

# Irrigation & Agriculture



## Model KBJ/KBJA - DOSE-O-MAT Automatic Metering Valve

Volume based irrigation device, consisting of a water meter, a volume control dial and a double chamber valve contained in a single unit.

### • Description

The Dose-O-Mat line of automatic metering valves provides a reliable and economical solution for a wide variety of irrigation applications.

A variety of models and sizes are available to meet virtually any operational requirements and budget.

The desired quantity is set using the volume control dial, according to local crop and soil. It automatically closes the double chambered valve once the pre-set quantity of water has passed through the unit.

Dose-O-Mat units that are 1 1/2" and larger contain a hydraulic double chamber valve and may be installed either as single points of control or in groups that operate in sequence. Operation is extremely simple, it does not require neither skilled labor nor intensive training.

### • Available Sizes

KBJ - Globe type: 1 1/2", 2", 3", 4", 6", 8"

KBJA - Angle type: 2", 3", 4", 6", 8"

### Features:

- Simple to operate and maintain - just set it & forget about it.
- High accuracy
- Rugged, heavy-duty construction
- Immune to fluctuations in line pressure
- Low loss of head
- Up to 30% saving compared to time based irrigation
- Wide variety of flow and pressure regulation options
- Wide variety of models & sizes - suitable for virtually all irrigation applications
- Can function together with other units as part of an automatic, sequential irrigation system

### Technical Specifications:

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**Maximum Working Pressure** 16 bar

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**Maximum Working Temperature** 60°C

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**Body** Cast iron body

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**Connection** KBJ 1 1/2" - 1 1/2" BSP male thread with coupling.  
KBJ/KBJA 2" - 2" BSP male thread with coupling - Internal thread 2" BSPT or 2" NPT  
KBJ/ KBJA 3" - 8" - Cast iron flanges meeting BS 10, ISO, AWWA, JIS10.

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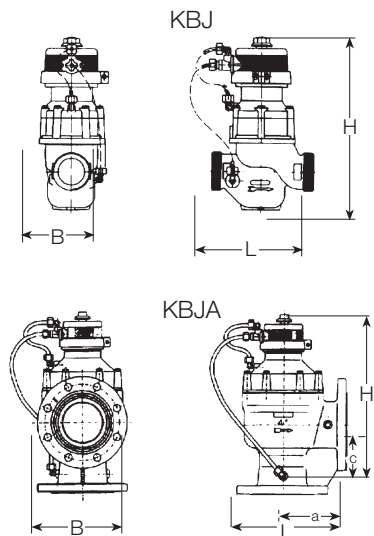
## Model KBJ/KBJA - DOSE-O-MAT Automatic Metering Valve

### Dimensions

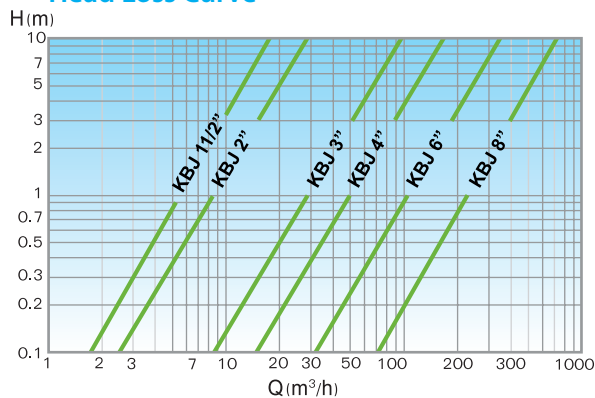
Model		KBJ						KBJA					
Nominal size	(mm)	40	50	80	100	150	200	50	80	100	150	200	
	(inch)	½	2	3	4	6	8	2	3	4	6	8	
L – Length without couplings (mm)		160	190	270	320	500	600	158	243	277	440	525	
H – Height (mm)		262	330	350	360	645	770	350	430	450	645	675	
A – (mm)		-	-	-	-	-	-	96	140	162	250	300	
C – (mm)		-	-	-	-	-	-	122	140	176	300	280	
B – Width (mm)		120	120	210	210	380	450	120	210	230	380	450	
Weight (kg)		2	3.8	21.5	29.5	120	150	3.5	19.5	28.5	111	140	
Weight with couplings (kg)		3	5.2	-	-	-	-	4.9	-	-	-	-	

### Performance data

Model	Nominal Size		Maximum Working Pressure (bar)	Minimum Working Pressure (bar)	Qmax Maximum Flow Rate (m³/h)	Qmin Minimum Flow Rate (m³/h)	Regulated Flow Rate
	inch	mm					
KBJ KBJA	1½	40	16	1	15	1.5	2% ±
	2	50	16	1	30	2	
	3	80	16	1	40	3	
	4	100	16	1	120	4.8	
	6	150	16	1	300	12	
	8	200	16	1	500	22	



### Head Loss Curve



### Standard Scales

Model	Scale																
	1	3	10	20	25	40	50	100	200	400	1,000	1,600	2,500	4,000	5,000	10,000	25,000
KBJ 1½"					●			●	●								
KBJ/KBAJ 2"								●	●	●							
KBJ/KBAJ 3"										●	●						
KBJ/KBAJ 4"										●	●						
KBJ/KBAJ 6"											●	●					
KBJ/KBAJ 8"											●				●	●	●

\* Other scales upon request.

### Installation Requirements

- The meter should be installed in horizontal position



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