# Dorot-95/96 valve



# **Dorot**

The Dorot 95/96 Series has a PVC housing with free passage and is therefore suitable for large capacities and/or low resistances. The function of the diaphragm minimises the risk of water hammer. Special soft diaphragms (low-flow) are available for applications with a minimum working pressure (0.5 bar).

The 95/96 Series is supplied as standard as a basic diaphragm valve or with a 3-way industrial solenoid. Basic diaphragm valves can be used to construct manual actuators, pilot valves, float valves, etc. and for (hydraulic) remote control. A PR pilot (29-100) can be used as a flow restrictor and for automatic pressure control.

The Dorot 95 PVC valve has a 3" female thread and the 96 Series has a glue fitting (90 or 110 mm). They have a high resistance to fertilisers.

# **APPLICATION**

Sprinkler and drip irrigation systems. Also for applications with minimum pressure (for special soft diaphragms, low-flow). In combination with a float can be used as a float valve, in combination with a pilot as a control valve.

#### **CHARACTERISTICS**

- Large passage and reliable function
- Equipped with an industrial solenoid, optionally with flow restrictor or float valve
- Less risk of water hammer than with e.g. a butterfly valve
- Simple installation with glue fitting

# **TECHNICAL DATA**

Diameter : Dorot 95: 3" BSPT

(female thread) Dorot 96: 90 - 110 mm

(glue fitting)

Optional : Dorot 96: 160 mm

Control connection : ¼" BSP

Maximum pressure : 8 bar (at 20°C)
Minimum pressure : 1 bar (0.5 - 1 bar: soft

diaphragm, low-flow)

Capacity range : 25 - 260 m³/h (at 0.3 bar)
Maximum temperature : 40°C (with decreasing maxi-

mum pressure)

Pressure losses : see chart

Opening / closing time : dependent on the diameter,

pressure, capacity, etc.

Material : U-PVC (housing)

: rubber (diaphragm)

: Stainless steel 302 (spring)

Weight : 4.2 kg

Control signal : 24V DC/AC (50/60 Hz)

Electric solenoid: 3-way: industrial 24V DC/AC (50/60

Hz); 230 V

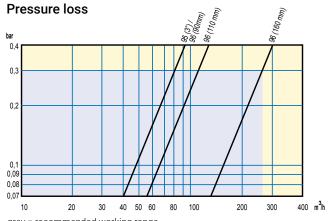
Note: an NC model has a NO brass base block

Optional : air-controlled (max. 1.6 mm

nozzle)

: manual actuation, float, pressure reduction and pressure

relief valve



grey = recommended working range



#### **INSTALLATION & MAINTENANCE**

- The Dorot 95/96 Series can be installed in any position, although installation 'upright' or 'vertical with the solenoid facing upwards' are preferred as the air can thus escape easily and the accumulation of contaminants behind the solenoid plunger is prevented.
- ✓ Take care with air control that the air pressure is not more than 0.5 bar above the line pressure when the valves are closed. The air used must be free from lubricants.
- ✓ With relatively low capacity (up to +/- 70 m³/h), the drain of the solenoid can be connected to the 'downstream' plug of the valve. This shortens the closing time significantly, but also results in a slight increase in resistance.
- If there is a risk of freezing, the water must be drained from the valves (and solenoids).

# Parts list Dorot-95/96

No.	Description	Article No.
1	Long bolt	71680-012666
2	Short bolt	71680-012663
3	Washer	
4	Bonnet	71680-009170
5	Spring	71680-008100
6	Spring seat	
7	Diaphragm	71680-007660
	Diaphragm low flow	43020-015980
8	Body 90 mm	71680-018000
	Body 110 mm	71680-018050
	Body 3" BSPT	
9	Nut	71680-031760
10	Finger filter	71680-014170
NC-valve	Operator (3-Way Bacc-NO) 24VAC-5,5W 2,4-1/4"	02244-600840
NC-valve	Operator (3-Way Bacc-NO) 24VDC-5,5W 2,4-1/4"	02244-600842
NO-valve	Operator (3-Way Bacc-NC) 24VAC-5,5W 2,4-1/4"	02244-600850
NO-valve	Operator (3-Way Bacc-NC) 24VDC-5,5W 2,4-1/4"	02244-600852

