

# **D**ISTRELMA

EFFICIENT PUMPING SYSTEMS

*ERIES*



*DCRS*

*DCR*

***STAINLESS STEEL***

***HIGH EFFICIENCY MOTOR***

***IE3 - CLASS F***

# VERTICAL MULTISTAGE PUMPS

## PRESENTATION



## Vertical Multistage Pumps

DCR , DCRS, DCRN is a kind of vertical non-self priming vertical multistage pump of in line design, flange or with Vic taulic coupling with equally sized suction and discharge ports. Stage construction with stainless steel impellers, chambers and pressure casing. Pump stub shaft and motor shaft of the IEC- standards motor are directly close coupled. All pumps are equipped with a cartridge type mechanical seal for easy maintenance. This kind of pump have different pump sizes and various numbers of stages to provide the flow and the pressure required.

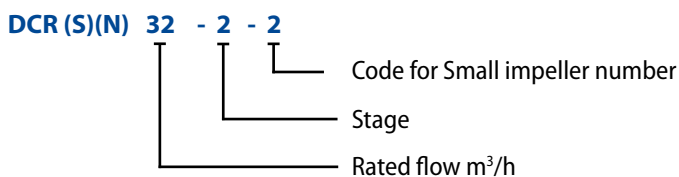
## Application

DCR , DCRS and DCRN pumps is a kind of multifunctional products. It can be used to convey various medium from tap waterto industrial liquid at different temperature and with different flow rate and pr essure.

DCR type is applicable to conveying non-corrosive liquid, while DCRN and DCRS is suitable for slightly corrosive liquid.

- Water supply and pressure boosting: Pressure boosting in buildings, hotels, residential complexes Pressure boosterstations, supply of water networks Pressure boosting for industrial water supply.
- Light industry: Washing and cleaning systems, Car washing facilities, Fire fighting systems, Process water systems, Machine tools (cooling lubricants).
- Heating, Ventilation and Air-Conditioning: Boilers, Induction heating, Heat exchangers, Refrigerators, Cooling towersand systems, Temperature control systems.
- Irrigation and Agriculture: Greenhouses, Sprinkler irrigation, Field irrigation (flooding).
- Water Treatment: Water softeners and de-mineralization, Reverse Osmosis systems, Distillation systems, Filtration, Ultra-filtration systems.

## Definition of Model

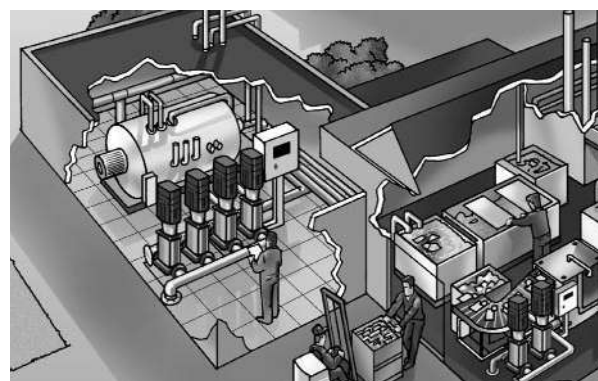
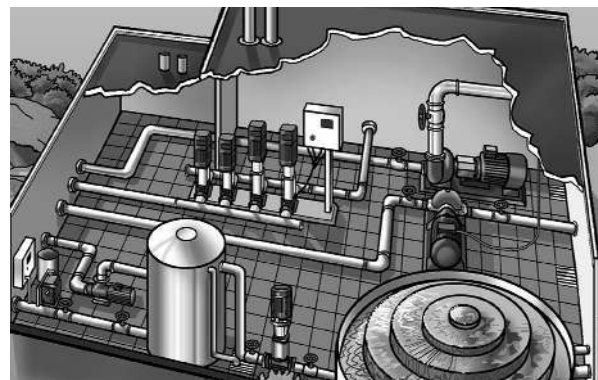


- DCR** Vertical multistage centrifugal pump  
**DCRS** Flow passage components stainless steel 304  
**DCRN** Flow passage components stainless steel 316

## Motor

The pump is fitted with a totally enclosed , fan cooled squirrel-cage 2 pole high efficiency motor IE3.









- Protection class: IP55
- Insulation class: F
- Standard voltage: - 1x220V-240V / - 3x220V-240V / - 3x380V-415V  
Single phase motor max 2.2kW



# VERTICAL MULTISTAGE PUMPS

DCR RANGE

## Product Information

 <b>ENERGY-SAVING CERTIFICATE</b>	 <b>LARGE FLOW CAPACITY</b>	 <b>IE3 MOTOR IP55 CLASS F ALL COPPER WIRE</b>	 <b>STAINLESS STEEL 304 IMPELLER &amp; SHAFT</b>
 <b>ANTI-CORROSIVE COATING</b>	 <b>NSK BEARING</b>	 <b>EFFICIENT PUMPING SYSTEMS</b>	 <b>GOOD QUALITY &amp; SERVICE 12 MONTH GUARANTEE</b>

## Product Range

Description	DCR 1	DCR 2	DCR 3	DCR 4	DCR 8	DCR 12	DCR 16	DCR 20	DCR 32	DCR 45	DCR 65	DCR 90
<b>Nominal flow rate [m<sup>3</sup>/h]</b>	3	2	3	4	8	12	16	20	32	42	65	85
<b>Flow [l/s]</b>	0,28	0,56	0,83	1,1	2,2	3,3	4,4	5,6	8,9	11,7	18	24
<b>Flow range [m<sup>3</sup>/h]</b>	0,4-2	1-3,5	1,2-4	1,5-7	5-12	7-16	8-22	10-28	16-4	25-55	30-8	50-110
<b>Flow range [l/s]</b>	0,11-0,56	0,28-0,97	0,33-1,1	0,42-1,9	1,4-3,3	1,9-4,4	2,2-6,1	2,8-7,8	4,4-11,1	6,9-15,3	8,3-22,2	13,8-3,516,7
<b>Max. Pressure. [bar]</b>	21	23	22	21	21	22	22	23	29	30	22	17
<b>Motor power [KW]</b>	0,37-2,2	0,37-3	0,37-3	0,37-4	0,75-7,5	1,5-11	2,2-15	1,1-18,5	1,5-3	3-45	4-45	5,5-45
<b>Temperature range. [°C]</b>	-15 ~ +120											
<b>Max. efficiency. [%]</b>	44	46	54	57	62	63	66	69	73	75	76	77
<b>Type</b>												
<b>DCR</b>	•	•	•	•	•	•	•	•	•	•		•
<b>DCRS</b>	•	•	•	•	•	•	•	•	•	•		•
<b>Connection DCR</b>												
<b>Flange Size</b>	DN25	DN25	DN25	DN32	DN40	DN50	DN50	DN50	DN65	DN80	DN100	DN100
<b>Oval Flange</b>	G1	G1	G1	G11/4	G11/2							

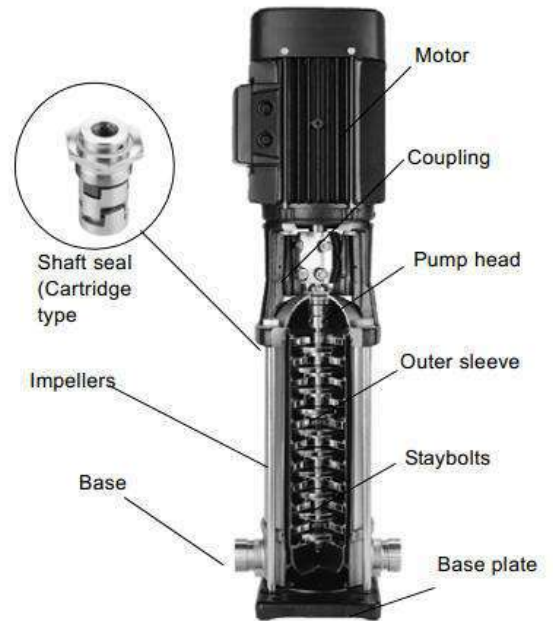
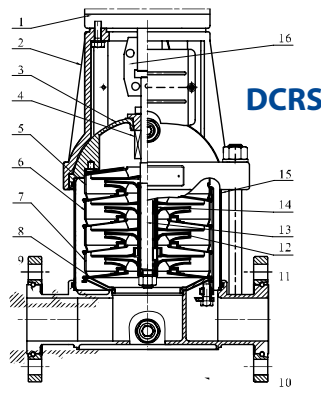
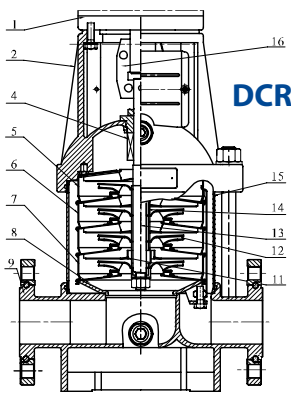
# VERTICAL MULTISTAGE PUMPS

## PRESENTATION



## Vertical Multistage Pumps

High Pressure Pumps DCR , DCRN, DCRS with pumping pressure up to 305 meter and flow up to 110 m<sup>3</sup>/h. All essential parts like shaft, impellers and intermediate chambers are fully stainless steel AISI 304 (W-r.1.43.01). On request. the complete pump can be supplied in stainless steel or with higher grad stainless steel AISI 316 (W-Nr. 1.44.01). Usually the pumps are equipped with mechanical seals tungsten carbide/carbon. Special seals are applied according to the pumping liquid. The pumps have got high efficiency.



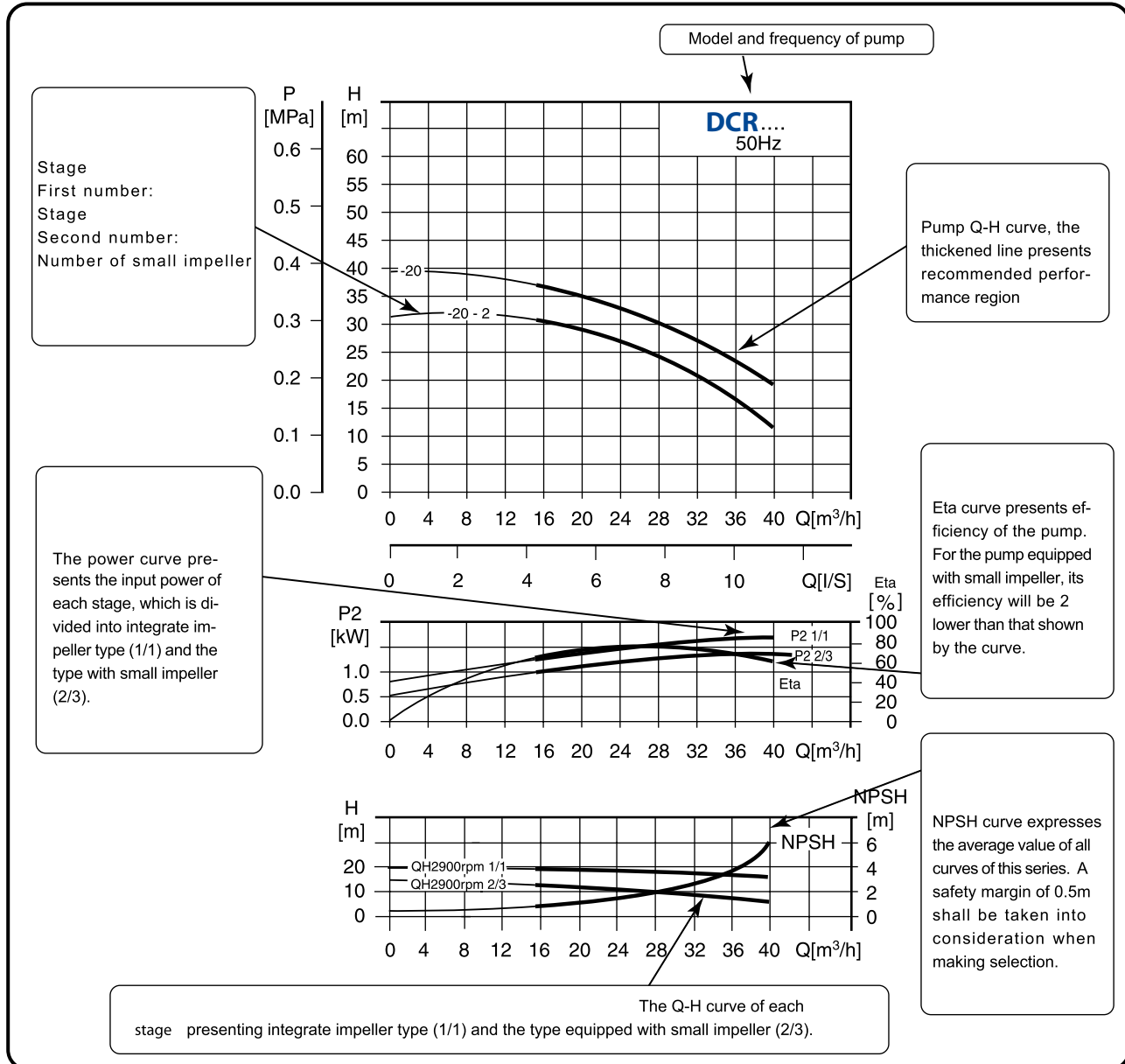
	Description	Material	AISI /ASTM
1	Motor	IP55 Class F IE3	
2	Pump Case	Cast iron	ASTM25B
4	Mechanical Seal	Stainless steel	
5	Top Diffuser	Stainless steel	AISI 304
6	Diffuser	Stainless steel	AISI 304
7	Support Diffuser	Stainless steel	AISI 304
8	Inducer	Stainless steel	AISI 304
11	Bearing	Tungsten Carbide	
12	Impeller	Stainless steel	AISI 304
13	Shaft	Stainless steel	AISI 304 /AISI 316L
14	Impeller Sleeve	Stainless steel	AISI 304
15	Cylinder	Stainless steel	AISI 304
16	Coupling	Carbon steel	
<b>DCR</b>			
9	Inlet & Outlet Chamberr	Cast iron	ASTM25B
<b>DCRS</b>			
9	Inlet & Outlet Chamberr	Stainless steel	AISI 304
3	Seal Base	Stainless steel	AISI 304
10	Base Plate	Cast iron	ASTM25B



# VERTICAL MULTISTAGE PUMPS

## GENERAL DATA

The performance curve applies to the DCR , DCRS and DCRN



### Conditions for the performance curves:

1. All the performance curves are based on the measured values of a motor 3x380V ~ 415V at a constant speed of 2900 rpm.
2. Curve tolerance in conformity with ISO9906, appendix A.
3. Measurement is done with 20 °C air-free water, kinematic viscosity of 1mm<sup>2</sup> /sec.
4. The operation of pump shall refer to the performance region indicated by the thickened curve to prevent overheating due to too small flow rate or overload of motor due to too large flow rate.

# VERTICAL MULTISTAGE PUMPS

## GENERAL DATA

## Minimum inlet pressure NPSH

In case that the pressure in pump is lower than the steam pressure used to convey liquid, the cavitations will occur. To avoid cavitations, a minimum pressure at the inlet side of the pump shall be guaranteed. The maximum suction stroke can be calculated with following formula:

$$H = P_b \times 10.2 - NPSH - H_f - H_v - H_s$$

**P<sub>b</sub>** = atmosphere pressure [bar] (can be set as 1 bar)

In a closed system, P<sub>b</sub> means system pressure [bar]

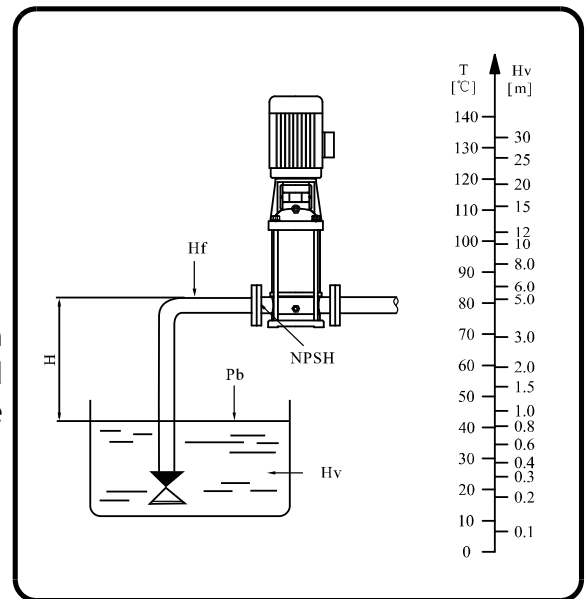
**NPSH** = Net positive suction head [m], It can be read out from the point of possible max. flow rate shown on NPSH curve

**H<sub>f</sub>** = Pipeline loss at the inlet [m]

**H<sub>v</sub>** = Steam pressure [m]

**H<sub>s</sub>** = Safety margin Minimum 0.5m delivery head

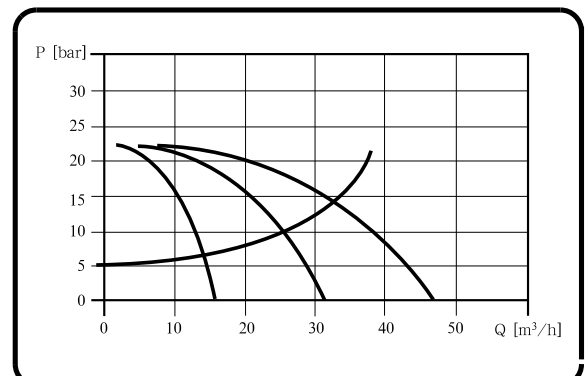
If the calculated result H is positive, the pump may run under the max. suction stroke H. In case the calculated result H is negative, a delivery head of min. inlet pressure is necessary.



Check and ensure that the pump is not at cavitation state.

## Operation in parallel

- Connecting several pumps in a parallel running mode will benefit the reliability of the system compared to a single pump system.
- Applicable to different working states required by a variable flow system.
- Increasing the availability of water supply if a pump fails: only a part of the system flow is effected.



Two pumps or more can be connected in parallel running if necessary.

# VERTICAL MULTISTAGE PUMPS

DCR RANGE



## Pumped Liquids

**DCR , DCRS, DCRN** pumps can handle a wide variety of liquids, each with its own characteristic.

### DCR , DCRS

Non-corrosive liquids

For fluid transfer, circulation and pressure boosting of cold or hot clean water.

### DCRN

Industrial liquids

Light acids

The fluids covered in the list are not complete. Data on the application limits of different pump materials when handling any of the listed fluids are considered to be the best choices. However, the table is intended as a general guide only, and cannot replace actual testing of the pumped fluids and pump materials under specific working conditions. When choosing the pump version, sufficient attention should be given to the flow medium, such as density, solidification point, viscosity as well as ex-protection requirement. The limits of applicability of the pumps, based on pressure and temperature must also be considered.

## Pumped Liquids

Pumped fluid	Fluid Concentration, temperature	DCR / DCRS		DCRN	
		EPDM	Viton	EPDM	Viton
Acetic acid anhydride	25°C			•	
Alkaline cleaner		•			
Aluminium sulphate	10%, 25°C				•
Ammonia water (A. hydroxide)	20%, 40°C	•			
Ammonia hydrogen carbonate	10%, 40°C	•		•	
Benzoic acid	10%, 90°C				•
Boric acid	Unsaturated solution, 60°C				•
Butanol	60°C	•			
Calcium acetate	30%, 50°C	•			
Calcium hydroxide	Saturated solution, 50°C	•			
Chromic acid	1%, 20°C				•
Condensate	90°C	•			
Copper sulphate	Unsaturated solution, 60°C				•
Deionic (fully desalinated water)	50°C			•	
Ethanol	100%, 20°C	•			
Ethylene glycol/Diethylene glycol	40%, 70°C	•	•	•	•
Fixer	25°C				•
Formic acid	5%, 20°C			•	

# VERTICAL MULTISTAGE PUMPS

PRESENTATION

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## Pumped Liquids

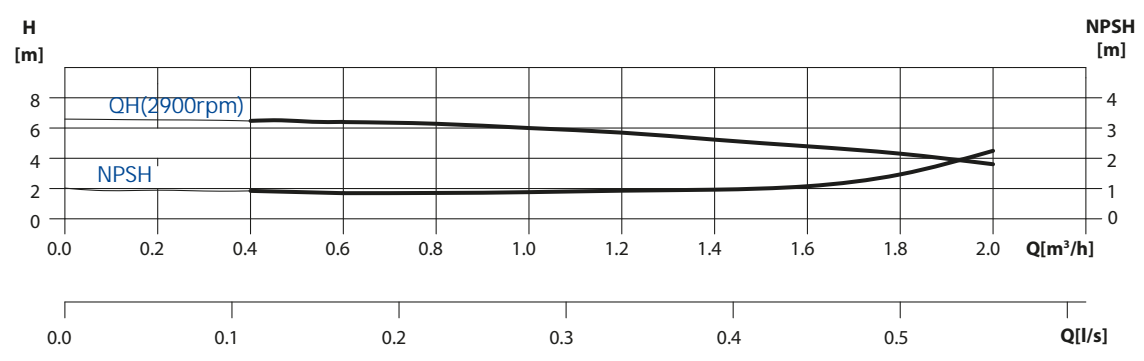
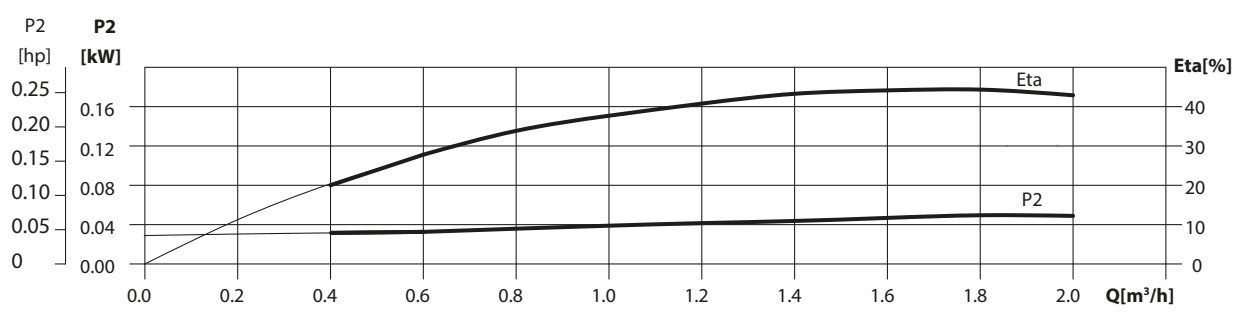
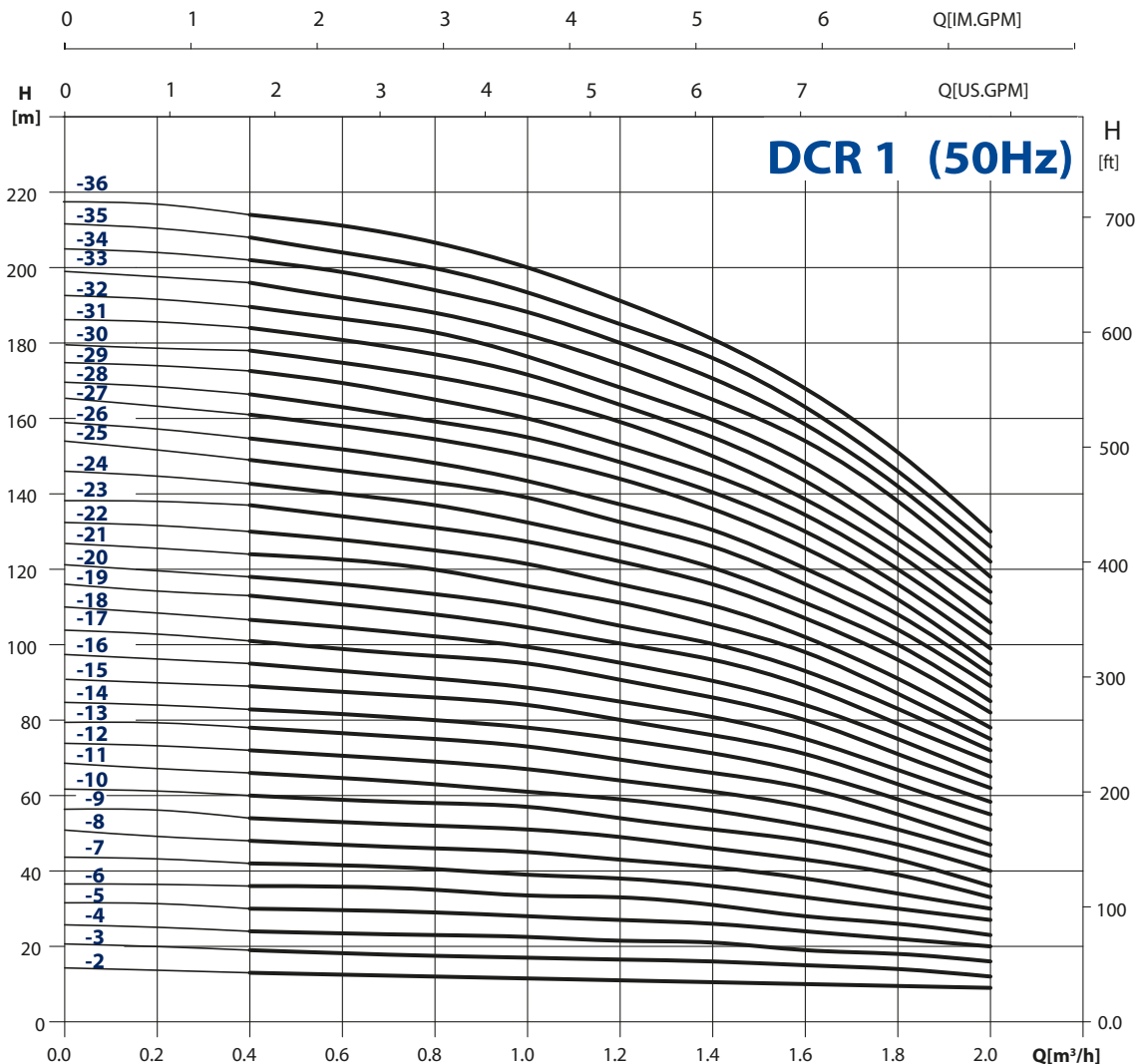
Pumped fluid	Fluid Concentration, temperature	DCR / DCRS		DCRN	
		EPDM	Viton	EPDM	Viton
Fruit juice	50°C				•
Glycerine	50%, 50°C	•			
Heating oil (Light)		•			•
Hydraulic oil	100%, 100°C		•		
Isopropanol		•			
Lactic acid	10%, 20°C				•
Linoleic acid	100%, 20°C	•			
Linseed oil	60°C		•		
Liqueur	60°C				•
Maize oil	80°C		•		
Maleic acid	50%, 50°C				•
Methanol	100%, 20°C	•			
Motor oil	100%, 80°C	•			
Oil-water-mixture	100°C		•		
Oxalic acid	1%, 20°C			•	
Peanut oil	100%, 80°C		•		
Phosphoric acid	20%, 20°C			•	
Polyglycols	90°C		•		•
Polyethylene glycols	40%, 70°C	•			
Potassium carbonate	10%, 60°C	•			
Potassium hydrogen carbonate	10%, 60°C	•			
Potassium permanganate	5%, 20°C			•	
Potassium sulphate	Unsaturated solution, 80°C			•	
Rapeseed oil	100%, 80°C		•		
Silicone oil	100%		•		
Sodium carbonate	10%, 60°C			•	
Sodium hydroxide	25%, 50°C			•	
Sodium nitrate	Unsaturated solution, 80°C			•	
Sodium phosphate	5%, 100°C			•	
Sodium sulphate	10%, 60°C			•	
Sulphuric acid	5%, 25°C				•
<b>Water</b>					
Swimming pool water	35°C	• DCRS		•	
Deionic	50°C			•	
Distilled water	50°C			•	
Decarbonated water				•	
Soft water				•	
Heating water				•	
Boiler water				•	
Pure water				•	
Rinsing water		•DCRS		•	

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

DCR 1 / DCRS 1 / DCRN 1

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

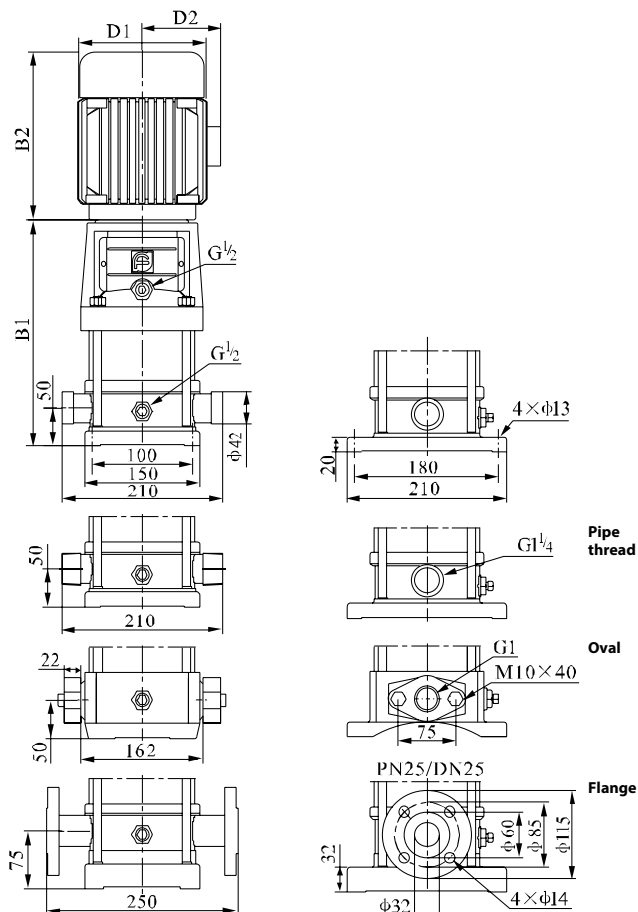
+ **DCR 1 / DCRS 1 / DCRN 1**

DN 25X25

Model	Motor		Q (m3/h)	0,4	0,6	0,8	1	1,2	1,4	1,6	1,8	2
	(kW)	(hp)										
DCR 1-2	0,37	0,5	H (m)	13	12,5	12	11,5	11	10,5	10	9,5	9
DCR 1-3	0,37	0,5		19	18	17,5	17	16,5	16	15	14	12
DCR 1-4	0,37	0,5		24	23,5	23	22,5	21,5	21	19	18	16
DCR 1-5	0,37	0,5		30	29,6	29	28	27	26	24	22	20
DCR 1-6	0,37	0,5		36	35,5	35	33,5	33	31	28	26	23
DCR 1-7	0,37	0,5		42	41	40,5	39	38	36	33	30	27
DCR 1-8	0,55	0,75		48	47	46	45	43	41	38	34	30
DCR 1-9	0,55	0,75		54	53	52	51	49	46	43	39	33
DCR 1-10	0,55	0,75		60	59	58	57	54	51	48	43	36
DCR 1-11	0,55	0,75		66	65	63	61	59	56	52	47	40
DCR 1-12	0,75	1		72	71	69	67	64	61	57	51	44
DCR 1-13	0,75	1		78	77	75	73	69	66	62	55	47
DCR 1-15	0,75	1		89	88	86	84	79	76	71	63	55
DCR 1-17	1,1	1,5		101	99	97	95	89	86	80	71	62
DCR 1-19	1,1	1,5		113	110	108	106	99	96	89	79	69
DCR 1-21	1,1	1,5		124	122	120	117	110	106	98	87	75
DCR 1-23	1,1	1,5		137	133	131	128	121	116	107	96	82
DCR 1-25	1,5	2		149	145	143	139	131	126	116	104	89
DCR 1-27	1,5	2		161	157	155	150	141	136	125	112	95
DCR 1-30	1,5	2		178	175	171	166	157	150	139	124	106
DCR 1-33	2,2	3		196	192	188	183	173	165	154	137	118
DCR 1-36	2,2	3		214	210	205	200	190	181	169	151	130

## Dimensions and weights

DN 25X25



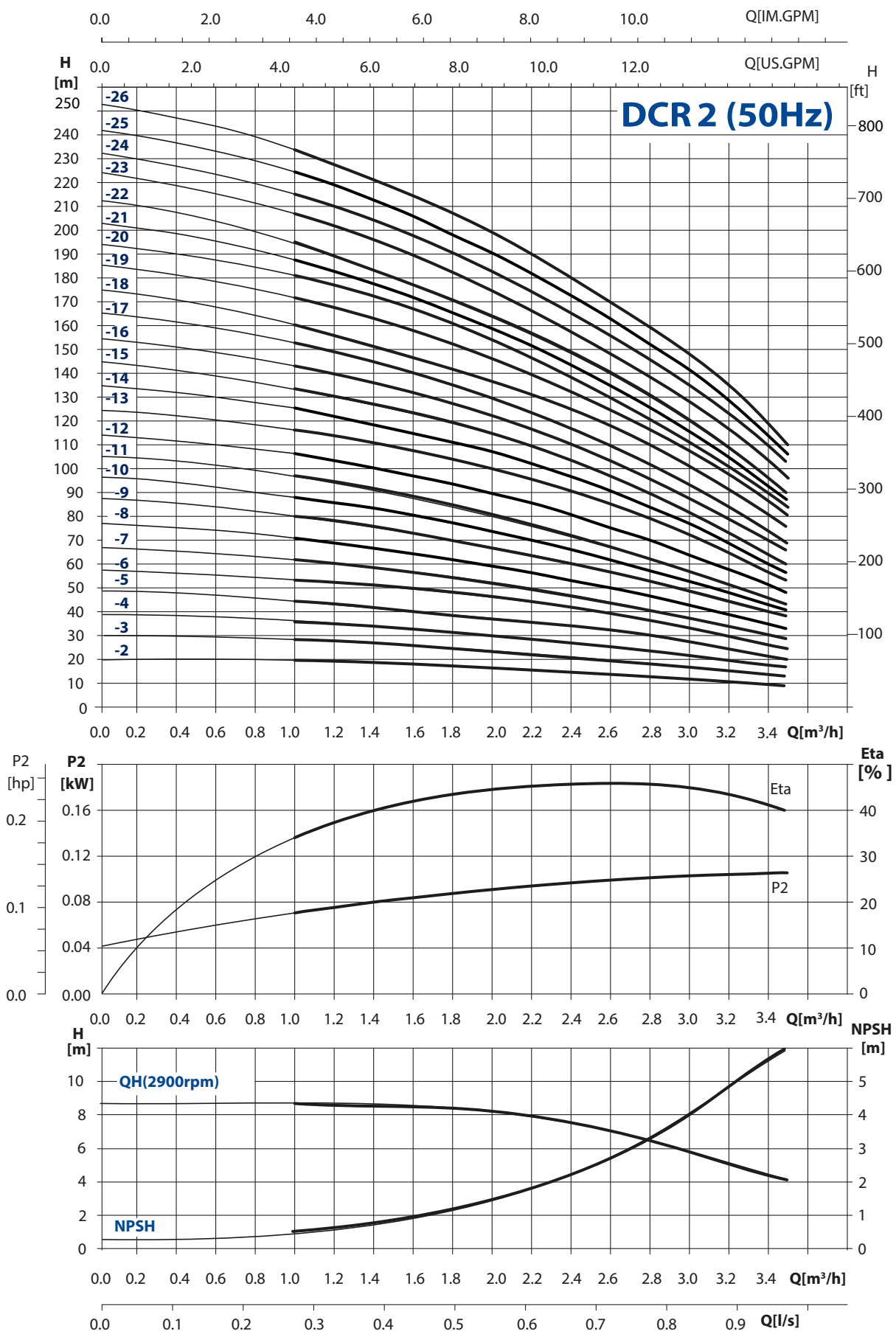
Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 1-2	258	225	483	148	117	20
DCR 1-3	276	225	501	148	117	20
DCR 1-4	294	225	519	148	117	21
DCR 1-5	312	225	537	148	117	21
DCR 1-6	330	225	555	148	117	22
DCR 1-7	348	225	573	148	117	23
DCR 1-8	366	225	591	148	117	24
DCR 1-9	384	225	609	148	117	25
DCR 1-10	402	225	627	148	117	26
DCR 1-11	420	225	645	148	117	26
DCR 1-12	448	245	693	170	142	29
DCR 1-13	466	245	711	170	142	30
DCR 1-15	502	245	747	170	142	31
DCR 1-17	538	245	783	170	142	33
DCR 1-19	574	245	819	170	142	34
DCR 1-21	610	245	855	170	142	35
DCR 1-23	646	245	891	170	142	36
DCR 1-25	692	290	982	190	155	42
DCR 1-27	728	290	1018	190	155	43
DCR 1-30	782	290	1072	190	155	45
DCR 1-33	836	290	1126	190	155	49
DCR 1-36	890	290	1180	190	155	51

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

DCR 2 / DCRS 2 / DCRN 2

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

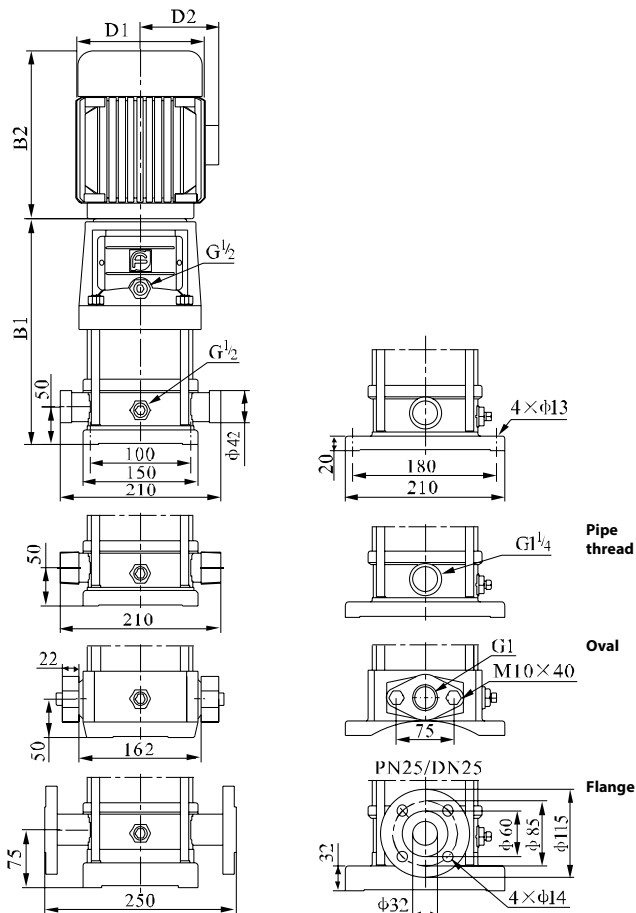
+ DCR 2 / DCRS 2 / DCRN 2

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

DN 25X25

Modèle	Motor		Q (m3/h)	1	1,2	1,6	2	2,4	2,8	3,2	3,5
	(kW)	(hp)									
DCR 2-2	0,37	0,5	H (m)	18	17	16	15	13	12	10	8
DCR 2-3	0,37	0,5		27	26	24	22	20	18	15	12
DCR 2-4	0,55	0,75		36	35	33	30	26	24	20	16
DCR 2-5	0,55	0,75		45	43	40	37	33	30	24	20
DCR 2-6	0,75	1		53	52	50	45	40	36	30	24
DCR 2-7	0,75	1		63	31	57	52	47	41	35	28
DCR 2-9	1,1	1,5		80	78	73	67	61	54	45	37
DCR 2-11	1,1	1,5		98	95	89	82	73	64	54	44
DCR 2-13	1,5	2		116	114	106	98	89	78	65	52
DCR 2-15	1,5	2		134	130	123	112	100	90	73	60
DCR 2-18	2,2	3		161	157	148	136	121	108	91	76
DCR 2-22	2,2	3		197	192	180	165	148	130	110	90
DCR 2-26	3	4		232	228	214	198	179	158	130	110

## Dimensions and weights



DN 25X25

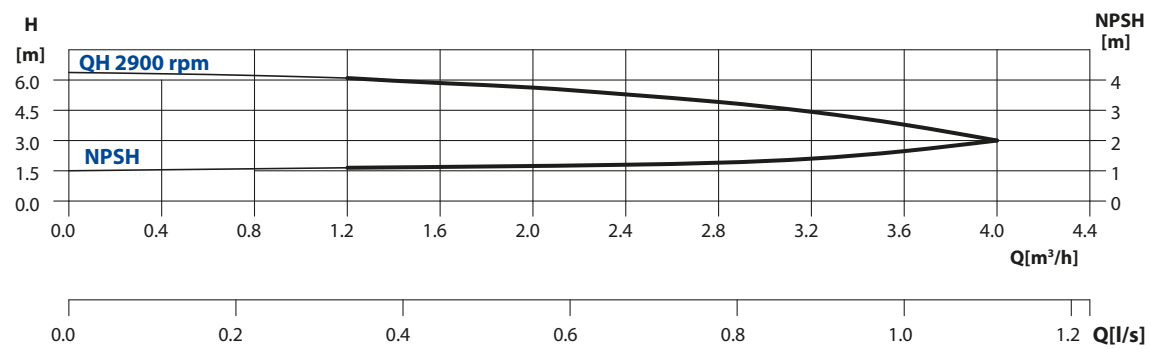
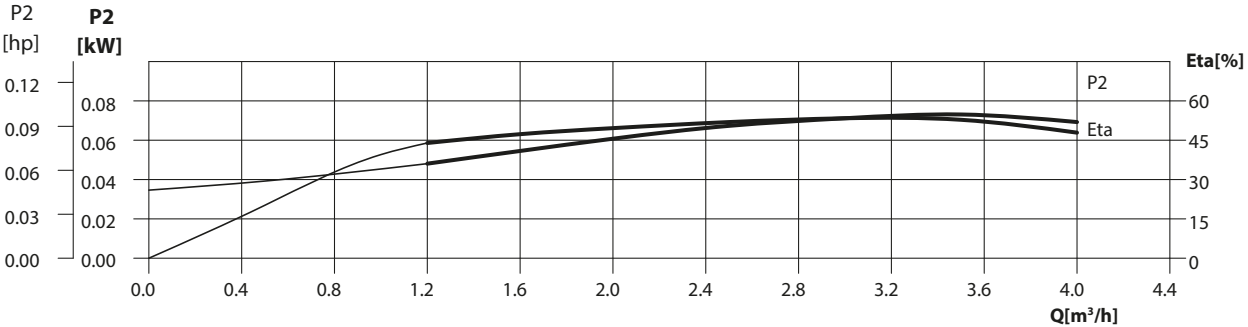
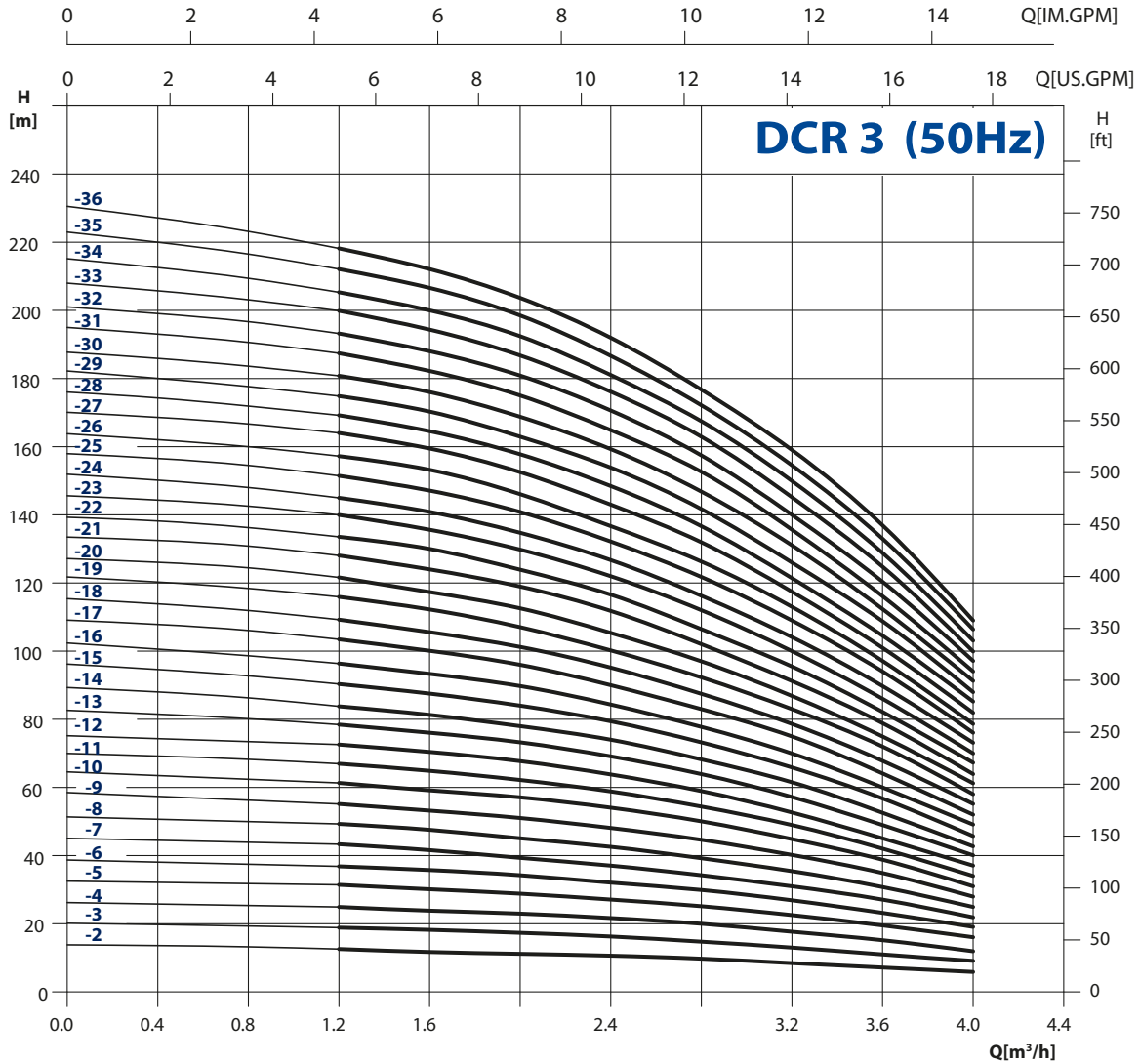
Model	Dimensions (mm)					Weights (kg)
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DCR 2-3	276	225	501	148	117	20
DCR 2-4	294	225	519	148	117	22
DCR 2-5	312	225	537	148	117	23
DCR 2-6	340	245	585	170	142	26
DCR 2-7	358	245	603	170	142	26
DCR 2-9	394	245	639	170	142	28
DCR 2-11	430	245	675	170	142	29
DCR 2-13	476	290	766	190	155	35
DCR 2-15	512	290	802	190	155	36
DCR 2-18	566	290	856	190	155	41
DCR 2-22	638	290	928	190	155	42
DCR 2-26	720	345	1035	197	165	52

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

DCR 3 / DCRS 3 / DCRN 3

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

+ DCR 3 / DCRS 3 / DCRN 3

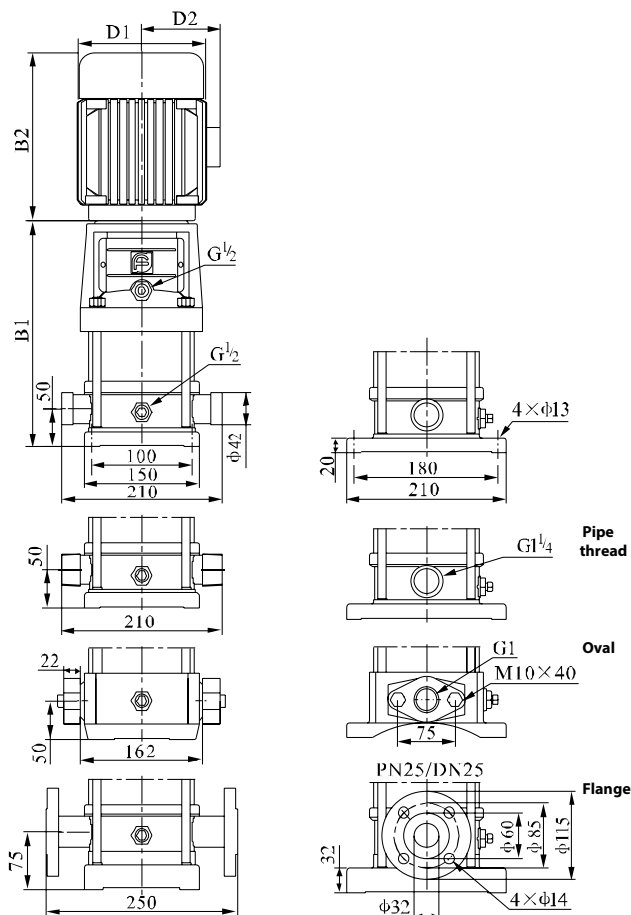
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

DN 25X25

Model	Motor		Q (m <sup>3</sup> /h)	1,2	1,6	2	2,4	2,8	3	3,2	3,6	4
	(kW)	(hp)										
DCR 3-2	0,37	0,5	H (m)	12,5	11,5	11	10,5	10	9	8	7	6
DCR 3-3	0,37	0,5		19	18,5	17,5	16,5	15	14	13	11	9
DCR 3-4	0,37	0,5		25	24	23	21,5	20	19	18	15	12
DCR 3-5	0,37	0,5		31	30	29	27	25	23	22	19	16
DCR 3-6	0,55	0,75		36	35	34	32	30	28	27	23	19
DCR 3-7	0,55	0,75		43	41	39	37	34	32	31	27	22
DCR 3-8	0,75	1		49	47	45	43	39	37	35	31	25
DCR 3-9	0,75	1		55	53	51	48	45	42	40	35	28
DCR 3-10	0,75	1		61	59	57	54	50	47	45	39	31
DCR 3-11	1,1	1,5		67	64	61	58	54	51	49	42	34
DCR 3-12	1,1	1,5		73	70	67	63	58	55	52	45	37
DCR 3-13	1,1	1,5		78	76	73	69	64	60	57	49	40
DCR 3-15	1,1	1,5		90	88	84	79	73	69	66	57	46
DCR 3-17	1,5	2		103	100	96	90	83	79	75	64	52
DCR 3-19	1,5	2		115	112	107	100	92	88	83	72	58
DCR 3-21	2,2	3		128	124	119	112	102	98	91	79	64
DCR 3-23	2,2	3		140	135	130	122	112	107	100	86	70
DCR 3-25	2,2	3		151	147	141	131	122	116	109	94	76
DCR 3-27	2,2	3		164	159	152	143	132	124	117	101	82
DCR 3-29	2,2	3		175	170	163	153	142	133	126	109	88
DCR 3-31	3	4		187	182	175	165	153	142	135	116	94
DCR 3-33	3	4		199	194	187	176	163	151	145	125	100
DCR 3-36	3	4		218	212	204	192	178	168	159	137	109

## Dimensions and weights

DN 25X25



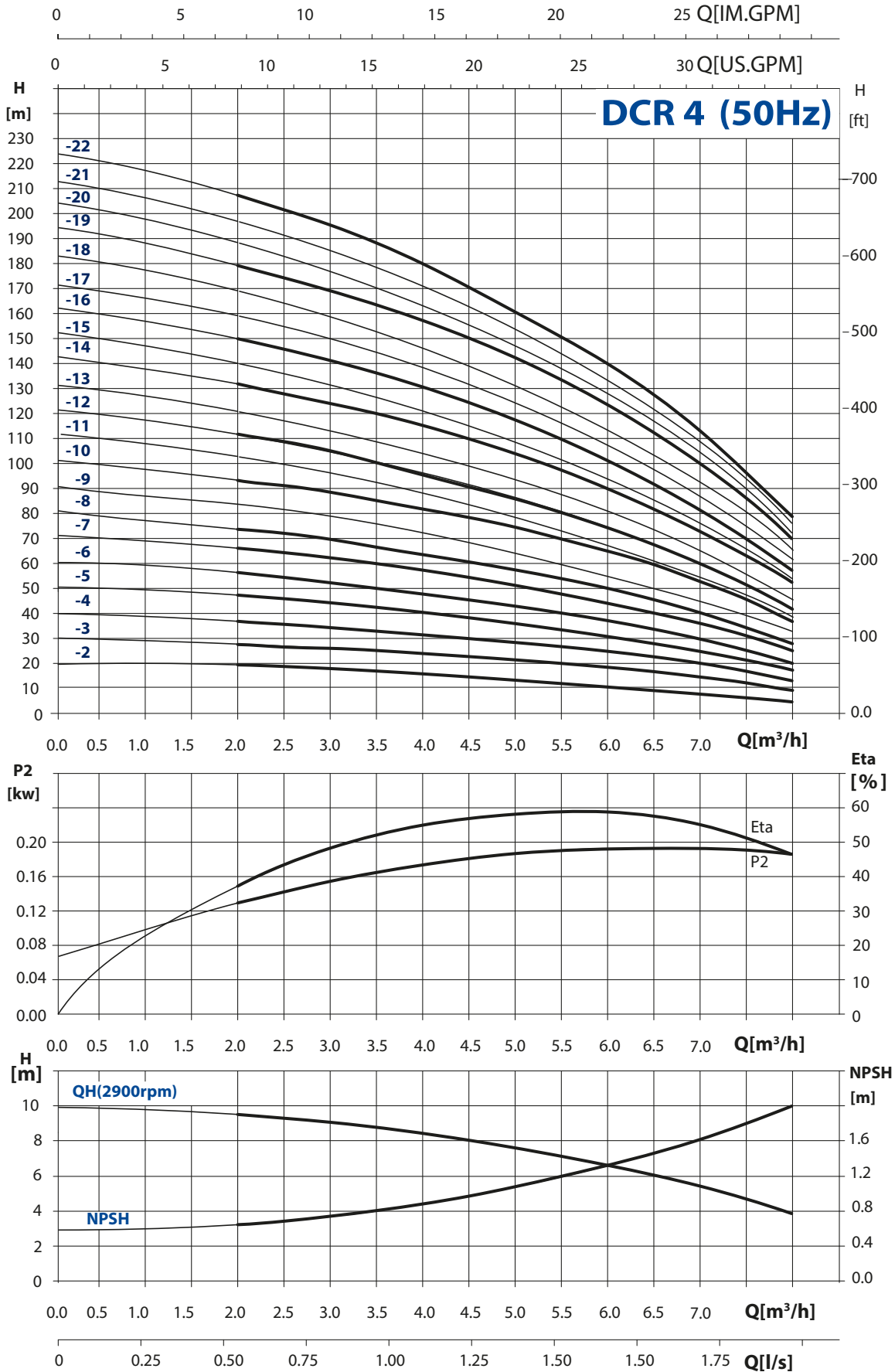
Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 3-2	258	225	483	148	117	20
DCR 3-3	276	225	501	148	117	20
DCR 3-4	294	225	519	148	117	21
DCR 3-5	312	225	537	148	117	21
DCR 3-6	330	225	555	148	117	23
DCR 3-7	348	225	573	148	117	24
DCR 3-8	376	245	621	170	142	27
DCR 3-9	394	245	639	170	142	28
DCR 3-10	412	245	657	170	142	28
DCR 3-11	430	245	675	170	142	29
DCR 3-12	448	245	693	170	142	30
DCR 3-13	466	245	711	170	142	31
DCR 3-15	502	245	747	170	142	32
DCR 3-17	548	290	838	190	155	38
DCR 3-19	584	290	874	190	155	39
DCR 3-21	620	290	910	190	155	42
DCR 3-23	655	290	946	190	155	43
DCR 3-25	692	290	982	190	155	44
DCR 3-27	728	290	1018	190	155	45
DCR 3-29	764	290	1054	190	155	46
DCR 3-31	810	345	1155	197	165	54
DCR 3-33	849	345	1191	197	165	55
DCR 3-36	900	345	1245	197	165	57

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

DCR 4 / DCRS 4 / DCRN 4

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

+ DCR 4 / DCRS 4 / DCRN 4

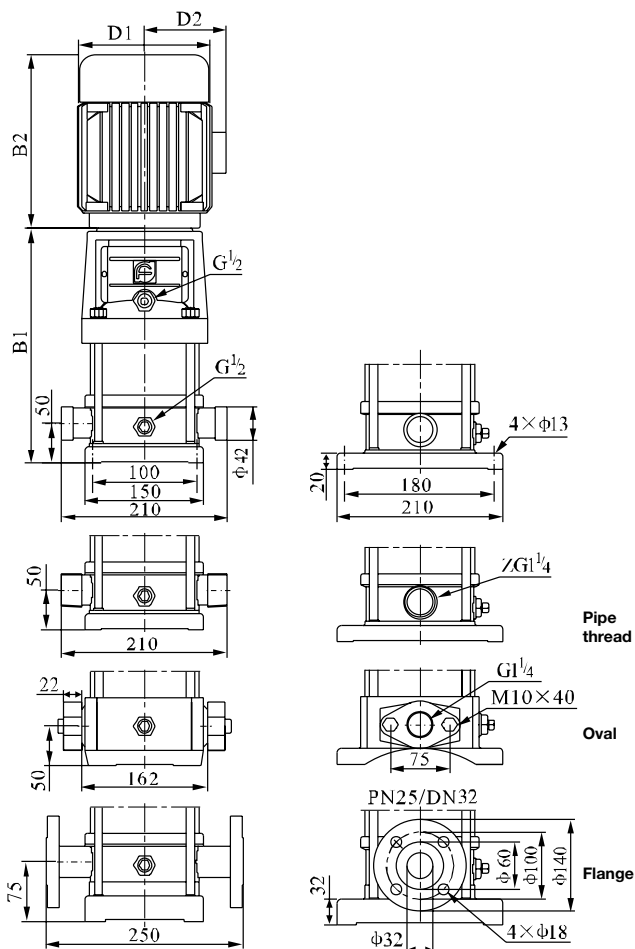
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

DN 32X32

Model	Motor		Q (m <sup>3</sup> /h)	1,5	2	3	4	5	6	7	8
	(kW)	(hp)									
			H (m)								
DCR 4-2	0,37	0,5		19	18	17	15	13	10	8	6
DCR 4-3	0,55	0,75		28	27	26	24	20	18	13	10
DCR 4-4	0,75	1		38	36	34	32	27	24	19	13
DCR 4-5	1,1	1,5		47	45	43	40	34	31	23	17
DCR 4-6	1,1	1,5		56	54	52	48	41	37	28	20
DCR 4-7	1,5	2		66	63	61	56	48	43	33	24
DCR 4-8	1,5	2		74	72	70	64	55	50	38	27
DCR 4-10	2,2	3		96	90	87	81	71	62	48	34
DCR 4-12	2,2	3		114	108	104	95	85	75	58	41
DCR 4-14	3	4		136	126	122	112	101	89	68	48
DCR 4-16	3	4		152	144	140	129	115	101	78	55
DCR 4-19	4	5,5		183	171	168	153	137	122	93	67
DCR 4-22	4	5,5		211	200	192	178	160	138	108	79

## Dimensions and weights

DN 32X32



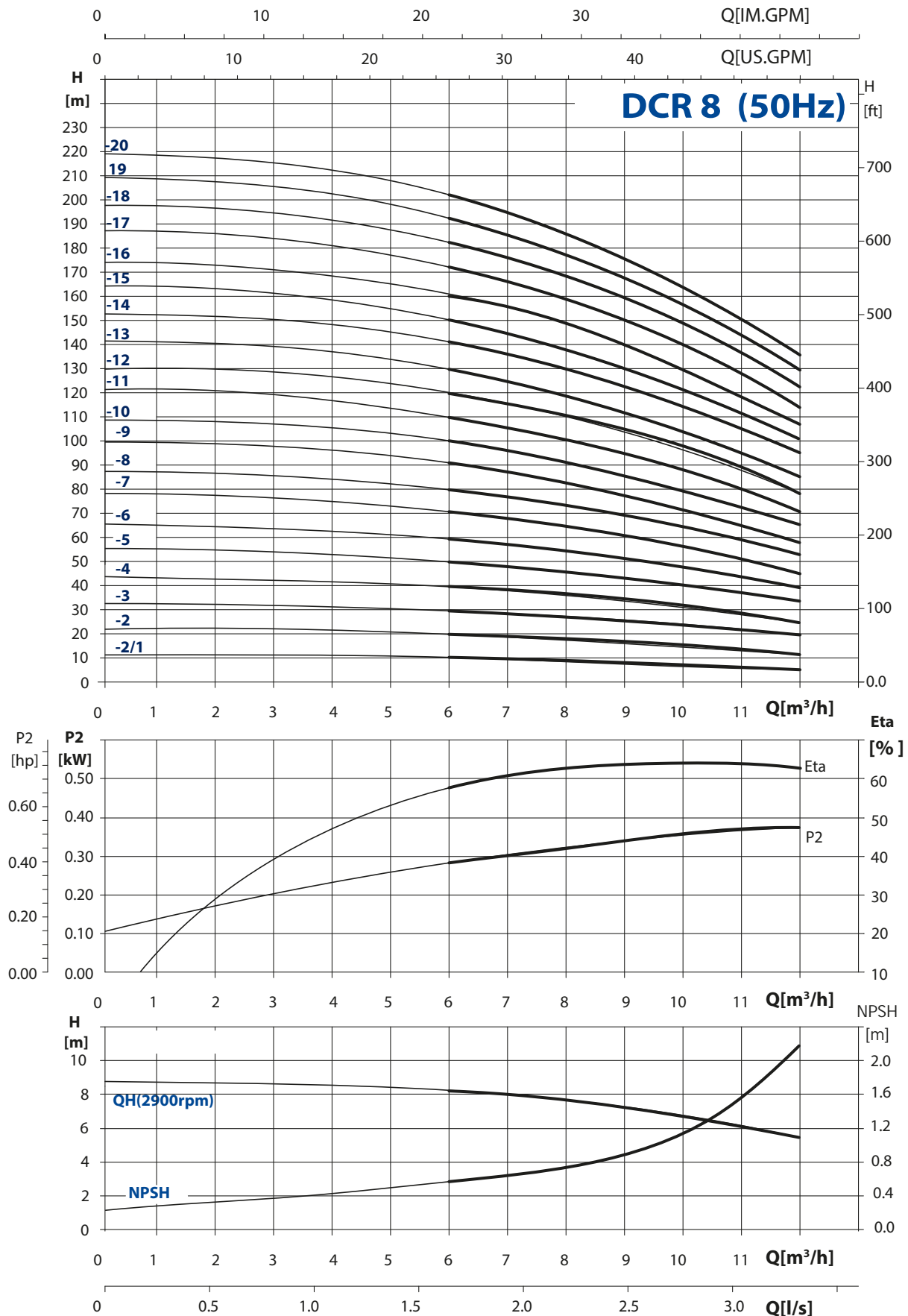
Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 4-2	276	225	501	148	117	21
DCR 4-3	303	225	528	148	117	22
DCR 4-4	340	245	585	170	142	25
DCR 4-5	367	245	612	170	142	27
DCR 4-6	394	245	639	170	142	27
DCR 4-7	431	290	721	190	155	33
DCR 4-8	458	290	748	190	155	33
DCR 4-10	512	290	802	190	155	37
DCR 4-12	566	290	856	190	155	38
DCR 4-14	630	345	975	197	165	46
DCR 4-16	684	345	1029	197	165	48
DCR 4-19	765	355	1120	230	188	57
DCR 4-22	846	355	1201	230	188	59

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

DCR 8 / DCRS 8 / DCRN 8

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

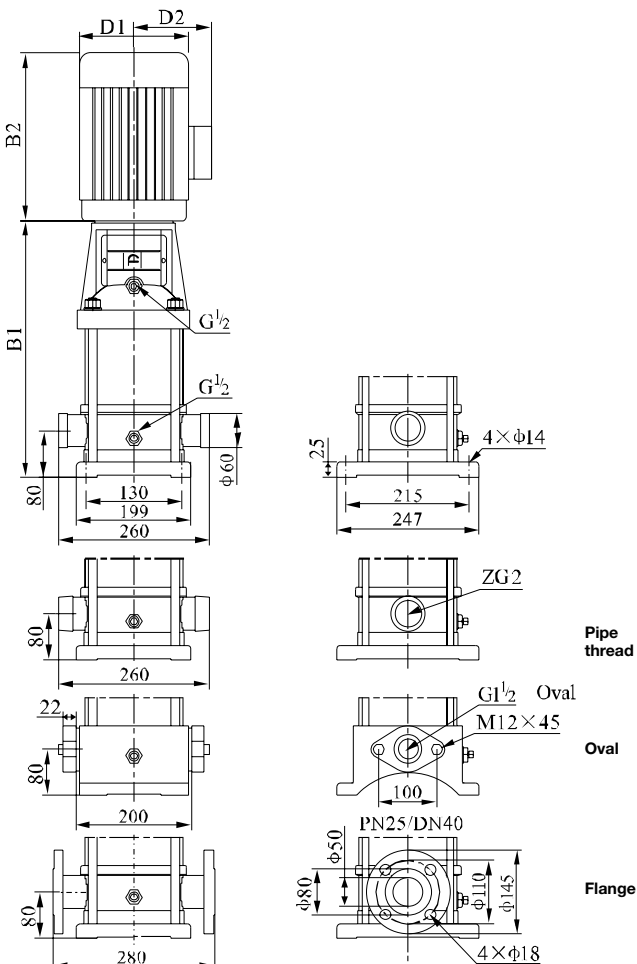
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

+ **DCR 8 / DCRS 8 / DCRN 8**

DN 40X40

Model	Motor		Q (m3/h)	5	6	7	8	9	10	11	12
	(kW)	(hp)									
DCR 8-2-1	0,75	1	H (m)	10	9,5	9,3	9	8,5	8	7	6
DCR 8-2	0,75	1		20	19,5	19	18	17	16	14	13
DCR 8-3	1,1	1,5		30	29,5	28,5	27	25	24	21	19
DCR 8-4	1,5	2		41	39,5	38	36	34	32	28	26
DCR 8-5	2,2	3		52	50	48	45	42	40	36	32
DCR 8-6	2,2	3		62	60	57	54	51	48	43	39
DCR 8-8	3	4		83	80	77	73	69	65	58	52
DCR 8-10	4	5,5		104	100	97	92	87	81	73	65
DCR 8-12	4	5,5		124	120	116	111	104	92	87	78
DCR 8-14	5,5	7,5		145	141	136	130	122	113	102	92
DCR 8-16	5,5	7,5		166	161	156	148	139	130	118	106
DCR 8-18	7,5	10		187	182	175	167	157	146	134	120
DCR 8-20	7,5	10		208	202	195	186	175	163	150	135

## Dimensions and weights



DN 40X40

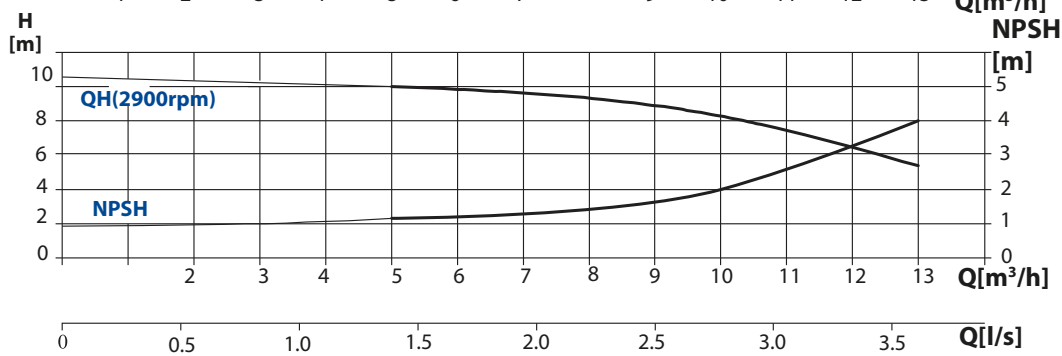
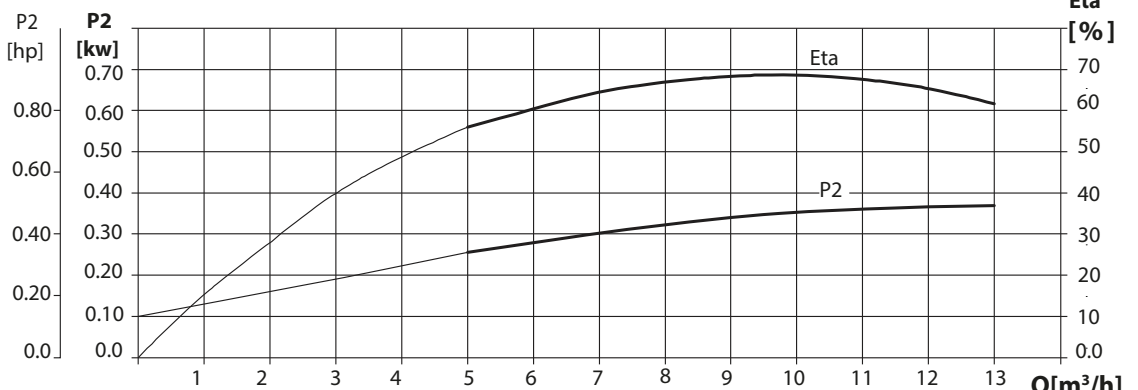
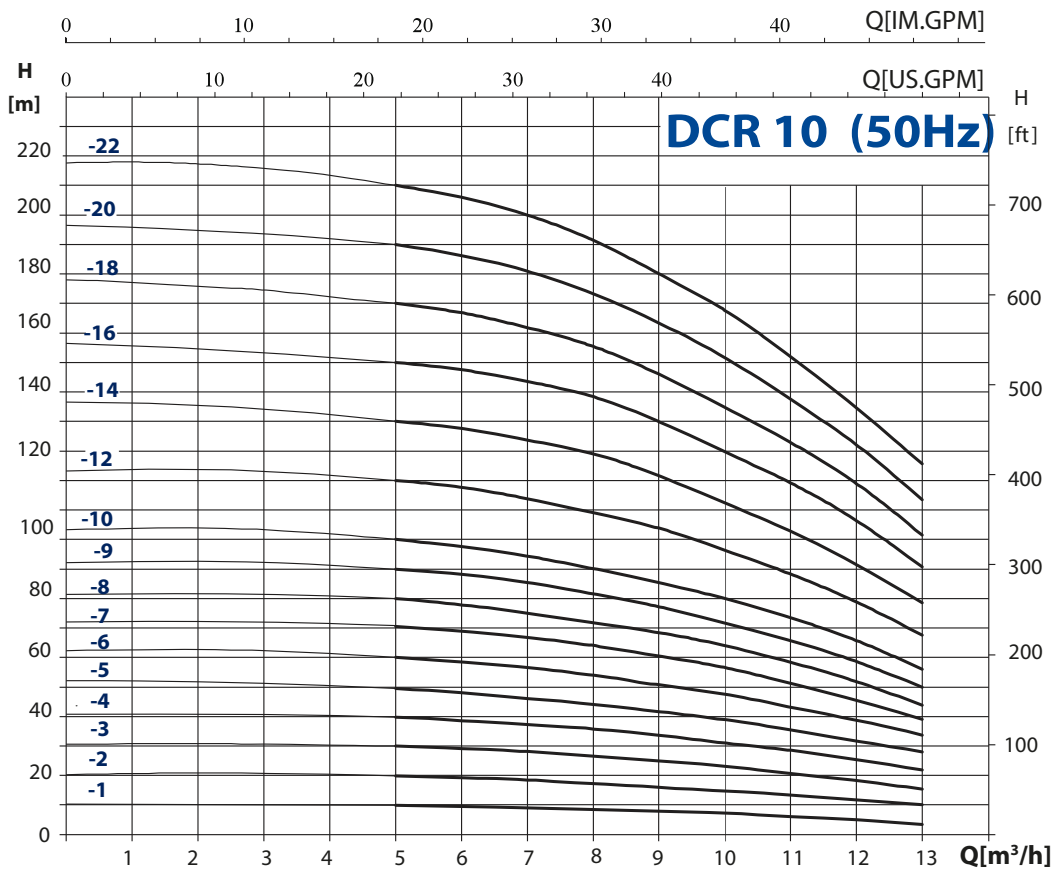
Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 8-2-1	347	245	592	170	142	32
DCR 8-2	347	245	592	170	142	32
DCR 8-3	377	245	622	170	142	34
DCR 8-4	417	290	707	190	155	40
DCR 8-5	447	290	737	190	155	44
DCR 8-6	477	290	767	190	155	45
DCR 8-8	547	345	892	197	165	53
DCR 8-10	607	355	962	230	188	64
DCR 8-12	667	355	1022	230	188	66
DCR 8-14	747	390	1137	260	208	81
DCR 8-16	807	390	1197	260	208	84
DCR 8-18	867	390	1257	260	208	93
DCR 8-20	927	390	1317	260	208	94

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

**+ DCR 10 / DCRS 10 / DCRN 10**



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

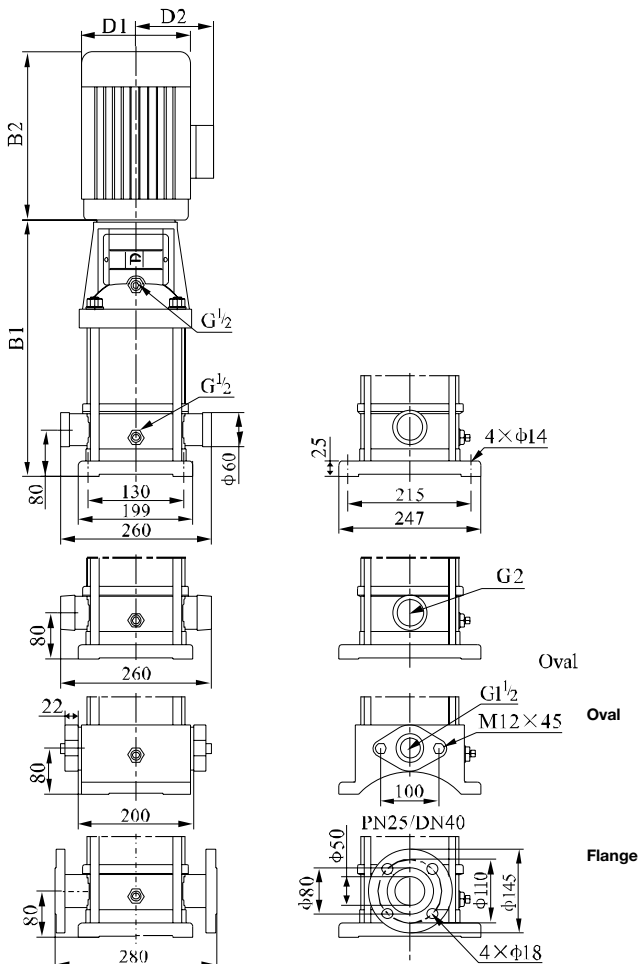
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

+ **DCR 10 / DCRS 10 / DCRN 10**

DN 40X40

Model	Motor		Q (m <sup>3</sup> /h)	5	6	7	8	9	10	11	12	13
	(kW)	(hp)										
DCR 10-1	0,75	1	H (m)	10	9,3	8,9	8	7,7	7	6	5	4
DCR 10-2	0,75	1		20	19	18	17	16	15	14	12	10
DCR 10-3	1,1	1,5		30	29	28	27	25	23	21	18	16
DCR 10-4	1,5	2		40	38,5	37,5	36	34	31	28	25	22
DCR 10-5	2,2	3		50	49	47	44	42	39	35	32	28
DCR 10-6	2,2	3		60	58	56	54	51	48	43	39	34
DCR 10-7	3	4		70	68	66	63	60	56	51	45	39
DCR 10-8	3	4		80	78	75	73	69	64	58	52	44
DCR 10-9	3	4		90	87	85	81	77	72	66	58	50
DCR 10-10	4	5,5		100	97	95	90	85	80	74	66	56
DCR 10-12	4	5,5		120	117	114	109	104	96	89	79	68
DCR 10-14	5,5	8		140	137	134	129	122	113	103	92	79
DCR 10-16	5,5	8		160	158	153	148	140	129	119	106	91
DCR 10-18	7,5	10		180	177	172	166	156	145	133	119	102
DCR 10-20	7,5	10		200	196	191	184	173	162	147	132	114
DCR 10-22	7,5	10		220	216	210	202	190	178	162	145	126

## Dimensions and weights



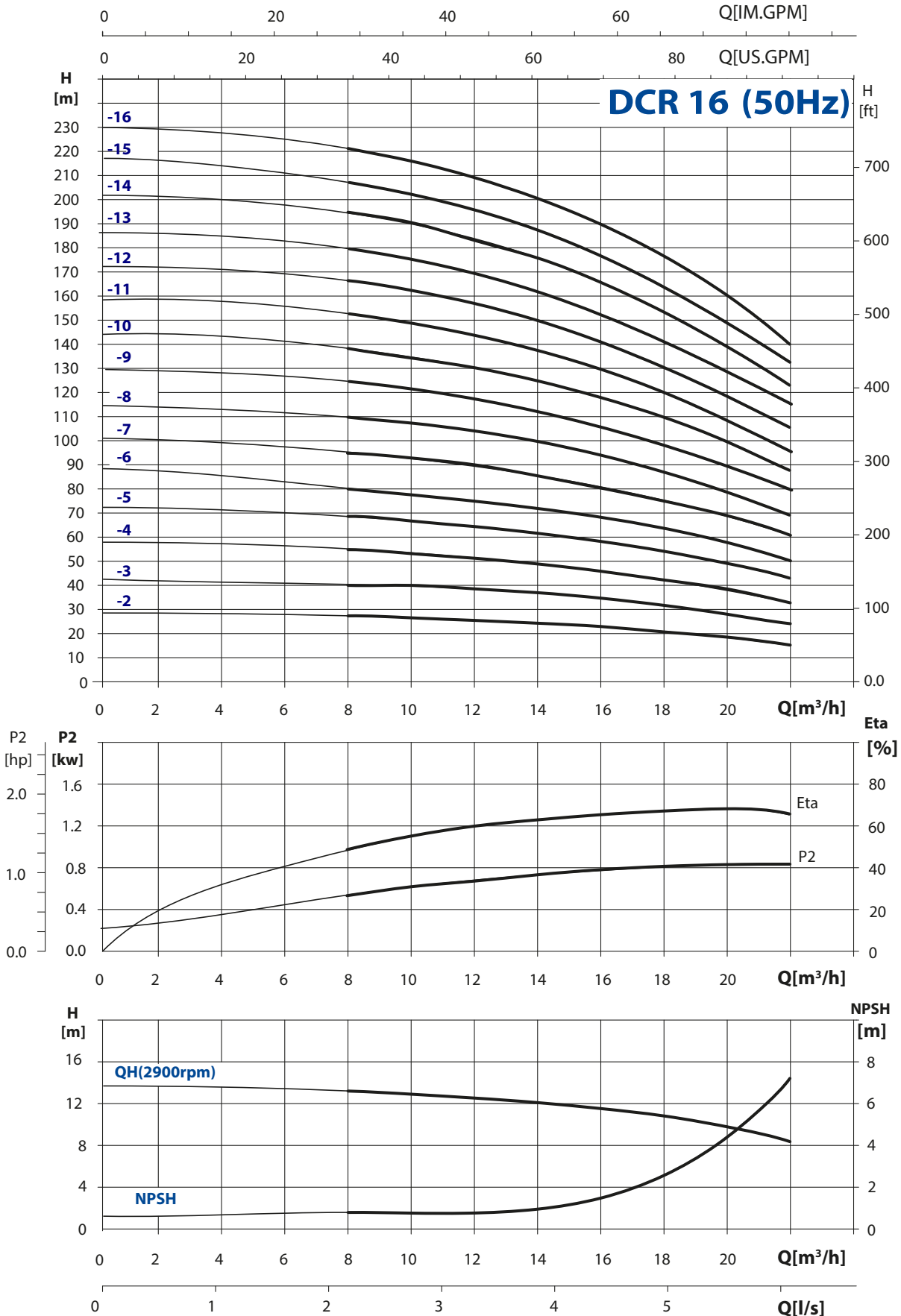
DN 40X40

Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 10-1	347	245	592	170	142	40
DCR 10-2	347	245	592	170	142	41
DCR 10-3	377	245	622	170	142	43
DCR 10-4	417	290	707	190	155	49
DCR 10-5	447	290	737	190	155	53
DCR 10-6	477	290	767	190	155	54
DCR 10-7	517	345	862	197	165	64
DCR 10-8	547	345	892	197	165	65
DCR 10-9	577	345	922	197	165	66
DCR 10-10	607	355	962	230	188	74
DCR 10-12	667	355	1022	230	188	76
DCR 10-14	747	390	1137	260	208	100
DCR 10-16	807	390	1197	260	208	102
DCR 10-18	867	390	1257	260	208	107
DCR 10-20	927	390	1317	260	208	109
DCR 10-22	987	390	1377	260	208	111

# VERTICAL MULTISTAGE PUMPS

## PERFORMANCE CURVES

### DCR 16 / DCRS 16 / DCRN 16



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

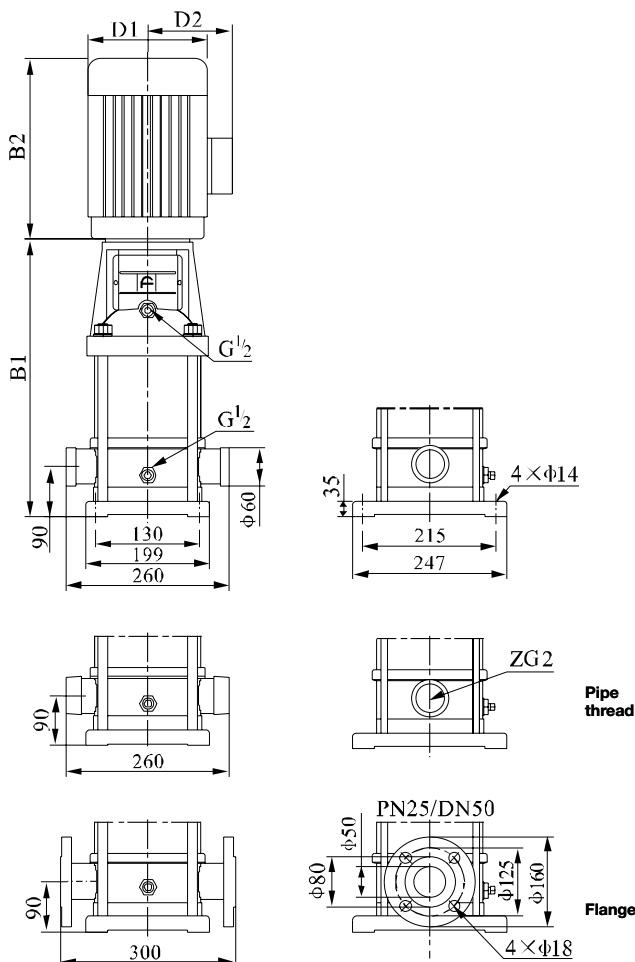
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

+ **DCR 16 / DCRS 16 / DCRN 16**

DN 50X50

Model	Motor		Q (m <sup>3</sup> /h)	8	10	12	14	16	18	20	22
	(kW)	(hp)									
DCR 16-2	2,2	3	H (m)	27	26	25	24	22	21	19	16
DCR 16-3	3	4		41	40	38	37	34	32	29	25
DCR 16-4	4	5,5		54	53	52	49	46	43	38	34
DCR 16-5	5,5	7,5		68	67	65	62	58	54	48	43
DCR 16-6	5,5	7,5		82	80	78	74	70	64	58	52
DCR 16-7	7,5	10		96	95	91	87	82	76	68	61
DCR 16-8	7,5	10		110	108	104	99	94	86	77	70
DCR 16-10	11	15		138	136	131	125	118	109	97	87
DCR 16-12	11	15		166	162	157	150	141	130	116	105
DCR 16-14	15	20		194	190	184	175	166	152	136	122
DCR 16-16	15	20		222	217	210	200	189	174	156	140

## Dimensions and weights



DN 50X50

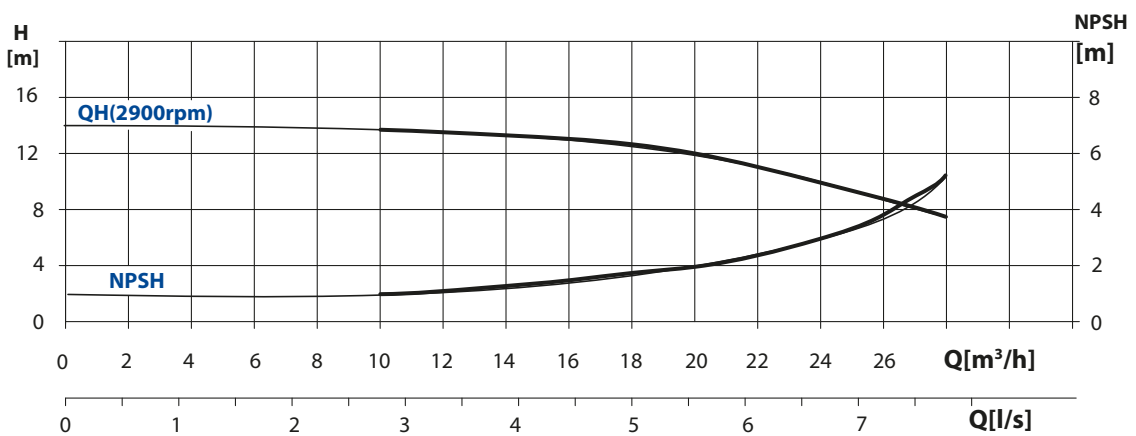
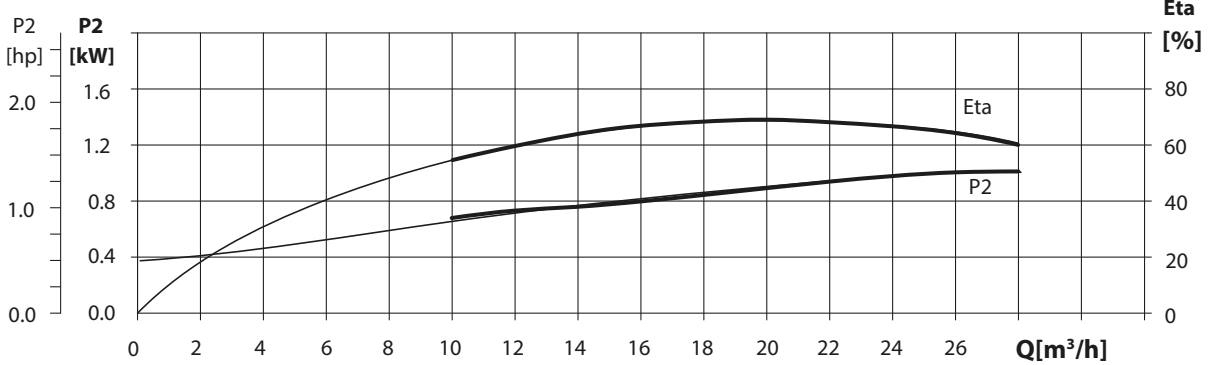
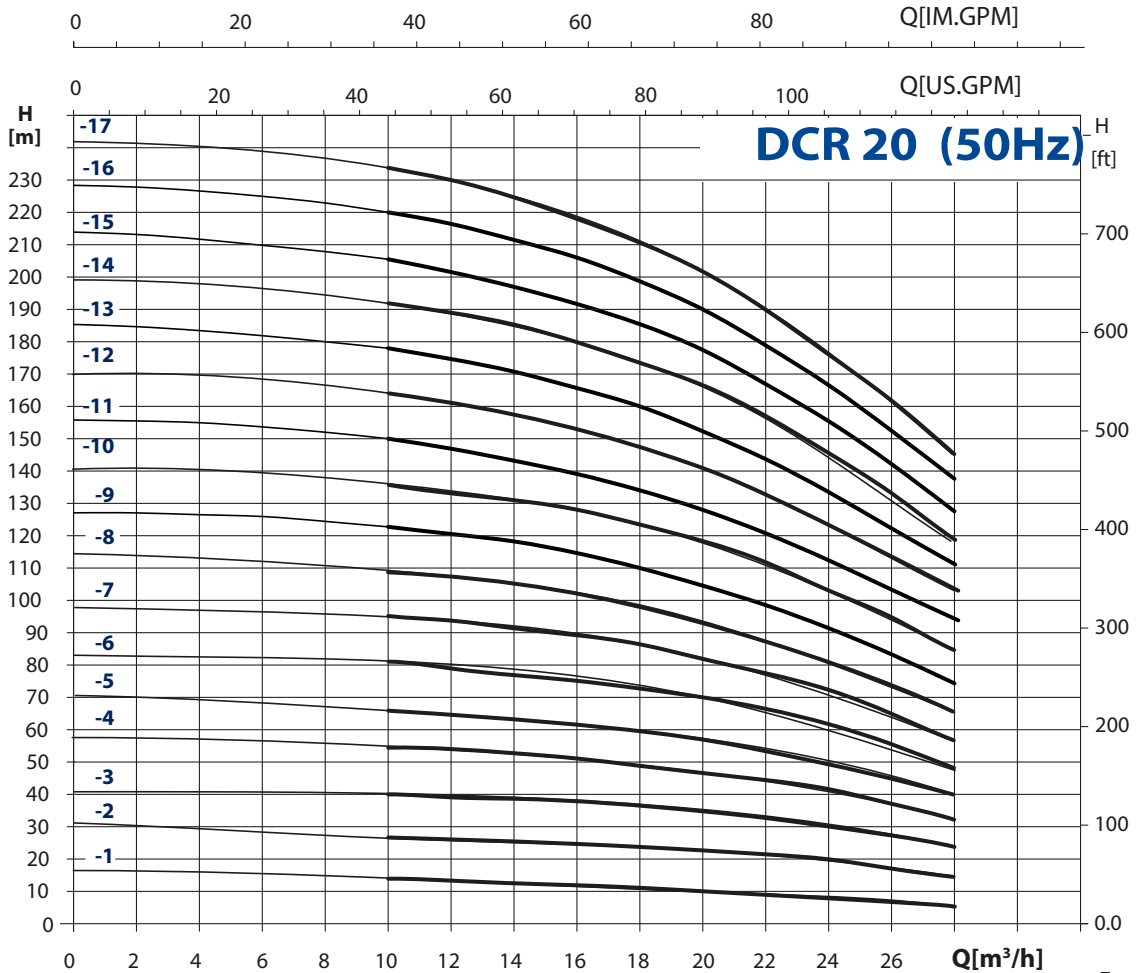
Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 16-2	397	290	687	190	155	42
DCR 16-3	452	345	797	197	165	50
DCR 16-4	497	355	852	230	188	59
DCR 16-5	562	390	952	260	208	76
DCR 16-6	607	390	997	260	208	77
DCR 16-7	652	390	1042	260	208	84
DCR 16-8	697	390	1087	260	208	86
DCR 16-10	875	500	1375	330	255	158
DCR 16-12	965	500	1465	330	255	161
DCR 16-14	1055	500	1555	330	255	174
DCR 16-16	1145	550	1645	330	255	178

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES



**+** DCR 20 / DCRS 20 / DCRN 20



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

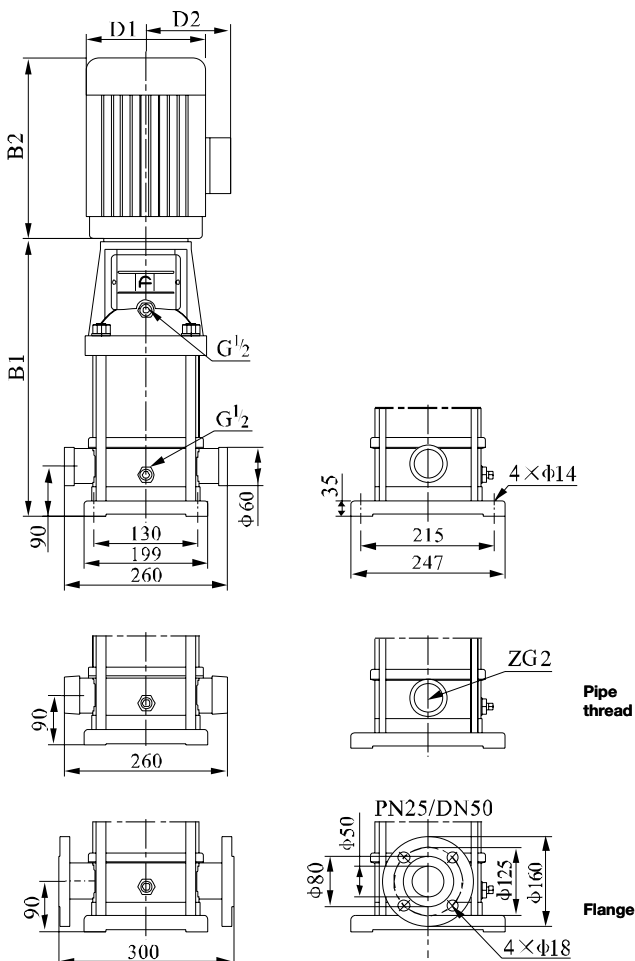
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

+ **DCR 20 / DCRS 20 / DCRN 20**

DN 50X50

Model	Motor		Q (m <sup>3</sup> /h)	10	12	14	16	18	20	22	24	26	28
	(kW)	(hp)											
DCR 20-1	1,1	1,5	H (m)	13,5	13	12,5	12	11	10	9	8	7	6
DCR 20-2	2,2	3		27	26,5	26	25	24	23	22	20	18	15
DCR 20-3	4	5,5		40	39,5	39	38	37	35	33	30	27	24
DCR 20-4	5,5	7,5		54	53	52	51	49	47	44	41	37	33
DCR 20-5	5,5	7,5		67	66	64	62	60	58	55	50	45	40
DCR 20-6	7,5	10		81	79	77	75	73	70	66	61	55	49
DCR 20-7	7,5	10		95	93	91	89	86	82	77	71	65	58
DCR 20-8	11	15		109	107	105	102	99	94	89	82	75	67
DCR 20-10	11	15		136	134	131	128	124	118	111	103	95	85
DCR 20-12	15	20		164	162	158	154	149	142	133	124	114	102
DCR 20-14	15	20		192	189	185	180	174	166	156	145	133	119
DCR 20-17	18,5	25		234	203	225	219	212	202	190	177	162	145

## Dimensions and weights



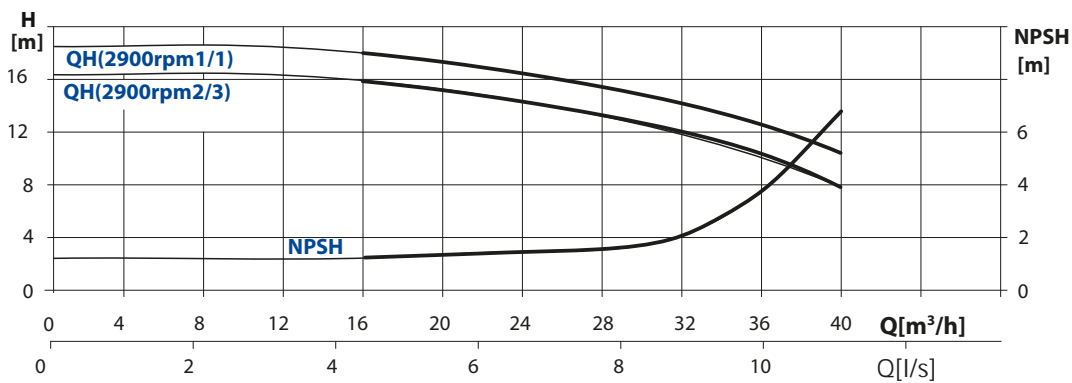
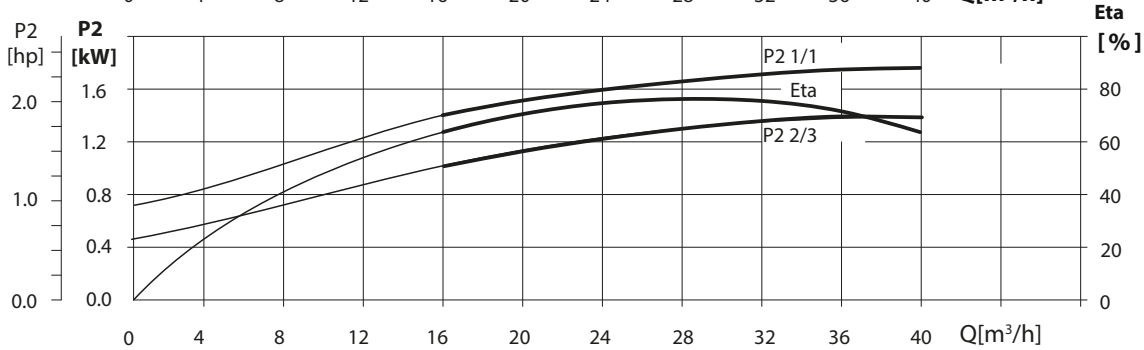
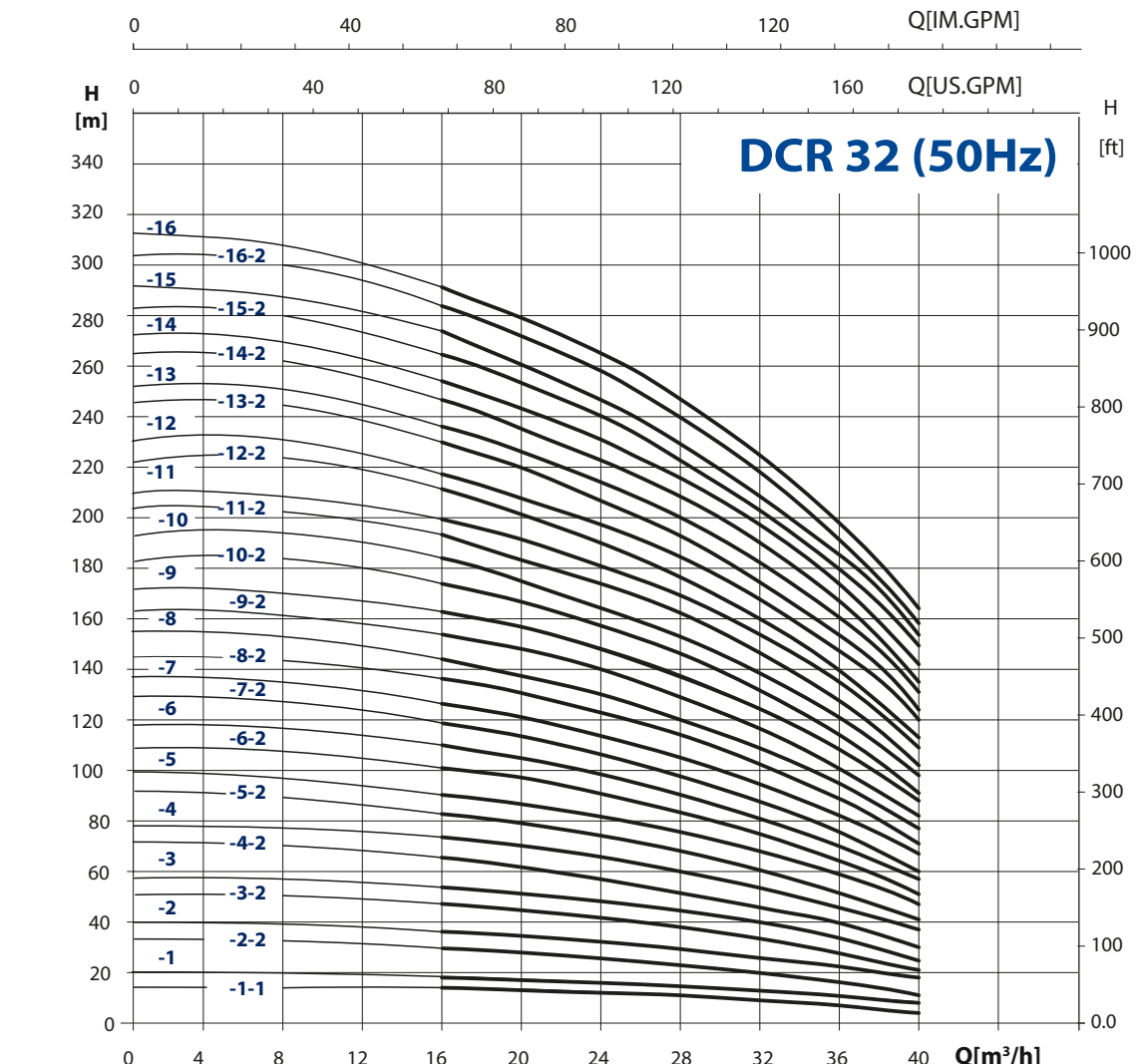
DN 50X50

Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 20-1	387	245	632	170	142	33
DCR 20-2	397	290	687	190	155	42
DCR 20-3	452	355	807	230	188	58
DCR 20-4	517	390	907	260	208	74
DCR 20-5	652	390	952	260	208	76
DCR 20-6	607	390	997	260	208	82
DCR 20-7	652	390	1042	260	208	84
DCR 20-8	785	500	1285	330	255	153
DCR 20-10	875	500	1375	330	255	157
DCR 20-12	965	500	1465	330	255	170
DCR 20-14	1055	550	1555	330	255	172
DCR 20-17	1190	550	1740	330	255	195

# VERTICAL MULTISTAGE PUMPS

## PERFORMANCE CURVES

### DCR 32/ DCRS 32/ DCRN 32



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

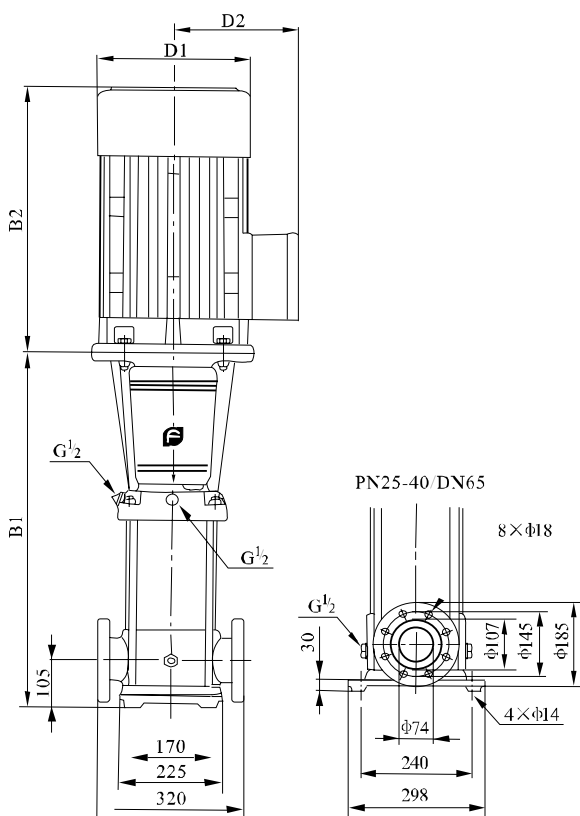
+ **DCR 32 / DCRS 32 / DCRN 32**

DN 65X65

Model	Motor		Q (m <sup>3</sup> /h)	16	20	24	28	32	36	40
	(kW)	(hp)								
DCR 32-1-1	1,5	2	H (m)	14	13	12	11	9	7	4
DCR 32-1	2,2	3		18	17	15	14	13	11	8
DCR 32-2-2	3	4		29	28	26	23	20	16	11
DCR 32-2	4	5,5		36	34	32	29	27	23	18
DCR 32-3-2	5,5	7,5		47	44	41	39	33	28	21
DCR 32-3	5,5	7,5		54	51	48	44	40	35	27
DCR 32-4-2	7,5	10		65	62	58	53	46	40	30
DCR 32-4	7,5	10		72	69	65	59	53	47	37
DCR 32-5-2	11	15		83	79	74	68	60	52	41
DCR 32-5	11	15		90	86	81	74	67	59	47
DCR 32-6-2	11	15		101	97	80	83	74	65	51
DCR 32-6	11	15		108	104	97	90	81	72	57
DCR 32-7-2	15	20		119	114	107	98	88	78	60
DCR 32-7	15	20		126	121	113	105	95	85	67
DCR 32-8-2	15	20		136	131	123	114	102	90	71
DCR 32-8	15	20		144	138	130	120	109	97	77
DCR 32-9-2	18,5	25		154	148	140	129	117	102	82
DCR 32-9	18,5	25		162	156	147	136	124	109	88
DCR 32-10-2	18,5	25		175	166	157	146	131	115	91
DCR 32-10	18,5	25		182	173	164	152	138	122	98
DCR 32-11-2	22	30		193	184	173	164	146	128	102
DCR 32-11	22	30		200	191	180	168	153	135	109
DCR 32-12-2	22	30		211	201	189	178	160	140	113
DCR 32-12	22	30		218	208	196	184	167	147	120
DCR 32-13-2	30	40		230	228	206	193	174	153	124
DCR 32-13	30	40		237	225	213	200	181	160	131
DCR 32-14-2	30	40		247	235	222	210	189	165	135
DCR 32-14	30	40		255	242	229	216	196	172	142
DCR 32-15-2	30	40		266	253	239	224	203	178	145
DCR 32-15	30	40		274	260	246	231	210	185	152
DCR 32-16-2	30	40		284	270	255	240	218	190	156
DCR 32-16	30	40		292	277	262	246	225	197	163

## Dimensions and weights

DN 65X65

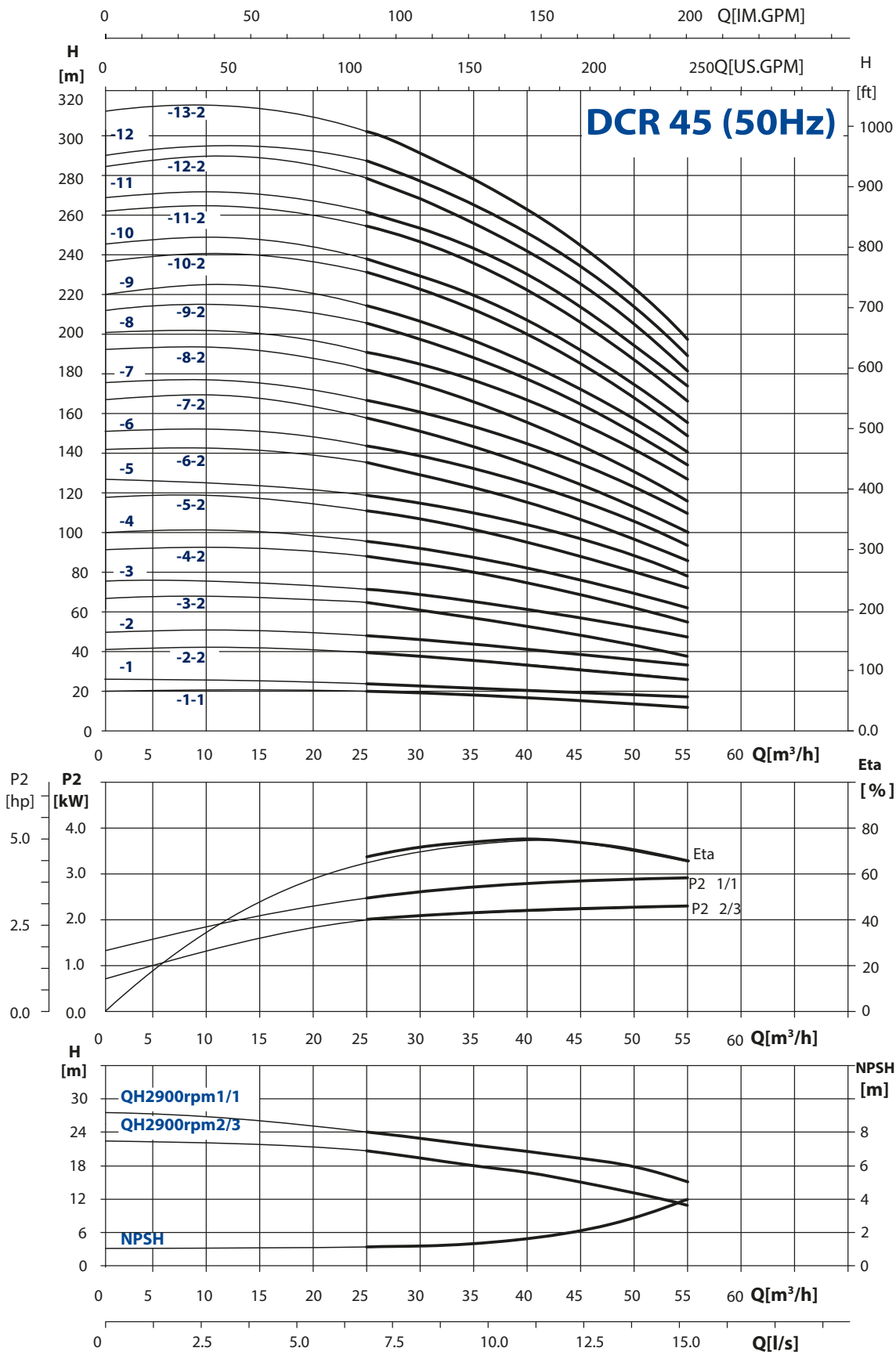


Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 32-1-1 DCR 32-1	505	290	795	190	155	64/68
DCR 32-2-2 DCR 32-2	575	345/ 355	920/ 930	197/ 230	165/ 180	77/85
DCR 32-3-2 DCR 32-3	645	390	1035	260	208	100
DCR 32-4-2 DCR 32-4	715	390	1105	260	208	109
DCR 32-5-2 DCR 32-5	890	500	1390	330	255	181
DCR 32-6-2 DCR 32-6	960	500	1460	330	255	185
DCR 32-7-2 DCR 32-7	1030	500	1530	330	255	199
DCR 32-8-2 DCR 32-8	1100	500	1600	330	255	203
DCR 32-9-2 DCR 32-9	1170	550	1720	330	255	222
DCR 32-10-2 DCR 32-10	1240	550	1790	330	255	227
DCR 32-11-2 DCR 32-11	1310	575	1885	360	285	272
DCR 32-12-2 DCR 32-12	1380	575	1955	360	285	276
DCR 32-13-2 DCR 32-13	1450	650	2100	400	310	337
DCR 32-14-2 DCR 32-14	1520	650	2170	400	310	341
DCR 32-15-2 DCR 32-15	1590	650	2240	400	310	345
DCR 32-16-2 DCR 32-16	1660	650	2310	400	310	350

# VERTICAL MULTISTAGE PUMPS

## PERFORMANCE CURVES

### DCR 45 / DCRS 45 / DCRN 45



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

+ DCR 45 / DCRS 45 / DCRN 45

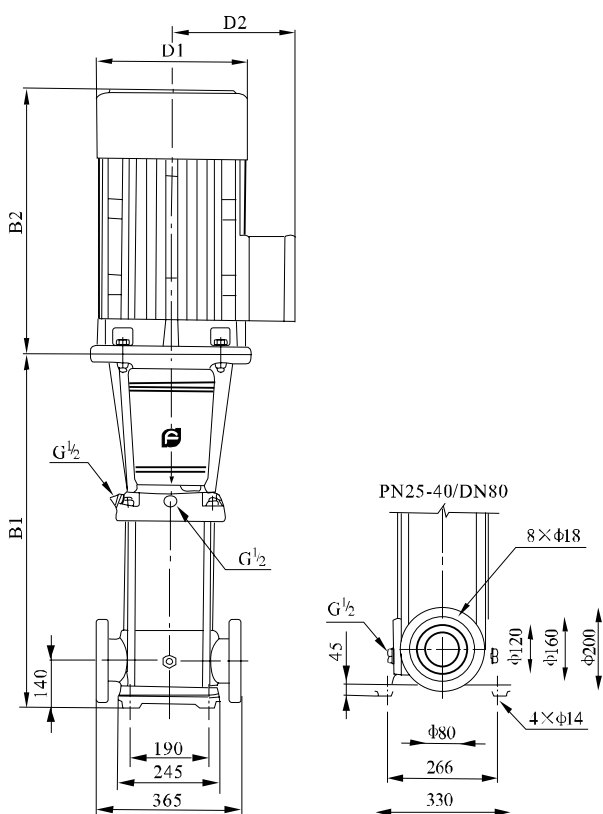
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

DN 80X80

Model	Motor		Q (m <sup>3</sup> /h)	25	30	35	40	42	45	50	55
	(kW)	(hp)									
DCR 45-1-1	3	4	H (m)	20	19	18	17	16	15	13	11
DCR 45-1	4	5,5		24	26	22	21	20	19	18	16
DCR 45-2-2	5,5	7,5		40	38	36	33	32	30	27	23
DCR 45-2	7,5	10		48	46	44	42	41	39	35	31
DCR 45-3-2	11	15		63	31	58	54	52	50	44	38
DCR 45-3	11	15		71	69	66	63	61	58	53	47
DCR 45-4-2	15	20		87	84	80	75	73	69	62	54
DCR 45-4	15	20		95	92	88	84	81	78	71	62
DCR 45-5-2	18,5	25		111	107	102	96	93	88	80	69
DCR 45-5	18,5	25		119	115	110	105	101	97	88	78
DCR 45-6-2	22	30		135	130	124	117	113	108	97	85
DCR 45-6	22	30		143	138	132	125	122	116	106	93
DCR 45-7-2	30	40		158	152	146	138	134	127	115	100
DCR 45-7	30	40		166	161	154	146	142	135	124	109
DCR 45-8-2	30	40		182	175	168	159	154	146	133	116
DCR 45-8	30	40		190	184	176	167	162	154	141	124
DCR 45-9-2	30	40		205	198	190	180	174	166	150	132
DCR 45-9	37	50		214	207	198	188	183	174	159	140
DCR 45-10-2	37	50		230	221	212	200	194	185	168	147
DCR 45-10	37	50		238	230	220	209	203	193	177	155
DCR 45-11-2	45	60		255	246	236	223	217	206	188	165
DCR 45-11	45	60		263	255	244	232	225	214	196	173
DCR 45-12-2	45	60		280	270	259	245	238	226	206	181
DCR 45-12	45	60		289	280	268	255	247	236	216	190
DCR 45-13-2	45	60	305	294	282	267	259	247	225	198	

## Dimensions and weights

DN 80X80



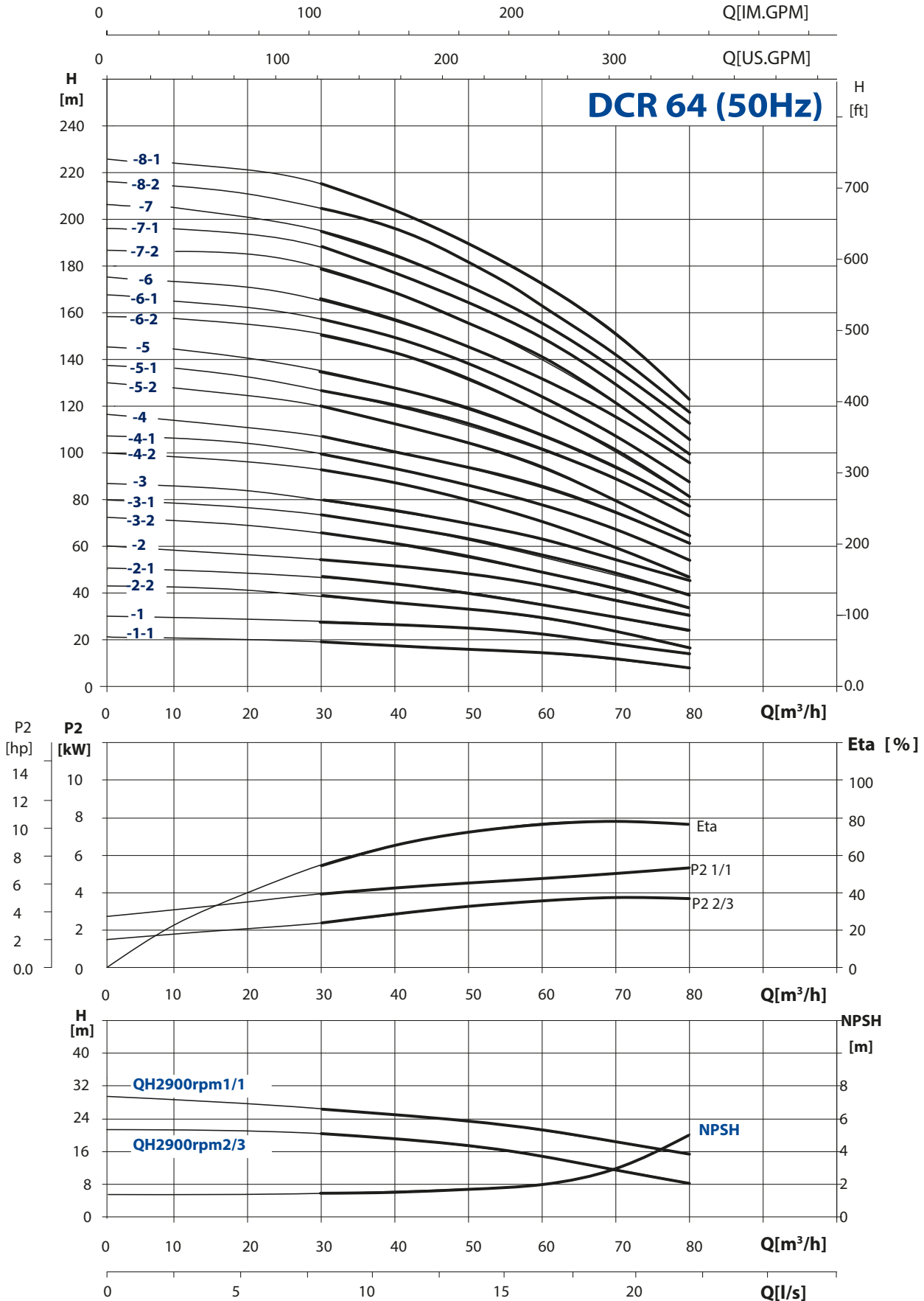
Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 45-1-1 DCR 45-1	561	345/ 355	906/ 916	197/ 230	165/ 188	83/90
DCR 45-2-2 DCR 45-2	641	390	1031	260	208	105/110
DCR 45-3-2 DCR 45-3	826	500	1326	330	255	183
DCR 45-4-2 DCR 45-4	906	500	1406	330	255	197
DCR 45-5-2 DCR 45-5	986	550	1536	330	255	221
DCR 45-6-2 DCR 45-6	1066	575	1641	360	285	261
DCR 45-7-2 DCR 45-7	1146	650	1796	400	310	320
DCR 45-8-2 DCR 45-8	1226	650	1876	400	310	324
DCR 45-9-2 DCR 45-9	1306	650	1956	400	310	328/352
DCR 45-10-2 DCR 45-10	1386	650	2036	400	310	355
DCR 45-11-2 DCR 45-11	1466	685	2151	450	345	426
DCR 45-12-2 DCR 45-12	1546	685	2231	450	345	432
DCR 45-13-2	1626	650	2311	450	345	438

# VERTICAL MULTISTAGE PUMPS

PERFORMANCE CURVES

**+** DCR 64 / DCRS 64 / DCRN 64

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

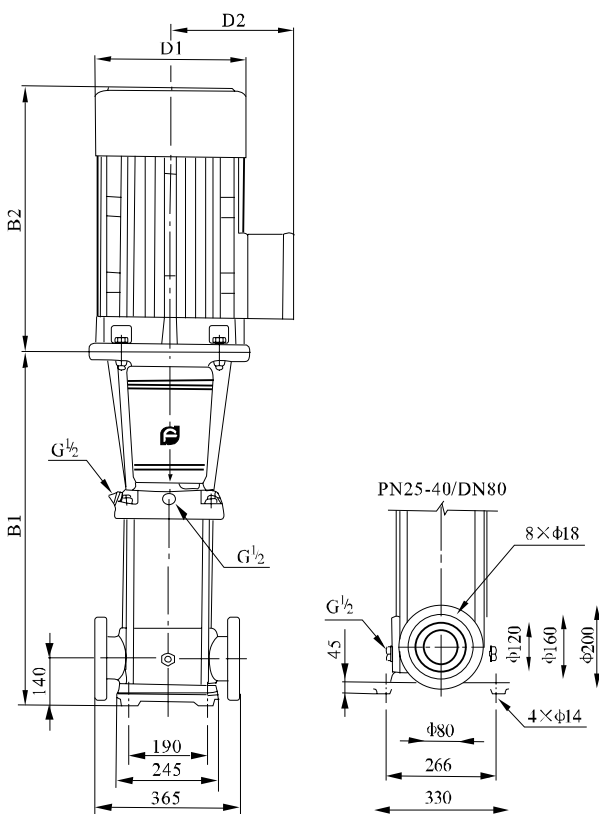
+ **DCR 64 / DCRS 64 / DCRN 64**

DN 100X100

Model	Motor		Q (m <sup>3</sup> /h)	30	40	50	60	65	70	80
	(kW)	(hp)								
DCR 64-1-1	4	5,5	H (m)	19	18	16	14	13	11	8
DCR 64-1	5,5	7,5		27	25	23	21	20	18	15
DCR 64-2-2	7,5	10		39	36	33	29	26	23	17
DCR 64-2-1	11	15		46	44	40	36	33	30	24
DCR 64-2	11	15		53	51	47	43	40	37	30
DCR 64-3-2	15	20		66	62	56	50	45	41	32
DCR 64-3-1	15	20		73	69	63	57	53	48	39
DCR 64-3	18,5	25		80	76	70	64	60	55	46
DCR 64-4-2	18,5	25		92	87	80	71	66	60	47
DCR 64-4-1	22	30		100	94	87	78	73	67	54
DCR 64-4-	22	30		107	101	94	85	80	74	61
DCR 64-5-2	30	40		121	114	105	95	88	80	64
DCR 64-5-1	30	40		128	121	112	102	95	87	71
DCR 64-5	30	40		136	129	119	109	102	94	78
DCR 64-6-2	30	40		150	142	131	118	110	101	81
DCR 64-6-1	37	50		157	149	138	125	117	108	88
DCR 64-6	37	50		164	156	145	132	124	115	95
DCR 64-7-2	37	50		179	169	156	141	132	121	99
DCR 64-7-1	37	50		186	176	163	148	139	128	106
DCR 64-7	45	60		193	183	170	155	146	135	112
DCR 64-8-2	45	60		207	196	182	164	154	142	116
DCR 64-8-1	45	60	215	203	189	171	161	149	123	

## Dimensions and weights

DN 100X100

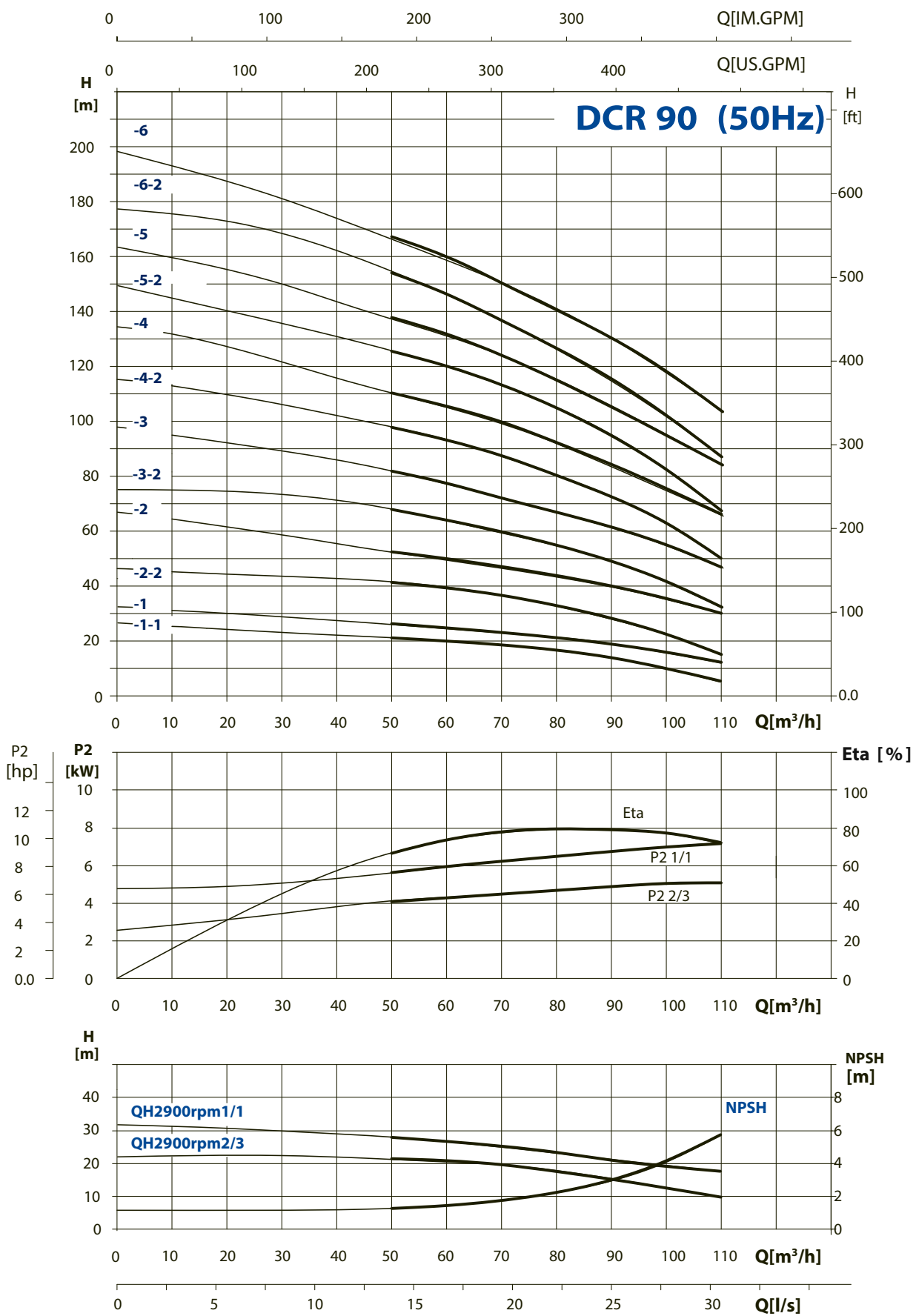


Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 64-1-1	561	335	916	230	188	93
DCR 64-1	561	390	951	260	208	105
DCR 64-2-2	644	390	1034	260	208	110
DCR 64-2-1	754	500	1254	3030	255	182
DCR 64-2	754	500	1254	330	255	182
DCR 64-3-2	836	500	1336	330	255	196
DCR 64-3-1	836	500	1336	330	255	197
DCR 64-3	836	550	1386	330	255	221
DCR 64-4-2	919	550	1469	330	255	225
DCR 64-4-1	919	575	1494	360	285	258
DCR 64-4-	919	575	1494	360	285	258
DCR 64-5-2	1001	650	1651	400	310	319
DCR 64-5-1	1001	650	1651	400	310	319
DCR 64-5	1001	650	1651	400	310	320
DCR 64-6-2	1084	650	1734	400	310	325
DCR 64-6-1	1084	650	1734	400	310	349
DCR 64-6	1084	650	1374	400	310	349
DCR 64-7-2	1166	650	1816	400	310	353
DCR 64-7-1	1166	650	1816	400	310	353
DCR 64-7	1166	685	1851	460	340	420
DCR 64-8-2	1248	685	1933	460	340	424
DCR 64-8-1	1248	685	1933	460	340	424

# VERTICAL MULTISTAGE PUMPS

## PERFORMANCE CURVES

### DCR 90 / DCRS 90/ DCRN 90



# VERTICAL MULTISTAGE PUMPS

PERFORMANCE DATA

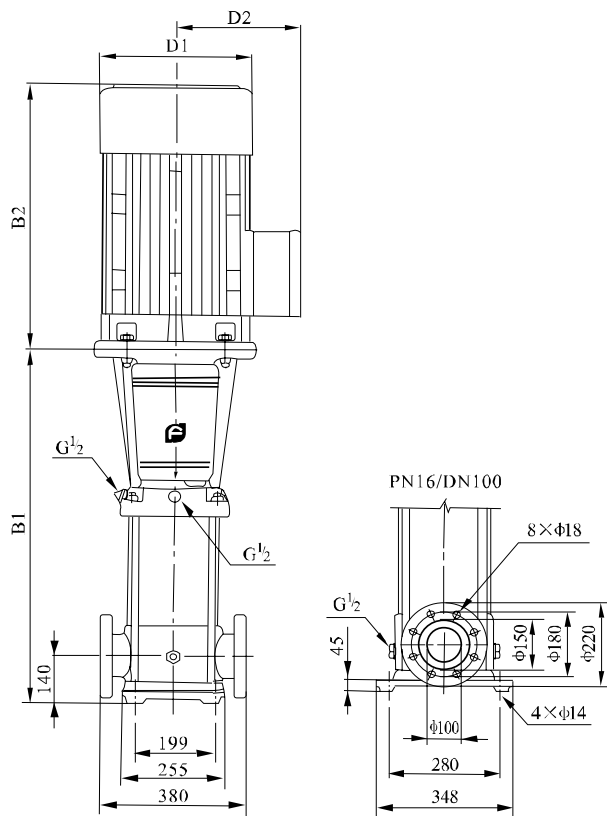
**DISTRELMA**  
EFFICIENT PUMPING SYSTEMS

+ **DCR 90 / DCRS 90 / DCRN 90**

DN 100X100

Model	Motor		Q (m <sup>3</sup> /h)	50	60	70	80	85	90	100	110
	(kW)	(hp)									
DCR 90-1-1	5,5	7,5	H (m)	22	19	17	16	14	13	10	6
DCR 90-1	7,5	10		25	24	22	21	20	19	16	12
DCR 90-2-2	11	15		41	39	36	32	30	28	22	15
DCR 90-2	15	20		53	50	47	44	41	40	36	30
DCR 90-3-2	18,5	25		68	65	60	55	52	49	41	32
DCR 90-3	22	30		81	77	72	67	64	62	55	48
DCR 90-4-2	30	40		98	93	87	80	75	72	62	50
DCR 90-4	30	40		110	105	100	92	86	84	76	66
DCR 90-5-2	37	50		126	120	113	104	98	93	81	68
DCR 90-5	37	50		139	131	124	115	110	106	94	83
DCR 90-6-2	45	60		155	148	139	129	122	117	102	85
DCR 90-6	45	60		168	160	150	141	134	130	117	103

## Dimensions and weights



DN 100X100

Model	Dimensions (mm)					Weights (kg)
	B1	B2	B1+B2	D1	D2	
DCR 90-1-1	571	390	961	260	208	105
DCR 90-1	571	390	961	260	208	110
DCR 90-2-2	773	500	1273	330	255	181
DCR 90-2	773	500	1273	330	255	192
DCR 90-3-2	865	550	1415	330	255	215
DCR 90-3	865	575	1440	360	285	252
DCR 90-4-2	957	650	1607	400	310	312
DCR 90-4	957	650	1607	400	310	312
DCR 90-5-2	1049	650	1699	400	310	336
DCR 90-5	1049	650	1699	400	310	336
DCR 90-6-2	1141	685	1826	460	340	407
DCR 90-6	1141	685	1826	460	340	407