

GLOBAL PUMP SOLUTION DOOCH

60Hz



IN-LINE CIRCULATION PUMP

DPX(L), DP, XQ-DP, NSQ-DP SERIES

INVERTER IN-LINE PUMP

Inverter In-line Circulation Pump

XQ-DP / NSQ-DP

INVERTER IN-LINE CIRCULATION PUMP

Inverter In-line Pump

XQ-DP / NSQ-DP pumps are built on the basis of DP pumps.

Enhanced with the NSQ / XQ drives, the DP pump together with the appropriate sensor is turned into an intelligent, variable speed pumping system.

The NSQ / XQ drives adjust the speed of the motor to provide constant pressure or differential pressure to the flow rate.

Operation

The system consists on an electric pump operated by an electronic control system(VFD) that delivers constant pressure by reducing or increasing the flow rate based on the water demand.

In case of an excessive system pressure decreases, the VFD drive starts the pump and regulates its speed until the operating pressure is re-established.

The pump's speed depends on the water demand.

If the water consumption increases, the control system raises the speed of the pump up to the max.set value.

If there is no further water demand, the pump automatically stops.

Application

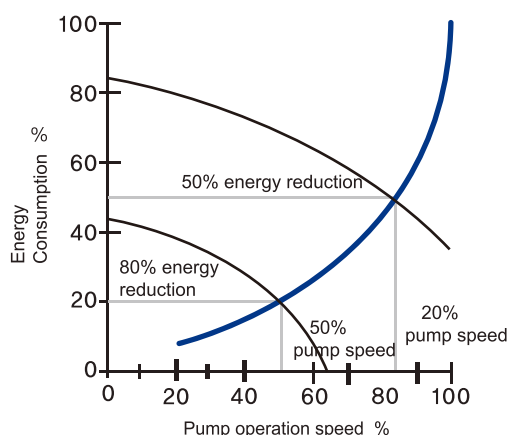
- To control frequent water consumption
- To supply water with constant pressure
- To communicate pump with external comm.

Advantages

- Energy saving (max 50%)
- Eliminates the need for separete control panel, bypass lines and control valves
- Water hammar protection
- Soft start functionality to reduce the mechanical stress on pumping system
- Compact assembly and installation

Energy Consumption Curve At Varying Pump Speed

If the pump speed decreases 20% depending on flow and head, the pump energy consumption decreases 50%.



Definition of model

NSQ - DP 50 - 20 / 2 (M) I

Use of goods

Input power

Pole of the motor

Rated head(m)

Inlet/Outlet flange size

Pump type : In-line circulation pump

V.F.D.

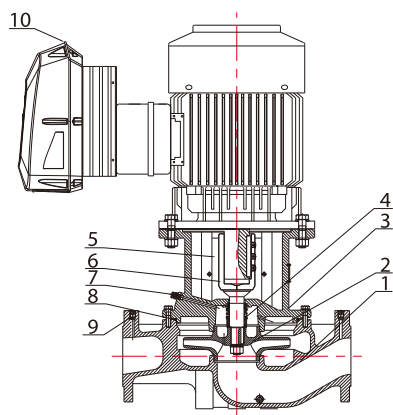
I	Without I
Water supply	Circulation

M	Without M
Input power 1Φ×220V	Input power 3Φ×380V

2	4
2 pole	4 pole

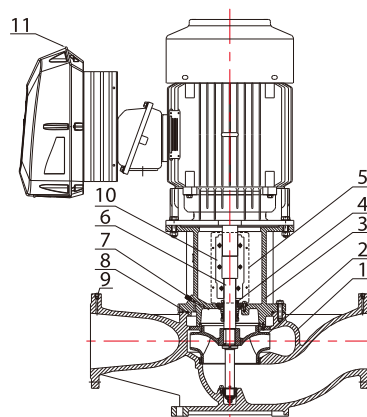
Model	XQ-Drive	NSQ-Drive
Feature	 Built-in DC reactor and EMC filter provides optimal stability and the lowest possible energy consumption.	 Variable Frequency Drive mounted dedicated controller for pump

Sectional Drawing(DP32 ~ DP150)



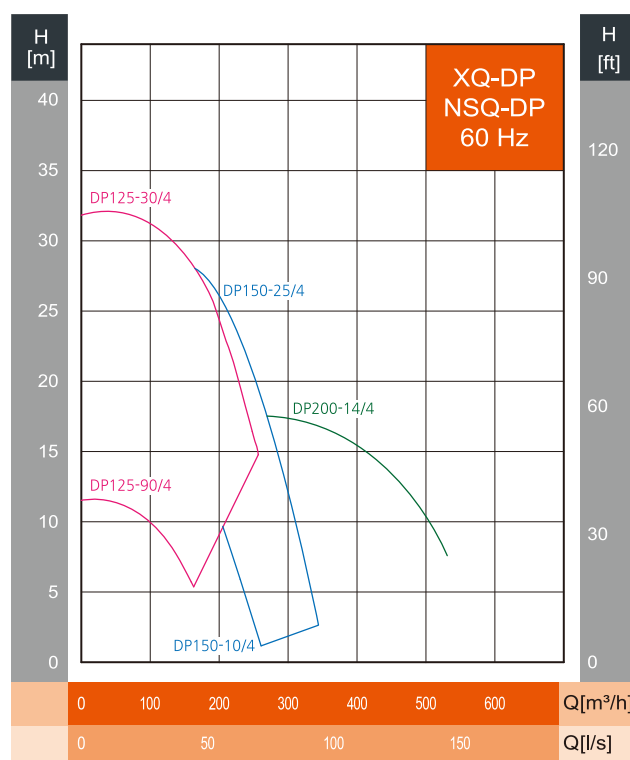
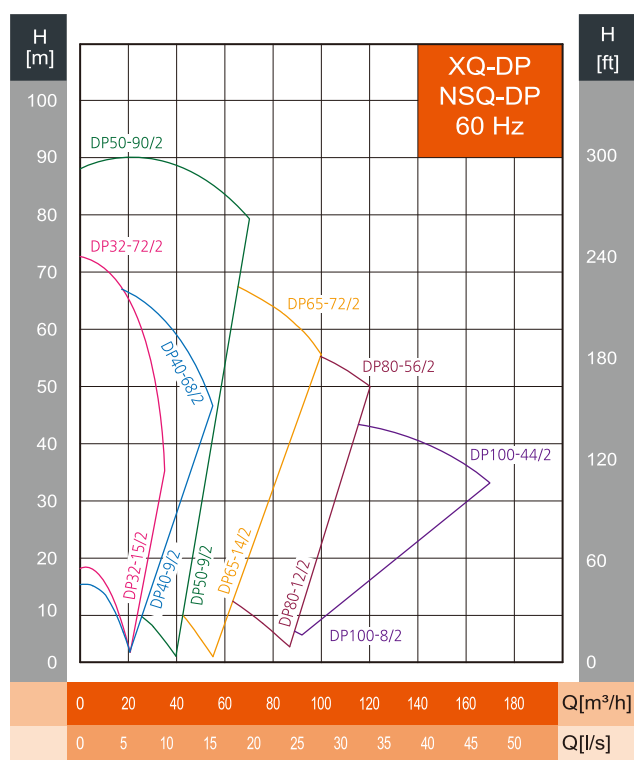
No.	PARTS	MATERIAL
1	Pump housing	Cast iron
2	Impeller	Stainless steel, Cast iron
3	Pump head	Cast iron
4	Mechanical seal	SIC/Carbon/Viton
5	Coupling cover	Stainless steel
6	Shaft	Stainless steel
7	Air vent	Stainless steel
8	O-ring	EPDM
9	Plug	Stainless steel
10	V.F.D.	XQ or NSQ Drive

Sectional Drawing(DP200)



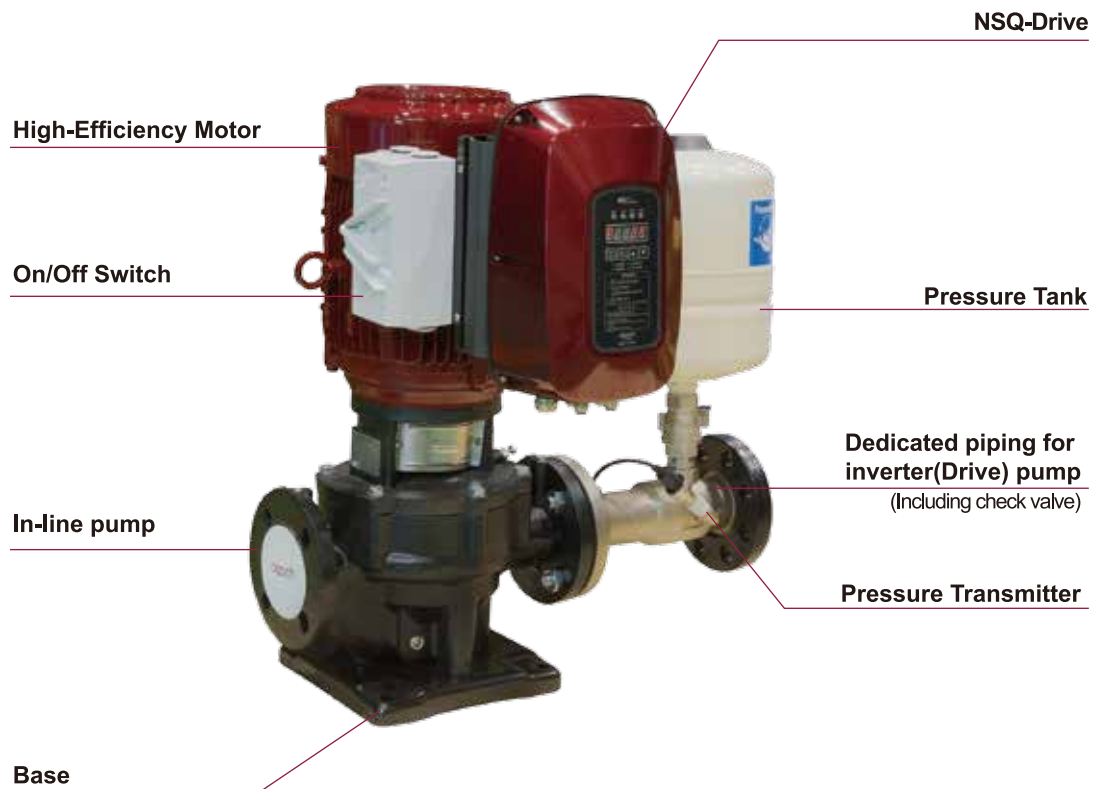
No.	PARTS	MATERIAL
1	Pump housing	Cast iron
2	Impeller	Cast iron
3	Pump head	Cast iron
4	Mechanical seal	SIC/Carbon/Viton (Cartridge seal type)
5	Coupling cover	Stainless steel
6	Shaft	Stainless steel
7	Air vent	Stainless steel
8	O-ring	EPDM
9	Plug	Stainless steel
10	Coupling	Ductile cast iron
11	V.F.D.	XQ or NSQ Drive

Performance Range



NSQ-DP

Water Supply



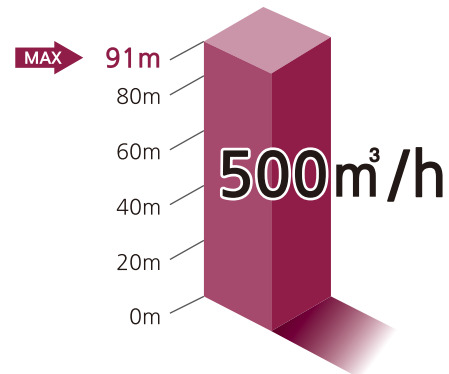
NSQ-DP Features

NSQ-DP consist on an electric pump(DP pump) operated by an electronic control system(V.F.D.).

Comparing with DP pump, NSQ drive and DP pump together with the appropriate sensor is turned into an intelligent, variable speed pumping system.

Specification

- Max. Flow : 500m³/h
- Max. Head : 91m
- Motor Power: 0.75~22kW (1~30HP)
- Input Power : 3Φ×380V / 60Hz



Function

- Control mode - pressure/differential pressure
- Set the setting pressure
- Dry-running and freeze protection
- Detect discharge flow-less automatically.
- Automatic recovery after power failure
- Protect pump and drive
- FND - Status monitoring

Advantages

- Energy saving (Max. 50%)
- Optimize the pump operation
- Water hammer protection / Low noise operation
- Compact assembly and installation
- Eliminate the need for separate control panel, bypass-lines and control valves.
- Extend life of the pump and motor
- Easy and convenient installation
- User friendly

Main Components



In-line Pump
DP Series



V.F.D. for pump
NSQ-Drive

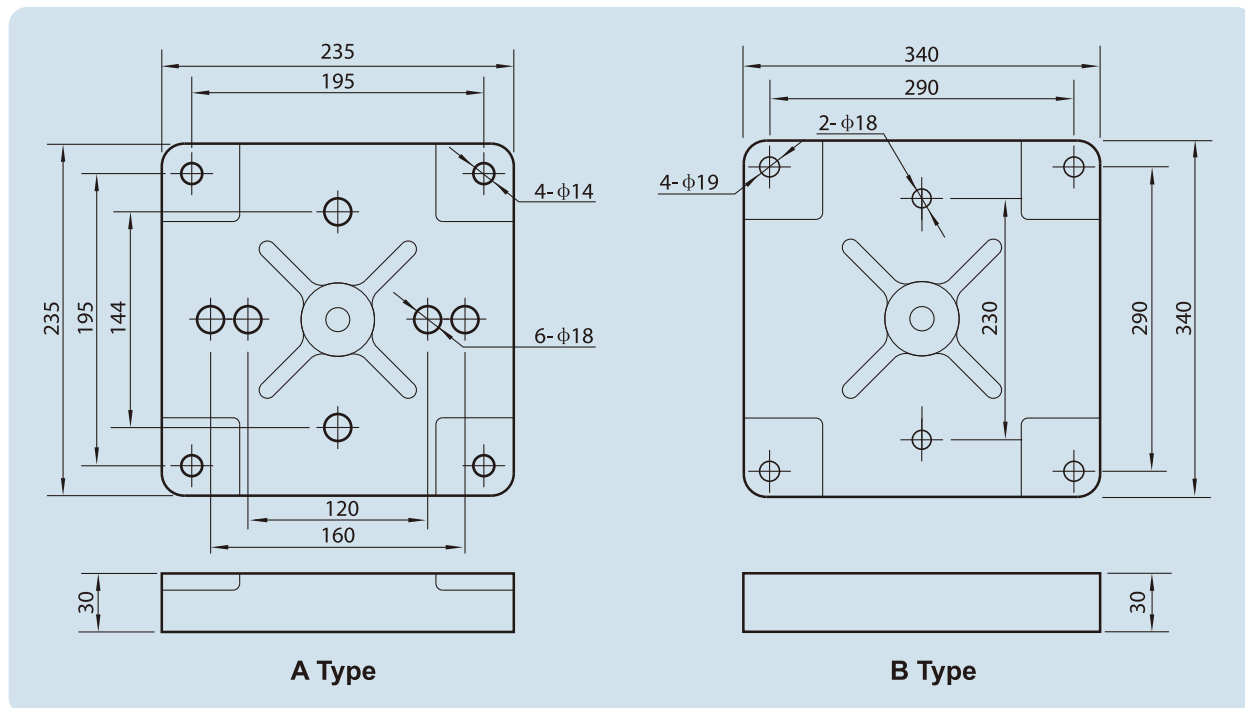


Pressure tank



Dedicated piping for
inverter(Drive) pump

Base Plate



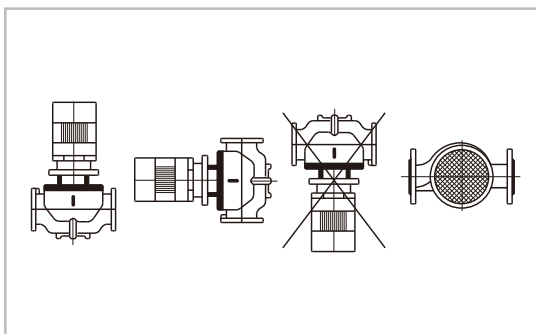
No.	MODEL	BASE PLATE TYPE	No.	MODEL	BASE PLATE TYPE	No.	MODEL	BASE PLATE TYPE	No.	MODEL	BASE PLATE TYPE
1	DP32-15/2	A	22	DP50-9/2	A	43	DP65-90/2	A	64	DP100-72/2	B
2	DP32-16/2	-	23	DP50-12/2	A	44	DP80-12/2	A	65	DP125-9/4	B
3	DP32-20/2	-	24	DP50-20/2	A	45	DP80-15/2	A	66	DP125-11/4	B
4	DP32-22/2	A	25	DP50-26/2	A	46	DP80-20/2	A	67	DP125-15/4	B
5	DP32-28/2	-	26	DP50-30/2	A	47	DP80-28/2	A	68	DP125-20/4	B
6	DP32-29/2	A	27	DP50-39/2	A	48	DP80-33/2	A	69	DP125-22/4	B
7	DP32-36/2	A	28	DP50-46/2	A	49	DP80-42/2	A	70	DP125-26/4	B
8	DP32-43/2	A	29	DP50-54/2	A	50	DP80-49/2	A	71	DP125-30/4	B
9	DP32-47/2	A	30	DP50-65/2	A	51	DP80-56/2	A	72	DP125-38/4	B
10	DP32-59/2	A	31	DP50-76/2	A	52	DP80-71/2	A	73	DP125-42/4	B
11	DP32-72/2	A	32	DP50-90/2	A	53	DP80-82/2	A	74	DP125-50/4	B
12	DP40-9/2	A	33	DP50-110/2	A	54	DP100-8/2	A	75	DP125-56/4	B
13	DP40-14/2	A	34	DP65-14/2	A	55	DP100-10/2	A	76	DP150-10/4	B
14	DP40-20/2	A	35	DP65-18/2	A	56	DP100-16/2	A	77	DP150-16/4	B
15	DP40-26/2	A	36	DP65-22/2	A	57	DP100-21/2	A	78	DP150-21/4	B
16	DP40-29/2	A	37	DP65-29/2	A	58	DP100-25/2	B	79	DP150-25/4	B
17	DP40-34/2	A	38	DP65-35/2	A	59	DP100-33/2	B	80	DP150-33/4	B
18	DP40-44/2	A	39	DP65-43/2	A	60	DP100-38/2	B	81	DP150-38/4	B
19	DP40-48/2	A	40	DP65-53/2	A	61	DP100-44/2	B	82	DP150-45/4	B
20	DP40-58/2	A	41	DP65-60/2	A	62	DP100-54/2	B	83		
21	DP40-68/2	A	42	DP65-72/2	A	63	DP100-62/2	B	84		

INSTALLATION REQUIREMENTS

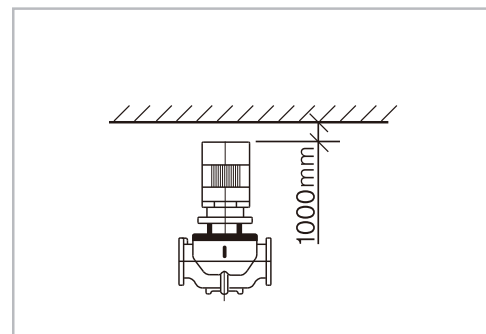
Detailed requirements of installation

1. If the system pipeline can support the pumps, pumps with 2.2kW motor power(including 2.2kW) can be hung in line;
If the system pipeline can't support the pumps or the pump motor power is higher than 2.2kW, the pumps must be installed in brackets or base.
2. Pump with motor power lower than 2.2kW(including 2.2kW) can be installed horizontally or vertically to the pipeline.
Pumps with motor power higher than 2.2kW, can only be installed vertically to the pipeline. (see 2-A)
3. The pump installation shall not allow the system pipeline tensile force to be transferred to the pump body.
4. The pump should be installed in the environment with sufficient cooling and the cooling air shall not be above 40°C.
5. If the pumps are installed outdoors, covers should be installed to protect electric components from water.
6. For the convenience of maintenance, there should be enough space above and below the pumps. (see 2-B).
7. To prevent noises and vibration and ensure the best operation, anti-vibration base shall be used in installation.
Generally, cement base with the weight equal or bigger than 1.5 x pump weight shall be adopted.
8. The base is optional as the client's requirement. (Refer to the base lay-out for the dimension.)

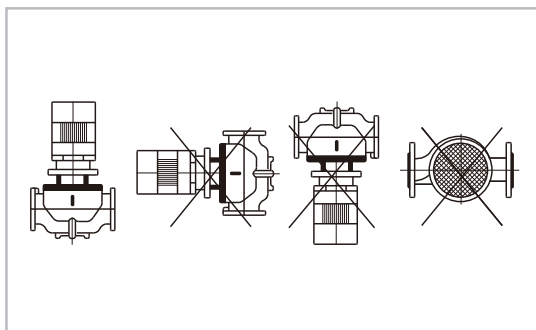
For power $\leq 2.2\text{kW}$



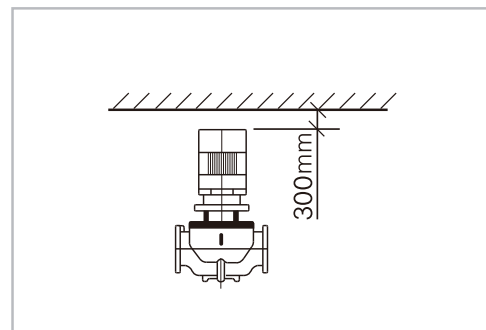
For power $\geq 5.5\text{kW}$



For power $> 2.2\text{kW}$



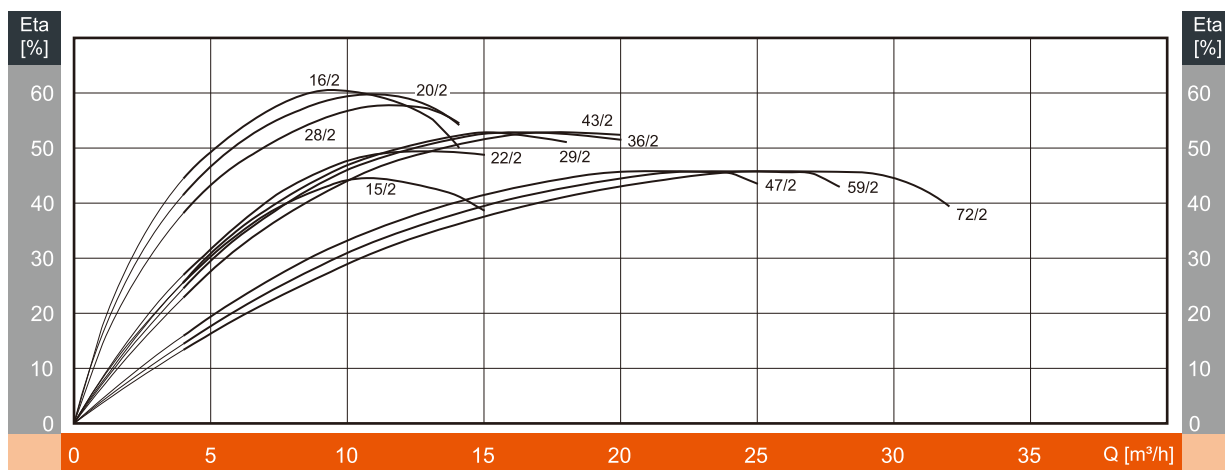
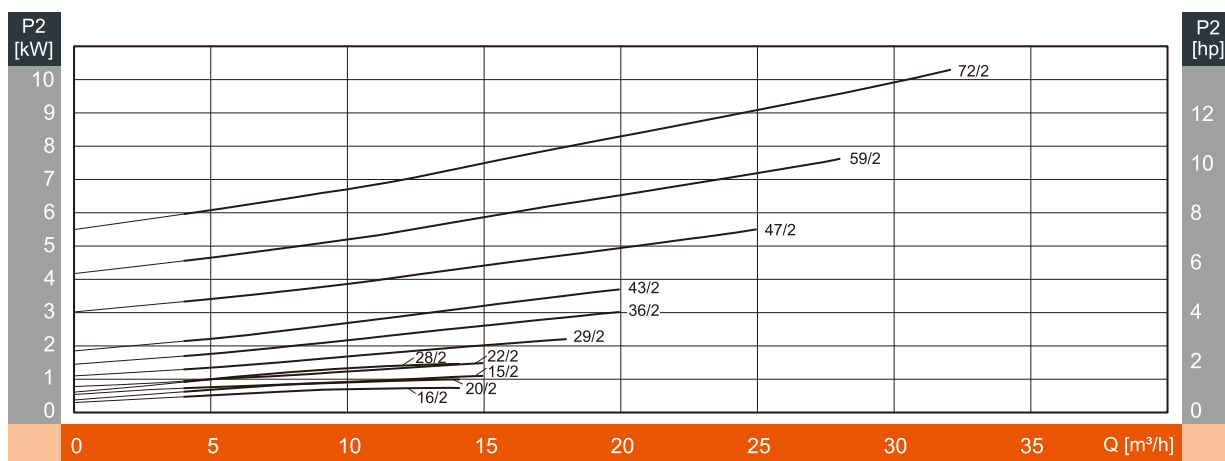
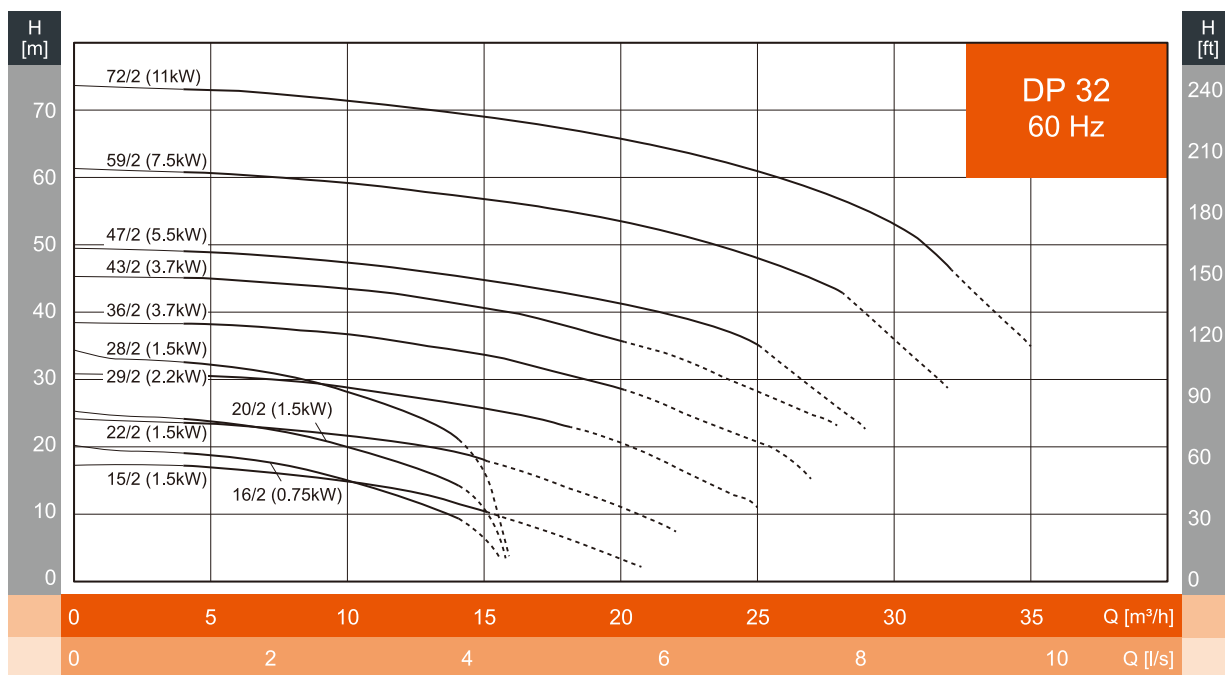
For power $< 5.5\text{kW}$



Pic. 2-A

Pic. 2-B

Performance Curve

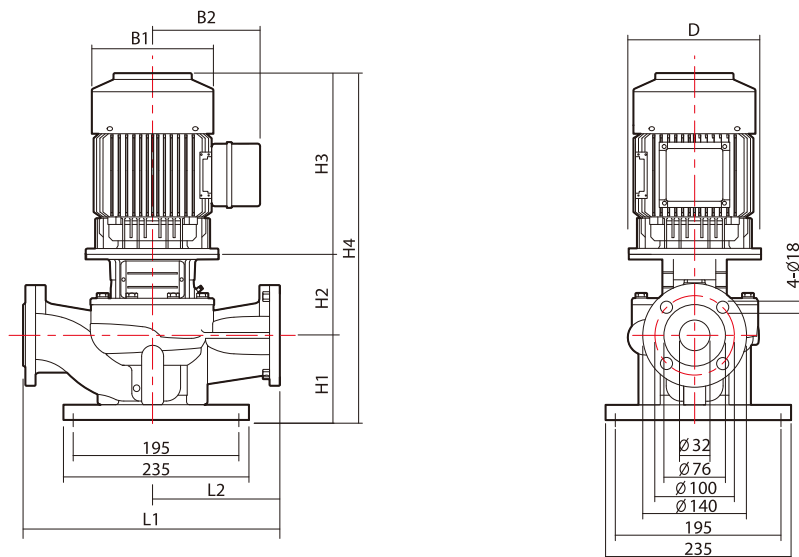


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Data Sheet

MODEL	POWER		Q (m³/hr)	5	10	15	20	25	30	35
	kW	HP								
DP32-15/2	1.5	2	HEAD (m)	17	15	10	3			
DP32-16/2	0.75	1		19	15	6				
DP32-20/2	1.5	2		24	20	11				
DP32-22/2	1.5	2		23	22	18	11			
DP32-28/2	1.5	2		32	28	17				
DP32-29/2	2.2	3		31	29	26	21	11		
DP32-36/2	3.7	5		38	37	34	29	21		
DP32-43/2	3.7	5		45	44	41	36	28		
DP32-47/2	5.5	7.5		49	47	45	42	35	16	
DP32-59/2	7.5	10		61	59	57	53	48	36	
DP32-72/2	11	15		73	71	69	66	61	54	35

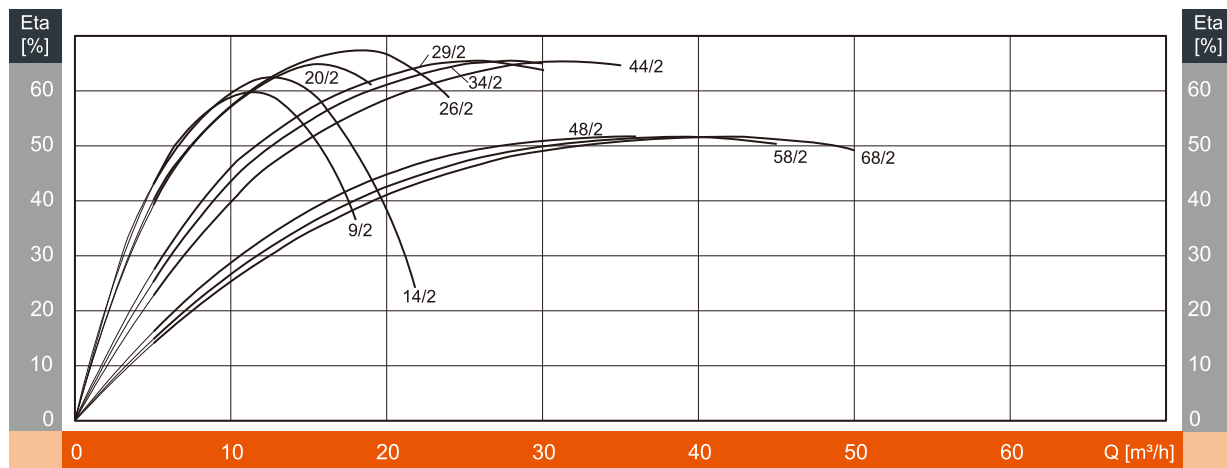
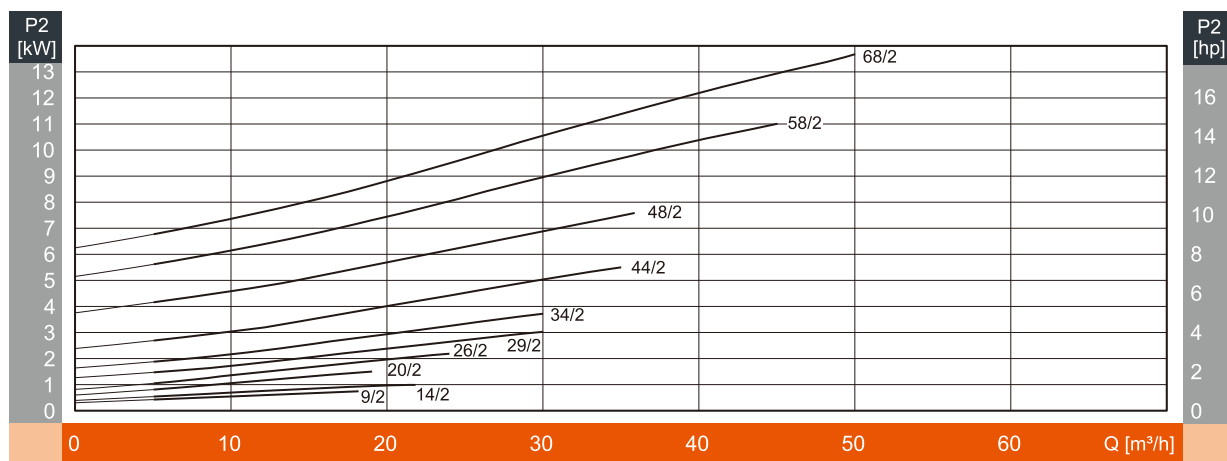
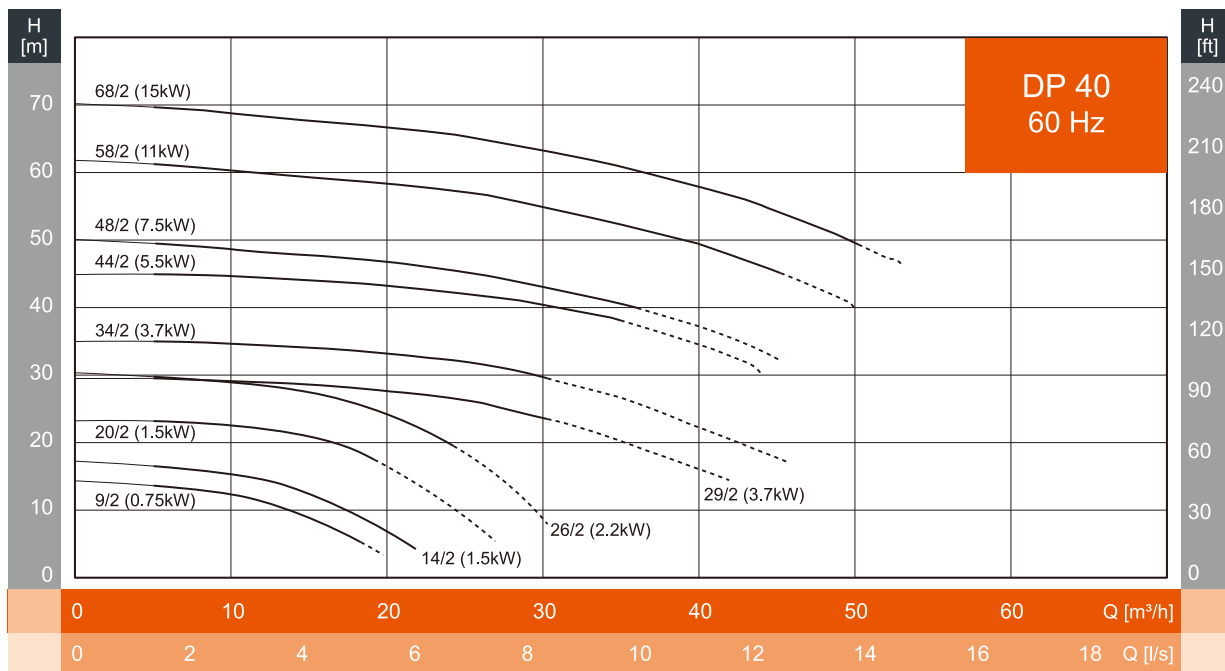
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP32-15/2	-	187	180	130	165.5	315	610.5	340	170	51
DP32-16/2	-	170	170	80	148	255	483	280	140	-
DP32-20/2	-	187	180	80	148	315	543	280	140	-
DP32-22/2	-	187	180	130	165.5	315	610.5	340	170	53
DP32-28/2	-	187	180	80	148	315	543	280	140	-
DP32-29/2	-	187	180	130	165.5	315	610.5	340	170	54
DP32-36/2	-	227	200	130	184.5	330	644.5	340	170	65
DP32-43/2	-	227	200	130	184.5	330	644.5	340	170	65
DP32-47/2	-	268	225	130	212.5	370	712.5	440	220	94
DP32-59/2	-	268	225	130	212.5	370	712.5	440	220	99
DP32-72/2	350	318	290	130	262	480	872	440	220	181

Performance Curve

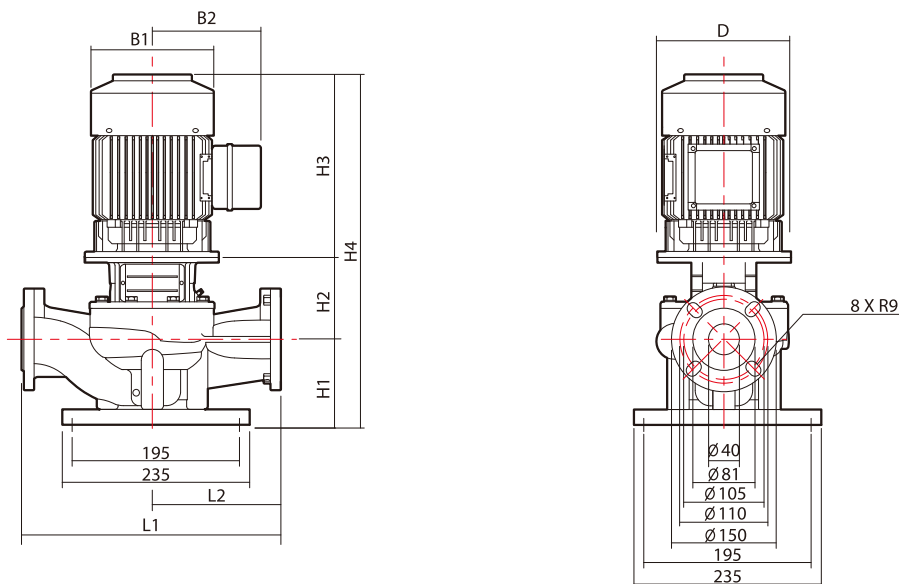


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Data Sheet

MODEL	POWER		Q (m³/hr)	6	12	13	18	24	30	36	42
	kW	HP									
DP40-9/2	0.75	1	HEAD (m)	14	11	11	6				
DP40-14/2	1.5	2		16	15	14	9				
DP40-20/2	1.5	2		23	22	22	19	11			
DP40-26/2	2.2	3		30	29	28	26	20	9		
DP40-29/2	3.7	5		29	29	29	28	27	24	19	14
DP40-34/2	3.7	5		35	34	34	34	32	30	26	20
DP40-44/2	5.5	7.5		45	44	44	44	42	40	37	32
DP40-48/2	7.5	10		49	48	48	47	46	43	40	35
DP40-58/2	11	15		61	60	60	59	57	55	52	48
DP40-68/2	15	20		70	68	68	67	66	64	60	57

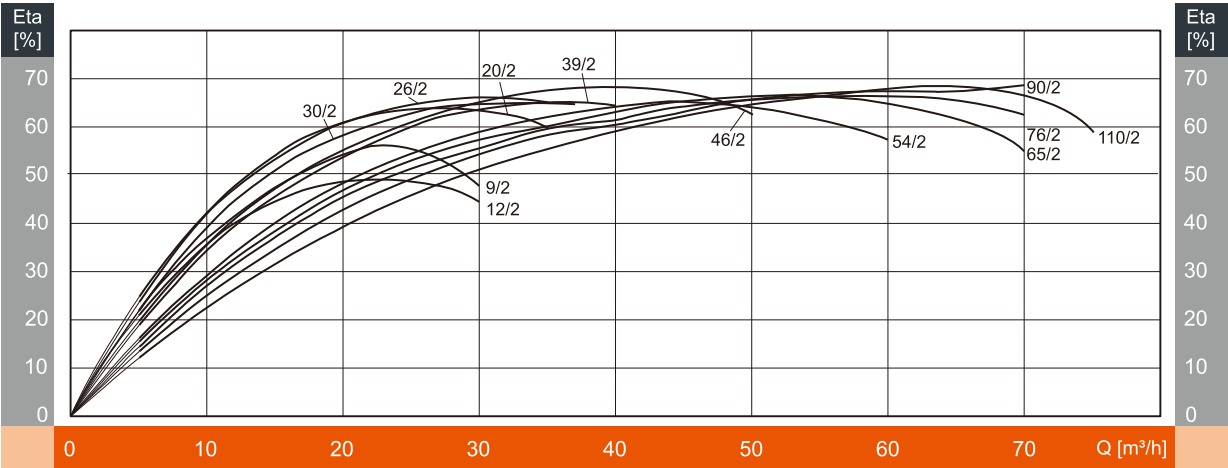
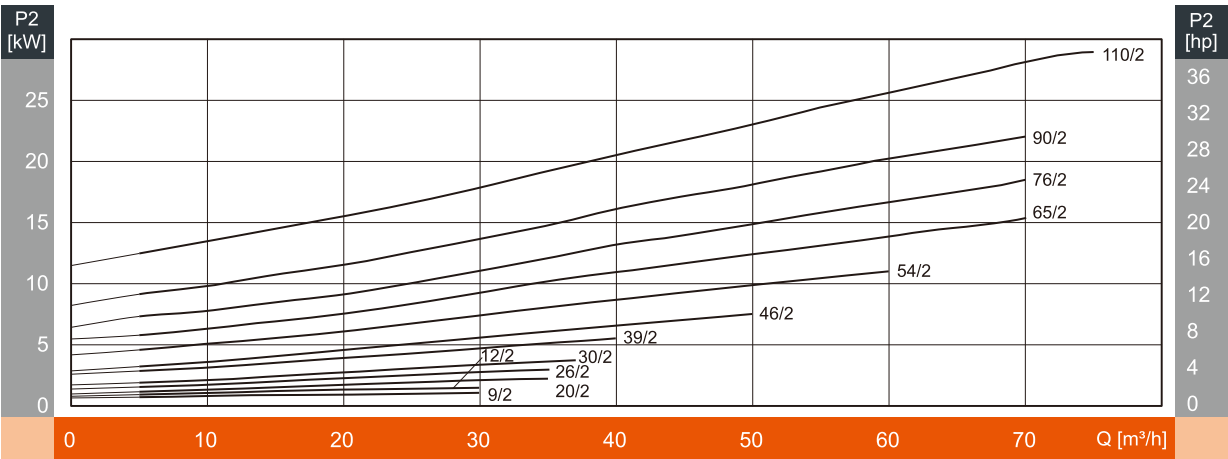
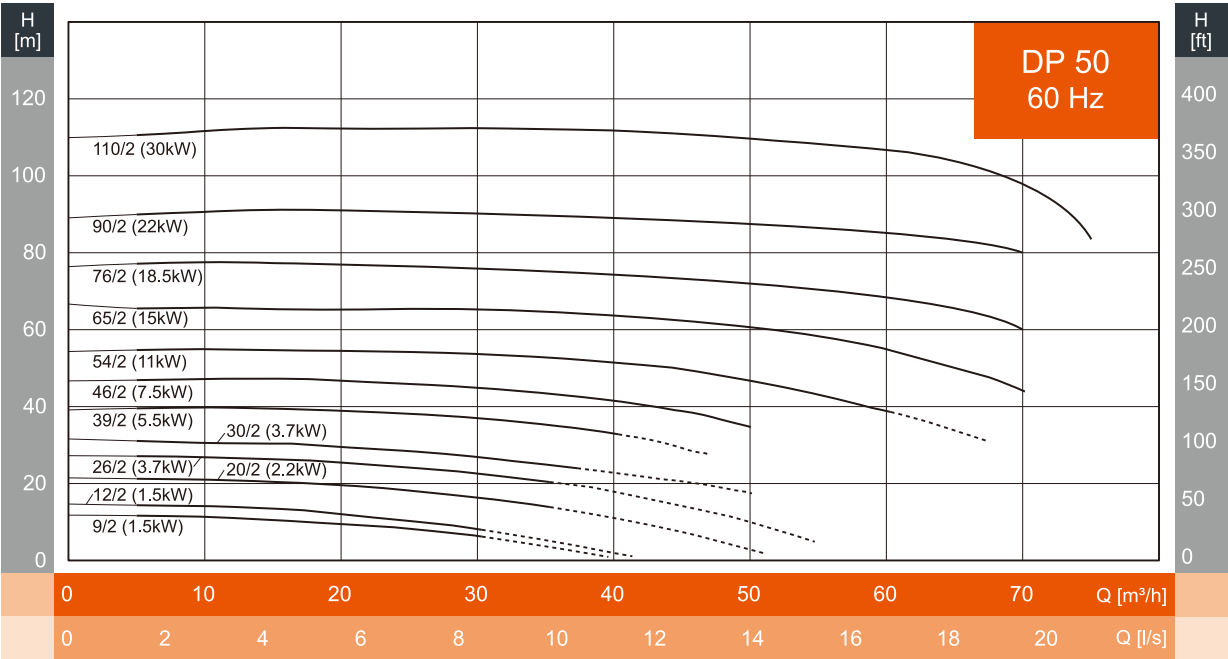
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP40-9/2	-	170	170	98	150	255	503	320	160	45
DP40-14/2	-	170	170	98	150	255	503	320	160	45
DP40-20/2	-	187	180	98	160	315	573	320	160	48
DP40-26/2	-	187	180	98	160	315	573	320	160	49
DP40-29/2	-	227	200	140	184.5	330	654.5	440	220	77
DP40-34/2	-	227	200	140	184.5	330	654.5	440	220	77
DP40-44/2	-	268	225	140	212.5	370	722.5	440	220	96
DP40-48/2	-	268	225	140	212.5	370	722.5	440	220	100
DP40-58/2	350	318	290	140	262	480	882	440	220	173
DP40-68/2	350	318	290	140	262	480	882	440	220	173

Performance Curve

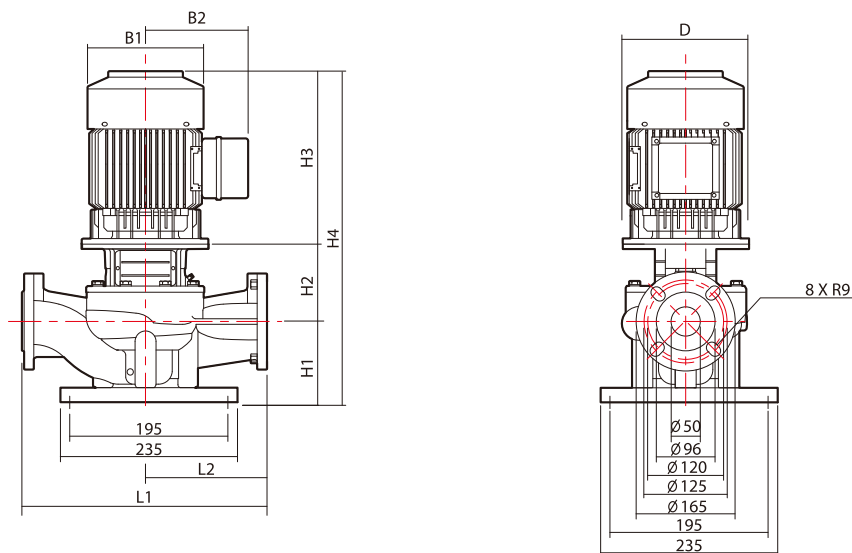


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Data Sheet

MODEL	POWER		Q (m³/hr)	5	10	15	20	25	30	35	40	45	50	55	60	65
	kW	HP														
DP50-9/2	1.5	2	HEAD (m)	12	11	11	9	8	6	4	1					
DP50-12/2	1.5	2		14	14	13	12	10	8	5	2					
DP50-20/2	2.2	3		21	21	20	20	18	16	14	11	7	3			
DP50-26/2	3.7	5		27	27	26	26	24	23	21	18	14	10			
DP50-30/2	3.7	5		32	31	30	30	28	27	25	23	20	17	7		
DP50-39/2	5.5	7.5		40	40	40	39	38	37	35	33	29	5			
DP50-46/2	7.5	10		47	47	47	47	46	45	43	42	39	35	11		
DP50-54/2	11	15		55	55	55	54	54	54	53	51	50	47	43	39	34
DP50-65/2	15	20		66	66	65	65	65	65	65	64	62	61	58	55	50
DP50-76/2	18.5	25		77	77	77	76	76	76	76	75	74	72	70	68	65
DP50-90/2	22	30		90	91	91	91	91	91	91	90	89	88	86	84	82
DP50-110/2	30	40		111	112	112	112	112	112	112	112	111	110	108	107	105

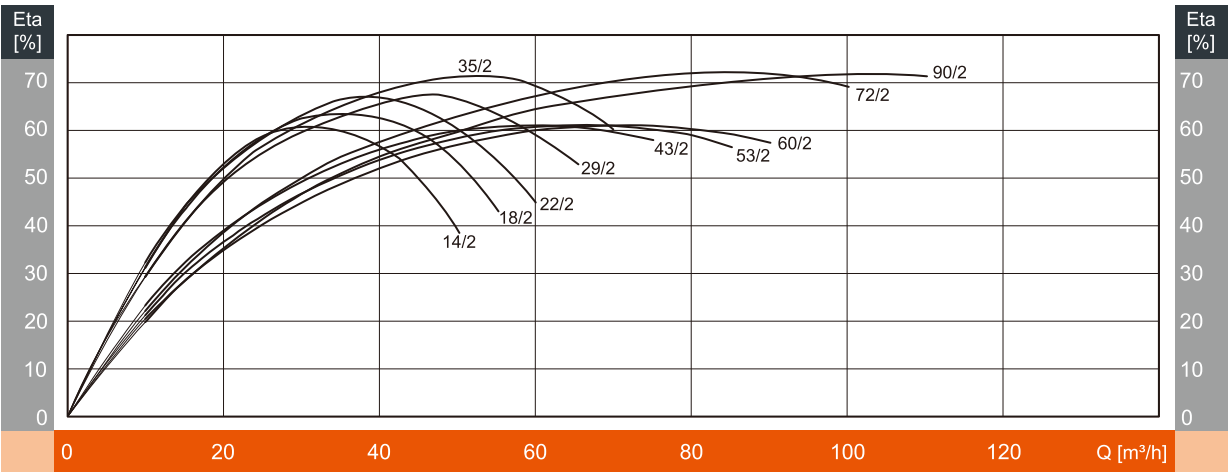
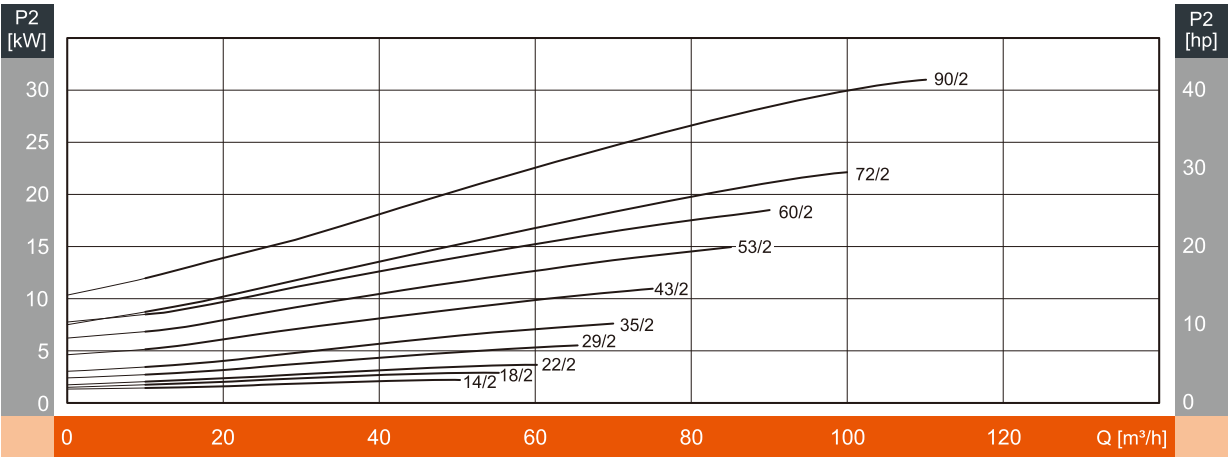
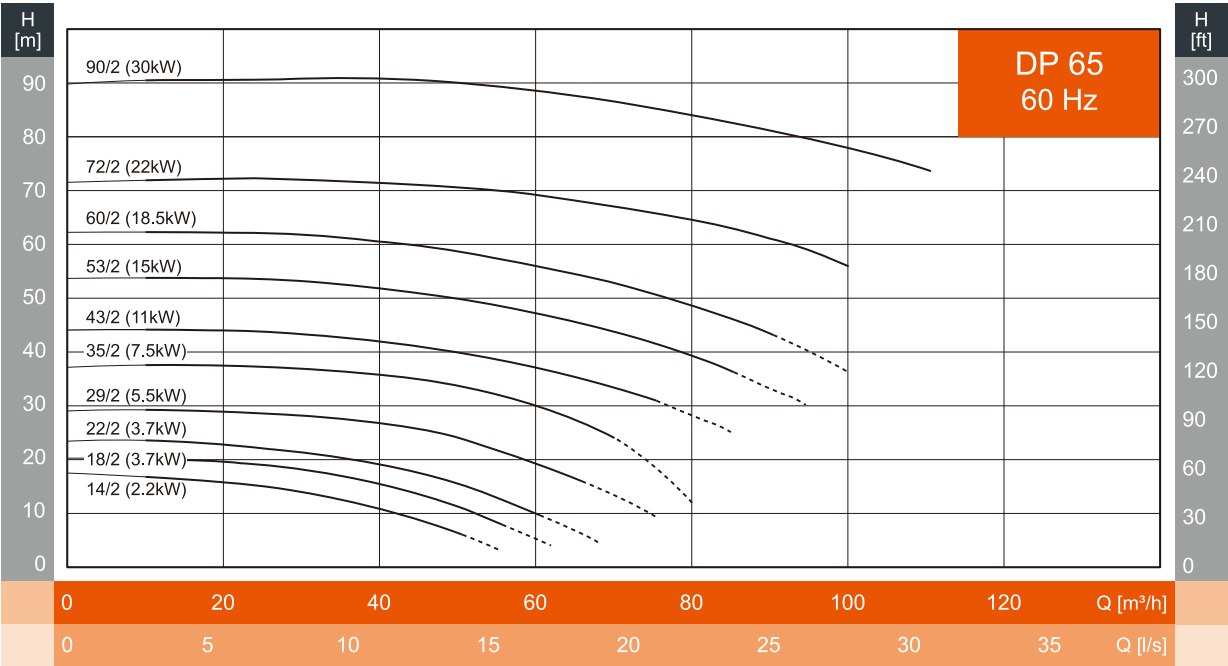
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP50-9/2	-	170	170	145	153	255	553	340	170	57
DP50-12/2	-	187	180	145	153	315	613	340	170	59
DP50-20/2	-	187	180	145	156	315	616	340	170	59
DP50-26/2	-	227	200	145	175	330	650	340	170	69
DP50-30/2	-	227	200	145	175	330	650	340	170	75
DP50-39/2	-	268	225	145	194	370	709	340	170	91
DP50-46/2	-	268	225	145	194	370	709	340	170	95
DP50-54/2	350	318	290	145	250	480	875	440	220	196
DP50-65/2	350	318	290	145	250	480	875	440	220	214
DP50-76/2	350	318	290	145	250	525	920	440	220	226
DP50-90/2	350	354	305	145	250	570	965	440	220	267
DP50-110/2	400	354	305	145	250	610	1005	440	220	320

Performance Curve

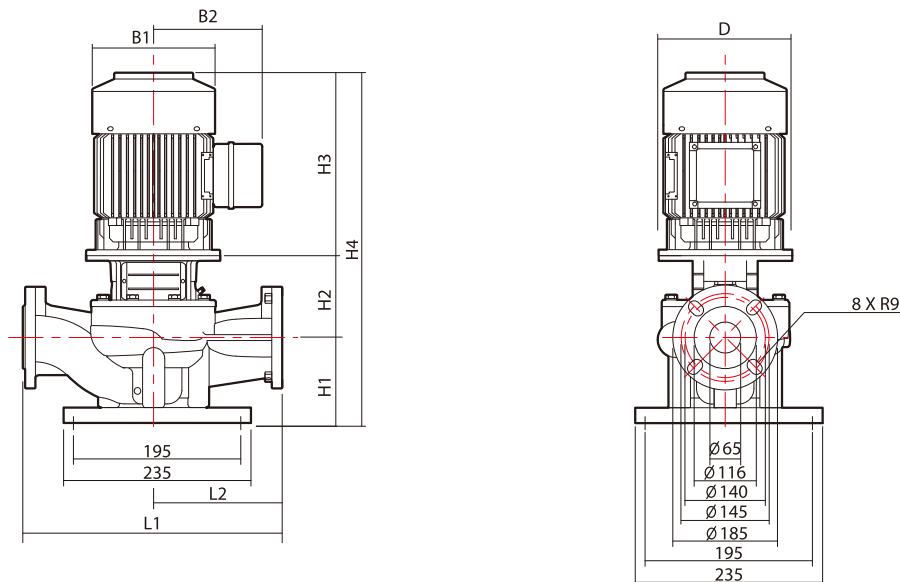


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Data Sheet

MODEL	POWER		Q (m³/hr)	10	20	30	40	50	60	70	80	90
	kW	HP										
DP65-14/2	2.2	3	HEAD (m)	17	16	14	11	6				
DP65-18/2	3.7	5		20	20	18	16	11	5			
DP65-22/2	3.7	5		24	23	22	19	16	10			
DP65-29/2	5.5	7.5		29	29	28	27	24	19	14		
DP65-35/2	7.5	10		38	38	37	36	34	30	24	12	
DP65-43/2	11	15		44	44	43	42	40	37	33	28	19
DP65-53/2	15	20		54	54	53	52	50	47	44	39	33
DP65-60/2	18.5	25		62	62	62	61	59	56	53	49	43
DP65-72/2	22	30		72	72	73	72	71	69	67	65	61
DP65-90/2	30	40		90	90	91	91	90	89	87	84	81

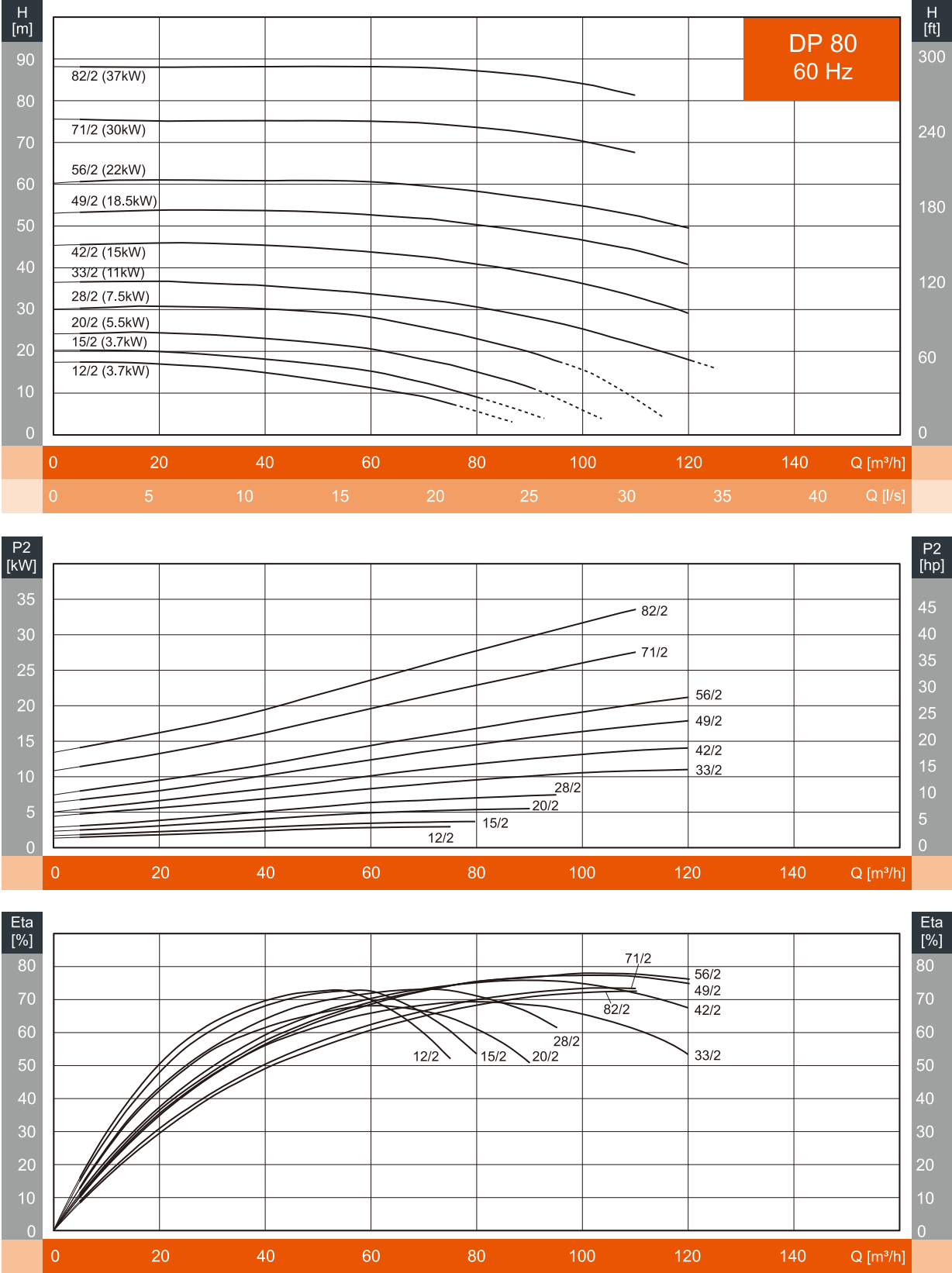
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP65-14/2	-	187	180	135	172	315	622	360	180	56
DP65-18/2	-	227	200	135	191	330	656	360	180	72
DP65-22/2	-	227	200	135	191	330	656	360	180	77
DP65-29/2	-	268	225	135	213	370	718	360	180	93
DP65-35/2	-	268	225	135	213	370	718	360	180	97
DP65-43/2	350	318	290	155	262	480	897	475	237.5	199
DP65-53/2	350	318	290	155	262	480	897	475	237.5	218
DP65-60/2	350	318	290	155	262	525	942	475	237.5	232
DP65-72/2	350	354	305	155	262	570	987	475	237.5	270
DP65-90/2	400	354	305	155	262	610	1027	475	237.5	333

Performance Curve

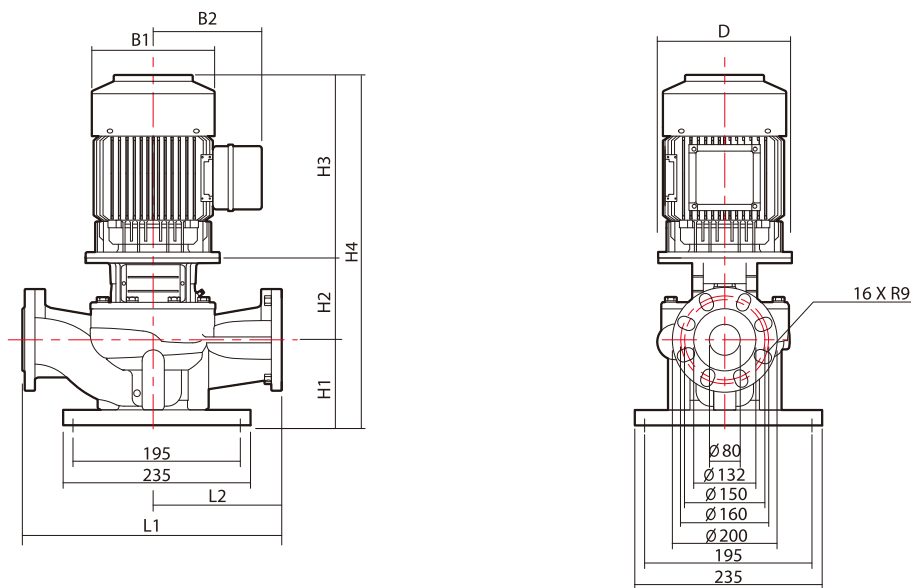


※ Please contact the headquarters to select the dotted line section.

Data Sheet

MODEL	POWER		Q (m ³ /hr)	10	20	30	40	50	60	70	80	90	100	110	120	130
	kW	HP														
DP80-12/2	3.7	5	HEAD (m)	17	17	16	15	14	12	9	6					
DP80-15/2	3.7	5		20	20	19	18	17	16	13	9	5				
DP80-20/2	5.5	7.5		24	24	24	23	22	21	18	15	11	6			
DP80-28/2	7.5	10		31	31	31	30	29	28	26	23	20	16	9		
DP80-33/2	11	15		37	37	36	36	35	34	32	31	28	25	22	18	10
DP80-42/2	15	20		46	46	46	45	45	44	43	41	39	36	33	29	
DP80-49/2	18.5	25		53	54	54	54	53	53	52	50	49	47	44	41	
DP80-56/2	22	30		61	61	61	61	61	61	60	58	57	55	52	50	
DP80-71/2	30	40		75	75	75	75	75	75	75	74	72	70	67	45	
DP80-82/2	37	50		88	88	88	88	88	88	88	87	86	84	81	49	

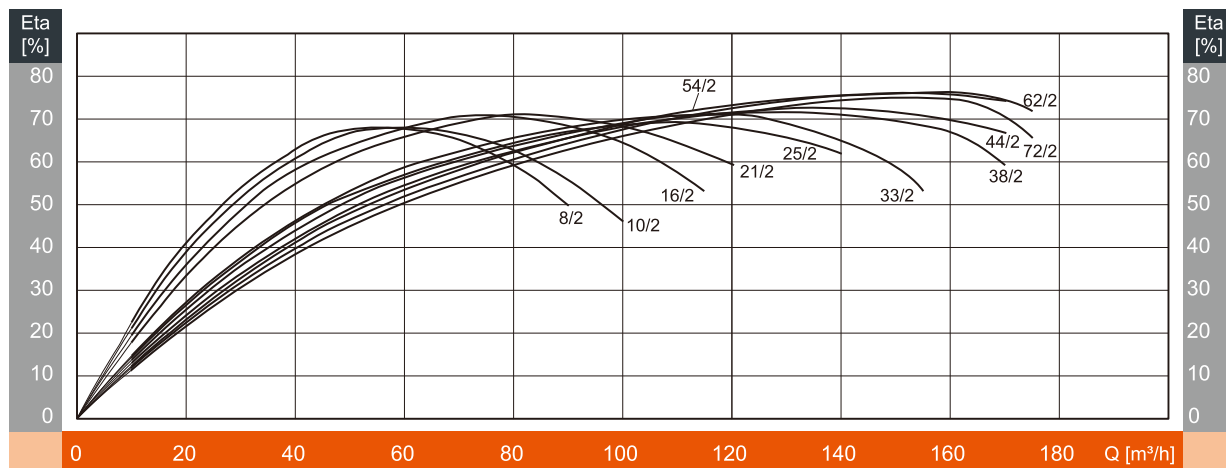
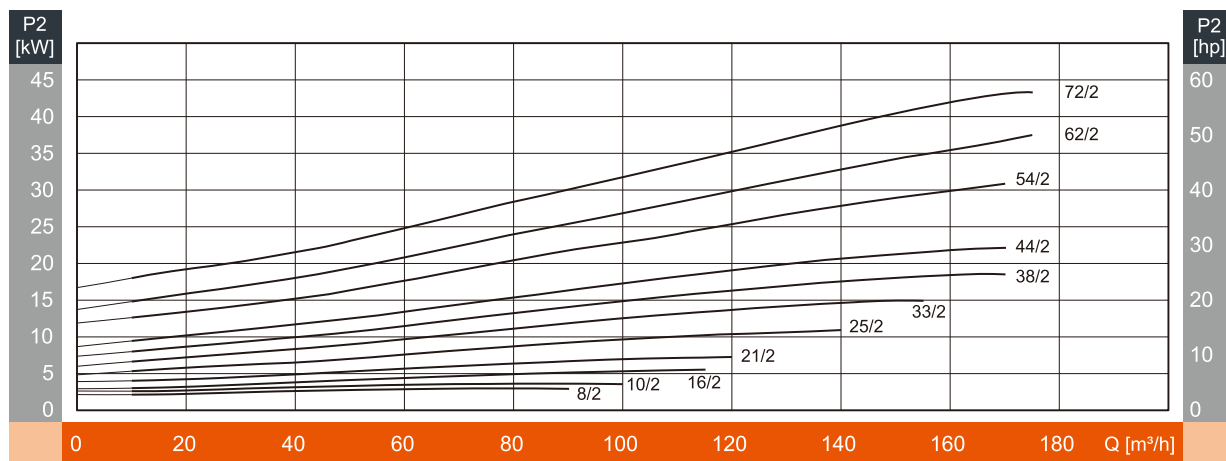
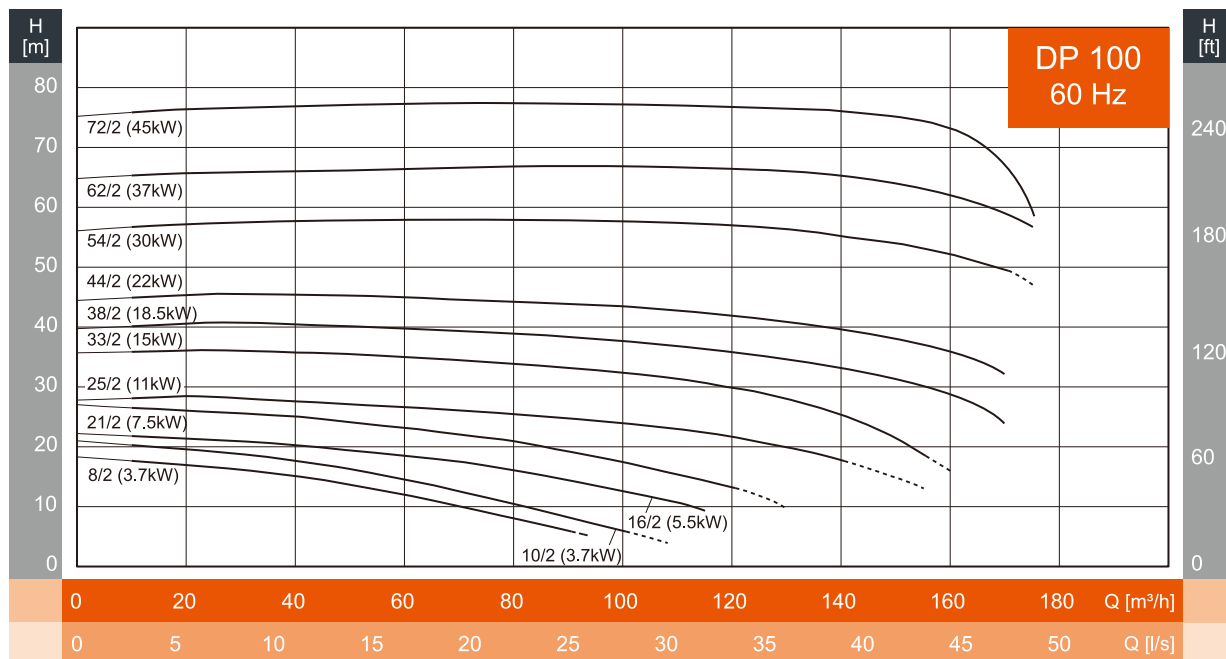
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP80-12/2	-	227	200	127	219	330	676	450	225	80
DP80-15/2	-	227	200	127	219	330	676	450	225	86
DP80-20/2	-	268	225	127	241	370	738	450	225	100
DP80-28/2	-	268	225	127	241	370	738	450	225	104
DP80-33/2	350	318	290	145	279	480	904	500	250	202
DP80-42/2	350	318	290	145	279	480	904	500	250	222
DP80-49/2	350	318	290	145	279	525	949	500	250	230
DP80-56/2	350	354	305	145	279	570	994	500	250	245
DP80-71/2	400	354	305	145	279	610	1034	500	250	329
DP80-82/2	400	404	350	145	279	670	1094	500	250	348

Performance Curve

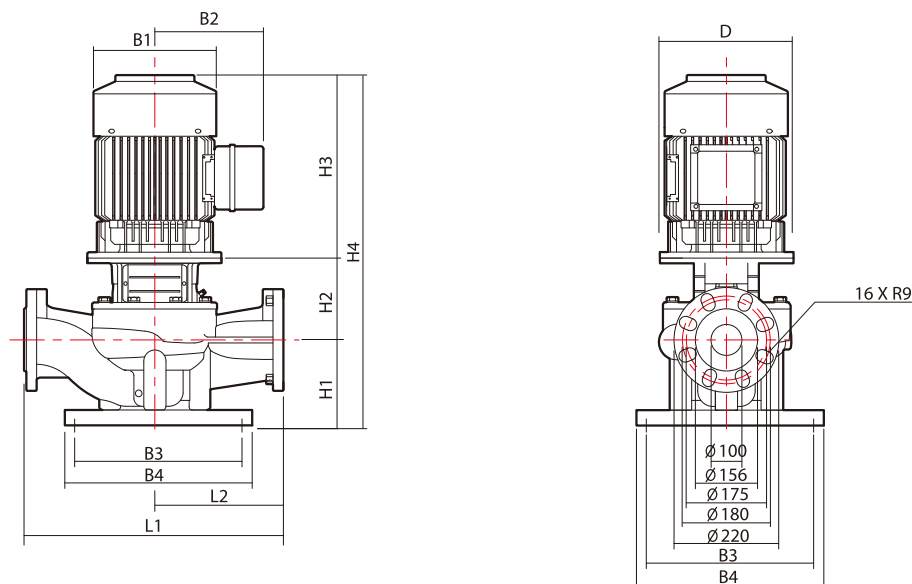


※ Please contact the headquarters to select the dotted line section.

Data Sheet

MODEL	POWER		Q (m³/hr)	15	30	45	60	75	80	90	105	120	135	150	165	180
	kW	HP														
DP100-8/2	3.7	5	HEAD (m)	17	16	15	12	9	8	6						
DP100-10/2	3.7	5		20	19	17	15	12	10	8	5					
DP100-16/2	5.5	7.5		22	21	20	19	17	16	15	12	7				
DP100-21/2	7.5	10		26	26	25	23	22	21	19	16	13	6			
DP100-25/2	11	15		28	28	27	27	26	26	25	24	22	19	15		
DP100-33/2	15	20		36	36	36	35	34	34	33	32	30	26	21	13	
DP100-38/2	18.5	25		40	41	40	40	39	39	38	38	36	34	31	27	
DP100-44/2	22	30		45	46	45	45	44	44	44	43	42	40	38	34	
DP100-54/2	30	40		57	58	58	58	58	59	58	58	57	56	54	51	26
DP100-62/2	37	50		66	66	66	66	67	67	67	67	66	66	64	61	
DP100-72/2	45	60		76	76	76	77	77	77	77	77	77	76	75	73	36

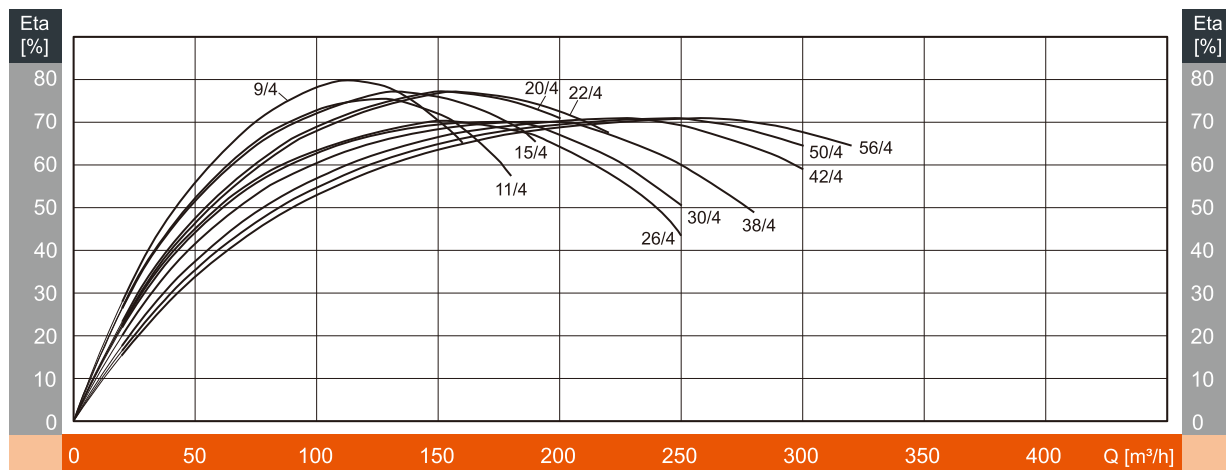
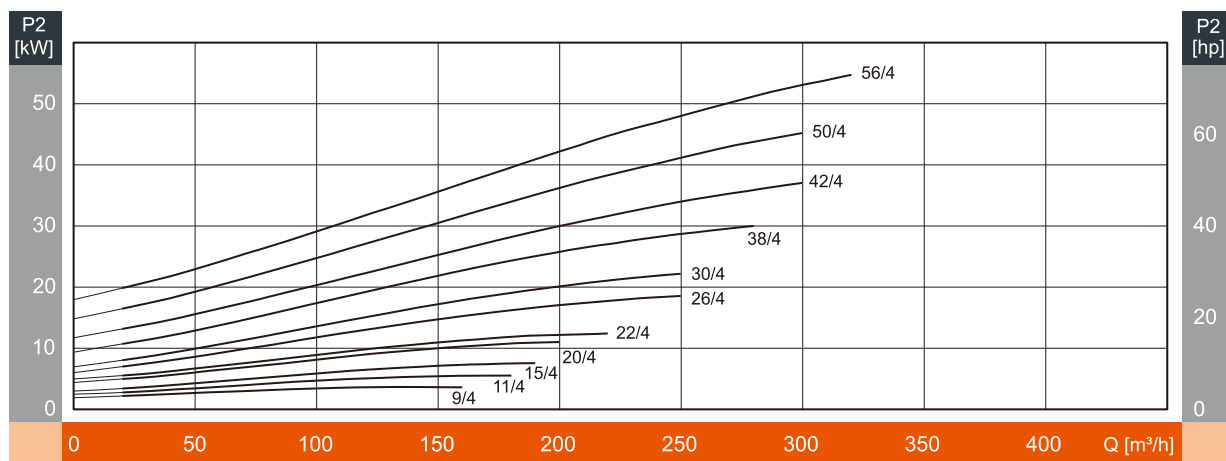
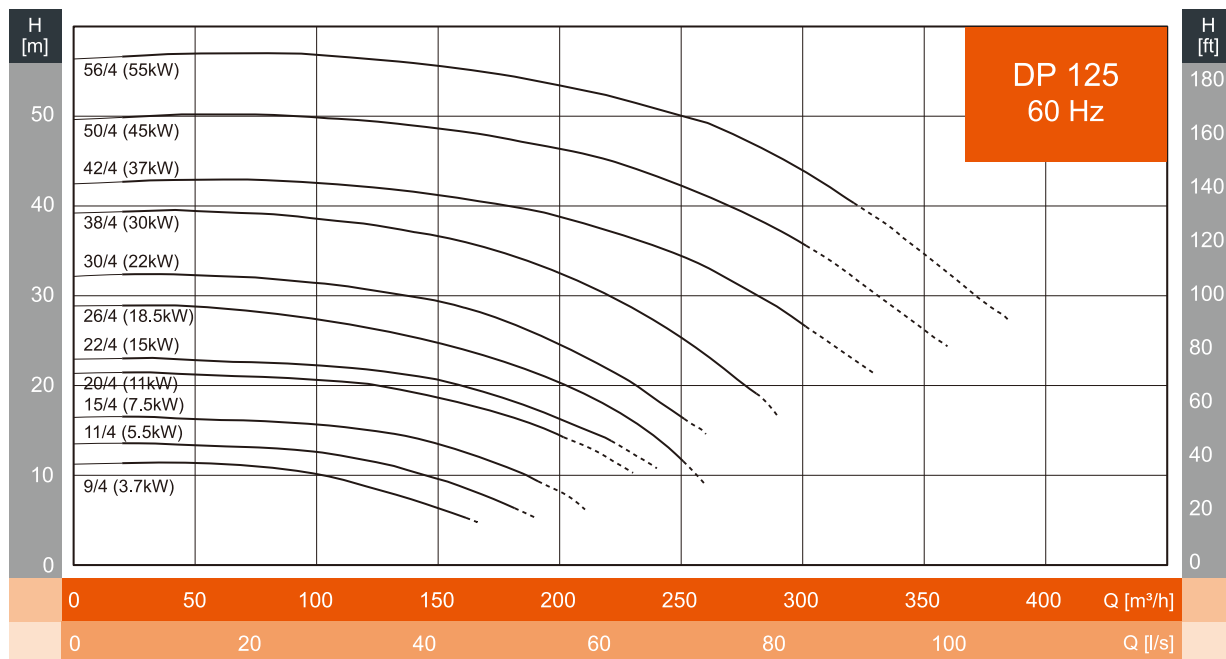
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)											WEIGHT (kg)
	D	B1	B2	B3	B4	H1	H2	H3	H4	L1	L2	
DP100-8/2	-	227	200	195	235	137	189.5	330	656.5	450	225	76
DP100-10/2	-	227	200	195	235	137	189.5	330	656.5	450	225	81
DP100-16/2	-	268	225	195	235	170	215	370	755	500	250	117
DP100-21/2	-	268	225	195	235	170	215	370	755	500	250	121
DP100-25/2	350	318	290	290	340	170	270	480	920	550	275	212
DP100-33/2	350	318	290	290	340	170	270	480	920	550	275	238
DP100-38/2	350	318	290	290	340	170	270	525	965	550	275	248
DP100-44/2	350	354	305	290	340	170	270	570	1010	550	275	285
DP100-54/2	400	354	305	290	340	170	270	610	1050	550	275	340
DP100-62/2	400	404	350	290	340	170	270	670	1110	550	275	473
DP100-72/2	450	404	350	290	340	170	270	670	1110	550	275	473

Performance Curve

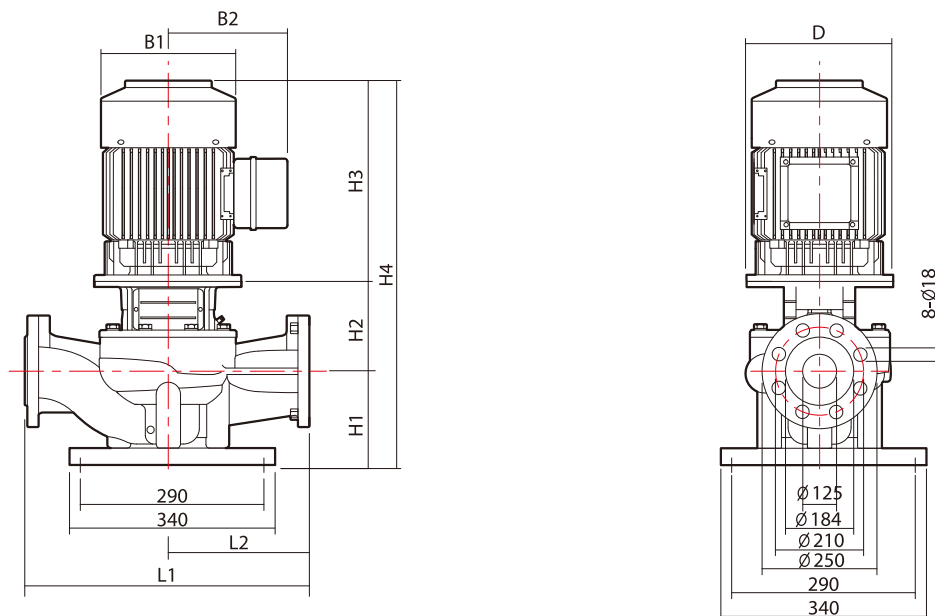


※ Please contact the headquarters to select the dotted line section.

Data Sheet

MODEL	POWER		Q (m³/hr)	20	40	60	80	100	120	140	160	180	200	220	240	260	280
	kW	HP															
DP125-9/4	3.7	5	HEAD (m)	11	11	11	10	10	9	7	5						
DP125-11/4	5.5	7.5		14	13	13	13	13	12	10	9	7	4				
DP125-15/4	7.5	10		17	16	16	16	16	15	14	13	11	8	4			
DP125-20/4	11	15		21	21	21	21	21	20	19	18	17	14	12	8	2	
DP125-22/4	15	20		23	23	23	23	22	22	21	20	18	16	14	11	5	
DP125-26/4	18.5	25		29	29	29	28	27	27	26	25	23	20	17	14	9	3
DP125-30/4	22	30		32	32	32	32	31	31	30	29	27	25	22	18	15	4
DP125-38/4	30	40		40	40	39	39	39	38	37	36	35	33	30	27	23	19
DP125-42/4	37	50		43	43	43	43	43	42	42	41	40	39	38	36	33	30
DP125-50/4	45	60		50	50	50	50	50	50	49	48	47	46	45	44	42	39
DP125-56/4	55	75		57	57	57	57	57	56	56	55	54	53	52	51	49	47

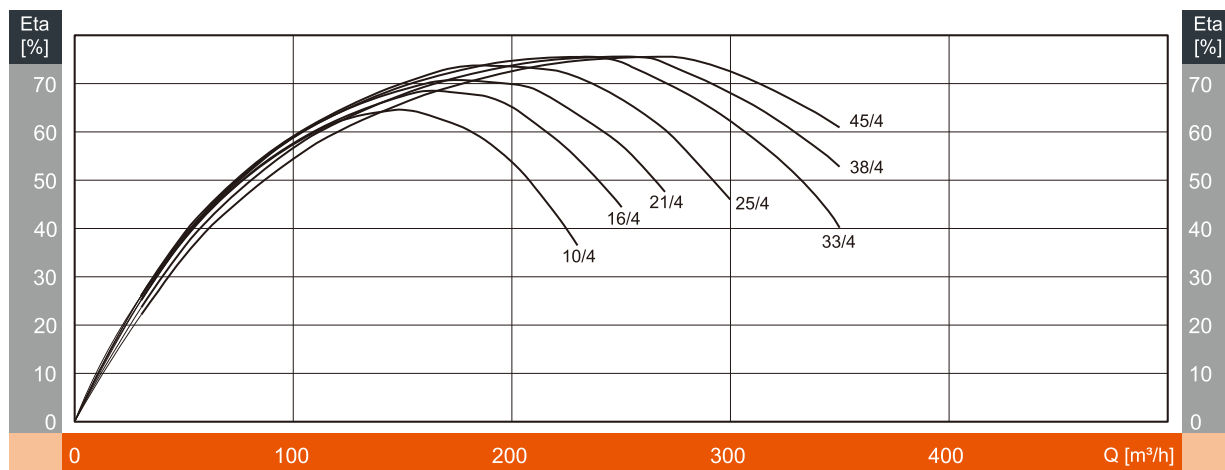
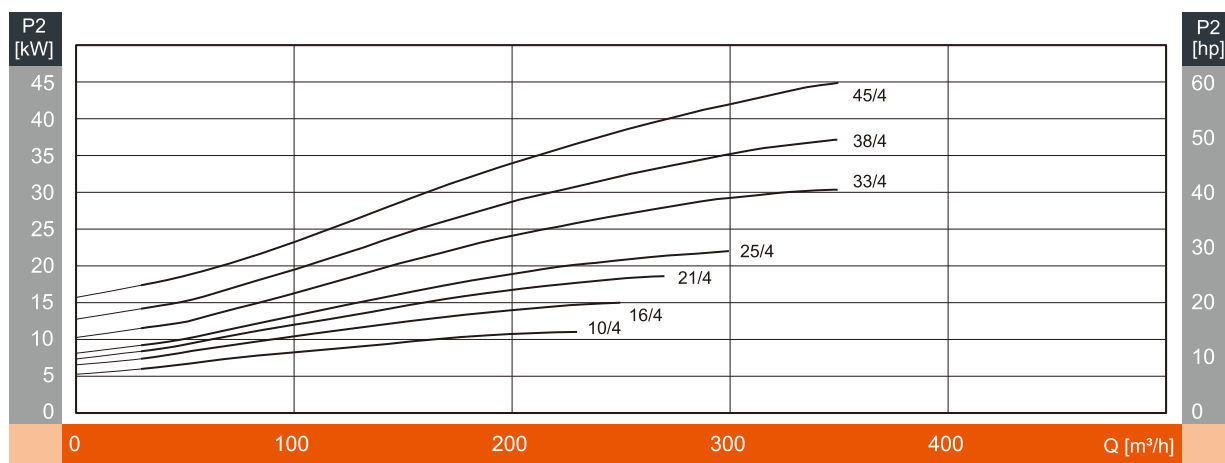
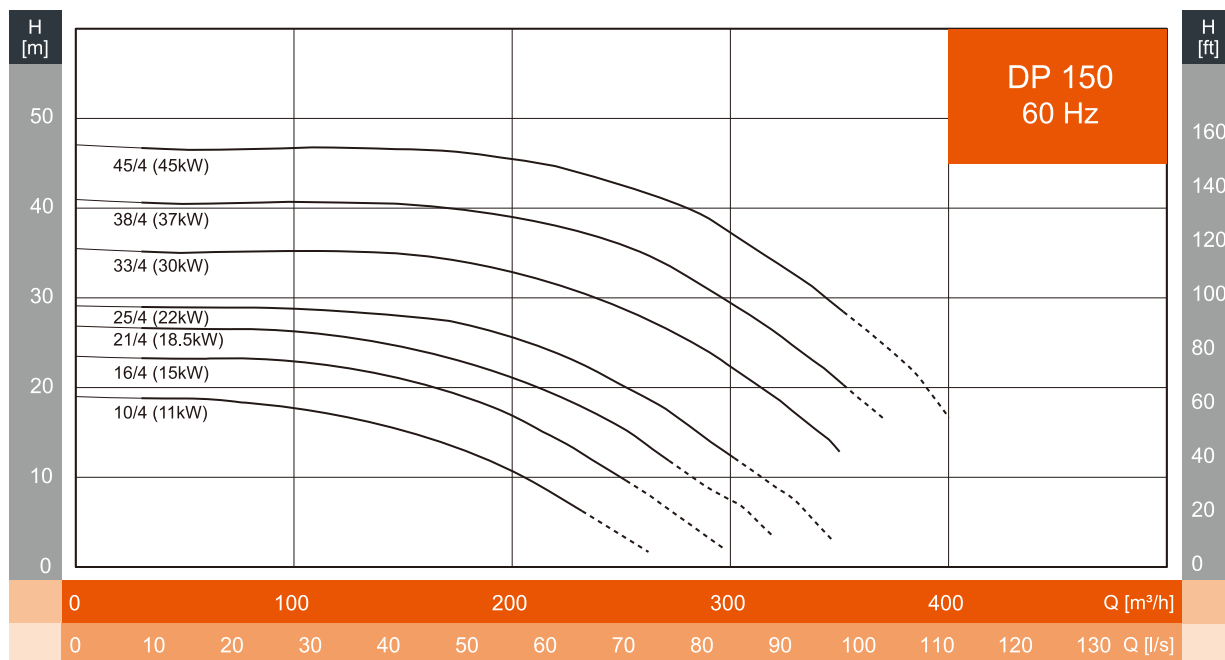
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP125-9/4	-	227	200	245	209.5	330	784.5	620	310	143
DP125-11/4	-	268	225	245	237.5	370	852.5	620	310	171
DP125-15/4	-	268	225	245	237.5	370	852.5	620	310	182
DP125-20/4	350	318	290	245	290.5	480	1015.5	620	310	334
DP125-22/4	350	318	290	245	290.5	525	1060.5	620	310	354
DP125-26/4	350	354	305	245	299	570	1114	800	400	364
DP125-30/4	350	354	305	245	299	570	1114	800	400	401
DP125-38/4	400	354	320	245	301	610	1156	800	400	458
DP125-42/4	450	404	350	245	319	670	1234	800	400	514
DP125-50/4	450	404	350	245	319	670	1234	800	400	551
DP125-56/4	550	457	460	245	319	685	1249	800	400	636

Performance Curve

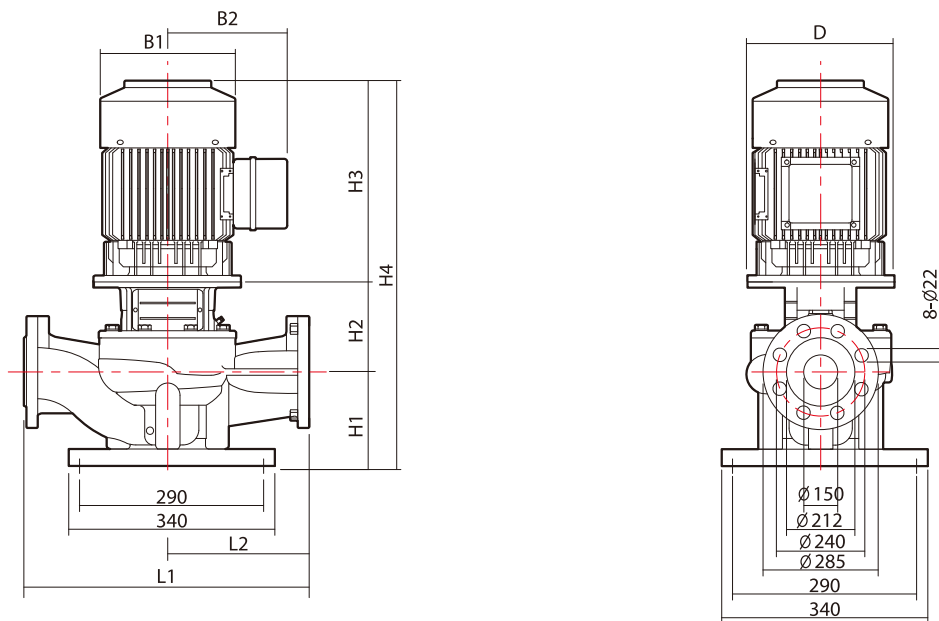


※ Please contact the headquarters to select the dotted line section.

Data Sheet

MODEL	POWER		Q (m ³ /hr)	20	40	60	80	100	120	140	160	180	200	220	240	260
	kW	HP														
DP150-10/4	11	15	HEAD (m)	19	19	19	18	18	17	16	15	13	11	8	5	2
DP150-16/4	15	20		23	23	23	23	22	21	21	20	19	17	14	11	8
DP150-21/4	18.5	25		27	27	26	26	26	25	25	24	23	22	19	17	14
DP150-25/4	22	30		29	29	29	29	29	29	28	28	27	26	24	22	19
DP150-33/4	30	40		35	35	35	35	35	35	35	35	34	33	32	31	28
DP150-38/4	37	50		41	41	40	41	41	41	40	40	40	39	38	37	35
DP150-45/4	45	60		47	47	46	47	47	47	47	46	46	45	45	43	42

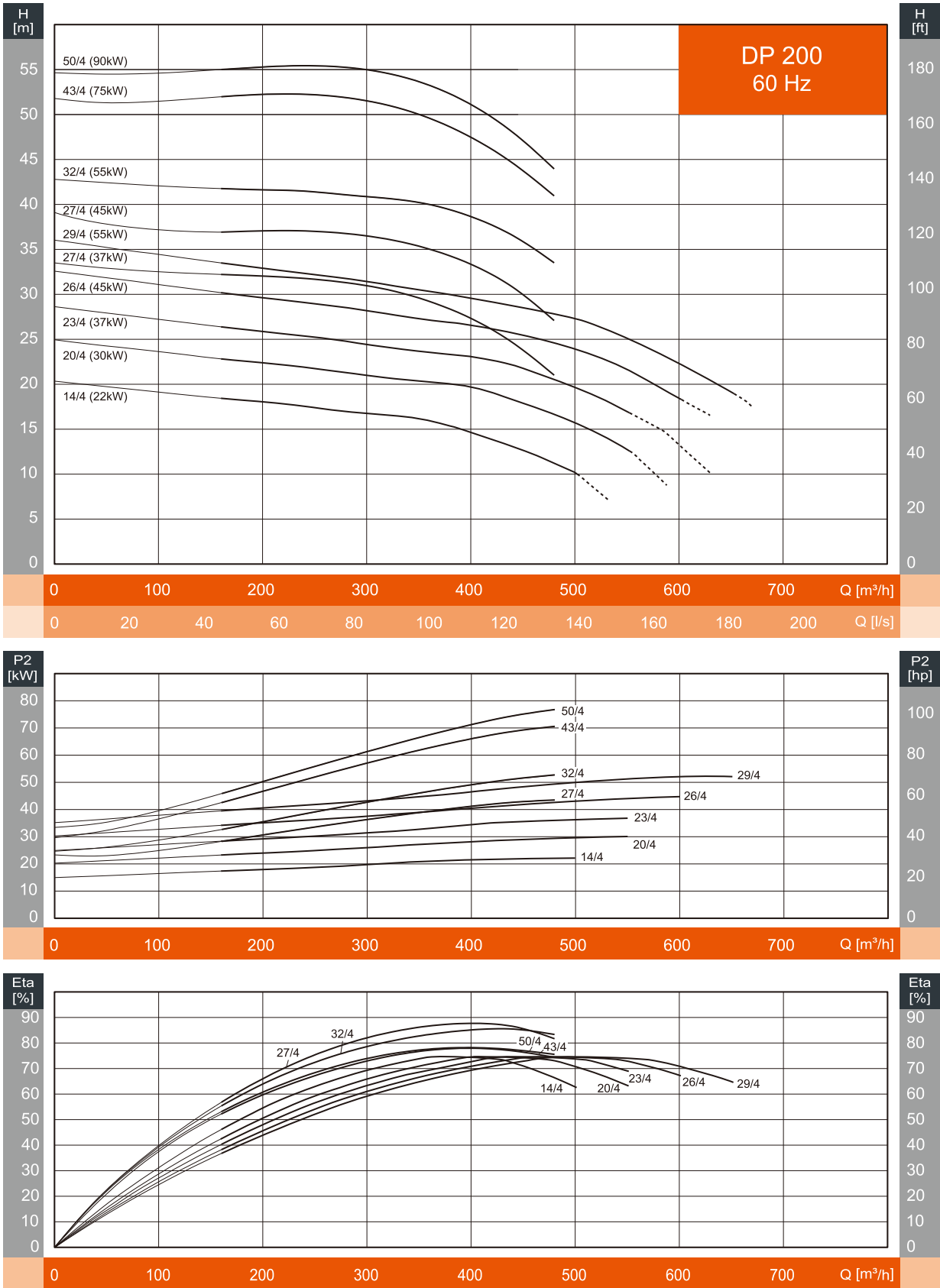
Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP150-10/4	350	318	290	245	268	480	993	800	400	318
DP150-16/4	350	318	290	245	268	525	1038	800	400	338
DP150-21/4	350	354	305	245	268	570	1083	800	400	374
DP150-25/4	350	354	305	245	268	570	1083	800	400	390
DP150-33/4	400	354	320	245	268	610	1123	800	400	441
DP150-38/4	450	404	350	245	268	670	1183	800	400	539
DP150-45/4	450	404	350	245	268	670	1183	800	400	539

Performance Curve

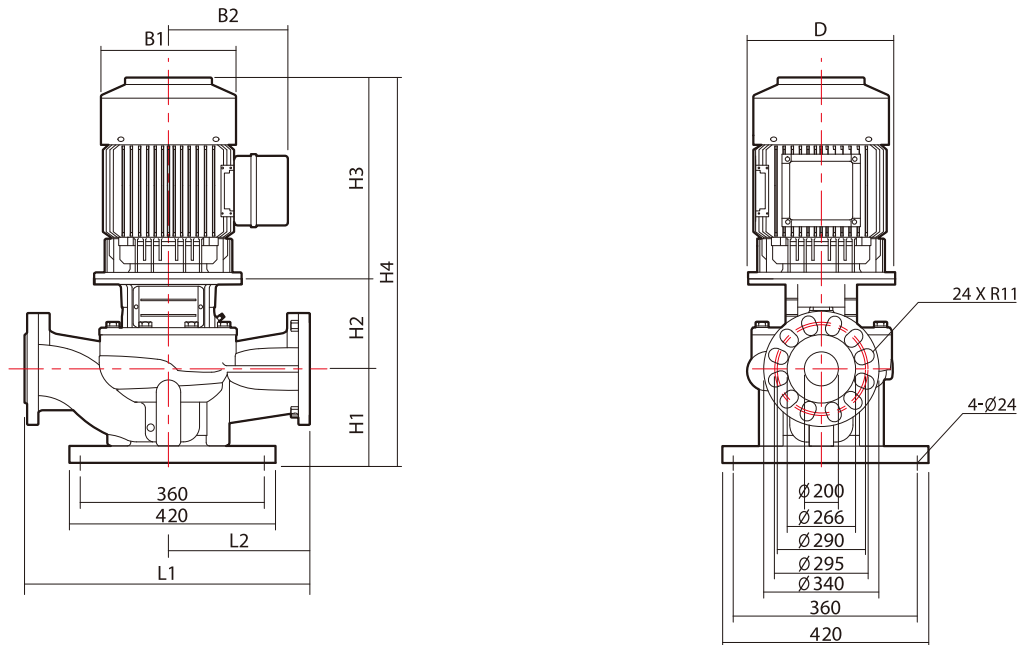


※ Please contact the headquarters to select the dotted line section.

Data Sheet

MODEL	POWER		Q (m³/hr)	40	80	120	160	200	240	280	320	360	400	440	480
	kW	HP													
DP200-14/4	22	30	HEAD (m)	20	19	19	18	18	18	17	17	16	15	13	11
DP200-20/4	30	40		24	24	23	23	22	22	21	21	20	20	18	17
DP200-23/4	37	50		28	28	27	26	26	25	25	24	24	23	22	21
DP200-26/4	45	60		32	31	31	30	30	29	29	28	27	27	26	25
DP200-27/4	37	50		33	32.7	32.5	32.4	32.2	32	31.5	30	28	25	24	21
	45	60		38	37	36.9	36.9	37	37	36.5	36	35	33	31	27
DP200-29/4	55	75		35	35	34	34	33	32	32	31	30	30	29	28
DP200-32/4	55	75		42.5	42.1	42	41.3	41.3	41.2	41	40.6	40	38	36.5	33.5
DP200-43/4	75	100		51.2	51.2	51.8	52.1	52.3	52.3	52	51	49.5	47.5	44.5	41
DP200-50/4	90	120		54.5	54.5	54.9	55	55.3	55.5	55.3	54.6	53.3	51	48	44

Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP200-14/4	350	354	305	270	415	570	1255	1000	500	566
DP200-20/4	400	354	320	270	415	610	1295	1000	500	625
DP200-23/4	450	404	350	270	415	670	1355	1000	500	723
DP200-26/4	450	404	350	270	415	670	1355	1000	500	723
DP200-27/4	450	404	350	270	450	670	1390	1100	550	771
DP200-29/4	550	457	460	270	415	685	1370	1000	500	808
DP200-32/4	550	457	460	270	450	685	1405	1100	550	842
DP200-43/4	550	512	480	270	454	760	1484	1100	550	1015
DP200-50/4	550	512	480	270	454	800	1524	1100	550	1106

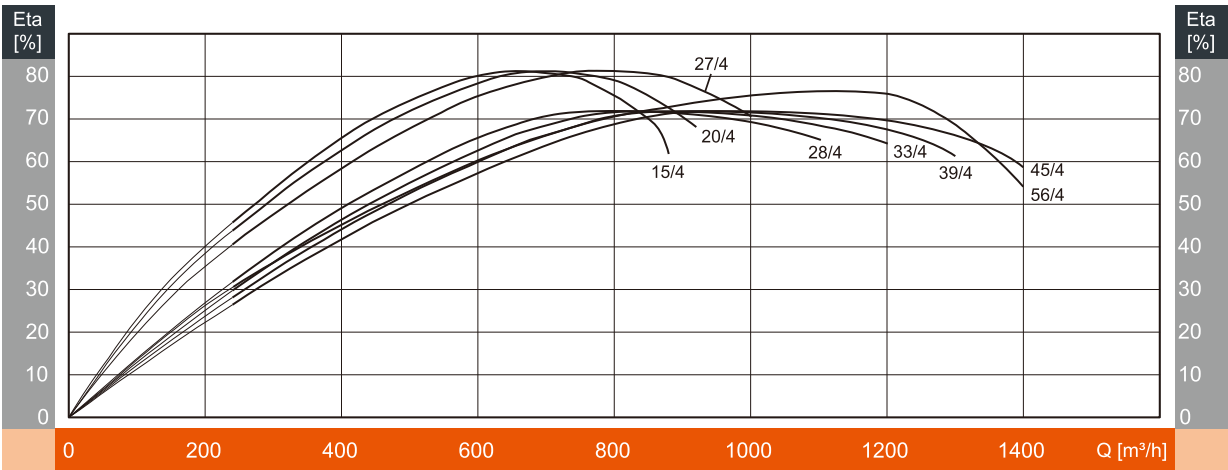
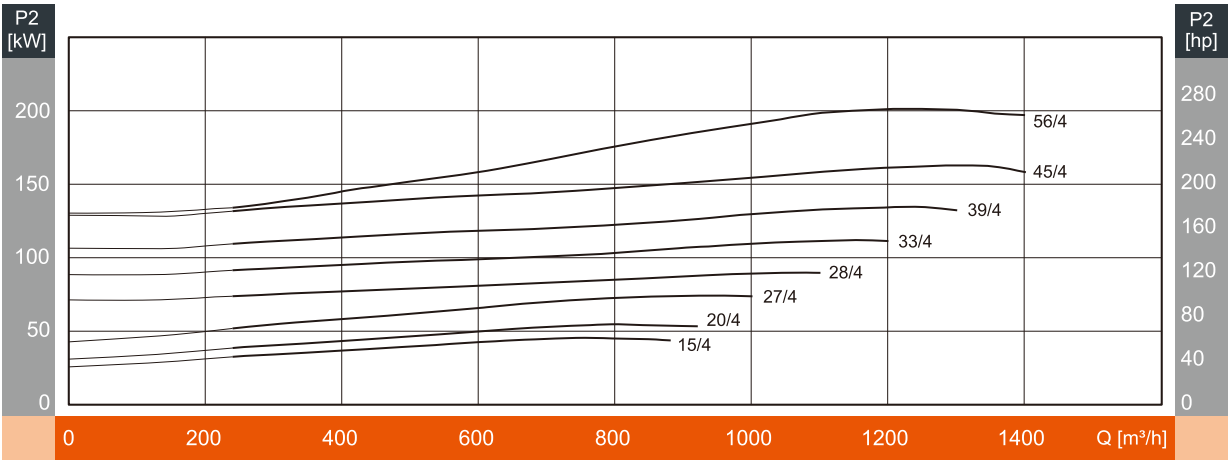
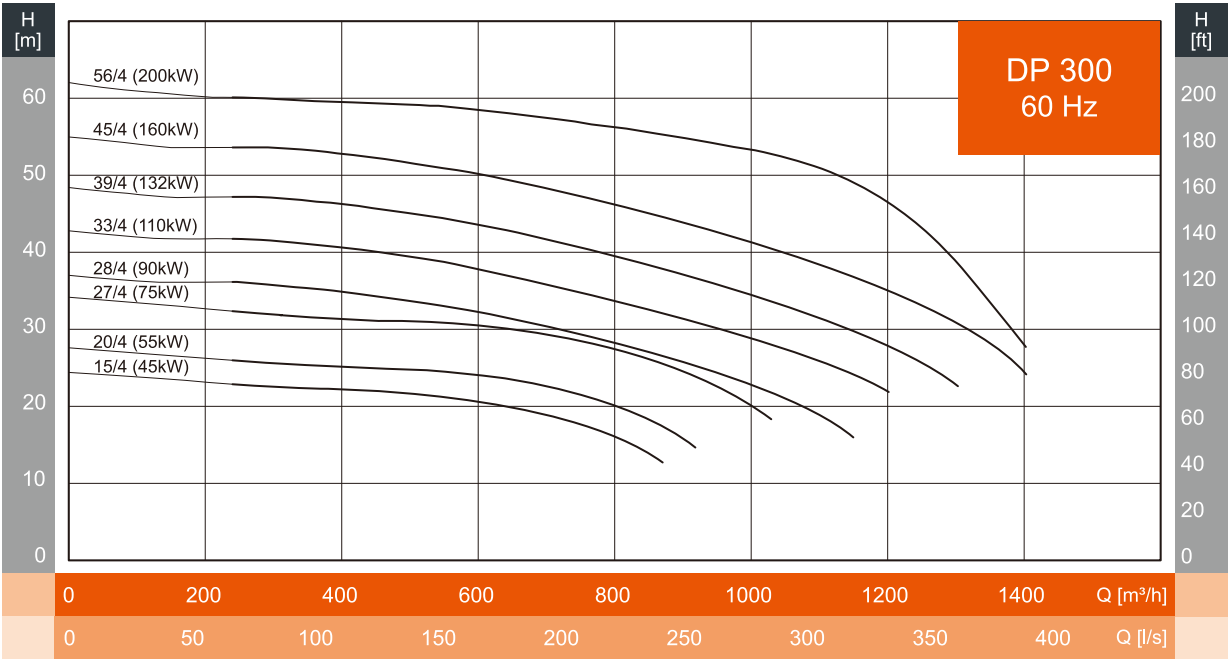
DP 300 SERIES

In-line Circulation Pump

DP 60Hz

IN-LINE CIRCULATION PUMP

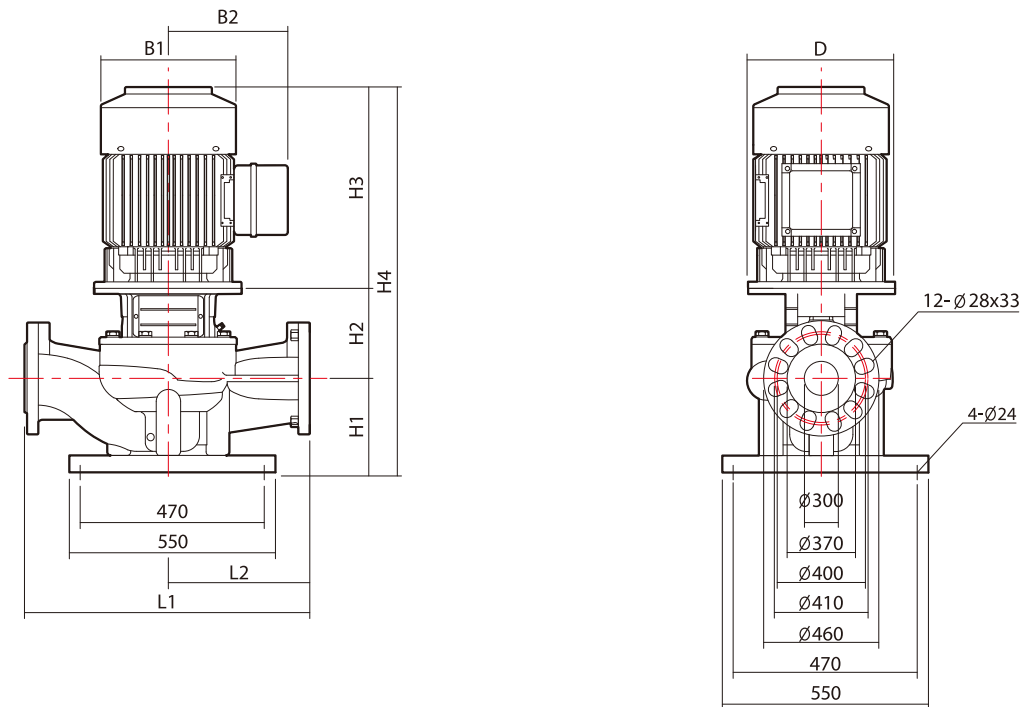
Performance Curve



Data Sheet

MODEL	POWER		Q (m³/hr)	100	200	300	400	500	600	700	800	900	1000	1100
	kW	HP												
DP300-15/4	45	60	HEAD (m)	24	23	23	22	22	21	19	16			
DP300-20/4	55	75		27	26	26	25	25	24	23	20			
DP300-27/4	75	100		33	33	32	31	31	30	29	27	24	19	
DP300-28/4	90	120		36	36	36	35	34	32	30	28	25	23	20
DP300-33/4	110	150		42	42	41	41	39	38	36	33	31	29	26
DP300-39/4	132	175		48	47	47	46	45	44	42	39	37	34	31
DP300-45/4	160	214		54	54	54	53	52	50	48	46	43	41	38
DP300-56/4	200	268		61	60	60	60	59	59	58	56	55	53	51

Outline Drawing



Dimension / Weight

MODEL	DIMENSION (mm)									WEIGHT (kg)
	D	B1	B2	H1	H2	H3	H4	L1	L2	
DP300-15/4	450	404	350	362	460	670	1492	1240	620	922
DP300-20/4	550	457	460	362	465	685	1512	1240	620	1044
DP300-27/4	550	512	480	362	465	760	1587	1240	620	1213
DP300-28/4	550	512	480	336	525	800	1661	1240	620	1392
DP300-33/4	660	578	520	336	578	890	1804	1240	620	1596
DP300-39/4	660	578	520	336	578	945	1859	1240	620	1682
DP300-45/4	660	578	520	336	578	1095	2009	1240	620	1755
DP300-56/4	660	578	520	336	578	1095	2009	1240	620	1908