Submittal & Order Entry

Gas-Fired Duct Modules & Furnaces

HMG / HDG Series

Steady - State Efficiency – 80% +

Input – 50,000 to 600,000 BTUH

DATE:_____ **COMPANY:**_____ **CONTACT:**_____ **PROJECT:**_____ **P.O.#:**_____

Tag:

Qty:			26									
Qty:			26									
Qty:			26									
Qty:			26									

☐ Optional High and Low Gas Pressure Switches (Included in 500/600)

☐ Welded Tubes (For Suction Side Application) (Central Furnace)

☐ 2 units to be installed in series (Not All Units/Configurations Available. Refer to Website for Model List)

Submit as Quote: ☐ Order: ☐

Reset Form

Model Number Identification

Example: ***HM G 400 SS 26 B 15 MA 1 N R2 S XX - X***

HM = Tubular Module
HD = Tubular Duct Furnace

G = 1.75" OD Tube/4 Pass/16,667-30,000 BTUH (25,000 BTUH Standard)

Input Rating x 1,000 BTUH = 50 to 600 (See Ratings)

Tube Material (Wall Thickness)
SS = 409 Stainless Steel (.042 min.)
CS = 304 Stainless Steel (.042 min.)
HS = 439 Stainless Steel (.042 min.)

Tube Insertion Length = 26" Standard

Configuration (See Page 2)

Number of Tubes = 3 through 15 (See Pages 3-4)

Firing Mode
SN = 1 Stage On/Off
TN = 2 Stage High/Low
TS = 2 Stage Low Fire Start
MA = Modulating (5:1) for Natural
MD = Modulating (3:1) for Propane
**MB = Modulating (10:1) Seamless Natural (6:1 for Propane)

Power
1 = System/Inducer Voltage 120 VAC
*2 = System/Inducer Voltage 230 VAC
*, ***3 = System/Inducer Voltage 208 VAC

Fuel Type
N = Natural Gas
L = Propane

Housing Material Types
X = No Housing (Standard for HM & HD OEM Insert No Vestibule)
P = Pre-paint Vestibule/Cabinet, Galvanized Airside Wrapper (Standard)
L = Galvanized
C = 304 SS Vestibule/Cabinet and airside wrapper (Premium)
D = 316 SS Vestibule/Cabinet and airside wrapper (Premium)

Housing (No Control Vestibule) - See Page 2
XX = No Housing (HM Series Only)
CX = OEM Insert / No Vestibule / Galvanized Airside Wrapper

Housing (for HD OEM Insert with Control Vestibule) - See Page 2
CK = Indoor Front Exhaust Vestibule
CS = Indoor Separated Combustion Vestibule
CN = Weatherproof Top Exhaust Vestibule
CW = Weatherproof Front Exhaust Vestibule

Housing (for HD Freestanding Duct Furnace) - See Page 2
KX = Indoor Front Exhaust Cabinet
SX = Indoor Separated Combustion Cabinet
NX = Weatherproof Top Exhaust Cabinet
WX = Weatherproof Front Exhaust Cabinet

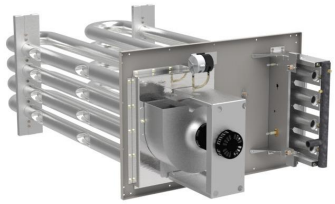
Job Site Elevation
S = 0 to 2,000'
H = 2,001 to 6,999' (Specify)
Y = Above 7000' (Consult Heatco)

Design Temp. Rise (F)
R2 = 20F to 80F (A-G,P,Q Configurations, See Page 3)
R3 = 20F to 60F (H-N,R,S Configurations, See Page 4)

* Not available with the MB (10:1) control on 175,000 and smaller
** Only available for models 100,150,200,250,300,350 & 400
***Not available on 175,000 and smaller

Housing & Utilities

"XX"



Heat Module

Config. ALL

"CX"

Furnace w/ Air Side Wrapper

Config. ALL

"CK"

Indoor Front Exhaust

Config. B, F, M & I

"CS"

Indoor Separated Combustion

Config. B, F, M & I

"CW"

Outdoor Front Exhaust

Config. B, F, M & I

"KX"

Indoor Top Exhaust

Config. ALL

"SX"

Indoor Separated Combustion

Config. B, F, M & I

"NX"

Weatherproof and Top Exhaust

Config. B, F, M & I

"WX"

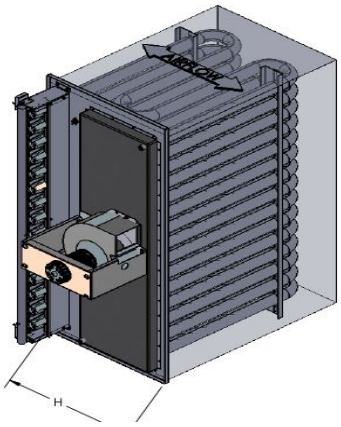
Weatherproof and Front Exhaust

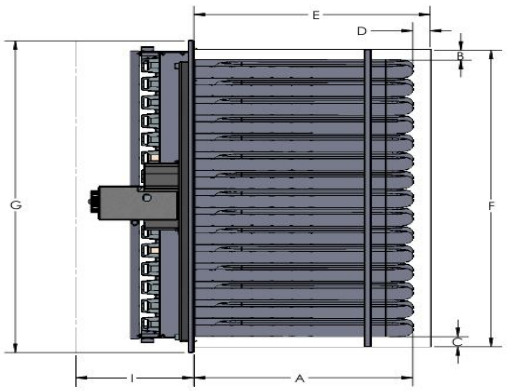
Config. B, F, M & I

UTILITIES

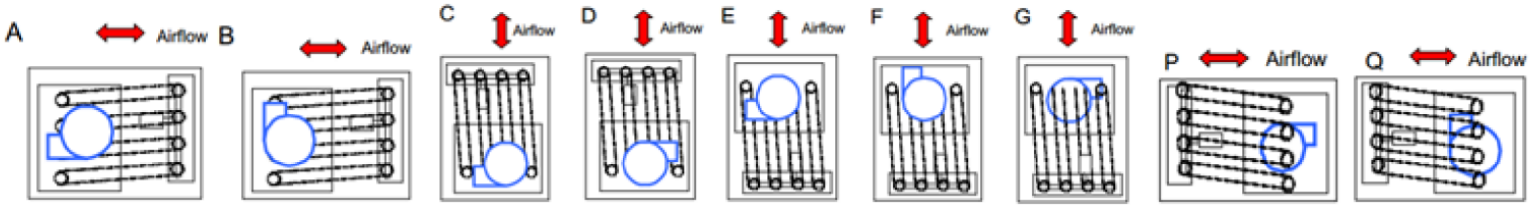
Electrical	***050-175 Units***	***200-400 Units***	***500-600 Units***
	115 VAC FLA 2.4 Amps	115 VAC FLA 4 Amps	115 VAC FLA 5 Amps
	230 VAC FLA 1.5 Amps	208 VAC FLA 2.5 Amps	208 VAC FLA 3.2 Amps
		230 VAC FLA 2.4 Amps	230 VAC FLA 3.1 Amps
Gas	***050-175 Units***	***200-400 Units***	***500-600 Units***
	13.5" w.c. (1/2, lb.) Max. Inlet Pressure	13.5" w.c. (1/2, lb.) Max Inlet Pressure	13.5" w.c. (1/2, lb.) Max Inlet Pressure
	5.0" NAT / 11" LP w.c. Min Inlet Pressure	6.0" NAT / 11" LP w.c. Min Inlet Pressure	6.0" NAT / 12" LP w.c. Min Inlet Pressure
	Inlet 3/4" NPT Connection	Inlet 3/4" NPT Connection	Inlet 1" NPT Connection
Control Inputs			
	Heat Enable - 1 Set 115 VAC Contacts		
	Off/On - 1 Set VAC Contacts, 2-Stage - 2 Sets 24 VAC Contacts, Mod. - 0 to 10 VDC Analog Input (By Others)		
Flue Diameter			
	5" = 050-175, 6" 200-400, 7" 500-600		
	Approved for Category 1 and 3 applications		
	For applications outside our installation guidelines, contact Precision Vent for flue design: http://www.precisionvent.com		

Crossflow (Configurations A-G, P Q)





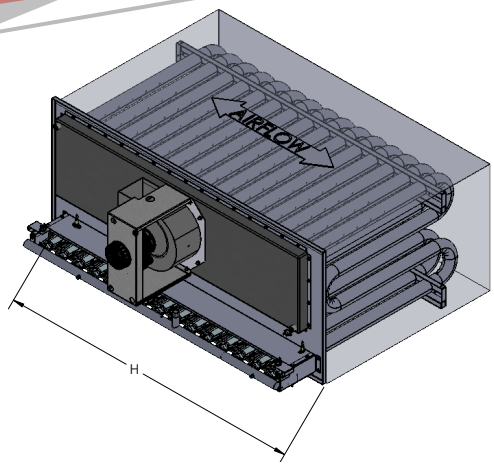
Rise Range: R2 only (80 F Rise, Max.)

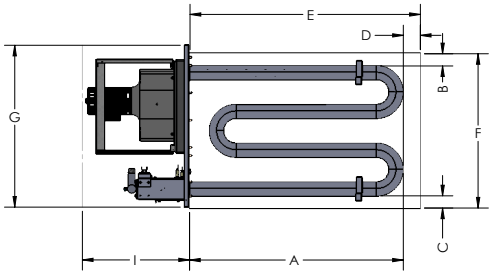


Model # (No. Tubes)	Input Rate	Tube Depth	Min. Clearances to duct / cabinet from tube @ rated PD			Nominal Duct Opening for rated PD		Nom. Duct Area	Vestibule Panel			Output	Temp Rise		Air Flow @ Nom. Duct Opening		Face Velocity		HMG	HDG		
		Nominal "A"	Top "B"	Bottom "C"	Rear "D"	Depth "E"	Height / Width "F"		Height "G"	Width "W"	Vestibule Depth "I" Min.		Min.	Max.	Min.	Max.	Min.	Max.	Module Only	Weight (OEM)	Weight (w/ Vestibule)	Weight (w/ Cabinet)
	Btuh	in.	in.	in.	in.		in.	ft.^{2}	in.	in.	in.	Btuh	°F	°F	cfm	cfm	fpm	fpm	lbs.	lbs.	lbs.	lbs.
	W	mm	mm	mm	mm		mm	m^2	mm	mm	mm	W	°C	°C	m^3/s	m^3/s	m/s	m/s	kg.	kg.	kg.	kg.
HMG Series - Crossflow Airflow (Configurations A-G, P, Q)[1]																						
H(D,M)G 600 (22)	**600,000**						**63.50**	**12.35**	**65.75**			**480,000**			**5556**	**22222**	**450**	**1800**	**282**	**315**	**469**	**674**
	175,842						1613	1.15	1670			140674			2.62	10.48	2.28	9.14	128	143	213	306
H(D,M)G 500 (18)	**500,000**	**26.00**	**1.50**	**1.50**	**2.00**	**28.00**	**52.50**	**10.21**	**54.75**	**19.88**	**13.00**	**400,000**	**20**	**80**	**4630**	**18519**	**454**	**1814**	**234**	**264**	**390**	**558**
	146,535						1334	0.95	1391			117228			2.18	8.73	2.30	9.21	106	120	177	253
H(D,M)G400 (15)	**400,000**						**44.25**	**8.60**	**46.50**			**320,000**			**3704**	**14815**	**430**	**1722**	**195**	**223**	**320**	**460**
	117,228						1124	0.80	1181			93782			1.75	6.99	2.19	8.74	88	101	145	209
H(D,M)G350 (14)	**350,000**						**41.50**	**8.07**	**43.75**			**280,000**			**3241**	**12963**	**402**	**1606**	**186**	**214**	**312**	**443**
	102,575						1054	0.75	1111			82060			1.53	6.11	2.04	8.16	84	97	142	201
H(D,M)G300 (12)	**300,000**	660	38	38	51	711	**36.00**	**7.00**	**38.25**	505	330	**240,000**	11	44	**2778**	**11111**	**397**	**1587**	**163**	**195**	**279**	**391**
	87,921						914	0.65	972			70337			1.31	5.24	2.01	8.06	74	88	127	177
H(D,M)G250 (10)	**250,000**						**30.50**	**5.93**	**32.75**			**200,000**			**2315**	**9259**	**390**	**1561**	**134**	**160**	**240**	**333**
	73,268						775	0.55	832			58614			1.09	4.37	1.98	7.93	193	73	109	151
H(D,M)G200 (8)	**200,000**						**25.00**	**4.86**	**27.25**			**160,000**			**1852**	**7407**	**381**	**1524**	**115**	**132**	**188**	**263**
	58,614						635	0.45	692			46891			0.87	3.49	1.93	7.74	52	60	85	119
H(D,M)G175 (7)	**175,000**						**22.25**	**4.33**	**24.50**			**140,000**			**1620**	**6481**	**375**	**1498**	**93**	**119**	**168**	**233**
	51,287	**26.00**	**1.50**	**1.50**	**2.00**	**28.00**	565	0.40	622	**19.88**	**13.00**	41030	**20**	**80**	0.76	3.06	1.90	7.61	42	54	76	106
H(D,M)G150 (6)	**150,000**						**19.50**	**3.79**	**21.75**			**120,000**			**1389**	**5556**	**366**	**1465**	**85**	**1115**	**157**	**213**
	43,961						495	0.35	552			35168			0.66	2.62	1.86	7.44	39	506	71	97
H(D,M)G125 (5)	**125,000**						**16.75**	**3.26**	**19.00**			**100,000**			**1157**	**4630**	**355**	**1421**	**71**	**105**	**140**	**186**
	36,634						425	0.30	483			29307			0.55	2.18	1.80	7.22	32	48	64	84
H(D,M)G100 (4)	**100,000**						**14.00**	**2.72**	**16.25**			**80,000**			**926**	**3704**	**340**	**1361**	**64**	**82**	**110**	**147**
	29,307						356	0.25	413			23446			0.44	1.75	1.73	6.91	29	37	50	67
H(D,M)G075 (3)	**75,000**	660	38	38	51	711	**11.25**	**2.19**	**13.50**	505	330	**60,000**	11	44	**694**	**2778**	**317**	**1270**	**48**	**55**	**76**	**104**
	21,980						286	0.20	343			17584			0.33	1.31	1.61	6.45	22	25	34	47
H(D,M)G050 (3)	**50,000**						**11.25**	**2.19**	**13.50**			**40,000**			**463**	**1852**	**212**	**847**	**48**	**55**	**76**	**104**
	14,654						286	0.20	343			11723			0.22	0.87	1.07	4.30	22	25	34	47

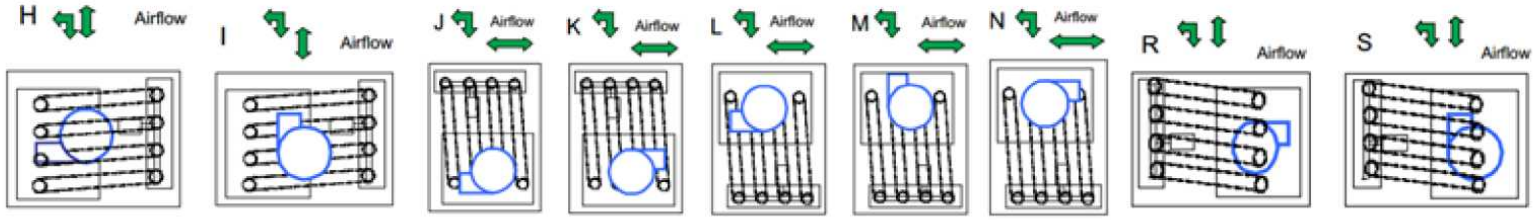
Notes: (1) All models listed have stainless steel heat exchangers

Series Flow (Configurations H-N, R S)





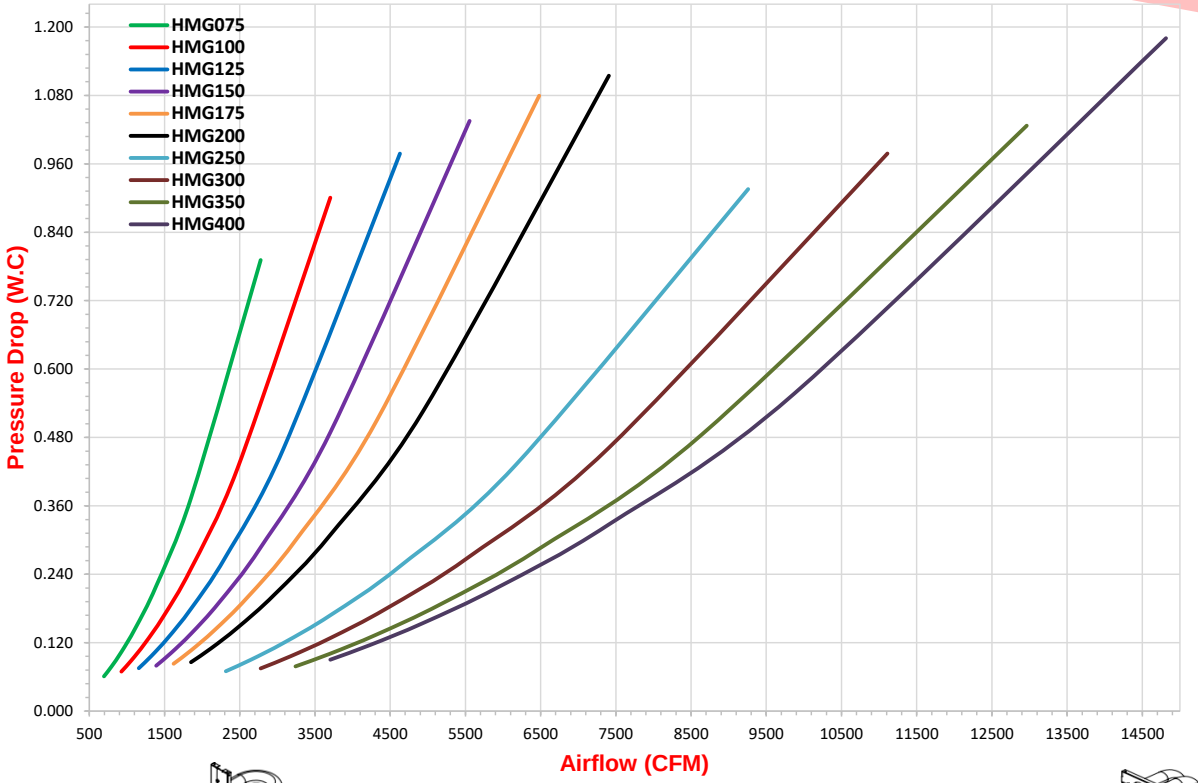
Rise Range: R3 only (60 F Rise, Max.)

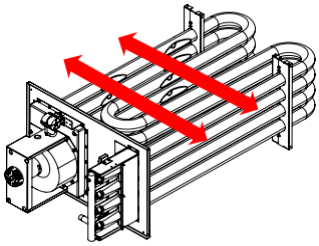


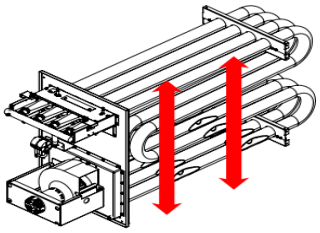
Model # (No. Tubes)	Input Rate	Tube Depth	Min. Clearances to duct / cabinet from tube @ rated PD			Nominal Duct Opening for rated PD		Nom. Duct Area	Vestibule Panel			Output	Temp Rise		Air Flow @ Nom. Duct Opening		Face Velocity		HMG	HDG		
		Nominal "A"	Top "B"	Bottom "C"	Rear "D"	Depth "E"	Height / Width "F"		Height "G"	Width "W"	Vestibule Depth "I" Min.		Min.	Max.	Min.	Max.	Min.	Max.	Module Only	Weight (OEM)	Weight (w/ Vestibule)	Weight (w/ Cabinet)
	Btuh	in.	in.	in.	in.		in.	ft.^{2}	in.	in.	in.	Btuh	°F	°F	cfm	cfm	fpm	fpm	lbs.	lbs.	lbs.	lbs.
	W	mm	mm	mm	mm		mm	m^2	mm	mm	mm	W	°C	°C	m^3/s	m^3/s	m/s	m/s	kg.	kg.	kg.	kg.
HMG Series -Series Airflow (Configurations H-N, R, S)[1]																						
H(D,M)G600 (22)	**600,000**	26.00	1.50	1.50	2.00	28.00	19.00	3.69	19.88	**63.50**	13.00	**480,000**	20	60	**7407**	**22222**	**2,005**	**6015**	**282**	**315**	**469**	**674**
	175,842									1613		140674			3.49	10.48	10.18	30.54	128	143	213	306
H(D,M)G500 (18)	**500,000**									**52.50**		**400,000**			**6173**	**18519**	**1,671**	**5013**	**234**	**264**	**390**	**558**
	146,535									1334		117228			2.91	8.73	8.48	25.45	106	120	177	253
H(D,M)G400 (15)	**400,000**									**46.50**		**320,000**			**4938**	**14815**	**1,337**	**4010**	**195**	**223**	**320**	**460**
	117,228									1181		93782			2.33	6.99	6.79	20.36	88	101	145	209
H(D,M)G350 (14)	**350,000**	660	38	38	51	711	483	0.34	505	43.75	330	**280,000**	11	33	**4321**	**12963**	**1,170**	**3509**	**186**	**214**	**312**	**443**
	102,575									1111		82060			2.04	6.11	5.94	17.81	84	97	142	201
H(D,M)G300 (12)	**300,000**									38.25		**240,000**			**3704**	**11111**	**1,003**	**3008**	**163**	**195**	**279**	**391**
	87,921									972		70337			1.75	5.24	5.09	15.27	74	88	127	177
H(D,M)G250 (10)	**250,000**									32.75		**200,000**			**3086**	**9259**	**835**	**2506**	**134**	**160**	**240**	**333**
	73,268									832		58614			1.46	4.37	4.24	12.72	193	73	109	151
H(D,M)G200 (8)	**200,000**	26.00	1.50	1.50	2.00	28.00	19.00	3.69	19.88	**27.25**	13.00	**160,000**	20	60	**2469**	**7407**	**668**	**2005**	**115**	**132**	**188**	**263**
	58,614									692		46891			1.16	3.49	3.39	10.18	52	60	85	119
H(D,M)G175 (7)	**175,000**									**24.50**		**140,000**			**2160**	**6481**	**585**	**2005**	**93**	**119**	**168**	**233**
	51,287									622		41030			1.02	3.06	2.97	8.91	42	54	76	106
H(D,M)G150 (6)	**150,000**									**21.75**		**120,000**			**1852**	**5556**	**501**	**1504**	**85**	**1115**	**157**	**213**
	43,961									552		35168			0.87	2.62	2.54	7.63	39	506	71	97
H(D,M)G125 (5)	**125,000**									19.00		**100,000**			**1543**	**4630**	**418**	**1253**	**71**	**105**	**140**	**186**
	36,634	660	38	38	51	711	483	0.34	505	483	330	29307	11	33	0.73	2.18	2.12	6.36	32	48	64	84
H(D,M)G100 (4)	**100,000**									16.25		**80,000**			**1235**	**3704**	**334**	**1003**	**64**	**82**	**110**	**147**
	29,307									14		23446			0.58	1.75	1.70	5.09	29	37	50	67
H(D,M)G075 (3)	**75,000**									13.50		**60,000**			**926**	**2778**	**251**	**752**	**48**	**55**	**76**	**104**
	21,980									343		17584			0.44	1.31	1.27	3.82	22	25	34	47
H(D,M)G050 (3)	**50,000**									13.50		**40,000**			**617**	**1852**	**167**	**501**	**48**	**55**	**76**	**104**
	14,654									343		11723			0.29	0.87	0.85	2.54	22	25	34	47

Notes: (1) All models listed have stainless steel heat exchangers

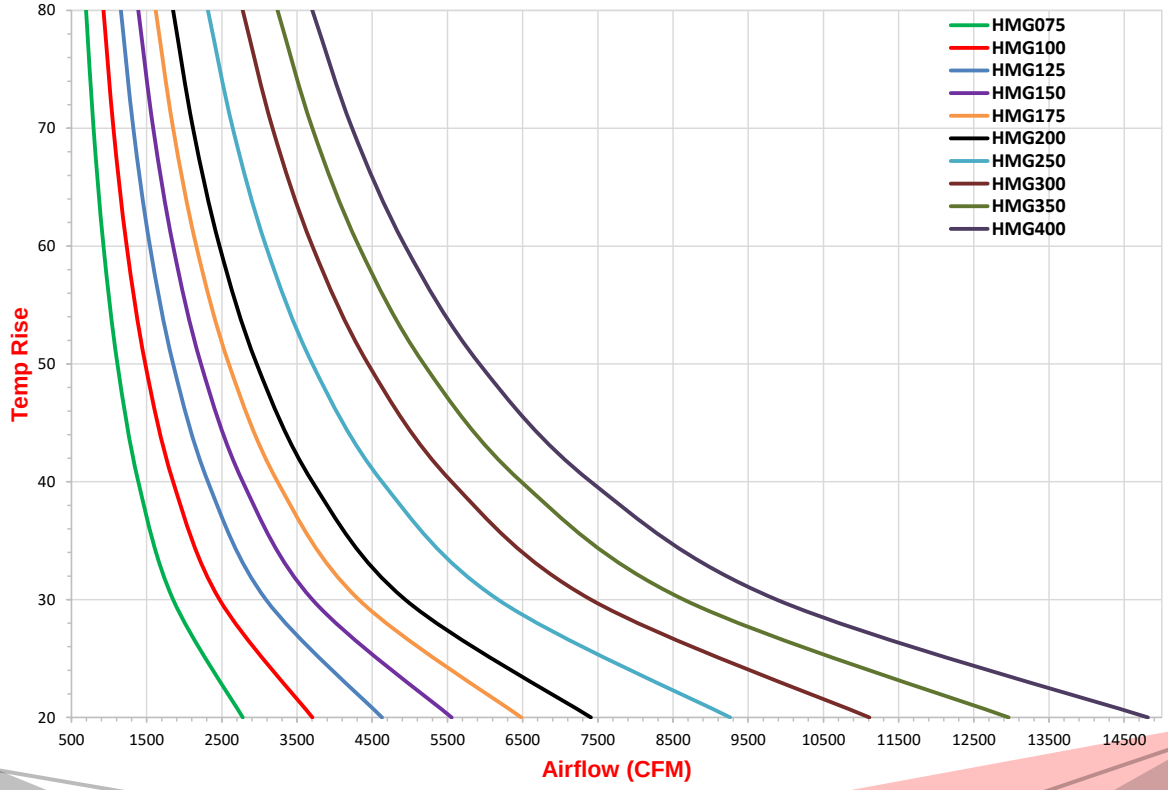
HMG/HDG 75-400 - Configurations A-G, P, Q - Pressure Drop - Cross Flow



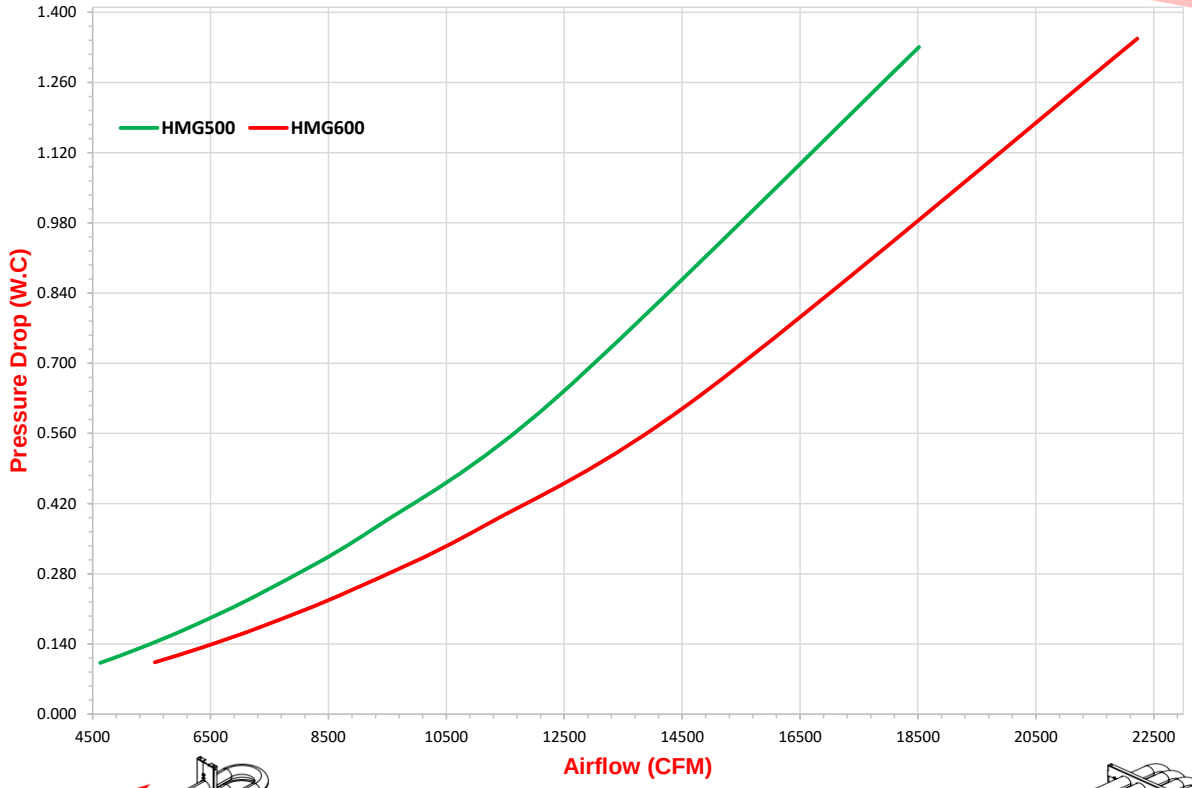


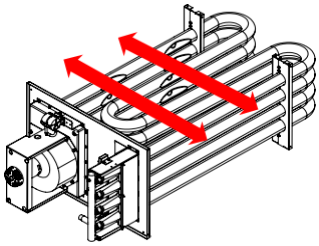


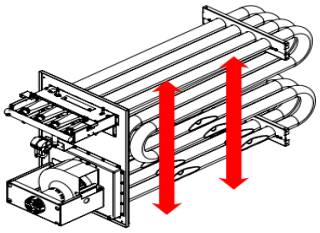
HMG/HDG 75-400 - Temperature Rise - Cross Flow



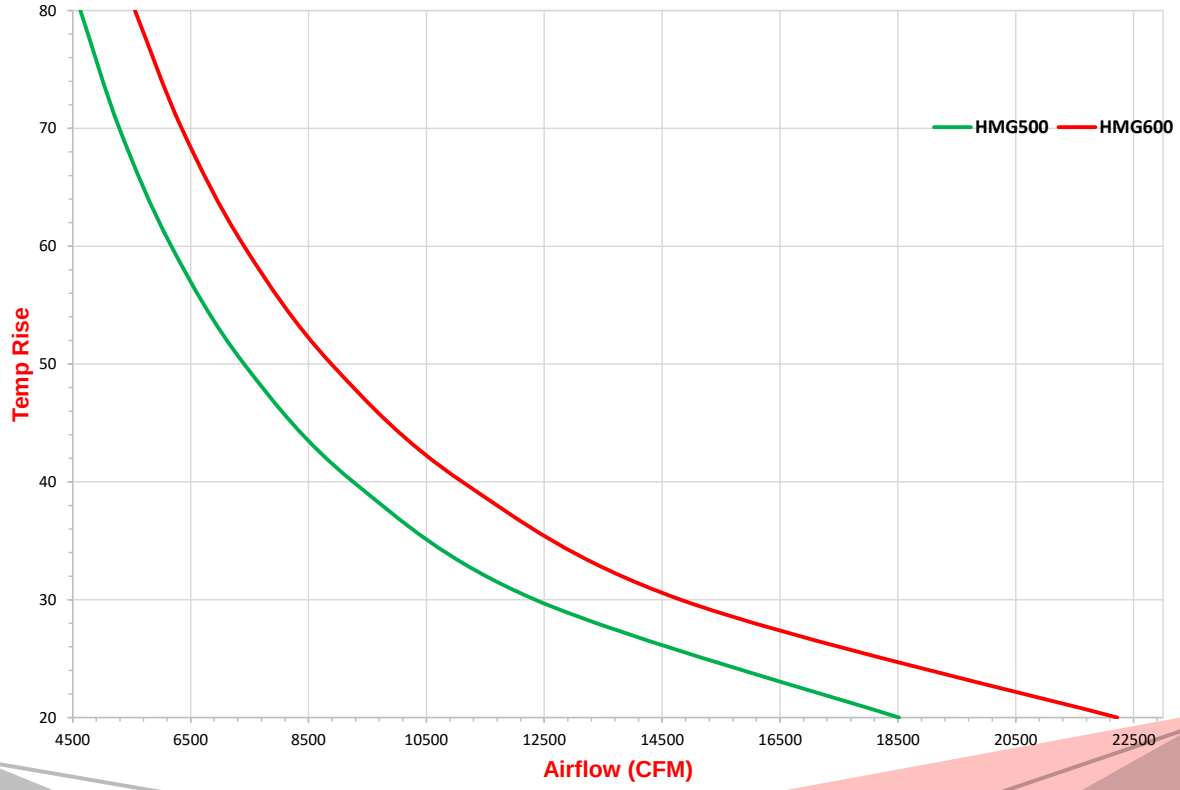
HMG/HDG 500-600 - Configurations A-G, P, Q - Pressure Drop - Cross Flow



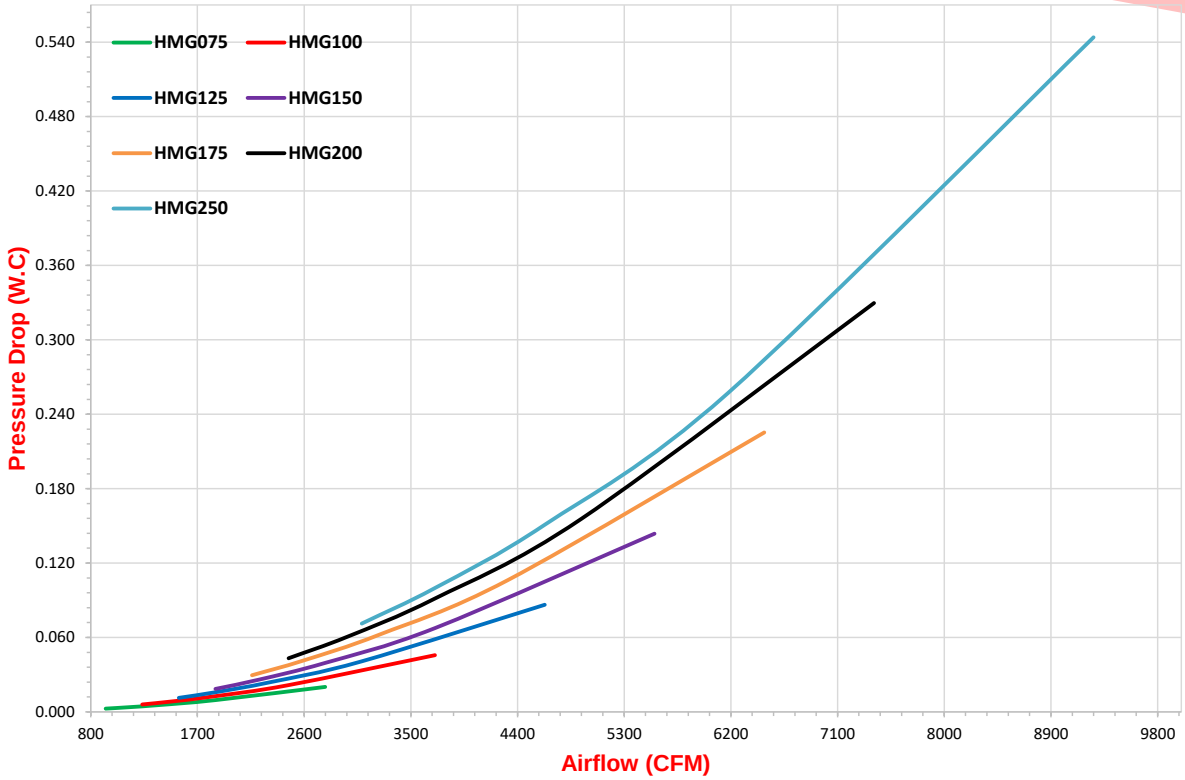


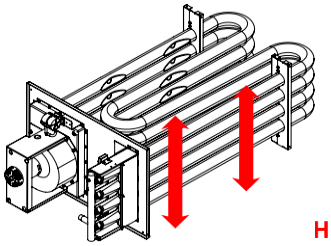


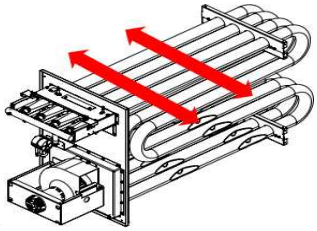
HMG/HDG 500-600 - Temperature Rise - Cross Flow



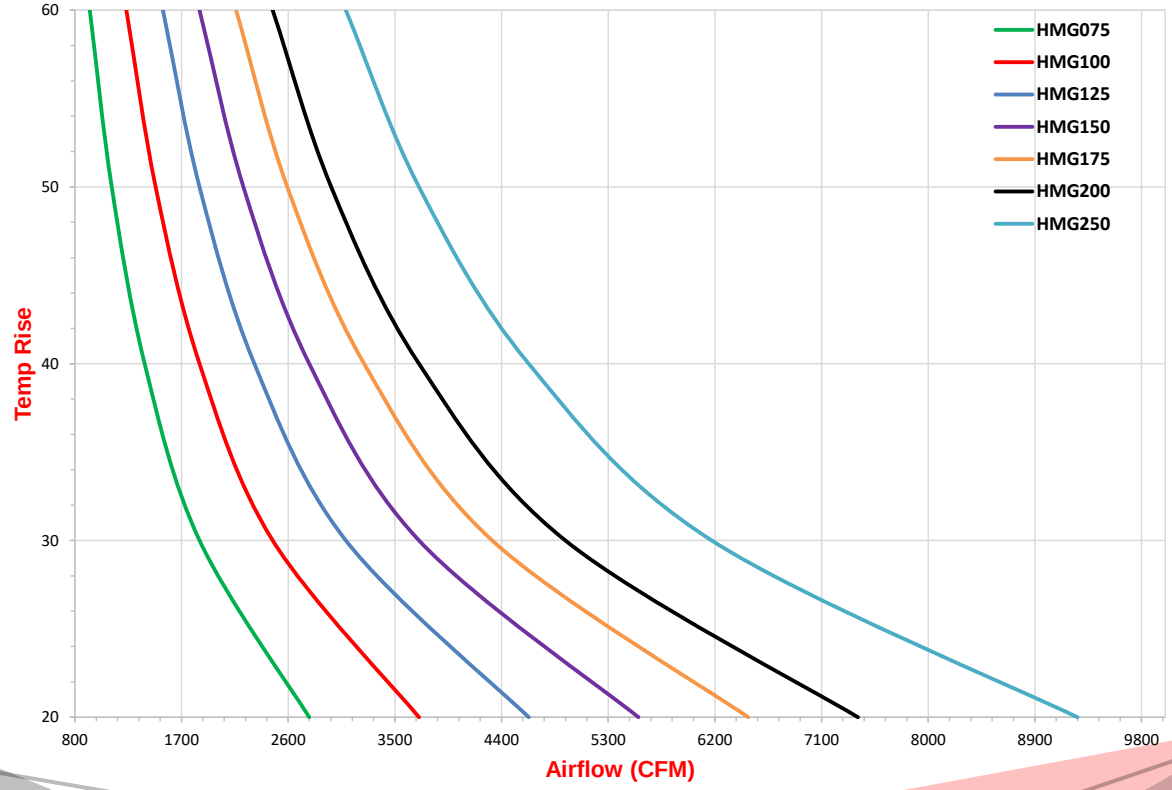
HMG/HDG 75-250 - Configurations H-N, R, S - Pressure Drop - Series Flow



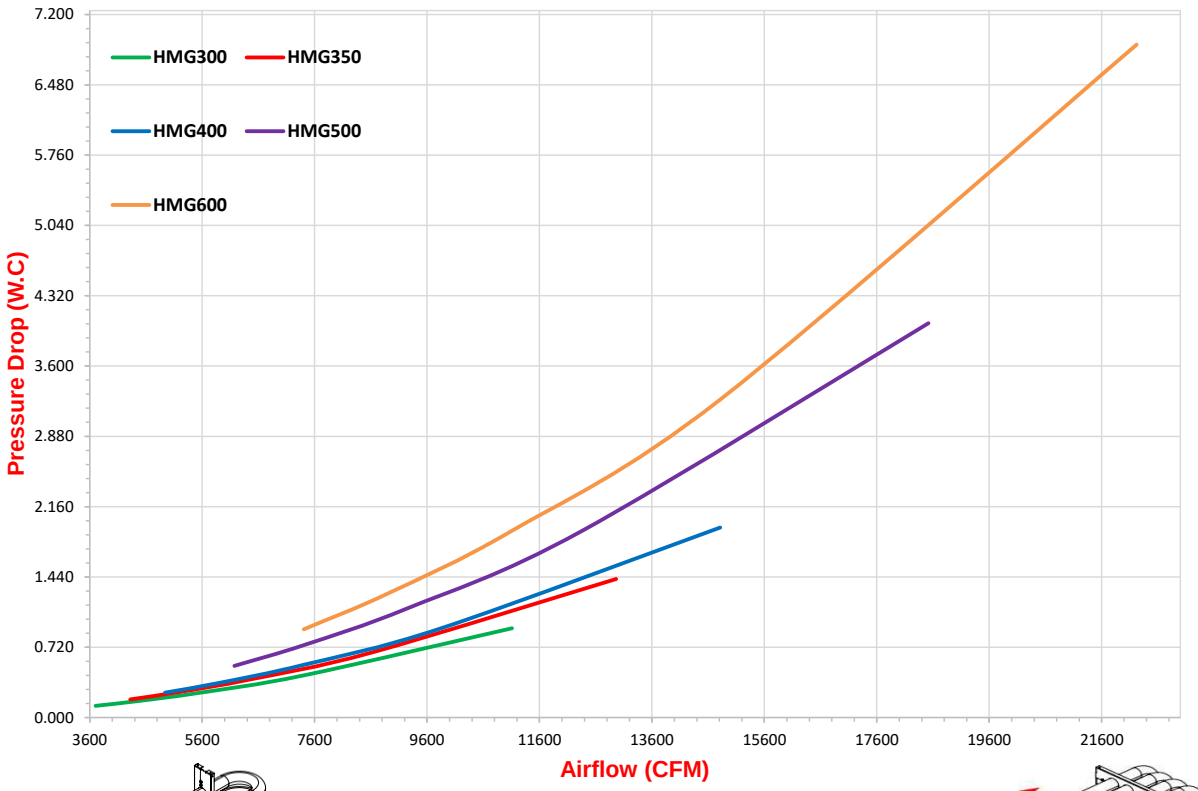


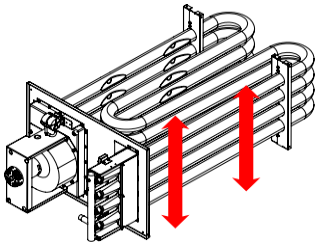


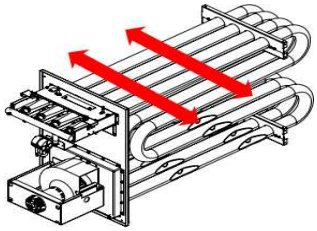
HMG/HDG 75-250 - Temperature Rise - Series Flow



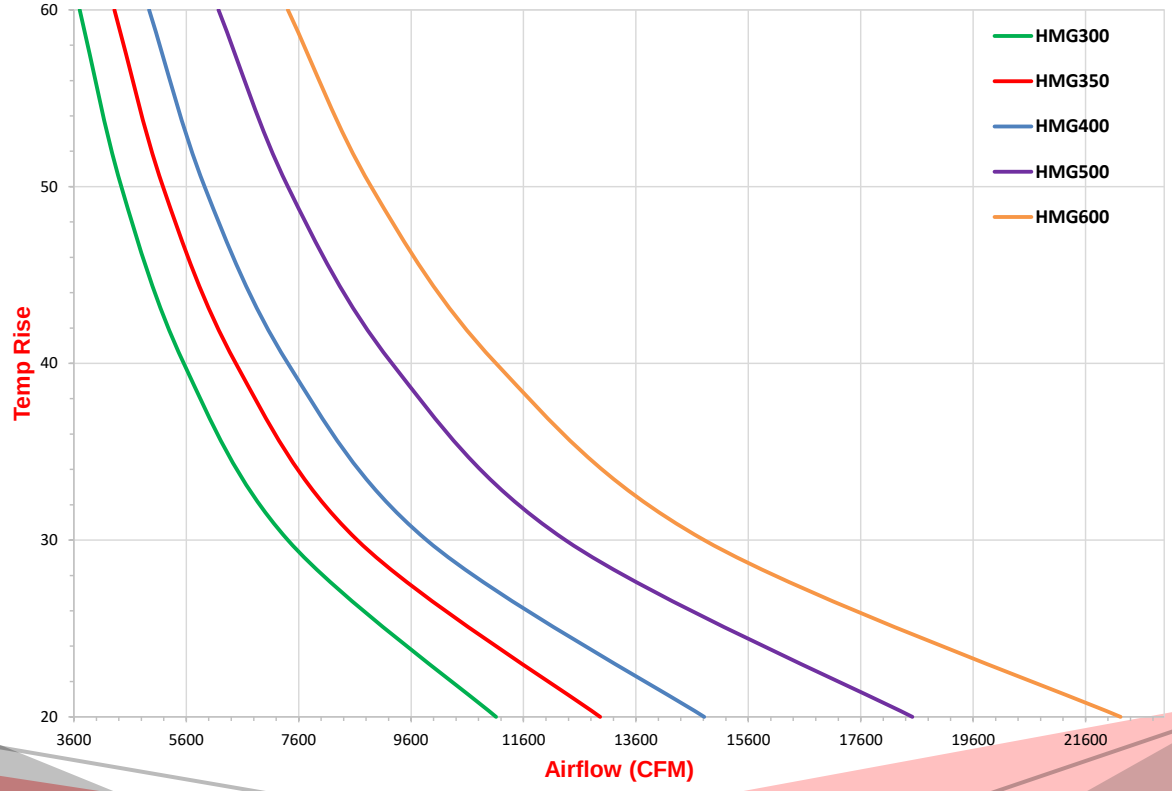
HMG/HDG 300-600 - Configurations H-N, R, S - Pressure Drop - Series Flow



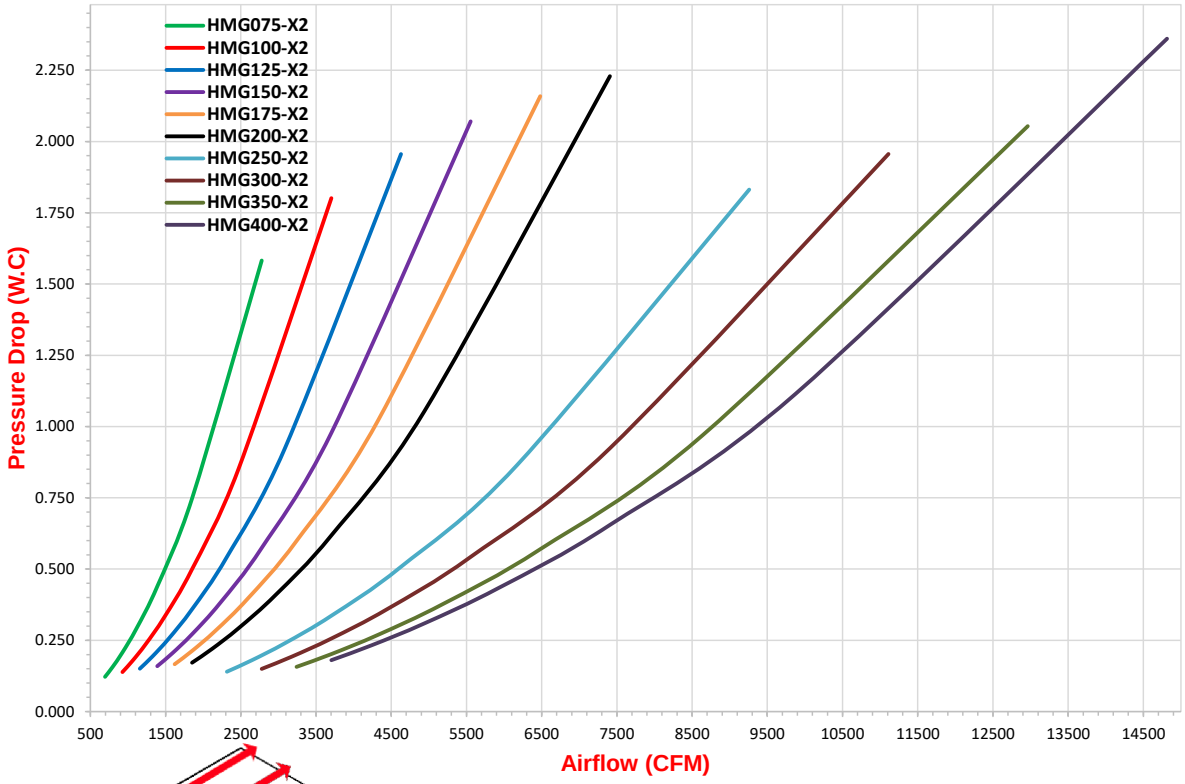


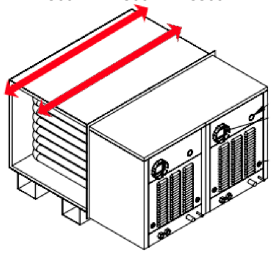


HMG/HDG 300-600 - Temperature Rise - Series Flow

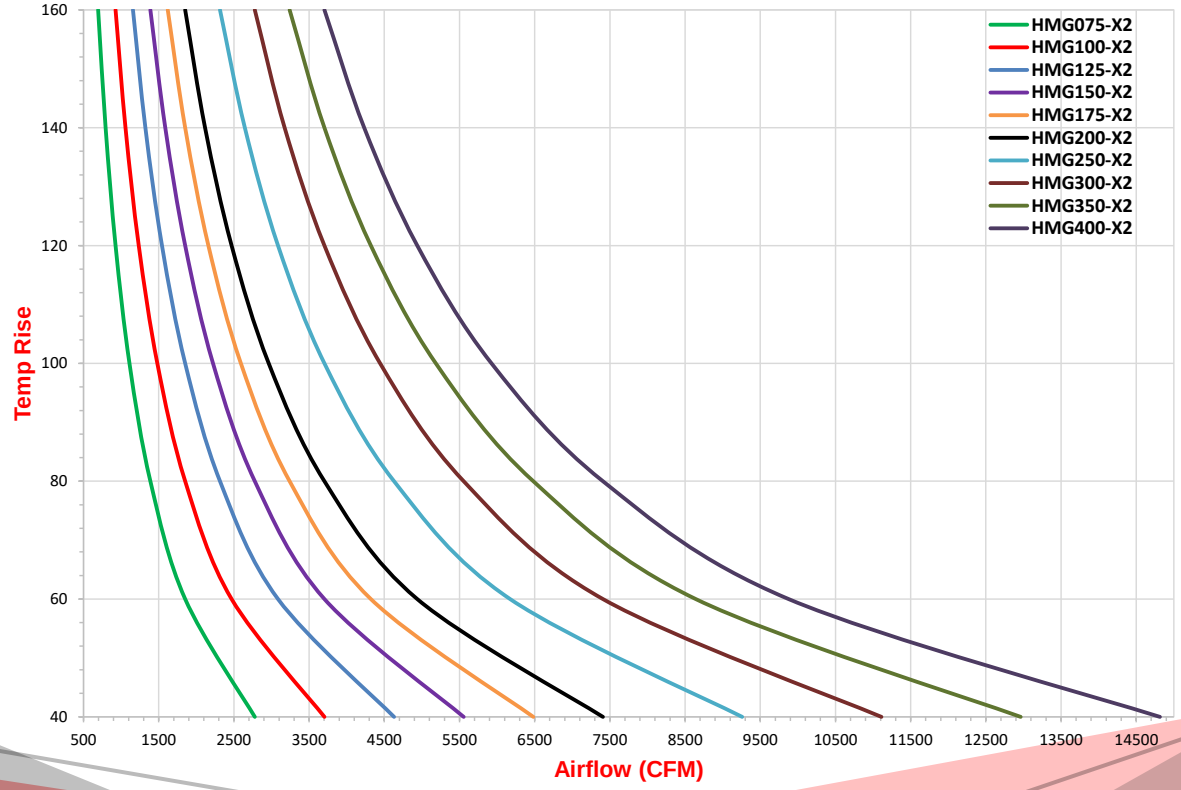


HMG/HDG-B-X2 - Pressure Drop - Cross Flow (Note: Max Discharge Temp is 160°F)

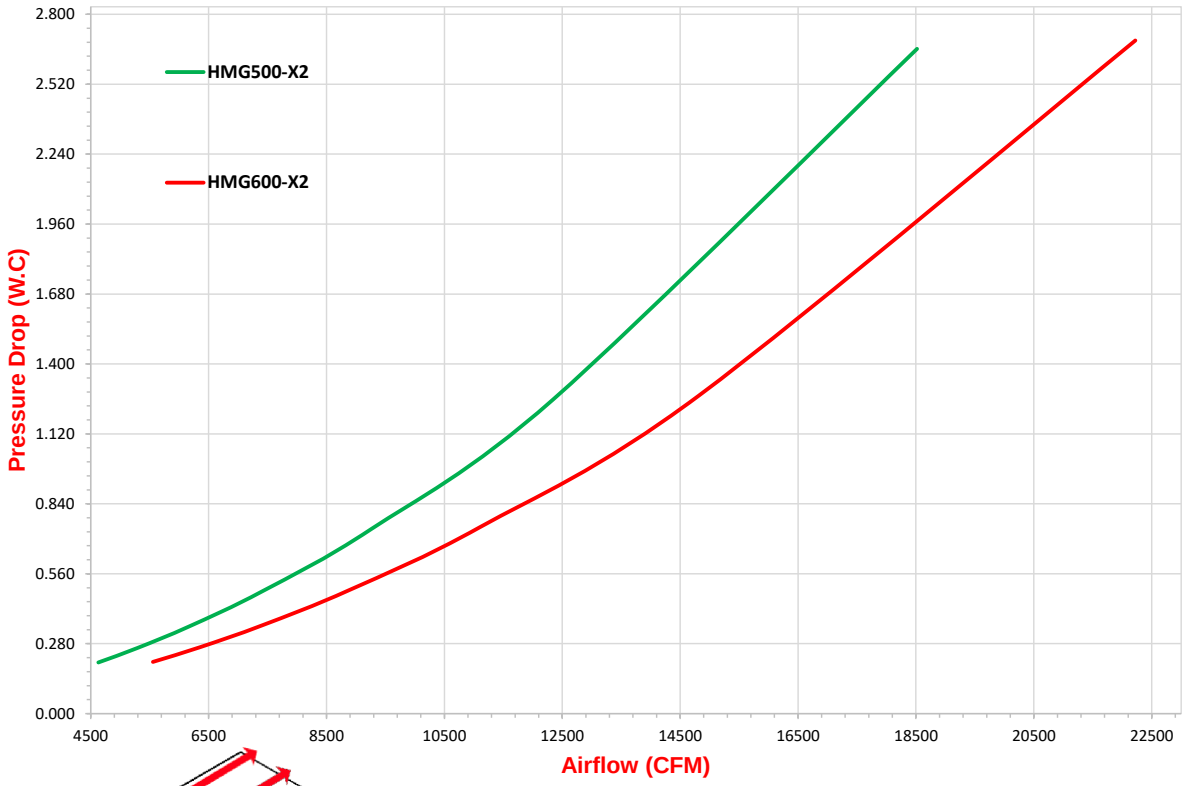


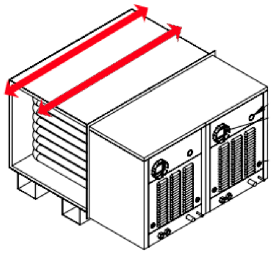
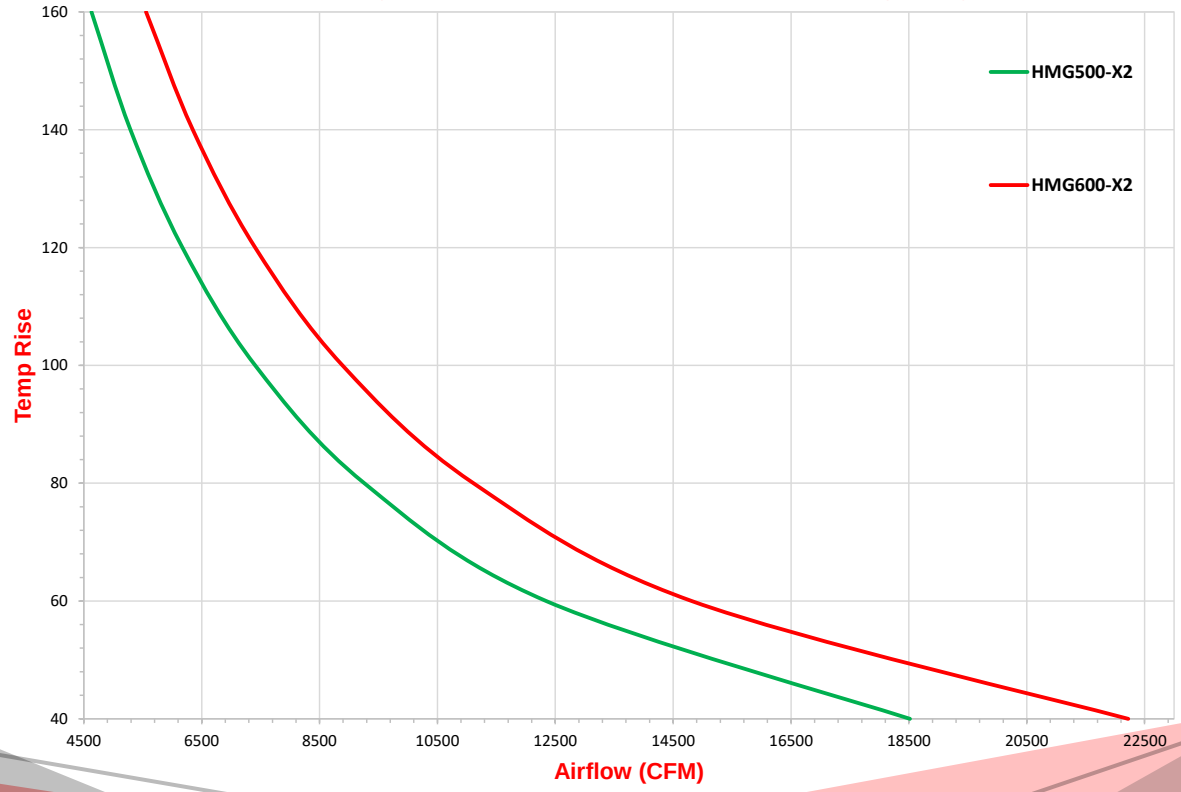


HMG-B-X2 - Temperature Rise - Cross Flow(Note: Max Discharge Temp is 160 °F)



HMG/HDG-B-X2 - Pressure Drop - Cross Flow (Note: Max Discharge Temp is 160°F)





HMG-B-X2 - Temperature Rise - Cross Flow(Note: Max Discharge Temp is 160 °F)