

# Micro Flapper

Tiny But Smart



## Features & Benefits

### Sealed, Pressure Compensating Online Emitter

Sealed and compact emitter offers ease of installation

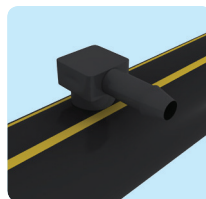


### Unique Self Cleaning Mechanism

Unique self cleaning design, flow path expands in case of blockages. Thus flushes off trapped dirt. This reduces the risk of clogging and minimizes maintenance cost drastically

### Precision Pressure Compensation

Precision moulded liquid silicone rubber diaphragm ensures pressure compensation, uniform water application and long lasting high quality performance

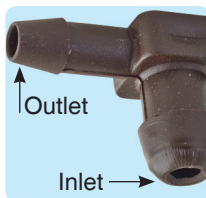


### Industries Most Compact PC Emitter

Emitter remain flushed to the lateral. Does not falls down while recoiling.

### Extended Barbed Outlet

Barbed extended outlet suitable for extension tube of 3.2 mm ID (1/8" ID)



### Wide Pressure Compensating Range

Pressure regulation range  
0.6-4 kg/cm<sup>2</sup> pressure  
(8.53 to 56.88 psi)

### Color Coded

Color coded emitter facilitates easy identification of flow rate



### Excellent CVm, Manufacturer's Coefficient of Variation

Manufacturing coefficient of variation, CVm ≤ 5% ensures high field emission uniformity

Online Emitters

# Micro Flapper

## Additional Features

- **No Environmental and Chemical Effects** : UV stabilized does not have any environmental effects. Resistant to chemicals used in agriculture.
- **Assured Quality** : Conforming to Indian Standard IS 13487 and International Standard ISO 9260.

## Applications

- For orchards and vineyards, greenhouses, nurseries, landscape etc.
- For areas with harsh topographical conditions.
- For irrigation of pot-plants with extension tube.
- Recommended to use where longer length of lateral is required.

## Operating Specifications

- Maintain the operating pressure within the pressure regulating range.
- Filtration recommendation 130 micron or less. Actual quality of filtration can be decided by quality of source water.
- Please refer to our "Maintenance Manual" for more details.

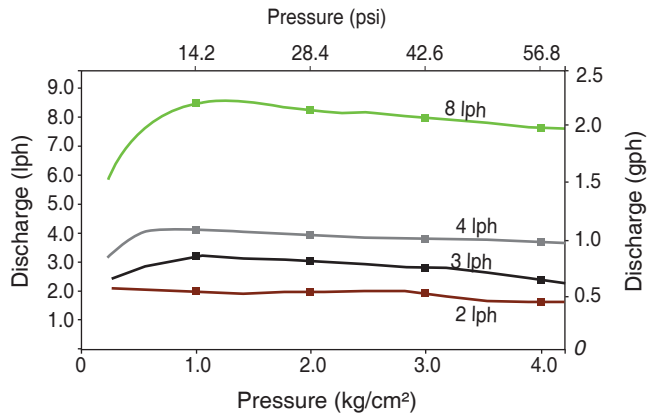
## Specifications

Discharge		Color	Emitter exponent (x)	Flow coeff. (k)	Coeff. of mfg. variation, CVm	Pressure Regulation Range, kg/cm <sup>2</sup>
lph	gph					
2.0	0.53	Brown	0.05	2.0	3.0	0.6 - 4.0
3.0	0.79	Gray	0.05	3.0	4.0	0.6 - 4.0
4.0	1.06	Black	0.05	4.0	2.5	0.6 - 4.0
8.0	2.11	Green	0.05	8.0	3.5	0.6 - 4.0

Flow equation  $q = kH^x$ ,  $q$ = Discharge, lph,  $H$ = Pressure head, kg/cm<sup>2</sup>,  $k$  = Flow coefficient,  $x$  = Emitter exponent.

- Recommended punch size - 3.9 mm

## Performance Graph



Note: Tested under standard test conditions.

## Ordering Specifications

MF	X
	Discharge (lph)
	2
	3
	4
	8

Example: MF4 - This code represents Micro Flapper emitter of flow 4 lph (1 gph) .



# Micro Flapper



## 12 mm tube (10.2 mm ID tube)

Dripper Spacing	20 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm	120 cm	150 cm	180 cm	200 cm	250 cm	300 cm	
Slope, %	Length (m)													
<b>2 lph</b>														
2	1.0	33.6	51.6	60.5	67.8	78.0	87.3	92.0	100.8	111.0	120.6	126.0	137.5	147.0
	1.5	45.8	71.6	84.5	96.0	111.8	126.0	133.0	148.8	168.0	183.6	196.0	217.5	237.0
	2.0	53.8	84.8	100.5	114.0	133.5	151.2	161.0	178.8	204.0	225.0	240.0	270.0	297.0
	2.5	60.2	95.2	113.0	128.4	150.8	170.1	182.0	202.8	231.0	257.4	274.0	310.0	342.0
	3.0	65.4	103.6	123.0	139.8	164.3	186.3	199.0	223.2	255.0	282.6	302.0	315.0	348.0
	3.5	69.8	110.8	132.0	150.0	177.0	200.7	214.0	240.0	274.5	306.0	328.0	340.0	378.0
	4.0	74.0	117.6	139.5	159.0	187.5	212.4	227.0	255.6	292.5	325.8	348.0	362.5	405.0
0	1.0	35.8	57.6	68.5	78.6	93.0	106.2	114.0	128.4	148.5	167.4	180.0	207.5	234.0
	1.5	47.6	76.4	91.0	104.4	123.8	141.3	151.0	170.4	198.0	221.4	238.0	275.0	312.0
	2.0	55.4	88.8	106.0	121.2	144.0	164.7	176.0	199.2	229.5	259.2	278.0	322.5	363.0
	2.5	61.6	98.8	118.0	135.0	159.8	182.7	196.0	220.8	255.0	288.0	310.0	357.5	402.0
	3.0	66.6	106.8	127.5	145.8	173.3	198.0	212.0	240.0	277.5	311.4	336.0	350.0	393.0
	3.5	71.0	114.0	136.5	156.0	184.5	211.5	226.0	255.6	295.5	333.0	358.0	372.5	420.0
	4.0	75.0	120.4	144.0	164.4	195.0	223.2	239.0	270.0	312.0	351.0	378.0	395.0	444.0
-2	1.0	38.2	63.2	77.0	89.4	108.8	126.9	137.0	158.4	187.5	217.8	238.0	285.0	330.0
	1.5	49.4	80.8	97.5	112.8	135.8	156.6	169.0	193.2	228.0	261.0	284.0	335.0	387.0
	2.0	57.0	92.8	112.0	129.0	154.5	178.2	192.0	219.6	256.5	293.4	318.0	375.0	429.0
	2.5	63.0	102.4	123.0	141.6	169.5	195.3	210.0	238.8	279.0	318.6	344.0	405.0	462.0
	3.0	68.0	110.4	132.5	152.4	182.3	209.7	225.0	256.8	300.0	340.2	368.0	385.0	441.0
	3.5	72.4	117.2	141.0	162.0	192.8	222.3	238.0	271.2	316.5	360.0	388.0	407.5	462.0
	4.0	76.2	123.6	148.0	170.4	203.3	233.1	250.0	285.6	331.5	376.2	408.0	427.5	486.0
<b>3 lph</b>														
2	1.0	26.2	40.8	48.0	54.0	62.3	70.2	74.0	81.6	91.5	100.8	106.0	115.0	126.0
	1.5	35.4	56.0	66.0	75.0	87.8	99.0	105.0	117.6	133.5	147.6	158.0	177.5	195.0
	2.0	41.6	66.0	78.0	88.8	104.3	117.9	126.0	141.6	160.5	178.2	190.0	217.5	240.0
	2.5	46.4	73.6	87.5	99.6	117.0	133.2	142.0	159.6	181.5	203.4	216.0	247.5	273.0
	3.0	50.4	80.0	95.0	108.6	127.5	144.9	155.0	174.0	199.5	223.2	238.0	247.5	276.0
	3.5	53.8	85.6	102.0	116.4	137.3	155.7	166.0	187.2	214.5	239.4	256.0	267.5	297.0
	4.0	57.0	90.8	108.0	123.0	145.5	165.6	176.0	198.0	228.0	253.8	272.0	285.0	318.0
0	1.0	27.6	44.0	52.5	60.0	71.3	81.9	87.0	98.4	114.0	127.8	138.0	160.0	180.0
	1.5	36.6	58.4	70.0	79.8	94.5	108.0	116.0	130.8	151.5	171.0	184.0	212.5	237.0
	2.0	42.6	68.0	81.5	93.0	110.3	126.0	135.0	152.4	177.0	198.0	214.0	247.5	276.0
	2.5	47.2	75.6	90.5	103.2	123.0	140.4	150.0	169.2	196.5	221.4	238.0	275.0	309.0
	3.0	51.2	82.0	98.0	112.2	132.8	152.1	163.0	183.6	213.0	239.4	258.0	267.5	303.0
	3.5	54.6	87.6	104.5	119.4	141.8	162.0	174.0	196.8	226.5	255.6	274.0	287.5	321.0
	4.0	57.6	92.4	110.5	126.6	150.0	171.0	183.0	207.6	240.0	270.0	290.0	302.5	342.0
-2	1.0	28.8	47.6	57.5	66.6	80.3	93.6	101.0	116.4	136.5	158.4	172.0	205.0	237.0
	1.5	37.6	61.2	73.5	85.2	102.0	117.9	126.0	144.0	169.5	192.6	210.0	247.5	282.0
	2.0	43.4	70.4	85.0	97.8	116.3	134.1	144.0	164.4	192.0	217.8	236.0	277.5	315.0
	2.5	48.0	78.0	93.5	107.4	128.3	147.6	158.0	180.0	210.0	239.4	258.0	302.5	345.0
	3.0	52.0	84.0	101.0	115.8	138.0	158.4	170.0	194.4	225.0	255.6	276.0	290.0	330.0
	3.5	55.4	89.6	107.5	123.0	147.0	168.3	181.0	205.2	238.5	271.8	292.0	307.5	348.0
	4.0	58.4	94.4	113.0	129.6	154.5	177.3	190.0	216.0	252.0	284.4	308.0	322.5	366.0

Minimum pressure at end of lateral is 0.6 kg/cm<sup>2</sup>

# Maximum Running Length for Micro Flapper™



## 12 mm tube (10.2 mm ID tube)

Dripper Spacing	20 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm	120 cm	150 cm	180 cm	200 cm	250 cm	300 cm	
Slope, %	Length (m)													
<b>4 lph</b>														
2	1.0	21.8	34.0	40.5	45.6	53.3	59.4	63.0	69.6	79.5	86.4	92.0	102.5	111.0
	1.5	29.6	46.8	55.5	63.0	73.5	83.7	89.0	99.6	112.5	126.0	134.0	150.0	168.0
	2.0	34.6	54.8	65.0	74.4	87.0	99.0	106.0	118.8	135.0	151.2	162.0	182.5	204.0
	2.5	38.6	61.2	73.0	82.8	97.5	111.6	119.0	133.2	153.0	171.0	182.0	207.5	231.0
	3.0	41.8	66.8	79.5	90.6	106.5	121.5	129.0	145.2	166.5	187.2	200.0	207.5	231.0
	3.5	44.8	71.2	85.0	96.6	114.0	129.6	139.0	156.0	180.0	199.8	214.0	222.5	249.0
	4.0	47.4	75.6	90.0	102.6	120.8	137.7	147.0	165.6	190.5	212.4	228.0	237.5	267.0
0	1.0	22.8	36.4	43.5	49.8	59.3	67.5	72.0	81.6	94.5	106.2	114.0	132.5	147.0
	1.5	30.2	48.4	58.0	66.0	78.8	90.0	96.0	108.0	126.0	140.4	152.0	175.0	198.0
	2.0	35.2	56.4	67.5	77.4	91.5	104.4	112.0	126.0	145.5	163.8	176.0	205.0	231.0
	2.5	39.2	62.8	75.0	85.8	102.0	116.1	124.0	140.4	162.0	181.8	196.0	227.5	255.0
	3.0	42.4	68.0	81.5	93.0	110.3	126.0	135.0	152.4	175.5	198.0	214.0	222.5	249.0
	3.5	45.2	72.4	86.5	99.0	117.8	134.1	144.0	163.2	187.5	210.6	228.0	237.5	267.0
	4.0	47.8	76.8	91.5	105.0	124.5	142.2	152.0	171.6	198.0	223.2	240.0	250.0	282.0
-2	1.0	23.8	38.8	47.0	54.6	65.3	75.6	82.0	93.6	111.0	126.0	138.0	162.5	189.0
	1.5	31.0	50.4	60.5	69.6	83.3	96.3	103.0	117.6	138.0	156.6	170.0	200.0	228.0
	2.0	35.8	58.0	70.0	80.4	96.0	109.8	118.0	134.4	157.5	178.2	192.0	225.0	255.0
	2.5	39.8	64.4	77.0	88.2	105.8	121.5	130.0	147.6	172.5	194.4	210.0	245.0	279.0
	3.0	43.0	69.2	83.0	95.4	114.0	130.5	140.0	159.6	184.5	208.8	226.0	237.5	270.0
	3.5	45.8	74.0	88.5	101.4	120.8	138.6	149.0	169.2	196.5	221.4	240.0	250.0	285.0
	4.0	48.2	78.0	93.5	106.8	127.5	145.8	157.0	177.6	207.0	234.0	252.0	265.0	300.0
<b>8 lph</b>														
2	1.0	14.0	22.0	26.5	30.0	35.3	39.6	42.0	46.8	52.5	59.4	62.0	70.0	78.0
	1.5	19.0	30.0	35.5	40.8	48.0	54.0	58.0	64.8	75.0	82.8	88.0	100.0	111.0
	2.0	22.2	35.2	42.0	48.0	56.3	63.9	68.0	76.8	88.5	99.0	106.0	120.0	135.0
	2.5	24.6	39.2	47.0	53.4	63.0	72.0	77.0	86.4	99.0	111.6	118.0	135.0	153.0
	3.0	26.8	42.8	51.0	58.2	68.3	78.3	83.0	93.6	108.0	120.6	130.0	135.0	150.0
	3.5	28.6	45.6	54.5	61.8	73.5	83.7	89.0	100.8	115.5	129.6	140.0	145.0	162.0
	4.0	30.2	48.4	57.5	65.4	77.3	88.2	95.0	106.8	123.0	136.8	148.0	152.5	171.0
0	1.0	14.4	23.2	27.5	31.8	37.5	42.3	46.0	51.6	60.0	66.6	72.0	82.5	93.0
	1.5	19.2	30.8	36.5	42.0	49.5	56.7	61.0	68.4	79.5	90.0	96.0	110.0	123.0
	2.0	22.4	36.0	43.0	49.2	57.8	66.6	71.0	80.4	93.0	104.4	112.0	130.0	144.0
	2.5	24.8	40.0	47.5	54.6	64.5	73.8	79.0	88.8	103.5	115.2	124.0	145.0	162.0
	3.0	27.0	43.2	51.5	58.8	69.8	80.1	86.0	97.2	111.0	126.0	136.0	140.0	159.0
	3.5	28.8	46.0	55.0	63.0	75.0	85.5	91.0	103.2	118.5	135.0	144.0	150.0	168.0
	4.0	30.4	48.8	58.0	66.6	78.8	90.0	96.0	109.2	126.0	142.2	152.0	160.0	180.0
-2	1.0	14.8	24.0	29.0	33.6	39.8	45.9	50.0	56.4	66.0	75.6	82.0	95.0	108.0
	1.5	19.6	31.6	38.0	43.2	51.8	59.4	64.0	72.0	84.0	95.4	104.0	120.0	138.0
	2.0	22.6	36.4	44.0	50.4	60.0	68.4	74.0	84.0	97.5	109.8	118.0	137.5	156.0
	2.5	25.2	40.4	48.5	55.8	66.0	75.6	81.0	92.4	106.5	120.6	130.0	152.5	171.0
	3.0	27.2	43.6	52.5	60.0	71.3	81.9	88.0	99.6	115.5	129.6	140.0	147.5	165.0
	3.5	29.0	46.8	56.0	64.2	75.8	87.3	93.0	105.6	123.0	138.6	150.0	155.0	177.0
	4.0	30.6	49.2	59.0	67.2	80.3	91.8	98.0	111.6	129.0	145.8	158.0	165.0	186.0

Minimum pressure at end of lateral is 0.6 kg/cm<sup>2</sup>

# Maximum Running Length for Micro Flapper™



## 16 mm tube (13.8 mm ID tube)

Dripper Spacing	20 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm	120 cm	150 cm	180 cm	200 cm	250 cm	300 cm	
<b>Slope, %</b>	<b>Length (m)</b>													
<b>2 lph</b>														
2	1.0	54.0	80.8	92.5	102.6	115.5	126.0	131.0	140.4	151.5	160.2	164.0	172.5	177.0
	1.5	74.8	115.6	135.0	151.8	174.8	194.4	205.0	225.6	249.0	270.0	284.0	307.5	327.0
	2.0	88.6	138.0	162.5	183.0	213.0	238.5	253.0	279.6	313.5	343.8	362.0	400.0	432.0
	2.5	99.4	155.6	183.5	207.6	242.3	272.7	289.0	321.6	363.0	399.6	422.0	472.5	513.0
	3.0	108.2	170.0	201.0	228.0	266.3	300.6	319.0	356.4	403.5	444.6	472.0	490.0	537.0
	3.5	115.8	182.8	216.0	245.4	287.3	324.9	345.0	385.2	438.0	484.2	516.0	535.0	588.0
	4.0	122.6	193.6	229.5	260.4	306.0	345.6	368.0	411.6	468.0	518.4	552.0	575.0	633.0
0	1.0	60.2	96.8	115.5	132.0	156.8	179.1	192.0	217.2	250.5	282.6	304.0	350.0	393.0
	1.5	79.8	128.0	153.0	175.2	207.8	237.6	254.0	286.8	331.5	372.6	402.0	465.0	522.0
	2.0	93.0	149.2	178.0	204.0	241.5	276.3	296.0	334.8	387.0	435.6	468.0	540.0	609.0
	2.5	103.2	165.6	198.0	226.2	268.5	306.9	328.0	372.0	429.0	482.4	520.0	600.0	675.0
	3.0	111.8	179.2	214.5	245.4	291.0	332.1	356.0	402.0	465.0	523.8	564.0	587.5	663.0
	3.5	119.2	191.2	228.5	261.6	310.5	354.6	380.0	429.6	496.5	558.0	600.0	627.5	708.0
	4.0	126.0	202.0	241.5	276.0	327.8	374.4	401.0	453.6	523.5	590.4	634.0	662.5	747.0
-2	1.0	66.6	113.2	139.0	162.6	199.5	234.9	256.0	298.8	358.5	419.4	460.0	560.0	657.0
	1.5	84.8	140.8	171.5	199.2	241.5	280.8	304.0	351.6	417.0	482.4	526.0	630.0	732.0
	2.0	97.2	160.4	194.0	224.4	270.8	314.1	339.0	390.0	460.5	529.2	578.0	687.5	792.0
	2.5	107.2	175.6	212.5	245.4	294.8	341.1	368.0	422.4	496.5	568.8	620.0	732.5	843.0
	3.0	115.4	188.8	227.5	262.8	315.8	364.5	393.0	450.0	528.0	603.0	656.0	690.0	789.0
	3.5	122.6	200.0	241.5	277.8	333.8	385.2	414.0	474.0	555.0	633.6	688.0	722.5	828.0
	4.0	129.2	210.4	253.5	291.6	349.5	403.2	434.0	495.6	580.5	660.6	718.0	752.5	861.0
<b>3 lph</b>														
2	1.0	42.6	64.8	75.0	84.0	95.3	105.3	111.0	120.0	132.0	140.4	146.0	155.0	162.0
	1.5	58.4	90.8	107.0	120.6	139.5	156.6	166.0	183.6	205.5	225.0	236.0	262.5	282.0
	2.0	68.8	108.0	127.5	144.6	168.8	189.9	202.0	224.4	253.5	279.0	296.0	330.0	360.0
	2.5	77.0	121.2	143.5	162.6	190.5	215.1	229.0	255.6	289.5	320.4	342.0	385.0	423.0
	3.0	83.8	132.4	157.0	178.2	209.3	236.7	252.0	280.8	321.0	354.6	378.0	392.5	435.0
	3.5	89.6	142.0	168.0	191.4	225.0	254.7	271.0	303.6	346.5	385.2	410.0	427.5	471.0
	4.0	94.8	150.4	178.5	202.8	238.5	270.9	288.0	322.8	369.0	410.4	438.0	455.0	507.0
0	1.0	46.2	74.4	88.5	101.4	120.0	137.7	147.0	166.8	192.0	216.0	232.0	267.5	303.0
	1.5	61.2	98.4	117.5	134.4	159.0	181.8	195.0	220.8	255.0	286.2	308.0	355.0	402.0
	2.0	71.4	114.4	137.0	156.6	185.3	212.4	227.0	256.8	297.0	333.0	360.0	415.0	468.0
	2.5	79.2	127.2	152.0	174.0	206.3	235.8	252.0	285.6	330.0	370.8	398.0	460.0	519.0
	3.0	85.8	137.6	164.5	188.4	223.5	255.6	273.0	308.4	357.0	401.4	432.0	452.5	507.0
	3.5	91.6	146.8	175.5	201.0	238.5	271.8	291.0	330.0	381.0	428.4	462.0	482.5	543.0
	4.0	96.8	155.2	185.5	212.4	251.3	287.1	308.0	348.0	402.0	453.6	488.0	510.0	573.0
-2	1.0	50.0	84.0	102.5	119.4	145.5	171.0	185.0	214.8	256.5	297.0	326.0	395.0	459.0
	1.5	64.2	106.0	128.5	148.2	179.3	207.9	225.0	258.0	306.0	351.0	382.0	455.0	525.0
	2.0	74.0	121.2	146.0	168.6	202.5	234.9	253.0	290.4	340.5	390.6	424.0	502.5	576.0
	2.5	81.6	133.2	160.5	184.8	222.0	255.6	276.0	315.6	369.0	421.2	458.0	540.0	618.0
	3.0	88.0	143.2	172.5	198.6	237.8	274.5	295.0	337.2	394.5	448.2	486.0	512.5	585.0
	3.5	93.6	152.0	183.0	210.6	252.0	289.8	312.0	356.4	415.5	473.4	512.0	537.5	615.0
	4.0	98.6	160.0	192.5	221.4	264.8	304.2	327.0	373.2	435.0	495.0	536.0	562.5	639.0

Minimum pressure at end of lateral is 0.6 kg/cm<sup>2</sup>

# Maximum Running Length for Micro Flapper™



## 16 mm tube (13.8 mm ID tube)

Dripper Spacing	20 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm	120 cm	150 cm	180 cm	200 cm	250 cm	300 cm	
Slope, %	Length (m)													
<b>4 lph</b>														
2	1.0	35.8	54.8	64.0	72.0	82.5	91.8	96.0	105.6	117.0	126.0	132.0	142.5	150.0
	1.5	48.8	76.4	90.0	102.0	118.5	133.2	141.0	157.2	177.0	194.4	206.0	230.0	249.0
	2.0	57.4	90.4	107.0	121.2	141.8	160.2	171.0	190.8	216.0	239.4	254.0	285.0	315.0
	2.5	64.2	101.2	120.0	136.2	160.5	180.9	193.0	216.0	246.0	273.6	290.0	330.0	363.0
	3.0	69.8	110.4	131.0	148.8	175.5	198.9	212.0	237.6	270.0	300.6	322.0	335.0	369.0
	3.5	74.6	118.4	140.5	159.6	188.3	213.3	228.0	255.6	292.5	325.8	348.0	360.0	402.0
	4.0	78.8	125.2	149.0	169.8	199.5	226.8	242.0	271.2	310.5	345.6	370.0	385.0	429.0
0	1.0	38.4	61.6	73.5	84.0	99.8	113.4	122.0	138.0	159.0	178.2	192.0	222.5	249.0
	1.5	50.8	81.6	97.5	111.6	132.0	151.2	162.0	182.4	211.5	237.6	256.0	295.0	333.0
	2.0	59.2	94.8	113.5	129.6	153.8	175.5	188.0	212.4	246.0	277.2	298.0	345.0	387.0
	2.5	65.8	105.6	126.0	144.0	171.0	195.3	209.0	236.4	273.0	307.8	330.0	382.5	429.0
	3.0	71.2	114.4	136.5	156.0	185.3	211.5	226.0	255.6	295.5	333.0	358.0	375.0	420.0
	3.5	76.0	122.0	145.5	166.8	197.3	225.9	242.0	273.6	316.5	354.6	382.0	400.0	450.0
	4.0	80.2	128.8	154.0	175.8	208.5	238.5	255.0	288.0	333.0	374.4	404.0	422.5	474.0
-2	1.0	41.0	68.0	83.0	96.6	117.0	136.8	148.0	171.6	204.0	235.8	258.0	310.0	360.0
	1.5	52.8	86.8	105.0	121.2	145.5	168.3	182.0	208.8	246.0	280.8	306.0	362.5	417.0
	2.0	61.0	99.6	120.0	138.0	165.8	191.7	206.0	235.2	276.0	315.0	342.0	402.5	462.0
	2.5	67.4	109.6	132.0	151.8	181.5	209.7	225.0	256.8	300.0	342.0	372.0	435.0	498.0
	3.0	72.6	118.0	142.0	163.2	195.0	225.0	241.0	274.8	321.0	365.4	396.0	415.0	474.0
	3.5	77.4	125.6	150.5	173.4	207.0	237.6	256.0	291.6	340.5	385.2	418.0	437.5	498.0
	4.0	81.6	132.0	158.5	182.4	217.5	250.2	269.0	306.0	357.0	405.0	438.0	457.5	522.0
<b>8 lph</b>														
2	1.0	23.4	36.4	43.0	48.6	56.3	63.0	67.0	74.4	82.5	91.8	96.0	107.5	117.0
	1.5	31.6	49.6	59.0	66.6	78.8	89.1	94.0	105.6	120.0	133.2	142.0	160.0	177.0
	2.0	37.0	58.4	69.5	79.2	93.0	105.3	112.0	126.0	144.0	160.2	172.0	195.0	216.0
	2.5	41.2	65.6	78.0	88.8	104.3	118.8	126.0	141.6	162.0	181.8	194.0	220.0	246.0
	3.0	44.8	71.2	84.5	96.6	114.0	129.6	138.0	154.8	178.5	198.0	212.0	220.0	246.0
	3.5	47.8	76.0	90.5	103.2	121.5	138.6	148.0	166.8	190.5	214.2	228.0	237.5	267.0
	4.0	50.6	80.4	96.0	109.2	129.0	146.7	157.0	176.4	202.5	226.8	244.0	252.5	282.0
0	1.0	24.4	39.2	46.5	53.4	63.0	72.0	77.0	87.6	100.5	113.4	122.0	140.0	159.0
	1.5	32.4	52.0	62.0	70.8	84.0	96.3	103.0	116.4	133.5	151.2	162.0	187.5	210.0
	2.0	37.6	60.4	72.0	82.2	97.5	111.6	120.0	135.6	156.0	176.4	190.0	217.5	246.0
	2.5	41.8	67.2	80.0	91.8	108.8	124.2	133.0	150.0	174.0	196.2	210.0	242.5	273.0
	3.0	45.4	72.8	87.0	99.6	117.8	134.1	144.0	163.2	187.5	212.4	228.0	237.5	267.0
	3.5	48.4	77.6	92.5	106.2	126.0	144.0	154.0	174.0	201.0	226.8	244.0	255.0	285.0
	4.0	51.0	82.0	98.0	112.2	132.8	151.2	162.0	183.6	211.5	239.4	256.0	267.5	303.0
-2	1.0	25.4	41.6	50.5	58.2	70.5	81.9	88.0	100.8	118.5	136.8	148.0	177.5	204.0
	1.5	33.2	54.0	65.0	75.0	89.3	103.5	111.0	127.2	148.5	169.2	182.0	215.0	246.0
	2.0	38.4	62.4	75.0	85.8	102.8	117.9	127.0	144.0	168.0	190.8	208.0	242.5	276.0
	2.5	42.4	68.8	82.5	94.8	113.3	129.6	139.0	158.4	184.5	208.8	226.0	265.0	300.0
	3.0	46.0	74.4	89.0	102.0	121.5	139.5	150.0	170.4	198.0	225.0	242.0	255.0	288.0
	3.5	49.0	79.2	94.5	108.6	129.8	148.5	159.0	181.2	210.0	237.6	258.0	270.0	306.0
	4.0	51.6	83.2	100.0	114.6	136.5	156.6	168.0	190.8	222.0	250.2	270.0	282.5	321.0

Minimum pressure at end of lateral is 0.6 kg/cm<sup>2</sup>

# Maximum Running Length for Micro Flapper™



## 20 mm tube (17.6 mm ID tube)

Dripper Spacing	20 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm	120 cm	150 cm	180 cm	200 cm	250 cm	300 cm	
Slope, %	Length (m)													
<b>2 lph</b>														
2	1.0	77.0	110.4	124.5	135.0	147.8	157.5	162.0	169.2	177.0	181.8	184.0	187.5	192.0
	1.5	109.8	165.6	191.0	212.4	240.8	263.7	276.0	297.6	322.5	342.0	354.0	375.0	390.0
	2.0	131.0	200.8	234.5	262.2	300.8	333.9	351.0	384.0	423.0	455.4	476.0	515.0	543.0
	2.5	147.6	228.0	267.5	300.6	347.3	387.0	409.0	450.0	501.0	543.6	572.0	625.0	669.0
	3.0	161.2	250.8	294.5	331.8	385.5	431.1	456.0	504.0	564.0	617.4	650.0	670.0	726.0
	3.5	173.0	270.0	318.0	359.4	417.8	468.9	497.0	550.8	619.5	678.6	718.0	742.5	807.0
	4.0	183.4	287.2	339.0	383.4	447.0	502.2	533.0	591.6	667.5	734.4	778.0	805.0	879.0
0	1.0	91.4	146.8	175.5	200.4	237.8	271.8	291.0	328.8	379.5	428.4	460.0	532.5	600.0
	1.5	121.0	194.4	232.0	265.2	315.0	360.0	385.0	435.6	504.0	567.0	610.0	705.0	792.0
	2.0	141.0	226.0	270.0	309.0	366.8	418.5	448.0	507.6	586.5	660.6	710.0	820.0	924.0
	2.5	156.4	251.2	300.0	343.2	407.3	465.3	498.0	562.8	651.0	732.6	788.0	910.0	1026.0
	3.0	169.4	272.0	325.0	372.0	441.0	504.0	540.0	610.8	705.0	793.8	854.0	892.5	1005.0
	3.5	180.8	290.0	346.5	396.6	470.3	537.3	576.0	651.6	753.0	847.8	912.0	952.5	1071.0
	4.0	190.8	306.4	366.0	418.8	496.5	567.9	608.0	687.6	795.0	894.6	962.0	1005.0	1131.0
-2	1.0	106.2	184.4	229.0	270.6	335.3	398.7	436.0	512.4	622.5	732.6	810.0	992.5	1173.0
	1.5	132.4	223.6	274.0	320.4	391.5	459.9	500.0	582.0	697.5	811.8	892.0	1080.0	1263.0
	2.0	150.8	251.6	306.5	357.0	433.5	505.8	549.0	634.8	756.0	874.8	958.0	1150.0	1338.0
	2.5	165.4	274.4	333.0	386.4	468.0	544.5	589.0	679.2	805.5	928.8	1016.0	1212.5	1407.0
	3.0	177.8	293.6	355.5	412.2	497.3	577.8	624.0	718.8	849.0	975.6	1066.0	1122.5	1296.0
	3.5	188.6	310.4	375.5	434.4	523.5	606.6	655.0	752.4	888.0	1018.8	1110.0	1170.0	1347.0
	4.0	198.4	325.6	393.5	454.8	547.5	633.6	683.0	783.6	924.0	1058.4	1152.0	1212.5	1395.0
<b>3 lph</b>														
2	1.0	61.6	90.8	104.0	114.0	127.5	137.7	143.0	152.4	162.0	169.2	172.0	180.0	183.0
	1.5	86.2	132.0	154.0	172.2	197.3	218.7	230.0	250.8	276.0	297.0	310.0	335.0	354.0
	2.0	102.4	158.8	186.5	209.4	242.3	270.9	286.0	315.6	352.5	383.4	404.0	442.5	474.0
	2.5	115.0	179.2	211.0	238.2	277.5	311.4	330.0	364.8	409.5	450.0	474.0	527.5	570.0
	3.0	125.2	196.4	231.5	262.2	306.0	343.8	365.0	405.6	457.5	504.0	534.0	552.5	603.0
	3.5	134.2	211.2	249.5	282.6	330.0	372.6	396.0	440.4	499.5	550.8	584.0	605.0	663.0
	4.0	142.2	224.0	265.0	300.6	351.8	396.9	423.0	471.6	535.5	592.2	628.0	652.5	717.0
0	1.0	70.2	112.8	134.5	154.2	182.3	208.8	223.0	252.0	292.5	327.6	354.0	407.5	459.0
	1.5	93.0	149.2	178.0	204.0	241.5	276.3	296.0	334.8	387.0	435.6	468.0	540.0	609.0
	2.0	108.2	173.6	207.5	237.6	281.3	321.3	344.0	390.0	450.0	505.8	546.0	630.0	708.0
	2.5	120.2	192.8	230.5	263.4	312.8	357.3	383.0	433.2	499.5	563.4	606.0	700.0	786.0
	3.0	130.2	208.8	249.5	285.6	339.0	387.0	414.0	469.2	541.5	610.2	656.0	685.0	771.0
	3.5	139.0	222.8	266.5	304.8	361.5	413.1	442.0	500.4	577.5	649.8	700.0	732.5	822.0
	4.0	146.6	235.2	281.0	321.6	381.8	435.6	467.0	528.0	610.5	687.6	738.0	772.5	870.0
-2	1.0	78.8	134.8	166.5	195.6	240.8	284.4	310.0	362.4	438.0	513.0	566.0	687.5	810.0
	1.5	99.8	166.4	203.0	236.4	287.3	335.7	364.0	421.2	502.5	581.4	636.0	765.0	891.0
	2.0	114.0	188.8	229.0	265.8	321.0	373.5	404.0	465.6	552.0	635.4	692.0	827.5	957.0
	2.5	125.6	206.4	250.0	289.2	348.8	404.1	436.0	501.6	592.5	678.6	740.0	880.0	1014.0
	3.0	135.2	221.6	268.0	309.0	372.0	430.2	464.0	532.8	627.0	718.2	782.0	822.5	945.0
	3.5	143.6	234.8	283.5	327.0	393.0	453.6	489.0	560.4	658.5	752.4	818.0	860.0	987.0
	4.0	151.0	246.8	297.5	342.6	411.8	475.2	511.0	585.6	687.0	783.0	850.0	895.0	1023.0

Minimum pressure at end of lateral is 0.6 kg/cm<sup>2</sup>

# Maximum Running Length for Micro Flapper™



## 20 mm tube (17.6 mm ID tube)

Dripper Spacing	20 cm	40 cm	50 cm	60 cm	75 cm	90 cm	100 cm	120 cm	150 cm	180 cm	200 cm	250 cm	300 cm	
Slope, %	Length (m)													
<b>4 lph</b>														
2	1.0	52.4	78.4	90.5	100.2	112.5	123.3	129.0	138.0	148.5	156.6	162.0	170.0	177.0
	1.5	72.4	112.0	131.0	147.0	169.5	189.0	200.0	219.6	243.0	264.6	276.0	302.5	321.0
	2.0	85.8	133.6	157.5	177.6	206.3	231.3	245.0	272.4	304.5	334.8	354.0	392.5	423.0
	2.5	96.0	150.4	178.0	201.0	234.8	264.6	281.0	312.0	352.5	388.8	412.0	460.0	501.0
	3.0	104.6	164.4	194.5	220.8	258.0	291.6	310.0	345.6	391.5	432.0	460.0	475.0	522.0
	3.5	112.0	176.8	209.0	237.6	278.3	314.1	335.0	373.2	424.5	469.8	500.0	520.0	573.0
	4.0	118.6	187.2	222.0	252.0	296.3	334.8	357.0	398.4	454.5	504.0	536.0	557.5	615.0
0	1.0	58.2	93.2	111.5	127.8	151.5	172.8	185.0	208.8	241.5	271.8	292.0	337.5	381.0
	1.5	77.0	123.6	148.0	169.2	200.3	228.6	245.0	277.2	321.0	360.0	388.0	447.5	504.0
	2.0	89.8	144.0	172.0	196.8	233.3	266.4	286.0	322.8	373.5	419.4	452.0	522.5	588.0
	2.5	99.6	160.0	191.0	218.4	259.5	296.1	317.0	358.8	414.0	466.2	502.0	580.0	654.0
	3.0	108.0	173.2	207.0	237.0	280.5	321.3	344.0	388.8	448.5	505.8	544.0	567.5	639.0
	3.5	115.2	184.8	221.0	252.6	300.0	342.0	367.0	415.2	478.5	540.0	580.0	607.5	681.0
	4.0	121.6	195.2	233.0	267.0	316.5	361.8	387.0	438.0	505.5	568.8	612.0	640.0	720.0
-2	1.0	64.2	108.8	133.5	156.0	191.3	225.0	245.0	285.6	343.5	399.6	440.0	532.5	627.0
	1.5	81.8	135.6	165.0	191.4	231.8	270.0	292.0	337.2	400.5	460.8	504.0	602.5	699.0
	2.0	93.8	154.4	187.0	216.0	261.0	302.4	326.0	375.6	442.5	507.6	554.0	657.5	759.0
	2.5	103.4	169.2	204.5	236.4	284.3	328.5	354.0	405.6	478.5	547.2	594.0	705.0	810.0
	3.0	111.4	182.0	219.5	253.2	303.8	351.0	378.0	433.2	508.5	579.6	630.0	662.5	759.0
	3.5	118.4	193.2	232.5	268.2	321.0	370.8	399.0	456.0	534.0	610.2	662.0	695.0	795.0
	4.0	124.6	202.8	244.5	281.4	336.8	387.9	418.0	477.6	558.0	635.4	690.0	725.0	828.0
<b>8 lph</b>														
2	1.0	34.6	53.2	62.0	69.6	80.3	89.1	94.0	103.2	114.0	122.4	128.0	140.0	147.0
	1.5	47.2	74.0	87.0	98.4	114.8	129.6	137.0	152.4	172.5	189.0	200.0	222.5	243.0
	2.0	55.6	87.6	103.5	117.6	137.3	155.7	165.0	184.8	210.0	232.2	246.0	277.5	306.0
	2.5	62.0	98.0	116.0	132.0	155.3	175.5	187.0	208.8	238.5	264.6	282.0	320.0	351.0
	3.0	67.4	106.8	127.0	144.0	169.5	192.6	205.0	229.2	262.5	291.6	312.0	322.5	360.0
	3.5	72.0	114.4	136.0	154.8	182.3	207.0	220.0	247.2	282.0	315.0	336.0	350.0	390.0
	4.0	76.2	121.2	144.0	163.8	193.5	219.6	234.0	262.8	301.5	334.8	358.0	372.5	414.0
0	1.0	37.0	59.2	71.0	81.0	96.0	109.8	118.0	133.2	153.0	172.8	186.0	215.0	243.0
	1.5	49.0	78.8	94.0	107.4	127.5	145.8	156.0	176.4	204.0	228.6	246.0	285.0	321.0
	2.0	57.2	91.6	109.5	125.4	148.5	170.1	182.0	205.2	237.0	266.4	288.0	332.5	375.0
	2.5	63.4	102.0	121.5	139.2	165.0	188.1	202.0	228.0	264.0	297.0	320.0	370.0	414.0
	3.0	68.8	110.4	132.0	150.6	178.5	204.3	219.0	247.2	286.5	322.2	346.0	362.5	408.0
	3.5	73.4	117.6	140.5	160.8	190.5	217.8	233.0	264.0	304.5	343.8	370.0	385.0	435.0
	4.0	77.4	124.4	148.5	169.8	201.8	230.4	246.0	278.4	322.5	361.8	390.0	407.5	459.0
-2	1.0	39.4	65.6	80.0	93.0	112.5	131.4	142.0	164.4	195.0	225.0	246.0	295.0	345.0
	1.5	51.0	83.6	101.0	116.4	140.3	162.0	175.0	200.4	237.0	270.0	294.0	347.5	402.0
	2.0	58.8	96.0	115.5	133.2	159.8	184.5	198.0	226.8	265.5	302.4	328.0	387.5	444.0
	2.5	65.0	105.6	127.0	146.4	174.8	201.6	217.0	247.2	289.5	329.4	358.0	420.0	480.0
	3.0	70.2	114.0	137.0	157.2	188.3	216.9	233.0	265.2	309.0	351.0	382.0	400.0	456.0
	3.5	74.6	121.2	145.5	166.8	199.5	229.5	247.0	280.8	327.0	370.8	402.0	422.5	480.0
	4.0	78.8	127.6	153.0	175.8	210.0	241.2	259.0	295.2	343.5	388.8	422.0	442.5	501.0

Minimum pressure at end of lateral is 0.6 kg/cm<sup>2</sup>