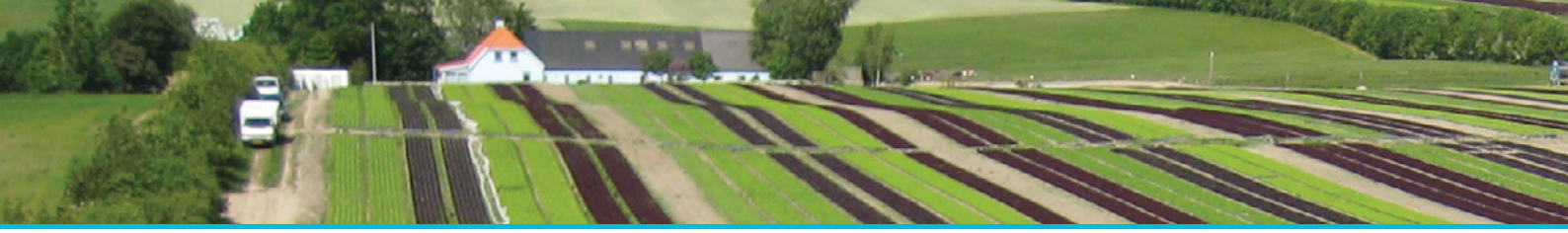


80 SERIES
REINFORCED NYLON CONTROL VALVES

DESCRIPTION
Globe and angle plastic valves of the 80 series, equipped with a fully supported diaphragm, guarantee rapid and precise control of irrigation systems.

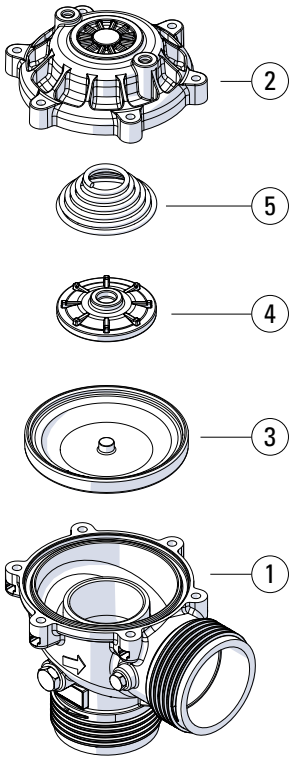
APPLICATIONS
Innovative valve series (1.5" – 4"R) specially designed to operate and protect irrigation networks in open fields, greenhouses, hydroponics and mist systems.

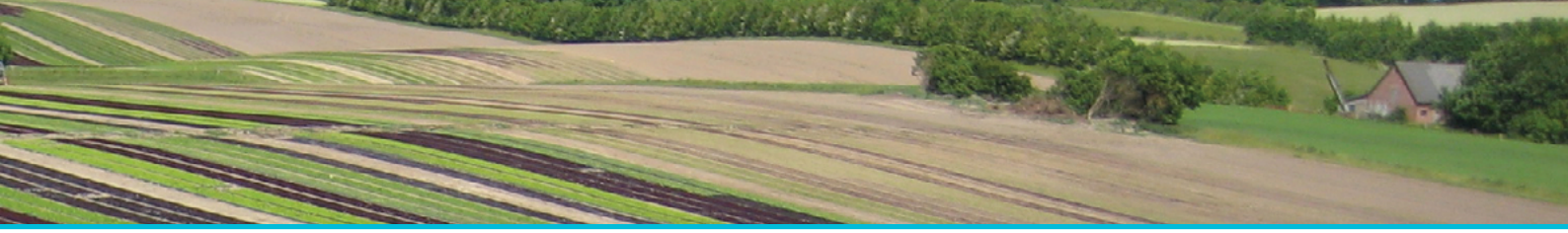
BENEFITS
- Optimal Protection
  Tight closing & quick opening is achieved by a rigid plug mechanism that is suitable for high pressure applications and responses rapidly to water pressure fluctuations.
- Efficient Installation
  The valves are available in both globe and angle shapes and therefore eliminate the use of elbow joints and extending pipelines.
- Extensive Flexibility
  Available with full range of control functions, various end connections and a selection of 2 way and 3 way bonnets with integral accessories.

TECHNICAL SPECIFICATIONS
- Maximum pressure – 10 bar (145 psi)
- Minimum recommended flow – 1 m3/h (5 gpm)
- Minimum operating pressure – 0.7 bar (10 psi)
- Maximum operating temperature – 70°C (160°F)

PARTS AND MATERIALS

#	PART	STANDARD
1	Body	Reinforced Nylon
2	Bonnet	Reinforced Nylon
3	Diaphragm	Natural Rubber
4	Spring seat	Nitrile Rubber
5	Spring	SST 302





HYDRAULIC PERFORMANCES

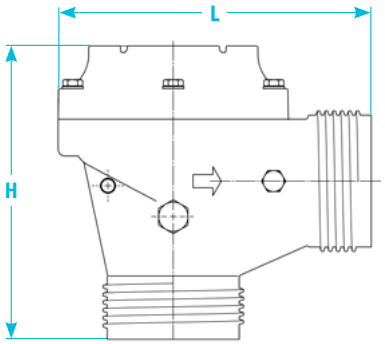
SHAPE		STRAIGHT		ANGLE			
DIAMETER	inch	1.5	2	1.5	2	3	4R*
	mm	40	50	40	50	80	100
FLOW RATE FACTOR**	Kv	45	55	45	60	145	145
	Cv	55	65	55	70	170	170

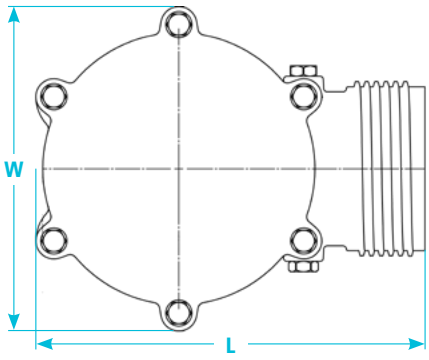
*. R – "Reduced" - 4R = 434".
**. In order to calculate the head loss at any desired flow rate, use the following equation: Head loss = (Flow rate/Flow rate factor)2

DIMENSIONS

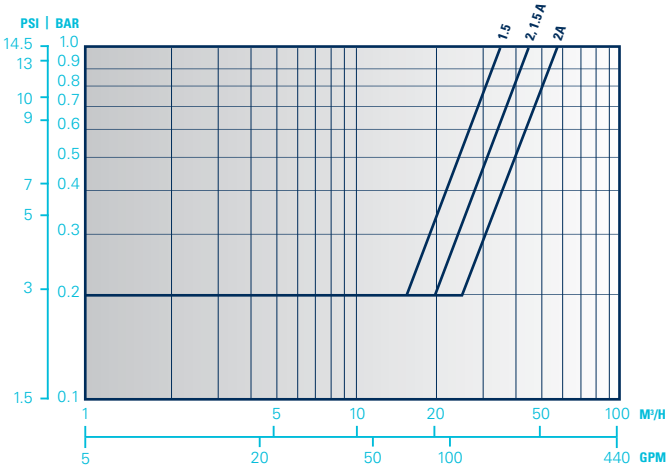
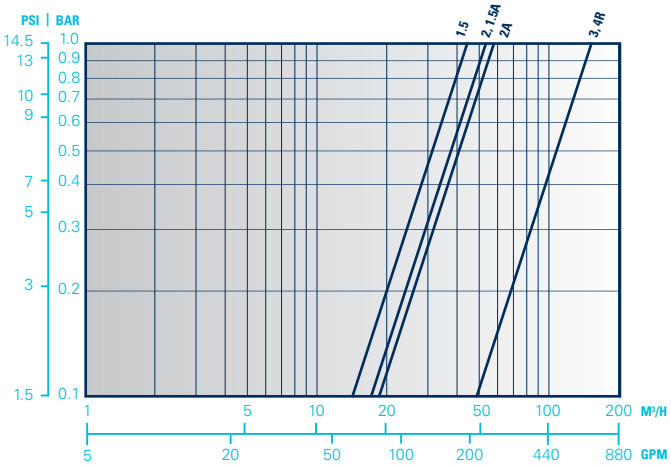
SHAPE			STRAIGHT		ANGLE			
DIAMETER		inch	1.5	2	1.5	2	3	4R*
		mm	40	50	40	50	80	100
HEIGHT	H	mm / inch	145 / 5.70	145 / 5.70	66 / 2.59	66 / 2.59	130 / 5.11	130 / 5.11
WIDTH	W	mm / inch	127 / 5.00	127 /5.00	127 / 5.00	127 / 5.00	195 7.67	195 / 7.67
LENGTH	L	mm / inch	165 / 6.49	165 / 6.49	88 /3.46	88 / 3.46	160 / 6.29	160 / 6.29
VOL. CONTROL CHAMBER		cc / gal	100 / 0.02	100 / 0.02	100 / 0.02	100 / 0.02	400 / 0.10	400 / 0.10
WEIGHT		kg / lbs	0.9 / 2	0.9 / 2	0.8 / 1.8	0.8 / 1.8	3.8 / 8.3	4.2 / 9.2

*. Dimensions for this diameter include flange





HEAD LOSS – 2 WAY VALVES



HEAD LOSS – 3 WAY VALVES