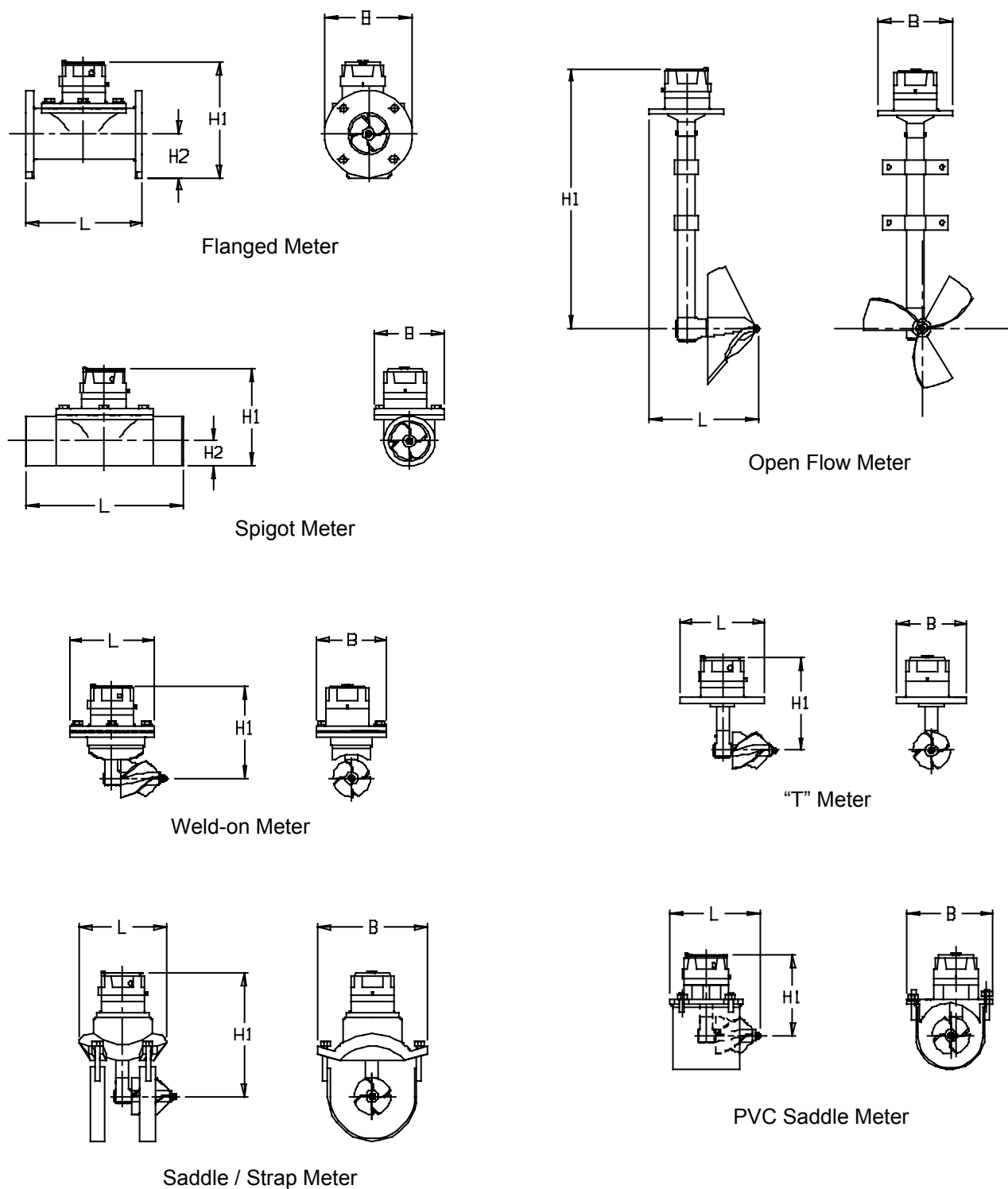


R2000 Dimensions



The Company's policy is one of continuous improvement and the right is reserved to modify the specifications without notice.

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R2000

Irrigation Water Meters

Max. Intermittent Flow Rate (qimax)	ML/Day	1.63 to 274
Size	mm	80 to 1050



The R2000 is an inline helical rotor type irrigation meter. The robust design and use of durable materials for the moving components in contact with the water make this meter tolerant to use with water containing low to medium levels of foreign particles (such as sand or silt).

The meter may be installed in horizontal or inclined pipelines (providing the counter is facing up) without loss of accuracy. Low head loss characteristics are due to minimum restriction and no change in flow direction as water passes through the meter.

For maintenance purposes the complete measuring stem assembly may be quickly replaced with a pre-calibrated stem assembly, or alternatively a blank cover may be fitted, making by-pass unnecessary in most cases.

The magnetic drive between the undergear and sealed counter enables easy fitment of ancillary attachments at any time between measuring element and IP68 sealed counter without interrupting or isolation of the water supply.

Standard Features

- The R2000 is available in a variety of alternate body configurations including - Flanged, Spigot, Weld-on, Saddle / Strap, Open Flow and "T" Meter.
- The counter can be fitted in any one of three positions relative to the direction of flow.
- Flanges on flanged meters are drilled to Australian Standard AS 2129 Table D. Other drilling patterns are available on request.
- Maximum working pressure 1400 kPa (Flanged, Spigot and Weld-on meters only).
- Maximum working temperature 50°C.

Measuring Stem Assembly

The measuring stem assembly consists of an impact resistant rotor mounted on a 316 stainless steel spindle with integral worm meshing

with a worm-wheel spindle assembly and mounted in a very robust gunmetal support stem. Two alumina ceramic sleeves are bonded to the rotor spindle and run in alumina ceramic bearings to give excellent wear resistance even when used with turbid water. Clear flow passages have been designed into the stem assembly to allow "flushing" to occur. This design feature also allows any suspended solids within the stem assembly to drain out during periods where the meter is dry and ensures the internal mechanism will not silt up.

Counter

The counter mechanism which incorporates a bold seven figure straight reading register with centre sweep hand plus scratch resistant mineral glass lens is fully sealed in a "copper can" to IP68. This eliminates condensation and ensures clear and precision readings in any environment over the service life of the meter. The counter is contained within a robust brass housing with protective lid.

Remote / Electronic Reading

The standard R2000 provides the water industry with the flexibility to meet future demands. Today a conventional meter – tomorrow, (whilst in use and without any disconnection, risk of component damage, need to re-calibrate and with no affect to meter performance or accuracy) it can be easily converted for electronic / remote readout capability by simply removing a plastic plug and fitting a magnetically operated (T130 / MEN 4071) signal sensor.

Optional Features

- T130 (MEN 4071) standard signal sensor for use with data loggers, remote counters and process control equipment.
- Alternative flange drilling provided on request.
- T131 (LRP), T134 (HRP) and T133 (DRP) pulse units for use with data loggers, rate of flow equipment and process control equipment.

Materials

All meters are manufactured from the highest quality materials ensuring maximum resistance to wear and corrosion.



R2000 Performance and Dimensions

Meter Size	mm	80	100	125	150	200	250	300
Maximum continuous flowrate (q _{cmax})	ML/day (kL/h)	1.37 (57)	2.64 (110)	3.27 (136)	6.48 (270)	8.16 (340)	10.8 (450)	15.4 (640)
Minimum flowrate (q _{min})	ML/day (kL/h)	0.22 (9.0)	0.26 (11)	0.41 (17)	0.48 (20)	0.55 (23)	0.67 (28)	0.82 (34)
Maximum intermittent flowrate (q _{imax})	ML/day (kL/h)	1.63 (68)	3.24 (135)	4.90 (204)	7.20 (300)	9.96 (415)	15.6 (650)	22.37 (932)
Accuracy (q _{min} to q _{imax}) ❶	%	±2	±2	±2	±2	±2	±2	±2
Pressure loss at q _{imax}	KPa	7	6	4	4	4	4	3
Maximum working pressure ❷	KPa	1400	1400	1400	1400	1400	1400	1400
Maximum working temperature	°C	50	50	50	50	50	50	50
Pointer registration (per revolution)	L	100	100	100	1000	1000	1000	1000
Maximum counter registration	ML	999.9999	999.9999	999.9999	9999.999	9999.999	9999.999	9999.999
MEN4071 Pulse Output (L.H. slow)	L/pulse	1000	1000	1000	10000	10000	10000	10000
MEN4071 Pulse Output (R.H. fast)	L/pulse	100	100	100	1000	1000	1000	1000
LRP Pulse Unit Output	L/pulse	10	10	10	100	100	100	100
HRP Pulse Unit Output	L/pulse	1	1	1	10	10	10	10
Flanged Meter Dimensions								
Overall meter Length (L)	mm	286	286	266	276	276	276	276
Height from bottom to top ❸ (H1)	mm	275	296	361	374	402	492	517
Height from bottom to centre line (H2)	mm	93	114	126	139	168	202	227
Width (B)	mm	185	220	254	280	335	403	455
Spigot Meter Dimensions								
Overall meter Length (L)	mm	390	390		372	372		
Height from bottom to top ❸ (H1)	mm	228	241		320	352		
Height from bottom to centre line (H2)	mm	48	61		89	116		
Width (B)	mm	172	172		216	232		
Weld-on Meter Dimensions								
Overall meter Length (L)	mm		210	210	210			
Height from centre line to top ❸ (H1)	mm		232	232	232			
Width (B)	mm		172	172	172			
Saddle / Strap Meter Dimensions								
Overall meter Length (L)	mm		220 ❹		230 ❹	240	240	240
Height from centre line to top ❸ (H1)	mm		180 ❹		200 ❹	Variable ❺	Variable ❺	Variable ❺
Width (B)	mm		160 ❹		210 ❹	280	280	280
"T" Meter Dimensions								
Overall meter Length (L)	mm				TBA	TBA	TBA	TBA
Height from centre line to top ❸ (H1)	mm				TBA	TBA	TBA	TBA
Width (B)	mm				TBA	TBA	TBA	TBA
Open Flow Meter Dimensions								
Meter depth (L)	mm							250
Height from centre line to top ❸ (H1)	mm							1000
Width (B)	mm							250
PLEASE REFER TO THE NOTES AT THE END OF THE OPPOSITE TABLE								

Meter Size	mm	375	450	500	550	600	750	900	1050
Maximum continuous flowrate (q _{cmax})	ML/day (kL/h)	23.9 (994)	34.3 (1431)	42.4 (1767)	51.3 (2138)	61.1 (2545)	95.2 (3967)	137 (5726)	187 (7793)
Minimum flowrate (q _{min})	ML/day (kL/h)	1.9 (80)	2.7 (115)	3.4 (141)	4.1 (171)	4.9 (204)	7.6 (318)	11.0 (458)	15.0 (623)
Maximum intermittent flowrate (q _{imax})	ML/day (kL/h)	34.9 (1455)	50.3 (2095)	62.0 (2587)	75.1 (3130)	89.4 (3725)	140 (5821)	201 (8382)	274 (11409)
Accuracy (q _{min} to q _{imax}) ❶	%	±2%	±2%	±3%	±3%	±3%	±3%	±3%	±3%
Pressure loss at q _{imax}	KPa	2	1	1	1	1	1	1	1
Maximum working pressure ❷	KPa	1400	1400	700	700	700	700	700	700
Maximum working temperature	°C	50	50	50	50	50	50	50	50
Pointer registration (per revolution)	L	10000	10000	10000	10000	10000	10000	100000	100000
Maximum counter registration	ML	99999.99	99999.99	99999.99	99999.99	99999.99	99999.99	999999.9	999999.9
MEN4071 Pulse Output (L.H. slow)	L/pulse	100000	100000	100000	100000	100000	100000	1000000	1000000
MEN4071 Pulse Output (R.H. fast)	L/pulse	10000	10000	10000	10000	10000	10000	100000	100000
LRP Pulse Unit Output	L/pulse	1000	1000	1000	1000	1000	1000	10000	10000
HRP Pulse Unit Output	L/pulse	100	100	100	100	100	100	1000	1000
Flanged Meter Dimensions									
Overall meter Length (L)	mm	458	458						
Height from bottom to top ❸ (H1)	mm	645	729						
Height from bottom to centre line (H2)	mm	275	320						
Width (B)	mm	550	640						
Saddle / Strap Meter Dimensions									
Overall meter Length (L)	mm	240	350	350	350	350	350	350	350
Height from centre line to top ❸ (H1)	mm	Variable ❺	Variable ❺	Variable ❺	Variable ❺	Variable ❺	Variable ❺	Variable ❺	Variable ❺
Width (B)	mm	280	420	420	420	420	420	420	420
"T" Meter Dimensions									
Overall meter Length (L)	mm	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Height from centre line to top ❸ (H1)	mm	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Width (B)	mm	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Open Flow Meter Dimensions									
Overall meter Length (L)	mm			250				250	
Height from centre line to top ❸ (H1)	mm			1000				1000	
Width (B)	mm			250				250	
Notes:									
❶ Accuracy for all Flanged and Spigot meters is ± 2%. (All others ± 3%).									
❷ Maximum working pressure for Flanged, Spigot and Weld-on meters is 1400 Kpa. For all Saddle / Strap meters this is 700 Kpa, excepting the 100 mm and 150 mm PVC Saddle / Strap type as shown under ❹ which is 400 Kpa and 1,000 Kpa respectively.									
❸ Heights given above are for lid closed. For height with lid open, add 98 mm to dimension (H1). T131 (LRP), T134 (HRP) and T133 (DRP) pulse units each add 29 mm in height to (H1) when fitted. Other sizes available on request.									
❹ All dimensions shown for the 100 and 150 mm sized meters apply only to Saddle / Strap meters for PVC pipe.									
❺ Dimension (H1) for Saddle / Strap meters is variable and is dependant on the type and class of pipe used.									