

Service Information



Date: May 12, 2011

Ref. No.: NS-07-11

To: Service Manual Holders
National, International, Canada
Field Sales and Waynesboro Personnel

SUBJECT: Quantum™ and Quantum™ LX Slide Valve Travel Ratio (Revision of NS-01-06)

NOTE: This bulletin adds information for the NGC 200, 250, 400 and 450 models to the Slide Valve Travel Ratio chart.

Under "Factory Setup" on the Quantum™ micro you will see a display called "Factory Setpoints." Under this you will see an adjustable setpoint labeled "Slide Valve Travel". Change the "Slide Valve Travel" setpoint to the number indicated on the chart under Micro Slide Valve Travel.

For a Quantum™ LX panel, log in to User Level 3 on the micro and from the main menu select "Calibration", then "Capacity/Volume". On this screen under the "Capacity" section you will see an adjustable setpoint labeled "Travel". Change this setpoint to the number indicated on the chart under Micro Slide Valve Travel.

Failure to set this Slide Valve Travel Setpoint may result in over compression, under compression, excessive noise, excessive vibration, high motor amp draw, high engine power consumption, high discharge temperatures and the inability to calibrate the slide valve and slide stop properly.

Minimum VI, maximum VI, and slide valve travel give important information that is necessary for the proper setup and calibration of the slide position feedback devices when first installing a Frick® compressor.

If you have questions, please feel free to give me a call.

Best regards,

A handwritten signature in black ink that reads "Joe".

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Frick Compressor Volume Ratio and Capacity Information

Bare Model	Package Model	Bare Model Serial Number	Standard Slide Valve		Low Vi Slide Valve		Theoretical Minimum Capacity	Micro Slide Valve Travel	Micro Slide Stop Travel
			Min Vi	Max Vi	Min Vi	Max Vi			
XJS/XJF 95	RXB/RXF 12, 15, 19	all	2.2, 3.5, 5.0		n/a	n/a	25%	165.6	76.2(50.8)
XJS/XJF 120	RXB/RXF 24,30, 39, 50	all	2.2, 3.5, 5.0		n/a	n/a	25%	171.7	76.2(50.8)
XJF/XJB 151 & 151X	RXF 58, 68, 85, 101	all	2.2, 3.5, 5.0		n/a	n/a	21%	181.0	76.2(50.5)
TDSH 163S	RWB-II 60	all	2.2	5.0	n/a	n/a	12%	195.6	76.2
TDSH 163L	RWB-II 38, 76	all	2.2	5.0	n/a	n/a	12%	195.6	76.2
TDSH 193S	RWB-II 100	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
TDSH 193L	RWB-II 134	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
TDSH 233S	RWB-II 177	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
TDSH 233L	RWB-II 222	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
TDSH 233XL	RWB-II 270	all	2.2	5.0	1.7	3.0	23%	158.6	76.2
TDSH 283S	RWB-II 316	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
TDSH 283L	RWB-II 399	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
TDSH 283LY	YS chiller (S7 compressor)	all	n/a	n/a	1.7	2.5	8%	194.1	56.5
TDSH 283SX	RWB-II 480	all	2.2	4.2	1.7	2.7	23%	165.5	64.8
TDSH/TDSB 355S	RWB-II 496	0153L / 0011SBS and lower	2.2	5.0	1.7	3.0	18%	185.6	76.2
TDSH/TDSB 355S	RWB-II 496	0154L / 0012SBS and higher	2.2	5.0	1.7	3.0	12%	213.9	76.2
TDSH/TDSB 355L	RWB-II 676	0222K / 0025SBL and lower	2.2	5.0	1.7	3.0	18%	185.6	76.2
TDSH/TDSB 355L	RWB-II 676	0223K / 0026SBL and higher	2.2	5.0	1.7	3.0	12%	213.9	76.2
TDSH/TDSB 355XL	RWB-II 856	0109XL / 0052SBXL and lower	2.2	5.0	1.7	3.0	30%	146.5	76.2
TDSH/TDSB 355XL	RWB-II 856	0110XL / 0053SBXL and higher	2.2	5.0	1.7	3.0	18%	184.6	76.2
TDSB 355U	RWB-II 1080	all	2.4	4.5	1.7	2.6	26%	141.5	58.0
TDSH 408S	RWB-II 852	all	2.2	5.0	1.7	3.0	12%	193.0	76.2
TDSH 408L	RWB-II 1179	all	2.2	5.0	1.7	3.0	12%	193.0	76.2
TDSH 408XL	RWB-II 1395	all	2.2	4.3	1.7	2.7	15%	183.9	66.4
API 408S		all	2.2	5.0	1.7	3.0	12%	193.0	76.2
API 408L		all	2.2	5.0	1.7	3.0	12%	193.0	76.2
API 408XL		all	2.2	4.3	1.7	2.7	21%	163.4	66.4
SGC 1913	RWF 100	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 1918	RWF 134	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 2313	RWF 177	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 2317	RWF 222	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 2321	RWF 270	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 2813	RWF 316	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 2817	RWF 399	all	2.2	5.0	1.7	3.0	12%	195.6	76.2
SGC 2821	RWF 480	all	2.2	5.0	1.7	3.0	12%	213.9	76.2
SGC 2824	RWF 546	all	2.0	4.1	n/a	n/a	18%	185.6	76.2
SGC 3511	RWF-II 496	all	2.2	5.0	1.7	3.0	12%	213.9	76.2
SGC 3515	RWF-II 676	all	2.2	5.0	1.7	3.0	12%	213.9	76.2
SGC 3519	RWF-II 856	all	2.2	5.0	1.7	3.0	18%	184.6	76.2
SGC 3524	RWF-II 1080	all	2.4	4.5	1.7	2.6	26%	141.5	58.0
NGC 100		all	2.2	5.0	1.7	3.0	12%	195.6	76.2
NGC 150		all	2.2	5.0	1.7	3.0	12%	195.6	76.2
NGC 200		all	2.2	5.0	1.7	3.0	12%	195.6	76.2
NGC 250		all	2.2	5.0	1.7	3.0	12%	195.6	76.2
NGC 300		all	2.0	4.1	n/a	n/a	15%	197.3	76.2
NGC 400		all	2.2	5.0	n/a	n/a	12%	213.9	76.2
NGC 450		NGC 450E0001Z only	2.0	3.3	n/a	n/a	26%	141.5	58.0
NGC 450		All NGC 450 except E0001Z	2.2	3.9	n/a	n/a	26%	141.5	58.0

NOTE: For 95, 120, and 151mm compressors, the slide stop travel value in parentheses is the travel from Vi=2.2 to Vi=3.5.