	0	-	45	-	21.5	13.5	Q6R212
		1.2	1.3	0	45	-	10	-	-	Q6R712
		1.6	1.7	0	-	25	-	21.5	13.5	Q6R216
		1.6	1.7	0	25	-	10	-	-	Q6R716
		2.0	3.0	0	-	16	-	21.5	13.5	Q6R220
		2.0	3.0	0	16	-	10	-	-	Q6R720
		2.4	3.5	0	-	10	-	21.5	13.5	Q6R224
		2.4	3.5	0	10	-	10	-	-	Q6R724
		3.0	4.5	0	-	7	-	21.5	13.5	Q6R230
		3.0	4.5	0	7	-	10	-	-	Q6R730
		4.0	7.5	0	-	3.5	-	21.5	13.5	Q6R240
		4.0	7.5	0	3.5	-	10	-	-	Q6R740

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/2

FLO CONTROL

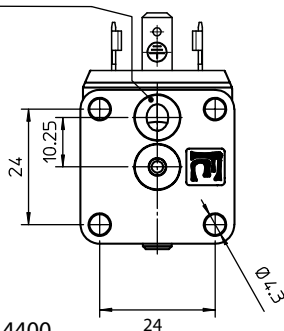
Solenoid Valves



direct operated solenoid valves

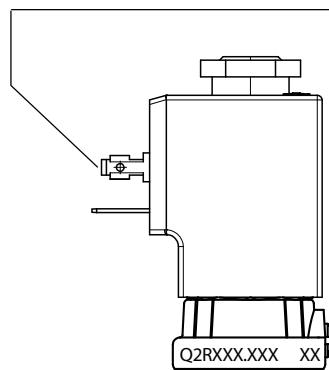
coil 31 mm

N°2 cavity for OR Ø6,07X1,78



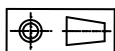
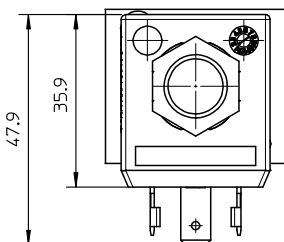
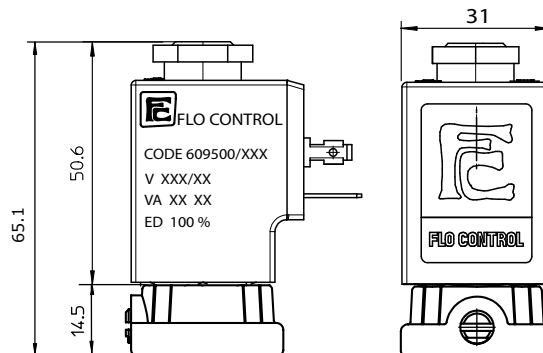
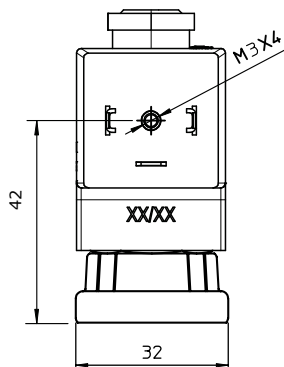
with push-magnet operator

Terminals for connector DIN 43650-A/ISO 4400



Catalog number

Production date



weight	275 g
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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)

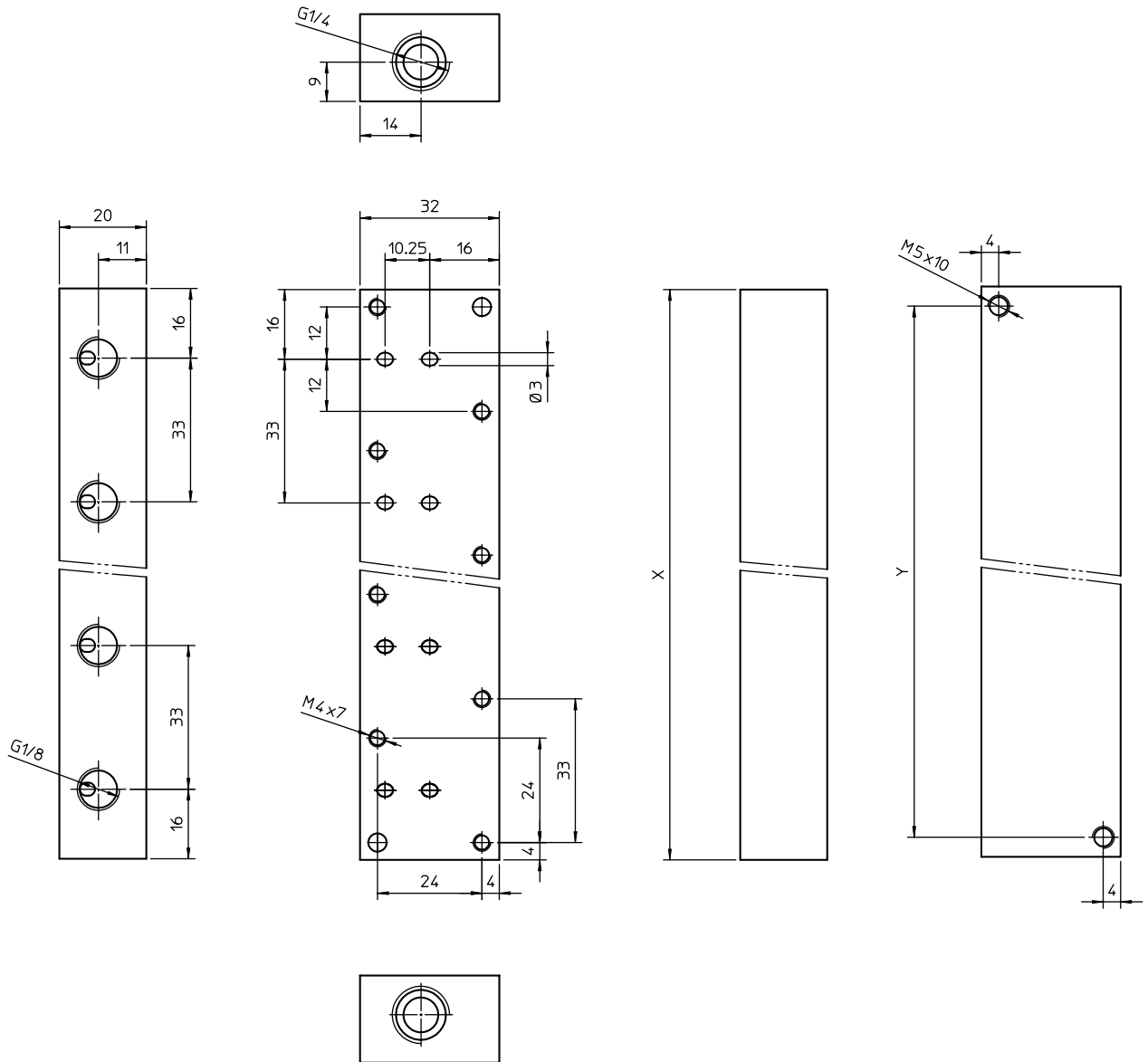
code	Z10031
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FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm

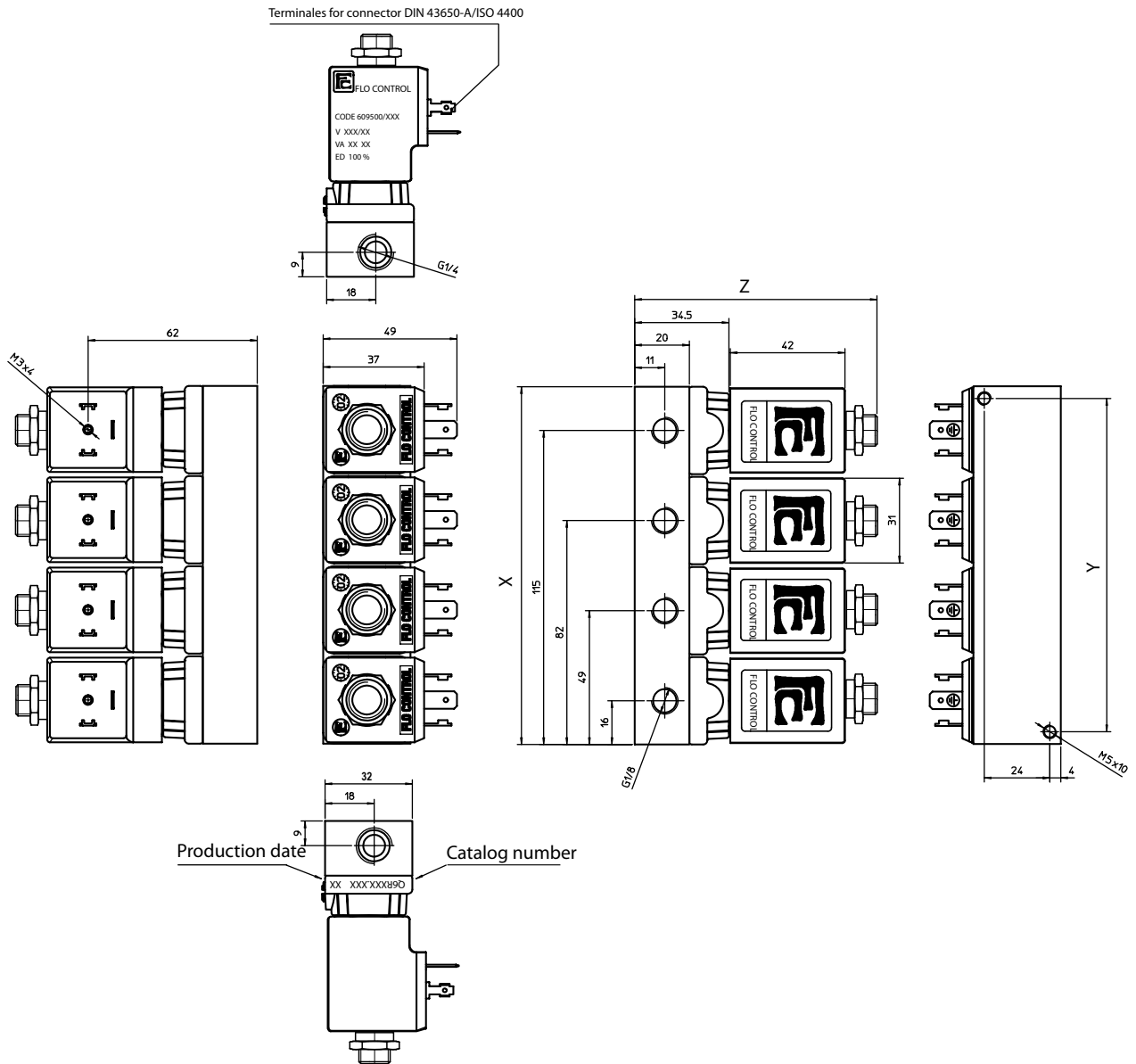


order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.28B	1	32	24	135
ZZ11.Q2.28B	2	65	57	285
ZZ11.Q3.28B	3	98	90	435
ZZ11.Q4.28B	4	131	123	585
ZZ11.Q5.28B	5	164	156	735
ZZ11.Q6.28B	6	197	189	890

-M4 screws order code Z11035 (two each valves station) must be ordered separately

direct operated solenoid valves

coil 31 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	32	24	85.1	410
	2	65	57	85.1	835
	3	98	90	85.1	1260
	4	131	123	85.1	1685
	5	164	156	85.1	2110
	6	197	189	85.1	2540

FLO CONTROL

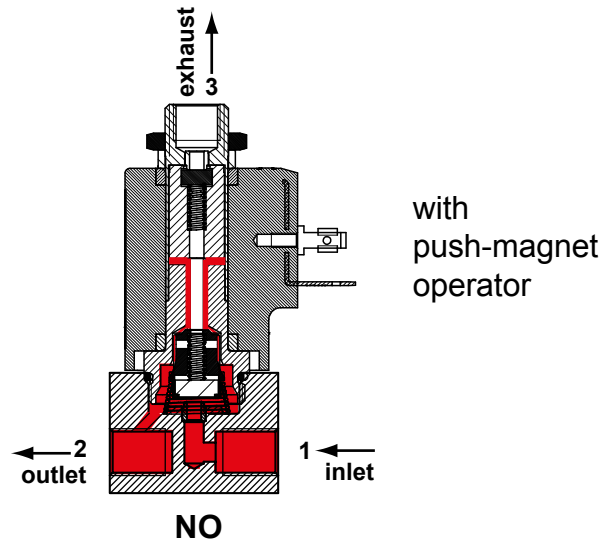
Solenoid Valves



direct operated solenoid valves

coil 31 mm

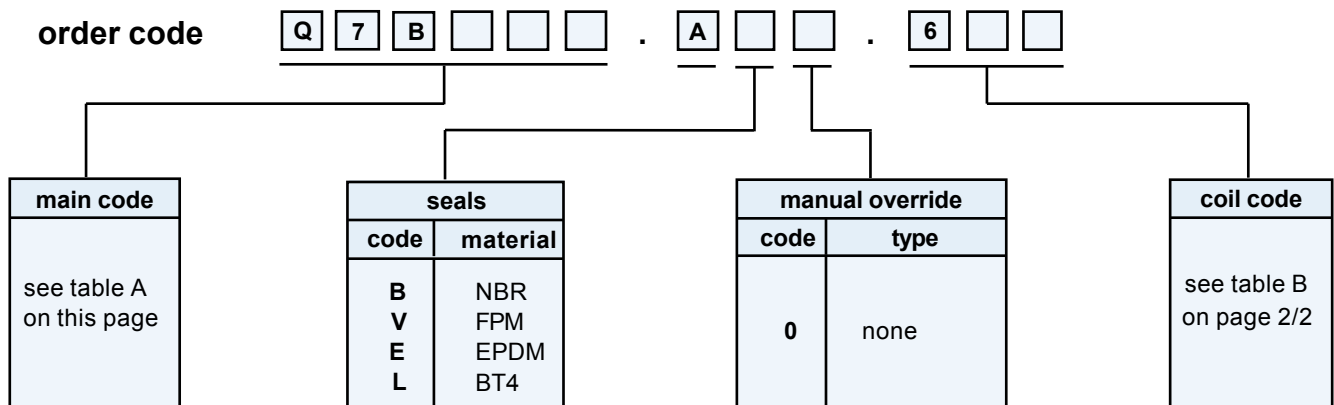
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

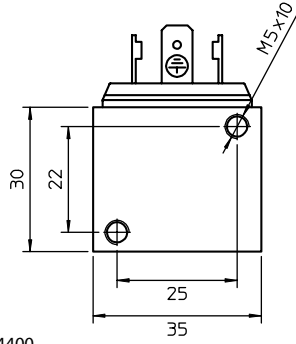
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol
3/2 normally open (NO) 	0.8	0.5	0	-	25	-	21.5	13.5	Q7B208	
	0.8	0.5	0	25	-	10	-	-	Q7B708	
	1.2	1.3	0	-	18	-	21.5	13.5	Q7B212	
	1.2	1.3	0	18	-	10	-	-	Q7B712	
	1.6	1.7	0	-	15	-	21.5	13.5	Q7B216	
	1.6	1.7	0	15	-	10	-	-	Q7B716	
	2.0	3.0	0	-	12	-	21.5	13.5	Q7B220	
	2.0	3.0	0	12	-	10	-	-	Q7B720	
	2.4	3.5	0	-	9	-	21.5	13.5	Q7B224	
	2.4	3.5	0	9	-	10	-	-	Q7B724	
	3.0	4.5	0	-	7.5	-	21.5	13.5	Q7B230	
	3.0	4.5	0	7.5	-	10	-	-	Q7B730	

*l/min. of water with ΔP of 1 bar



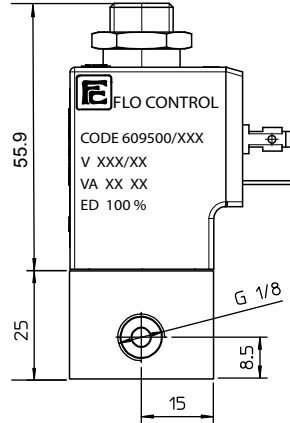
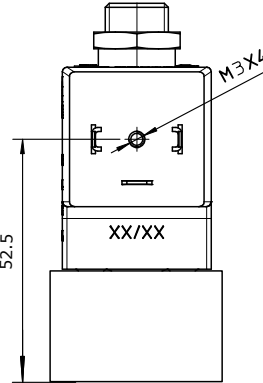
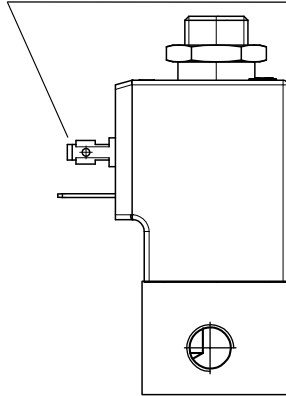
direct operated solenoid valves

coil 31 mm

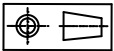
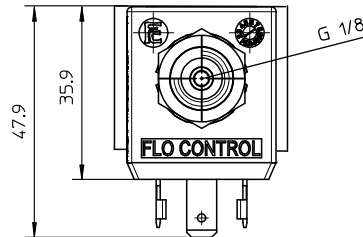


with push-magnet operator

Terminales for connector DIN 43650-A/ISO 4400



Catalog number
Production date



weight	230 g
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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
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FLO CONTROL

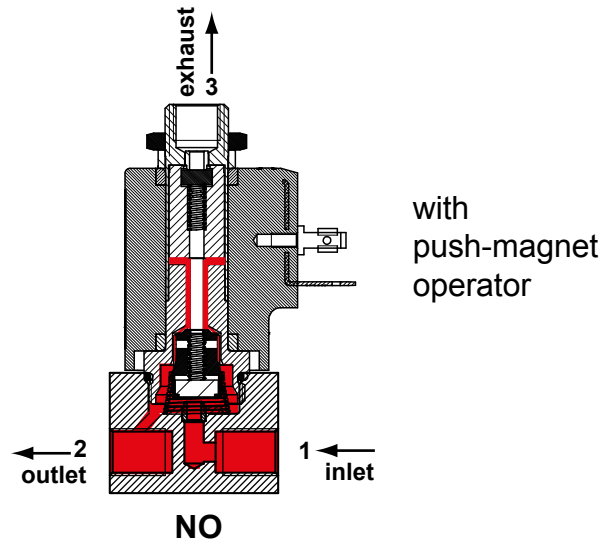
Solenoid Valves



direct operated solenoid valves

coil 31 mm

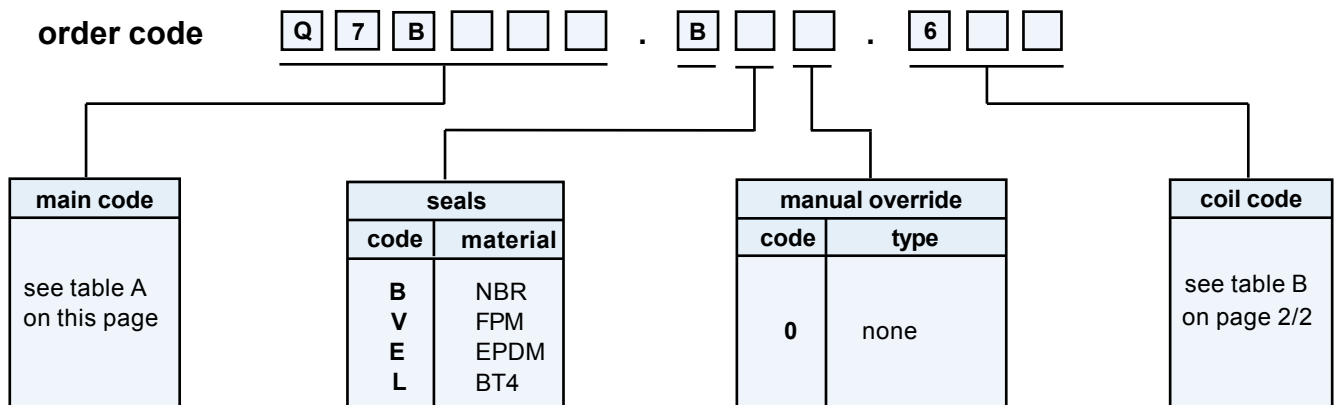
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

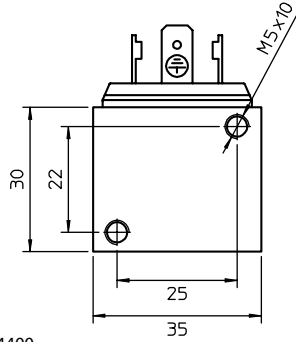
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A main code	
				min.	max. DC	max. AC	Watt DC	V.A. AC		
								inr.		hol
3/2 normally open (NO) 		0.8	0.5	0	-	25	-	21.5	13.5	Q7B208
		0.8	0.5	0	25	-	10	-	-	Q7B708
		1.2	1.3	0	-	18	-	21.5	13.5	Q7B212
		1.2	1.3	0	18	-	10	-	-	Q7B712
		1.6	1.7	0	-	15	-	21.5	13.5	Q7B216
		1.6	1.7	0	15	-	10	-	-	Q7B716
		2.0	3.0	0	-	12	-	21.5	13.5	Q7B220
		2.0	3.0	0	12	-	10	-	-	Q7B720
		2.4	3.5	0	-	9	-	21.5	13.5	Q7B224
		2.4	3.5	0	9	-	10	-	-	Q7B724
		3.0	4.5	0	-	7.5	-	21.5	13.5	Q7B230
		3.0	4.5	0	7.5	-	10	-	-	Q7B730

*l/min. of water with ΔP of 1 bar



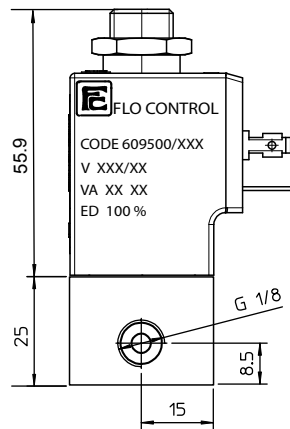
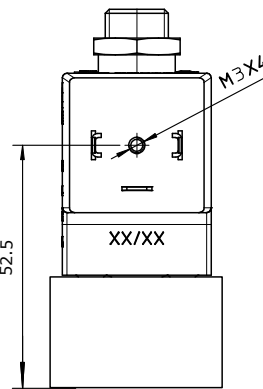
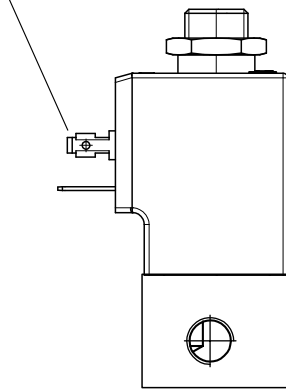
direct operated solenoid valves

coil 31 mm

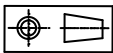
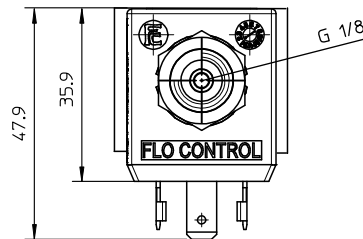


with push-magnet operator

Terminals for connector DIN 43650-A/ISO 4400



Catalog number
Production date



weight	340 g
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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
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FLO CONTROL

Solenoid Valves

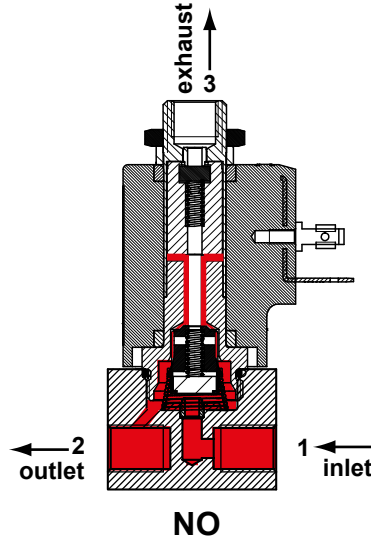


direct operated solenoid valves

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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request

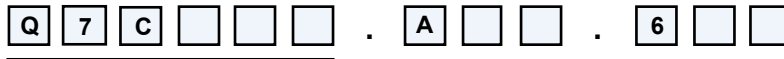


with push-magnet operator

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 open (NO) 		0.8	0.5	0	-	25	-	21.5	13.5	Q7C208
		0.8	0.5	0	25	-	10	-	-	Q7C708
		1.2	1.3	0	-	18	-	21.5	13.5	Q7C212
		1.2	1.3	0	18	-	10	-	-	Q7C712
		1.6	1.7	0	-	15	-	21.5	13.5	Q7C216
		1.6	1.7	0	15	-	10	-	-	Q7C716
		2.0	3.0	0	-	12	-	21.5	13.5	Q7C220
		2.0	3.0	0	12	-	10	-	-	Q7C720
		2.4	3.5	0	-	9	-	21.5	13.5	Q7C224
		2.4	3.5	0	9	-	10	-	-	Q7C724
		3.0	4.5	0	-	7.5	-	21.5	13.5	Q7C230
		3.0	4.5	0	7.5	-	10	-	-	Q7C730

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

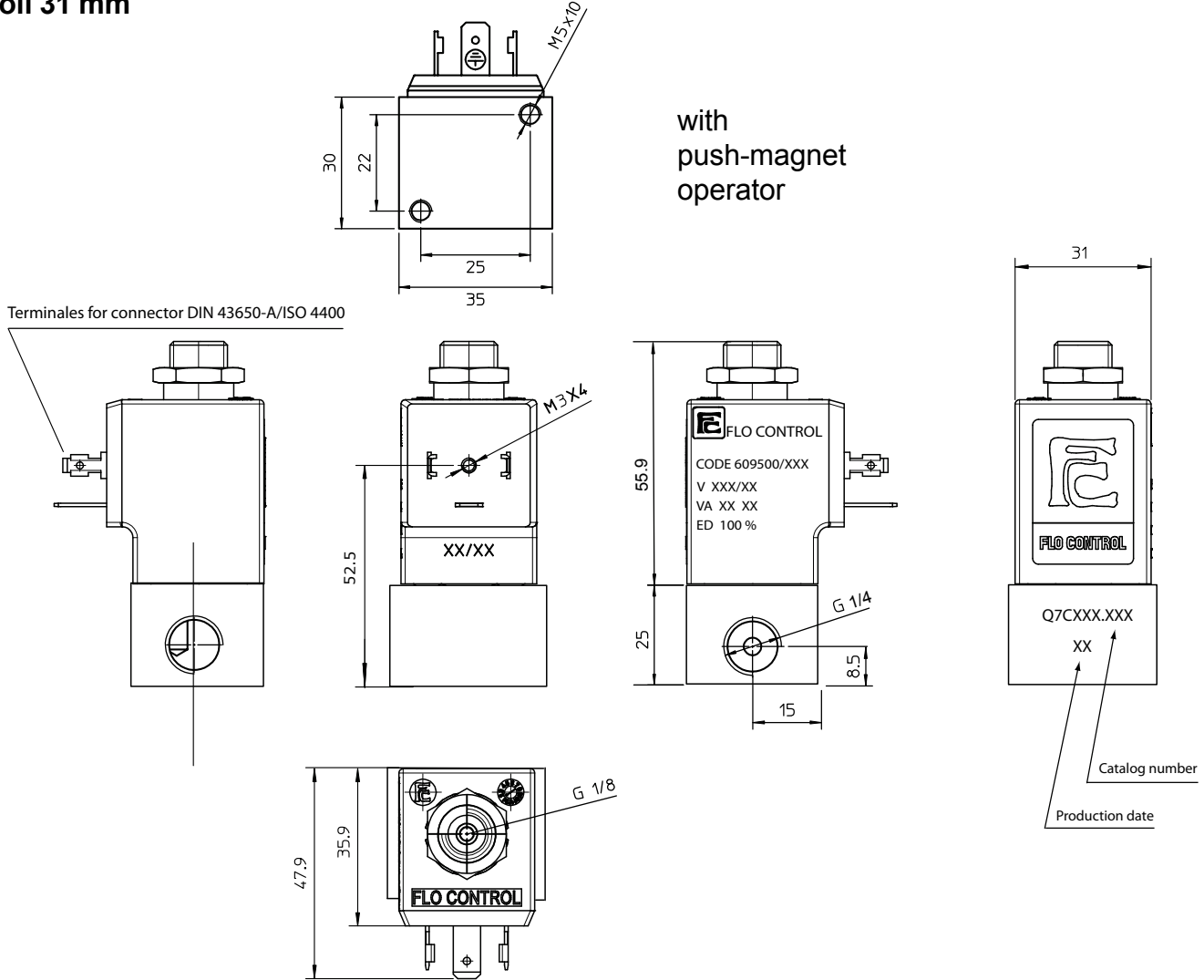
coil code
see table B on page 2/2

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm



weight	230 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
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FLO CONTROL
Solenoid Valves

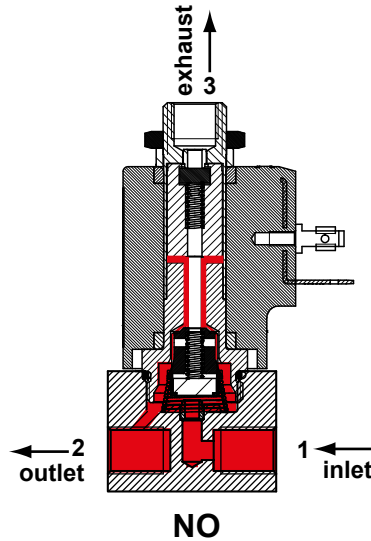


direct operated solenoid valves

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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request



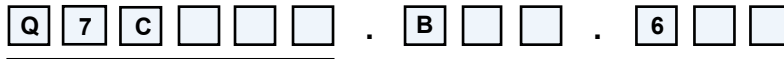
with push-magnet operator

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 open (NO) 	0.8	0.5	0	-	25	-	21.5	13.5	Q7C208	
	0.8	0.5	0	25	-	10	-	-	Q7C708	
	1.2	1.3	0	-	18	-	21.5	13.5	Q7C212	
	1.2	1.3	0	18	-	10	-	-	Q7C712	
	1.6	1.7	0	-	15	-	21.5	13.5	Q7C216	
	1.6	1.7	0	15	-	10	-	-	Q7C716	
	2.0	3.0	0	-	12	-	21.5	13.5	Q7C220	
	2.0	3.0	0	12	-	10	-	-	Q7C720	
	2.4	3.5	0	-	9	-	21.5	13.5	Q7C224	
	2.4	3.5	0	9	-	10	-	-	Q7C724	
	3.0	4.5	0	-	7.5	-	21.5	13.5	Q7C230	
	3.0	4.5	0	7.5	-	10	-	-	Q7C730	
	4.0**	7.5	0	-	4.0	-	21.5	13.5	Q7C240	
	4.0**	7.5	0	4.0	-	10	-	-	Q7C740	

*l/min. of water with ΔP of 1 bar

** 3.0 mm exhaust

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/2

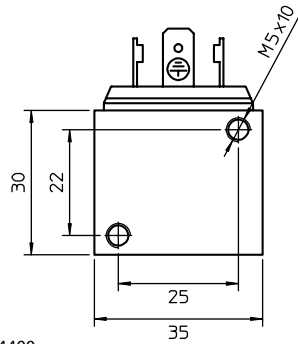
FLO CONTROL

Solenoid Valves



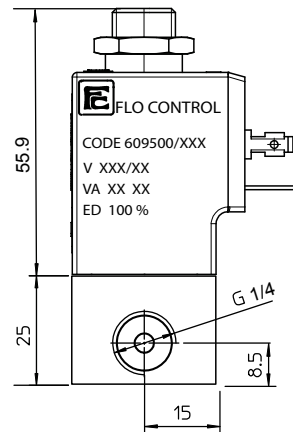
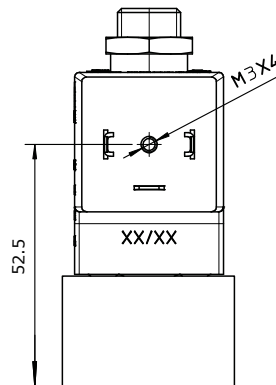
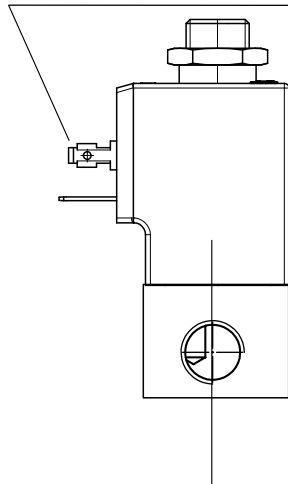
direct operated solenoid valves

coil 31 mm

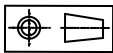
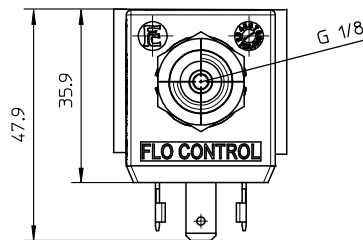


with push-magnet operator

Terminals for connector DIN 43650-A/ISO 4400



Catalog number
Production date



weight 340 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

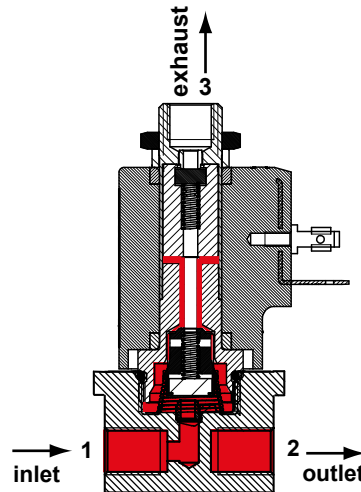
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



with push-magnet operator

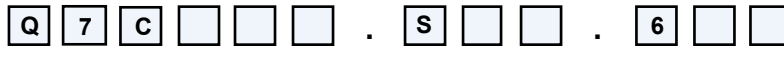
NO

* 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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q7C208	
	0.8	0.5	0	60	-	10	-	-	Q7C708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q7C212	
	1.2	1.3	0	45	-	10	-	-	Q7C712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q7C216	
	1.6	1.7	0	25	-	10	-	-	Q7C716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q7C220	
	2.0	3.0	0	16	-	10	-	-	Q7C720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q7C224	
	2.4	3.5	0	10	-	10	-	-	Q7C724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q7C230	
	3.0	4.5	0	7	-	10	-	-	Q7C730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q7C240	
	4.0	7.5	0	3.5	-	10	-	-	Q7C740	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/2

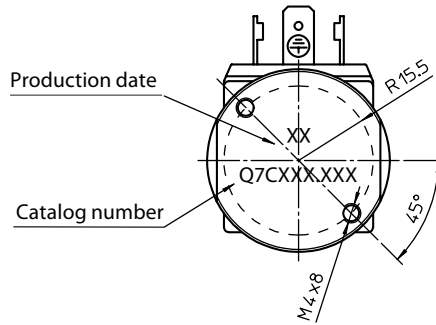
FLO CONTROL

Solenoid Valves



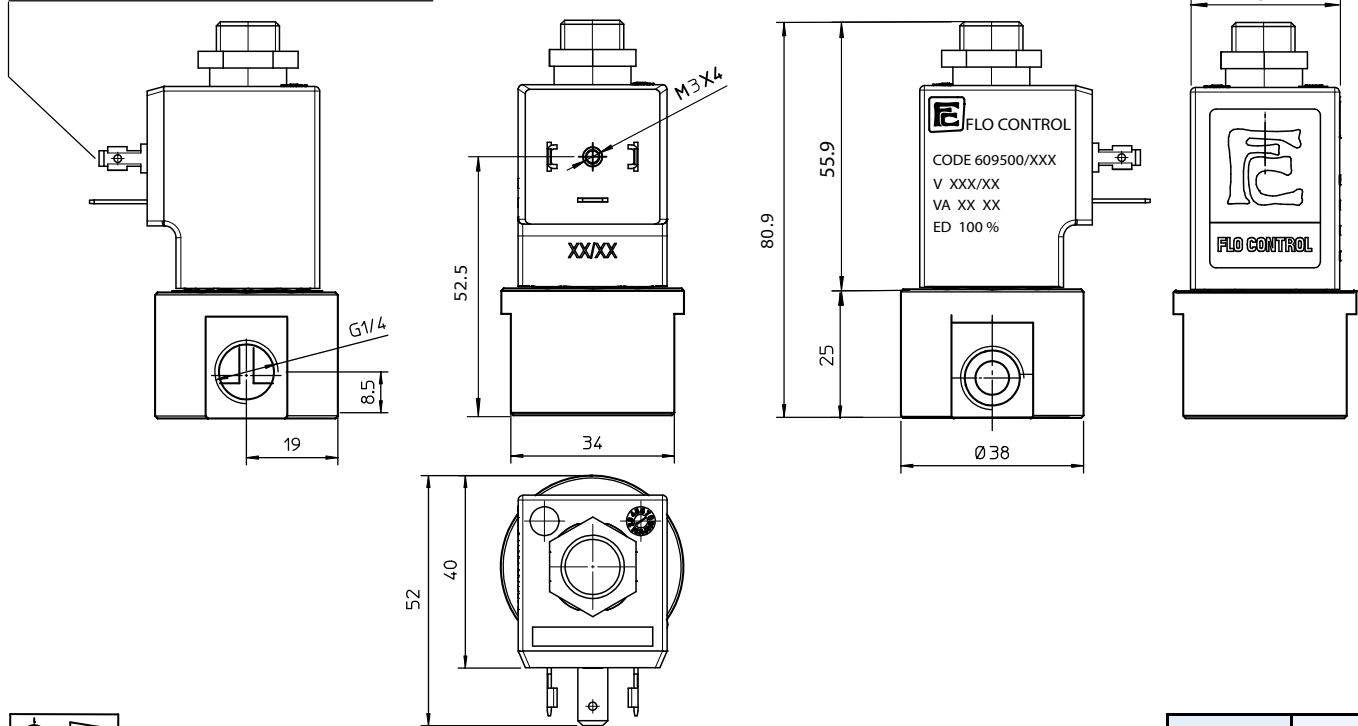
direct operated solenoid valves

coil 31 mm



with
push-magnet
operator

Terminals for connector DIN 43650-A/ISO 4400



weight 430 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

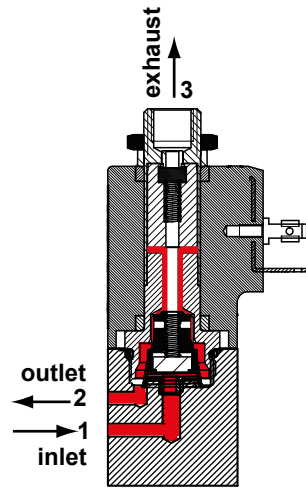


direct operated solenoid valves

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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

* other seal materials on request



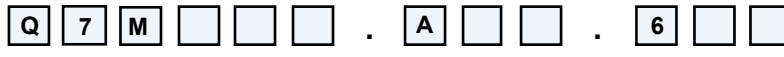
with push-magnet operator

NO

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	
3/2 normally open (NO) 		0.8	0.5	0	-	25	-	21.5	13.5	Q7M208
		0.8	0.5	0	25	-	10	-	-	Q7M708
		1.2	1.3	0	-	18	-	21.5	13.5	Q7M212
		1.2	1.3	0	18	-	10	-	-	Q7M712
		1.6	1.7	0	-	15	-	21.5	13.5	Q7M216
		1.6	1.7	0	15	-	10	-	-	Q7M716
		2.0	3.0	0	-	12	-	21.5	13.5	Q7M220
		2.0	3.0	0	12	-	10	-	-	Q7M720
		2.4	3.5	0	-	9	-	21.5	13.5	Q7M224
		2.4	3.5	0	9	-	10	-	-	Q7M724
		3.0	4.5	0	-	7.5	-	21.5	13.5	Q7M230
		3.0	4.5	0	7.5	-	10	-	-	Q7M730

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/2

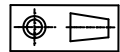
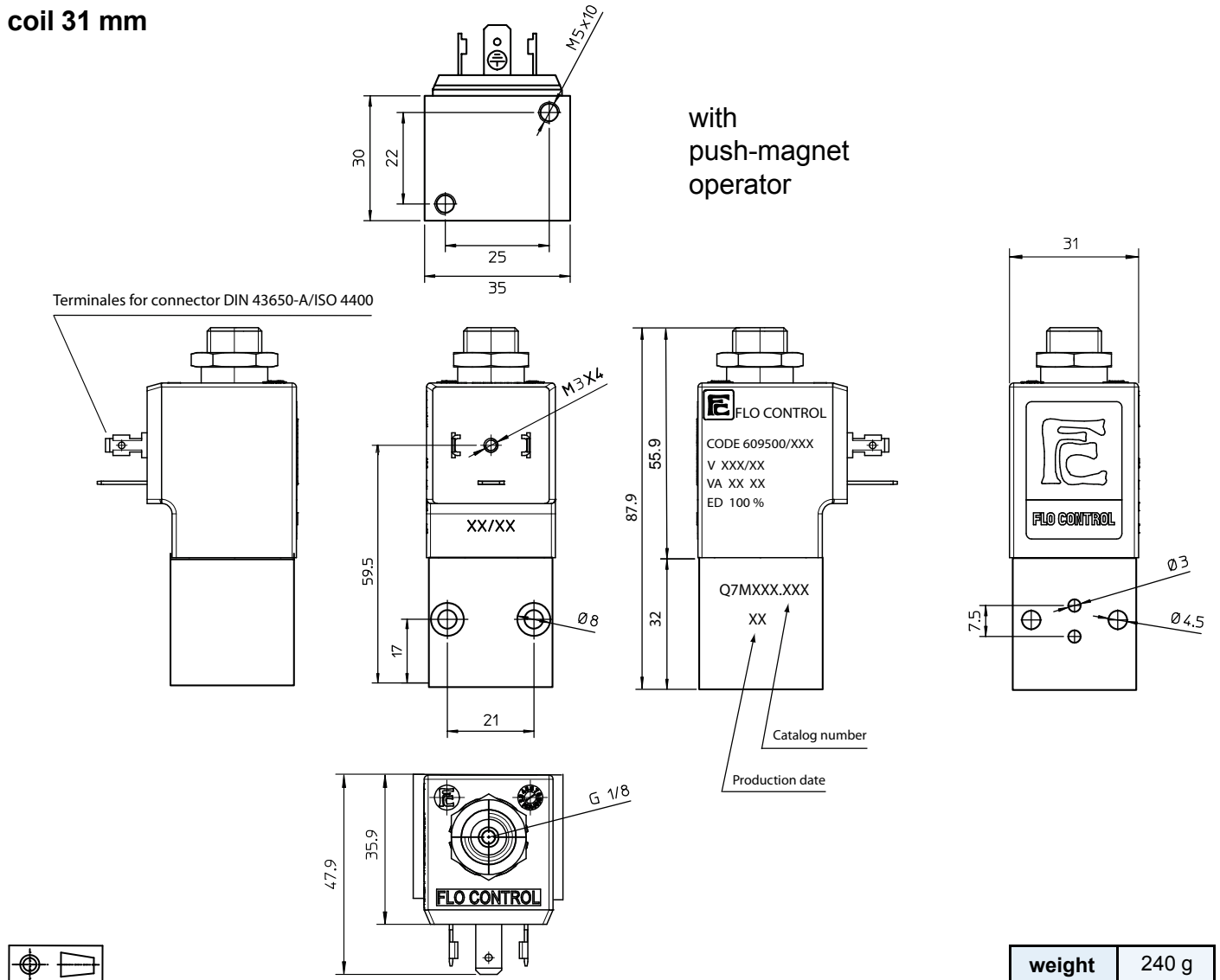
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



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
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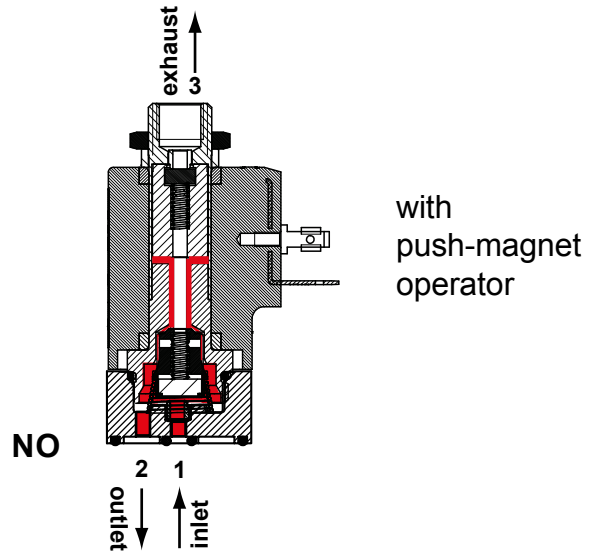
FLO CONTROL
Solenoid Valves



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*
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

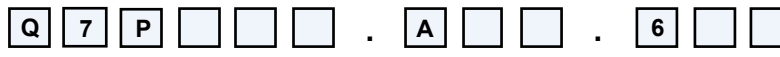


* other seal materials on request

function	symbol	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 open (NO) 	0.8	0.5	0	-	25	-	21.5	13.5	Q7P208	
	0.8	0.5	0	25	-	10	-	-	Q7P708	
	1.2	1.3	0	-	18	-	21.5	13.5	Q7P212	
	1.2	1.3	0	18	-	10	-	-	Q7P712	
	1.6	1.7	0	-	15	-	21.5	13.5	Q7P216	
	1.6	1.7	0	15	-	10	-	-	Q7P716	
	2.0	3.0	0	-	12	-	21.5	13.5	Q7P220	
	2.0	3.0	0	12	-	10	-	-	Q7P720	
	2.4	3.5	0	-	9	-	21.5	13.5	Q7P224	
	2.4	3.5	0	9	-	10	-	-	Q7P724	
	3.0	4.5	0	-	7.5	-	21.5	13.5	Q7P230	
	3.0	4.5	0	7.5	-	10	-	-	Q7P730	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/4

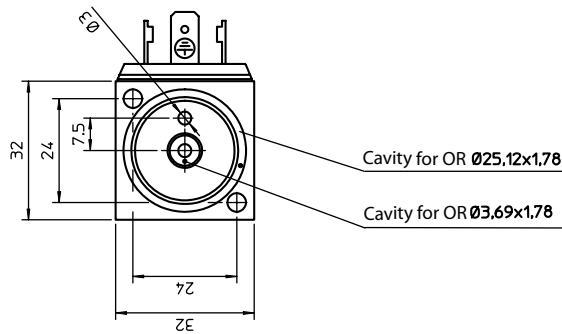
FLO CONTROL

Solenoid Valves



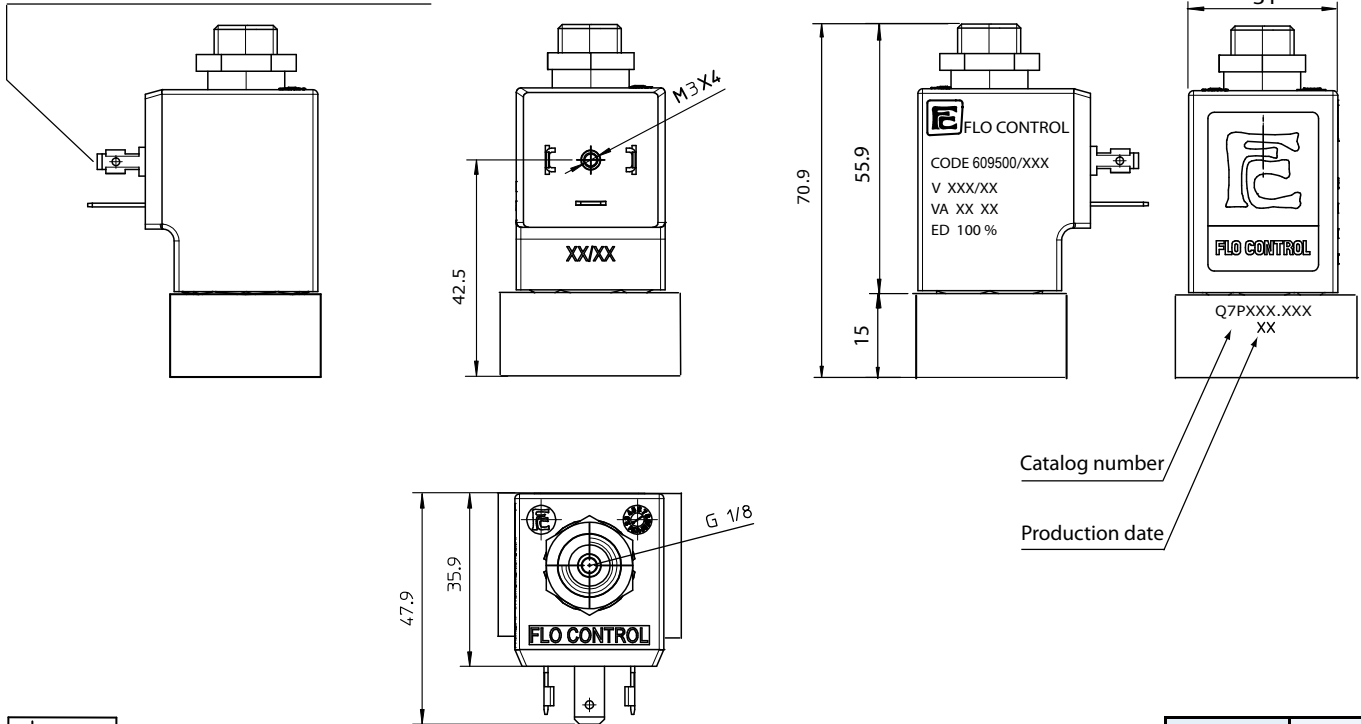
direct operated solenoid valves

coil 31 mm



with push-magnet operator

Terminals for connector DIN 43650-A/ISO 4400



Catalog number

Production date

weight	210 g
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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
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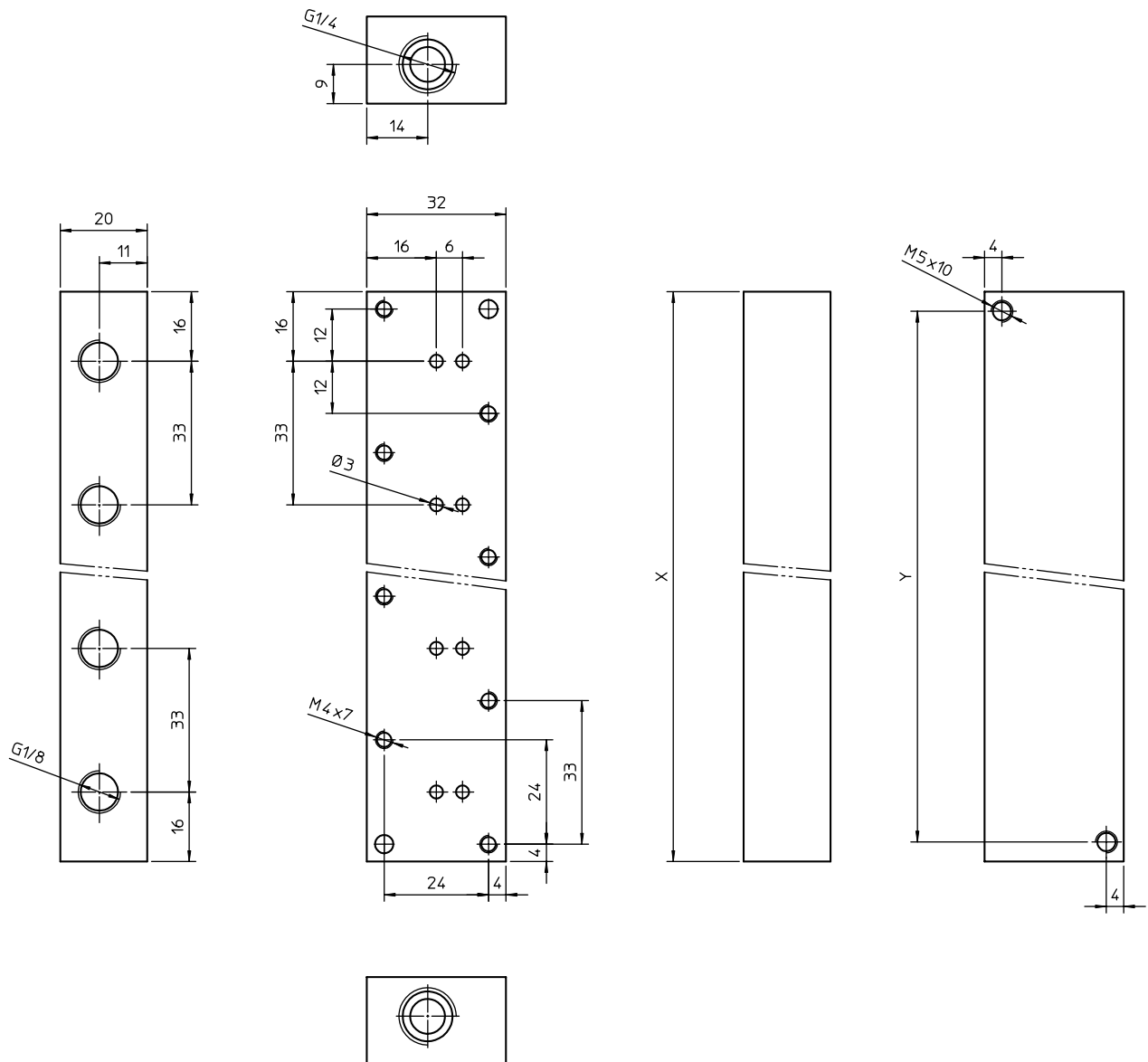
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.08B	1	32	24	45
ZZ11.Q2.08B	2	65	57	100
ZZ11.Q3.08B	3	98	90	150
ZZ11.Q4.08B	4	131	123	205
ZZ11.Q5.08B	5	164	156	260
ZZ11.Q6.08B	6	197	189	310

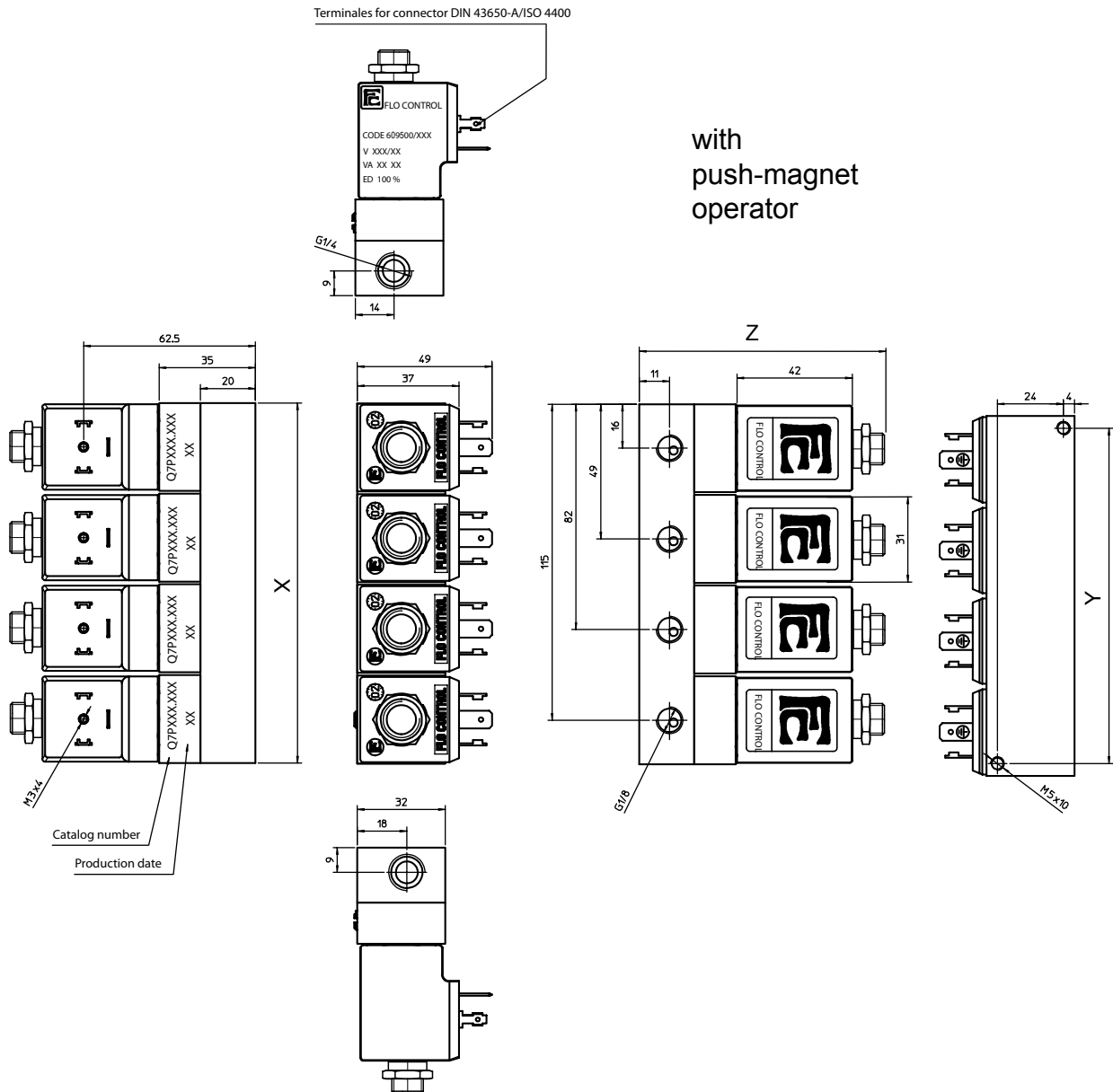
-M4 screws order code Z11030 (two each valves station) must be ordered separately

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm



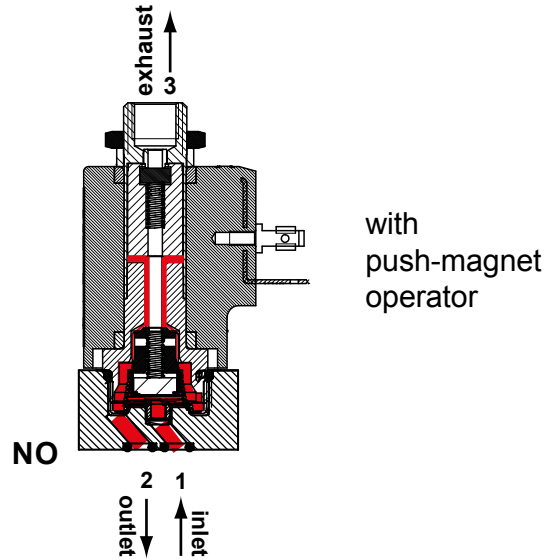
dimensions assembled manifolds

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	32	24	90.9	255
	2	65	57	90.9	520
	3	98	90	90.9	780
	4	131	123	90.9	1045
	5	164	156	90.9	1310
	6	197	189	90.9	1570

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 2/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4

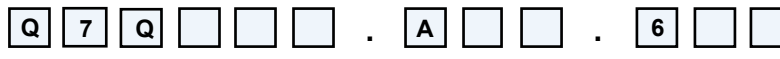


* other seal materials on request

function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A	
				min.	max. DC	max. AC	Watt DC	V.A. AC		main code
								inr.	hol	
3/2 normally open (NO) 		0.8	0.5	0	-	25	-	21.5	13.5	Q7Q208
		0.8	0.5	0	25	-	10	-	-	Q7Q708
		1.2	1.3	0	-	18	-	21.5	13.5	Q7Q212
		1.2	1.3	0	18	-	10	-	-	Q7Q712
		1.6	1.7	0	-	15	-	21.5	13.5	Q7Q216
		1.6	1.7	0	15	-	10	-	-	Q7Q716
		2.0	3.0	0	-	12	-	21.5	13.5	Q7Q220
		2.0	3.0	0	12	-	10	-	-	Q7Q720
		2.4	3.5	0	-	9	-	21.5	13.5	Q7Q224
		2.4	3.5	0	9	-	10	-	-	Q7Q724
		3.0	4.5	0	-	7.5	-	21.5	13.5	Q7Q230
		3.0	4.5	0	7.5	-	10	-	-	Q7Q730

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

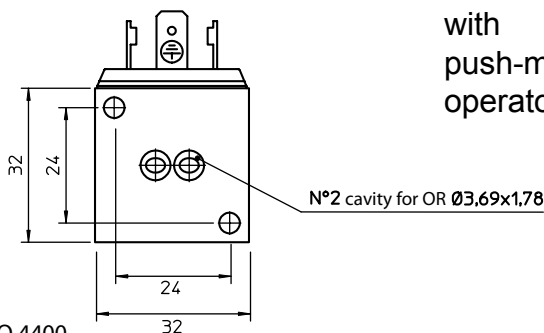
coil code
see table B on page 2/2



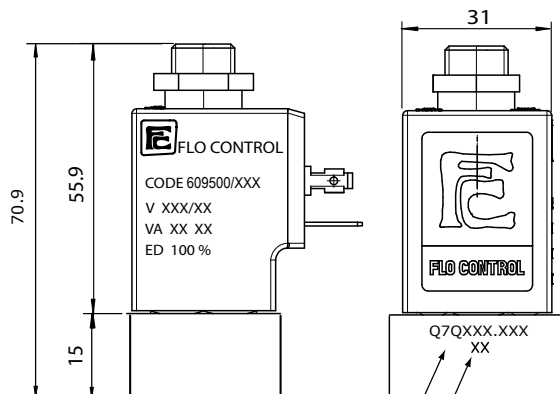
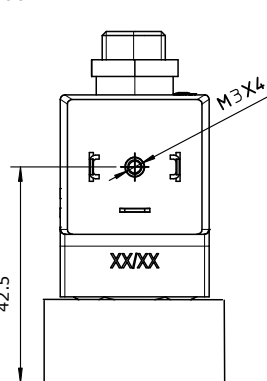
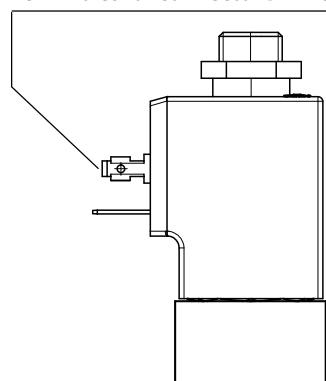
direct operated solenoid valves

coil 31 mm

with push-magnet operator

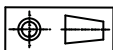
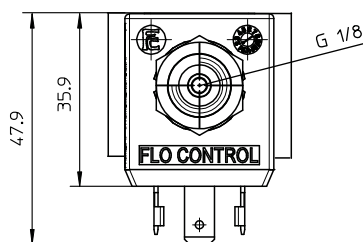


Terminals for connector DIN 43650-A/ISO 4400



Catalog number

Production date



weight	210 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
------	--------

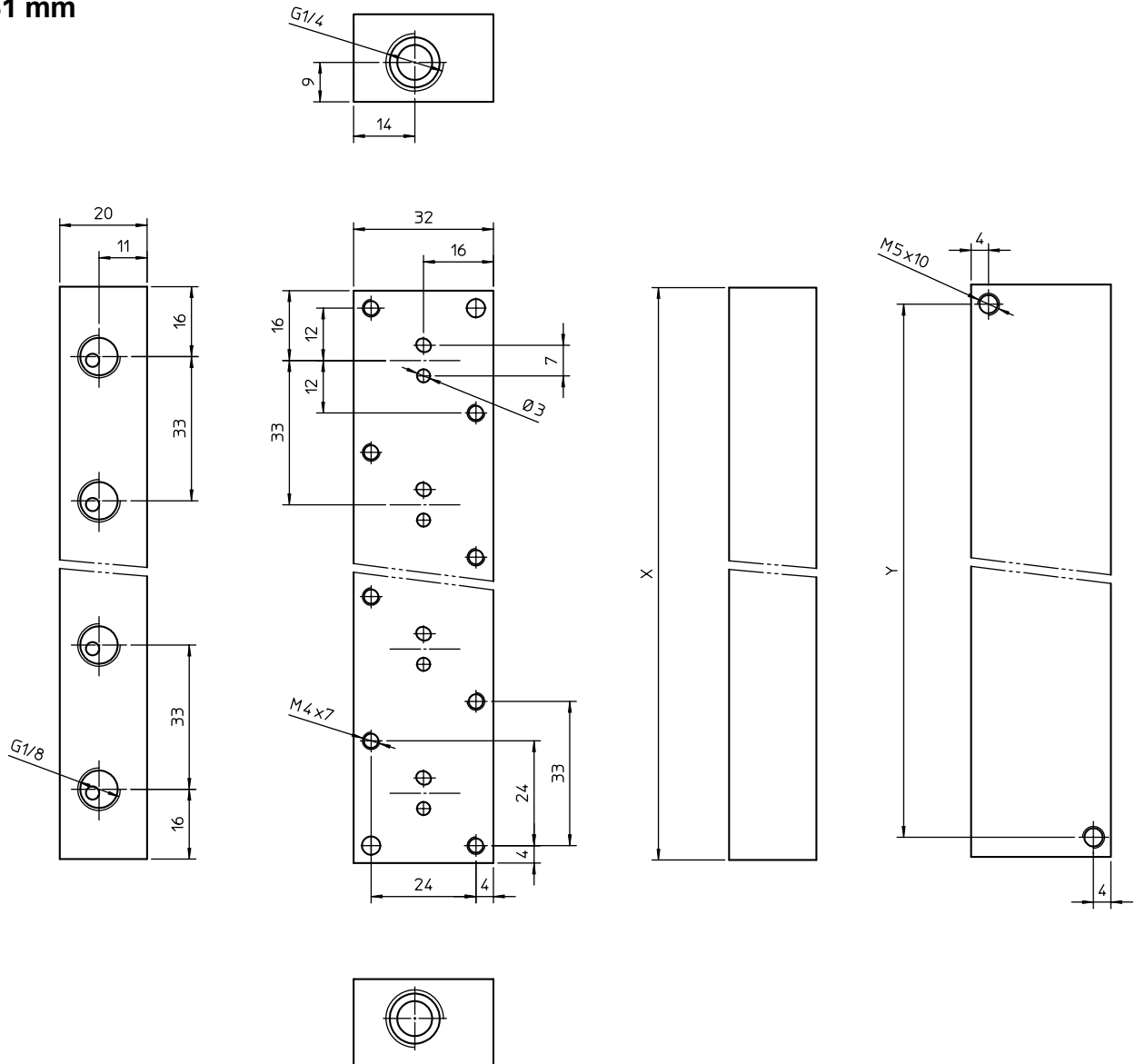
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.08B	1	32	24	45
ZZ11.Q2.08B	2	65	57	100
ZZ11.Q3.08B	3	98	90	150
ZZ11.Q4.08B	4	131	123	205
ZZ11.Q5.08B	5	164	156	260
ZZ11.Q6.08B	6	197	189	310

-M4 screws order code Z11030 (two each valves station) must be ordered separately

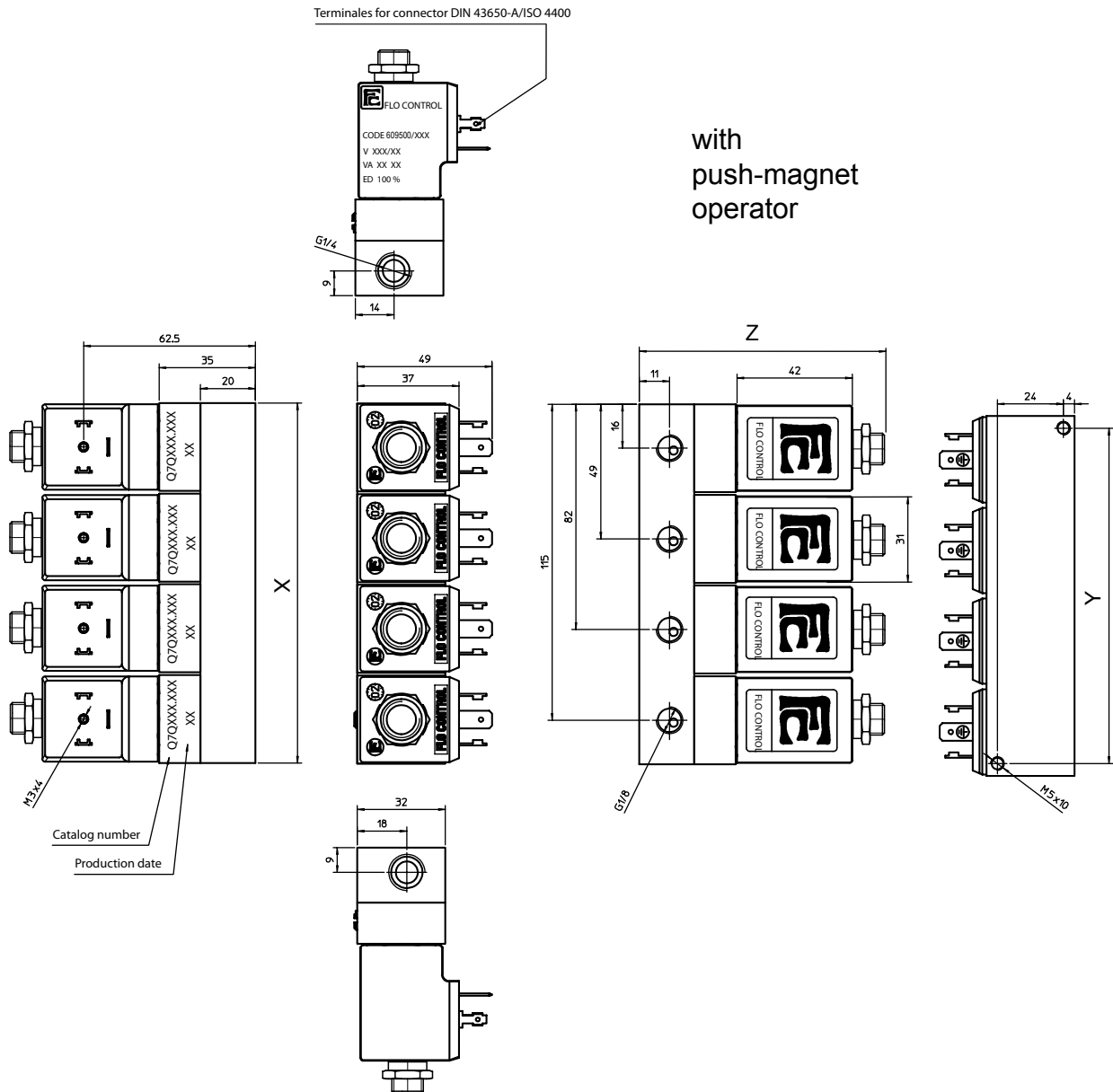
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



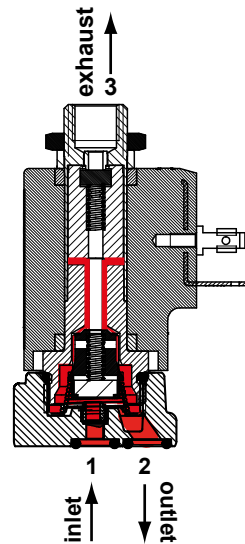
dimensions assembled manifolds

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	32	24	90.9	255
	2	65	57	90.9	520
	3	98	90	90.9	780
	4	131	123	90.9	1045
	5	164	156	90.9	1310
	6	197	189	90.9	1570

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 2/4
coil data	see page 2/4
connector data	see page 2/4
sub-base	see page 3/4 and 4/4



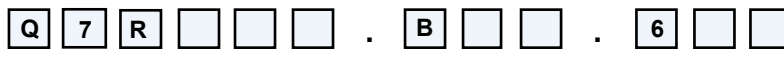
with push-magnet operator

* 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 open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q7R208	
	0.8	0.5	0	60	-	10	-	-	Q7R708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q7R212	
	1.2	1.3	0	45	-	10	-	-	Q7R712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q7R216	
	1.6	1.7	0	25	-	10	-	-	Q7R716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q7R220	
	2.0	3.0	0	16	-	10	-	-	Q7R720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q7R224	
	2.4	3.5	0	10	-	10	-	-	Q7R724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q7R230	
	3.0	4.5	0	7	-	10	-	-	Q7R730	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM
L	BT4

manual override	
code	type
0	none

coil code
see table B on page 2/2

FLO CONTROL

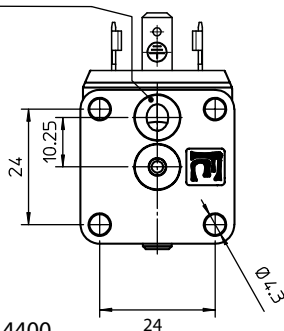
Solenoid Valves



direct operated solenoid valves

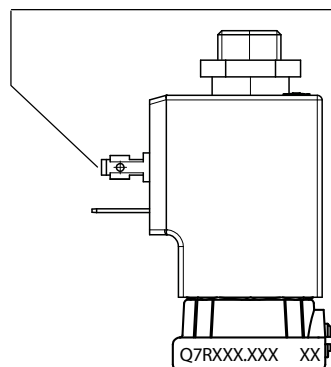
coil 31 mm

N°2 cavity for OR Ø6,07X1,78



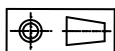
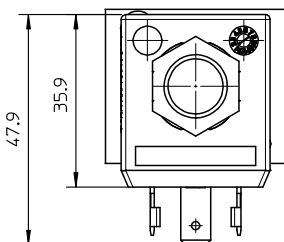
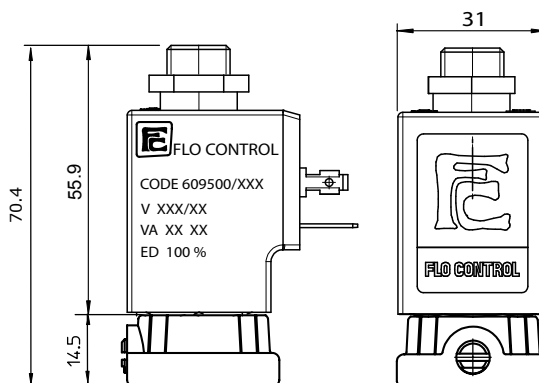
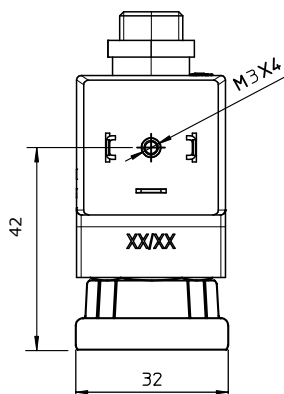
with push-magnet operator

Terminals for connector DIN 43650-A/ISO 4400



Catalog number

Production date



weight	280 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
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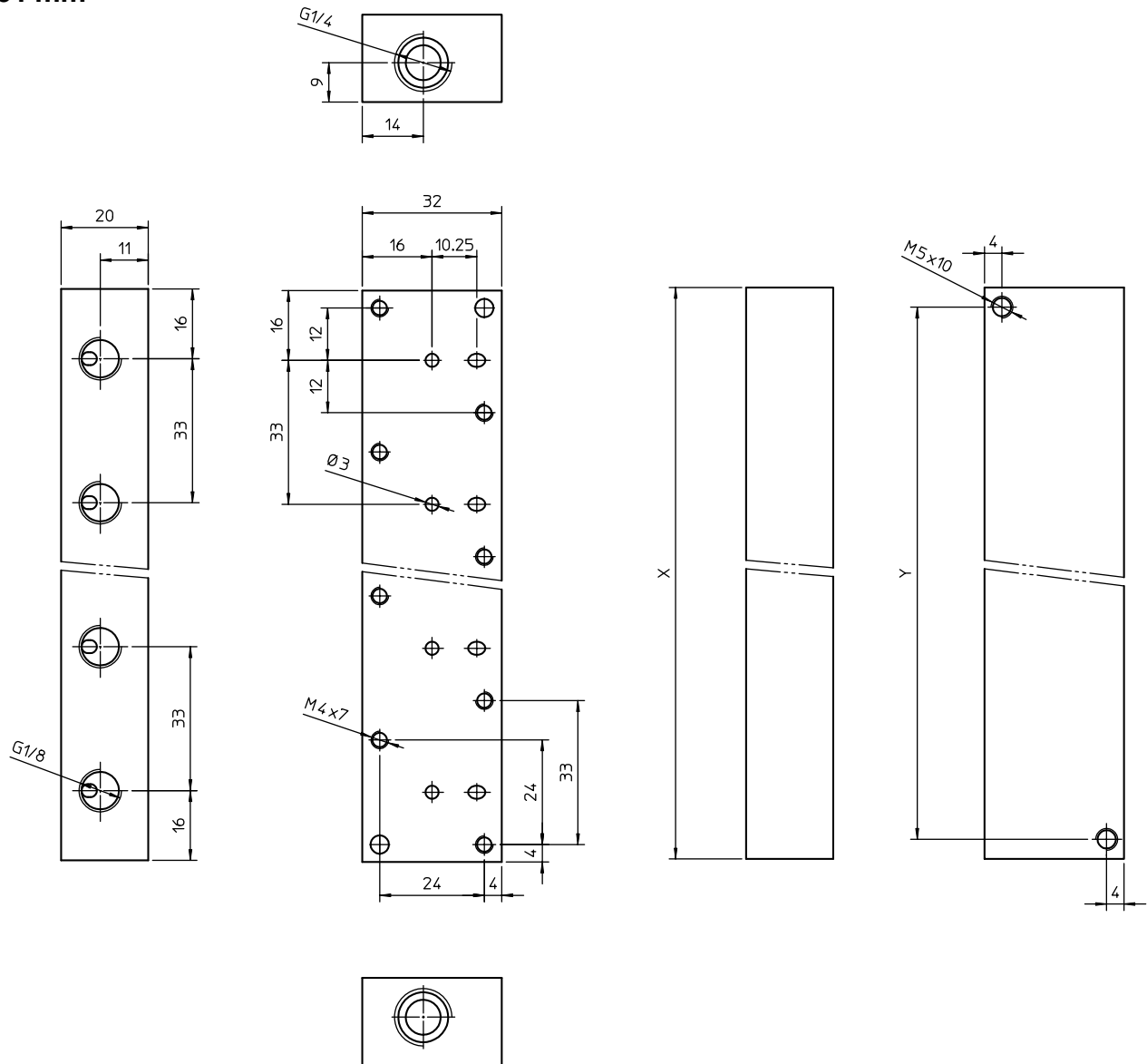
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



order code	stations	X (mm)	Y (mm)	weight (g)
ZZ11.Q1.38B	1	32	24	135
ZZ11.Q2.38B	2	65	57	285
ZZ11.Q3.38B	3	98	90	435
ZZ11.Q4.38B	4	131	123	585
ZZ11.Q5.38B	5	164	156	735
ZZ11.Q6.38B	6	197	189	890

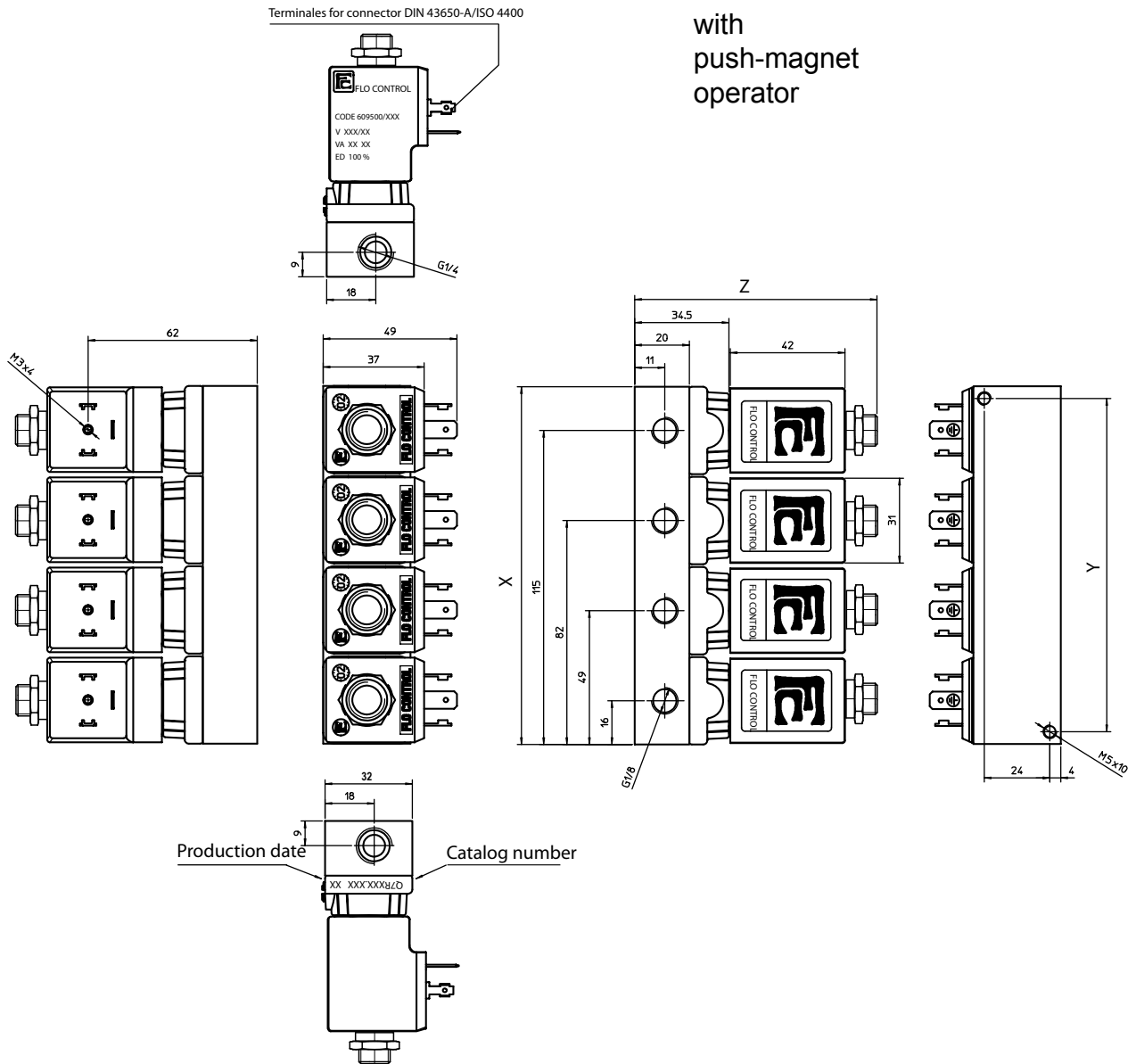
-M4 screws order code Z11035 (two each valves station) must be ordered separately

FLO CONTROL

Solenoid Valves



direct operated solenoid valves
coil 31 mm



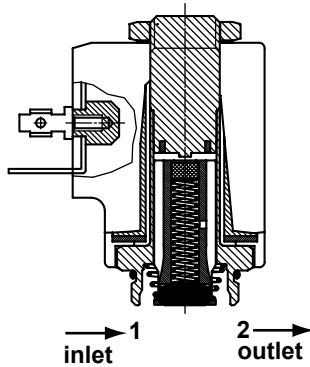
dimensions assembled manifolds

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	32	24	90.4	415
	2	65	57	90.4	845
	3	98	90	90.4	1275
	4	131	123	90.4	1705
	5	164	156	90.4	2135
	6	197	189	90.4	2570

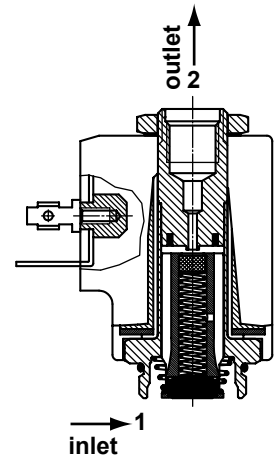
direct operated solenoid valves

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



NC



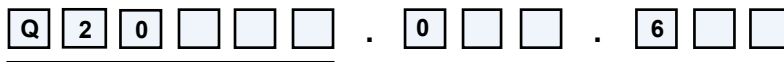
NO

* 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) 	0.8	0.5	0	60	80	10	21.5	13.5	Q20160	
	1.2	1.3	0	45	70	10	21.5	13.5	Q20160	
	1.6	1.7	0	35	60	10	21.5	13.5	Q20160	
	2.4	3.5	0	15	30	10	21.5	13.5	Q20160	
	3.0	4.5	0	10	18	10	21.5	13.5	Q20160	
	4.0	7.5	0	3	8	10	21.5	13.5	Q20160	
	6.0	12.0	0	0.7	2.5	10	21.5	13.5	Q20160	
2/2 normally open (NO) 	0.8	0.5	0	40	40	10	21.5	13.5	Q20208	
	1.2	1.1	0	35	35	10	21.5	13.5	Q20212	
	1.6	1.4	0	20	20	10	21.5	13.5	Q20216	
	2.4	3.0	0	10	10	10	21.5	13.5	Q20224	
	3.0	3.5	0	8	8	10	21.5	13.5	Q20230	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none

coil code
see table B on page 2/2

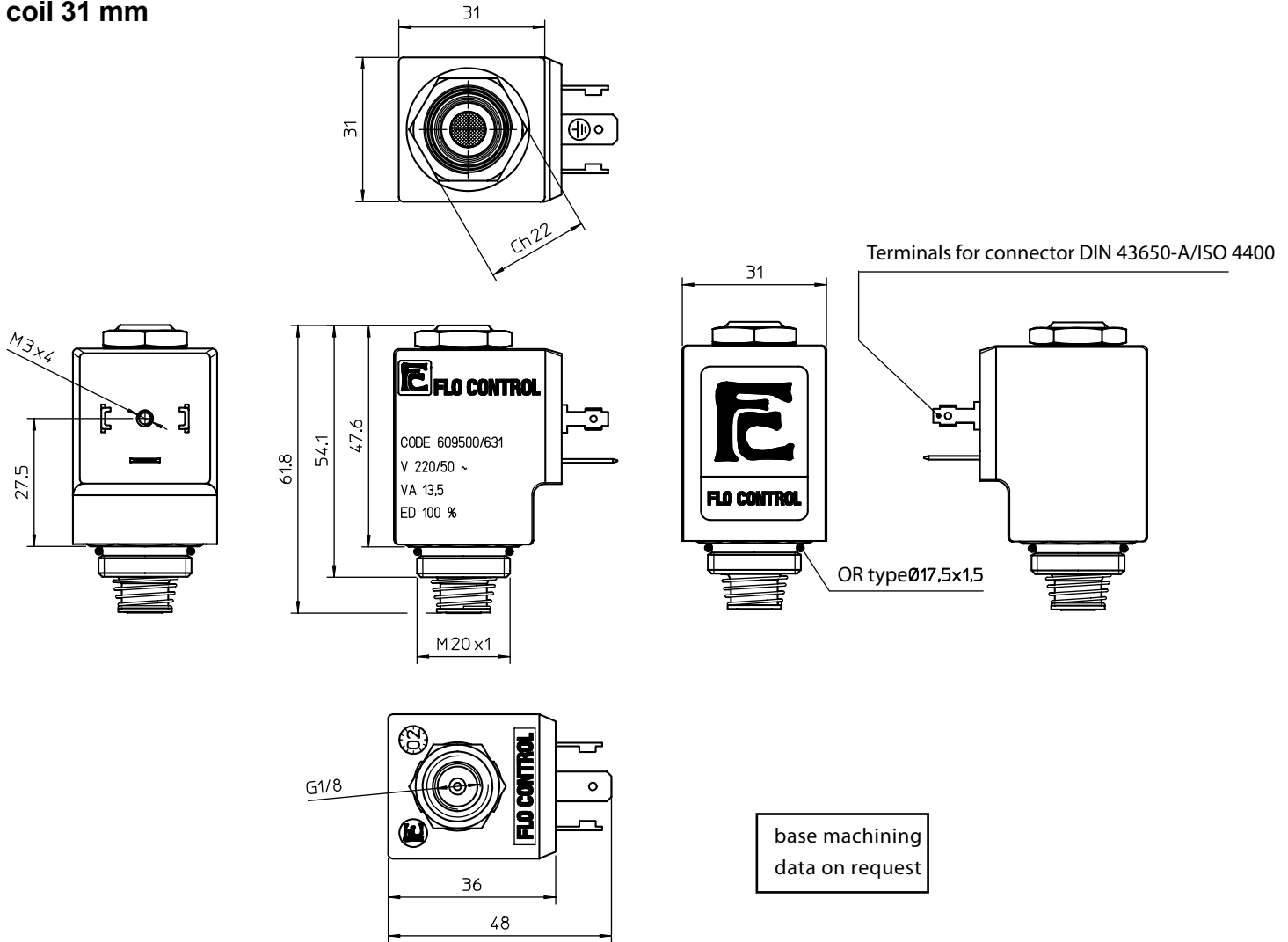
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



weight 150 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
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FLO CONTROL
Solenoid Valves

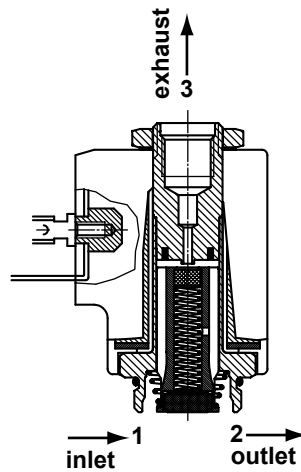


direct operated solenoid valves

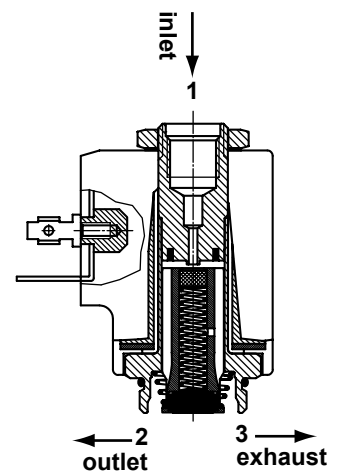
coil 31 mm

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

* other seal materials on request



NC

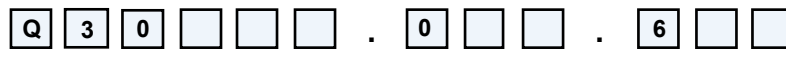


NO

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	Q30108	
	1.2	1.3	0	25	25	10	21.5	13.5	Q30112	
	1.6	1.7	0	15	15	10	21.5	13.5	Q30116	
	2.4	3.5	0	10	10	10	21.5	13.5	Q30124	
	3.0	4.5	0	6	6	10	21.5	13.5	Q30130	
3/2 normally open (NO) 	0.8	0.5	0	20	20	10	21.5	13.5	Q30208	
	1.2	1.1	0	15	15	10	21.5	13.5	Q30212	
	1.6	1.4	0	10	10	10	21.5	13.5	Q30216	
	2.4	3.0	0	6	6	10	21.5	13.5	Q30224	
	3.0	3.5	0	4.5	4.5	10	21.5	13.5	Q30230	

*l/min. of water with ΔP of 1 bar

order code



main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

manual override	
code	type
0	none

coil code
see table B on page 2/2

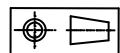
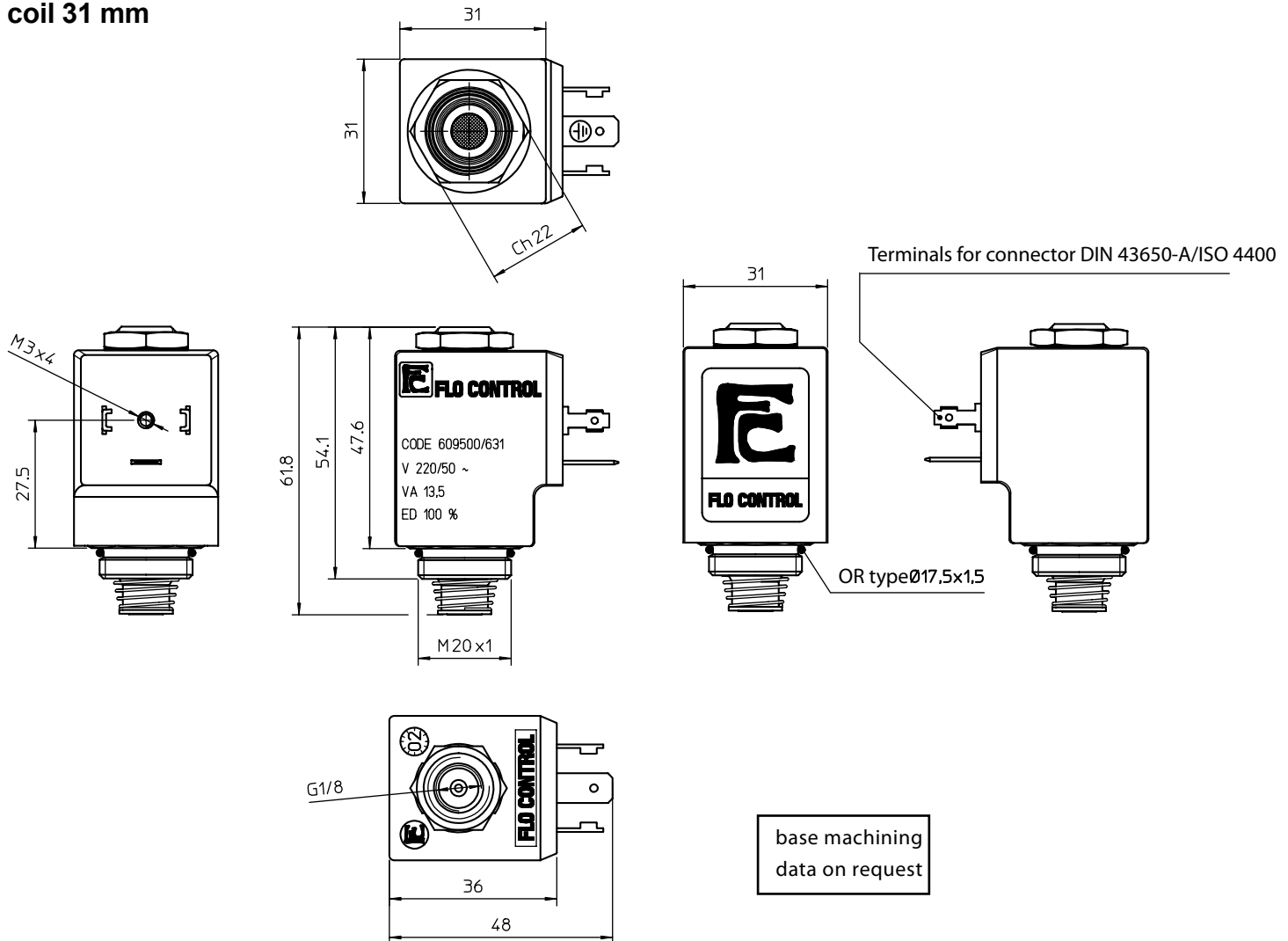
FLO CONTROL

Solenoid Valves



direct operated solenoid valves

coil 31 mm



weight 150 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
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FLO CONTROL

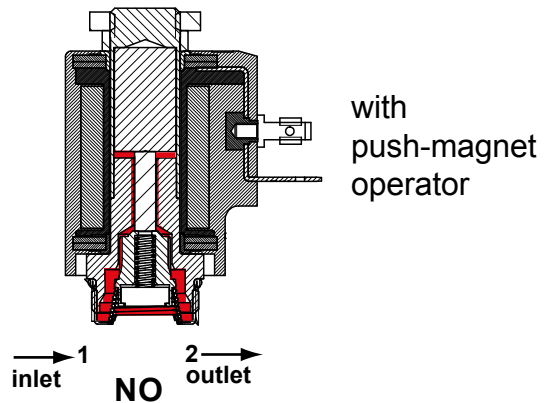
Solenoid Valves



direct operated solenoid valves

coil 31 mm

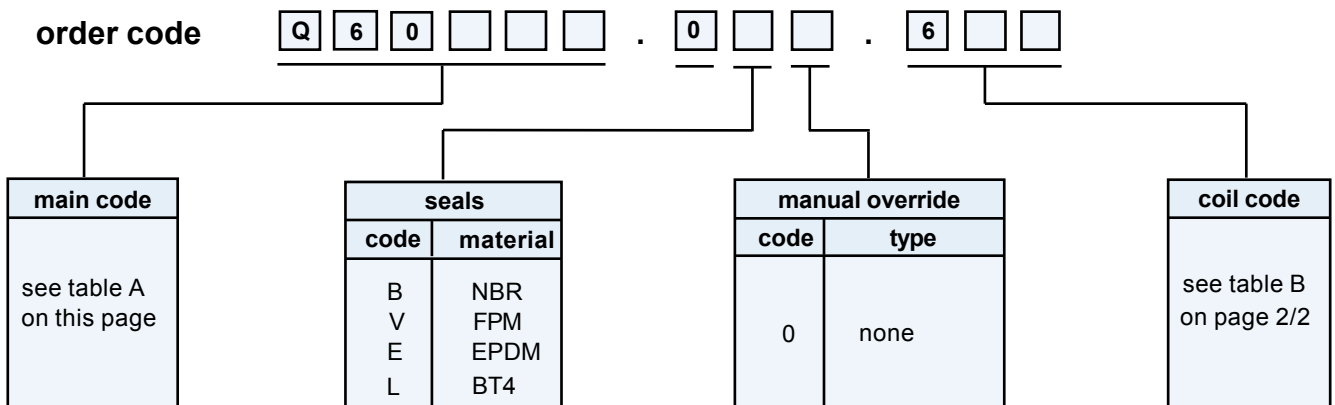
general information	
ambient temperature	- 10°C to + 50°C
response time	6 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM, EPDM, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

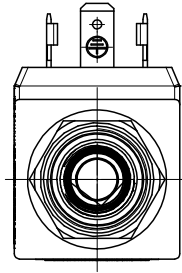
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A	
				min.	max. DC	max. AC	Watt DC	V.A. AC		main code
								inr.	hol	
2/2 normally open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q60208	
	0.8	0.5	0	60	-	10	-	-	Q60708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q60212	
	1.2	1.3	0	45	-	10	-	-	Q60712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q60216	
	1.6	1.7	0	25	-	10	-	-	Q60716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q60220	
	2.0	3.0	0	16	-	10	-	-	Q60720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q60224	
	2.4	3.5	0	10	-	10	-	-	Q60724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q60230	
	3.0	4.5	0	7	-	10	-	-	Q60730	
	4.0	7.5	0	-	3.5	-	21.5	13.5	Q60240	
	4.0	7.5	0	3.5	-	10	-	-	Q60740	

*l/min. of water with ΔP of 1 bar



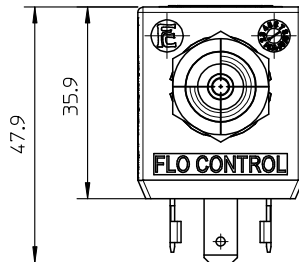
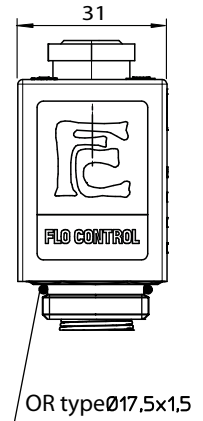
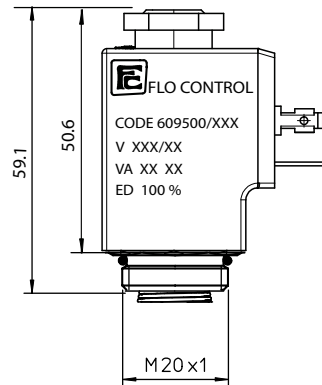
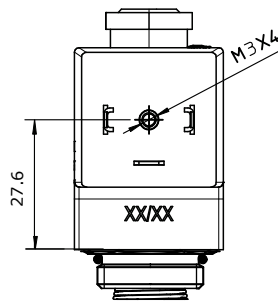
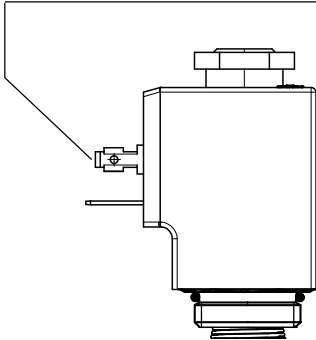
direct operated solenoid valves

coil 31 mm



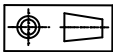
with
push-magnet
operator

Terminals for connector DIN 43650-A/ISO 4400



base machining
data on request

weight 165 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

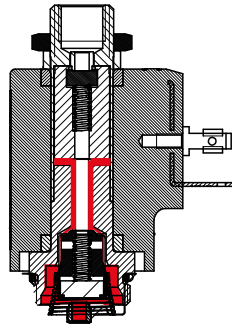
Solenoid Valves



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, BT4
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2

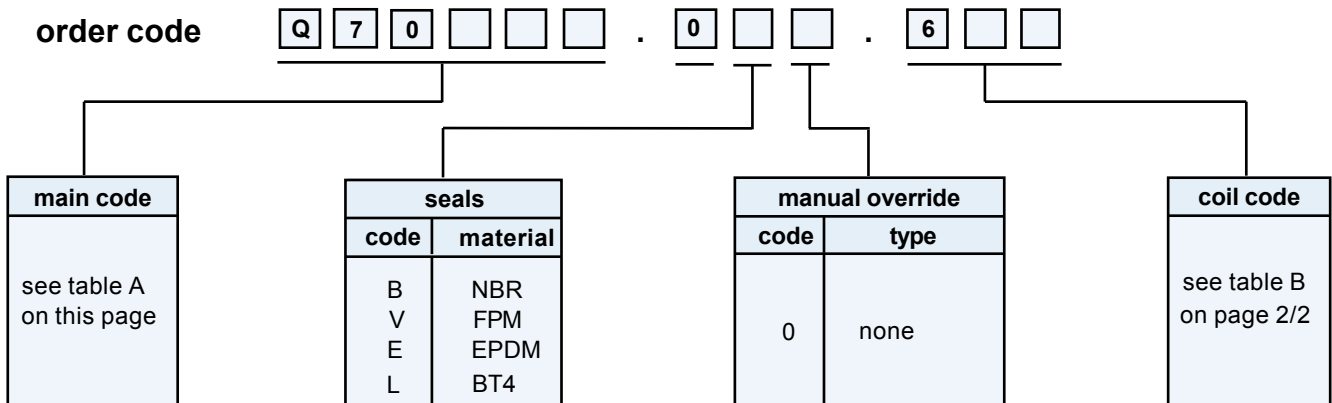


with
push-magnet
operator

* other seal materials on request

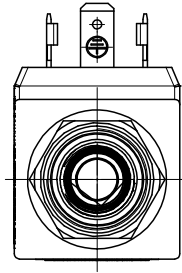
function	symbol	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A	
				min.	max. DC	max. AC	Watt DC	V.A. AC		main code
								inr.	hol	
3/2 normally open (NO) 	0.8	0.5	0	-	60	-	21.5	13.5	Q70208	
	0.8	0.5	0	60	-	10	-	-	Q70708	
	1.2	1.3	0	-	45	-	21.5	13.5	Q70212	
	1.2	1.3	0	45	-	10	-	-	Q70712	
	1.6	1.7	0	-	25	-	21.5	13.5	Q70216	
	1.6	1.7	0	25	-	10	-	-	Q70716	
	2.0	3.0	0	-	16	-	21.5	13.5	Q70220	
	2.0	3.0	0	16	-	10	-	-	Q70720	
	2.4	3.5	0	-	10	-	21.5	13.5	Q70224	
	2.4	3.5	0	10	-	10	-	-	Q70724	
	3.0	4.5	0	-	7	-	21.5	13.5	Q70230	
	3.0	4.5	0	7	-	10	-	-	Q70730	

*l/min. of water with ΔP of 1 bar



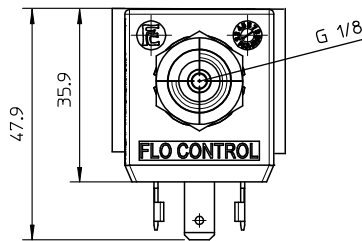
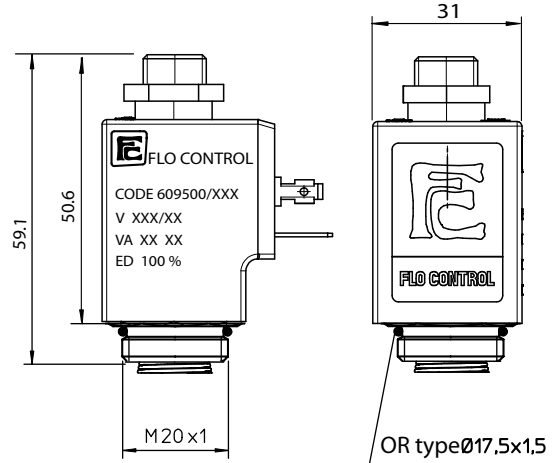
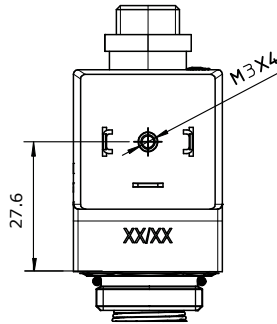
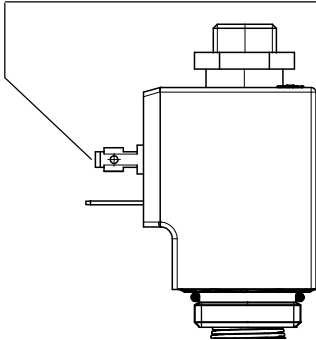
direct operated solenoid valves

coil 31 mm



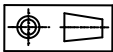
with
push-magnet
operator

Terminals for connector DIN 43650-A/ISO 4400



base machining
data on request

weight 160 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

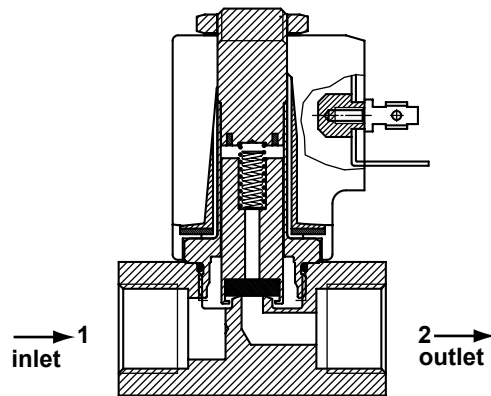
Solenoid Valves



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
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



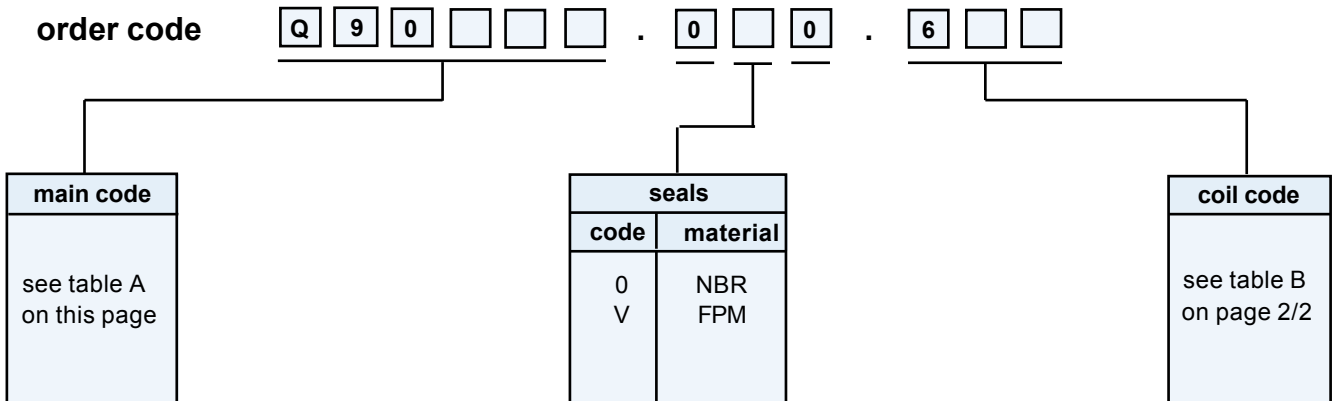
NC

* other seal materials on request

function	symbol	port size	orif. mm	*Kv	pressure range (bar)			nominal power		TABLE A
					min.	max. DC	max. AC	Watt DC	V.A. AC	main code
2/2 normally closed (NC) 	G1/4	4.0	7.5	0	8	17	10	19	Q90212	
	**1/4	4.0	7.5	0	8	17	10	19	Q90211	
	G3/8	4.0	7.5	0	8	17	10	19	Q90060	
	**3/8	4.0	7.5	0	8	17	10	19	Q90214	
	G1/2	4.0	7.5	0	8	17	10	19	Q90231	
	**1/2	4.0	7.5	0	8	17	10	19	Q90278	

*l/min. of water with ΔP of 1 bar

** NPT



FLO CONTROL

Solenoid Valves



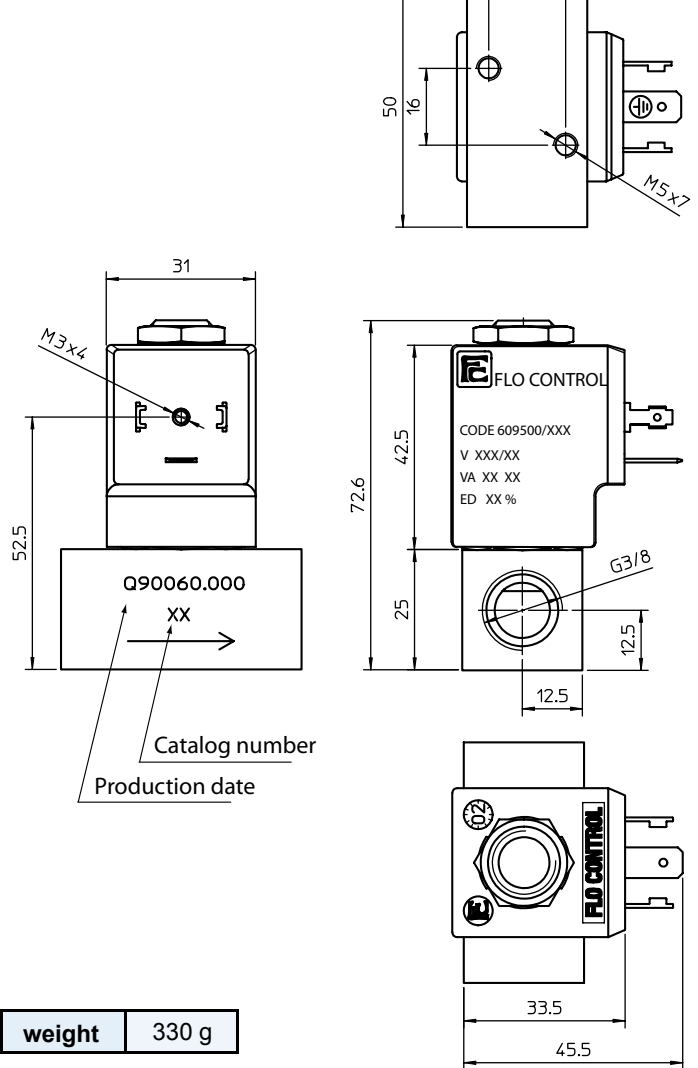
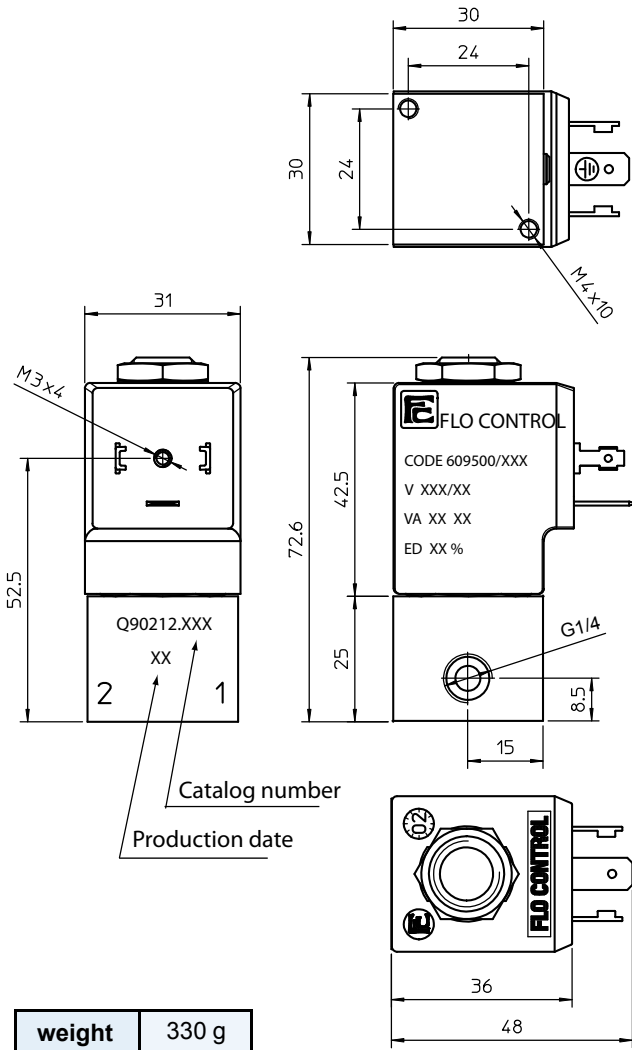
direct operated solenoid valves

drawings for 1/2 on request

coil 31 mm

G1/4

G3/8



coil code	TABLE B			
	*voltages	code		
		~ 50 Hz	~ 60 Hz	= DC
	12	-	-	666
	24	-	646	671
	48	-	-	676
	110	624	-	681
	115	-	655	-
	220	633	658	-
	230	637	660	-
	240	636	-	-

coil specification	
wire insulation	class H180° C
encapsulation	class F155° C
encapsulation mat.	nylon
energising duration	AC 25% at +20° C amb. DC 100% at +20° C amb.
voltage tolerance	- 10% +15%
power consumption	AC 19 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
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FLO CONTROL

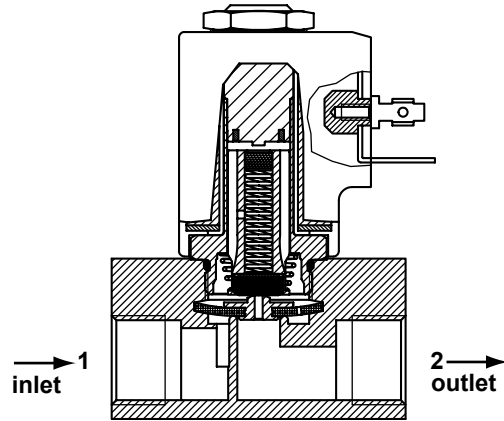
Solenoid Valves



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**

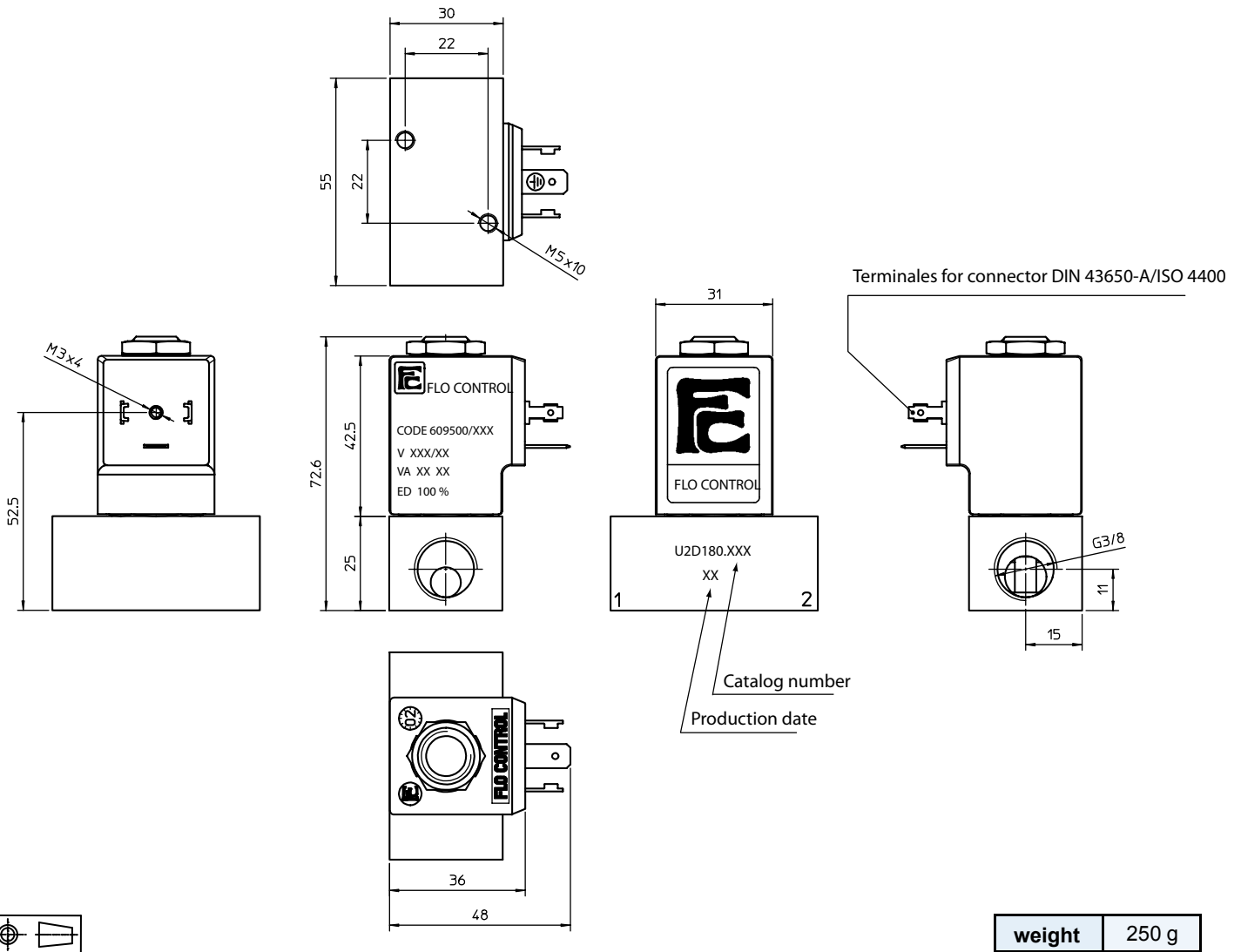
main code
see table A on this page

seals	
code	material
B	NBR
V	FPM
E	EPDM

coil code
see table B on page 2/2

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
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FLO CONTROL

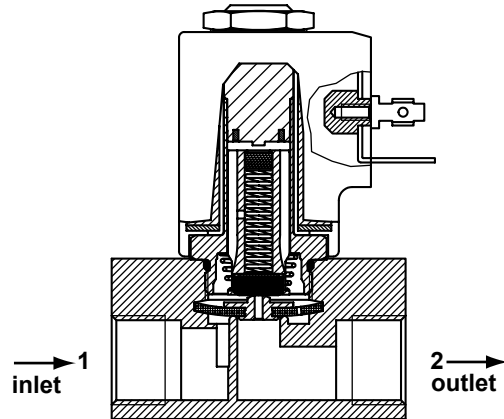
Solenoid Valves



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		main code
								inr.	hol.	
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

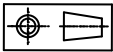
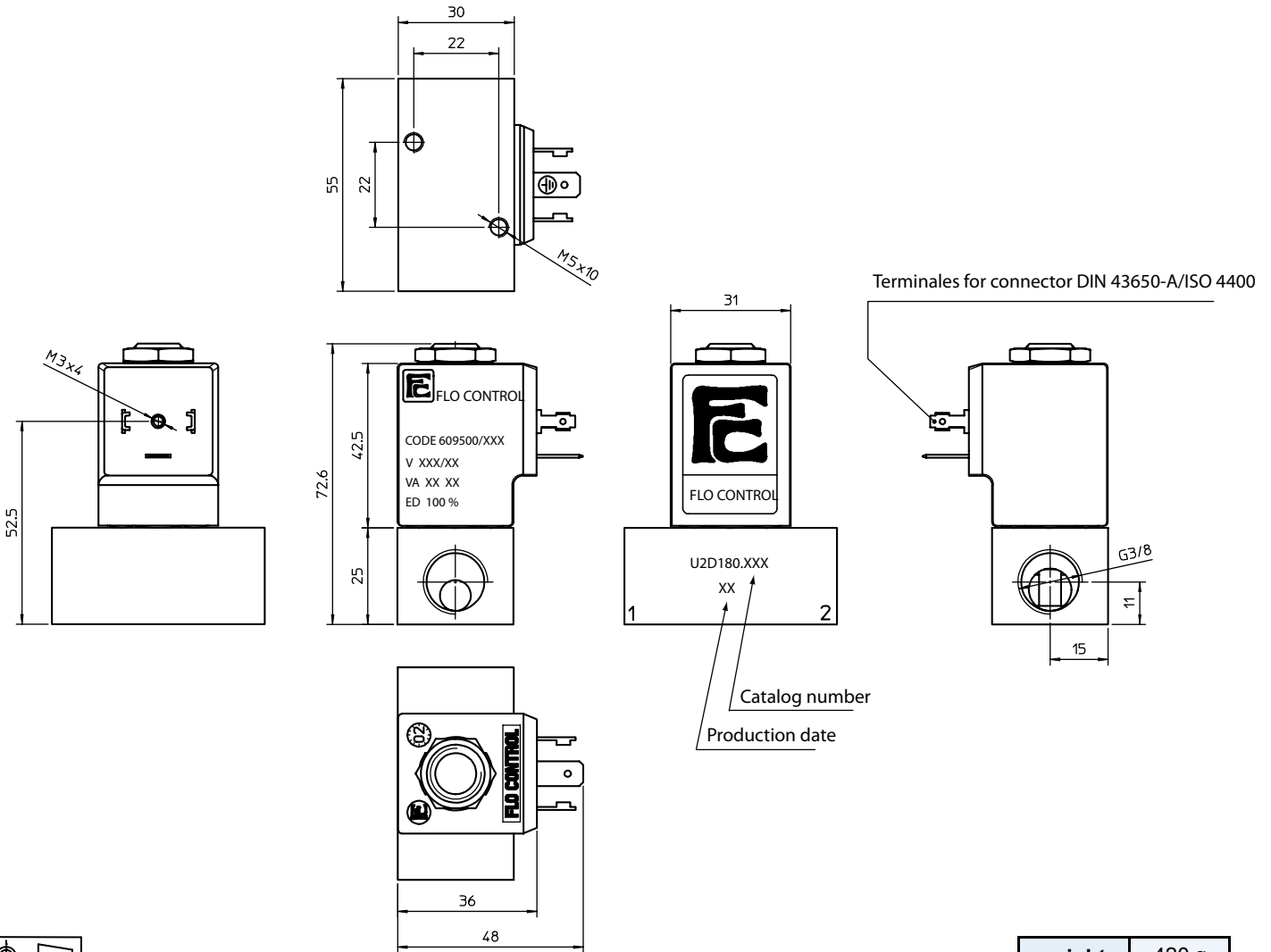
U 2 D [] [] [] . B [] 0 . 6 [] []

main code
see table A on this page

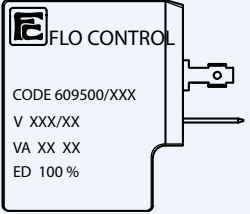
seals	
code	material
B	NBR
V	FPM
E	EPDM

coil code
see table B on page 2/2

pilot operated solenoid valves
coil 31 mm



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
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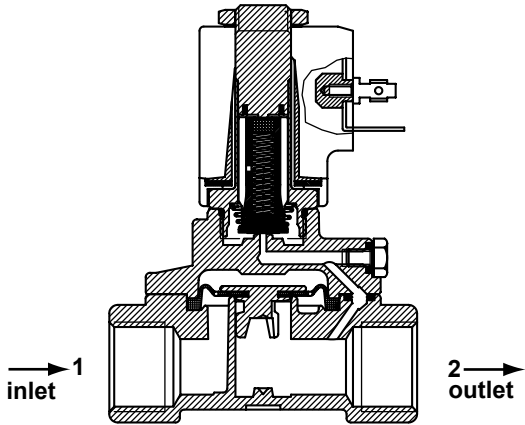
FLO CONTROL
Solenoid Valves



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

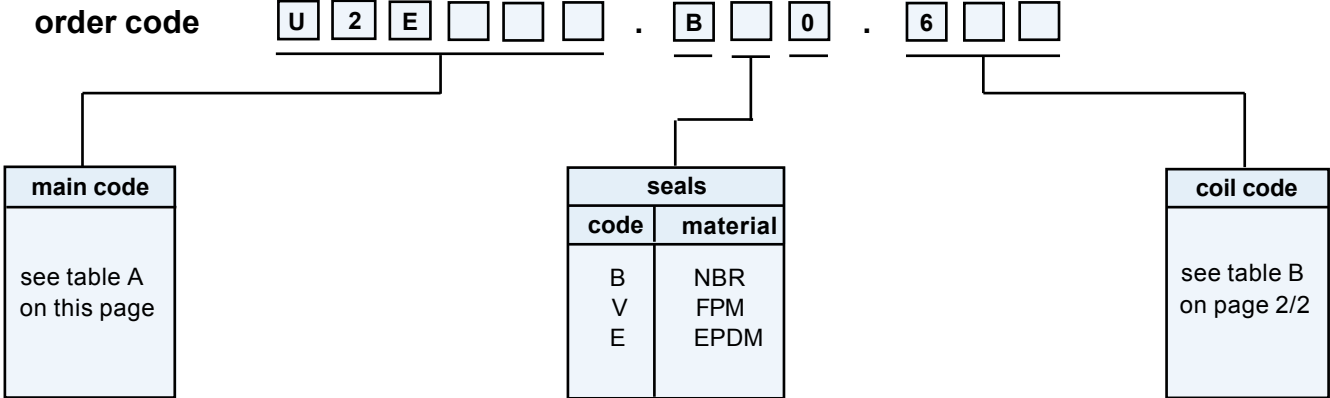


NC

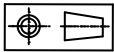
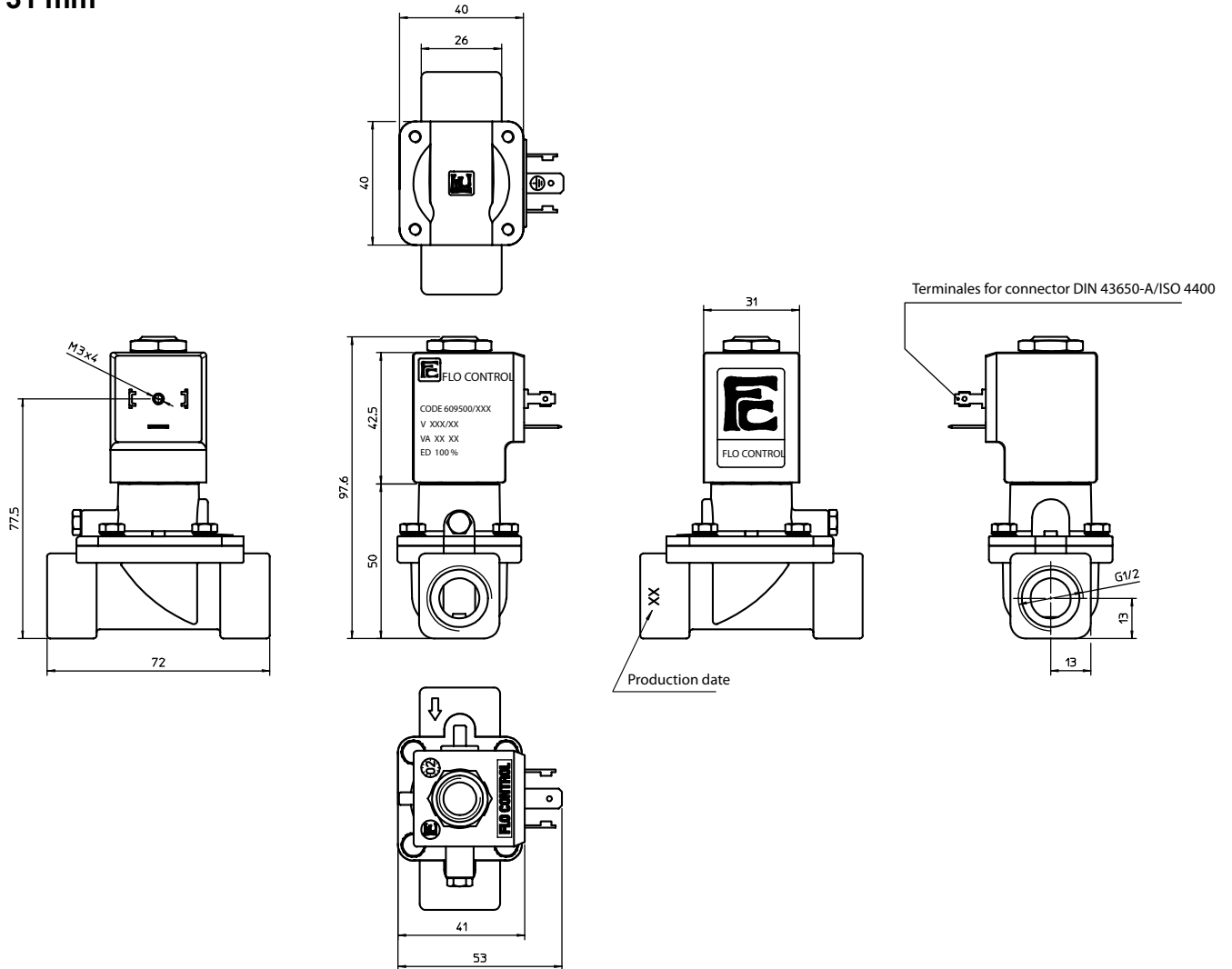
* other seal materials on request

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



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

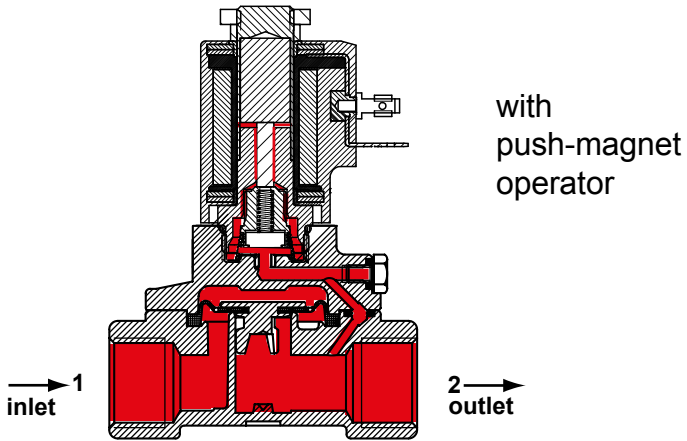
FLO CONTROL
Solenoid Valves



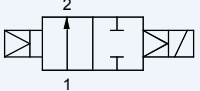
pilot operated solenoid valves

coil 31 mm

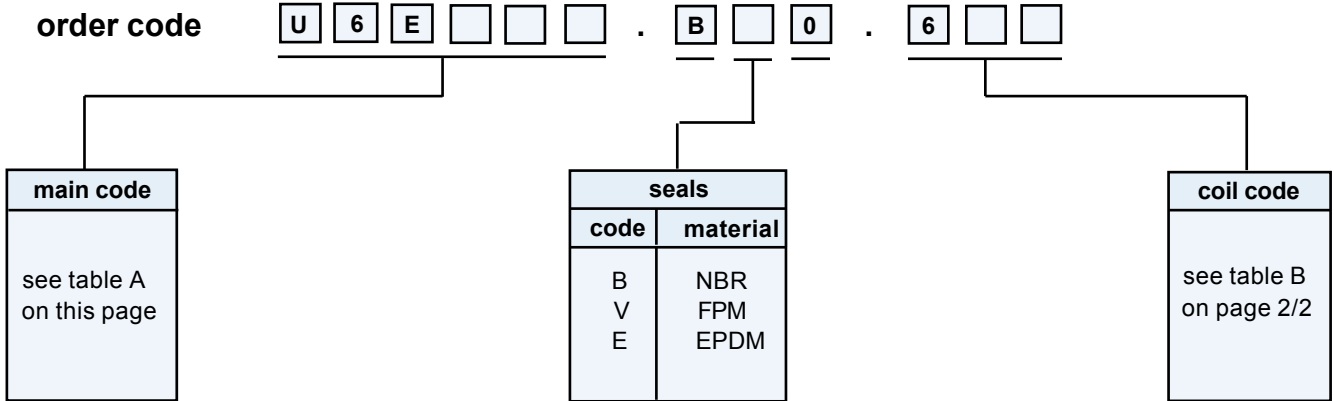
general information	
ambient temperature	- 10°C to + 50°C
response time	10 - 18 ms
mounting	in any position
standard seal materials*	NBR, FPM EPDM
dimensions	see page 2/2
coil data	see page 2/2
connector data	see page 2/2



* other seal materials on request

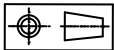
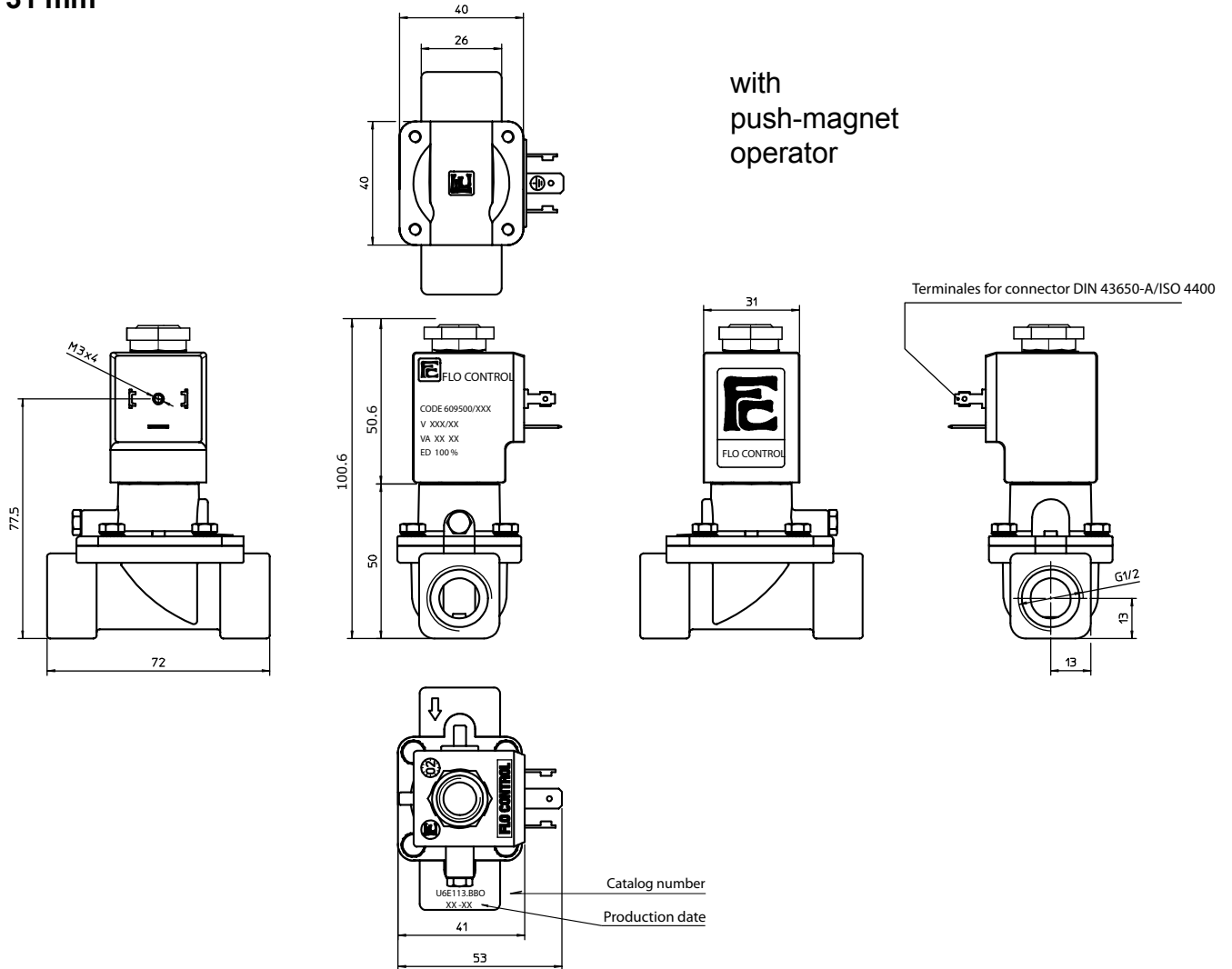
function	symbol	orifice mm	*Kv	pressure range (bar)			nominal power		TABLE A	
				min.	max. DC	max. AC	Watt DC	V.A. AC		main code
							inr.	hol.		
2/2 normally open (NO) 		13.0	35	0.5	12	12	10	21.5	13.5	U6E213

*l/min. of water with ΔP of 1 bar



pilot operated solenoid valves

coil 31 mm



weight 525 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

