

How to Select Cylinder Valve Specification

1. Valve Series

Select the suitable series based on design/application/materials/orientation/flow requirement/operating device/pressure rating etc. for your application from 'Series Selection Table'. Scan the QR code from the product page to download the detailed series catalogue, if applicable. Choose the appropriate three-digit valve series code given in the 'Product Selection Guide' of the detailed series catalogue for item code creation.

2. Valve Body Material

Select the appropriate valve body material from the options given in the 'Product Selection Guide'. Choose chrome plating option if available and required. The choice of valve body material with or without plating is reflected in the next two digits of the item code.

3. Valve Inlet

Select inlet connection to match the cylinder neck thread. Distinguish between taper & parallel threads. Taper threads seal by a combination of thread sealant & metal deformation. Parallel thread seal is created by O-ring. Select the applicable three-digit code from the options. Customer specific inlet size / respective oversize are offered on request.

4. Dip Tube Thread

Choose dip tube thread if required on inlet connection. Dip tubes are used for quick withdrawal of the liquid content of the cylinder. Select the corresponding single-digit for the dip tube thread. Choose "X" if dip tube thread is not required. Customer specific dip tube thread can be offered on request.

5. Valve Outlet

Select the outlet connection required. Outlet connection changes based on the gas service / pressure rating and the country of use. Outlet connections are referred in the national / international outlet connection standard (e.g. CGA/BS/DIN/AFNOR/UNI/AS/IS/ISO). Select the applicable three-digit code for the outlet. Outlet connection not listed can be provided on request.

6. Gas Service

Select the applicable two-digit code from the available list of gases.

7. Pressure Relief Device (PRD)

If PRD is required, select the applicable single digit for the PRD type taking into consideration the material option of the burst disc (if provided). Choose "X" if PRD is not required.

8. PRD Rating

Select the PRD rating (temperature &/or pressure) from the two-digit code. Choose "XX" if PRD is not required. Pressure rating of the PRD depends upon the working pressure of compressed gas, filling ratio used for liquifiable gases and the test pressure of the cylinder.

9. Specification

Select the applicable single-digit code for the standard to which the cylinder valve compliance is required (e.g. ISO 10297/ CGA V-9/IS 3224).



10. Inspection

Select the applicable single digit for the inspection requirement (e.g. In-house/third party).

11. Seating

Select the applicable single digit for the soft seat option. Ensure the soft seat is compatible with the gases for which the valves shall be used.

12. Valve Pressure Rating Nomenclature

Select "WP" (Working pressure) or "TP" (Test pressure) to reflect in the item code. WP is the settled pressure of a compressed gas at 15 °C in a full gas cylinder.

Note - As per ISO 10297, the term WP is only applicable for compressed gases & does not apply to liquefied or dissolved gases.

For compressed gases, $TP = 1.2 \times WP$

For liquefied gases, TP shall be at least equal to the minimum test pressure given in ADR.

13. Pressure Rating

Select the three-digit code to correspond to the pressure rating required for the valves.

Options:

Handwheel material & colour, filter, seal nut, gasket, dip tube, chain & keeper ring, EFV- are generally not unique to the item code & need to be specified separately.

Note:

Four-digit number following the item code is the drawing number & marked on the valve body representing the unique combination of selected technical parameters from 1-13

Sample Item Code Matrix

