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Fluid Power Systems

Release
10/5/2012

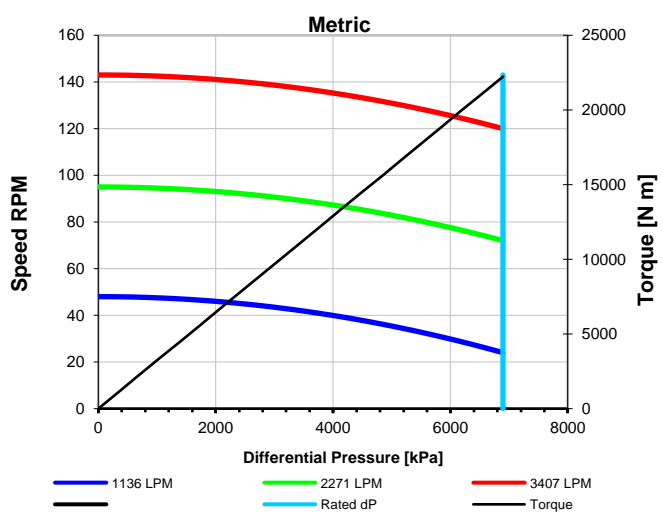
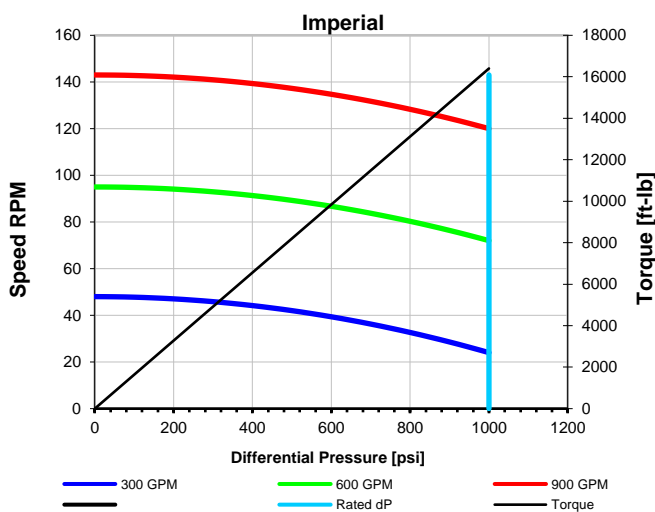
Dimensional Specifications	Rotor		Stator			
	Type 4		Standard		Oversize	
	Imperial	Metric	Imperial	Metric	Imperial	Metric
Tube OD, in. (mm)			8.00	203.2	8.00	203.2
Rotor bore diameter / Tube ID, in. (mm)			6.25	158.8	6.25	158.8
Overall length, in. (mm)	196.0	4978.4	206.0	5232.4	206.0	5232.4
Contour length, in. (mm)	188.0	4775.2	190.0	4826.0	190.0	4826.0
Rotor head length / Stator cutback up length, in. (mm)	8.0	203.2	8.0	203.2	8.0	203.2
Rotor head OD / Stator cutback down length, in. (mm)	4.75	120.7	8.0	203.2	8.0	203.2
Rotor eccentricity, in. (mm)	0.293	7.4				
Rotor head orbit diameter, in. (mm)	5.336	135.5				
Weight, lb. (kg)	880	400	1,235	561	1,235	561
Major diameter, in. (mm)	5.186	131.7	5.753	146.1	5.780	146.8
Minor diameter (rotor) / (stator) Vector Tool™, in. (mm)	4.014	102.0	4.581	116.4	4.634	117.7
Mean diameter* (rotor), in. (mm)	4.600	116.8				
Thread form	Customer specified		Customer specified		Customer specified	

*Mean Diameter odd number of lobes = Measurement from top of the lobe to opposite valley
*Mean Diameter even number of lobes = Average of major and minor diameter measurements

Stator dimensions at 68°F (20°C)
Minor Diameter Compression Fit = Rotor Mean Diameter - Stator Vector Minor Diameter

Minor Diameter Compression Fit	Standard Stator			Oversize Stator		
Temperature, °F (°C)	68 (20)	185 (85)	250 (121)	68 (20)	250 (121)	325 (163)
Interference fit, in. (mm)	0.019	0.073	0.103	-0.034	0.048	0.082
	0.483	1.860	2.623	-0.864	1.209	2.071

Performance Specifications	Imperial	Metric
Flow range, (US)gpm (lpm)	300 - 900	1136 - 3407
Speed range, rpm (rpm)	48 - 143	48 - 143
Speed ratio, rev/(US)gpm (rev/lpm)	0.16	0.042
Recommended max differential pressure, psi (kPa)	1,000	6,895
Torque ratio, lb-ft/psi (N-m/kPa)	16.4	3.225
Torque at recommended max differential pressure lb-ft (N-m)	16,400	22,235
Stall torque, lb-ft (N-m)	32,800	44,470



Performance curves for reference only, actual performance will vary depending on fit, temperature, fluid and condition.

Vector Tool is a trade mark of National Oilwell Varco.

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