

Product Selection Guide

Overview of Basic Data

Select diaphragm regulators when the outlet pressure < 500 psig.

Select piston regulators when the outlet pressure ≥ 500 psig.

Dual-stage diaphragm regulators are recommended when the inlet pressure fluctuates frequently but no outlet pressure variation is desired.

Type	Series	Sensing Mechanism	Maximum Inlet Pressure (psig)	Outlet Pressure Range (psig)	Captured Vent Port	Flow Rate (Cv)
General Diaphragm Regulators	RDGC	Diaphragm	4500	0~500	Yes	0.2 (Inlet pressure 500, 1500) 0.09 (Inlet pressure 3500, 4500)
General Tied-Diaphragm Regulators	RTGC	Diaphragm	3500	0~150	Yes	0.06 (Inlet pressure 3500) 0.15 (Inlet pressure 600, 1000)
Miniature Diaphragm Regulators	RDCC	Diaphragm	150	0~100	No	0.08
Miniature Tied Diaphragm Regulators	RTCC	Diaphragm	150	0~100	No	0.08
Two-Stage Diaphragm Regulators	RDDC	Diaphragm	4500	0~250	Yes	0.06
Sensitive Diaphragm Regulators	RDSC	Diaphragm	4500	0~200	Yes	0.06
Medium Flow Diaphragm Regulators	RDGH	Diaphragm	3000	0~200	Yes	1.0
High Flow Diaphragm Regulators	RDGN	Diaphragm	500	0~150	Yes	1.8
Steam Heated Regulators	RDVC	Diaphragm	3600	0~500	No	0.06
General Piston Regulators	RPGC	Piston	6000	0~2500	Yes	0.06 0.1 (Vent)
Compact Piston Regulators	RPCC	Piston	6000	0~1800	No	0.06
High Pressure Piston Regulators	RPGX	Piston	10000	10~10000	No	0.06
High Flow Piston Regulators	RPGN	Piston	4500	0~1500	No	2.0
Back Pressure Regulators	BDGC	Diaphragm	250	0~250	No	0.3
	BPGC	Piston	1000	10~1000	Yes	0.3
	BPGX	Piston	10000	5~10000	No	0.25
Pressure Control Panels ^①	FSR-1	Diaphragm	4500	0~500	No	0.06
	FSR-2	Piston	4500	0~2500	Yes	0.06 0.1 (Vent)
Changeover Systems ^①	FDR-1	Diaphragm	4500	0~500	No	0.06
	FDR-2	Piston	4500	0~2500	Yes	0.06 0.1 (Vent)
	CEPR	Diaphragm	3000	85~265	No	0.06
	FDR-1L	Diaphragm	4500	85~265	No	0.06
	DPPR	Diaphragm	3000	0~150	No	0.06
	FDR-1T	Diaphragm	4500	0~150	No	0.06
Point-of-Use Panels ^①	FPR-1	Diaphragm	1500	0~500	No	0.14
	FPR-1S	Diaphragm	1500	0~200	Yes	0.06

Note:

① Sensing mechanism of pressure control panels, changeover systems and point-of-use panels refers to the sensing mechanism of the pressure regulator.

Pressure Gauge Ordering Information

When selecting pressure gauges for use with pressure regulators, back pressure regulators, or control systems, the relationship between the maximum scale value of the inlet/outlet pressure gauge and the working pressure is as follows:

Working Pressure vs. Maximum Gauge Scale			
Working Pressure (psig)	Max. Gauge Scale		
	Scale Unit		
	psig (primary)	MPa (secondary)	bar (secondary)
15	30	0.2	2
25	60	0.4	4
30	60	0.4	4
50	100	0.7	7
60	100	0.7	7
75	100	0.7	7
80	160	1.1	11
100	160	1.1	11
140	200	1.3	13
150	200	1.3	13
200	300	2	20
220	300	2	20
250	400	2.5	25
300	400	2.5	25
500	800	5	50
600	1000	7	70
700	1000	7	70
750	1000	7	70
800	1500	10	100
1000	1500	10	100
1200	2000	13	130
1500	2000	13	130
1800	3000	20	200
2500	4000	25	250
3000	4000	25	250
3500	6000	40	400
3600	6000	40	400
3800	6000	40	400
4000	6000	40	400
4500	6000	40	400
6000	8000	55	550
10000	15000	100	1000

Notes:

- Pressure gauge scale units are available in either psi/MPa or psi/bar, with psi as the primary unit.
- For dual-scale pressure gauges, the maximum scale value refers to the primary scale. The secondary scale is for reference only.
Example: For a gauge with a scale range up to 200 psi, the primary scale's maximum value is 200 psi, while the secondary scale (MPa) may show a corresponding value of 1.3 or 1.4 MPa.
- Pressure regulators or back pressure regulators are generally equipped with GC series pressure gauges, except in the following cases:
 - For pressure regulators or back pressure regulators with welded integral FR metal gasket face seal connections, GP series pressure gauges are used by default.
 - If the inlet pressure or control pressure exceeds 4500 psig, GA series pressure gauges are default.
 - If pressure regulators or back pressure regulators are required to comply with NACE standards, GA Series pressure gauges are used by default.
 - If the working temperature exceeds 100°C, GA series pressure gauges are used by default.
- For pressure gauges used in control systems, refer to the corresponding product catalog.
- For special requirements regarding pressure gauge series or maximum scale values, please contact FITOK or our authorized distributors.