RAF SERIES - PN16

RAF 80

Pressure Sustaining Relief Control Valve

2-W Metal Pilot

The RAF 80 pressure sustaining/relief valve is line pressure hydraulically actuated, 2-W pilot. The RAF 80 maintains a minimum upstream pressure, as set on the 2-W pressure sustaining pilot, regardless of flow changes.
The RAF 80 pressure sustaining/relief valve will fully open should upstream pressure exceed 2-W pilot set pressure.

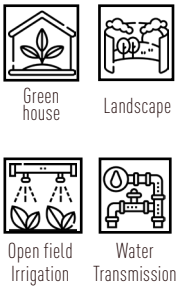
The 2-W pilot configuration together with Raphael's patented diaphragm enable smooth and precise upstream pressure control.

Maximal Nominal Pressure: 16 bar

Setting Range: 0.5 to 16 bar



MARKETS



TECHNICAL DATA

Fluid: Fluid: raw water or filtered water

Nominal Diameter (DN): from 50 to 400 mm (2" to 16")

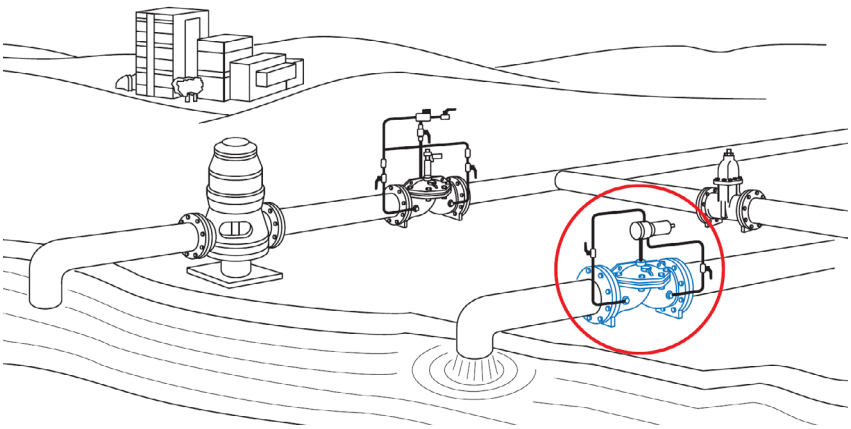
Available connections: Flanged, Threaded or Grooved

Nominal Pressure (PN): 16 bar

Medium Temperature: up to 70 °C

Body material: Ductile Iron

Standard Controls: RAF 80 pressure sustaining/relief valve controls with Raphael's 2-W P-181 pilot, reinforced plastic tubing and brass fittings.



TYPICAL APPLICATIONS

- Water supply systems with medium pressure rating.
- Use the valve to maintain a constant upstream pressure and to avoid an undesirable high pressure.
- Irrigation water distribution and field control.

ADJUSTMENTS

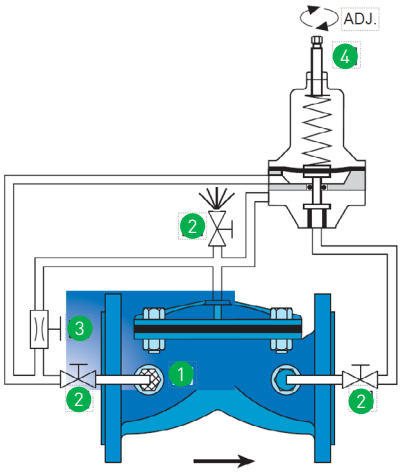
Minimum upstream pressure adjustment up to 16 bars.
For pressure setting by pilot screw adjustment, please refer to available springs list.

FEATURES

- RAF valve two-layered Epoxy-polyester coated
- Self-cleaning screen filter
- 2-W pilot P-181
- Needle valve
- Reinforced plastic tubing
- Glycerin filled pressure gauge

OPTIONAL FEATURES:

- Rilsan coating
- Large capacity external filter
- Stainless steel pilot
- Stainless steel needle valve
- Copper and stainless steel tubing
- Pressure check point



RAF-80 2-W Pressure Sustaining Relief Control Valve

Ref	Name
1	Self-cleaning screen filter
2	Cock valve
3	Needle valve
4	2-W pilot P-181

Nominal Diameter		Recommended Flow Rate			
		[m³/h]		[gpm]	
mm	inch	Min.	Max.	Min.	Max.
50	2	3	41	13	180
65	2.5	4	70	18	308
80-65-80	3D	4	70	18	308
80	3	7	95	31	418
100-80-100	4D	7	95	31	418
100	4	15	177	66	779
125-100-125	5	15	177	66	779
150-100-150	6D	15	177	66	779
150	6	15	240	66	1056
200	8	40	430	176	1893
250	10	80	822	352	3618
300	12	100	822	440	3618
350-300-350	14D	100	822	440	3618
350	14	200	1170	880	5150
400	16	200	1233	880	5428

SPRING SELECTION

Pilot P-181

Setting range [Bar]	Color of spring
2-10 (standard)	Green
0.5-4	Blue
0.5-6	Red
2-16	Yellow

Nominal diameter only, for full dimensions please refer to engineering department.