



Top 16 Selection Tips For Solenoid Valve



NO.	Parameter Classification	Option	Description
1	What type of cylinder is used for?	1) Single-acting cylinder; 2) Double-acting cylinder; 3) Special type cylinder.	The type of cylinder must be clearly described.
2	Brand requirement	1) Manufacturer's choice; 2) ASCO; 3) Norgren (Herion); 4) Bifold; 5) Other specified brands, such as KANEKO, SMC, and Parker, etc.	This should be chosen based on actual requirements.
3	Connection method between solenoid valve and cylinder	1) NAMUR standard surface mounting (flange); 2) Pipe connection (pipe type); 3) Other connection methods.	Pipe connection (pipe type) is a universal connection method, but it is more costly; NAMUR surface mounting (flange) is limited to small cylinders and it's a restricted connection but cost-saving.



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4	Type of solenoid valve - 1	<ol style="list-style-type: none">1) Two-position three-way (3/2 Way);2) Two-position five-way (5/2 Way);3) Three-position five-way (5/3 Way);4) Special types.	A single-acting cylinder must use a two-position three-way solenoid valve; however, a double-acting cylinder does not necessarily require a two-position five-way solenoid valve; it can also be controlled by a two-position three-way solenoid valve operating a two-position five-way pneumatic valve, so the specific situation should be analyzed in detail.
5	Type of solenoid valve - 2	<ol style="list-style-type: none">1) NC (Normal Close);2) NO (Normal Open);3) U (Universal);4) Special types.	This should be provided by the manufacturer based on actual requirements, but ensure the correctness of the selection result.
6	Solenoid drive action	<ol style="list-style-type: none">1) Direct action (direct type);2) Pilot type.	Generally, the manufacturer will choose based on the situation; sometimes the owner will also have requirements for direct or pilot type, so pay attention to this option.
7	Operating voltage of solenoid valve	<ol style="list-style-type: none">1) 24V DC;2) 110V AC @ 50HZ;3) 220V AC @ 60HZ;4) Other special voltages, etc.	Choose the correct operating voltage according to customer requirements; generally, the options of 24VDC and 220VAC are more common.



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8	Coil housing material?	<ol style="list-style-type: none">1) Cast aluminum;2) Stainless steel;3) Other materials.	Any standard solenoid valve from any manufacturer is composed of two parts: the coil part (including the wiring part, called Coil in English) and the valve body part (called Body in English). Therefore, it is more accurate to describe these two parts separately.
9	Valve body material?	<ol style="list-style-type: none">1) Cast aluminum;2) Brass;3) Stainless steel;4) Other materials.	The coil and valve body materials need to be defined separately before the final confirmation of the entire solenoid valve's material can be made, so please pay special attention to this point.
10	Valve port size?	<ol style="list-style-type: none">1) 1/4" NPT;2) 1/2" NPT.	There are just two options, generally, it is 1/4" NPT, and 1/2" NPT is rarely used.
11	Electrical interface material?	<ol style="list-style-type: none">1) 1/2" NPT;2) 3/4" NPT;3) M20*1.5;4) Special interface size.	Generally, choose from the first three options listed, which is to say, pick one from the three.



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12	Explosion-proof rating?	<ol style="list-style-type: none">1) Only dust and waterproof, no explosion-proof required Only IP65/66;2) Intrinsic safety explosion-proof Exia IICT4/6 + IP65/66;3) Flameproof explosion-proof Exd IICT4/6 + IP65/66;4) Other types of explosion-proof.	Generally, choose from the first three options listed, which is to say, pick one from the three
13	Power consumption requirements	<ol style="list-style-type: none">1) Standard power consumption: around 10W;2) Reduced power consumption: less than or equal to 4.0W;3) Low power consumption: less than or equal to 2.0W;4) Other power consumption requirements.	Typically, select from the first three options listed, especially from those less than or equal to 4.0W and less than or equal to 2.0W.
14	Does it come with manual operation?	<ol style="list-style-type: none">1) Manual operation;2) Manual reset;3) Other operations.	This usually needs to be defined according to the requirements of the design institute, but for devices with safety integrity level (SIL) requirements, whether the manual operation options can meet SIL needs to be consulted with the manufacturer.



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15	Requirements for ambient temperature	<ol style="list-style-type: none">1) No low temperature required, normal ambient temperature;2) Low temperature required, not lower than -20°C;3) Low temperature required, not lower than -40°C;4) Low temperature required, not lower than -60°C;5) High temperature required, please list the high temperatures;6) Please specify Other special ambient temperatures if needed.	Attention must be paid to temperature as different manufacturers may choose different models and series of solenoid valves based on temperature, and the price difference can be significant. Therefore, theoretically, when selecting, one should first determine the solenoid valve's requirements for ambient temperature.
16	Are there any other requirements?		