

- High flow rate**
- Compact design**
- Proven sealing system**
- Manual override as standard**
- Low Maintenance**
- Low power consumption solenoids**
- Air Pilot options available**
- Will control vacuum or pressure**
- Manifold system for easy assembly**
- Design multi pressure system manifolds**



Technical data

Medium:
Compressed air, filtered to 50 µm, lubricated* or non lubricated.

Operation:
Electromagnetically or pneumatically controlled

Mounting position:
Optional

Connection:
G 1/8 up to G 1/2

Operating pressure:
1,5/2 up to 8/10 bar

Flow direction:
Internal pilot supply: fixed
External pilot supply: optional

Flow:

Size	3/2, 5/2	2 x 3/2, 5/3
G1/8	750	500
G1/4	1300	950
G3/8	2600	1900
G1/2	4200	

Ambient temperature:
-10°C to +50°C

Fluid temperature:
-10°C to +50°C

Consult our Technical Service for use below +2°C.

Materials

Housing and base plate: aluminium
Spindle: stainless steel,
Piston, spacers and cover: synthetic
material Static and dynamic seals: NBR,
Screws: zinc plated
Springs: stainless steel.

* Oil recommendation: Shell Hydrol DO 32, ESSO Febis K 32 (as of 07/92) or comparable oils with DVI values < 8 (DIN 53521) and ISO viscosity class 32 to 46 (DIN 51519)

Ordering information

To place an order, choose the valve design and order the coil and plug separately

Typical Example:

You require a 1/8 bsp 5/2 Double Solenoid - operated valve with a 24 VDC Coil & Plug
From the table you can choose :
Valve = V60A511A-A2000
Coil = QM/48/13J/21
Plug = M/P19063XF
Standard Manual Override is
Push and turn to Lock

Din Plug Connector types

Solenoid according to DIN EN 175 301-803 (DIN 43650 B).

Connector types

Standard see data sheet 7.7.002

AS-i see data sheet 7.7.003

Alternative models

NPT ports.





5/2 directional control valves, solenoid actuated

Symbol	Model	Port size	Pilot supply	Pilot exhaust	Solenoid variant	Flow (l/min)	Operating pressure (bar)	Pilot pressure (bar)	kg	Dimensional drawing no.
	V60A513A-A2000	G1/8	Internal	Not collected	1	750	2 ... 8	–	0,24	9
	V60A523A-A2000	G1/8	External	Not collected	1	750	-0,9 ... 8	3 ... 8	0,24	9
	V60A513D-C213A	G1/8	Internal	Collected	2	750	2 ... 10	–	0,23	11
	V60A523D-C213A	G1/8	External	Collected	2	750	-0,9 ... 10	3 ... 10	0,23	11
	V61B513A-A2000	G1/4	Internal	Not collected	1	1300	2 ... 8	–	0,33	9
	V61B523A-A2000	G1/4	External	Not collected	1	1300	-0,9 ... 8	3 ... 8	0,33	9
	V61B513D-C213A	G1/4	Internal	Collected	2	1300	2 ... 10	–	0,32	11
	V61B523D-C213A	G1/4	External	Collected	2	1300	-0,9 ... 10	3 ... 10	0,32	11
	V62C513A-A2000	G3/8	Internal	Not collected	1	2600	2 ... 8	–	0,62	9
	V62C523A-A2000	G3/8	External	Not collected	1	2600	-0,9 ... 8	3 ... 8	0,62	9
	V62C513D-C213A	G3/8	Internal	Collected	2	2600	2 ... 10	–	0,61	11
	V62C523D-C213A	G3/8	External	Collected	2	2600	-0,9 ... 10	3 ... 10	0,61	11
	V63D513A-A2000	G1/2	Internal	Not collected	1	4200	2 ... 8	–	0,96	12
	V63D523A-A2000	G1/2	External	Not collected	1	4200	-0,9 ... 8	3 ... 8	0,96	12

*** Insert coil code from table below or 000 for version without solenoid. For manual override options, substitute 'x' as follows: 1 = without manual override, 2 = push and lock, 3 = push only

Coil & voltage codes

Solenoid variant 1 (solenoid rotates 4 x 90°)
22 mm coil DIN EN 175 301-803 (DIN 43650 B)

Voltage	Coil code	Power inrush/hold	Model
12 V d.c.	12L	2 W	V10626-A12L
24 V d.c.	13L	2 W	V10626-A13L
24 V 50/60 Hz	14L	4/2,5 VA	V10626-A14L
48 V 50/60 Hz	16L	4/2,5 VA	V10626-A16L
110/120 V 50/60 Hz	18L	4/2,5 VA	V10626-A18L
220/240 V 50/60 Hz	19L	6/5 VA	V10626-A19L

22 mm coil industrial standard

Voltage	Coil code	Power inrush/hold	Model
12 V d.c.	12J	2 W	QM/48/12J/21
24 V d.c.	13J	2 W	QM/48/13J/21
24 V 50/60 Hz	14J	4/2,5 VA	QM/48/14J/21
48 V 50/60 Hz	16J	4/2,5 VA	QM/48/16J/21
110/120 V 50/60 Hz	18J	4/2,5 VA	QM/48/18J/21
220/240 V 50/60 Hz	19J	6/5 VA	QM/48/19J/21

Solenoid variant 2

Double solenoid DIN EN 175 301-803 (DIN 43650 type C) 4 pin

Voltage	Coil code	Power inrush/hold	Manual override	Model
24 V d.c.	13 A	2 W	Push only	9031703900002400
24 V d.c.	13 A	2 W	Turn & lock	9031704900002400
24 V d.c.	13 A	2 W	Without	9031705900002400

Connector plugs must be ordered separately – see page 16

Electrical details

Voltage tolerance:	±10%
Rating:	100% E.D.
Protection class:	IP 65 with sealed plugs (ISO 6952)

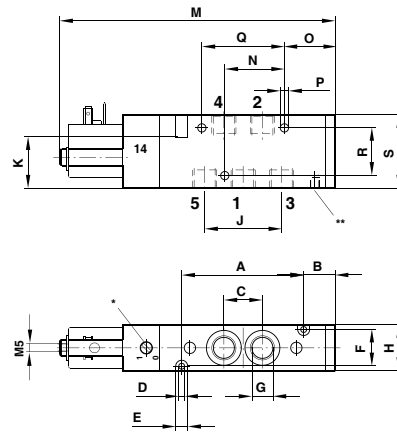
Plug configuration, valve side/twin pilot

Symbol	Plug no.	Function	Actuation
	1	(+)	12 (Solenoid 2)
	2	(-)	12 + 14
	3	(+)	14 (Solenoid 1)

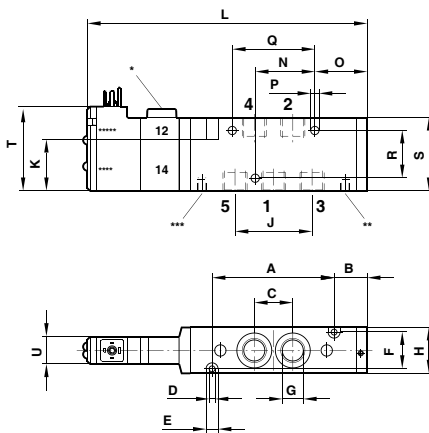


Drawing dimensions

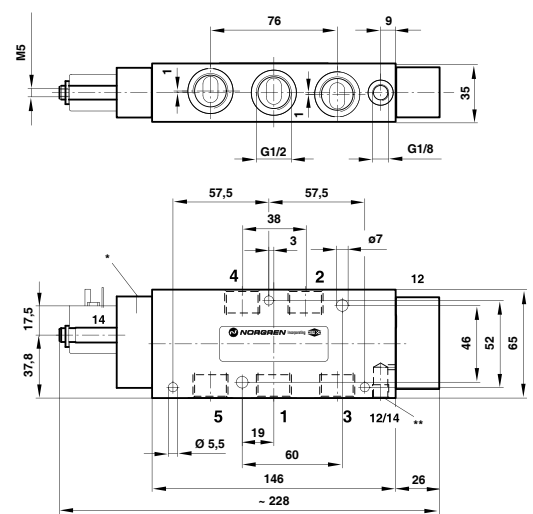
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11



12



- * Manual override
- ** External pilot supply (M5)
- *** Collected pilot exhaust (M5)
- **** Solenoid 1
- ***** Solenoid 2

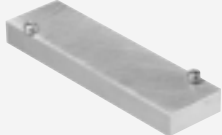








Dimensional drawing no.	Type	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U
9	V60	50	17	16,2	3,2	6,5	17	G1/8; 8 deep	22	32,4	28	-	129	25	25	4,5	33,6	26	35	-	-
9	V61	66	18	21	3,2	6,5	20	G1/4; 10 deep	25	42	28	-	150	32	29	4,5	44	26	40	-	-
9	V62	78	21	24,4	4,5	8	28	G3/8; 11,5 deep	34	48,8	44	-	170	12	60	4,5	26	36	55	-	-
10	V60	50	-	16,2	3,2	6,5	17	G1/8; 8 deep	22	32,4	28	175	-	25	-	4,5	33,6	26	35	-	-
10	V61	66	-	21	3,2	6,5	20	G1/4; 10 deep	25	42	28	199	-	32	-	4,5	44	26	40	-	-
10	V62	78	-	24,4	4,5	8	28	G3/8; 11,5 deep	34	48,8	44	218	-	12	-	4,5	26	36	55	-	-
11	V60	50	17	16,2	3,2	6,5	17	G1/8; 8 deep	22	32,4	28	134	-	25	25	4,5	33,6	26	35	46	15
11	V61	66	18	21	3,2	6,5	20	G1/4; 10 deep	25	42	28	153	-	32	29	4,5	44	26	40	46	15
11	V62	78	22	24,4	4,5	8	28	G3/8; 11,5 deep	34	48,8	44	172	-	12	61	4,5	26	36	55	54	15










Accessories






Manifolds

				
Blanking plate	Blanking plug for 2 station and 3 station manifolds	Pressure shut-off part for 4 station up to 20 station manifolds	Intermediate supply/exhaust plate (instead of a valve)	Adapter plate to connect different manifold sizes
0100561 (V60) 0,050 kg	0701208 (V60) 0,006 kg	0100567 (V60) 0,010 kg	0101808 (V60) 0,110 kg	0102158 (V60□V61) on request
0100563 (V61) 0,060 kg	0701209 (V61) 0,012 kg	0100569 (V61) 0,015 kg	0101797 (V61) 0,220 kg	0102160 (V61□V62) on request
0100565 (V62) 0,100 kg	0701210 (V62) 0,020 kg	0100571 (V62) 0,020 kg	0101809 (V62) 0,390 kg	0102162 (V60□V62) on request
				
Pressure switch adapter plate	DIN Rail fixing kit	Blanking plug for port 12/14 and 82/84	Blanking plug for port 1, 3, 5	
0102146 (V60) 0,130 kg	0101796 (V60□V62) 0,010 kg	160050018 (V60□V62) 0,008 kg	160050028 (V60) 0,015 kg	
0102148 (V61) 0,160 kg			160050038 (V61) 0,020 kg	
0102150 (V62) 0,260 kg			160050048 (V62) 0,035 kg	

Valves

				
Silencer sintered bronze	Exhaust flow regulator without silencer	Exhaust flow regulator with silencer	Diffusor for pilot exhaust	Circlip for coil fixing
0014400 M5 0,025 kg	4048004 G1/8 0,025 kg	4048005 G1/8 0,025 kg	81110800 0,002 kg	81021600 0,001 kg
0014510 G1/8 0,008 kg	4048104 G1/4 0,060 kg	4048105 G1/4 0,060 kg		
0014610 G1/4 0,010 kg	(G3/8 on request)	(G3/8 on request)		
0014710 G3/8 0,025 kg				
0014810 G1/2 0,060 kg				

Connectors

				
Industrial standard 22 mm 2-pole + PE	DIN EN 175301-803 (DIN 43650 B)	DIN EN 175301-803 (DIN 43650 C)	DIN EN 175301-803 (DIN 43650 B)	DIN EN 175301-803 (DIN 43650 B)
M/P 19063 0,005 kg	0680003 0,005 kg	0588666 0,002 kg	0101033 0,030 kg	0101032 0,030 kg
12...250 V a.c./d.c.	12...250 V a.c./d.c.	12...250 V a.c./d.c.	1 output	1 output + 2 inputs with M12 x 1
0680000 0,005 kg	0664811 0,005 kg	0102144 0,200 kg		
15...30 V d.c.; LED, surge suppression	15...30 V d.c.; LED, surge suppression	12...250 V a.c./d.c.; cable 3 m		
0680001 0,005 kg	0664812 0,005 kg			
150...250 V a.c.; glim lamp	150...250 V a.c.; glim lamp			