

# DPR 3000

## DIRECT PRESSURE REGULATING VALVE

Netafim Direct Pressure Regulating Valves designed to protect thin-wall irrigation systems from unstable pressure, water hammers and fluctuations. It is suitable for open field and intensive greenhouse applications.



Quick  
reaction



Great  
modularity



Remote  
operation

## / Benefits & Features

- **Quick reaction**
  - Fast-acting pressure regulation minimizes downstream pressure fluctuations, protecting the system from water hammers and supporting intensive irrigation
- **Pressure Uniformity**
  - It ensures continuous non-peak, consistent pressure and maximum system uptime
- **Modular design**
  - Supports multiple spring options for precise pressure set points and a wide range of connection types including grooved and solvent-welded, in ISO and ATM standards.
  - The DPR 3000 is also available at various downstream pressures
- **Remote operation**
  - By hydraulic-relays operators or solenoids such as Aquative™

## / Specifications & Recommendations

- Diameters – 4" (Coming soon: 2", 3", 6")
- Connections Types – Grooved (VIC) 4"; Female Solvent Welded (SW) ASTM 3"/ ISO 90 mm
- Maximum Fluid Temperature – 60°C (140°F)
- PN Rating – 6.0 bar / 87 psi
- Body – Reinforced polyamide
- Springs – Stainless steel
- Flow Rates\* – Min. 20 m³/h (88.0 gpm); Max. 80 m³/h (352 gpm)
- Max. Inlet Pressure – 6.0 bar (87 psi)
- Spring Types – 0.70, 1.20, 1.70, 2.0 bar (10.0, 17.50, 25.0, 29.0 psi)

\* Higher flow rates will incur higher pressure losses, and probably less stability especially at low upstream pressures

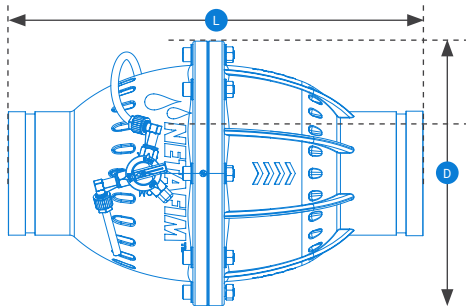
**Note:** The DPR 3000 should not be opened/disassembled in the field/grower warehouse. Only a specialized technician with the correct tools should be allowed to inspect the interior parts of the product.

## → Opening and Closing Pressures Required for Each Spring

| Spring                  | Opening Pressure    | Closing Pressure   |
|-------------------------|---------------------|--------------------|
| A - 0.70 bar / 10.0 psi | 1.2 bar / 17.50 psi | 1.1 bar / 16.0 psi |
| B - 1.2 bar / 17.50 psi | 1.2 bar / 17.50 psi | 1.1 bar / 16.0 psi |
| C - 1.7 bar / 24.50 psi | 1.8 bar / 26.0 psi  | 1.1 bar / 16.0 psi |
| D - 2 bar / 29.0 psi    | 1.8 bar / 26.0 psi  | 1.1 bar / 16.0 psi |

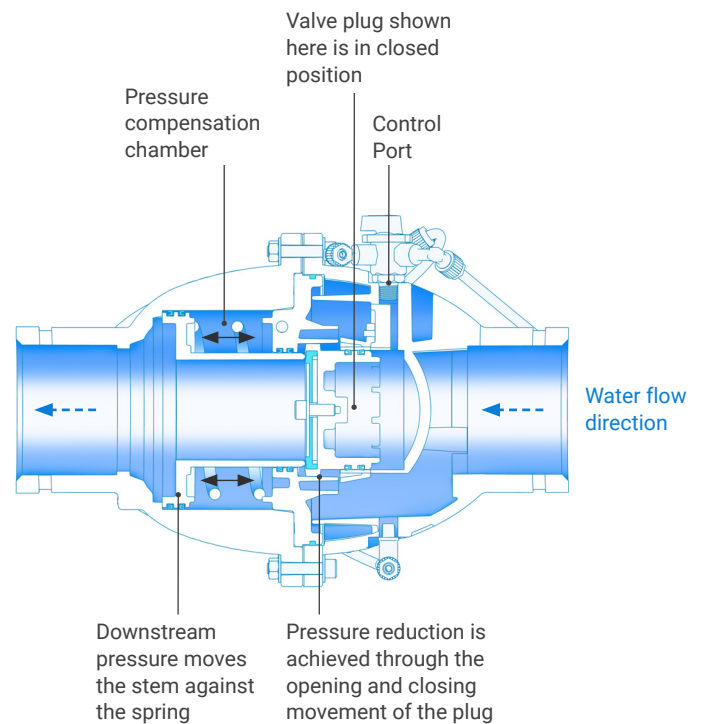
## → Technical Dimensions

DPR 3000 4" (Kv=120, Cv=140)

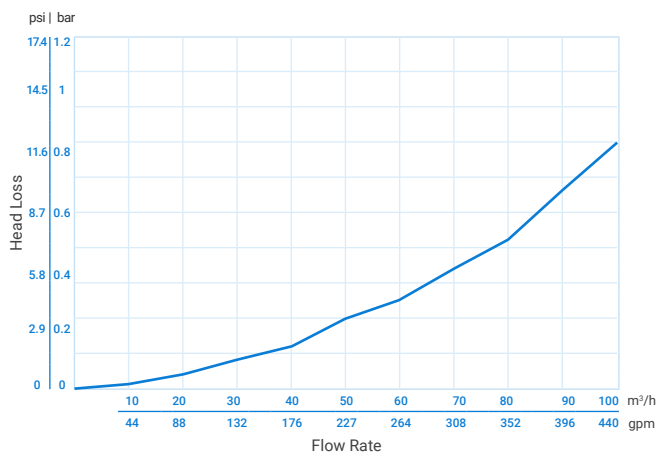


| Model       | Diameter<br>(mm / inch) | Length<br>(mm / inch) | Weight<br>(kg / lb.) |
|-------------|-------------------------|-----------------------|----------------------|
| DPR 3000 4" | 245 / 9.64              | 380 / 14.95           | 3.75 / 8.27          |

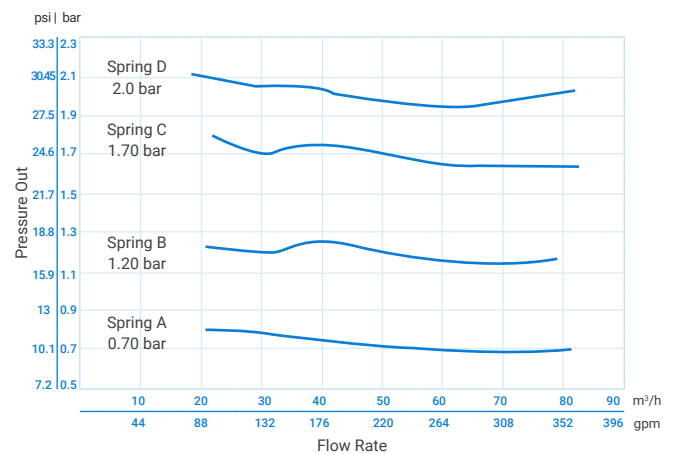
## → Cross Section



## → Head Loss vs. Flow Rate



## → Outlet Pressure vs. Flow Rate



All test were performed at inlet pressure of 3 bar/ 43.50 psi

## → Flow Rate & Pressure Regulation Spring Selection

| Product                                     | Min. Flow Rate |      | Max. Flow Rate |       | Max. Regulation Pressure |      | Body Material        |
|---------------------------------------------|----------------|------|----------------|-------|--------------------------|------|----------------------|
|                                             | m³/h           | gpm  | m³/h           | gpm   | bar                      | psi  |                      |
| 4" DPR 3000 Spring A (0.70 bar / 10.0 psi)  | 20.0           | 88.0 | 80.0           | 352.5 | 4.50                     | 65.0 | Reinforced Polyamide |
| 4" DPR 3000 Spring B (1.20 bar / 17.50 psi) | 20.0           | 88.0 | 80.0           | 352.5 | 6.00                     | 87.0 | Reinforced Polyamide |
| 4" DPR 3000 Spring C (1.70 bar / 25.0 psi)  | 20.0           | 88.0 | 80.0           | 352.5 | 6.00                     | 87.0 | Reinforced Polyamide |
| 4" DPR 3000 Spring D (2.0 bar / 29.0 psi)   | 20.0           | 88.0 | 80.0           | 352.5 | 6.00                     | 87.0 | Reinforced Polyamide |

## → Catalog Numbers

| Description                             | Flow Range          |                    | Nominal Output Pressure |       | Max. Regulation Pressure |      | Catalog Number |
|-----------------------------------------|---------------------|--------------------|-------------------------|-------|--------------------------|------|----------------|
|                                         | m³/h<br>(min - max) | gpm<br>(min - max) | bar                     | psi   | bar                      | psi  |                |
| Spring A (0.7 bar / 10.0 psi)           |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN A S P       | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000002   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC A S P | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000003   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC A P  | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000004   |
| DPRV PL 4" H VIC/ 3" ISO MAN A S P      | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000005   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC A S P | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000006   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC A P   | 20.0 - 80.0         | 88 - 352           | 0.70                    | 10.0  | 4.50                     | 65.0 | 30510-000007   |
| Spring B (1.20 bar / 17.5 psi)          |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN B S P       | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000010   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC B S P | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000011   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC B P  | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000012   |
| DPRV PL 4" H VIC/ 3" ISO MAN B S P      | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000013   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC B S P | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000014   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC B P   | 20.0 - 80.0         | 88 - 352           | 1.20                    | 17.50 | 6.0                      | 87.0 | 30510-000015   |
| Spring C (1.70 bar/ 25 psi)             |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN C S P       | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000030   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC C S P | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000031   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC C P  | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000032   |
| DPRV PL 4" H VIC/ 3" ISO MAN C S P      | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000033   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC C S P | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000034   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC C P   | 20.0 - 80.0         | 88 - 352           | 1.70                    | 25.0  | 6.0                      | 87.0 | 30510-000035   |
| Spring D (2.0 bar/ 29.0 psi)            |                     |                    |                         |       |                          |      |                |
| DPR PL 4" H VIC/3" ASTM MAN D S P       | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000040   |
| DPR PL 4" H VIC/ 3" ASTM ELE AQAC D S P | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000041   |
| DPRV PL 4" H VIC/ 3" ASTM ELE AQAC D P  | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000042   |
| DPRV PL 4" H VIC/ 3" ISO MAN D S P      | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000043   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC D S P | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000044   |
| DPRV PL 4" H VIC/ 3" ISO ELE AQAC D P   | 20.0 - 80.0         | 88 - 352           | 2.0                     | 29.0  | 6.0                      | 87.0 | 30510-000045   |

**Note:** All configurations/catalog numbers listed above are supplied with a pressure gauge included in the product packaging.

ELE = Electric control on/off  
 MAN = Manual control on/off  
 AQAC = Solenoid Aquative 24 AC  
 A, B, C, D = Type of spring  
 S = 3 way manual valve  
 H = Horizontal  
 VIC = Victaulic connection  
 ASTM = Adhesion standard  
 ISO = Adhesion standard  
 P = Pressure gauge