

CENTRIFUGAL PUMPS TNP



Teknopomp Teknolojik Pompa ve Hidrofor Sistemleri



TNP - SINGLE STAGE CENTRIFUGAL PUMPS

Construction

- Hhorizontal shaft, end suction, single stage radial impeller centrifugal pump.
- In accordance with EN 733
- Due to back pull out design, centrifugal pump can easily demount and reassembly from piping system

Sealing:

- Horizontal shaft, end suction, single stage radial impeller centrifugal pump.
- In accordance with EN 733
- Due to back pull out design, centrifugal pump can easily demount and reassembly from piping system

Application

For clean liquids, without abrasives, which are non-aggressive.

For the pump materials (contents of solids up to 0.2%).

For water supply. For heating, air conditioning, cooling and circulation plants.

For civil and industrial applications and for agriculture. For fire fighting applications. For irrigation.

Operating Conditions

- Liquid temerature between -10 +90 C
- Ambient temperature up to 40C
- Maximum suction lift up to 7 m.
- Allowable working pressure up to 10 bar

Pump-Motor Connection

TNP pump connected to a standard electric motor in B3 construction form (EN 60072-1), by means of a baseplate, driven by a flexible coupling and with coupling protection.

Three-phase 400 V, 50 Hz

Classification scheme IE3 for three-phase motors from 0,55 kW.

IP 55 protection.

Motor suitable for operation with frequency converter.

Special Features on Request

- Special mechanical selection
- AISI 316 Stainless Steel pump shaft
- Other protection standarts
- Exproof Motor (In accordance ATEX -94/9 EEC)
- Other Electric Motor Voltages
- Frequency 60 Hz.

Pump Flanges

DIN 2533 PN16

Pump Identification TNP 80 - 200
Pump type TNP
Outlet Flange Diameter
Nominal Impeller Diameter

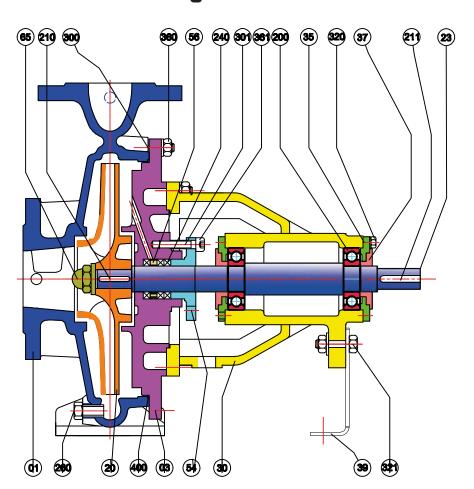
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	MATERIAL														
PART NAME	Standart	With Bronze Impeller	All Bronze	Ductile Iron	Steel Casting	Stainless Steel									
Volute Casing	GG 25	GG 25	Bronz	GGG 50	GS 45	AISI 304-316									
Stuffing Box	GG 25	GG 25	Bronz	GGG 50	GS 45	AISI 304-316									
Impeller	GG 25	Bronz	Bronz	GGG 50	GS 45	AISI 304-316									
Gland	GGG 40	Bronz	Bronz	Bronz	Bronz	AISI 304-316									
Wear Ring(*)	Bronz	GG 25	Bronz	GG 25	Bronz	X20Cr13									
Shaft	X20Cr13	X20Cr13	X20Cr13	X20Cr13	X20Cr13	AISI 304-316									
Shaft Sleeve(*)	X20Cr13	X20Cr13	X20Cr13	X20Cr13	X20Cr13	X20Cr13									
Bearing Bracket	GG 25	GG 25	GG 25	GG 25	GG 25	GG 25									
Bearing Cover	GG 25	GG 25	GG 25	GG 25	GG 25	GG 25									





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Sectional Drawing and Part List



1- Volute Casing
2- Stuffing Box
3- Impeller
4- Bearing Bracket
5- Bearing Cover
6- Water Thrower
7- Pump Support Foot
8- Gland
9- Lantern Ring
10- Impeller Nut
11- Bearing
12- Impeller Key
13- Coupling Key
14- Stuffing Box Packing
15- Plug
16- Imbus Bolt
17- Gland Stud
18- Stuffing Box Bolt
19- Support Foot Bolt
20- Gland Nut
21- O Ring
22- Shaft

Common Part List

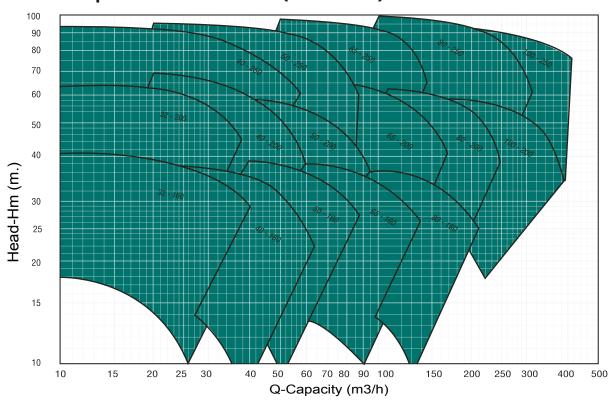
This list includes common parts in accordance with DIN 24 255

Part No	Part Name	Pump Size	TNP 32 - 160	TNP 40 - 160	TNP 50 - 160	TNP 65 - 160	TNP 80 - 160	TNP 32 - 200	TNP 40 - 200	TNP 50 - 200	TNP 65 - 200	TNP 40 - 250	TNP 50 - 250	TNP 80 - 200	TNP 100 - 200	TNP 65 - 250	TNP 80 - 250	TNP 100 - 250	TNP 125 - 250	TNP 65 - 315	TNP 80 - 315	TNP 100 - 315	TNP 125 - 315	TNP 150 - 315	TNP 100 - 400	TNP 125 - 400	TNP 150 - 400
	DESIGN GROUP		A1		A2 A3			B1 B2				B3			C1			C2									
01	Volute Casing	3	а	b	С	d	е	f	g	Н	i	İ	k		m	n	0	р	q	r	s	t	u	٧	w	Х	У
20	Impeller		а	b	С	d	е	f	g	h	i	j	k		m	n	0	р	q	r	s	t	u	٧	w	х	у
03	Stuffing Box	A11		A11 A12			1 1 - 1						11		B2		В		ВЗ	1	С	11		C21			
	Bearing Brack	ket		Α										В									C				
60	Shaft			Α						В								С									
65	Shaft Nut	A				4							В								С						
54	Gland			A							В								С								
37	Bearing Cove	r		Α												В					С						
56	Lantern Ring			А				АВ									С										

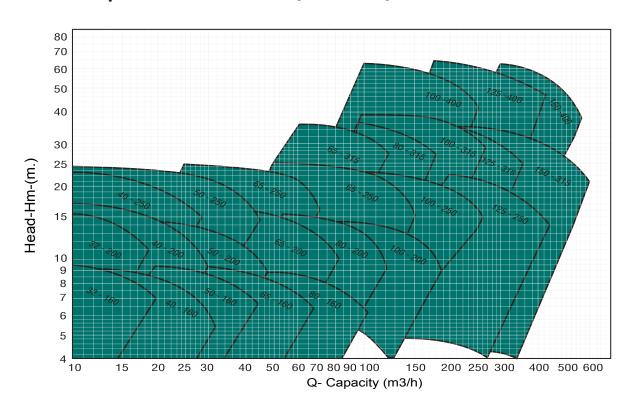
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Technical Data

Pump Performance Field (2900RPM)



Pump Performance Field (1450RPM)

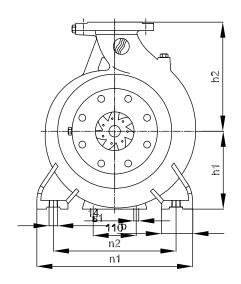


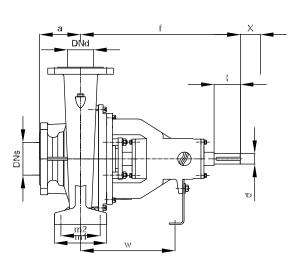


Teknolojik Pompa ve Hidrofor Sistemleri

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General Dimension Table





NIa	Pum	o Model	Inlet-Ou	tlet(PN16)	Len	gth					C	onnect	tion Di	mensi	ons	Shaf	t End	(*)
No	D I N 24255	EK	DNs	DN Del.	а	f	h1	h2	b	m1	m2	n1	n2	s1	W	d	- 1	Х
1	32-160		50	32	80	360	132	160	50	100	70	240	190	M12	260	24	50	65
2	32-200		50	32	80	360	160	180	50	100	70	240	190	M12	260	24	50	65
3		32-250	50	32	100	360	180	225	65	125	95	320	250	M12	260	24	50	80
4	40-160		65	40	80	360	132	160	50	100	70	240	190	M12	260	24	50	75
5	40-200		65	40	100	360	160	180	50	100	70	265	212	M12	260	24	50	75
6	40-250		65	40	100	360	180	225	65	125	95	320	250	M12	260	24	50	75
7	50-160		65	50	100	360	160	180	50	100	70	265	212	M12	260	24	50	80
8	50-200		65	50	100	360	160	200	50	100	70	265	212	M12	260	24	50	85
9	50-250		65	50	100	360	180	225	65	125	95	320	250	M12	260	24	50	85
10		50-315	80	50	125	470	225	280	65	125	95	345	280	M12	330	32	80	100
11	65-160		80	65	100	360	160	200	65	125	95	280	212	M12	260	24	50	100
12	65-200		80	65	100	360	180	225	65	125	95	320	250	M12	260	24	50	100
13	65-250		80	65	100	470	200	250	80	160	120	360	280	M16	340	32	80	100
14	65-315		80	65	125	470	225	280	80	160	120	400	315	M16	340	32	80	110
15		65-400	100	65	125	470	250	355	80	160	120	400	315	M16	340	32	80	110
16	80-160		100	80	125	360	180	225	65	125	95	320	250	M12	260	24	50	110
17	80-200		100	80	125	470	180	250	65	125	95	345	280	M12	340	32	80	110
18	80-250		100	80	125	470	200	280	80	160	120	400	315	M16	340	32	80	115
19	80-315		100	80	125	470	250	315	80	160	120	400	315	M16	340	32	80	120
20		80-400	100	80	125	530	280	355	100	200	150	500	400	M20	370	42	110	120
21	100-200		125	100	125	470	200	280	80	160	120	360	280	M16	340	32	80	120
22	100-250		125	100	140	470	225	280	80	160	120	400	315	M16	340	32	80	130
23	100-315		125	100	140	470	250	315	80	160	120	400	315	M16	340	32	80	130
24	100-400		125	100	140	530	280	355	100	200	150	500	400	M20	370	42	110	130
25		125-200	150	125	140	470	250	315	80	160	120	400	315	M16	340	32	80	130
26	125-250		150	125	140	470	250	355	80	160	120	400	315	M16	340	32	80	140
27	125-315		150	125	140	530	280	355	100	200	150	500	400	M20	370	42	110	140
28	125-400	_	125	150	140	530	315	400	100	200	150	500	400	M20	370	42	110	140
29		150-200	200	150	160	470	280	355	100	200	150	500	400	M16	340	32	80	170
30		150-250	200	150	160	470	280	375	100	200	150	500	400	M16	340	32	80	140
32	150-315		200	150	160	530	280	400	100	200	150	550	450	M20	370	42	110	140
32	150-400		200	150	160	530	315	450	100	200	150	550	450	M20	370	42	110	140

^{*}Back Pull Out Distance required between motor shaft end and pump shaft end.

TNP pumps are conforming with DN 25 255 and EN 733

Opertaion pressure is 10 Bar and test pressure is 13 Bar