

TD

Single-Stage Pipeline Circulation Pump



Private House



Civil use



Industrial use



Single Stage Pipeline Circulation Pump

WINALUX
WATER PUMP

Product Overview

TD Series Single-Stage Pipeline Circulation Pump, equipped with standard motor and mechanical seal, the structure of TD is less likely to be affected by impurities in the pump liquid than similar products. This series is designed in a pull-out top disassembly form, which allows the pump to be repaired without affecting the piping system. TD32-TD150 caliber products are of extended shaft structure, and TD200-TD300 caliber products are of disassembled structure, and the disassembled structure adopts integrated mechanical seal, so there is no need to disassemble the motor when replacing the mechanical seal.

Application

TD pump is a multi-purpose product, which can convey different media from tap water to industrial liquid, mainly used as liquid conveying, pressurizing and circulating equipment. For example: district heating system (the water quality in the heating system should meet the recognized water quality standard of the system) HVAC system, cooling system, domestic hot water system, industrial liquid conveying, water supply system.

Motor

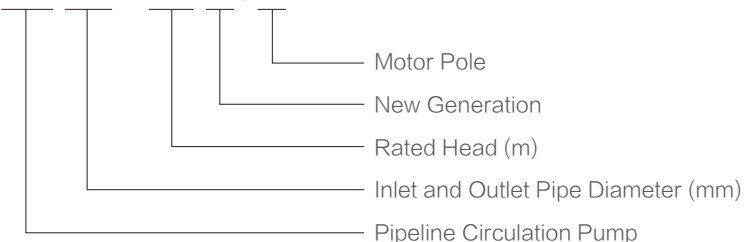
- Motor is a fully enclosed, air-cooled two or four pole
- standard motor.
- Protection Class : IP55
- Insulation Class: F
- Voltage : 50Hz: 1 × 220-230/240V
3 × 200-220/346-380V
3 × 220-240/380-415V

Operating Conditions

- TD pump is suitable for conveying thin, clean, non-erosive, non-flammable and non-explosive, and does not contain solid particles, fibers or liquids with physical and chemical properties similar to water. In the case of viscous or dense liquids, the pump characteristic curve will be reduced and energy consumption will be increased.
- Max. working pressure: 12 bar for conventional models, 16 bar for special models
- Liquid Temperature: -15°C to 110°C
- Ambient Temperature: up to +40°C
- Altitude: up to 1000m
- Rotation Direction: Clockwise (looking down from motor blade end)

Model Implication

TD 50 - 24 G / 2



Minimum Inlet Pressure – NPSH

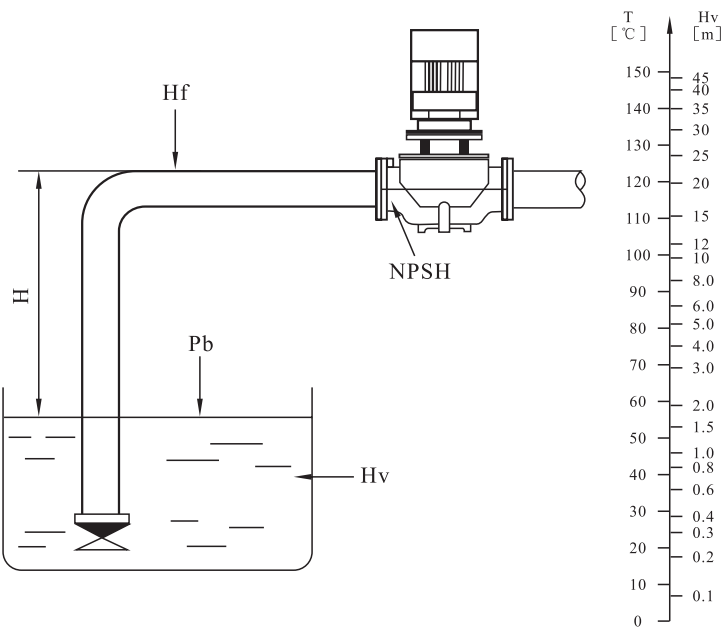
To avoid cavitation, it is necessary to ensure a minimum pressure on the inlet side of the pump. The maximum suction height "H" can be calculated as follows:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

- **H** is maximum suction head (m)
- **P_b** is atmospheric pressure in bar
(Can be set to 1bar, in closed system, P_b is system pressure)
- **NPSH** is the net positive suction head of the pump in m; the corresponding value at maximum flow can be read in the graph
- **H_f** is the suction line resistance loss in m (at the maximum flow of the pump)
- **H_v** is the vaporization pressure in m
(can be read from the vaporization pressure gauge. Its value depends on the liquid temperature "t_m")
- **H_s** is the minimum safety margin of 0.5m
- If the calculated "H" is positive, the pump can operate at a maximum suction height of "H"
- If the calculated "H" is negative, the pump requires a minimum "H" inlet pressure

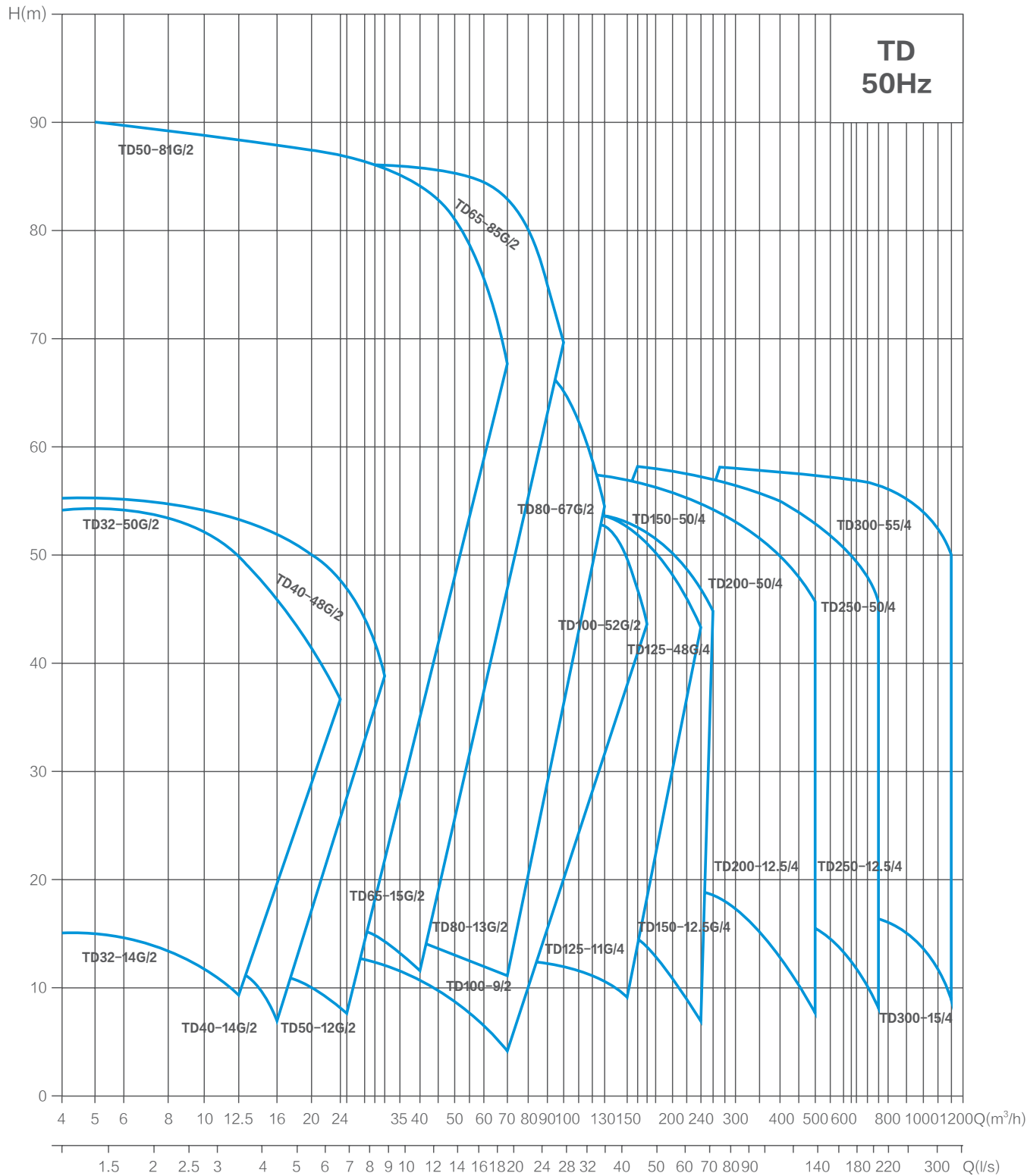
It is recommended to calculate the inlet pressure "H" when the following conditions exist:

- High liquid temperature
- The flow is significantly greater than the rated flow
- Pump water from low
- Pumping water from long pipes
- Poor import conditions

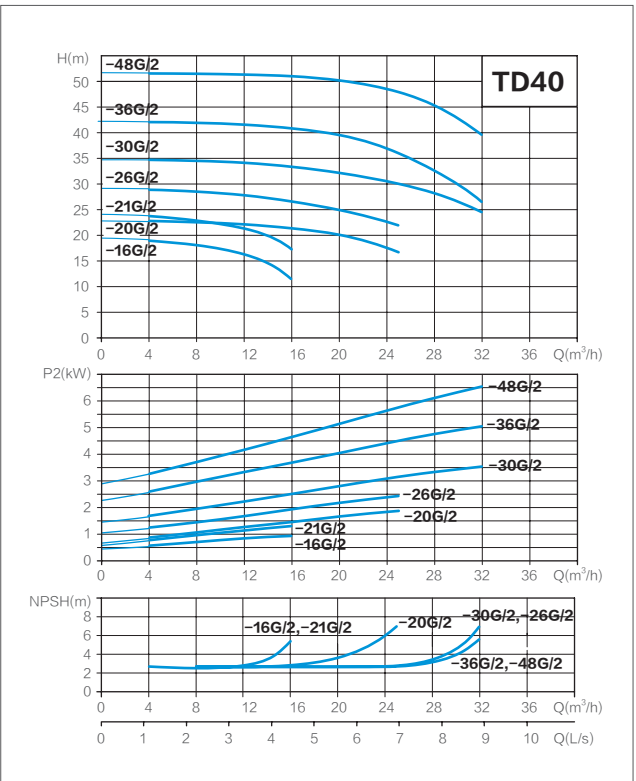
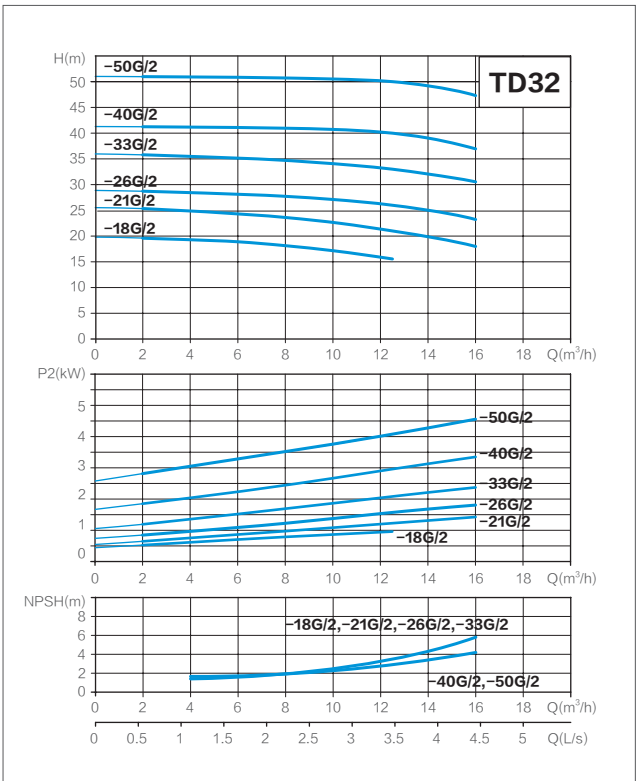


NOTE: To avoid cavitation, the pump should be rated away from the right side of the NPSH curve. Always check the NPSH value of the pump at the highest possible flow.

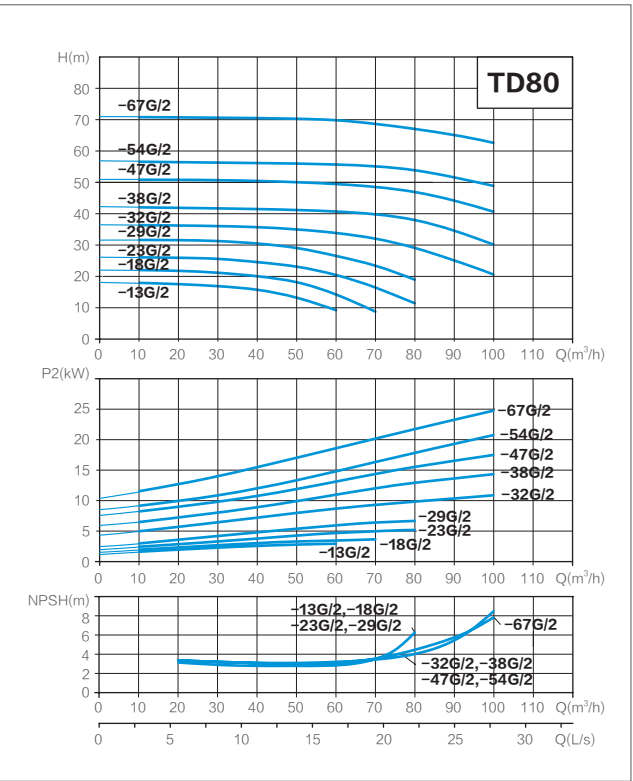
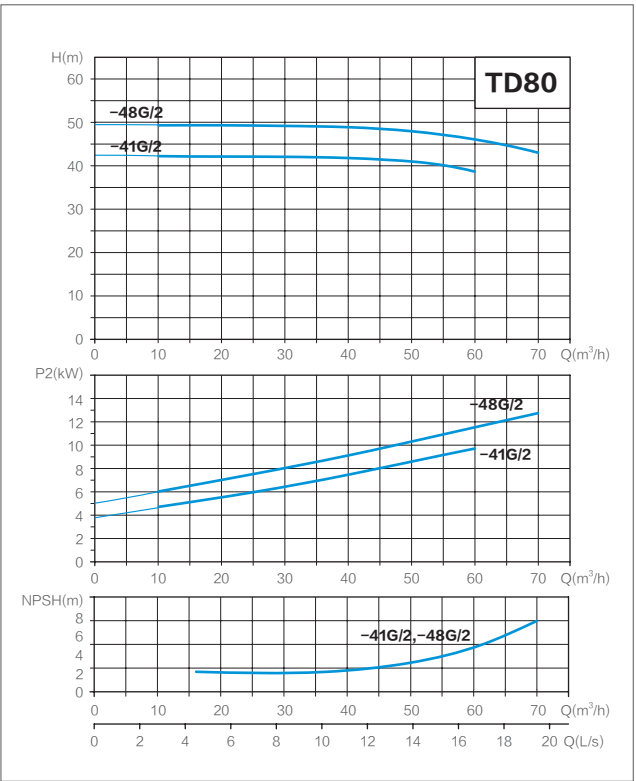
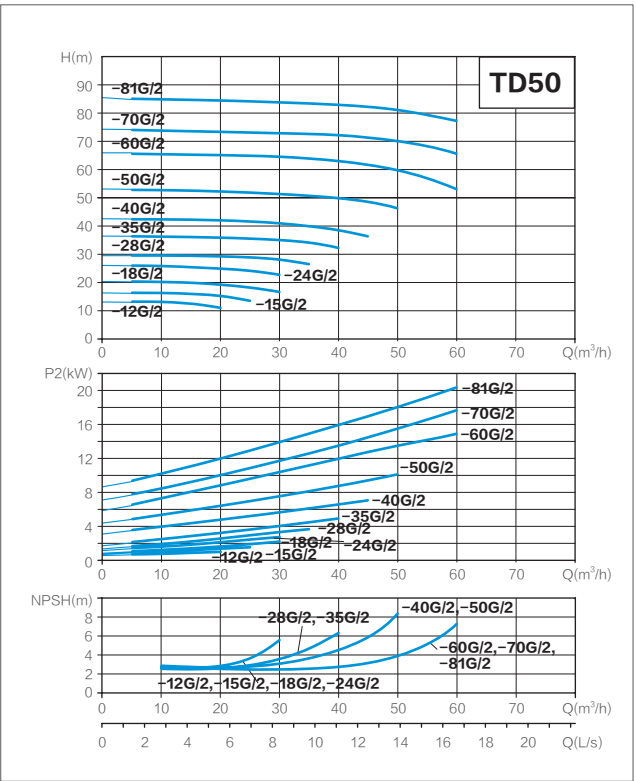
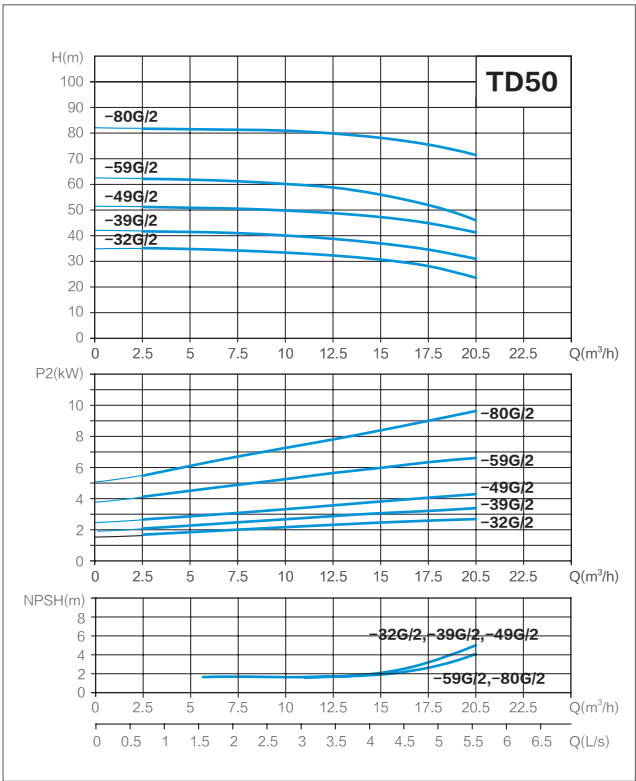
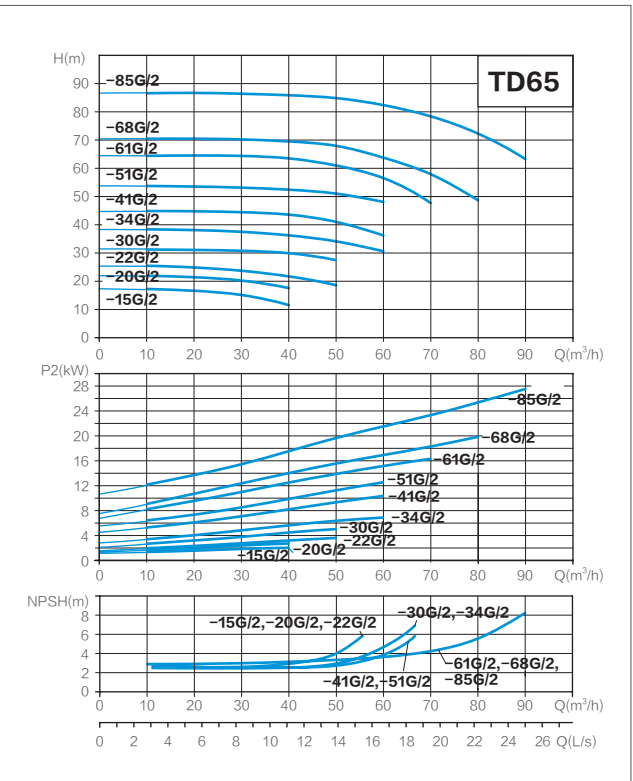
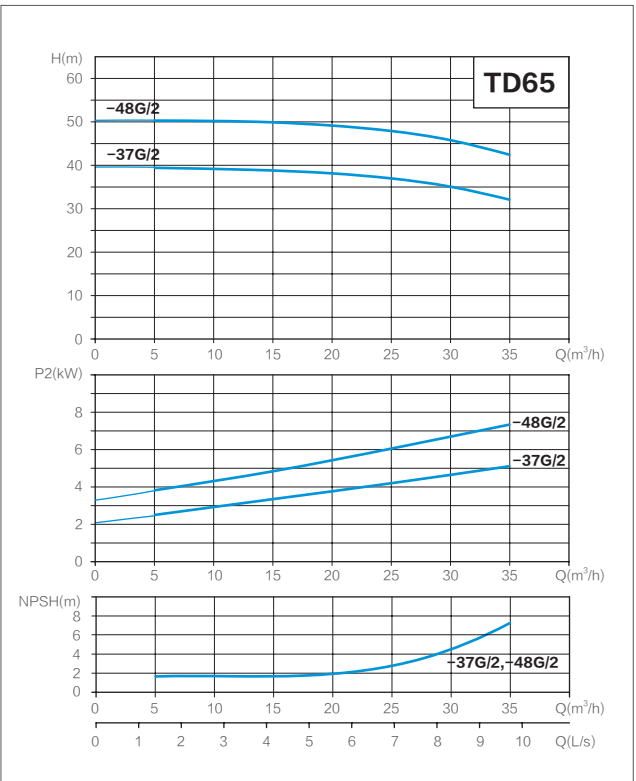
Scope of Performance



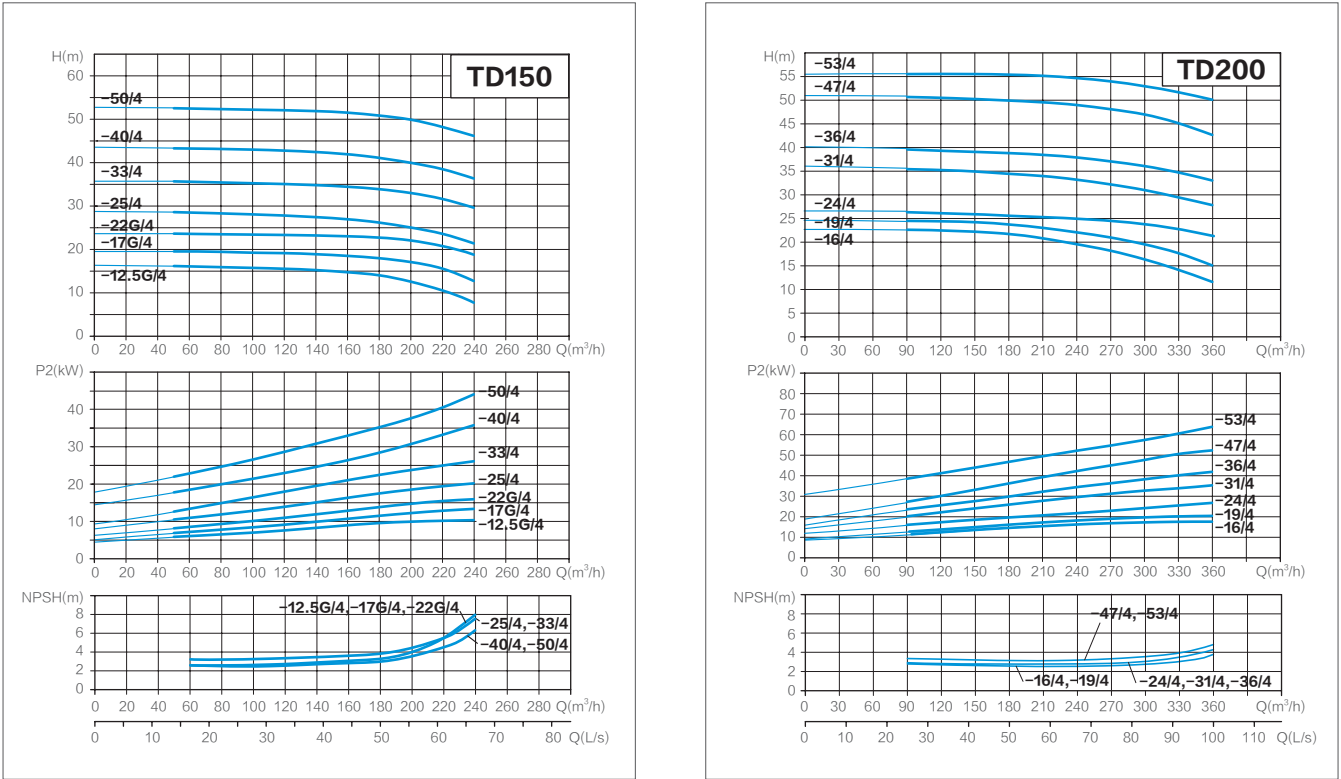
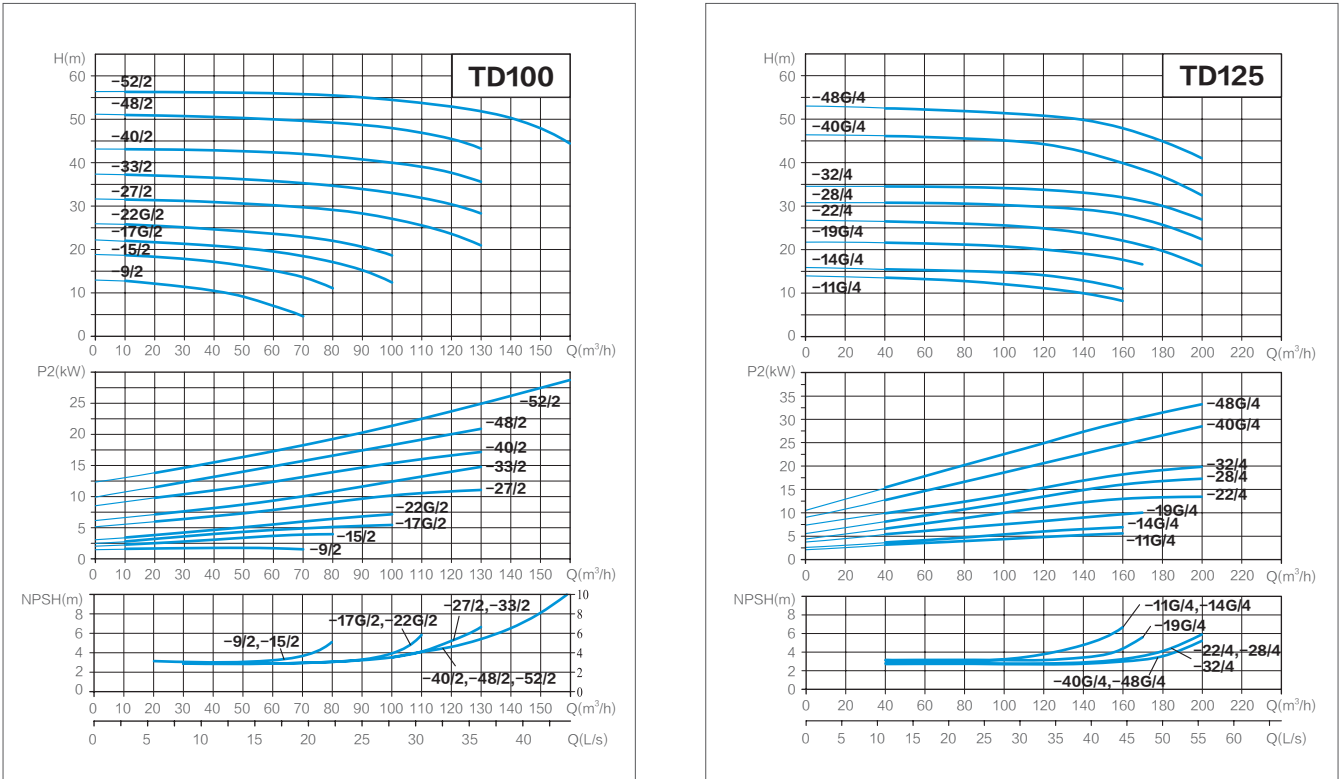
Hydraulic Performance Curves



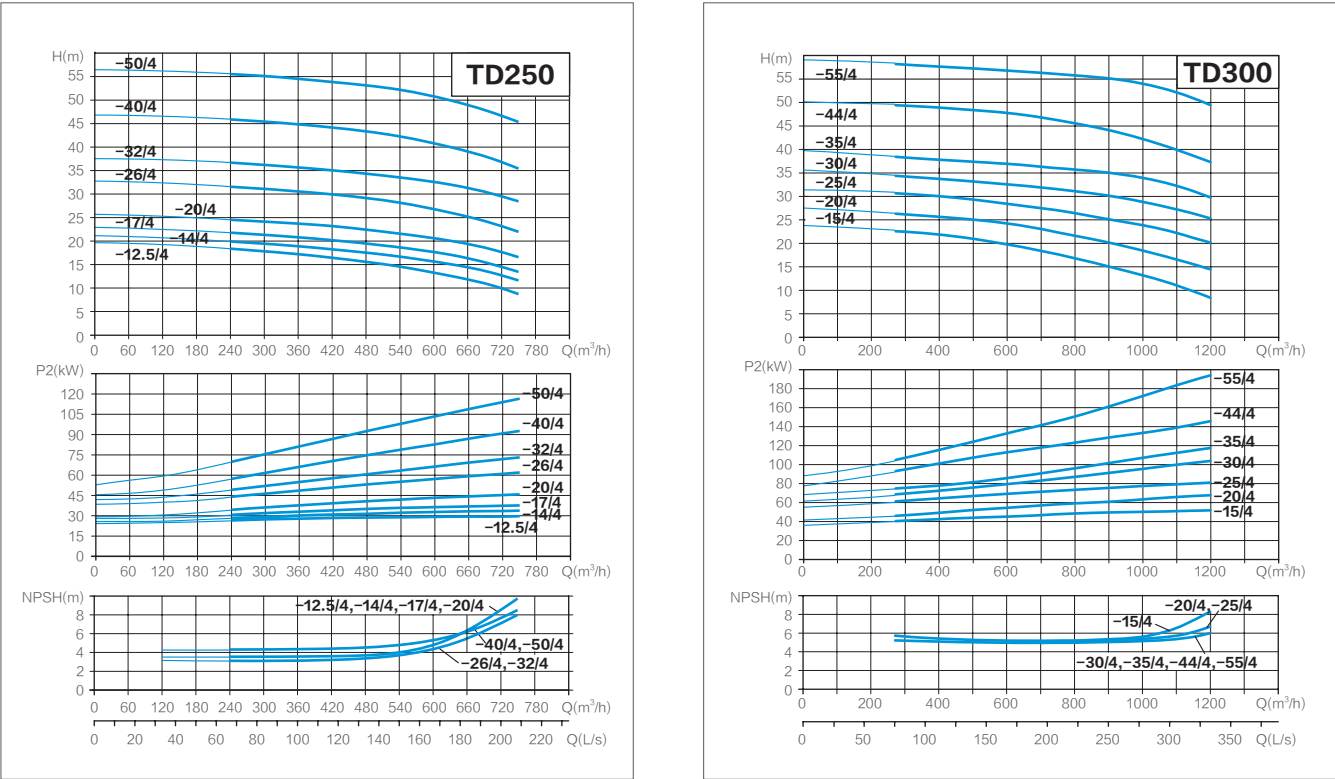
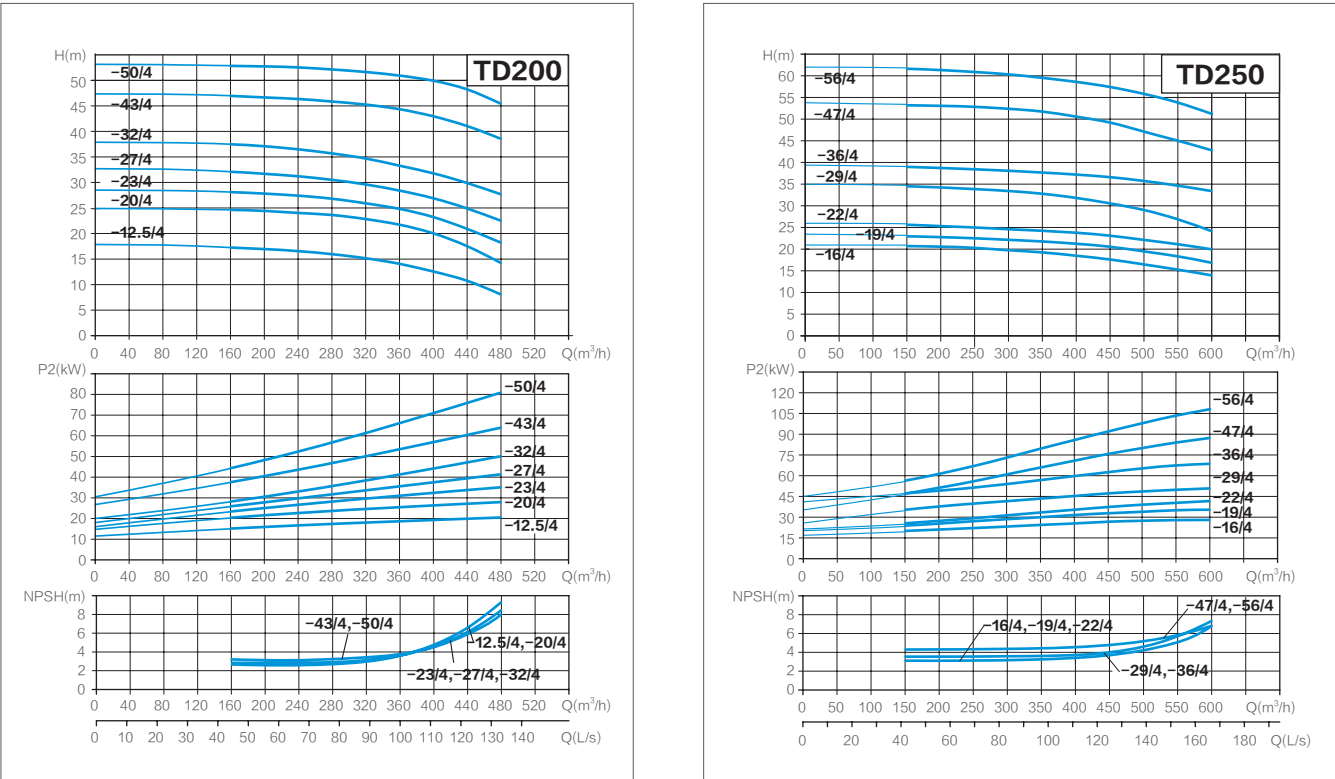
Hydraulic Performance Curves



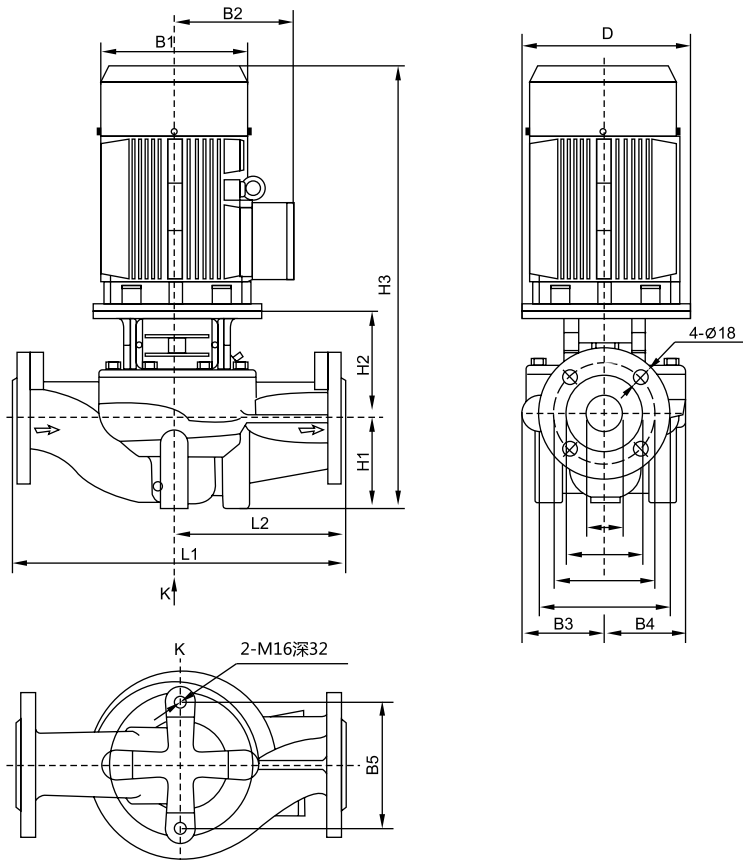
Hydraulic Performance Curves



Hydraulic Performance Curves



Technical Parameter



NO.	Model	Q (m³/h)	H (m)	N (r/min)	Standard motor voltage (V)		Size(mm)										Weight (kg)		
					1×220V P2(kW)	3×380V P2(kW)	D	B1	B2	B3	B4	B5	H1	H2	H3	L1		L2	
1	TD32-14G/2	8	14	2900	0.75	0.75	120	151	125	101	101	144	90	135	469	320	160	33	
2	TD32-18G/2	8	18		1.1	1.1	120	151	125	101	101	144	90	135	469	320	160	34	
3	TD32-21G/2	12.5	21		1.5	1.5	140	171	137	101	101	144	90	137	514	320	160	38	
4	TD32-26G/2	12.5	26		2.2	2.2	140	171	137	101	101	144	90	137	514	320	160	42	
5	TD32-33G/2	12.5	33			3	160	196	150	109	109	144	90	145	572	340	170	52	
6	TD32-40G/2	12.5	40			4	160	214	169	128	128	144	100	151	593	360	180	65	
7	TD32-50G/2	12.5	50			5.5	200	257	190	128	128	144	100	173	656	360	180	84	
8	TD40-14G/2	8	14			0.75	0.75	122	151	125	98	95	120	68	139	451	320	160	31
9	TD40-16G/2	12.5	16			1	1.1	122	151	125	98	95	120	68	139	451	320	160	32

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					1×220V P2(kW)	3×380V P2(kW)	D	B1	B2	B3	B4	B5	H1	H2	H3	L1	L2		
10	TD40-21G/2	12.5	21	2900	1.5	1.5	140	171	137	98	95	120	68	149	504	320	160	38	
11	TD40-20G/2	20	20		2.2	2.2	140	171	137	105	95	144	85	144	516	320	160	43	
12	TD40-26G/2	20	26			3	160	196	150	116	109	144	85	156	578	340	170	54	
13	TD40-30G/2	25	30			4	160	214	169	116	109	144	85	156	583	340	170	62	
14	TD40-36G/2	25	36			5.5	200	257	190	133	128	144	90	181	654	380	190	85	
15	TD40-48G/2	25	48			7.5	200	257	190	133	128	144	90	181	654	380	190	94	
16	TD50-32G/2	12.5	32			3	160	196	150	128	128	144	105	150	592	400	200	64	
17	TD50-39G/2	12.5	39			4	160	214	169	128	128	144	105	150	597	400	200	71	
18	TD50-49G/2	12.5	49			5.5	200	257	190	128	128	144	105	172	660	400	200	88	
19	TD50-59G/2	12.5	59			7.5	200	257	190	163	163	144	105	178	666	440	220	112	
20	TD50-80G/2	12.5	80			11	350	314	261	163	163	144	105	222	783	440	220	184	
21	TD50-12G/2	16	12			1.1	1.1	120	151	125	114	101	144	105	135	484	340	170	37
22	TD50-15G/2	20	15			1.5	1.5	140	171	137	114	101	144	105	137	529	340	170	42
23	TD50-18G/2	25	18			2.2	2.2	140	171	137	114	101	144	105	137	529	340	170	45
24	TD50-24G/2	25	24			3	160	196	150	114	101	144	105	147	589	340	170	55	
25	TD50-28G/2	30	28			4	160	214	169	118	109	144	105	152	599	340	170	64	
26	TD50-35G/2	30	35			5.5	200	257	190	118	109	144	105	175	663	340	170	81	
27	TD50-40G/2	35	40			7.5	200	257	190	142	138	144	105	175	663	400	200	98	
28	TD50-50G/2	40	50			11	350	314	261	142	138	144	105	225	830	400	200	173	
29	TD50-60G/2	50	60			15	350	314	261	171	163	144	115	225	840	440	220	196	
30	TD50-70G/2	50	70			18.5	350	314	261	171	163	144	115	225	884	440	220	203	
31	TD50-81G/2	50	81			22	350	355	273	171	163	144	115	225	917	440	220	256	
32	TD65-37G/2	25	37			5.5	200	257	190	128	128	144	105	180	668	400	200	90	
33	TD65-48G/2	25	48			7.5	200	257	190	128	128	144	105	180	668	400	200	98	
34	TD65-15G/2	30	15			2.2	2.2	140	171	137	116	101	144	105	153	545	340	170	48
35	TD65-20G/2	30	20			3	160	196	150	116	101	144	105	163	605	340	170	57	
36	TD65-22G/2	40	22			4	160	214	169	116	101	144	105	163	610	340	170	64	
37	TD65-30G/2	40	30			5.5	200	257	190	131	115	144	105	194	682	360	180	85	
38	TD65-34G/2	50	34			7.5	200	257	190	131	115	144	105	194	682	360	180	94	
39	TD65-41G/2	50	41			11	350	314	261	148	138	144	105	234	839	400	200	173	
40	TD65-51G/2	50	51			15	350	314	261	148	138	144	105	234	839	400	200	188	
41	TD65-61G/2	50	61			18.5	350	314	261	174	162	160	125	228	897	475	238	208	
42	TD65-68G/2	50	68			22	350	355	273	174	162	160	125	228	930	475	238	260	
43	TD65-85G/2	50	85			30	400	397	314	174	162	160	125	231	1008	475	238	322	
44	TD80-41G/2	50	41			11	350	314	261	137	128	144	115	221	836	500	250	176	

Technical Parameter

NO.	Model	Q (m³/h)	H (m)	N (r/min)	Standard motor voltage (V)		Size(mm)										Weight (kg)	
					1×220V P2(kW)	3×380V P2(kW)	D	B1	B2	B3	B4	B5	H1	H2	H3	L1		L2
45	TD80-48G/2	50	48	2900		15	350	314	261	137	128	144	115	221	836	500	250	191
46	TD80-13G/2	50	13		2.2	3	160	196	150	134	112	144	105	171	613	400	200	63
47	TD80-18G/2	50	18			4	160	214	169	134	112	144	105	171	618	400	200	70
48	TD80-23G/2	50	23			5.5	200	257	190	134	112	144	105	195	683	400	200	87
49	TD80-29G/2	50	29			7.5	200	257	190	134	112	144	105	195	683	400	200	95
50	TD80-32G/2	70	32			11	350	314	261	159	138	144	115	240	855	450	225	179
51	TD80-38G/2	80	38			15	350	314	261	159	138	144	115	240	855	450	225	194
52	TD80-47G/2	80	47			18.5	350	314	261	159	138	144	115	240	899	450	225	203
53	TD80-54G/2	80	54			22	350	355	273	159	138	144	115	240	932	450	225	256
54	TD80-67G/2	80	67			30	400	397	314	180	162	160	115	242	1017	500	250	324
55	TD100-9/2	50	9			2.2	140	171	137	134	101	160	105	178	570	450	225	56
56	TD100-15/2	60	15			4	160	214	169	134	101	160	105	190	637	450	225	73
57	TD100-17G/2	80	17			5.5	200	257	190	146	118	144	120	199	702	450	225	96
58	TD100-22G/2	80	22			7.5	200	257	190	146	118	144	120	199	702	450	225	104
59	TD100-27/2	100	27	1450		11	350	314	261	147	123	144	140	260	900	550	275	187
60	TD100-33/2	100	33			15	350	314	261	147	123	144	140	260	900	550	275	202
61	TD100-40G/2	100	40			18.5	350	314	261	181	152	230	140	270	954	550	275	220
62	TD100-48G/2	100	48			22	350	355	273	181	152	230	140	270	987	550	275	273
63	TD100-52G/2	130	52			30	400	397	314	181	152	230	140	270	1062	550	275	336
64	TD125-11G/4	120	11			5.5	200	257	190	198	162	230	160	229	772	620	310	140
65	TD125-14G/4	120	14			7.5	200	257	190	198	162	230	160	229	772	620	310	150
66	TD125-19G/4	140	19			11	350	314	261	213	178	230	160	301	961	660	330	255
67	TD125-22G/4	160	22			15	350	314	261	236	208	230	215	292	1051	800	400	310
68	TD125-28G/4	160	28			18.5	350	355	273	236	208	230	215	292	1084	800	400	340
69	TD125-32G/4	160	32			22	350	355	273	236	208	230	215	292	1122	800	400	361
70	TD125-40G/4	160	40			30	400	397	314	261	233	230	160	298	1110	800	400	455
71	TD125-48G/4	160	48			37	400	445	334	261	233	230	160	313	1167	800	400	492
72	TD150-12.5G/4	200	12.5			11	350	314	261	217	180	230	175	297	972	660	330	260
73	TD150-17G/4	200	17		15	350	314	261	217	180	230	175	297	1016	660	330	281	
74	TD150-22G/4	200	22		18.5	350	355	273	217	180	230	175	297	1049	660	330	312	
75	TD150-25/4	200	25		22	350	355	273	238	208	230	215	269	1061	800	400	365	
76	TD150-33/4	200	33		30	400	397	314	238	208	230	215	269	1136	800	400	445	
77	TD150-40/4	200	40		37	450	445	334	267	248	230	230	288	1212	900	450	518	
78	TD150-50/4	200	50		45	450	445	334	267	248	230	230	288	1212	900	450	570	
79	TD200-16/4	300	16		18.5	350	355	273	278	219	360	270	415	1265	1000	500	417	

Technical Parameter

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					1×220V P2(kW)	3×380V P2(kW)	D	B1	B2	B3	B4	B5	H1	H2	H3	L1		L2
80	TD200-19/4	300	19	1450		22	350	355	273	278	219	360	270	415	1305	1000	500	434
81	TD200-24/4	300	24			30	400	397	314	303	252	360	270	415	1335	1100	550	537
82	TD200-31/4	300	31			37	450	445	334	303	252	360	270	445	1395	1100	550	602
83	TD200-36/4	300	36			45	450	445	334	303	252	360	270	445	1420	1100	550	648
84	TD200-47/4	300	47			55	550	484	367	315	269	360	270	457	1517	1100	550	744
85	TD200-53/4	300	53			75	550	547	407	315	269	360	270	457	1587	1100	550	877
86	TD200-12.5/4	400	12.5			22	350	355	273	278	219	360	270	415	1300	1000	500	432
87	TD200-20/4	400	20			30	400	397	314	278	219	360	270	415	1334	1000	500	492
88	TD200-23/4	400	23			37	450	445	334	303	252	360	270	445	1389	1100	550	602
89	TD200-27/4	400	27			45	450	445	334	303	252	360	270	445	1412	1100	550	638
90	TD200-32/4	400	32			55	550	484	367	303	252	360	270	445	1488	1100	550	710
91	TD200-43/4	400	43			75	550	547	407	315	269	360	270	457	1556	1100	550	883
92	TD200-50/4	400	50			90	550	547	407	315	269	360	270	457	1607	1100	550	975
93	TD250-16/4	500	16			30	400	397	314	316	243	390	300	465	1430	1100	550	550
94	TD250-19/4	500	19			37	450	445	334	316	243	390	300	495	1475	1100	550	611
95	TD250-22/4	500	22			45	450	445	334	316	243	390	300	495	1500	1100	550	647
96	TD250-29/4	500	29			55	550	484	367	329	264	440	300	507	1597	1100	550	773
97	TD250-36/4	500	36			75	550	547	407	329	264	440	300	507	1667	1100	550	909
98	TD250-47/4	500	47			90	550	547	407	347	292	440	305	485	1700	1200	600	1030
99	TD250-56/4	500	56			110	660	645	535	347	292	440	305	525	1860	1200	600	1389
100	TD250-12.5/4	630	12.5			30	400	397	314	316	243	390	300	465	1414	1100	550	552
101	TD250-14/4	630	14			37	450	445	334	316	243	390	300	495	1469	1100	550	613
102	TD250-17/4	630	17			45	450	445	334	316	243	390	300	495	1492	1100	550	649
103	TD250-20/4	630	20			55	550	484	367	316	243	390	300	495	1568	1100	550	722
104	TD250-26/4	630	26			75	550	547	407	329	264	440	300	507	1636	1100	550	909
105	TD250-32/4	630	32			90	550	547	407	329	264	440	300	507	1687	1100	550	999
106	TD250-40/4	630	40			110	660	645	535	347	292	440	305	525	1840	1200	600	1389
107	TD250-50/4	630	50			132	660	645	535	347	292	440	305	525	1990	1200	600	1473
108	TD300-15/4	900	15		55	550	484	367	345	250	440	290	649	1720	1200	600	907	
109	TD300-20/4	900	20		75	550	547	407	345	250	440	290	649	1770	1200	600	1075	
110	TD300-25/4	900	25		90	550	547	407	380	280	480	290	659	1850	1200	600	1230	
111	TD300-30/4	900	30		110	660	645	535	380	280	480	290	699	2000	1200	600	1570	
112	TD300-35/4	900	35		132	660	645	535	380	280	480	290	699	2150	1200	600	1650	
113	TD300-44/4	900	44		160	660	645	535	380	295	480	290	702	2150	1200	600	1790	
114	TD300-55/4	900	55		200	660	645	535	380	295	480	290	702	2150	1200	600	1905	