



WEST HARTFORD, CT 06110, U.S.A.

ENGINEERING DATA SHEET

EDS- X-0201-0021-08

SHEET 1 of 1

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PREPARED BY: MPS

APPROVED BY:

SUBJECT: General Screw Compressor Specs and Design Limitations- DB255

MODELS 2510, 2512, 2515, 2516, 2519, & 2522

GENERAL SPECIFICATIONS:

	2510	2512	2515	2516	2519	2522
Rotor Diameter (mm)	255	255	255	255	255	255
Rotor Length to Diameter Ratio (L/D)	1.05	1.25	1.50	1.65	1.90	2.25
Swept Volume (ft ³ /rev)	0.2990	0.3560	0.4271	0.4698	0.5384	0.6375
Displacement at 3550 rpm (CFM)	1061.4	1263.6	1516.3	1667.9	1911.1	2263.1
Rotor Profile	DB	DB	DB	DB	DB	DB
Drive Rotor	Male	Male	Male	Male	Male	Male
Rotation (Looking From Drive Unit)	CCW	CCW	CCW	CCW	CCW	CCW
Design Pressure (psia)	400	400	400	400	400	400

OPERATING LIMITS:

	2510	2512	2515	2516	2519	2522
Minimum Inlet Gas Temperature (°F)	-50	-50	-50	-50	-50	-50
Maximum Suction Temperature (°F)	100	100	100	100	100	100
Maximum Pressure Differential (psid)	250	250	250	250	210	210
Maximum Discharge Temperature (°F)	212	212	212	212	212	212
Maximum Discharge Pressure (psia)	325	325	325	325	325	325
Maximum Drive Speed (rpm)	3600	3600	3600	3600	3600	3600
Recommended Minimum Speed (rpm) *	1750	1750	1750	1750	1750	1750
Minimum Drive Speed (rpm)	1750	1750	1750	1750	1750	1750

* - For efficiency reasons

APPLICATION RANGES:

Model	High - Water Cooled	High	Low	Ultra-Low
Radial Built-in Volume Ratio (Vi)	2.0	2.4	3.6	5.4
Axial Built-in Volume Ratio (Vi)	4.0	4.0	6.0	6.0
Maximum Suction Pressure (psia)	120	120	80	45

APPROVED WORKING FLUIDS:

Refrigerants: R717, R22, R407C, R134a, R404A, R507

Hydrocarbons: Methane, Propane, Propylene

Gases: Dry Air, Carbon-Dioxide, Helium

OIL SPECIFICATIONS: Section 0600

PART LOAD DATA: Section 0209