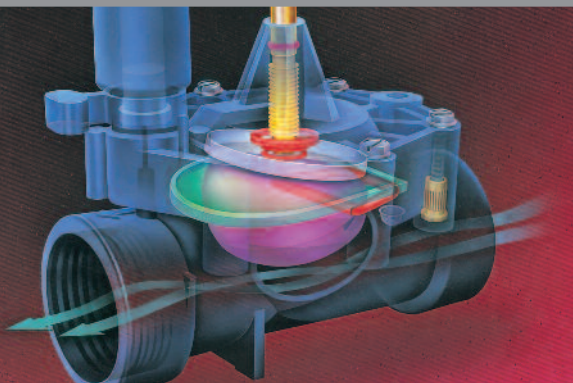


TORO

Count on it.

700 Series Ultra-Flow

Micro-Irrigation



Application:

Unique straight-through flow path provides low-pressure loss and superior regulating capabilities. The 700 Series Ultra-Flow valves are ideal for low flow applications found in nursery and greenhouse.

3/4", 1", 1½" and 2" plastic models

Features:

Performance

- Flow range from .10-180 GPM
- Pressure range from 10-150 psi
- Manual internal bleed
- Self-flushing, 150-mesh, stainless steel filter screen on 1-, 1½- and 2-inch models
- Unique straight-through flow path provides low pressure loss and superior regulation
- Slow-closing design prevents water hammer
- Wide flow range
- Flow control allows precise flow adjustment and manual shutoff (not available on ¾-inch model)

Quality Construction

- Tough glass-reinforced nylon, stainless steel and brass construction
- Rugged, nylon-reinforced Buna-N diaphragm provides leak-proof seal
- Buna-N valve seat seal
- Encapsulated injection-molded solenoid
- Captive plunger
- Compact, low-profile design
- Unique three-way stainless steel bonnet screws with threaded brass inserts accept Phillips, flatblade and hex-driver tools



700 Series Ultra-Flow

Pressure Regulating 713 Models

- Manual downstream pressure regulating valves
- Available in 1", 1.5" and 2" models (25, 40 and 50 mm)
- Available in in-line and downstream sensing versions, with 20–100 or 0–30 psi (1,4–6,9 or 0–2 bar) range
- Self-modulating pressure regulator maintains constant downstream pressure within +/- 2 psi (0,14 bar) of pressure setting [for in-valve sensing; within +/- 1 psi (0,07 bar) for downstream sensing]
- All flow ranges must be within recommended range indicated on pressure loss chart — minimum 15 gpm (0,9 l/s) recommended for 703 and 713 models
- Inlet pressure must be 15 psi (1,03 bar) greater than desired outlet pressure

Electrical Specifications

- Solenoid:
24 VAC
- Inrush volt-amp:
24 VAC-11.50 VA
- Inrush current:
.4 amp
- Holding volt-amp:
24 VAC-5.75 VA
- Holding current:
.2 amp

Example:

How To Order:

Model	Size	Solenoid
A-700B-.75	3/4"	yes
A-700-1	1"	yes
A-700B-1.5	1.5"	yes
A-700-2	2"	yes
A-700B-.75-LS	3/4"	no
A-700-1-LS	1"	no
A-700-1.5-LS	1.5"	no
A-700-2-LS	2"	no

Pressure Regulating

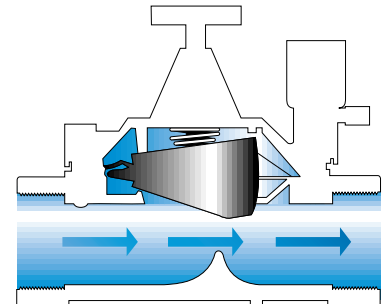
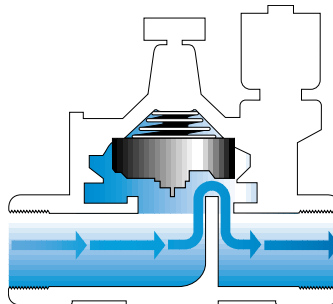
Downstream Sensing 0–100psi

713-1-100DS	1"	no
713-1.5-100DS	1.5"	no
713-2-100DS	2"	no

Downstream Sensing 0–30psi

713-1-30DS	1"	no
713-1.5-30DS	1.5"	no
713-2-30DS	2"	no

NOTES: 3/4" model working pressure range is 10 to 125 psi (0,69 to 8,6 bar) and does not include flow control or 150 mesh filter.



Flow Rate (GPM)

Model	Size	2	5	10	15	20	30	40	50	60	80	100	120	140	160	180	Pressure Loss PSI	
A-700B-.75	3/4"	0.38	0.86	1.22	2.03	3.27	6.75											
A-700-1 713-1-100DS 713-1-30DS	1"	1.59	1.80	1.84	2.23	2.41	3.22	5.58	8.59									
A-700-1.5 713-1.5-100DS 713-1.5-30DS	1 1/2"				0.19	0.36	0.69	1.13	1.49	2.13	3.85	6.06	8.72	11.89				
A-700-2 713-2-100DS 713-2-30DS	2"						0.64	0.83	0.98	1.17	2.07	3.06	3.96	5.21	6.50	8.23		

NOTES: (1) When designing a system, the industry standard for flow rate velocity through pipes and fittings is 5 Fps (2m/s). (2) Pressure loss data is derived from valves independently tested by C.I.T., Fresno, CA.

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