Kobelco KS23LNB Gas Screw Compressor Flow Table (400 hp)

Discharge Pressure (psig)

Suction Pressure (psig)

	85	100	120	140	160	180	200	220	240	260	280	300
0	0.971, 147 5, 100%	0.964, 160 5, 100%	0.953, 176 5, 100%	0.943, 192 5, 100%	0.931, 208 5, 100%	0.919, 224 5, 100%	0.907, 240 5, 100%	0.894, 256 5, 100%	0.881, 279 5, 100%	0.868, 288 5, 100%	0.854, 304 5, 100%	0.840, 320 5, 100%
5	1.377, 161 3.65, 100%	1.368, 177 3.65, 100%	1.356, 198 3.65, 100%	1.349, 212 5, 100%	1.337, 228 5, 100%	1.325, 244 5, 100%	1.312, 260 5, 100%	1.299, 276 5, 100%	1.285, 292 5, 100%	1.271, 308 5, 100%	1.257, 324 5, 100%	1.242, 341 5, 100%
10	1.763, 169 2.9, 100%	1.752, 189 2.9, 100%	1.741, 209 3.65, 100%	1.729, 231 3.65, 100%	1.721, 248 5, 100%	1.709, 264 5, 100%	1.697, 280 5, 100%	1.683, 296 5, 100%	1.670, 312 5, 100%	1.656, 329 5, 100%	1.641, 345 5, 100%	1.626, 361 5, 100%
15	2.512, 174 2.2, 100%	2.141, 194 2.9, 100%	2.126, 220 2.9, 100%	2.115, 243 3.65, 100%	2.101, 263 3.65, 100%	2.087, 284 3.65, 100%	2.081, 300 5, 100%	2.068, 316 5, 100%	2.055, 332 5, 100%	2.041, 349 5, 100%	2.026, 365 5, 100%	1.832, 5, 100%
20	2.548, 173 2.2, 100%	2.532, 198 2.2, 100%	2.516, 225 2.9, 100%	2.501, 252 2.9, 100%	2.489, 275 3.65, 100%	2.475, 296 3.65, 100%	2.454, 318 3.65, 100%	2.445, 339 3.65, 100%	2.440, 364 5, 100%	2.424, 370 5, 100%	2.195, 370 5, 96.3%	1.950, 5, 92.3%
25	2.965, 171 2.2, 100%	2.929, 198 2.2, 100%	2.907, 232 2.2, 100%	2.891, 257 2.9, 100%	2.875, 284 2.9, 100%	2.863, 308 3.65, 100%	2.843, 330 3.65, 100%	2.833, 350 3.65, 100%	2.800, 370 3.65, 99.7%	2.533, 370 3.65, 96.1%	2.366, 370 5, 93.7%	2.067, 370 5, 88.5%
30	3.381, 190 2.9, 100%	3.348, 197 2.2, 100%	3.304, 231 2.2, 100%	3.282, 266 2.2, 100%	3.267, 290 2.9, 100%	3.249, 316 2.9, 100%	3.233, 342 2.9, 100%	3.222, 362 3.65, 100%	3.049, 370 3.65, 98.0%	2.788, 370 3.65, 94.8%	2.528, 370 3.65, 91.6%	2.181, 370 3.65, 78.2%
35	3.231, 172 3.65, 100%	3.477, 216 2.9, 100%	3.705, 229 2.2, 100%	3.679, 264 2.2, 100%	3.657, 298 2.2, 100%	3.642, 322 2.9, 100%	3.619, 348 2.9, 100%	3.556, 370 2.9, 99.4%	3.287, 370 3.65, 96.5%	3.016, 370 3.65, 93.5%	2.740, 370 3.65, 90.6%	2.438, 370 3.65, 77.5%
40		4.147, 257 3.65, 100%	4.131, 248 2.9, 100%	4.079, 263 2.2, 100%	4.058, 300 2.9, 100%	4.032, 331 2.2, 100%	4.017, 354 2.9, 100%	3.877, 370 2.9, 98.7%	3.553, 370 2.9, 95.6%	3.283, 370 3.65, 92.9%	3.036, 370 3.65, 90.5%	2.643, 370 3.65, 74.3%
45		4.546, 265 3.65, 100%	4.526, 253 2.9, 100%	4.485, 261 2.2, 100%	4.458, 307 2.9, 100%	4.430, 330 2.2, 100%	4.407, 365 2.2, 100%	4.179, 370 2.9, 98.0%	3.864, 370 2.9, 95.2%	3.535, 370 2.9, 92.3%	3.218, 370 3.65, 88.1%	2.835, 370 3.65, 71.0%
50			4.928, 303 3.65, 100%	4.908, 286 2.9, 100%	4.859, 295 2.2, 100%	4.830, 329 2.2, 100%	4.805, 363 2.2, 100%	4.495, 370 2.9, 97.5%	4.159, 370 2.9, 94.7%	3.838, 370 2.9, 92.1%	3.444, 370 2.9, 85.6%	2.997, 370 2.9, 67.2%
55			5.331, 315 3.65, 100%	5.311, 292 2.9, 100%	5.289, 318 2.9, 100%	5.234, 327 2.2, 100%	5.206, 362 2.2, 100%	4.822, 370 2.2, 97.1%	4.434, 370 2.9, 94.2%	4.128, 370 2.9, 91.9%	3.738, 370 2.9, 85.8%	3.274, 370 2.9, 68.2%
60				5.713, 349 3.65, 100%	5.692, 325 2.9, 100%	5.642, 327 2.2, 100%	5.610, 361 2.2, 100%	5.211, 370 2.2, 97.3%	4.737, 370 2.2, 93.9%	4.377, 370 2.9, 91.3%	4.015, 370 2.9, 85.4%	3.555, 370 2.9, 69.2%
65					5.944, 370 3.65, 99.0%	6.073, 357 2.9, 100%	6.017, 359 2.2, 100%	5.605, 370 2.2, 97.4%	5.133, 370 2.2, 94.3%	4.661, 370 2.2, 91.2%	4.216, 370 2.9, 82.5%	3.825, 370 2.9, 69.7%
70					6.195, 370 3.65, 98.5%	5.914, 370 3.65, 96.4%	6.164, 370 2.9, 98.1%	6.023, 370 2.2, 97.6%	5.476, 370 2.2, 94.3%	5.050, 370 2.2, 91.6%	4.470, 370 2.2, 81.7%	4.029, 370 2.9, 67.9%
75						6.162, 370 3.65, 95.7%	5.855, 370 3.65, 94.0%	6.429, 370 2.2, 97.7%	5.882, 370 2.2, 94.6%	5.381, 370 2.2, 91.7%	4.880, 370 2.2, 85.4%	4.280, 370 2.2, 68.0%
80						6.417, 370 3.65, 95.0%	6.104, 370 3.65, 93.4%	6.382, 370 2.9, 95.1%	6.253, 370 2.2, 94.7%	5.764, 370 2.2, 92.0%	5.169, 370 2.2, 85.8%	4.643, 370 2.2, 71.0%
85							6.360, 370 3.65, 92.9%	6.087, 370 3.65, 91.5%	6.233, 370 2.9, 92.6%	6.105, 370 2.2, 92.1%	5.621, 370 2.2, 89.4%	4.936, 370 2.2, 71.7%

Gas Flow Rate (MMscfd)
Horse Power (max. usable = 370 hp for this application)
Vi Ratio
Turn Valve Position (%)

Operating Conditions:
- Inlet Temperature = 60 deg. F
- Ambient Pressure = 13.5 psia
- Ambient Temperature = 95 deg. F
- Specific Gravity of Gas = 0.65
- Compressor Speed = 1800 rpm
- Lube Oil Supply Temp. = 140 deg.F
- Gas Discharge Temp. = 185 deg. F

Note: An oil pump (40 gmp) is required if the differential pressure is less than 85 psig.
Note: Discharge Pressures between 300 psig and 350 psig are available in some cases. Contact Jiro Engineering for Confirmation.
This chart was created by Jiro Engineering using Kobelco's Oil & Gas Selection Program (Version 2.0.5)