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 DATE: Dec. 10, 2007  
 SUPERSEDES: New  
 DATE: New

**ARMflo AFO-G Fixed Orifice Flowmeters**  
 DN65 to DN300

**SUBMITTAL**

JOB: \_\_\_\_\_ REPRESENTATIVE: \_\_\_\_\_

ENGINEER: \_\_\_\_\_ ORDER NO: \_\_\_\_\_ DATE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_ SUBMITTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

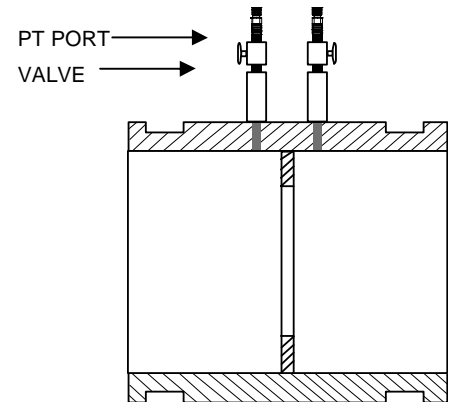
APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

MODEL	SIZE	QUANTITY	IDENTIFICATION	MODEL	SIZE	QUANTITY	IDENTIFICATION
AFO 2.5-G	DN65			AFO 6-G	DN150		
AFO 3-G	DN80			AFO 8-G	DN200		
AFO 4-G	DN100			AFO 10-G	DN250		
AFO 5-G	DN125			AFO 12-G	DN300		

**APPLICATION:**

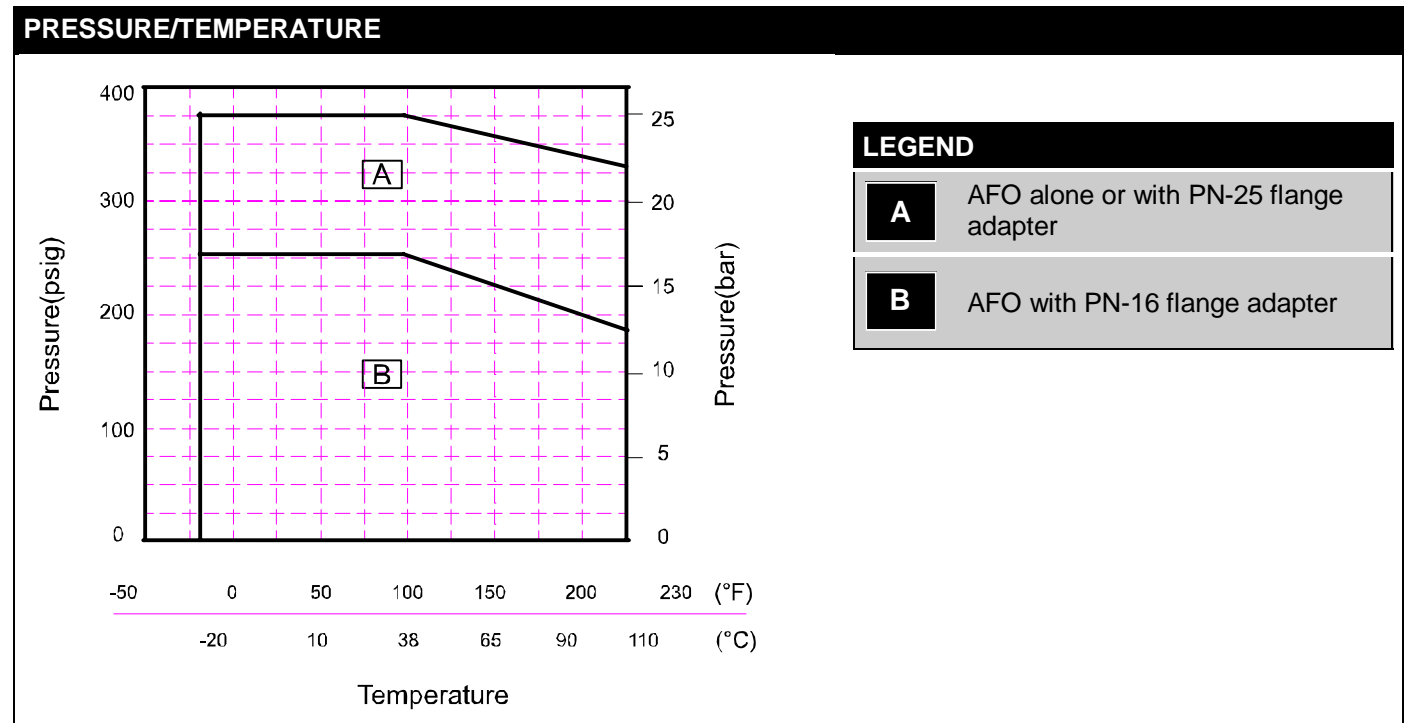
ARMflo AFO-G flowmeters are used to accurately determine hydronic fluid flow in HVAC heating and chiller systems. The BS-7350 compliant, square-edged fixed orifice provides a stable differential pressure value and fixed Kv for simple flow calculation. Measurements are made with any compatible differential manometer, such as the Armstrong DPM-100. System connection is made with industry standard grooved couplings for lowest installed cost, or with ARMgrip flange adapters for PN16 or PN25 flange connection requirements.

The AFO-G may be close-coupled to an Armstrong grooved CBV, or mounted elsewhere in the system piping where flow measurement may be desired.



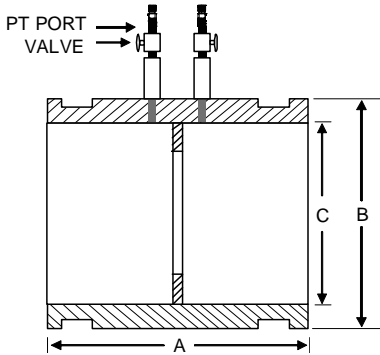
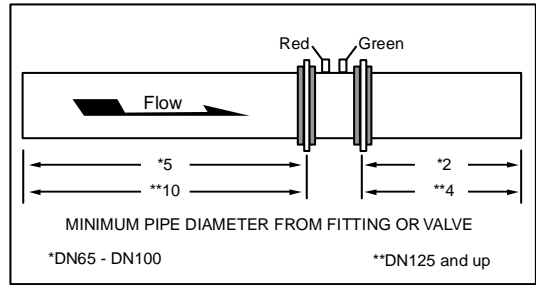
**MATERIALS OF CONSTRUCTION**

Body / Orifice Plate	Carbon steel – ANSI B36.10, Zinc plated
Meter Ports	Qty 2 – Brass PT ports with caps, Nordel check and gasket
PT Port Extensions / Valves	Brass – ASTM B-16



## INSTALLATION

To achieve optimum accuracy (to +/-1%), locate the flowmeter at least the distance prescribed from any fitting or valve, and at least 10 pipe diameters from any pump. Alternatively, the flowmeter may be close coupled to an Armstrong CBV, enabling flowrate feedback during valve adjustment, with a typical accuracy of +/- 5%. Accuracy is not significantly affected by throttling the ARMflo CBV within the recommended operating limits of both the CBV and flowmeter.



## DIMENSIONS - AFO mm (")

Model	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300
A	89 (3.5)	89 (3.5)	92 (3.6)	109 (4.3)	109 (4.3)	121 (4.8)	127 (5.0)	127 (5.0)
B	73 (2.9)	89 (3.5)	114 (4.5)	142 (5.6)	168 (6.6)	219 (8.6)	273 (10.8)	324 (12.8)
C	63 (2.5)	78 (3.0)	102 (4.0)	127 (5.0)	154 (6.0)	203 (8.0)	254 (10.0)	303 (12.0)
Weight kg (lbs)	0.8 (1.7)	1.0 (2.2)	1.4 (3.1)	2.2 (4.8)	3.0 (6.7)	4.7 (10.4)	7.3 (16.1)	8.9 (19.7)

## FLOWRATE RANGES

Flowmeter Model	Size	Flow Coefficient		Min Flowrate		Max Flowrate	
		Kv	Cv	L/s	US GPM	L/s	US GPM
AFO2.5-G	DN65	82	96	4.0	63	13	206
AFO3-G	DN80	119	140	5.8	92	21	333
AFO4-G	DN100	213	250	11	174	33	523
AFO5-G	DN125	269	315	13	206	40	634
AFO6-G	DN150	384	450	19	301	60	951
AFO8-G	DN200	832	975	40	634	130	2061
AFO10-G	DN250	1152	1350	55	872	180	2853
AFO12-G	DN300	1791	2100	88	1395	280	4438

NOTE: Min and Max flowrates are based on operation between 3 and 30 kPa. Operating beyond these recommendations may affect the performance of the AFO and other HVAC equipment. For optimum performance, select the flowmeter to operate as close to 3 kPa as possible, without going under.

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