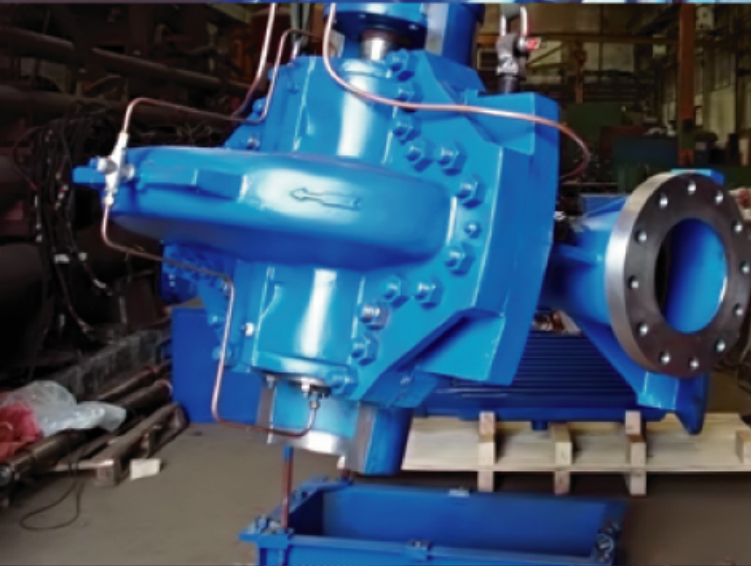




ASN, ASN-E Double Suction Axially Split Casing Pumps

ASN PUMPS
DRAKOS - POLEMIS S.A



APPLICATIONS

- Irrigation and water supply pumping stations
- Industrial water supply
- Fire fighting
- Marine
- Air condition
- Refineries

OPERATING DATA

Discharge sizes	: 80 to 800 mm
Capacity	: up to 11000 m ³ /h
Head	: up to 180 m
Operating pressure	: up to 25 bar
Operating temperature	: up to 105 °C

TYPES

ASN & ASN/V	: from 80 - 220 to 350 - 640
ASN-E & ASN-E/V	: from 400 - 550 to 800 - 980

MATERIALS

- Casing
 - Cast Iron
 - Ductile Iron
 - Ni – RESIST
 - Bronze
 - Stainless Steel
 - Duplex Steel
- Impeller
 - Cast Iron
 - Ni – RESIST
 - Bronze
 - Stainless Steel
 - Duplex Steel
- Shaft
 - Steel
 - Stainless Steel
 - Duplex Steel
- Shaft sleeve
 - Stainless Steel
 - Bronze
- Wear rings
 - Cast Iron
 - Bronze
 - Stainless Steel

FEATURES

• DESIGN

Single stage axially split casing pump, with double entry radial impeller. Pumps are suitable for horizontal or vertical (types ASN/V & ASN-E/V) installation.

• CASING

Of robust construction to eliminate the risk of vibrations. suction and discharge branches are co-axial and are integrally casted with the lower half casing, as well as the pump feet.

The two casing halves are aligned by dowels, sealed by gaskets and bolted together.

Easy maintenance, without disturbing the suction / discharge piping and the motor.

The upper half casing, is easily removable, to allow access to the rotating assembly, for inspection and maintenance.

• IMPELLER

The impellers are designed for high efficiency and low NPSH. Double entry, dynamically balanced, keyed to the shaft and locked in position. Hydraulic thrust is balanced due to the pressure equalization on both sides of the impeller.

• SHAFT

The shaft is accurately machined and features minimum deflection at the seals faces. It is protected by shaft sleeves from wear in the stuffing boxes areas.

• BEARINGS

The pump shaft is supported on grease lubricated ball or roller bearings, calculated for minimum 50.000 operation hours.

• STUFFING BOX

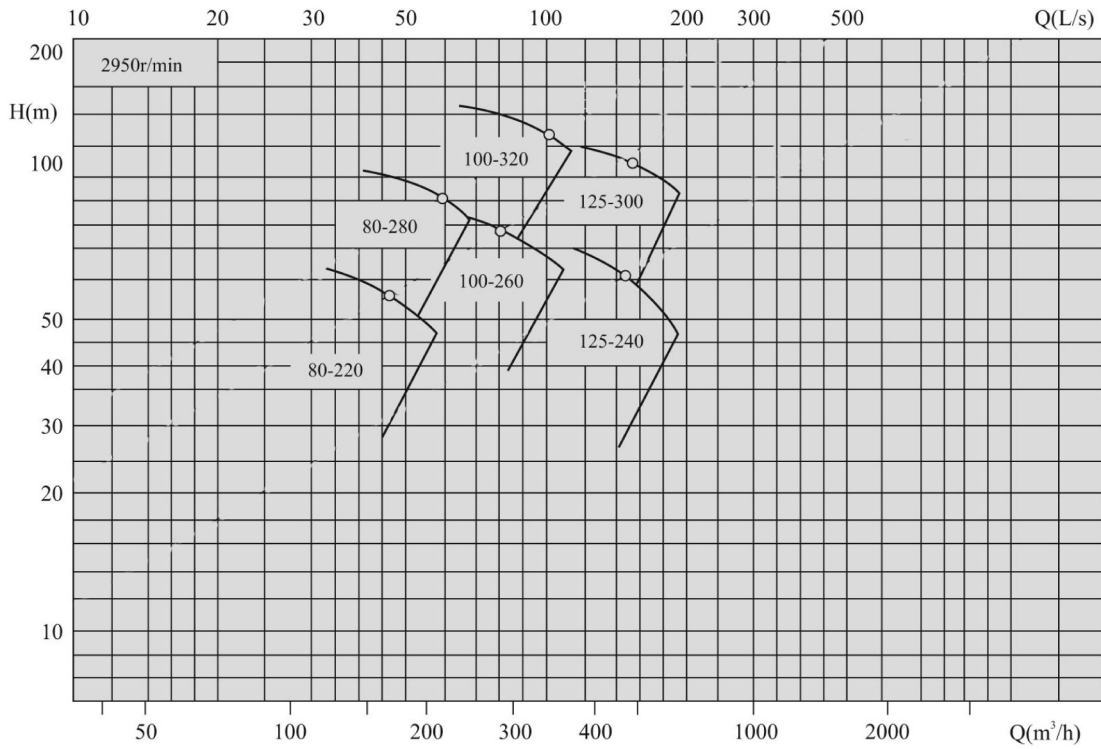
Pumps are sealed by gland packing or by mechanical seals on request.

• FLANGES

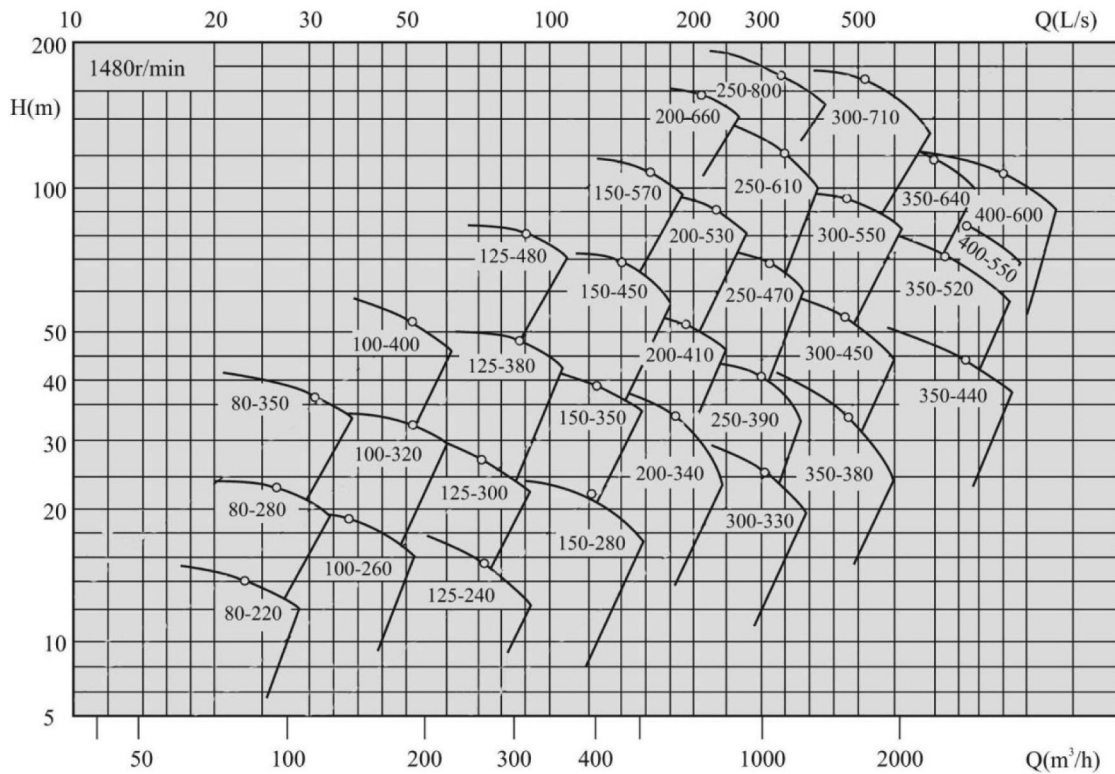
Flanges are drilled to ISO, DIN, BS or ANSI.

Selection Charts 50 HZ

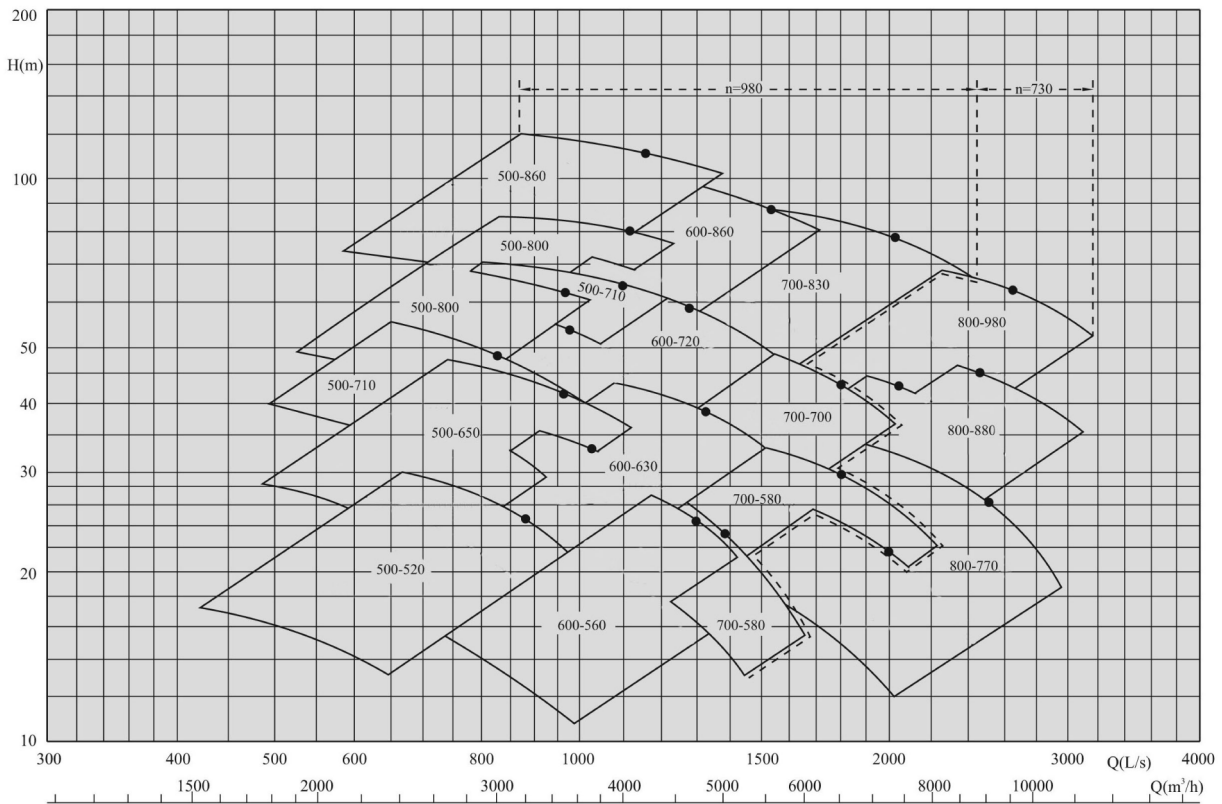
1. N=2900 rpm



2. N=1450 rpm



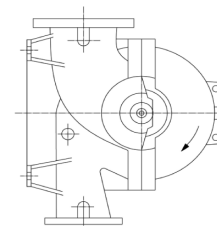
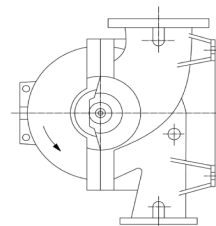
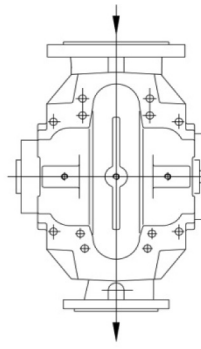
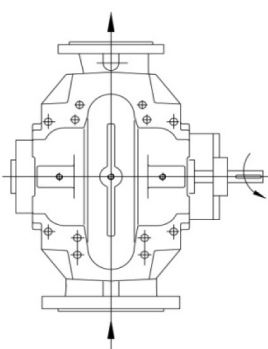
3. N= 960 & 740 rpm



Direction of rotation

Horizontal

Vertical



“counterclockwise”

“clockwise”

“counterclockwise”

“clockwise”

as viewed from the shaft end

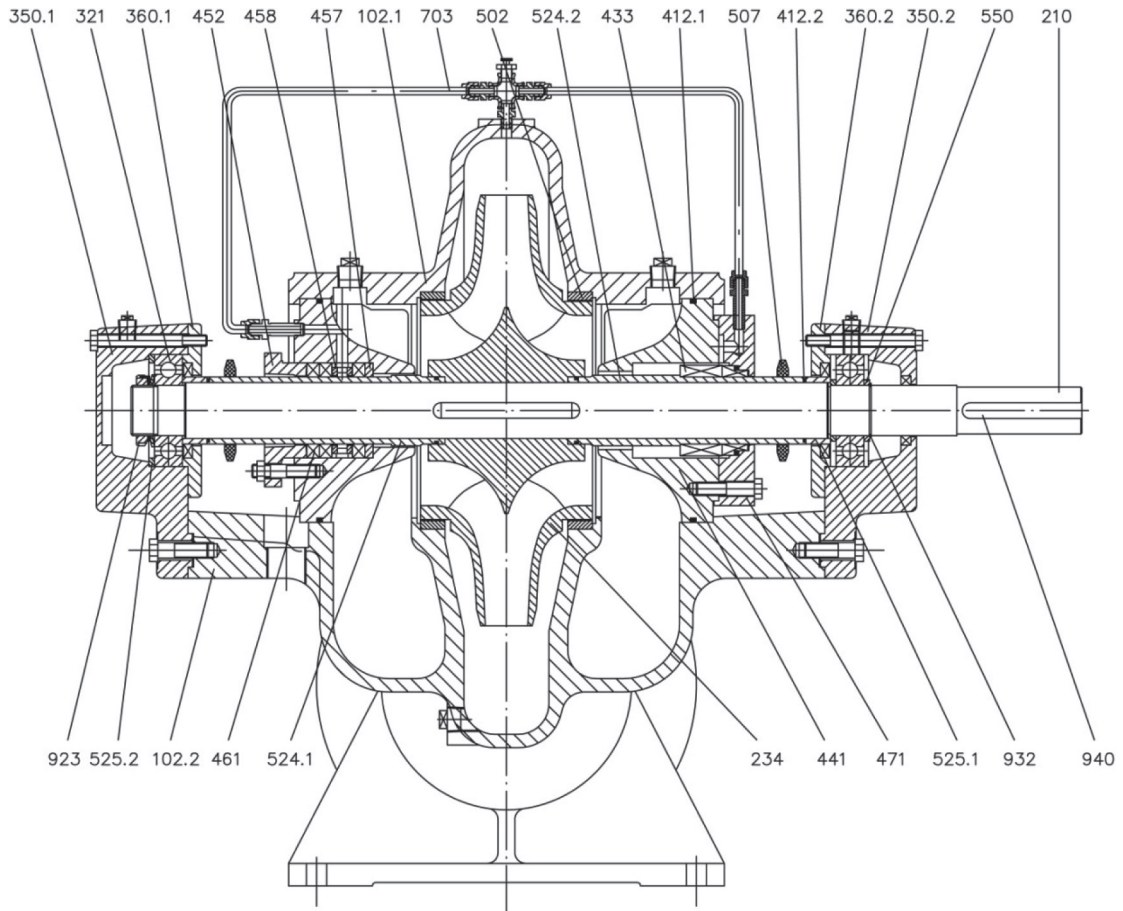
as viewed from the shaft end

as viewed from the shaft end

as viewed from the shaft end

Cross sectional drawing

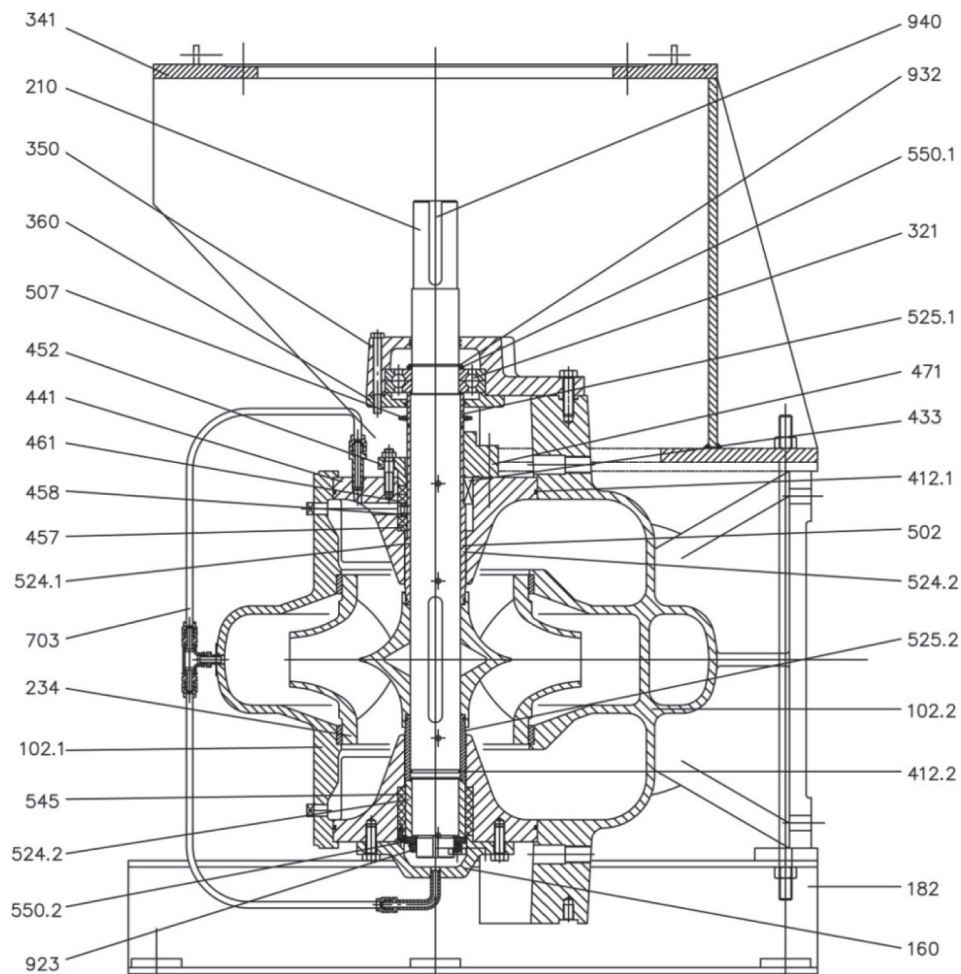
ASN



Part No	Part Name	Part No	Part Name
102.1	Upper half casing	458	Lantern ring
102.2	Lower half casing	461	Gland packing
210	Shaft	471	Mechanical seal cover
234	Impeller	502	Casing wear ring
321	Ball bearing	507	Deflector
350...	Bearing housing	524...	Shaft sleeve
360...	Bearing cover	525...	Spacer ring
412...	"O" rings	550...	Washer
433	Mechanical seal	703	Pipe
441	Stuffing box	923	shaft nut
452	Gland	932	Circlip
457	Distance ring	940...	Keys

Cross sectional drawing

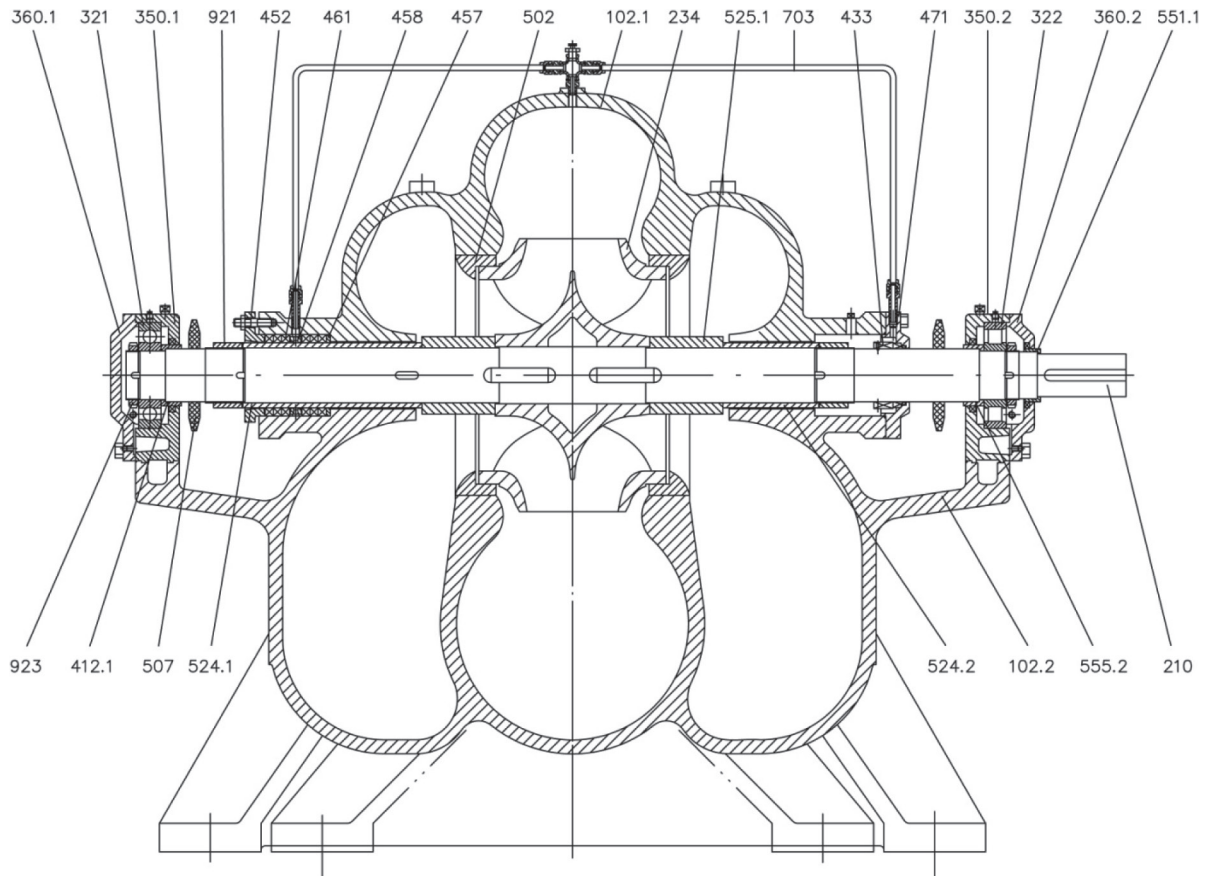
ASN/V



Part No	Part Name	Part No	Part Name
102.1	Upper half casing	457	Distance ring
102.2	Lower half casing	458	Lantern ring
160	Bearing cover	461	Gland packing
182	Base plate	471	Mechanical seal cover
210	Shaft	502	Casing wear ring
234	Impeller	507	Deflector
321	Ball bearing	524...	Shaft sleeve
341	Motor stool	525...	Spacer ring
350...	Bearing housing	545	Bearing bush
360...	Bearing cover	550...	Washer
412...	"O" rings	703	Pipe
433	Mechanical seal	923	shaft nut
441	Stuffing box	932	Circlip
452	Gland	940...	Key

Cross sectional drawing

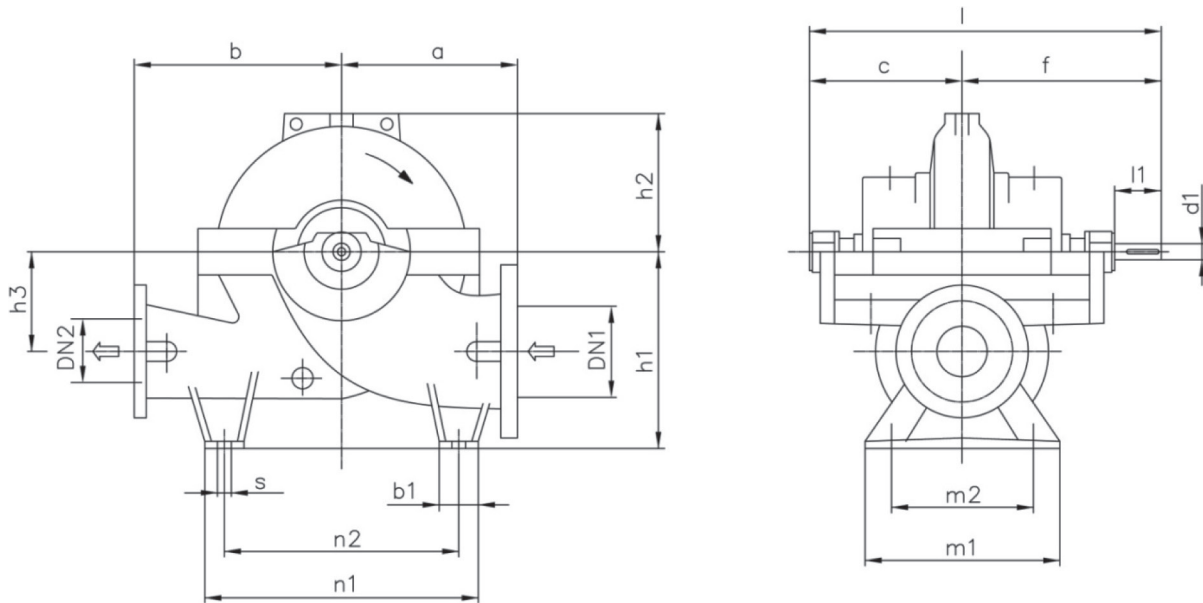
ASN-E



Part No	Part Name	Part No	Part Name
102.1	Upper half casing	458	Lantern ring
102.2	Lower half casing	461	Gland packing
210	Shaft	471	Mechanical seal cover
234	Impeller	502	Casing wear ring
321	Ball bearing	507	Deflector
322	Roller bearing	524...	Shaft sleeve
350...	Bearing housing	525...	Spacer ring
360...	Bearing cover	555.1	Bearing cover ring
412...	"O" rings	555.2	Bearing housing ring
433	Mechanical seal	703	Pipe
452	Gland	921	Nut
457	Distance ring	923	shaft nut

Dimensional Drawing

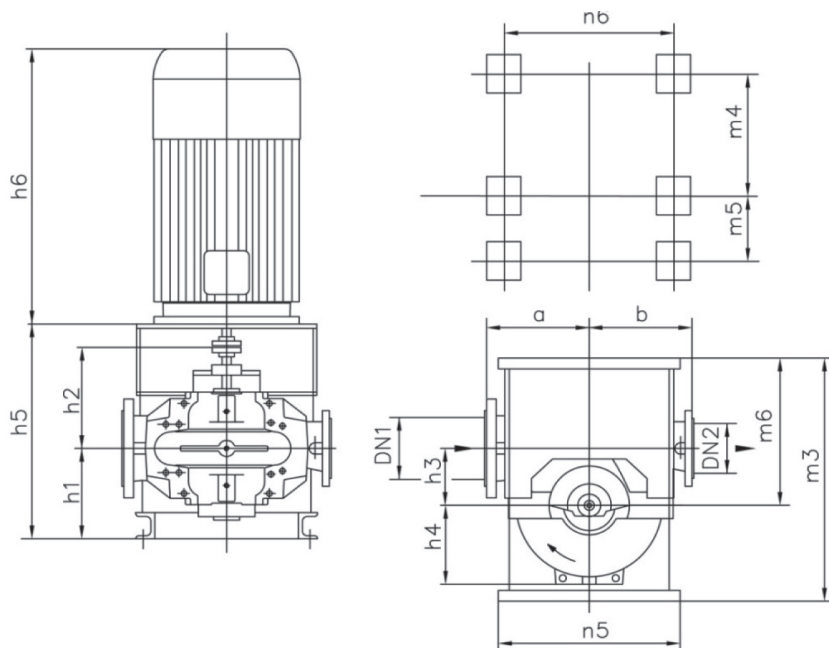
ASN



PUMP SIZE	DN1	DN2	a	b	c	f	l	h1	h2	h3	n1	n2	b1	s	m1	m2	d1	l1	weight
80-220	125	80	300	300	300	415	715	315	168	140	410	340	70	17,5	320	270	35	80	181
80-280	125	80	300	300	300	415	715	315	190	140	410	340	70	17,5	320	270	35	80	194
80-350	125	80	330	330	300	415	715	315	225	140	410	340	70	17,5	320	270	35	80	204
100-260	150	100	330	330	300	415	715	355	195	170	470	400	70	17,5	320	270	35	80	207
100-300	150	100	330	330	300	415	715	355	225	170	470	400	70	17,5	320	270	35	80	220
100-320	150	100	330	330	300	415	715	355	225	170	470	400	70	17,5	320	270	35	80	225
100-400	150	100	370	370	300	415	715	355	260	170	470	400	70	17,5	320	270	35	80	241
125-240	200	125	370	370	366	515	881	400	210	200	520	450	70	17,5	390	340	45	100	310
125-300	200	125	370	370	366	515	881	400	230	200	520	450	70	17,5	390	340	45	100	350
125-380	200	125	370	370	366	515	881	400	260	200	520	450	70	17,5	390	340	45	100	370
125-400	200	125	370	370	366	515	881	400	260	200	520	450	70	17,5	390	340	45	100	370
125-480	200	125	450	450	366	515	881	400	305	200	630	560	70	17,5	390	340	45	100	500
150-280	200	150	400	400	366	515	881	400	245	200	520	450	70	17,5	390	340	45	100	347
150-350	200	150	400	400	366	515	881	400	265	200	520	450	70	17,5	390	340	45	100	410
150-450	200	150	450	450	399	590	989	400	305	245	630	560	70	17,5	480	430	55	125	520
150-570	200	150	600	500	399	590	989	500	370	300	770	700	70	17,5	480	430	55	125	740
200-340	250	200	450	450	399	590	989	500	285	240	630	560	70	17,5	480	430	55	125	590
200-410	250	200	500	500	399	590	989	500	310	240	630	560	70	17,5	480	430	55	125	620
200-530	250	200	600	500	464	655	1119	560	370	300	770	700	70	22	480	400	65	140	840
200-660	250	200	650	550	464	655	1199	600	430	350	800	700	100	22	480	400	65	140	1000
250-390	300	250	500	500	464	655	1119	600	320	300	800	700	100	22	480	400	65	140	810
250-470	300	250	550	550	515	730	1245	600	355	300	800	700	100	22	600	520	75	160	930
250-610	300	250	650	550	515	730	1245	630	415	350	800	700	100	22	600	520	75	160	1400
250-800	300	250	800	700	592	810	1402	710	520	400	1150	950	200	34	600	520	85	180	1650
300-330	350	300	550	500	464	655	1119	630	300	360	800	700	100	22	480	400	65	140	900
300-450	400	300	650	550	515	730	1245	670	350	365	800	700	100	22	600	520	75	160	1400
300-550	400	300	700	650	585	810	1395	710	350	430	1050	950	100	22	600	520	85	180	2090
300-710	400	300	750	650	748	935	1683	750	400	480	1050	950	100	22	600	520	85	180	2600
350-380	400	350	650	550	515	730	1245	670	410	350	800	700	100	22	600	520	75	160	1200
350-440	400	350	750	650	585	810	1395	750	465	400	1050	950	100	22	600	520	85	180	1450
350-520	400	350	700	650	585	810	1395	750	420	400	1050	950	100	22	600	520	85	180	1800

Dimensional Drawing

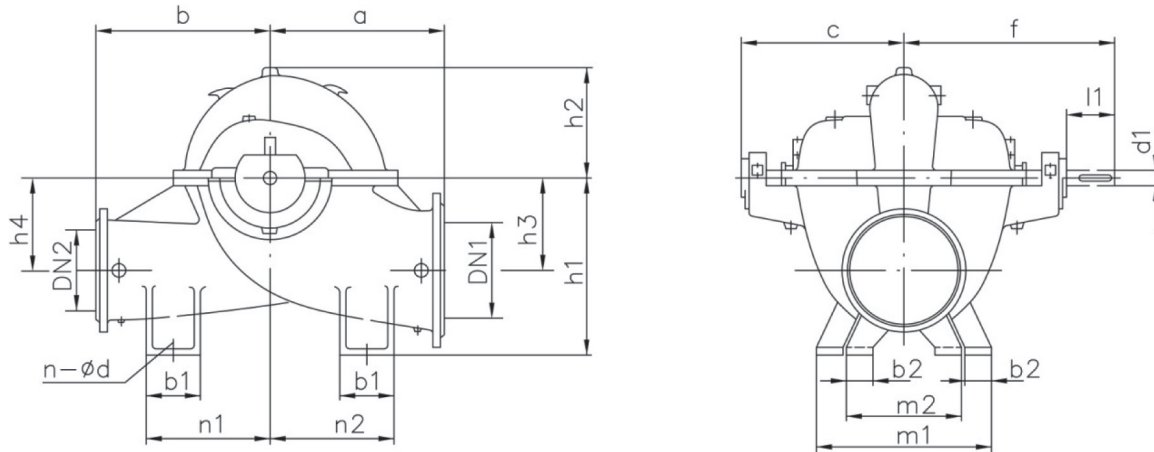
ASN/V



PUMP SIZE	DN1	DN2	a	b	h1	h2	h3	h4	h5	m3	m4	m5	m6	n5	n6	weight
80-220	125	80	300	300	320	415	140	168	790-850	640-720	275	100	380	450-710	340	181
80-280	125	80	300	300	320	415	140	190	800-880	640-720	275	100	380	450-710	340	194
80-350	125	80	330	330	320	415	140	225	820-850	640	275	100	380	450	340	204
100-260	150	100	330	330	300	415	170	195	780-860	695-760	315	115	420	500-810	400	207
100-300	150	100	330	330	300	415	170	225	800-860	695-760	315	115	420	500-810	400	220
100-320	150	100	330	330	300	415	170	225	800-860	695-760	315	115	420	500-810	400	225
100-400	150	100	370	370	300	415	170	260	830-860	695-760	315	115	420	500-810	400	241
125-240	200	125	370	370	355	515	200	210	955-1015	855	360	210	475	600-860	450	310
125-300	200	125	370	370	355	515	200	230	955-1015	855	360	210	475	600-860	450	350
125-380	200	125	370	370	355	515	200	260	985-1015	855	360	210	475	600	450	370
125-400	200	125	370	370	355	515	200	260	985-1015	855	360	210	475	600	450	370
125-480	200	125	450	450	355	515	200	305	985-1045	855	360	210	475	700	560	500
150-280	200	150	400	400	355	515	200	245	985-1015	855	360	210	475	600	450	347
150-350	200	150	400	400	355	515	200	265	985-1015	855	360	210	475	600	450	410
150-450	200	150	450	450	400	590	245	305	1105-1165	855	360	210	475	700	560	520
150-570	200	150	600	500	400	590	300	370	1135-1205	1060-1340	460	315	575	900-1300	700	740
200-340	250	200	450	450	400	590	240	285	1105-1135	1060	460	315	575	700	560	590
200-410	250	200	500	500	400	590	240	310	1135-1165	1060	460	315	575	700	560	620
200-530	250	200	600	500	440	655	300	370	1240-1310	1120-1400	520	315	635	900-1300	700	840
200-660	250	200	650	550	440	655	350	430	1270-1310	1180-1460	560	315	685	900-1300	700	1000
250-390	300	250	500	500	440	655	300	320	1240-1270	1180	560	315	685	900	700	810
250-470	300	250	550	550	500	730	300	355	1375-1445	1180-1460	560	315	685	900-1300	700	930
250-610	300	250	650	550	500	730	350	415	1405-1445	1210-1490	590	315	715	900-1300	700	1400
300-330	350	300	550	500	440	655	360	300	1210-1270	1210	590	315	715	900	700	900
300-450	400	300	650	550	500	730	365	350	1375-1445	1210	630	315	755	900-1300	700	1400
300-550	400	300	700	650	570	810	430	350	1555-1595	1210	670	400	795	1200	950	2090
300-710	400	300	750	650	570	935	480	400	1720	1415	710	400	835	1200	950	2600
350-380	400	350	650	550	500	730	350	410	1375-1445	1250-1530	630	315	755	900-1300	700	1200
350-440	400	350	750	650	570	810	400	465	1555-1595	1415-1610	710	400	835	1200-1300	950	1450
350-520	400	350	700	650	570	810	400	420	1595	1415	710	400	835	1200	950	1800

Dimensional Drawing

ASN-E



TYPE	DN1	DN2	a	b	c	f	h1	h2	h3	h4	n1	n2	b1	m1	m2	b2	n-Ød	d1	l1	weight
350-640	400	350	740	670	710	910	775	515	460	460	490	550	210	930	670	130	4-Ø35	95	190	2570
400-550	500	400	800	750	585	810	900	500	425	500	550	550	300	530	530	130	4-Ø35	85	200	2400
400-600	500	400	800	750	758	980	900	557	425	500	550	550	300	530	530	130	4-Ø42	95	200	3200
400-660	600	400	850	750	670	960	950	560	500	500	550	550	300	445	445	130	4-Ø42	95	210	3400
500-520	600	500	850	750	820	1025	900	560	475	475	550	590	300	1130	830	130	4-Ø30	75	180	3200
500-650	600	500	950	800	910	1095	980	600	495	495	600	640	300	1130	830	130	4-Ø35	95	210	4500
500-710	600	500	1050	850	850	1085	1000	620	550	620	690	790	300	1130	830	130	4-Ø42	105	230	5240
500-800	600	500	1000	900	900	1210	1050	660	600	600	740	840	300	1130	830	130	4-Ø42	115	250	4900
500-860	600	500	1050	950	920	1210	1100	710	650	650	790	890	300	1130	880	130	4-Ø42	135	290	5000
500-1050	600	500	1250	1050	1090	1360	1150	800	650	650	1000	850	300	1180	910	130	8-Ø42	135	290	6300
600-560	700	600	1100	900	885	1080	1100	750	610	610	700	800	300	1100	550	150	4-Ø35	75	190	4500
600-630	700	600	1000	1000	840	1060	1050	650	545	545	800	800	300	1100	650	150	4-Ø35	85	225	4700
600-720	700	600	1000	1100	897	1160	1050	650	545	545	800	800	300	1200	650	150	4-Ø42	105	230	4800
600-860	700	600	1100	1200	1000	1275	1100	760	580	580	900	800	300	1200	750	150	4-Ø55	115	250	5300
700-580	800	700	1300	800	1090	1300	1150	720	600	600	600	900	350	1090	790	150	4-Ø42	95	210	5100
700-700	800	700	1200	1150	1130	1360	1170	750	620	620	900	900	350	1090	790	150	4-Ø42	105	230	6500
700-830	800	700	1200	1250	1160	1440	1200	850	630	630	950	950	350	1090	790	150	4-Ø42	125	305	6700
800-770	900	800	1400	950	1180	1410	1380	920	770	770	750	900	400	1190	890	150	4-Ø42	105	230	7800
800-880	900	800	1400	1125	1180	1500	1360	900	770	770	900	950	400	1190	890	150	4-Ø42	115	310	8300
800-980	900	800	1400	1300	1270	1580	1370	850	760	760	1000	1000	400	1190	890	150	4-Ø55	135	310	9130

DRAKOS - POLEMIS | PUMPS

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