

Model 243 Capacity Tables

1½" and 2" Model 243-8-1 and 243-8-2 in SCFH of Natural Gas (0.6 Specific Gravity – 14.65 psia – 60°F)

Outlet Pressure and Spring	Inlet Pressure psi	Orifice Size and Valve Angle					
		1"	¾"	½"	⅜"	¼"	0.207"
		30°	10°	10°	10°	10°	10°
Setpoint 6" w.c. 1" w.c. Droop Red-Black Spring 3½" to 6½" w.c. 143-82-021-00	12	1100	900	700	500		
	1	1950	1600	1050	750	350	
	2	3200	2400	1550	1000	550	350
	5	5200	3900	2700	1900	950	550
	10	7400	5800	4500	3000	1350	900
	15	9100	7100	5800	3800	1700	1150
	25	12500	8700	7200	5100	2400	1500
	40		10500	9200	7100	3200	2100
	60			11000	9300	4400	2900
	80			11500	10500	5600	3700
	100				11000	7000	4500
	125					8000	5600
Setpoint 7" w.c. 1" w.c. Droop Blue-Black Spring 5" to 8½" w.c. 143-82-021-01	12	1000	750	650	400		
	1	1600	1150	900	650	300	
	2	2700	1800	1350	950	450	350
	5	4800	3500	2350	1600	770	500
	10	7000	5400	3900	2500	1250	900
	15	9100	7000	5000	3500	1700	1150
	25	12500	8700	6600	5100	2400	1500
	40		10500	9000	7100	3200	2100
	60			11000	9300	4400	2900
	80			11500	10500	5600	3700
	100				11000	7000	4500
	125					8000	5600
Setpoint 11" w.c. 2" w.c. Droop Green-Black Spring 6" to 14" w.c. 143-82-021-02	1	1650	1150	1000	650	300	
	2	2700	2000	1400	1000	450	350
	5	4800	3800	2600	1750	900	600
	10	7000	5400	4200	2800	1300	900
	15	9000	7400	5500	3600	1700	1100
	25	11000	8800	7500	5100	2400	1500
	40		11000	9600	7100	3200	2100
	60			11000	9300	4400	2900
	80			11500	10500	5600	3700
	100				11000	7000	4500
	125					8000	5600

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the optimum performance range.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

1½" Models 243-8-1 and 243-8-2 in SCFH of Natural Gas (0.6 Specific Gravity – 14.65 psia – 60°F)

Outlet Pressure and Spring	Inlet Pressure psi	Orifice Size and Valve Angle					
		1"	¾"	½"	⅜"	¼"	0.207"
		30°	10°	10°	10°	10°	10°
Setpoint 18" w.c. 3" w.c. Droop Green Spring 12" to 28" w.c. 143-16-021-05	1	1500	1100	800	550		
	2	2100	1700	1300	900	450	350
	5	4500	3400	2000	1350	850	600
	10	6600	5700	3500	2400	1300	850
	15	8800	7100	5000	3400	1700	1050
	25	11500	9100	7100	5100	2400	1500
	40		11000	9300	7100	3200	2100
	60			11000	9400	4400	2900
	80			12000	10500	5600	3700
	100				11000	7000	4500
125					8000	5600	
Setpoint 1 psi 0.31 psi Droop Green Spring 12" to 28" w.c. 143-16-021-05	2	4000	3500	1800	1200	500	
	5	6000	5000	3500	2200	1000	
	10	7500	7000	5000	3000	1500	
	15	9000	8000	6500	4000	1850	
	25	12000	10000	8000	5000	2000	
	40		12500	9500	7000	3000	
	60			11500	9500	4500	
	80			12500	11500	6000	
	100				12500	7000	
	125					8000	
Setpoint 1 psi 0.2 psi Droop Orange Spring 1 to 2 psi 143-16-021-06	2	2100	1650	1200	850	450	
	5	4000	3200	2100	1300	850	550
	10	6500	5200	3100	2200	1300	800
	15	8400	6500	4400	3000	1700	1000
	25	11000	8600	6500	4400	2400	1500
	40		11000	8600	6700	3200	2100
	60			10500	9000	4400	2900
	80			11500	10500	5600	3700
	100				11000	7000	4500
	125					8000	5600

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the optimum performance range.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

1½" Models 243-8-1 and 243-8-2 in SCFH of Natural Gas (0.6 Specific Gravity – 14.65 psia – 60°F) (Continued)

Outlet Pressure and Spring	Inlet Pressure psi	Orifice Size and Valve Angle					
		1"	¾"	½"	⅜"	¼"	0.207"
		30°	10°	10°	10°	10°	10°
Setpoint 3 psi 0.35 psi Droop Black Spring 2 to 4¼ psi 143-16-021-07	5	3000	1800	1200	1100	900	
	10	4000	2500	1800	1500	1000	
	15	5200	4000	2850	2000	1400	
	25	7000	5200	3600	3100	1800	
	40		9000	5000	4200	2200	
	60			8300	6500	3000	
	80			10000	8500	5000	
	100				9000	6000	
	125					8000	
	Setpoint 3 psi 0.6 psi Droop Black Spring 2 to 4¼ psi 143-16-021-07	5	4400	3400	2400	1600	800
10		7100	5900	3600	2400	1300	750
15		9600	7500	4800	3400	1700	1000
25		12500	10500	6500	5000	2400	1500
40			13000	9600	7000	3200	2100
60				12500	9300	4400	2900
80				13500	11000	5600	3700
100					12000	7000	4500
125					8000	5600	

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the *optimum performance* range.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

1¼" Models 243-8-1, 243-8-2, 243-12-1 and 243-12-2 in SCFH of Natural Gas

(0.6 Specific Gravity – 14.65 psia – 60°F)

Outlet Pressure and Spring 243-12	Outlet Pressure and Spring 243-8	Inlet Pressure psi	Orifice Size and Valve Angle				
			¾"	½"	⅜"	¼"	0.207"
			10°	10°	10°	10°	10°
Setpoint 6" w.c. 1" w.c. Droop Red Spring 3½" to 6" w.c. 143-16-021-03	Setpoint 6" w.c. 1" w.c. Droop Red-Black Spring 3½" to 6½" w.c. 143-82-021-00	1/2	900	700	500		
		1	1600	1050	750	350	
		2	2250	1500	1000	550	350
		5	2500	2200	1900	950	550
		10	3100	2900	2650	1350	900
		15	3550	3600	2700	1700	1050
		25	4200	3800	3300	2400	1500
		40	4200	4100	3800	3200	2100
		60		4800	4400	4400	2900
		80		5600	5600	5600	3700
		100			6000	6000	4500
125				6000	5600		
Setpoint 7" w.c. 1" w.c. Droop Blue Spring 5" to 8½" w.c. 143-16-021-04	Setpoint 7" w.c. 1" w.c. Droop Blue-Black Spring 5" to 8½" w.c. 143-82-021-01	1/2	750	650	400		
		1	1150	900	650	300	
		2	1700	1300	950	450	350
		5	2300	1900	1600	770	500
		10	2900	2600	2200	1250	900
		15	3500	3100	2500	1700	1050
		25	4200	3600	3300	2400	1500
		40	4800	4000	3800	3200	2100
		60		4600	4400	4400	2900
		80		5600	5600	5600	3700
		100			6000	6000	4500
125				6000	5600		
Setpoint 11" w.c. 2" w.c. Droop Green Spring 6" to 14" w.c. 143-16-021-05	Setpoint 11" w.c. 2" w.c. Droop Green-Black Spring 6" to 14" w.c. 143-82-021-02	1	1150	1000	650	300	
		2	1850	1350	1000	450	350
		5	2500	2200	1750	800	550
		10	2900	2700	2450	1300	900
		15	3700	3950	2600	1700	1100
		25	4250	4000	3300	2400	1500
		40	5300	4200	3800	3200	2100
		60		4850	4400	4400	2900
		80		5850	5600	5600	3700
		100			6000	7000	4500
		125				8000	5600

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the optimum performance range.

NOTE: 1" x 30° and 1¼" x 30° orifice and valve angle are available on the 1¼" 243-12-1 and 243-12-2 models.

NOTE: The performance data is based on normal testing at 70°F flowing temperature.

Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

1 1/4" Models 243-8-1, 243-8-2, 243-12-1 and 243-12-2 in SCFH of Natural Gas

(0.6 Specific Gravity – 14.65 psia – 60°F) (Continued)

Outlet Pressure and Spring 243-12	Outlet Pressure and Spring 243-8	Inlet Pressure psi	Orifice Size and Valve Angle				
			3/4"	1/2"	3/8"	1/4"	0.207"
			10°	10°	10°	10°	10°
Setpoint 18" w.c. 3" w.c. Droop Orange Spring 12" to 28" w.c. 143-16-021-06	Setpoint 18" w.c. 3" w.c. Droop Green Spring 12" to 28" w.c. 143-16-021-05	1	1100	800	500		
		2	1900	1250	900	450	350
		5	2250	1700	1350	750	550
		10	2950	2250	2100	1300	850
		15	3450	3600	2450	1700	1050
		25	4400	3750	3300	2400	1500
		40	5300	4100	3800	3200	2100
		60		4800	4400	4400	2900
		80		4850	5600	5600	3700
		100			6000	7000	4500
		125				8000	5600
Setpoint 1 psi 0.31 psi Droop Orange Spring 12" to 28" w.c. 143-16-021-06	Setpoint 1 psi 0.31 psi Droop Green Spring 12" to 28" w.c. 143-16-021-05	2	3000	1800	1200	500	
		5	4000	3000	2000	1000	
		10	5000	4000	3000	1500	
		15	6000	5100	3900	1900	
		25	7500	6400	4500	2200	
		40	8000	7400	6100	2600	
		60		8000	7350	4000	
		80		8500	8000	5100	
		100			8500	6500	
		125				7000	
Setpoint 1 psi 0.2 psi Droop Black Spring 1 to 2 psi 143-16-021-07	Setpoint 1 psi 0.2 psi Droop Orange Spring 1 to 2 psi 143-16-021-06	2	1850	1150	850	450	
		5	2100	1700	1350	750	500
		10	2700	2000	1950	1300	800
		15	3150	3100	2050	1700	1000
		25	4150	3250	2850	2400	1500
		40	5300	3800	3600	3200	2100
		60		4600	4250	4400	2900
		80		4650	5600	5600	3700
		100			6000	7000	4500
		125				8000	5600

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the *optimum performance* range.

NOTE: 1" x 30° and 1 1/4" x 30° orifice and valve angle are available on the 1 1/4" 243-12-1 and 243-12-2 models.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

1 1/4" Models 243-8-1, 243-8-2, 243-12-1 and 243-12-2 in SCFH of Natural Gas

(0.6 Specific Gravity – 14.65 psia – 60°F) (Continued)

Outlet Pressure and Spring 243-12	Outlet Pressure and Spring 243-8	Inlet Pressure psi	Orifice Size and Valve Angle				
			3/4"	1/2"	3/8"	1/4"	0.207"
			10°	10°	10°	10°	10°
Setpoint 3 psi 0.35 psi Droop Cadmium Spring 1 1/2 to 3 psi 143-16-021-08	Setpoint 3 psi 0.35 psi Droop Black Spring 2 to 4 1/4 psi 143-16-021-07	5	1200	1000	800	500	
		10	2000	1800	1400	1000	
		15	3300	2800	1800	1400	
		25	4700	3300	2300	1650	
		40	6300	4900	2800	2000	
		60		5800	5000	2800	
		80		6500	6400	4600	
		100			6500	4750	
		125				5000	
Setpoint 3 psi 0.6 psi Droop Cadmium Spring 1 1/2 to 3 psi 143-16-021-08	Setpoint 3 psi 0.6 psi Droop Black Spring 2 to 4 1/4 psi 143-16-021-07	5	2200	1950	1650	700	
		10	3600	2300	2150	1300	750
		15	3800	3400	2350	1700	1000
		25	5000	3900	3250	2400	1500
		40	6300	4300	3700	3200	2100
		60		5500	4400	4400	2900
		80		5500	5850	5600	3700
		100			6550	7000	4500
		125				8000	5600

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the optimum performance range.

NOTE: 1" x 30° and 1 1/4" x 30° orifice and valve angle are available on the 1 1/4" 243-12-1 and 243-12-2 models.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

2" Models 243-8-1 and 243-8-2 in SCFH of Natural Gas (0.6 Specific Gravity – 14.65 psia – 60°F)

Outlet Pressure and Spring	Inlet Pressure psi	Orifice Size and Valve Angle					
		1"	¾"	¾"	½"	¾"	¼"
		30°	30°	10°	10°	10°	10°
Setpoint 18" w.c. 3" w.c. Droop Green Spring 12" to 28" w.c. 143-16-021-05	1	1500	1200	1100	800	600	
	2	2400	1800	1700	1250	950	500
	5	5500	3700	3500	2300	1400	900
	10	9400	8400	6000	3700	2400	1400
	15	12000	12000	8100	5600	3800	1700
	25	14500	17500	10000	8200	5600	2400
	40		20000	12000	11500	7400	3400
	60				13500	10000	4600
	80				14000	11000	5600
	100					12000	7000
125						8000	
Setpoint 1 psi 0.31 psi Droop Green Spring 12" to 28" w.c. 143-16-021-05	2	5000	4000	4000	3000	1000	500
	5	8000	7000	7000	4000	1900	1000
	10	14000	12800	10000	5500	3000	1500
	15	16500	14000	13900	7750	4500	1800
	25	17700	16900	15000	9000	5500	2500
	40		18000	16500	11500	7400	3200
	60				15000	10000	4600
	80				17000	13800	6100
	100					14000	7000
	125						9000
Setpoint 1 psi 0.2 psi Droop Orange Spring 1 to 2 psi 143-16-021-06	2	2400	1800	1700	1200	850	450
	5	4000	3400	3300	2200	1300	900
	10	7000	6000	5400	3500	2200	1400
	15	11000	9000	7000	4600	3100	1700
	25	14500	15000	10000	7400	4800	2400
	40		17500	12000	10500	7000	3400
	60				12500	9500	4600
	80				13500	10500	5600
	100					11000	7000
	125						8000

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the *optimum performance* range.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.

Model 243 Capacity Tables

2" Models 243-8-1 and 243-8-2 in SCFH of Natural Gas (0.6 Specific Gravity – 14.65 psia – 60°F) (Continued)

Outlet Pressure and Spring	Inlet Pressure psi	Orifice Size and Valve Angle					
		1"	¾"	¾"	½"	¾"	¼"
		30°	30°	10°	10°	10°	10°
Setpoint 3 psi 0.35 psi Droop Black Spring 2 to 4¼ psi 143-16-021-07	5	2000	1600	1600	1400	1000	500
	10	4000	3000	3000	2000	1400	1000
	15	5800	4200	4000	2600	1800	1500
	25	7500	5200	5000	3900	2750	2300
	40		9100	9000	6500	5800	3100
	60				10000	7500	4600
	80				14000	10000	6000
	100					12000	7000
	125						9000
Setpoint 3 psi 0.6 psi Droop Black Spring 2 to 4¼ psi 143-16-021-07	5	4400	3400	3300	2400	1600	800
	10	7600	6000	5800	3600	2400	1300
	15	11000	9000	7500	4800	3500	1700
	25	15000	15000	10500	8000	5100	2400
	40		17500	13000	11000	7000	3400
	60				14000	9600	4600
	80				15000	11000	5600
	100					12000	7000
	125						8000

The last capacity figure in each group indicates the maximum allowable inlet pressure (except for emergency conditions). The stepped line indicates the recommended maximum capacity and inlet pressure for each orifice for operation within the *optimum performance* range.

NOTE: The performance data is based on normal testing at 70°F flowing temperature. Changes in performance can occur at extreme low flowing temperatures.