EUROFLO™

where innovation flows

Horizontal Axially

Split Casing Pumps

ESC*series*

www.euroflopumps.com

Coding System

e.g. ESC 250/52 M BC

XXXX XXX/XXX X XX

Series

ESC = Spilt Casing Pump

ESC(V) = Vertical Double Suction Centrifugal Pump

Pump Suction Diameter

Duty Point Head

Seal type

M = Alloy - Alloy/NBR

P = Gland Packing

M1 = Carbon - Ceramic/Viton (Optional)

M2 = Carbon - SiC/Viton (Optional)

M3 = Carbon - SiC/EPDM (Optional)

M4 = Cartridge Mechanical Seals (optional)

Impeller/body casing material

BC = Bronze impeller and Cast Iron Body

BD = Bronze impeller and Ductile Iron Body

BB = Bronze impeller and Body

CC = Cast Iron impeller and Body

CD = Cast Iron impeller and Ductile Iron Body

KK = SS316 impeller and Body

KC = SS316 impeller and Cast Iron Body

SS = SS304 impeller and Body

SC = SS304 impeller and Cast Iron Body

DC = Ductile Iron impeller and Cast Iron Body

DD = Ductile Iron impeller and Body

QQ = Duplex Stainless Steel impeller and Body

WW = Carbon Steel impeller and Body

Introduction

ESC series are Horizontal Split casing, Single stage,Double suction impeller with in-between bearing design , allows pumps run quietly and with minimal vibration. Coupled with dynamically balanced impeller the pumps life is greatly prolonged and therefore, increase MTBF (Mean Time Between Failure). This allows the pump to be mounted Horizontally and also, vertically to save spaces.

Flange	DIN 2501 FF (std) ANSI B16.5B (optional)
Materials:	Cast Iron, Ductile Iron, Stainless Steel
Mounting:	- Bare Shaft - Engine Driven

DN 50 - 1,000
Q 18,000m3/hr
O.P. up to 25bar
H 150m; up to 180m (optional)
Ns up to 3,600rpm
t up to 105°C

Application:
- HVAC and Cooling Tower
- Municipal Water Supply
- Marine and Ship Building
- Power Plant
- Irrigation and agriculture
- Fire Fighting

Constructional Features

Design Construction
ESC series pump is single stage, double suction, axial split casing centrifugal pumps. Both Horizontal and vertical mounting is possible. The design allows for change of rotation and position of the motor to suit in stallation requirement at site without extra or changed of components to the existing pump.

Casing
Heavy Duty construction with high inner wall finishes to increase efficiency and reduce turbulences. The integrated foot on the suction allow for rigidity and absorb external forces, yet allows user with ease of removing the rotating assembly without disconnecting the pipes and motor for maintenances and routine inspection of Seals and wear rings.

Impeller
The double suction, Francis vane design allow for hydratically balanced operation, low NPSH (required) and reduces radial loan that helps to prolong bearing seals and shaft life.

Shaft
Machined with large shaft diameter to resist deflection and grounded to size for consistency enable smooth in stallation of seals and bearing without damage and adjustment. Carbon steel (C45) material is standard with option for Stainless steel upon request.

Shaft Sleeve
Replaceable sleeve enable one to select different material for different application and needs. Saving money and time for the user from replacing shaft due to erosion and wear.

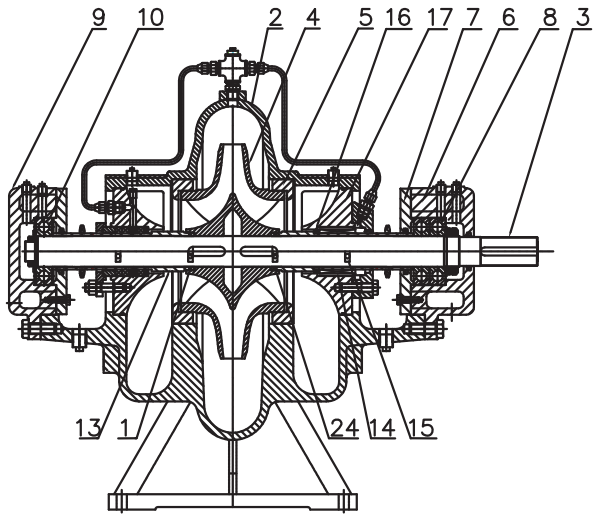
Wear ring
Eliminate casing wear and permit easy maintenance of proper running clearances for maximum efficiency through out pumps operation. Positively locked in place to prevent rotation during pump operation.

Stuffing box
Designed with large cavity for excellent heat dissipation and "no dead ends" to remove debris that may jam the seals, coupled with abilities to have different flushing plans, to further enhances cooling and dirt removal. Available, with Packing and Mechanical Seals of different material.

Bearing housing
Designed for maximum heat dissipation, it allows operation up to 130°C without extra cooling. The machined registered housing gives rigidity and accurate alignment during dismantling and assembly for maintenance. Coupled with double deep grooved ball bearing for horizontal mounting and Double Angular contact bearing for vertical mounting on the driver end, the B10 life is greatly improved. Additionally, provision of grease nipple for re-greasing and temperature detecting probe socket.

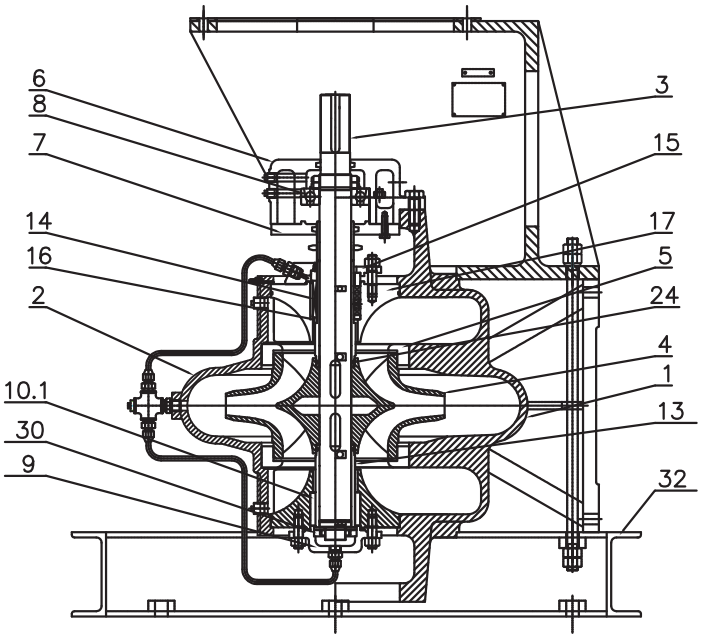
ESC/ESCV - Sectional drawings

ESC - Part materials



Item	Description	Material Design						
		CC	DC	BC	SC	DD	SS	WW
1	Casing - Bottom	GG 25				GGG 40	SS 304	Carbon Steel
2	Casing - Top	GG 25				GGG 40	SS 304	Carbon Steel
3	Shaft	SUS 420						
4	Impeller	GG 25	GGG 40	G-CuSn10Zn	SS 304	GGG 40	SS 304	Carbon Steel
5	Wear Ring	GG 25				GGG 40	SS 304	Carbon Steel
6	Bearing Housing-Drive End	GG 25						
7	Bearing Housing Cover-Drive End	GG 25						
8	Ball Bearing - Drive End	GG 25						
9	Bearing Housing - Non Drive End	GG 25						
10	Ball Bearing - Non-Drive End	Steel						
13	Sleeves	SUS 420					SS 304	SUS 420
14	Mech Seal or Soft packing(14.1 - 14.3)							
14.1	Gland *	Gland Packing						
14.2	Lantern Ring *	GG 25					SS 304	Carbon Steel
14.3	Neck Ring *	GG 25					SS 304	Carbon Steel
15	Seal Plate with Plan 11 Flushing	GG 25					SS 304	Carbon Steel
16	Sleeves spacer - For mech seal	GG 25	GGG 40	GG 25		GGG 40	SS 304	Carbon Steel
17	Seal Chamber with Plan 01 flushing	GG 25	GGG 40	GG 25		GGG 40	SS 304	Carbon Steel
24	Impeller and Sleeve O-ring	NBR						

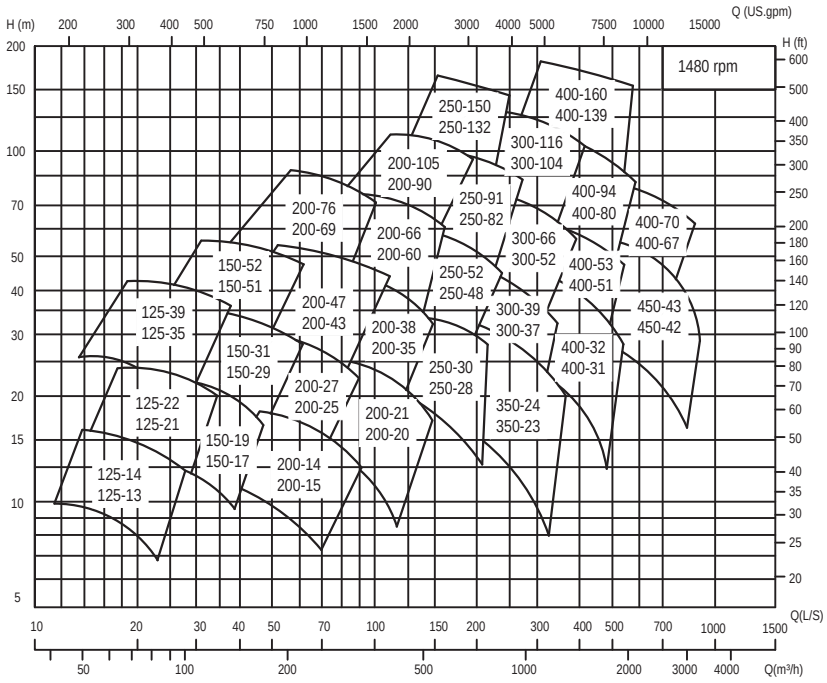
ESCV - Part materials

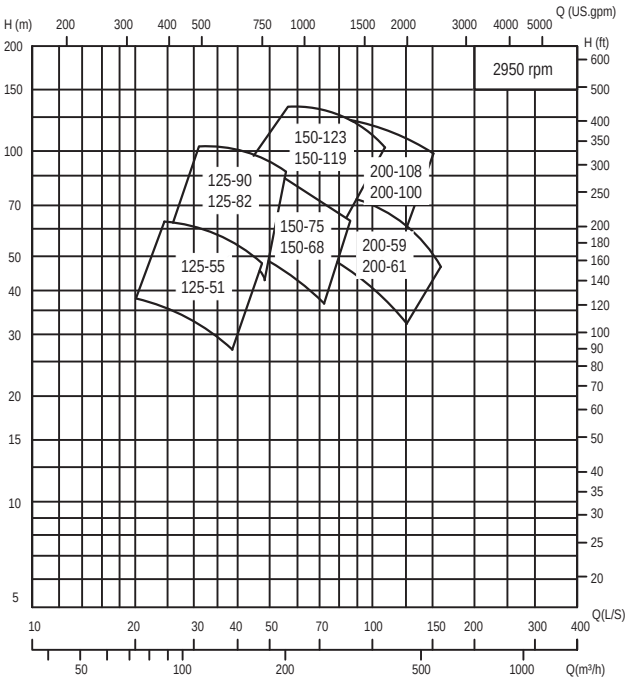


Item	Description	Material Design						
		CC	DC	BC	SC	DD	SS	WW
1	Casing - Bottom	GG 25				GGG 40	SS 304	Carbon Steel
2	Casing - Top	GG 25				GGG 40	SS 304	Carbon Steel
3	Shaft	SUS 420						
4	Impeller	GG 25	GGG 40	G-CuSn10Zn	SS 304	GGG 40	SS 304	Carbon Steel
5	Wear Ring	GG 25				GGG 40	SS 304	Carbon Steel
6	Bearing Housing-Drive End	GG 25						
7	Bearing Housing Cover -Drive End	GG 25						
8	Ball Bearing - Drive End	GG 25						
9	Bearing Housing-non Drive End	GG 25						
10	Ball Bearing - non Drive End	Steel						
10.1	Bushing	Engineering Plastic						
13	Sleeves	SUS 420					SS 304	SUS 420
14	Mech Seal or Soft packing(14.1 - 14.3)							
14.1	Gland *	Gland Packing						
14.2	Lantern Ring *	GG 25					SS 304	Carbon Steel
14.3	Neck Ring *	GG 25					SS 304	Carbon Steel
15	Seal Plate with Plan 11Flushing	GG 25					SS 304	Carbon Steel
16	Sleeves spacer - for mech seal	GG 25	GGG 40	GG 25		GGG 40	SS 304	Carbon Steel
17	Seal Chamber with Plan 01 flushing	GG 25	GGG 40	GG 25		GGG 40	SS 304	Carbon Steel
24	Impeller and Sleeve O-ring	NBR						
30	Bushing Locknut	Steel						
32	Base	Steel						

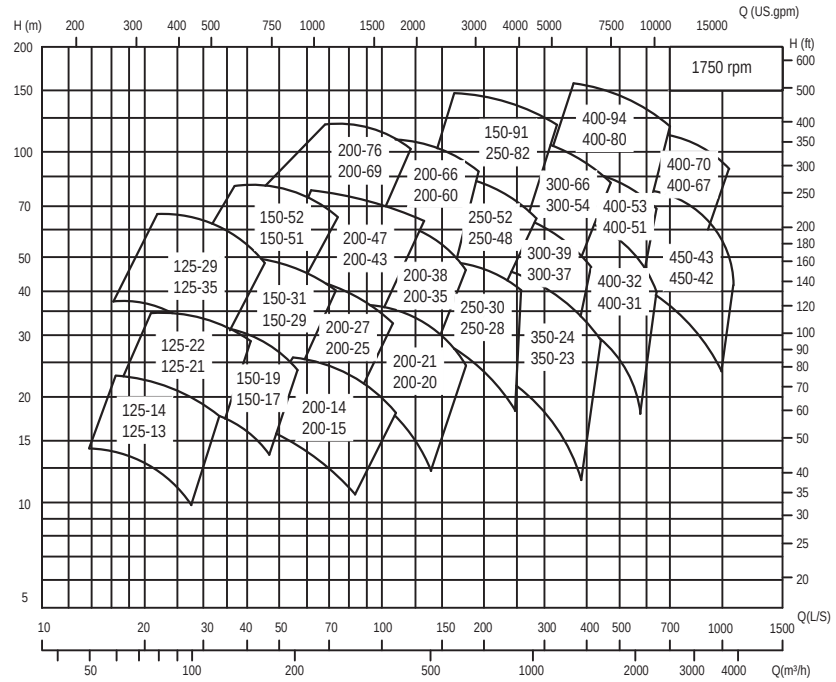
Performance Chart

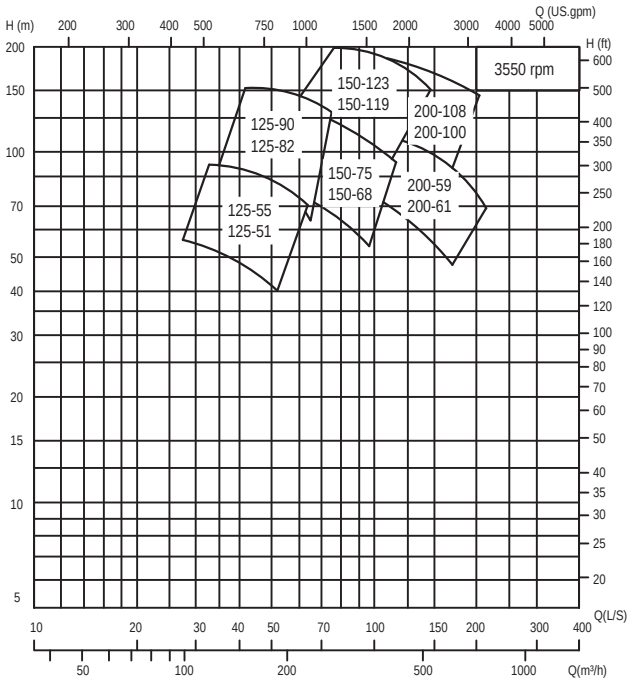
50Hz



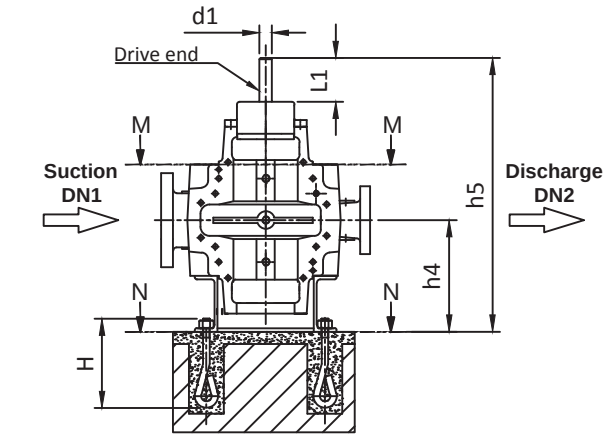


60Hz





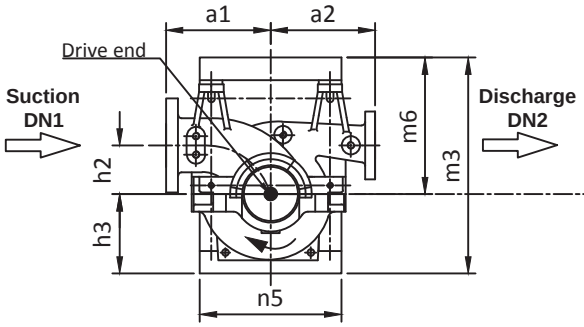
ESCV - Outline Dimension Drawing (without base plate)



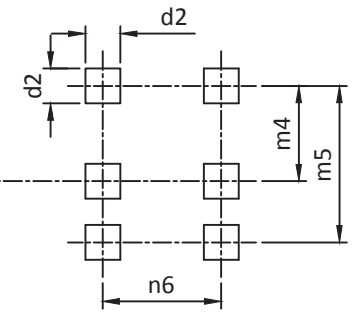
Note :

Rotation Clockwise

view from drive end



View M-M



View N-N

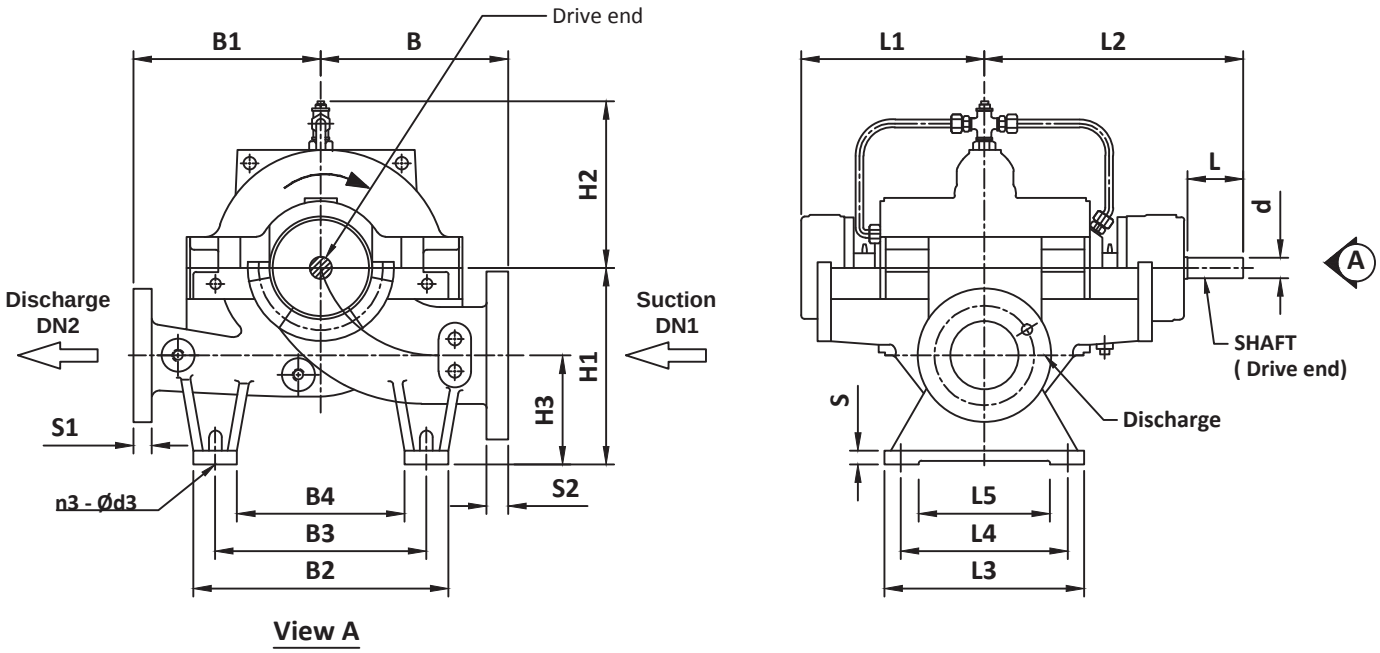
ESCV - Installation Dimension (without base plate)

Pump Size	Flange		Dimension													Shaft			Weight
	DN1	DN2	a1	a2	h2	h3	h4	h5	m3	m4	m5	m6	d2	n5	n6	d1	L	H	KG
ESC(V)125-14	125	80	300	300	140	190	320	735	620	275	335	392	100	406	340	35	70	400	215
ESC(V)125-55	125	80	300	300	140	190	320	735	620	275	335	392	100	406	340	35	70	400	225
ESC(V)125-90	125	80	300	300	140	190	320	735	620	275	335	392	100	406	340	35	70	400	245
ESC(V)125-22	125	80	300	300	140	190	320	735	620	275	335	392	100	406	340	35	70	400	245
ESC(V)125-39	125	80	330	330	140	225	320	735	620	275	335	392	100	406	340	35	70	400	245
ESC(V)125-75	150	100	330	330	170	195	320	735	695	315	408	432	100	466	400	35	70	400	270
ESC(V)125-19	150	100	330	330	170	195	320	735	695	315	408	432	100	466	400	35	70	400	270
ESC(V)150-123	150	100	330	330	170	225	355	870	695	315	408	432	100	466	400	45	100	400	290
ESC(V)150-31	150	100	330	330	170	225	355	870	695	315	408	432	100	466	400	45	100	400	290
ESC(V)150-52	150	100	370	370	170	260	320	735	695	315	408	430	100	466	400	35	70	400	320
ESC(V)200-59	200	125	370	370	200	210	355	870	855	360	570	475	100	486	450	45	100	400	350
ESC(V)200-14	200	125	370	370	200	210	355	870	855	360	570	475	100	486	450	45	100	400	350
ESC(V)200-108	200	125	370	370	200	230	355	870	855	360	570	475	100	486	450	45	100	400	380
ESC(V)200-27	200	125	370	370	200	230	355	870	855	360	570	475	100	486	450	45	100	400	380
ESC(V)200-47	200	125	370	370	200	260	355	870	855	360	570	475	100	485	450	45	100	400	410
ESC(V)200-76	200	125	450	450	200	305	355	870	855	353	570	468	100	610	560	45	100	400	460
ESC(V)200-21	200	150	400	400	200	245	355	870	855	360	570	475	100	486	450	45	100	400	460
ESC(V)200-38	200	150	400	400	200	275	355	870	855	360	570	475	100	486	450	45	100	400	480
ESC(V)200-66	200	150	450	450	200	300	400	990	1080	450	780	580	100	606	560	55	110	500	610
ESC(V)200-105	200	150	600	500	300	370	400	990	1080	450	780	580	100	746	700	55	110	500	840
ESC(V)250-30	250	200	450	450	240	285	400	990	1080	450	780	580	200	606	560	55	110	500	620
ESC(V)250-52	250	200	500	500	240	310	400	990	1080	450	780	580	200	606	560	55	110	500	710
ESC(V)250-91	250	200	600	500	300	370	460	1155	1314	535	958	666	200	770	700	65	140	500	1580
ESC(V)250-150	250	200	650	550	350	280	476	1171	1314	535	958	666	200	770	700	65	140	500	1580
ESC(V)300-39	300	250	500	500	300	330	460	1155	1314	535	958	666	200	770	700	65	140	500	1270
ESC(V)300-66	300	250	550	550	300	482	536	1290	1354	602	1030	733	200	770	700	75	140	500	1450
ESC(V)300-116	300	250	650	550	350	475	536	1290	1354	602	1030	733	200	770	700	75	140	500	1900
ESC(V)350-24	350	300	550	500	300	450	460	1155	1314	535	958	666	200	770	700	65	140	500	1200
ESC(V)400-53	400	300	650	550	350	345	536	1290	1354	602	1030	733	200	770	700	70	140	500	1650
ESC(V)400-32	400	350	650	550	350	420	536	1290	1354	602	1030	733	200	770	700	75	140	500	1500
ESC(V)400-70	400	350	700	650	400	540	635	1495	1500	711	1198	819	200	1025	950	85	175	500	1580
ESC(V)400-94	400	300	700	650	350	430	580	1140	1500	711	1198	819	200	1025	950	85	175	500	1860
ESC(V)450-43	450	400	750	650	400	465	645	1505	1500	711	1198	819	200	1025	950	85	175	500	1690

ESC - Outline Dimension Drawing (without base plate)

Note :

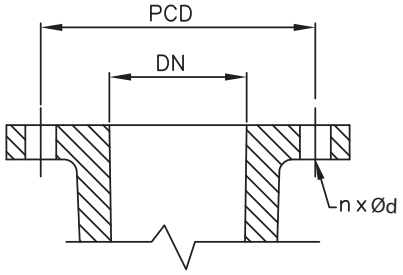
Rotation Clockwise view from drive end



Flange Diemension - PN16 & PN25

Standard		DN80			DN100			DN125			DN150			DN200		
		PCD	n	Ød	PCD	n	Ød	PCD	n	Ød	PCD	n	Ød	PCD	n	Ød
ISO7005/2 DIN2501	PN16	160	8	17.5	180	8	17.5	210	8	17.5	240	8	22	295	12	22
ISO7005/2 DIN2501	PN25	160	8	17.5	190	8	22	220	8	26	250	8	26	310	12	26

Standard		DN250			DN300			DN350			DN400			DN450		
		PCD	n	Ød	PCD	n	Ød	PCD	n	Ød	PCD	n	Ød	PCD	n	Ød
ISO7005/2 DIN2501	PN16	355	12	26	410	12	26	470	16	26	525	16	30	585	20	30
ISO7005/2 DIN2501	PN25	370	12	30	430	16	30	490	16	33	550	16	36			



ESC - Installation Dimension (without base plate)

Pump Size	Flange		Dimension															Shaft		Weight
	DN1	DN2	B1	B	L1	L2	H1	H2	H3	n3-d3	L5	L4	L3	B4	B3	B2	S	d	L	KG
ESC125-13	125	80	300	300	315	415	315	276.5	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	260
ESC125-14	125	80	300	300	315	415	315	276.5	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	260
ESC125-21	125	80	300	300	315	415	315	268	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	260
ESC125-22	125	80	300	300	315	415	315	268	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	260
ESC125-35	125	80	330	330	315	415	315	311.5	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	290
ESC125-39	125	80	330	330	315	415	315	311.5	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	290
ESC125-51	125	80	300	300	315	415	315	276.5	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	260
ESC125-55	125	80	300	300	315	415	315	276.5	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	260
ESC125-82	125	80	300	300	315	415	315	268	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	280
ESC125-90	125	80	300	300	315	415	315	268	175	4- Ø18.5	210	270	320	270	340	410	32	35	70	280
ESC150-17	150	100	330	330	315	415	355	273	185	4- Ø18.5	210	270	320	330	400	470	28	35	70	310
ESC150-19	150	100	330	330	315	415	355	273	185	4- Ø18.5	210	270	320	330	400	470	28	35	70	310
ESC150-29	150	100	330	330	315	415	355	315	185	4- Ø18.5	210	270	320	330	400	470	32	35	70	310
ESC150-31	150	100	330	330	315	415	355	315	185	4- Ø18.5	210	270	320	330	400	470	32	35	70	310
ESC150-51	150	100	370	370	315	415	355	346.5	185	4- Ø20	210	270	320	330	400	470	32	35	70	310
ESC150-52	150	100	370	370	315	415	355	346.5	185	4- Ø20	210	270	320	330	400	470	32	35	70	310
ESC150-68	150	100	330	330	315	415	355	273	185	4- Ø18.5	210	270	320	330	400	470	28	35	70	300
ESC150-75	150	100	330	330	315	415	355	273	185	4- Ø18.5	210	270	320	330	400	470	28	35	70	300
ESC150-119	150	100	330	330	381	515	355	315	185	4- Ø18.5	210	270	320	330	400	470	36	45	100	380
ESC150-123	150	100	330	330	381	515	355	315	185	4- Ø18.5	210	270	320	330	400	470	36	45	100	380
ESC200-14	200	125	370	370	381	515	400	288	200	4- Ø23	250	340	390	370	450	530	36	45	100	430
ESC200-15	200	125	370	370	381	515	400	288	200	4- Ø23	250	340	390	370	450	530	36	45	100	430
ESC200-20	200	150	400	400	381	515	400	323	200	4- Ø24	250	340	390	370	450	530	36	45	100	460
ESC200-21	200	150	400	400	381	515	400	323	200	4- Ø24	250	340	390	370	450	530	36	45	100	460
ESC200-25	200	125	370	370	381	515	400	308	200	4- Ø23	250	340	390	370	450	530	36	45	100	420
ESC200-27	200	125	370	370	381	515	400	308	200	4- Ø23	250	340	390	370	450	530	36	45	100	420
ESC200-35	200	150	400	400	381	515	400	354	200	4- Ø24	250	340	390	370	450	530	36	45	100	480
ESC200-38	200	150	400	400	381	515	400	354	200	4- Ø24	250	340	390	370	450	530	36	45	100	480
ESC200-43	200	125	370	370	381	515	400	338	200	4- Ø23	250	340	390	370	450	530	36	45	100	470
ESC200-47	200	125	370	370	381	515	400	338	200	4- Ø23	250	340	390	370	450	530	36	45	100	470
ESC200-59	200	125	370	370	381	515	400	288	200	4- Ø23	250	340	390	370	450	530	36	45	100	460
ESC200-60	200	150	450	450	433	590	500	390	300	4- Ø23	300	430	480	490	560	630	40	55	110	670
ESC200-61	200	125	370	370	381	515	400	288	200	4- Ø23	250	340	390	370	450	530	36	45	100	460
ESC200-66	200	150	450	450	433	590	500	390	300	4- Ø23	300	430	480	490	560	630	40	55	110	670
ESC200-69	200	125	450	450	381	515	400	365	200	4- Ø23	250	340	390	480	560	630	36	45	100	540
ESC200-76	200	125	450	450	381	515	400	365	200	4- Ø23	250	340	390	480	560	630	36	45	100	540
ESC200-90	200	150	500	600	433	590	500	456	200	4- Ø23	300	430	480	630	700	770	40	55	110	850
ESC200-100	200	125	370	370	381	515	400	308	200	4- Ø23	250	340	390	370	450	530	36	45	100	420
ESC200-105	200	150	500	600	433	590	500	456	200	4- Ø23	300	430	480	630	700	770	40	55	110	850
ESC200-108	200	125	370	370	381	515	400	308	200	4- Ø23	250	340	390	370	450	530	36	45	100	420
ESC250-28	250	200	450	450	433	590	500	374	260	4- Ø23	300	430	480	490	560	630	40	55	110	670
ESC250-30	250	200	450	450	433	590	500	374	260	4- Ø23	300	430	480	490	560	630	40	55	110	670
ESC250-48	250	200	500	500	433	590	500	396	260	4- Ø23	300	430	480	490	560	630	40	55	110	700
ESC250-52	250	200	500	500	433	590	500	396	260	4- Ø23	300	430	480	490	560	630	40	55	110	700
ESC250-82	250	200	500	600	511	695	600	448	300	4- Ø23	320	400	480	600	700	800	45	65	140	1050
ESC250-91	250	200	500	600	511	695	600	448	300	4- Ø23	320	400	480	600	700	800	45	65	140	1050
ESC250-132	250	200	550	650	511	695	600	518	250	4-Ø23	320	400	480	600	700	800	32	65	140	1200
ESC250-150	250	200	550	650	511	695	600	518	250	4-Ø23	320	400	480	600	700	800	32	65	140	1200
ESC300-37	300	250	500	500	511	695	600	420	300	4-Ø23	320	400	480	600	700	800	45	65	140	1000
ESC300-39	300	250	500	500	511	695	600	420	300	4-Ø23	320	400	480	600	700	800	45	65	140	1000
ESC300-54	300	250	550	550	556	754	670	482	370	4-Ø23	440	520	612	600	700	800	45	75	140	1200
ESC300-66	300	250	550	550	556	754	670	482	370	4-Ø23	440	520	612	600	700	800	45	75	140	1200
ESC300-104	300	250	550	650	556	754	670	485	320	4-Ø23	440	520	612	600	700	800	32	75	140	1400
ESC300-116	300	250	550	650	554	754	670	485	320	4-Ø23	440	520	612	600	700	800	32	75	140	1400
ESC350-23	350	300	500	550	511	695	600	450	300	4-Ø23	320	400	480	600	700	800	45	65	140	1000
ESC350-24	350	300	500	550	511	695	600	450	300	4-Ø23	320	400	480	600	700	800	45	65	140	1000
ESC400-31	400	350	550	650	556	754	670	505	320	4-Ø23	440	520	612	600	700	800	48	75	140	1400
ESC400-32	400	350	550	650	556	754	670	505	320	4-Ø23	440	520	612	600	700	800	48	75	140	1400
ESC400-51	400	300	550	650	556	754	670	450	320	4-Ø23	440	520	612	600	700	800	48	75	140	1400
ESC400-53	400	300	550	650	556	754	670	450	320	4-Ø23	440	520	612	600	700	800	48	75	140	1400
ESC400-67	400	350	650	700	622	860	750	540	350	4-Ø23	420	520	720	850	950	1050	50	85	175	1850
ESC400-70	400	350	650	700	622	860	750	540	350	4-Ø23	420	520	720	850	950	1050	50	85	175	1850
ESC400-80	400	300	650	700	622	860	750	535	390	4-Ø23	450	520	610	850	950	1050	50	85	175	1800
ESC400-94	400	300	650	700	622	860	750	535	390	4-Ø23	450	520	610	850	950	1050	50	85	175	1800
ESC400-139	400	300	650	700	622	860	750	594	350	4-Ø23	420	520	720	850	950	1050	40	85	175	2100
ESC400-160	400	300	650	700	622	860	750	594	350	4-Ø23	420	520	720	850	950	1050	40	85	175	2100
ESC450-42	450	400	650	750	622	860	750	545	350	4-Ø23	450	520	612	850	950	1050	50	85	175	1850
ESC450-43	450	400	650	750	622	860	750	545	350	4-Ø23	450	520	612	850	950	1050	50	85	175	1850

EUROFLO™

ESC series

Your local distributor details:

Euroflo Pumps International Pte Ltd

No.1 Joo Koon Way Singapore 628942 Tel: +65 6861 3836 Fax: +65 6861 3936

40105/1806Rev06