

630 HP - Kobelco 28LNB Gas Screw Compressor Flow Table

Discharge Pressure (psig)

		80	100	120	140	160	180	200	220	240	260	280
0		1,615,236	1,603,262	1,587,288	1,570,315	1,553,342	1,534,369	1,515,394	1,495,421	1,475,448	1,454,475	1,433,500
	3.65, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%	5, 100%
5		408,54,176	475,62,176	545,72,176	615,81,176	685,90,176	756,99,176	809,85,185	880,93,185	951,100,185	1008,88,184	1076,94,184
	2.280,255	2,262,291	2,243,326	2,232,349	2,241,375	2,195,401	2,175,428	2,154,455	2,134,481	2,122,508	2,090,534	
10		377,50,176	471,82,176	562,74,176	621,82,176	692,91,176	758,100,176	809,85,185	880,93,185	951,100,185	1002,88,184	1070,94,184
	2,916,267	2,895,310	2,879,345	2,860,380	2,847,409	2,828,434	2,809,461	2,788,488	2,767,515	2,745,542	2,723,567	
15		331,44,176	443,58,176	533,70,176	624,82,176	701,92,176	768,101,176	812,85,185	883,93,185	954,100,185	1000,88,184	1068,94,184
	3,559,275	3,535,319	3,514,362	3,496,398	3,476,433	3,454,468	3,443,495	3,423,522	3,402,548	3,381,575	3,205,590	
20		271,36,176	389,51,176	501,66,176	595,78,176	687,90,176	778,102,176	815,86,185	886,93,185	957,101,185	997,87,184	1058,93,184
	4,211,271	4,178,327	4,155,371	4,132,416	4,114,453	4,092,488	4,070,523	4,048,558	4,039,582	3,787,590	3,427,590	
25		224,39,167	332,44,176	448,59,176	562,74,176	660,87,176	752,99,176	805,85,185	897,94,185	950,101,185	977,87,184	1027,93,184
	4,903,270	4,830,326	4,798,382	4,775,424	4,750,468	4,733,507	4,710,542	4,687,577	4,424,590	4,003,590	3,677,590	
30		143,25,167	250,33,176	397,52,176	506,66,176	621,82,176	722,95,176	770,81,185	861,91,185	929,100,185	947,88,184	992,94,184
	5,568,268	5,490,323	5,449,380	5,418,436	5,395,477	5,370,520	5,345,563	5,248,590	4,817,590	4,390,590	4,045,590	
35		114,30,158	214,38,167	311,41,176	412,50,176	507,59,176	595,68,176	679,89,176	741,78,185	822,87,185	878,97,185	940,93,184
	6,193,322	6,108,378	6,070,434	6,038,491	6,015,530	5,989,573	5,960,590	5,939,573	5,650,590	5,253,590	4,838,590	4,337,590
40		88,33,158	132,23,167	227,30,176	375,49,176	522,68,176	624,82,176	736,97,176	769,84,185	820,93,185	874,103,185	898,89,184
	8,863,319	8,813,375	8,727,432	8,691,488	8,659,544	8,636,582	8,613,590	8,641,590	8,210,590	7,540,590	6,664,590	5,664,590
45		74,33,158	114,30,158	198,35,167	288,38,176	436,57,176	583,77,176	681,90,176	699,77,185	769,89,185	825,99,185	852,85,184
	7,487,374	7,392,430	7,348,487	7,312,543	7,157,590	6,696,590	6,138,590	5,613,590	5,613,590	5,613,590	4,997,590	4,997,590
50		64,33,158	104,30,158	188,35,167	278,38,176	426,57,176	573,77,176	671,90,176	689,77,185	759,89,185	815,99,185	842,85,184
	8,160,371	8,108,428	8,011,485	7,969,542	7,824,590	7,070,590	6,635,590	6,098,590	6,098,590	6,098,590	5,491,590	5,491,590
55		54,33,158	94,30,158	178,35,167	268,38,176	416,57,176	563,77,176	661,90,176	679,77,185	749,89,185	805,99,185	832,85,184
	8,787,426	8,687,483	8,632,539	8,511,590	7,726,590	7,134,590	6,587,590	6,587,590	6,587,590	6,587,590	5,821,590	5,821,590
60		44,33,158	84,30,158	168,35,167	258,38,176	406,57,176	553,77,176	651,90,176	669,77,185	739,89,185	795,99,185	822,85,184
	9,408,481	9,301,538	9,192,590	9,192,590	8,334,590	7,827,590	7,080,590	6,289,590	6,289,590	6,289,590	6,289,590	6,289,590
65		34,33,158	74,30,158	158,35,167	248,38,176	396,57,176	543,77,176	641,90,176	659,77,185	729,89,185	785,99,185	812,85,184
	10,087,479	10,030,535	9,880,590	9,880,590	8,990,590	8,182,590	7,540,590	6,762,590	6,762,590	6,762,590	6,762,590	6,762,590
70		24,33,158	64,30,158	148,35,167	238,38,176	386,57,176	533,77,176	631,90,176	649,77,185	719,89,185	775,99,185	802,85,184
	11,393,532	11,335,588	10,300,590	10,300,590	9,630,590	8,840,590	8,067,590	7,197,590	7,197,590	7,197,590	7,197,590	7,197,590
75		14,33,158	54,30,158	138,35,167	228,38,176	376,57,176	523,77,176	621,90,176	639,77,185	709,89,185	765,99,185	792,85,184
	11,720,590	11,720,590	10,680,590	10,680,590	9,890,590	9,224,590	8,330,590	7,460,590	7,460,590	7,460,590	7,460,590	7,460,590
80		4,33,158	44,30,158	128,35,167	218,38,176	366,57,176	513,77,176	611,90,176	629,77,185	699,89,185	755,99,185	782,85,184
	12,019,590	12,019,590	10,960,590	10,960,590	10,070,590	9,224,590	8,330,590	7,460,590	7,460,590	7,460,590	7,460,590	7,460,590
85		3,33,158	43,30,158	127,35,167	217,38,176	365,57,176	512,77,176	610,90,176	628,77,185	698,89,185	754,99,185	781,85,184
	11,720,590	11,720,590	10,680,590	10,680,590	9,890,590	9,224,590	8,330,590	7,460,590	7,460,590	7,460,590	7,460,590	7,460,590

Suction Pressure (psig)

Gas Flowrate (MMscfd)
 Horse Power (max. useable = 590 hp)
 Vi Rating
 Turn Valve Position (%)
 Lube Oil Cooler Heat Duty (kBTU/h)
 Lube Oil Flowrate (gpm)
 Discharge Temperature (deg. F)

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

Note: An oil pump (75 gpm) is required if the differential pressure is less than 85 psi.

This chart was created by Jiro Engineering using Kobelco's Oil & Gas Selection Program (Version 2.0.5)