



# DUAL PLATE CHECK VALVES

**SERIES**  
915

**AWS**  
APPARATEBAU

# GENERAL DESCRIPTION DUAL PLATE CHECK VALVES



### Description and intended purpose

AWS dual plate check valves impress with their simple design and short overall lengths (in accordance with DIN EN 558 series 16 or API 594). They also feature particularly high flow rates thanks to their low flow resistance. They can be installed directly between flanges (PN 10 - PN 40 or Class 150 - Class 600).

**AWS dual plate check valves are maintenance-free.**

### Function

AWS dual plate check valves require only a low opening pressure. The resulting opening pressure and, if necessary, the weight of the plates (depending on the installation position), forces the plates against a spring, thus releasing the medium. If the inlet pressure drops or the outlet pressure exceeds the inlet pressure, the valve closes and seals against the medium by means of a vulcanised seal in the body or by means of the metal seat.

# WHY CHOOSE AWS DUAL PLATE CHECK VALVES?

### IN BRIEF:

Many years of experience in the production of check valves

In-house assembly department with maximum flexibility and expertise

Advice and technical design via in-house design and engineering team

High availability ensuring short delivery times of standard articles

### QUALITY AND TESTING AT AWS:

Own test benches for pressure and leak tests in accordance with EN 12266-1, API 598 and other common standards

Experience and routine in the preparation of works and acceptance test certificates in accordance with DIN EN 10204 (2.2, 3.1 or 3.2 certificate)

Regular auditing of processes and quality mechanisms by TÜV Süd, discerning customers and other external bodies

In-house spectral analyses for metallic materials

Additional quality assurance measures (external and internal), for example corrosion testing, dye penetrant testing, X-ray testing, preparation of QCPs, etc.

# OVERVIEW MATRIX DUAL PLATE CHECK VALVES

### DESCRIPTION

	915	916	
	<b>Standard design</b>	<b>Retainerless body</b>	
<b>NOMINAL SIZES</b>	DN 50 – DN 900 2" - 36"	DN 50 – DN 600*1 2" - 24"*1	
<b>FLANGE CONNECTION*2</b>	PN 10 / PN 16 / PN 25 / PN 40 Class 150	PN 10 / PN 16 / PN 25 / PN 40 Class 150 / Class 300 / Class 600	
<b>OTHER BODY DESIGNS</b>	-	Lug type Flange type	
<b>PRESSURE*3</b>	FTF dimensions in accordance with DIN EN 558: max. 16 bar FTF dimensions in accordance with API 594: max. 20 bar	Different pressure ranges, up to max. 100 bar	
<b>TEMPERATURE RANGES</b>	-10 °C to +200 °C	-196 °C to +400 °C	
<b>MATERIALS AVAILABLE*4</b>	Ductile iron	x	-
	Carbon steel	-	x
	Stainless steel	x	x
	Duplex	x	x
	Aluminium bronze	x	-
<b>SEALS AVAILABLE</b>	NBR, EPDM, FKM	NBR, EPDM, FKM, metal	

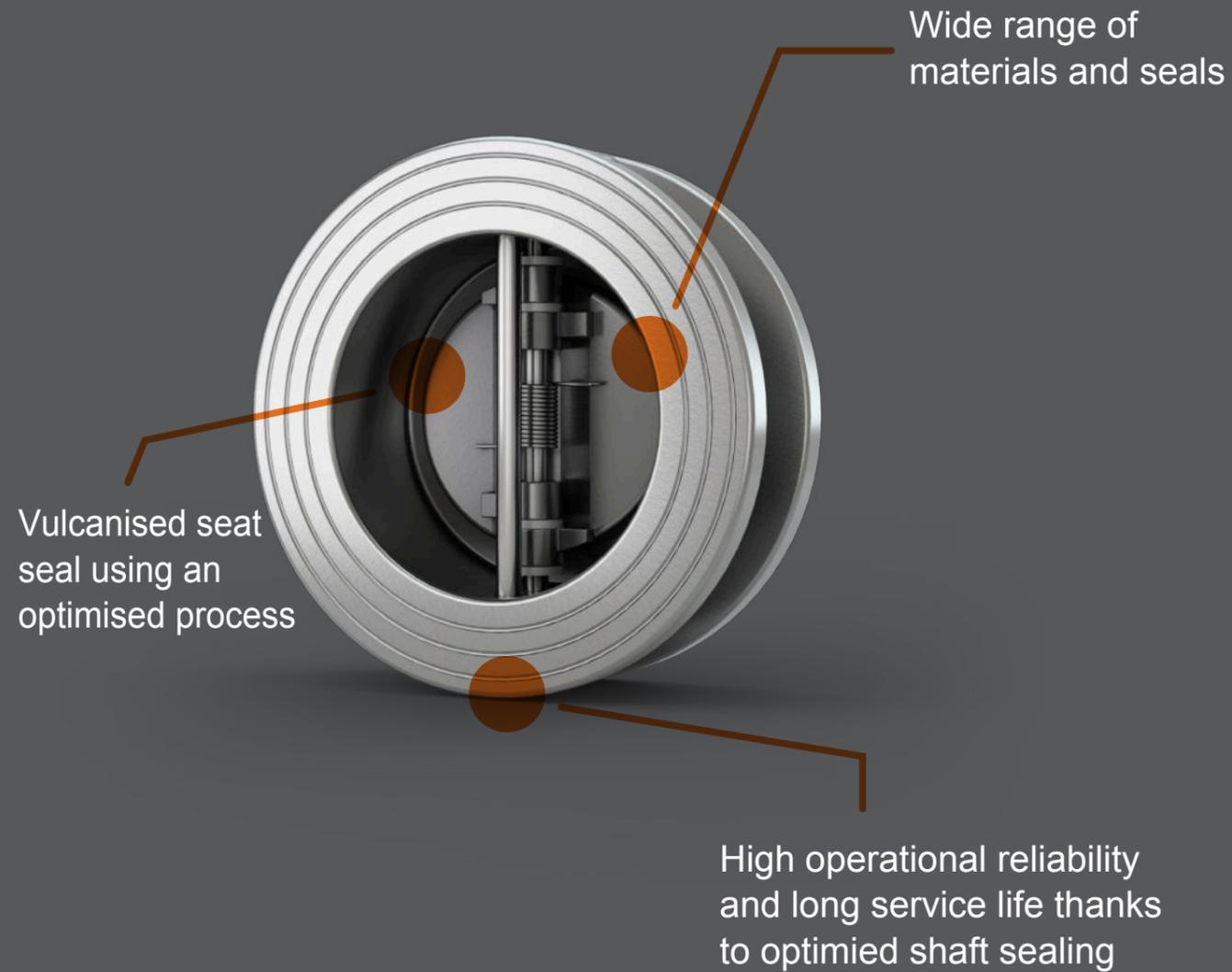
\*1 larger nominal sizes on request \*2 other flange connection dimensions on request \*3 higher pressures on request \*4 other materials on request

# ... AND BECAUSE WE KNOW WHAT MATTERS IN YOUR INDUSTRY!



## TECHNICAL DATA

### DUAL PLATE CHECK VALVE | SERIES 915



#### Nominal sizes

DN 50 - 900 | 2" - 36"

#### Flange connection

PN 10 - 40 | Class 150

#### FTF (face-to-face) dimensions

DIN EN 558, Series 16 | API 594

#### Temperature range

-10 °C to +200 °C

## TECHNICAL DATA

### DUAL PLATE CHECK VALVE | SERIES 915



1. Body

2. Plates

3. Shafts

4. Spring

Design	Body	Plates	Shafts	Spring	Pressure range*1	Seal	Temperature	Leakage rate*4
1	EN-GJS-400-15*2	EN-GJS-400-15*3	1.4401	1.4571	FTF acc. to DIN EN 558: DN 50 - DN 250: 0 to max. 16 bar DN 300 - DN 900: 0 to max. 10 bar	NBR	-10 °C to +90 °C	A
2	EN-GJS-400-15*2	Aluminium bronze	1.4401	1.4571		EPDM*5	-10 °C to +120 °C	A
3	EN-GJS-400-15*2	1.4408	1.4401	1.4571	FTF acc. to API 594: 0 to max. 20 bar	FKM	-10 °C to +200 °C	A
4	1.4408	1.4408	1.4401	1.4571				
6	Aluminium bronze	Aluminium bronze	Aluminium bronze	Inconel 600				
7	1.4469	1.4469	Inconel 600	Inconel 600				

\*1 max. allowable pressure is dependent on the temperature

\*2 Epoxy-resin coated, with DVGW approval for coating

\*3 nickel-plated

\*4 acc. to EN 12266-1 / in order to achieve the specified leakage rate, a back pressure of at least 1 bar is required

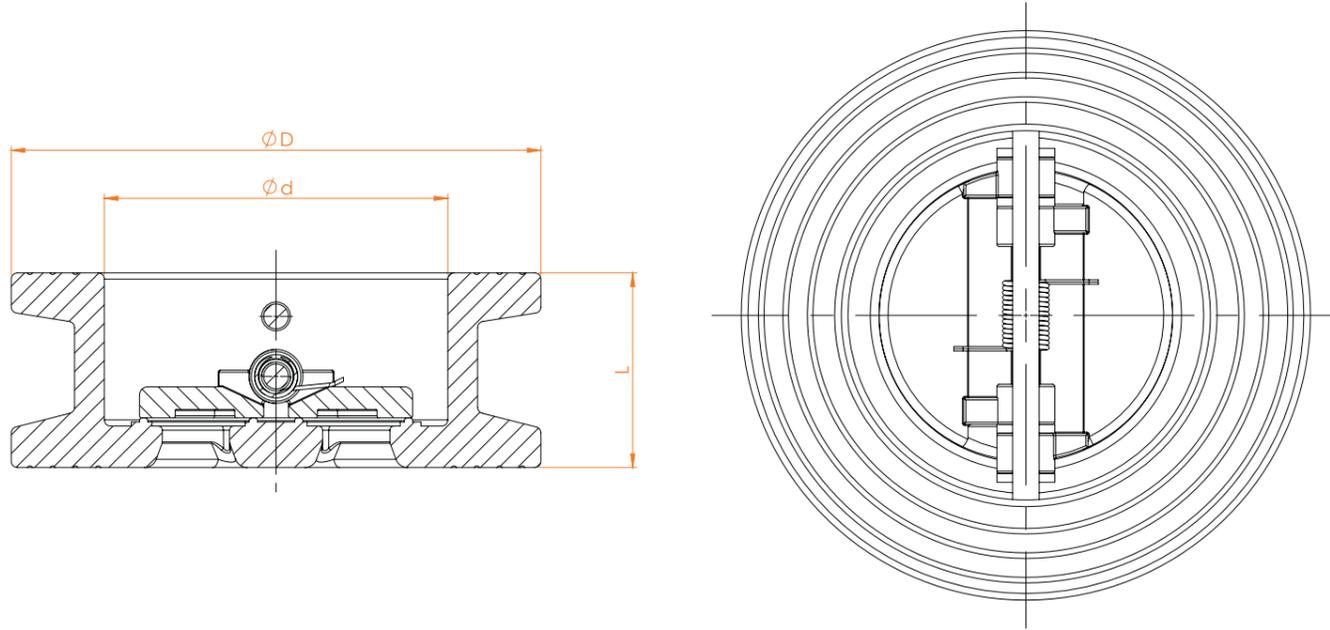
\*5 approval for drinking water up to +85 °C in accordance with WRAS

#### Additional quality features:

- Approval for drinking water in accordance with WRAS for EPDM seal
- DVGW approval for epoxy coating (design 1 - 3)

# TECHNICAL DATA

## DUAL PLATE CHECK VALVE | SERIES 915



Nominal size	Ø D*6					Ø d	L		Kv value [m³/h]	Opening pressure [mbar]			Weight *7 [kg]
	PN 10	PN 16	PN 25	PN 40	Class 150		EN 558	API 594		↔	↑	↓	
DN 50	2"	107			101	70,5	43	60	63	~ 15	~ 20	~ 10	1,5
DN 65	2 1/2"	127			121	80	46	67	109	~ 15	~ 20	~ 10	2,3
DN 80	3"	142			134	98	64	73	172	~ 15	~ 20	~ 10	3,6
DN 100	4"	162	170		171	117	64	73	289	~ 15	~ 20	~ 10	4,4
DN 125	5"	192			192 (193)*8	145	70	83	476	~ 15	~ 20	~ 10	6,0
DN 150	6"	218	226		218 (219)*8	172	76	98	750	~ 15	~ 20	~ 10	8,6
DN 200	8"	273	285		273 (276)*8	221	89	127	1330	~ 15	~ 20	~ 10	15
DN 250	10"	328	345		340 (336)*8	275,5	114	146	2080	~ 15	~ 20	-	24
DN 300	12"	378	383	404	406	325,5	114	181	3676	~ 15	~ 20	-	35
DN 350	14"	438	444	458	448	361	127	184	5274	~ 15	~ 20	-	58
DN 400	16"	489	495	516	514 (511)*8	412	140	191	7306	~ 15	~ 30	-	75
DN 450	18"	539	555	566	546	468	152	203	9246	~ 15	~ 30	-	98
DN 500	20"	594	617	626	603	515	152	219	11410	~ 15	~ 30	-	125
DN 600	24"	695	734	734	-	714	178	222	17570	~ 15	~ 30	-	170
DN 700	28"	807	802	-	-	828	229	-	23920	~ 15	~ 40	-	250
DN 800	32"	917	912	-	-	936	241	-	31250	~ 15	~ 40	-	366
DN 900	36"	1016	1012	-	-	1044*9	241	368*9	39540	~ 15	~ 40	-	513

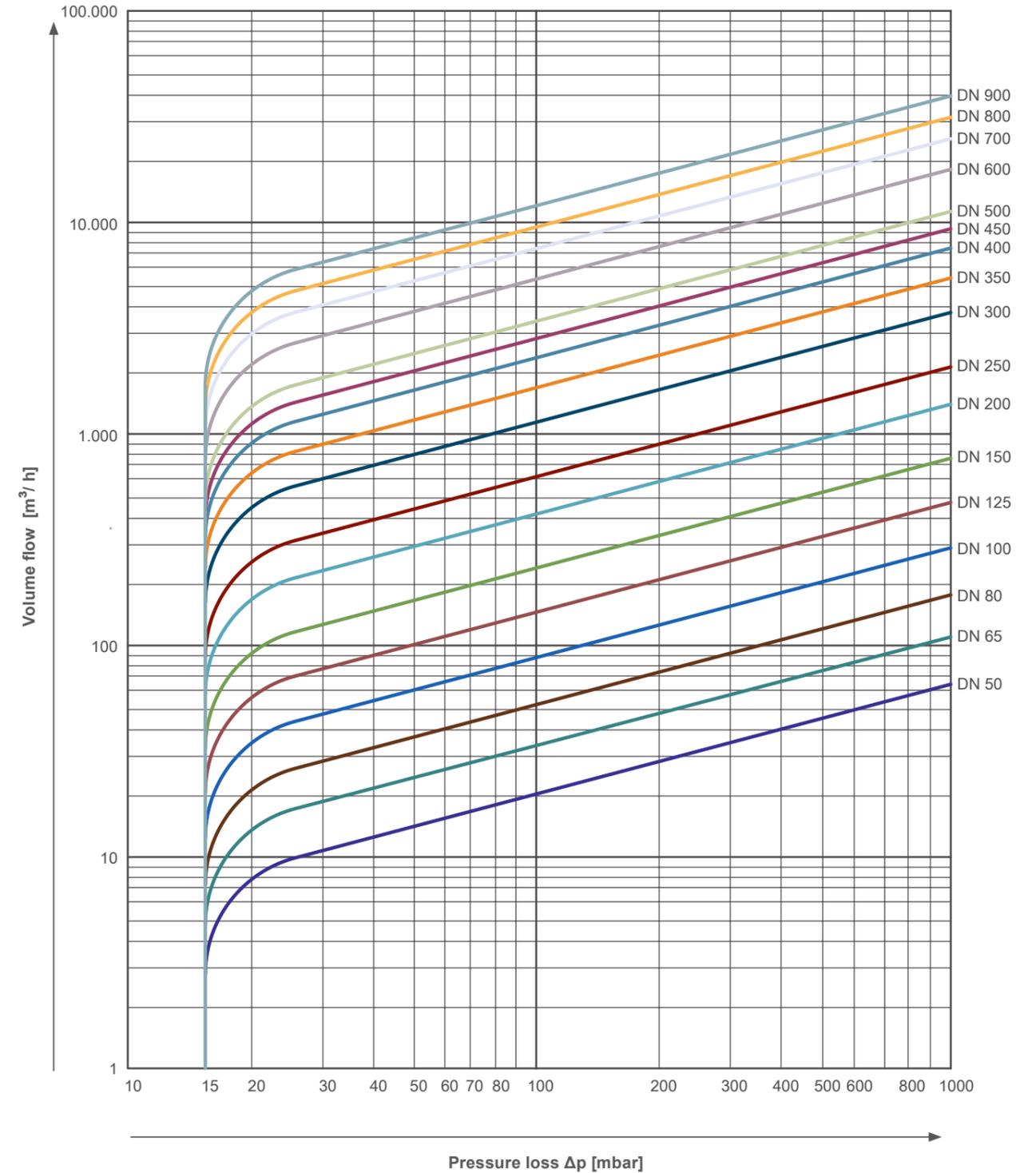
\*6 flange centering rings can be used to achieve the flange connection dimensions  
 \*7 weight refers to valve suitable for PN 10 flanges and may vary slightly, depending on the design  
 \*8 value in brackets: dimension for valve with FTF dimension in accordance with API 594  
 \*9 DN 900 with flange connection dimension and FTF dimension in accordance with Class 125

# TECHNICAL DATA

## DUAL PLATE CHECK VALVE | SERIES 915

### Pressure-Loss Diagram Type 915

The diagram figures apply to water at a temperature of 20 °C. At the opening of the valve, the curves apply to operation in horizontal pipelines. For calculations for other fluids or temperatures, please contact us.



# SPECIAL OPTIONS

## DUAL PLATE CHECK VALVES

With our many years of experience, and our understanding of the demands of the market and the constantly rising expectations of our customers, we always strive to develop and implement solutions that go well beyond the standard. Here are just a few examples of special designs that we have created either in-house, based on our standard models, or with the help of our long-standing pool of partners. Here we adhere to the criteria of technical and economic feasibility combined with a healthy dose of pragmatism.



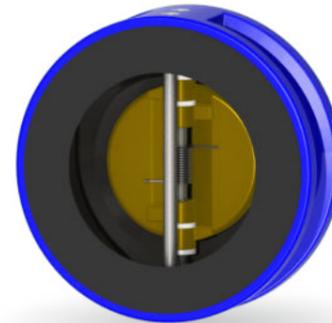
**Other body designs**  
Lug type



Flange type



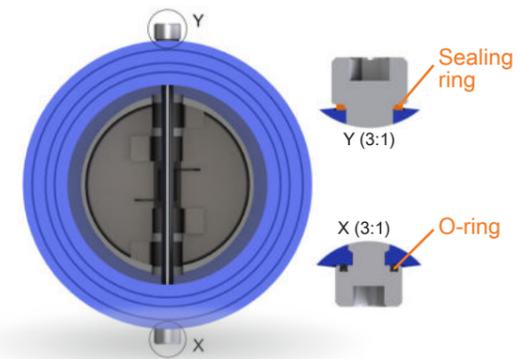
**Flange centering ring**  
for special flange dimensions



**Rubberlined body**  
for increased corrosion resistance



**Spacer ring**  
for special FTF dimensions and flange sealing surfaces



**Screw seal**  
Sealing ring, O-ring

**Other special options:**

- Reduced opening pressure
- Cleaned free of oil and grease
- Cleaned free of silicone (type 916)
- Outer diameter suitable for JIS flanges
- Optimized seal for higher seat tightness at low back pressure (Type 915)
- Other materials on request
- Larger nominal sizes on request
- Higher pressures on request
- Other special options on request

**With attached ground cable**





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