

-  Clean water
-  Domestic use
-  Civil use



### INSTALLATION AND USE

**VSP** is a versatile pumping unit designed for various applications. It's ideal for residential and commercial use, providing water supply and pressure boosting.

**VSP** seamlessly integrates with any pressurization system, including existing ones, ensuring maximum comfort and enabling significant energy savings.

### PRODUCT DESCRIPTION

**VSP** is a system comprising a pump and an integrated frequency converter. Equipped with a pressure sensor, it ensures a constant pressure as the system's water demand fluctuates.

This ready-to-use product eliminates the need for configuration procedures. Users can adjust the working pressure and view operating parameters and alarm messages via the user interface.

For advanced users, the system offers access to an advanced menu for modifying factory parameters through a guided procedure, allowing adaptation to specific plant conditions.

**VSP** is an intelligent pumping unit, equipped with:

- ✘ **display and keypad** allowing simple and intuitive configuration and reading of operating parameters;
- ✘ interface ports for additional **analogue** and **digital** input and output **signals**;
- ✘ **PFC technology** maintains hydraulic performance unaffected even when supply voltages vary within  $\pm 20\%$  of the nominal value;
- ✘ **RS 485 communication** for connection to a second device in parallel.

### Integrated protection against:

- ✘ dry running
- ✘ overcurrent
- ✘ overvoltage and undervoltage
- ✘ combustion chamber
- ✘ short circuit
- ✘ lack of phases in the connections (for three-phase version)

### TECHNICAL DATA

- Power supply:
  - 1~ 230V $\pm 10\%$  or 3~ 400V $\pm 10\%$
  - Frequency: **50/60 Hz**
- Please refer to the technical data of the specific electro-pumps for liquid temperature, ambient temperature, and protection degree.

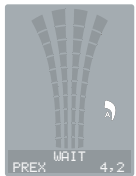
### KEY FEATURES

- ✘ Easy installation, configuration, and adjustment.
- ✘ Greater comfort, thanks to optimized performance and low noise levels.
- ✘ Energy saving reduces startup and operating currents, ensuring.
- ✘ Automatic compensation for fluctuations in the supply voltage.
- ✘ Communication with another device to enhance system capabilities.
- ✘ Intelligent management of control and intervention in case of anomalies.

## USER INTERFACE

It enables access to configuration menus, navigation through settings, adjustment of operating parameters, and activation or deactivation of the pumping unit.

1. Scroll arrow keys (▼) (▲)
2. ESC menu exit key (ESC)
3. ON/OFF button (⏻)
4. Confirmation button OK (OK)
5. 4-backlit display to indicate the operating status of the VSP



**WHITE display**  
EXPECTATION



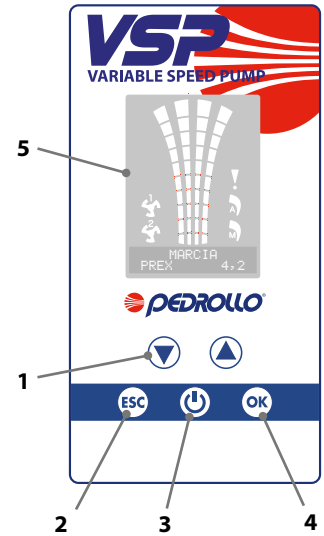
**Display VERDE**  
START



**RED display**  
ERROR

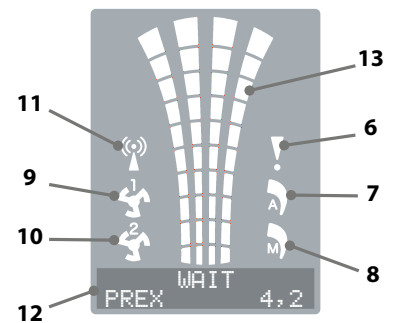


**YELLOW display**  
(MENU OF  
PROGRAMMING

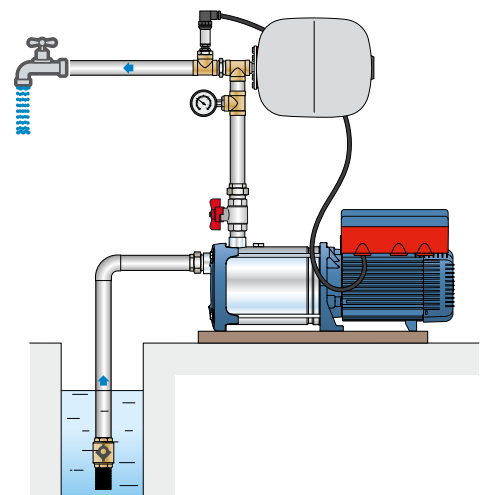
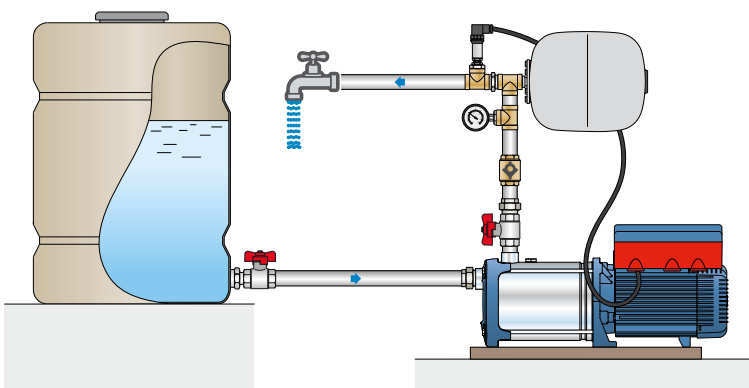


## DISPLAY SYMBOLS

6. ALARM warning light (!)
7. AUTOMATIC operation indicator light (A)
8. MANUAL operation indicator light (M)
9. Indicator light for running pump no. 1 (P1)
10. Indicator light for running pump no. 2 (P2) (if present)
11. WI-FI active indicator light (Wi-Fi symbol) (if present)
12. Alphanumeric display with 2 lines for visualization of: voltage, frequency, current, power factor (cosφ), pressure, level, system operating status, system anomalies.
13. VSP operating status LED lights

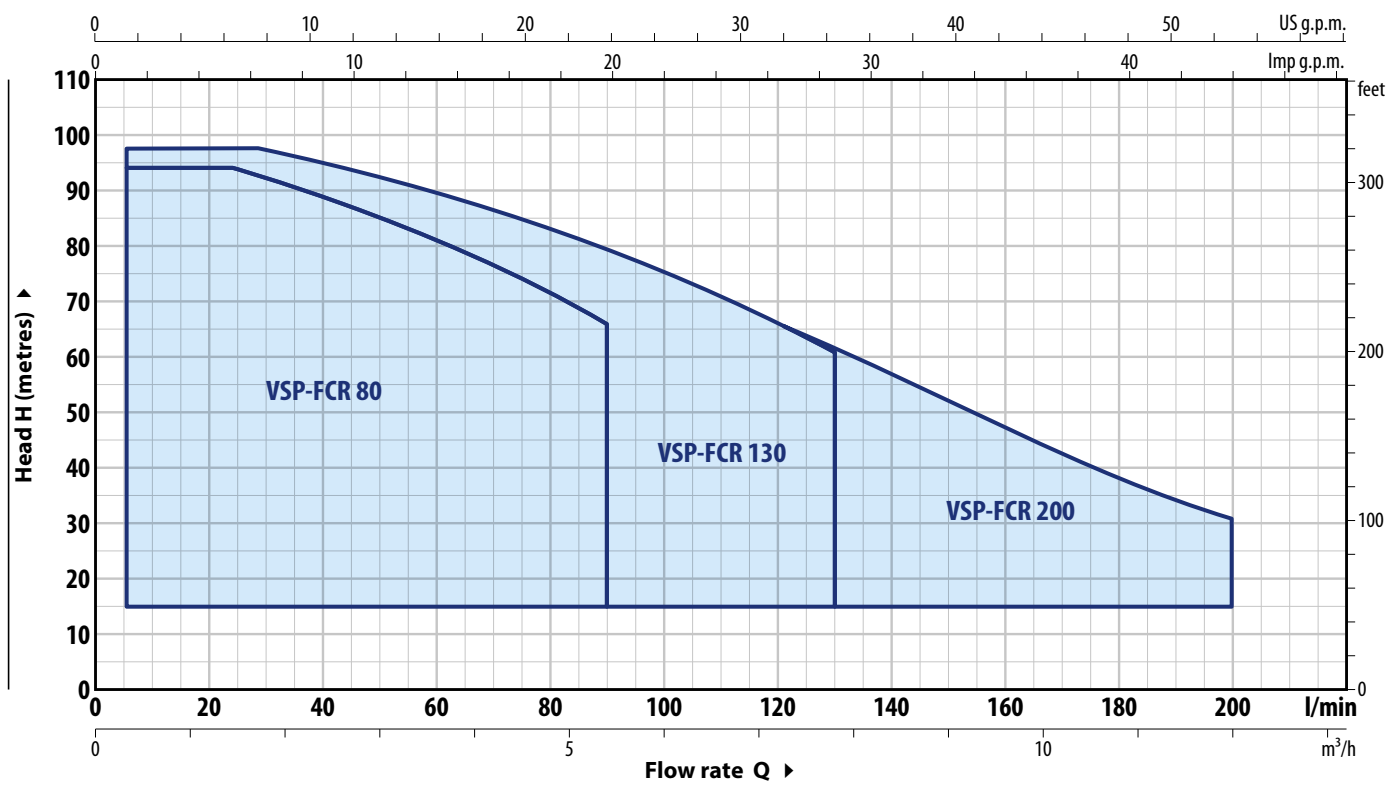


## TYPICAL INSTALLATION



# VSP – FCR

## FIELD AND PERFORMANCE DATA

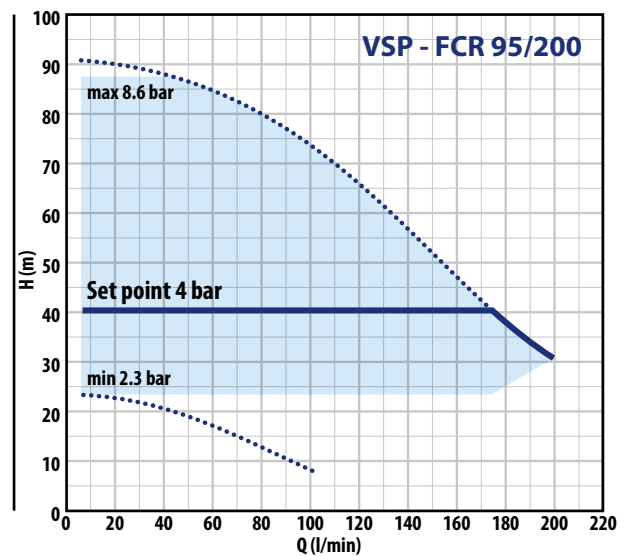
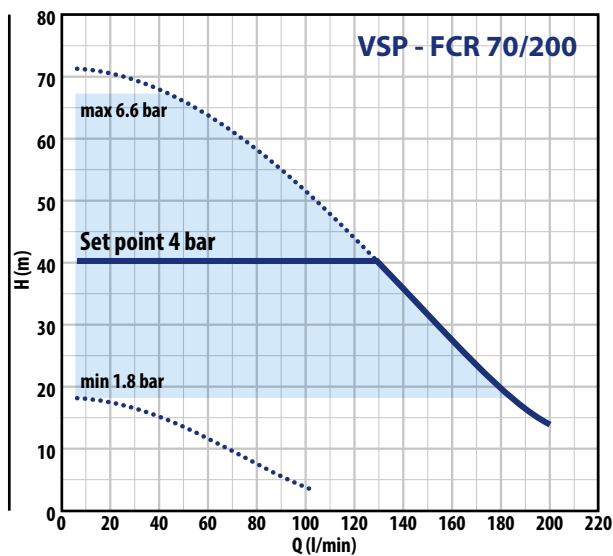
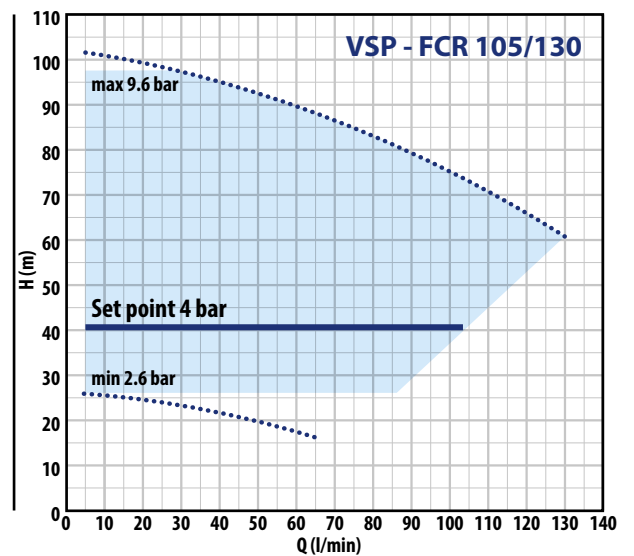
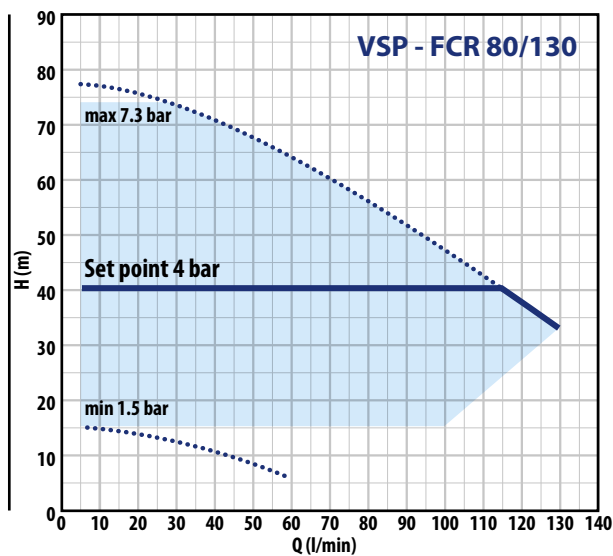
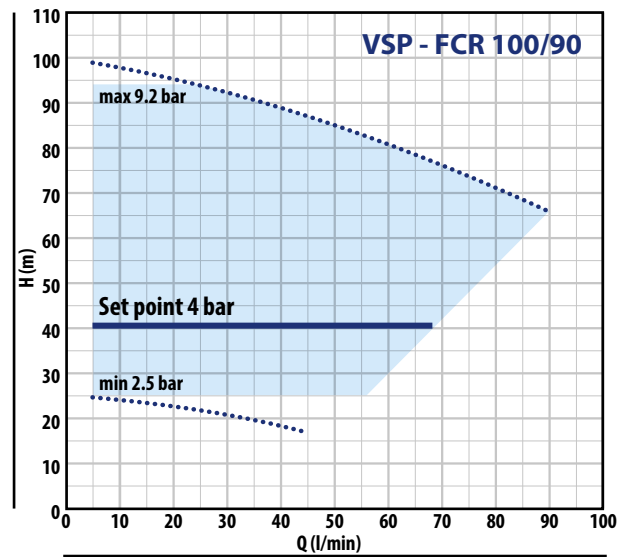
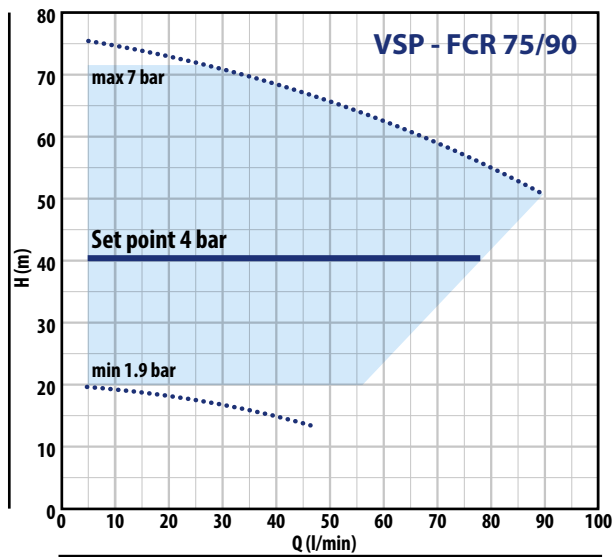


MODEL		POWER P <sub>2</sub>		Q	Flow rate								
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	0.3	1.2	2.4	3	3.6	4.8	5.4
				l/min	0	5	20	40	50	60	80	90	
VSPm - FCR 75/90	VSP - FCR 75/90	1.5	2	H m	71.5	71.5	71.5	68.5	66	63	55.5	50.5	
-	VSP - FCR 100/90	2.2	3		94	94	94	89	85	80.5	71	66	

MODEL		POWER P <sub>2</sub>		Q	Flow rate									
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	0.3	1.2	2.4	3.6	4.8	6	7.2	7.8
				l/min	0	5	20	40	60	80	100	120	130	
VSPm - FCR 80/130	VSP - FCR 80/130	1.5	2	H m	74.5	74.5	74.5	71	64.5	56	47	38	33.5	
-	VSP - FCR 105/130	2.2	3		98	98	98	95.5	90	83.5	75.5	66	61	

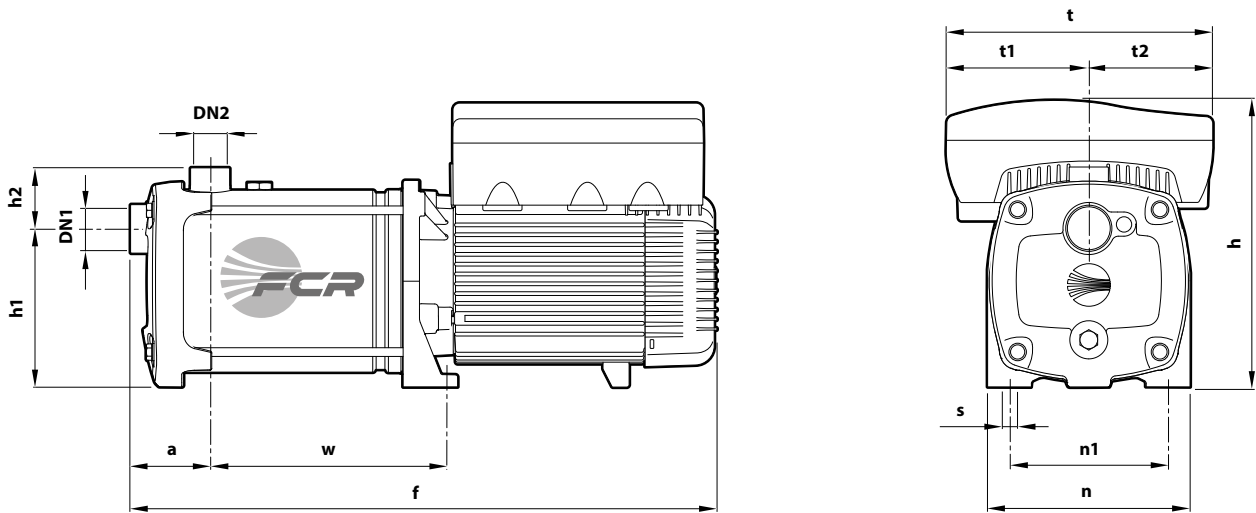
MODEL		POWER P <sub>2</sub>		Q	Flow rate											
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	0.3	1.2	2.4	3.6	4.8	6	7.2	9	10.2	12
				l/min	0	5	20	40	60	80	100	120	150	170	200	
VSPm - FCR 70/200	VSP - FCR 70/200	1.5	2	H m	67.5	67.5	67.5	67.5	64	58.5	51.5	44	31.5	23.5	14	
-	VSP - FCR 95/200	2.2	3		87.5	87.5	87.5	87.5	85	80.5	74	66	52.5	43	31	

**PERFORMANCE CURVES**



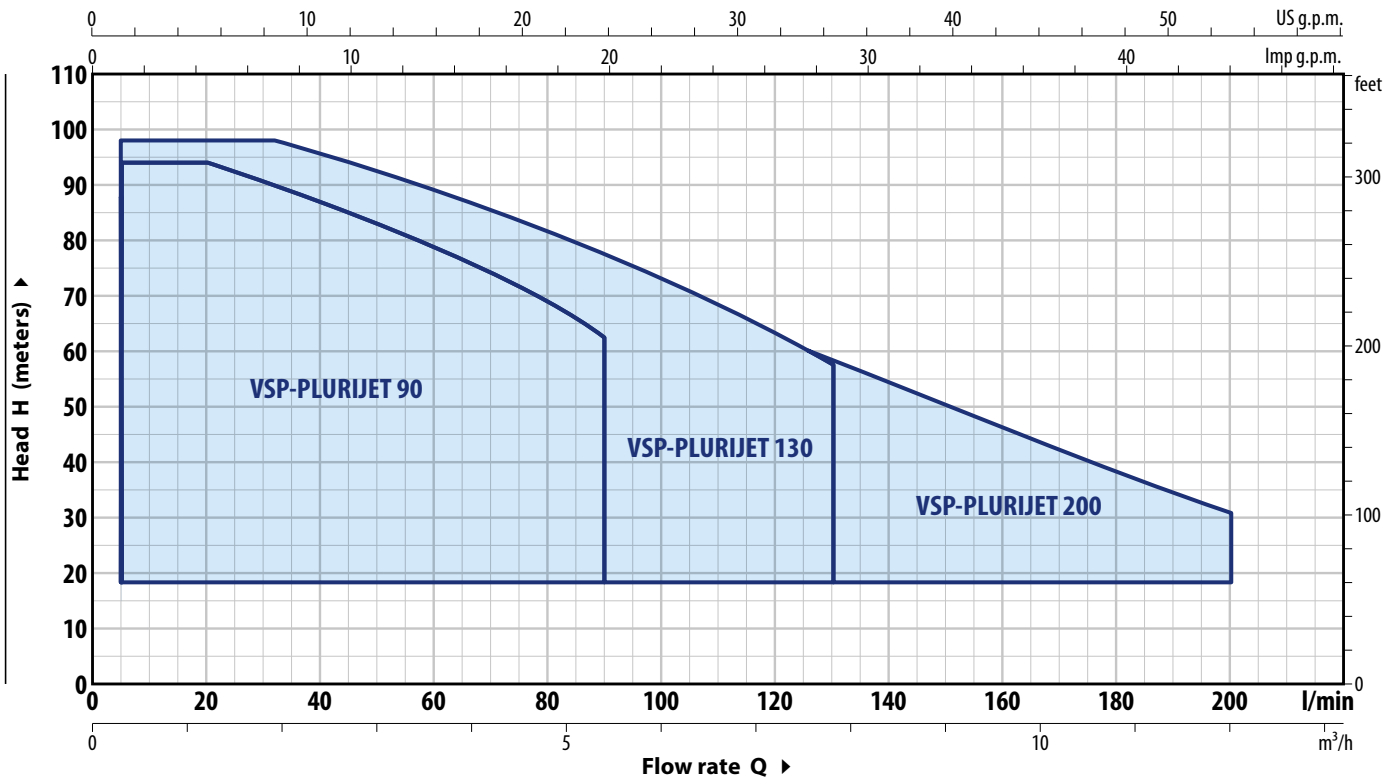
# VSP – FCR

## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm													kg	
Single-phase	Three-phase	DN1	DN2	f	a	w	h	h1	h2	t	t1	t2	n	n1	s	1~	3~	
VSPm - FCR 75/90	VSP - FCR 75/90	1 1/4"	1"	445	75	139	260	145	59	242	129	113	185	145	11	21.7	21.7	
-	VSP - FCR 100/90			471		165										-	21.9	
VSPm - FCR 80/130	VSP - FCR 80/130			445		139										21.9	21.9	
-	VSP - FCR 105/130			471		165										-	21.9	
VSPm - FCR 70/200	VSP - FCR 70/200			445		139										24.1	23.9	
-	VSP - FCR 95/200			471		165										-	24.0	

## FIELD AND PERFORMANCE DATA



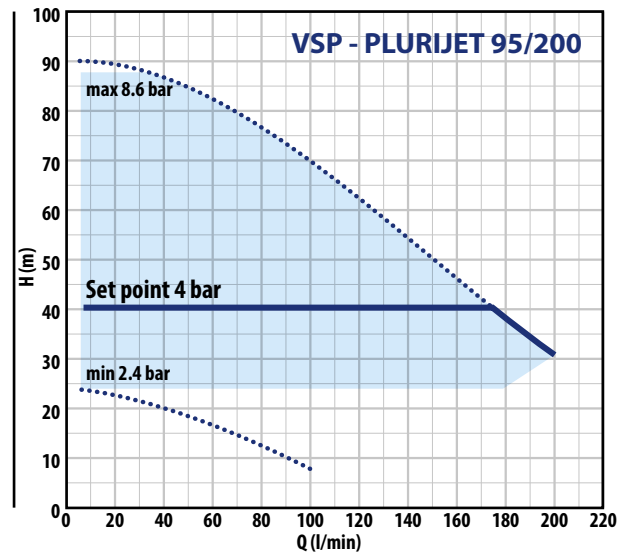
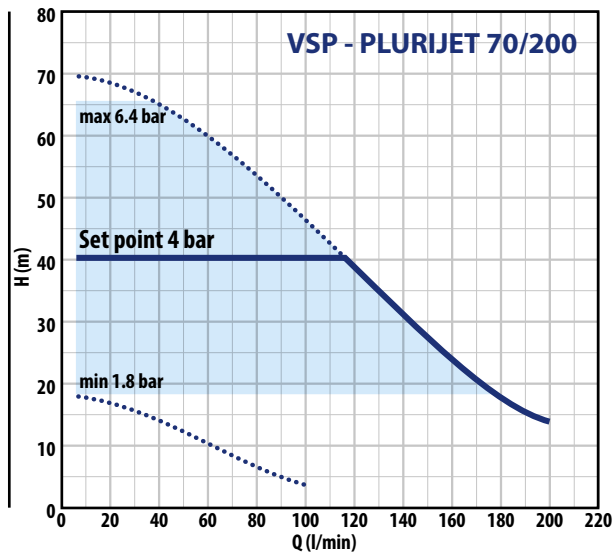
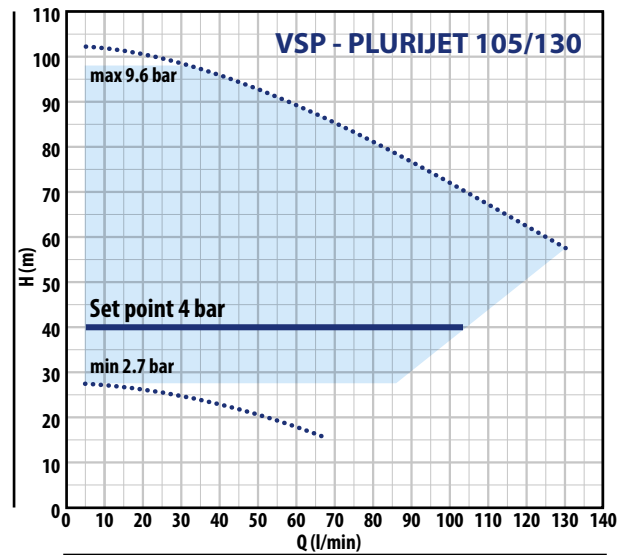
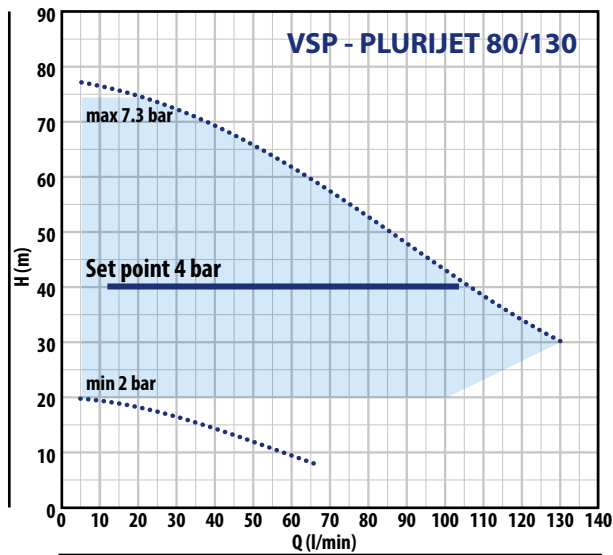
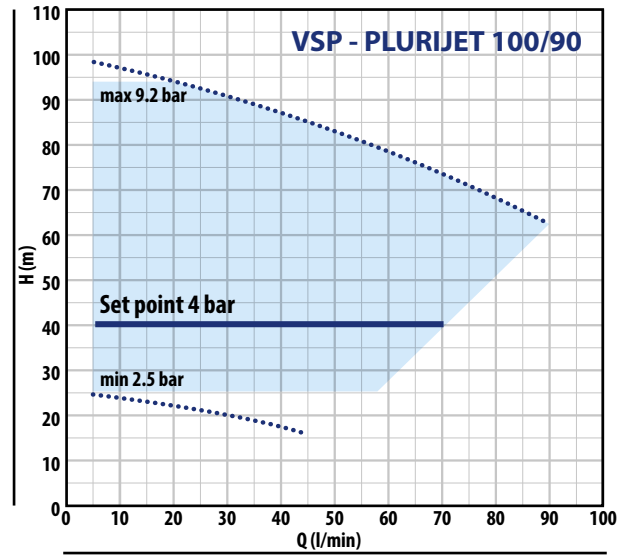
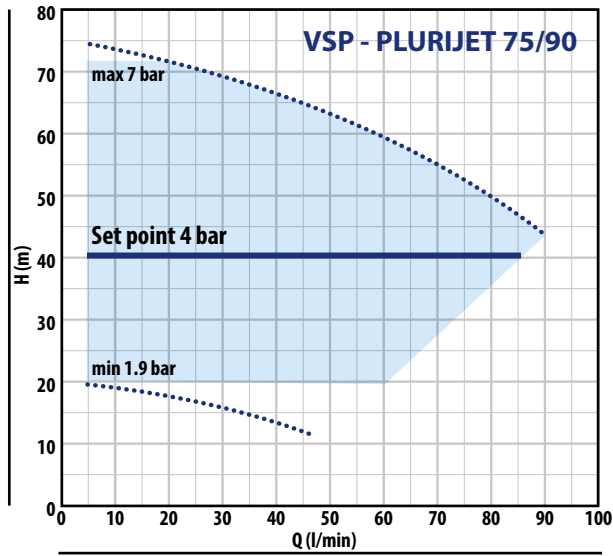
MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h								
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3	3.6	4.8	5.4	
VSPm - PJ 75/90	VSP - PJ 75/90	1.5	2	H m	71.5	71.5	71	66	63	59.5	49.5	43.5	
-	VSP - PJ 100/90	2.2	3		94	94	94	87.5	83	78.5	68	62.5	

MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h											
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3.6	4.8	6	7.2	7.8			
VSPm - PJ 80/130	VSP - PJ 80/130	1.5	2	H m	74.5	74.5	74.5	69.5	62	52.5	43	34	30			
-	VSP - PJ 105/130	2.2	3		98	98	98	96	89.5	81	72	62	57.5			

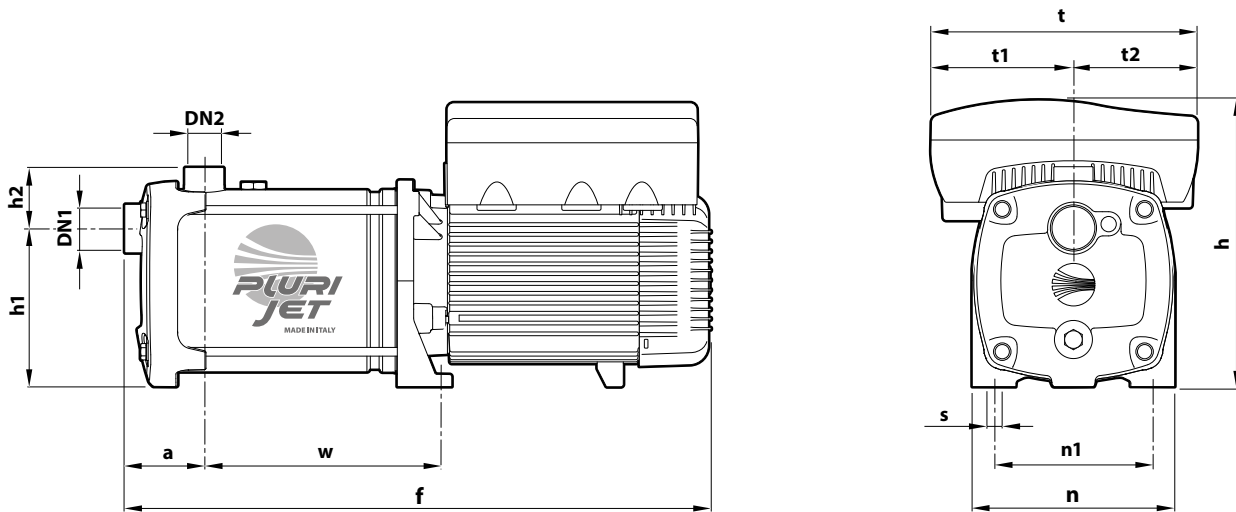
MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h													
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3.6	4.8	6	7.2	9	10.2	12			
VSPm - PJ 70/200	VSP - PJ 70/200	1.5	2	H m	65.5	65.5	65.5	65	60	53.5	46	38.5	27.5	21	14			
-	VSP - PJ 95/200	2.2	3		87.5	87.5	87.5	87	82.5	76.5	70	62.5	50.5	42	31			

# VSP – PLURIJET

## PERFORMANCE CURVES



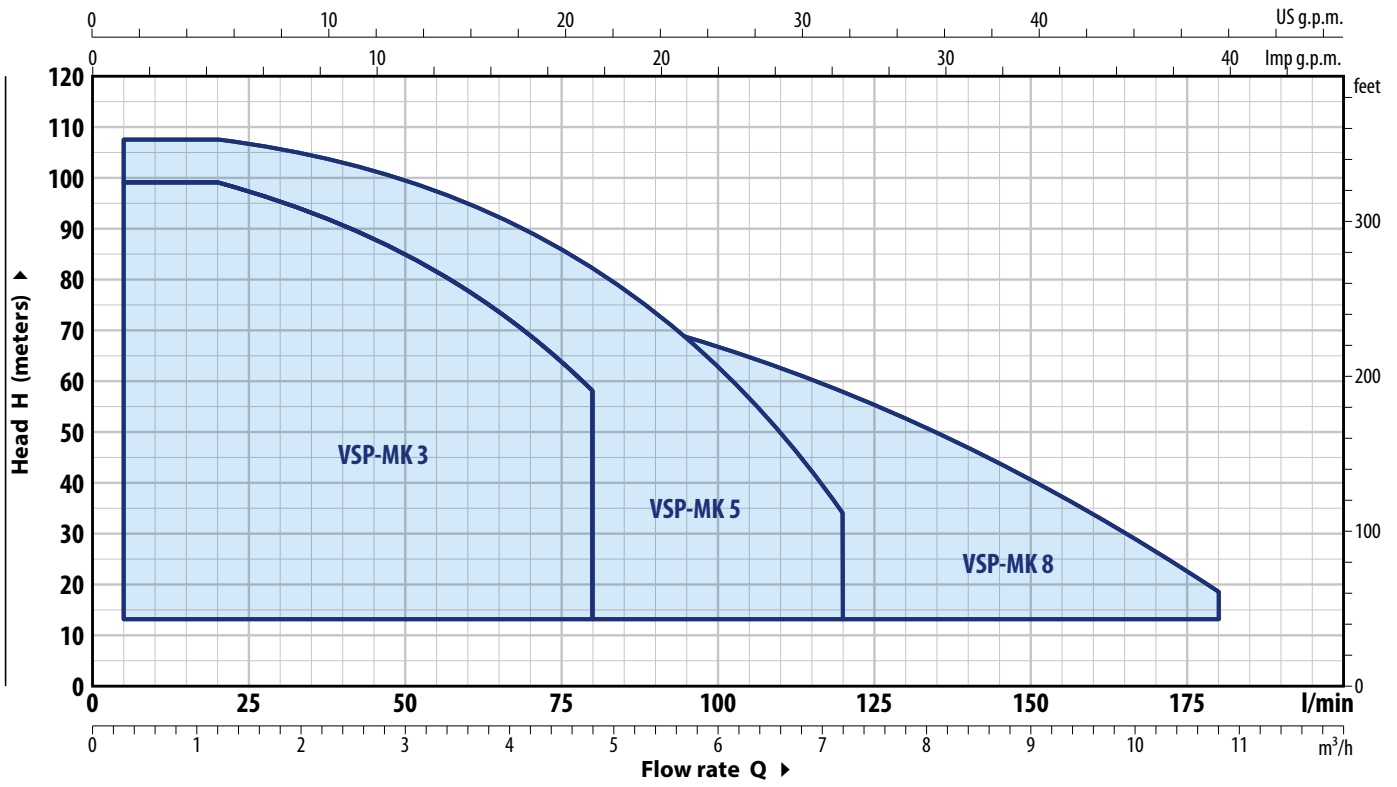
## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm													kg			
Single-phase	Three-phase	DN1	DN2	f	a	w	h	h1	h2	t	t1	t2	n	n1	s	1~	3~			
VSPm - PLURIJET 75/90	VSP - PLURIJET 75/90	1 1/4"	1"	497		191										21.7	21.7			
-	VSP - PLURIJET 100/90			523		217												-	23.9	
VSPm - PLURIJET 80/130	VSP - PLURIJET 80/130			497	75	191	260	145	59	242	129	113	185	145	11			21.9	21.9	
-	VSP - PLURIJET 105/130			523		217													-	24.1
VSPm - PLURIJET 70/200	VSP - PLURIJET 70/200			497		191													21.9	21.9
-	VSP - PLURIJET 95/200			523		217													-	24.0

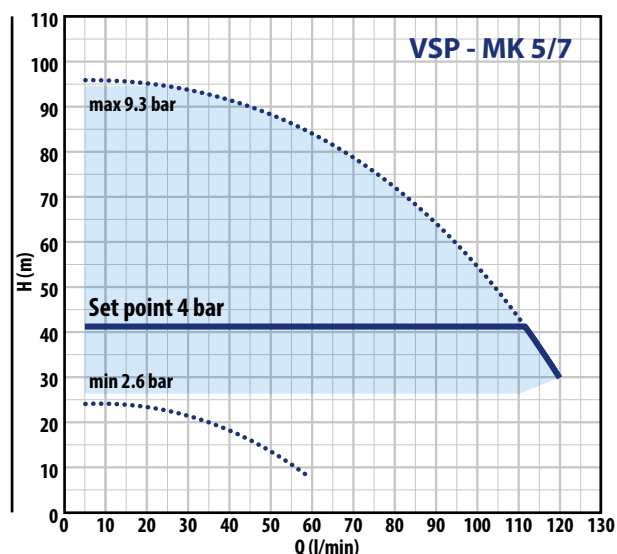
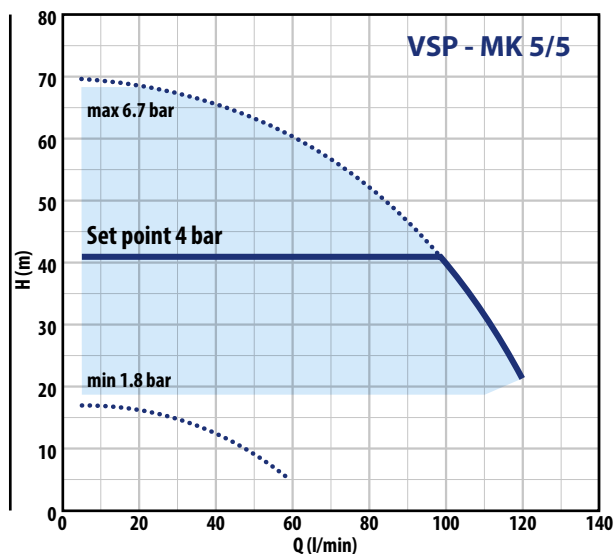
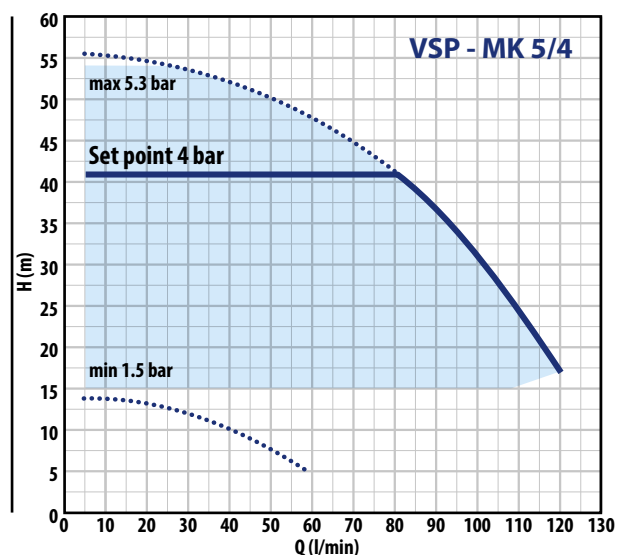
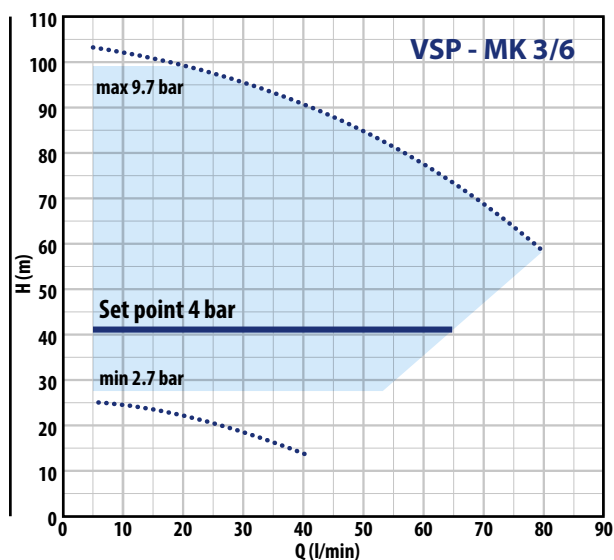
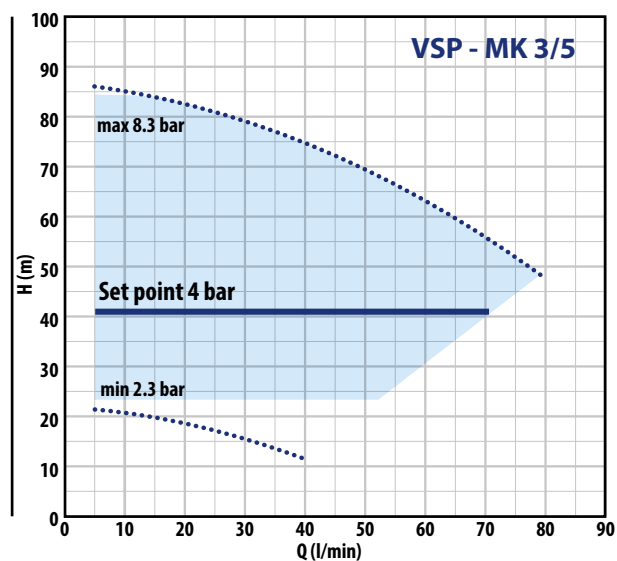
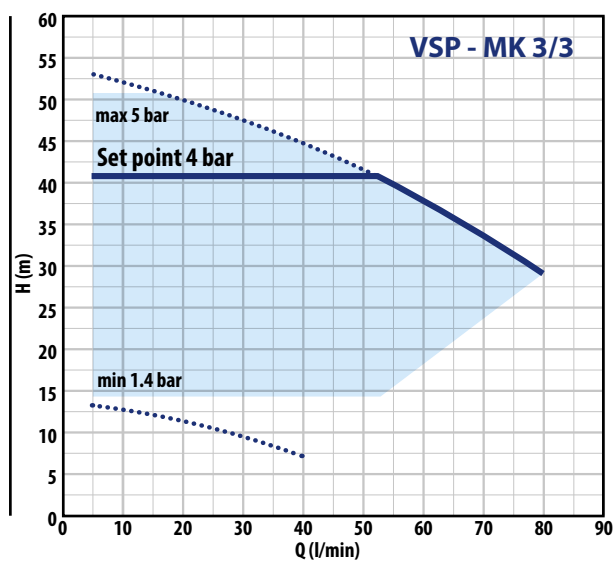
# VSP – MK

## FIELD AND PERFORMANCE DATA



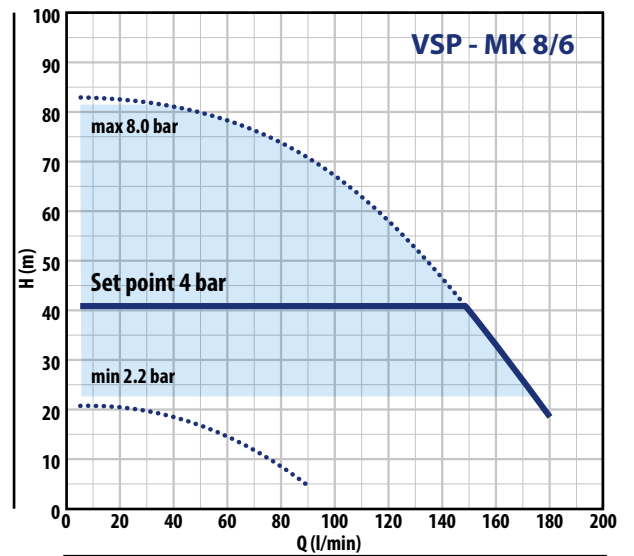
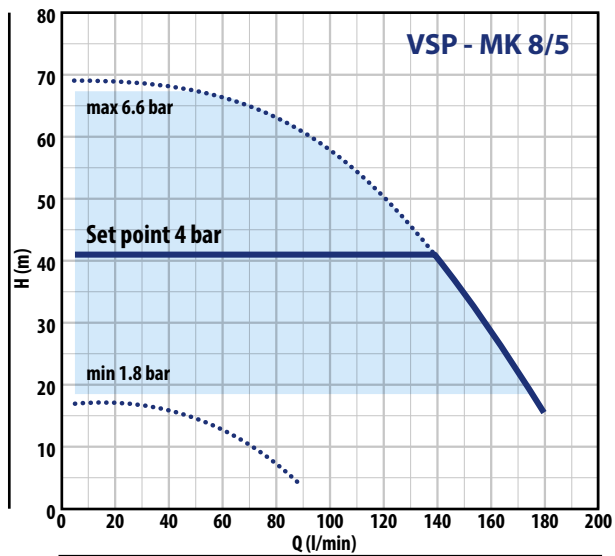
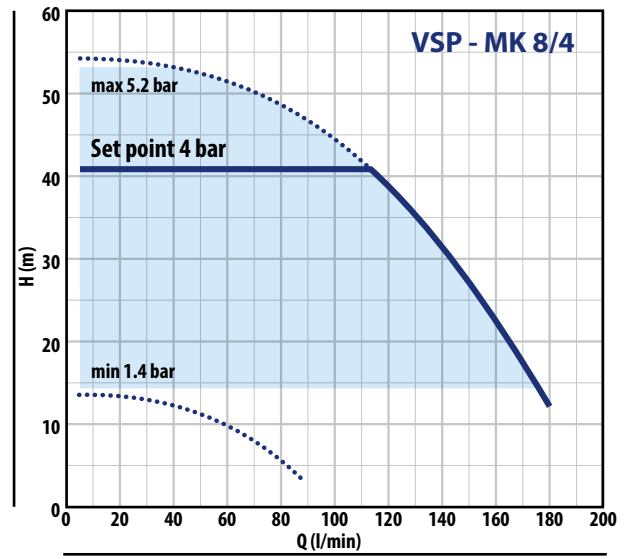
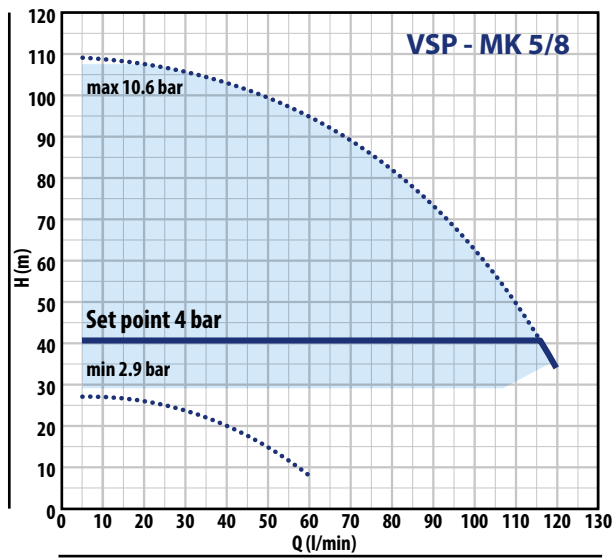
MODEL		POWER P <sub>2</sub>		Q	H m													
Single-phase	Three-phase	kW	HP		m <sup>3</sup> /h	0	0.6	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8		
				l/min	0	5	20	40	60	80	100	120	140	160	180			
VSPm - MK 3/3	VSP - MK 3/3	0.75	1	H m	51	51	50	45	38.5	29								
VSPm - MK 3/5	VSP - MK 3/5	1.1	1.5		84.5	84.5	83	75	64	48								
VSPm - MK 3/6	VSP - MK 3/6	1.5	2		99	99	99	90	77	58								
VSPm - MK 5/4	VSP - MK 5/4	0.75	1		54	54	54	50	45	37.5	28.5	17						
VSPm - MK 5/5	VSP - MK 5/5	1.1	1.5		68.5	68.5	67.5	62.5	56	47	35.5	21.5						
VSPm - MK 5/7	VSP - MK 5/7	1.5	2		95	95	95	88	78	66	50	30						
-	VSP - MK 5/8	2.2	3		108	108	108	100	90	75	57	34						
VSPm - MK 8/4	VSP - MK 8/4	1.1	1.5		53	53	53	53	51	47.5	43	37.5	30.5	22.1	12			
VSPm - MK 8/5	VSP - MK 8/5	1.5	2		67.5	67.5	67.5	67	64	59.5	54	47	38	27.5	15.5			
-	VSP - MK 8/6	2.2	3		81.5	81.5	81.5	80	77	72	64.5	56	45.5	33	18.5			

**PERFORMANCE CURVES**

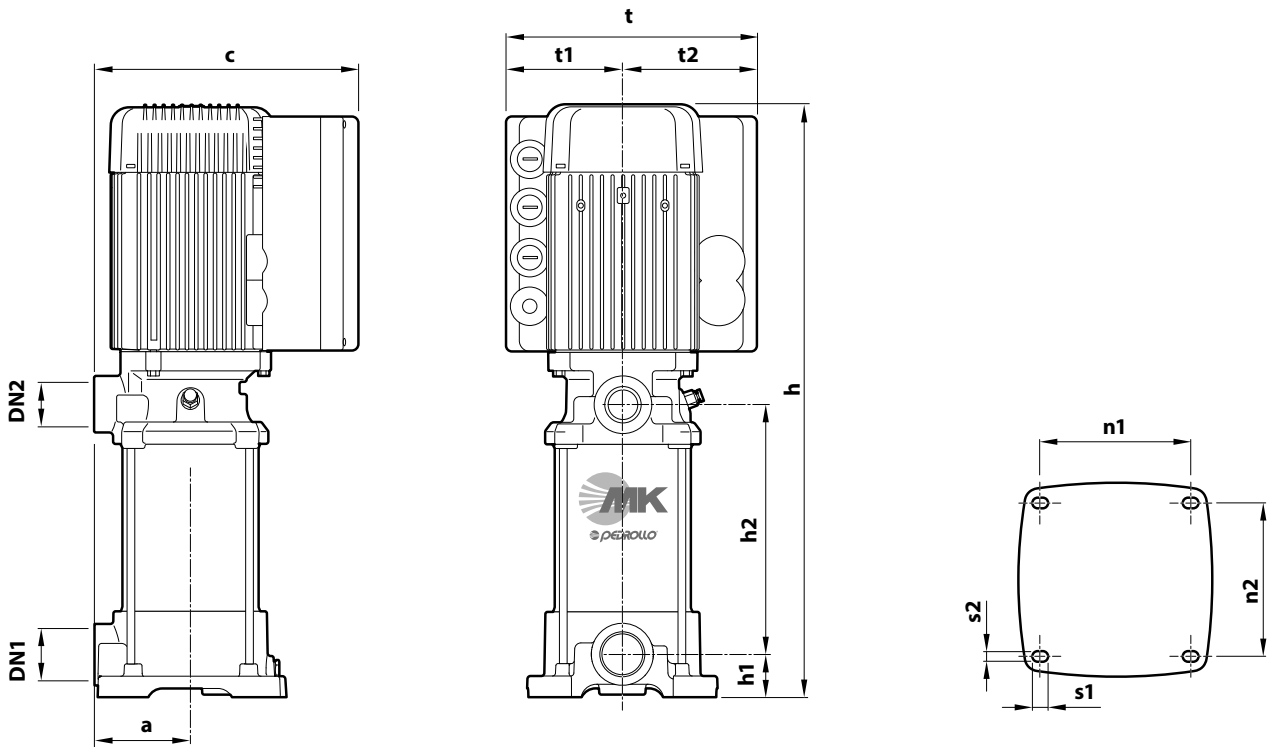


# VSP - MK

## PERFORMANCE CURVES



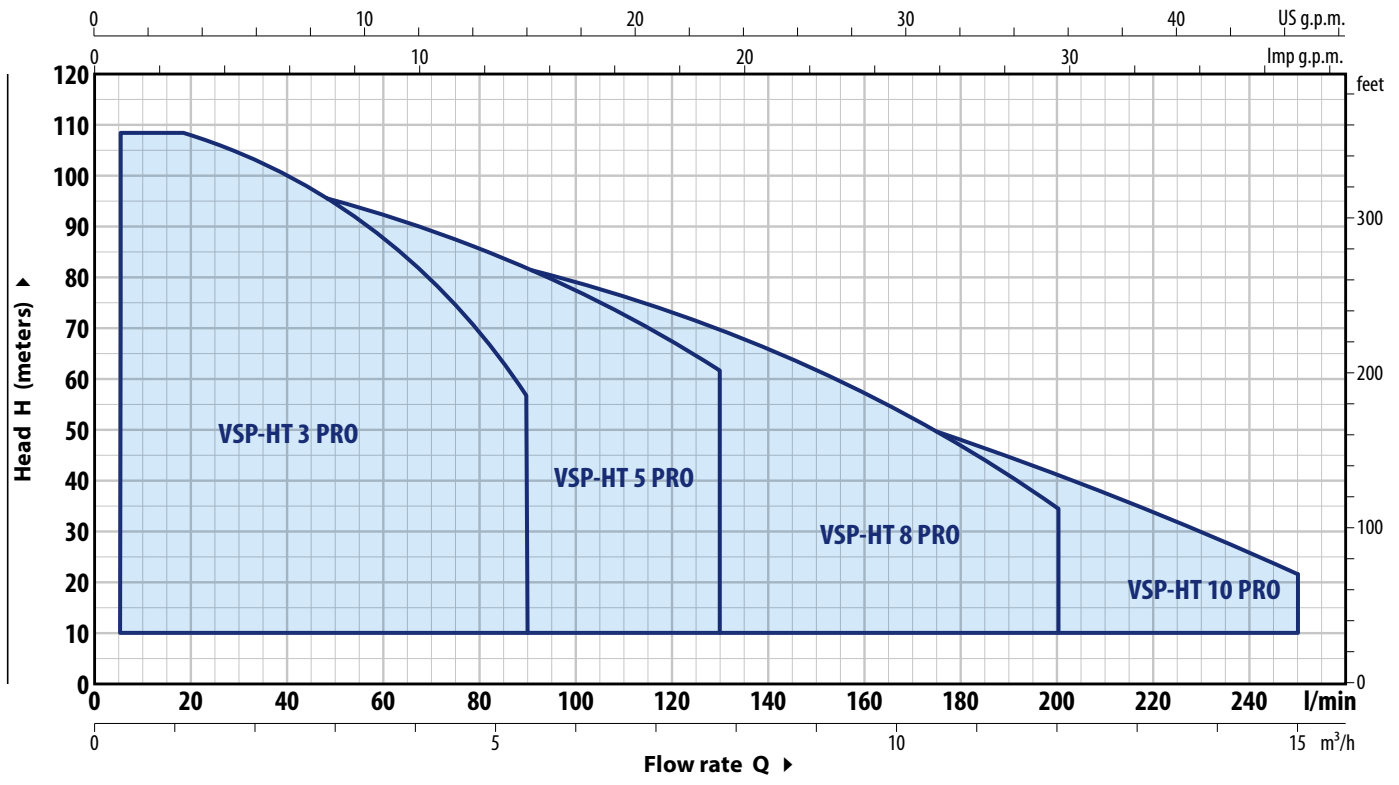
## DIMENSIONS AND WEIGHT



MODEL		PORTS		DIMENSIONS mm										kg			
Single-phase	Three-phase	DN1	DN2	a	c	h	h1	h2	t	t1	t2	n1	n2	S1	S2	1~	3~
VSPm - MK 3/3	VSP - MK 3/3	1¼"	1"	93	255	447	41	132	242	113	129	143	146	14.5	10	23.3	23.3
VSPm - MK 3/5	VSP - MK 3/5					501		186								25.5	25.5
VSPm - MK 3/6	VSP - MK 3/6					528		213								27.3	27.3
VSPm - MK 5/4	VSP - MK 5/4					474		159								23.8	23.8
VSPm - MK 5/5	VSP - MK 5/5					501		186								25.2	25.2
VSPm - MK 5/7	VSP - MK 5/7					555		240								28.3	28.3
-	VSP - MK 5/8					602		267								-	28.6
VSPm - MK 8/4	VSP - MK 8/4					474		159								26.6	26.6
VSPm - MK 8/5	VSP - MK 8/5					501		186								27.0	27.0
-	VSP - MK 8/6					548		213								-	29.4

# VSP – HT-PRO

## FIELD AND PERFORMANCE DATA



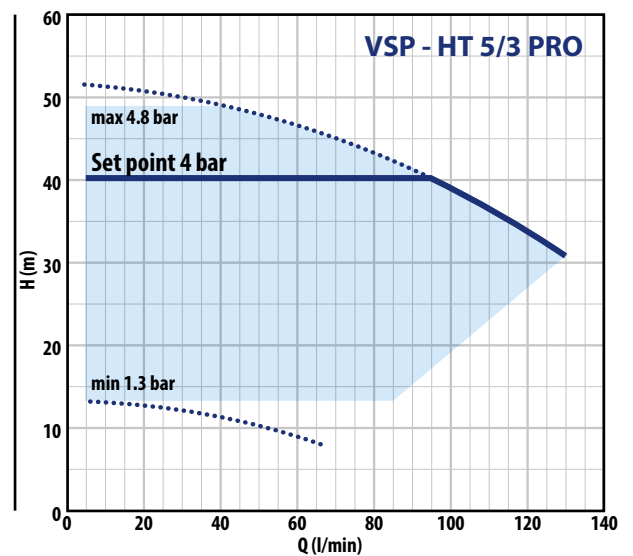
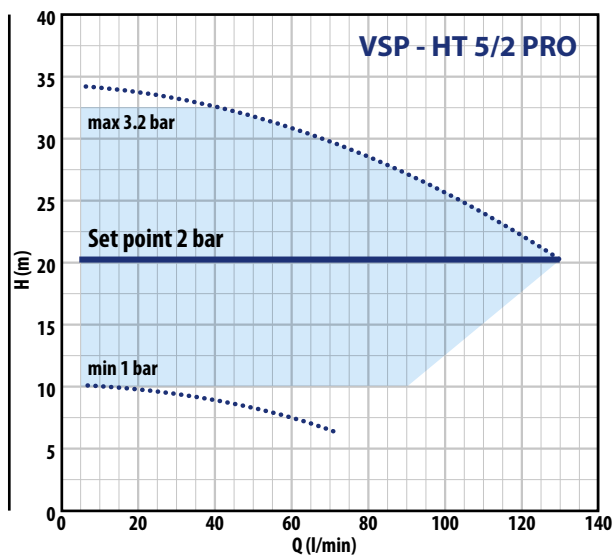
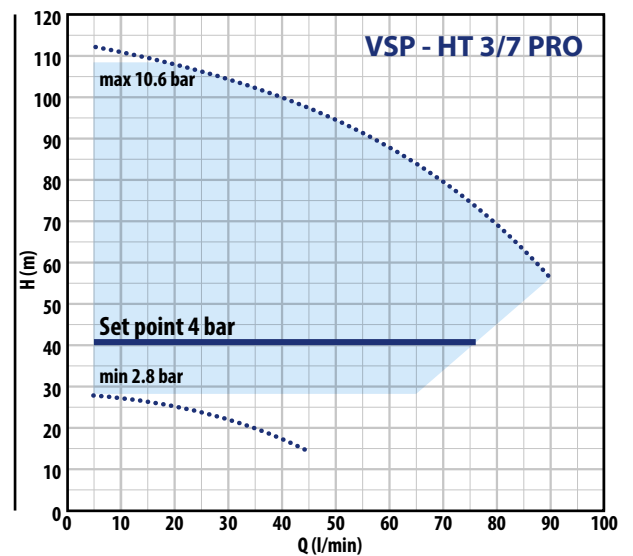
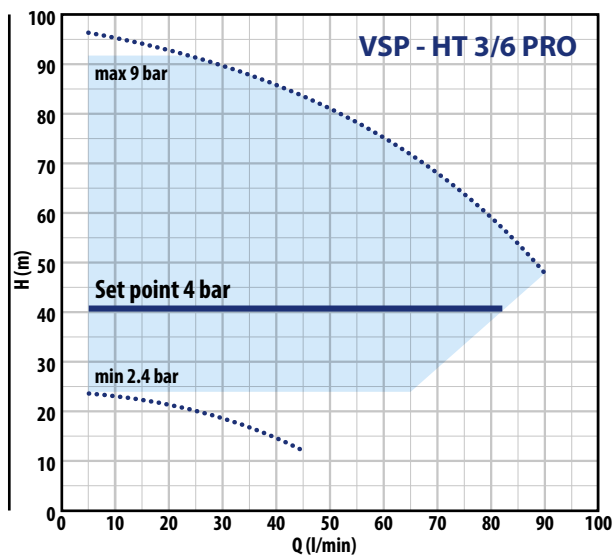
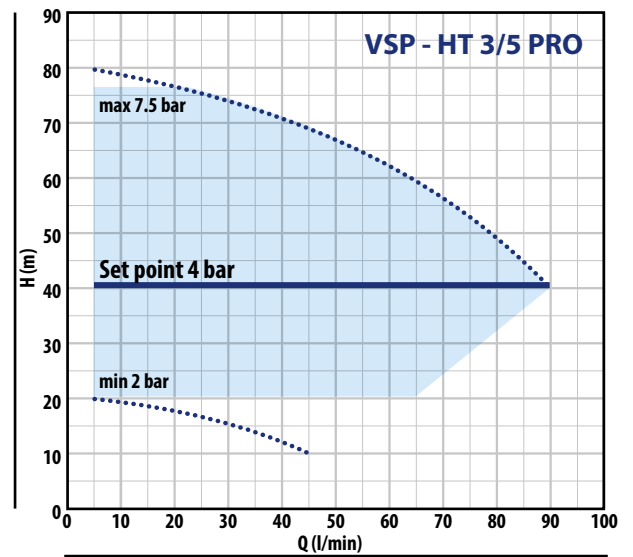
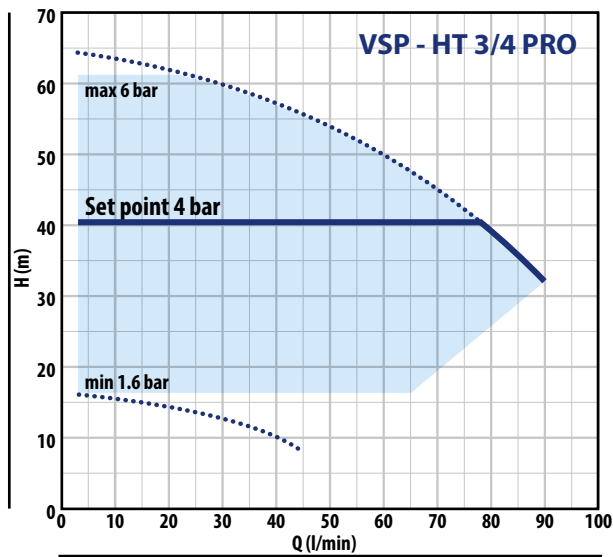
MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h										
Single-phase	Three-phase	kW	HP		0	0.3	1.2	1.8	2.4	3	3.6	4.2	4.8	5.4	
VSPm - HT3/4 PRO	VSP - HT3/4 PRO	0.75	1	H m	61	61	61	59.5	57	54	50	45.5	39.5	32	
VSPm - HT3/5 PRO	VSP - HT3/5 PRO	1.1	1.5		76.5	76.5	76.5	74.5	71.5	67.5	63	56.5	49.5	40	
VSPm - HT3/6 PRO	VSP - HT3/6 PRO	1.5	2		92	92	92	89.5	85.5	81	75.5	68	59	48	
-	VSP - HT3/7 PRO	1.8	2.5		108	108	107.5	104	100	94.5	88	79.5	69	56	

MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h								
Single-phase	Three-phase	kW	HP		0	0.3	2.4	3.6	4.8	5.4	6	7.8	
VSPm - HT5/2 PRO	VSP - HT5/2 PRO	0.75	1	H m	32.5	32.5	32.5	31	28.5	27.5	26	20.5	
VSPm - HT5/3 PRO	VSP - HT5/3 PRO	1.1	1.5		49	49	49	46.5	43	41	39	31	
VSPm - HT5/4 PRO	VSP - HT5/4 PRO	1.5	2		65.5	65.5	65	62	57.5	55	52	41	
-	VSP - HT5/5 PRO	1.8	2.5		81.5	81.5	81.5	77.5	72	68.5	65	51.5	
-	VSP - HT5/6 PRO	2.2	3		97	97	97	92.5	86	82.5	78	62	

MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h										
Single-phase	Three-phase	kW	HP		0	0.3	2.4	3.6	4.8	5.4	7.2	9	10.8	12	
VSPm - HT8/3 PRO	VSP - HT8/3 PRO	1.1	1.5	H m	45	45	45	44	42	41	36.5	30.5	23	17	
VSPm - HT8/4 PRO	VSP - HT8/4 PRO	1.5	2		60	60	60	58.5	56	54.5	48.5	40.5	31	23	
-	VSP - HT8/5 PRO	1.8	2.5		74.5	74.5	74.5	73.5	70	68	61	51	38.5	28.5	
-	VSP - HT8/6 PRO	2.2	3		91	91	91	88	84	82	73	61	46	34.5	

MODEL		POWER P <sub>2</sub>		Q	m <sup>3</sup> /h											
Single-phase	Three-phase	kW	HP		0	0.3	2.4	3.6	4.8	6	7.2	9	11.4	13.2	15	
VSPm - HT10/3 PRO	VSP - HT10/3 PRO	1.5	2	H m	45	45	45	43.5	42	40	38	33.5	26.5	20.5	13	
-	VSP - HT10/4 PRO	1.8	2.5		60	60	60	58	56	53.5	50.5	45	35.5	27	17	
-	VSP - HT10/5 PRO	2.2	3		73.5	73.5	73.5	72.5	70	67	63	56	44.5	34	21.5	

**PERFORMANCE CURVES**



# VSP - HT-PRO

## PERFORMANCE CURVES

