

# CV-11/S1-S2

## CHECK VALVES

### GENERAL FEATURES

Check valves are commonly used armatures that can be applied for liquid, gaseous and steam applications. They increase the process safety and can be used instead of complicated armatures. Because of short installation time and installation distance, small dimensions; Ayvaz disco check valve appears to be advantageous.

Check valves provide the flows just one way. When liquid flows through to flowing direction, check valves open and let it pass. But liquid tries to flow opposite direction of flowing, check valves close and prevent passing.

#### Applications:

- Iron and steel industry
- Heating air-conditioning pipe lines
- Mineral, oil industry
- Wood working, pulp and paper industry
- Textile industry
- Water and condensate lines
- Nautical industry

#### O-ring conditions:

EPDM O-ring: from -50°C to 150°C

For water, condensate and steam FKM O-ring: from -25°C to +200°C oil, gas and air (optional manufacturing.)

#### Material Structure:

Body: GG-25 Ductile iron  
Inner parts: Stainless steel

#### Connection:

Wafer type

#### Nominal Diameter:

DN125 (5") - DN200 (8")

**Working Pressure:** Up to 16 bars

**Working Temperature:** -10°C to 300°C

#### Installation

Installation is in all positions.

#### CONNECTIONS

CV-11/S1	CV-11/S2
Between flanges BS 10 tables D, E, DIN 2501 (PN / 10/16/40) ANSI B 16.1 class 125 FF	Between flanges BS 10 tables D, E, F, J DIN 2501 (PN /6/ 10/16/40) ANSI B 16.1 class 125 FF

#### WORKING CONDITIONS

Nominal Pressure(PN)	40 bar
Min. Temperature (°C)	-10
Max. Working Pressure (bar)	40-38-37
Temperature depends on Pressure (°C)	100-200-300

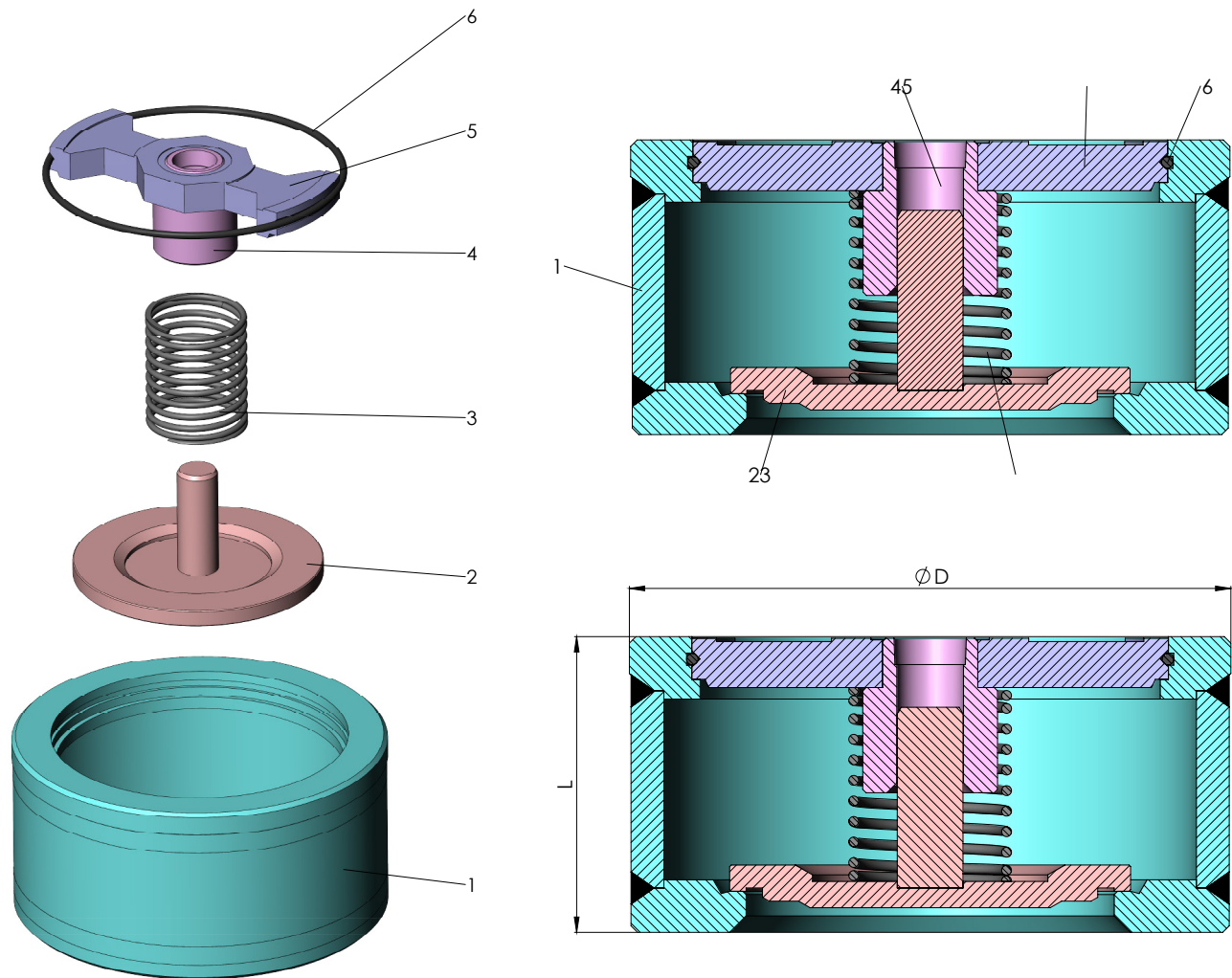
#### DIMENSIONS

DN (mm)	Inch
125-200	5" - 8"

	CV-11/S1	CV-11/S2
Body	AISI 304 Stainless Steel	AISI 316 Stainless Steel
Max. Working Temperature	300 °C	300 °C
Max. Working Pressure	40 bar	40 bar

# CV-11/S1-S2 CHECK VALVES

## TECHNICAL SPECIFICATIONS



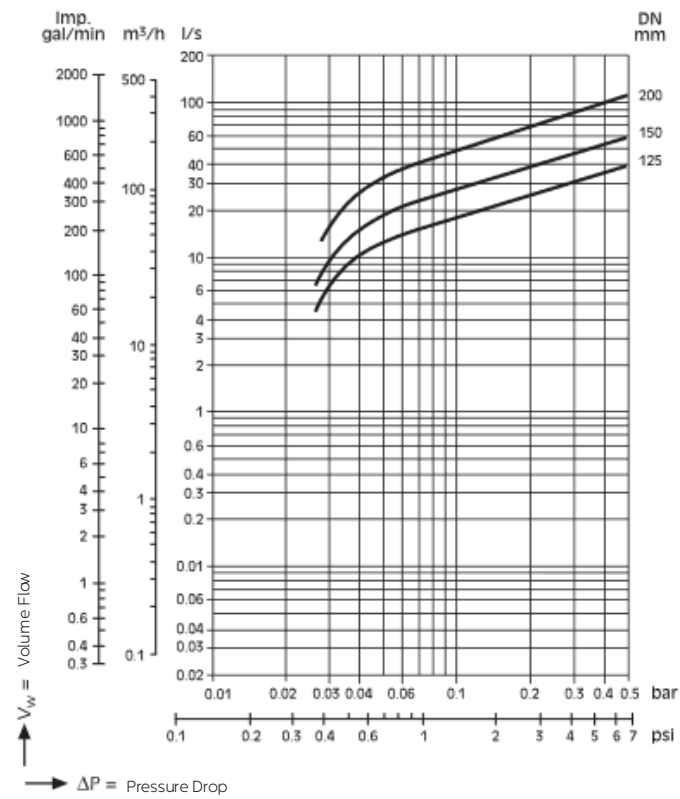
NO	PART NAME	CV-11/S1	CV-11/S2
1	Body	Stainless Steel AISI 304	Stainless Steel AISI 316
2	Disc	Stainless Steel AISI 304	Stainless Steel AISI 316
3	Spring	Stainless Steel AISI 302	Stainless Steel AISI 302
4	Centering Piece	Stainless Steel AISI 304	Stainless Steel AISI 316
5	Ring Holder	Stainless Steel AISI 304	Stainless Steel AISI 316
6	Ring	Stainless Steel AISI 304	Stainless Steel AISI 302

DIMENSIONS				
DIA	125	150	200	250
ØD (mm)	183	210	264	328
L (mm)	90	106	142	200

# CV-11/S1-S2 CHECK VALVES

The curves given in the chart are valid for water at 20°C. To read the pressure drop for other fluids the equivalent watervolume flow rate must be calculated and used in the graph. The values indicated in the chart are applicable to spring-loaded valves with horizontal flow

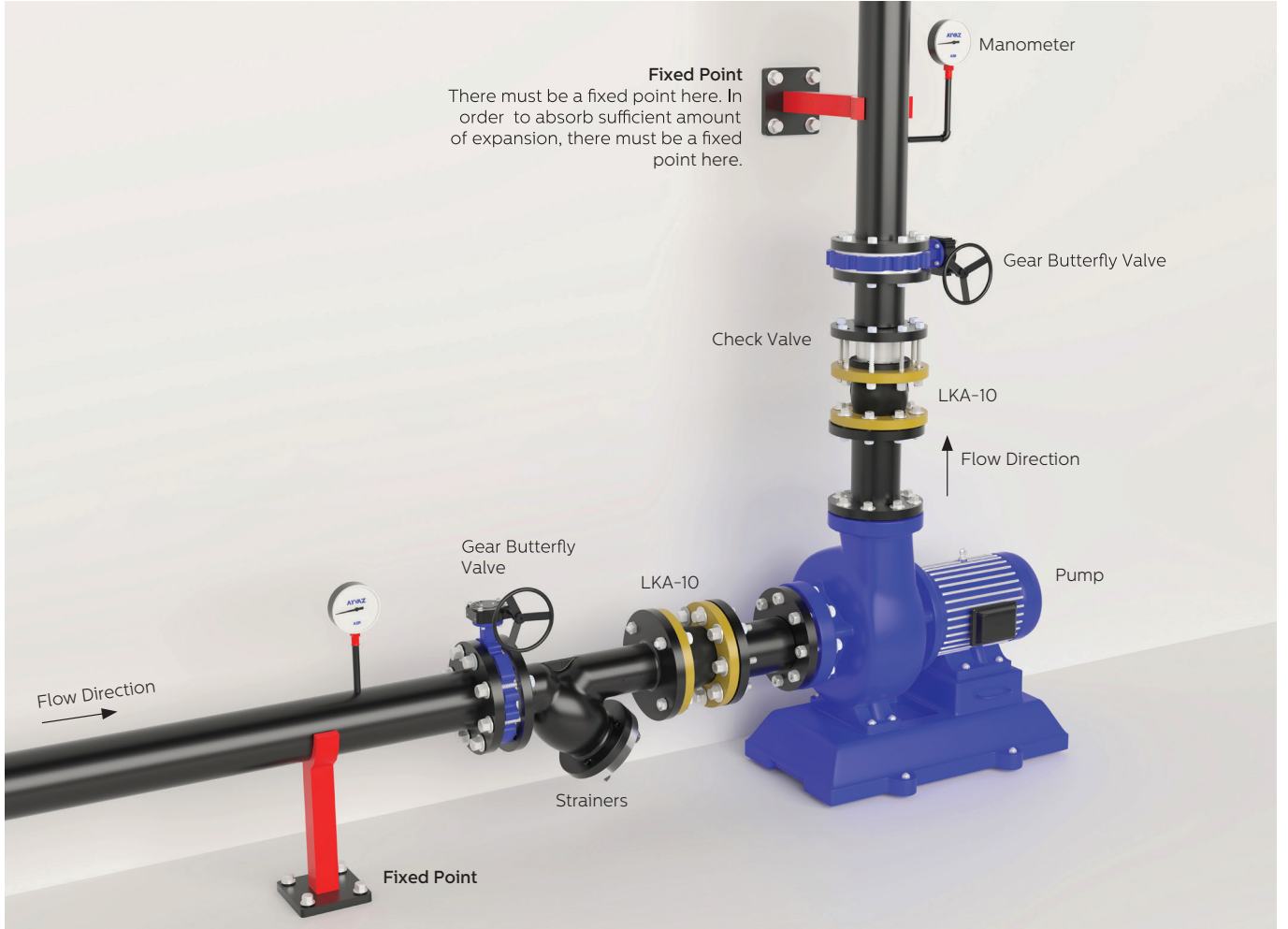
PRESSURE GRAPH



OPENING PRESSURE MBAR				
DN	Flow Direction			
	W/O Spring	With Spring		
	↑	↑	⇒	↓
125	0,53	31	20,5	10
150	11,5	33	21,5	10
200	11,2	32,4	21,2	10

## CV-11/S1-S2 CHECK VALVES

### 3D APPLICATION EXAMPLE



- Double-plate check valve is used after the pump.
- It prevents the fluid from returning to the pump when the pump is running or has stopped.