

TECHNICAL SPECIFICATIONS, DESCRIPTIONS and GENERAL FEATURES

- * **Fluids:** Valves are suitable for water, low viscosity oils etc... non-aggressive liquids and Air, Inert Gas etc... gaseous but is not suitable for hazardous fluids
- * **Switching Function:** Normally Closed (N.C., Closed when de-energised) [PRV 10 Series] and Normally Open (N.O., Open when de-energised) [PRV 11 Series]
- * **Principle of Operation:** Direct Operated
- * **Way Number:** 2/2 (Ports / Positions)
- * **Connection and Port Sizes:** G1/8" and G1/4"
- * **Connection Type:** Thread (Female), G (BSPP / ISO 228-1)
- * **Pressure Range:** 0-16 Bar (PRV 10 Series), 0-12 Bar (PRV 11 Series)
- * **Fluid Temperature:** -10 °C to max 80 °C
- * **Ambient Temperature:** -20 °C to max 70 °C
- * **Opening Time:** 25 ms
- * **Closing Time:** 25 ms
- * **Max. Viscosity:** 38 cSt or mm²/s
- * **Max. Allowable Pressure or Design Pressure:** 24 bar (PRV 10 Series), 18 bar (PRV 11 Series)
- * Don't require differential pressure, internal exhaust system (for PRV 11 Series)
- * Compact design
- * Valve has sealing o-rings
- * Suitable AC and DC voltage, high voltage tolerance
- * Coil interchangeable without dismantling the valve (don't matter AC or DC)
- * Low flow loss, low power loss
- * Various flow rate options, wide range of pressure ratings, wide range of orifice options
- * Mounting position, optional any position but preferably solenoid coil vertical on top
- * The fluid passing through the valve must be filtered
- * According 97/23/EC Pressure Equipment Directive (PED), 2006/95/EEC Low Voltage Directive (LVD) and 2004/108/EC Electromagnetic Compatibility Directive (EMC)
- * Flow rate (Q) can be usually calculated as a function of pressure, density and flow coefficient



Low Power Loss	Don't Require Differential Pressure Loss	Coil Rotatable 360°	High Reliability
Compact Design	Low Flow Loss	High Performance	Long Life

Model No	Position	Connection and Port Size	Orifice Size	Flow Factor / Coefficient Kv		Operating Pressure Differential				Fluid Temperature		Seal	Approximate Weight
						Min. (For AC)	Min. (For DC)	Max. (For AC)	Max. (For DC)	Min.	Max.		
PRV		G	mm	L/m	m ³ /h	Bar	Bar	Bar	Bar	°C	°C		Kg
PRV 10.00.018	N.C.	1/8"	1,8	1,7	0,10	0	0	16	16	-10	+80	NBR	0,35
PRV 10.00.025	N.C.	1/8"	2,5	3,3	0,19	0	0	12	12	-10	+80	NBR	0,35
PRV 10.00.030	N.C.	1/8"	3	4,5	0,27	0	0	10	10	-10	+80	NBR	0,35
PRV 10.00.040	N.C.	1/8"	4	6,5	0,39	0	0	9	9	-10	+80	NBR	0,35
PRV 10.00.045	N.C.	1/8"	4,5	7,7	0,46	0	0	8	8	-10	+80	NBR	0,35
PRV 10.00.050	N.C.	1/8"	5	9,5	0,57	0	0	7	7	-10	+80	NBR	0,35
PRV 10.00.060	N.C.	1/8"	6	11,5	0,69	0	0	5	5	-10	+80	NBR	0,35
PRV 10.01.018	N.C.	1/4"	1,8	1,7	0,10	0	0	16	16	-10	+80	NBR	0,33
PRV 10.01.025	N.C.	1/4"	2,5	3,3	0,19	0	0	12	12	-10	+80	NBR	0,33
PRV 10.01.030	N.C.	1/4"	3	4,5	0,27	0	0	10	10	-10	+80	NBR	0,33
PRV 10.01.040	N.C.	1/4"	4	6,5	0,39	0	0	9	9	-10	+80	NBR	0,33
PRV 10.01.045	N.C.	1/4"	4,5	7,7	0,46	0	0	8	8	-10	+80	NBR	0,33
PRV 10.01.050	N.C.	1/4"	5	9,5	0,57	0	0	7	7	-10	+80	NBR	0,33
PRV 10.01.060	N.C.	1/4"	6	11,5	0,69	0	0	5	5	-10	+80	NBR	0,33
PRV 11.00.018	N.O.	1/8"	1,8	1,7	0,10	0	0	12	12	-10	+80	NBR	0,38
PRV 11.00.025	N.O.	1/8"	2,5	3,3	0,19	0	0	10	10	-10	+80	NBR	0,38
PRV 11.00.030	N.O.	1/8"	3	4,5	0,27	0	0	6	6	-10	+80	NBR	0,38
PRV 11.01.018	N.O.	1/4"	1,8	1,7	0,10	0	0	12	12	-10	+80	NBR	0,36
PRV 11.01.025	N.O.	1/4"	2,5	3,3	0,19	0	0	10	10	-10	+80	NBR	0,36
PRV 11.01.030	N.O.	1/4"	3	4,5	0,27	0	0	6	6	-10	+80	NBR	0,36

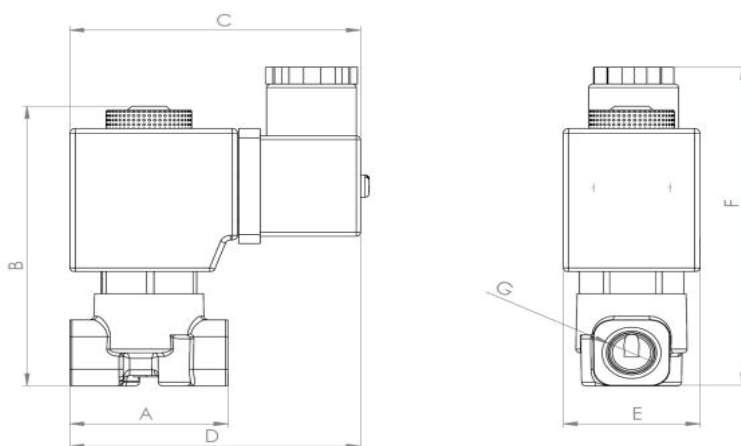
OPTIONS

- * Custom options can be performed for customer's special requests.
- * On request; NPT (ANSI 1.20.3), R (BSPT / ISO 7-1), W (BSW /Whitworth), M (Metric) etc...
- * On request; diaphragm or sealing or o-rings can be FPM (VITON) (-10 °C to 160 °C) , EPDM (-10 °C to 140 °C)
- * On request; various body surface coating, nickel plated body, different body materials, internal parts stainless steel (for PRV 81), seat can be stainless steel, filter, other pipe connections, 2 mounting sub-base holes at the bottom of the body.
- * On request; other special supply voltages, frequencies (60 Hz), other power, coil insulation class : F (155 °C), coil duty latching model
- * On request; with electronic timer , Explosion-Proof coil for use in zones 1/21-2/22 (Eex em II T4/T5), coil encapsulation material can be fiber glass reinforced (V0 or V1)
- * On request; connector with LED or without connector, connector with visual indication and peak voltage suppression, connector with cable length of 2m, Spade plug (Cable Ø8-10mm), connector non-flammable
- * On request; other versions

POWER CONSUMPTION

Power Consumption							
Alternating Current (AC)				Direct Current (DC)			
Model No	Voltage	Inrush (VA)	Holding (VA)	Model No	Voltage	Cold (W)	Hot (W)
PRB-1000-12 VAC	12V	30	18	PRB-1000-12 VDC	12V	16	12
PRB-1000-24 VAC	24V	30	18	PRB-1000-24 VDC	24V	16	12
PRB-1000-48 VAC	48V	30	18	PRB-1000-48 VDC	48V	16	12
PRB-1000-110 VAC	110V	30	18	PRB-1000-110 VDC	110V	16	12
PRB-1000-220 VAC	220V	30	18	PRB-1000-220 VDC	220V	16	12

DIMENSIONS (mm)



ELECTRICAL CHARACTERISTICS

- * **Protection Range:** IP 65 (EN 60529) (with connector)
- * **Plug Connection:** DIN 46340-3 poles connectors (DIN 43650)
- * **Connector Specification:** ISO 4400 / EN 175301-803 Form A, Spade plug (Cable Ø 6-8 mm)
- * **Electrical Safety:** IEC 335, EN 60335-1, EN 60204-1
- * **Coil Insulation Class:** H (180 °C)
- * **Coil Impregnation:** Polyester Fiber-Resin Glass
- * **Coil Encapsulation Material:** Fiber Glass Reinforced (V2)
- * **Supply Voltages:** For AC (~) : 12V , 24V , 48V , 110V , 230V
For DC (=) : 12V , 24V , 48V , 110V , 230V
- * **Voltage Tolerances:** For AC (~) or DC (=) %-10 ; %+10
- * **Frequency:** 50 Hz
- * **Coil Duty Cycle:** %100 ED, Continuously Rated
- * Design according to DIN VDE 0580

MATERIALS

- * **Body:** Brass
- * **Plunger Seal:** NBR
- * **Enclosing Tube:** Stainless Steel (AISI 430FR and AISI304) for PRV 10 Series , Stainless Steel (AISI430 FR and AISI304) and Brass for PRV 11 Series
- * **Plunger:** Stainless Steel (AISI 430FR)
- * **Springs:** Stainless Steel (AISI 302)
- * **Shading Ring:** Copper
- * **Seat:** Brass
- * **O-rings:** NBR
- * **Internal Metal Parts:** Stainless Steel and Brass

Size	A	B	C	D	E	F
G1/8"	37	75	68	68	32	85
G1/4"	37	75	68	68	32	85