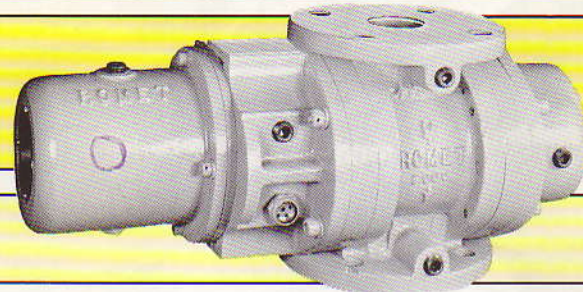


RM 1500 DC



RM 2000 DC

A

B

## Standard Digital Counter (DC)

Measures uncorrected flow of gas through the meter at line conditions. Readings must be corrected for temperature and/or pressure unless flow is at standard base conditions. A remote instrument may be attached to the meter to correct readout for pressure and/or temperature (e.g. Romet EVC-PT-R).

A full view window permits unobstructed reading of the index. A 5, 7 or 8 digit index may be specified.

These meters may be installed in either the horizontal or vertical plane.

Integral pulse output available as an option.

**Illustration A.** Threaded connection meter with fully pressurized case.

**Illustration B.** Flange connection meter with non-pressurized counter module that rotates 90 degrees for horizontal or vertical installation. Counter module is interchangeable with STD. ID or DCID module of same size.

	Illust.	Capacity	Readout per Rev.	Start Flow	RPM @ Max. Flow	Gear Ratio	Displacement per Rev.	▲ P @ MAX. Flow (Typ)	Max. Work. Press.*
<b>IMPERIAL</b>									
RM1000	DC A	1000 C.F.H.	1.0 C.F. 10 C.F.	0.9 C.F.H.	2083	1246.17 :1	0.0080246 C.F.	0.5 IWC	175 psi
RM1500	DC A	1500 C.F.H.	— 10 C.F.	1.0 C.F.H.	2250	900.00 :1	0.00111111 C.F.	0.7 IWC	175 psi
RM2000	DC B	2000 C.F.H.	— 10 C.F.	3.7 C.F.H.	2175	652.75 :1	0.0153198 C.F.	0.8 IWC	175 psi
RM3000	DC B	3000 C.F.H.	— 10 C.F.	4.0 C.F.H.	2250	450.00 :1	0.0222222 C.F.	0.9 IWC	175 psi
RM5000	DC B	5000 C.F.H.	— 10 C.F.	4.8 C.F.H.	2269	272.22 :1	0.0367346 C.F.	0.9 IWC	175 psi
RM7000	DC B	7000 C.F.H.	— 10 C.F.	4.9 C.F.H.	1908	163.33 :1	0.0612244 C.F.	1.0 IWC	175 psi
RM11000	DC B	11000 C.F.H.	— 10 C.F.	5.1 C.F.H.	1846	100.63 :1	0.0993788 C.F.	1.1 IWC	175 psi
RM16000	DC B	16000 C.F.H.	10 C.F. 100 C.F.	5.9 C.F.H.	1893	710.15 :1	0.1408163 C.F.	1.4 IWC	175 psi
<b>SOFT METRIC (Imperial construction-metric readout)</b>									
RM30	DC A	30 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.025 m <sup>3</sup> /h	2215	4409.17 :1	0.0002268 m <sup>3</sup>	0.125 kPa	860 kPa
RM40	DC A	40 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.028 m <sup>3</sup> /h	2131	3450.66 :1	0.0002898 m <sup>3</sup>	0.170 kPa	860 kPa
RM55	DC B	55 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.105 m <sup>3</sup> /h	2112	2304.15 :1	0.0004340 m <sup>3</sup>	0.200 kPa	1200 kPa
RM85	DC B	85 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.113 m <sup>3</sup> /h	2254	1591.09 :1	0.0006285 m <sup>3</sup>	0.225 kPa	1200 kPa
RM140	DC B	140 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.136 m <sup>3</sup> /h	2250	964.32 :1	0.0010370 m <sup>3</sup>	0.250 kPa	1200 kPa
RM200	DC B	200 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.139 m <sup>3</sup> /h	1922	576.50 :1	0.0017346 m <sup>3</sup>	0.250 kPa	1200 kPa
RM300	DC B	300 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.144 m <sup>3</sup> /h	1777	335.39 :1	0.0028138 m <sup>3</sup>	0.275 kPa	1200 kPa
RM450	DC B	450 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.150 m <sup>3</sup> /h	1881	250.84 :1	0.0039866 m <sup>3</sup>	0.350 kPa	1200 kPa
<b>HARD METRIC (European DIN Standard)</b>									
G16	DC A	25 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.025 m <sup>3</sup> /h	1847	4409.17 :1	0.0002268 m <sup>3</sup>	1.20 mbar	8 bar
G25	DC A	40 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.028 m <sup>3</sup> /h	2131	3450.66 :1	0.0002898 m <sup>3</sup>	1.70 mbar	8 bar
G40	DC B	65 m <sup>3</sup> /hr.	0.1 m <sup>3</sup> —	0.108 m <sup>3</sup> /h	2244	2071.68 :1	0.0004827 m <sup>3</sup>	1.75 mbar	12 bar
G65	DC B	100 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.118 m <sup>3</sup> /h	2329	1397.62 :1	0.0007155 m <sup>3</sup>	1.85 mbar	12 bar
G100	DC B	160 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.137 m <sup>3</sup> /h	2255	845.88 :1	0.0011822 m <sup>3</sup>	2.18 mbar	12 bar
G160	DC B	250 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.140 m <sup>3</sup> /h	1888	453.14 :1	0.0022068 m <sup>3</sup>	2.55 mbar	12 bar
G250	DC B	400 m <sup>3</sup> /hr.	— 1.0 m <sup>3</sup>	0.150 m <sup>3</sup> /h	1881	250.84 :1	0.0039866 m <sup>3</sup>	3.48 mbar	12 bar

\*Meters may be certified to 275 psi upon request



# ROMET ADVANTAGE

The new generation of Romet products are designed and manufactured to the challenging demands of the gas industry. Romet offers a complete line of quality products from the basic counter / rotary meter combination to a complete electronic pressure / temperature volume corrector with 2 way communication.

Romet's commitment to the future is clear with the introduction of high pressure and high temperature meters. The features combine both flexibility and functionality as described :

- \* Fewer components
- \* Pinned timing gears
- \* Cover & module rotation - 90 deg. increments regardless of meter position
- \* Universal ID drive
- \* Counter module common to all sized meters
- \* Light weight
- \* Compact in design
- \* Heavy duty construction
- \* Ease of installation and maintenance

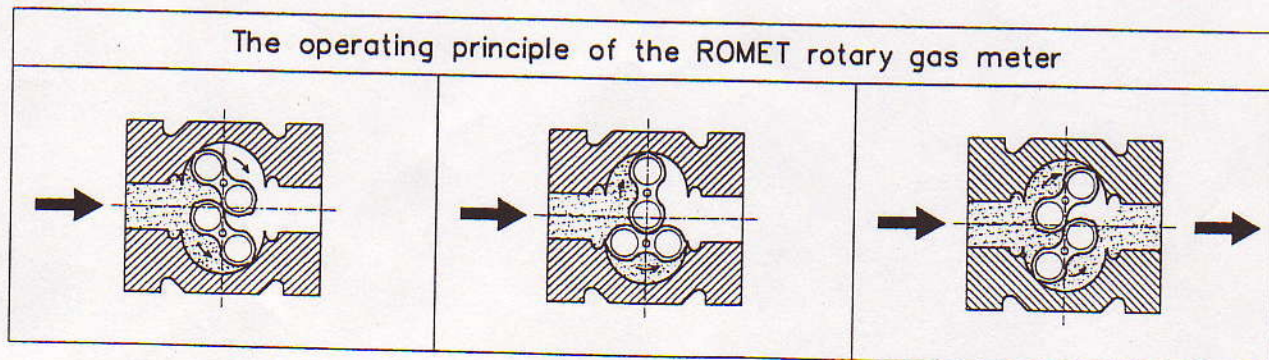
## PRINCIPLES OF OPERATION

Romet rotary gas meters operate according to the positive displacement principle. Gas entering the inlet of the meter produces a differential pressure due to the resistance of the impellers. A driving torque is created causing the impellers to rotate.

The impellers are synchronized by two precision timing gears which are critical to this principle. To ensure optimum performance the impellers are lightweight in design, perfectly balanced and combined with high quality ball bearings result in a smooth, low drag rotation. During rotation, measuring chambers are formed between the impellers and cylinder housing which fill and discharge gas volume periodically.

The impeller shaft transfers a mechanical drive through a gear train assembly and a magnetic coupling to a counting device.

The rotation of the impellers are translated into standard units of volume promoting accurate gas measurement.



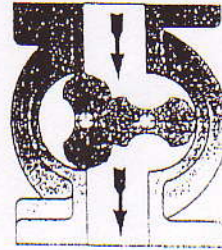
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## PRINCIPLE OF OPERATION

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Gas entering the inlet of the meter produces a differential pressure across the meter which causes the impellers to rotate. The timing gears synchronize the impellers to turn in opposing directions and at 90° to each other. The volume of the

measuring chamber is metered four times per complete revolution of the impellers. The rotation of the impellers is translated into standard units of volume by a precision gear box before being displayed on a counter.



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## CONSTRUCTION

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Pressure body and covers:	Cast aluminum alloy.
Impeller:	Extruded aluminum alloy
Impeller shafts:	Stainless steel alloy.
O-rings:	Nitrile.
Counter window:	Polycarbonate (with UV stabilizer) Engineering plastic.
Bearings:	High carbon steel.
Magnet coupling:	Hard ferrite ceramic magnet.
Counter (index):	PBT Engineering plastic.
Timing gears:	Steel alloy.
Finish:	Sulphuric and hard anodized.





# ROMET Limited

1080 MATHESON BLVD. • MISSISSAUGA, ONTARIO, CANADA L4W 2V2

TELEPHONE: (905) 624-1591

FAX: (905) 624-5005

September 23, 2003

## THE FOLLOWING IS A BREAKDOWN OF THE MATERIALS USED IN OUR ROTARY METERS (Stainless Steel Trim Option)

### CYLINDER:

Alcan 356.2 T6 Aluminum alloy.  
Hard Anodized to MIL-A-8625, Type 3, Class 1.

### COVER:

Alcan 356.2 T6 Aluminum alloy.  
Sulphuric Anodized per MIL-A-8625, Type 2, Class 1.

### IMPELLERS:

Alcan 6063-T5 Aluminum alloy.  
Hard Anodized to MIL-A-8625, Type 3, Class 1.

### INTERNAL ASSEMBLIES (ie. Bearings, gears, etc):

Stainless Steel 303.

### INDEX WINDOWS AND SIGHT GLASSES:

Makrolon Polycarbonate

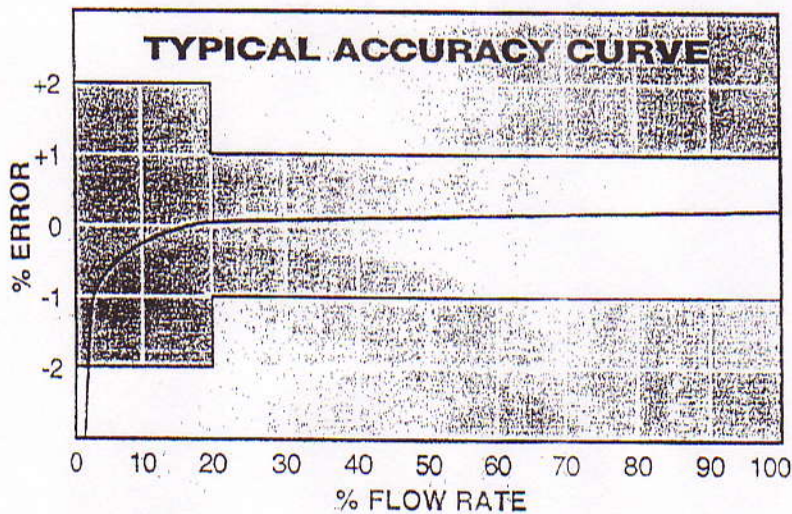


Mr. Andrzej Smich  
Product Engineer.

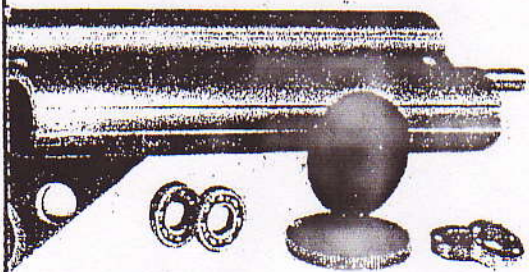
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## PERFORMANCE SPECIFICATIONS

	RM30	RM40	RM55	RM85	RM140	RM200	RM300	RM450	RM650
Maximum Operating Pressure (kPa)	1200	1200	1200	1200	1200	1200	1200	1200	1200
Q <sub>max</sub> @ ± 1% error max. (m <sup>3</sup> /h)	30	40	55	85	140	200	300	450	650
Q <sub>min</sub> @ ± 1% error max. (m <sup>3</sup> /h)	0.9	2.0	2.5	2.8	4.2	5.7	6.0	9.1	9.6
Q <sub>min</sub> @ ± 2% error max. (m <sup>3</sup> /h)	0.6	0.7	1.0	1.0	1.5	2.8	3.4	3.5	3.7
Rangeability @ ± 1% error max.	33:1	20:1	22:1	30:1	33:1	35:1	50:1	49:1	68:1
Rangeability @ ± 2% error max.	50:1	57:1	55:1	85:1	93:1	71:1	88:1	128:1	175:1
ΔP @ Q <sub>max</sub> (Pa)	150	170	190	215	240	255	265	400	600
Start Flow (m <sup>3</sup> /h)	0.025	0.028	0.105	0.108	0.113	0.136	0.139	0.144	0.167
Counter Resolution (m <sup>3</sup> )	0.01	0.01	0.01	0.01	0.1	0.1	0.1	0.1	0.1
Instrument Drive (m <sup>3</sup> /rev)	0.1	0.1	0.1	0.1	1.0	1.0	1.0	1.0	1.0
L.F. Pulser Resolution (m <sup>3</sup> /pulse)	0.1	0.1	0.1	0.1	1.0	1.0	1.0	1.0	1.0



Government of Canada  
Industry Canada Approval  
Approved for Custody  
Transfer in Australia and  
New Zealand



More detailed information is available in the following technical bulletins:

- Selection and Application
- Options and Accessories
- Installation and Maintenance
- Testing

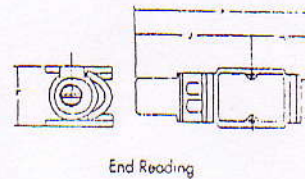
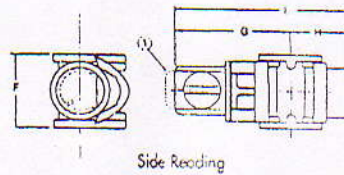
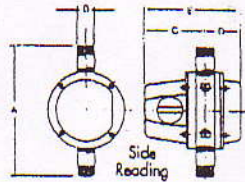
Romer rotary meters are available in three other configurations:

- G Metric Series with DIN 2633 flanges and an index in cubic meters
- RM Imperial Series with ANSI 150 flanges and an index in cubic feet
- RG Imperial Series with BS4504 flanges and an index in cubic feet

Catalogues on each of these configurations are available on request.

# DIMENSIONS AND WEIGHTS

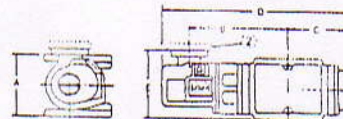
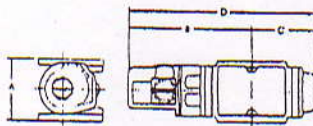
ANSI 150 FLANGES



## STANDARD COUNTER (STD CTR)

METER	A	B	C	D	E	WT. (KG)	F	FLANGE	G	H	I	J	K	WT. (KG)
RM30	267	1.5" NPT	127	78	205	4.5	171	2"	127	78	205	N/A	N/A	5.5
RM40	267	1.5" NPT	137	87	224	5.0	171	2"	137	87	224	N/A	N/A	6.2
RM55	N/A	N/A	N/A	N/A	N/A	N/A	171	2"	217	121	338	253	374	9.8
RM85	N/A	N/A	N/A	N/A	N/A	N/A	171	2"	237	142	379	274	416	11.0
RM140	N/A	N/A	N/A	N/A	N/A	N/A	171	3"	281	185	466	318	503	13.2
RM200	N/A	N/A	N/A	N/A	N/A	N/A	241	3"	273	176	449	309	485	20.0
RM300	N/A	N/A	N/A	N/A	N/A	N/A	241	4"	333	236	569	369	605	24.3
RM450	N/A	N/A	N/A	N/A	N/A	N/A	241	4"	347	250	597	384	634	26.3
RM650	N/A	N/A	N/A	N/A	N/A	N/A	241	4"	398	301	699	434	735	33.1

Note (1): Add 28 mm to Dimension A for an external pulser

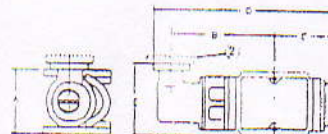
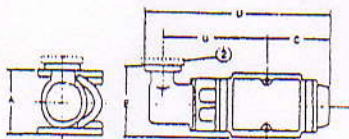


## TEMPERATURE COMPENSATED COUNTER (TC)

## TEMPERATURE COMPENSATED INSTRUMENT DRIVE (TCID)

METER	A	FLANGE	B	C	D	WT. (KG)	A	FLANGE	B	C	D	E	WT. (KG)
RM55	171	2"	281	121	402	10.7	171	2"	205	121	403	187	10.2
RM85	171	2"	302	142	444	11.2	171	2"	226	142	445	187	11.2
RM140	171	3"	346	185	531	13.6	171	3"	270	185	533	187	13.6
RM200	241	3"	342	176	518	21.1	241	3"	261	176	519	238	21.1
RM300	241	4"	403	236	639	26.4	241	4"	321	236	640	238	26.4
RM450	241	4"	417	250	667	29.5	241	4"	335	250	668	238	29.5
RM650	241	4"	468	301	769	36.3	241	4"	386	301	770	238	36.3

Note (1): Add 13 mm to Dimension E for an instrument platform.



## STANDARD INSTRUMENT DRIVE (ID)

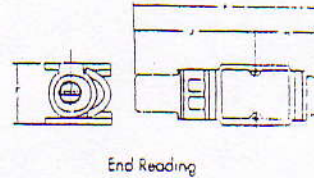
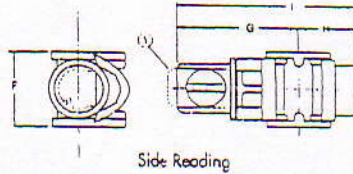
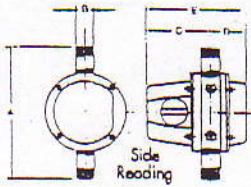
## DIGITAL COUNTER INSTRUMENT DRIVE (DCID)

METER	A	FLANGE	B	C	D	E	WT. (KG)	A	FLANGE	B	C	D	E	WT. (KG)
RM55	171	2"	223	121	395	187	10.2	171	2"	223	121	395	187	10.2
RM85	171	2"	244	142	437	187	11.5	171	2"	244	142	437	187	11.5
RM140	171	3"	288	185	524	187	13.6	171	3"	288	185	524	187	13.6
RM200	241	3"	280	176	506	222	20.4	241	3"	280	176	506	222	20.4
RM300	241	4"	340	236	626	222	24.7	241	4"	340	236	626	222	24.7
RM450	241	4"	354	250	655	222	26.8	241	4"	354	250	655	222	26.8
RM650	241	4"	405	301	756	222	33.6	241	4"	405	301	756	222	33.6

Note (1): Add 13 mm to Dimension E for an instrument platform.

# DIMENSIONS AND WEIGHTS

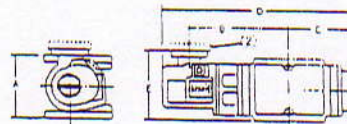
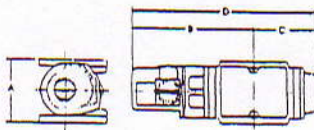
ANSI 150 FLANGES



## STANDARD COUNTER (STD CTR)

METER	A	B	C	D	E	WT. (KG)	F	FLANGE	G	H	I	J	K	WT. (KG)
RM30	267	1.5" NPT	127	78	205	4.5	171	2"	127	78	205	N/A	N/A	5.5
RM40	267	1.5" NPT	137	87	224	5.0	171	2"	137	87	224	N/A	N/A	6.2
RM55	N/A	N/A	N/A	N/A	N/A	N/A	171	2"	217	121	338	253	374	9.8
RM85	N/A	N/A	N/A	N/A	N/A	N/A	171	2"	237	142	379	274	416	11.0
RM140	N/A	N/A	N/A	N/A	N/A	N/A	171	3"	281	185	466	318	503	13.2
RM200	N/A	N/A	N/A	N/A	N/A	N/A	241	3"	273	176	449	309	485	20.0
RM300	N/A	N/A	N/A	N/A	N/A	N/A	241	4"	333	236	569	369	605	24.3
RM450	N/A	N/A	N/A	N/A	N/A	N/A	241	4"	347	250	597	384	634	26.3
RM650	N/A	N/A	N/A	N/A	N/A	N/A	241	4"	398	301	699	434	735	33.1

Note ①: Add 28 mm to Dimension A for an external pulser



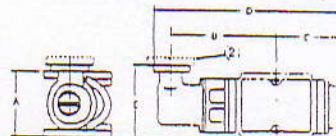
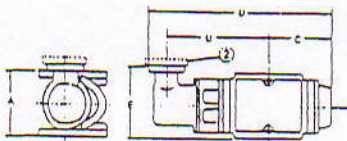
## TEMPERATURE COMPENSATED COUNTER (TC)

METER	A	FLANGE	B	C	D	WT. (KG)
RM55	171	2"	281	121	402	10.7
RM85	171	2"	302	142	444	11.2
RM140	171	3"	346	185	531	13.6
RM200	241	3"	342	176	518	21.1
RM300	241	4"	403	236	639	26.4
RM450	241	4"	417	250	667	29.5
RM650	241	4"	468	301	769	36.3

## TEMPERATURE COMPENSATED INSTRUMENT DRIVE (TCID)

METER	A	FLANGE	B	C	D	E	WT. (KG)
RM55	171	2"	205	121	403	187	10.7
RM85	171	2"	226	142	445	187	11.2
RM140	171	3"	270	185	533	187	13.6
RM200	241	3"	261	176	519	238	21.1
RM300	241	4"	321	236	640	238	26.4
RM450	241	4"	335	250	668	238	29.5
RM650	241	4"	386	301	770	238	36.3

Note ②: Add 13 mm to Dimension E for an instrument platform.



## STANDARD INSTRUMENT DRIVE (ID)

METER	A	FLANGE	B	C	D	E	WT. (KG)
RM55	171	2"	223	121	395	187	10.2
RM85	171	2"	244	142	437	187	11.5
RM140	171	3"	288	185	524	187	13.6
RM200	241	3"	280	176	506	222	20.4
RM300	241	4"	340	236	626	222	24.7
RM450	241	4"	354	250	655	222	26.8
RM650	241	4"	405	301	756	222	33.6

## DIGITAL COUNTER INSTRUMENT DRIVE (DCID)

METER	A	FLANGE	B	C	D	E	WT. (KG)
RM55	171	2"	223	121	395	187	10.2
RM85	171	2"	244	142	437	187	11.5
RM140	171	3"	288	185	524	187	13.6
RM200	241	3"	280	176	506	222	20.4
RM300	241	4"	340	236	626	222	24.7
RM450	241	4"	354	250	655	222	26.8
RM650	241	4"	405	301	756	222	33.6

Note ③: Add 13 mm to Dimension E for an instrument platform.

Flow Capacity at Various Pressures

Gauge Pressure kPa	RM Metric Meters (8M3/H)									
	RM30	RM40	RM55	RM85	RM140	RM200	RM300	RM450	RM650	
5	31.5	42.0	57.7	89.2	146.9	209.9	314.8	472.2	682.1	
10	33.0	43.9	60.4	93.4	153.8	219.7	329.6	494.4	714.2	
50	44.8	59.7	82.1	126.9	209.1	298.7	448.0	672.1	970.8	
100	59.6	79.5	109.3	168.9	278.2	397.4	596.1	894.1	1291.5	
150	74.4	99.2	136.4	210.8	347.3	496.1	744.1	1116.2	1612.3	
200	89.2	119.0	163.6	252.8	416.3	594.8	892.2	1338.2	1933.0	
250	104.0	138.7	190.7	294.7	485.4	693.5	1040.2	1560.3	2253.8	
300	118.6	158.4	217.8	336.7	554.5	792.2	1188.2	1782.3	2574.5	
500	178.0	237.4	326.4	504.4	830.8	1186.9	1780.4	2670.6	3857.5	
750	252.1	336.1	452.1	714.2	1176.3	1680.4	2520.6	3780.9	5461.3	
1000	326.1	434.8	597.8	923.9	1521.7	2173.8	3260.8	4891.2	7065.0	
1200	385.3	513.7	706.4	1091.7	1798.0	2568.6	3852.9	5779.4	8348.0	

**ABSOLUTE BASE AND ATMOSPHERIC PRESSURE @ 101.325 BAR**

Gauge Pressure P.S.I.G.	RM IMPERIAL METERS (SCFH)									
	RM1000	RM1500	RM2000	RM3000	RM5000	RM7000	RM11000	RM16000	RM23000	
1	1045	1568	2091	3136	5227	7318	11500	16728	24046	
5	1317	1976	2634	3951	6585	9219	14487	21073	30292	
10	1656	2485	3313	4969	8282	11595	18221	26504	38099	
15	1996	2994	3992	5988	9980	13971	21955	31935	45906	
20	2335	3503	4671	7006	11677	16348	25689	37366	53714	
25	2675	4012	5350	8024	13374	18724	29423	42797	61521	
50	4372	6558	8744	13116	21860	30604	48092	69952	100557	
75	6069	9104	12138	18208	33346	42485	66762	97108	139593	
100	7766	11650	15533	23299	33832	54365	85431	124263	178629	
125	9464	14196	18927	28391	47318	66246	104100	151419	217685	
150	11161	16741	22322	33483	55804	78126	122770	178574	256701	
175	12858	19287	25716	38574	64291	90007	141439	205730	295737	

**BASE PRESSURE @ 14.73 PSIA and ATMOSPHERIC PRESSURE @ 14.4 PSIA**



# Installation Instructions for Line Mounted ROMET Meters

## RM1000 through RM16000

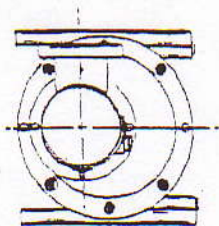
## RM30 through RM450

## G16 through G250

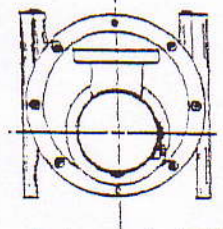
This bulletin covers the installation of all line mounted ROMET meters.

All Romet meters are "line mounted", that is to say, the meter is supported by the piping without any special support for the meter. The meter can be installed in either the top inlet (vertical) position or the side inlet (horizontal) position, with the top inlet being preferred because of the self cleaning action of the impellers in this position.

**Note:** Standard noncompensated flanged meters are normally supplied for top inlet installation. For side inlet installation, the gear reduction (readout) module should be rotated 90° as shown below.



VERTICAL MOUNT



HORIZONTAL MOUNT

To protect the meter from damage, the upstream piping should be free from loose scale, swarf, welding beads, etc. The use of a Romet Screen "T" filter is strongly recommended, especially where dirty gas may be supplied. (Bulletin No. 701)

The piping of the meter set should be such that there is a clearance of about 4" between the pipe flange O.D. and any wall or other obstruction. This clearance will allow the addition

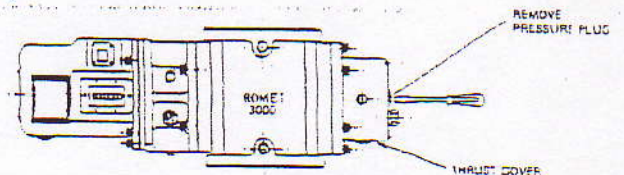
of other equipment such as a Romet EVC, or other auxiliary instrumentation.

Before installing a Romet meter a simple test should be carried out to check the meters operating condition.

First remove the sealing tape from both flange openings on the meter, then lightly blow into the inlet of the meter. This should cause the impellers to rotate. They should turn freely and come to a stop slowly.

Should the impellers not rotate by blowing into the meter, it may be necessary to flush the meter with kerosene or an approved solvent, to remove dust or other matter which would cause the impellers to stick. The proper method of flushing a meter is to remove the pressure plug from the thrust cover and using a flat screw driver, gently work the crank cap in both directions while flushing the metering chamber with solvent (Sketch #2). This action should release any particles lodged in the meter. When the impellers fully rotate, compressed air may be used to speed up the cleaning process.

**Note:** Meters are cleaned and sealed when shipped from the factory.



If this does not produce the desired results the meter should be returned to the shop or manufacturer for repair.



# INSTALLATION

A Romet meter is a precision measuring instrument, manufactured to exacting tolerances and should be treated accordingly. Rough handling must be avoided.

Installation of a Romet rotary meter is a relatively simple procedure if the meter set is properly constructed. The main point of concern in the make-up of the meter set is that the pipe flanges must be level, properly aligned and spaced so that the meter together with the top and bottom gaskets can slide into place.

If the meter is not set level, it is possible to overfill the oil reservoirs while the oil sight glasses indicate the proper level. Over-filling with oil can cause the meter to read incorrectly due to increased drag on the gears and bleeding of oil into the measurement chamber.

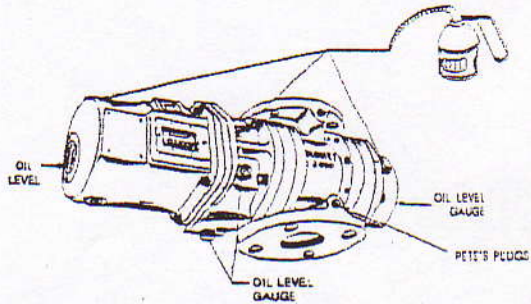
Meters are normally installed using 1/8" full face rubber gaskets between the meter and pipe flanges. Care must be taken to ensure that the pipe flanges are oriented properly and are level. The bolt holes must line up and the flanges spaced far enough apart for easy access of the meter and gaskets. Excessive misalignment or distance between the pipe flanges may over-stress the meter body when the flange bolts are tightened. Severe over-stress can cause the meter to read incorrectly. If several meters of the same size are to be installed, the use of a "spool piece" is recommended to accurately locate the pipe flanges. These spools are available from Romet.

The correct bolt sizes for the RM series meters is 5/8"-11 x 1 1/2" Hex Hd and M16 x 40 mm for the G series. All bolts should be installed with flat washers.

The Romet nipple connection meters are line mounted meters designed to be supported by the adjacent piping and requiring no additional supports or brackets. They are supplied with 1 1/2" NPT connections at the inlet and outlet. These meters are built and pressure tested with the connecting nipples in place and care must be taken to avoid either further tightening or loosening of these nipples. Removal of the nipples from the meter may void the warranty.

Components for Romet meters are manufactured to exacting tolerances and internal clearances, in the measurement chamber are extremely close, so it is essential that care be exercised to avoid foreign material entering the meter during installation and start up. Use only sufficient pipe dope to seal the joints. Pipe dope entering the measuring chamber will render the meter inoperative immediately.

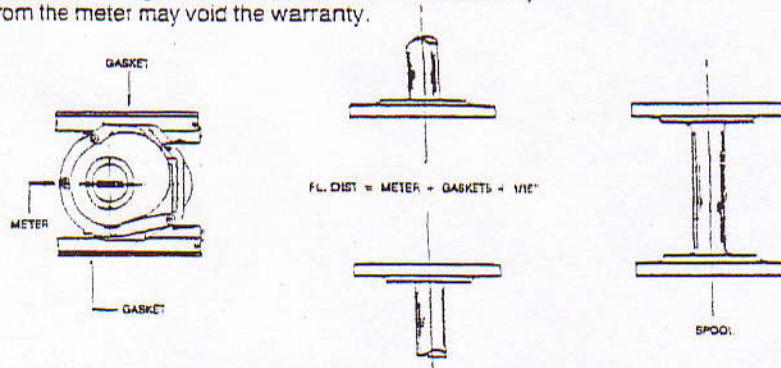
After the meter has been installed, instrument oil must be added to each of the reservoirs. There are two oil reservoirs in the nipple connection meters and three oil reservoirs in the flange mounted meters, in the thrust end cover and the magnetic housing, oil must be added to the centre of the oil sight glass and in the module cover, to the oil level line. **DO NOT OVERFILL. USE ONLY INSTRUMENT OIL WITH AN ISO NUMBER 10 to 15 OR 68-65 SUS. @ 100°F.** A pump oil can with a flexible spout is best for "oiling up".



When the meter installation has been completed, the gas lines should be pressurized **SLOWLY** to avoid excessive differential and consequent over-running of the meter.

**Note:** Should the installation be subject to "INSTANT ON" loads, the meter may have to be protected from over-speeding by a restricting flow orifice plate.

After start up the readout counter should be turning smoothly.



## METER OIL CAPACITY

STANDARD COUNTER AND INSTRUMENT DRIVE	RM1600, 1500		RM2000, 3000, 5000				RM7000, 11000, 16000					
	RM300, 400, 25		RM55, 85, 140, 640, 65, 100		RM200, 300, 450, 2160, 250							
	HORIZ.		VERT.		HORIZ.		VERT.		HORIZ.		VERT.	
COUNTER MODULE	2.4oz	71mL	5.5oz	160mL	6.0oz	177.5mL	6.0oz	177.5mL	6.0oz	177.5mL	6.0oz	177.5mL
MAGNETIC HOUSING	N/A	N/A	N/A	N/A	3.0oz	88.5mL	3.0oz	88.5mL	3.0oz	88.5mL	10.0oz	295.0mL
THRUST END	1.2oz	36mL	4.5oz	128mL	3.0oz	88.5mL	3.0oz	88.5mL	3.0oz	88.5mL	10.0oz	295.0mL
<b>TEMPERATURE COMP.</b>												
COUNTER												
TEMPERATURE COMP.												
INSTRUMENT DRIVE												
COUNTER MODULE	N/A	N/A	N/A	N/A	7.5oz	207.0mL	10.0oz	295.0mL	8.0oz	235.0mL	21.0oz	621.0mL
MAGNETIC HOUSING	N/A	N/A	N/A	N/A	3.0oz	88.5mL	3.0oz	88.5mL	10.0oz	295.0mL	10.0oz	295.0mL
THRUST END	N/A	N/A	N/A	N/A	3.0oz	88.5mL	3.0oz	88.5mL	10.0oz	295.0mL	10.0oz	295.0mL
<b>ELECTRONICALLY CORRECTED</b>												
COUNTER MODULE	2.4oz	71mL	5.5oz	160mL	7.5oz	207.0mL	10.0oz	295.0mL	8.0oz	235.0mL	21.0oz	621.0mL
MAGNETIC HOUSING	N/A	N/A	N/A	N/A	3.0oz	88.5mL	3.0oz	88.5mL	10.0oz	295.0mL	10.0oz	295.0mL
THRUST END	1.2oz	36mL	4.5oz	128mL	3.0oz	88.5mL	3.0oz	88.5mL	10.0oz	295.0mL	10.0oz	295.0mL

