



Torontech is a leading North American based international manufacturer and supplier of pumps, pipes, valves & actuators. The Torontech is group has established an extensive network in the USA as well as international markets and remains to be a preferred vendor of choice supplying quality pumps for today's leading corporations.

Creating comprehensive solutions for our clients has always been the core value of our company. From sales, to order execution, and post-sales support; every staff member is here to assist you in selecting the solution that best suits your unique requirements and budget.

The Torontech [™] group offers a complete range of quality pumps that are,ANSI to ISO approved and engineered to last, ensuring your company continuous production without interruptions.

Since the beginning, we have succeeded in only offering quality manufactured pumps that are currently being used worldwide. We offer the best value for your investment and provide world-class support.

Due to the demand for our quality pumps, Torontech ™ has experience explosive growth primarily in the oil & gas, water filtration and chemical refinery industries.

We offer an extensive range of solutions and products for oil & gas projects, refineries, petrochemical plants, and marine applications. Our main class of pumps includes API (American Petroleum Institute) Standard, Mining, Water & Sewage and Firefighting applications. The pumps are offered in various configurations depending on orientation of the pump, required head and type of fuel used for operation.





TTAAC-Series of Pulp Pumps

Description

- Casing: single volue casing with working pressure up to **16bar**.
- Impeller: fully open, semi-open, three blades for a large open cross section. Six blades for high pressures and low pulsations.
- Two wearing rings:to pretect the pump casing and casing cover.
- Shaft: ensure minor shaft deflection and low mechanical vibration.

Bearing:

• (NU308E/7308B, NU310E/7310B,NU312E/7312B, NU316E/7316B,NU320E/7320B)

Shaft Seal:

- 38mm/48mm/53mm/65mm/90mm
- Gland Packing: Need high pressure seal pipe.
- Single mechanical seal: can use liquid for the lubrication and cooling.
- Cartridge dural mechanical seal/normal dural mechanical seal: need high pressure seal pipe.
- Cartridge :the pressure is required to be 2-3bars higher than suction pressure of pump

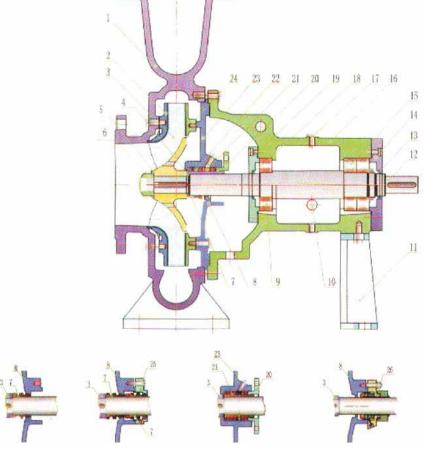
Flange:

Standard: DIN2501 1.0 Mpa (10bar) Option: 1.6Mpa (16bar)

Techanical Data:

- Flow (max): 3300m3/h
- Head(max):100m
- Speed: 750rpm/990rpm/1450rpm/2900rpm (50Hz) 1750rpm/3500rpm (60Hz)
- Temperature: -10 °C-120 °C
- Operating Pressure: 1.0Mpa to 1.6Mpa
- Max Test pressure 2.5Mpa
- Max solid contains: <=6%.

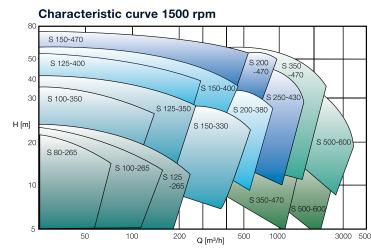


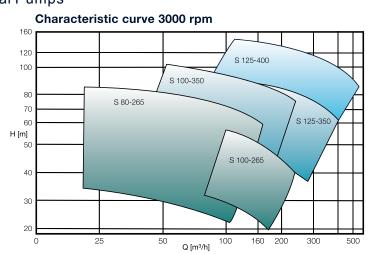


- Pump casing Front wear lining impeller adjust washer impeller lock washer impeller nut mechanical seal pump cover (mechanical seal) Roller Bearing 10 Oil level pump support 12 shaft 13 gasket oil seal 14 bearing cover15 angular contact ball bearing 17 plug 18 gasket oil seal 19 bearing cover 20 gland cover gland packing 22 lantern ring 23 pump cover (gland packing) 24 rear wear lining 25 seal cover 27 cartridge dural mechanical seal
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Material Selected and Characteristic curves

Characteristic curves TTAAC- OP-S Series Centrifugal Pumps





Material Selected based on liquid

OP-S Material Combinations														
Code		CD)			SD		DD			DT			
OP-S Series	Cast Iron	SS	SS	Cast Iron	SS		Duplex ss	Cast Iron	Duplex ss	Duplex ss	Duplex ss	Super Duplex SS		
DIN std	0. 6025	1. 4021	1. 446	0.6025	1. 4021	1.4059M	1. 4460	0. 6025	1. 4462	1. 4460	1. 4460	1.4517M		
Material	HT250	X2Cr13	X3CrNiMoN27-5-2	HT250	X2Cr13	X2Cr2N17Mo	X3CrNMoN27-5-2	HT250	X3CrN5Mo2N	X3CrNMoN27-5-2	X3CrNMoN27-5-2	X2CrNMoCuN25-63-3		
Impeller			•				•			•		•		
Pump Casing/Cover	•					•				•	•			
Bearing Housing	•			•				•						
Wear lining			•				•			•		•		
pump shaft		٠			•				•					

Material Selected based on liquid													
DI II	Material												
Fluid	CD	CS	SS	SL	SD	DD	DT						
Clean Water	•	•											
White Water	•	٠											
little Solid contains, PH=6-8, Pressure<6bar	•	٠											
more solid contains, PH=6-8, high pressure					•								
more solid contains, corrosive, high pressure						•							
big solid contains, corrosive, high pressure							٠						
pulp industry						•							
sewage water treatment	•	•	•	•	•								
chemical industry			•	•									
Food Industry			•	•		•							

					Visc	osity Sel	ection: m	/s		7-11	1	
pulp contains	<65	80-100	0UTLET 125-150		300-400	>400	<65	80-100	SUCTIOIN 125-150	(DN) 200-300	300-400	>400
<0.5%	2. 0	2. 5	3. 0	3. 0	3. 5	3. 5	1. 5	2. 0	2. 0	2. 5	2. 5	2. 5
<1.5%	1.5-2	2. 5	3. 0	3. 0	3. 0	3. 0	1.5	1.5	2. 5	2. 5	2. 5	2. 5
<3%	1.0	1.5	2.0	2.0	2. 5	2.5	0.5	0.8	1.5	1.5	1.5	1.5
<4%	-	1.5	2.0	2.0	2.5	2.5	-	0.5	1.0	1.0	1.0	1.5
<5%	-	1.5	2.0	2.0	2.5	2.5	-	0.5	1.0	1.0	1.0	1.5
<6%	-	1.0	1.5	1.5	2.0	2.0	-	-	0.5	0.5	0.5	1.0

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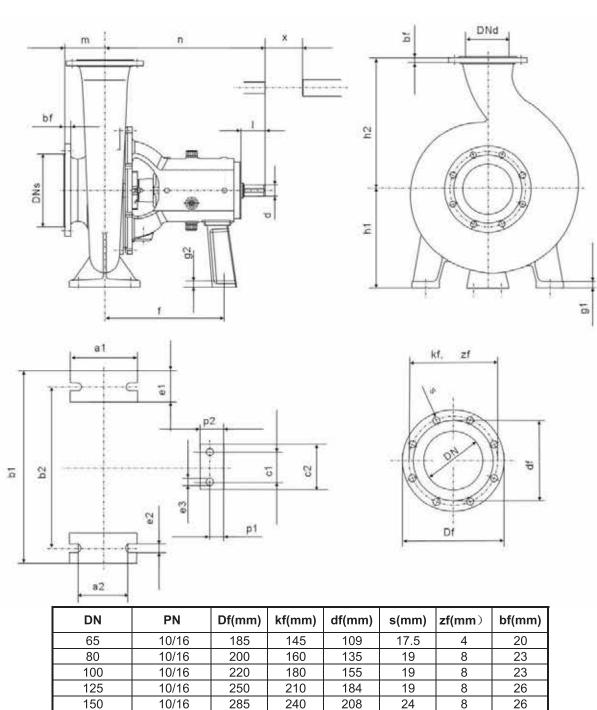






Dimension of OP-S series

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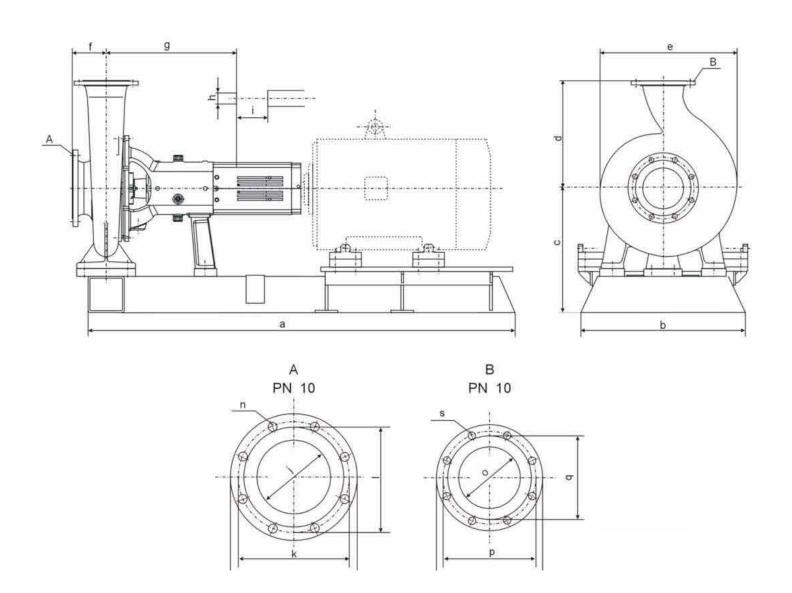


DN	PN	Df(mm)	kf(mm)	df(mm)	s(mm)	zf(mm)	bf(mm)
65	10/16	185	145	109	17.5	4	20
80	10/16	200	160	135	19	8	23
100	10/16	220	180	155	19	8	23
125	10/16	250	210	184	19	8	26
150	10/16	285	240	208	24	8	26
200	10	340	295	264	24	8	27
250	10	395	350	316	24	12	27
300	10	445	400	370	24	12	28
350	10	505	460	428	24	16	33
500	10	670	620	585	26	20	34

unit: mm

Pumps and Valves

eang Housin	d	i	e1	e2	e3	g1	g2	р1	p2
OP-S30	28	60	80	23	16	16	16	48	80
OP-S40	38	72	100	28	16	21	16	30	80
OP-S50	42	80	100	28	18	26	16	30	90
OP-S60	55	102	125	32	20	26	20	25	80
OP-S80	80	141	125	38	18	30	20	95	120



unit:	mm

Model	earing Housir	DNs	DNd	m	n	h1	h2	a1	a2	b1	b2	c1	c2	f
OP-S65-350		80	65	135	500	270	300	160	110	400	315	72	130	390
OP-S80-260		100	80	130	480	240	290	160	110	400	315	72	130	370
OP-S80-265	OP-S30	100	80	130	480	240	300	160	100	400	315	72	130	370
OP-S100-265		125	100	130	480	240	300	160	100	400	315	72	130	370
OP-S125-265		150	125	130	480	240	300	160	100	400	315	72	130	370
OP-S80-350		100	80	125	560	240	330	170	110	410	315	100	160	440
OP-S100-350	OP-S40	125	100	132	555	315	400	200	130	500	400	100	160	440
OP-S125-350	OP-540	150	125	132	555	315	400	200	130	500	400	100	160	440
OP-S150-330	1	200	150	132	555	315	400	200	130	500	400	100	160	440
OP-S80-400		125	80	150	600	355	400	220	140	510	410	120	180	475
OP-S100-400		150	100	150	595	355	480	260	180	550	450	120	180	465
OP-S125-400	OP-S50	150	125	150	590	355	480	260	180	550	450	120	180	465
OP-S150-400		200	150	150	590	355	480	260	180	550	450	120	180	465
OP-S200-380		250	200	150	590	355	480	260	180	550	450	120	180	465
OP-S150-470		200	150	165	719	410	550	270	190	650	550	110	170	557.5
OP-S200-470	OP-S60	250	200	160	719	410	550	270	190	650	550	110	170	557.5
OP-S250-430] [300	250	160	724	410	550	270	190	650	550	110	170	562.5
OP-S350-470	OP-S80	350	350	180	1055	500	700	320	220	770	650	180	240	780
OP-S500-600	OF-360	500	500	340	1072	605	895	400	300	840	960	180	240	794

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