



# Flowmeters

## Variable Area, Correlated

### Cole-Parmer® 65-mm Flowmeters

Clear polycarbonate front shield magnifies scale 16% for easier reading

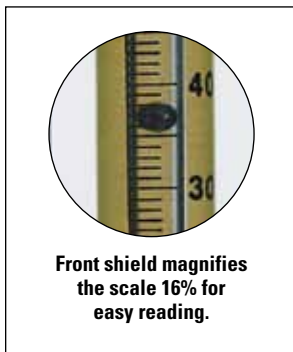
- A vertical tangential locator line ensures hairline accuracy in reading float position
- Ceramic millimeter scale is fused directly to flowtube
- 16-turn high-precision valve features a “nonrising stem” to more accurately set your desired flow point

Each flowmeter consists of a heavy-walled glass flowtube mounted in a frame with white acrylic back plate (1/8" thick). **Aluminum** flowmeters are economical and good for general use with noncorrosive gases and liquids. **Brass** flowmeters are economical and good for use with water. **316 Stainless Steel** flowmeters feature excellent chemical compatibility.

Select a flowmeter with a high-resolution valve for superior flow rate control—ideal for low-flow applications or for any application where you need precise flow control. All flowmeters come with correlation data sheets for water and air at standard temperature and pressure (STP). We can also supply calibration data for oxygen, nitrogen, hydrogen, helium, CO<sub>2</sub>, argon, other liquids and gases, and for conditions other than STP—call your local dealer for more information.



Brass flowmeter  
03268-64



Front shield magnifies the scale 16% for easy reading.

#### Specifications

**Accuracy:** ±5% full-scale for meters with rate of 0.065 and 0.283 mL/min of H<sub>2</sub>O  
±2% full-scale for remaining

**Repeatability:** ±0.25% full-scale

**Max pressure:** 200 psi (13.7 bar)

**Operating temp:**  
-15 to 250°F (-26 to 121°C)

**Connections:** 1/8" NPT(F)



#### Materials of Construction

Part	Aluminum	Brass	SS
Flowtube	Borosilicate glass		
Fittings, valves	Aluminum	Chrome-plated brass	316 SS
O-rings	Buna N		Viton®
Float	Glass, 316 SS, or carboly		
Shield	Polycarbonate		
Frame	Aluminum/acrylic		

For pressure drop information for these flowmeters, go to ...  
[ColeParmer.com](http://ColeParmer.com)

Maximum flow rate (mL/min) <sup>†</sup>									Float <sup>††</sup>	Correlated meters without valves		
H <sub>2</sub> O <sup>‡</sup>	Air <sup>‡</sup>	O <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	He	CO <sub>2</sub>	Ar	Aluminum Cat. no.		Brass Cat. no.	316 SS Cat. no.	
0.065	5.8	5.1	5.6	14	5.5	6.6	4.3	G	TW-03266-00	TW-03268-50	TW-03268-01	
0.283	16.7	15.3	17.6	32	15.8	20.2	14.2	SS	TW-03266-02	TW-03268-52	TW-03268-03	
0.55	48.7	46	51	99	47	59.2	38	G	TW-03266-04	TW-03268-54	TW-03268-05	
1.75	104	94	113	284	99	122	86	G	TW-03266-08	TW-03268-58	TW-03268-09	
2.38	145	132	149	314	146	160	122	SS	TW-03266-06	—	TW-03268-07	
2.6	202.1	189	215	502	211	221	174.2	G	TW-03266-15	—	TW-03268-18	
7.74	299	268	312	828	313	310	246	SS	TW-03266-09	TW-03268-60	TW-03268-16	
12	522	480	530	1488	636	489	429	SS	TW-03266-17	TW-03268-64	TW-03268-15	
20.5	992	970	1015	3218	1903	883	829	G	TW-03266-19	—	TW-03268-20	
27	1249	1165	1293	3923	1990	1110	1065	G	TW-03266-16	TW-03268-66	TW-03268-17	
39.7	2040	1928	2091	6359	3470	1794	1784	G	TW-03266-20	—	TW-03268-21	
52	2678	2323	2624	9410	4853	2237	2171	G	TW-03266-24	—	TW-03268-25	
55.5	1946	1842	1983	6598	4128	1699	1645	SS	TW-03266-21	—	TW-03268-22	
70.7	2520	2360	2610	8602	4970	2190	2124	SS	TW-03266-18	TW-03268-68	TW-03268-19	
108.3	3990	3761	4097	13,600	8699	3449	3388	SS	TW-03266-22	TW-03268-72	TW-03268-23	
147	6318	5880	6380	21,712	13,750	5470	5290	G	TW-03266-28	TW-03268-78	TW-03268-29	
150	4922	4733	5026	17,966	10,947	4225	4172	SS	TW-03266-26	TW-03268-76	TW-03268-27	
309	13,153	12,341	13,412	47,100	29,762	11,156	11,125	G	TW-03266-32	—	TW-03268-33	
364	12,058	11,250	12,200	42,040	27,300	10,150	10,175	SS	TW-03266-30	TW-03268-80	TW-03268-31	
745	24,680	23,322	25,311	90,323	58,472	20,798	21,116	SS	TW-03266-34	—	TW-03268-35	
<b>Price</b>												
<b>High-flow flowmeters</b>												
522	23,169	21,686	23,506	80,752	51,380	19,379	19,817	G	TW-03266-36	—	TW-03268-37	
1261	42,094	40,053	43,487	154,750	104,600	35,100	37,441	SS	TW-03266-38	TW-03268-88	TW-03268-39	
1866	58,500	55,539	60,618	220,500	148,114	47,950	50,200	C	TW-03266-40	—	TW-03268-41	
<b>Price</b>												

<sup>†</sup>Correlation data sheets for water and air are included with flowmeters.

<sup>‡</sup>Flow rates are at standard temperature and pressure (70°F and 14.7 psi). Minimum flow rate is approx 10% of the maximum flow rate.

<sup>††</sup>Float material key: G = glass, SS = 316 stainless steel, C = carboly

**INNOCAL®**  
INNOVATIVE CALIBRATION SOLUTIONS

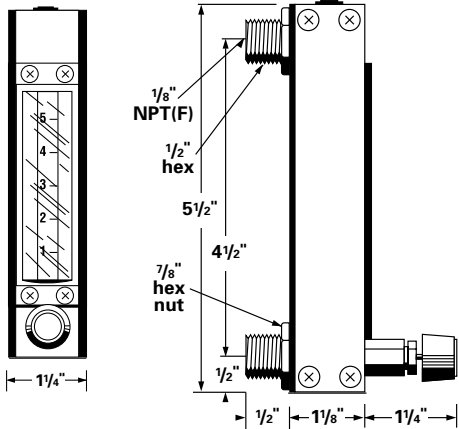
**Ensure the accuracy of your flowmeter!**

[TW-17080-00](#) NIST-traceable calibration with data for air/gas flowmeter

[TW-17080-12](#) NIST-traceable calibration with data for liquid flowmeter

**To Panel Mount**

Drill two holes to fit the inlet and outlet according to the diagrams below. Face width is 1 1/4" (3.2 cm). Secure flowmeter with the two retaining nuts (included).



**Aluminum flowmeter**  
03216-00  
with valve



**Aluminum flowmeter**  
32044-00 with  
high-resolution valve

Correlated meters with 10-turn valves			Correlated meters with high-resolution 16-turn valves		
Aluminum	Brass	316 SS	Aluminum	Brass	316 SS
Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
<a href="#">TW-03216-00</a>	<a href="#">TW-03293-00</a>	<a href="#">TW-03218-01</a>	<a href="#">TW-32044-00</a>	<a href="#">TW-32045-00</a>	<a href="#">TW-32046-01</a>
<a href="#">TW-03216-02</a>	<a href="#">TW-03293-02</a>	<a href="#">TW-03218-03</a>	<a href="#">TW-32044-02</a>	<a href="#">TW-32045-02</a>	<a href="#">TW-32046-03</a>
<a href="#">TW-03216-04</a>	<a href="#">TW-03293-04</a>	<a href="#">TW-03218-05</a>	<a href="#">TW-32044-04</a>	<a href="#">TW-32045-04</a>	<a href="#">TW-32046-05</a>
<a href="#">TW-03216-08</a>	<a href="#">TW-03293-08</a>	<a href="#">TW-03218-09</a>	<a href="#">TW-32044-08</a>	<a href="#">TW-32045-08</a>	<a href="#">TW-32046-09</a>
<a href="#">TW-03216-06</a>	<a href="#">TW-03293-06</a>	<a href="#">TW-03218-07</a>	<a href="#">TW-32044-06</a>	<a href="#">TW-32045-06</a>	<a href="#">TW-32046-07</a>
<a href="#">TW-03216-12</a>	<a href="#">TW-03293-12</a>	<a href="#">TW-03218-13</a>	<a href="#">TW-32044-12</a>	<a href="#">TW-32045-12</a>	<a href="#">TW-32046-13</a>
<a href="#">TW-03216-10</a>	<a href="#">TW-03293-10</a>	<a href="#">TW-03218-11</a>	<a href="#">TW-32044-10</a>	<a href="#">TW-32045-10</a>	<a href="#">TW-32046-11</a>
<a href="#">TW-03216-14</a>	<a href="#">TW-03293-14</a>	<a href="#">TW-03218-15</a>	<a href="#">TW-32044-14</a>	<a href="#">TW-32045-14</a>	<a href="#">TW-32046-15</a>
<a href="#">TW-03216-15</a>	<a href="#">TW-03293-15</a>	<a href="#">TW-03218-16</a>	<a href="#">TW-32044-15</a>	<a href="#">TW-32045-15</a>	<a href="#">TW-32046-16</a>
<a href="#">TW-03216-16</a>	<a href="#">TW-03293-16</a>	<a href="#">TW-03218-17</a>	<a href="#">TW-32044-16</a>	<a href="#">TW-32045-16</a>	<a href="#">TW-32046-17</a>
<a href="#">TW-03216-20</a>	<a href="#">TW-03293-20</a>	<a href="#">TW-03218-21</a>	<a href="#">TW-32044-20</a>	<a href="#">TW-32045-20</a>	<a href="#">TW-32046-21</a>
<a href="#">TW-03216-24</a>	<a href="#">TW-03293-24</a>	<a href="#">TW-03218-25</a>	<a href="#">TW-32044-24</a>	<a href="#">TW-32045-24</a>	—
<a href="#">TW-03216-17</a>	<a href="#">TW-03293-17</a>	<a href="#">TW-03218-18</a>	<a href="#">TW-32044-17</a>	<a href="#">TW-32045-17</a>	<a href="#">TW-32046-18</a>
<a href="#">TW-03216-18</a>	<a href="#">TW-03293-18</a>	<a href="#">TW-03218-19</a>	<a href="#">TW-32044-18</a>	<a href="#">TW-32045-18</a>	<a href="#">TW-32046-19</a>
<a href="#">TW-03216-22</a>	<a href="#">TW-03293-22</a>	<a href="#">TW-03218-23</a>	<a href="#">TW-32044-22</a>	—	<a href="#">TW-32046-23</a>
<a href="#">TW-03216-28</a>	<a href="#">TW-03293-28</a>	<a href="#">TW-03218-29</a>	<a href="#">TW-32044-28</a>	<a href="#">TW-32045-28</a>	—
<a href="#">TW-03216-26</a>	<a href="#">TW-03293-26</a>	<a href="#">TW-03218-27</a>	<a href="#">TW-32044-26</a>	<a href="#">TW-32045-26</a>	<a href="#">TW-32046-27</a>
<a href="#">TW-03216-32</a>	<a href="#">TW-03293-32</a>	<a href="#">TW-03218-33</a>	<a href="#">TW-32044-32</a>	<a href="#">TW-32045-32</a>	<a href="#">TW-32046-33</a>
<a href="#">TW-03216-30</a>	<a href="#">TW-03293-30</a>	<a href="#">TW-03218-31</a>	<a href="#">TW-32044-30</a>	<a href="#">TW-32045-30</a>	<a href="#">TW-32046-31</a>
<a href="#">TW-03216-34</a>	<a href="#">TW-03293-34</a>	<a href="#">TW-03218-35</a>	<a href="#">TW-32044-34</a>	—	<a href="#">TW-32046-35</a>
<b>High-flow flowmeters</b>					
<a href="#">TW-03216-36</a>	—	<a href="#">TW-03218-37</a>	<a href="#">TW-32044-36</a>	—	—
<a href="#">TW-03216-38</a>	<a href="#">TW-03293-38</a>	<a href="#">TW-03218-39</a>	<a href="#">TW-32044-38</a>	—	<a href="#">TW-32046-39</a>
<a href="#">TW-03216-40</a>	<a href="#">TW-03293-40</a>	<a href="#">TW-03218-41</a>	<a href="#">TW-32044-40</a>	<a href="#">TW-32045-40</a>	<a href="#">TW-32046-41</a>

**Tripod Bases**

Securely stand up to three flowmeters in any combination. Three leveling screws and spirit level are built into a clear acrylic base.



Catalog number	Number of meters held	Price
<a href="#">TW-03226-10</a>	One	
<a href="#">TW-03226-30</a>	One, two, or three	

**TW-30904-01 Fitting:** NPT(M) to barbed adapter, brass, 1/8" x 1/4"

**TW-31412-34 Fitting:** NPT(M) to compression adapter, brass, 1/8" x 1/8"

**TW-31406-34 Fitting:** NPT(M) to compression adapter, SS, 1/8" x 1/8"

**TW-30621-30 Fitting:** NPT(M) to barbed adapter, SS, 1/8" x 1/8"



# Flowmeters

## Variable Area, Correlated

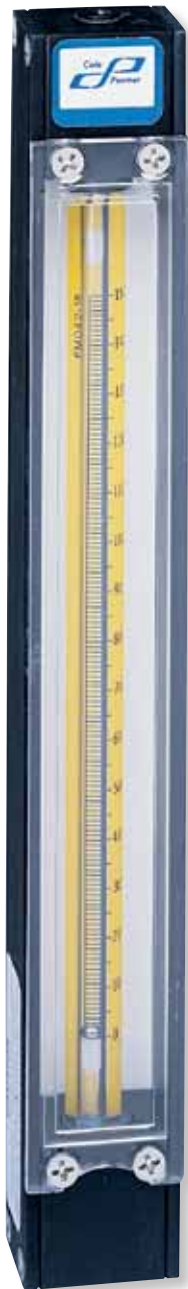
### Cole-Parmer 150-mm Flowmeters

Longer 150-mm scale makes these flowmeters perfect for applications demanding high resolution

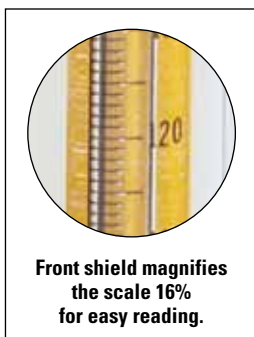
- Ceramic millimeter scale is fused directly to flowtube
- A vertical tangential locator line ensures hairline accuracy in reading float position
- 16-turn high-precision valve features a “nonrising stem” to more accurately set your desired flow point

Each flowmeter consists of a heavy-walled glass flowtube mounted in a frame with white acrylic back plate (1/8" thick). Aluminum flowmeters are economical and good for general use with noncorrosive gases and liquids. Brass flowmeters are economical and good for use with water. The 316 stainless steel flowmeters feature excellent chemical compatibility. Select a flowmeter with a high-precision valve for superior flow rate control—ideal for low-flow applications, for metering samples, and calibration gases for gas analyzers.

All flowmeters come with correlation data sheets for water and air at standard temperature and pressure (STP). We can also supply calibration data for oxygen, nitrogen, hydrogen, helium, CO<sub>2</sub>, argon, other liquids and gases, and for conditions other than STP—call your local dealer for more information.



Aluminum flowmeter 03267-00 without valve



Front shield magnifies the scale 16% for easy reading.

For pressure drop information for these flowmeters, go to . . . [ColeParmer.com](http://ColeParmer.com)

### Specifications

- Accuracy:** ±5% full-scale for meters with rate of 0.19 and 0.94 mL/min H<sub>2</sub>O  
±2% full-scale for remaining
- Repeatability:** ±0.25% full-scale
- Max pressure:** 200 psi (13.7 bar)
- Operating temp:** -15 to 250°F (-26 to 121°C)
- Connections:** 1/8" NPT(F)

CERTIFIED SUPPLIER



### Materials of Construction

Part	Aluminum	Brass	SS
Flowtube	Borosilicate glass		
Fittings, valves	Aluminum	Chrome-plated brass	316 SS
O-rings	Buna N		Viton®
Float	Glass, 316 SS, or carboly		
Shield	Polycarbonate		
Frame	Aluminum/acrylic		

Maximum flow rate (mL/min) <sup>†</sup>								Float <sup>††</sup>	Correlated meters without valves		
H <sub>2</sub> O <sup>†</sup>	Air <sup>†</sup>	O <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	He	CO <sub>2</sub>	Ar		Aluminum	Brass	316 SS
									Cat. no.	Cat. no.	Cat. no.
0.19	18.7	17	20	37	16	23.6	15.4	G	<a href="#">TW-03267-00</a>	<a href="#">TW-03269-50</a>	<a href="#">TW-03269-01</a>
0.49	49.1	42	48	94	46.2	56.4	43.5	G	<a href="#">TW-03267-04</a>	<a href="#">TW-03269-54</a>	<a href="#">TW-03269-05</a>
0.85	92	81	92	208	90.1	103.1	75.6	G	<a href="#">TW-03267-08</a>	—	<a href="#">TW-03269-09</a>
0.94	60.5	54	62	123	53	72	49	SS	<a href="#">TW-03267-02</a>	<a href="#">TW-03269-52</a>	<a href="#">TW-03269-03</a>
2.45	137	131	143	301	133	150	113	SS	<a href="#">TW-03267-06</a>	—	<a href="#">TW-03269-07</a>
4.74	264	233	271	627	283	281	218	SS	<a href="#">TW-03267-09</a>	—	<a href="#">TW-03269-16</a>
5.5	374	340	382	1021	450	355	305	G	<a href="#">TW-03267-15</a>	<a href="#">TW-03269-62</a>	<a href="#">TW-03269-18</a>
16.5	844	772	827	2620	1490	725	687	G	<a href="#">TW-03267-16</a>	<a href="#">TW-03269-66</a>	<a href="#">TW-03269-17</a>
20.4	814	753	824	2496	1290	728	676	SS	<a href="#">TW-03267-17</a>	—	<a href="#">TW-03269-15</a>
46	1682	1545	1662	5547	3397	1420	1380	SS	<a href="#">TW-03267-18</a>	<a href="#">TW-03269-68</a>	<a href="#">TW-03269-19</a>
53.5	2313	2169	2395	7817	4880	2048	1949	G	<a href="#">TW-03267-20</a>	<a href="#">TW-03269-70</a>	<a href="#">TW-03269-21</a>
84	3807	3485	3868	13,105	7803	3374	3151	G	<a href="#">TW-03267-24</a>	<a href="#">TW-03269-74</a>	<a href="#">TW-03269-25</a>
134	4562	4341	4685	15,855	9770	3990	3903	SS	<a href="#">TW-03267-22</a>	<a href="#">TW-03269-72</a>	<a href="#">TW-03269-23</a>
210	8678	8269	8916	29,840	19,426	7485	7366	G	<a href="#">TW-03267-28</a>	<a href="#">TW-03269-78</a>	<a href="#">TW-03269-29</a>
217	7825	6992	7722	27,804	15,960	6308	6384	SS	<a href="#">TW-03267-26</a>	<a href="#">TW-03269-76</a>	<a href="#">TW-03269-27</a>
506	16,737	15,710	17,021	59,996	38,576	14,051	14,131	SS	<a href="#">TW-03267-30</a>	<a href="#">TW-03269-80</a>	<a href="#">TW-03269-31</a>
								Price			
<b>High-flow flowmeters</b>											
541	23,742	21,350	23,512	85,812	53,100	18,989	19,761	G	<a href="#">TW-03267-32</a>	<a href="#">TW-03269-82</a>	—
1288	45,227	39,567	43,000	159,699	103,647	34,287	45,227	SS	<a href="#">TW-03267-34</a>	<a href="#">TW-03269-84</a>	<a href="#">TW-03269-35</a>
1881	66,346	54,902	59,580	221,872	146,500	46,311	47,890	C	<a href="#">TW-03267-36</a>	<a href="#">TW-03269-86</a>	<a href="#">TW-03269-37</a>
								Price			

<sup>†</sup>Correlation data sheets for water and air are included with flowmeters.  
<sup>††</sup>Flow rates are at standard temperature and pressure (70°F and 14.7 psi). Minimum flow rate is approx 10% of the maximum flow rate.  
<sup>†††</sup>Float material key: G = glass, SS = 316 stainless steel, C = carboly

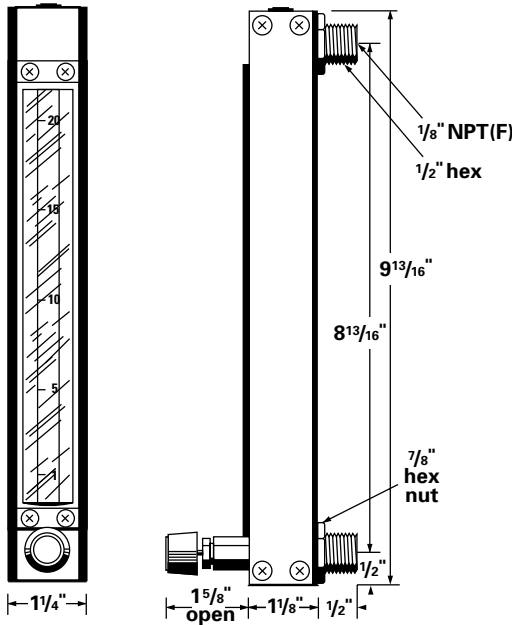
**INNOCAL®**  
INNOVATIVE CALIBRATION SOLUTIONS

**Ensure the accuracy of your flowmeter!**

- [TW-17080-00](#) NIST-traceable calibration with data for air/gas flowmeter
- [TW-17080-12](#) NIST-traceable calibration with data for liquid flowmeter

**To Panel Mount**

Drill two holes to fit inlet and outlet according to the diagrams below. Face width is 1 1/4". Secure flowmeter with the two retaining hex nuts (included).



**316 SS flowmeter**  
03229-01 with  
high-resolution valve

**Brass flowmeter**  
03294-16 with valve

**Correlated meters with valves**

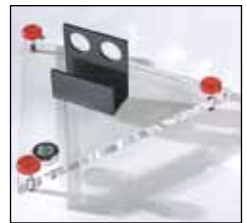
Correlated meters with valves			Correlated meters with high-resolution valves		
Aluminum	Brass	316 SS	Aluminum	Brass	316 SS
Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.	Cat. no.
<a href="#">TW-03217-00</a>	<a href="#">TW-03294-00</a>	<a href="#">TW-03219-01</a>	<a href="#">TW-03227-00</a>	<a href="#">TW-03295-00</a>	<a href="#">TW-03229-01</a>
<a href="#">TW-03217-04</a>	<a href="#">TW-03294-04</a>	<a href="#">TW-03219-05</a>	<a href="#">TW-03227-04</a>	<a href="#">TW-03295-04</a>	<a href="#">TW-03229-05</a>
<a href="#">TW-03217-08</a>	<a href="#">TW-03294-08</a>	<a href="#">TW-03219-09</a>	<a href="#">TW-03227-08</a>	<a href="#">TW-03295-08</a>	<a href="#">TW-03229-09</a>
<a href="#">TW-03217-02</a>	<a href="#">TW-03294-02</a>	<a href="#">TW-03219-03</a>	<a href="#">TW-03227-02</a>	<a href="#">TW-03295-02</a>	<a href="#">TW-03229-03</a>
<a href="#">TW-03217-06</a>	<a href="#">TW-03294-06</a>	<a href="#">TW-03219-07</a>	<a href="#">TW-03227-06</a>	<a href="#">TW-03295-06</a>	<a href="#">TW-03229-07</a>
<a href="#">TW-03217-10</a>	<a href="#">TW-03294-10</a>	<a href="#">TW-03219-11</a>	<a href="#">TW-03227-10</a>	<a href="#">TW-03295-10</a>	<a href="#">TW-03229-11</a>
<a href="#">TW-03217-12</a>	<a href="#">TW-03294-12</a>	<a href="#">TW-03219-13</a>	<a href="#">TW-03227-12</a>	<a href="#">TW-03295-12</a>	<a href="#">TW-03229-13</a>
<a href="#">TW-03217-16</a>	<a href="#">TW-03294-16</a>	<a href="#">TW-03219-17</a>	<a href="#">TW-03227-16</a>	<a href="#">TW-03295-16</a>	<a href="#">TW-03229-17</a>
<a href="#">TW-03217-14</a>	<a href="#">TW-03294-14</a>	<a href="#">TW-03219-15</a>	<a href="#">TW-03227-14</a>	<a href="#">TW-03295-14</a>	<a href="#">TW-03229-15</a>
<a href="#">TW-03217-18</a>	<a href="#">TW-03294-18</a>	<a href="#">TW-03219-19</a>	<a href="#">TW-03227-18</a>	<a href="#">TW-03295-18</a>	<a href="#">TW-03229-19</a>
<a href="#">TW-03217-20</a>	<a href="#">TW-03294-20</a>	<a href="#">TW-03219-21</a>	<a href="#">TW-03227-20</a>	<a href="#">TW-03295-20</a>	<a href="#">TW-03229-21</a>
<a href="#">TW-03217-24</a>	<a href="#">TW-03294-24</a>	<a href="#">TW-03219-25</a>	<a href="#">TW-03227-24</a>	<a href="#">TW-03295-24</a>	<a href="#">TW-03229-25</a>
<a href="#">TW-03217-22</a>	<a href="#">TW-03294-22</a>	<a href="#">TW-03219-23</a>	<a href="#">TW-03227-22</a>	<a href="#">TW-03295-22</a>	<a href="#">TW-03229-23</a>
<a href="#">TW-03217-28</a>	<a href="#">TW-03294-28</a>	<a href="#">TW-03219-29</a>	<a href="#">TW-03227-28</a>	<a href="#">TW-03295-28</a>	<a href="#">TW-03229-29</a>
<a href="#">TW-03217-26</a>	<a href="#">TW-03294-26</a>	<a href="#">TW-03219-27</a>	<a href="#">TW-03227-26</a>	<a href="#">TW-03295-26</a>	<a href="#">TW-03229-27</a>
<a href="#">TW-03217-30</a>	<a href="#">TW-03294-30</a>	<a href="#">TW-03219-31</a>	<a href="#">TW-03227-30</a>	<a href="#">TW-03295-30</a>	<a href="#">TW-03229-31</a>

**High-flow flowmeters**

<a href="#">TW-03217-32</a>	<a href="#">TW-03294-32</a>	<a href="#">TW-03219-33</a>	<a href="#">TW-03227-32</a>	<a href="#">TW-03295-32</a>	<a href="#">TW-03229-33</a>
<a href="#">TW-03217-34</a>	<a href="#">TW-03294-34</a>	<a href="#">TW-03219-35</a>	<a href="#">TW-03227-34</a>	<a href="#">TW-03295-34</a>	<a href="#">TW-03229-35</a>
<a href="#">TW-03217-36</a>	<a href="#">TW-03294-36</a>	<a href="#">TW-03219-37</a>	<a href="#">TW-03227-36</a>	<a href="#">TW-03295-36</a>	<a href="#">TW-03229-37</a>

**Tripod Bases**

Securely stand up to three flowmeters in any combination. Three leveling screws and spirit level are built into a clear acrylic base.



Catalog number	Number of meters held	Price
<a href="#">TW-03226-10</a>	One	
<a href="#">TW-03226-30</a>	One, two, or three	

[TW-30904-01](#) Fitting; NPT(M) to barbed adapter, brass, 1/8" x 1/4"

[TW-31412-34](#) Fitting; NPT(M) to compression adapter, brass, 1/8" x 1/8"

[TW-31406-34](#) Fitting; NPT(M) to compression adapter, SS, 1/8" x 1/8"

[TW-30621-30](#) Fitting; NPT(M) to barbed adapter, SS, 1/8" x 1/8"





# Flowmeters

## Variable Area, Correlated

### Cole-Parmer 65-mm Flowmeters with PTFE Components

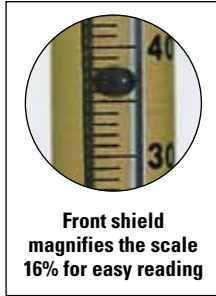
Designed for high-purity applications with flexibility for a broad array of gases

- Compact design is ideal for small panels or cramped workspaces
- High turndown—minimum flow rate is less than one-tenth of maximum flow
- High-precision valve option allows monitoring and control

The substitution of metal fittings with PTFE eliminates a potential contamination source for high-purity applications. The glass tube utilizes a fused ceramic scale for a precise, permanent measuring guide. In addition, a vertical-tangential locator line provides readings with hairline accuracy. Further improving readability is a front shield that magnifies the scale 16%. An anodized aluminum frame protects the heavy-walled glass flowtube; a white acrylic backplate protects and enhances viewing in the protective frame.

Select a flowmeter with a valve for flow rate control. The standard valve is suitable where high resolution metering is not essential. The high-resolution valve features a fine-adjust 16-turn “non-rising stem” to more accurately set your desired flow rate.

All flowmeters come with correlation data sheets for water and numerous gases (listed below) at standard temperature and pressure (STP).



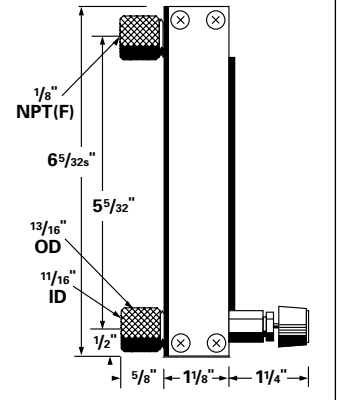
Front shield magnifies the scale 16% for easy reading



65-mm PTFE flowmeter 03216-50 with valve

#### To Panel Mount

Drill two holes to fit the inlet and outlet according to the diagram at left. Face width is 1¼" (3.2 cm). Secure flowmeter with the two retaining nuts (included).



#### Specifications

**Accuracy:** ±5% full-scale for meters with rate of 0.084 mL/min H<sub>2</sub>O  
±2% full-scale for remaining

**Repeatability:** ±0.25% full-scale

**Max pressure:** 100 psi (6.9 bar)

**Operating temp:** -15 to 150°F (-26 to 65°C)

**Connections:** ½" NPT(F)

ISO9001:2008  
CERTIFIED SUPPLIER



#### Materials of Construction

Part	Material
Flowtube	Borosilicate glass
Fittings, valves	PTFE/PCTFE
O-rings	PTFE
Float	PTFE
Frame	Aluminum

Maximum flow rate (mL/min) <sup>†</sup>								Float <sup>††</sup>	Flowmeters without valves	Flowmeters with valves	Flowmeters with high-resolution valves
H <sub>2</sub> O <sup>†</sup>	Air <sup>†</sup>	O <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	He	CO <sub>2</sub>	Ar		Catalog number	Catalog number	Catalog number
0.084	8.3	7.1	8.5	15.3	7.9	10	7.7	Sa	<a href="#">TW-03266-50</a>	<a href="#">TW-03216-50</a>	<a href="#">TW-32044-50</a>
0.55	48.7	46	51	99	47	59.2	38	G	<a href="#">TW-03266-52</a>	<a href="#">TW-03216-52</a>	<a href="#">TW-32044-52</a>
0.98	72.3	72	78	150	71	90	63	Sa	<a href="#">TW-03266-55</a>	<a href="#">TW-03216-55</a>	<a href="#">TW-32044-55</a>
1.75	104	94	113	284	99	122	86	G	<a href="#">TW-03266-57</a>	<a href="#">TW-03216-57</a>	<a href="#">TW-32044-57</a>
3.44	159	147	167	435	157	181	131	Sa	—	<a href="#">TW-03216-60</a>	<a href="#">TW-32044-60</a>
2.6	202.1	189	215	502	211	221	174.2	G	—	<a href="#">TW-03216-62</a>	<a href="#">TW-32044-62</a>
4.7	300	279	312	788	327	307	257	Sa	<a href="#">TW-03266-65</a>	<a href="#">TW-03216-65</a>	<a href="#">TW-32044-65</a>
20.5	986	970	1015	3218	1903	883	829	G	<a href="#">TW-03266-67</a>	<a href="#">TW-03216-67</a>	<a href="#">TW-32044-67</a>
34	1299	1217	1321	4215	2606	1143	1095	Sa	<a href="#">TW-03266-70</a>	<a href="#">TW-03216-70</a>	<a href="#">TW-32044-70</a>
36.7	1623	1575	1710	5470	2950	1500	1395	Sa	—	<a href="#">TW-03216-75</a>	—
39.7	2040	1928	2091	6359	3470	1794	1784	G	<a href="#">TW-03266-77</a>	<a href="#">TW-03216-77</a>	<a href="#">TW-32044-77</a>
61	2704	2522	2859	9130	4932	2314	2279	Sa	<a href="#">TW-03266-80</a>	<a href="#">TW-03216-80</a>	<a href="#">TW-32044-80</a>
147	6318	5880	6380	21,712	13,750	5470	5290	G	<a href="#">TW-03266-82</a>	<a href="#">TW-03216-82</a>	<a href="#">TW-32044-82</a>
217	8145	7640	8280	28,211	18,500	6980	6900	Sa	—	<a href="#">TW-03216-85</a>	—
309	13,153	12,341	13,412	47,100	29,762	11,156	11,125	G	<a href="#">TW-03266-87</a>	<a href="#">TW-03216-87</a>	<a href="#">TW-32044-87</a>

#### High-flow flowmeters

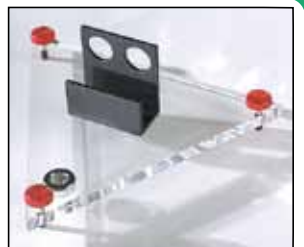
522	23,169	21,686	23,506	80,752	51,380	19,379	19,817	G	<a href="#">TW-03266-88</a>	<a href="#">TW-03216-88</a>	<a href="#">TW-32044-88</a>
798	29,218	27,901	30,337	106,000	67,754	24,630	24,597	Sa	<a href="#">TW-03266-90</a>	<a href="#">TW-03216-90</a>	<a href="#">TW-32044-90</a>

<sup>†</sup>Correlation data sheets for water and air are included with flowmeters.

<sup>††</sup>Flow rates are at standard temperature and pressure (70°F and 14.7 psi). Minimum flow rate is approx 10% of the maximum flow rate. <sup>††</sup>Float material key: G = glass, Sa = sapphire

#### Tripod Bases

Securely stand up to three flowmeters in any combination. Three leveling screws and spirit level are built into a clear acrylic base.



Catalog number	Number of meters held	Price
<a href="#">TW-03226-10</a>	One	
<a href="#">TW-03226-30</a>	One, two, or three	

#### Find MORE!

For fittings, see pages 509–575.

For tubing, see pages 1823–1859.

**Cole-Parmer® 150-mm Flowmeters**  
with PTFE Components

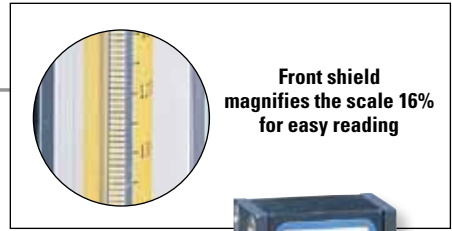
Designed for high-purity applications with flexibility for a broad array of gases

- Longer scale improves control resolution and readability for critical applications
- High turndown—minimum flow rate is less than one-tenth of maximum flow
- High-precision valve option allows monitoring and control

The substitution of metal fittings with PTFE eliminates a potential contamination source for high-purity applications. The glass tube utilizes a fused ceramic scale for a precise, permanent measuring guide. In addition, a vertical tangential locator line provides readings with hairline accuracy. Further improving readability is a front shield that magnifies the scale 16%. An anodized aluminum frame protects the heavy-walled glass flowtube; a white acrylic backplate protects and enhances viewing in the protective frame.

Select a flowmeter with a valve for flow rate control. The standard valve is suitable where high resolution metering is not essential. The high-resolution valve features a fine-adjust 16-turn “nonrising stem” to more accurately set your desired flow rate.

All flowmeters come with correlation data sheets for water and numerous gases (listed below) at standard temperature and pressure (STP).



Front shield magnifies the scale 16% for easy reading

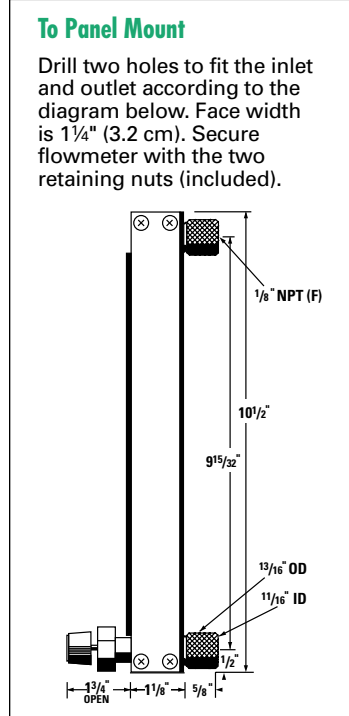
**Specifications**

- Accuracy:** ±2% full-scale
- Repeatability:** ±0.25% full-scale
- Max pressure:** 100 psi (6.9 bar)
- Operating temp:** -15 to 150°F (-26 to 65°C)
- Connections:** 1/8" NPT(F)



**Materials of Construction**

Flowtube	Borosilicate glass
Fittings, valves	PTFE/PTCFE
O-rings	PTFE
Float	Glass or sapphire
Shield	Polycarbonate
Frame	Aluminum/acrylic



150-mm PTFE flowmeter 03217-55 with valve

Maximum flow rate (mL/min) <sup>†</sup>									Float <sup>††</sup>	Flowmeters without valves	Flowmeters with valves	Flowmeters with high-resolution valves
H <sub>2</sub> O <sup>†</sup>	Air <sup>†</sup>	O <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	He	CO <sub>2</sub>	Ar	Catalog number		Catalog number	Catalog number	
0.39	30	27	31	59	26	36.8	24.5	Sa	<a href="#">TW-03267-50</a>	<a href="#">TW-03217-50</a>	<a href="#">TW-03217-52</a>	
0.53	49	49	56	100	47	56.8	43.5	G	<a href="#">TW-03267-52</a>	<a href="#">TW-03217-51</a>	<a href="#">TW-03217-53</a>	
0.85	92	81	92	208	90.1	103.1	75.6	G	<a href="#">TW-03267-57</a>	<a href="#">TW-03217-56</a>	<a href="#">TW-03217-58</a>	
0.99	73	70	76	149	69	84	60.1	Sa	<a href="#">TW-03267-55</a>	<a href="#">TW-03217-55</a>	<a href="#">TW-03217-57</a>	
1.92	140	121	139	322	142	157	110.9	Sa	<a href="#">TW-03267-60</a>	<a href="#">TW-03217-60</a>	<a href="#">TW-03217-62</a>	
5.5	374	340	382	1021	450	355	305	G	<a href="#">TW-03267-62</a>	<a href="#">TW-03217-61</a>	<a href="#">TW-03217-63</a>	
9.9	513	472	520	1497	681	472	429	Sa	<a href="#">TW-03267-65</a>	<a href="#">TW-03217-65</a>	<a href="#">TW-03217-67</a>	
16.5	825	772	827	2620	1490	725	687	G	<a href="#">TW-03267-67</a>	<a href="#">TW-03217-66</a>	<a href="#">TW-03217-68</a>	
26.1	1093	1024	1110	3546	2059	944	910	Sa	<a href="#">TW-03267-70</a>	<a href="#">TW-03217-70</a>	<a href="#">TW-03217-72</a>	
53.5	2313	2169	2395	7817	4880	2048	1949	G	<a href="#">TW-03267-72</a>	<a href="#">TW-03217-71</a>	<a href="#">TW-03217-79</a>	
77.8	3079	2860	3142	10,455	6458	2620	2605	Sa	<a href="#">TW-03267-75</a>	<a href="#">TW-03217-75</a>	<a href="#">TW-03217-73</a>	
84	3807	3485	3868	13,105	7803	3374	3151	G	<a href="#">TW-03267-77</a>	<a href="#">TW-03217-77</a>	<a href="#">TW-03217-83</a>	
126	5005	4652	5090	16,108	10,336	4388	4175	Sa	<a href="#">TW-03267-80</a>	<a href="#">TW-03217-80</a>	<a href="#">TW-03217-74</a>	
210	8678	8269	8916	29,840	19,426	7485	7366	G	<a href="#">TW-03267-82</a>	<a href="#">TW-03217-81</a>	<a href="#">TW-03227-84</a>	
306	11,356	10,706	11,524	40,006	25,400	9557	9539	Sa	<a href="#">TW-03267-85</a>	<a href="#">TW-03217-85</a>	<a href="#">TW-03217-76</a>	
<b>Price</b>												
<b>High-flow flowmeters</b>												
541	22,536	21,350	23,512	85,812	53,100	18,989	19,761	G	<a href="#">TW-03267-87</a>	<a href="#">TW-03217-87</a>	<a href="#">TW-03227-87</a>	
806	29,560	27,181	29,930	110,101	70,100	23,855	24,563	Sa	<a href="#">TW-03267-90</a>	<a href="#">TW-03217-90</a>	<a href="#">TW-03217-78</a>	
<b>Price</b>												

<sup>†</sup>Correlation data sheets for water and air are included with flowmeters.

<sup>‡</sup>Flow rates are at standard temperature and pressure (70°F and 14.7 psi). Minimum flow rate is approx 10% of the maximum flow rate.

<sup>††</sup>Float material key: G = glass, Sa = sapphire



**Ensure the accuracy of your flowmeter!**

- [TW-17080-00](#) NIST-traceable calibration with data for air/gas flowmeter
- [TW-17080-12](#) NIST-traceable calibration with data for liquid flowmeter

# Flowmeters

## Variable Area, Correlated

### Benchtop Flowmeters with PTFE Fittings

Design makes each meter suitable for a broad range of laboratory applications

- Modular components allow for meter flexibility across a wide range of flow rates
- Multiple end connections to suit process requirements
- Correlated scaling for interchangeability among multiple fluids

**Unshielded Flowmeters** work well in low-pressure applications. Connect the flowtube end directly to tubing having the proper inner diameter—flowtube outer diameters are listed below. Glass taper joints are an alternate connection option which slip on the PTFE stops that contain the float (contact our Application Specialists to order the glass taper joints).

**Shielded Flowmeters** are better suited to higher-pressure applications or for installations requiring a panel-mounted flowmeter. End bushings are molded with dual connection capability—tubing or threaded; listed below are the appropriate tubing and threaded connections provided with each meter.

**Shielded Flowmeters with Valves** offer flow monitoring along with precise control through an integrated 20-turn micrometer valve. The valve can be adjusted from 0.1 to 100% of maximum flow (semilogarithmic) and provides precise regulation from 0.3 to 60% of maximum flow.

Computer-calibrated flow charts are included for floats used with both air and water at standard temperature and pressure. An "R factor" chart and formulas are included to convert scale readings for other gases or liquids or for floats other than glass. Order the flow rate analysis software below to generate flow charts specific to other applications.



#### Materials of Construction

Part	Unshielded	Shielded	Shielded with valve
Tube	Borosilicate glass		
O-rings	Viton®		
Inserts	PTFE	—	
Body	—	PTFE	
Couplings	—	Polypropylene (PP) with PTFE Inserts†	
Shield	—	Polycarbonate	
Valve	—	Glass chamber with PCTFE plug‡	

†Order PTFE Couplings (below) for a full PTFE coupling.  
‡Tube sizes 14 and 15 have PTFE plug.

#### Dimensions

Tube size(s)	Unshielded	Shielded	Shielded with valves
Micro	5 <sup>1</sup> / <sub>8</sub> "H x 3 <sup>1</sup> / <sub>16</sub> "OD	8"H x 1"OD	8 <sup>1</sup> / <sub>8</sub> "H x 6"H x 1 <sup>1</sup> / <sub>16</sub> "OD
0, 1, 2	7 <sup>1</sup> / <sub>2</sub> "H x 5 <sup>1</sup> / <sub>16</sub> "OD	10 <sup>1</sup> / <sub>4</sub> "H x 1"OD	11"H x 6"W x 1 <sup>1</sup> / <sub>16</sub> "OD
3	7 <sup>1</sup> / <sub>2</sub> "H x 7 <sup>1</sup> / <sub>16</sub> "OD	—	—
4	9"H x 1 <sup>1</sup> / <sub>16</sub> "OD	13 <sup>1</sup> / <sub>4</sub> "H x 1 <sup>1</sup> / <sub>2</sub> "OD	14 <sup>1</sup> / <sub>2</sub> "H x 6"W x 1 <sup>1</sup> / <sub>16</sub> "OD
5	9"H x 1 <sup>1</sup> / <sub>16</sub> "OD	—	—
6	—	15 <sup>1</sup> / <sub>2</sub> "H x 1 <sup>3</sup> / <sub>4</sub> "OD	—

#### Specifications



##### Accuracy

Micro tube size: ±5% of reading or ±2% of scale, whichever is greater; for water, ±10% of reading or ±3 scale divisions, whichever is greater  
All other tube sizes: ±2% of reading or ±1 scale division, whichever is greater

**Repeatability:** ±1% of reading or 1/2 scale graduation, whichever is greater

**Max operating temp:** 150°F (65°C)

**Connections** (for shielded flowmeters)  
Tube sizes micro, 0, 1, 2, 3: 3/8" ID tubing  
Tube sizes 4, 5, 6: 5/8" ID tubing

Flow ranges		Floats†	Tube size	Unshielded flowmeters			Shielded flowmeters				Shielded flowmeters with valves			
Air (mL/min)	Water (mL/min)			Catalog number	Max psi	Price	Catalog number	Ports** NPT	Max psi	Price	Catalog number	Ports** NPT	Max psi	Price
0.02 to 15	0.0002 to 0.12	Ruby	Micro	<a href="#">TW-03210-00</a>	15	—	<a href="#">TW-03210-20</a>	1/4"	125	—	<a href="#">TW-03234-50</a>	1/8" (M)	125	—
0.2 to 100	0.002 to 1.1	Glass	0	<a href="#">TW-03201-02</a>	15	—	<a href="#">TW-03201-22</a>	1/4"	125	—	<a href="#">TW-03234-10</a>	1/8" (M)	125	—
0.36 to 180	0.004 to 2.3	316 SS	0	—	—	—	—	—	—	—	—	—	—	—
1 to 280	0.01 to 4.0	Glass	1	<a href="#">TW-03201-00</a>	15	—	<a href="#">TW-03201-20</a>	1/4"	125	—	<a href="#">TW-03234-11</a>	1/8" (M)	125	—
2 to 500	0.02 to 8.6	316 SS	1	—	—	—	—	—	—	—	—	—	—	—
10 to 1900	0.2 to 36	Glass	2	<a href="#">TW-03202-00</a>	15	—	<a href="#">TW-03202-20</a>	1/4"	100	—	<a href="#">TW-03234-12</a>	1/8" (M)	100	—
20 to 3400	0.43 to 77	316 SS	2	—	—	—	—	—	—	—	—	—	—	—
200 to 14,000	3 to 300	Glass	3	<a href="#">TW-03203-00</a>	15	—	<a href="#">TW-03203-20</a>	1/4"	75	—	<a href="#">TW-03234-13</a>	1/8" (M)	75	—
360 to 25,000	6 to 640	316 SS	3	—	—	—	—	—	—	—	—	—	—	—
1000 to 36,000	10 to 850	Glass	4	<a href="#">TW-03204-00</a>	15	—	<a href="#">TW-03204-20</a>	1/4"	60	—	—	—	—	—
1800 to 64,000	21 to 1820	316 SS	4	—	—	—	—	—	—	—	—	—	—	—
3000 to 77,000	30 to 1900	Glass	5	<a href="#">TW-03205-00</a>	15	—	<a href="#">TW-03205-20</a>	1/2"	50	—	<a href="#">TW-03234-16</a>	1/4" (M)	50	—
5300 to 137,000	64 to 4100	316 SS	5	—	—	—	—	—	—	—	—	—	—	—
25,000 to 330,000	500 to 8000	Glass	6	—	—	—	<a href="#">TW-03205-22</a>	1/2"	50	—	—	—	—	—
50,000 to 675,000	1500 to 20,000	316 SS	6	—	—	—	—	—	—	—	—	—	—	—

†When using the stainless steel float, refer to the correlation chart (included) for proper readings.

\*\*Port sizes are relevant only if couplings are removed; otherwise, users should reference information in the specifications list.

#### Flow Rate Analysis Software

generates accurate flow rate tables specific to your fluid, temperature, pressure, density, and viscosity using factory calibration data for the specific Gilmont flow tube used.



[TW-32120-10](#) Flow rate analysis software runs with Windows® 95/98/NT computers; CD-ROM

[TW-03198-00](#) Flowmeter stand kit. Use to mount a flowmeter on a benchtop or wall. Mount valved flowmeters without intermediate support—base accepts two large flowmeters (tube size 4, 5 or 6) or three of the smaller flowmeters (tube size micro, 0, 1, 2, 3). Includes one base, one rod, and two mounting clamps

[TW-03198-10](#) Replacement flowmeter base

[TW-03198-20](#) Replacement rod, 18"L (45.7 cm)

[TW-03198-30](#) Replacement mounting clamp

[TW-03198-40](#) PTFE coupling adapter with Viton O-rings replaces the threaded polypropylene bushings on shielded flowmeters to provide an all-PTFE connection; 1/4" NPT(F) port

[TW-31320-07](#) Fitting; NPT(M) to compression adapter, PFA, 1/8"

[TW-31320-09](#) Fitting; NPT(M) to compression adapter, PFA, 1/4"

[TW-31320-13](#) Fitting; NPT(M) to compression adapter, PFA, 1/2"

**Cole-Parmer Easy-View Correlated Flowmeters**

**Perfect for large and small bench-scale or lab systems**

- Wide 180° viewing angle—view flow tube and float from either front or side
- Rotating shield magnifies tube for precise readings
- Dual-float models have higher flow rates and allow a better than 20:1 turndown ratio

All meters include correlation charts for water and air. Correlation charts for oxygen, nitrogen, hydrogen, carbon dioxide, and helium are available from our Application Specialists upon request. Inlet and outlet ports are located on the back of the flowmeter to keep tubing out of the way. Mount flowmeters vertically on a control panel or bench mount with tripod base (order separately below). Valve included to control flow.

These are ideal for measuring and regulating flow rates for analytical instruments or industrial chemical processes. Common applications include blending, mixing, and gas purging.

**Specifications**

**Media type:** water, air, or gases

**Accuracy**

- 65-mm flowmeters: ±5% full-scale
- 150-mm flowmeters: ±3% full-scale

**Max pressure:** 200 psi (13.7 bar)

**Max operating temp:** 200°F (93°C)

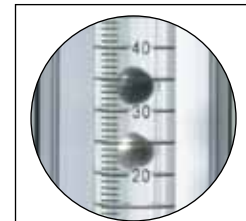
**Connections:** 1/8" NPT(F)

**Dimensions (W x H x D)**

- 65-mm flowmeters: 1 1/4" x 5 1/2" x 2 3/8"  
(3.2 x 14.0 x 6.0 cm)
- 150-mm flowmeters: 1 1/4" x 9 1/16" x 2 3/8"  
(3.2 x 24.9 x 6.0 cm)

**Materials of Construction**

Part	Aluminum	316 SS
Frame, fittings, valves	Aluminum	316 SS
O-rings	Buna N	Viton®
Flowtube	Borosilicate glass	



Dual-float flowmeters have a turndown ratio better than 20:1.



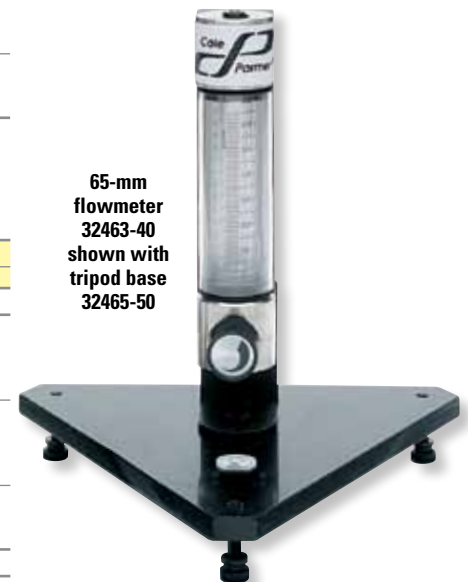
150-mm flowmeter 32464-12

**65-mm Flowmeters**

Max flow rate (mL/min) <sup>†</sup>							Float(s) <sup>‡</sup>	Aluminum		316 SS	
H <sub>2</sub> O	Air	O <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	He	CO <sub>2</sub>		Cat. no.	Price	Cat. no.	Price
<b>Single-float flowmeters</b>											
0.54	50	49	53	102	49	61	G	<a href="#">TW-32463-00</a>		<a href="#">TW-32463-02</a>	
1.23	100	91	106	254	97	115	G	<a href="#">TW-32463-08</a>		—	—
1.28	150	136	159	381	145	172	S	<a href="#">TW-32463-12</a>		<a href="#">TW-32463-14</a>	
6.00	400	368	420	1080	440	408	G	<a href="#">TW-32463-20</a>		<a href="#">TW-32463-22</a>	
30	1175	1116	1210	3748	1997	1046	S	<a href="#">TW-32463-32</a>		<a href="#">TW-32463-34</a>	
55	2500	2375	2550	9525	6725	2025	G	<a href="#">TW-32463-40</a>		<a href="#">TW-32463-42</a>	
146	5000	4750	5100	19,050	13,450	4050	SS	<a href="#">TW-32463-48</a>		<a href="#">TW-32463-50</a>	
240	10,000	9500	10,200	38,100	26,900	8100	G	<a href="#">TW-32463-56</a>		<a href="#">TW-32463-58</a>	
545	20,000	19,000	20,400	96,200	53,800	16,200	S	<a href="#">TW-32463-64</a>		<a href="#">TW-32463-66</a>	
1380	44,425	42,204	45,313	169,259	119,503	35,984	SS	<a href="#">TW-32463-72</a>		—	—

**150-mm Flowmeters**

Max flow rate (mL/min) <sup>†</sup>							Float(s) <sup>‡</sup>	Aluminum		316 SS	
H <sub>2</sub> O	Air	O <sub>2</sub>	N <sub>2</sub>	H <sub>2</sub>	He	CO <sub>2</sub>		Cat. no.	Price	Cat. no.	Price
<b>Single-float flowmeters</b>											
0.55	50	48	53	102	48	61	G	<a href="#">TW-32464-00</a>		<a href="#">TW-32464-02</a>	
2.15	155	141	164	393	150	178	S	<a href="#">TW-32464-12</a>		<a href="#">TW-32464-14</a>	
5.4	295	271	312	776	310	312	SS	<a href="#">TW-32464-16</a>		<a href="#">TW-32464-18</a>	
23	850	807	867	2584	1334	782	SS	<a href="#">TW-32464-24</a>		<a href="#">TW-32464-26</a>	
27.7	1150	1092	1173	3680	1955	1023	S	<a href="#">TW-32464-28</a>		<a href="#">TW-32464-30</a>	
75	2950	2802	3009	11,239	7935	2389	S	<a href="#">TW-32464-36</a>		<a href="#">TW-32464-38</a>	
126	4550	4322	4641	17,335	12,239	3685	S	<a href="#">TW-32464-40</a>		<a href="#">TW-32464-42</a>	
210	6800	6460	6936	25,908	18,292	5508	SS	<a href="#">TW-32464-44</a>		<a href="#">TW-32464-46</a>	
565	19,050	18,097	19,431	72,580	51,244	15,430	SS	<a href="#">TW-32464-52</a>		<a href="#">TW-32464-54</a>	
1415	46,200	43,890	47,124	176,022	124,278	37,422	SS	<a href="#">TW-32464-60</a>		<a href="#">TW-32464-62</a>	
2200	72,600	68,970	74,052	276,606	195,294	58,806	T	<a href="#">TW-32464-64</a>		<a href="#">TW-32464-66</a>	
<b>Dual-float flowmeters</b>											
2.5	152	142	156	340	153	167	G/SS	<a href="#">TW-32466-00</a>		<a href="#">TW-32466-02</a>	
5.4	290	260	300	640	290	300	G/SS	<a href="#">TW-32466-04</a>		<a href="#">TW-32466-06</a>	
22.2	870	820	895	2175	1435	790	G/SS	<a href="#">TW-32466-08</a>		<a href="#">TW-32466-10</a>	
47.5	1700	1610	1745	5100	3535	1490	G/SS	<a href="#">TW-32466-12</a>		<a href="#">TW-32466-14</a>	
125	4430	4170	4500	15,060	9600	3800	G/SS	<a href="#">TW-32466-16</a>		<a href="#">TW-32466-18</a>	
188	6500	6150	6650	23,400	14,600	5600	G/SS	<a href="#">TW-32466-20</a>		<a href="#">TW-32466-22</a>	
500	17,000	16,000	17,250	64,250	38,600	14,200	G/SS	<a href="#">TW-32466-24</a>		<a href="#">TW-32466-26</a>	



65-mm flowmeter 32463-40 shown with tripod base 32465-50

**Tripod Base**

[TW-32465-50](#) Tripod base mounts one flowmeter. Includes mounting bracket, leveling screws, and spirit level

<sup>†</sup>Minimum flow rate is approximately 10% of the maximum flow rate using a single-float and 5% using a dual-float.  
<sup>‡</sup>Float material key: G = glass, S = sapphire, SS = stainless steel, and T = tantalum.