



HEAVY DUTY PUMPS AND WATER TURBINE MFG.CO.



WATER PUMPS



A 3D rendering of the PETCO logo in a dark blue, blocky font. The letters are arranged in a slightly staggered, perspective view, giving them a three-dimensional appearance. The logo is set against a light, hazy background that shows a faint reflection of the facility above.

QUALITY IS A JOURNEY NOT A DESTINATION

PETCO has been established in 1991 for design and manufacturing of various types of pumps in refineries , power plants , chemical and petrochemical plants , pump stations , water and waste water treatment plants and etc .

The factory is located in tabriz city in an area of 80000 m² and, total covered area is 20000 m² with largest hydrualic test facility in middle east .

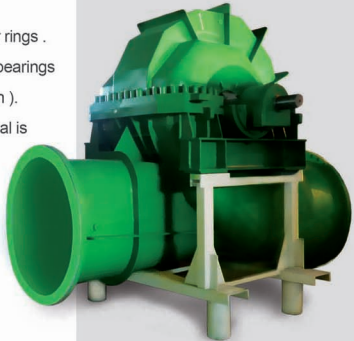
VENUS1/HGT1/CYRUS/FWS SERIES

- Horizontal centrifugal axially split case .
- Single or double volute foot mounted case
(centerline mounted is applicable as an option)
- Side-Side arrangement nozzles
- Single stage double suction impeller .
- Easily replaced case and impeller wear rings .
- Long life grease lubricated anti friction bearings
(oil lubricated is applicable as an option) .
- Soft packing shaft seal (mechanical seal is applicable as an option)



Operating Data

Capacity : up to 20000 m³/h
Total head : up to 150 m



Applications

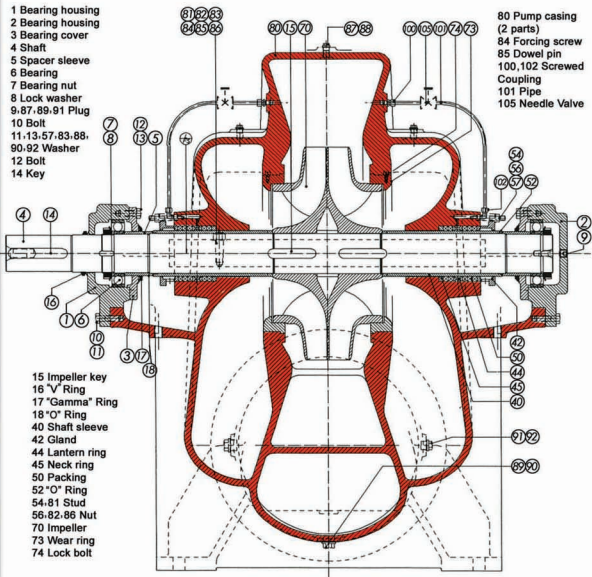
Water industries
Water supply systems
Cooling water services
Drainage pumping stations



SECTIONAL DRAWING

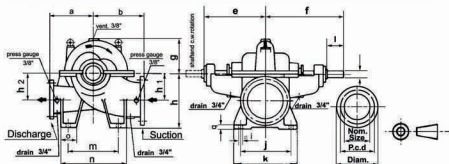
- 1 Bearing housing
- 2 Bearing housing
- 3 Bearing cover
- 4 Shaft
- 5 Spacer sleeve
- 6 Bearing
- 7 Bearing nut
- 8 Lock washer
- 9, 87, 89, 91 Plug
- 10 Bolt
- 11, 13, 57, 83, 88, 90, 92 Washer
- 12 Bolt
- 14 Key

- 80 Pump casing (2 parts)
- 84 Forcing screw
- 85 Dowel pin
- 100, 102 Screwed Coupling
- 101 Pipe
- 105 Needle Valve



- 15 Impeller key
- 16 "V" Ring
- 17 "Gamma" Ring
- 18 "O" Ring
- 40 Shaft sleeve
- 42 Gland
- 44 Lantern ring
- 45 Neck ring
- 50 Packing
- 52 "O" Ring
- 54, 81 Stud
- 56, 82, 86 Nut
- 70 Impeller
- 73 Wear ring
- 74 Lock bolt

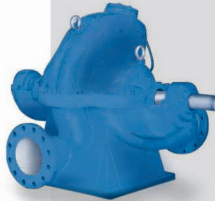
HORIZONTAL SPLITCASE CENTRIFUGAL PUMP



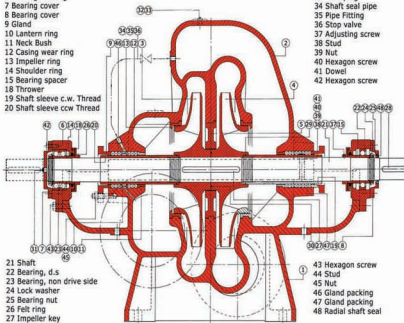
Type	Dis.	Suc.	a	b	e	f	g	h	h¹	h²	øi	j	k	m	n	o	q	ød	l
1-250160 *	250	300	440	425	385	495	345	475	250	200	23	400	500	400	500	100	22	45	110
1-100250 *	100	125	275	300	385	470	200	280	150	155	23	270	325	325	400	75	22	38	80
1-125250	125	150	300	350	385	495	230	330	180	210	23	320	380	375	430	75	25	45	110
1-150250 *	150	200	300	400	385	495	270	375	180	210	23	375	430	375	430	75	25	45	110
1-200250 *	200	250	350	450	455	565	300	450	200	265	23	400	500	400	500	100	30	55	110
1-250250	250	300	450	500	525	645	275	530	275	275	27	525	650	525	650	125	27	65	120
1-300250 *	300	350	550	600	585	725	400	535	280	300	27	525	650	525	650	125	30	75	140
1-125315 *	125	150	355	395	385	495	255	330	180	200	23	375	430	375	430	90	25	45	110
1-150315 *	150	200	350	400	455	565	275	375	200	200	23	400	500	400	500	100	25	55	110
1-200315 *	200	250	400	450	525	645	320	425	200	250	27	450	550	450	550	100	27	65	120
1-250315 *	250	300	450	500	525	645	330	530	275	275	27	525	650	525	650	125	27	65	120
1-300315 *	300	350	500	600	585	725	380	585	325	360	30	580	700	580	700	125	30	75	140
1-350315 *	350	400	550	700	715	890	450	700	325	400	30	675	850	675	850	175	35	85	170
1-150400 *	150	200	400	450	455	565	320	400	225	250	23	400	500	400	500	100	25	55	110
1-200400 *	200	250	450	475	525	645	340	470	200	275	27	450	550	450	550	100	27	65	120
1-250400 *	250	300	450	500	525	645	340	530	300	300	27	525	650	525	650	125	27	65	120
1-300400 *	300	350	500	550	585	725	380	585	325	325	30	580	700	580	700	125	30	75	140
1-350400 *	350	400	550	650	715	890	450	650	325	380	30	675	850	675	850	175	35	85	170
1-400400 *	400	500	600	750	715	890	530	760	400	470	35	725	950	725	950	225	35	85	170
1-500400 *	500	600	750	900	970	1075	600	900	425	525	35	1000	1200	780	1000	225	40	100	210
1-200500 *	200	250	450	500	540	675	350	470	200	285	27	400	500	400	500	100	40	75	140
1-250500 *	250	300	500	550	585	725	400	525	250	325	27	525	650	525	650	125	30	75	140
1-300500 *	300	350	550	575	600	775	450	585	325	350	30	580	700	580	700	150	35	85	170
1-350500 *	350	400	600	675	755	965	500	675	325	385	33	675	850	675	850	175	35	100	210
1-400500 *	400	500	600	750	715	890	550	760	400	470	35	725	950	725	950	225	35	85	170
1-500500	500	600	650	850	825	1025	600	865	450	525	40	775	1000	775	1000	225	40	100	210
1-600500	600	700	700	950	825	1025	650	1000	500	600	40	850	1100	850	1100	250	45	100	210
1-250650	250	300	500	550	585	725	450	550	325	325	27	525	650	525	650	125	30	75	140
1-300650 *	300	350	650	650	600	775	520	675	325	425	33	580	700	580	700	150	35	85	170
1-350650	350	400	550	650	715	895	475	730	350	450	33	675	850	675	850	175	32	100	210
1-400650	400	500	650	800	825	1025	600	760	400	470	35	725	950	725	950	225	35	100	210
1-500650	500	600	700	850	825	1025	650	865	450	525	40	775	1000	775	1000	225	40	100	210
1-600650	600	700	700	1000	910	1125	675	1040	500	650	40	850	1100	850	1100	250	45	100	210
1-300800 *	300	350	800	750	755	965	620	730	325	500	33	675	850	675	850	175	35	100	210
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1-400800 *	400	500	800	825	730	960	740	775	400	475	35	565	740	900	1100	250	50	120	210
1-500800	500	600	750	950	910	1125	680	940	450	600	40	775	1000	775	1000	225	40	120	210
1-600800	600	700	750	1000	910	1160	730	1040	500	650	40	850	1100	850	1100	250	45	140	250

HG1 / HG2 / SERIES

- Horizontal centrifugal axially split case .
- Single or double volute foot mounted case .
- Side-Side arrangement nozzles .
- Single / two stage single suction impeller .
- Easily replaced case and impeller wear rings .
- Long life grease lubricated anti friction bearings (optionally oil lubricated is applicable) .
- Soft packing shaft seal (mechanical seal is applicable as an option)



- 1 Casing half-Lower
- 2 Casing half-Upper
- 3 Impeller-First stage
- 4 Impeller-Second stage
- 5 Intermediate disc
- 6 Bearing housing
- 7 Bearing cover
- 8 Bearing cover
- 9 Gland
- 10 Lantern ring
- 11 Neck Bush
- 12 Casing wear ring
- 13 Impeller ring
- 14 Shoulder ring
- 15 Bearing spacer
- 18 Thrower
- 19 Shaft sleeve c.w. Thread
- 20 Shaft sleeve ccw Thread



- 28 Coupling key
- 29 Joint for shaft sleeve
- 30 Joint ring
- 31 Plug
- 32 Drain plug
- 33 Vent plug
- 34 Shaft seal pipe
- 35 Pipe Fitting
- 36 Stop valve
- 37 Adjusting screw
- 38 Stud
- 39 Nut
- 40 Hexagon screw
- 41 Dowel
- 42 Hexagon screw

- 21 Shaft
- 22 Bearing, d.s
- 23 Bearing, non drive side
- 24 Lock washer
- 25 Bearing nut
- 26 Felt ring
- 27 Impeller key

- 43 Hexagon screw
- 44 Stud
- 45 Nut
- 46 Gland packing
- 47 Gland packing
- 48 Radial shaft seal



Operating Data

Capacity : up to 2000 m³/h

Total head : up to 250 m



Applications

Water industries

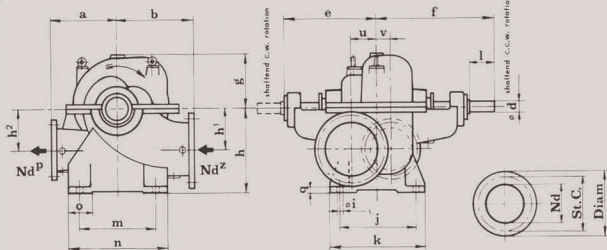
Water supply systems

Cooling water services

Drainage pumping stations

SINGLE SUCTION / TWO STAGE SPLIT CASE PUMPS

Type HG	Nd ^p	Nd ^z	a	b	f	e	g	h	h ¹	h ²	øi	j	k	m	n	o	q	u	v	ød	l
2 - 80315	80	100	325	350	555	450	300	325	135	215	23	375	430	375	430	75	35	130	40	45	110
2 - 100315	100	125	350	375	585	475	300	350	150	225	23	400	475	400	475	75	35	150	75	55	110
2 - 100400	100	125	400	425	585	475	350	390	150	265	23	400	475	400	475	75	35	150	75	55	110
2 - 125315	125	150	375	400	585	475	325	375	175	235	27	450	525	450	525	100	35	175	90	55	110
2 - 125400	125	150	425	450	700	580	400	415	175	275	27	450	525	450	525	100	35	175	90	65	120
2 - 125500	125	150	475	550	700	580	450	470	175	325	27	450	525	450	525	100	35	175	90	65	120
2 - 150315	150	200	425	450	700	580	375	415	200	250	27	500	600	500	600	100	40	225	105	65	120
2 - 150400	150	200	450	475	700	580	425	440	175	275	27	500	600	500	600	100	40	225	85	65	120
2 - 150500	150	200	500	550	780	640	475	470	200	310	30	500	600	500	600	100	40	225	105	75	140
2 - 150650	150	200	575	625	870	700	550	550	200	390	30	500	600	500	600	100	40	225	105	85	170
2 - 200400	200	250	475	500	780	640	450	500	210	300	30	550	650	550	650	120	40	225	105	75	140
2 - 200500	200	250	500	550	780	640	500	520	210	325	30	550	650	550	650	120	40	225	105	75	140
2 - 200650	200	250	550	625	900	700	585	610	225	425	30	550	650	550	650	120	40	225	125	100	200
2 - 250400	250	300	500	550	925	750	900	575	225	350	33	600	700	600	700	115	40	325	115	85	170
2 - 250500	250	300	550	600	900	700	925	600	250	375	33	600	700	600	700	150	45	275	140	100	200
2 - 250650	250	300	575	650	1000	800	950	665	250	450	36	600	700	600	700	150	45	275	140	120	220
2 - 300400	300	350	550	600	1000	800	925	625	275	375	36	650	800	650	800	150	45	325	175	100	200
2 - 300500	300	350	575	650	1050	830	950	665	275	400	36	650	800	650	800	150	45	325	175	120	220
2 - 300650	300	350	600	675	1100	850	975	725	300	475	36	750	900	750	900	200	50	325	175	140	250



NC1 / NC2 / VNC SERIES

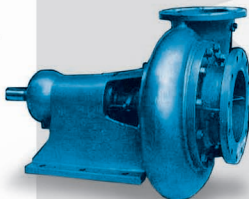
- Horizontal centrifugal radial split case .
- Single or double volute bracket mounted case .
- End suction - top discharge in NC1 types .
- Top - Top nozzle arrangement in NC2 types .
- Side - Side nozzle arrangement in VNC types (vertical in line) .
- Single / two stage single suction impeller .
- Easily replaced case and impeller wear rings .
- Long life grease lubricated anti friction bearings (optionally oil lubricated is applicable) .
- Soft packing shaft seal (mechanical seal is applicable as an option) .

**Operating Data**

Capacity : up to 600 m³/h
 Total head : up to 300 m

**Applications**

Water industries
 Water supply systems
 Industrial plants
 Drainage pumping stations



VDL/HVCPR/VPL SERIES

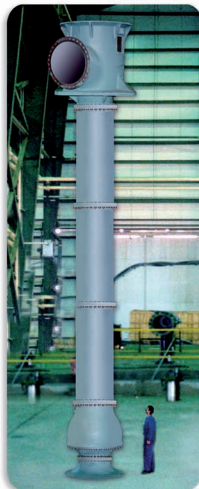
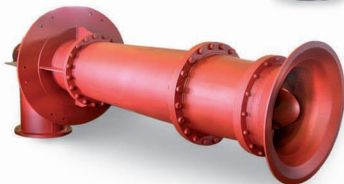
- Vertical turbine casing .
- Single / multi stage closed impeller in VDL and HVCPR serie. Propeller type in VPL serie .
- Bellmouth suction in bottom and flanged discharge inside of above floor .
- Medium lubricated radial bearings / grease lubricated anti friction ball thrust bearing
- Packed gland shaft seal
- Minimum shaft deflection



Operating Data

Capacity : up to 20000 m³ /h

Total head : up to 200 m



Applications

Water industries

Water supply systems

cooling water services

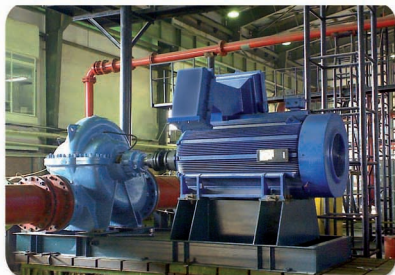
Sea water intake systems

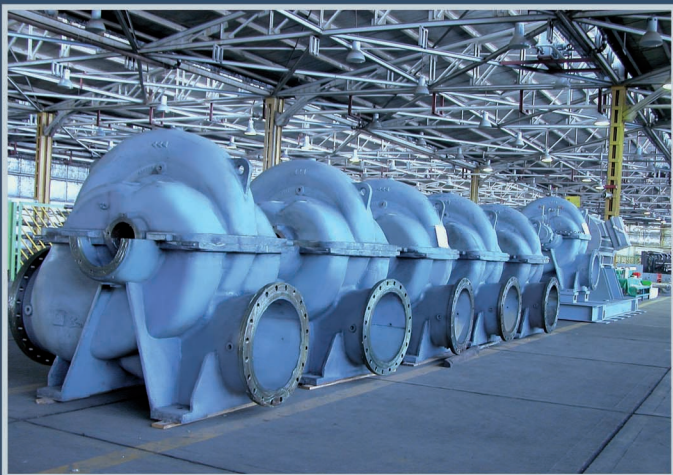
Applicable Materials



Part	Material	ASTM Code
Case	Cast Iron	A48 / A278 CLASS 25/30/40
	Carbon Steel	A216 Gr. WCB
	Ni- Resist	A436 - A439
	Stainless Steel	A217 / A484 / A743 / A351
	Duplex & Super Duplex	A890 Gr. 1A/1B - A351
Impeller	Cast Iron	A48 / A278 CLAS 25/30/40
	Bronze	C87200/C90700/C92200/C95200/C95800/C95400
	Carbon Steel	A216 Gr. WCB
	Ni- Resist	A436 - A439
	Stainless Steel	A217/A484/A743/A351/A182/A479/A276
	Duplex & Super Duplex	A890 Gr. 1A/1B
Shaft	Carbon Steel	A696
	AISI 4140 Steel	A434
	Chrome Steel	A276 TYPE 420
	Stainless Steel	A182 / A479
	Duplex & Super Duplex	A276

RELIABILITY ENHANCEMENT CAPABILITIES





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