

## Technical specifications sheet

Part number **290852352030B**

Description **DPVF 85/3 B~Flanged NW100~22kW 400/690V~50Hz 2P~IEC 180M~~Easy Access Ca Sic EPDM**

Vertical centrifugal pump, suction and discharge connections in-line.

### Quotation details

Quotation number

Project

Position

### Search criteria

Medium to be pumped	Water
Flow	40.00 l/sec
Pressure	70.0 mwc

### Hydraulic efficiency

Minimum efficiency index according:	MEI ≥ 0.60
Commission Regulation (EU) No 547/2012	

### Actual duty point

Flow	43.6 l/sec
Pressure	70.1 mwc
NPSH	2.2 m
Efficiency	76.4 %
Motor power	39.22 kW
Frequency	50.0Hz
No of duty pumps	2

### Best efficiency point

Flow	45.6 l/sec
Pressure	68.4 mwc
NPSH	2.4 m
Efficiency	76.5 %
Motor power	39.99 kW
Frequency	50Hz

### Connection base

Connection type	Flanged
DIN connection standard	EN 1092-2
ASME connection standard	ASME B 16.1 cl.125
JIS connection standard	
DIN connection size	NW100
ASME connection size	NPS 4
JIS connection size	
DIN connection pressure class	PN16
ASME connection pressure class	232PSI
JIS connection pressure class	
Material S/D casing	AISI304
Material flanges	Cast Iron JS1030
Material baseplate	Cast Iron JL1040

### Seal data

Shaft diameter	ø 22mm
Seal diameter	ø 22mm
Construction shaft seal	Easy Access
Seal code	11
Shaft seal type	MG12-G60
Material mechanical seal	B Q1 E GG
Material shaft seal rotor	Ca
Material shaft seal stator	Sic
Material shaft seal elastomer	EPDM
Material pump elastomer	EPDM
Material seal cover	AISI304
Pressure class shaft seal	PN10
Temperature range shaft seal	-20/+100 °C

### Basic hydraulic data

Maximum working pressure	PN40+80 °C
Maximum liquid temperature	140 °C+PN25
Minimum liquid temperature	-20 °C
Material hydraulic	AISI304

### Plug

Air relieve construction	Vent. plug
Material plug	AISI304

### For details contact

DP Pumps  
PO Box 28  
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NL



# Hydraulic performance sheet

Part number **290852352030B**

Description **DPVF 85/3 B~Flanged NW100~22kW 400/690V~50Hz 2P~IEC 180M~~Easy Access Ca Sic EPDM**

Vertical centrifugal pump, suction and discharge connections in-line.

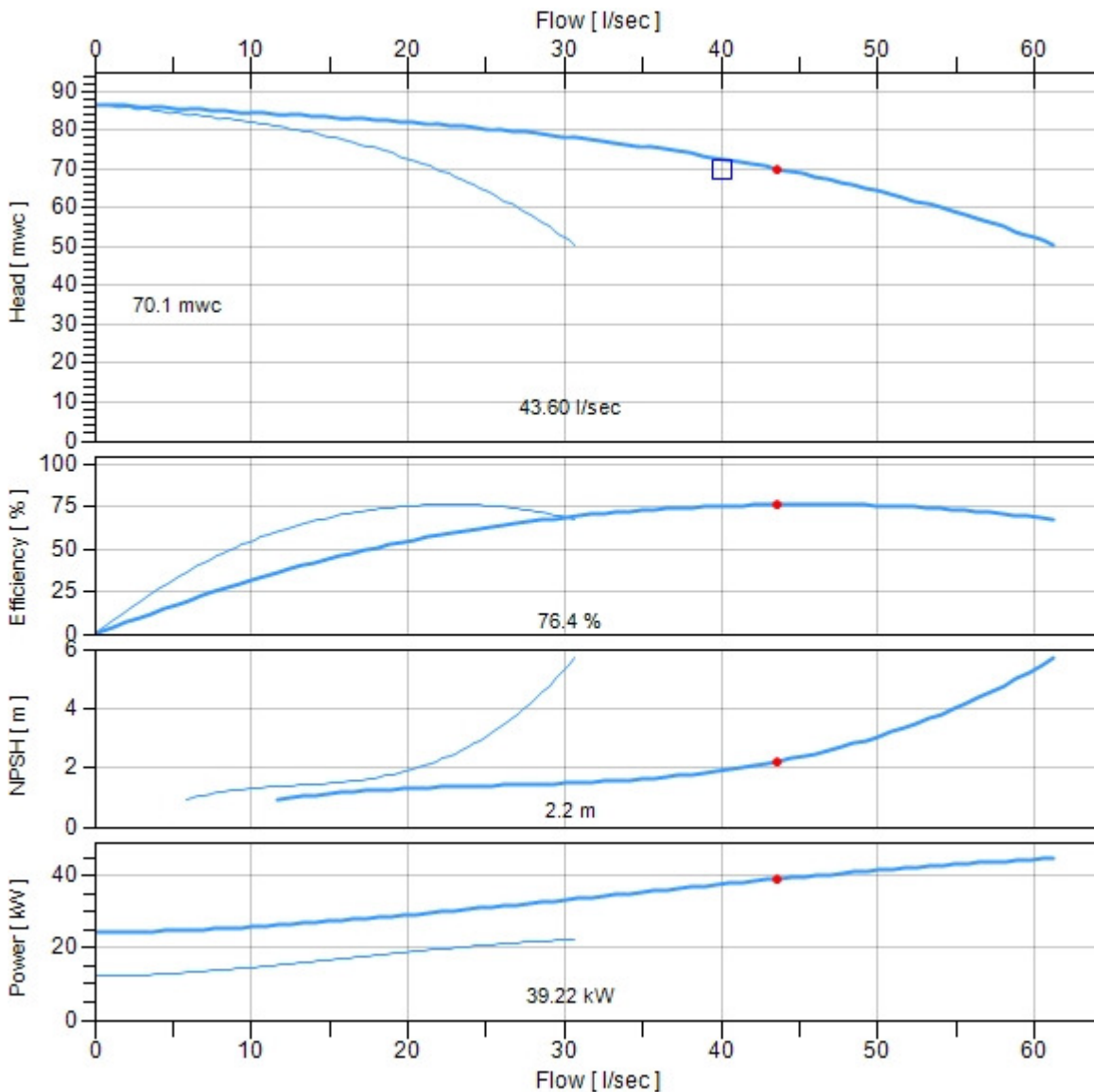
**Search criteria**

Medium to be pumped

Flow 40.00 l/sec  
 Pressure 70.0 mwc

**Actual duty point**

Flow 43.60 l/sec  
 Pressure 70.1 mwc  
 Efficiency 76.4 %  
 NPSH 2.2 m  
 Power 39.22 kW  
 Frequency 50.0Hz



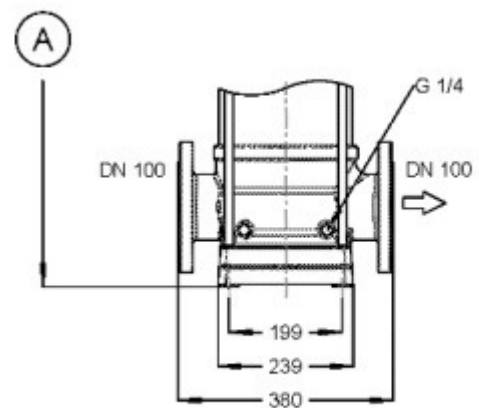
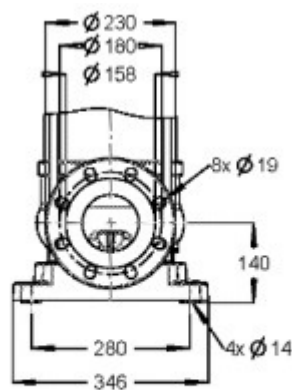
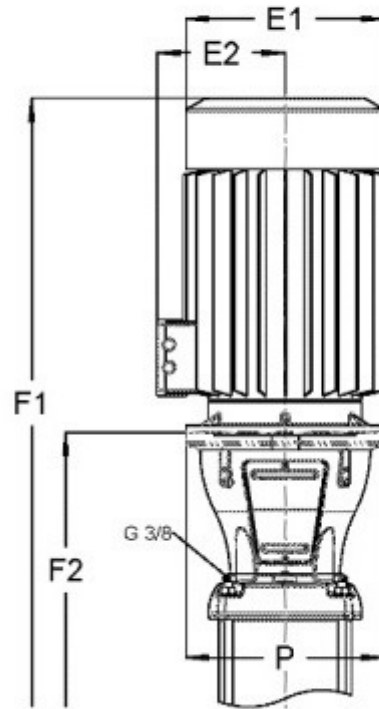
Duty Point  
 ● Actual  
 □ Required

Dimensions sheet

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Description **DPVF 85/3 B~Flanged NW100~22kW 400/690V~50Hz 2P~IEC 180M~~Easy Access Ca Sic EPDM**

Vertical centrifugal pump, suction and discharge connections in-line.



Motor width (E1)	350mm
Motor width (E2)	223mm
Total height (F1)	1469mm
Total height (F2)	889mm
Total net weight	312kg

## Motor specifications

Part number **3710112220**

Description **Motor DMC 22kW 400/690V 2P IE2 180M IP55 3xPTC Pos. 801**

### Electric Data

Rated power output	22kW
Maximum power output	25,7kW
Rated voltage	400/690V
Phases	3ph
Frequency	50/60Hz
Voltage range	360-440/594-726V
Motor poles	2P
ATEX class	
Duty class	S1
Insulation class	F (rise-B)
Moment of inertia	0,062kgm <sup>2</sup>
Motor standard	IEC
Capacitor	
Motor efficiency	91,3/91,5%
Motor efficiency class	IE2

### 50Hz

Tolerance rated voltage	±10%
Rated speed	2945rpm
Starting current factor (Ia/In)	7.5
Rated current (In)	39,5/22,9A
Maximum current (Imax)	46,3/26,7A
Rated Cos phi	0.88
Sound pressure	75dB(A)
Rated nominal torque	71,3Nm
Rated starting torque	186,0Nm

### 60Hz

Tolerance rated voltage	+20%,-10%
Rated speed	3530rpm
Starting current factor (Ia/In)	6.5
Rated current (In)	38,8/22,4A
Maximum current (Imax)	46,3/26,7A
Rated Cos phi	0.9
Sound pressure	80dB(A)
Rated nominal torque	59,5Nm
Rated starting torque	113,1Nm

### Motor protection

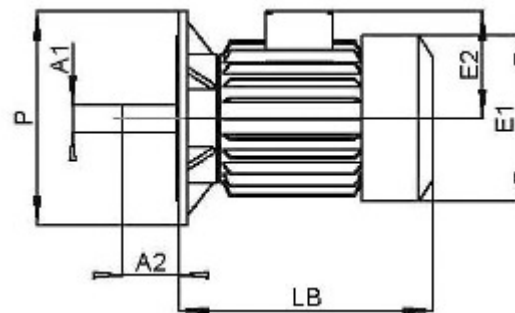
Motor protection class	IP55
Temperature sensor	3xPTC
Rain cover	
Anti condensation heater	

### Mechanical data

Shaft execution	smooth shaft
Maximum starts per hour	12
Cable gland	2xM32x1,5
VFD allowance	VFD allowed

### Dimensions

Diameter shaft A1	48mm
Length shaft A2	110mm
Diameter motor E1	350mm
Terminal box height E2	223mm
Diameter flange P	350mm
L. motor (without shaft) LB	591mm
Frame size	180M
Motor construction type	IM V1
Motor face	IEC 60034-7 Form FF 300



### Bearings / lubrication

Grease nipple	D-end
Bearing fixation pos	D-end
D-end bearing type	7311
Bearing grease	Lithium based -20%/+160

### Details

Motor label	DMC
Weight	172kg
Lifting lugs	2 x M12
Motor finish	RAL5002
Rated max. amb. temp.	40°C
Material housing	Cast Iron JL1040