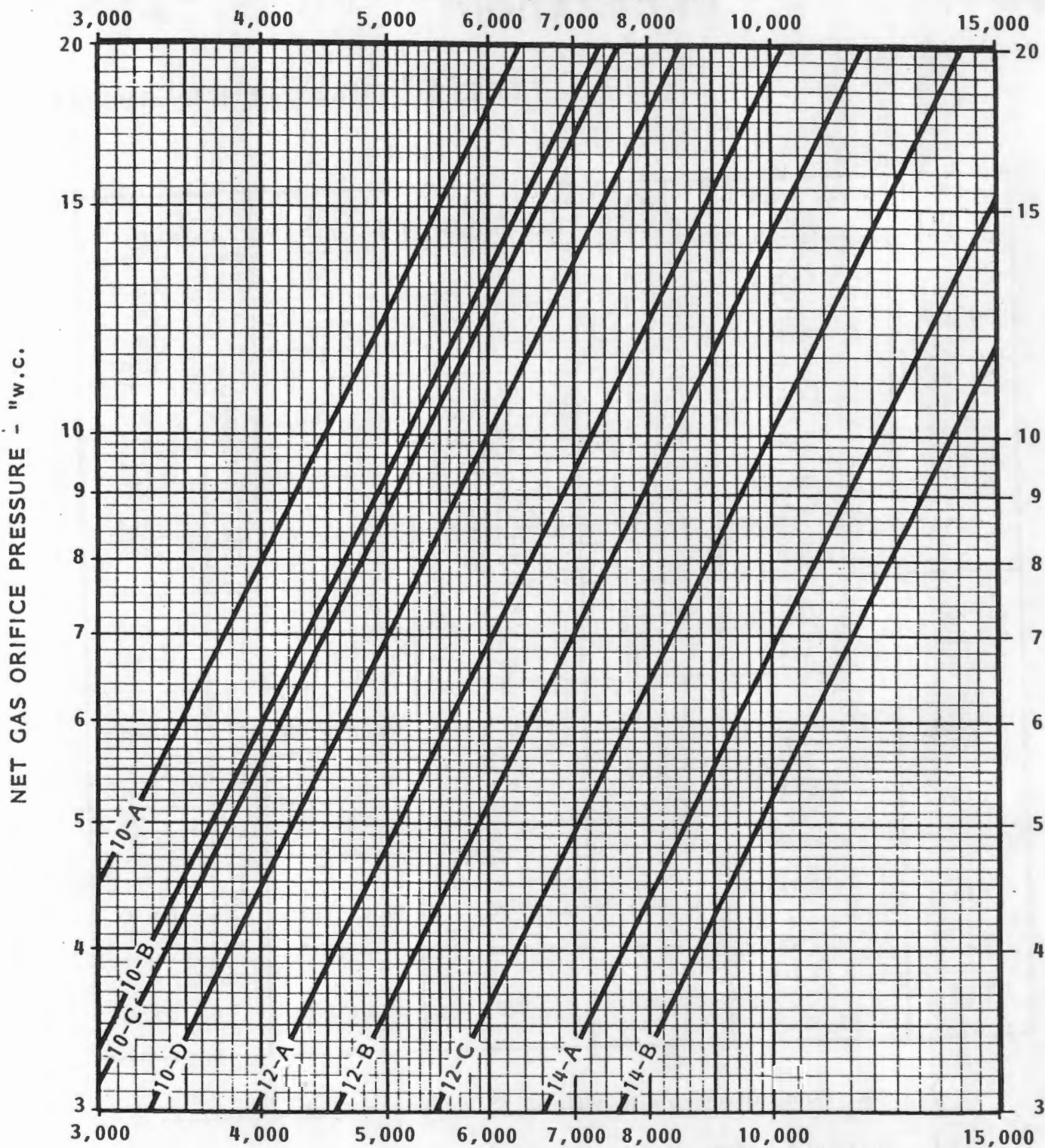


TYPE "F" TURBO-RING BURNER

BURNER MODEL	MAX. INPUT MBH	ORIFICES DRILL SIZE (inch)			CURVE		
		PRIMARY	SECONDARY	TERTIARY			
F10 FL10	Ⓐ 6,050	1/4	3/16	-	GRAPH I, PAGE 2	10-A	
		1/4	Open Tube	-		10-B	
		9/32	7/32	-		10-C	
		5/16	1/4	-		10-D	
F12 FL12	Ⓐ 8,400	1/4	3/16	-		12-A	
		9/32	7/32	-		12-B	
		5/16	1/4	-		12-C	
F14 FL14	Ⓐ 12,300	9/32	7/32	-		14-A	
		5/16	1/4	-		14-B	
F16 FL16	Ⓐ 18,480	5/16	5/32	-		GRAPH II, PAGE 3	16-A
		9/32	7/32	-			16-B
		5/16	1/4	-			16-C
F18 FL18	Ⓐ 30,500	9/32	1/4	Open Tube	18-A		
F18		9/32	5/16	-	18-B		
FL18		5/16	1/4	-	18-B		
		23/64	9/32	-	18-C		
		3/8	19/64	-	18-D		
F20	Ⓑ 34,000	9/32	1/4	Open Tube	20-A		
F22	Ⓒ 42,000	1/4	9/32	Open Tube	22-A		

- Ⓐ Maximum burner input with -0.5" wc boiler firebox draft.
- Ⓑ Maximum burner input with +5.0" wc boiler firebox pressure.
- Ⓒ Maximum burner input with +6.0" wc boiler firebox pressure.

GRAPH I (F10, F12 and F14) MANIFOLD GAS PRESSURE



BURNER CAPACITY - CFH NATURAL GAS (0.60 SP. GR.)

See 1-GEN-10.53 for graph of Control Train Pressure Drops

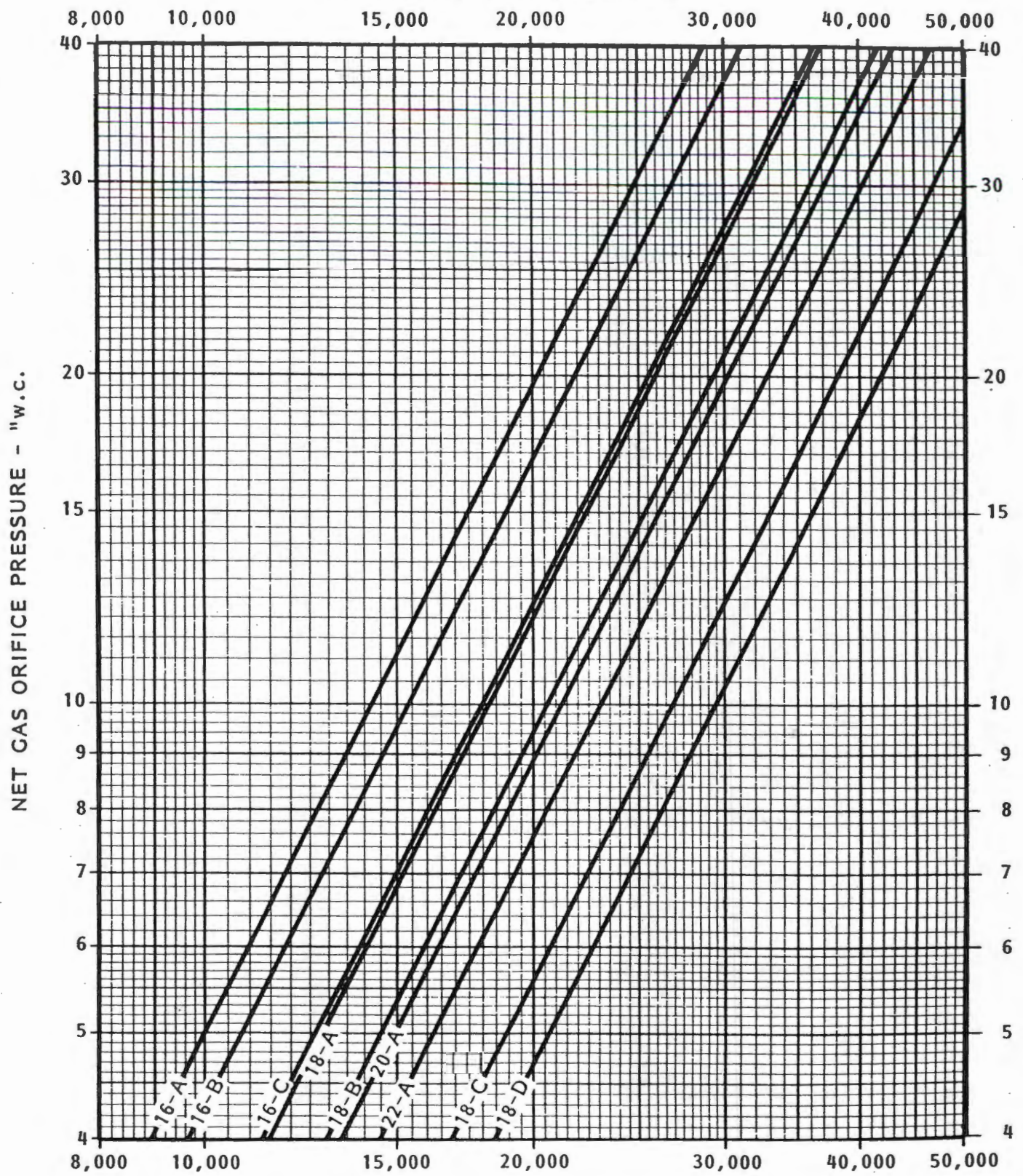
EXAMPLE: F10.1-30 Burner With 4400 CFH Input

Net Gas Orifice Pressure with 5/16" Primary and 1/4" Secondary Orifices (Curve 10-D).....	+5.4" WC
Boiler Firebox Pressure.....	+0.5" WC
Total Pressure Required at Orifice.....	+5.9" WC
Pressure Drop Thru 2-1/2" UL Gas Train (See 1-GEN-10.53)...	<u>3.2" WC</u>
Total Pressure Required at Inlet to Control Train.....	9.1" WC

NOTE: F10 & F14 burners are available for firebox boilers with 20 primary and 10 secondary orifice arrangement for low gas pressure applications. To determine orifice pressure for 20 & 10 orifice arrangement, multiply actual firing rate x 0.8 and use resulting flow rate on orifice gas pressure chart above.

EXAMPLE: To find orifice pressure for a firing rate of 4400 CFH on F10 with 20 and 10 orifice arrangement, 4400 x 0.8 = 3520. Pressure drop with 5/16" (P) and 1/4" (S) = 3.4" WC.

GRAPH II (F16, F18, F20 and F22) MANIFOLD GAS PRESSURE

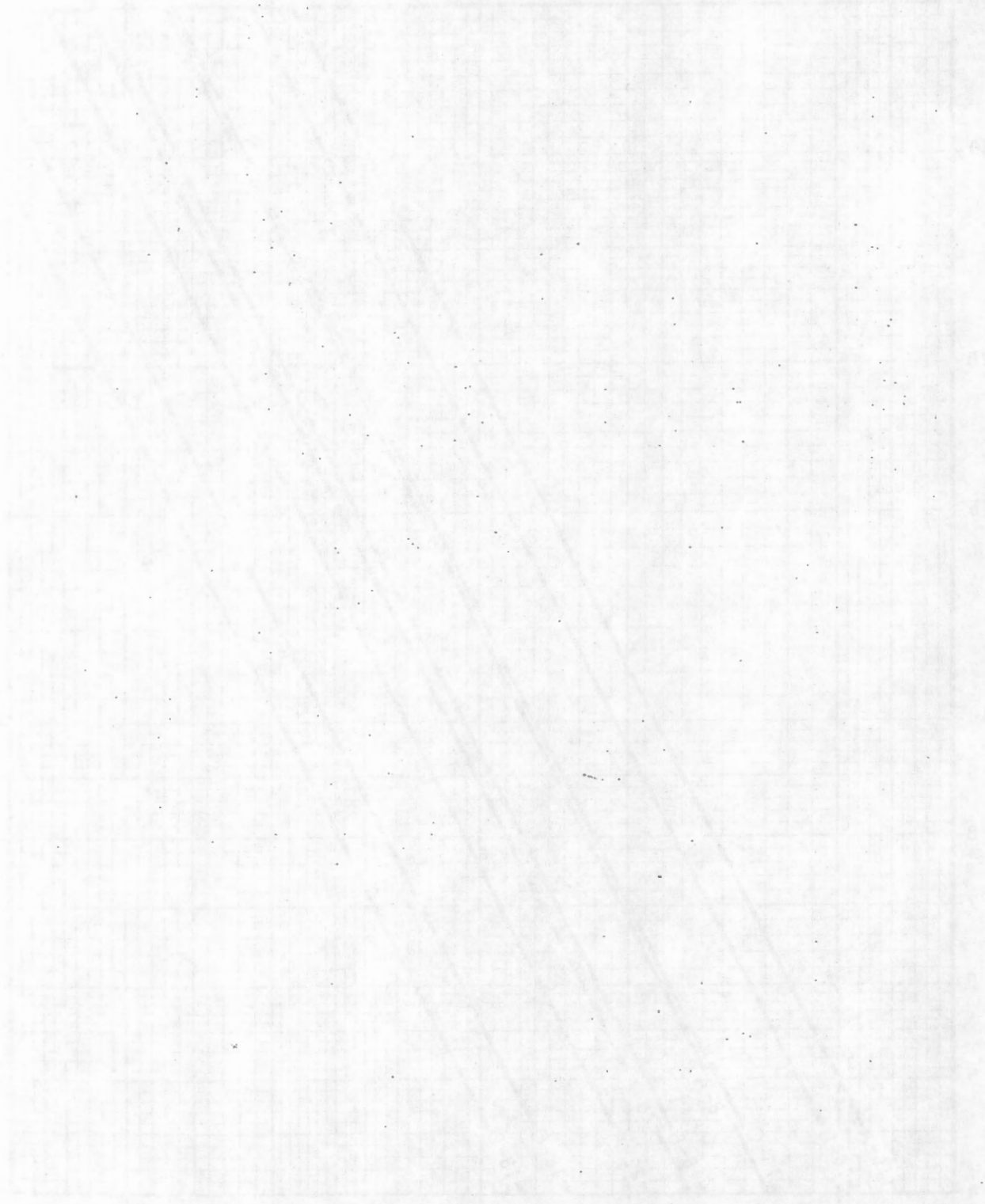


BURNER CAPACITY - CFH NATURAL GAS (0.60 SP. GR.)

See 1-GEN-10.53 for graph of Control Train Pressure Drops

NOTES

1. "Net Gas Pressure" is manifold gauge pressure, plus or minus firebox pressure. Firebox pressure must be subtracted if negative or added if positive.
2. Burner performance will be improved with higher orifice pressure (smaller orifices).



MANHOLD GARAGE

1984

1984

1984

1984