



C.R.I. FLUID SYSTEMS

Pumping trust. Worldwide.



ECC - CHEMICAL PROCESS PUMPS

An ISO 9001, ISO 14001 & OHSAS 18001 Company



* For specific models only.



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T H E B E G I N N I N G

of C.R.I., way back in 1961, was a resolute attempt to produce a few irrigation equipments using the limited facilities of an in-house foundry. Eventually the founder's dream was coming true as the small production unit he started kept growing rapidly. Now, after more than five eventful decades, it is an enormous, widely reputed organization, which produces more than 2300 varieties of perfectly engineered pumps and motors and sells its products in numerous countries spread across 6 continents.

C . R . I . I S O N E A M O N G

the few pioneers in the world to produce 100% stainless steel submersible pumps. Having achieved a record production capacity of over 2 million pumps per annum, today C.R.I. is rubbing its shoulders with the best brands in the world, with advanced technology and safety standards as its hallmarks.

T H E I N F R A S T R U C T U R E

of C.R.I. is pretty comprehensive with state-of-the-art machineries and high potential in-house R&D recognised by the ministry of science and technology, Govt. of India - all within its own covered area of 300,000 square metres. The production environment is accredited with ISO 9001, ISO 14001 & OHSAS 18001 certifications and the products are CE, UR/UL, IEC, TSE & ISI certified. The R&D team always stays in tune with the changing scenario and seldom fails in coming up with outstanding solutions every time.

N E E D L E S S T O S A Y ,

behind this legendary growth lies the untiring, innovative, enthusiastic and dedicated team work. and, of course, a flawlessly maintained value system too. The name C.R.I. itself encapsulates the company's ethos: " Commitment, Reliability, Innovation".





C.R.I. FLUID SYSTEMS

Pumping trust. Worldwide.

Vision, Mission and Values

To be the industry leader providing best - in - class fluid management solutions to individual and institutional customers and societies in our chosen markets.

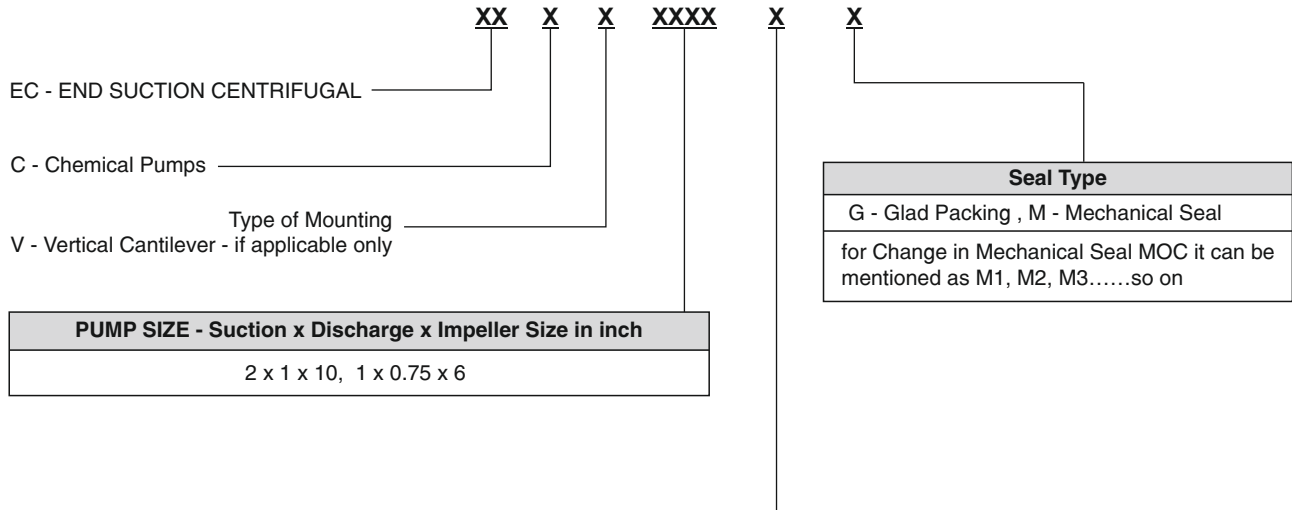
We will achieve this through our dedicated efforts to enhance the welfare of all our stakeholders and by living by our values of **commitment, reliability** and **innovation**.

C O N T E N T S

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GENERAL INFORMATION

MODEL IDENTIFICATION



Description	Material of Construction							
	N	M	S	T	L	W	C	F
Casing	SS 316	SS 316	SS 304	SS 304	SS 316 L	CS (WCB)	CI	CI
Impeller	SS 316	SS 316	SS 304	SS 304	SS 316 L	CS (WCB)	CF8	CF8M
Stuffing box & Gland	SS 316	SS 316	SS 304	SS 304	SS 316 L	CS (WCB)	CI	CI
Shaft	SS 316	EN 8	SS 316	EN 8	SS 316 L	EN 8	EN 8	EN 8
shaft sleeve	SS 316	SS 316	SS 316	SS 316	SS 316	SS 316	SS 410	SS 410
Bearing Housing & Connecting Frame	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Type of material of construction	N	M	S	T	L	W	C	F

TECHNICAL SPECIFICATIONS

- Power : upto 80kW
- Flow : upto 920 m³/h
- Head : upto 140 m
- Max. Liquid Temperature : -10°C to 180°C
- Max. Operating Pressure : 16 bar
- Speed : 970/1450/2900 rpm

GENERAL INSTRUCTIONS

- Performance curves are as per specific gravity and viscosity of water.
- Curve tolerance according to ISO 9906 : 2012 Table 8 - 2B.
- For Safety consider a margin of 0.5m higher of NPSH.
- All dimensions are in mm
- In view of continuous developments the information / performance / descriptions / specifications / Illustrations mentioned in this catalogues are subject to change without notice.

CHEMICAL PROCESS PUMPS – ECC SERIES ANSI B73.1 / ASME B73.1

C.R.I. make ECC series are horizontal, end suction, single stage centre line discharge design which complies to ANSI B73.1/ ASME B73.1 standards. The ANSI B73.1 will ensure that other ANSI process pumps with similar sizes can be interchangeable. These pumps are specially designed to handle corrosive, abrasive or high temperature liquids etc. These pumps provide excellent performance for tough applications including pumping of acids(Sulphuric Acid, Hydrochloric Acid, Nitric Acid, Citric Acid, Acetic Acid, etc.) and all alkalis (Sodium Hydroxide, Calcium Hydroxide, etc.) , brines, caustics, bleaches, sea water, high temperature liquids and a wide variety of waste liquids for a wide range of applications including chemical, petrochemical, hot oil, ethanol, food, sugar, pharmaceuticals, metal finishing, waste water/effluent treatment, desalination and aquarium/aquaculture etc. These pumps are offered with semi-open type impellers fitted with flow inducing vane and balance hole to reduce high thrust and it is designed to give better performance even at high vapour pressure of the liquid. It can be offered with different type of material of construction as per liquid specifications. The ECC series are tailor made pump to ensure process reliability, high efficiency and low operating costs. At the same time, the spare parts inventory and costs are kept to a minimum by means of standardization and inter-changeability of spares among the ranges. These pumps are offered with back pull out design considering easy maintenance and repair. These pumps can also be offered with vertical execution type.



APPLICATIONS

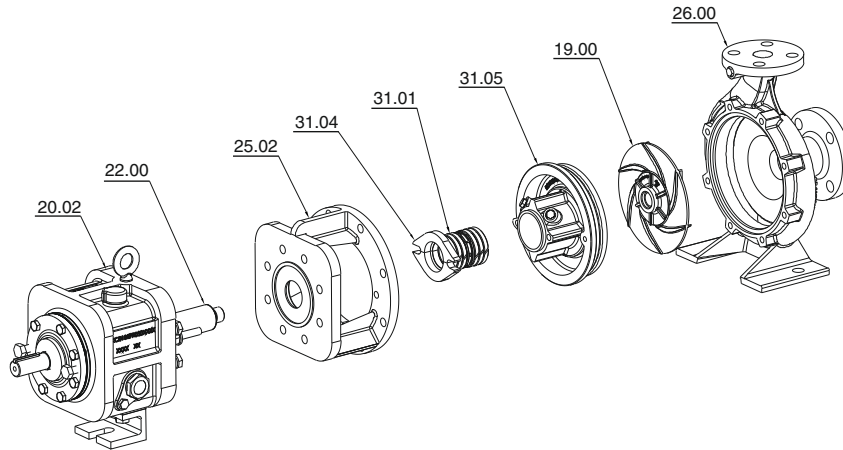
- Power Generation
- Chemical & Petrochemical
- Oil & Gas
- Water, Sewage & Effluent Treatment Plants
- Desalination Plant
- Steel & Automotive Industries
- Paper and Pulp industries
- Semiconductor Industries
- Food processing, beverage & Dairy industries
- Sugar Industries
- Pharmaceuticals
- Dying & Paint Industries
- Mining
- Edible oil refinery and General Industries.

DESIGN FEATURES

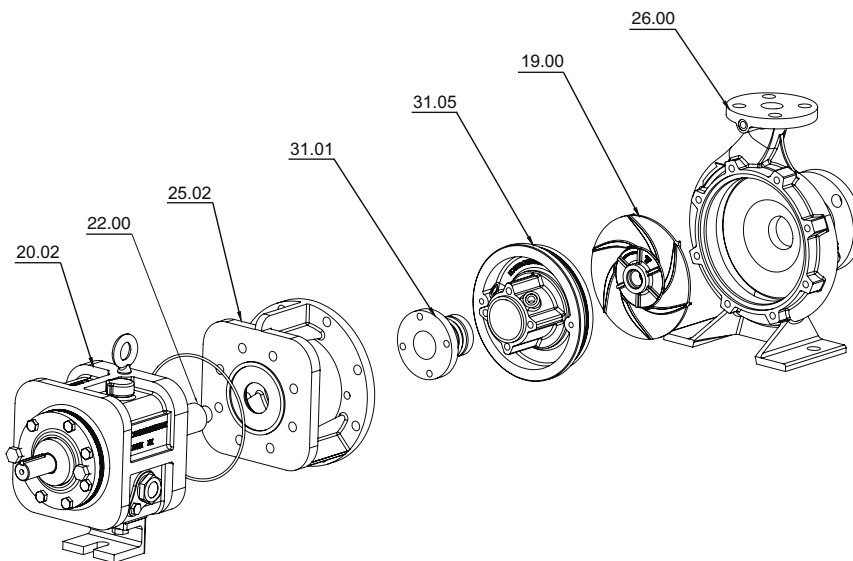
- ASME / ANSI B73.1 standard (OH1)
- Back pull out design offered with semi open impeller
- Maximum inter-changeability of spares to reduce the inventory cost
- Balance relief hole on impeller to reduce the thrust
- Customized material of construction against specific requirement
- Lowest life cycle cost
- Jacketed casing for hot liquids
- Both mechanical seal and gland options

EXPLODED VIEW

GLAND PACKING CONSTRUCTION



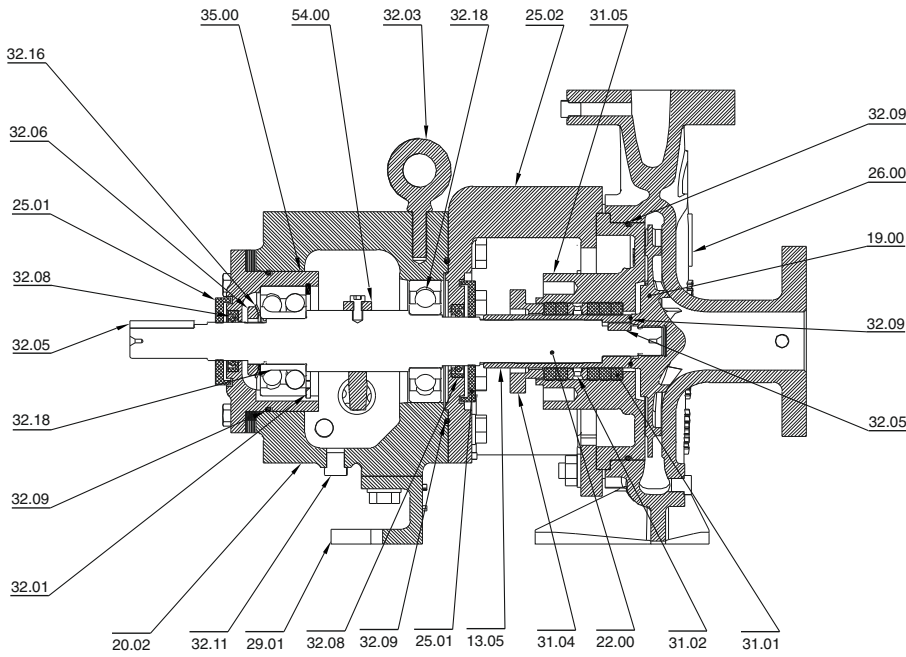
MECHANICAL SEAL CONSTRUCTION



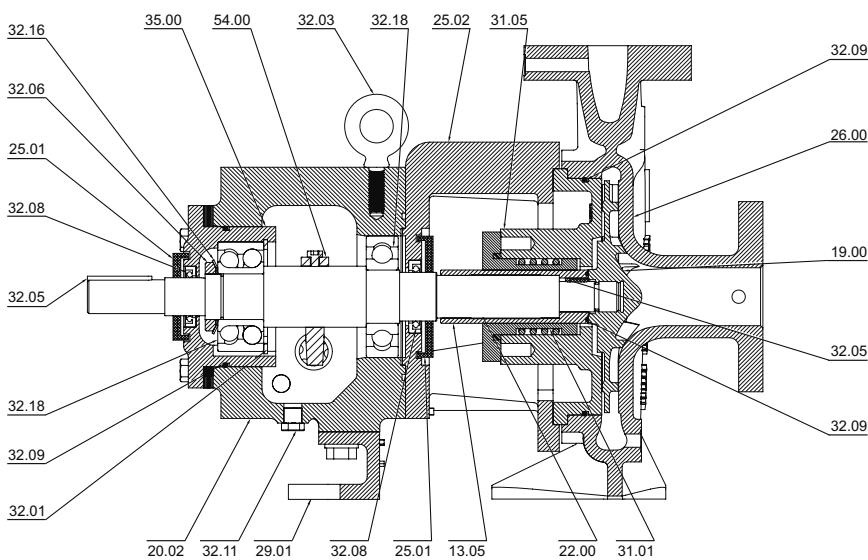
PART NO	PART NAME
26.00	CASING
19.00	IMPELLER
31.05	STUFFING BOX
31.01	PACKING / MECHANICAL SEAL
25.02	CONNECTING FRAME
20.02	BEARING FRAME
22.00	PUMP SHAFT
31.04	GLAND

CROSS SECTIONAL DRAWING

GLAND PACKING CONSTRUCTION





















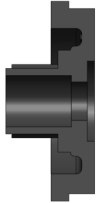
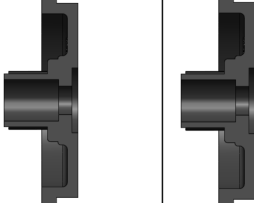
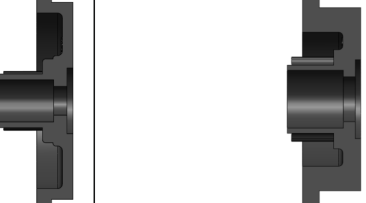
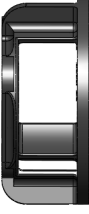

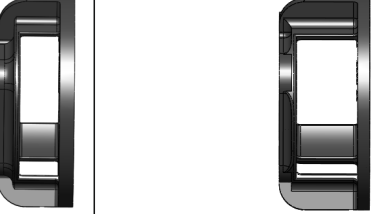




MECHANICAL SEAL CONSTRUCTION



































Part No	Part Name
32.11	Plug
20.02	Bearing Frame
32.01	Circlip
32.18	Bearing
32.06	Lock Nut
32.16	Washer
35.00	Bearing Housing
54.00	Thrower
32.03	Eye Bolt
25.02	Connecting Frame
31.05	Stuffing Box
32.09	O-Ring
26.00	Casing
19.00	Impeller
32.05	Key
31.01	Packing / Mechanical Seal
31.02	Lantern Ring
22.00	Pump Shaft
31.04	Gland
13.05	Sleeve
25.01	Deflector
32.08	Oil Seal
29.01	Frame Support

INTERCHANGEABILITY CHART

PART NAME	1.5 x 1 x 6 (40 x 25 x 150)	3 x 1.5 x 6 (80 x 40 x 150)	3 x 2 x 6 (80 x 50 x 150)	1.5 x 1 x 8 (40 x 25 x 200)	3 x 1.5 x 8 (80 x 40 x 200)	2 x 1 x 10 (50 x 25 x 250)	3 x 1.5 x 8.5 (80 x 40 x 215)	3 x 2 x 8.5 (80 x 50 x 215)	4 x 3 x 8.5 (100 x 80 x 215)	6 x 4 x 8.5 (150 x 100 x 215)
CASING										
IMPELLER										
STUFFING BOX										
CONNECTING FRAME										
BEARING FRAME ASSEMBLY										

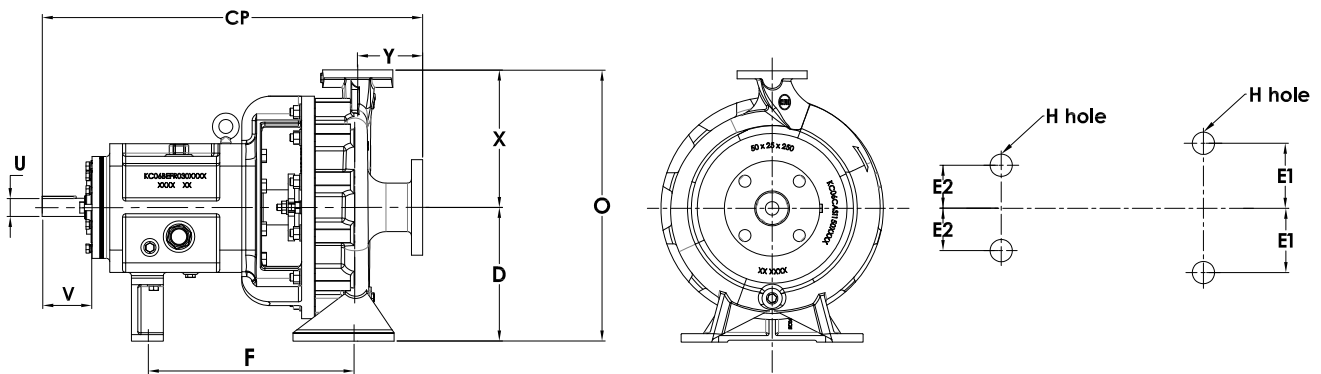
INTERCHANGEABILITY CHART

PART NAME	3 x 1.5 x 11 (80 x 40 x 280)	3 x 2 x 11 (80 x 50 x 280)	4 x 3 x 11 (100 x 80 x 280)	3 x 1.5 x 13 (80 x 40 x 330)	3 x 2 x 13 (80 x 50 x 330)	4 x 3 x 13 (100 x 80 x 330)	6 x 4 x 13 (150 x 100 x 330)	8 x 6 x 13 (200 x 150 x 330)	8 x 6 x 15 (200 x 150 x 380)	10 x 8 x 13 (250 x 200 x 330)	10 x 8 x 15 (250 x 200 x 380)
CASING											
IMPELLER											
STUFFING BOX											
CONNECTING FRAME											
BEARING FRAME ASSEMBLY											

DETAILS OF STANDARD COMPONENTS

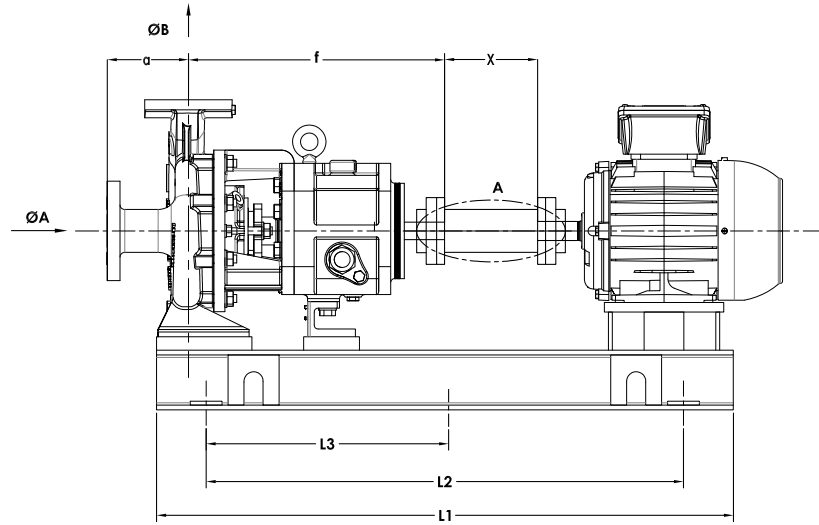
SHAFT AND BEARING DATA	FRAME SIZE		
	I	II	III
SHAFT DIAMETER (mm)			
At Coupling	Ø 22.23	Ø 28.58	Ø 60.33
At 'NDE' Bearings	Ø 35	Ø 55	Ø 85
At 'DE' Bearings	Ø 30	Ø 45	Ø 75
Between bearings	Ø 40.13	Ø 60	Ø 92.1
Under Sleeve	Ø 27.97	Ø 45	Ø 60
Stuffing Box Details			
Shaft sleeve OD	Ø 35	Ø 55	Ø 70
Stuffing Box Bore Diameter	Ø 50.5	Ø 74.5	Ø 94.5
Stuffing Box Depth	57	67	91
SHAFT LENGTHS (mm)			
Impeller end of shaft to 'NDE' Bearing	165.95	218.25	297
Between bearings	67.4	128.75	172
'DE' Bearing. To Coupling end	116	150	247.5
BEARINGS			
'NDE'	6307	6311	6317
'DE'	3306	7309 (2 Bearings back to back)	3315
KEYWAY AT COUPLING (mm)			
Width	4.76	6.35	15.88
Depth	2.38	3.18	9.15
Length	40	50	90
SHAFT THREAD AT IMPELLER	M20X1.5 RH	M24X2 RH	M45X1.5 RH

MOUNTING DIMENSION - PUMP



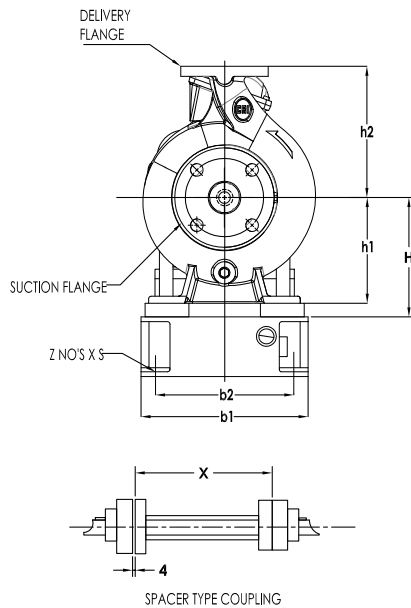
Pump Size in inch (mm)	Flange Dim. in mm		Dimension in mm										
	Suction	Delivery	CP	D	ZE 1	ZE 2	F	H	X	Y	O	V	U (Dia.)
1.5 x 1 x 6 (40 x 25 x 150)	40	25	445	133	152	0	184	16	165	102	298	51	22.23
3 x 1.5 x 6 (80 x 40 x 150)	80	40	445	133	152	0	184	16	165	102	298	51	22.23
3 x 2 x 6 (80 x 50 x 150)	80	50	445	133	152	0	184	16	165	102	298	51	22.23
1.5 x 1 x 8 (40 x 25 x 200)	40	25	445	133	152	0	184	16	165	102	298	51	22.23
3 x 1.5 x 8 (80 x 40 x 200)	80	40	445	133	248	0	184	16	165	102	298	51	22.23
2 x 1 x 10 (50 x 25 x 250)	50	25	597	210	248	184	318	16	216	102	425	67	28.58
3 x 1.5 x 8.5 (80 x 40 x 215)	80	40	597	210	248	184	318	16	216	102	425	67	28.58
3 x 2 x 8.5 (80 x 50 x 215)	80	50	597	210	248	184	318	16	242	102	450	67	28.58
4 x 3 x 8.5 (100 x 80 x 215)	100	80	597	210	248	184	318	16	280	102	490	67	28.58
6 x 4 x 8.5 (150 x 100 x 215)	150	100	597	210	248	184	318	16	280	102	490	67	28.58
3 x 1.5 x 11 (80 x 40 x 280)	80	40	597	254	248	184	318	16	267	102	520	67	28.58
3 x 2 x 11 (80 x 50 x 280)	80	50	597	254	248	184	318	16	292	102	546	67	28.58
4 x 3 x 11 (100 x 80 x 280)	100	80	597	254	248	184	318	16	318	102	571	67	28.58
3 x 1.5 x 13 (80 x 40 x 330)	80	40	597	254	248	184	318	16	266	102	520	67	28.58
3 x 2 x 13 (80 x 50 x 330)	80	50	597	254	248	184	318	16	292	102	546	67	28.58
4 x 3 x 13 (100 x 80 x 330)	100	80	597	254	248	184	318	16	318	102	572	67	28.58
6 x 4 x 13 (150 x 100 x 330)	150	100	597	254	248	184	318	16	343	102	597	67	28.58
8 x 6 x 13 (200 x 150 x 330)	200	150	860	368	406	229	476	22	406	152	775	102	60.33
8 x 6 x 15 (200 x 150 x 380)	200	150	860	368	406	229	476	22	457	152	826	102	60.33
10 x 8 x 13 (250 x 200 x 330)	250	200	860	368	406	229	476	22	483	152	851	102	60.33
10 x 8 x 15 (250 x 200 x 380)	250	200	860	368	406	229	476	22	483	152	851	102	60.33

MOUNTING DIMENSION - PUMP SET



Pump Model	Motor Rating (kW)		Motor Frame Size	Nominal Size ($\varnothing A$)	Outside Diameter	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size ($\varnothing B$)	Outside Diameter	Pitch Circle Diameter	No. Holes	
	1450 rpm	2900 rpm											
ECC	1.5X1X6	0.75	0.75/1.1	80	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X6	1.1	1.5	90S	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X6	1.5	2.2	90L	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X6	2.2	3.7	100L	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X6	3.7	5.5	112M	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X6	5.5	7.5	132S	40	125	98.4	4	15.9	25	110	79.4	4
ECC	1.5X1X6	7.5	9.3	132M	40	125	98.4	4	15.9	25	110	79.4	4
	3X1.5X6	0.75	0.75/1.1	80	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X6	1.1	1.5	90S	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X6	1.5	2.2	90L	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X6	2.2	3.7	100L	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X6	3.7	5.5	112M	80	190	152.4	4	19.1	40	125	98.4	4
ECC	3X1.5X6	5.5	7.5	132S	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X6	7.5	9.3	132M	80	190	152.4	4	19.1	40	125	98.4	4
	3X2X6	0.75	0.75/1.1	80	80	190	152.4	4	19.1	50	150	120.7	4
	3X2X6	1.1	1.5	90S	80	190	152.4	4	19.1	50	150	120.7	4
	3X2X6	1.5	2.2	90L	80	190	152.4	4	19.1	50	150	120.7	4
	3X2X6	2.2	3.7	100L	80	190	152.4	4	19.1	50	150	120.7	4
ECC	3X2X6	3.7	5.5	112M	80	190	152.4	4	19.1	50	150	120.7	4
	3X2X6	5.5	7.5	132S	80	190	152.4	4	19.1	50	150	120.7	4
	3X2X6	7.5	9.3	132M	80	190	152.4	4	19.1	50	150	120.7	4
	1.5X1X8	0.75	0.75/1.1	80	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X8	1.1	1.5	90S	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X8	1.5	2.2	90L	40	125	98.4	4	15.9	25	110	79.4	4
ECC	1.5X1X8	2.2	3.7	100L	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X8	3.7	5.5	112M	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X8	5.5	7.5	132S	40	125	98.4	4	15.9	25	110	79.4	4
	1.5X1X8	7.5	9.3	132M	40	125	98.4	4	15.9	25	110	79.4	4
	3X1.5X8	0.75	0.75/1.1	80	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X8	1.1	1.5	90S	80	190	152.4	4	19.1	40	125	98.4	4
ECC	3X1.5X8	1.5	2.2	90L	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X8	2.2	3.7	100L	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X8	3.7	5.5	112M	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X8	5.5	7.5	132S	80	190	152.4	4	19.1	40	125	98.4	4
	3X1.5X8	7.5	9.3	132M	80	190	152.4	4	19.1	40	125	98.4	4
	2X1X10	5.5	7.5	132S	50	150	120.7	4	19.1	26	110	79.4	4
ECC	2X1X10	7.5,9.3	9.3	132M	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	11	11,15	160M	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	15	18.5	160L	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	18.5	22	180M	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	22		180L	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	30	30,37	200L	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	37		225S	50	150	120.7	4	19.1	26	110	79.4	4
	2X1X10	45	45	225M	50	150	120.7	4	19.1	26	110	79.4	4

MOUNTING DIMENSION - PUMP SET



Hole Diameter	a	b1	b2	f	a+f	Channel height	Cl Height	H	h1	h2	U	V	L1	L2	L3	L4	Z No's	S	X
15.9	102	210	174	343	445	75	225	208	133	165	114.4	102.4	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	114.4	102.4	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	114.4	102.4	750	625	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	114.4	102.4	800	650	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	114.4	102.4	800	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	114.4	102.4	950	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	114.4	102.4	950	650	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	122	104	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	122	104	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	122	104	750	625	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	122	104	800	650	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	122	104	800	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	122	104	950	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	122	104	950	650	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	122	127	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	122	127	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	122	127	750	625	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	122	127	800	650	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	122	127	800	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	122	127	950	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	122	127	950	650	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	121	129	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	121	129	725	600	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	121	129	800	650	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	121	129	800	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	121	129	950	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	121	129	950	650	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	124	133	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	124	133	725	600	-	-	4	14	100
15.9	102	210	174	343	445	75	225	208	133	165	124	133	750	625	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	124	133	800	650	-	-	4	14	100
15.9	102	240	204	343	445	75	225	208	133	165	124	133	800	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	124	133	950	650	-	-	4	14	100
15.9	102	244	224	343	445	75	225	208	133	165	124	133	950	650	-	-	4	14	100
15.9	102	300	264	495	597	75	302	285	210	216	160	170	1170	870	290	290	8	14	140
15.9	102	300	264	495	597	75	302	285	210	216	160	170	1210	906	302	302	8	14	140
15.9	102	340	304	495	597	75	302	285	210	216	160	170	1300	996	332	332	8	14	140
15.9	102	330	284	495	597	100	327	285	210	216	160	170	1350	1050	350	350	8	18	140
15.9	102	375	330	495	597	100	327	285	210	216	160	170	1380	1080	360	360	8	18	140
15.9	102	375	330	495	597	100	327	285	210	216	160	170	1420	1116	372	372	8	18	140
15.9	102	400	355	495	597	100	327	285	210	216	160	170	1500	1161	387	387	8	18	140
15.9	102	450	405	495	597	100	327	285	210	216	160	170	1550	1209	403	403	8	18	140
15.9	102	450	405	495	597	100	327	285	210	216	160	170	1580	1239	413	413	8	18	140

MOUNTING DIMENSION - PUMP SET

Pump Model		Motor Rating (kW)		Motor Frame Size	Nominal Size (Ø A)	Outside Diameter	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Outside Diameter	Pitch Circle Diameter	No. Holes
		1450 rpm	2900 rpm										
ECC	3X1.5X8.5	5.5	7.5	132S	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	7.5,9.3	9.3	132M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	11	11,15	160M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	15	18.5	160L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	18.5	22	180M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	22		180L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	30	30,37	200L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	37		225S	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X8.5	45	45	225M	76	190	152.4	4	19.1	38	125	98.4	4
ECC	3X2X8.5	5.5	7.5	132S	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	7.5,9.3	9.3	132M	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	11	11,15	160M	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	15	18.5	160L	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	18.5	22	180M	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	22		180L	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	30	30,37	200L	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	37		225S	76	190	152.4	4	19.1	52	150	120.7	4
	3X2X8.5	45	45	225M	76	190	152.4	4	19.1	52	150	120.7	4
ECC	4X3X8.5	5.5	7.5	132S	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	7.5,9.3	9.3	132M	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	11	11,15	160M	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	15	18.5	160L	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	18.5	22	180M	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	22		180L	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	30	30,37	200L	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	37		225S	102	230	190.5	8	19.1	76	190	152.4	4
	4X3X8.5	45	45	225M	102	230	190.5	8	19.1	76	190	152.4	4
ECC	6X4X8.5	5.5	7.5	132S	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	7.5,9.3	9.3	132M	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	11	11,15	160M	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	15	18.5	160L	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	18.5	22	180M	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	22		180L	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	30	30,37	200L	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	37		225S	152	280	241.3	8	22.2	100	230	190.5	8
	6X4X8.5	45	45	225M	152	280	241.3	8	22.2	100	230	190.5	8
ECC	3X1.5X11	-	5.5	112M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	5.5	7.5	132S	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	7.5,9.3	9.3	132M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	11	11,15	160M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	15	18.5	160L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	18.5	22	180M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	22	-	180L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	30	30,37	200L	76	190	152.4	4	19.1	38	125	98.4	4

MOUNTING DIMENSION - PUMP SET

Hole Diameter	a	b1	b2	f	a+f	Channel height	Cl Height	H	h1	h2	U	V	L1	L2	L3	L4	Z No's	S	X
15.9	102	300	264	495	597	75	302	285	210	216	142	154	1170	870	290	290	8	14	140
15.9	102	300	264	495	597	75	302	285	210	216	142	154	1210	906	302	302	8	14	140
15.9	102	340	304	495	597	75	302	285	210	216	142	154	1300	996	332	332	8	14	140
15.9	102	330	284	495	597	100	327	285	210	216	142	154	1350	1050	350	350	8	18	140
15.9	102	375	330	495	597	100	327	285	210	216	142	154	1380	1080	360	360	8	18	140
15.9	102	375	329	495	597	100	327	285	210	216	142	154	1420	1116	372	372	8	18	140
15.9	102	400	355	495	597	100	327	285	210	216	142	154	1500	1161	387	387	8	18	140
15.9	102	450	405	495	597	100	327	285	210	216	142	154	1550	1209	403	403	8	18	140
15.9	102	450	405	495	597	100	327	285	210	216	142	154	1580	1239	413	413	8	18	140
19.1	102	300	264	495	597	75	302	285	210	242	150	177	1170	870	290	290	8	14	140
19.1	102	300	264	495	597	75	302	285	210	242	150	177	1210	906	302	302	8	14	140
19.1	102	340	304	495	597	75	302	285	210	242	150	177	1300	996	332	332	8	14	140
19.1	102	330	284	495	597	100	327	285	210	242	150	177	1350	1050	350	350	8	18	140
19.1	102	375	330	495	597	100	327	285	210	242	150	177	1380	1080	360	360	8	18	140
19.1	102	375	329	495	597	100	327	285	210	242	150	177	1420	1116	372	372	8	18	140
19.1	102	400	355	495	597	100	327	285	210	242	150	177	1500	1161	387	387	8	18	140
19.1	102	450	405	495	597	100	327	285	210	242	150	177	1550	1209	403	403	8	18	140
19.1	102	450	405	495	597	100	327	285	210	242	150	177	1580	1239	413	413	8	18	140
19.1	102	300	264	495	597	75	302	285	210	280	158	183	1170	870	290	290	8	14	140
19.1	102	300	264	495	597	75	302	285	210	280	158	183	1210	906	302	302	8	14	140
19.1	102	340	304	495	597	75	302	285	210	280	158	183	1300	996	332	332	8	14	140
19.1	102	330	284	495	597	100	327	285	210	280	158	183	1350	1050	350	350	8	18	140
19.1	102	375	330	495	597	100	327	285	210	280	158	183	1380	1080	360	360	8	18	140
19.1	102	375	329	495	597	100	327	285	210	280	158	183	1420	1116	372	372	8	18	140
19.1	102	400	355	495	597	100	327	285	210	280	158	183	1500	1161	387	387	8	18	140
19.1	102	450	405	495	597	100	327	285	210	280	158	183	1550	1209	403	403	8	18	140
19.1	102	450	405	495	597	100	327	285	210	280	158	183	1580	1239	413	413	8	18	140
19.1	102	300	264	495	597	75	302	285	210	280	172	202	1170	870	290	290	8	14	140
19.1	102	300	264	495	597	75	302	285	210	280	172	202	1210	906	302	302	8	14	140
19.1	102	340	304	495	597	75	302	285	210	280	172	202	1300	996	332	332	8	14	140
19.1	102	330	284	495	597	100	327	285	210	280	172	202	1350	1050	350	350	8	18	140
19.1	102	375	330	495	597	100	327	285	210	280	172	202	1380	1080	360	360	8	18	140
19.1	102	375	329	495	597	100	327	285	210	280	172	202	1420	1116	372	372	8	18	140
19.1	102	400	355	495	597	100	327	285	210	280	172	202	1500	1161	387	387	8	18	140
19.1	102	450	405	495	597	100	327	285	210	280	172	202	1550	1209	403	403	8	18	140
19.1	102	450	405	495	597	100	327	285	210	280	172	202	1580	1239	413	413	8	18	140
15.9	102	300	264	495	597	75	346	329	254	267	178	192	1120	819	273	273	8	14	140
15.9	102	300	264	495	597	75	346	329	254	267	178	192	1180	870	290	290	8	14	140
15.9	102	300	264	495	597	75	346	329	254	267	178	192	1220	921	307	307	8	14	140
15.9	102	340	304	495	597	75	346	329	254	267	178	192	1310	1020	340	340	8	14	140
15.9	102	330	284	495	597	100	371	329	254	267	178	192	1360	1065	355	355	8	18	140
15.9	102	375	330	495	597	100	371	329	254	267	178	192	1390	1095	365	365	8	18	140
15.9	102	375	330	495	597	100	371	329	254	267	178	192	1430	1131	377	377	8	18	140
15.9	102	400	355	495	597	100	371	329	254	267	178	192	1530	1191	397	397	8	18	140

MOUNTING DIMENSION - PUMP SET

Pump Model		Motor Rating (kW)		Motor Frame Size	Nominal Size (Ø A)	Outside Diameter	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Outside Diameter	Pitch Circle Diameter	No. Holes
		1450 rpm	2900 rpm										
ECC	3X1.5X11	37	-	225S	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X11	45	45	225M	76	190	152.4	4	19.1	38	125	98.4	4
ECC	3X2X11	-	5.5	112M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	5.5	7.5	132S	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	7.5,9.3	9.3	132M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	11	11,15	160M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	15	18.5	160L	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	18.5	22	180M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	22	-	180L	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	30	30,37	200L	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X11	37	-	225S	76	190	152.4	4	19.1	50	150	120.7	4
3X2X11	45	45	225M	76	190	152.4	4	19.1	50	150	120.7	4	
ECC	4X3X11	-	5.5	112M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	5.5	7.5	132S	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	7.5,9.3	9.3	132M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	11	11,15	160M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	15	18.5	160L	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	18.5	22	180M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	22	-	180L	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	30	30,37	200L	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X11	37	-	225S	101	230	190.5	8	19.1	76	190	152.4	4
4X3X11	45	45	225M	101	230	190.5	8	19.1	76	190	152.4	4	
ECC	3X1.5X13	-	5.5	112M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	5.5	7.5	132S	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	7.5,9.3	9.3	132M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	11	11,15	160M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	15	18.5	160L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	18.5	22	180M	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	22	-	180L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	30	30,37	200L	76	190	152.4	4	19.1	38	125	98.4	4
	3X1.5X13	37	-	225S	76	190	152.4	4	19.1	38	125	98.4	4
3X1.5X13	45	45	225M	76	190	152.4	4	19.1	38	125	98.4	4	
ECC	3X2X13	-	5.5	112M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	5.5	7.5	132S	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	7.5,9.3	9.3	132M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	11	11,15	160M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	15	18.5	160L	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	18.5	22	180M	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	22	-	180L	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	30	30,37	200L	76	190	152.4	4	19.1	50	150	120.7	4
	3X2X13	37	-	225S	76	190	152.4	4	19.1	50	150	120.7	4
3X2X13	45	45	225M	76	190	152.4	4	19.1	50	150	120.7	4	
ECC	4X3X13	-	5.5	112M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	5.5	7.5	132S	101	230	190.5	8	19.1	76	190	152.4	4

MOUNTING DIMENSION - PUMP SET

Hole Diameter	a	b1	b2	f	a+f	Channel height	Cl Height	H	h1	h2	U	V	L1	L2	L3	L4	Z No's	S	X
15.9	102	450	405	495	597	100	371	329	254	267	178	192	1580	1239	413	413	8	18	140
15.9	102	450	405	495	597	100	371	329	254	267	178	192	1600	1260	420	420	8	18	140
19.1	102	300	264	495	597	75	346	329	254	292	187	206	1120	819	273	273	8	14	140
19.1	102	300	264	495	597	75	346	329	254	292	187	206	1180	870	290	290	8	14	140
19.1	102	300	264	495	597	75	346	329	254	292	187	206	1220	921	307	307	8	14	140
19.1	102	340	304	495	597	75	346	329	254	292	187	206	1310	1020	340	340	8	14	140
19.1	102	330	284	495	597	100	371	329	254	292	187	206	1360	1065	355	355	8	18	140
19.1	102	375	330	495	597	100	371	329	254	292	187	206	1390	1095	365	365	8	18	140
19.1	102	375	329	495	597	100	371	329	254	292	187	206	1430	1131	377	377	8	18	140
19.1	102	400	355	495	597	100	371	329	254	292	187	206	1530	1191	397	397	8	18	140
19.1	102	450	405	495	597	100	371	329	254	292	187	206	1580	1239	413	413	8	18	140
19.1	102	450	405	495	597	100	371	329	254	292	187	206	1600	1260	420	420	8	18	140
19.1	102	300	264	495	597	75	346	329	254	318	189	216	1120	819	273	273	8	14	140
19.1	102	300	264	495	597	75	346	329	254	318	189	216	1180	870	290	290	8	14	140
19.1	102	300	264	495	597	75	346	329	254	318	189	216	1220	921	307	307	8	14	140
19.1	102	340	304	495	597	75	346	329	254	318	189	216	1310	1020	340	340	8	14	140
19.1	102	330	284	495	597	100	371	329	254	318	189	216	1360	1065	355	355	8	18	140
19.1	102	375	330	495	597	100	371	329	254	318	189	216	1390	1095	365	365	8	18	140
19.1	102	375	329	495	597	100	371	329	254	318	189	216	1430	1131	377	377	8	18	140
19.1	102	400	355	495	597	100	371	329	254	318	189	216	1530	1191	397	397	8	18	140
19.1	102	450	405	495	597	100	371	329	254	318	189	216	1580	1239	413	413	8	18	140
19.1	102	450	405	495	597	100	371	329	254	318	189	216	1600	1260	420	420	8	18	140
15.9	102	300	264	495	597	75	346	329	254	266	202	215	1120	819	273	273	8	14	140
15.9	102	300	264	495	597	75	346	329	254	266	202	215	1180	870	290	290	8	14	140
15.9	102	300	264	495	597	75	346	329	254	266	202	215	1220	921	307	307	8	14	140
15.9	102	340	304	495	597	75	346	329	254	266	202	215	1310	1020	340	340	8	14	140
15.9	102	330	284	495	597	100	371	329	254	266	202	215	1360	1065	355	355	8	18	140
15.9	102	375	330	495	597	100	371	329	254	266	202	215	1390	1095	365	365	8	18	140
15.9	102	375	329	495	597	100	371	329	254	266	202	215	1430	1131	377	377	8	18	140
15.9	102	400	355	495	597	100	371	329	254	266	202	215	1530	1191	397	397	8	18	140
15.9	102	450	405	495	597	100	371	329	254	266	202	215	1580	1239	413	413	8	18	140
15.9	102	450	405	495	597	100	371	329	254	266	202	215	1600	1260	420	420	8	18	140
19.1	102	300	264	495	597	75	346	329	254	292	208	226	1120	819	273	273	8	14	140
19.1	102	300	264	495	597	75	346	329	254	292	208	226	1180	870	290	290	8	14	140
19.1	102	300	264	495	597	75	346	329	254	292	208	226	1220	921	307	307	8	14	140
19.1	102	340	304	495	597	75	346	329	254	292	208	226	1310	1020	340	340	8	14	140
19.1	102	330	284	495	597	100	371	329	254	292	208	226	1360	1065	355	355	8	18	140
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19.1	102	375	329	495	597	100	371	329	254	292	208	226	1430	1131	377	377	8	18	140
19.1	102	400	355	495	597	100	371	329	254	292	208	226	1530	1191	397	397	8	18	140
19.1	102	450	405	495	597	100	371	329	254	292	208	226	1580	1239	413	413	8	18	140
19.1	102	450	405	495	597	100	371	329	254	292	208	226	1600	1260	420	420	8	18	140
19.1	102	300	264	495	597	75	346	329	254	318	220	248	1120	819	273	273	8	14	140
19.1	102	300	264	495	597	75	346	329	254	318	220	248	1180	870	290	290	8	14	140

MOUNTING DIMENSION - PUMP SET

Pump Model		Motor Rating (kW)		Motor Frame Size	Nominal Size (Ø A)	Outside Diameter	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Outside Diameter	Pitch Circle Diameter	No. Holes
		1450 rpm	2900 rpm										
ECC	4X3X13	7.5,9.3	9.3	132M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	11	11,15	160M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	15	18.5	160L	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	18.5	22	180M	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	22	-	180L	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	30	30,37	200L	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	37	-	225S	101	230	190.5	8	19.1	76	190	152.4	4
	4X3X13	45	45	225M	101	230	190.5	8	19.1	76	190	152.4	4
ECC	6X4X13	-	5.5	112M	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	5.5	7.5	132S	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	7.5,9.3	9.3	132M	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	11	11,15	160M	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	15	18.5	160L	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	18.5	22	180M	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	22	-	180L	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	30	30,37	200L	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	37	-	225S	152	280	241.3	8	22.2	102	230	190.5	8
	6X4X13	45	45	225M	152	280	241.3	8	22.2	102	230	190.5	8
ECC	5X4X10	-	5.5	112M	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	5.5	7.5	132S	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	7.5,9.3	9.3	132M	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	11	11,15	160M	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	15	18.5	160L	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	18.5	22	180M	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	22	-	180L	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	30	30,37	200L	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	37	-	225S	127	255	215.9	8	22.2	100	230	190.5	8
	5X4X10	45	45	225M	127	255	215.9	8	22.2	100	230	190.5	8
ECC	8X6X13	-	22	180L	202	345	298.5	8	22.2	152	280	241.3	8
	8X6X13	22	30	200L	202	345	298.5	8	22.2	152	280	241.3	8
	8X6X13	-	37	225S	202	345	298.5	8	22.2	152	280	241.3	8
	8X6X13	30	45	225M	202	345	298.5	8	22.2	152	280	241.3	8
	8X6X13	37	55	250M	202	345	298.5	8	22.2	152	280	241.3	8
	8X6X13	45	75	280S	202	345	298.5	8	22.2	152	280	241.3	8
ECC	8X6X15	-	22	180L	204	345	298.5	8	22.2	152	280	241.3	8
	8X6X15	22	30	200L	204	345	298.5	8	22.2	152	280	241.3	8
	8X6X15	-	37	225S	204	345	298.5	8	22.2	152	280	241.3	8
	8X6X15	30	45	225M	204	345	298.5	8	22.2	152	280	241.3	8
	8X6X15	37	55	250M	204	345	298.5	8	22.2	152	280	241.3	8
	8X6X15	45	75	280S	204	345	298.5	8	22.2	152	280	241.3	8
ECC	10X8X15	-	22	180L	255	405	382	12	25.4	200	345	298.5	8
	10X8X15	22	30	200L	255	405	382	12	25.4	200	345	298.5	8
	10X8X15	-	37	225S	255	405	382	12	25.4	200	345	298.5	8
	10X8X15	30	45	225M	255	405	382	12	25.4	200	345	298.5	8
	10X8X15	37	55	250M	255	405	382	12	25.4	200	345	298.5	8
	10X8X15	45	75	280S	255	405	382	12	25.4	200	345	298.5	8

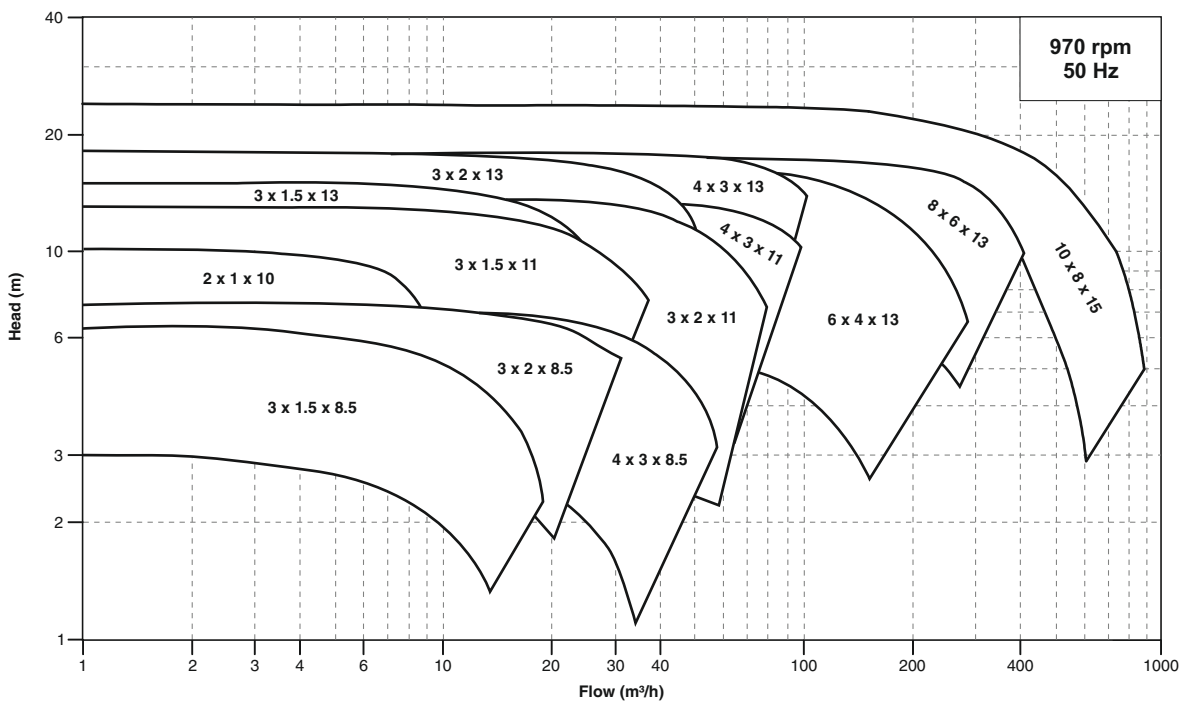
MOUNTING DIMENSION - PUMP SET

Hole Diameter	a	b1	b2	f	a+f	Channel height	Cl Height	H	h1	h2	U	V	L1	L2	L3	L4	Z No's	S	X
19.1	102	300	264	495	597	75	346	329	254	318	220	248	1220	921	307	307	8	14	140
19.1	102	340	304	495	597	75	346	329	254	318	220	248	1310	1020	340	340	8	14	140
19.1	102	330	284	495	597	100	371	329	254	318	220	248	1360	1065	355	355	8	18	140
19.1	102	375	330	495	597	100	371	329	254	318	220	248	1390	1095	365	365	8	18	140
19.1	102	375	329	495	597	100	371	329	254	318	220	248	1430	1131	377	377	8	18	140
19.1	102	400	355	495	597	100	371	329	254	318	220	248	1530	1191	397	397	8	18	140
19.1	102	450	405	495	597	100	371	329	254	318	220	248	1580	1239	413	413	8	18	140
19.1	102	450	405	495	597	100	371	329	254	318	220	248	1600	1260	420	420	8	18	140
19.1	102	300	264	495	597	75	346	329	254	343	222	270	1120	819	273	273	8	14	140
19.1	102	300	264	495	597	75	346	329	254	343	222	270	1180	870	290	290	8	14	140
19.1	102	300	264	495	597	75	346	329	254	343	222	270	1220	921	307	307	8	14	140
19.1	102	340	304	495	597	75	346	329	254	343	222	270	1310	1020	340	340	8	14	140
19.1	102	330	284	495	597	100	371	329	254	343	222	270	1360	1065	355	355	8	18	140
19.1	102	375	330	495	597	100	371	329	254	343	222	270	1390	1095	365	365	8	18	140
19.1	102	375	329	495	597	100	371	329	254	343	222	270	1430	1131	377	377	8	18	140
19.1	102	400	355	495	597	100	371	329	254	343	222	270	1530	1191	397	397	8	18	140
19.1	102	450	405	495	597	100	371	329	254	343	222	270	1580	1239	413	413	8	18	140
19.1	102	450	405	495	597	100	371	329	254	343	222	270	1600	1260	420	420	8	18	140
19.1	102	300	264	495	597	75	346	329	254	343	181	206	1120	819	273	273	8	14	140
19.1	102	300	264	495	597	75	346	329	254	343	181	206	1180	870	290	290	8	14	140
19.1	102	300	264	495	597	75	346	329	254	343	181	206	1220	921	307	307	8	14	140
19.1	102	340	304	495	597	75	346	329	254	343	181	206	1310	1020	340	340	8	14	140
19.1	102	330	284	495	597	100	371	329	254	343	181	206	1360	1065	355	355	8	18	140
19.1	102	375	330	495	597	100	371	329	254	343	181	206	1390	1095	365	365	8	18	140
19.1	102	375	329	495	597	100	371	329	254	343	181	206	1430	1131	377	377	8	18	140
19.1	102	400	355	495	597	100	371	329	254	343	181	206	1530	1191	397	397	8	18	140
19.1	102	450	405	495	597	100	371	329	254	343	181	206	1580	1239	413	413	8	18	140
19.1	102	450	405	495	597	100	371	329	254	343	181	206	1600	1260	420	420	8	18	140
22.2	152	540	470	708	860	150	538	518	368	406	237	290	1740	1278	426.7	426.7	8	24	180
22.2	152	540	470	708	860	150	538	518	368	406	237	290	1810	1350	450	450	8	24	180
22.2	152	540	470	708	860	150	538	518	368	406	237	290	1885	1425	475	475	8	24	180
22.2	152	540	470	708	860	150	538	518	368	406	237	290	1960	1500	500	500	8	24	180
22.2	152	620	550	708	860	150	538	518	368	406	237	290	2055	1595	531.7	531.7	8	24	180
22.2	152	540	470	708	860	150	538	518	368	456	268	324	1740	1278	426.7	426.7	8	24	180
22.2	152	540	470	708	860	150	538	518	368	456	268	324	1810	1350	450	450	8	24	180
22.2	152	540	470	708	860	150	538	518	368	456	268	324	1885	1425	475	475	8	24	180
22.2	152	540	470	708	860	150	538	518	368	456	268	324	1960	1500	500	500	8	24	180
22.2	152	620	550	708	860	150	538	518	368	456	268	324	2055	1595	531.7	531.7	8	24	180
22.2	152	540	470	708	860	150	538	518	368	483	314	373	1740	1268	426.7	426.7	8	24	180
22.2	152	540	470	708	860	150	538	518	368	483	314	373	1810	1315	450	450	8	24	180
22.2	152	540	470	708	860	150	538	518	368	483	314	373	1885	1365	475	475	8	24	180
22.2	152	540	470	708	860	150	538	518	368	483	314	373	1960	1415	475	475	8	24	180
22.2	152	620	550	708	860	150	538	518	368	483	314	373	2055	1500	500	500	8	24	180
22.2	152	620	550	708	860	150	538	518	368	483	314	373	2055	1595	531.7	531.7	8	24	180

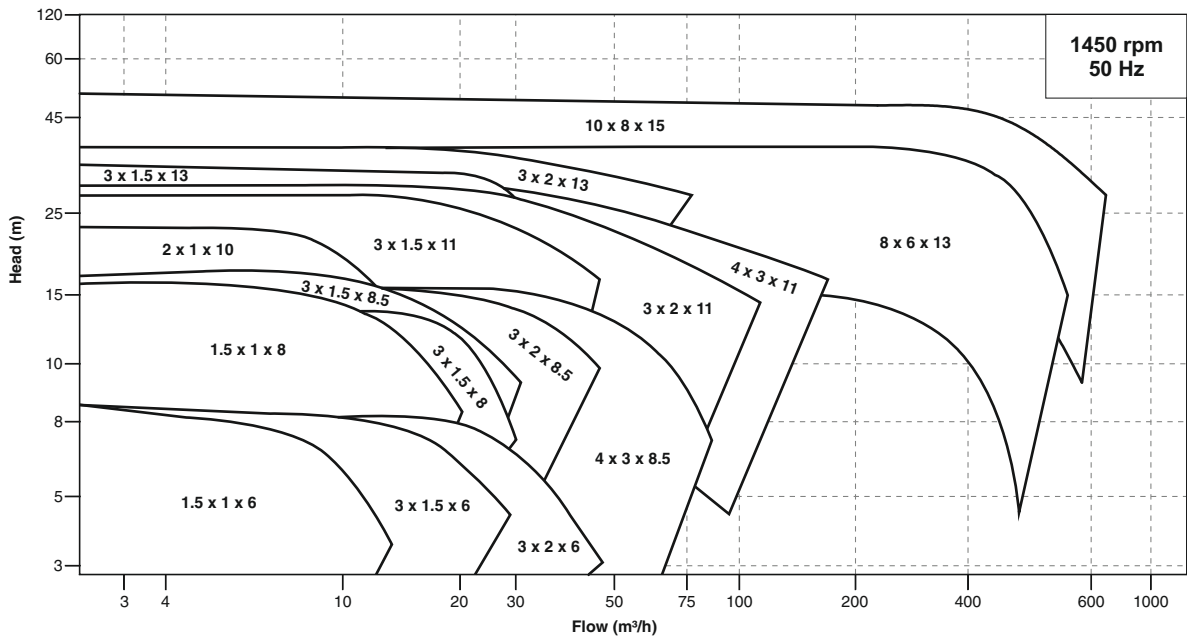
OVERALL RANGE & PERFORMANCE DETAILS

S. No.	Pump Size - Suction x Discharge / Impeller Sizes in inch (mm)	Suction Nozzle Dia in mm	Discharge Nozzle Dia in mm	Pump Weight in kg	Maximum Power in kW	Speed Min / Max in rpm	Maximum Working Pressure in Bar	Maximum Flow Rate in m ³ /h	Maximum Total Head in m	Maximum Solid Size / Dia in mm
1	1.5 x 1 x 6 (40 x 25 x 150)	38	25	40	5	700/3600	10/16	34	49	4.8
2	3 x 1.5 x 6 (80 x 40 x 150)	76	38	45	8	700/3600	10/16	60	48	8
3	3 x 2 x 6 (80 x 50 x 150)	76	50	46	9	700/3600	10/16	96	43	15
4	1.5 x 1 x 8 (40 x 25 x 200)	38	25	47	15	700/3600	10/16	48	95	9
5	3 x 1.5 x 8 (80 x 40 x 200)	76	38	50	22	700/3600	10/16	68	94	8
6	2 x 1 x 10 (50 x 25 x 250)	50	25	115	24	700/3600	10/16	38	130	4.5
7	3 x 1.5 x 8.5 (80 x 40 x 215)	76	38	102	30	700/3600	10/16	62	104	6.6
8	3 x 2 x 8.5 (80 x 50 x 215)	76	50	105	32	700/3600	10/16	91	95	8.3
9	4 x 3 x 8.5 (100 x 80 x 215)	100	76	114	38	700/3600	10/16	194	95	17
10	6 x 4 x 8.5 (150 x 100 x 215)	150	100	129	45	700/3600	10/16	350	100	24
11	3 x 1.5 x 11 (80 x 40 x 280)	76	38	128	58	700/3600	10/16	91	168	7.5
12	3 x 2 x 11 (80 x 50 x 280)	76	50	128	75	700/3600	10/16	148	168	13
13	4 x 3 x 11 (100 x 80 x 280)	100	76	136	105	700/3600	10/16	268	125	21
14	3 x 1.5 x 13 (80 x 40 x 330)	76	38	137	85	700/3600	10/16	74	198	6
15	3 x 2 x 13 (80 x 50 x 330)	76	50	145	105	700/3600	10/16	136	198	12.8
16	4 x 3 x 13 (100 x 80 x 330)	100	76	163	38	700/1800	10/16	216	61	14.5
17	6 x 4 x 13 (150 x 100 x 330)	150	100	160	48	700/1800	10/16	431	55	25.5
18	8 x 6 x 13 (200 x 150 x 330)	200	150	249	90	700/1800	10/16	817	58	52
19	8 x 6 x 15 (200 x 150 x 380)	200	150	325	150	700/1800	10/16	980	78	40
20	10 x 8 x 13 (250 x 200 x 330)	250	200	325	110	700/1800	10/16	900	65	51
21	10 x 8 x 15 (250 x 200 x 380)	250	200	359	150	700/1800	10/16	1020	74	40

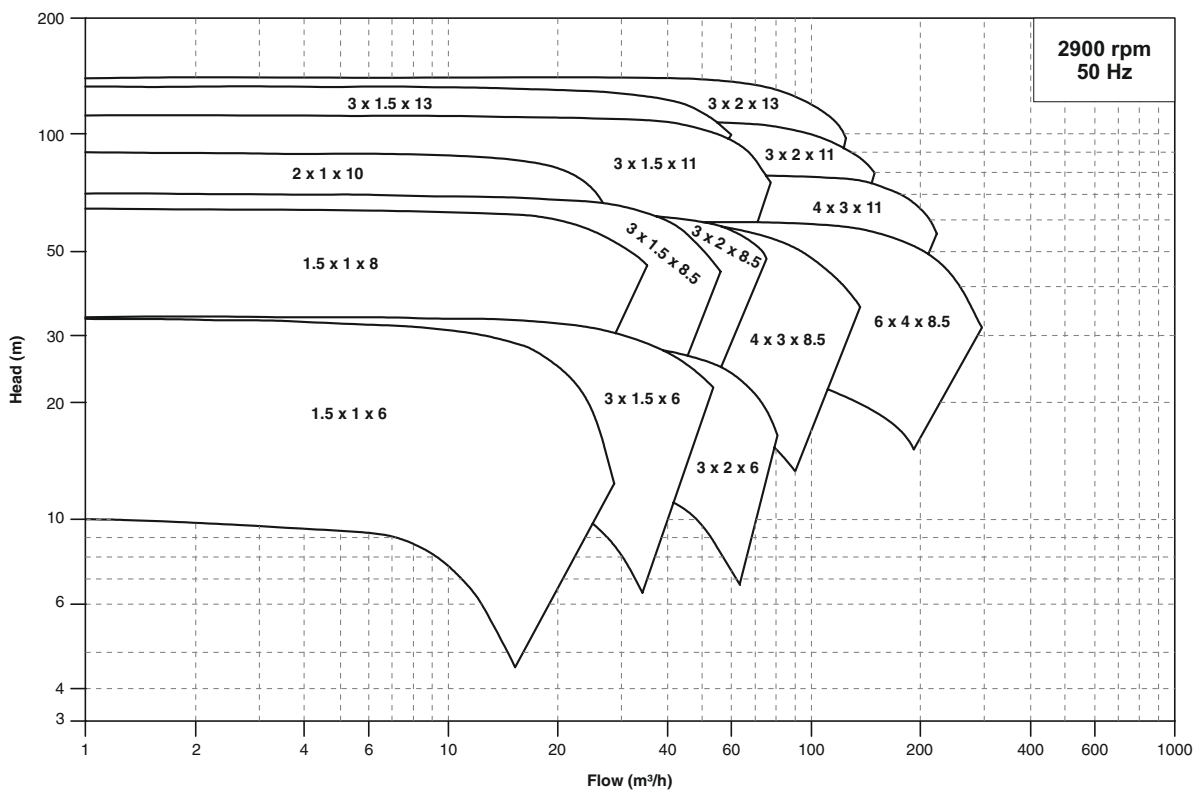
GROUP PERFORMANCE CURVE



GROUP PERFORMANCE CURVE



GROUP PERFORMANCE CURVE

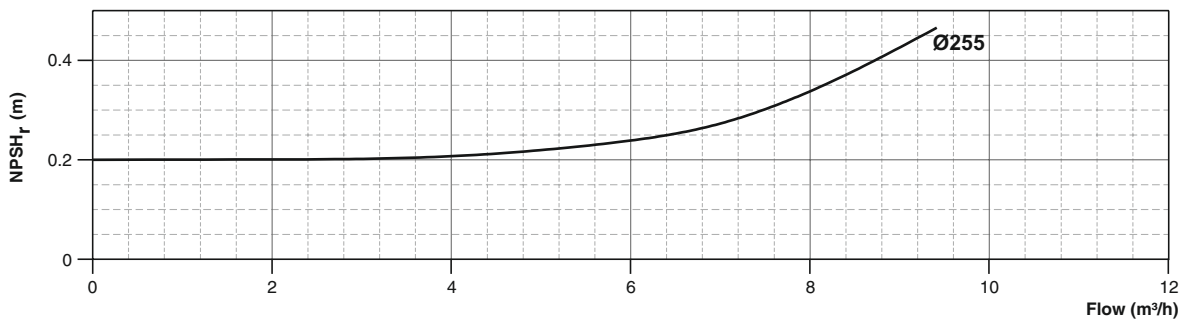
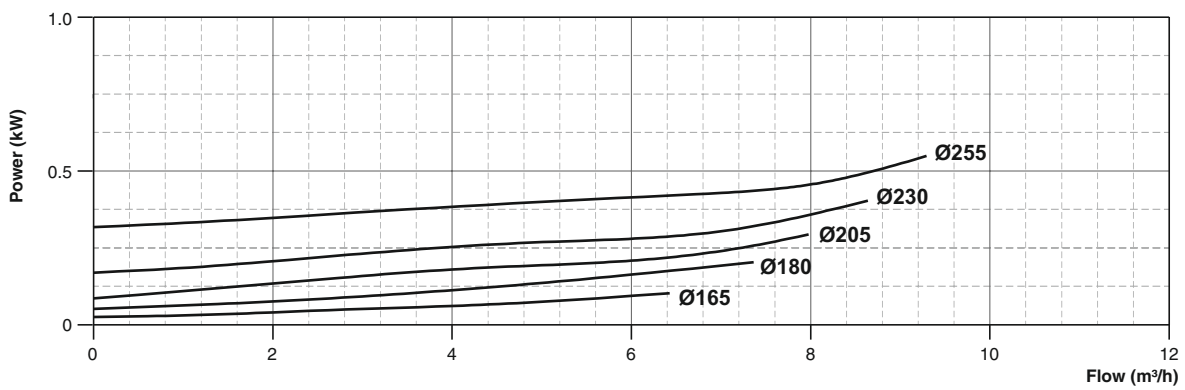
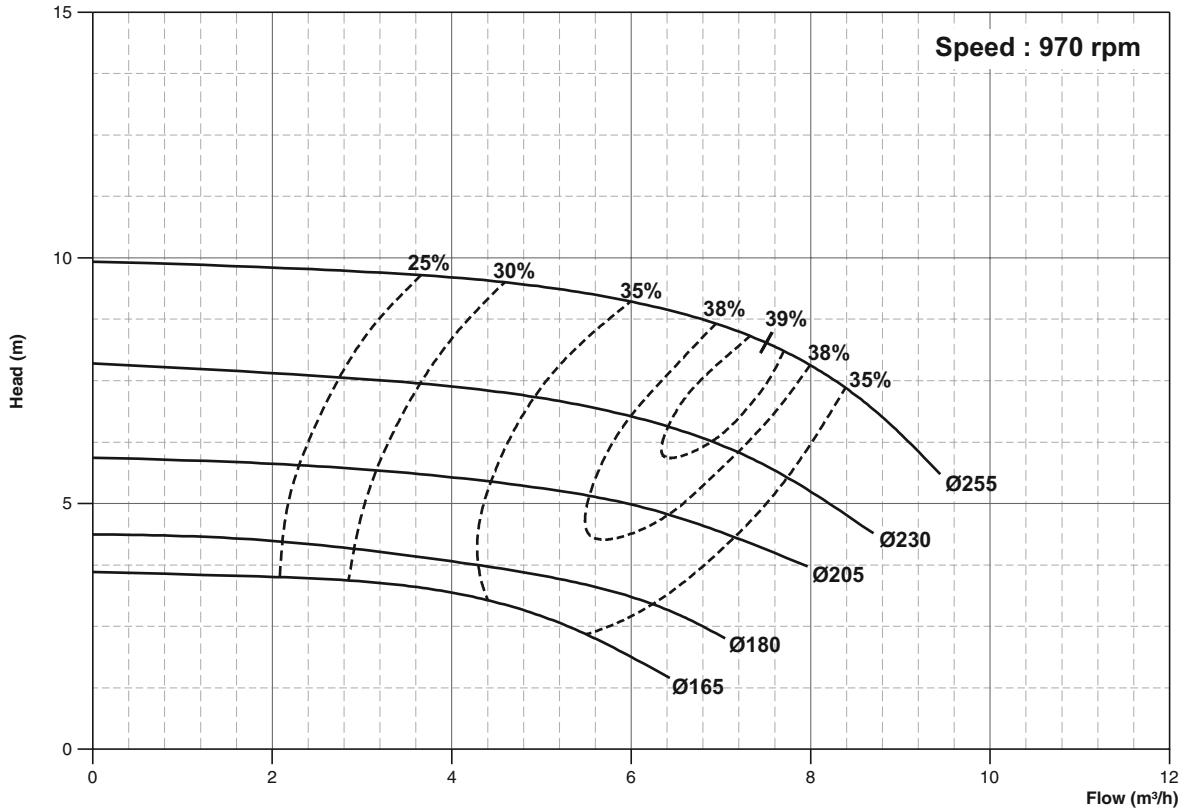




PERFORMANCE CURVE

Pump Model : **ECC - 2 x 1 x 10**
(50 x 25 x 250)

Pump Size in mm : **50 x 25**
(Suc x Dis)

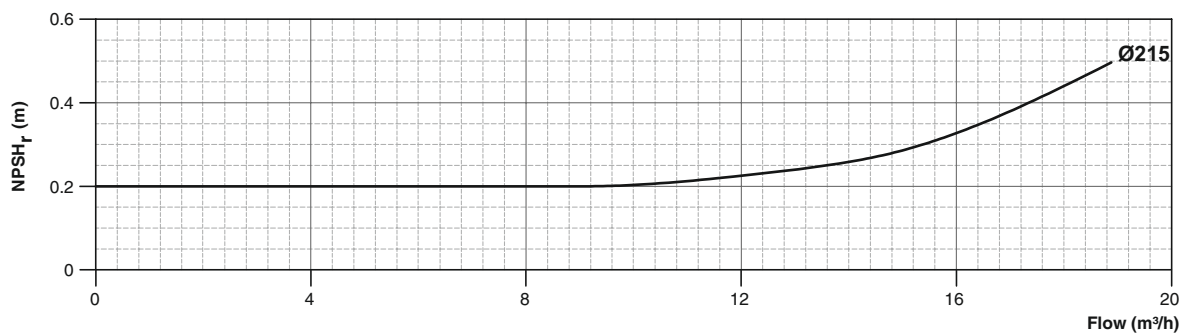
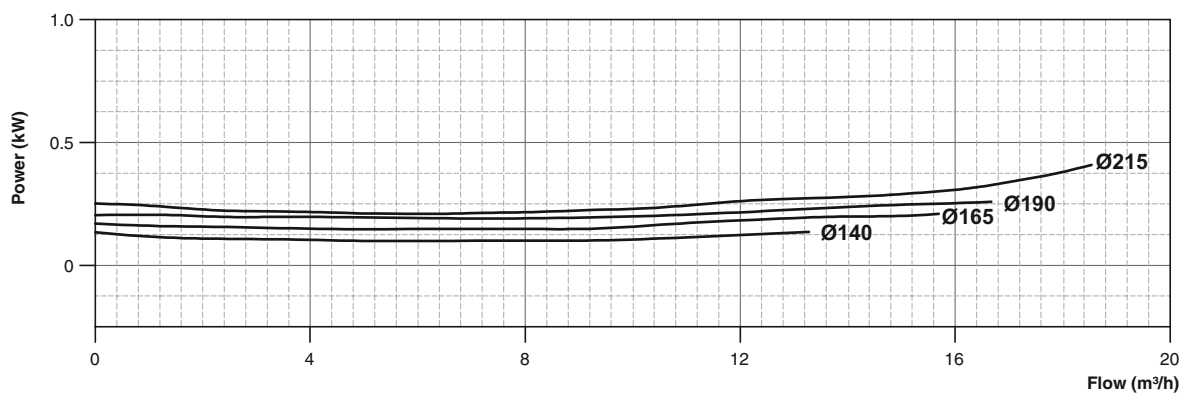
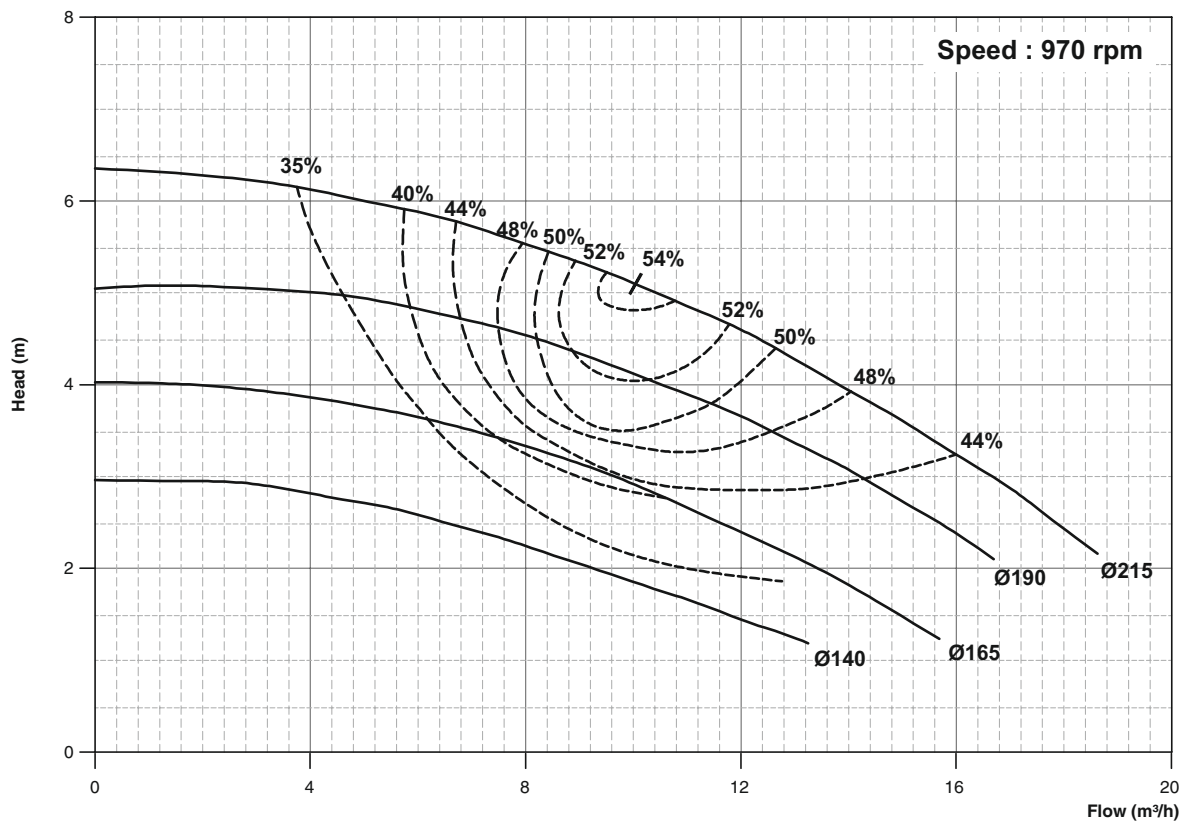




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 8.5**
(80 x 40 x 215)

Pump Size in mm : **80 x 40**
(Suc x Dis)

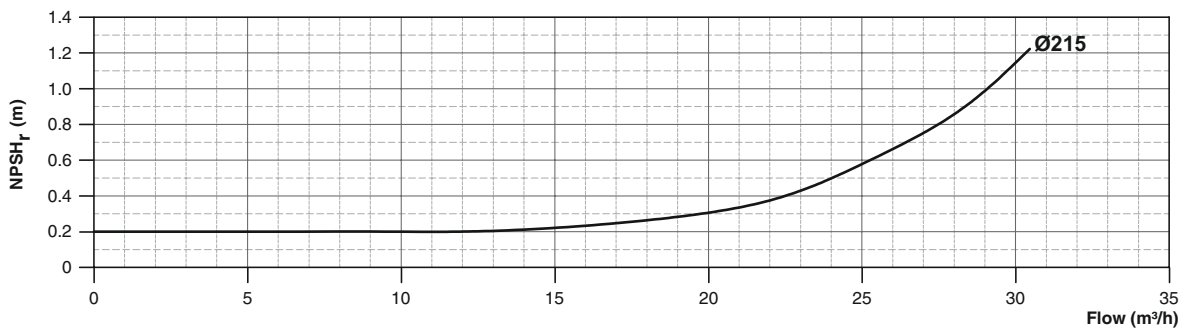
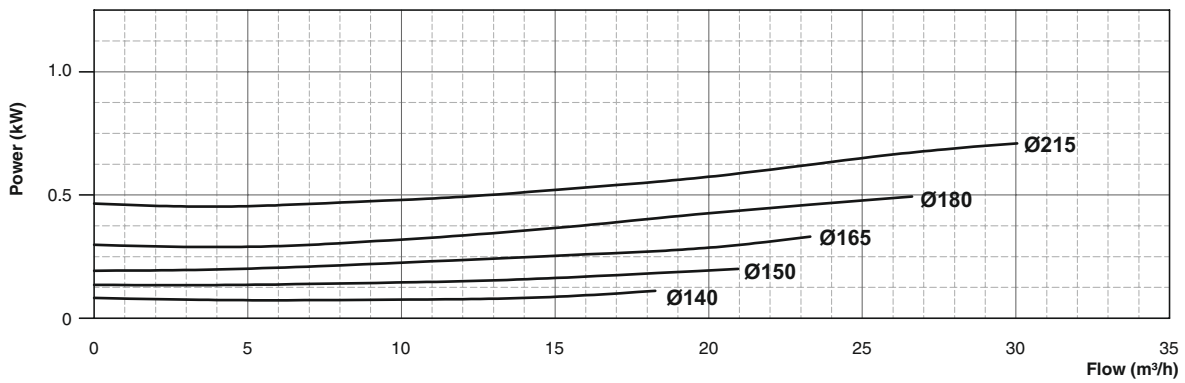
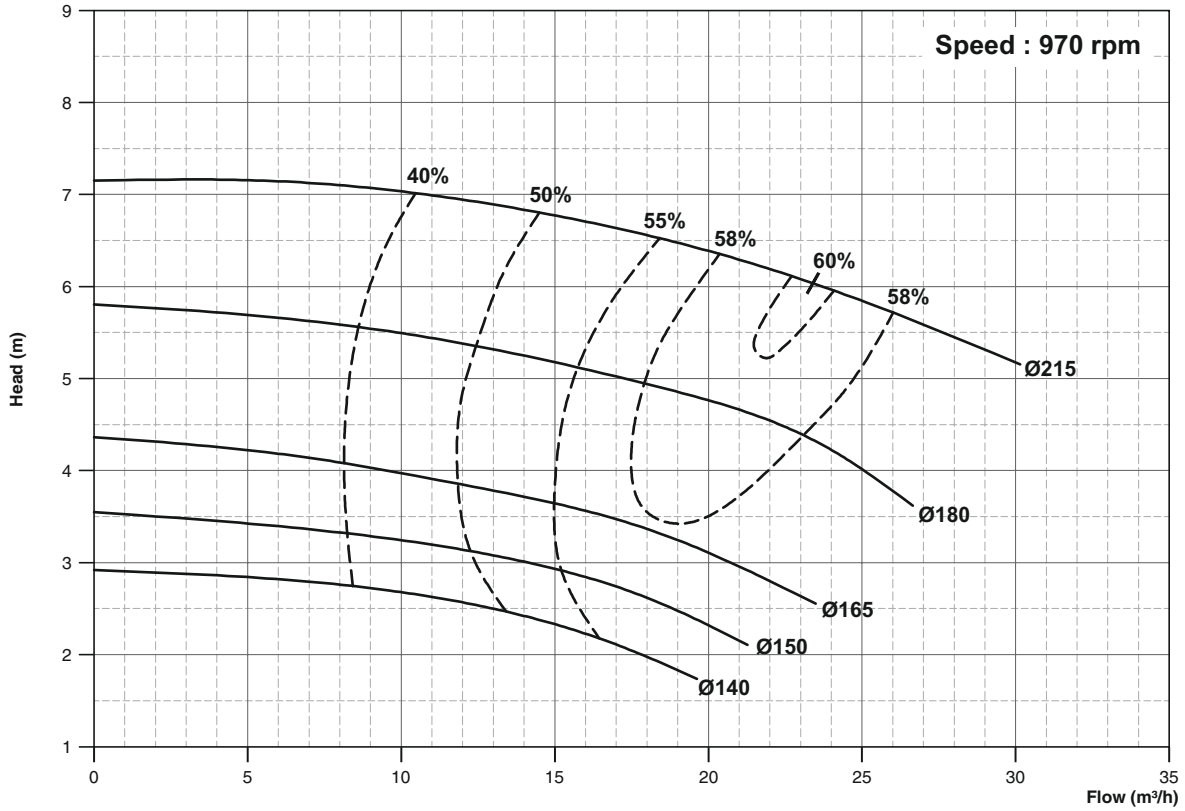




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 8.5**
(80 x 50 x 215)

Pump Size in mm : **80 x 50**
(Suc x Dis)

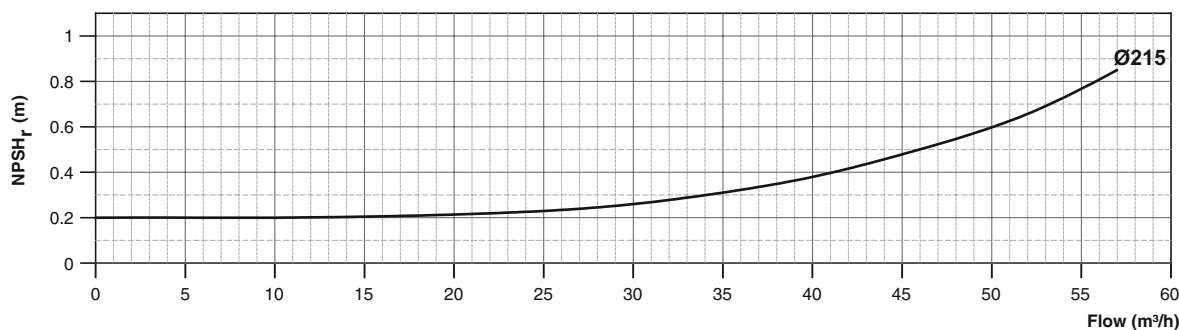
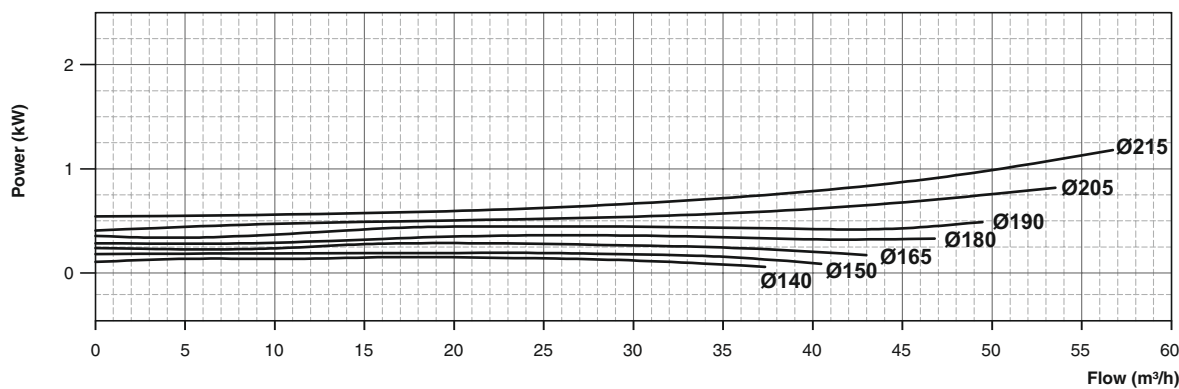
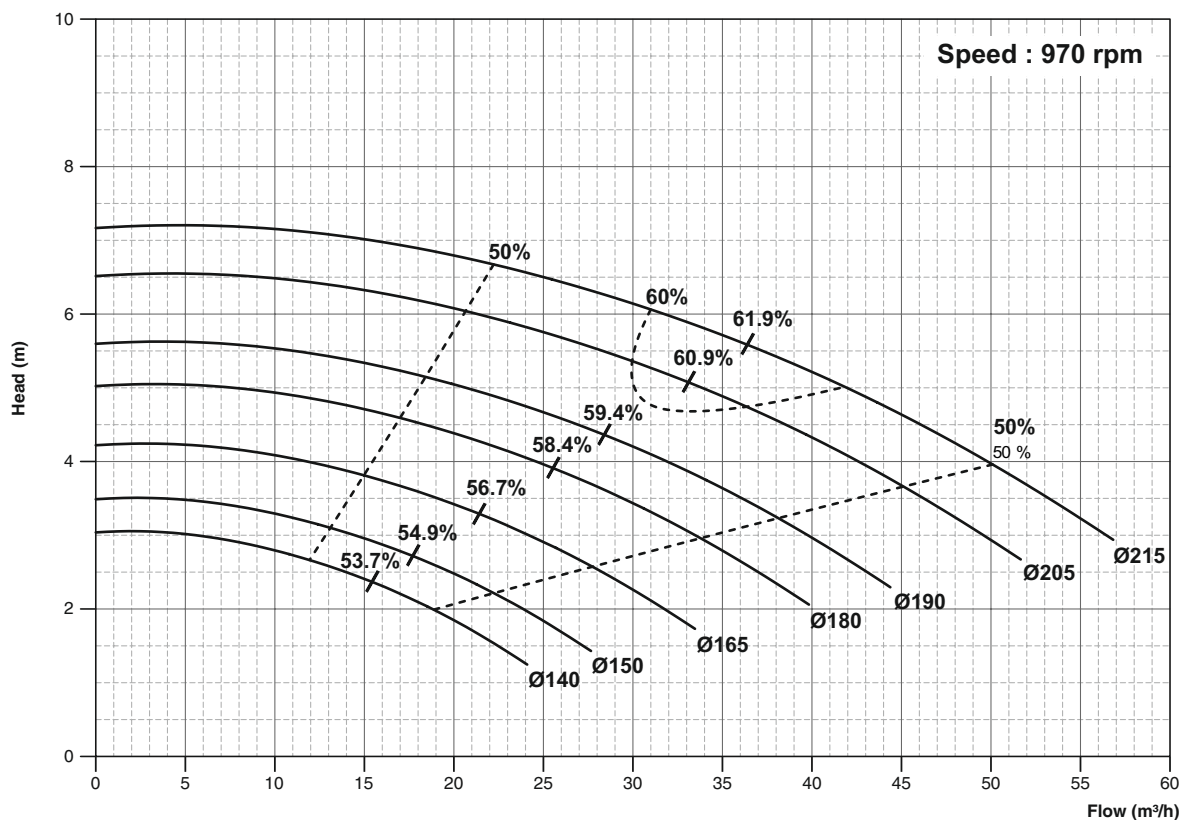




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 8.5**
(100 x 80 x 215)

Pump Size in mm : **100 x 80**
(Suc x Dis)

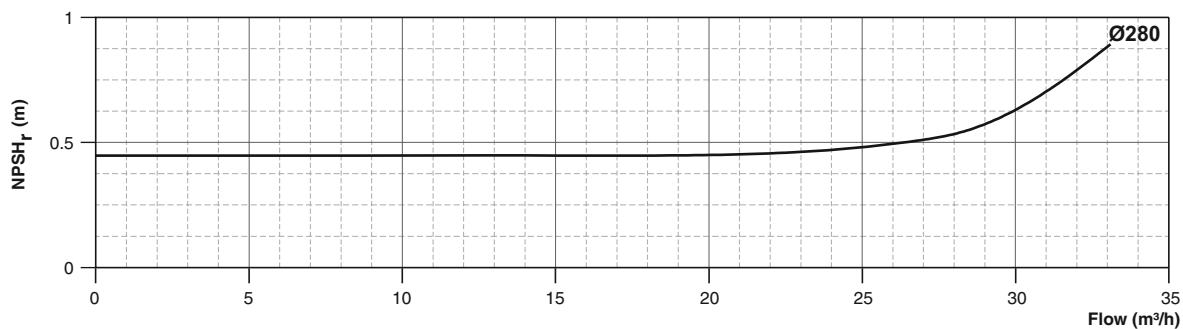
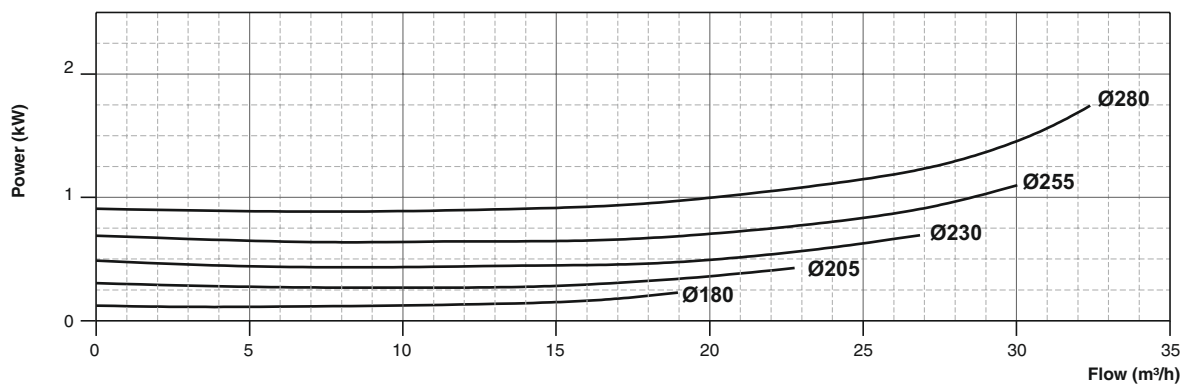
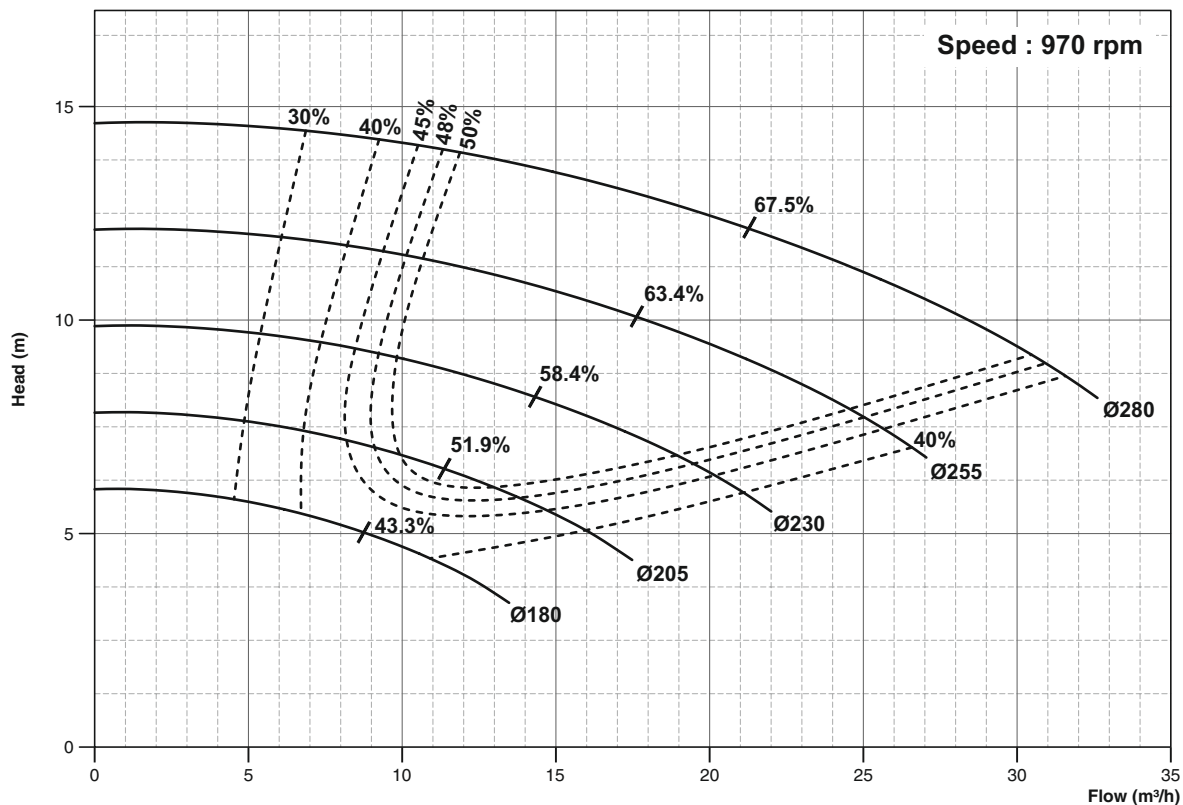




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 11**
(80 x 40 x 280)

Pump Size in mm : **80 x 40**
(Suc x Dis)

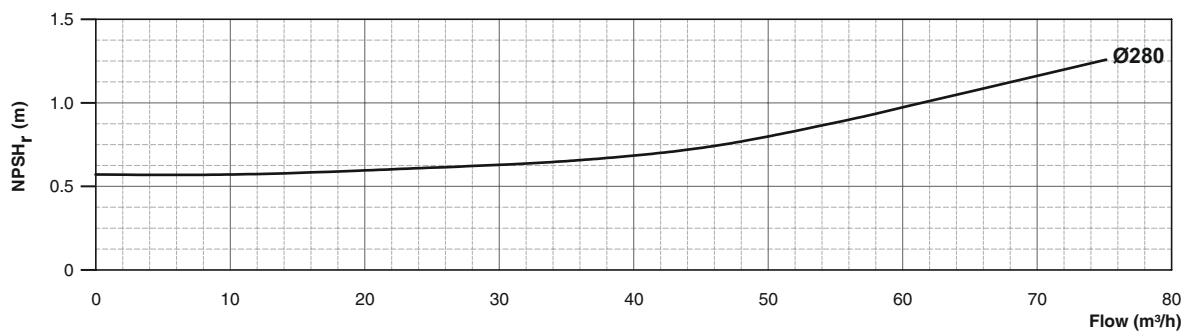
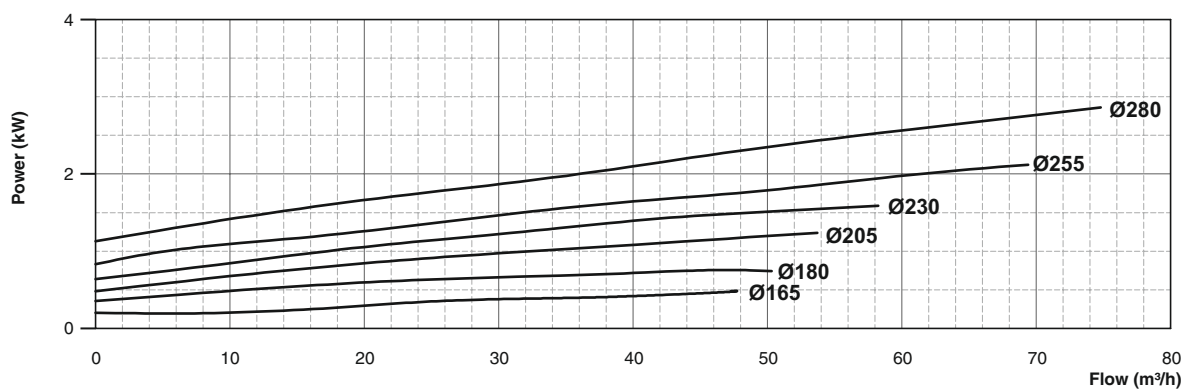
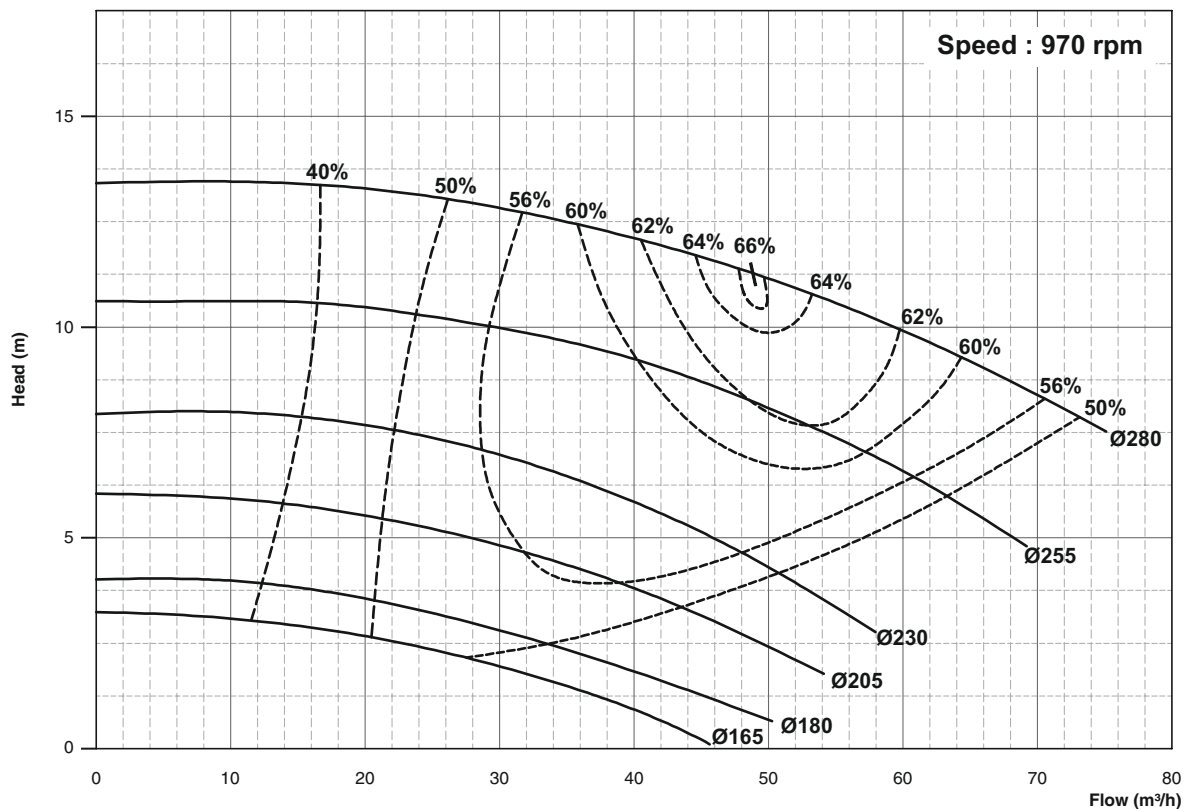




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 11**
(80 x 50 x 280)

Pump Size in mm : **80 x 50**
(Suc x Dis)

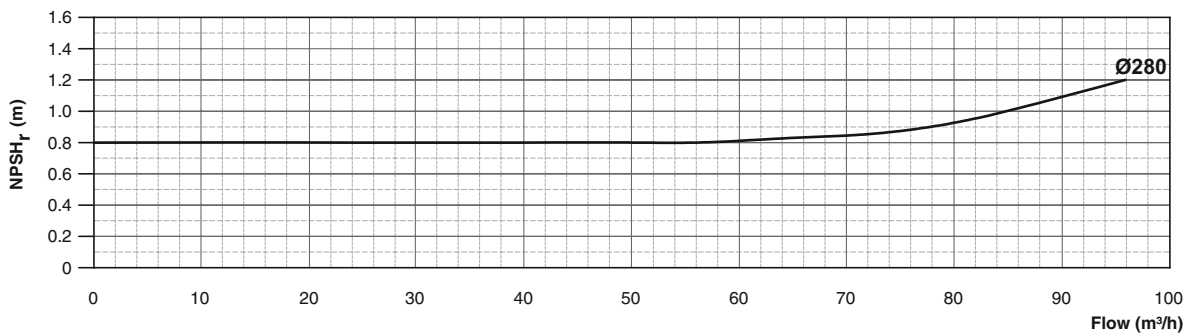
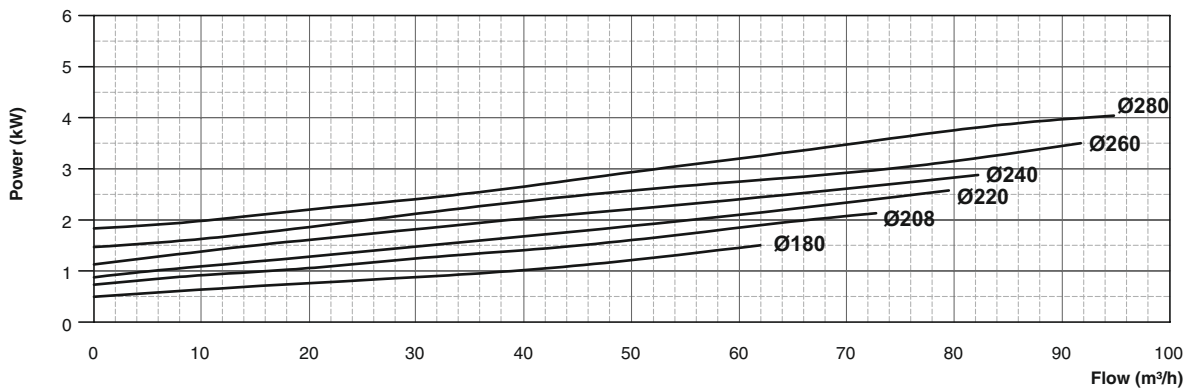
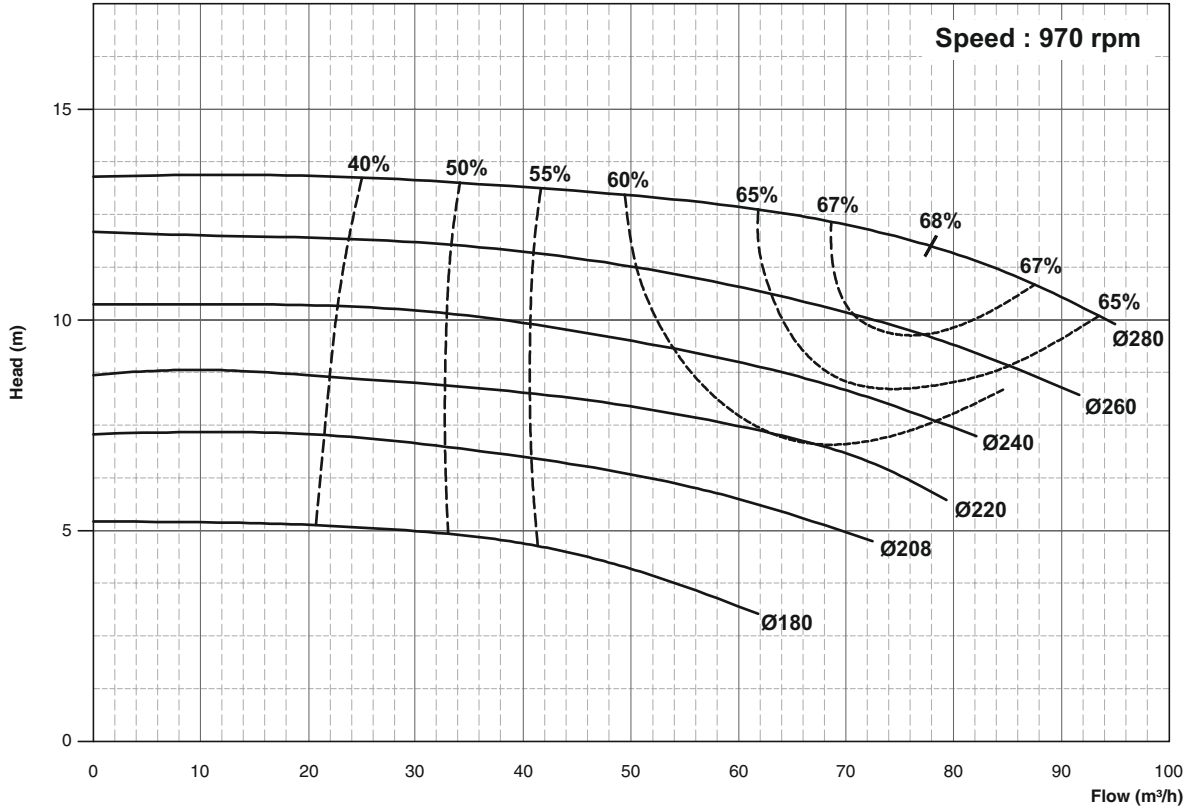




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 11**
(100 x 80 x 280)

Pump Size in mm : **100 x 80**
(Suc x Dis)

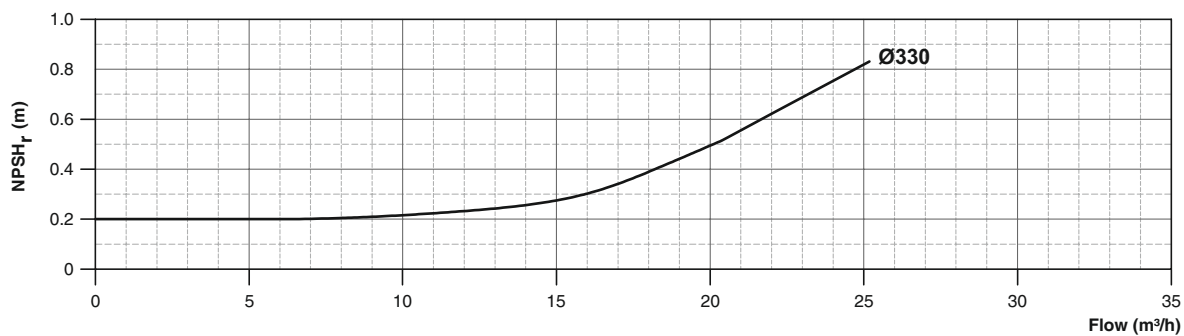
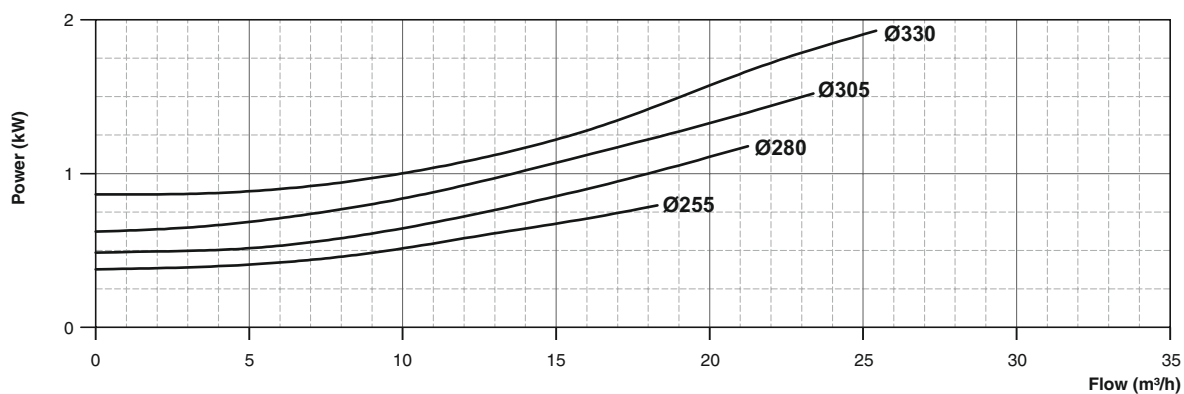
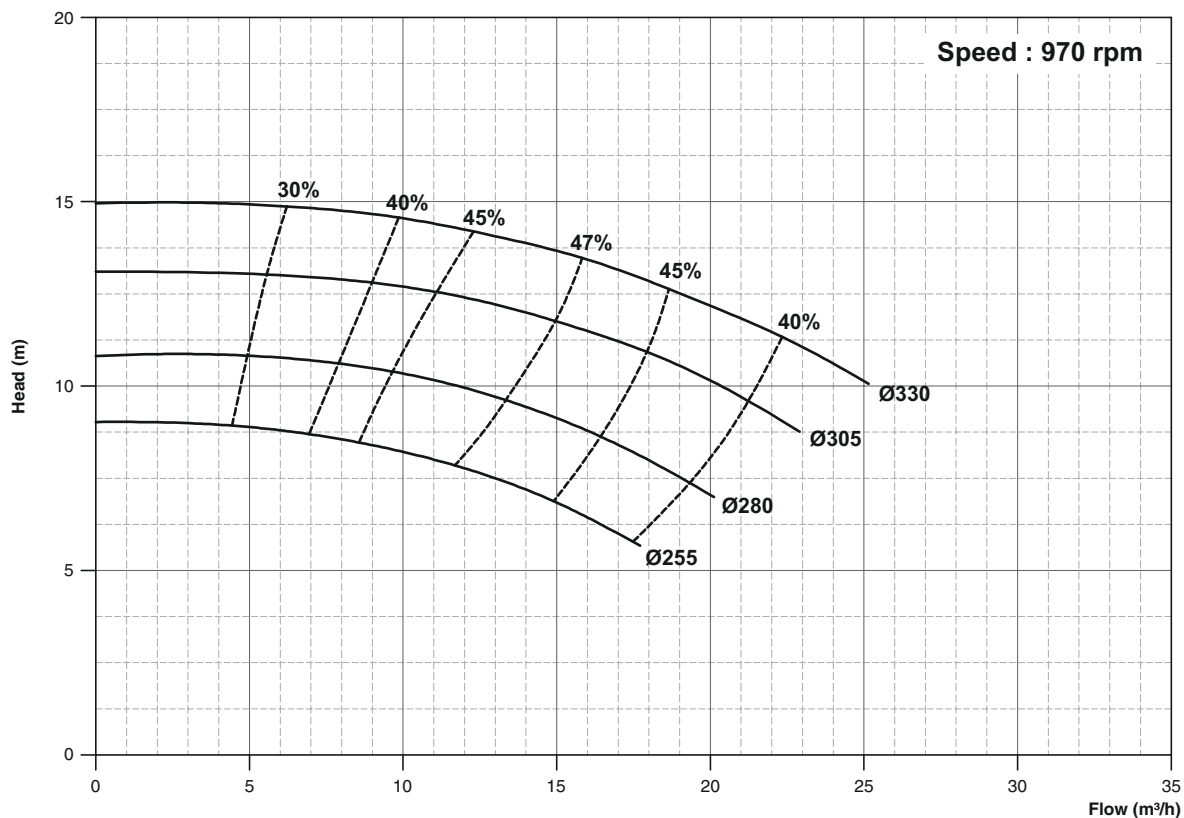




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 13**
(80 x 40 x 330)

Pump Size in mm : **80 x 40**
(Suc x Dis)

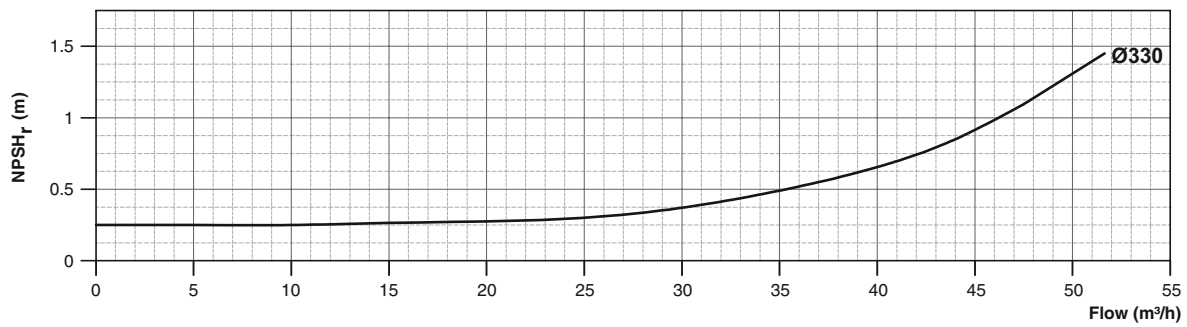
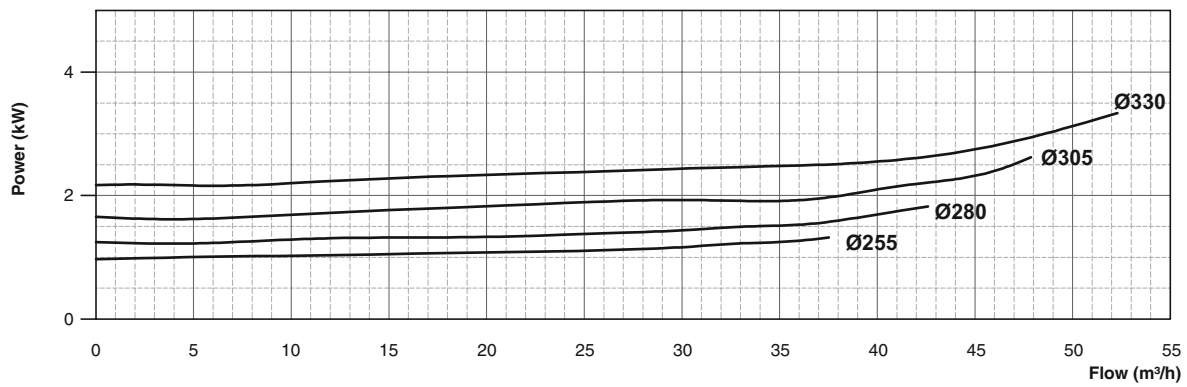
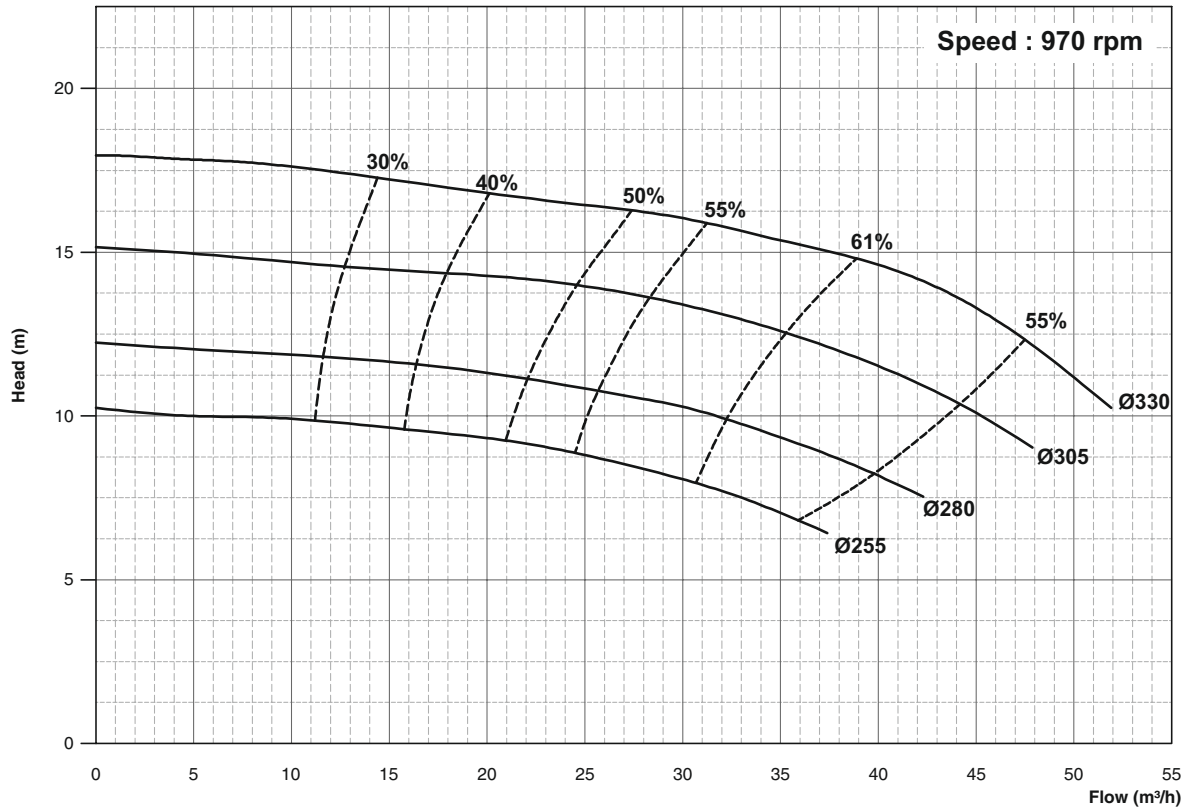




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 13**
(80 x 50 x 330)

Pump Size in mm : **80 x 50**
(Suc x Dis)

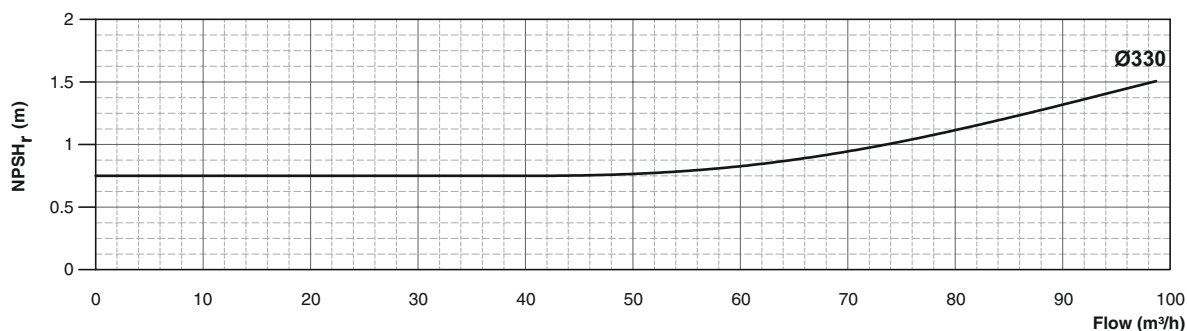
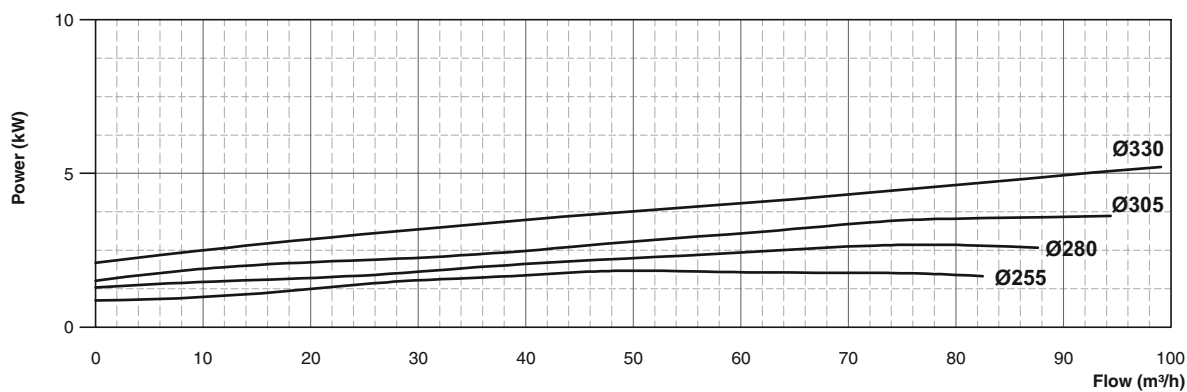
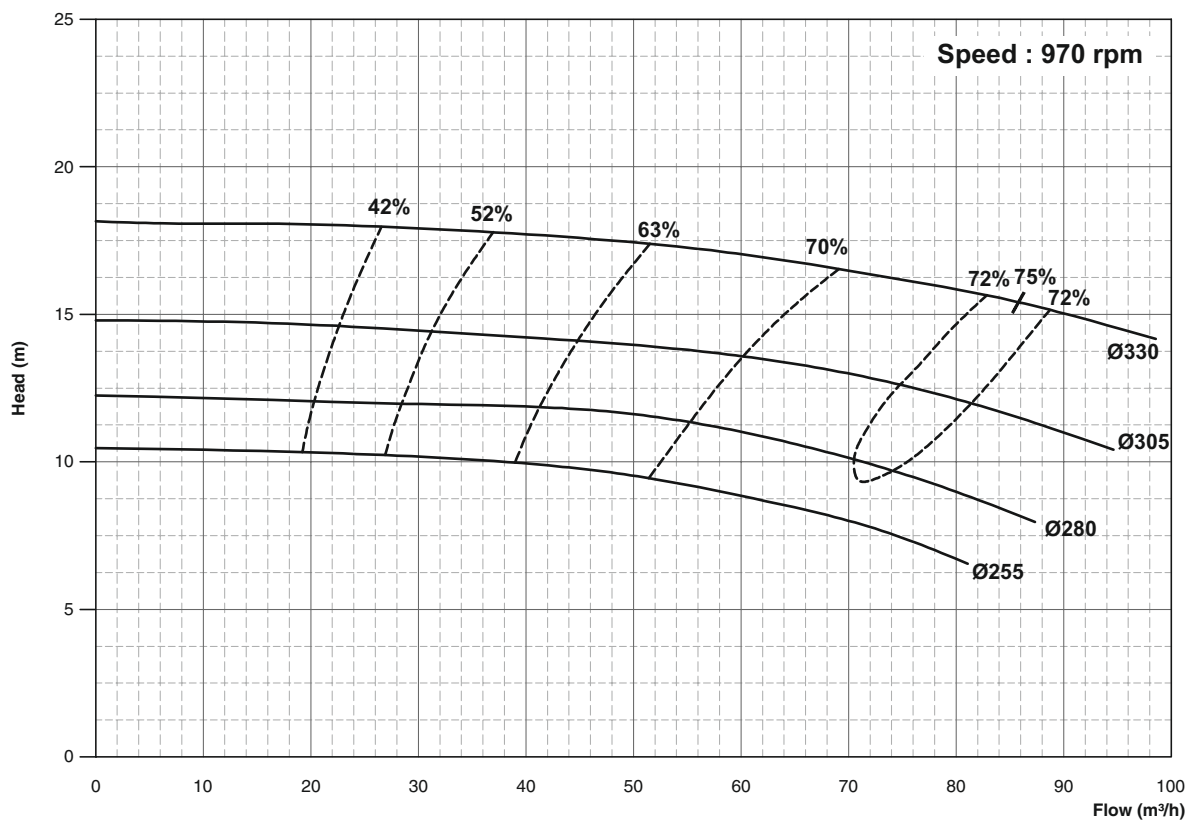




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 13**
(100 x 80 x 330)

Pump Size in mm : **100 x 80**
(Suc x Dis)

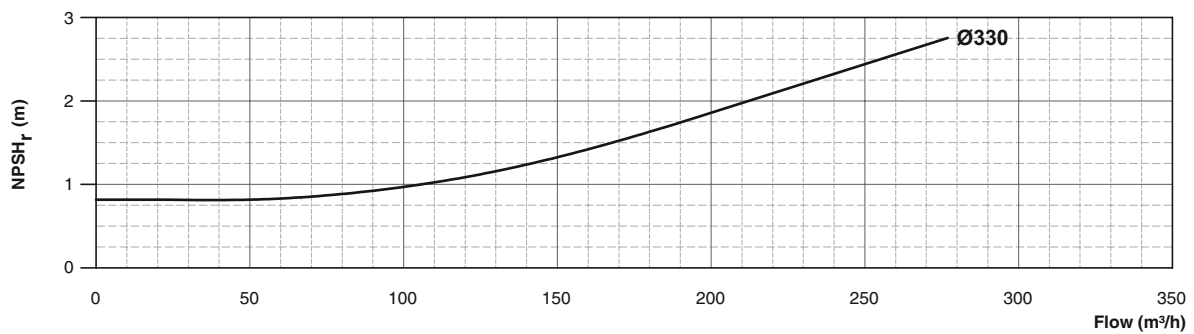
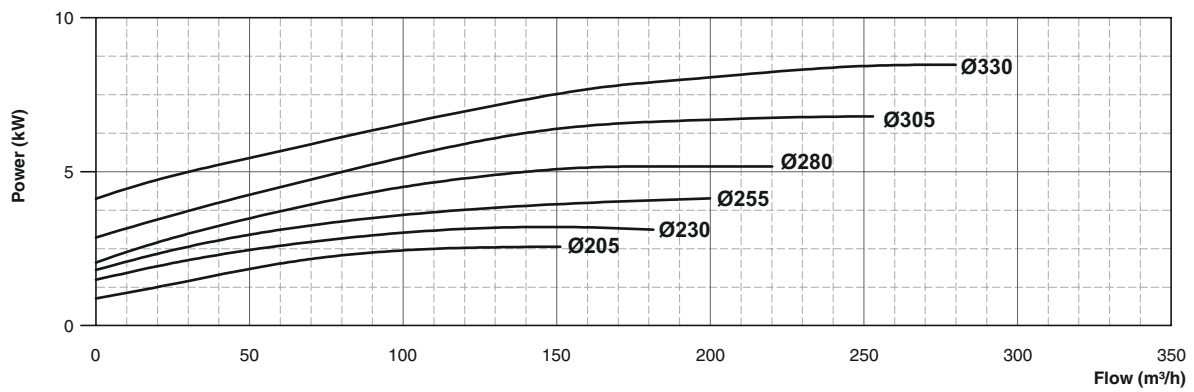
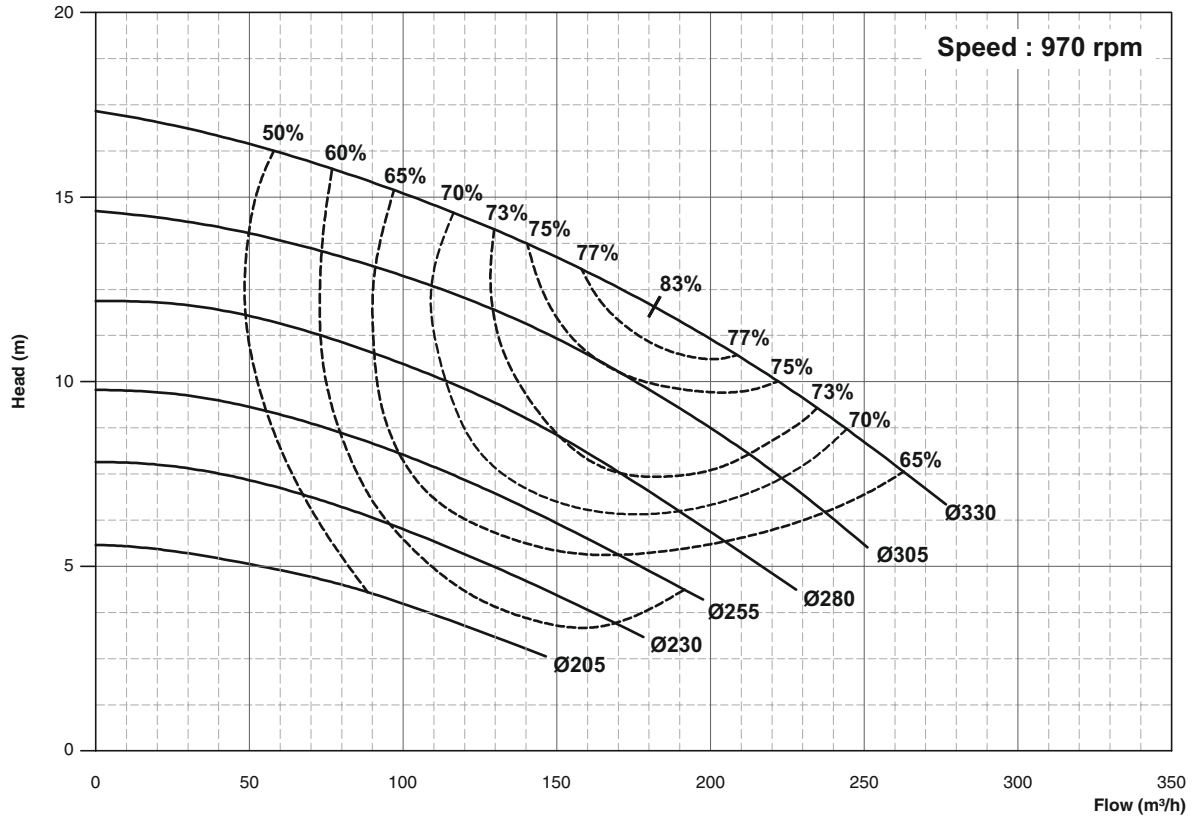




PERFORMANCE CURVE

Pump Model : **ECC - 6 x 4 x 13**
(150 x 100 x 330)

Pump Size in mm : **150 x 100**
(Suc x Dis)

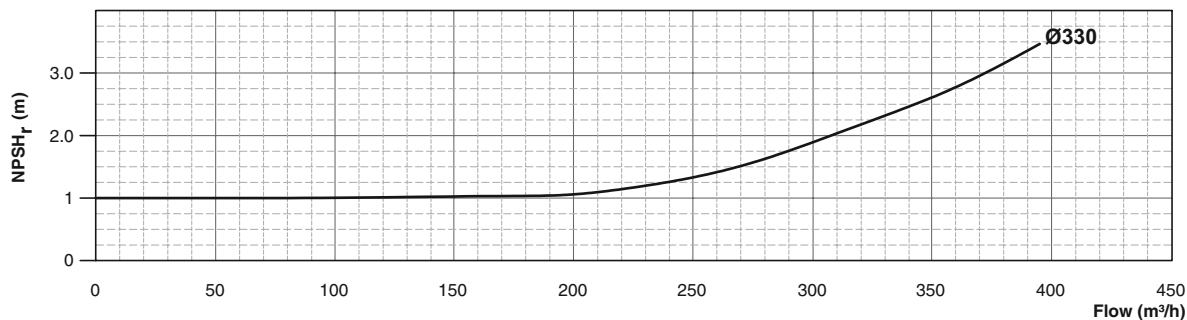
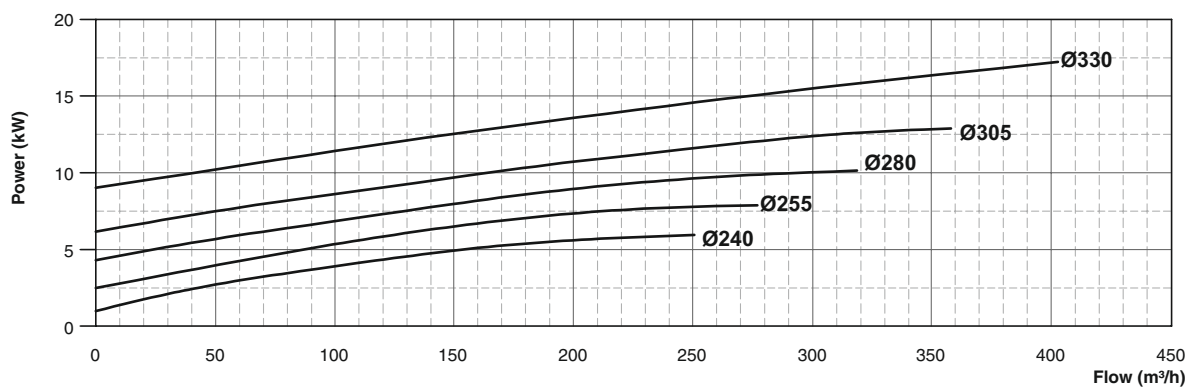
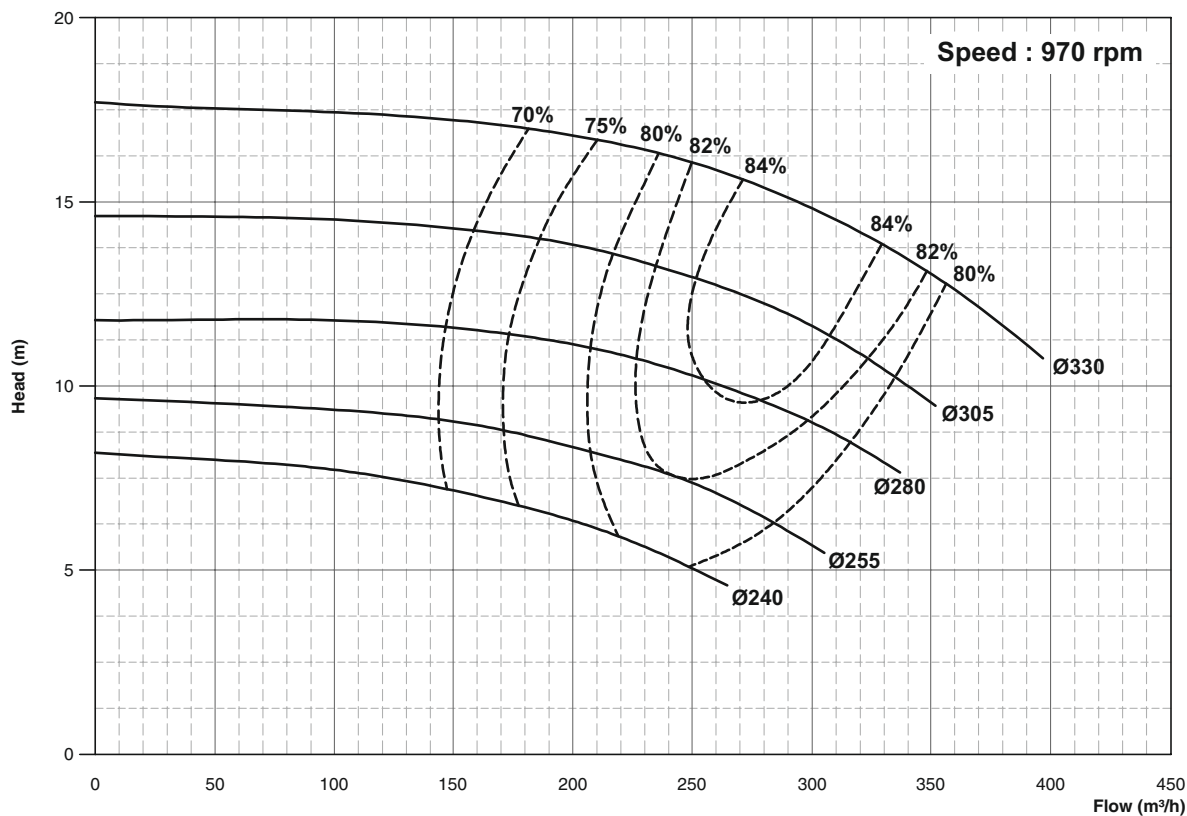




PERFORMANCE CURVE

Pump Model : **ECC - 8 x 6 x 13**
(200 x 150 x 330)

Pump Size in mm : **200 x 150**
(Suc x Dis)

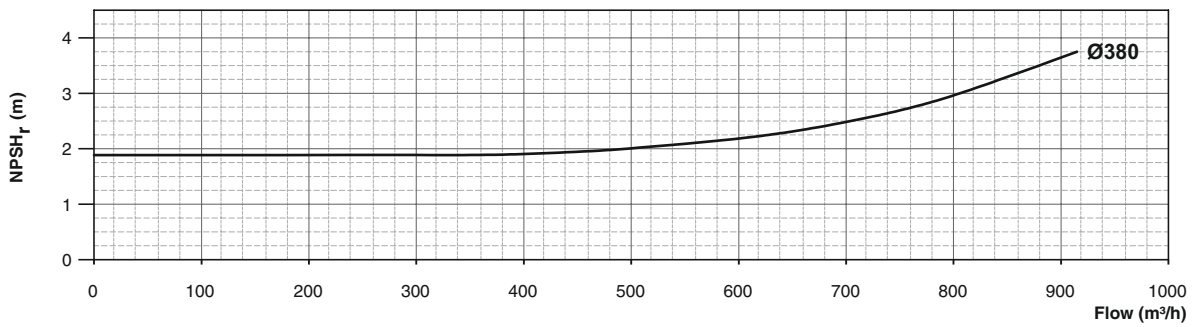
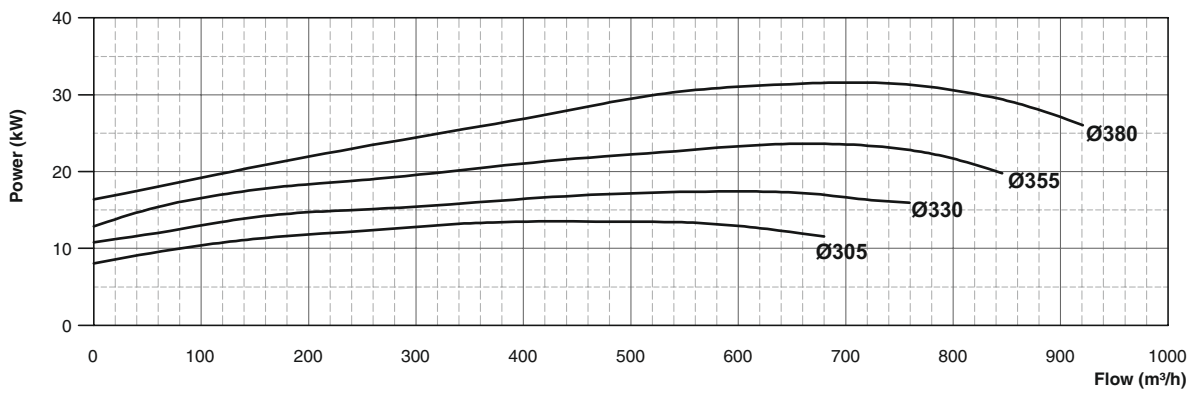
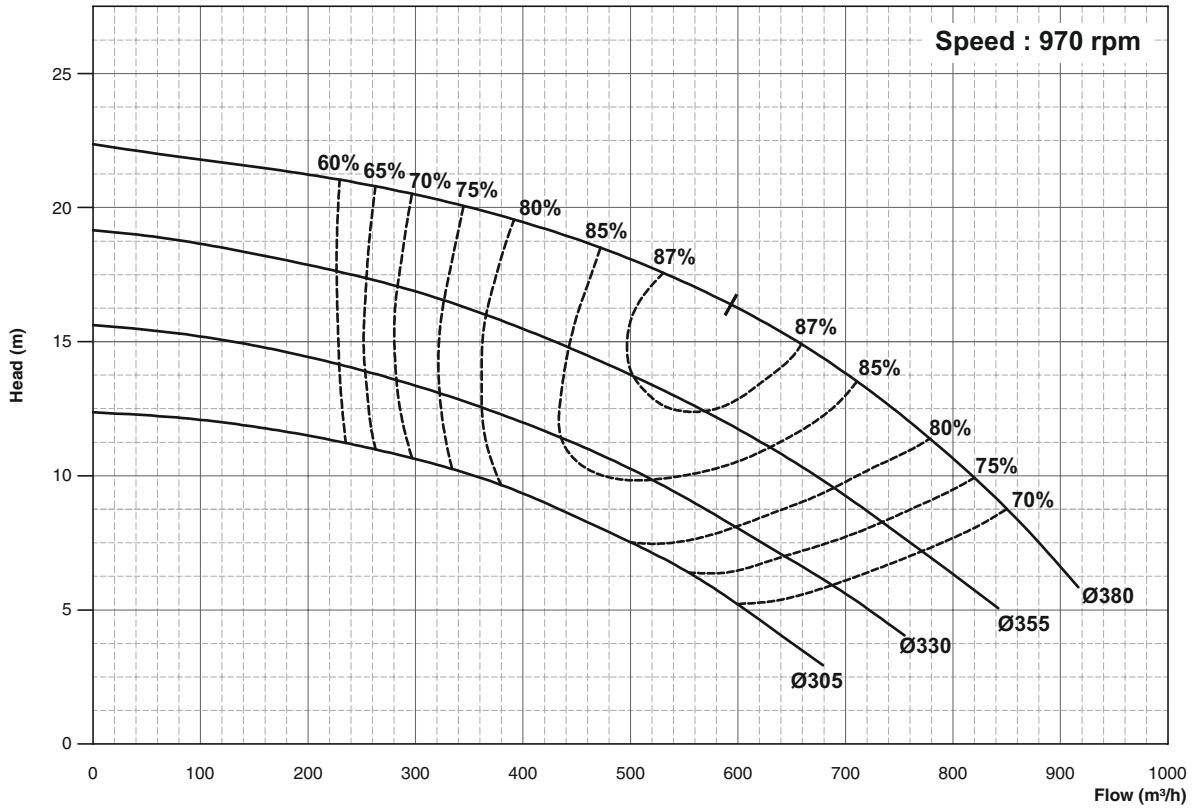




PERFORMANCE CURVE

Pump Model : **ECC - 10 x 8 x 15**
(250 x 200 x 380)

Pump Size in mm : **250 x 200**
(Suc x Dis)

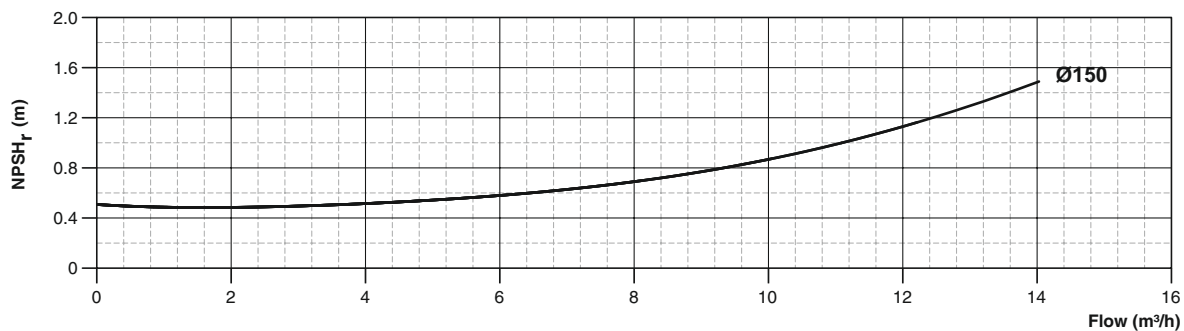
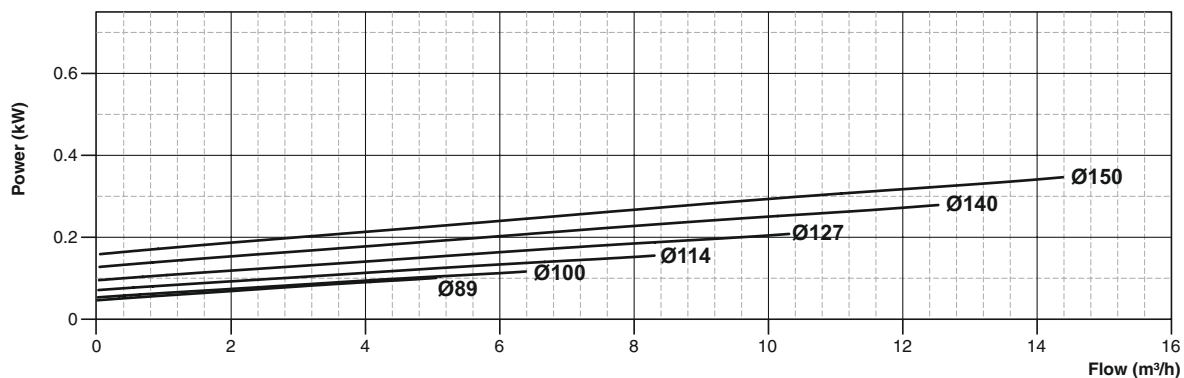
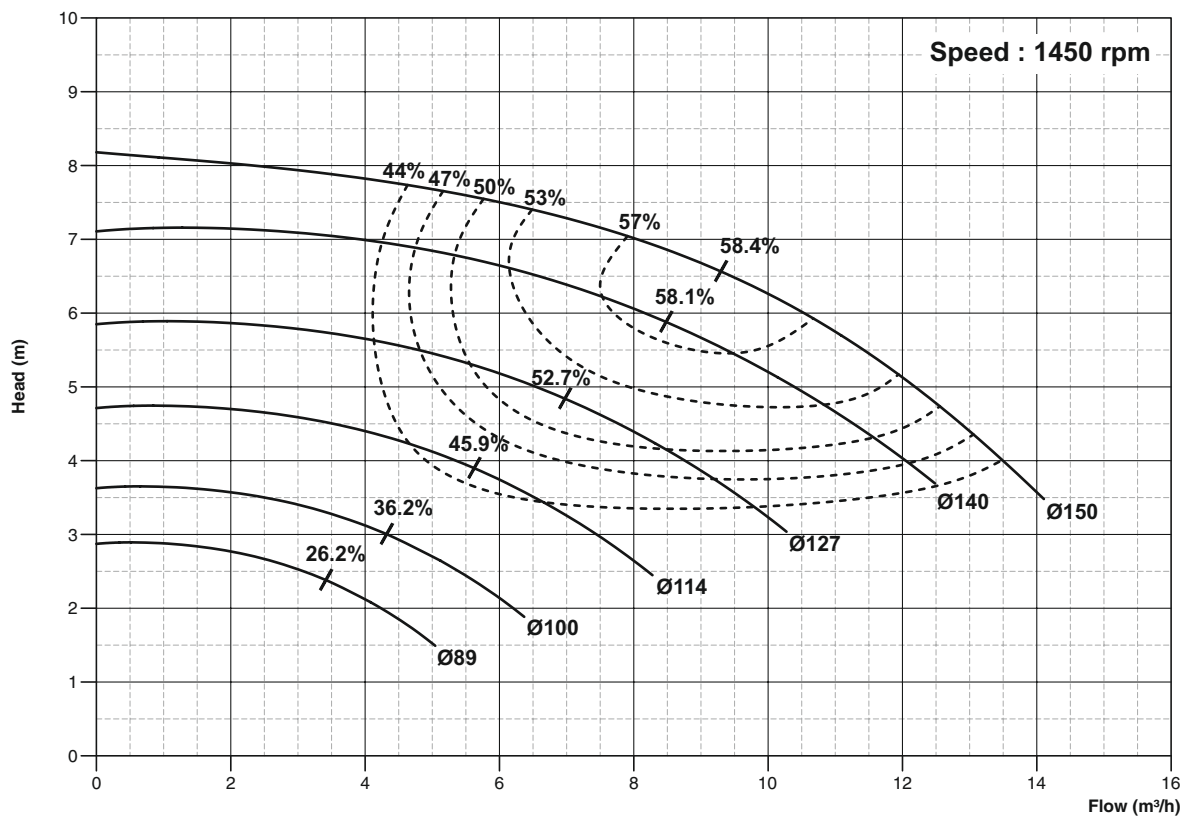




PERFORMANCE CURVE

Pump Model : **ECC - 1.5 x 1 x 6**
(40 x 25 x 150)

Pump Size in mm : **40 x 25**
(Suc x Dis)

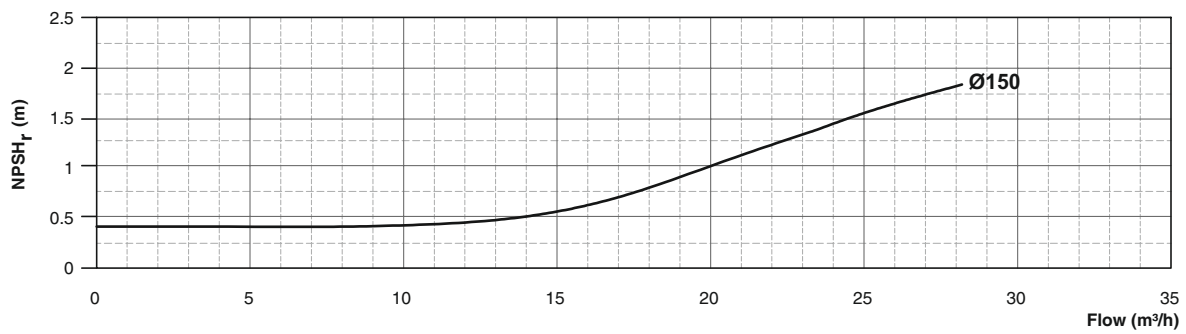
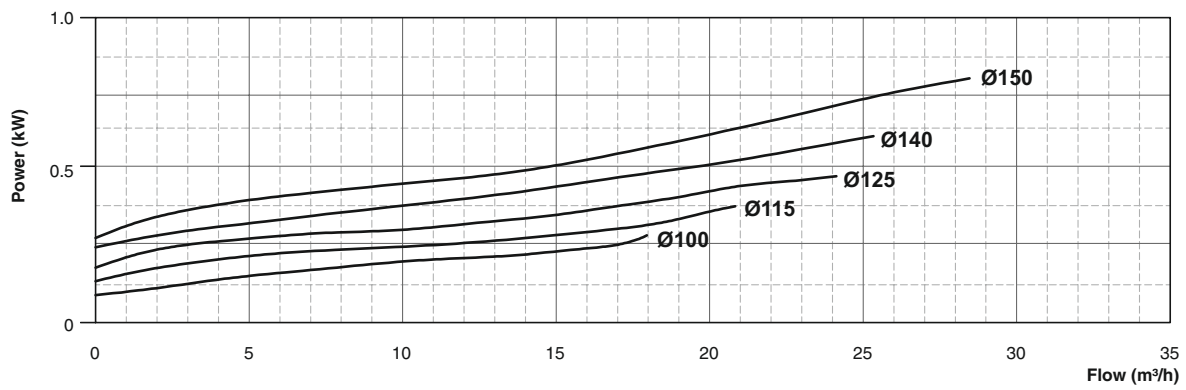
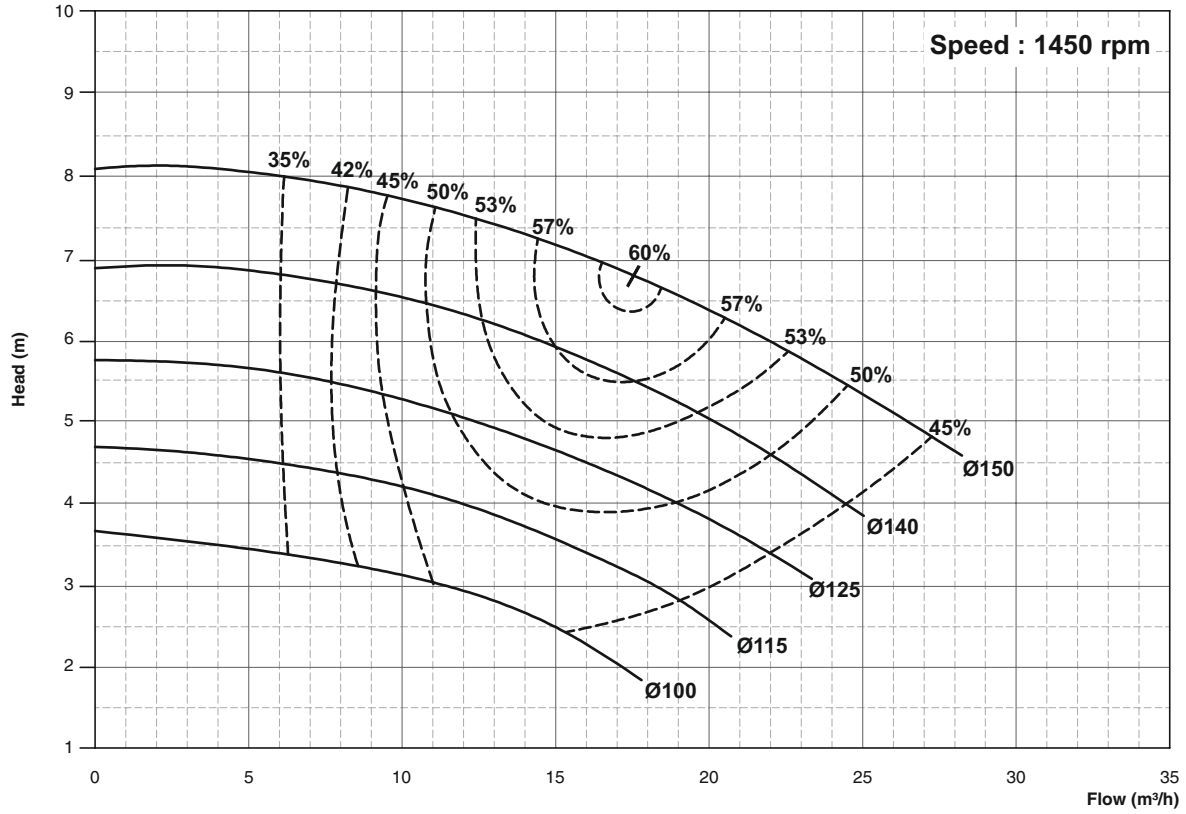




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 6**
(80 x 40 x 150)

Pump Size in mm : **80 x 40**
(Suc x Dis)

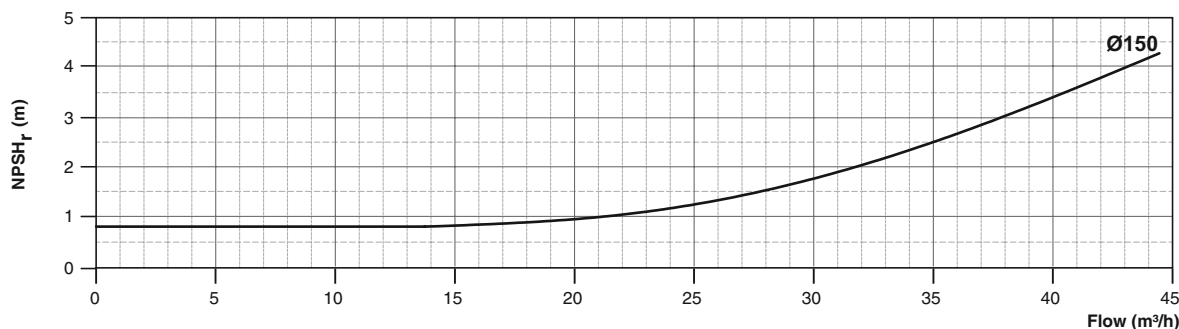
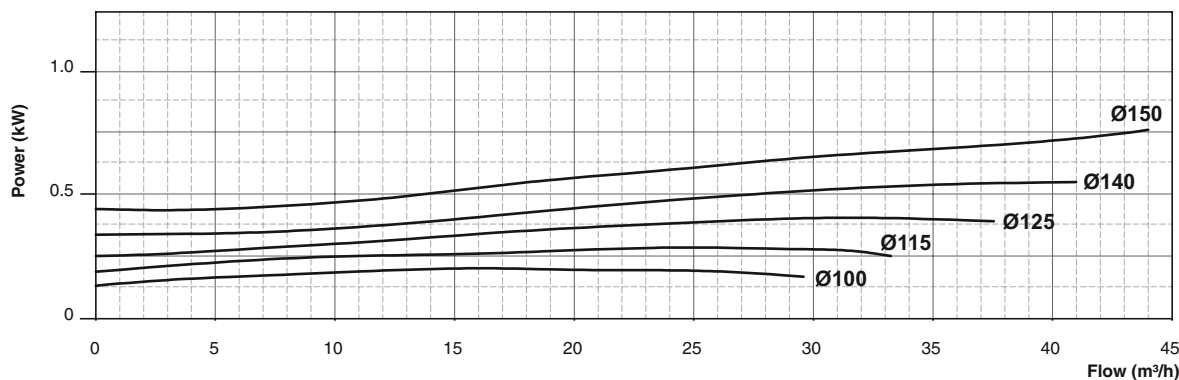
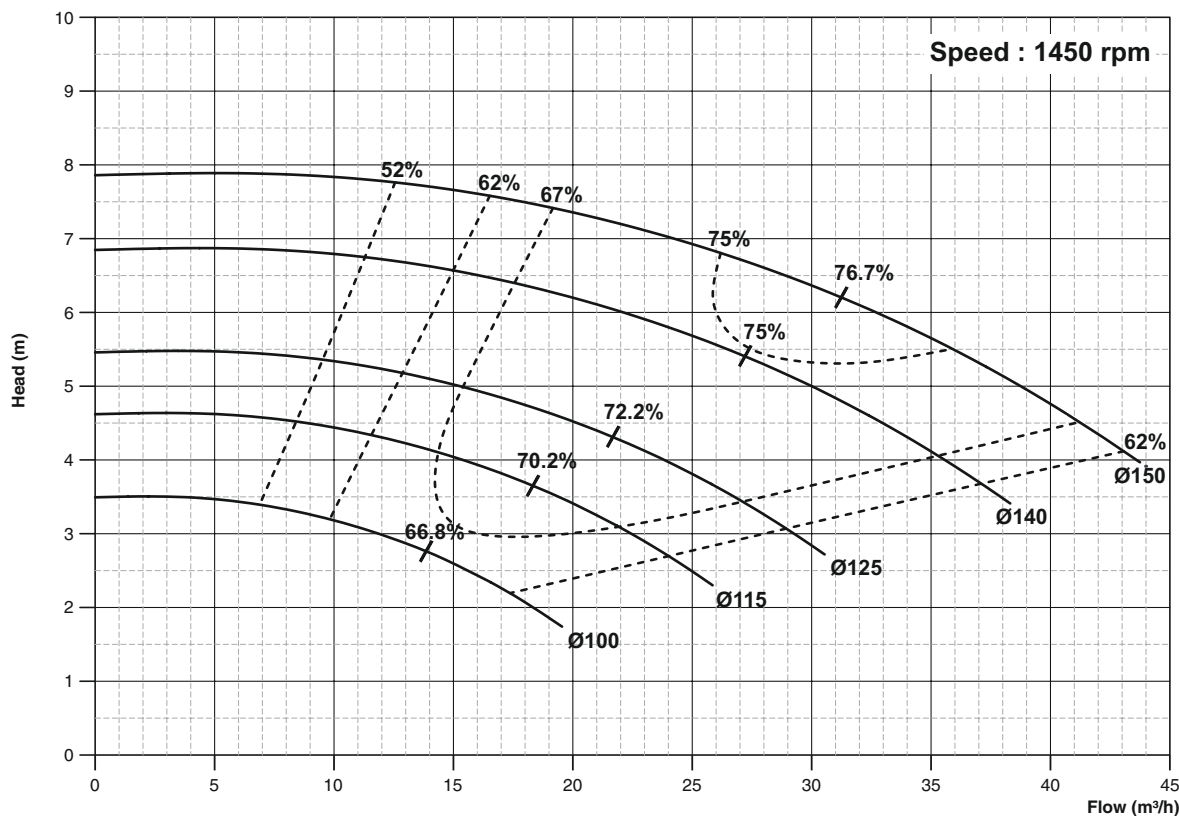




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 6**
(80 x 50 x 150)

Pump Size in mm : **80 x 50**
(Suc x Dis)

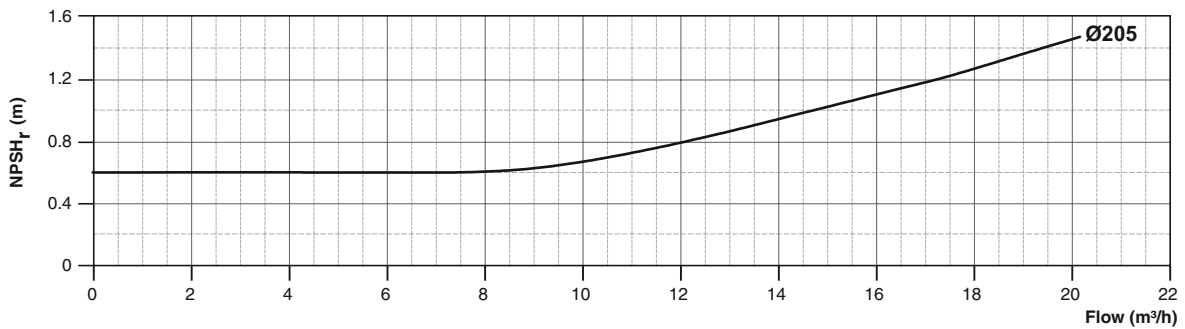
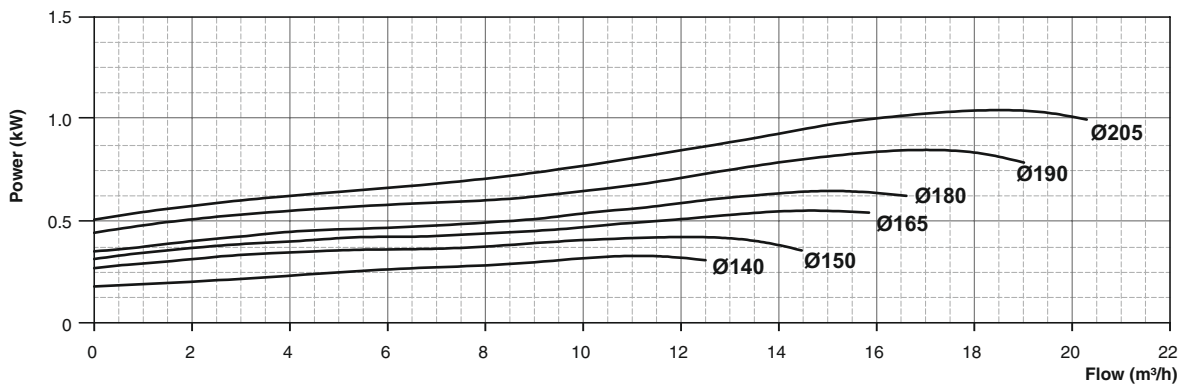
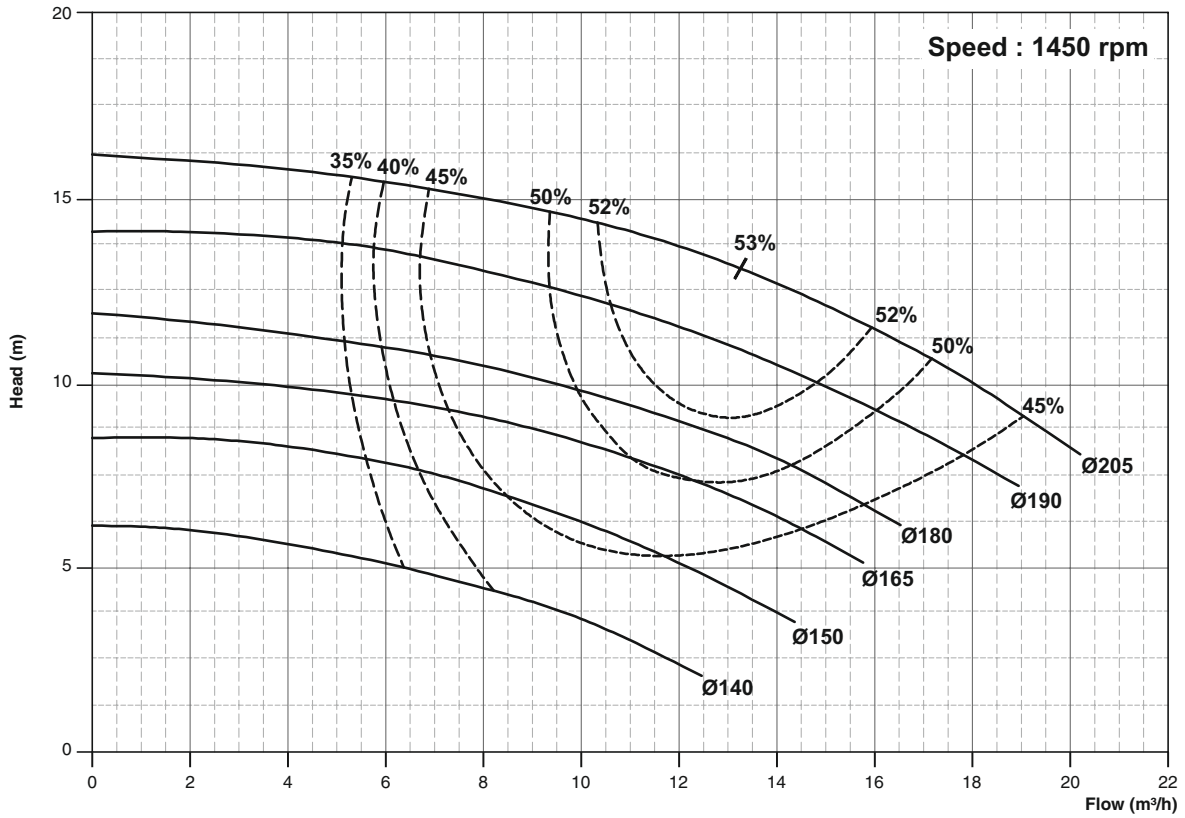




PERFORMANCE CURVE

Pump Model : **ECC - 1.5 x 1 x 8**
(40 x 25 x 200)

Pump Size in mm : **40 x 25**
(Suc x Dis)

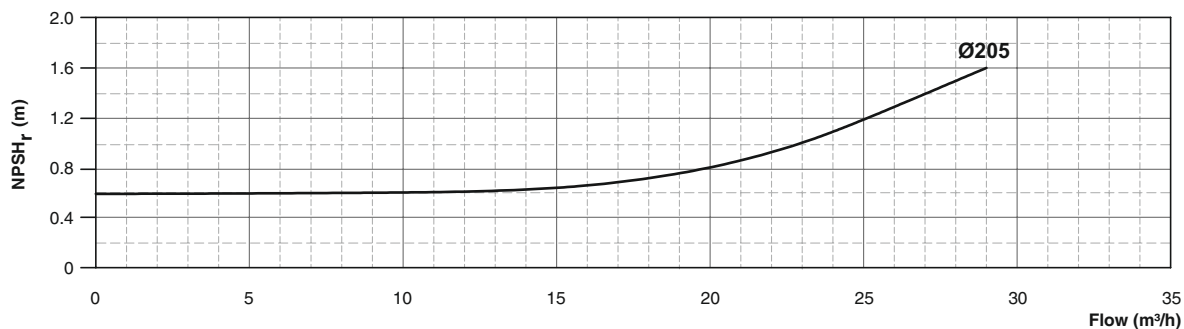
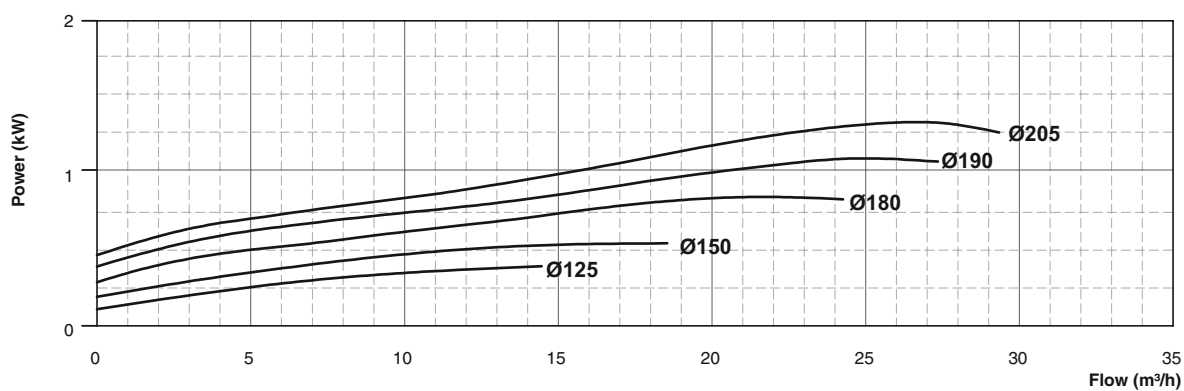
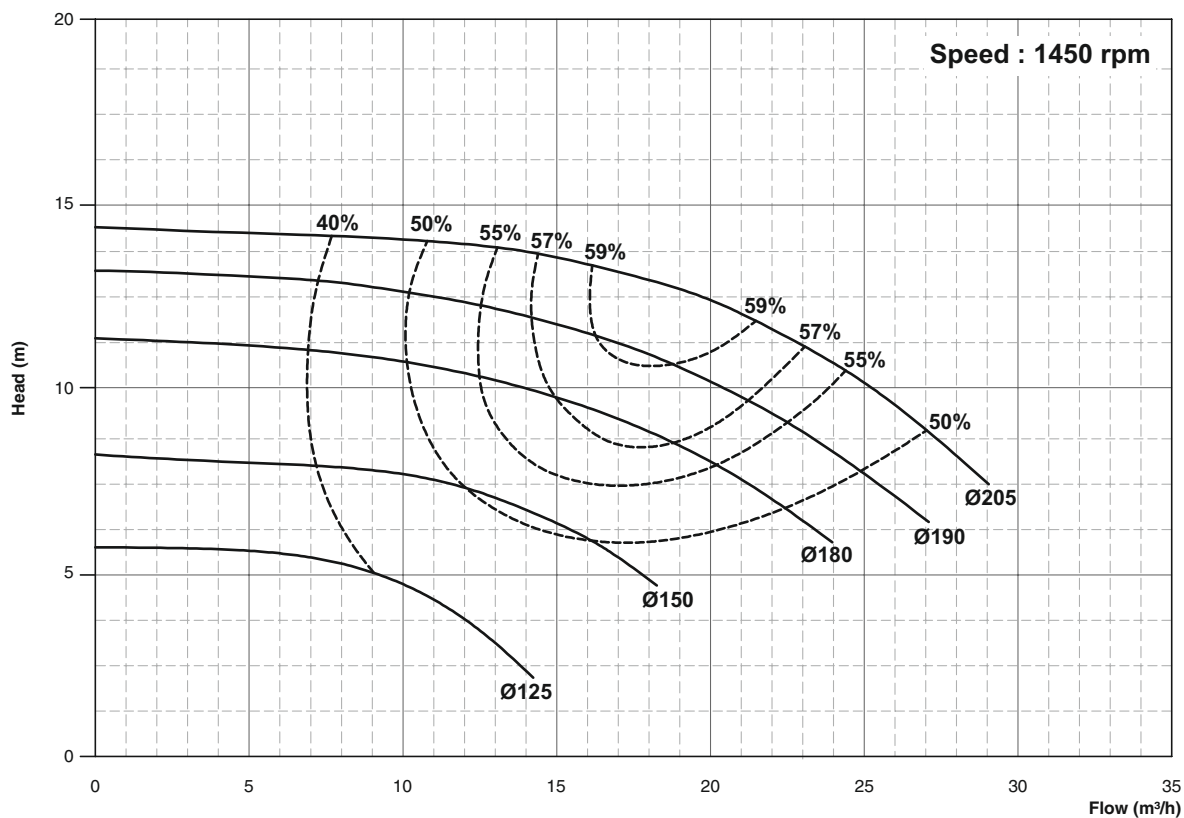




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 8**
(80 x 40 x 200)

Pump Size in mm : **80 x 40**
(Suc x Dis)

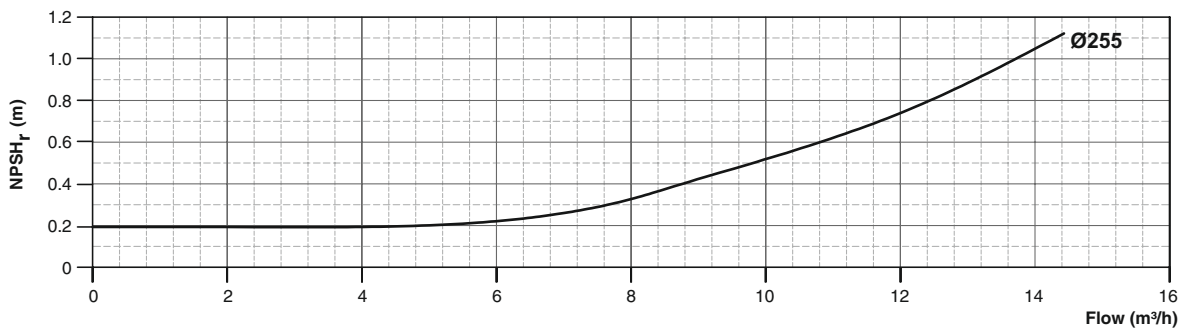
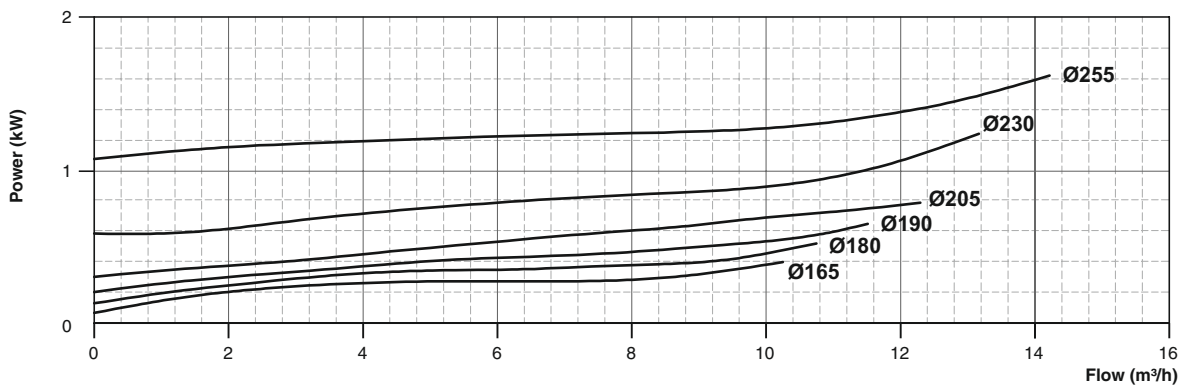
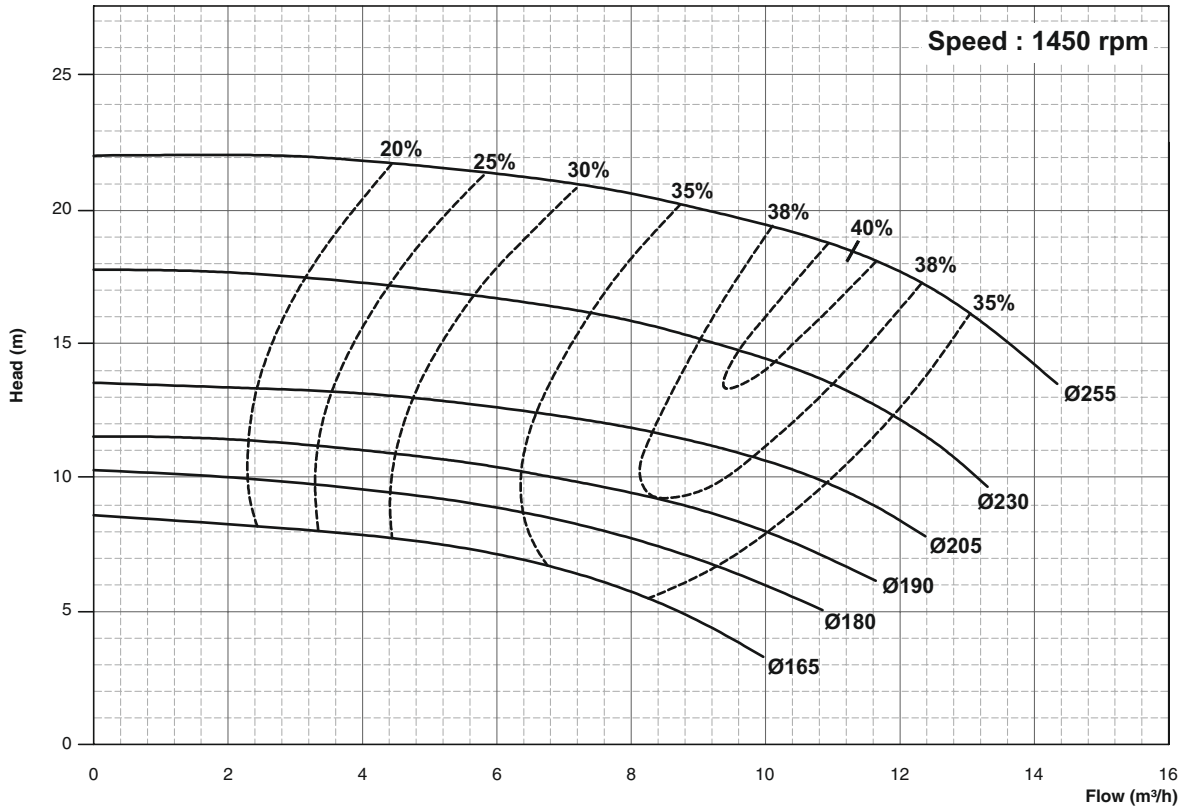




PERFORMANCE CURVE

Pump Model : **ECC - 2 x 1 x 10**
(50 x 25 x 250)

Pump Size in mm : **50 x 25**
(Suc x Dis)

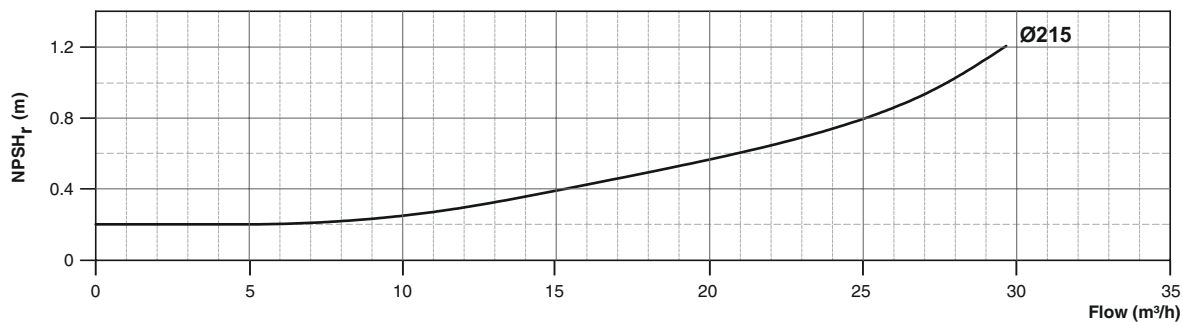
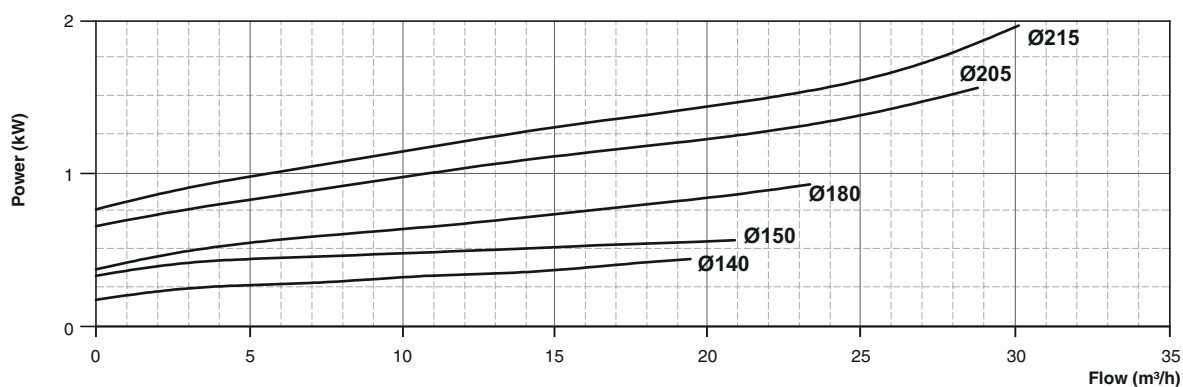
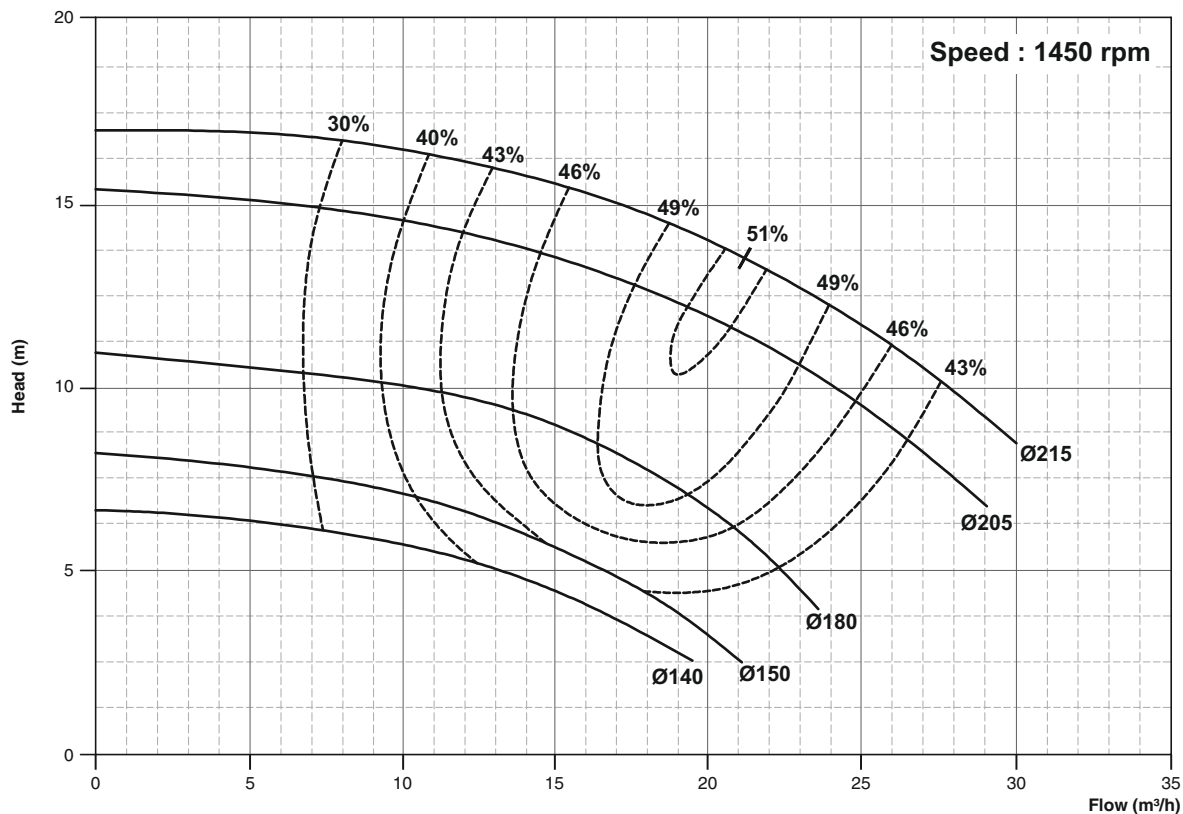




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 8.5**
(80 x 40 x 215)

Pump Size in mm : **80 x 40**
(Suc x Dis)

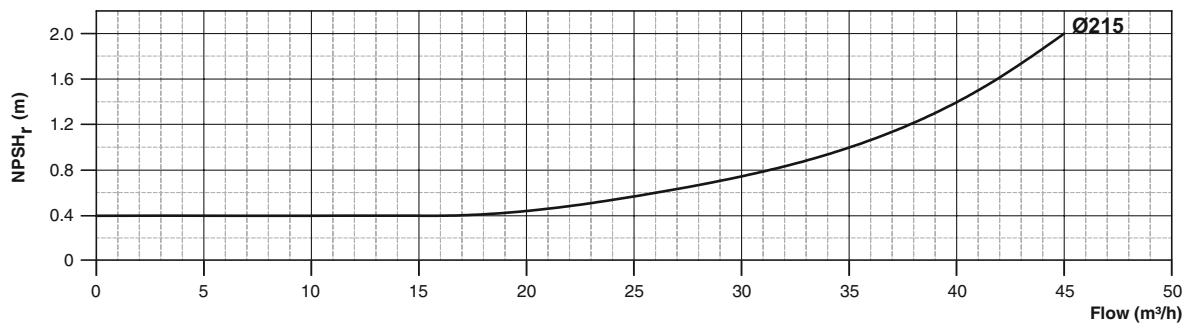
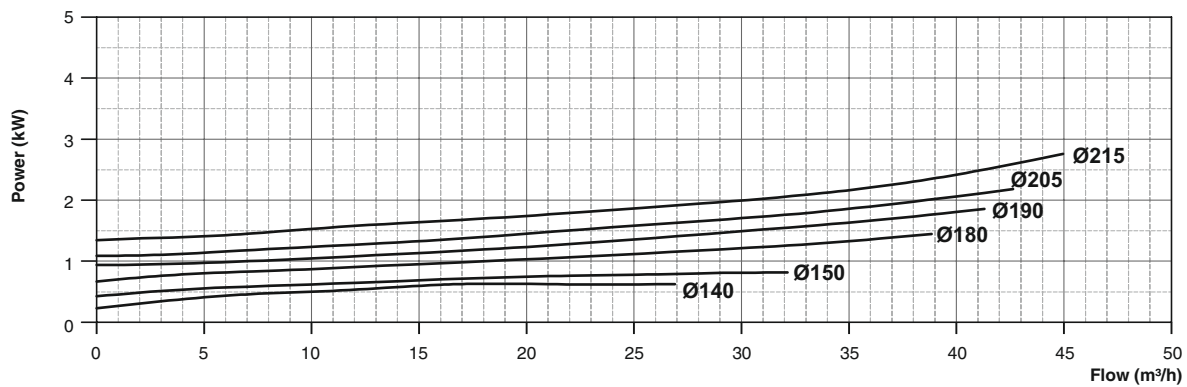
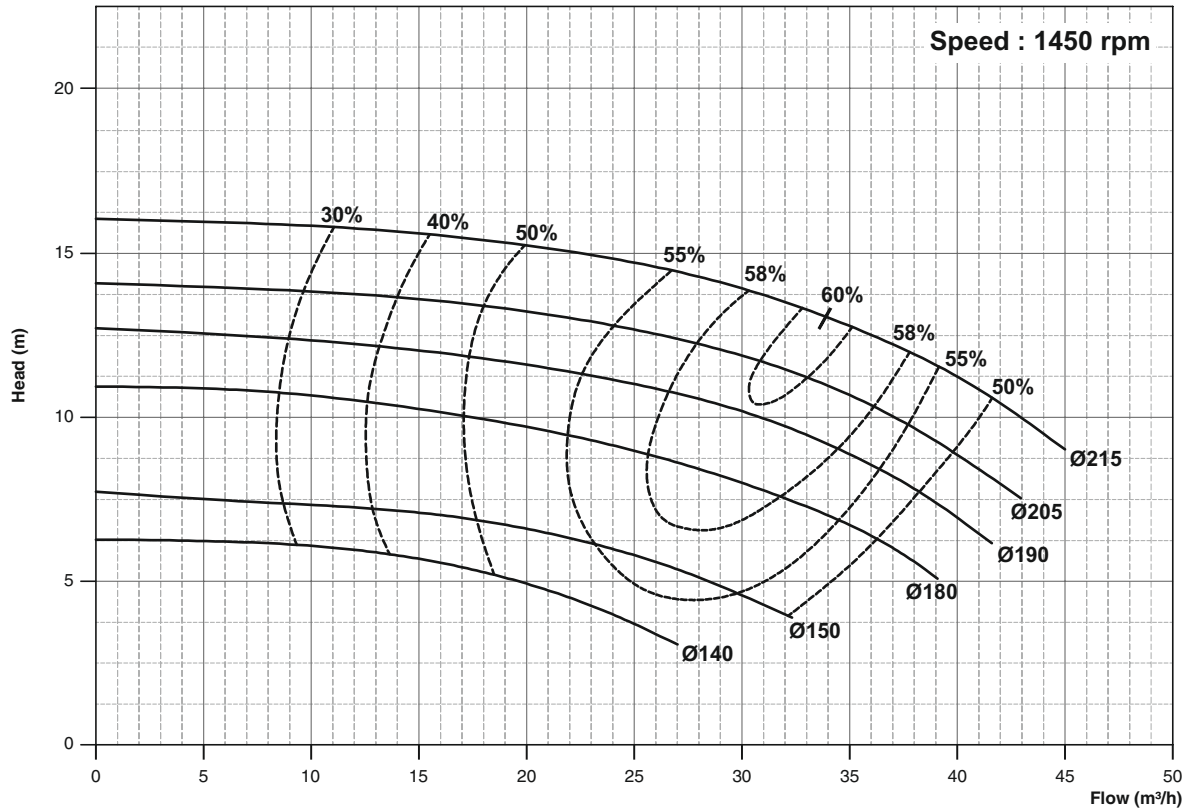




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 8.5**
(80 x 50 x 215)

Pump Size in mm : **80 x 50**
(Suc x Dis)

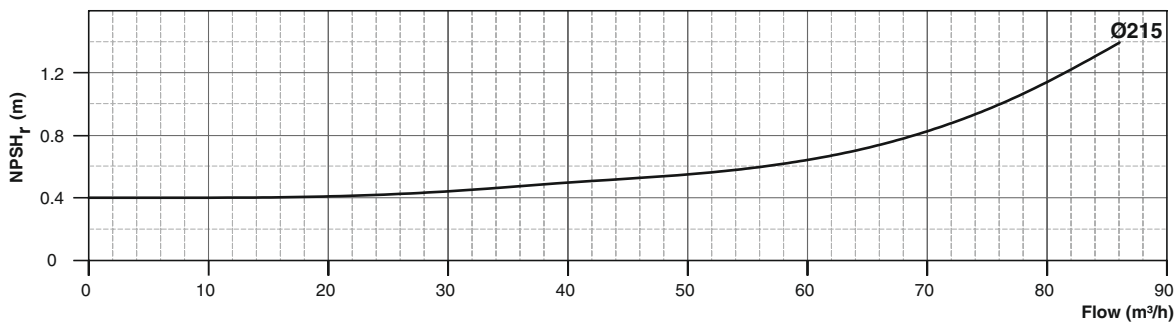
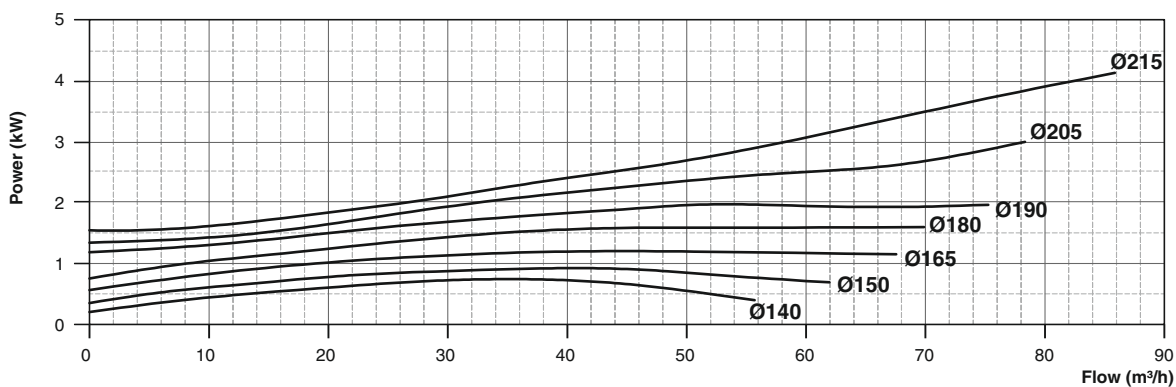
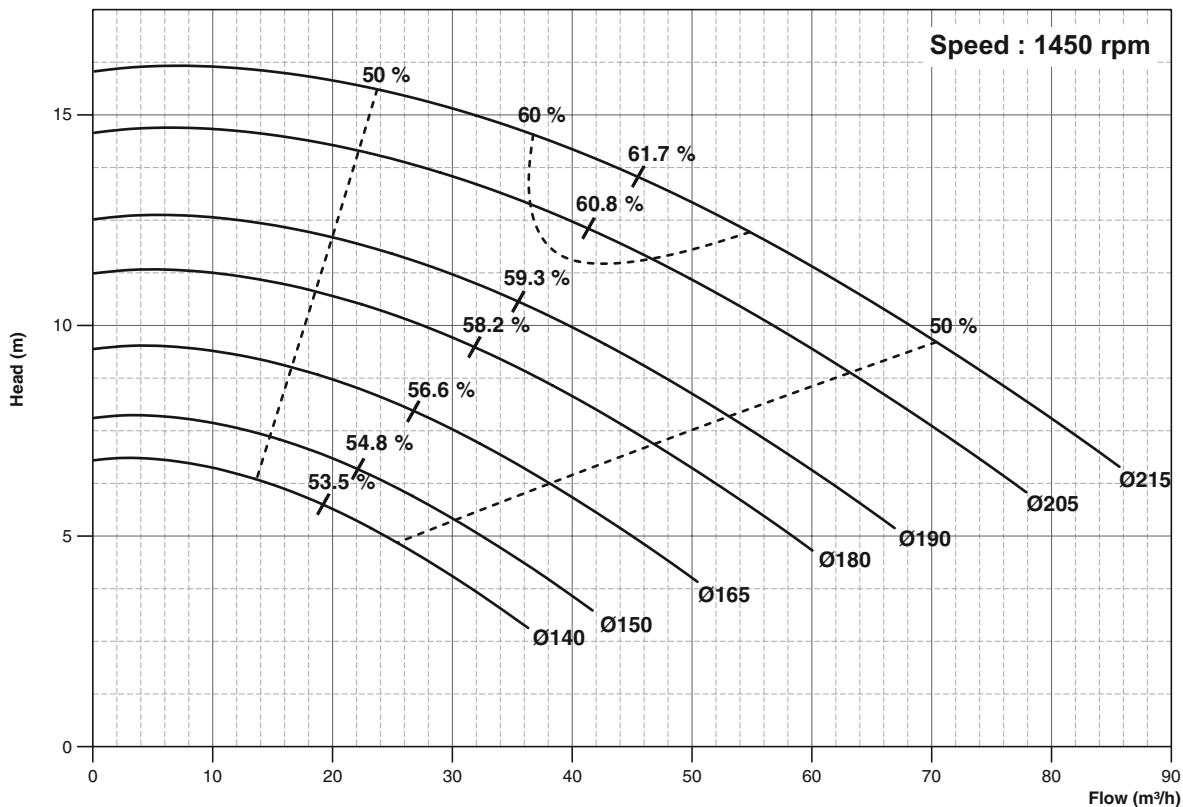




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 8.5**
(100 x 80 x 215)

Pump Size in mm : **100 x 80**
(Suc x Dis)

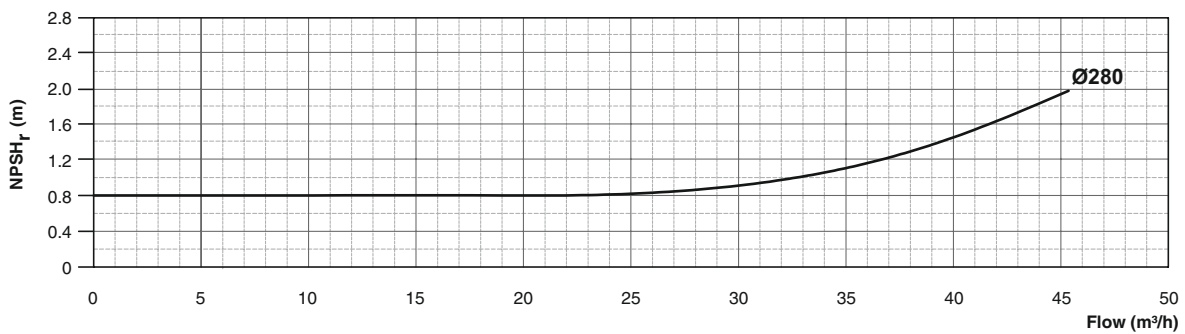
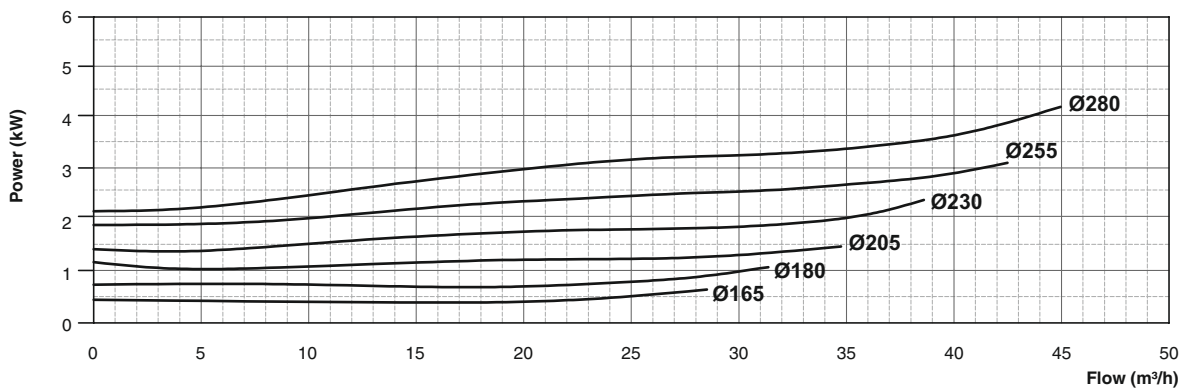
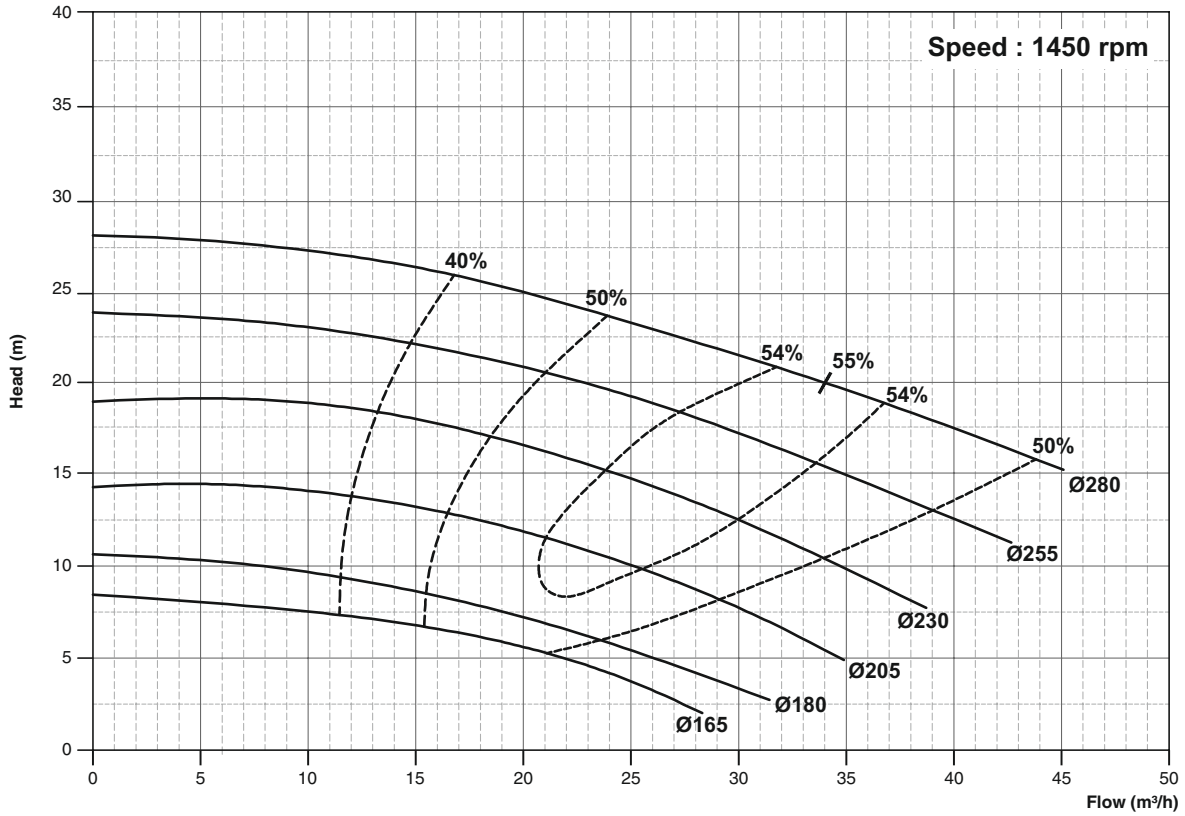




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 11**
(80 x 40 x 280)

Pump Size in mm : **80 x 40**
(Suc x Dis)

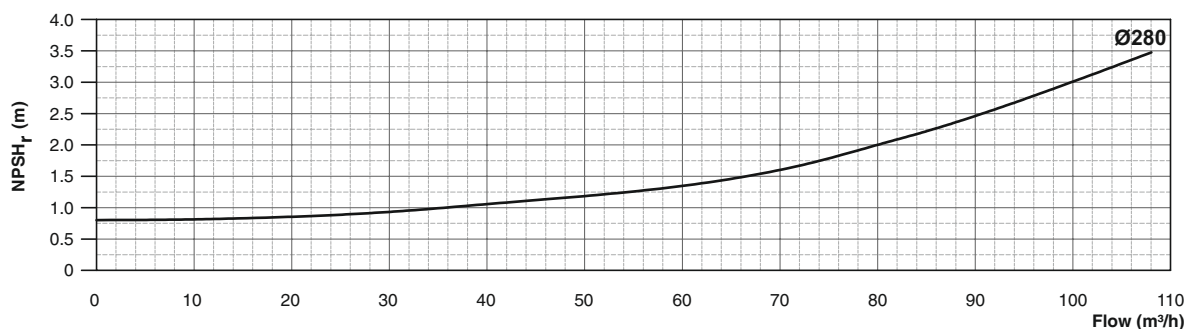
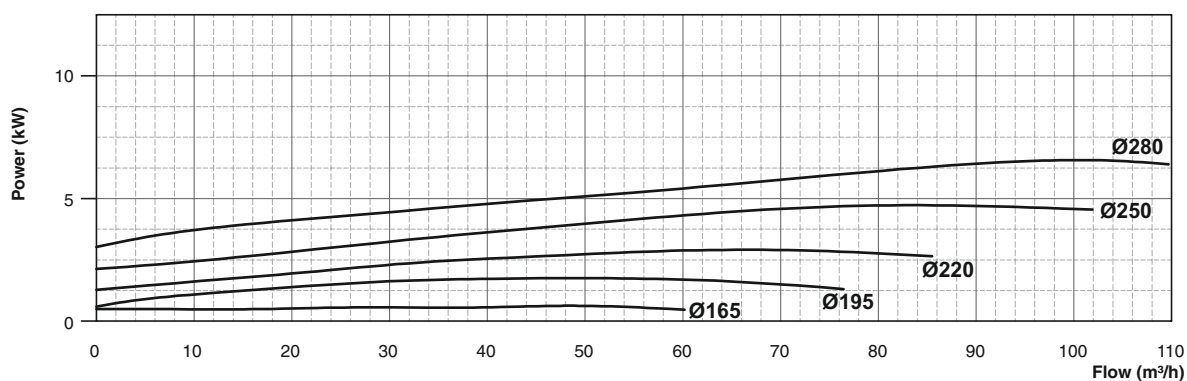
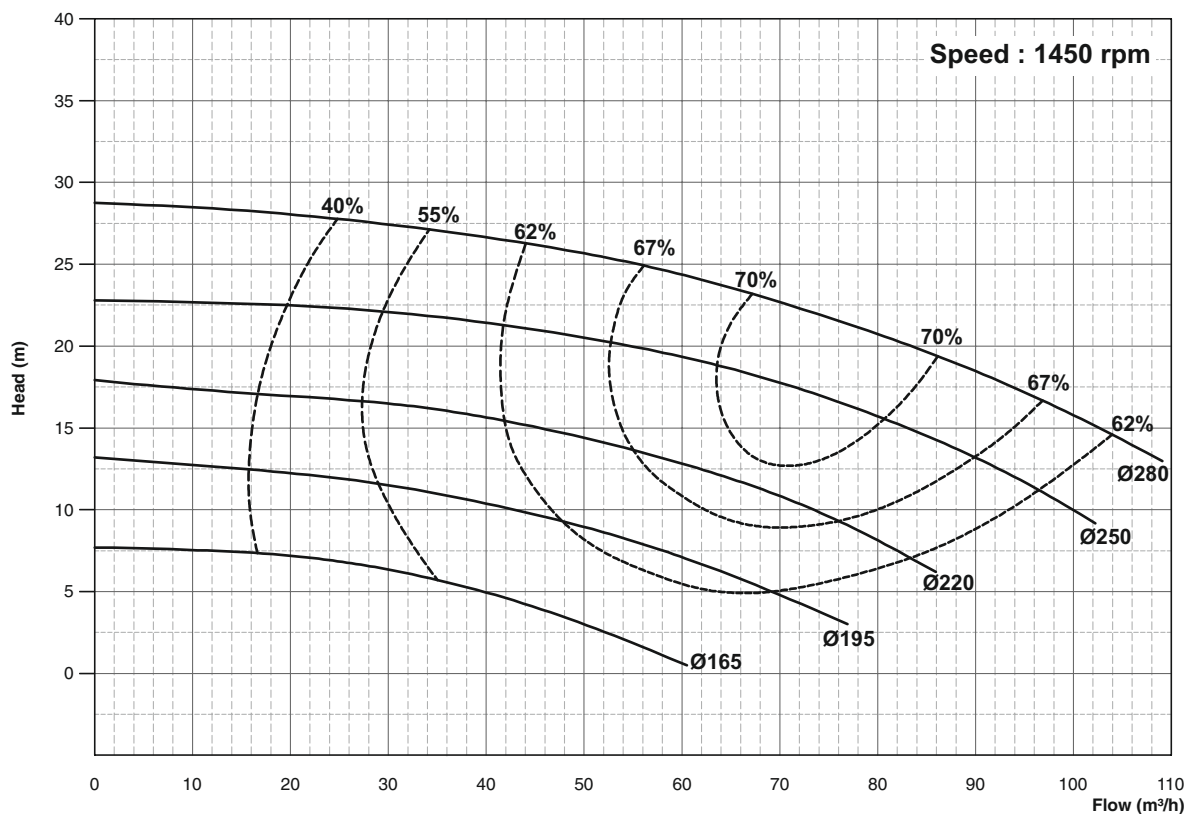




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 11**
(80 x 50 x 280)

Pump Size in mm : **80 x 50**
(Suc x Dis)

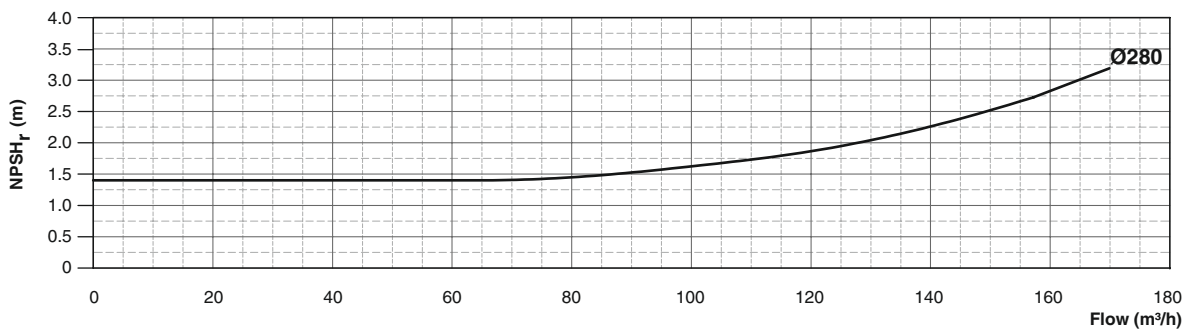
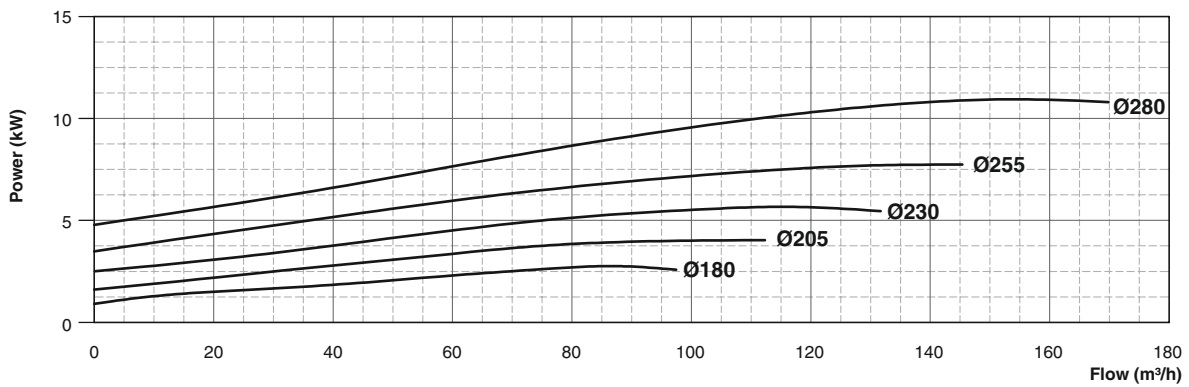
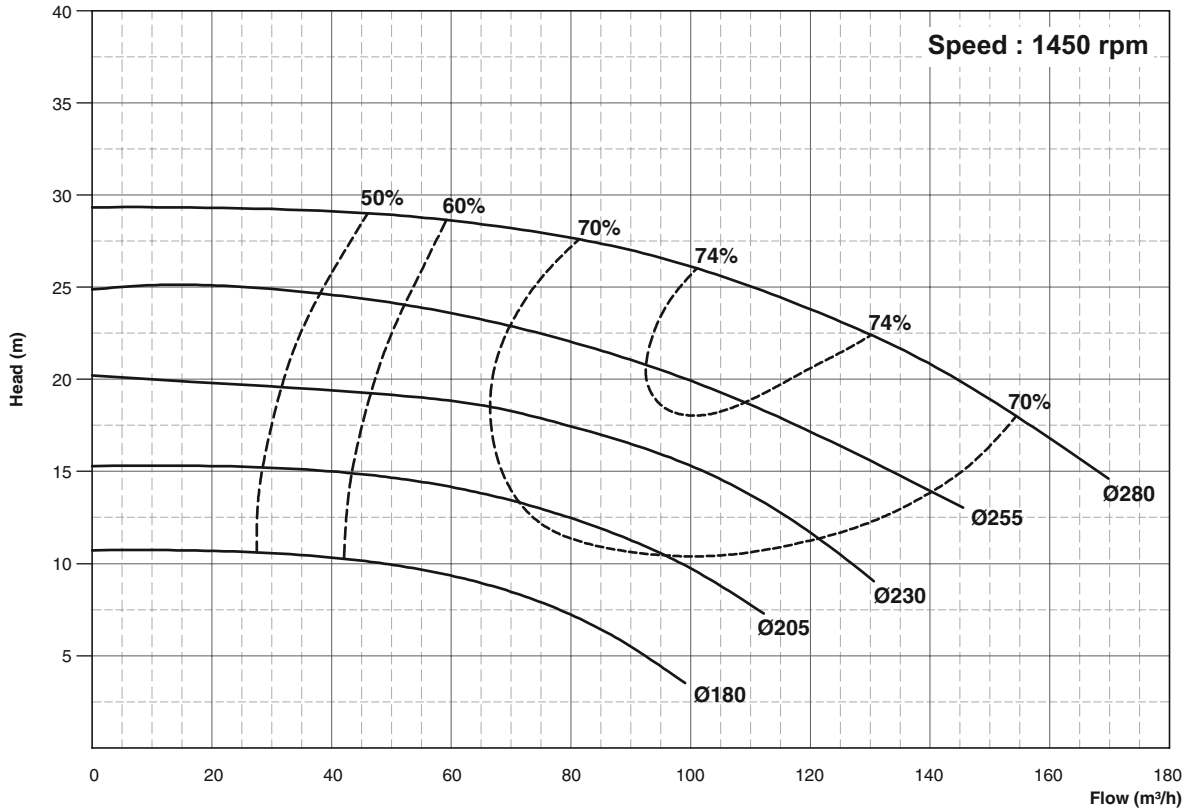




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 11**
(100 x 80 x 280)

Pump Size in mm : **100 x 80**
(Suc x Dis)

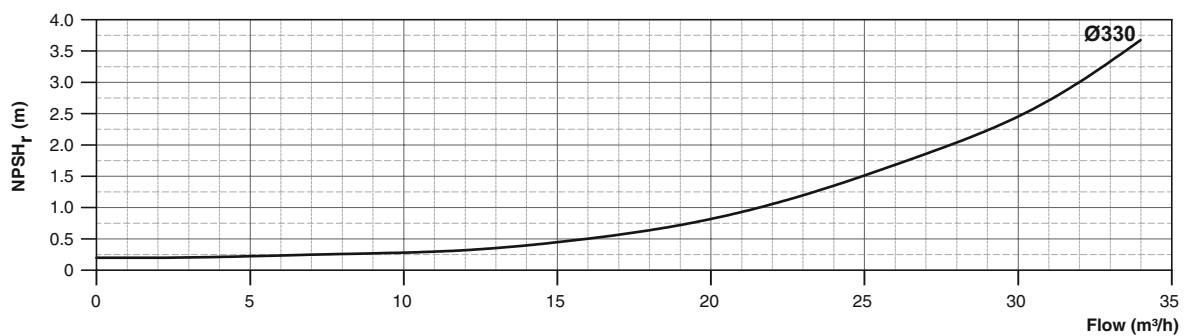
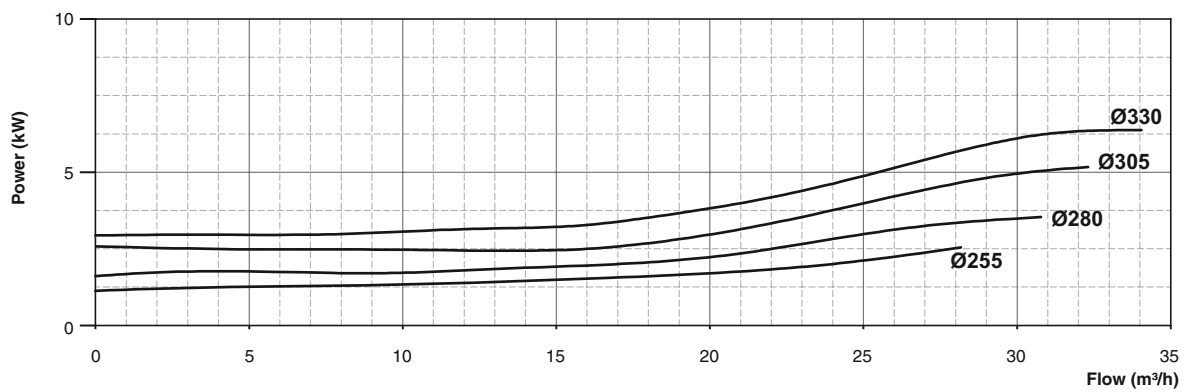
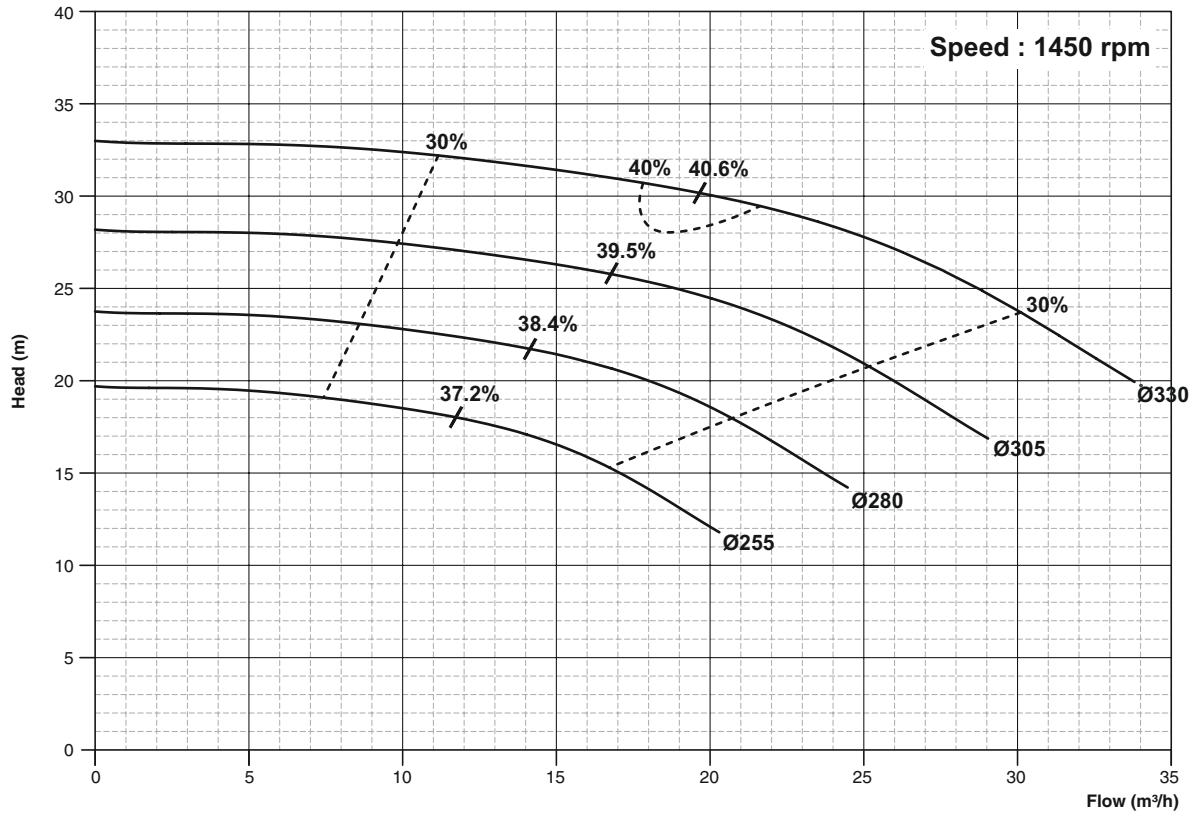




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 13**
(80 x 40 x 330)

Pump Size in mm : **80 x 40**
(Suc x Dis)

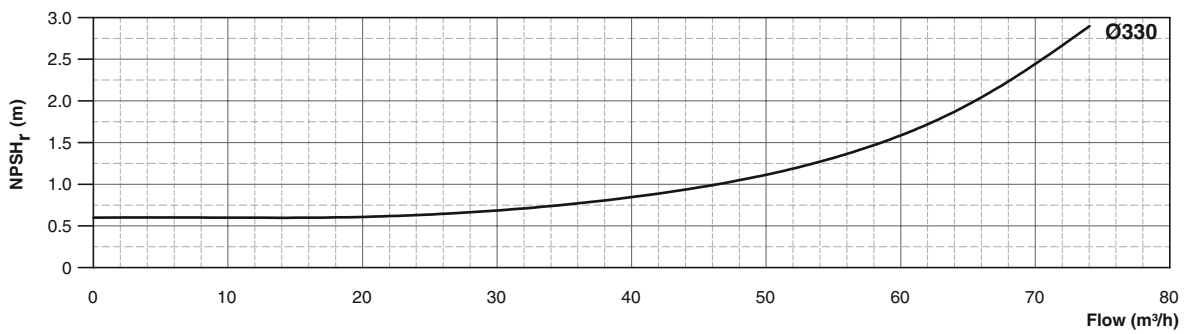
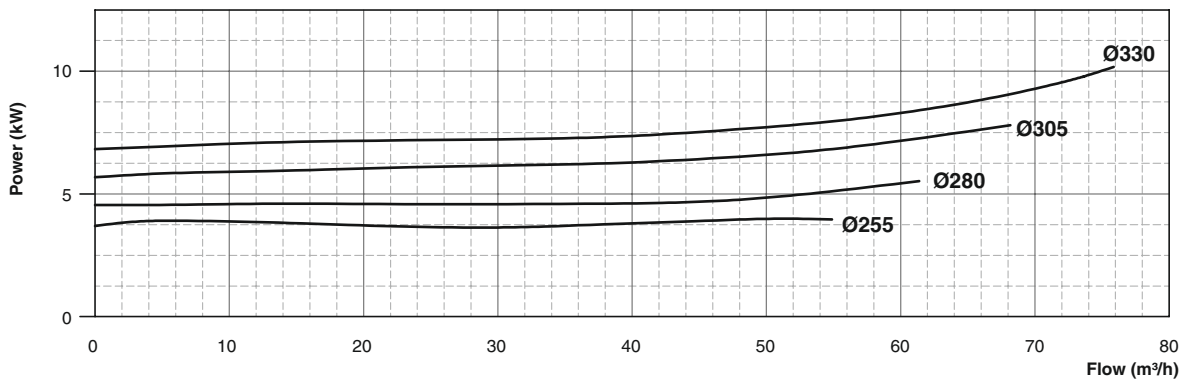
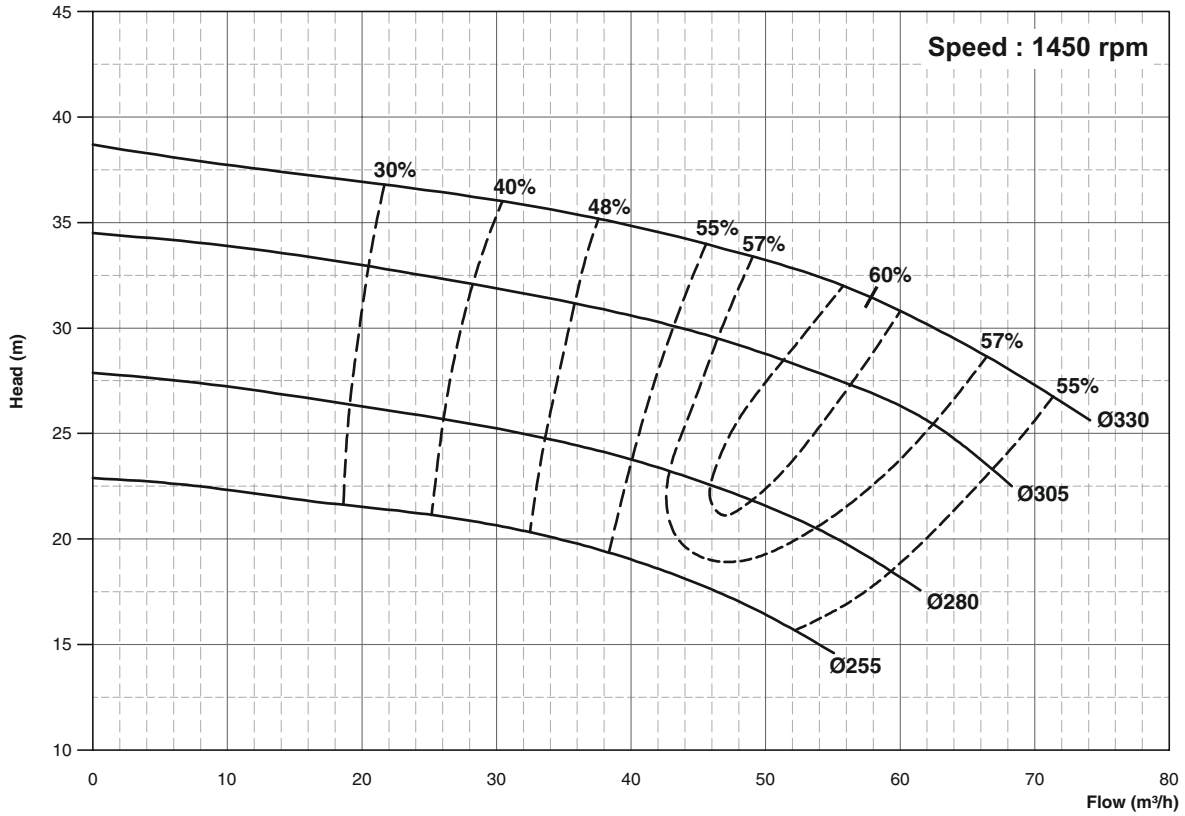




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 13**
(80 x 50 x 330)

Pump Size in mm : **80 x 50**
(Suc x Dis)

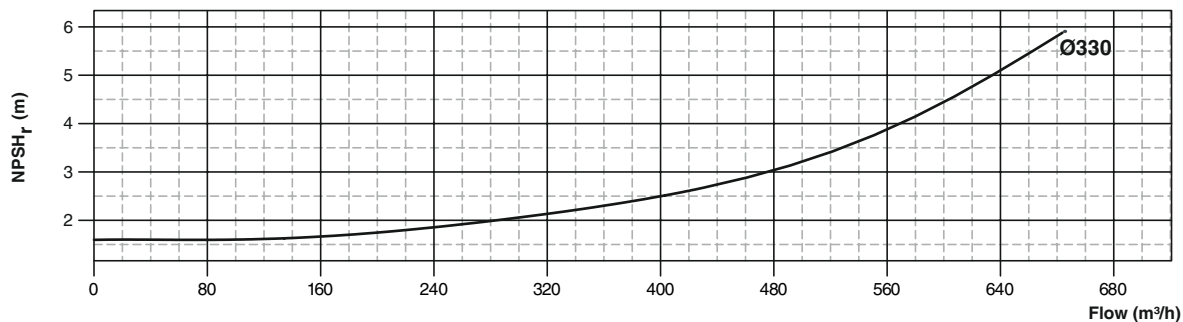
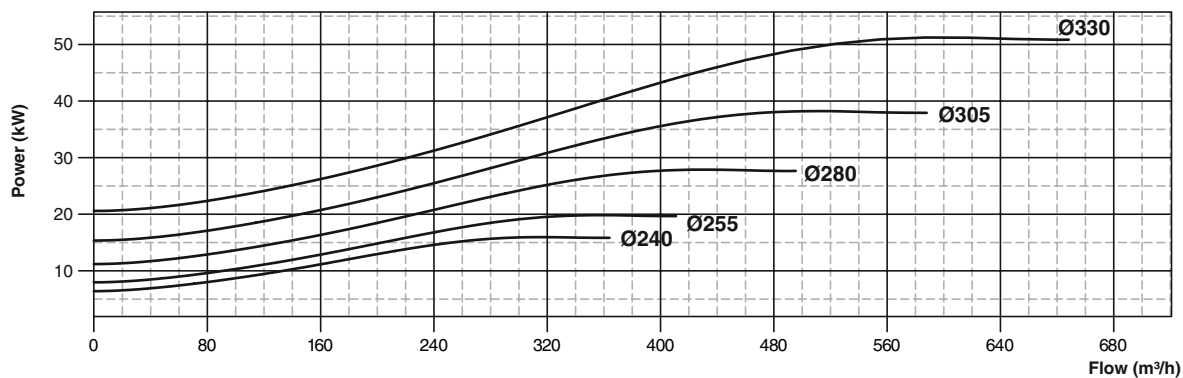
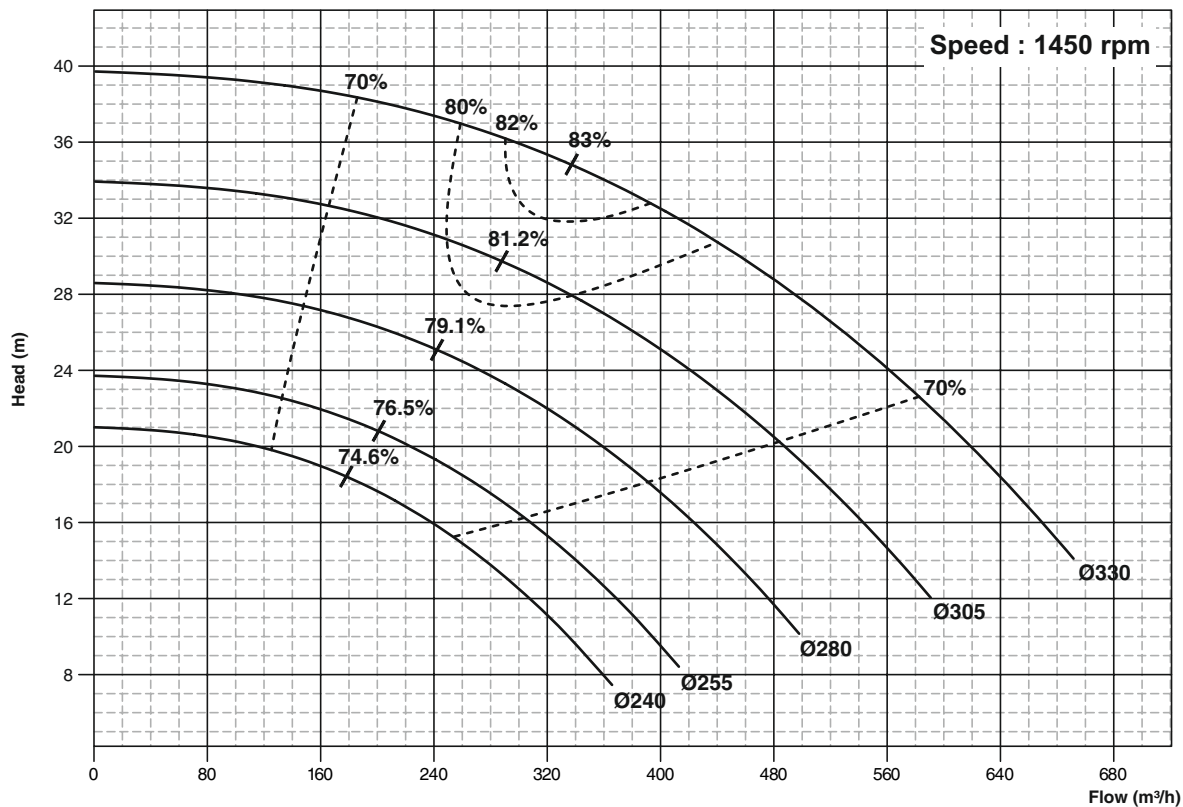




PERFORMANCE CURVE

Pump Model : **ECC - 8 x 6 x 13**
(200 x 150 x 330)

Pump Size in mm : **200 x 150**
(Suc x Dis)

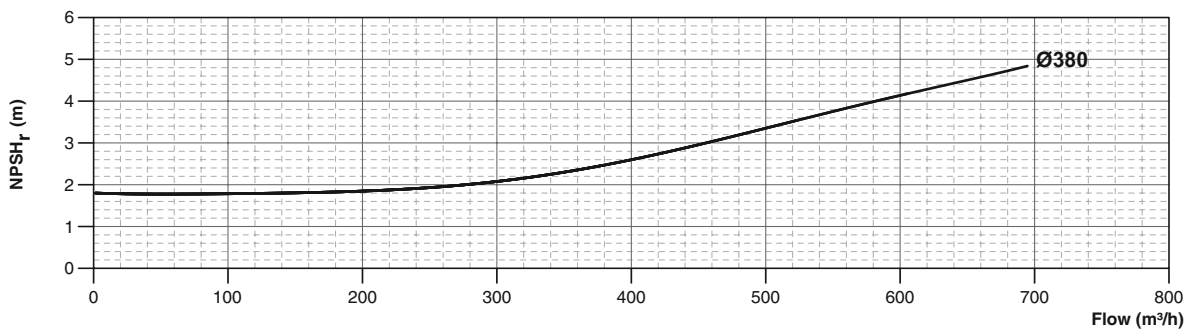
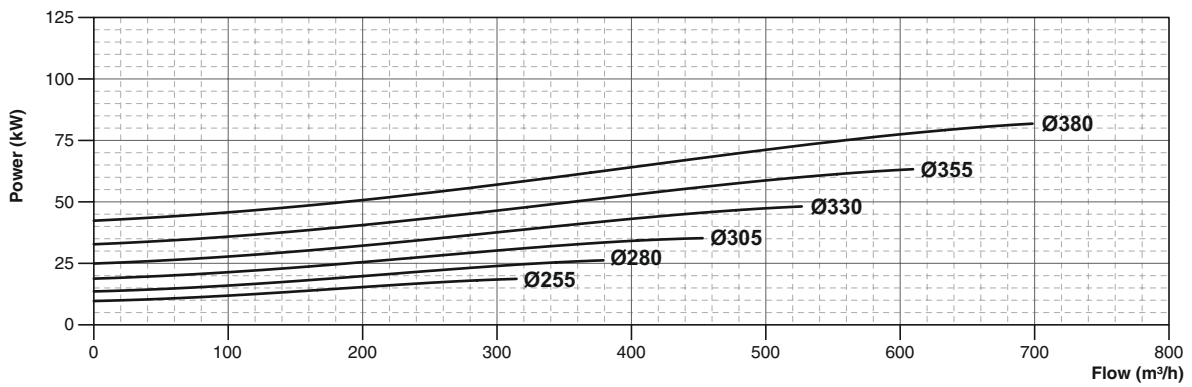
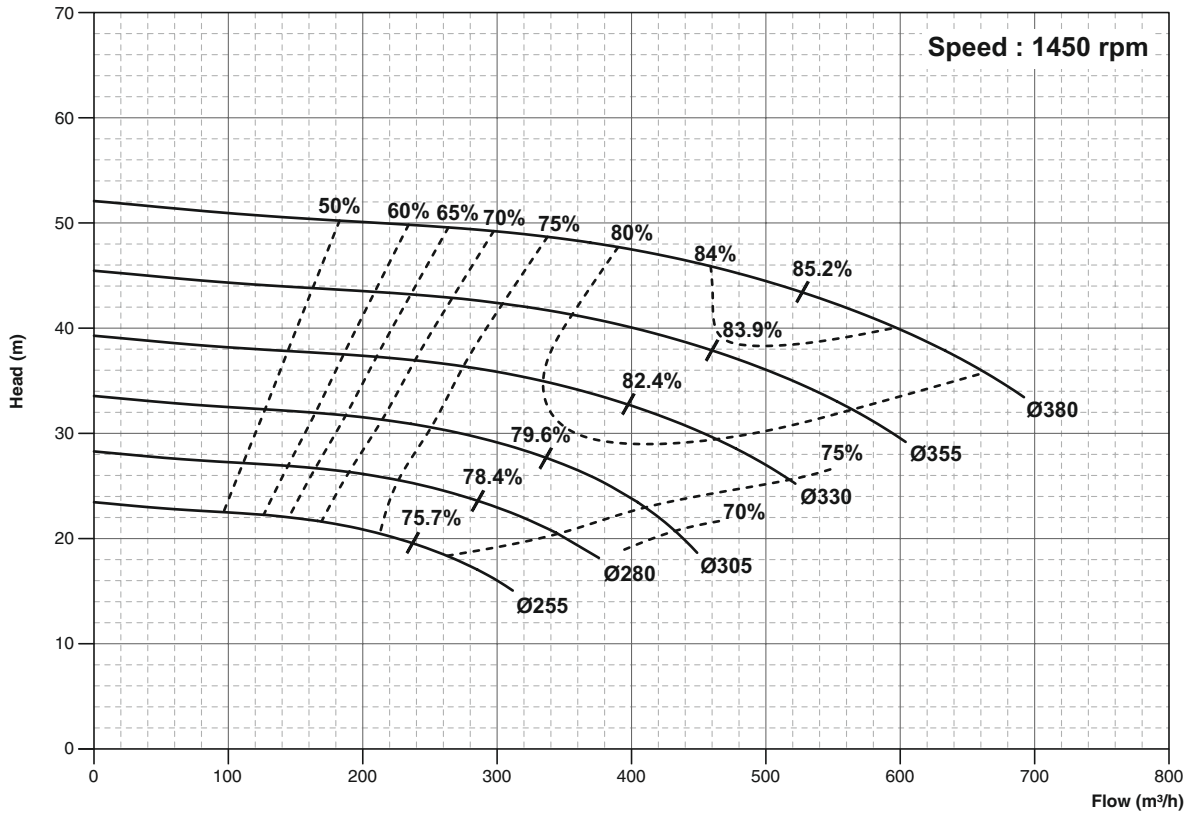




PERFORMANCE CURVE

Pump Model : **ECC - 10 x 8 x 15**
(250 x 200 x 380)

Pump Size in mm : **250 x 200**
(Suc x Dis)

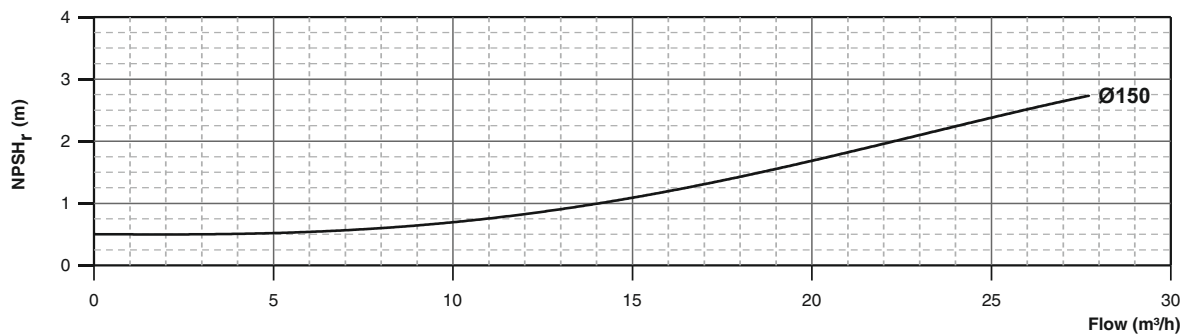
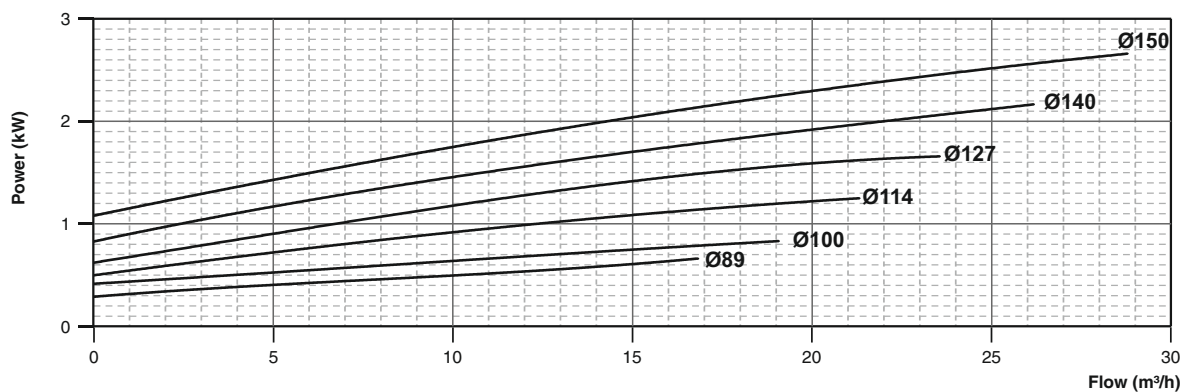
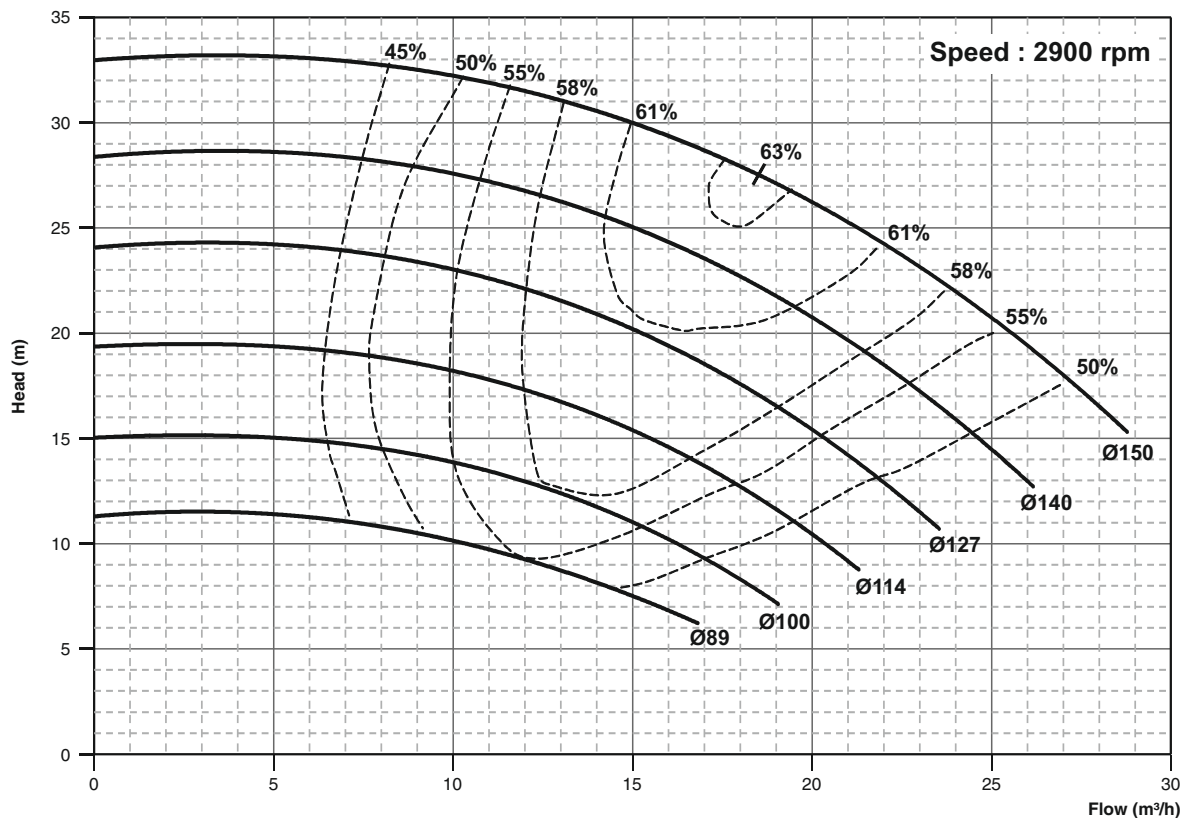




PERFORMANCE CURVE

Pump Model : **ECC - 1.5 x 1 x 6**
(40 x 25 x 150)

Pump Size in mm : **40 x 25**
(Suc x Dis)

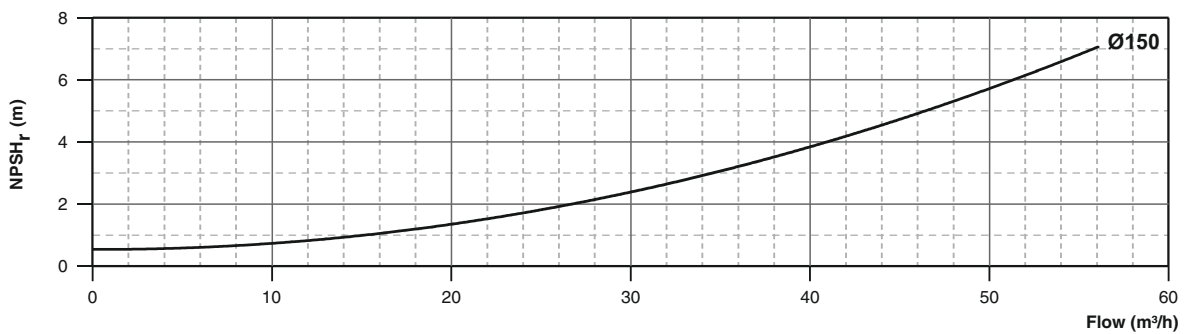
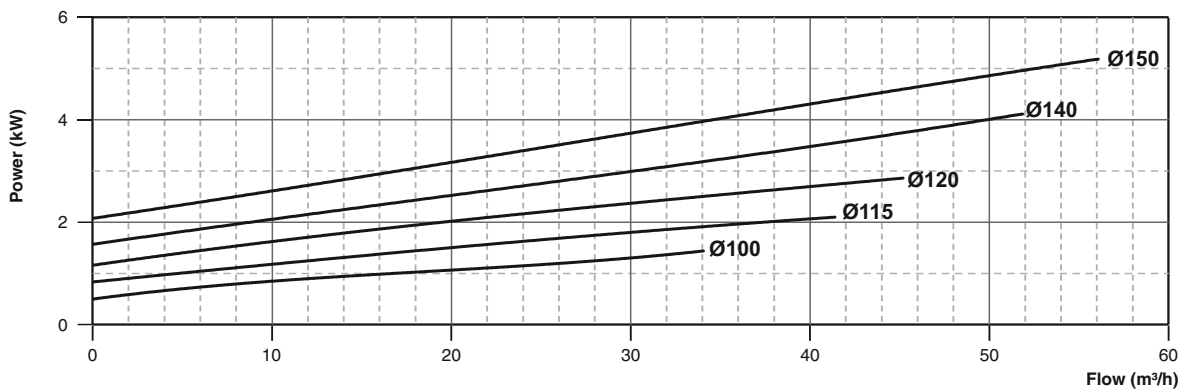
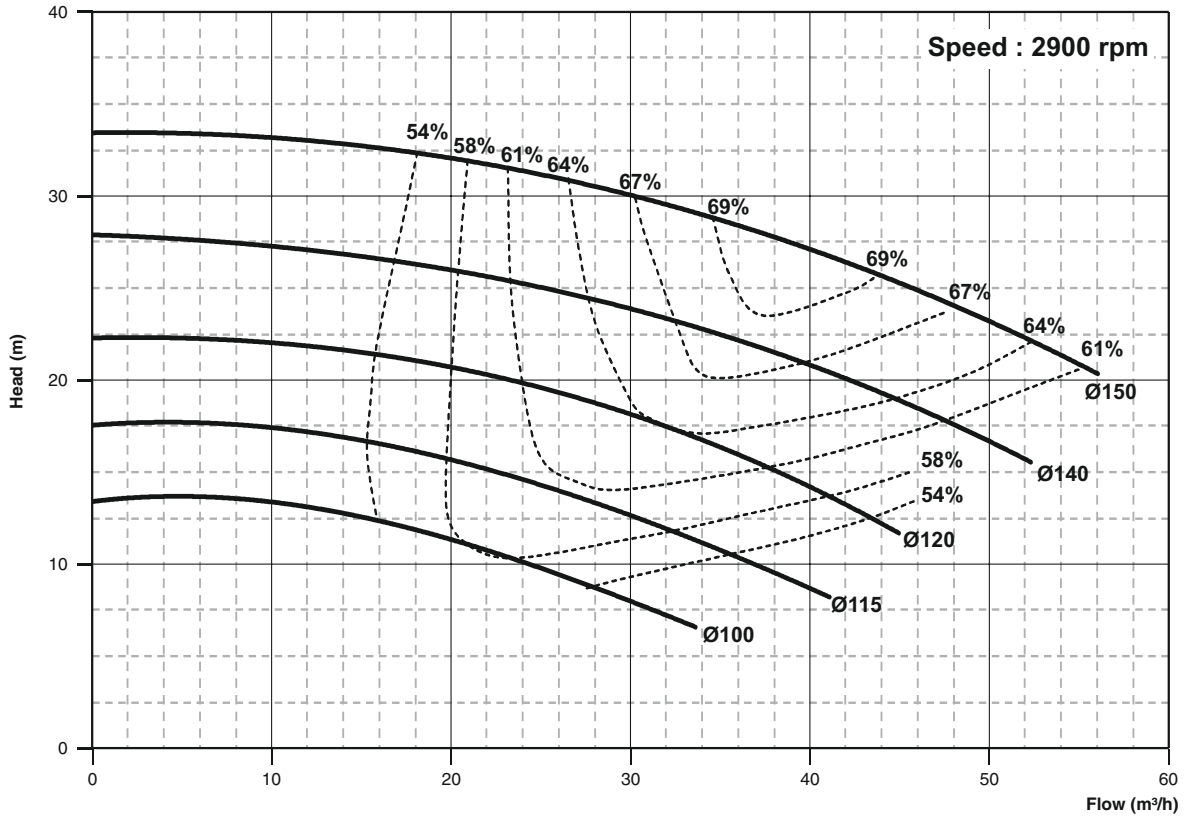




PERFORMANCE CURVE

Pump Model : ECC - 3 x 1.5 x 6
(80 x 40 x 150)

Pump Size in mm : 80 x 40
(Suc x Dis)

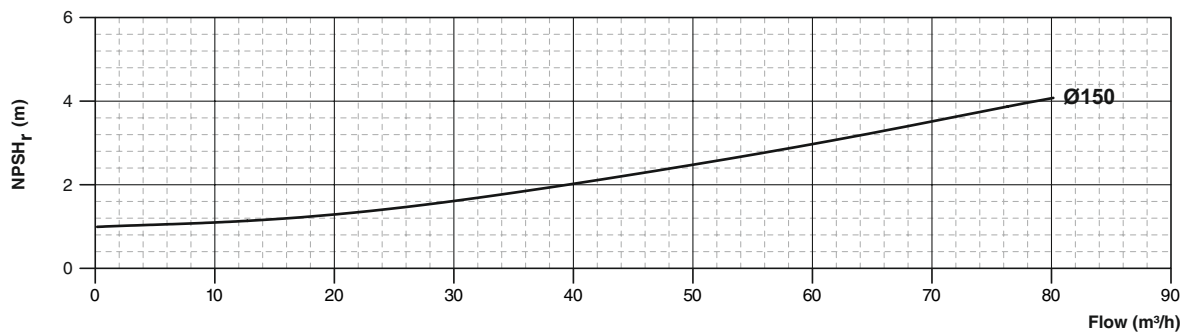
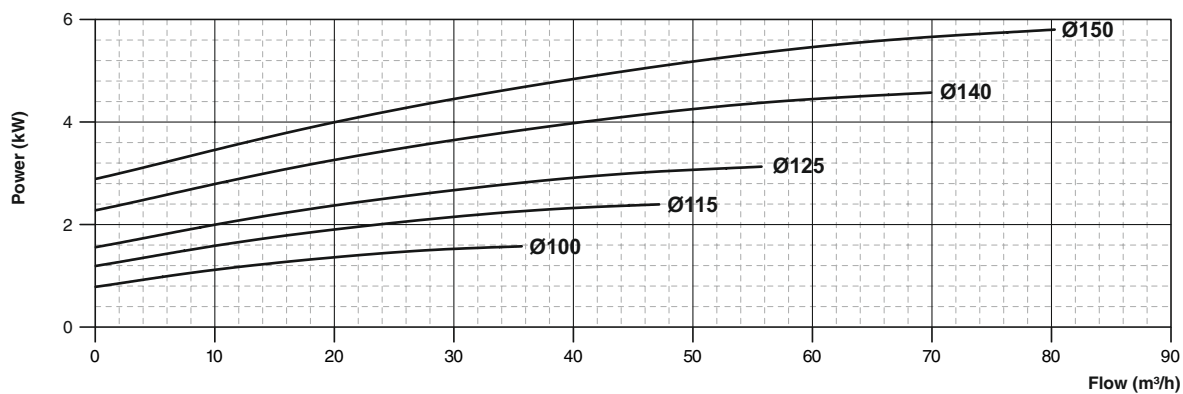
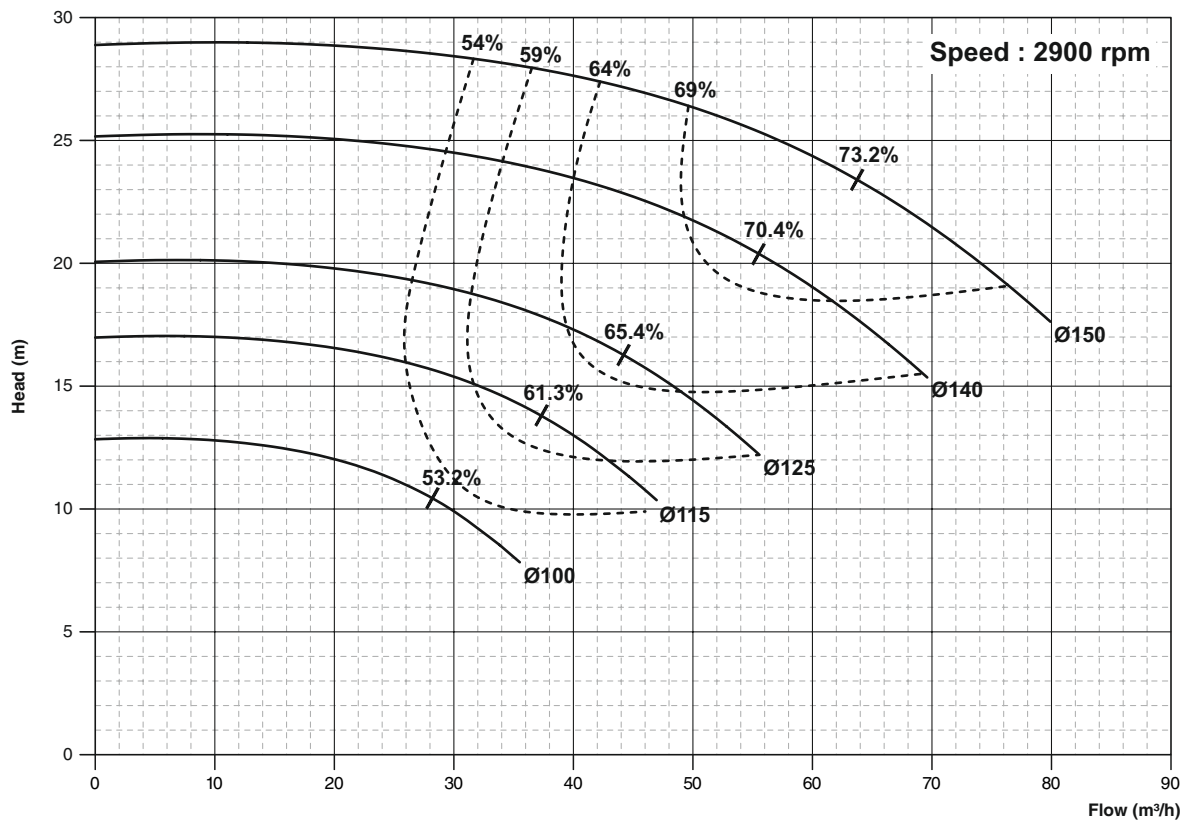




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 6**
(80 x 50 x 150)

Pump Size in mm : **80 x 50**
(Suc x Dis)

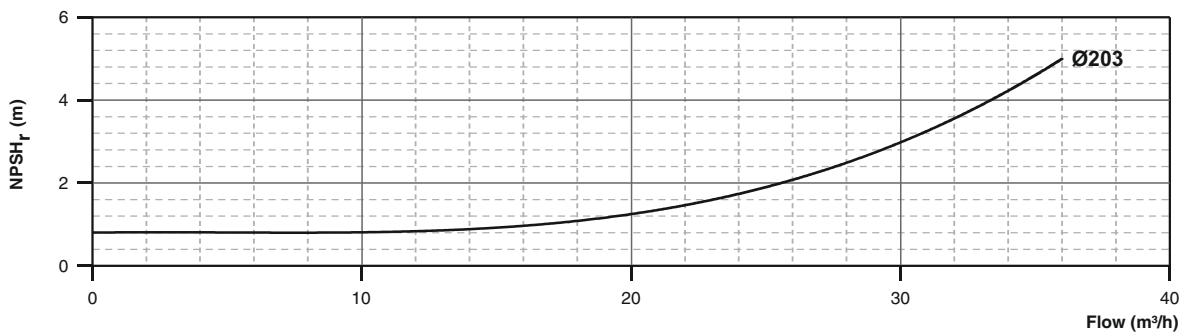
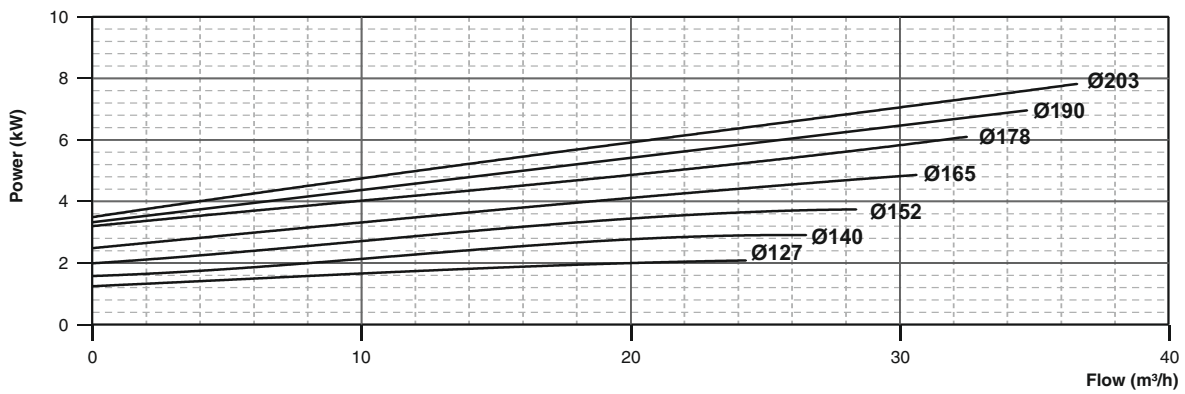
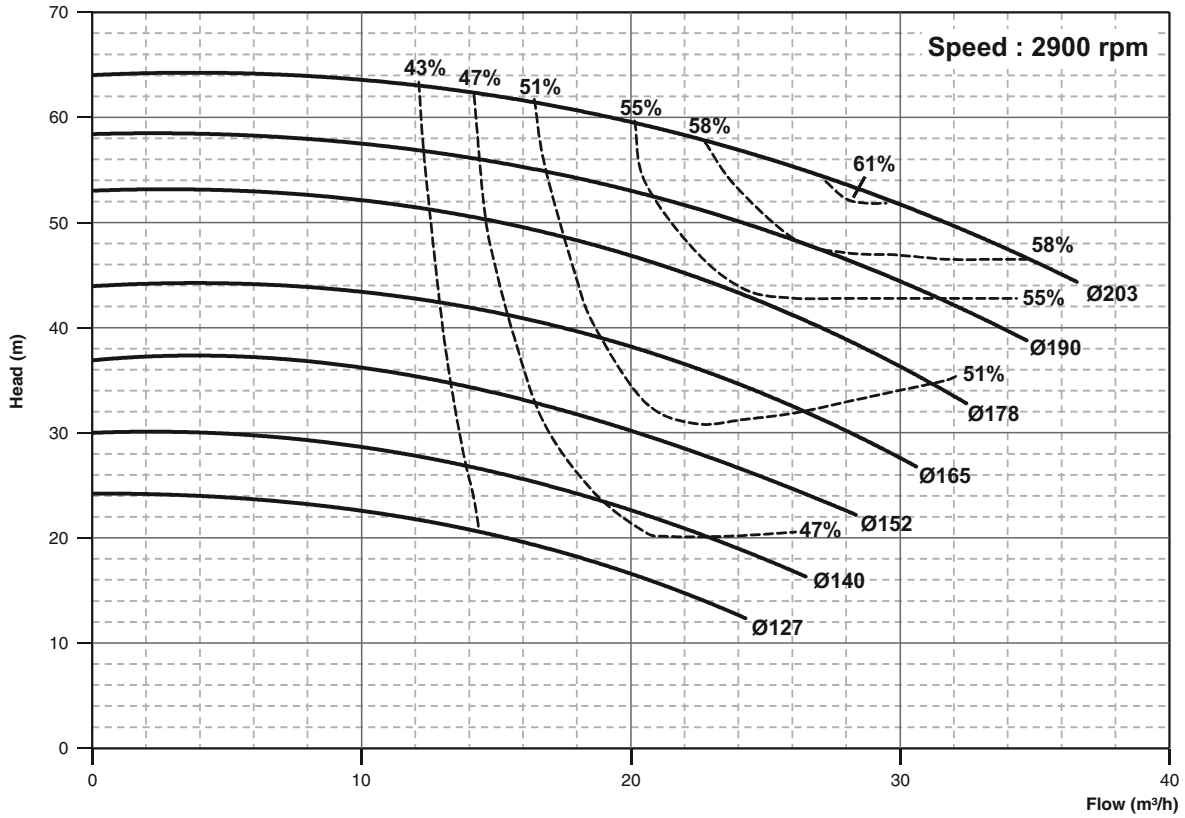




PERFORMANCE CURVE

Pump Model : **ECC - 1.5 x 1 x 8**
(40 x 25 x 200)

Pump Size in mm : **40 x 25**
(Suc x Dis)

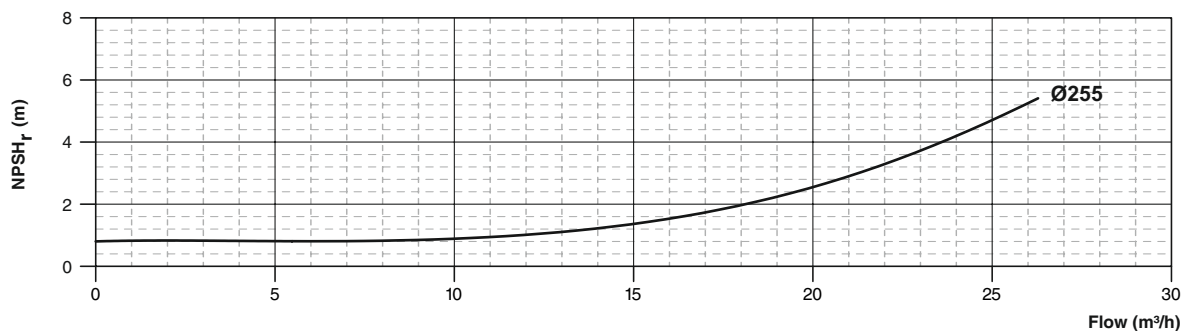
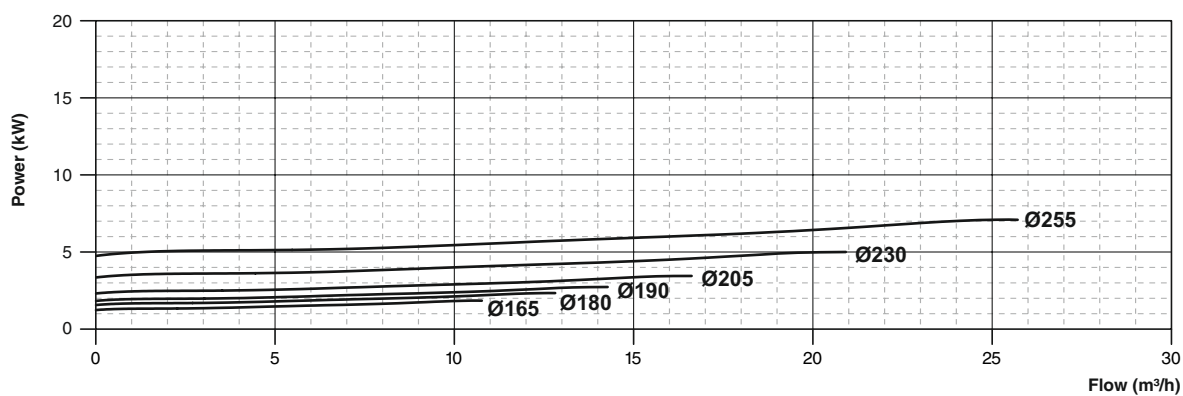
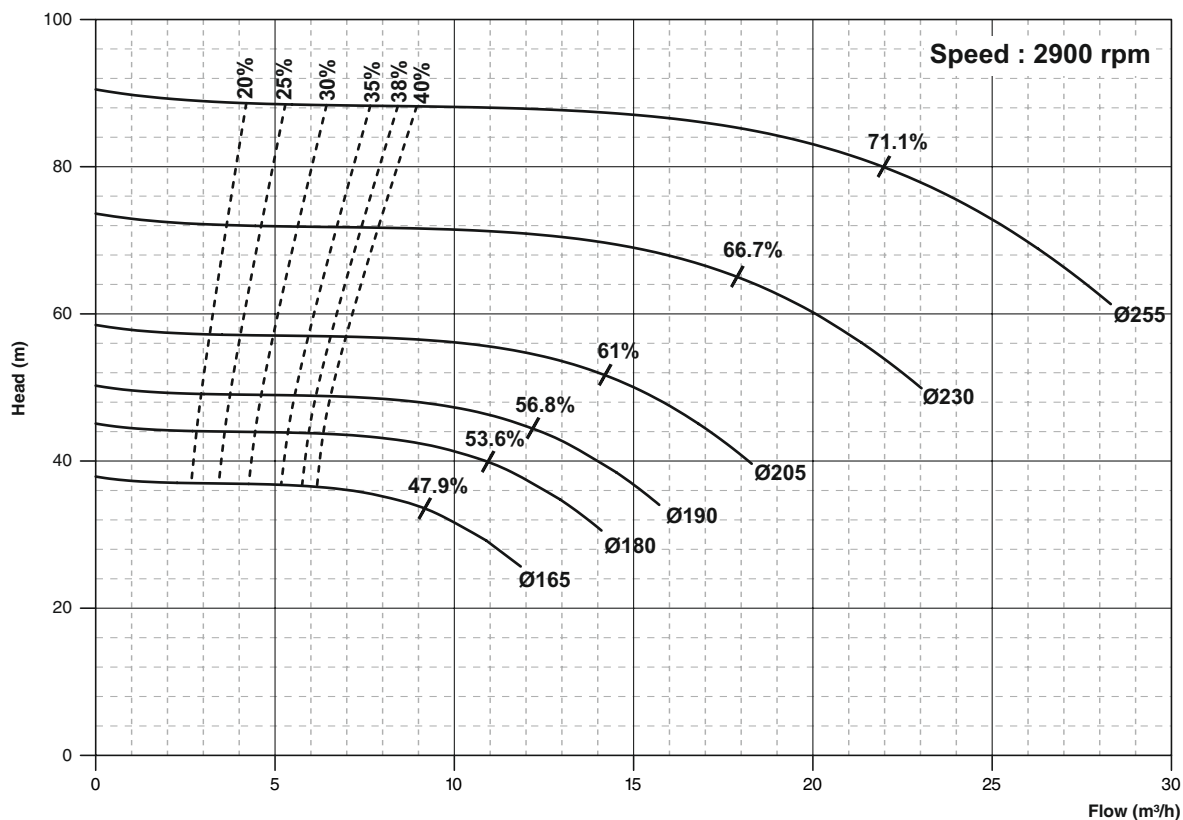




PERFORMANCE CURVE

Pump Model : **ECC - 2 x 1 x 10**
(50 x 25 x 250)

Pump Size in mm : **50 x 25**
(Suc x Dis)

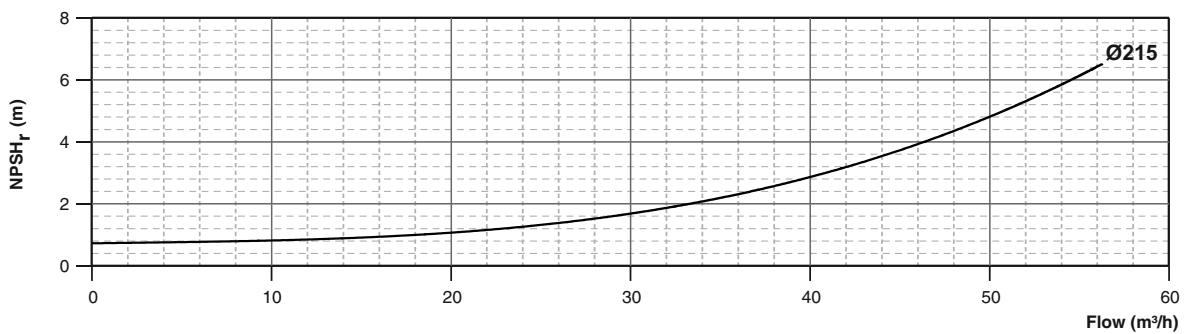
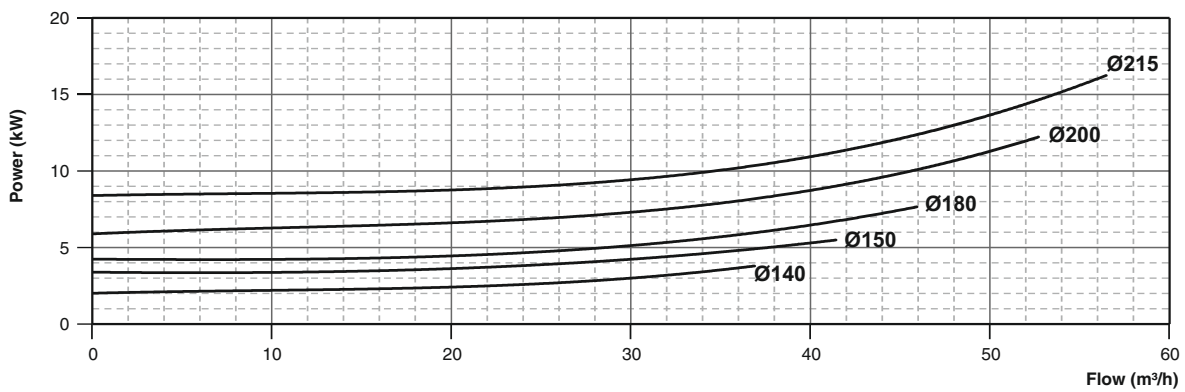
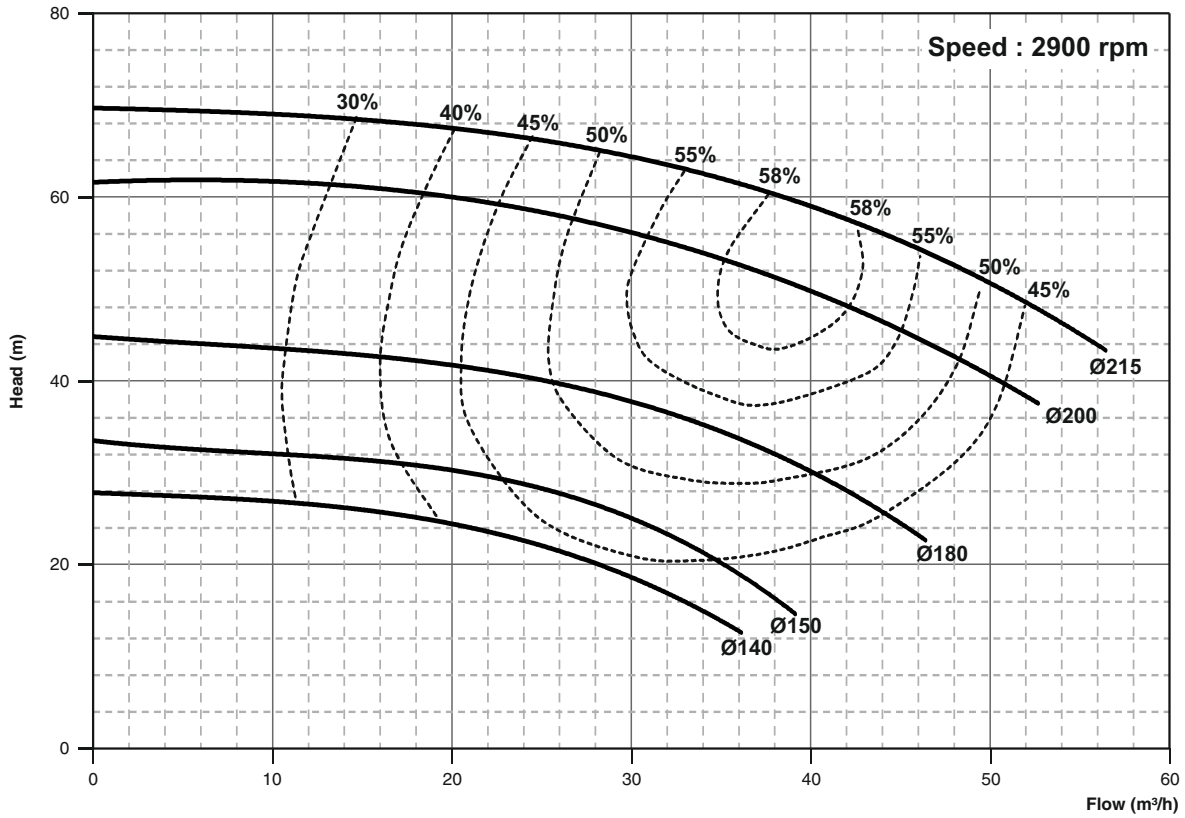




PERFORMANCE CURVE

Pump Model : ECC - 3 x 1.5 x 8.5
(80 x 40 x 215)

Pump Size in mm : 80 x 40
(Suc x Dis)

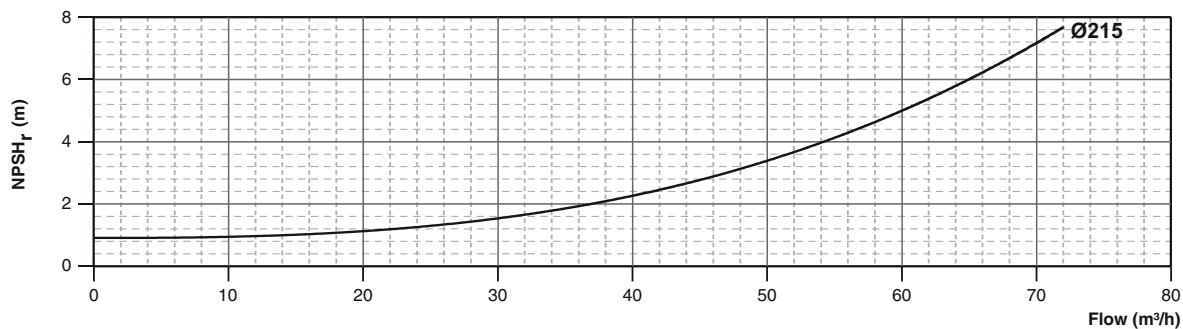
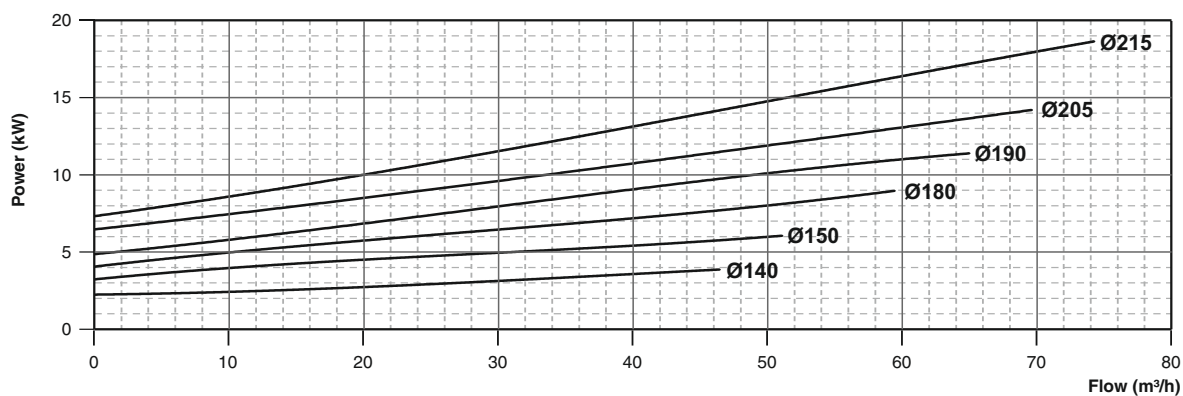
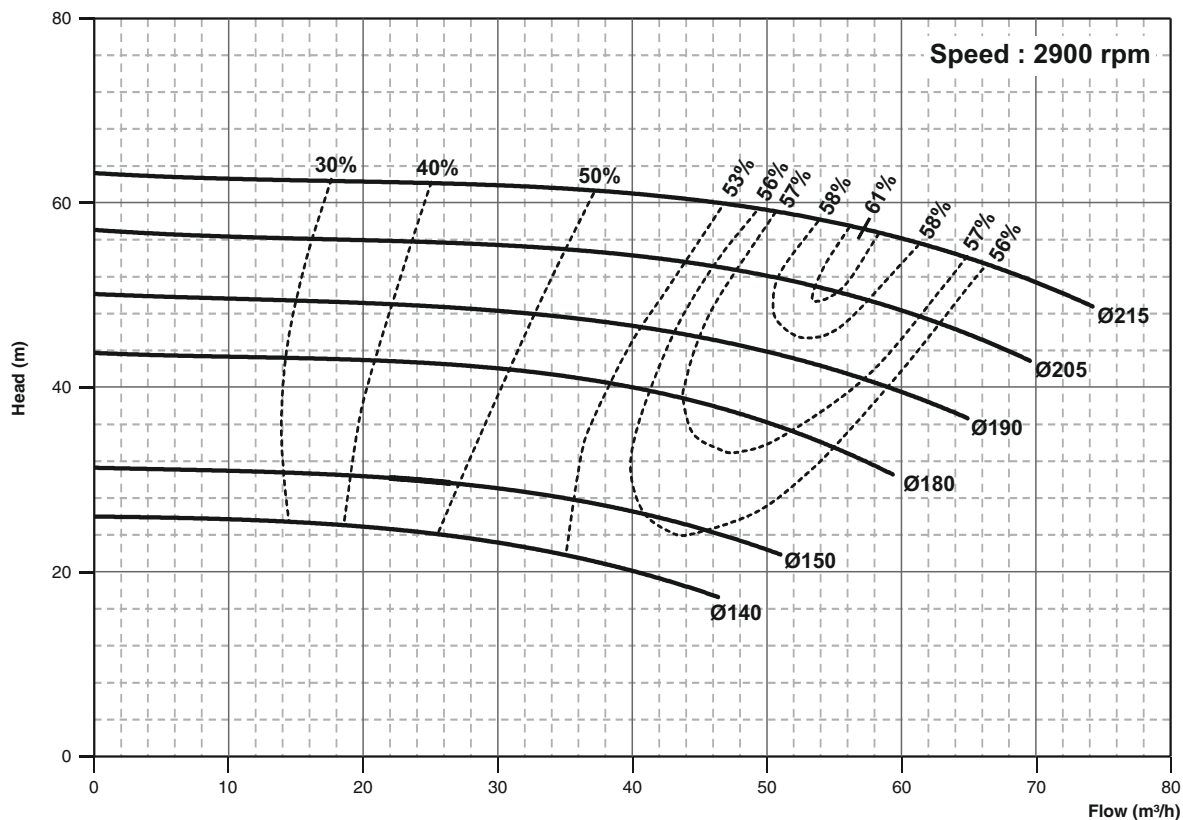




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 8.5**
(80 x 50 x 215)

Pump Size in mm : **80 x 50**
(Suc x Dis)

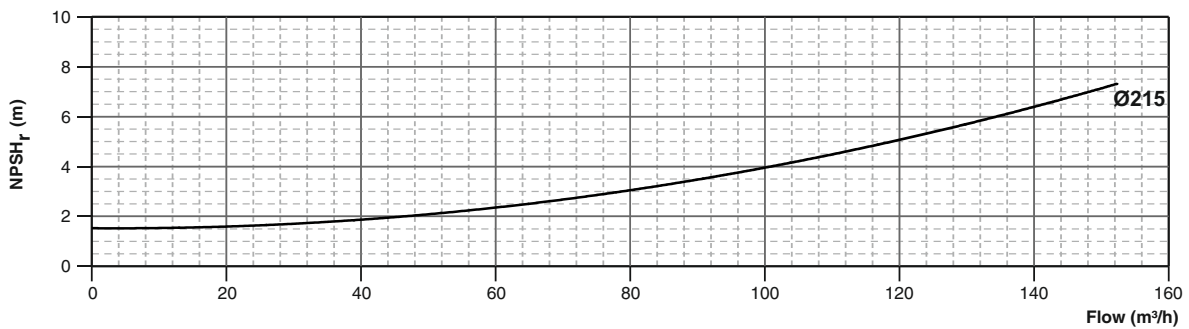
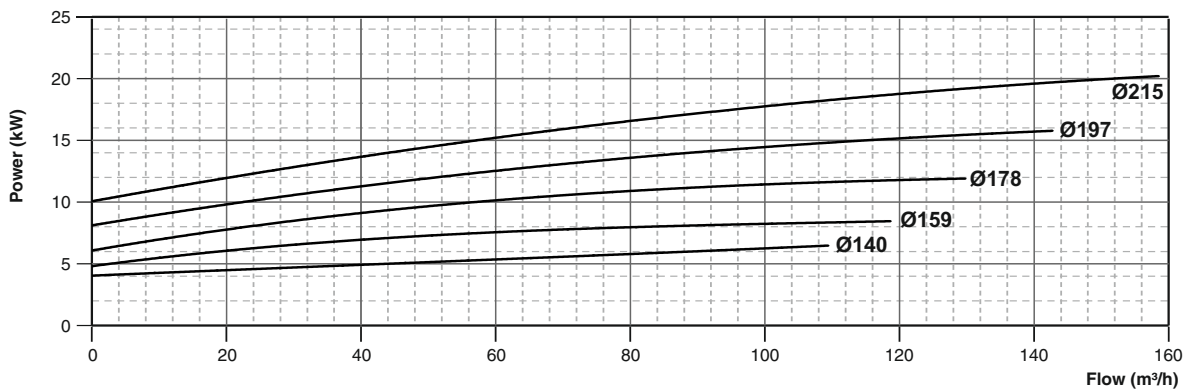
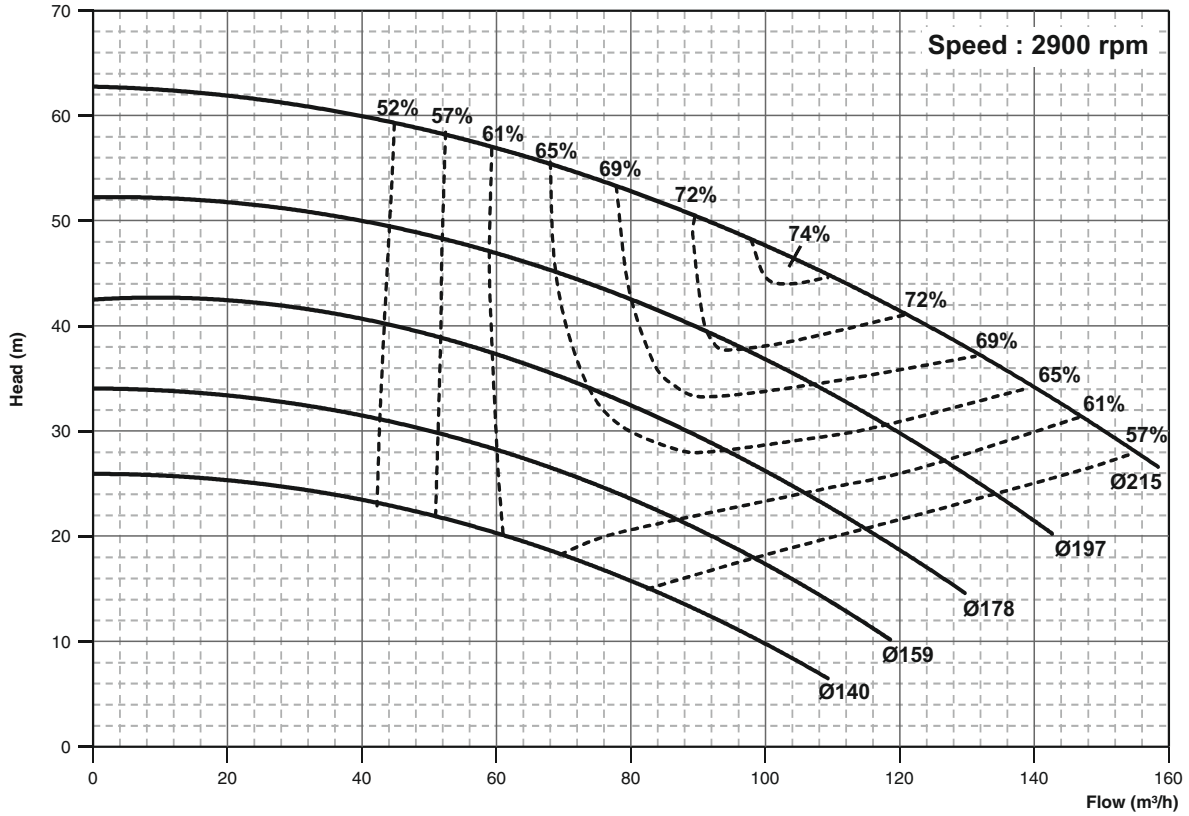




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 8.5**
(100 x 80 x 215)

Pump Size in mm : **100 x 80**
(Suc x Dis)

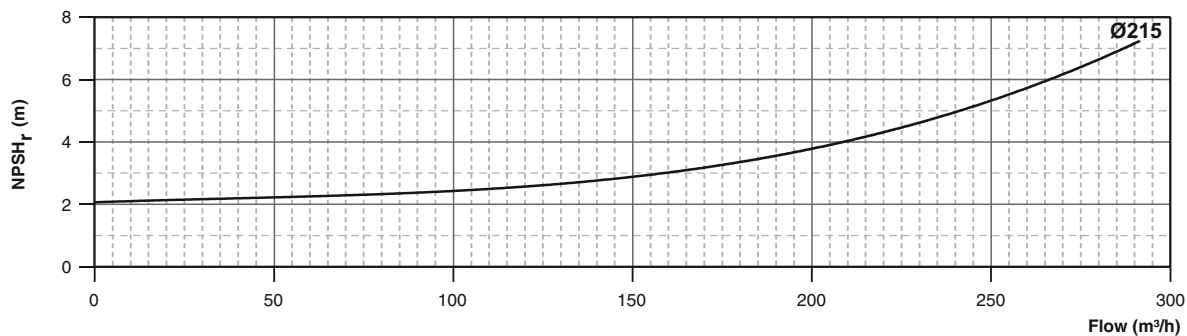
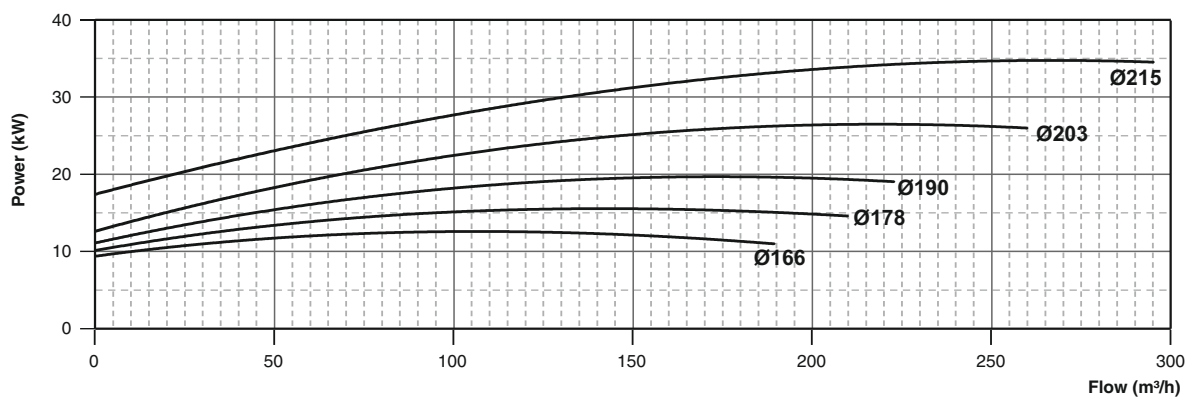
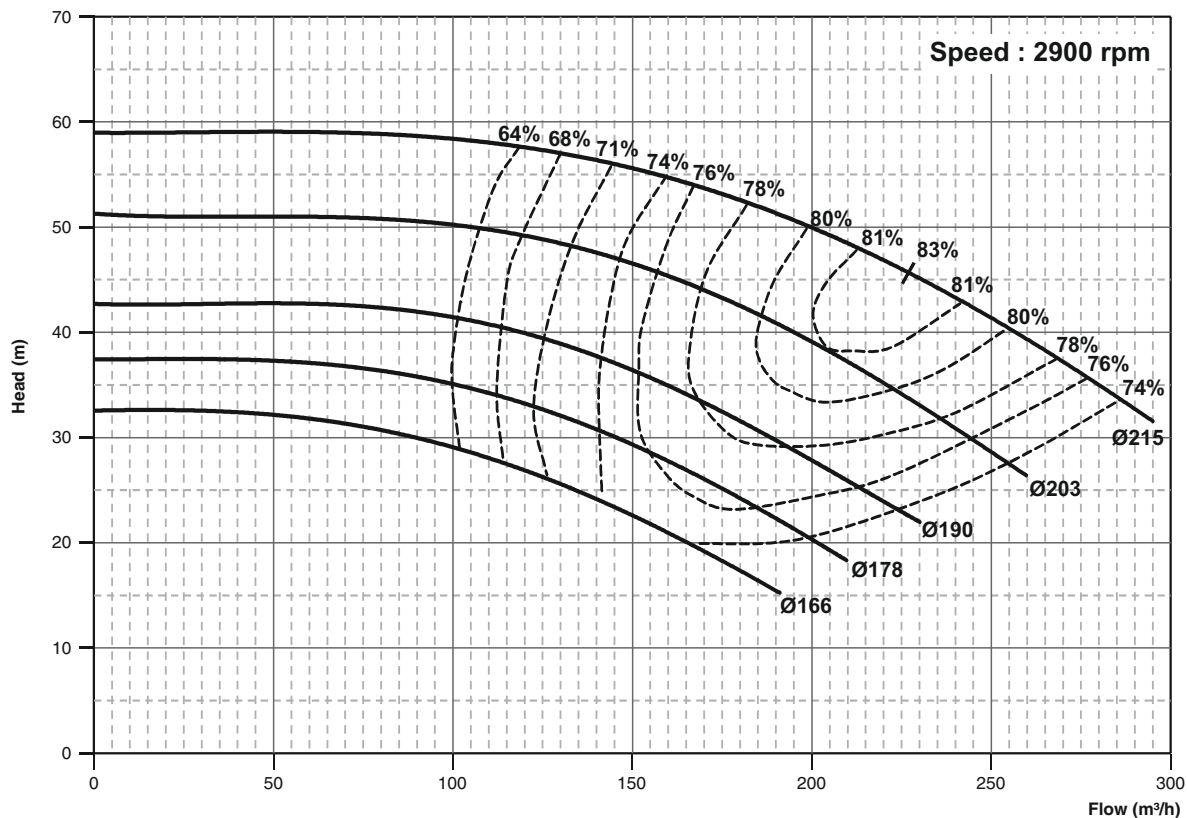




PERFORMANCE CURVE

Pump Model : **ECC - 6 x 4 x 8.5**
(150 x 100 x 215)

Pump Size in mm : **150 x 100**
(Suc x Dis)

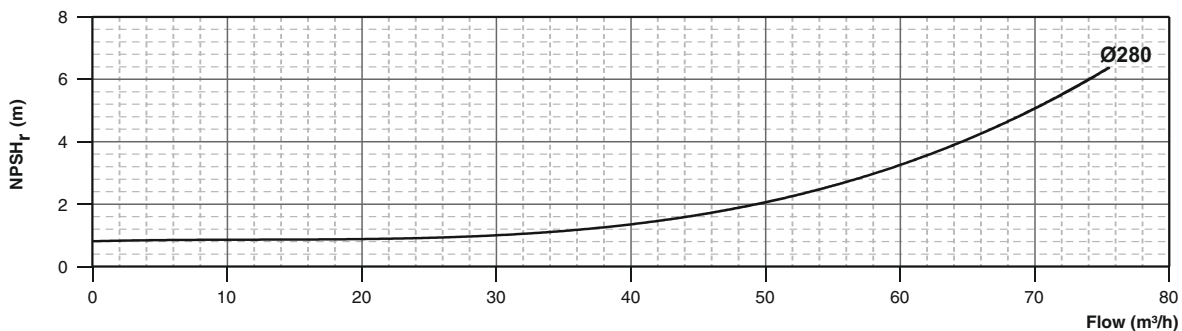
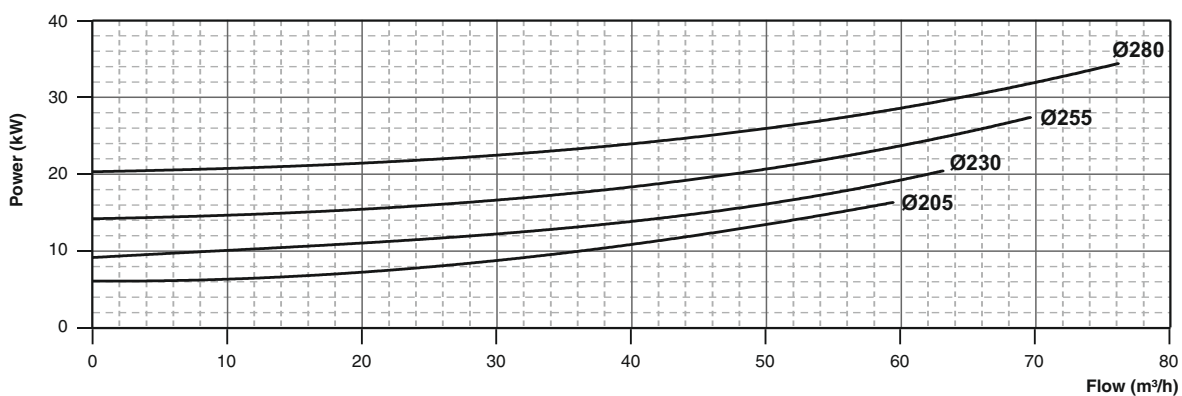
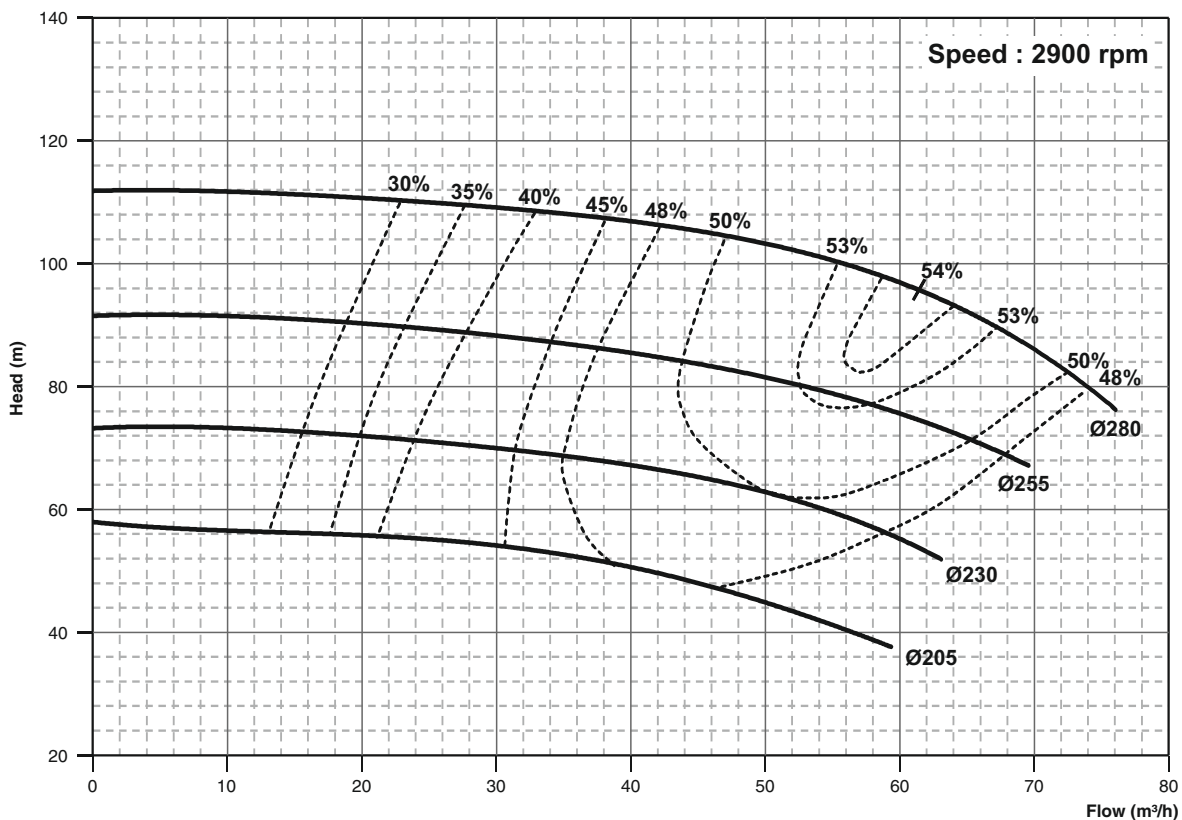




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 11**
(80 x 40 x 280)

Pump Size in mm : **80 x 40**
(Suc x Dis)

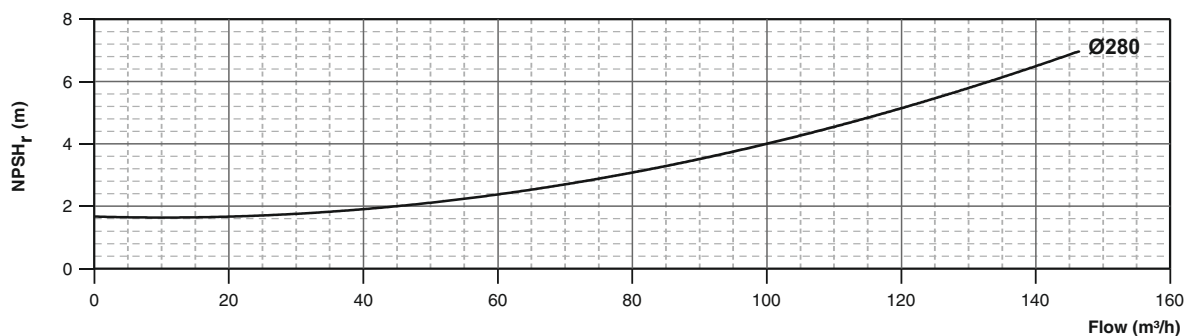
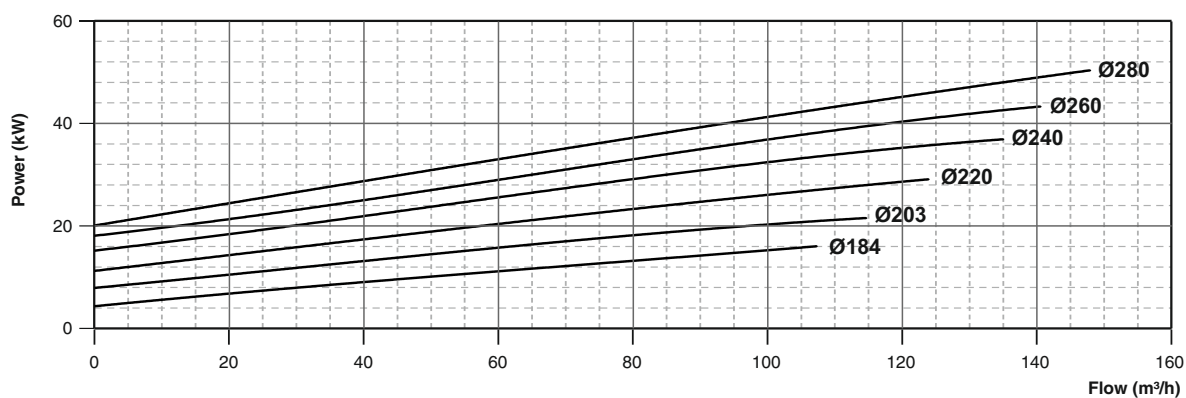
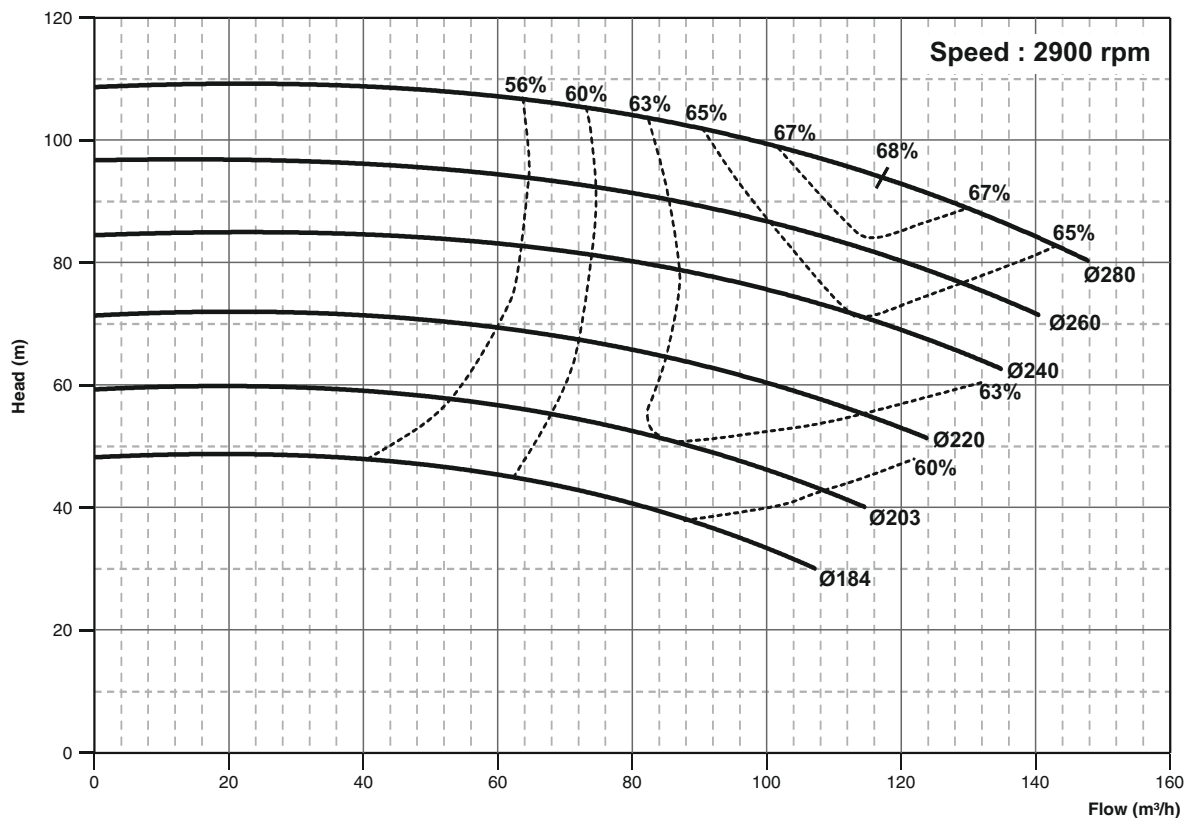




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 11**
(80 x 50 x 280)

Pump Size in mm : **80 x 50**
(Suc x Dis)

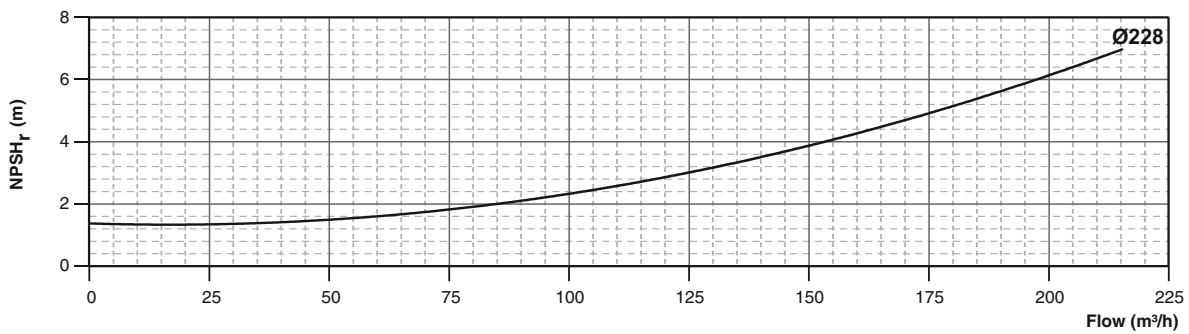
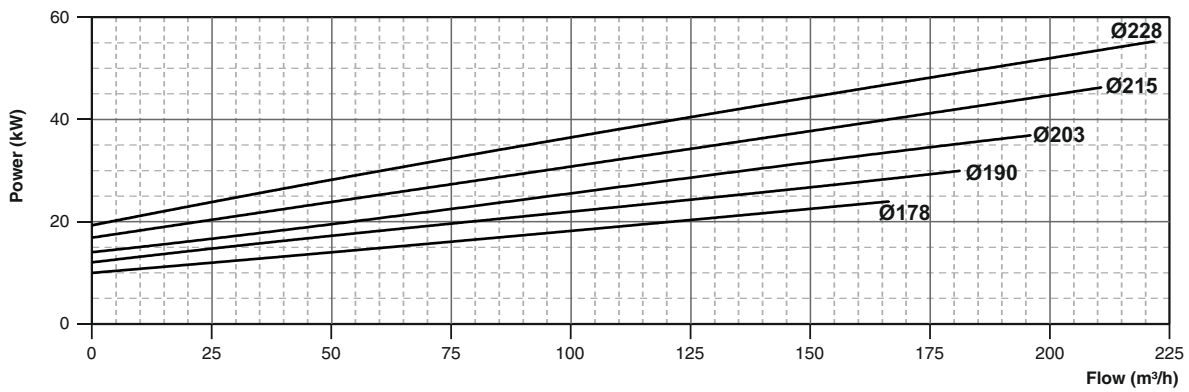
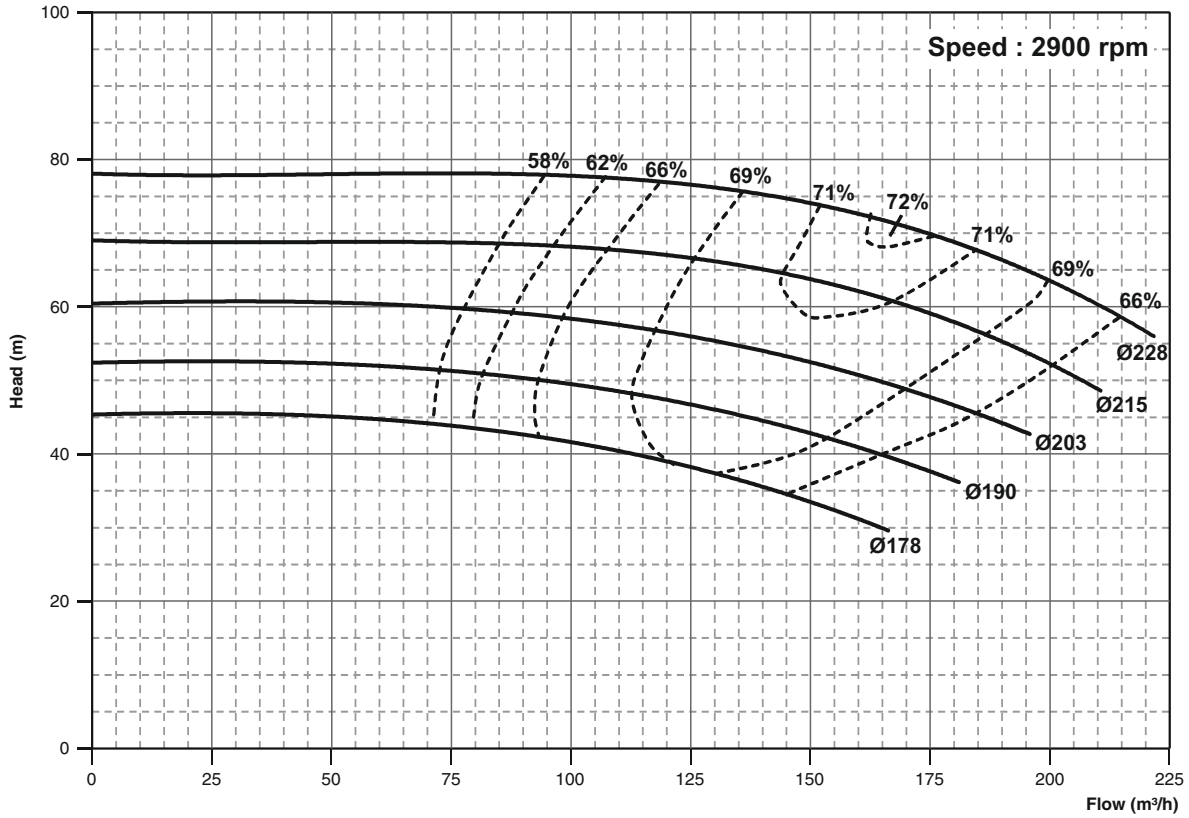




PERFORMANCE CURVE

Pump Model : **ECC - 4 x 3 x 11**
(100 x 80 x 280)

Pump Size in mm : **100 x 80**
(Suc x Dis)

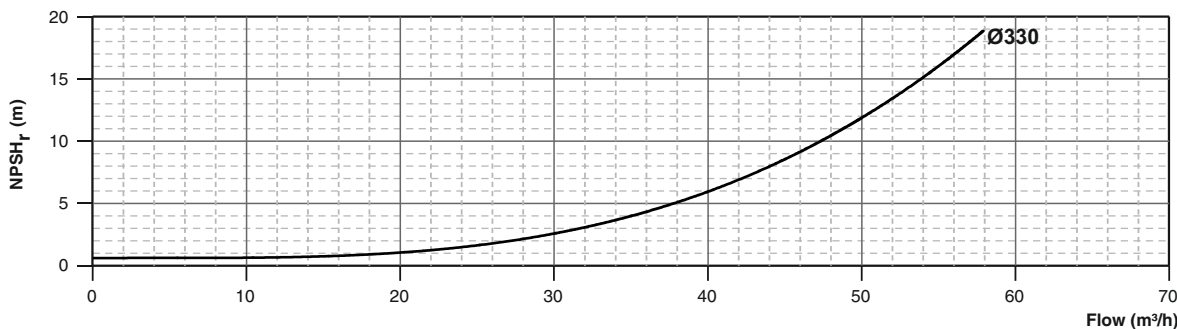
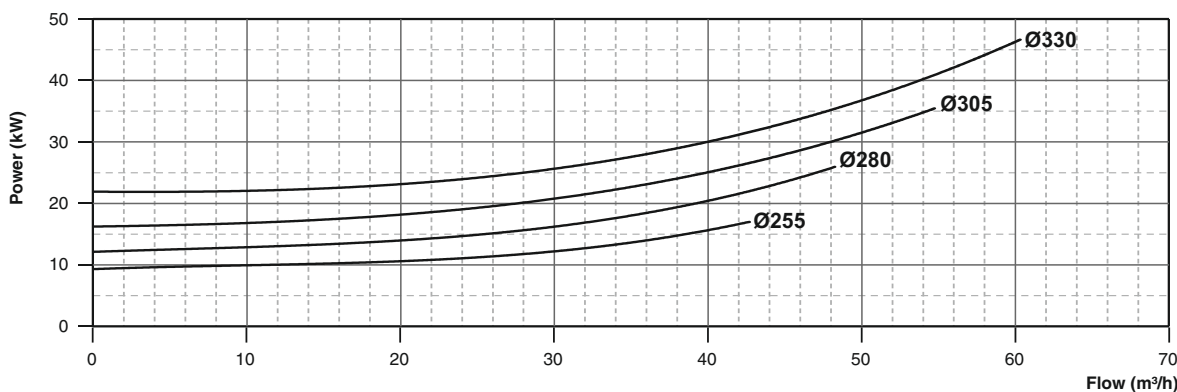
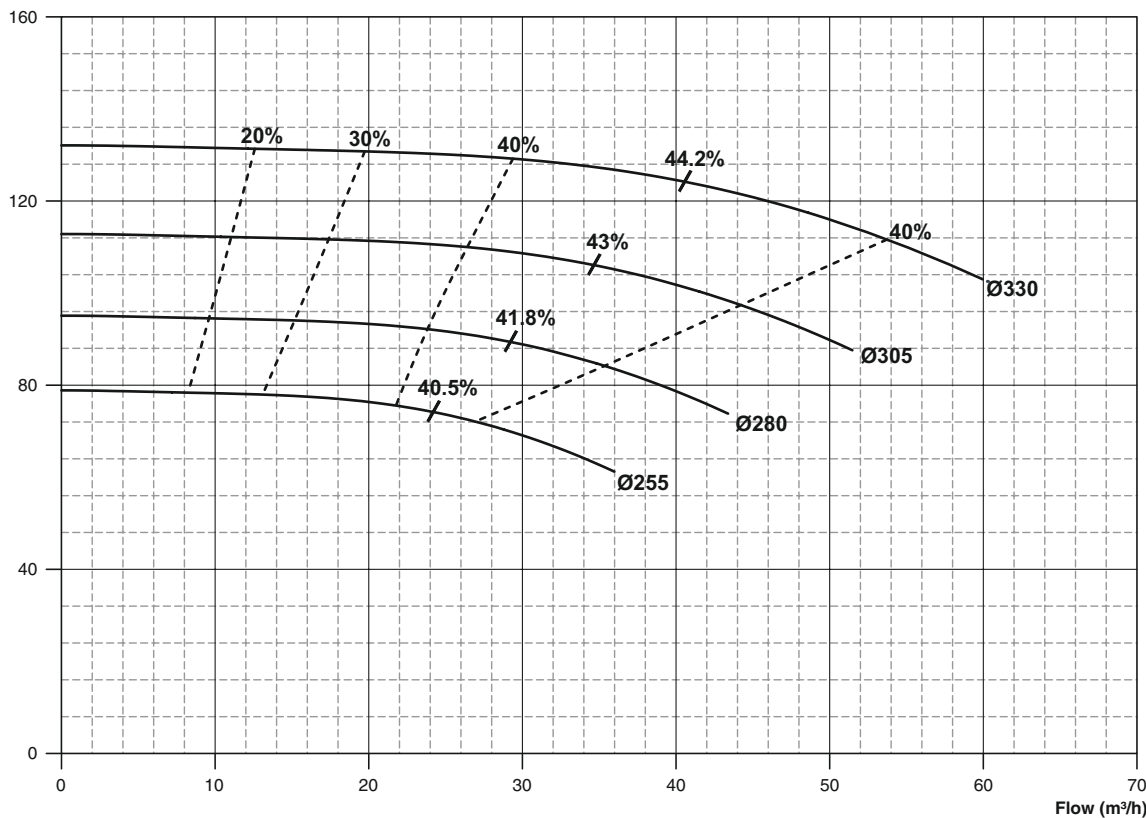




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 1.5 x 13**
(80 x 40 x 330)

Pump Size in mm : **80 x 40**
(Suc x Dis)

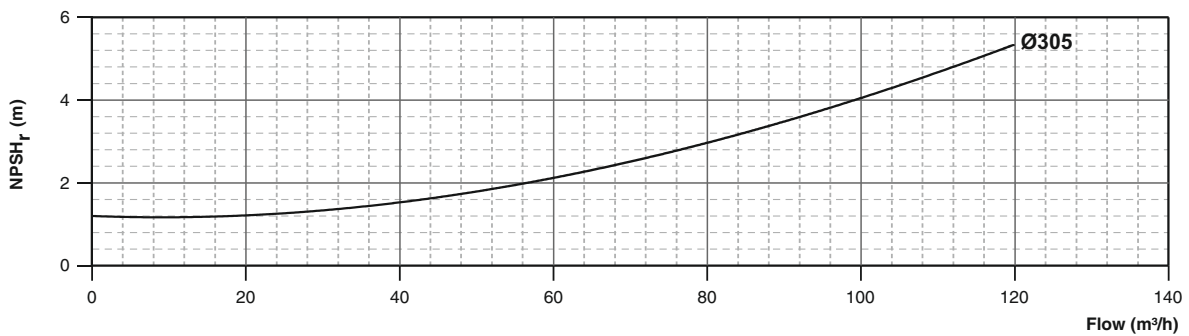
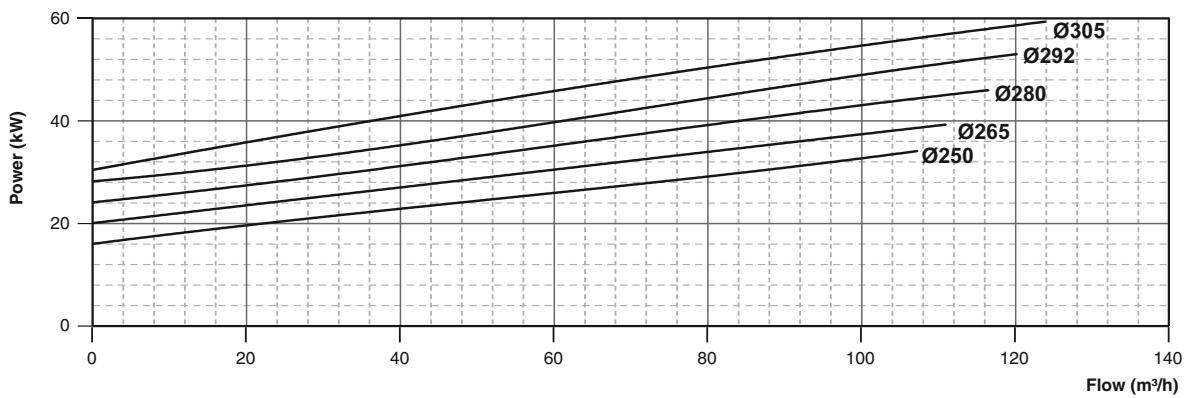
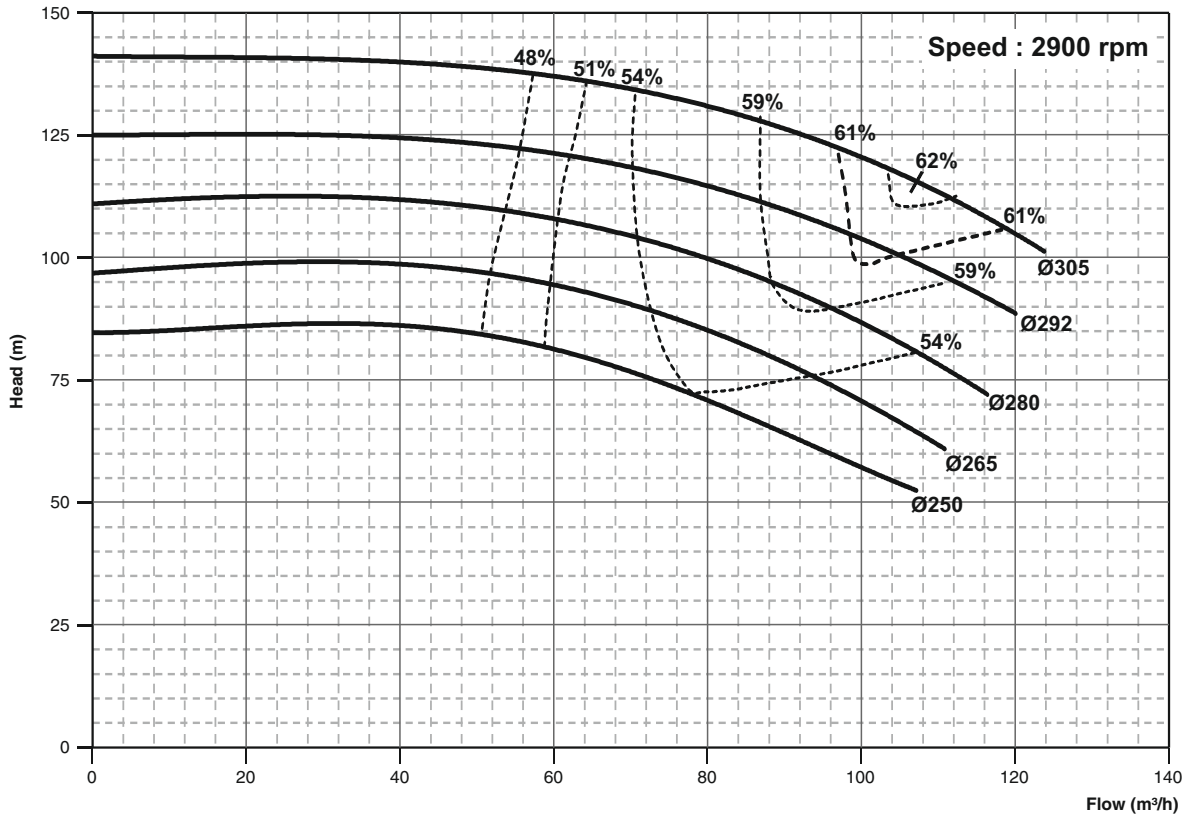




PERFORMANCE CURVE

Pump Model : **ECC - 3 x 2 x 13**
(80 x 50 x 330)

Pump Size in mm : **80 x 50**
(Suc x Dis)



CHEMICAL PROCESS PUMPS – ECC IL SERIES (NON ANSI PUMPS)

C.R.I. make ECC IL series are horizontal, end suction, single stage centre line discharge design for low flow requirements. These pumps are Non ANSI specially designed to handle corrosive, abrasive or high temperature liquids etc. These pumps provide excellent performance for tough applications including pumping of acids (Sulphuric Acid, Hydrochloric Acid, Nitric Acid, Citric Acid, Acetic Acid, etc.) and all alkalis (Sodium Hydroxide, Calcium Hydroxide, etc.), brines, caustics, bleaches, sea water, high temperature liquids and a wide variety of waste liquids for a wide range of applications including chemical, petrochemical, hot oil, ethanol, food, sugar, pharmaceuticals, metal finishing, waste water/effluent treatment, desalination and aquarium/aquaculture etc. These pumps are offered with semi-open type impellers fitted with flow inducing vane and balance hole to reduce high thrust and it is designed to give better performance even at high vapour pressure of the liquid. It can be offered with different type of material of construction as per liquid specifications. The ECC IL series are tailor made pump to ensure process reliability, high efficiency and low operating costs. At the same time, the spare parts inventory and costs are kept to a minimum by means of standardization and inter-changeability of spares among the ranges. These pumps are offered with back pull out design considering easy maintenance and repair. These pumps are also can be offered with vertical execution type.



APPLICATIONS

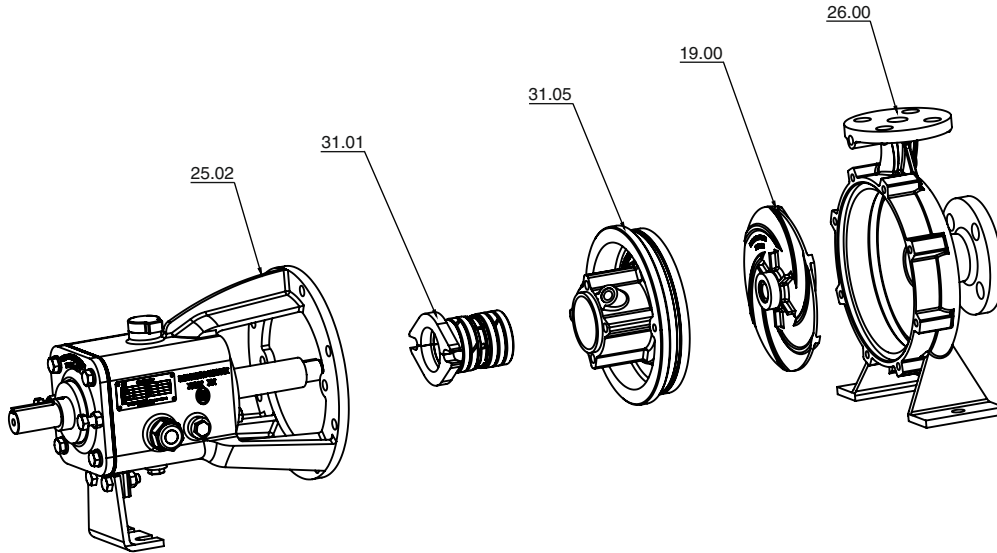
- Power Generation
- Chemical & Petrochemical
- Oil & Gas
- Water, Sewage & Effluent Treatment Plants
- Desalination Plant
- Steel & Automotive Industries
- Paper and Pulp industries
- Semiconductor Industries
- Food processing, beverage & Dairy industries
- Sugar Industries
- Pharmaceuticals
- Dying & Paint Industries
- Mining
- Edible oil refinery and General Industries.
- Chemical Dosing

DESIGN FEATURES

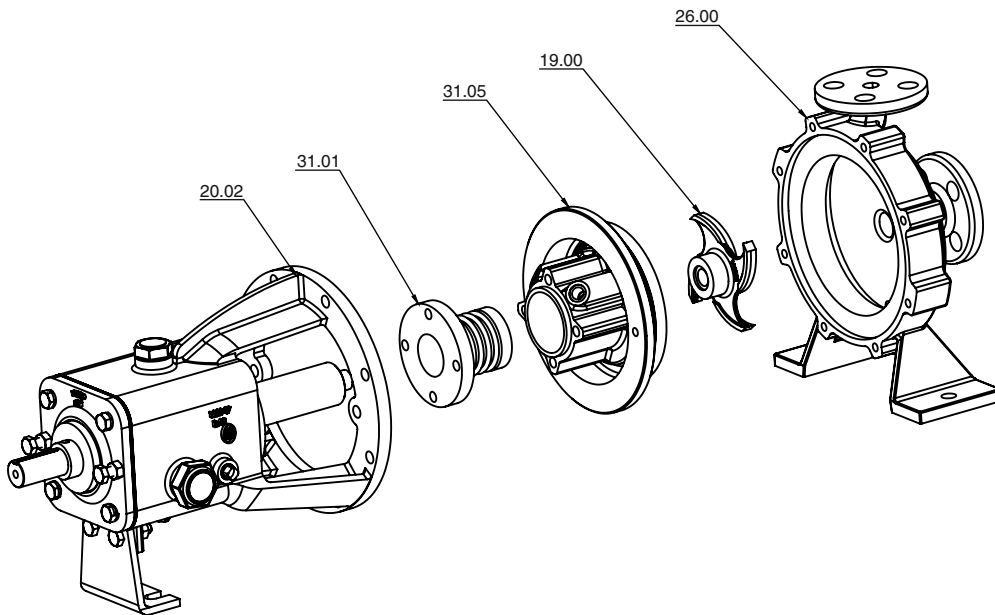
- Back pull out design offered with semi open impeller
- Maximum inter-changeability of spares to reduce the inventory cost
- Balance relief hole on impeller to reduce the thrust
- Customized material of construction against specific requirement
- Lowest life cycle cost
- Jacketed casing for hot liquids
- Both mechanical seal and gland options

EXPLODED VIEW

GLAND PACKING CONSTRUCTION



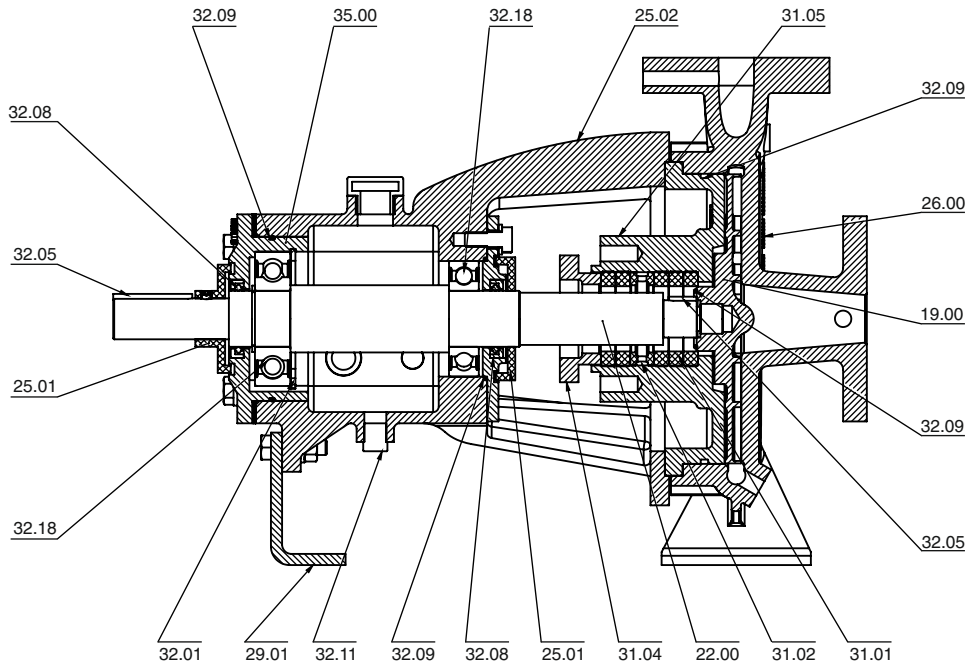
MECHANICAL SEAL CONSTRUCTION



PART NO	PART NAME
26.00	CASING
19.00	IMPELLER
31.05	STUFFING BOX
31.01	PACKING / MECHANICAL SEAL
25.02	CONNECTING FRAME
20.02	BEARING FRAME

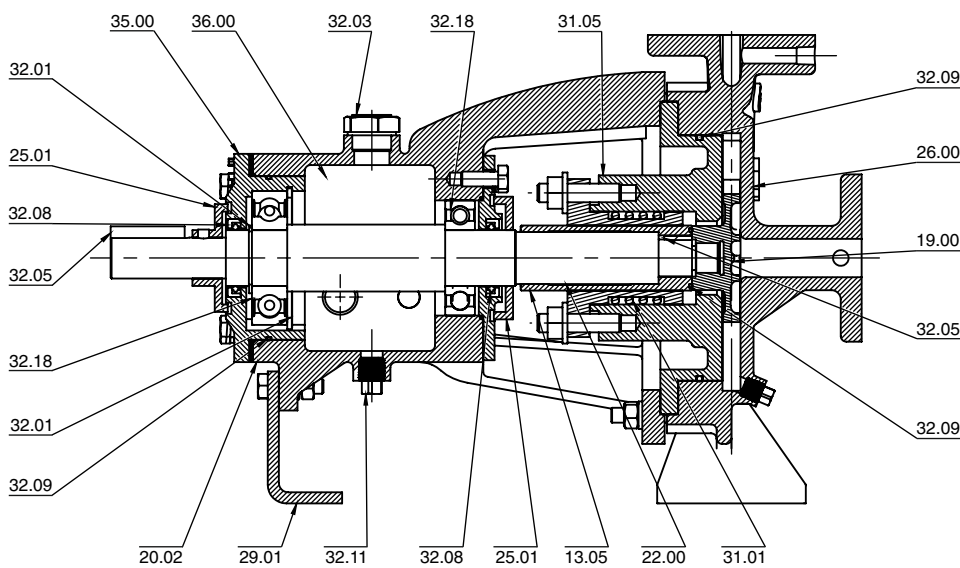
CROSS SECTIONAL DRAWING

GLAND PACKING CONSTRUCTION



















Part No	Part Name
32.09	O - RING
26.00	CASING
19.00	IMPELLER
32.05	KEY
31.01	PACKING / MECHANICAL SEAL
31.02	LANTERN RING
22.00	PUMP SHAFT
31.04	GLAND
13.05	SLEEVE
25.01	DEFLECTOR
32.08	OIL SEAL
29.01	FRAME SUPPORT
32.11	PLUG
20.02	BEARING FRAME
32.01	CIRCLIP
32.18	BEARING
35.00	BEARING HOUSING
25.02	CONNECTING FRAME
31.05	STUFFING BOX
32.03	OIL BREATHER
36.00	OIL CHAMBER

MECHANICAL SEAL CONSTRUCTION



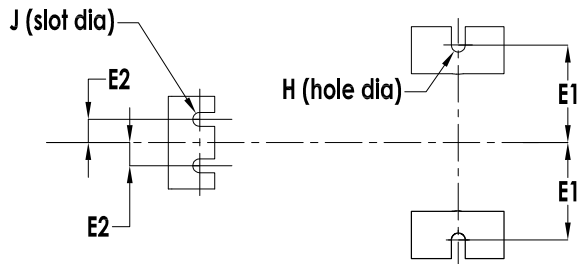
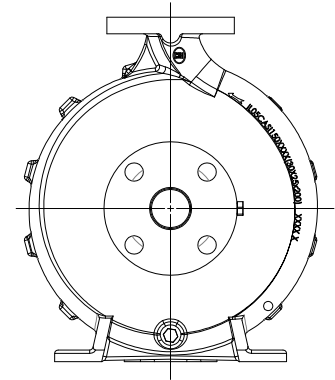
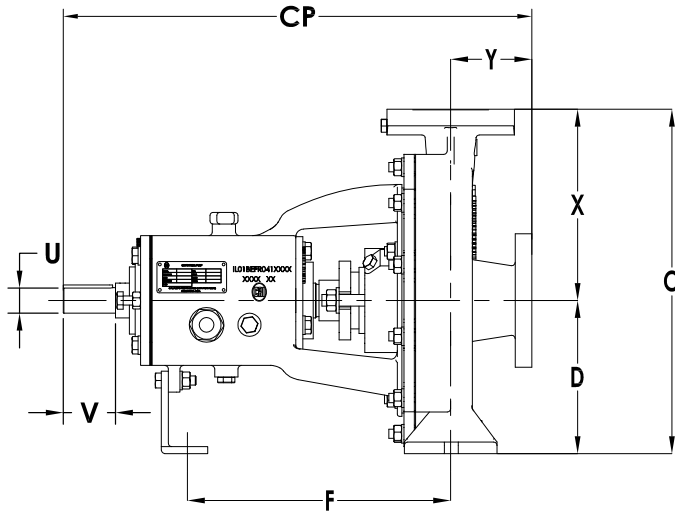
INTERCHANGEABILITY CHART

IL SERIES					
PUMP NAME	1 X 0.75 X 6	1.25 X 1 X 6	1.5 X 1.25 X 6	1 X 0.75 X 8	1.25 X 1 X 8
	25 X 20 X 150	32 X 25 X 150	40 X 32 X 150	25 X 20 X 200	32 X 25 X 200
CASING					
IMPELLER					
STUFFING BOX					
BEARING FRAME					
BEARING FRAME ASSEMBLY					

DETAILS OF STANDARD COMPONENTS

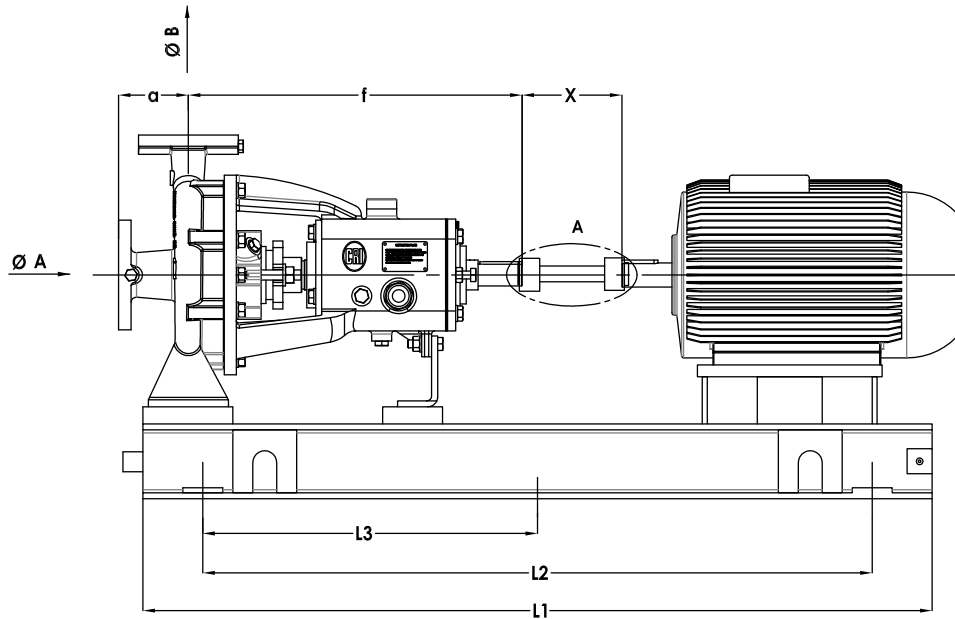
SHAFT AND BEARING DATA	FRAME
	0
SHAFT DIAMETER (mm)	
At Coupling	Ø 22.23
At 'NDE' Bearings	Ø 30
At 'DE' Bearings	Ø 30
Between bearings	Ø 51
Under Sleeve	Ø 27.97
Stuffing Box Details	
Shaft sleeve OD	Ø 35
Stuffing Box Bore Diameter	Ø 51
Stuffing Box Depth	57
SHAFT LENGTHS (mm)	
Impeller end of shaft to 'NDE' Bearing	156.5
Between bearings	85
'DE' Bearing. To Coupling end	95
BEARINGS	
'NDE'	6206
'DE'	6306
KEYWAY AT COUPLING (mm)	
Width	4.76
Depth	2.38
Length	40
SHAFT THREAD AT IMPELLER	M16X2 RH

MOUNTING DIMENSION - PUMP



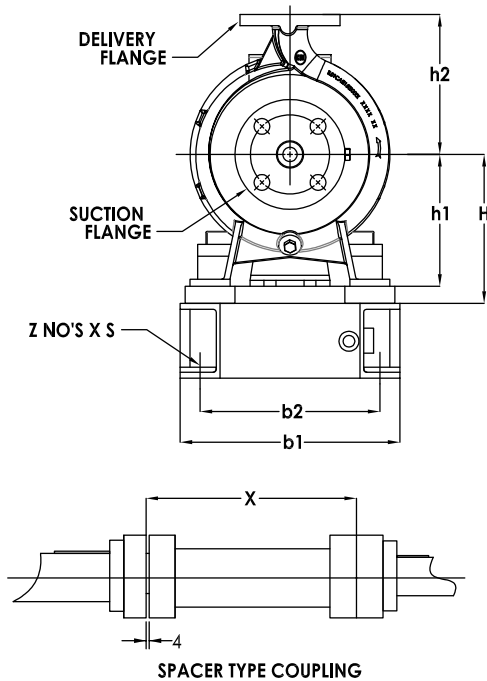
Pump Series	Pump Size (Inch)	General Dimensions Table (mm)													
		CP	D	E1	E2	F	X	Y	O	V	U (DIA)	H	J	M	WEIGHT (KG)
ECC-IL	1 x 0.75 x 6	404	132	84	20	223	140	70	272	45	22	12	12	112	22
ECC-IL	1.25 x 1 x 6	404	132	84	20	223	140	70	272	45	22	12	12	112	23
ECC-IL	1.5 x 1.25 x 6	404	132	84	20	223	140	70	272	45	22	12	12	112	24
ECC-IL	1 x 0.75 x 8	404	132	84	20	223	165	70	297	45	22	12	12	112	28
ECC-IL	1.25 x 1 x 8	404	132	84	20	223	165	70	297	45	22	12	12	112	30

MOUNTING DIMENSION - PUMP SET



Pump Model	Motor Rating (kW)		Motor Frame Size	Nominal Size (Ø A)	Outside Diameter	Pitch Circle Diameter	No. of Holes	Hole Diameter	Nominal Size (Ø B)	Outside Diameter	Pitch Circle Diameter	No. Holes	
	1450 rpm	2900 rpm											
ECC-IL	1X0.75X6	0.18	0.18,0.25	63	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X6	0.25,0.37	0.37,0.55	71	25	110	79.4	4	15.9	19	100	69.9	4
ECC-IL	1X0.75X6	0.55,0.75	0.75,1.1	80	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X6	1.1	1.5	90S	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X6	1.5	2.2	90L	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X6	2.2	3.7	100L	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X6	3.7	5.5	112M	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X6	5.5	7.5	132S	25	110	79.4	4	15.9	19	100	69.9	4
	1.25X1X6	0.18	0.18,0.25	63	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X6	0.25,0.37	0.37,0.55	71	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X6	0.55,0.75	0.75,1.1	80	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X6	1.1	1.5	90S	32	115	88.9	4	15.9	25	110	79.4	4
ECC-IL	1.25X1X6	1.5	2.2	90L	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X6	2.2	3.7	100L	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X6	3.7	5.5	112M	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X6	5.5	7.5	132S	32	115	88.9	4	15.9	25	110	79.4	4
	1.5X1.25X6	0.18	0.18,0.25	63	38	125	98.4	4	15.9	32	115	88.9	4
	1.5X1.25X6	0.25,0.37	0.37,0.55	71	38	125	98.4	4	15.9	32	115	88.9	4
	1.5X1.25X6	0.55,0.75	0.75,1.1	80	38	125	98.4	4	15.9	32	115	88.9	4
	1.5X1.25X6	1.1	1.5	90S	38	125	98.4	4	15.9	32	115	88.9	4
	1.5X1.25X6	1.5	2.2	90L	38	125	98.4	4	15.9	32	115	88.9	4
	1.5X1.25X6	2.2	3.7	100L	38	125	98.4	4	15.9	32	115	88.9	4
ECC-IL	1.5X1.25X6	3.7	5.5	112M	38	125	98.4	4	15.9	32	115	88.9	4
	1.5X1.25X6	5.5	7.5	132S	38	125	98.4	4	15.9	32	115	88.9	4
	1X0.75X8	0.18	0.18,0.25	63	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	0.25,0.37	0.37,0.55	71	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	0.55,0.75	0.75,1.1	80	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	1.1	1.5	90S	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	1.5	2.2	90L	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	2.2	3.7	100L	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	3.7	5.5	112M	25	110	79.4	4	15.9	19	100	69.9	4
	1X0.75X8	5.5	7.5	132S	25	110	79.4	4	15.9	19	100	69.9	4
ECC-IL	1.25X1X8	0.18	0.18,0.25	63	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	0.25,0.37	0.37,0.55	71	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	0.55,0.75	0.75,1.1	80	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	1.1	1.5	90S	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	1.5	2.2	90L	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	2.2	3.7	100L	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	3.7	5.5	112M	32	115	88.9	4	15.9	25	110	79.4	4
	1.25X1X8	5.5	7.5	132S	32	115	88.9	4	15.9	25	110	79.4	4

MOUNTING DIMENSION - PUMP SET



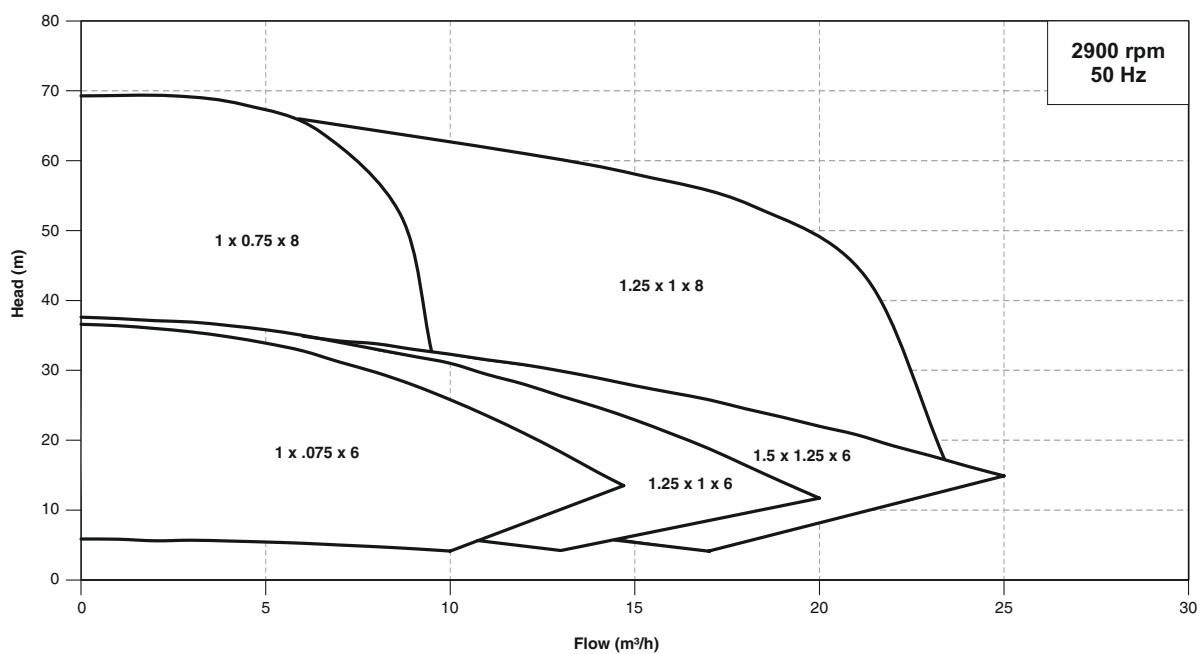
Hole Diameter	a	b1	b2	f	a+f	Channel height	Cl Height	H	h1	h2	U	V	L1	L2	L3	L4	Z No's	S	X
15.9	70	220	184	334	404	75	224	207	132	140	94.25	98.85	700	580	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	94.25	98.85	720	600	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	94.25	98.85	750	630	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	94.25	98.85	760	640	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	94.25	98.85	790	670	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	94.25	98.85	820	700	-	-	4	14	100
15.9	70	260	224	334	404	75	224	207	132	140	94.25	98.85	830	710	-	-	4	14	100
15.9	70	260	224	334	404	75	224	207	132	140	94.25	98.85	900	790	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	96.29	102.3	700	580	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	96.29	102.3	720	600	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	96.29	102.3	750	630	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	96.29	102.3	760	640	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	96.29	102.3	790	670	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	96.29	102.3	820	700	-	-	4	14	100
15.9	70	260	224	334	404	75	224	207	132	140	96.29	102.3	830	710	-	-	4	14	100
15.9	70	260	224	334	404	75	224	207	132	140	96.29	102.3	900	790	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	98.66	106.5	700	580	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	98.66	106.5	720	600	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	98.66	106.5	750	630	-	-	4	14	100
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15.9	70	220	184	334	404	75	224	207	132	140	98.66	106.5	790	670	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	140	98.66	106.5	820	700	-	-	4	14	100
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15.9	70	260	224	334	404	75	224	207	132	140	98.66	106.5	900	790	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	165	116.9	119.7	700	580	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	165	116.9	119.7	720	600	-	-	4	14	100
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15.9	70	260	224	334	404	75	224	207	132	165	116.9	119.7	830	710	-	-	4	14	100
15.9	70	260	224	334	404	75	224	207	132	165	116.9	119.7	900	790	-	-	4	14	100
15.9	70	220	184	334	404	75	224	207	132	165	115.9	126.7	700	580	-	-	4	14	100
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15.9	70	260	224	334	404	75	224	207	132	165	115.9	126.7	830	710	-	-	4	14	100
15.9	70	260	224	334	404	75	224	207	132	165	115.9	126.7	900	790	-	-	4	14	100

OVERALL RANGE & PERFORMANCE DETAILS

S. No.	Pump Size (mm) - Suction x Discharge x Impeller Sizes in inch	Suction Nozzle Dia in mm	Discharge Nozzle Dia in mm	Pump Weight in kg	Maximum Power in kW	Speed Min / Max in rpm	Maximum Working Pressure in Bar	Maximum Flow Rate in m ³ /h	Maximum Total Head in m	Maximum Solid Size / Dia in mm
1	1 x .075 x 6	25	20	22	7.5kW	2900	5	12.4	35.5	4.5
2	1.25 x 1 x 6	30	25	23	7.5kW	2900	5	16.1	37.1	6.5
3	1.5 x 1.25 x 6	40	30	24	7.5kW	2900	5	24.3	37.1	8
4	1 x 0.75 x 8	25	20	28	7.5kW	2900	10	10.2	68	6
5	1.25 x 1 x 8	30	25	30	7.5kW	2900	10	20.8	68	8

*1450 rpm on request

GROUP PERFORMANCE CURVE

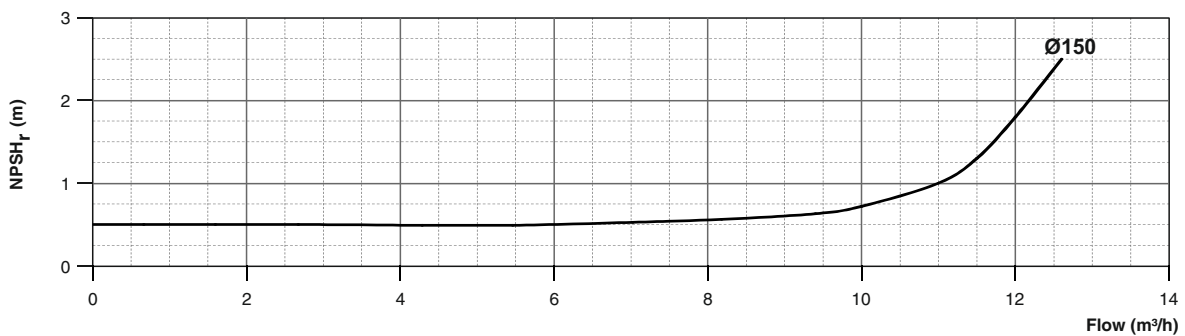
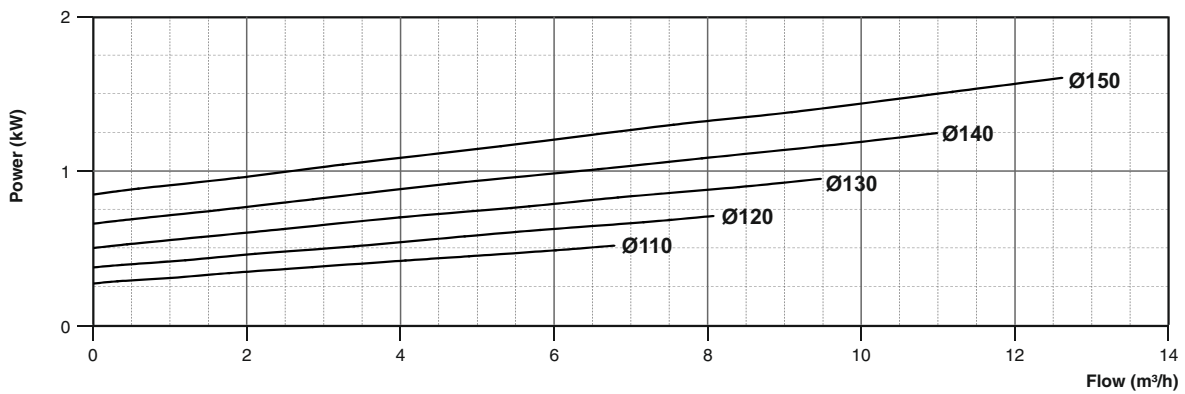
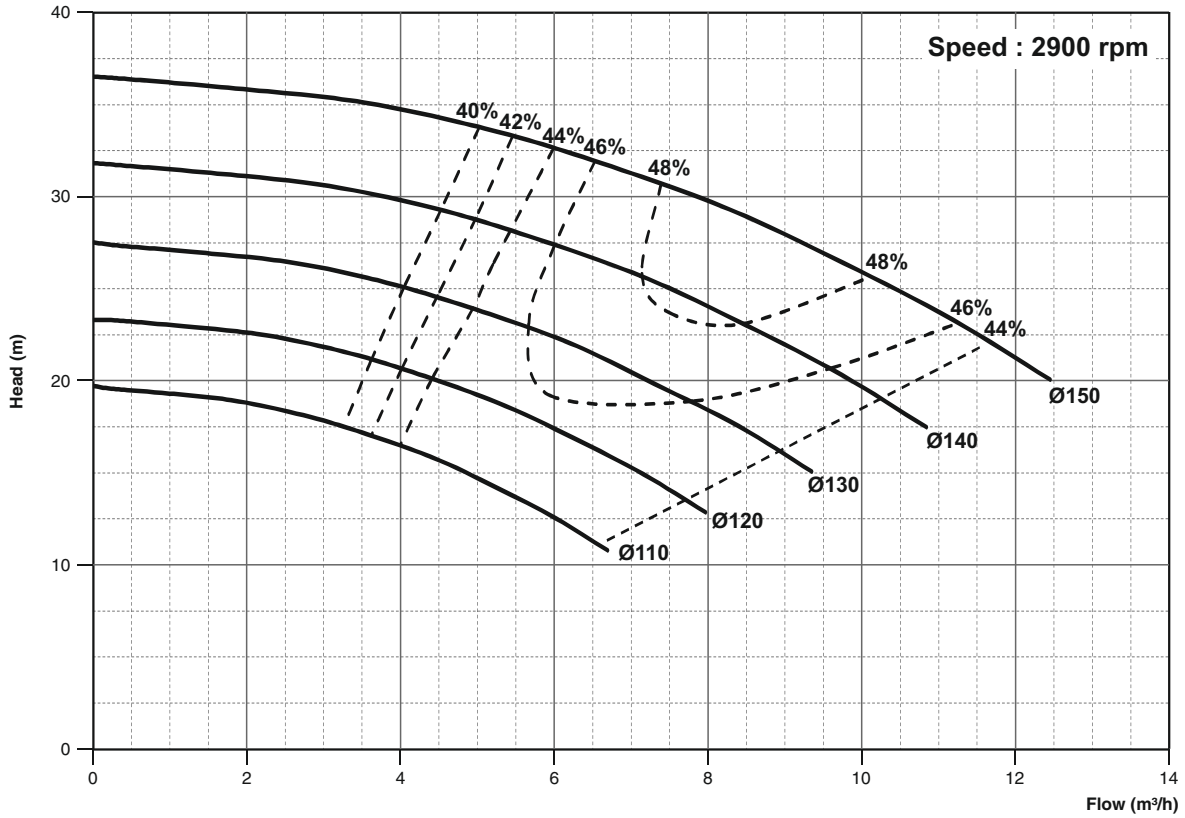




PERFORMANCE CURVE

Pump Model : ECC - 1 x 0.75 x 6

Pump Size in inch : 1 x 0.75
(Suc x Dis)

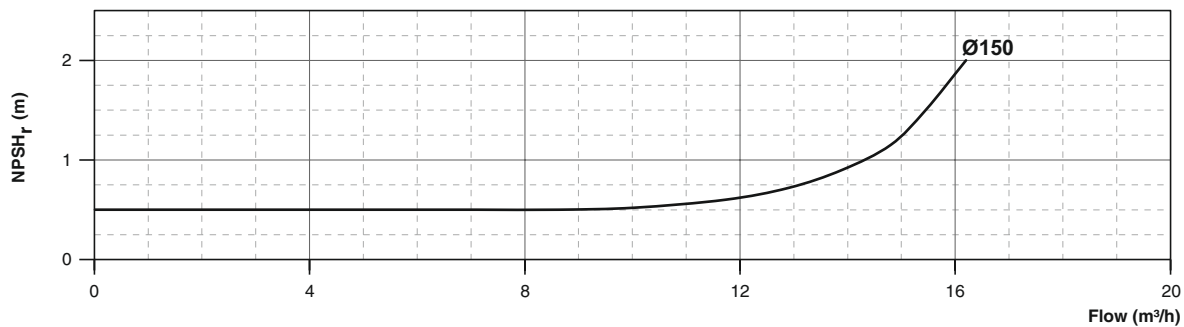
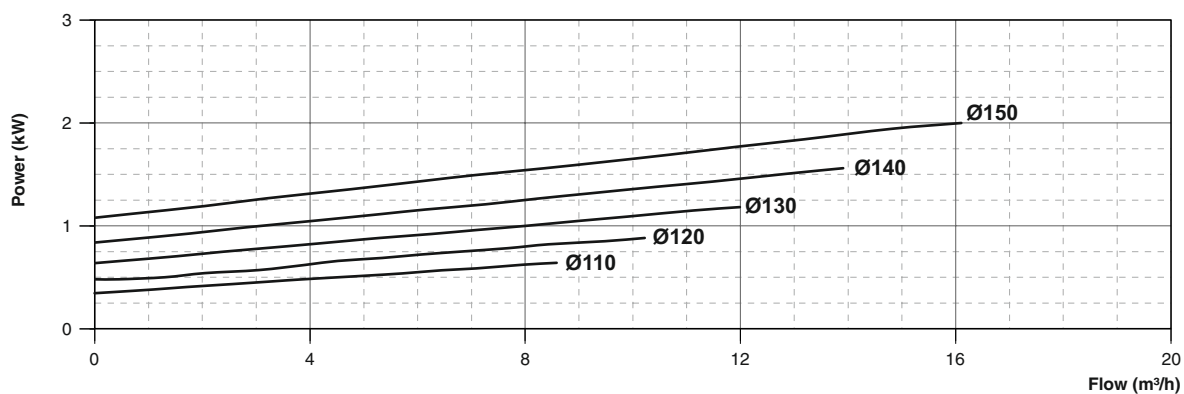
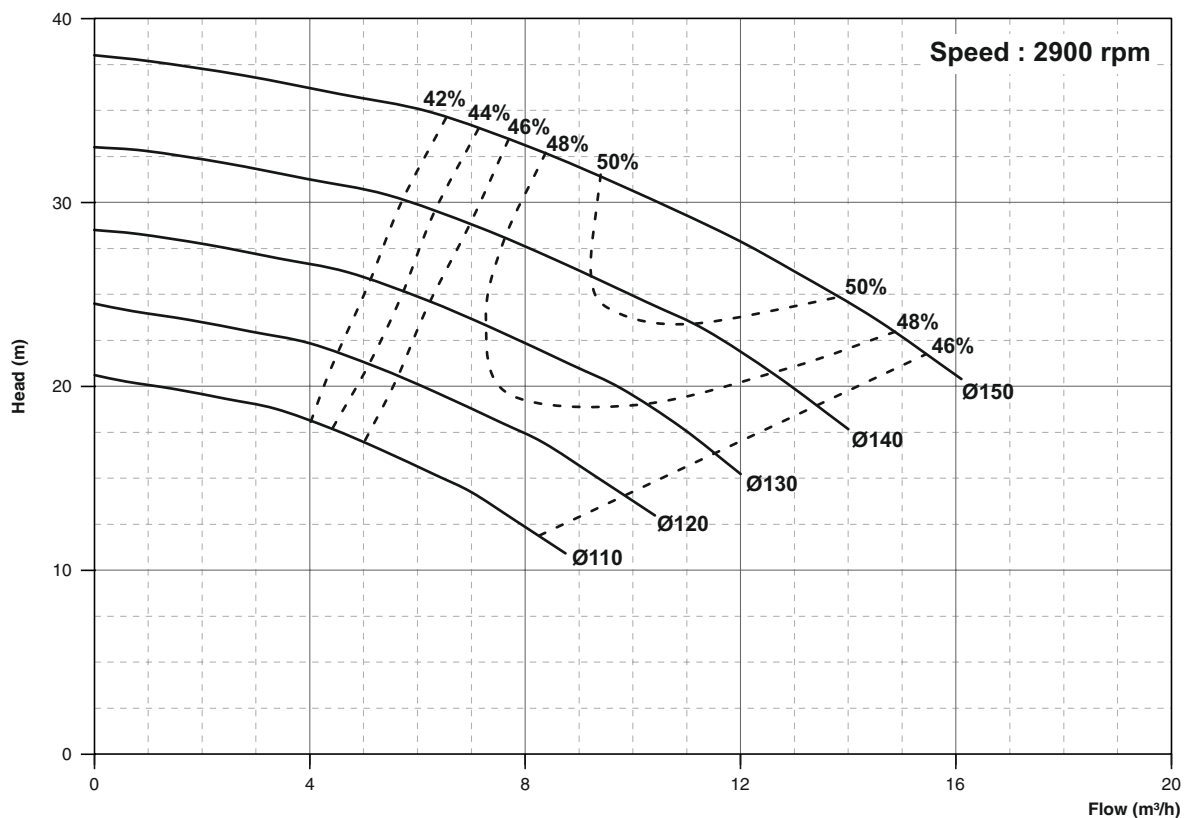




PERFORMANCE CURVE

Pump Model : **ECC - 1.25 x 1 x 6**

Pump Size in inch : **1.25 x 1**
(Suc x Dis)

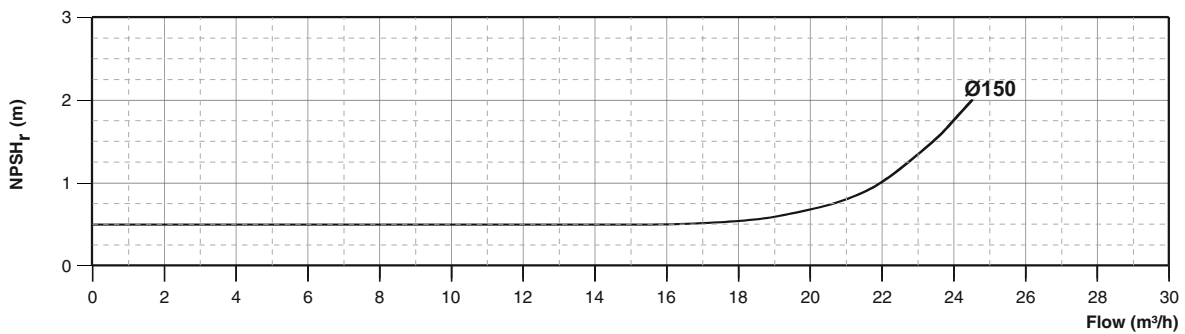
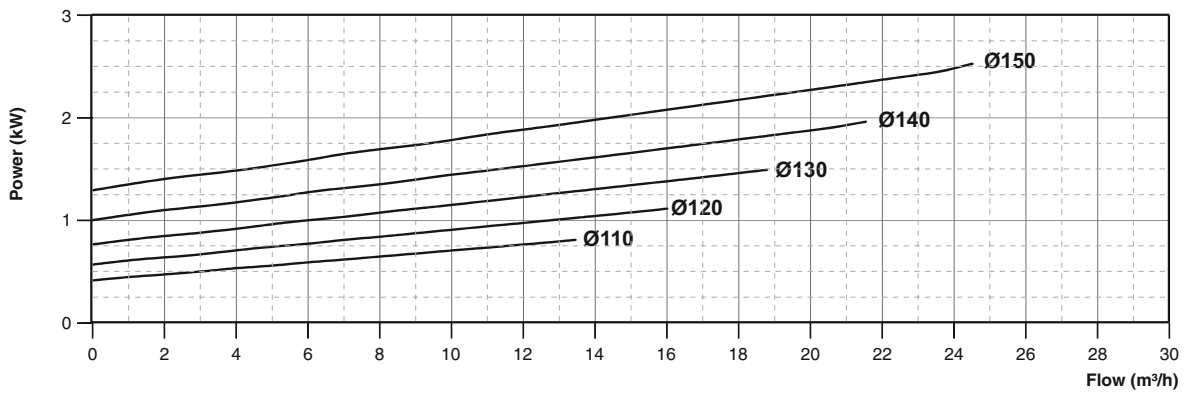
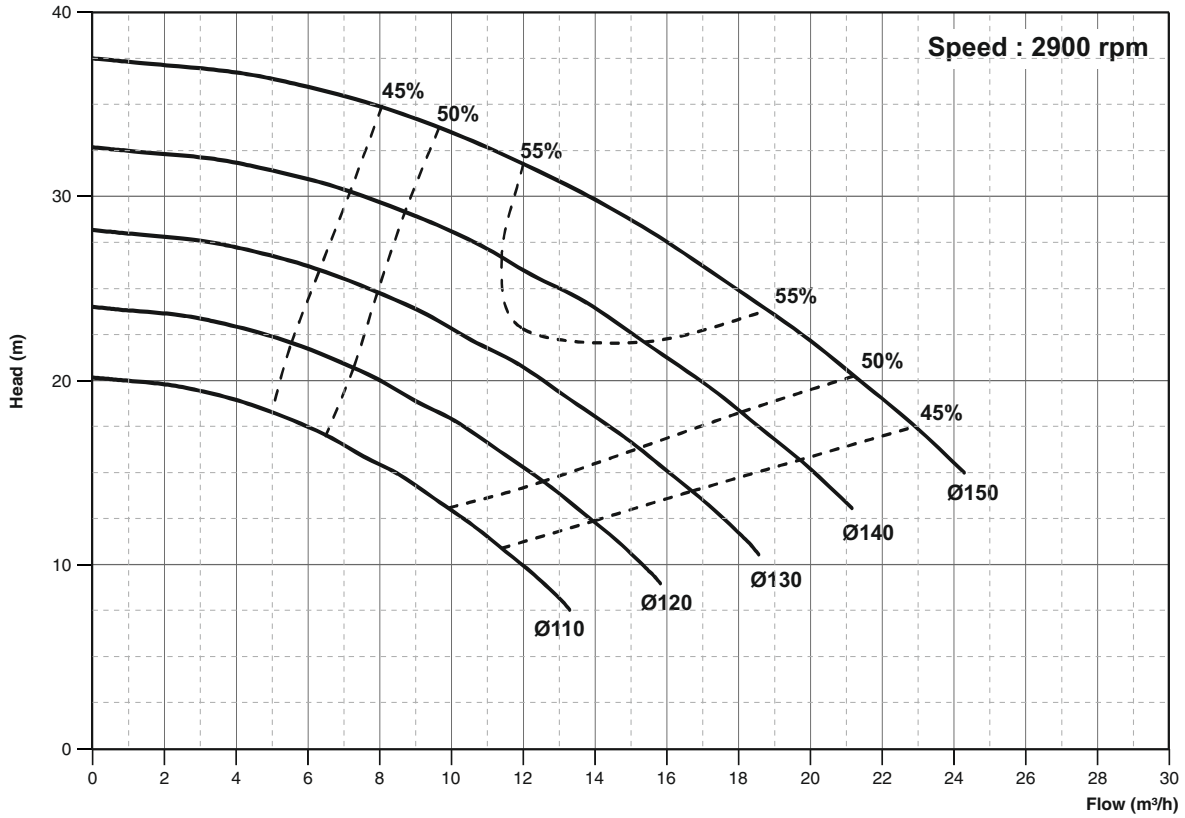




PERFORMANCE CURVE

Pump Model : ECC - 1.5 x 1.25 x 6

Pump Size in inch : 1.5 x 1.25
(Suc x Dis)

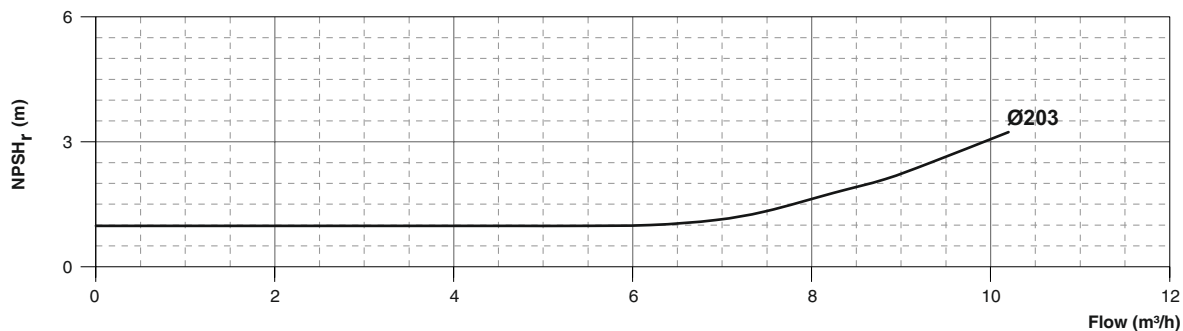
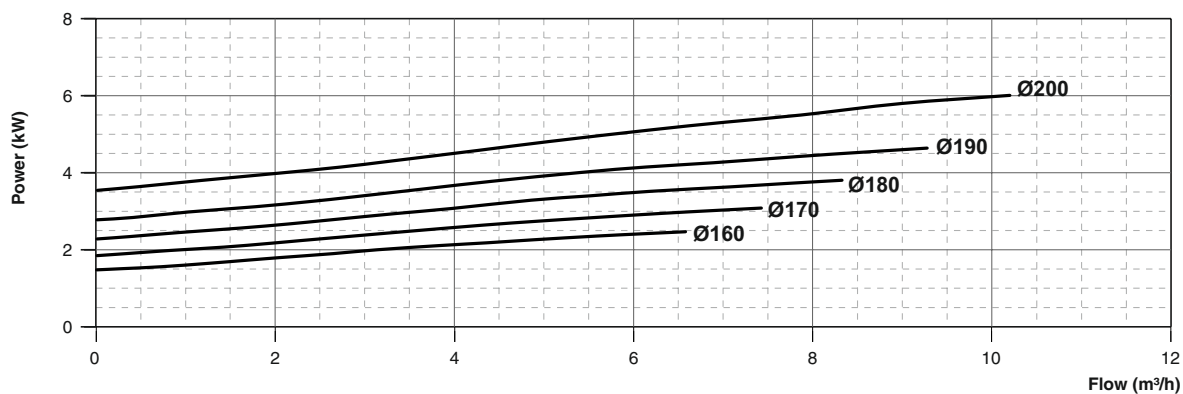
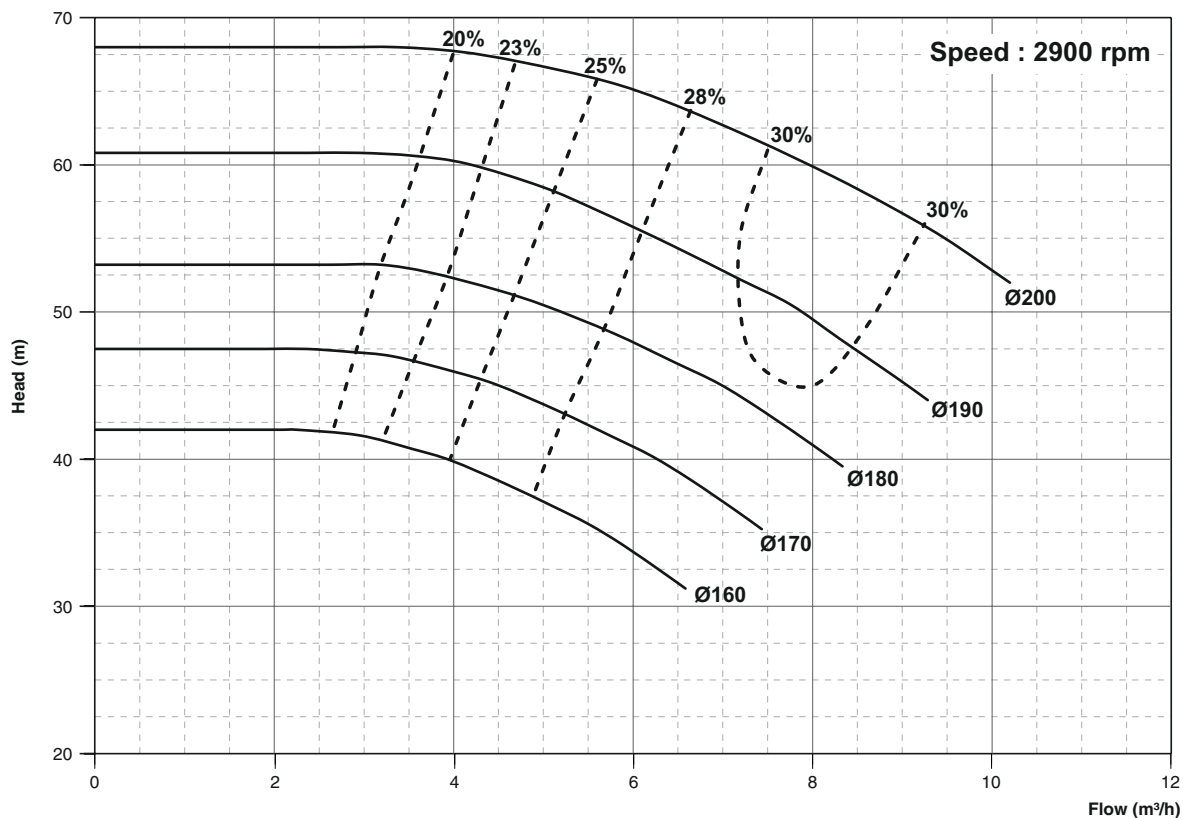




PERFORMANCE CURVE

Pump Model : **ECC - 1 x 0.75 x 8**

Pump Size in inch : **1 x 0.75**
(Suc x Dis)

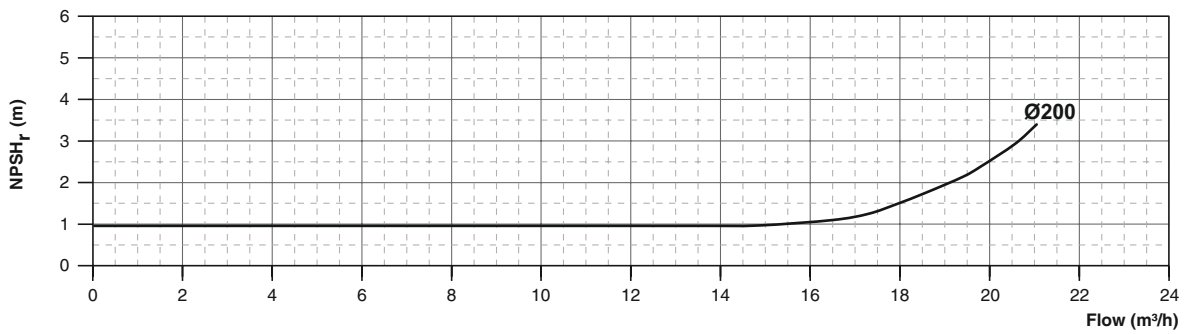
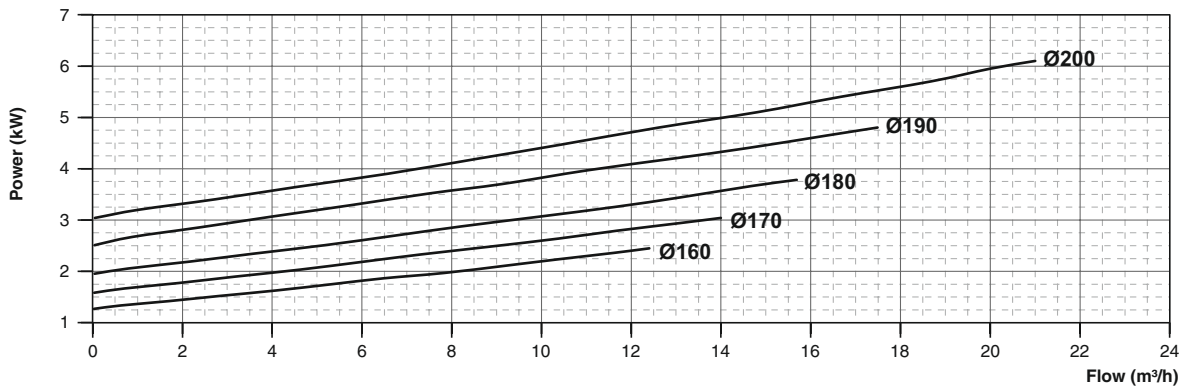
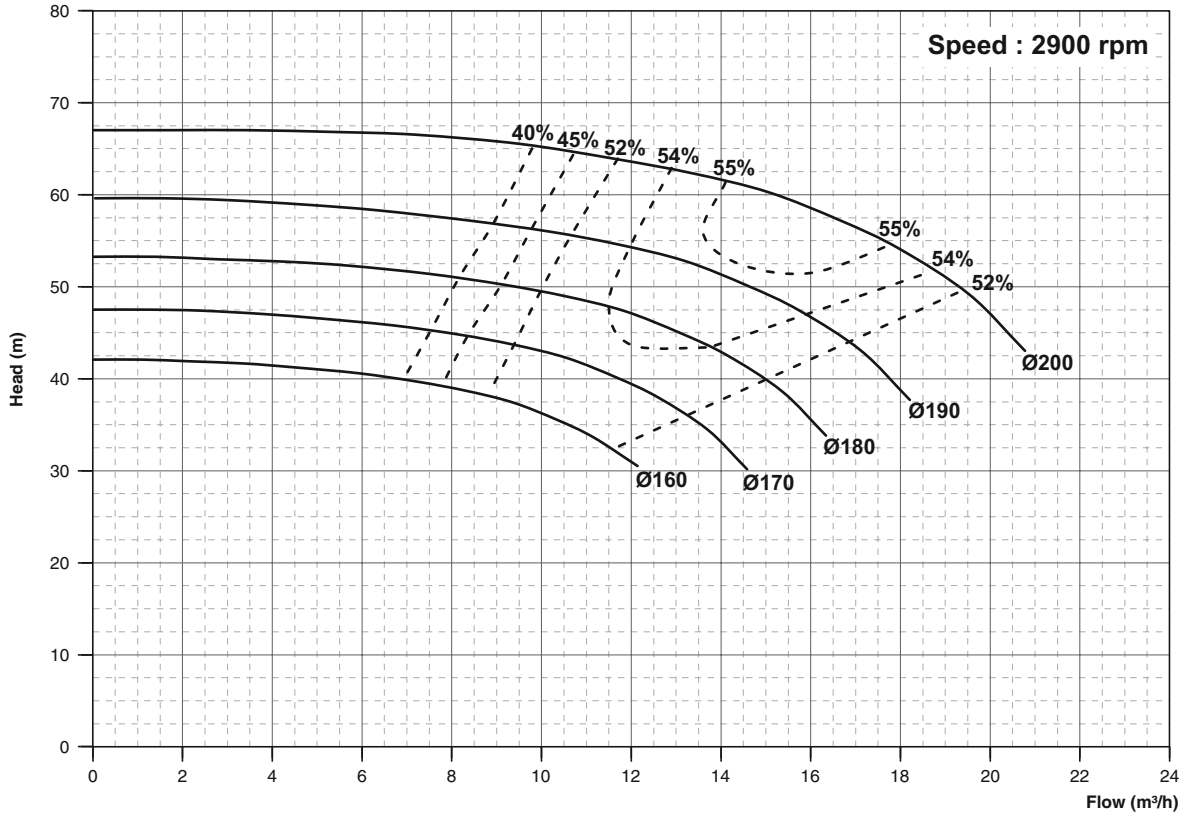




PERFORMANCE CURVE

Pump Model : ECC - 1.25 x 1 x 8

Pump Size in inch : 1.25 x 1
(Suc x Dis)



W I N N I N G W A Y S

When you have a good thing going it is quite in the fitting of things that recognitions come our way. Several prestigious awards, which decorate our shelf, say it all. These rewards not only acknowledge our position as a leader in the water pump industry but also serve as reminders about what the customer expects from a winner. And we, as ever, have our ears perfectly tuned to customer expectations.



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