

# TISSEL-200

## Pumps with inverter

-  Clean water
-  Domestic use
-  Civil use



TS2-MK



TS2-FCR



TS2-PLURIJET

### DESCRIPTION

- **TISSEL 200** are compact pumping units consisting of one centrifugal waterpump coupled with a variable speed device (inverter) with an external pressure sensor to be placed in a place inside the system.
- Sturdy and simple to use, **TISSEL 200** is ideal to keep always constant pressure inside system regardless variation of utilities.
- Built-in speed regulator with automatic fan ventilation and IP54 protection. Powered by single-phase alternate tension (230±10% V - 50/60 Hz) it gives an output alternate 3phase tension to run waterpump motor in IE3 class.
- Smooth start and stop of the pump .
- Lower wear of the waterpump due to modulation of running speed from the inverter.

### PROTECTIONS

- **Dry running**  
Microchip action stops pump after few seconds and try scheduled set restarts to check water availability.
- **Running pressure lower than minimum set running**  
It stops the pump after few seconds ( i.e. when there is a break in a pipe).
- **Currents-tensions-temperatures**  
It limits currents; it informs whether tension reaches the allowed limits, it protects from overheating as well as short circuits between the output phases.

### CONSTRUCTION AND SAFETY STANDARDS

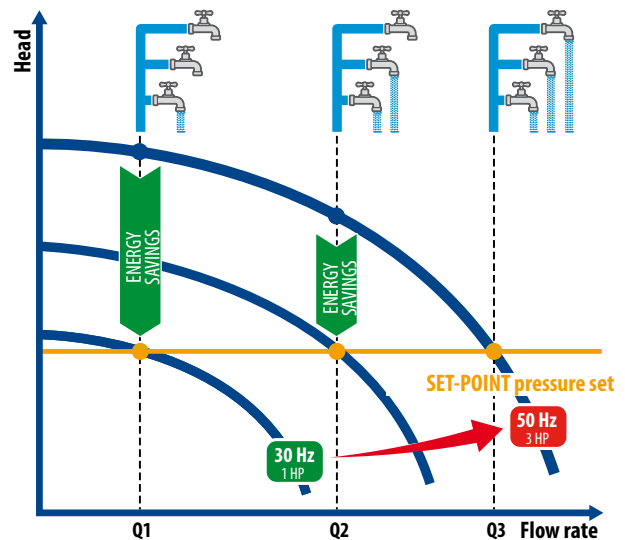
EN 60335-1  
IEC 60335-1  
CEI 61-150

EN 60034-1  
IEC 60034-1  
CEI 2-3



### ENERGY SAVINGS

As it works at variable speed, TISSEL 200 uses only the necessary energy demand required by the system according to the water demand.



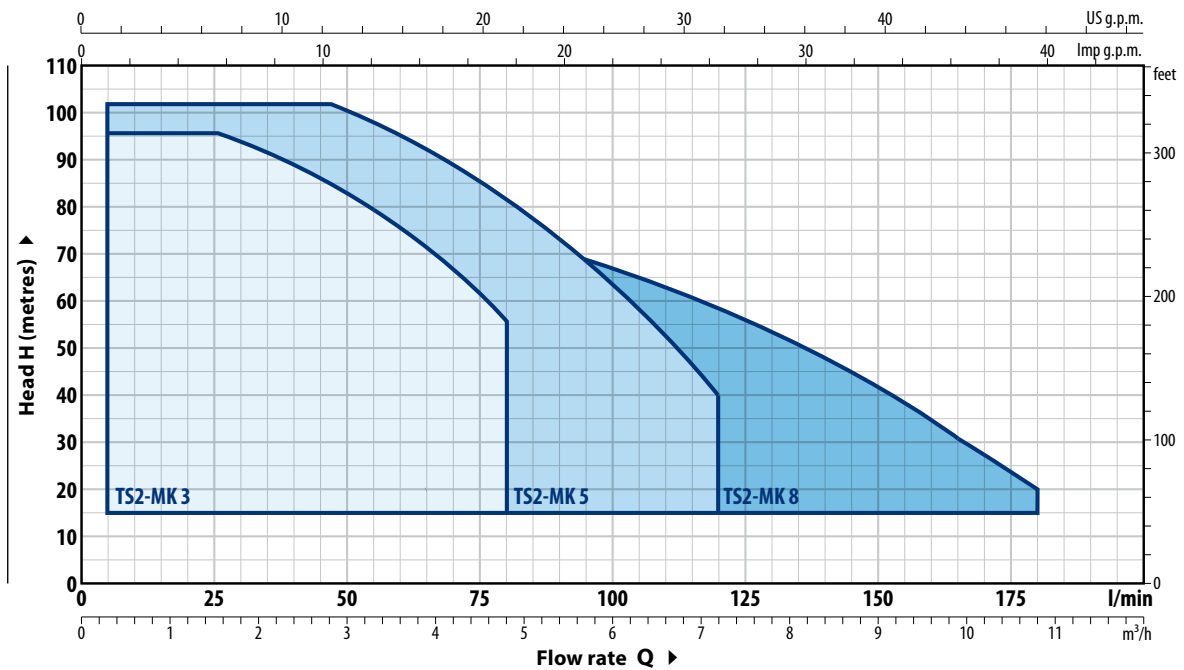
### CERTIFICATIONS

Company with management system certified DNV  
ISO 9001: QUALITY



# TISSEL-200 MK

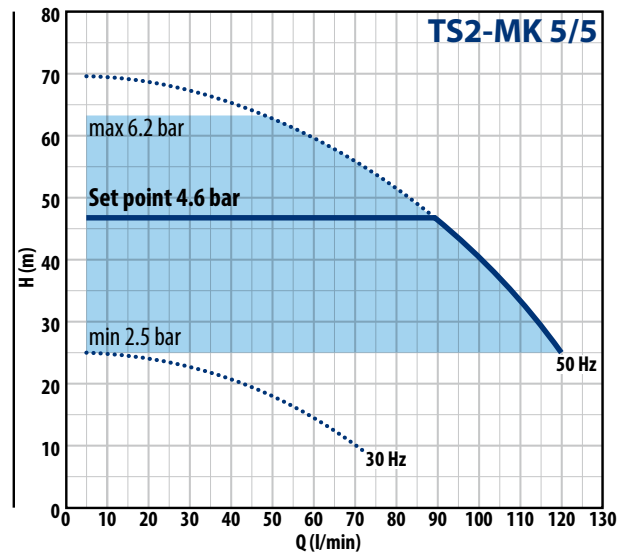
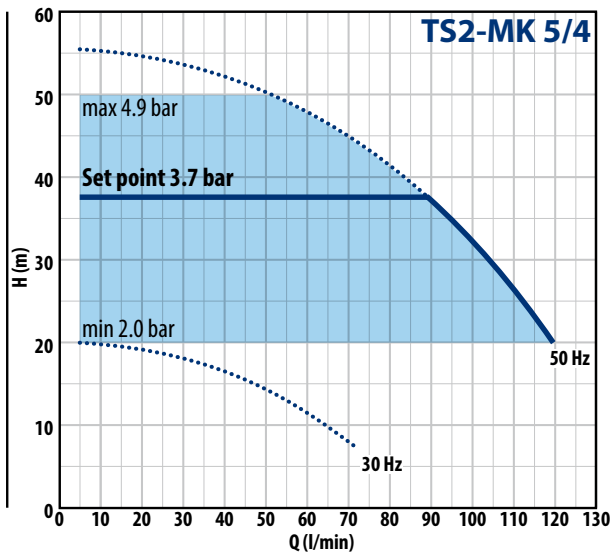
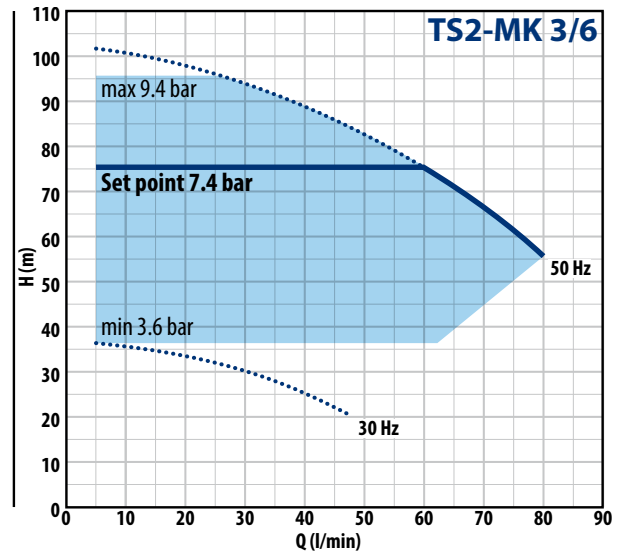
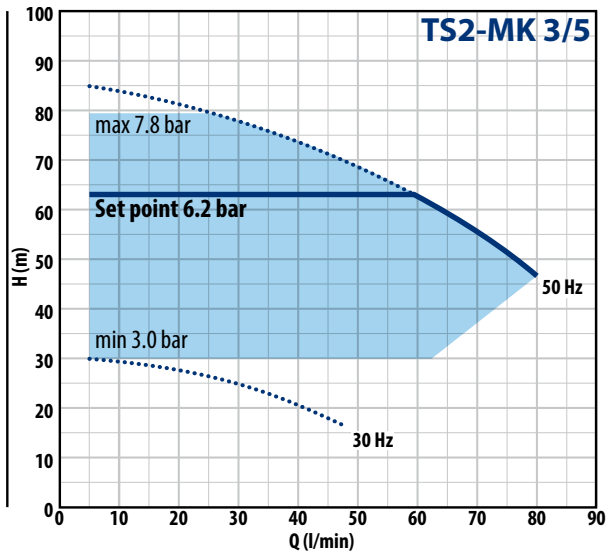
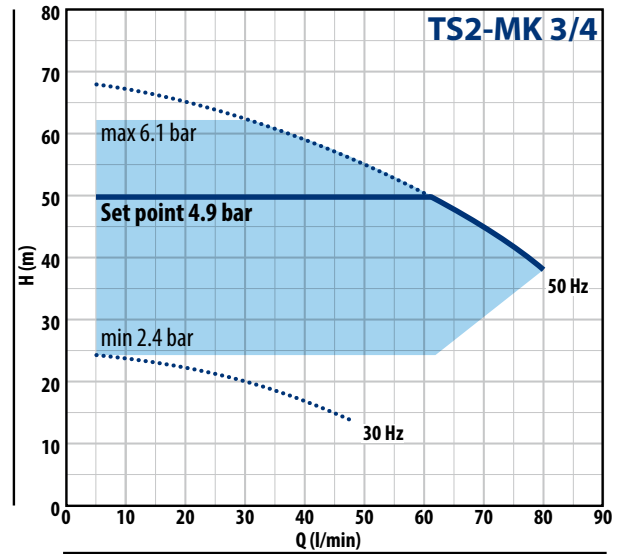
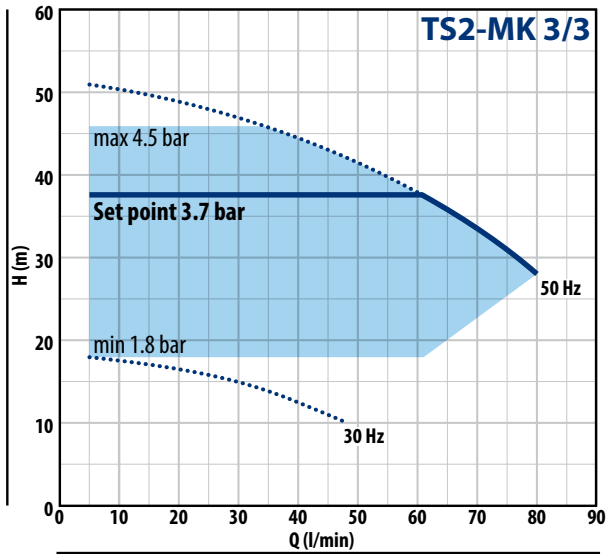
PERFORMANCE RANGE n= 2900 min<sup>-1</sup>



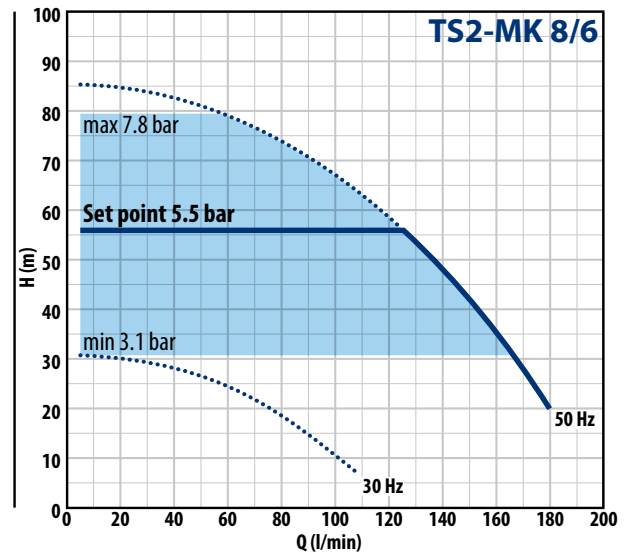
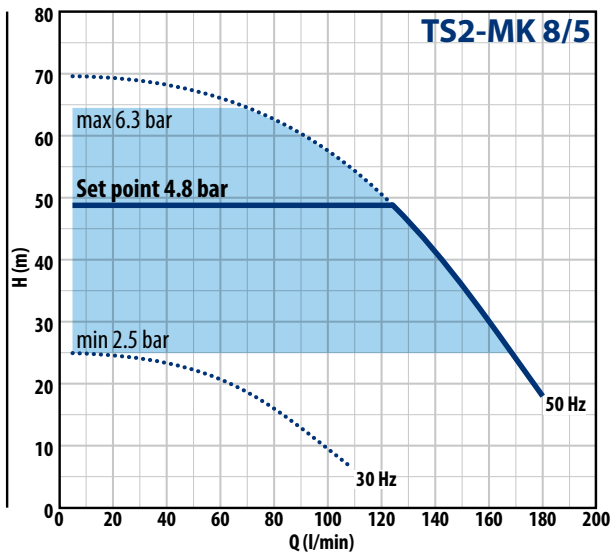
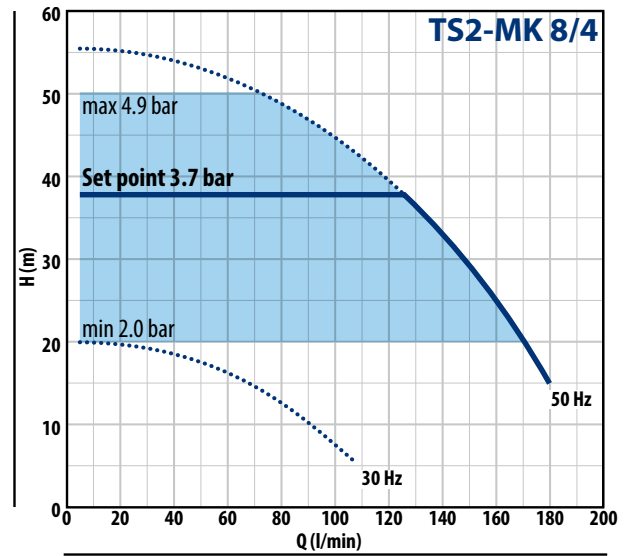
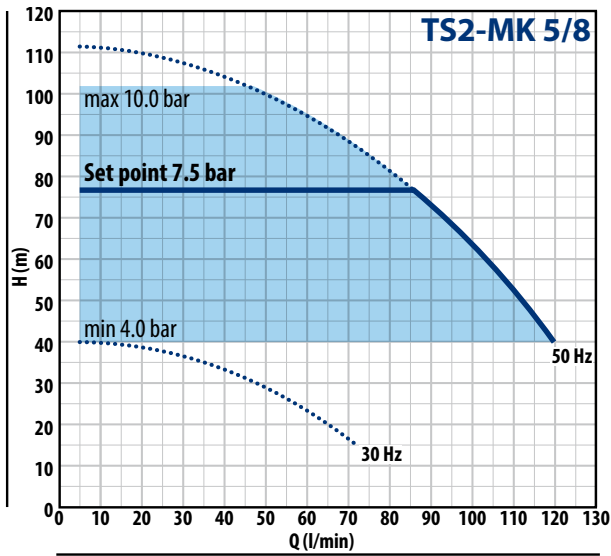
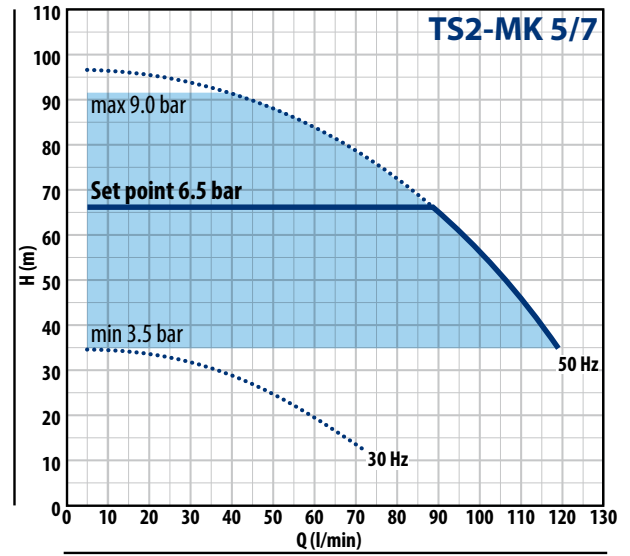
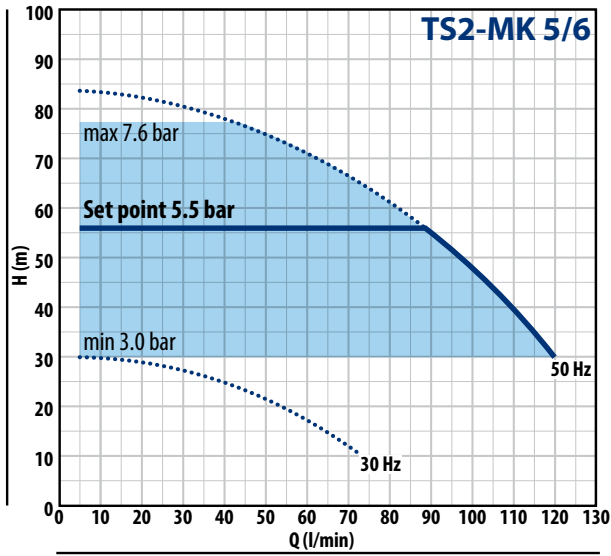
MODEL	POWER		ABSORPTION	MAX PERFORMANCES		PERFORMANCES (ADJUSTABLE SET POINT)					
	P2	▲		230 V	Q	H	Min. Set Point		Set Point Stand. Setting		Max. Set Point
Single-phase	kW	HP		l/min	metres	bar	l/min	bar	l/min	bar	l/min
TS2-MK 3/3	0.75	1	9.0 A	5 – 80	46 – 28	1.8	5 – 63	<b>3.7</b>	5 – <b>58</b>	4.5	5 – 35
TS2-MK 3/4	1.1	1.5	9.0 A	5 – 80	62 – 38	2.4	5 – 62	<b>4.9</b>	5 – <b>58</b>	6.1	5 – 33
TS2-MK 3/5	1.1	1.5	13.0 A	5 – 80	80 – 47	3.0	5 – 62	<b>6.2</b>	5 – <b>58</b>	7.8	5 – 28
TS2-MK 3/6	1.5	2	13.0 A	5 – 80	96 – 56	3.6	5 – 63	<b>7.4</b>	5 – <b>58</b>	9.4	5 – 25
TS2-MK 5/4	1.1	1.5	10.0 A	5 – 120	50 – 20	2.0	5 – 120	<b>3.7</b>	5 – <b>85</b>	4.9	5 – 48
TS2-MK 5/5	1.1	1.5	12.0 A	5 – 120	63 – 25	2.5	5 – 120	<b>4.6</b>	5 – <b>85</b>	6.2	5 – 48
TS2-MK 5/6	1.5	2	13.5 A	5 – 120	78 – 30	3.0	5 – 120	<b>5.5</b>	5 – <b>85</b>	7.6	5 – 45
TS2-MK 5/7	1.8	2.5	16.0 A	5 – 120	92 – 34	3.5	5 – 118	<b>6.5</b>	5 – <b>85</b>	9.0	5 – 43
TS2-MK 5/8	2.2	3	17.5 A	5 – 120	102 – 40	4.0	5 – 120	<b>7.5</b>	5 – <b>85</b>	10.0	5 – 46
TS2-MK 8/4	1.5	2	14.0 A	5 – 180	50 – 15	2.0	5 – 167	<b>3.7</b>	5 – <b>120</b>	4.9	5 – 70
TS2-MK 8/5	1.8	2.5	15.0 A	5 – 180	64 – 18	2.5	5 – 167	<b>4.8</b>	5 – <b>120</b>	6.3	5 – 70
TS2-MK 8/6	2.2	3	16.0 A	5 – 180	80 – 20	3.1	5 – 163	<b>5.5</b>	5 – <b>120</b>	7.8	5 – 53

# TISSEL-200 MK

CHARACTERISTIC CURVES  $n = 2900 \text{ min}^{-1}$

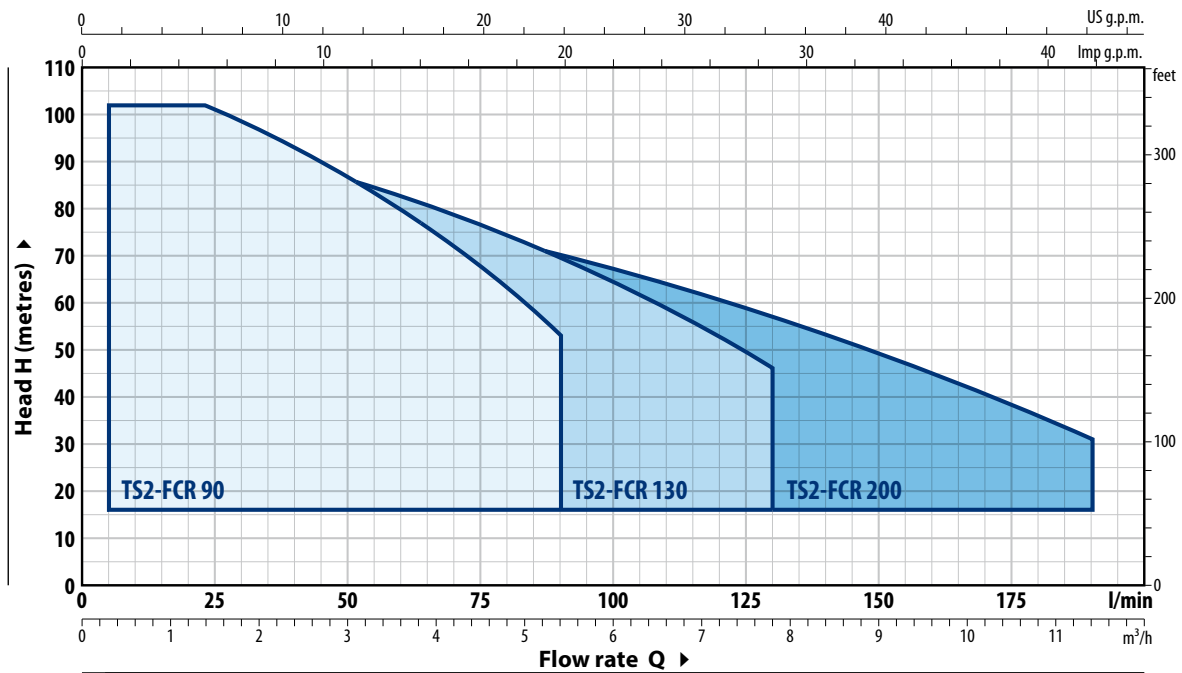


**CHARACTERISTIC CURVES**  $n = 2900 \text{ min}^{-1}$



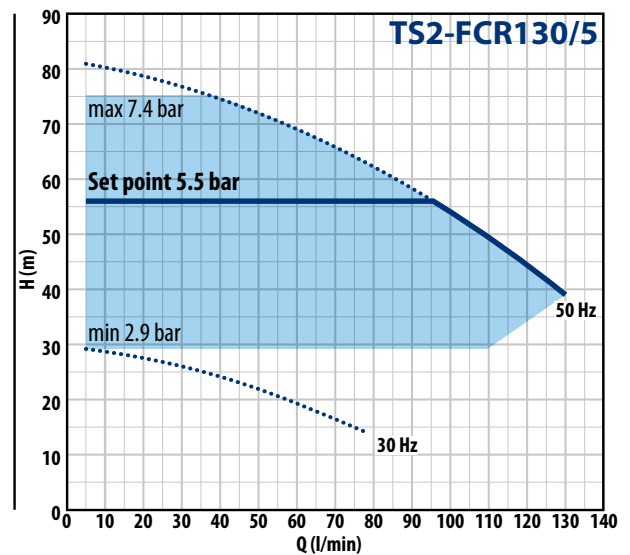
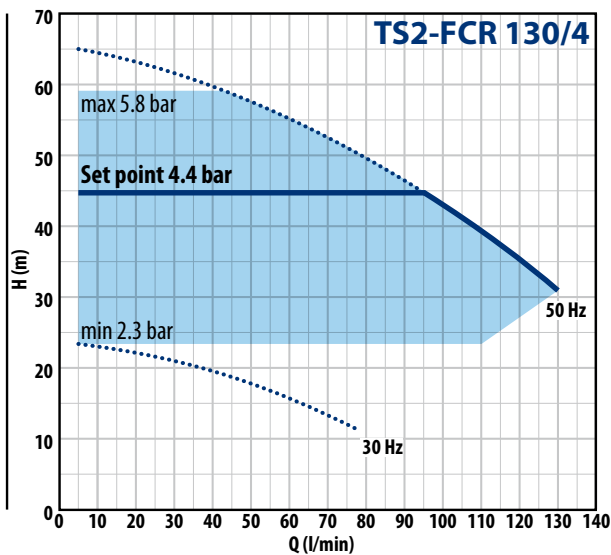
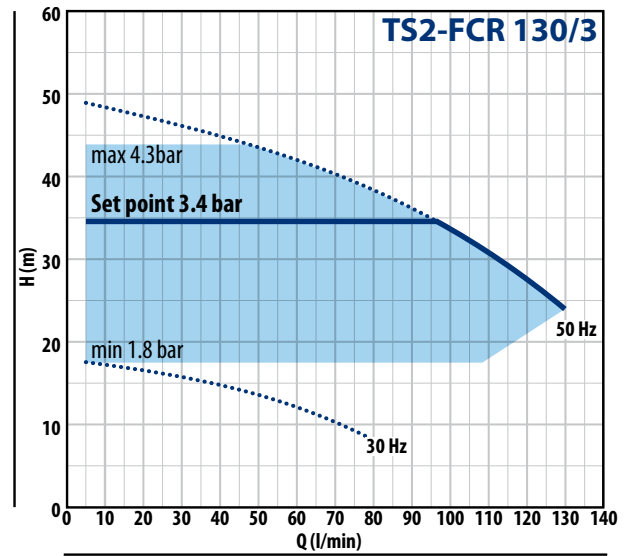
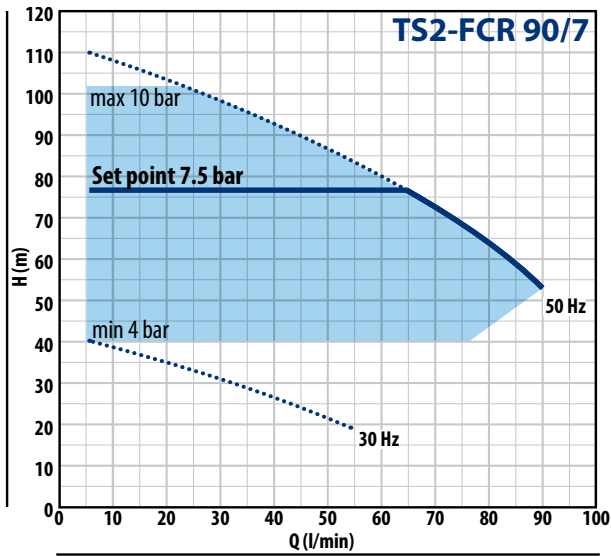
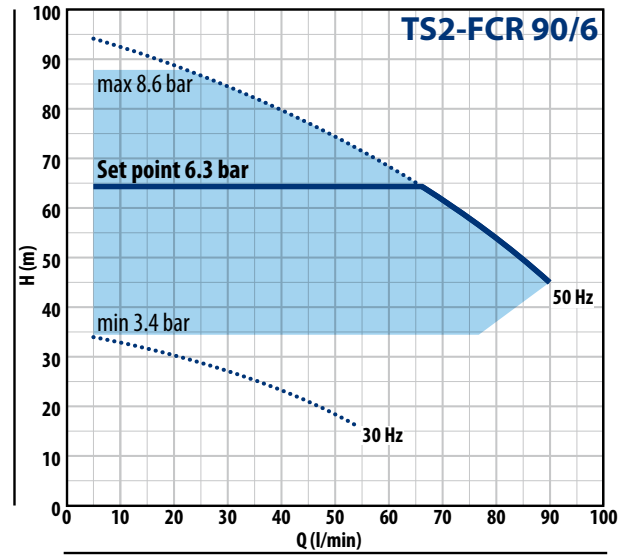
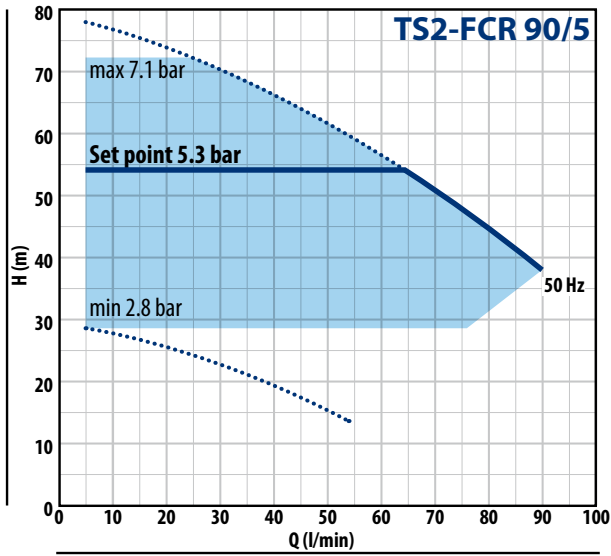
# TISSEL-200 FCR

CHARACTERISTIC CURVES n= 2900 min<sup>-1</sup>



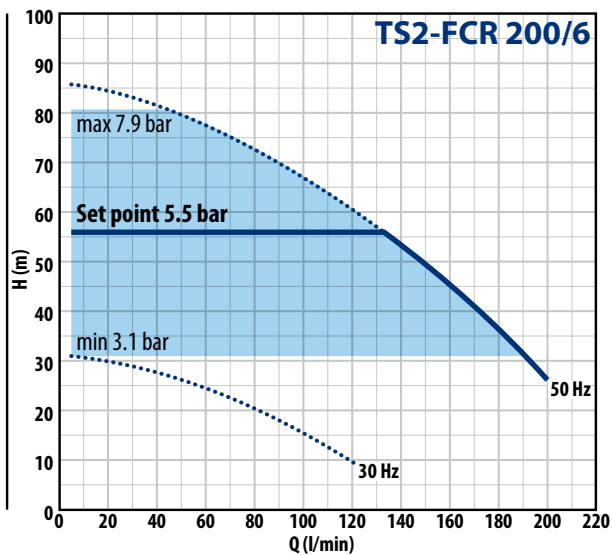
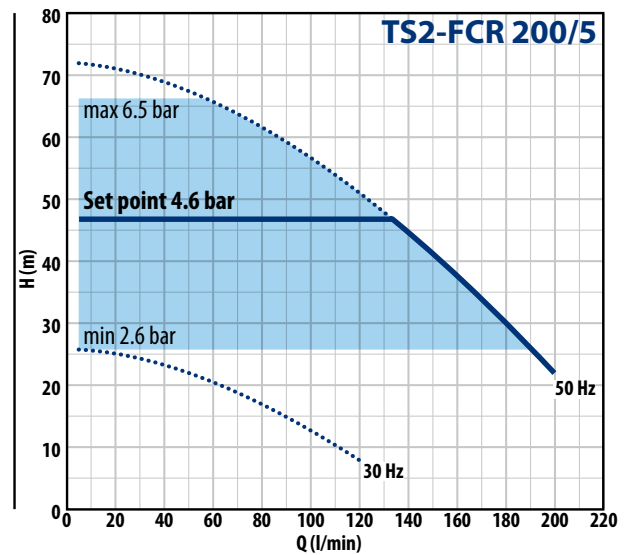
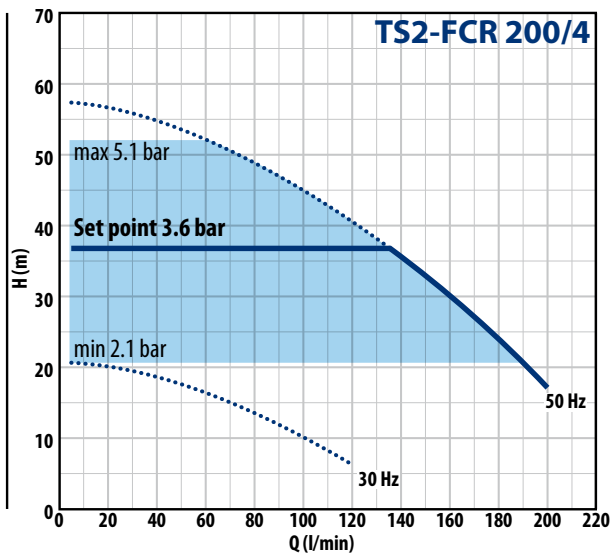
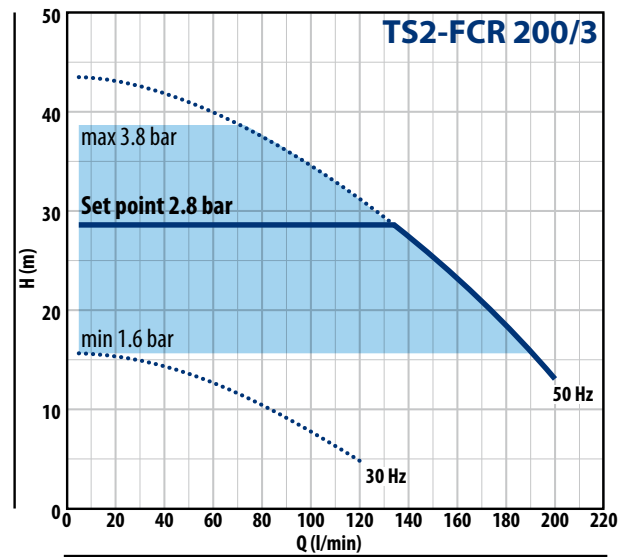
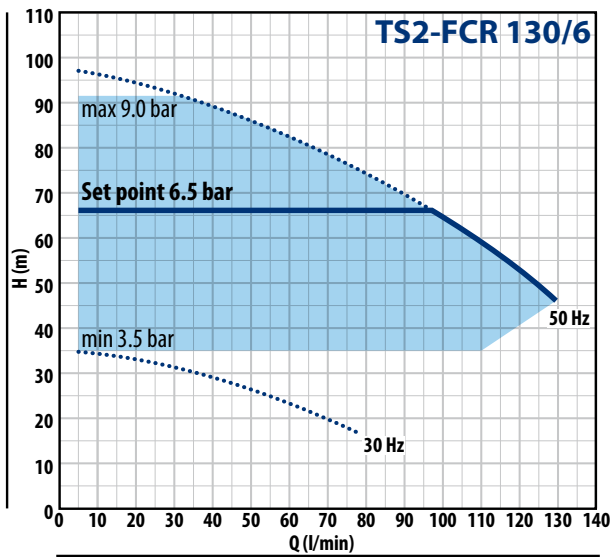
MODEL	POWER		ABSORPTION	MAX PERFORMANCES		PERFORMANCES (ADJUSTABLE SET POINT)					
	kW	HP		230 V	Q	H	Min. Set Point		Set Point Stand. Setting		Max. Set Point
Single-phase				l/min	metres	bar	l/min	bar	l/min	bar	l/min
TS2-FCR 90/5	1.1	1.5	13.0 A	5 – 90	78 – 38	2.80	5 – 75	5.30	5 – 65	7.10	5 – 23
TS2-FCR 90/6	1.5	2	13.5 A	5 – 90	94 – 45	3.40	5 – 75	6.30	5 – 65	8.60	5 – 21
TS2-FCR 90/7	1.8	2.5	16.0 A	5 – 90	110 – 53	4.00	5 – 75	7.50	5 – 65	10.00	5 – 21
TS2-FCR 130/3	1.1	1.5	12.5 A	5 – 130	49 – 24	1.80	5 – 110	3.40	5 – 92	4.30	5 – 48
TS2-FCR 130/4	1.5	2	14.5 A	5 – 130	65 – 31	2.30	5 – 110	4.40	5 – 92	5.80	5 – 45
TS2-FCR 130/5	1.8	2.5	18.5 A	5 – 130	81 – 39	2.90	5 – 110	5.50	5 – 92	7.40	5 – 38
TS2-FCR 130/6	2.2	3	20.5 A	5 – 130	97 – 45	3.50	5 – 110	6.50	5 – 92	9.00	5 – 33
TS2-FCR 200/3	1.1	1.5	10.0 A	5 – 200	43 – 13	1.60	5 – 185	2.80	5 – 133	3.80	5 – 72
TS2-FCR 200/4	1.5	2	13.0 A	5 – 200	57 – 17	2.10	5 – 185	3.60	5 – 133	5.10	5 – 65
TS2-FCR 200/5	1.8	2.5	16.0 A	5 – 200	72 – 22	2.60	5 – 185	4.60	5 – 133	6.50	5 – 56
TS2-FCR 200/6	2.2	3	22.0 A	5 – 200	86 – 26	3.10	5 – 185	5.50	5 – 133	7.90	5 – 45

**CHARACTERISTIC CURVES** n= 2900 min<sup>-1</sup>



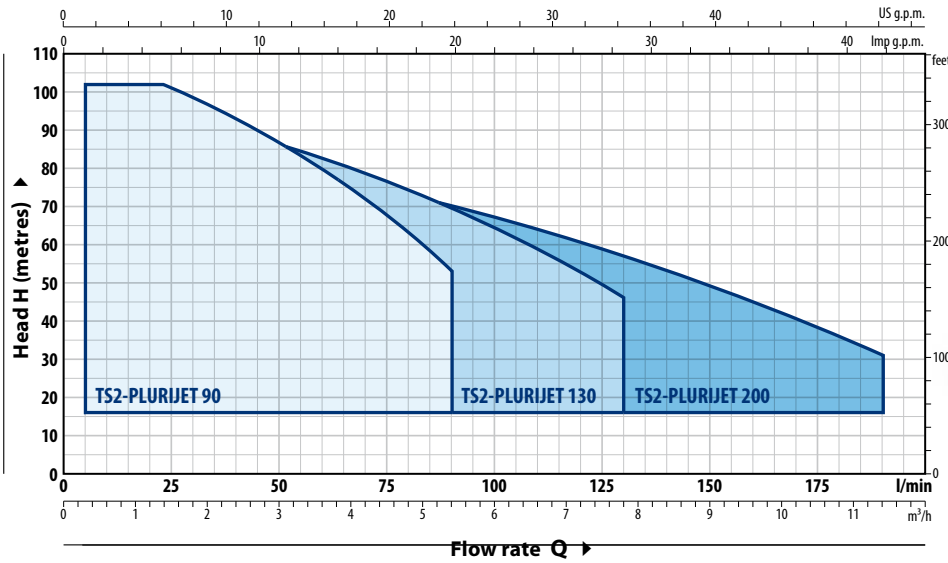
# TISSEL-200 FCR

CHARACTERISTIC CURVES  $n = 2900 \text{ min}^{-1}$



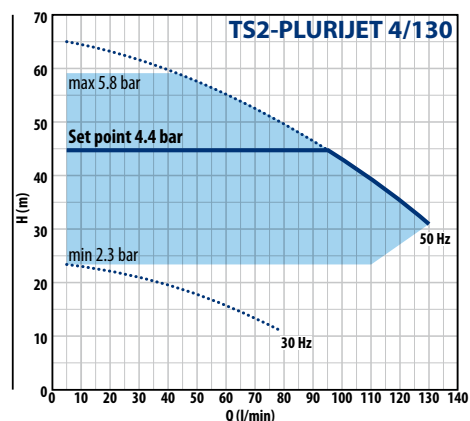
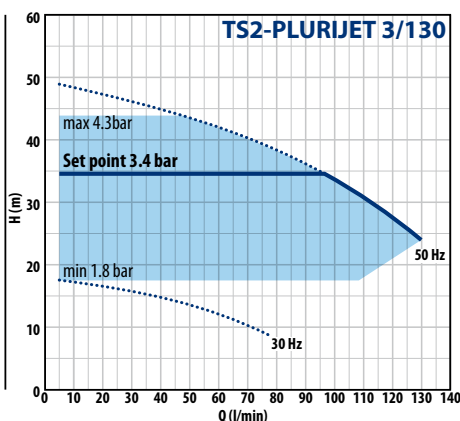
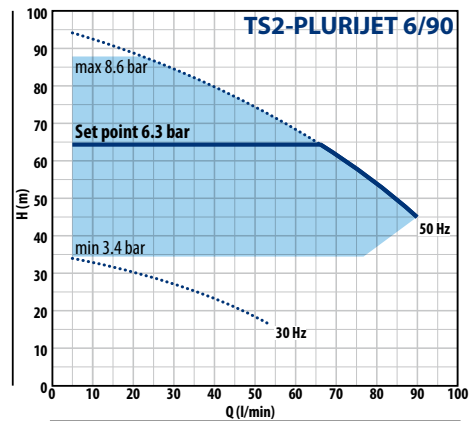
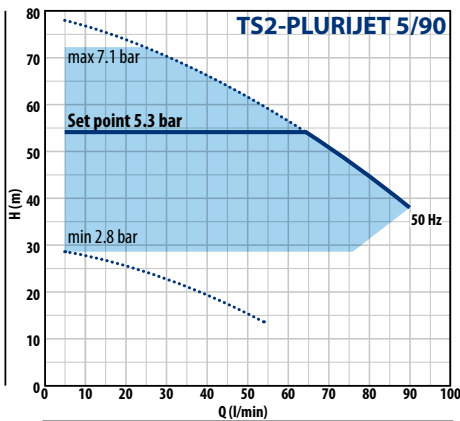
# TISSSEL-200 PLURIJET

## CHARACTERISTIC CURVES n= 2900 min<sup>-1</sup>



MODEL	POWER		ABSORPTION	MAX PERFORMANCES		PERFORMANCES (ADJUSTABLE SET POINT)					
	P2	▲		230 V	Q	H	Min. Set Point	Set Point Stand. Setting		Max. Set Point	
Single-phase	kW	HP	230 V	l/min	metres	bar	l/min	bar	l/min	bar	l/min
TS2-PLURIJET 5/90	1.1	1.5	11.5 A	5 – 90	78 – 38	2.80	5 – 75	5.30	5 – 65	7.10	5 – 23
TS2-PLURIJET 6/90	1.5	2	13.5 A	5 – 90	94 – 45	3.40	5 – 75	6.30	5 – 65	8.60	5 – 21
TS2-PLURIJET 3/130	1.1	1.5	12.5 A	5 – 130	49 – 24	1.80	5 – 110	3.40	5 – 92	4.30	5 – 48
TS2-PLURIJET 4/130	1.5	2	14.5 A	5 – 130	65 – 31	2.30	5 – 110	4.40	5 – 92	5.80	5 – 45
TS2-PLURIJET 5/130	1.8	2.5	18.5 A	5 – 130	81 – 39	2.90	5 – 110	5.50	5 – 92	7.40	5 – 38
TS2-PLURIJET 6/130	2.2	3	20.0 A	5 – 130	97 – 45	3.50	5 – 110	6.50	5 – 92	9.00	5 – 33
TS2-PLURIJET 3/200	1.1	1.5	10.0 A	5 – 200	43 – 13	1.60	5 – 185	2.80	5 – 133	3.80	5 – 72
TS2-PLURIJET 4/200	1.5	2	16.0 A	5 – 200	57 – 17	2.10	5 – 185	3.60	5 – 133	5.10	5 – 65
TS2-PLURIJET 5/200	1.8	2.5	16.0 A	5 – 200	72 – 22	2.60	5 – 185	4.60	5 – 133	6.50	5 – 56
TS2-PLURIJET 6/200	2.2	3	22.0 A	5 – 200	86 – 26	3.10	5 – 185	5.50	5 – 133	7.90	5 – 45

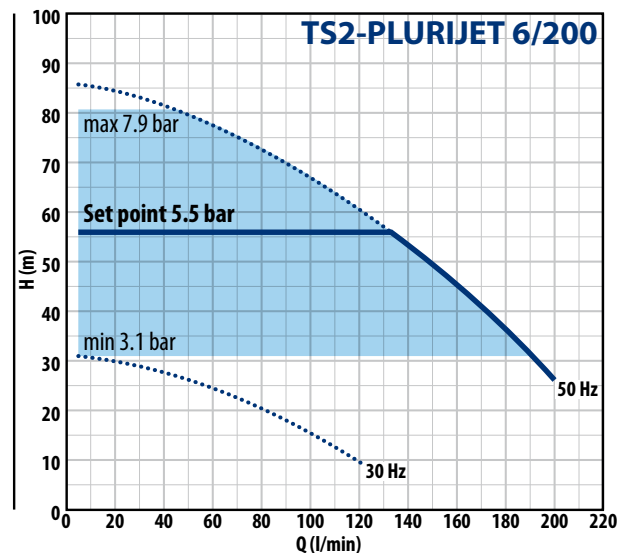
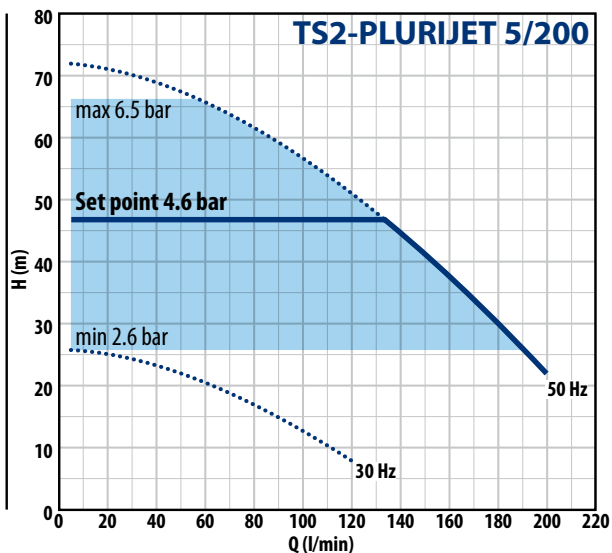
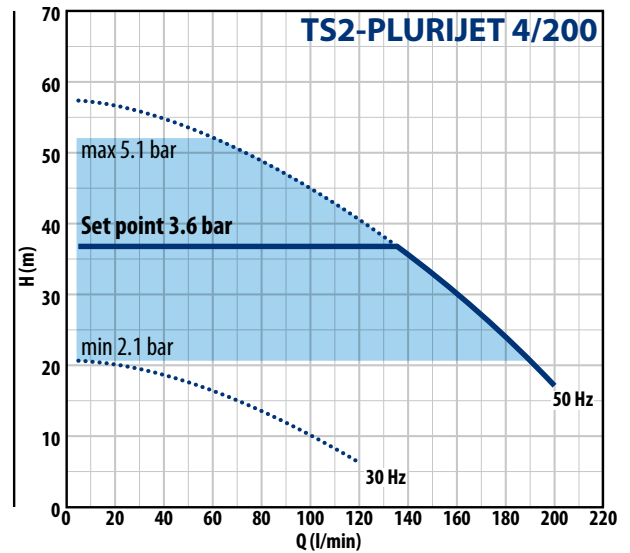
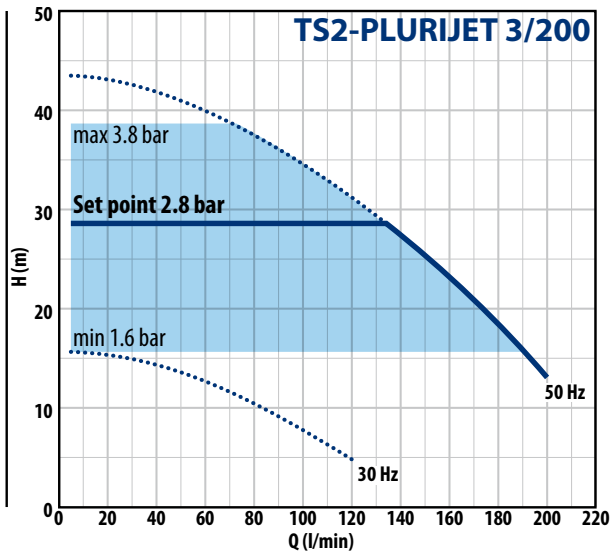
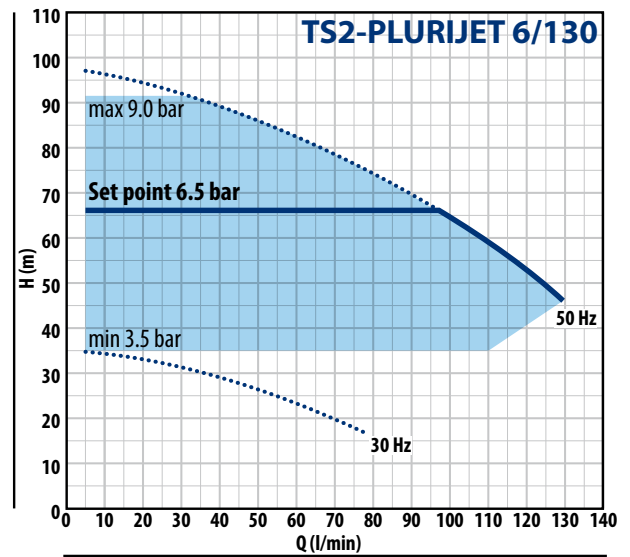
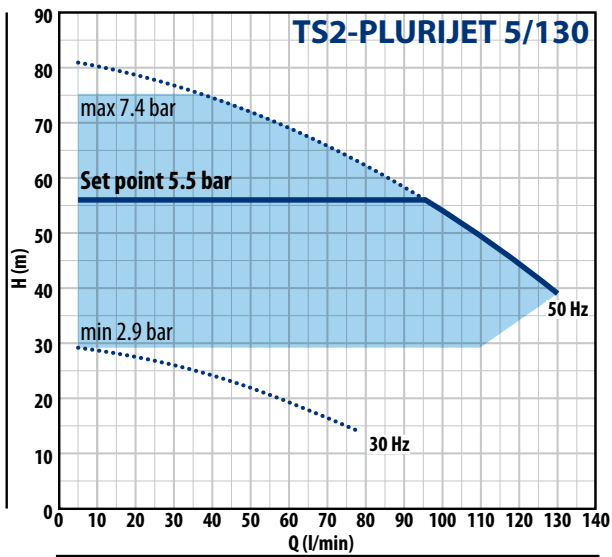
## CHARACTERISTIC CURVES n= 2900 min<sup>-1</sup>



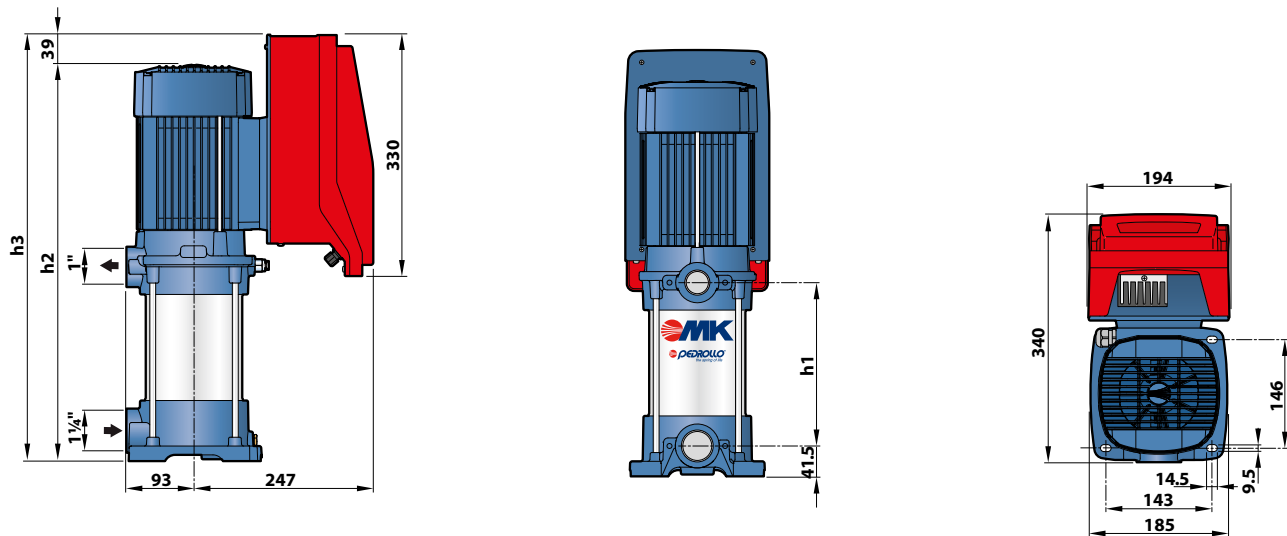


# TISSEL-200 PLURIJET

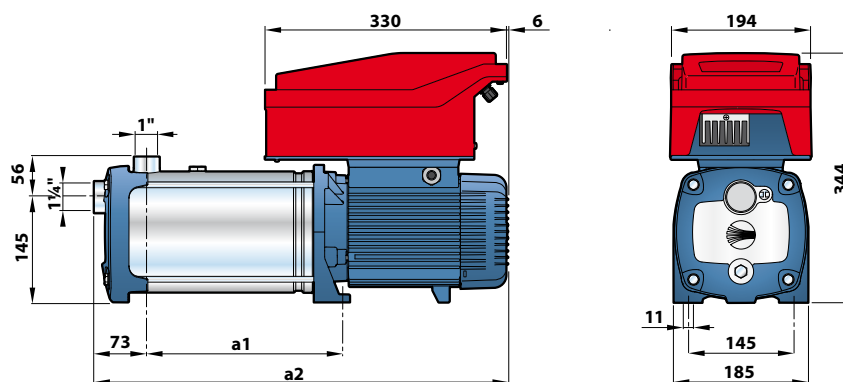
CHARACTERISTIC CURVES  $n=2900 \text{ min}^{-1}$



## DIMENSIONS (mm)



MODEL	h1	h2	h3	kg
TS2-MK 3/3	132.5	450	489	26.7
TS2-MK 3/4	159.5	477	516	27.0
TS2-MK 3/5	186.5	504	543	28.6
TS2-MK 3/6	213.5	531	570	30.1
TS2-MK 5/4	159.5	477	516	26.9
TS2-MK 5/5	186.5	504	543	28.5
TS2-MK 5/6	213.5	531	570	30.3
TS2-MK 5/7	240.5	558	597	30.7
TS2-MK 5/8	267.5	585	624	30.9
TS2-MK 8/4	159.5	477	516	28.0
TS2-MK 8/5	186.5	504	543	29.6
TS2-MK 8/6	213.5	531	570	30.4



MODEL	a1	a2	kg
TS2-FCR 90/5	193	497	26.3
TS2-FCR 90/6	219	523	28.4
TS2-FCR 90/7	245	569	32.5
TS2-FCR 130/3	141	445	25.0
TS2-FCR 130/4	167	471	26.9
TS2-FCR 130/5	193	517	30.3
TS2-FCR 130/6	219	543	31.2
TS2-FCR 200/3	141	445	25.0
TS2-FCR 200/4	167	471	26.9
TS2-FCR 200/5	193	517	30.3
TS2-FCR 200/6	219	543	31.2

MODEL	a1	a2	kg
TS2-PLURIJET 5/90	245	549	27.0
TS2-PLURIJET 6/90	271	575	29.0
TS2-PLURIJET 3/130	193	497	25.1
TS2-PLURIJET 4/130	219	523	27.1
TS2-PLURIJET 5/130	245	569	30.7
TS2-PLURIJET 6/130	271	595	31.8
TS2-PLURIJET 3/200	193	497	25.1
TS2-PLURIJET 4/200	219	523	27.1
TS2-PLURIJET 5/200	245	569	30.7
TS2-PLURIJET 6/200	271	595	31.8