

# ÖZKAN Nozzle Check Valve

Technical Guide W4.42

Designed to prevent backflow in several applications through a dynamic design using springs allowing a quick response to flow changes.



10.21 | W4.42 HAWLE ÖZKAN NOZZLE CHECK VALVE

## Applications

Raw water  
River water  
Grey water  
Screened effluent

## Product Attributes

Quick response to flow changes  
Short closing stroke  
Low head loss  
High corrosion resistance

## Approvals/Standards

EN 558-1 Series 13 and 14 face to face dimensions

Working tests to EN 1074 EN 12266  
AS4087 Flanges

## Quality

ISO 9001:2008 Quality Management  
ISO 14001:2004  
Environmental Management  
OHAS 18001:2007 Health and Safety

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# Özkan Nozzle Check Valve

## Design Specifications

Özkan Nozzle Check Valves are a speciality type of check valve that brings unique design features together for high performance applications.

These valves have non-slam closure, low head loss, self-cleaning seat area and can handle applications in raw, grey and river water as well as screened effluent.

| Diameter   | Pressure |
|------------|----------|
| DN300-1000 | PN 10-25 |

## Design Features

TABLE 1 Design Features

| Part No. | Description | Material                   |
|----------|-------------|----------------------------|
| 1        | Body        | Ductile iron EN-GJS-400-15 |
| 2        | Disc        | Ductile iron EN-GJS-400-15 |
| 3        | Bearing     | Bronze                     |
| 4        | Shaft       | Stainless steel X20Cr13    |
| 5        | Stopper     | Stainless steel X20Cr13    |
| 6        | Spring      | Stainless steel            |
| 7        | Bolt        | Stainless steel A2         |
| 8        | Nut         | Stainless steel X20Cr13    |
| 9        | Setscrew    | Stainless steel A2         |

\* Other material grades are available upon request.

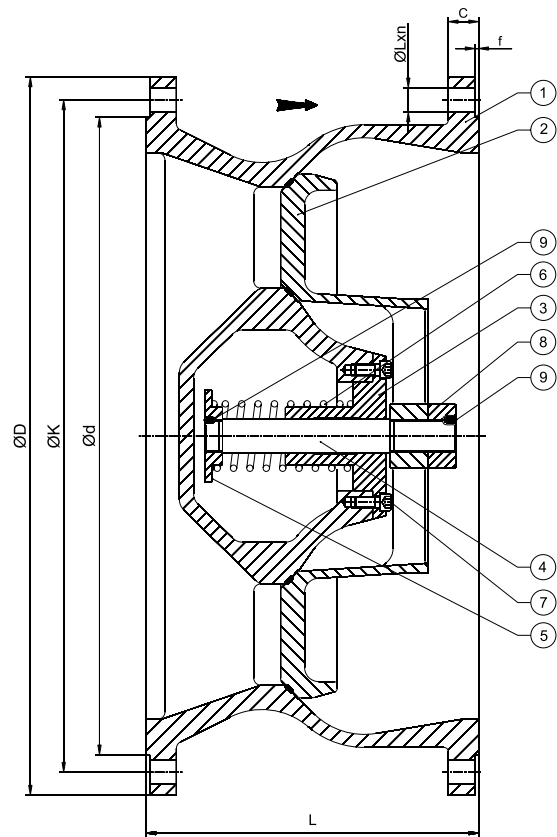


FIG. 1 Nozzle Check Valve Design Features

## Technical Specifications

**TABLE 2 Nozzle Check Valve PN10 Technical Information**

| DN   | PN | ØD   | Øk   | Ød   | C    | f | ØLxn  | L   | Weight (KG) |
|------|----|------|------|------|------|---|-------|-----|-------------|
| 300  | 10 | 460  | 400  | 370  | 24.5 | 4 | 23x12 | 270 | 70          |
| 350  | 10 | 520  | 460  | 429  | 27   | 4 | 23x16 | 290 | 113         |
| 400  | 10 | 580  | 515  | 480  | 28   | 4 | 28x16 | 310 | 146         |
| 450  | 10 | 615  | 565  | 530  | 25.5 | 4 | 28x20 | 330 | 178         |
| 500  | 10 | 670  | 620  | 582  | 26.5 | 4 | 28x20 | 350 | 255         |
| 600  | 10 | 780  | 725  | 682  | 30   | 5 | 31x20 | 390 | 395         |
| 700  | 10 | 895  | 840  | 794  | 32.5 | 5 | 31x24 | 430 | 475         |
| 800  | 10 | 1015 | 950  | 901  | 35   | 5 | 34x24 | 470 | 600         |
| 900  | 10 | 1125 | 1050 | 1001 | 46.5 | 5 | 34x28 | 510 | 1020        |
| 1000 | 10 | 1255 | 1160 | 1112 | 50   | 5 | 37x28 | 550 | 1300        |

*\*Please contact us for other sizes and pressure rates.*

**TABLE 3 Nozzle Check Valve PN16 Technical Information**

| DN   | PN | ØD   | Øk   | Ød   | C    | f | ØLxn  | L   | Weight (KG) |
|------|----|------|------|------|------|---|-------|-----|-------------|
| 300  | 16 | 460  | 410  | 370  | 24.5 | 4 | 28x12 | 270 | 70          |
| 350  | 16 | 520  | 470  | 429  | 27   | 4 | 28x16 | 290 | -           |
| 400  | 16 | 580  | 525  | 480  | 28   | 4 | 31x16 | 310 | 146         |
| 450  | 16 | 640  | 585  | 548  | 30   | 4 | 31x20 | 330 | 178         |
| 500  | 16 | 715  | 650  | 609  | 31.5 | 4 | 34x20 | 350 | 255         |
| 600  | 16 | 840  | 770  | 720  | 36   | 5 | 37x20 | 390 | 395         |
| 700  | 16 | 910  | 840  | 794  | 39.5 | 5 | 37x24 | 430 | -           |
| 800  | 16 | 1025 | 950  | 901  | 43   | 5 | 41x24 | 470 | 685         |
| 900  | 16 | 1125 | 1050 | 1001 | 46.5 | 5 | 41x28 | 510 | 1110        |
| 1000 | 16 | 1255 | 1170 | 1112 | 50   | 5 | 44x28 | 550 | 1300        |

*\*Please contact us for other sizes and pressure rates.*

*\*\* PN25 & PN40 Nozzle Check Valves are manufactured upon request.*

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