

# QJ-VR & PTC-VR

## VARIABLE RATE FERTILIZER ASSEMBLIES

The QJ-VR and PTC-VR line of variable rate fertilizer assemblies feature a variable diameter orifice that produces a wide range of flow rates across standard operating pressures. This allows for a wider range of ground speeds and/or application rates from a single size for improved productivity. The elastomer orifice design provides consistent flow rate performance while utilizing a simple, reliable design with no springs or moving parts.

### FEATURES:

- Both QJ-VR and PTC-VR are ideal for installation on planters and toolbars for liquid fertilizer metering and application.
- PTC-VR features nylon construction for excellent strength and chemical resistance.
- QJ-VR features acetal body construction with choice of nylon or stainless steel hose barbs for strength and excellent chemical resistance.
- PTC-VR Push-to-Connect is available to fit 1/4", 5/16" or 3/8" O.D. tubing.
- QJ-VR hose barb assembly is available to fit 1/4" or 3/8" I.D. hose.
- Simple, elastomer (EPDM) variable orifice for reliable, long-term operation.
- Recommended operating pressure:
  - 10-100 PSI (0.7-7.0 bar)



PTC-VR PUSH-TO-CONNECT  
METERING ASSEMBLY



QJ-VR HOSE BARB  
METERING ASSEMBLY



## APPLICATION INFORMATION

Assembly	Liquid Pressure in bar	Capacity 1 Nozzle in l/min	l/ha for 50cm Spacing (water)							
			8 km/hr	10 km/hr	12 km/hr	16 km/hr	20 km/hr	25 km/hr	30 km/hr	35 km/hr
QJ-VR & PTC-VR	1.0	0.62	93.0	74.4	62.0	46.5	37.2	29.8	24.8	21.3
	1.5	0.80	120	96.0	80.0	60.0	48.0	38.4	32.0	27.4
	2.0	1.00	150	120	100	75.0	60.0	48.0	40.0	34.3
	2.5	1.22	183	146	122	91.5	73.2	58.6	48.8	41.8
	3.0	1.46	219	175	146	110	87.6	70.1	58.4	50.1
	3.5	1.72	258	206	172	129	103	82.6	68.8	59.0
	4.0	2.00	300	240	200	150	120	96.0	80.0	68.6
	5.0	2.61	392	313	261	196	157	125	104	89.5
	6.0	3.31	497	397	331	248	199	159	132	113
7.0	4.08	612	490	408	306	245	196	163	140	

Assembly	Liquid Pressure in bar	Capacity 1 Nozzle in l/min	l/ha for 75cm Spacing (water)							
			8 km/hr	10 km/hr	12 km/hr	16 km/hr	20 km/hr	25 km/hr	30 km/hr	35 km/hr
QJ-VR & PTC-VR	1.0	0.62	62.0	49.6	41.3	31.0	24.8	19.8	16.5	14.2
	1.5	0.80	80.0	64.0	53.3	40.0	32.0	25.6	21.3	18.3
	2.0	1.00	100	80.0	66.7	50.0	40.0	32.0	26.7	22.9
	2.5	1.22	122	97.6	81.3	61.0	48.8	39.0	32.5	27.9
	3.0	1.46	146	117	97.3	73.0	58.4	46.7	38.9	33.4
	3.5	1.72	172	138	115	86.0	68.8	55.0	45.9	39.3
	4.0	2.00	200	160	133	100.0	80.0	64.0	53.3	45.7
	5.0	2.61	261	209	174	131	104	83.5	69.6	59.7
	6.0	3.31	331	265	221	166	132	106	88.3	75.7
7.0	4.08	408	326	272	204	163	131	109	93.3	

Note: Always double check your application rates. Tabulations are based on spraying water at 70°F (21°C).

DENSITY - kg/L	CONVERSION FACTOR
0.84	0.92
0.96	0.98
1.00 - WATER	1.00
1.08	1.04
1.20	1.10
1.28 - 28% NITROGEN	1.13
1.32	1.15
1.44	1.20
1.68	1.30

\*NOTE: Conversion factors must be used when spraying solutions heavier or lighter than water. First, multiply desired application rate by the appropriate conversion factor above. Then use the new application rate to select the most appropriate operating pressure from the application chart on this page.

### How To Order:

Example:

PART NUMBER	DESCRIPTION
QJ-VR-1/4-SS	QJ-VR 1/4" Stainless Steel Hose Barb Variable Rate Metering Assembly
PTC-VR-3/8	3/8" Push-to-Connect Variable Rate Metering Assembly

