

D-040, DT-040, DG-10 combination air valve

A.R.I.



The A.R.I. D-040 is a nylon combination air valve suitable for discharging and admitting both small and large quantities of air. The air valve combines a large opening (kinetic function) with a small opening (automatic function). This combination ensures a self-cleaning effect (thus less clogging) and prevents premature closing.

The DG-10 is the agricultural model of the D-040. It is designed for a lower pressure and higher capacities. The DT-040 is a combination air valve with integral valve for smaller capacities.

APPLICATION

In situations where both a large quantity of air has to be discharged/admitted in a short time or an automatic function is also necessary

CHARACTERISTICS

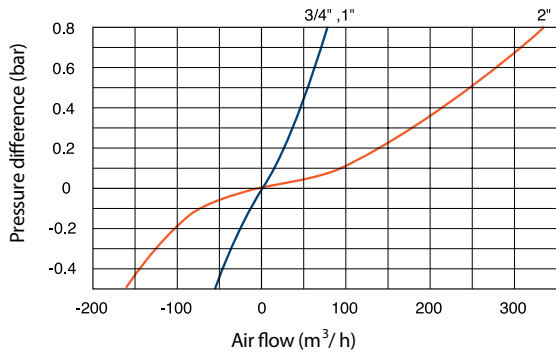
- ✔ For the discharge/admission of air from/to irrigation systems
- ✔ Body of high-quality plastic material
- ✔ UV-resistant, hence suitable for outdoor use

TECHNICAL DATA

	D-040	DG-10 (agrarian)	DT-040
Working pressure	: 0.2 - 16 bar	: 0.1 - 10 bar	: 0.2 - 10 bar
Diameter	: BSPT male 3/4" - 1" - 2"	: BSPT male 3/4" - 1" - 2"	: BSPT male 1/2" - 3/4"
Large kinetic	: 100 mm ² (3/4" - 1")	: 100 mm ² (3/4" - 1")	: 42 mm ²
Small automatic	: 7.8 mm ² (3/4" - 1")	: 7.8 mm ² (3/4" - 1")	: 5.6 mm ²
Large kinetic	: 804 mm ² (2")	: 804 mm ² (3/4" - 1")	: 42 mm ²
Small automatic	: 12 mm ² (2")	: 12 mm ² (2")	: 5.6 mm ²
Discharge connection	: 3/8" BSPT fem. (3/4" - 1") : 1 1/2" BSPT female (2")	: 3/8" BSPT fem. (3/4" - 1") : 1 1/2" BSPT female (2")	: 10 mm : -
Temperature	: 60°C	: 60°C	: 60°C
Material	: Reinf. nylon (housing) : EPDM (O-ring)	: Reinf. nylon (housing) : EPDM (O-ring)	: Reinf. nylon (housing) : EPDM (O-ring)
Colour	: black/blue	: black/blue	: grey/blue/orange
Certification	: REACH	: REACH	: REACH
Option	: D-040-B: Brass housing: -		: DT-040-VAC (one-way out) LP-HT-OUT (6 bar)

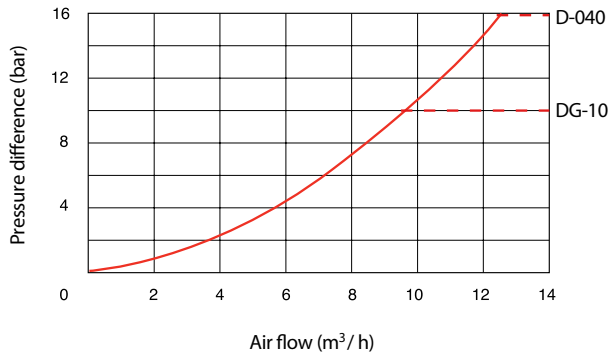


Air movement chart (kinetic) D-040 / DG-10

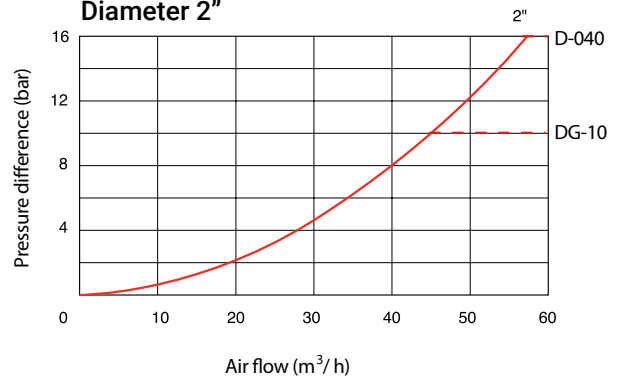


Air movement chart (automatic) D-040 / DG-1

Diameters 3/4" - 1"

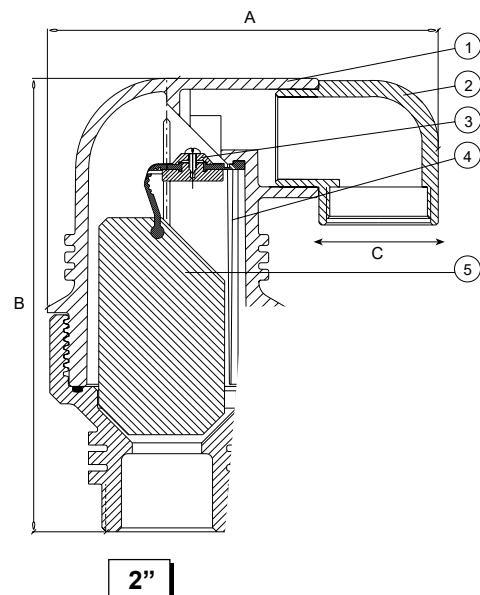
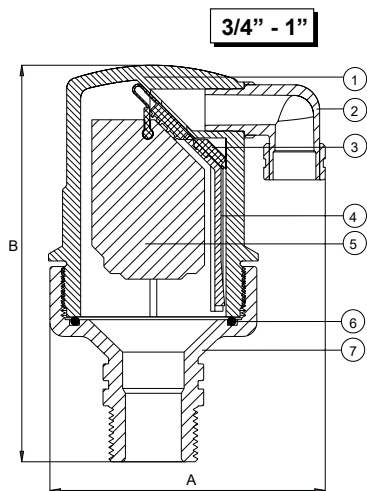


Diameter 2"

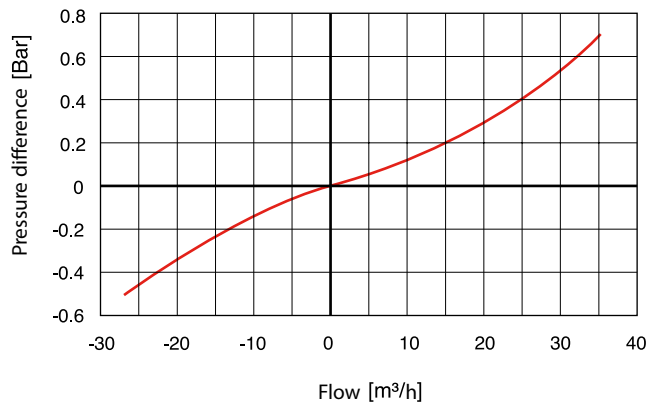


Parts list and technical drawing D-040-DG-10

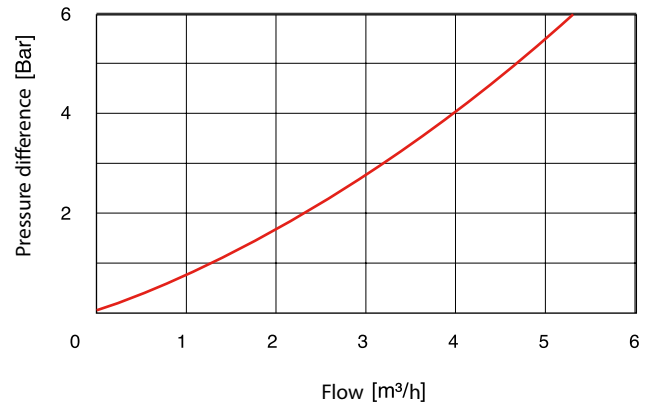
No.	Description	Material
1	Body	Glassfibre-reinforced nylon
2	Drainage elbow	PP
3	Seal plug assembly	
4	Clamping stem	Reinforced nylon
5	Float	Glassfibre-reinforced nylon
6	O-ring	BUNA-N
7	Base	Glassfibre-reinforced nylon



Air movement chart (kinetic) DT-040

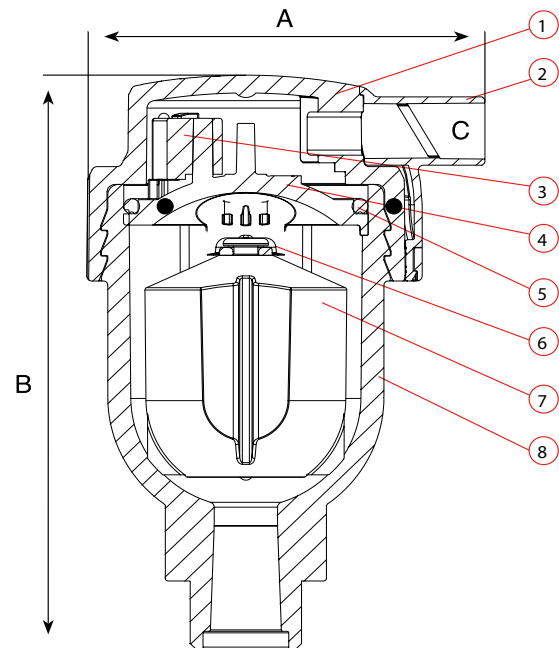


Air movement chart (automatic) DT-040



Parts list and technical drawing (DT-040)

No.	Description	Material
1	Cover & Shut Off Valve	Acetal
2	Discharge Outlet	EPDM
3	Flat Plug	Glassfibre-reinforced PP
4	Seat	BUNA-N
5	O-ring	EPDM
6	Seal	PP
7	Float	Glassfibre-reinforced PP
8	Body	Nylon



INSTALLATION & MAINTENANCE

The D-040 combination air valve is used in an installation as follows:

- ✓ Located at the highest point in lines (on portals, filters, etc.) to discharge trapped air, particularly if the flow velocity drops below the critical value.
- ✓ Behind a pump to discharge vapour bubbles formed by the pump.
- ✓ In long lines of around 500 - 800 meters.
- ✓ Behind any device that can cause vapour bubbles or allows the ingress of air, such as pumps, pressure reducers, parts that cause turbulence and possible leaking couplings.
- ✓ Air valves are always installed upright. In the event of a vacuum, the Segev air valves allow a limited amount of air into the system.
- ✓ Seen from above, the upper housing can be closed clockwise and opened counter clockwise.
- ✓ **Note:** the discharge connection of the D-040, DG-10 and DT-040 must be unpressurised.