



■ series

PZD



TWIN SCREW PUMPS DIVISION

LARGE FLOW, FOR LUBRICATING MEDIA, OIL, FUEL OIL

FLOW RANGE: 2000 to 9000 litres/minute (120 to 540 m³/h)

MAX PRESSURE: 16 bar (8 bar for 1.6 – 10 cSt range)

MAIN APPLICATIONS:

- **Marine:** oil or fuel transfer
- **Power generation:** lubrication or cooling of large equipment

AVAILABLE IN TWO MAIN INTERNAL VERSIONS:

- **Three screw configuration:** PZD
- **Twin screw WTG (Without Timing Gear) PZD - WTG**



MAIN CHARACTERISTICS



SERIES

PZD

NPSHr is at best low level in similar pump product ranges

PZD and PZD-WTG are equipped with a renewable liner

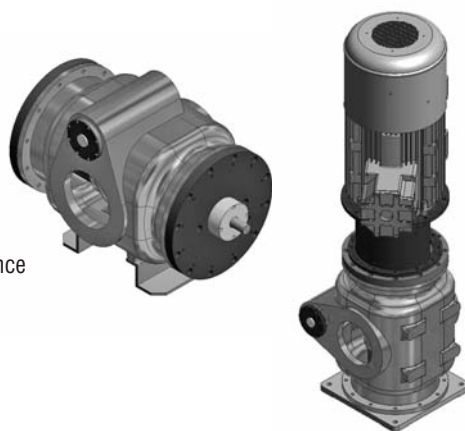
Screw-set and liner can be dismantled from shaft side flange, for easy main maintenance

Internal valve:

Pumps are equipped with an internal recirculation valve limiting the pressure

In case of air in the fluid:

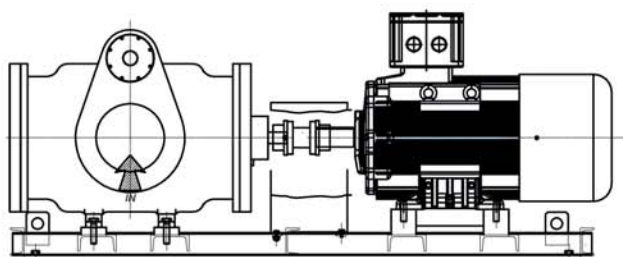
An adjustable internal device helps reducing significantly noise and pressure changes



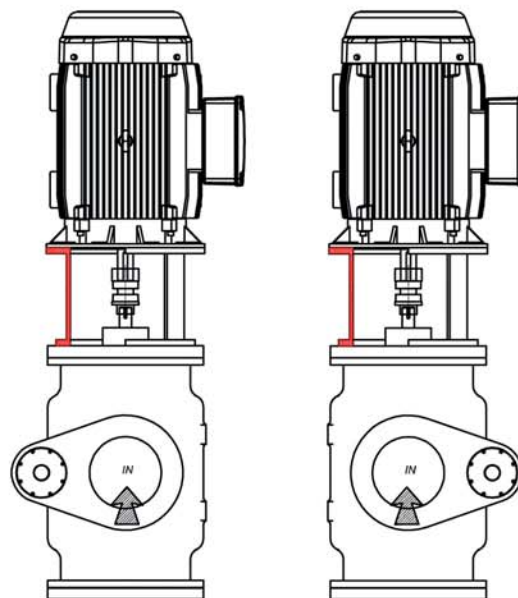
INSTALLATION DATA	
Installation	Indoor or Outdoor
Environment	Marine, Industrial
OPERATING DATA	
Handled fluid	Hydraulic and Lube oils, HFO, DO, LSMGO
Viscosity range	From 1.6 to 5000 cSt (*)
Pump speed	From 750 to 1750 rpm
Rotation (viewed from coupling end)	CW (Std version); CCW on demand
TECHNICAL CHARACTERISTICS	
Flow range	2000 to 9000 litres/min (120 to 540 m³/h)
Suction pressure	From - 0,5 to 10 bar
Delivery pressure	Up to 16 bar (8 bar for 1.6-10 cSt range)
Operating temperature range	From 0 to 120 °C (*)
Seal	Mechanical seal
Bearing type	Radial ball bearing on main shaft
Bearing lubrication	Lubricated by pumped fluid
Mounting arrangement	Vertical or horizontal
Inlet & Outlet connection	DIN standard (double internal entry and delivery port in the middle)
MATERIALS	
Casing/Flanges	Cast Iron GGG40, GG25 (*)
Screws	Nitrided steel
O-rings	Viton ®
Surface protection	On demand

(*) For different values contact Seim

MAX PRESSURE VALVE CONFIGURATIONS

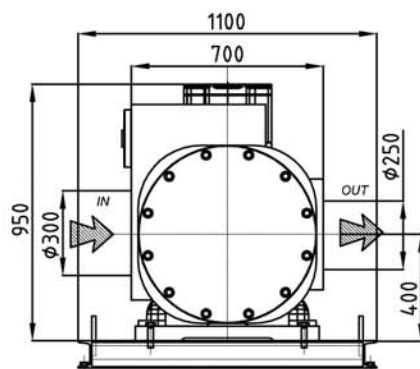
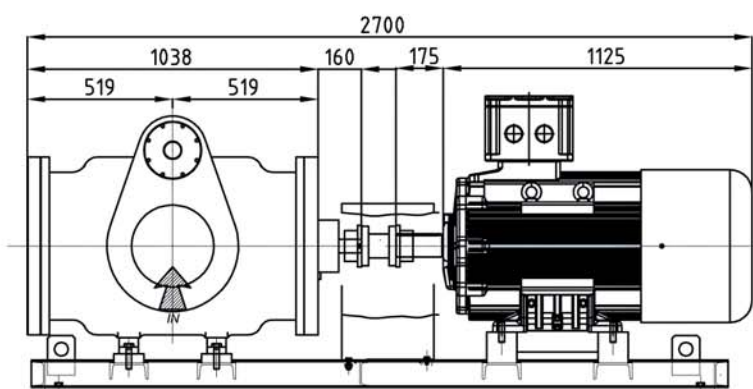


HORIZONTAL VERSIONS MAX PRESSURE VALVE ON THE TOP

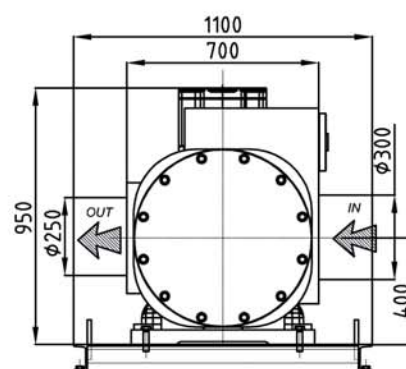


VERTICAL VERSIONS MAX PRESSURE VALVE ON THE LEFT OR RIGHT SIDE

HORIZONTAL VERSIONS - PZD 156 & PZD WTG 170



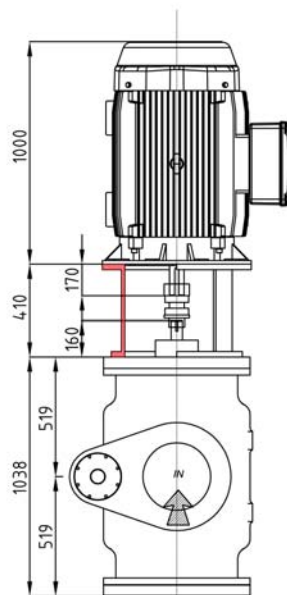
SUCTION ON THE LEFT OR THE RIGHT SIDE



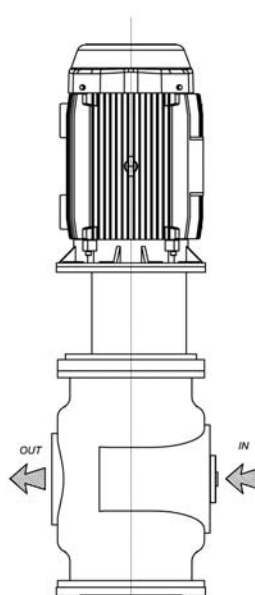
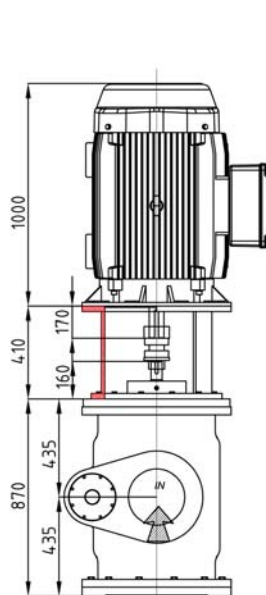
SERIES

PZD

PZD 156

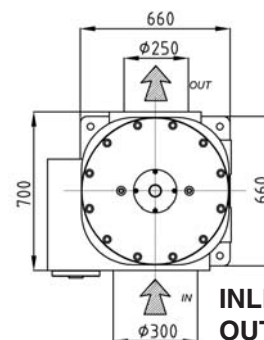


PZD 126 - 102



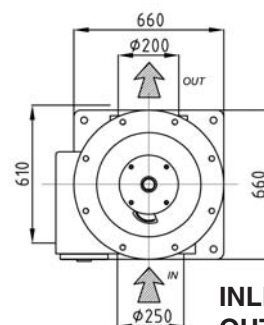
MOTOR SIZE 315

PZD 156



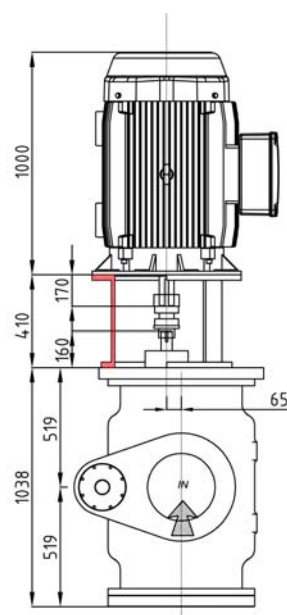
INLET DN 300
OUTLET DN 250

PZD 126 - 102

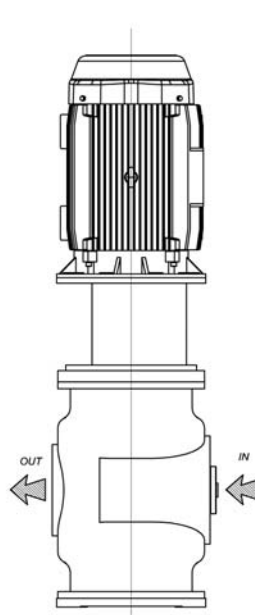
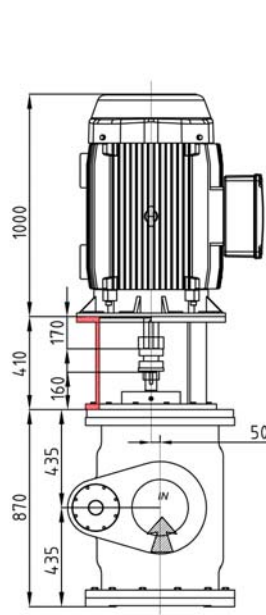


INLET DN 250
OUTLET DN 200

PZD WTG 170

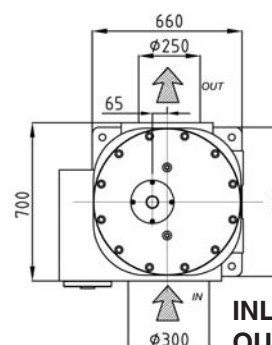


PZD WTG 130



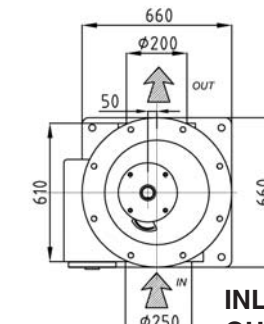
MOTOR SIZE 315

PZD WTG 170



INLET DN 300
OUTLET DN 250

PZD WTG 130



INLET DN 250
OUTLET DN 200

PERFORMANCE CHART



SERIES

PZD

THREE SCREW VERSION

	cSt »	25								50							
	rpm »	1000		1200		1500		1800		1000		1200		1500		1800	
P/N°	bar	lit/l	kW	lit/l	kW	lit/l	kW	lit/l	kW	lit/l	kW	lit/l	kW	lit/l	kW	lit/l	kW
PZD 102#3B	5	1434	17	1749	20	2222	26	2694	32	1476	18	1791	22	2263	28	2736	35
	10	1376	30	1691	36	2163	46	2636	56	1434	31	1749	37	2222	48	2694	58
	15	1331	43	1646	52	2118	66	2591	80	1402	44	1717	53	2190	67	2663	82
PZD 102#3C	5	1776	21	2166	25	2751	32	3336	40	1827	22	2217	27	2802	35	3387	43
	10	1703	37	2093	45	2678	57	3264	69	1776	38	2166	46	2751	59	3336	72
	15	1647	53	2038	64	2623	81	3208	98	1736	54	2126	66	2712	83	3297	101
PZD 126#3A	5	2221	25	2702	31	3423	40	4144	49	2275	27	2756	33	3477	43	4198	53
	10	2145	45	2626	55	3347	70	4069	85	2221	47	2702	57	3423	73	4144	89
	15	2087	65	2568	79	3289	100	4011	121	2180	67	2661	81	3382	103	4103	125
PZD 126#3B	5	2750	31	3345	38	4238	49	5131	61	2816	33	3412	41	4305	53	5197	66
	10	2656	56	3252	68	4144	87	5037	106	2750	58	3345	71	4238	90	5131	110
	15	2584	81	3180	98	4072	124	4965	150	2699	83	3294	100	4187	127	5080	155
PZD 126#3C	5	3385	39	4117	47	5216	61	6315	75	3466	41	4199	50	5298	65	6397	81
	10	3269	69	4002	84	5101	107	6200	130	3385	71	4117	87	5216	111	6315	136
	15	3181	100	3913	121	5012	152	6111	185	3322	102	4055	124	5154	157	6253	191
PZD 156#3A	5	4269	48	5181	59	6550	76	7919	93	4355	51	5267	63	6636	81	8005	101
	10	4147	86	5059	104	6428	133	7797	162	4269	89	5181	108	6550	138	7919	169
	15	4054	124	4966	150	6335	190	7704	230	4203	127	5115	154	6484	195	7853	237
PZD 156#3B	5	5254	59	6377	72	8061	93			5360	62	6483	77	8167	100		
	10	5104	106	6227	129	7912	164			5254	109	6377	133	8061	170		
	15	4989	153	6112	185	7797	234			5173	156	6296	189	7980	240		

	cSt » 50								75								
	rpm »	1000		1200		1500		1800		1000		1200		1500		1800	
P/N°	bar	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW
PZD 102#3B	5	1476	18	1791	22	2263	28	2736	35	1494	18	1809	23	2282	29	2754	36
	10	1434	31	1749	37	2222	48	2694	58	1460	31	1775	38	2248	49	2720	60
	15	1402	44	1717	53	2190	67	2663	82	1434	44	1749	54	2222	69	2694	84
PZD 102#3C	5	1827	22	2217	27	2802	35	3387	43	1850	23	2240	28	2825	36	3410	45
	10	1776	38	2166	46	2751	59	3336	72	1808	39	2198	47	2783	61	3368	74
	15	1736	54	2126	66	2712	83	3297	101	1776	55	2166	67	2751	85	3336	104
PZD 126#3A	5	2275	27	2756	33	3477	43	4198	53	2298	28	2779	34	3500	45	4222	56
	10	2221	47	2702	57	3423	73	4144	89	2255	48	2736	58	3457	75	4178	92
	15	2180	67	2661	81	3382	103	4103	125	2221	68	2702	82	3423	105	4144	128
PZD 126#3B	5	2816	33	3412	41	4305	53	5197	66	2846	34	3441	43	4334	55	5227	69
	10	2750	58	3345	71	4238	90	5131	110	2792	59	3387	72	4280	93	5173	113
	15	2699	83	3294	100	4187	127	5080	155	2750	84	3345	102	4238	130	5131	158
PZD 126#3C	5	3466	41	4199	50	5298	65	6397	81	3502	42	4235	52	5334	68	6433	85
	10	3385	71	4117	87	5216	111	6315	136	3436	73	4168	89	5267	114	6366	140
	15	3322	102	4055	124	5154	157	6253	191	3385	103	4117	126	5216	160	6315	195
PZD 156#3A	5	4355	51	5267	63	6636	81	8005	101	4393	53	5305	65	6674	85	8043	106
	10	4269	89	5181	108	6550	138	7919	169	4323	91	5235	111	6604	142	7973	174
	15	4203	127	5115	154	6484	195	7853	237	4269	129	5181	156	6550	199	7919	242
PZD 156#3B	5	5360	62	6483	77	8167	100			5407	65	6530	80	8214	104		
	10	5254	109	6377	133	8061	170			5320	112	6443	136	8128	175		
	15	5173	156	6296	189	7980	240			5254	159	6377	193	8061	245		

	cSt » 150								400								
	rpm » 1000		1200		1500		1800		1000		1200		1500		1800		
P/N°	bar	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW	l/l/1	kW
PZD 102#3B	5	1518	20	1833	24	2305	32	2778	40	1540	22	1855	28	2328	37	2800	47
	10	1494	33	1809	40	2282	52	2754	64	1525	36	1841	44	2313	57	2786	71
	15	1476	46	1791	56	2263	71	2736	87	1514	49	1829	60	2302	77	2775	94
PZD 102#3C	5	1879	24	2269	30	2854	40	3440	50	1907	28	2297	35	2882	46	3467	58
	10	1850	41	2240	50	2825	64	3410	79	1889	44	2279	54	2864	70	3449	87
	15	1827	57	2217	69	2802	88	3387	108	1875	60	2265	74	2850	95	3435	117
PZD 126#3A	5	2329	30	2810	37	3531	49	4253	61	2358	34	2839	43	3560	57	4282	72
	10	2298	50	2779	61	3500	79	4222	97	2339	54	2820	67	3541	87	4263	108
	15	2275	70	2756	85	3477	109	4198	133	2325	74	2806	91	3527	117	4248	144
PZD 126#3B	5	2884	37	3479	46	4372	60	5265	76	2920	42	3515	53	4408	70	5301	89
	10	2846	62	3441	76	4334	98	5227	120	2896	67	3492	83	4385	107	5278	133
	15	2816	87	3412	106	4305	135	5197	165	2878	92	3474	113	4367	145	5260	178
PZD 126#3C	5	3550	46	4282	57	5381	74	6480	93	3594	52	4326	65	5425	86	6524	109
	10	3502	76	4235	93	5334	120	6433	148	3565	83	4297	102	5396	132	6495	164
	15	3466	107	4199	130	5298	166	6397	203	3543	113	4275	139	5374	178	6473	219
PZD 156#3A	5	4443	57	5355	71	6724	93	8093	116	4489	65	5402	81	6770	108	8139	136
	10	4393	95	5305	116	6674	150	8043	184	4459	103	5371	127	6740	165	8109	204
	15	4355	133	5267	162	6636	207	8005	253	4435	141	5348	173	6717	222	8085	273
PZD 156#3B	5	5468	70	6591	87	8275	114			5525	80	6648	100	8333	133		
	10	5407	117	6530	143	8214	184			5488	127	6611	156	8295	203		
	15	5360	164	6483	199	8167	254			5459	173	6582	212	8267	273		

PERFORMANCE CHART



SERIES

PZD WTG

TWIN SCREW VERSION

	MODEL			5 cSt			50 cSt			500 cSt		
		pitch mm	differ-P bar	flow		power kW	flow		power kW	flow		power kW
980 rpm	130	130	4	2088	125.3	19.0	2255	135.3	22.5	2333	140.0	30.0
		130	8	1777	106.6	35.0	2111	126.6	38.5	2266	135.9	46.0
		130	12	1465	87.9	51.0	1966	118.0	54.5	2198	131.9	62.0
		130	16	1154	69.2	67.0	1821	109.3	70.5	2131	127.9	78.0
		160	4	2554	153.2	22.8	2768	166.1	26.5	2868	172.1	34.3
		160	8	2154	129.3	42.5	2583	155.0	46.2	2781	166.9	54.0
		160	12	1755	105.3	62.2	2397	143.8	65.9	2695	161.7	73.7
		160	16	1355	81.3	81.9	2212	132.7	85.6	2609	156.6	93.4
		190	4	3016	181.0	26.7	3279	196.8	30.5	3402	204.1	38.6
		190	8	2525	151.5	50.0	3051	183.1	53.8	3296	197.7	62.0
1150 rpm	130	190	12	2034	122.0	73.4	2823	169.4	77.2	3190	191.4	85.4
		190	16	1542	92.5	96.8	2595	155.7	100.6	3084	185.0	108.8
	170	150	4	4159	249.6	36.6	4438	266.3	42.9	4568	274.1	56.4
		150	8	3639	218.4	67.8	4197	251.8	74.1	4456	267.3	87.6
		150	12	3119	187.1	99.0	3955	237.3	105.3	4343	260.6	118.8
		150	16	2599	155.9	130.2	3714	222.8	136.5	4231	253.9	150.0
		180	4	4968	298.1	43.1	5315	318.9	49.6	5476	328.6	63.7
		180	8	4321	259.2	80.5	5015	300.9	87.1	5337	320.2	101.2
		180	12	3673	220.4	118.0	4714	282.8	124.5	5197	311.8	138.6
		180	16	3026	181.5	155.4	4413	264.8	161.9	5058	303.5	176.0
		210	4	5773	346.4	49.5	6190	371.4	56.3	6384	383.0	70.9
		210	8	4993	299.6	93.2	5828	349.7	100.0	6216	373.0	114.6
1450 rpm	130	210	12	4214	252.9	136.9	5467	328.0	143.7	6048	362.9	158.2
		210	16	3435	206.1	180.6	5105	306.3	187.3	5880	352.8	201.9
	170	130	4	2505	150.3	22.5	2672	160.3	26.8	2749	164.9	36.1
		130	8	2193	131.6	41.3	2527	151.6	45.6	2682	160.9	54.9
		130	12	1881	112.9	60.1	2382	142.9	64.4	2615	156.9	73.6
		130	16	1570	94.2	78.8	2238	134.3	83.1	2548	152.9	92.4
		160	4	3066	184.0	27.0	3281	196.8	31.5	3380	202.8	41.2
		160	8	2667	160.0	50.1	3095	185.7	54.6	3294	197.6	64.3
		160	12	2267	136.0	73.2	2909	174.6	77.7	3208	192.5	87.5
		160	16	1867	112.0	96.3	2724	163.4	100.8	3122	187.3	110.6
		190	4	3625	217.5	31.5	3888	233.3	36.2	4010	240.6	46.3
		190	8	3133	188.0	58.9	3660	219.6	63.6	3904	234.3	73.7
1750 rpm	130	190	12	2642	158.5	86.4	3432	205.9	91.1	3798	227.9	101.2
		190	16	2151	129.1	113.8	3204	192.2	118.5	3693	221.6	128.6
	170	150	4	4971	298.3	43.3	5250	315.0	51.1	5379	322.8	67.8
		150	8	4451	267.1	79.9	5009	300.5	87.7	5267	316.0	104.4
		150	12	3931	235.8	116.6	4767	286.0	124.3	5155	309.3	141.1
		150	16	3410	204.6	153.2	4526	271.5	160.9	5043	302.6	177.7
		180	4	5942	356.5	50.9	6289	377.4	59.0	6450	387.0	76.5
		180	8	5295	317.7	94.9	5989	359.3	103.0	6311	378.7	120.4
		180	12	4647	278.8	138.8	5688	341.3	146.9	6171	370.3	164.3
		180	16	4000	240.0	182.7	5388	323.3	190.8	6032	361.9	208.3
		210	4	6909	414.5	58.5	7327	439.6	66.9	7520	451.2	84.9
		210	8	6130	367.8	109.8	6965	417.9	118.1	7352	441.1	136.2
1950 rpm	130	210	12	5351	321.1	161.0	6603	396.2	169.4	7185	431.1	187.4
		210	16	4572	274.3	212.3	6242	374.5	220.6	7017	421.0	238.7
	170	130	4	3239	194.4	28.7	3406	204.4	34.6	3484	209.0	47.2
		130	8	2928	175.7	52.4	3262	195.7	58.3	3417	205.0	70.9
		130	12	2616	157.0	76.1	3117	187.0	82.0	3349	201.0	94.6
		130	16	2305	138.3	99.8	2972	178.3	105.6	3282	196.9	118.3
		160	4	3971	238.2	34.5	4185	251.1	40.6	4284	257.0	53.8
		160	8	3571	214.2	63.6	3999	240.0	69.7	4198	251.9	83.0
		160	12	3171	190.3	92.7	3814	228.8	98.9	4112	246.7	112.1
		160	16	2771	166.3	121.9	3628	217.7	128.0	4026	241.5	141.2
		190	4	4698	281.9	40.1	4962	297.7	46.5	5084	305.0	60.3
2150 rpm	130	190	8	4207	252.4	74.7	4734	284.0	81.1	4978	298.7	94.9
		190	12	3716	223.0	109.3	4506	270.3	115.7	4872	292.3	129.5
		190	16	3225	193.5	143.9	4278	256.7	150.3	4766	286.0	164.1
	170	150	4	6404	384.2	55.3	6683	401.0	65.9	6812	408.7	88.7
		150	8	5884	353.0	101.5	6441	386.5	112.1	6700	402.0	134.9
		150	12	5363	321.8	147.6	6200	372.0	158.2	6588	395.3	181.0
		150	16	4843	290.6	193.8	5958	357.5	204.4	6476	388.5	227.2
		180	4	7661	459.7	64.9	8008	480.5	76.0	8169	490.2	99.7
		180	8	7014	420.8	120.3	7708	462.5	131.3	8030	481.8	155.1
		180	12	6366	382.0	175.7	7407	444.4	186.7	7890	473.4	210.5
		180	16	5719	343.1	231.1	7107	426.4	242.1	7751	465.1	265.9
		210	4	8915	534.9	74.5	9332	559.9	85.9	9526	571.6	110.5
		210	8	8136	488.1	139.1	8971	538.2	150.5	9358	561.5	175.1
2350 rpm	130	210	12	7356	441.4	203.8	8609	516.5	215.2	9190	551.4	239.7
		210	16	6577	394.6	268.4	8247	494.8	279.8	9022	541.3	304.4
	170	130	4	3974	238.4	35.1	4141	248.5	42.6	4218	253.1	58.9
		130	8	3662	219.7	63.7	3996	239.8	71.2	4151	249.1	87.4
		130	12	3351	201.0	92.2	3852	231.1	99.8	4084	245.0	116.0
		130	16	3039	182.4	120.8	3707	222.4	128.3	4017	241.0	144.6
		160	4	4875	292.5	42.0	5089	305.3	49.9	5188	311.3	66.9
		160	8	4475	268.5	77.2	4903	294.2	85.1	5102	306.1	102.1
		160	12	4075	244.5	112.3	4718	283.1	120.2	5016	301.0	137.2
		160	16	3676	220.5	147.5	4532	271.9	155.4	4930	295.8	172.4
		190	4	5772	346.3	48.9	6035	382.1	57.1	6158	369.5	74.8
		190	8	5281	316.9	90.6	5807	348.4	98.8	6052	363.1	116.5
2750 rpm	130	190	12	4790	287.4	132.4	5579	334.8	140.6	5946	356.8	158.3
		190	16	4298	257.9	174.1	5351	321.1	182.3	5840	350.4	200.0
	170	150	4	7836	470.2	67.5	8115	486.9	81.1	8245	494.7	110.4
		150	8	7316	439.0	123.2	7874	472.4	136.8	8133	488.0	166.1
		150	12	6796	407.8	178.9	7632	457.9	192.5	8020	481.2	221.8
		150	16	6276	376.5	234.6	7391	443.4	248.2	7908	474.5	277.5
		180	4	9381	562.8	79.1	9727	583.6	93.3	9889	593.3	123.8
		180	8	8733	524.0	146.0	9427	565.6	160.1	9749	584.9	190.6
		180	12	8085	485.1	212.8	9126	547.6	227.0	9610	576.6	257.5
		180	16	7438	446.3	279.7	8826	529.5	293.8	9470	568.2	324.3



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