



Split Case  
Double Suction Centrifugal Pumps

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Made in Turkey



## SPLT & SPLT.M Series

### Split Case Double Suction Centrifugal Pump

#### General Information

#### Fields of Application

- Water supply and booster stations.
- Irrigation, overhead irrigation.
- Drainage stations.
- Power stations.
- Industrial water supply systems.
- Firefighting systems.
- Marine applications.
- General applications in refineries.

#### Pumped Liquids

Thin, clean, non-aggressive and non-explosive liquids free from large solid particles or fibers.

For special applications, please consult to Sistema Pumps.

#### Design

- Single-stage axially split casing pumps with double entry and radial impeller.
- Double entry, closed impeller is hydraulically thrust compensated.
- Lower casing is in-line design, suction and discharge nozzles are on the same line.
- Upper casing is self-aligning and it is easy to mount.
- The NPSH values are reduced and high suction lifts are possible thanks to double suction impeller.
- Two different designs can be applicable:
  1. Long shaft design: For soft packing stuffing box, the length of the pump shaft is longer. It is also possible to use mechanical seal on this design.
  2. Short shaft design: For mechanical seal applications, shaft length can be reduced. Therefore, compact and rigid pumps are available.
- Pump and motor are separate components connected to each other via flexible coupling and mounting on a base plate. It is also possible to couple the pump to the diesel engine.

#### Bearings

For pump groups A, B and C, there are ball bearings at the both dead and drive end of the pump. For pump groups D, E and F, a cylindrical roller bearing is installed at the drive end of the pump and there is a ball bearing at the dead end of the pump.

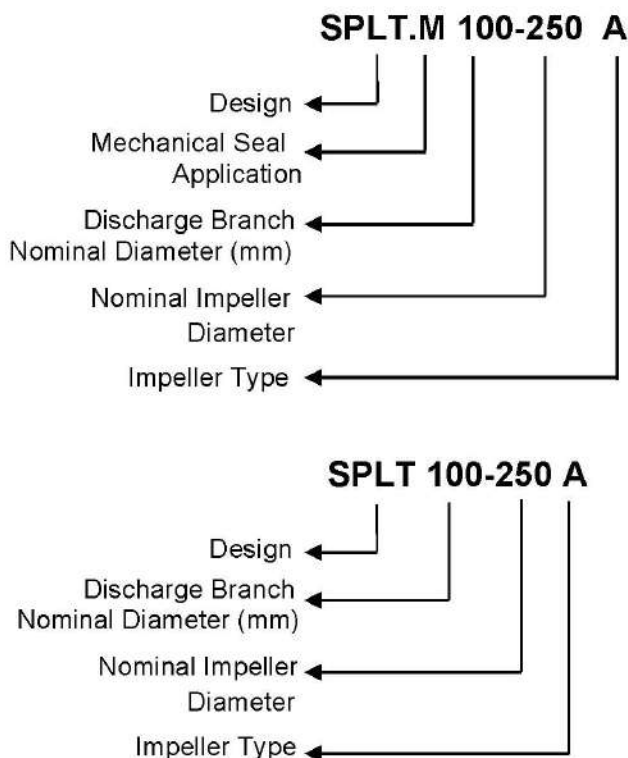
#### Shaft Seal

- Uncooled soft packed stuffing box with lantern ring is essential for the long shaft design.
- There is a leakage setting device on the washing water line of packing.
- Different types of mechanical seals are available on the long or short shaft design pumps.

#### Technical Data

- Suction Nozzle : DN 80... DN 500
- Discharge Nozzle : DN 65...DN 500
- Operating Pressure : 16 - 20 Bar
- Temperature Range : -10 – 110 °C
- Speed Range : 960 – 3500 rpm
- Capacity Range : 30 – 4000 m<sup>3</sup> / h
- Head Range : 15 - 160 m

#### Identification Code



# SPLT & SPLT.M Series

## Split Case Double Suction Centrifugal Pump

### Technical Advantages

#### Innovative Casing

- In-line design.
- Short distance between bearings and also short shaft.
- Leak-free thanks to compact casing split flange with long prestressed bolts.
- Change of the direction of rotation.
- Easy mounting of self-aligning upper casing.

#### High Performance Impeller

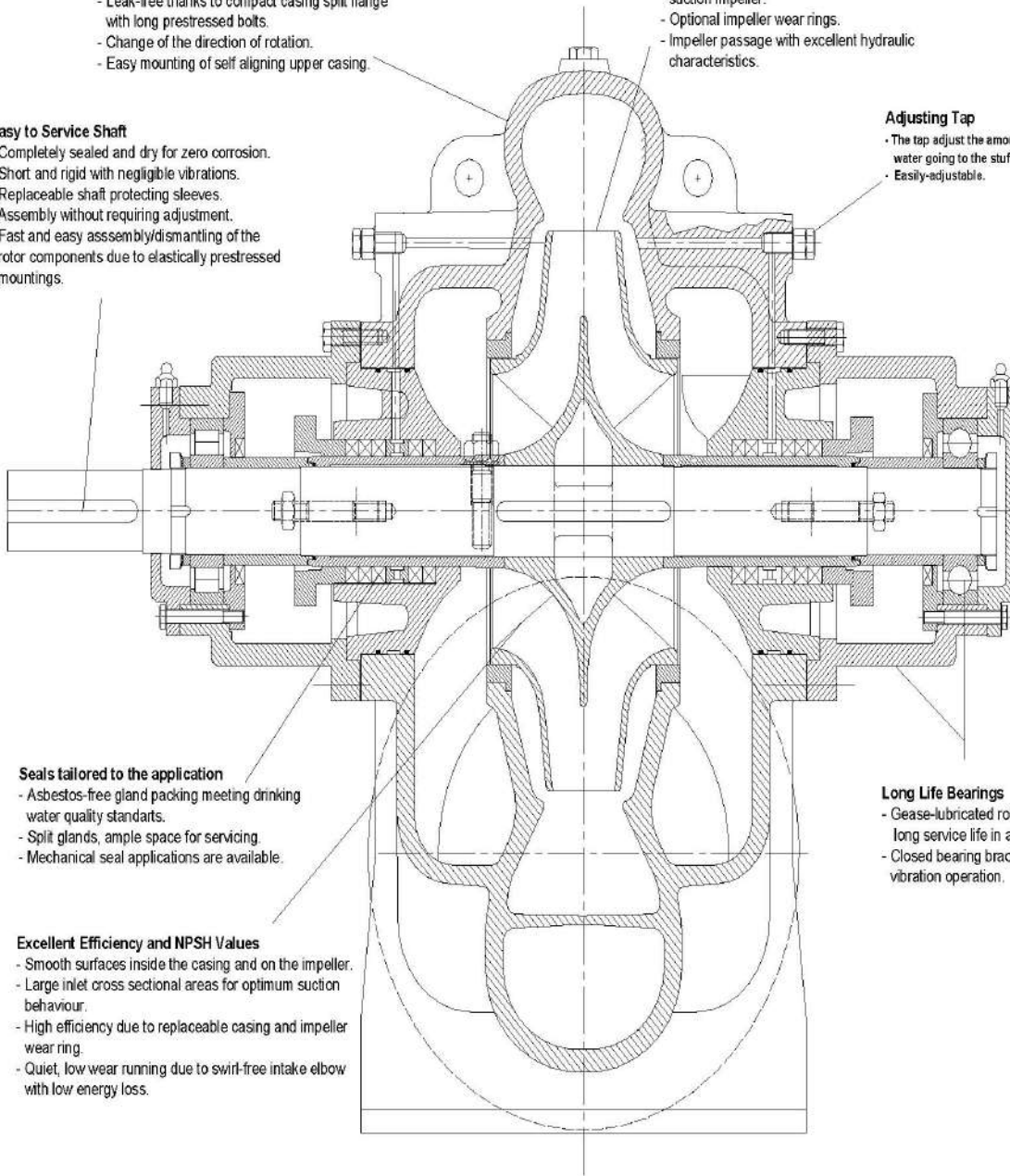
- Minimum axial thrust because of double suction impeller.
- Optional impeller wear rings.
- Impeller passage with excellent hydraulic characteristics.

#### Easy to Service Shaft

- Completely sealed and dry for zero corrosion.
- Short and rigid with negligible vibrations.
- Replaceable shaft protecting sleeves.
- Assembly without requiring adjustment.
- Fast and easy assembly/dismantling of the rotor components due to elastically prestressed mountings.

#### Adjusting Tap

- The tap adjust the amount of water going to the stuffing box.
- Easily-adjustable.



#### Seals tailored to the application

- Asbestos-free gland packing meeting drinking water quality standards.
- Split glands, ample space for servicing.
- Mechanical seal applications are available.

#### Long Life Bearings

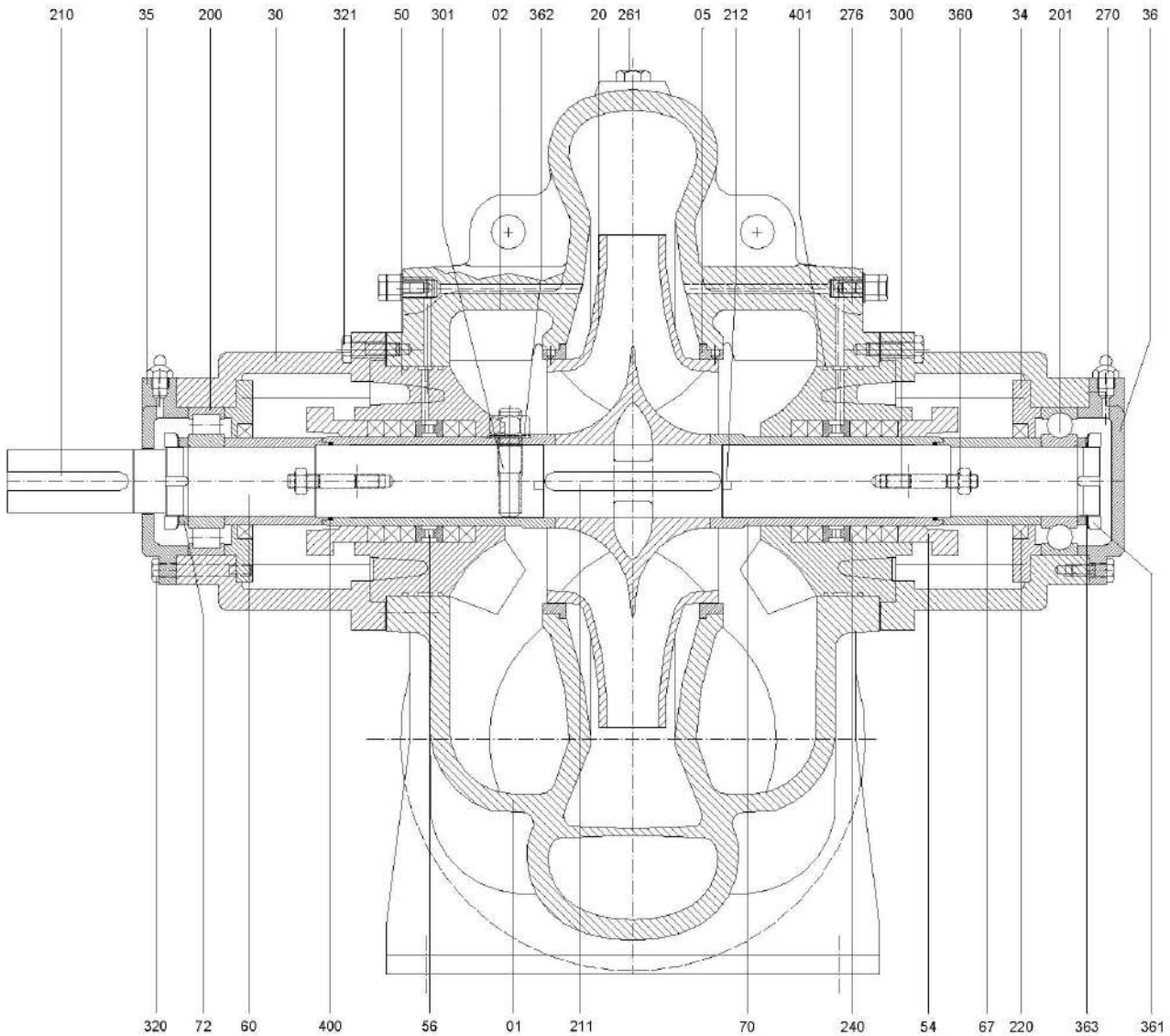
- Grease-lubricated rolling element bearings for long service life in all operating range.
- Closed bearing brackets for low-noise and low vibration operation.

#### Excellent Efficiency and NPSH Values

- Smooth surfaces inside the casing and on the impeller.
- Large inlet cross sectional areas for optimum suction behaviour.
- High efficiency due to replaceable casing and impeller wear ring.
- Quiet, low wear running due to swirl-free intake elbow with low energy loss.

# SPLT & SPLT.M Series

## Split Case Double Suction Centrifugal Pump Cross-Sectional Drawing For SPLT



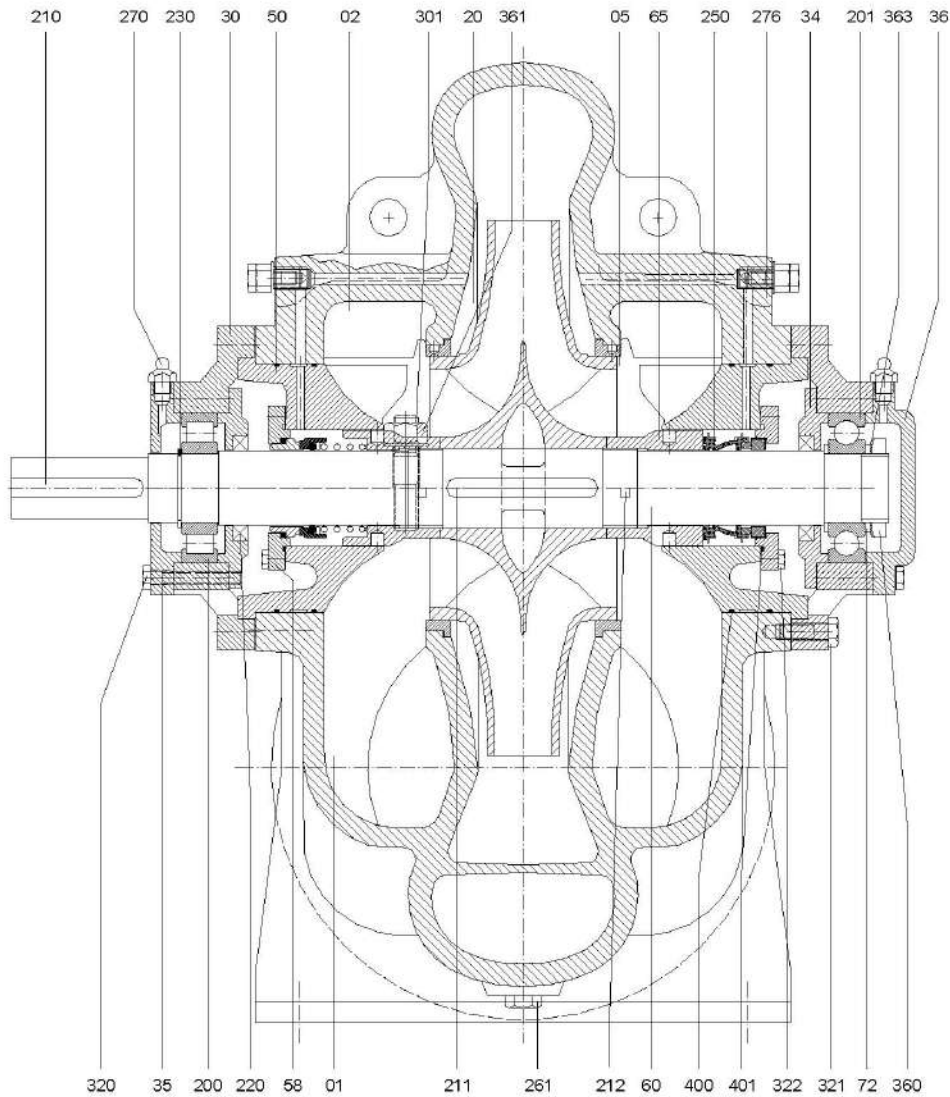
### PART LIST

PART NO	PART NAME	PART NO	PART NAME
01	Casing Lower Part	211	Key for Impeller
02	Casing Upper Part	212	Key for Wearing Ring
05	Wear Ring	220	Oil Seal
20	Impeller	240	Soft Packing
30	Bearing Housing	261	Plug
34	Bearing Cover (Dead Side)	270	Greaser
35	Bearing Cover (Motor Side)	276	Adjusting Tap
36	Bearing Housing Cover	300	Stud for Gland
50	Stuffing Box	301	Casing Stud
54	Gland	320	Hexagonal Bolt
56	Lantern Ring	321	Bolt
60	Pump Shaft	360	Nut for Gland
67	Space Sleeve	361	Nut for Bearing
70	Bushing for Seal	362	Nut for Casing Stud
72	Bushing for Bearing	363	Washer for Bearing
200	Roller Bearing	400	O-Ring (Shaft Sleeve)
201	Ball Bearing	401	O-Ring (Stuffing Box)
210	Key for Coupling		

# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

## Cross-Sectional Drawing For SPLT.M



### PART LIST

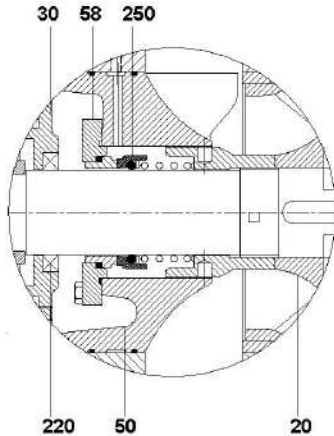
PART NO	PART NAME	PART NO	PART NAME
01	Casing Lower Part	212	Key for Wearing Ring
02	Casing Upper Part	220	Oil Seal
05	Wear Ring	230	Safety Ring
20	Impeller	250	Mechanical Seal
30	Bearing Housing	261	Plug
34	Bearing Cover (Dead Side)	270	Greaser
35	Bearing Cover (Motor Side)	276	Adjusting Tap
36	Bearing Housing Cover	301	Casing Stud
50	Stuffing Box	320	Hexagonal Bolt
58	Mech. Seal Cover	321	Bolt
60	Pump Shaft	322	Bolt for Mech. Seal Cover
65	Impeller Nut	361	Nut for Casing Stud
72	Bushing for Bearing	362	Nut for Casing Stud
200	Roller Bearing	363	Washer for Bearing
201	Ball Bearing	400	O-Ring (Shaft Sleeve)
210	Key for Coupling	401	O-Ring (Stuffing Box)
211	Key for Impeller		

## SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump  
**Mechanical Seal Applications for SPLT.M**

### BURGMANN M3N

- Single Seal
- Unbalanced
- Conical Spring
- Dependent on direction of rotation
- To EN 12756

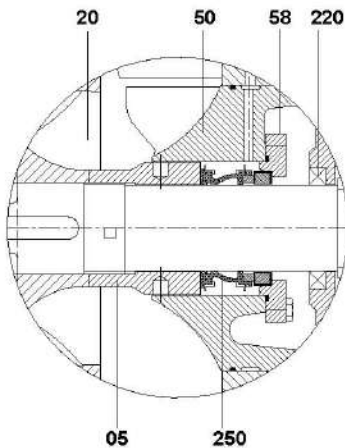


$p_1$	: 10 Bar
$t$	: -20... 180 °C
$V_g$	: 10 m/s
Axial Movement	: $\pm 1,0$ mm

Part No	Part Name
20	Impeller
30	Bearing Housing
50	Stuffing Box
58	Mech. Seal Cover
220	Oil Seal
250	Mechanical Seal

### BURGMANN MG1

- Single Seal
- Unbalanced
- Elastomer Bellows
- Independent on direction of rotation



$p_1$	: 12 Bar
$t$	: -20... 120 °C
$V_g$	: 10 m/s

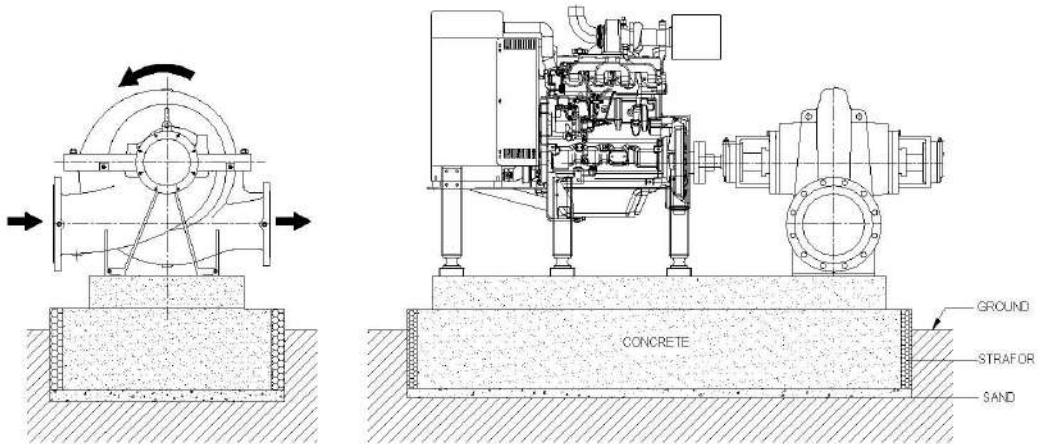
Part No	Part Name
20	Impeller
05	Wearing Ring
50	Stuffing Box
58	Mech. Seal Cover
220	Oil Seal
250	Mechanical Seal

# SPLT & SPLT.M Series

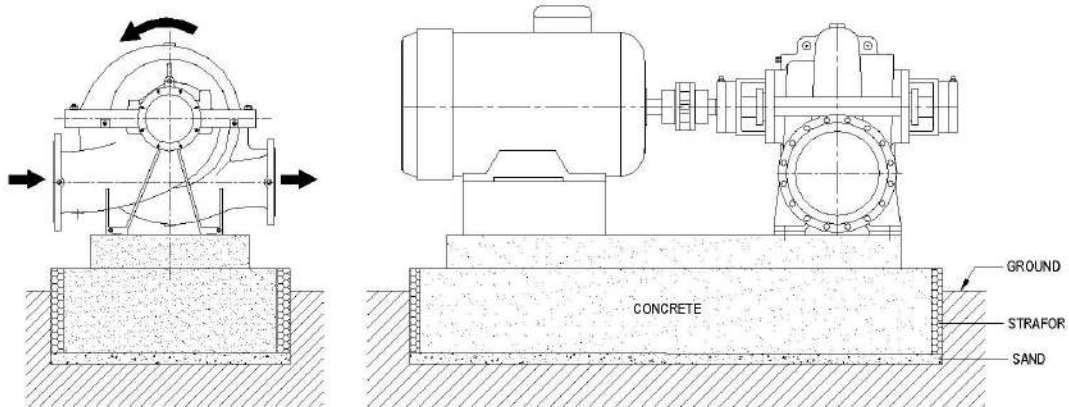
Split Case Double Suction Centrifugal Pump

## Installation Types

### Horizontal Installation with Diesel



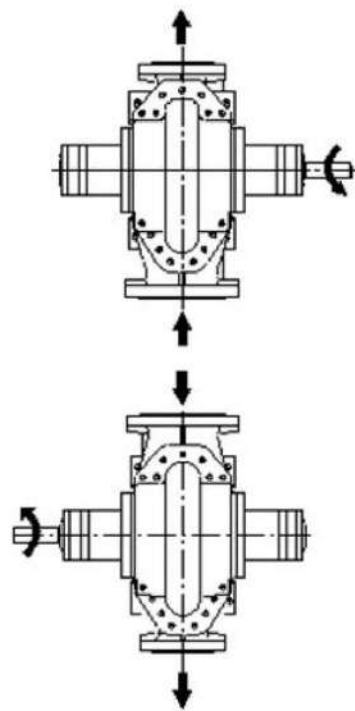
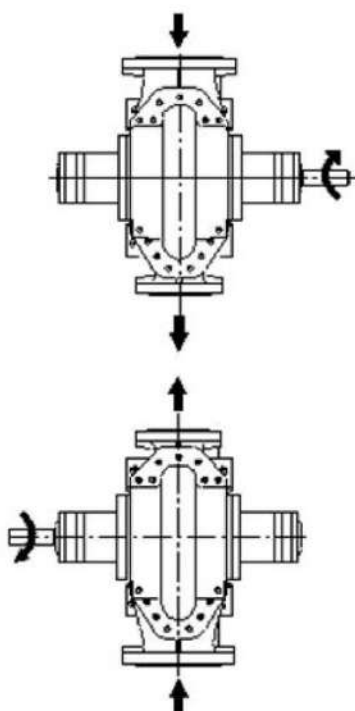
### Horizontal Installation with Electric Motor



### Direction of Rotation / Flow

Direction of rotation clockwise  
(Viewed from the drive end)

Direction of rotation counter clockwise  
(Viewed from the drive end)



## SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

### Technical Data

#### Material Options

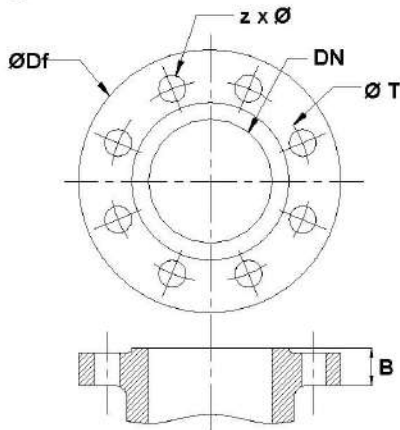
Components	Material. No						
		0.6025	0.7040	2.1050.01	1.4021	1.4301	1.4401
Casing		●	○	○		○	○
Impeller		●	○	○		○	○
Shaft					●	○	○
Casing Wear Ring				●	○	○	○
Stuffing Box		●	○	○		○	○
Gland			●	○		○	○
Bearing Housing		●					
Bearing Cover		●					

● – Standard Manufacturing  
○ – Optional

#### Material Equivalent

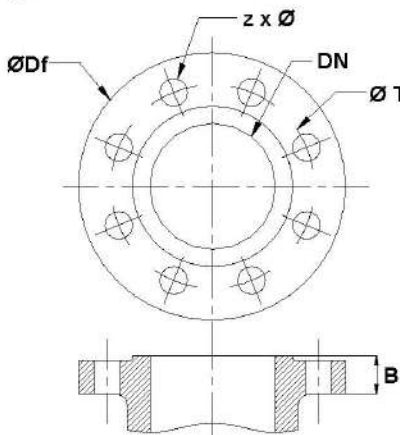
Description	DIN 17007	EN-DIN	ASTM
Cast Iron	0.6025	GJL-250 (GG25)	A 48 Class 40-B
Nodular Cast Iron	0.7040	GJS-400-15 (GGG40)	A 536 Gr.60-40-18
Cast Bronze	2.1050.01	G-Cu Sn 10	B 584 C 90700
Chrome Steel	1.4021	X20 Cr 13	A 276 Type 420
Chrome Nickel Steel	1.4301	X5 Cr Ni 18.9	A 276 Type 304
Chrome Nickel Molybdenum Steel	1.4401	X5 Cr Ni Mo 18.10	A 276 Type 316

#### PN 16 Flange Dimension



DN mm ø	Df mm ø	T mm ø	Z Each	ø mm ø	B mm
DN 65	185	145	4	18	20
DN 80	200	160	8	18	22
DN 100	220	180	8	18	24
DN 125	250	210	8	18	26
DN 150	285	240	8	23	26
DN 200	340	295	12	23	30
DN 250	405	355	12	27	32
DN 300	460	410	12	27	32
DN 350	520	470	16	27	36
DN 400	580	525	16	30	38

#### PN 10 Flange Dimension



DN mm ø	Df mm ø	T mm ø	Z Each	ø mm ø	B mm
DN 250	395	350	12	23	28
DN 300	445	400	12	23	28
DN 350	505	460	16	23	30
DN 400	565	515	16	27	32
DN 500	670	620	20	27	34



# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

## Technical Data



### Pump Flange Classification

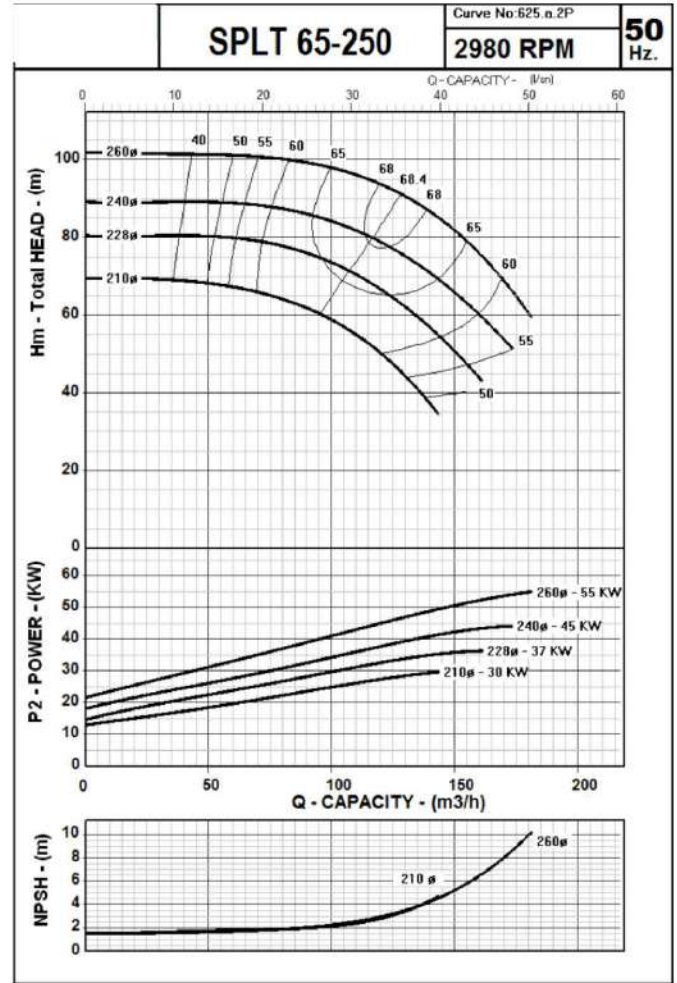
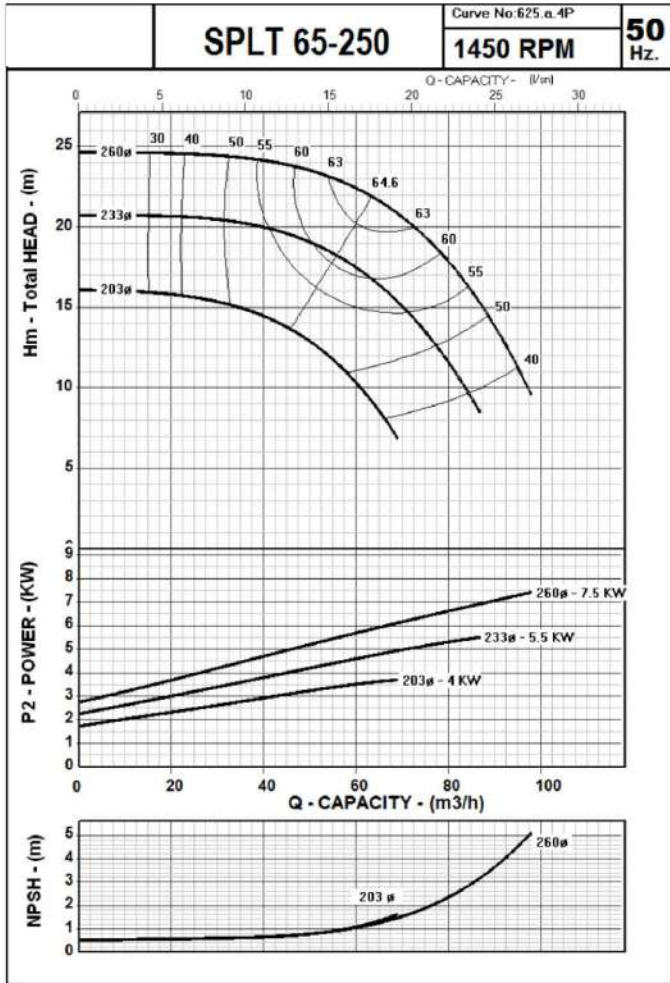
Pump Type	Flange	
	DNs (mm) (Suction)	DNd (mm) (Discharge)
65-250	100	65
80-250	125	80
80-360	125	80
100-250	150	100
100-315	150	100
150-250	200	150
125-400	150	125
150-315	200	150
150-315A	200	150
150-400	200	150
150-500	200	150
200-315	250	200
200-400	250	200
200-500	250	200
250-315	300	250
250-400	300	250
250-500	300	250
350-400	400	350
350-500	400	350
400-400	500	400
500-500	500	500

# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 65-250

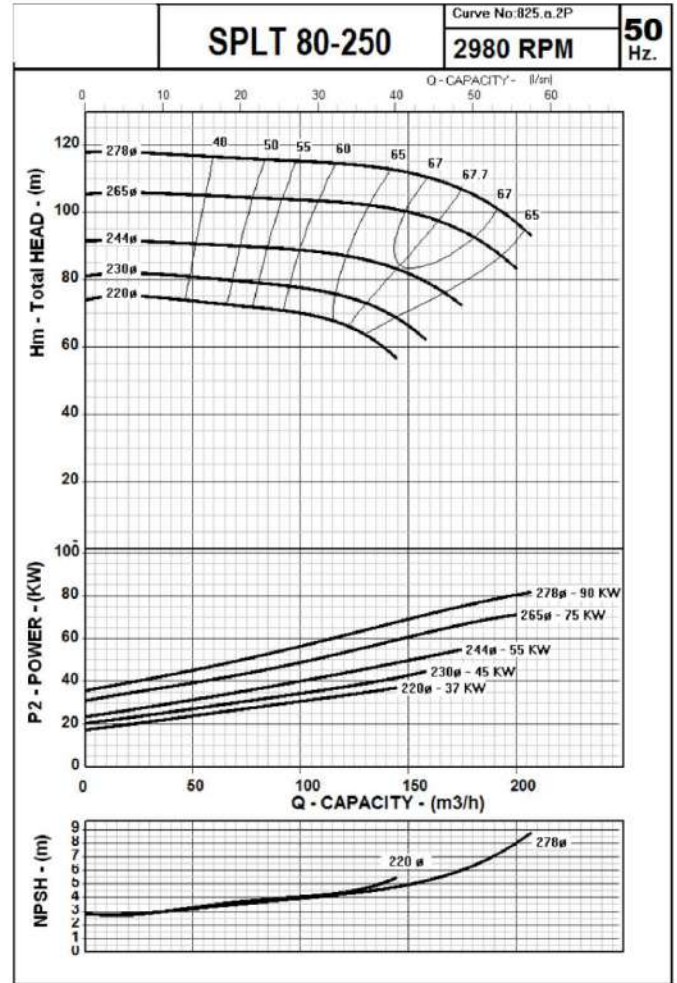
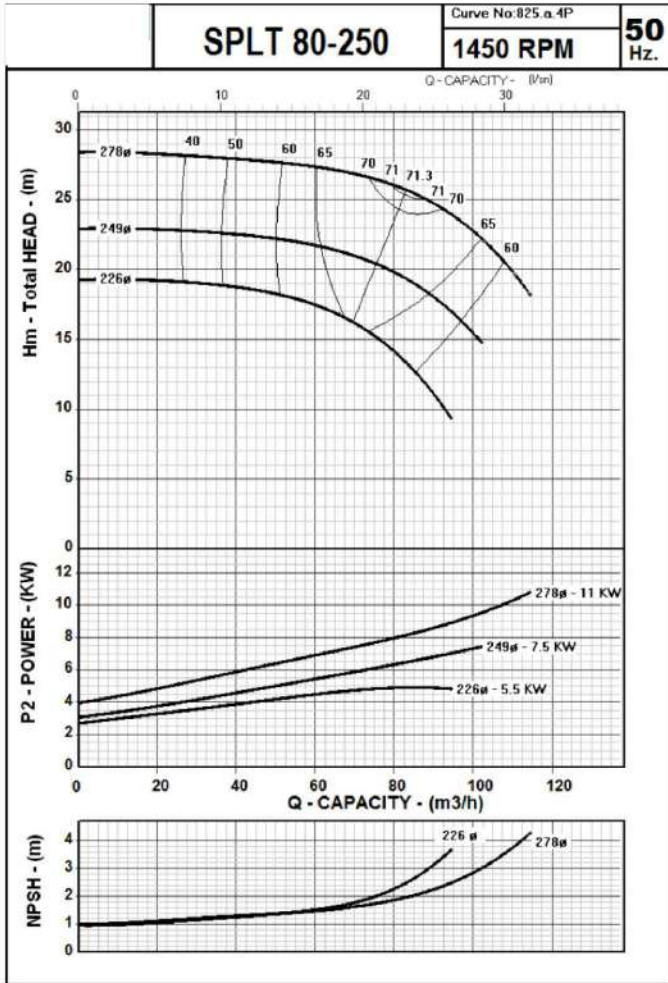


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 80-360

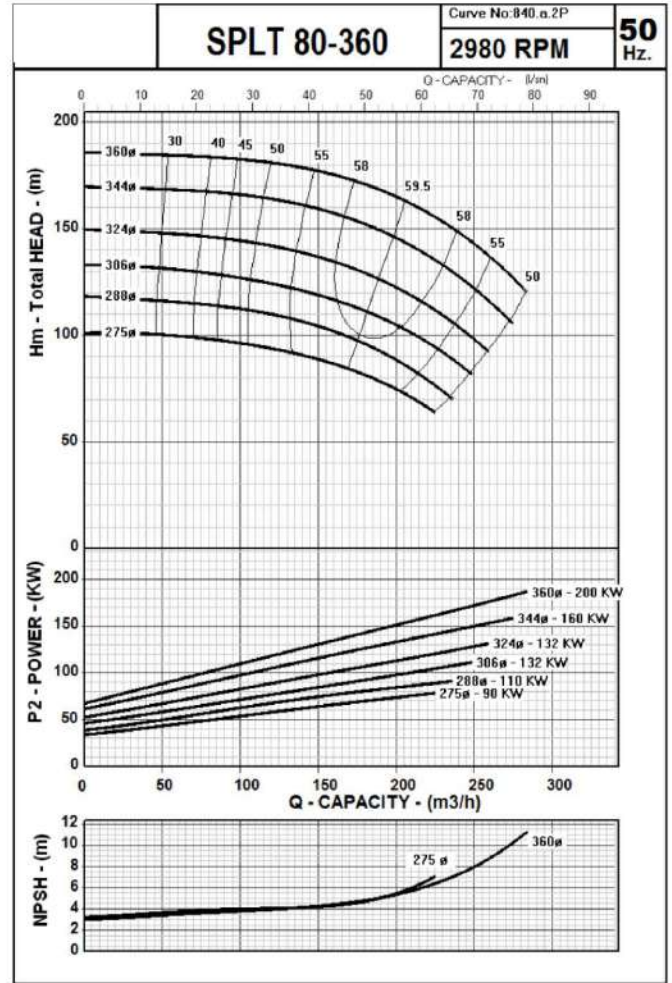
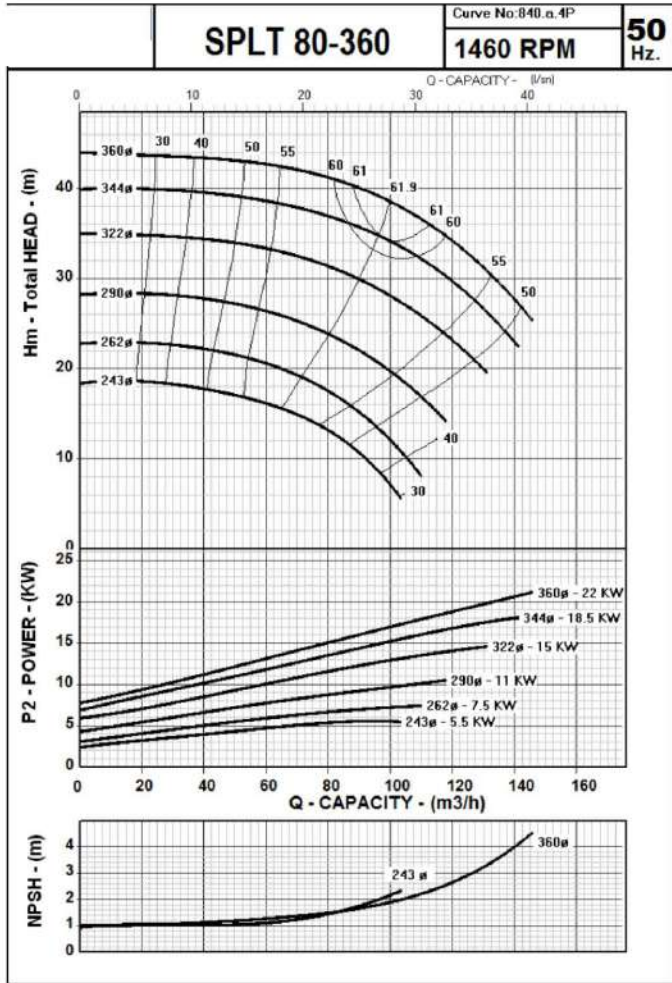


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 80-360

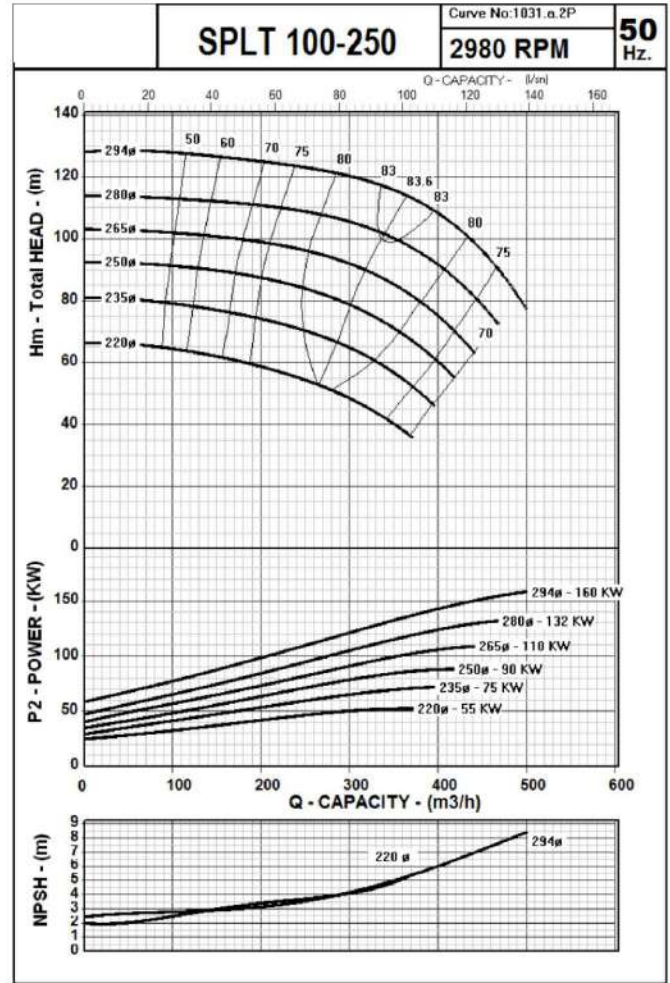
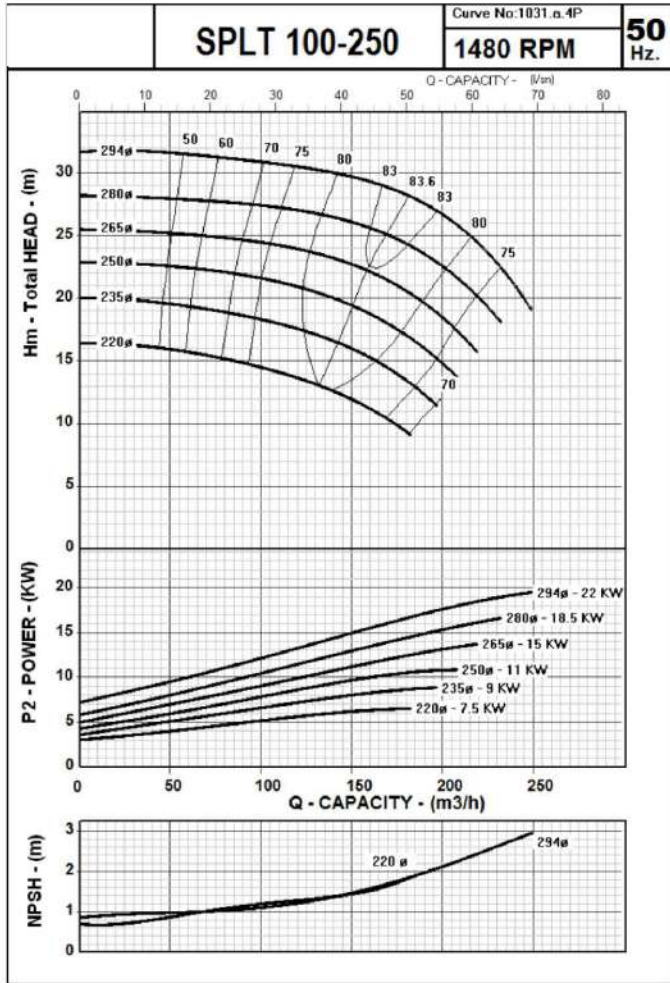


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 100-250

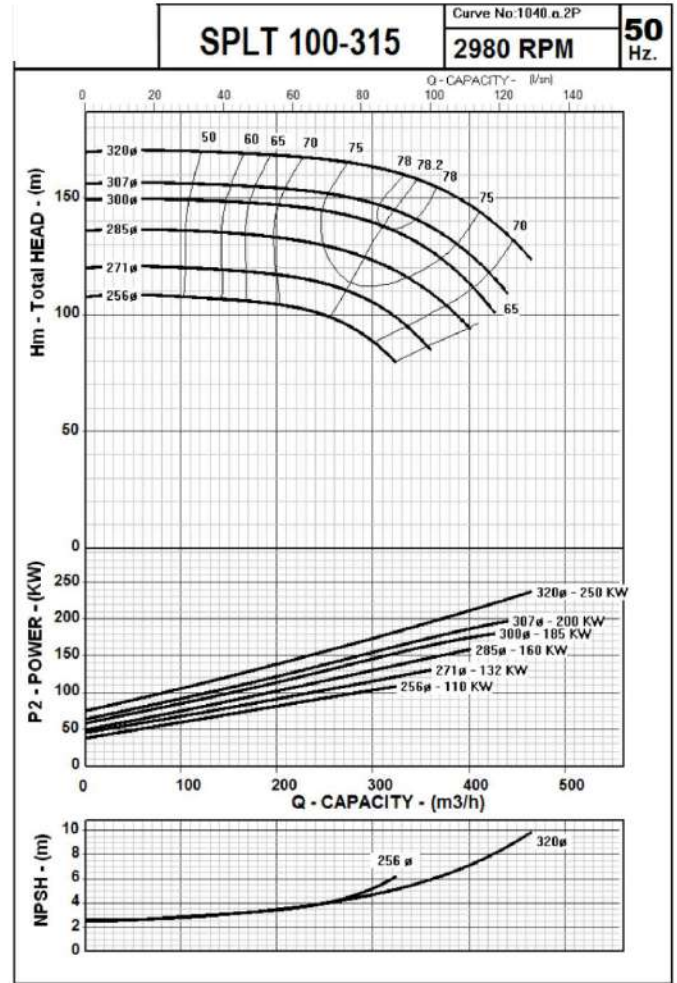
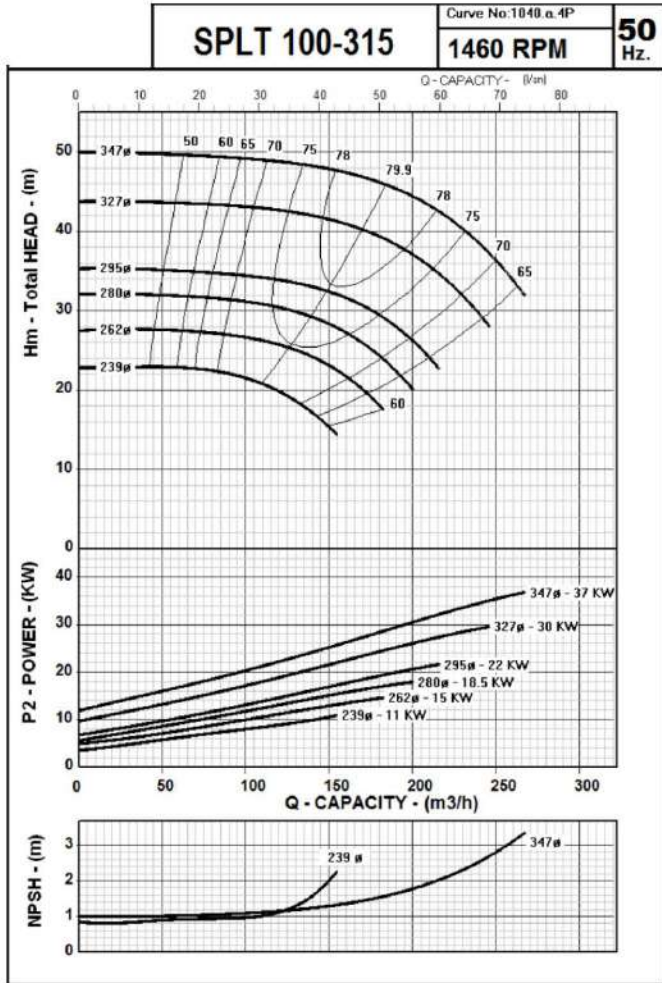


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 100-315

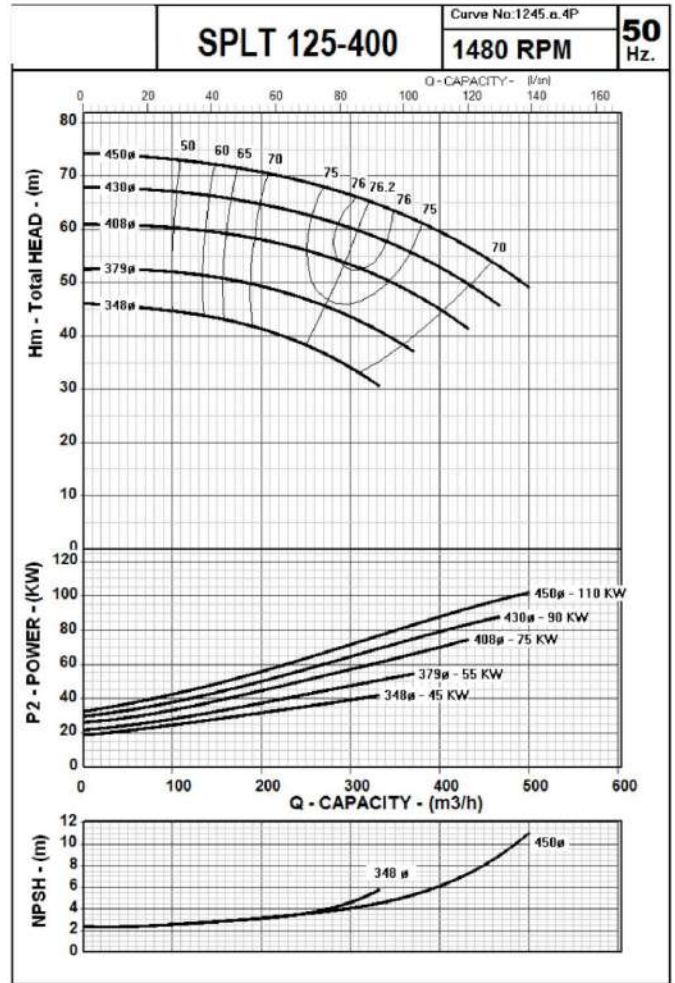
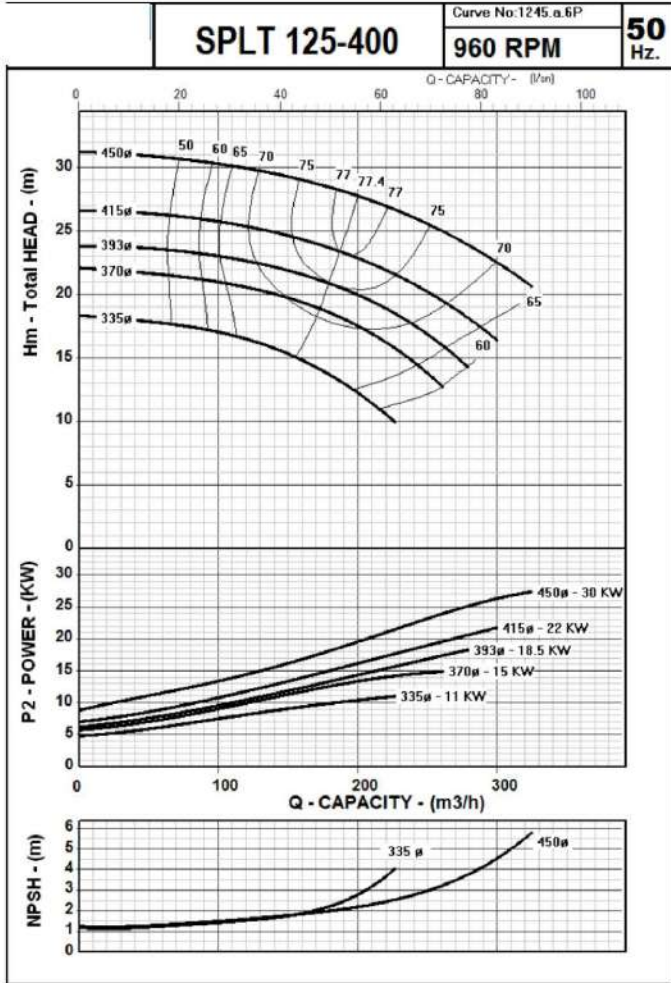


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 125-400

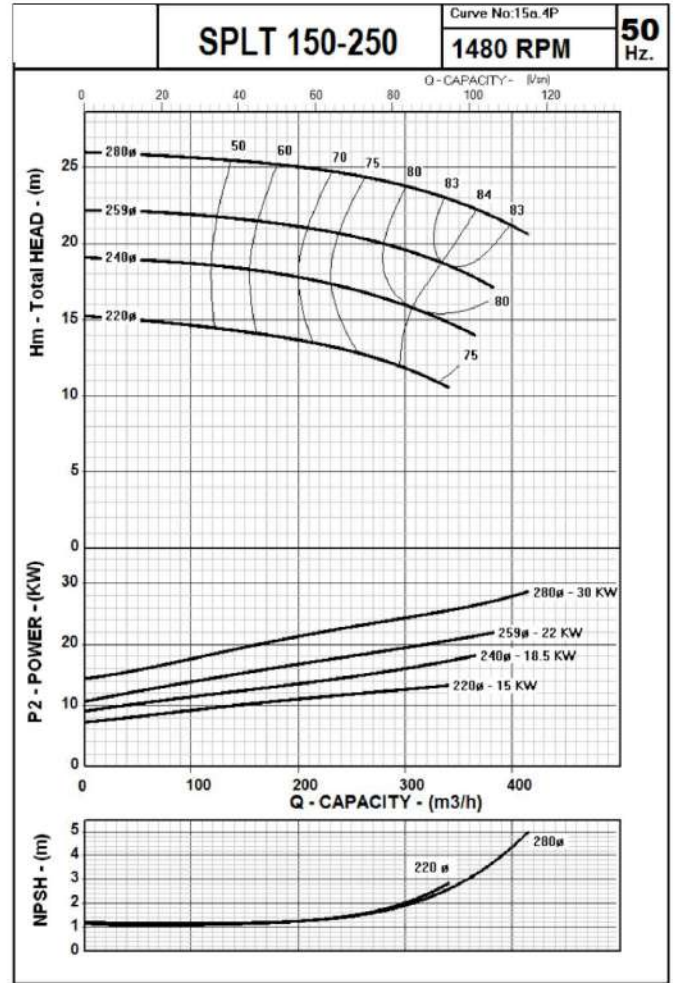
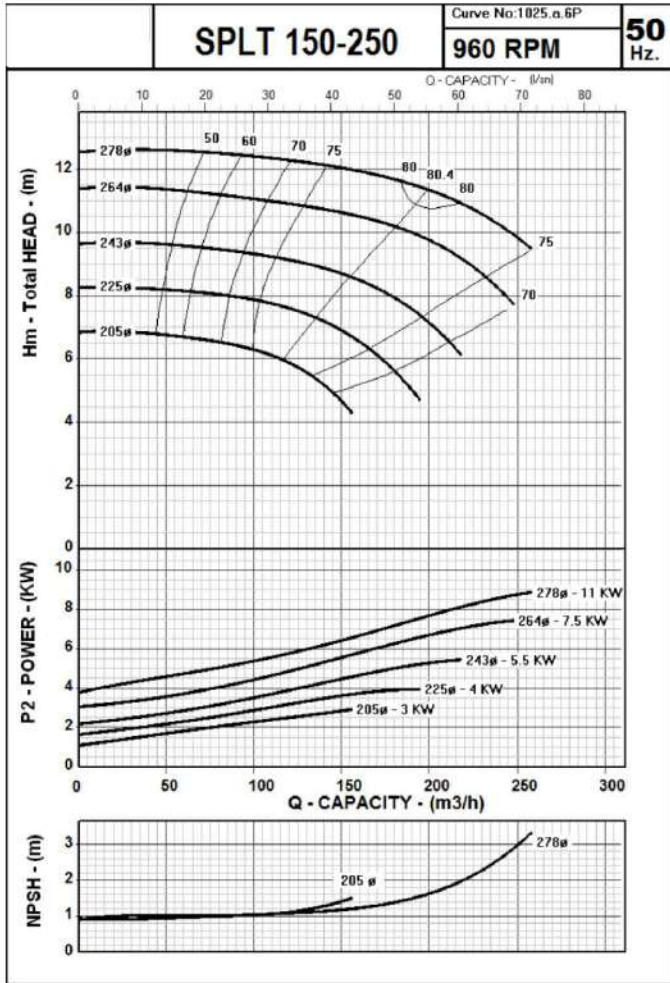


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 150-250



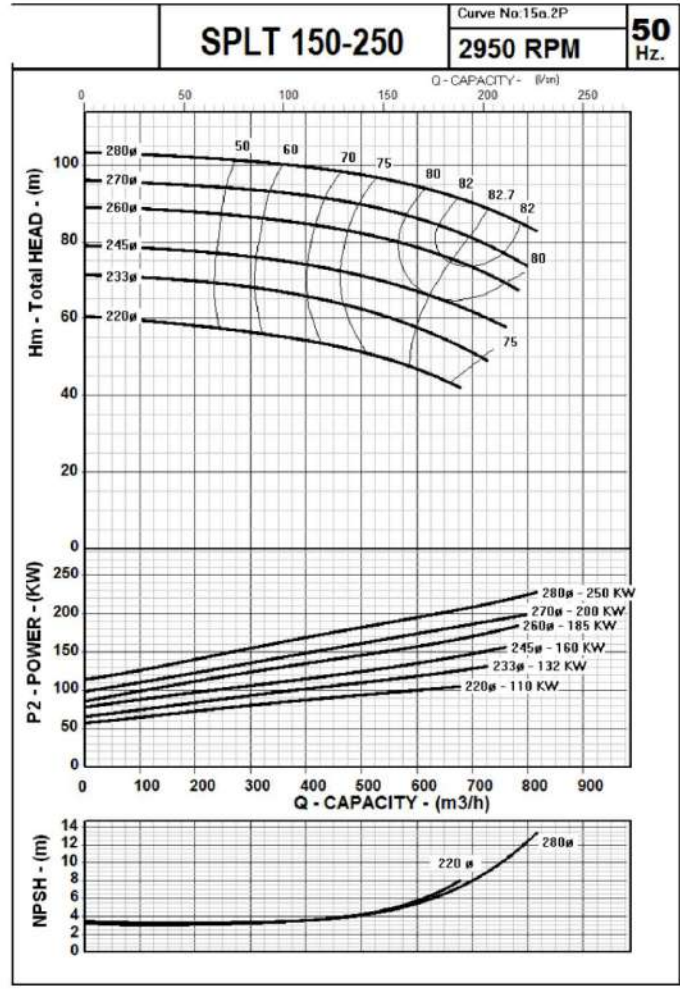


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 150-250

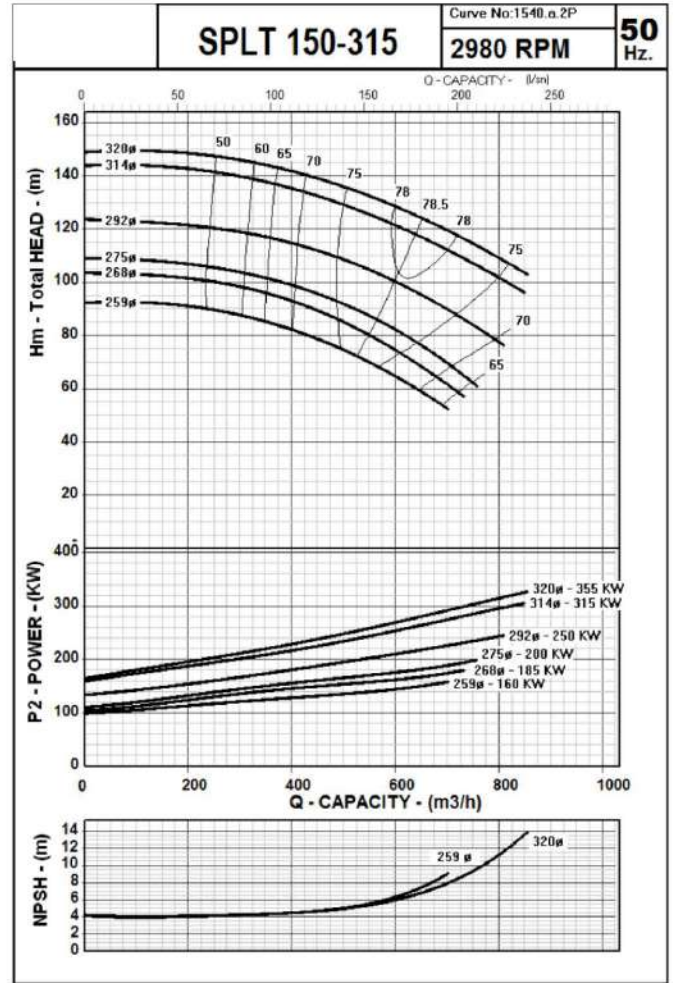
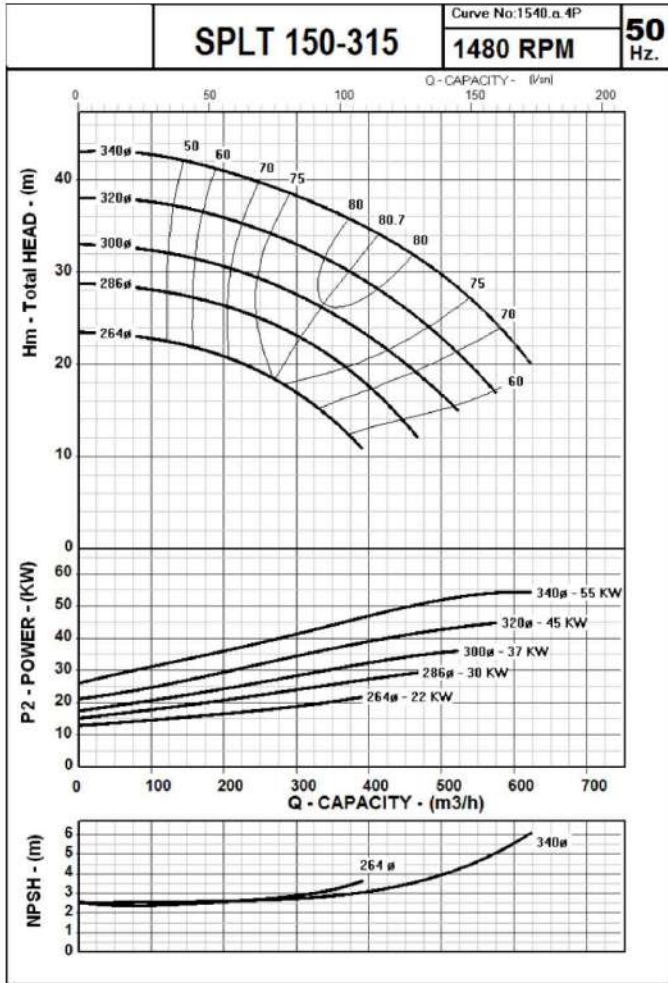


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 150-315

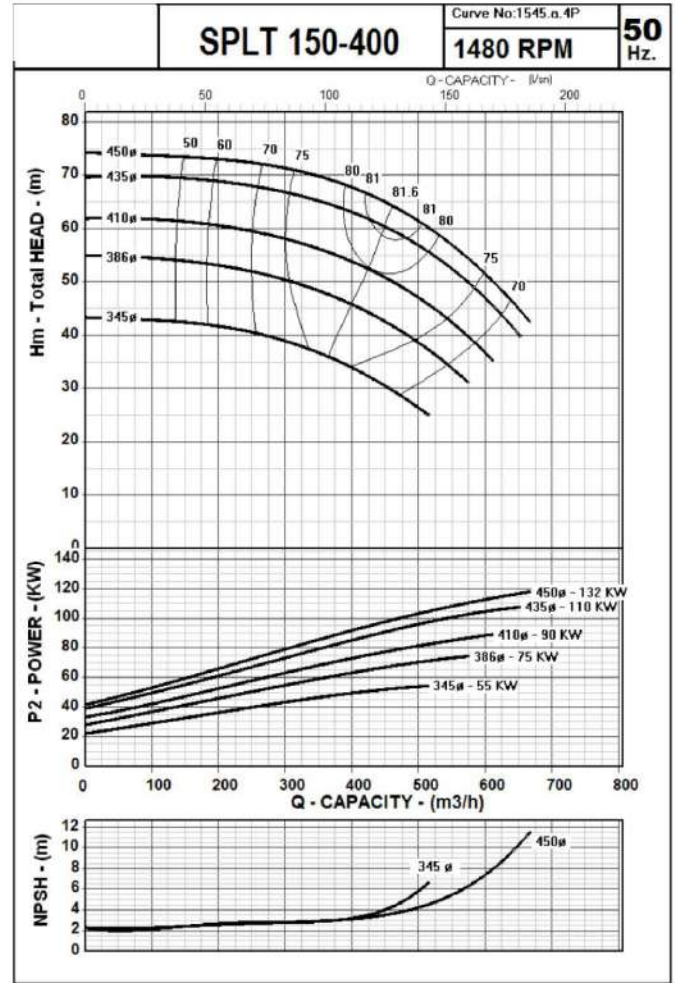
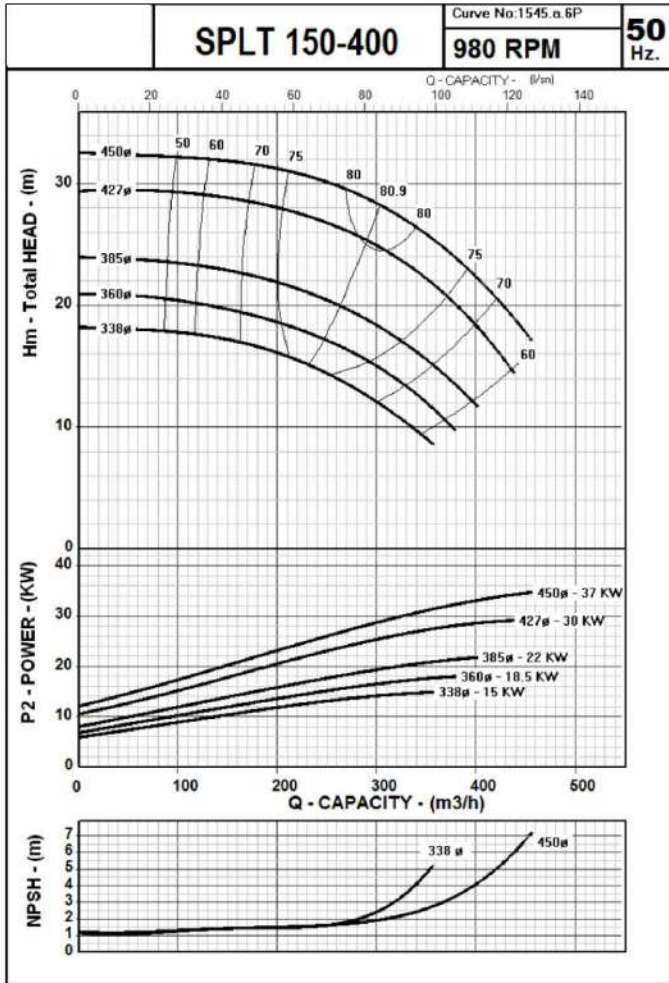


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 150-400

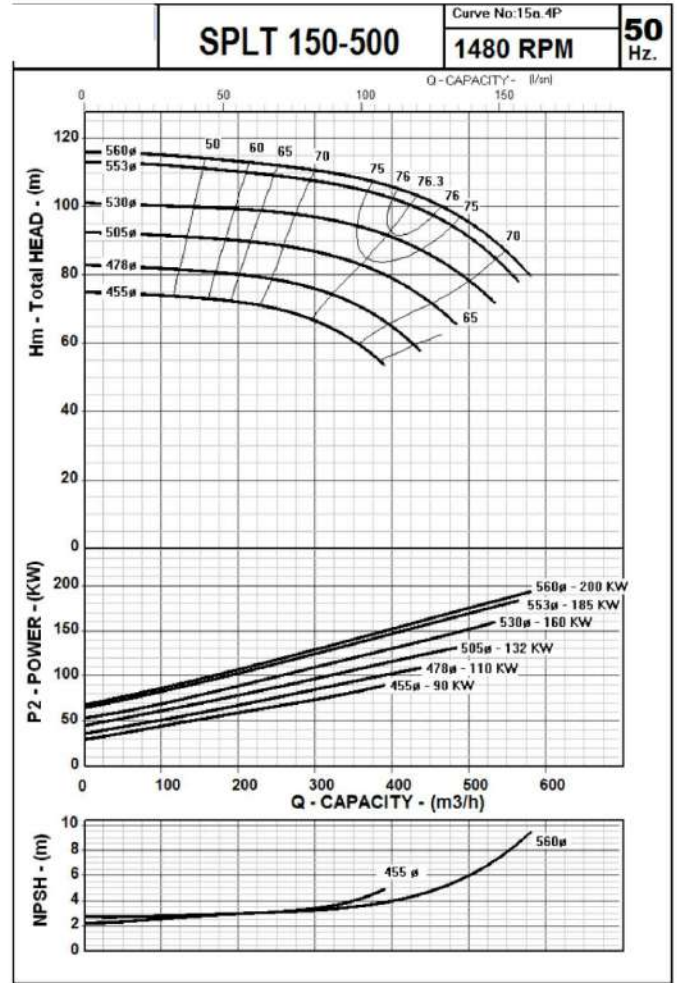
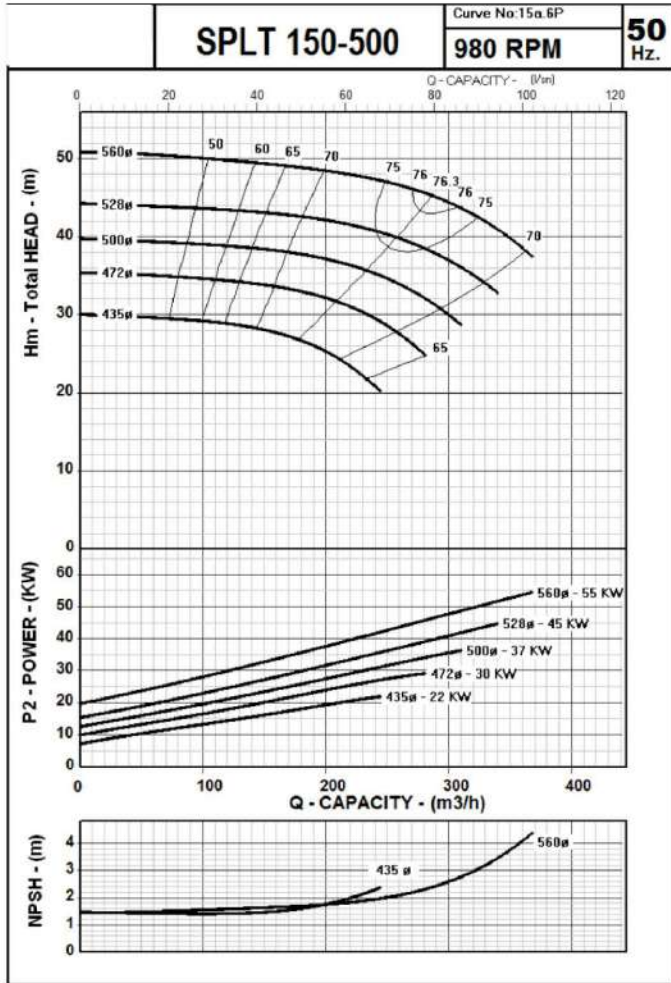


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 150-500

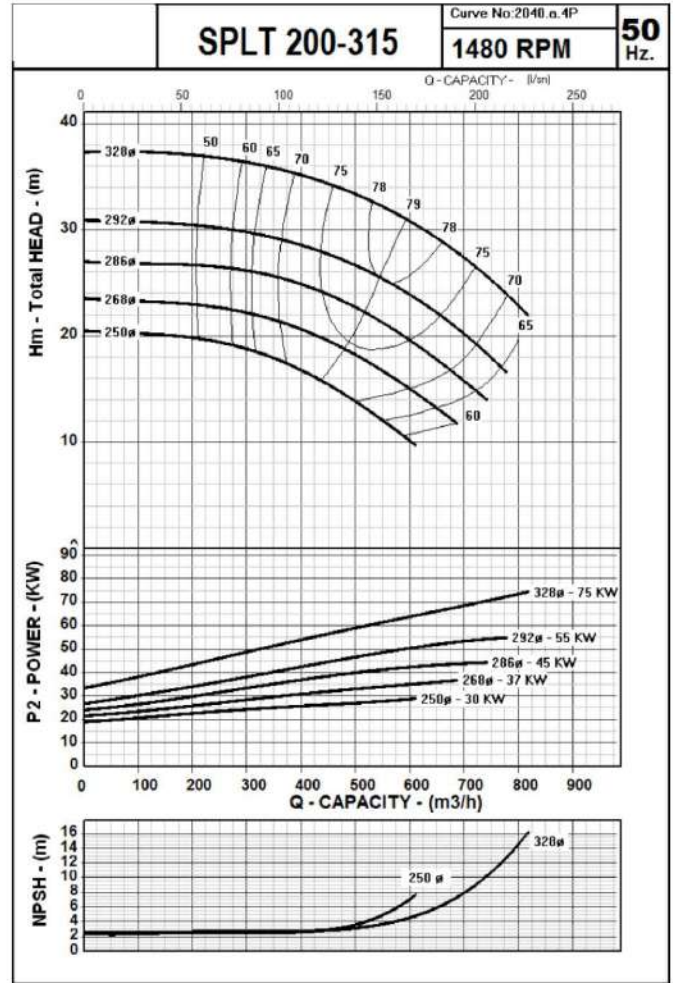
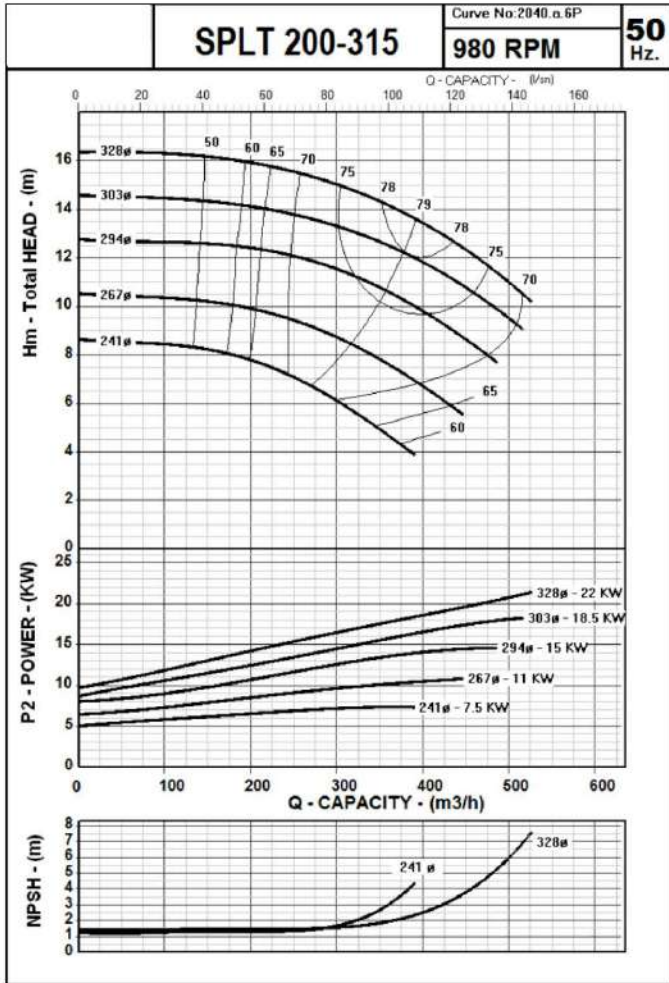


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 200-315

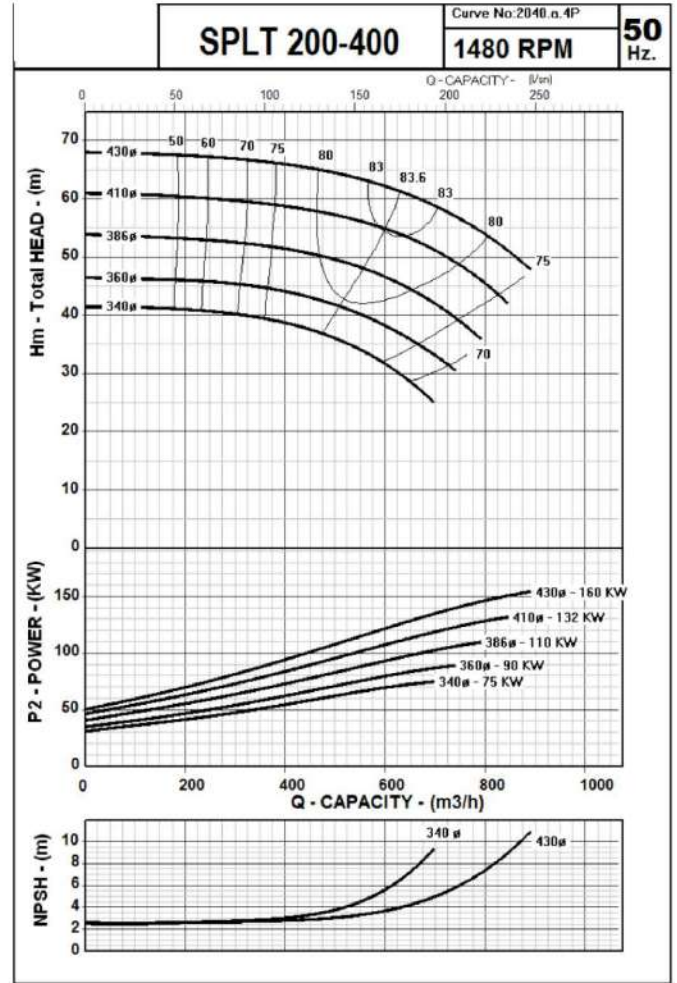
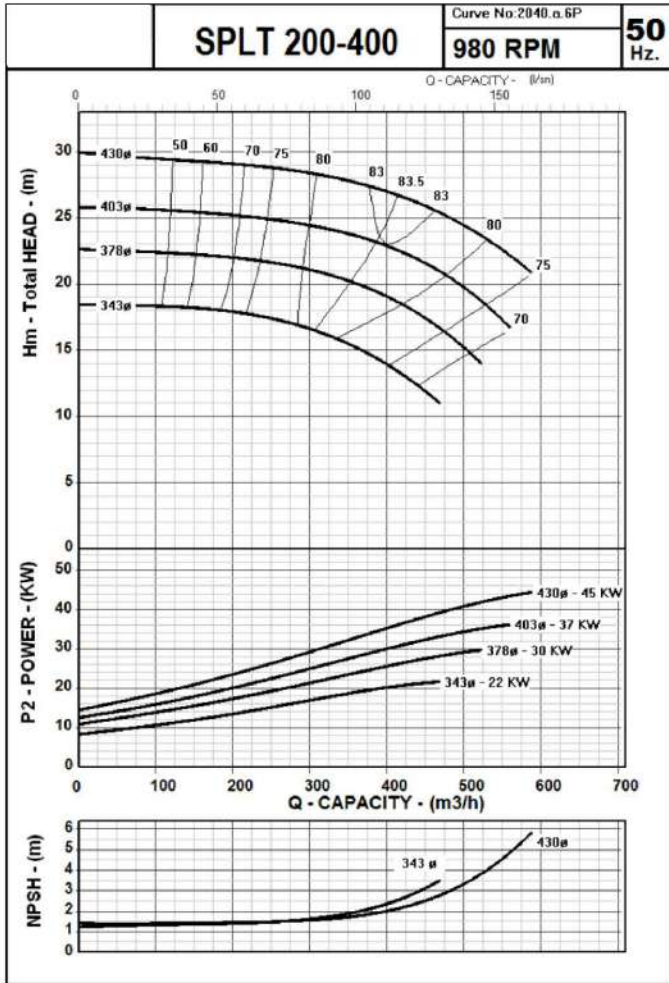


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 200-400

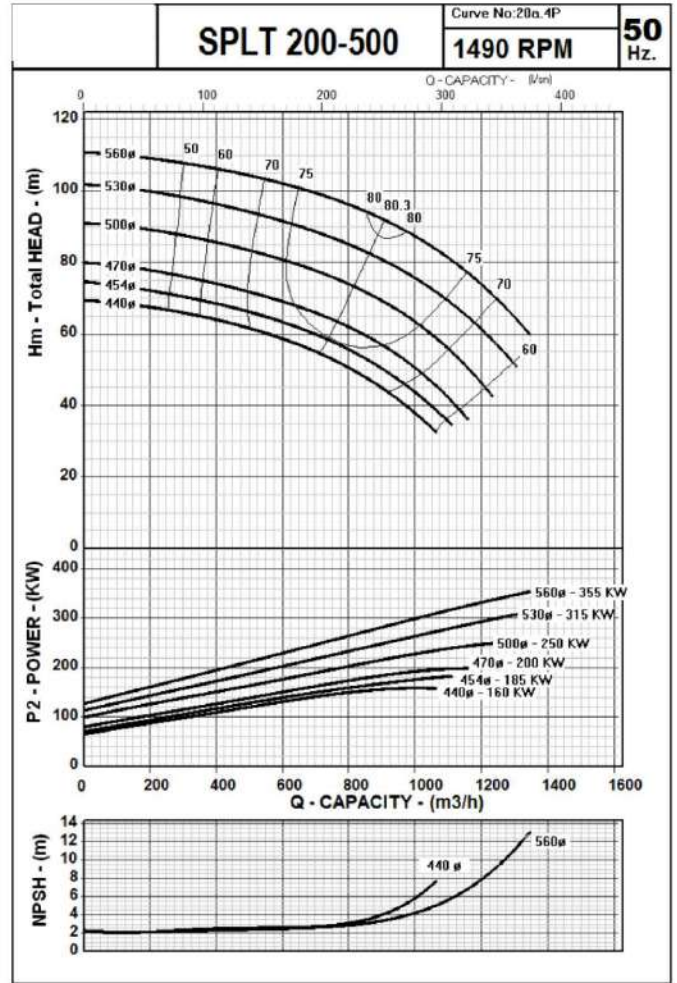
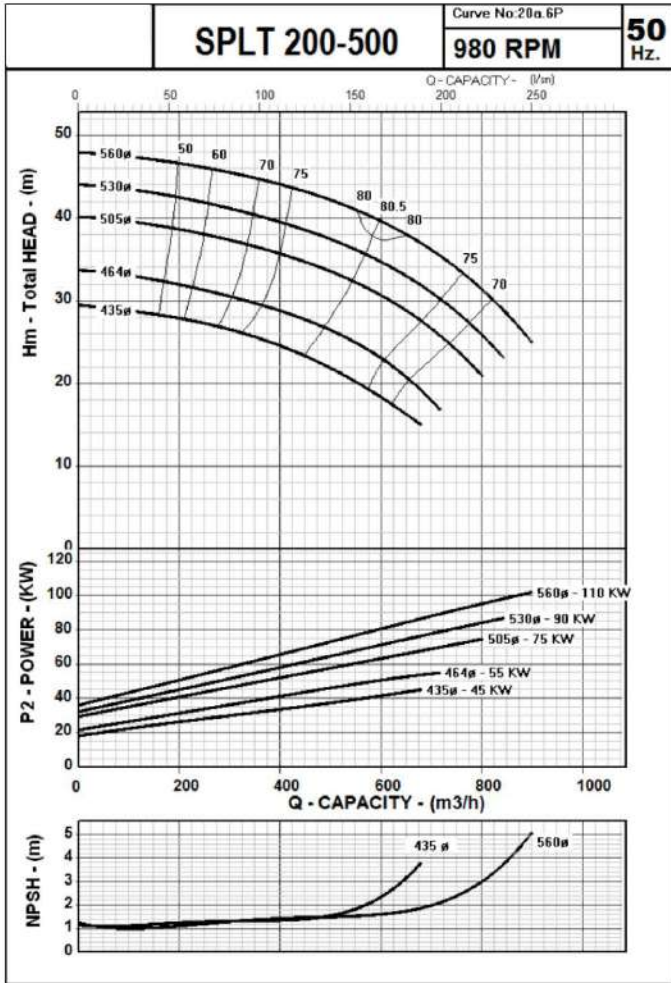


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 200-500

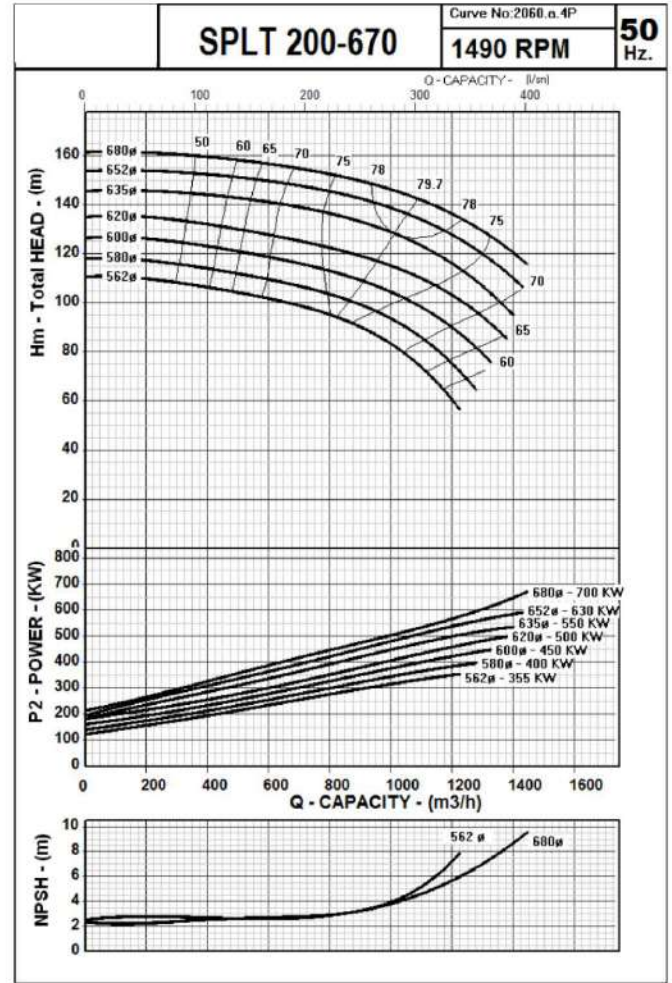
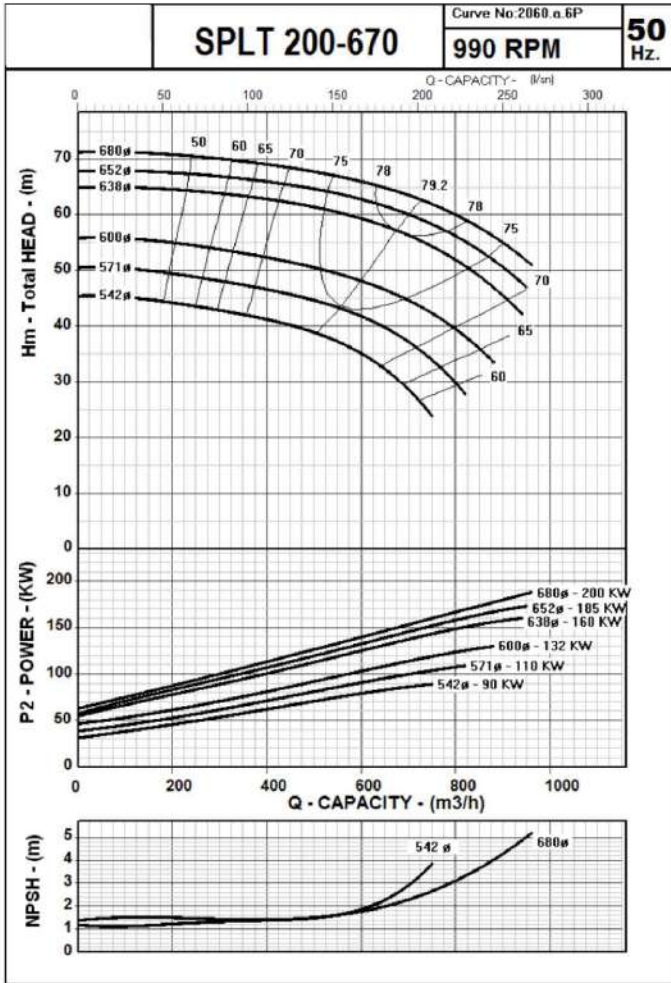


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 200-670



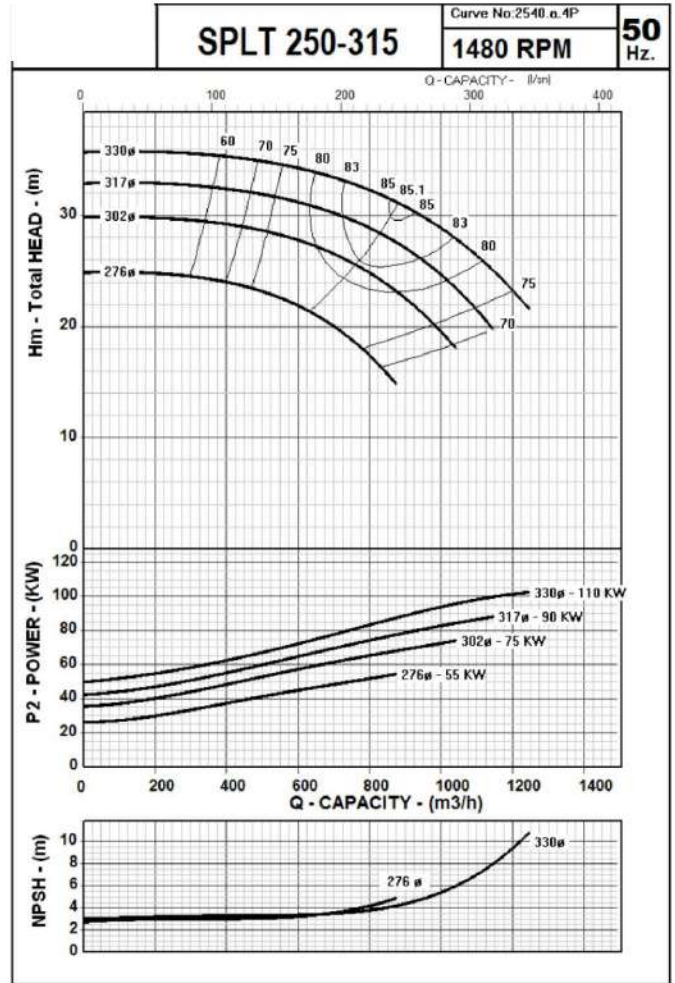
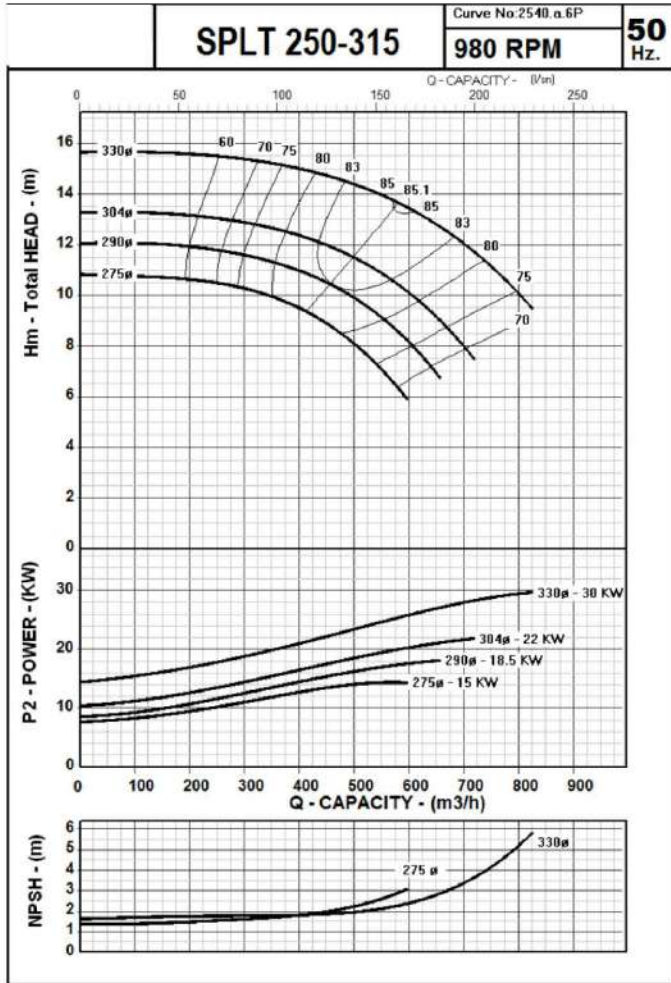


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 250-315

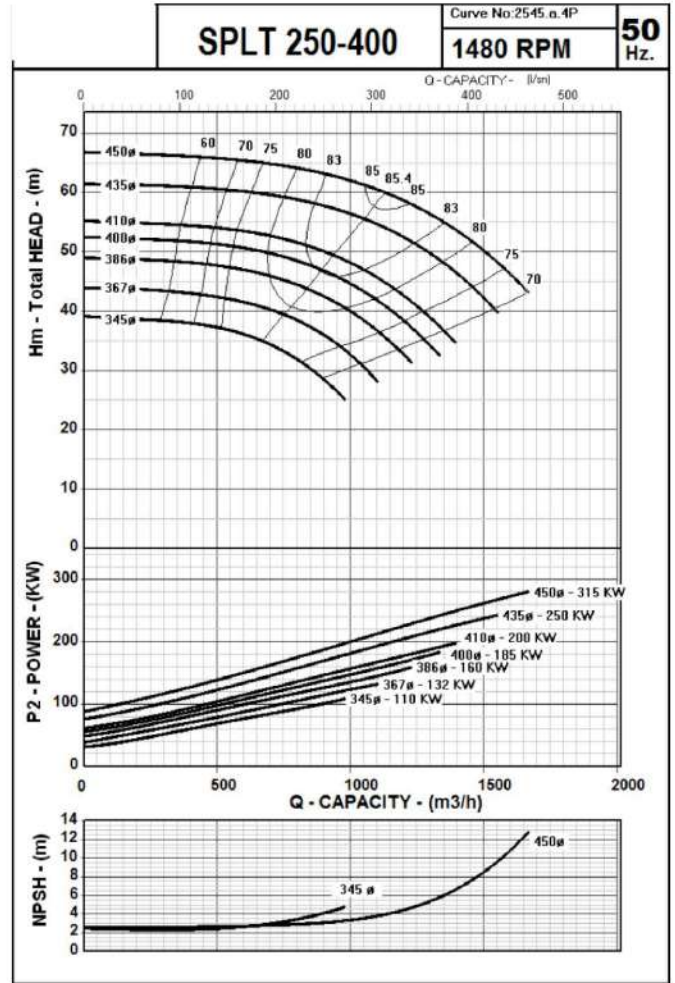
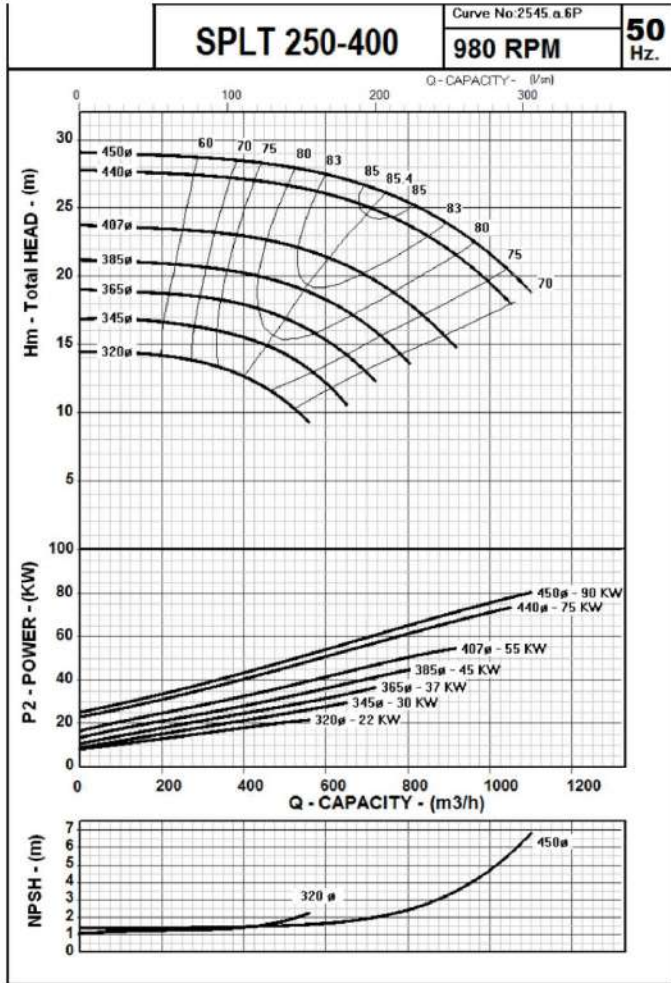


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 250-400

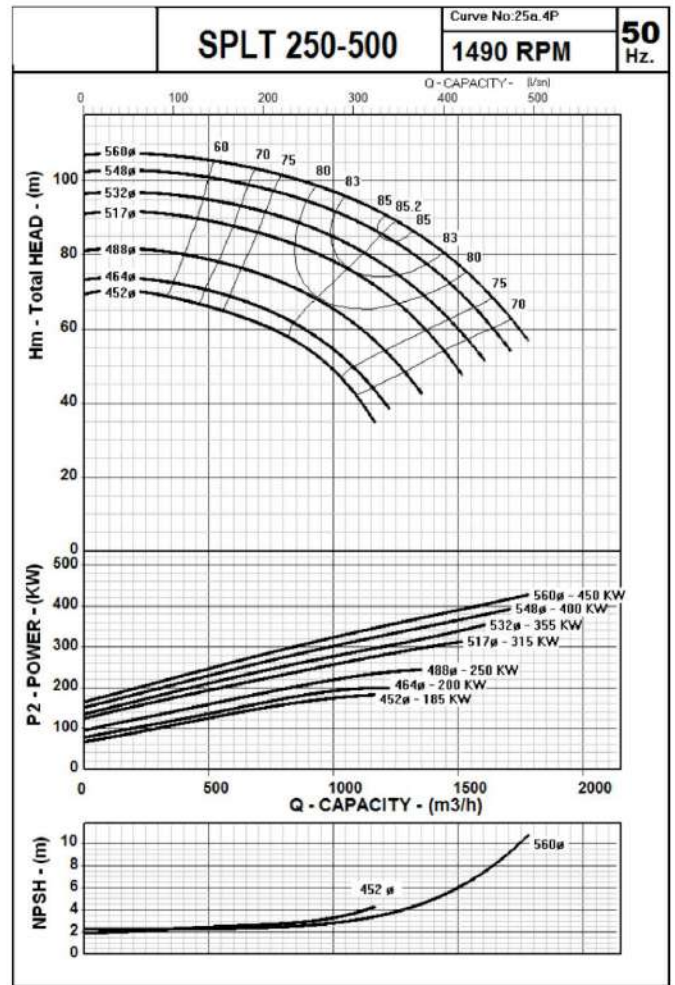
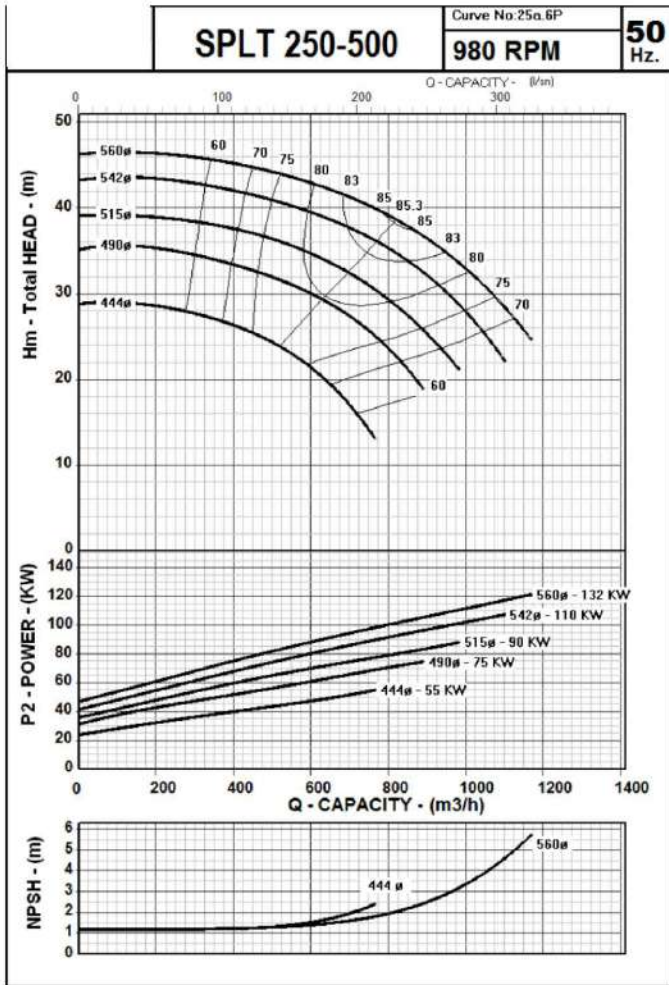


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 250-500

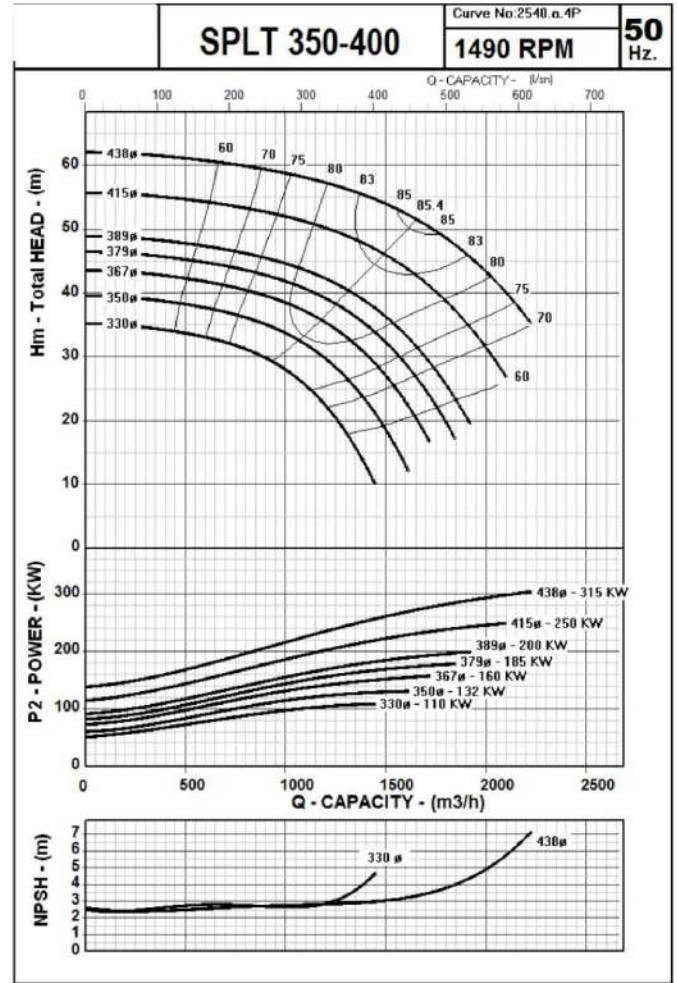
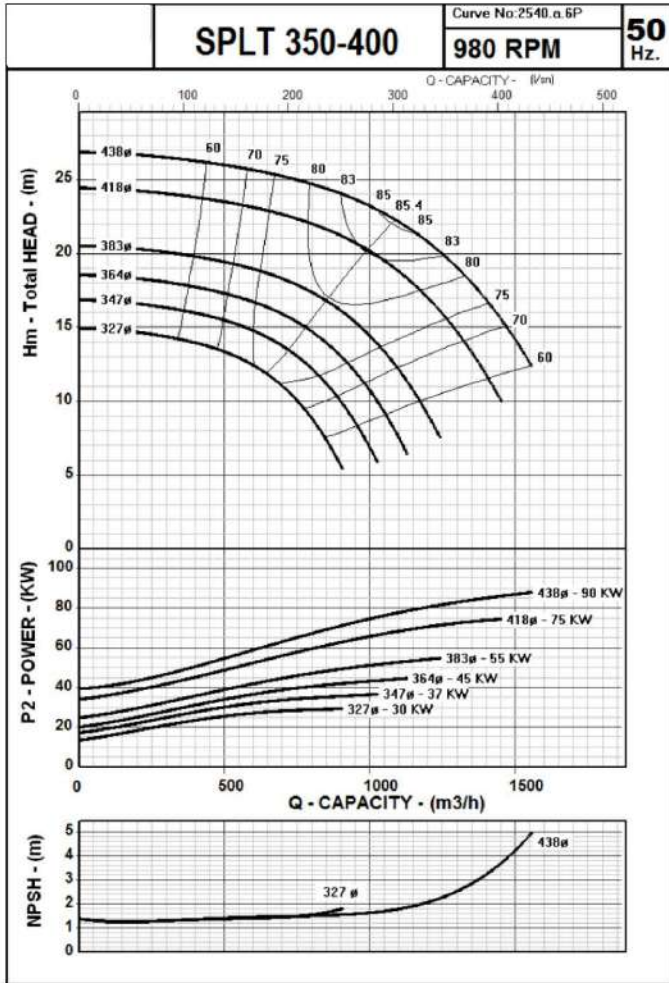


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 350-400

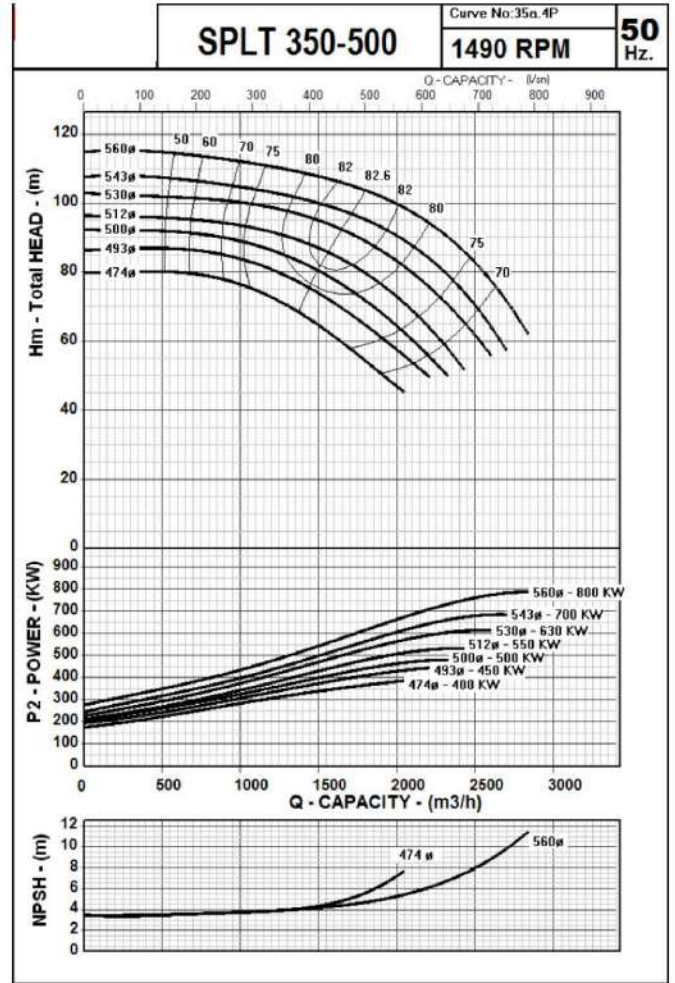
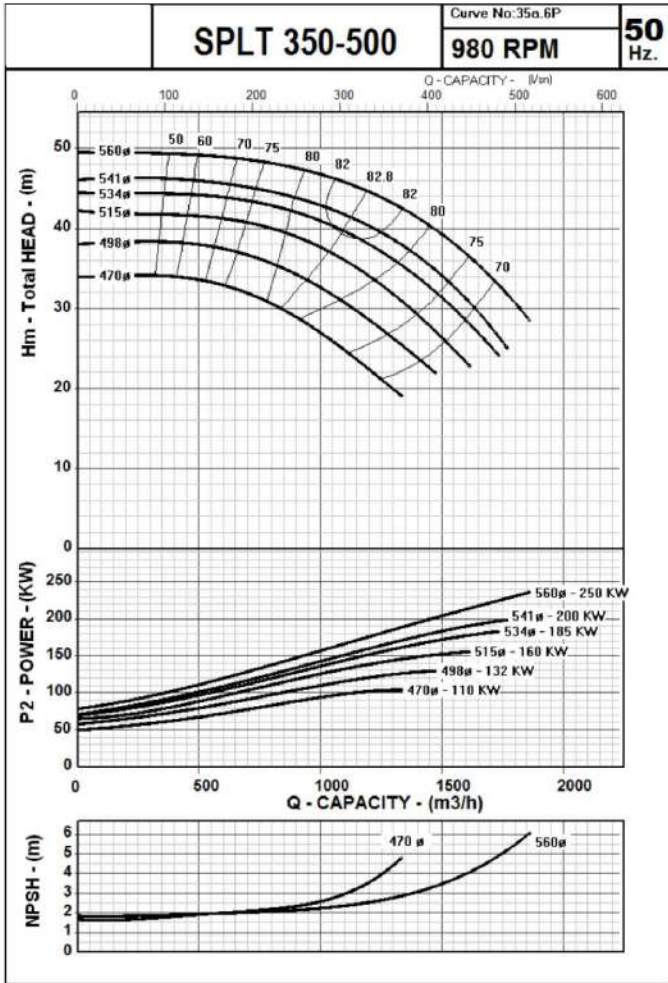


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 350-500

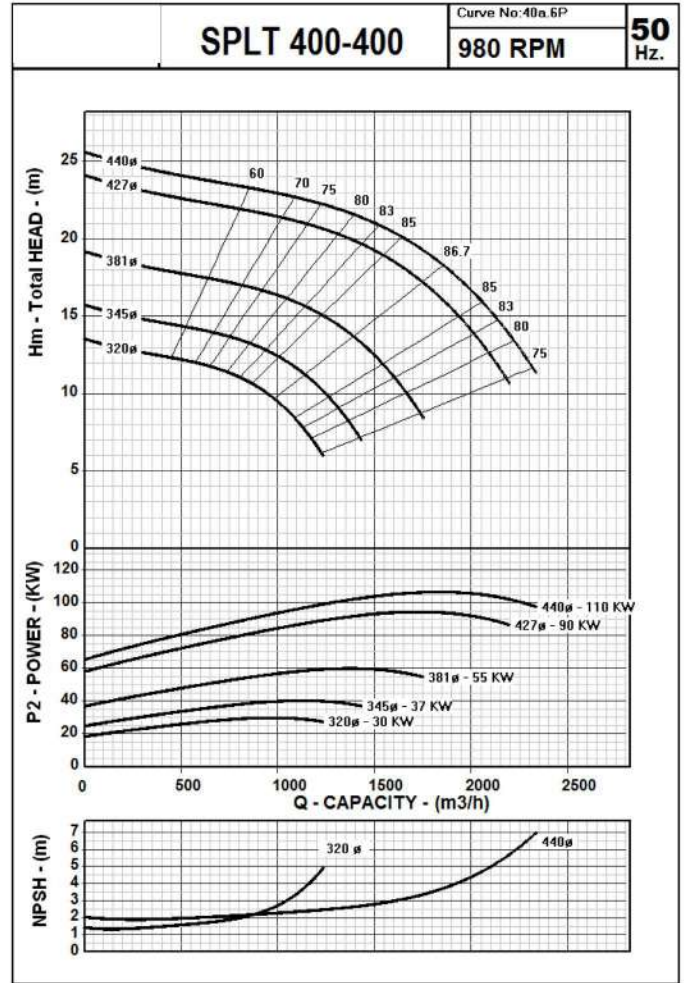
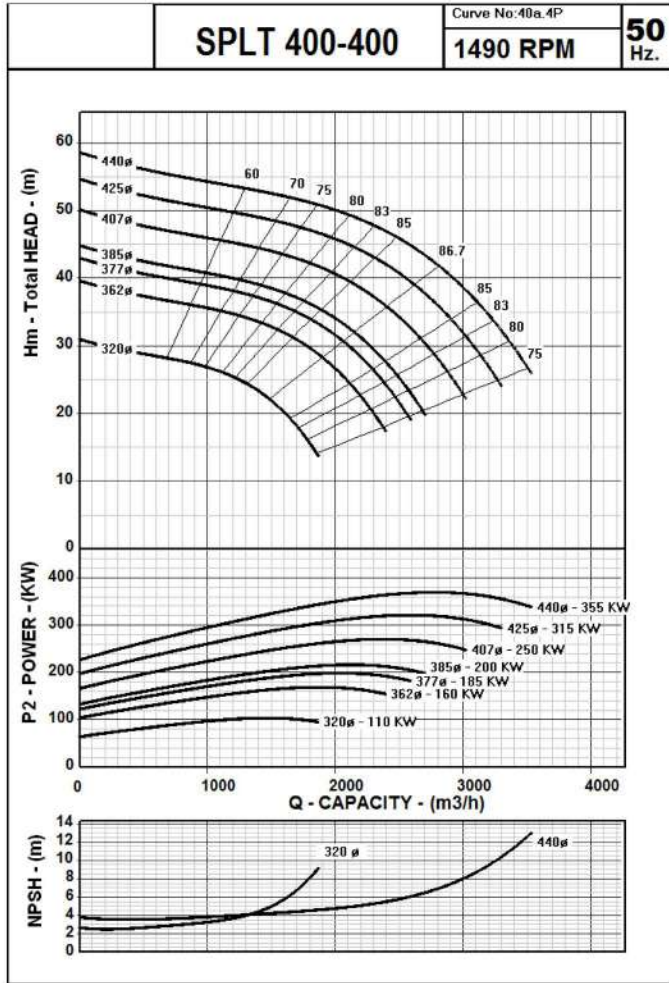


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

SPLT 400-400

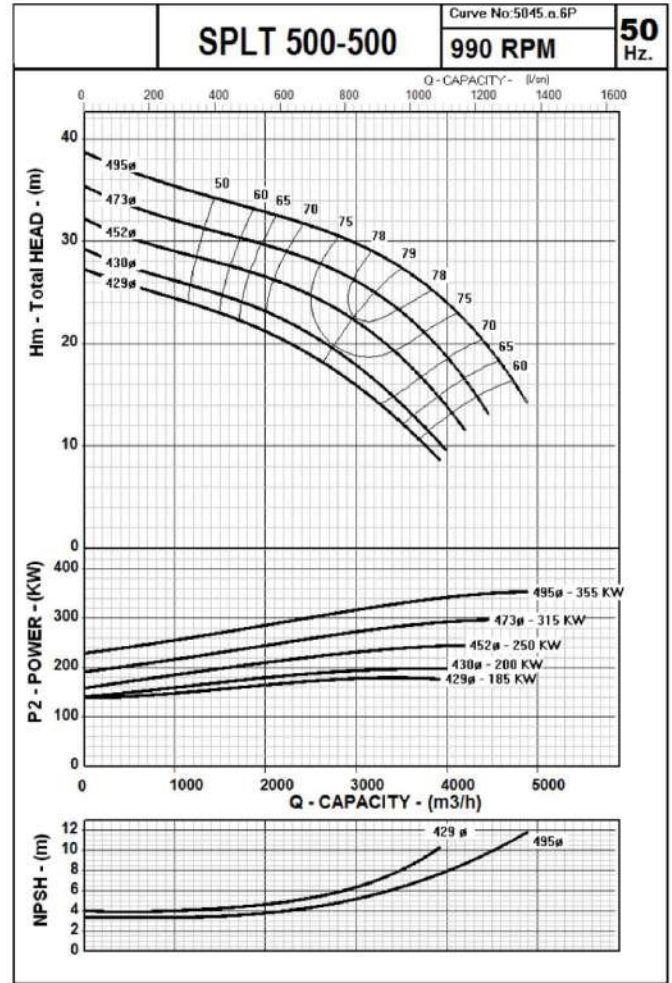
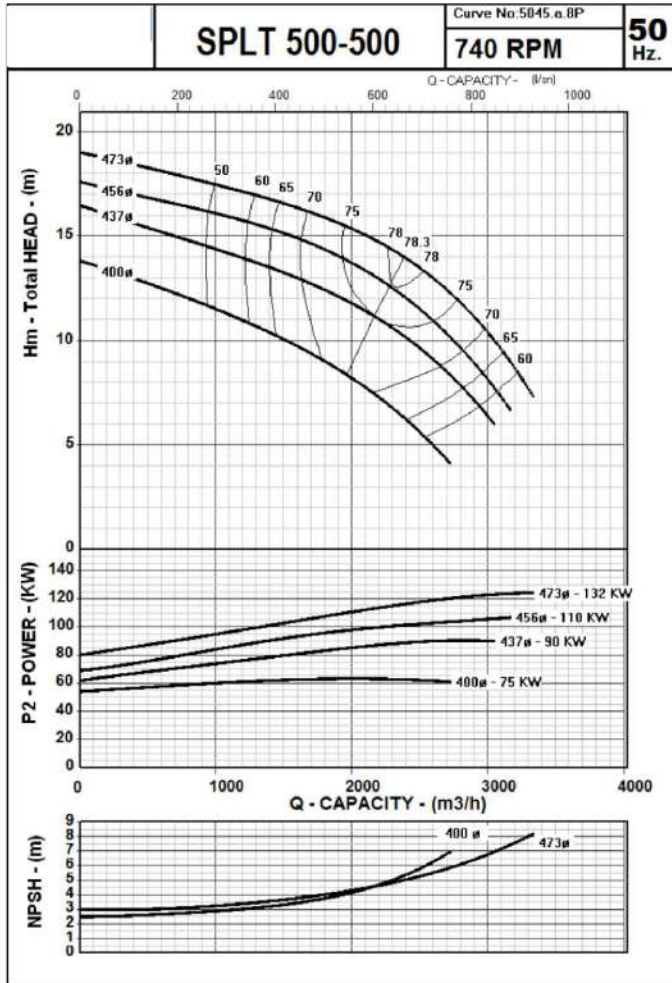


# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Performance Range

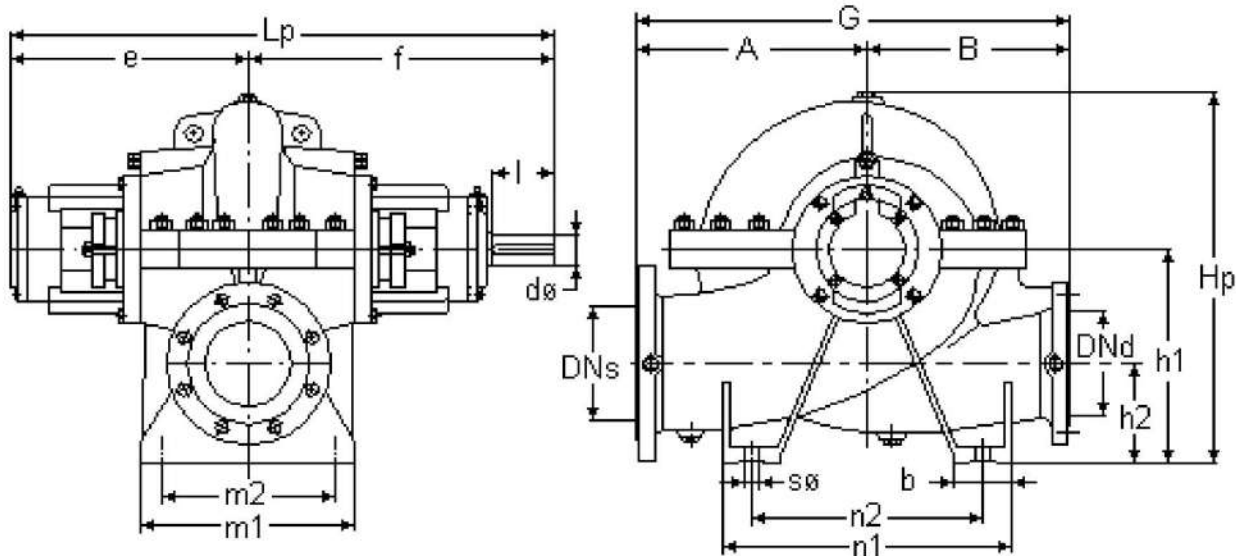
SPLT 500-500



# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

Dimension Table for SPLT and SPLT.M



## Dimension of SPLT

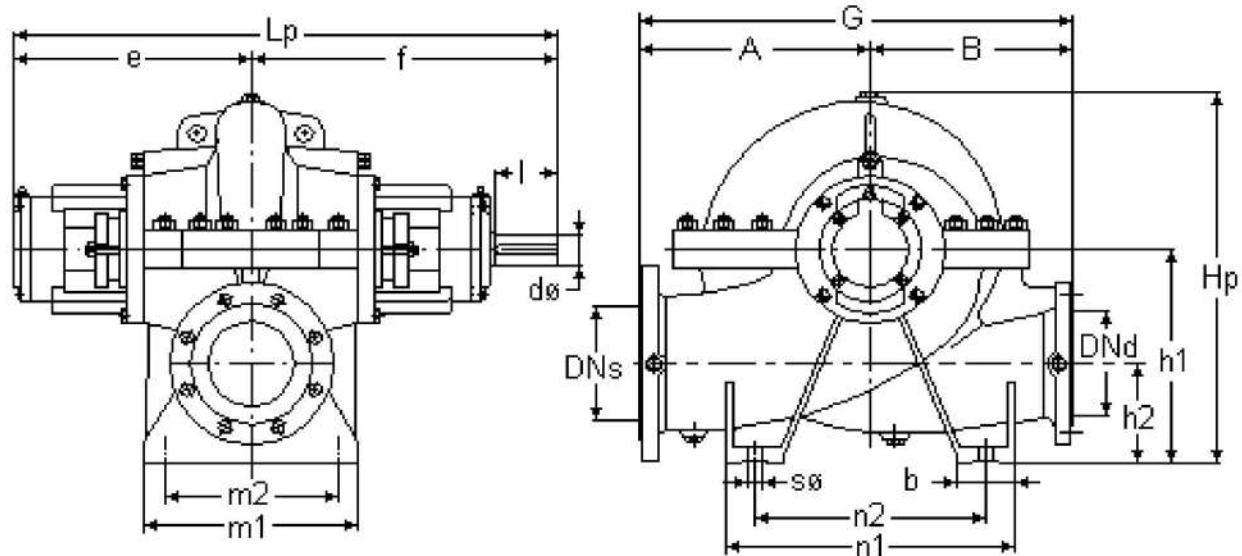
Pump Type	Group	Flanges		Lp	e	f	h1	h2	Hp	A	B	G	b	m1	m2	n1	n2	Øs	l	Ød
		DNs	DNd																	
65-250	A	100	65	585	260	325	250	115	425	285	225	510	70	240	190	350	275	18	60	28
80-250	B	125	80	680	300	380	280	140	485	300	275	575	80	234	190	400	330	18	80	35
80-360		125	80	680	300	380	315	135	550	325	275	600	80	134	190	400	330	18	80	35
100-250	C	150	100	715	315	400	315	155	550	325	275	600	80	270	220	400	330	18	80	35
100-315		150	100	820	350	470	355	145	585	360	320	680	90	290	230	435	350	23	110	45
150-250	D	200	150	870	375	495	375	175	635	400	325	725	100	340	270	500	400	23	110	45
125-400		150	125	945	415	530	375	175	700	450	400	850	100	370	300	500	400	23	110	55
125-315	E	150	125	874	377	497	400	200	665	400	350	750	100	250	200	470	400	20	110	45
150-315		200	150	945	415	530	375	175	645	400	350	750	100	370	300	500	400	23	110	55
150-315A	F	200	150	970	450	350	400	175	688	450	350	800	100	370	300	500	400	23	110	55
150-400		200	150	945	415	530	400	200	730	475	400	875	100	370	300	500	400	23	110	55
150-500	G	200	150	945	415	530	450	250	870	550	500	1050	100	370	300	650	550	23	110	55
200-315		250	200	975	430	545	430	205	730	450	375	825	100	430	360	500	400	23	110	55
200-400	H	250	200	975	430	545	430	205	790	525	425	950	100	430	360	600	500	23	110	55
200-500		250	200	1042	447	595	475	220	870	550	500	1050	100	460	390	650	550	28	140	65
250-315	I	300	250	1062	457	605	500	225	860	525	450	975	100	480	410	650	550	28	140	65
250-400		300	250	1042	457	595	500	225	865	550	450	1000	100	460	390	650	550	28	140	65
250-500	J	300	250	1062	457	605	525	240	945	600	500	1100	100	480	410	650	550	28	140	65
350-400		400	350	1290	570	720	610	295	1010	600	500	1100	150	600	500	750	600	28	140	75
350-500	K	400	350	1290	570	720	630	315	1055	650	550	1200	150	600	500	800	650	28	140	75
400-400		500	400	1510	680	830	725	345	1180	700	500	1200	110	600	540	760	650	34	140	75
500-500	L	500	500	1538	694	844	760	370	1280	750	600	1350	150	700	600	800	650	28	140	75



# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

## Dimension Table for SPLT and SPLT.M



### Dimension of SPLT.M

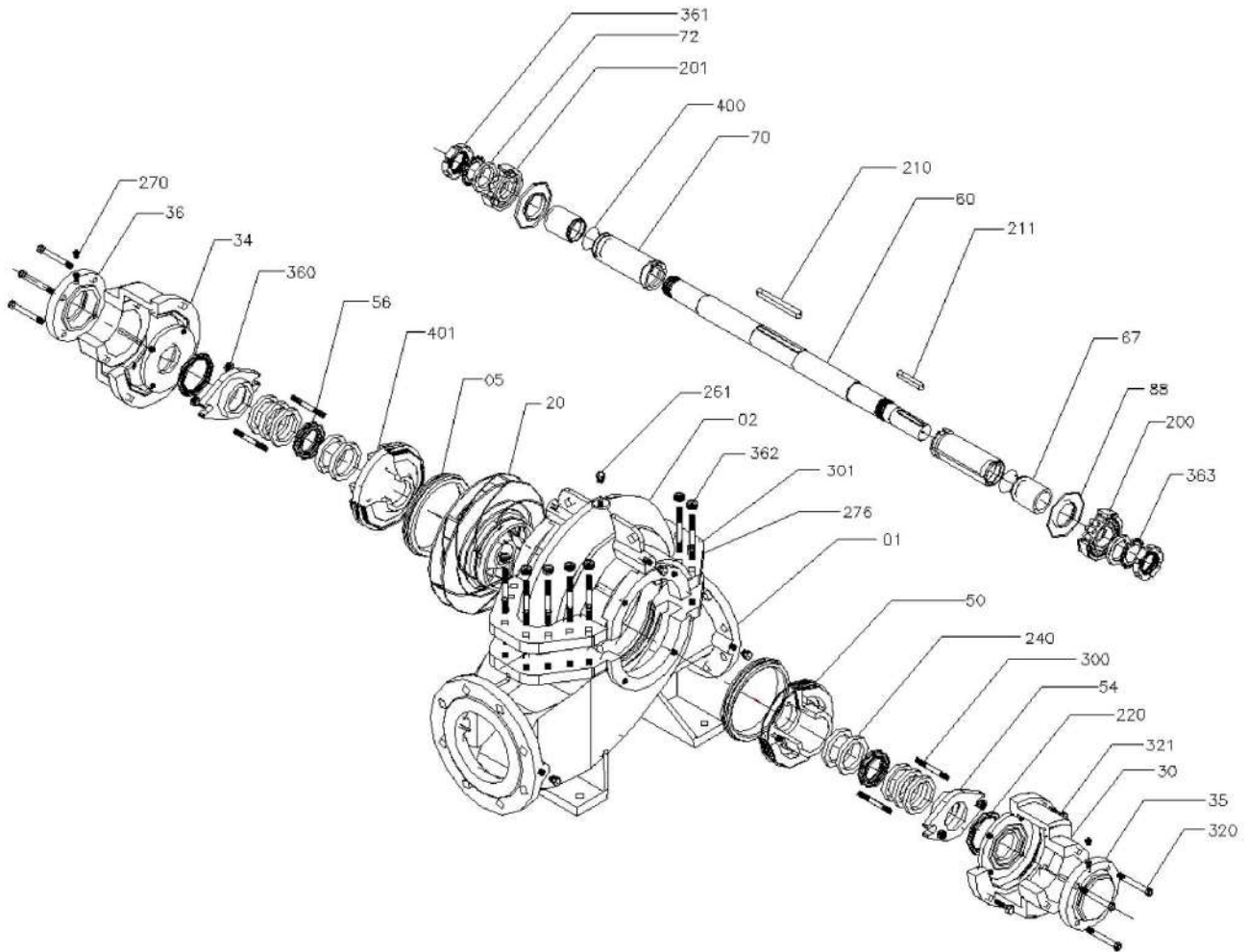
Pump Type	Grup	Flanges		Lp	e	f	h1	h2	Hp	A	B	G	b	m1	m2	n1	n2	Øs	l	Ød
		DNs	DNd																	
65-250	A	100	65	455	195	260	250	115	425	285	225	510	70	240	190	350	275	18	60	28
80-250	B	125	80	507	212	295	280	140	485	300	275	575	80	234	190	400	330	18	80	32
80-360		125	80	507	212	295	315	135	550	325	275	600	80	234	190	400	330	18	80	32
100-250	C	150	100	545	230	315	315	155	550	325	275	600	80	270	220	400	330	18	80	32
100-315		150	100	615	260	355	355	145	585	360	320	680	90	290	230	435	350	23	110	40
150-250	D	200	150	665	285	380	375	175	635	400	325	725	100	340	270	500	400	23	110	40
125-400		150	125	696	300	396	375	175	700	450	400	850	100	370	300	500	400	23	110	50
125-315	E	150	125	874	377	497	400	200	665	400	350	750	100	250	200	470	400	20	110	45
150-315A		200	150	970	450	350	400	175	688	450	350	800	100	370	300	500	400	23	110	55
150-315	F	200	150	696	300	396	375	175	645	400	350	750	100	370	300	500	400	23	110	50
150-400		200	150	696	300	396	400	200	730	475	400	875	100	370	300	500	400	23	110	50
150-500	G	200	150	696	300	396	450	250	870	550	500	1050	100	370	300	650	550	23	110	50
200-315		250	200	725	315	410	430	205	730	450	375	825	100	430	360	500	400	23	110	50
200-400	H	250	200	725	315	410	430	205	790	525	425	950	100	430	360	600	500	23	110	50
200-500		250	200	822	337	485	475	220	870	550	500	1050	100	460	390	650	550	28	140	60
250-315	I	300	250	842	347	495	500	225	860	525	450	975	100	480	410	650	550	28	140	60
250-400		300	250	822	337	485	500	225	865	550	450	1000	100	460	390	650	550	28	140	60
250-500	J	300	250	842	347	495	525	240	945	600	500	1100	100	480	410	650	550	28	140	60
350-400		400	350	1000	435	565	610	295	1010	600	500	1100	150	600	500	750	600	28	140	75

**Note:** SPLT is soft packing design. However, SPLT.M is compact design and only mechanical seal application is possible. All dimensions are in millimeters.

# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

## SPLT – Exploded View



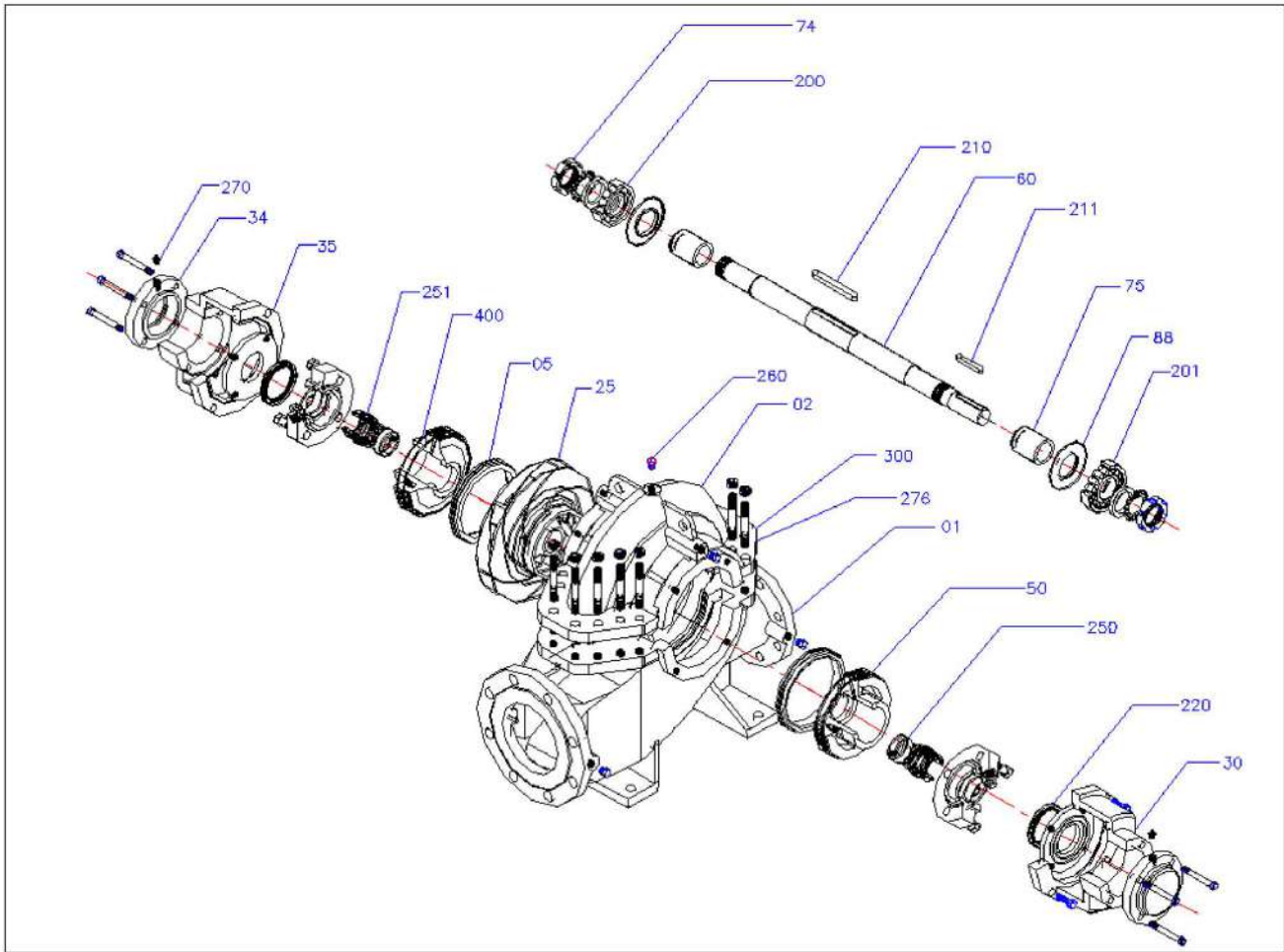
### PART LIST

PART NO	PART NAME	PART NO	PART NAME
01	Casing Lower Part	201	Roller Bearing
02	Casing Upper Part	210	Key for Impeller
05	Wear Ring	211	Key for Coupling
20	Impeller	220	Oil Seal
30	Bearing Housing	240	Soft Packing
34	Bearing Cover (Dead Side)	260	Plug
35	Bearing Cover (Motor Side)	270	Greaser
36	Bearing Housing Cover	276	Adjusting Tap
50	Stuffing Box	300	Casing Stud
54	Gland	301	Stud for Gland
56	Lantern Ring	320	Hexagonal Bolt
60	Pump Shaft	321	Bolt
70	Seal Sleeve	360	Nut for Casing Stud
72	Ring	361	Nut for Gland
73	Space Sleeve	363	Washer for Bearing
74	Nut for Bearing	400	O-Ring (Stuffing Box)
88	Water Thrower	401	O-Ring (Shaft Sleeve)
200	Ball Bearing		

# SPLT & SPLT.M Series

Split Case Double Suction Centrifugal Pump

## SPLT.M – Exploded View



### PART LIST

PART NO	PART NAME	PART NO	PART NAME
01	Casing Lower Part	200	Ball Bearing
02	Casing Upper Part	201	Roller Bearing
05	Wear Ring	210	Key for Impeller
25	Impeller	211	Key for Coupling
30	Bearing Housing	220	Oil Seal
34	Bearing Housing Cover	250	Mechanical Seal Ring
35	Bearing Cover (Dead Side)	251	Mechanical Seal
50	Stuffing Box	260	Plug
60	Pump Shaft	270	Greaser
74	Nut for Bearing	276	Adjusting Tap
75	Space Sleeve	300	Casing Stud
88	Water Thrower	400	O-Ring (Stuffing Box)



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