

90 Series

Solvent-welded and threaded valves from the 90 series are crafted from PVC, providing reliable control for leaching systems.



High durability



Very high efficiency



Versatility

/ Benefits & Features

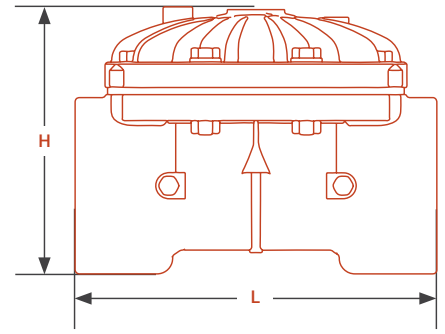
- **High durability** Offers superior resistance to chemicals and acids, minimizing maintenance costs. Components are crafted from materials designed to withstand high acid concentrations found in mines.
- **Superior performance** Excellent regulation capabilities achieved by a flexible diaphragm mechanism that is designed to allow maximal to near zero flow while operation.
- **Versatility** Full selection of control functions and end connections available. Ensures compatibility and seamless integration.

/ Specifications

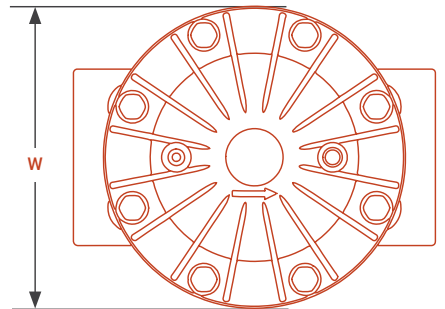
- Maximum pressure
3" (90 mm) & 4" (110 mm) - 8 bar / 115 psi.
6" (160 mm) - 10 bar / 145 psi.
- Minimum recommended flow - 1 m³/h (5 gpm).
- Minimum operating pressure - 0.6 bar (8 psi).
- Maximum operating temperature - 40°C (104°F).

→ Technical dimensions

Diameter		inch	3	4	6
		mm	90	110	160
Height	H1		208 / 8.06	208 / 8.06	382 / 15
Width	W	mm / inch	229/9.16	229/9.16	260/10.40
Length	L		258/10.18	258/10.18	360/14.18
Volume control chamber	cc / gal		681/0.18	681/0.18	2575/0.68
Weight	kg / lbs		4.0/8.8	4.2/9.2	11.8/26

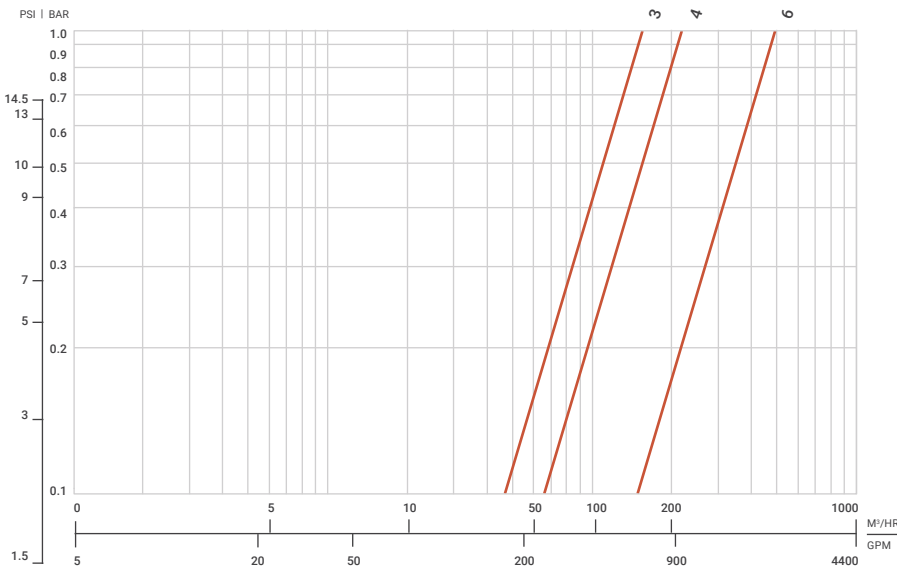


Diameter		inch	3	4	6
		mm	90	110	160
Flow rate factor*	Kv (metric)		155	215	480
	Cv (US)		180	250	560
Pressure range	WMC		6-80	5-100	
	PSI		9-115	7-150	



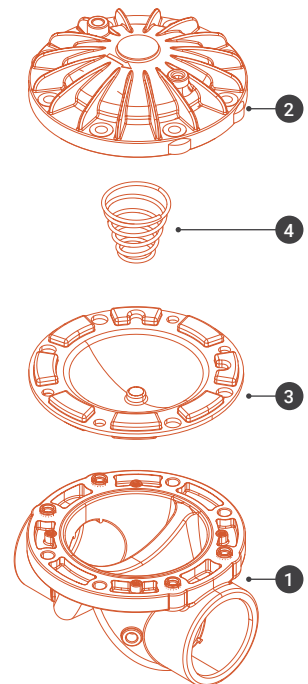
* In order to calculate the head loss at any desired flow rate, use the following equation:
 Head loss = (Flow rate/Flow rate factor)²

→ Head loss



→ Components raw materials

#	Part name	Material
1	Body	PVC
2	Bonnet	PPS
3	Diaphragm	ALD70
4	Spring	SST 316



→ Description guide

To correctly define a valve with its respective accessories and according to the needs, the following selection parameters can be used.

→ Flowchart to determine the desired product definition

1 Serie		2 Material		3 Nominal diameter		4 Configuration		5 Conection		6 Main function	
S90	PV	PVC	3"	3" (80 mm)	H	Horizontal	NPT	NPT	BAS	Basic	
			4"	4" (100 mm)	A	Angle	BSP	BSP	MAN	Manual control on/off	
			6"	6" (150 mm)			UNF	Universal flange*	HYD	Hydraulic control on/off	
								VIC	Grooved	ELE	Electric control on/off
								GLUE	PVC solvent welded	PRV	Pressure reducing
										PSV	Pressure sustaining (& relief)
										PRS	Pressure reducing & sustaining
										FLV	Flow control
										QRV	Quick relief
										LCV	Level control
										SAV	Surge anticipating
										TOV	Pressure reducing, two stage opening
										TSV	Pressure reducing, two sets of pressure
										PCV	Pump control valve

7 Pilot		8 Pilot spring		9 Solenoid type		10 Valve>s mode		11 Accessories	
PP	Plastic pilot	Y	Yellow spring	AQAC	Solenoid Aqautive 24AC	3WNC	3-Way N.C	C/2C	Check point (1 unit, 2 unit)
MP	Metal pilot*	G	Green spring	AQDC	Solenoid Aqautive 12-40VDC latch	2WNC	2-Way N.C	P/2P	Pressure gauge (1 unit, 2 unit)
		R	Red spring	D24A	Dorot solenoid 24VAC	3WNO	3-Way N.O	H	Hydraulic relay
				D24D	Dorot solenoid 24VDC	2WNO	2-Way N.O	F	Float
				D12D	Dorot solenoid 12VDC	2W	2-Way*	O	Orifice
				D12L	Dorot solenoid 12VDC latch	3W	3-Way*	T	Shuttle T
				24AC	Other solenoid 24VAC	* Manual control only			
				24DC	Other solenoid 24VDC			N	Non-return feature
				12DC	Other solenoid 12VDC			S	3 Way manual valve
				12DL	Other solenoid 12VDC latch			LP	Low pressure diaphragm
								HP	High pressure diaphragm
								MIN	Mining
								SV	Shreader

→ Catalog numbers examples

Serie	Material	Diameter (mm)	Configuration	Connection type	Main function	Solenoid type/Pilot	Valves mode	Accessories	Catalog number
S90	PV	2"	H	Glue	PRV	PPG	3WNC	C MIN	71600-005833

*Other configurations are available upon request

The products defined for mining (MIN) are composed of ALD* diaphragms and SST 316 (stainless steel) spring.

*ALD The qualities and resistance of this material are presented below.

Some of these valves can also be ordered with the relevant components manufactured of Hastelloy (resistant against chlorine gas, hypochlorite and chlorine dioxide solutions). The alloy is characterized by excellent resistance against concentrated solutions of oxidizing salts (such as iron III and copper chloride)