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pressure regulator mechanical

PRESSURE REGULATOR

FOR USE IN ALL IRRIGATION SYSTEMS



SPECIFICATIONS

- Sealed regulating units, field replaceable (2000 Series)
- Built in indicator pops out when proper pressure is achieved (2000 Series)
- Accurate regulator for Low-Flow application (In-Line Serie)
- For extreme chemical application and lower maximum inlet pressure in mining etc. (In-Line Chemical)



3/4 " In-Line

3/4 " x 1 (2000)

1 1/2 " x 2 (2000)

2 " x 4 (2000)

2 " x 6 (2000)

3 " x 10 (2000)

PRESSURE REGULATORS SELECTION

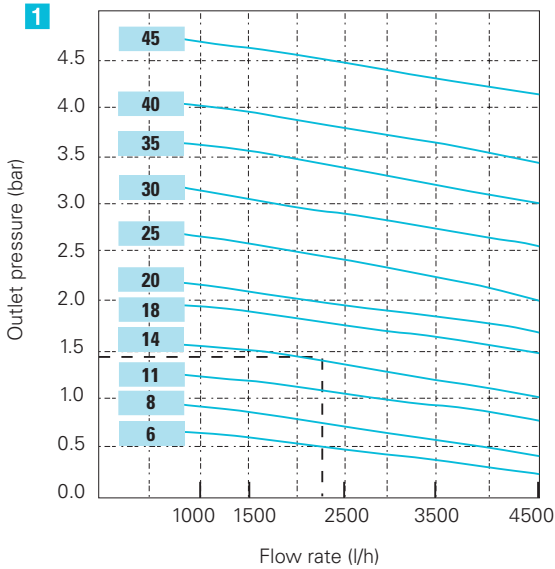
PRODUCT	MODEL	MIN. FLOW RATE	MAX. FLOW RATE M ³ /H	MAX. INLET PRESSURE M ³ /H	BODY MATERIAL
3/4" In-Line (Low Flow)	In-Line	0.05	1.0	10	Plastic, black
3/4" In-Line (Chemical)	In-Line	0.05	1.0	4	Plastic, purple
3/4" (1 spring)	2000	0.8	4.5	10	Plastic, black
1 1/2" (2 springs)	2000	1.6	9.0	10	Plastic
2" (4 springs)	2000	3.2	18.0	10	Bronze
2" (6 springs)	2000	4.8	27.0	10	Bronze
3" (10 springs)	2000	8.0	45.0	10	Bronze

AVAILABLE REGULATING UNITS FOR 2000 SERIES (OUTLET PRESSURE BAR)

0.6, 0.8, 1.1, 1.4, 1.8, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5



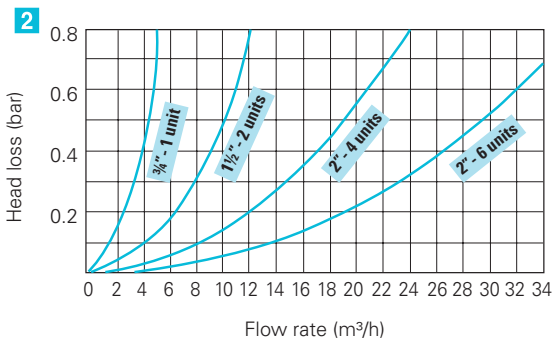
2000 SERIES OUTLET PRESSURE VS. FLOW RATE



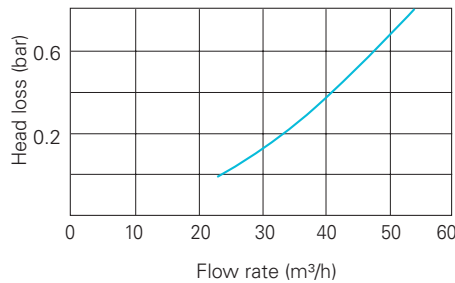
EXAMPLE: FLOW RATE – OUTPUT PRESSURE

- Given flow rate = 14.0 m³/h
- Required output pressure = 1.4 bar
- Calculation: Selected product = PRV 2" x 6 springs.
- Headloss across the PRV unit at 14.0 m³/h = 0.12 bar (graph 2).
- Flow rate per spring = 14:6 = 2.3 m³/h.
- Selected spring 1.4 = output pressure at 2.3 m³/h is 1.4 bar (graph 1).
- Total minimum required inlet pressure = 1.4 + 0.12 + 0.2 (0.2 bar is constant addition to move the piston out) = 1.72 bar.
- Spring pressure regulator valve = > head loss + actual output pressure + 0.2 bar = minimum required inlet pressure.

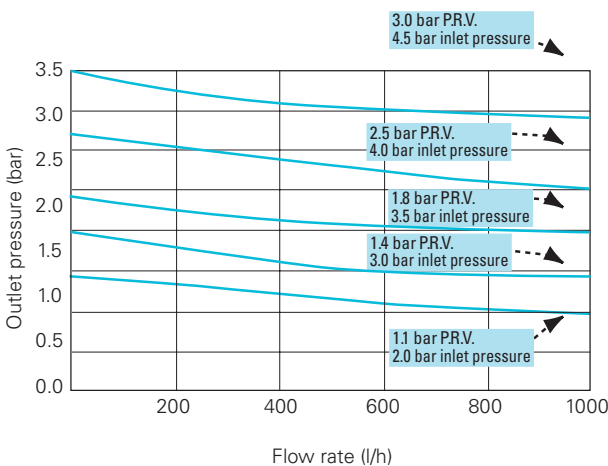
PRESSURE REGULATORS (HEAD LOSS VS. FLOW RATE)



3"X10 (HEAD LOSS VS. FLOW RATE)



IN-LINE OUTLET PRESSURE VS. FLOW RATE



IN-LINE LOW FLOW PRESSURE REGULATOR

- Plastic body, corrosion resistant
- Stainless steel spring
- Min. flow rate 50 l/h, max. flow rate 1000 l/h
- Inlet and outlet connector 3/4 " female
- Max. inlet pressure: 10 bar
- Spring for drip irrigation: 1.1, 1.4 and 1.8 bar
- Spring for sprinklers: 2.5 and 3.0 bar