

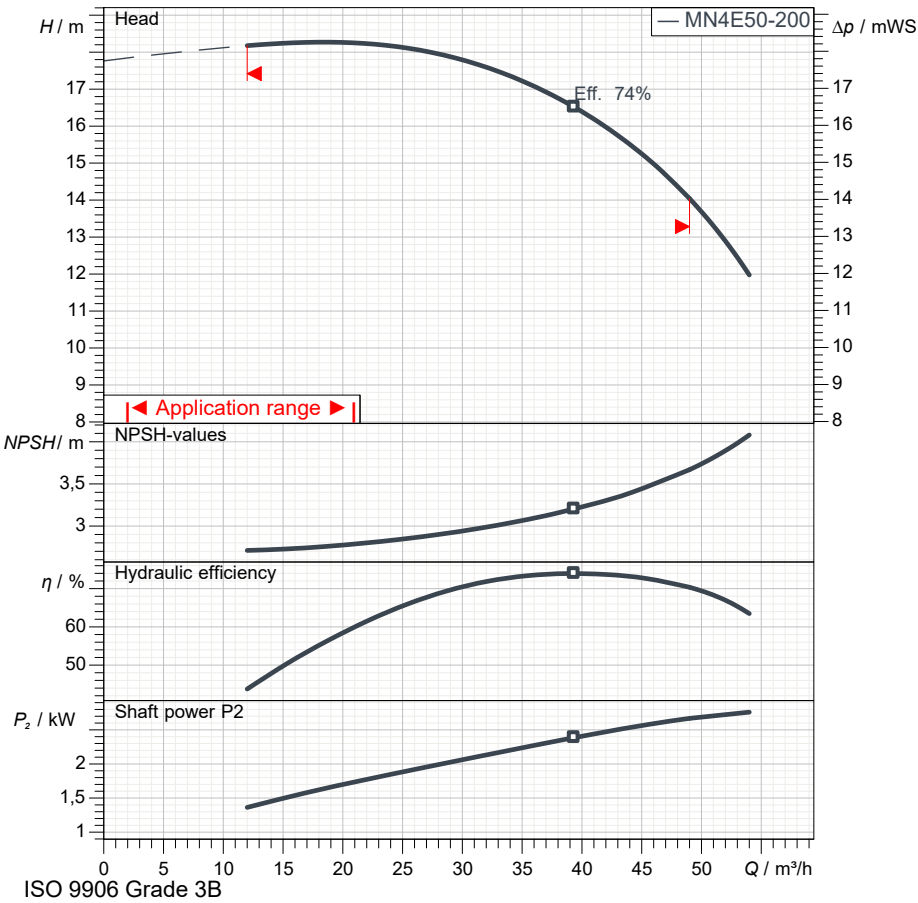
## Product description

### MN4E50-200-4P-50-TM-SS

Pos.no	Description	Item no	Qty.	UP / €	TP / €
1	<b>Close-coupled electric pump according to EN 733 (DIN 24255)</b>				
2	Centrifugal pump: MN4E50-200-4P-50-TM-SS		1	Price on req.	Price on req.
3	<p>Pump bodies</p> <p>Close-coupled electric pumps in compliance with EN 733 - DIN 24255 standards coupled to IEC standard electric motors through rigid coupling.</p> <p>Duty point</p> <p>Flow : / Head :</p> <p>Pump operating data</p> <p>Impeller diameter : 220 mm / Speed : 1.450 1/min</p> <p>Flow : / Head :</p> <p>Shaft power P2 : / Efficiency :</p> <p>Head (Q = 0) : 17,76 m</p> <p>Pump body : Cast iron</p> <p>Impeller : Stainless steel</p> <p>Wear ring : Cast iron</p> <p>Support : Cast iron</p> <p>Coupling : Cast iron</p> <p>Shaft : Stainless steel</p> <p>Max. solid contents : 40 g/m<sup>3</sup></p> <p>Max. water temperature : 90 °C</p> <p>Max. running time with Q=0 : 2 min</p>				
4	Motor: IEC 4 - 4		1		
5	<p>Electric motor</p> <p>Three-phase IE2 asynchronous squirrel cage motor.</p> <p>Casing : Aluminium</p> <p>Protection : IP 55</p> <p>Insulation class : F</p> <p>Number of startings : max 14</p> <p>Max environment temperature : 40 °C</p> <p>Max altimetric level : 1000 m</p> <p>Weight : 26,5 kg</p> <p>Frequency : 50 Hz</p> <p>N. poles : 4</p> <p>P2 : 3 kW</p> <p>U : 230 V</p> <p>In 1/1 : 6,18 A</p> <p>EFF : 85,8 %</p> <p>CosPhi : 0,82</p>				
6	Shaft seal: Mechanical seal		1		
7	<p>Cover : Cast iron</p> <p>Spacer : Stainless steel</p> <p>Seal face : Graphite</p> <p>Seat : Ceramic</p> <p>Seal ring : NBR</p> <p>Spring : AISI 304 stainless steel</p>				

## Technical data

### MN4E50-200-4P-50-TM-SS



Operating data specification	
Capacity	
Head	
Fluid	Pure water
Type of installation	<Single head pump>

Pump operating data	
Design	MN4E50-200-4P-50-TM-SS
Impeller $\varnothing$	220 mm
Speed	1.450 1/min
Flow	
Head	
Shaft power $P_2$	
Efficiency	
Head ( $Q=0$ )	17,8 m
Non return valve loss	

Electric motor technical data	
Design	IEC 4 - 4
Rated power	3 kW
Frequency	50 Hz
Number of poles	4
Nominal speed	1.450 1/min
Rated voltage	3~ 230 V
Starting mode	Direct starting
Rated current	6,18 A
Insulation class	F
Degree of protection	IP 55

Use limits	
Max N° startings/hour	14
Max. running time with $Q=0$	2 min
Max. solids contents	40 $g/m^3$
Max. pumped liquid temperature	90 °C
Maximum density	998 $kg/m^3$
Maximum viscosity	1 $mm^2/s$

Materials	
Pump body	Cast iron
Impeller	Stainless steel
Wear ring	Cast iron
Support	Cast iron
Coupling	Cast iron
Shaft	Stainless steel

Shaft seal	
Cover	Cast iron
Spacer	Stainless steel
Seal face	Graphite
Seat	Ceramic
Seal ring	NBR
Spring	AISI 304 stainless steel

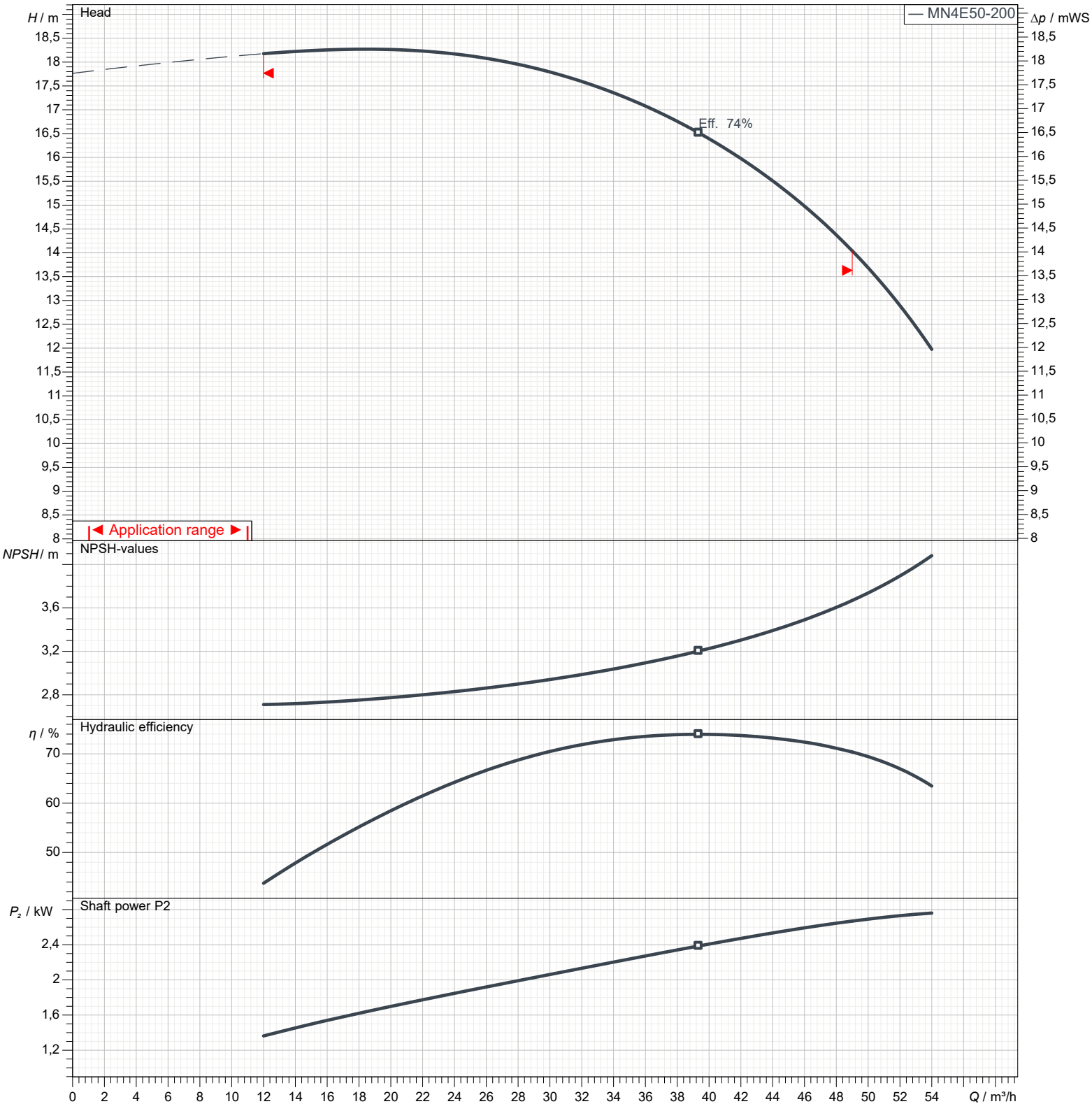


Dimensions in mm				Total weight 71,5 kg			
a	100	Da1	185	E	63	m1	100
A	160	Da2	145	G1	143	m2	70
AB	200	Da3	18	G2	156	n1	265
b	50	Dm1	165	H	100	n2	212
B	140	Dm2	125	h1	160	s1	14
BB	175	Dm3	18	h2	200	x	4
C	325	DNa	65	K	12	y	4
D	160	DNrr	50	L	340		

## Performance curves

### MN4E50-200-4P-50-TM-SS

Performances				
Speed		1.450 1/min	Density	998 kg/m <sup>3</sup>
Flow	Min.	12 m <sup>3</sup> /h	Viscosity	1 mm <sup>2</sup> /s
	Max.	49 m <sup>3</sup> /h	Temperature	20 °C
Efficiency	Max.	39,4 m <sup>3</sup> /h	Tolerances	ISO 9906 Grade 3B



## Types of installation

### MN4E50-200-4P-50-TM-SS



Total weight		71,5 kg		Dimensions in mm	
a	100	h2	200		
A	160	K	12		
AB	200	L	340		
b	50	m1	100		
B	140	m2	70		
BB	175	n1	265		
C	325	n2	212		
D	160	s1	14		
Da1	185	x	4		
Da2	145	y	4		
Da3	18				
Dm1	165				
Dm2	125				
Dm3	18				
DNa	65				
DNm	50				
E	63				
G1	143				
G2	156				
H	100				
h1	160				