

2 Specifications (continued)

Port Size: 32F, 40F, 50F

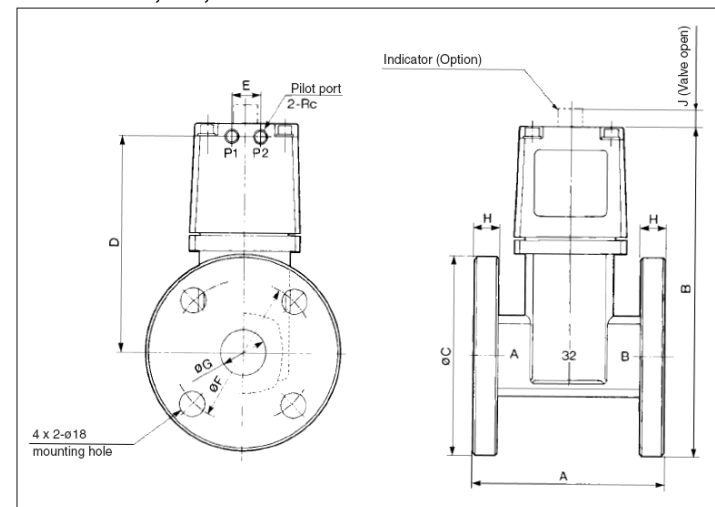


Figure 4

Model	Applicable Flange	Pilot Port	A	B	C	D	E
56-VND50#D-32F	32	1/8	130	211.5	135	135	20
56-VND60#D-40F	40	1/4	150	227	140	147	24
56-VND70#D-50F	50	1/4	180	251	155	163.5	24

Model	Applicable Flange	Pilot Port	F	G	H	J
56-VND50#D-32F	32	1/8	100	36	12	8
56-VND60#D-40F	40	1/4	105	42	12	10
56-VND70#D-50F	50	1/4	120	54	14	12

Table 5

3 Installation

Warning

- Do not install the product unless the safety instructions have been read and understood.

3.1 Environment

Warning

- Do not use in an environment where the product is directly exposed to corrosive gases, chemicals, salt water, water or steam.
- Do not use in an explosive atmosphere except Zone 2.
- The product should not be exposed to prolonged sunlight. Use a protective cover.
- Do not mount the product in a location where it is subject to strong vibrations and/or shock. Check the product specifications for above ratings.
- Do not mount the product in a location where it is exposed to radiant heat.

3.2 Piping

Caution

- Before piping is connected, it should be thoroughly blown out with air or washed to remove chips, cutting oil, dust and other debris from inside the piping.
- When installing piping or fittings, ensure sealant material does not enter inside the port. When using seal tape, leave 1.5 to 2 threads exposed on the end of the pipe/fitting.
- To use the piping with high temperature fluid, use heat resistant fittings and tubing.
- Install piping so that it does not apply pulling, pressing, bending or other forces on the valve body.

3 Installation (continued)

Thread	Tightening Torque (Nm)
1/8	7 to 9
1/4	12 to 14
3/8	22 to 24
1/2	28 to 30
3/4	28 to 30
1	36 to 38
1 1/4	40 to 42
1 1/2	48 to 50
2	48 to 50

Table 6

Caution

- External Pilot**
- P1 and P2 piping should be as follows according to model.
- Installing a silencer to the exhaust port/bleed port is recommended for noise reduction and to prevent the entry of dust.

Port	56-VND#0#D	56-VND#02D
P1	External Pilot	Bleed Port
P2	Bleed Port	External Pilot

Table 7

3.3 Lubrication

Caution

- SMC products have been lubricated for life at manufacturer and do not require lubrication in service.
- If a lubricant is used in the system, use turbine oil Class 1(no additive), ISO VG32. Once lubricant is used in the system, lubrication must be continued because the original lubricant applied during manufacturing will be washed away.

4 Settings

4.1 Mechanical Indicator (Optional)

- The mechanical indicator protrudes from the valve when the valve is open.

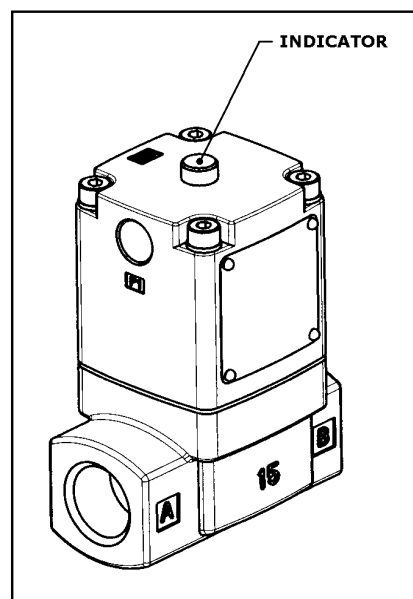


Figure 5

5 Circuit symbols

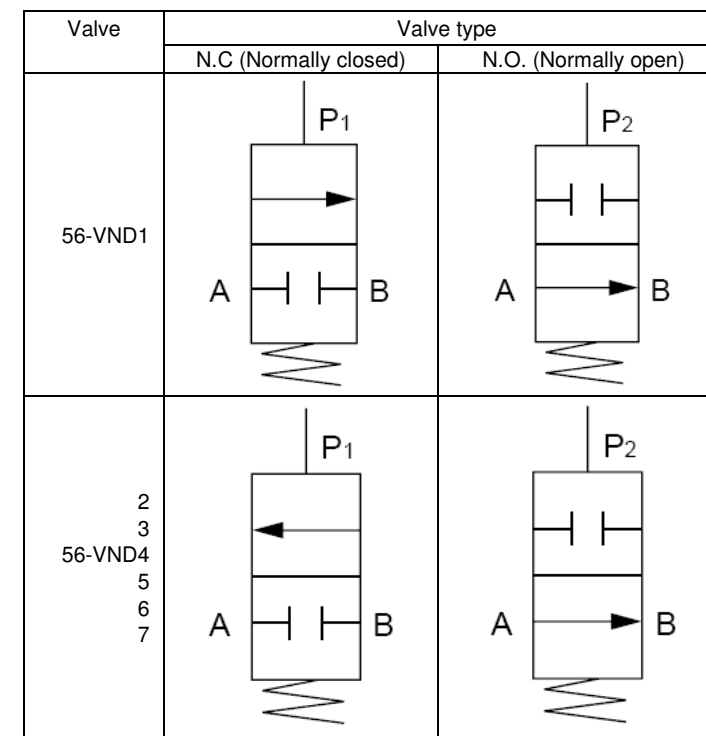


Table 8

6 How to Order

Refer to the catalogue for this product.

7 Outline Dimensions (mm)

Refer to the catalogue for this product.

8 Maintenance

Warning

- Not following proper maintenance procedures could cause the product to malfunction and lead to equipment damage.
- If handled improperly, compressed air can be dangerous. Assembly, handling and repair of pneumatic system should be performed by qualified personnel only.
- Drain:** remove condensate from the filter bowl on a regular basis.
- Shut-down before maintenance:** before attempting any kind of maintenance make sure the supply pressure is shut off and all residual air pressure is released from the system to be worked on.
- Start-up after maintenance:** apply operating pressure and power to the equipment and check for proper operation and possible air leaks. If operation is abnormal, please verify product set-up parameters.
- Do not make any modification to the product
- Do not disassemble the product, unless required by installation or maintenance instructions.
- Before removing equipment or compressed air supply/exhaust devices, shut off the air and power supplies, and exhaust compressed air from the system. Further, when restarting equipment after remounting or replacement, first confirm safety and then check the equipment for normal operation.
- Do not disassemble the product. Products which have been disassembled cannot be guaranteed. If disassembly is necessary, contact SMC.
- In order to obtain optimum performance from valves, perform periodic inspections to confirm that there are no leaks from valves or fittings.
- Flush drainage from filters regularly.
- After a long period of non-use, perform a test before beginning regular operation.

9 Limitations of Use

Danger

- Do not exceed any of the specifications laid out in section 2 of this document or the specific product catalogue.
- Ensure all air and power supplies are ISOLATED before commencing installation.
- Do not use in atmosphere where the valve is in direct contact with corrosive gases, chemicals, salt water, water or steam.
- If it is intended to energise a valve for an extended period of time, please consult SMC.
- These valves are NOT intended to be used as emergency shut-off valves.
- DO NOT use these valves below -5°C .
- Ensure valves are operated within the specification range.
- Do not use compressed air which includes chemicals, synthetic oils containing organic solvents, salt or corrosive gases, etc., as this may cause damage or malfunction.
- Install air filters.
Install air filters upstream, close to the valves. A filtration of $5\ \mu\text{m}$ or less should be selected.
- Install an air dryer or after cooler.
Compressed air that includes excessive drainage may cause malfunction of valves and other pneumatic equipment. To prevent this, install an air drier or after cooler.
- If excessive carbon powder is seen, install a mist separator on the upstream side of the valve. If excessive carbon powder is generated, it may adhere to the inside of the valve and cause malfunction.

10 Contacts

AUSTRIA	(43) 2262 62280-0	LATVIA	(371) 781 77 00
BELGIUM	(32) 3 355 1464	LITHUANIA	(370) 5 264 8126
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CZECH REP.	(420) 541 424 611	NORWAY	(47) 67 12 90 20
DENMARK	(45) 7025 2900	POLAND	(48) 22 211 9600
ESTONIA	(372) 651 0370	PORTUGAL	(351) 21 471 1880
FINLAND	(358) 207 513513	ROMANIA	(40) 21 320 5111
FRANCE	(33) 1 6476 1000	SLOVAKIA	(421) 2 444 56725
GERMANY	(49) 6103 4020	SLOVENIA	(386) 73 885 412
GREECE	(30) 210 271 7265	SPAIN	(34) 945 184 100
HUNGARY	(36) 23 511 390	SWEDEN	(46) 8 603 1200
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SMC Corporation

URL : <http://www.smcworld.com> (Global) <http://www.smceu.com> (Europe)
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