

-  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.

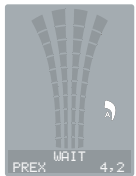
KEY FEATURES

- ✳ 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



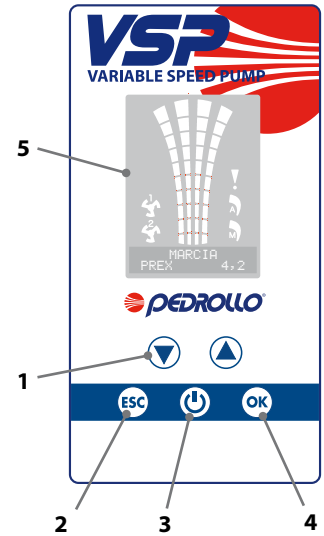
Display VERDE
START



RED display
ERROR

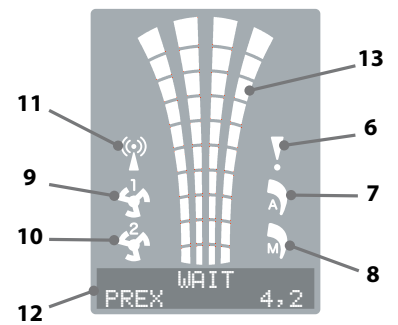


YELLOW display
(MENU OF
PROGRAMMING)

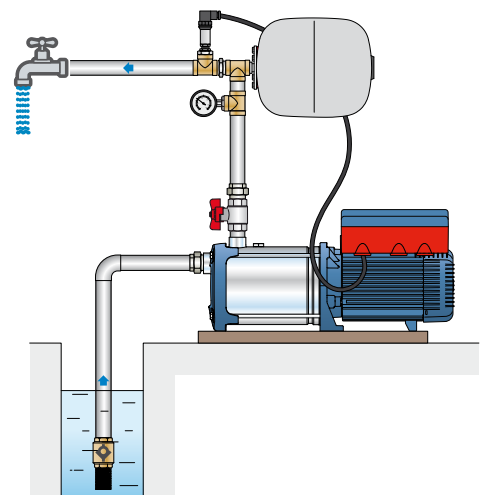
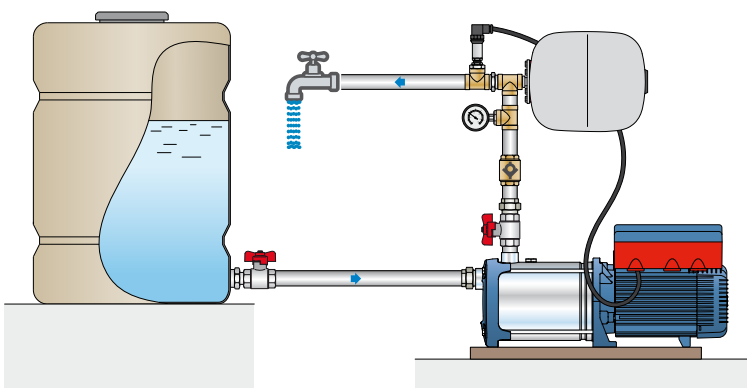


DISPLAY SYMBOLS

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

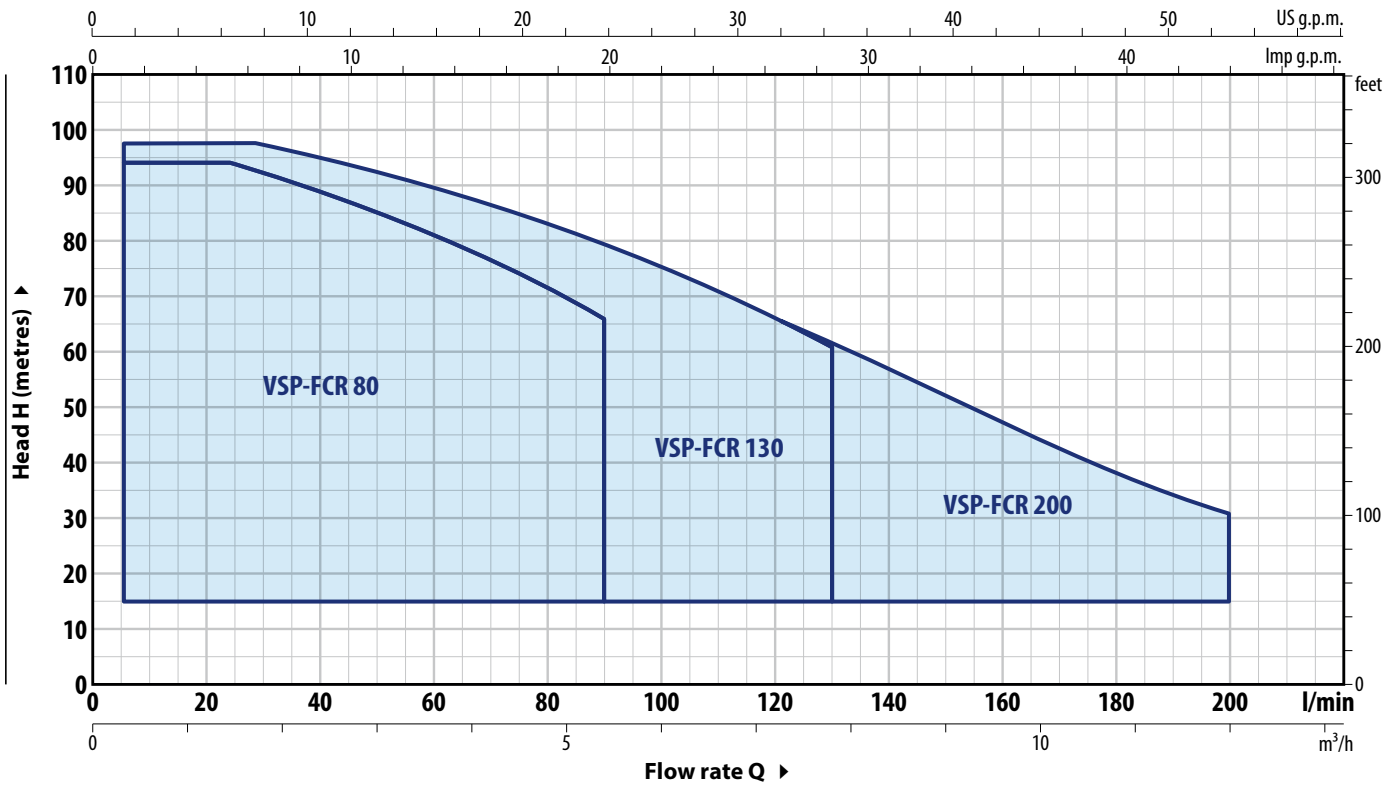


TYPICAL INSTALLATION



VSP – FCR

PERFORMANCE RANGE

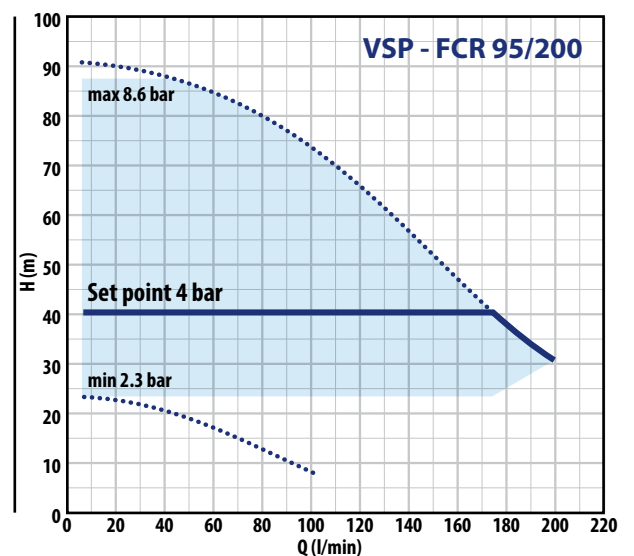
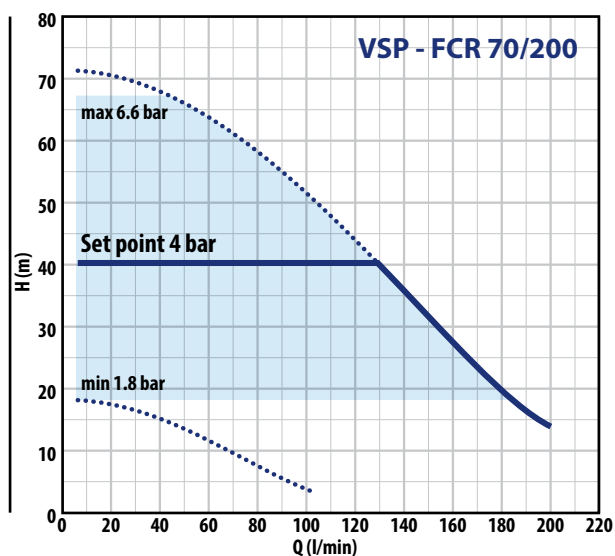
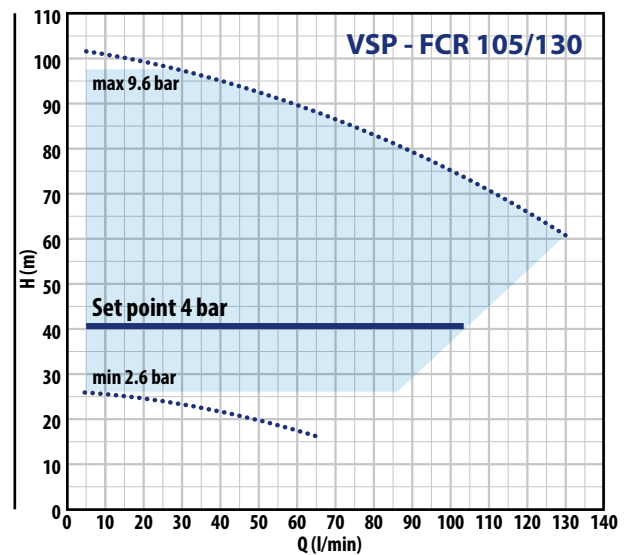
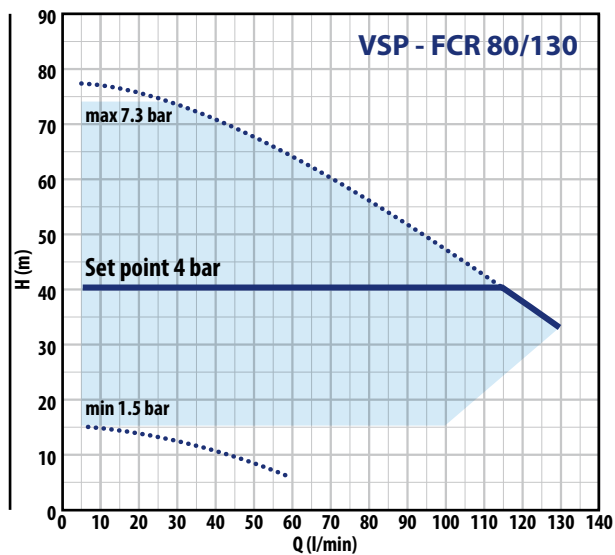
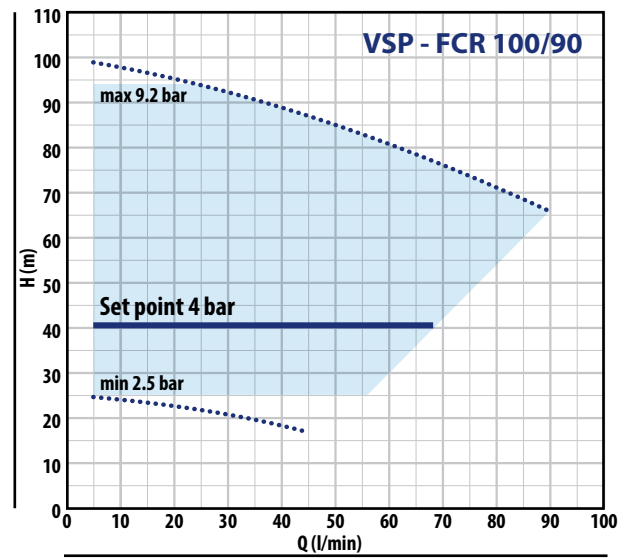
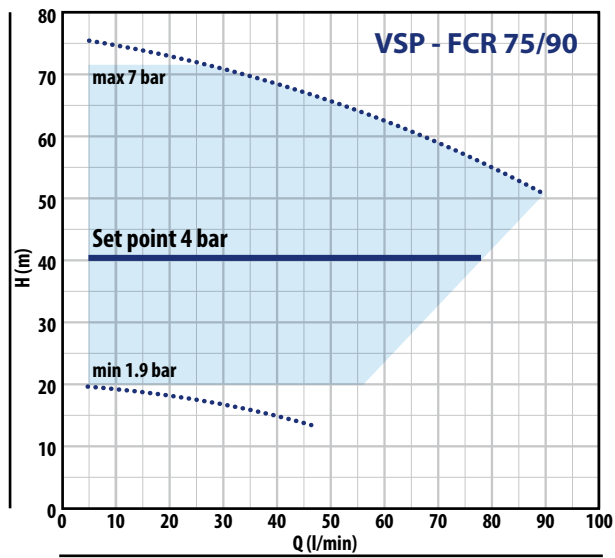


TYPE		POWER P ₂		Q	m ³ /h								
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3	3.6	4.8	5.4	
VSPm - FCR 75/90	VSP - FCR 75/90	1.5	2	H m	71.5	71.5	71.5	68.5	66	63	55.5	50.5	
-	VSP - FCR 100/90	2.2	3		94	94	94	89	85	80.5	71	66	

TYPE		POWER P ₂		Q	m ³ /h											
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3.6	4.8	6	7.2	7.8			
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			

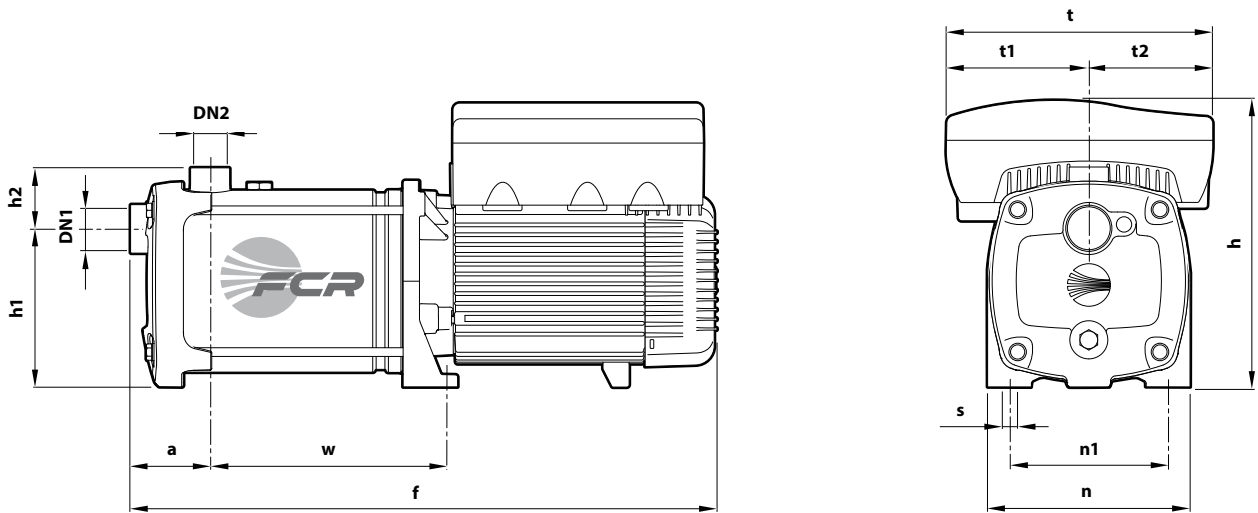
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Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3.6	4.8	6	7.2	9	10.2	12			
VSPm - FCR 70/200	VSP - FCR 70/200	1.5	2	H m	67.5	67.5	67.5	67.5	64	58.5	51.5	44	31.5	23.5	14			
-	VSP - FCR 95/200	2.2	3		87.5	87.5	87.5	87.5	85	80.5	74	66	52.5	43	31			

PERFORMANCE CURVES



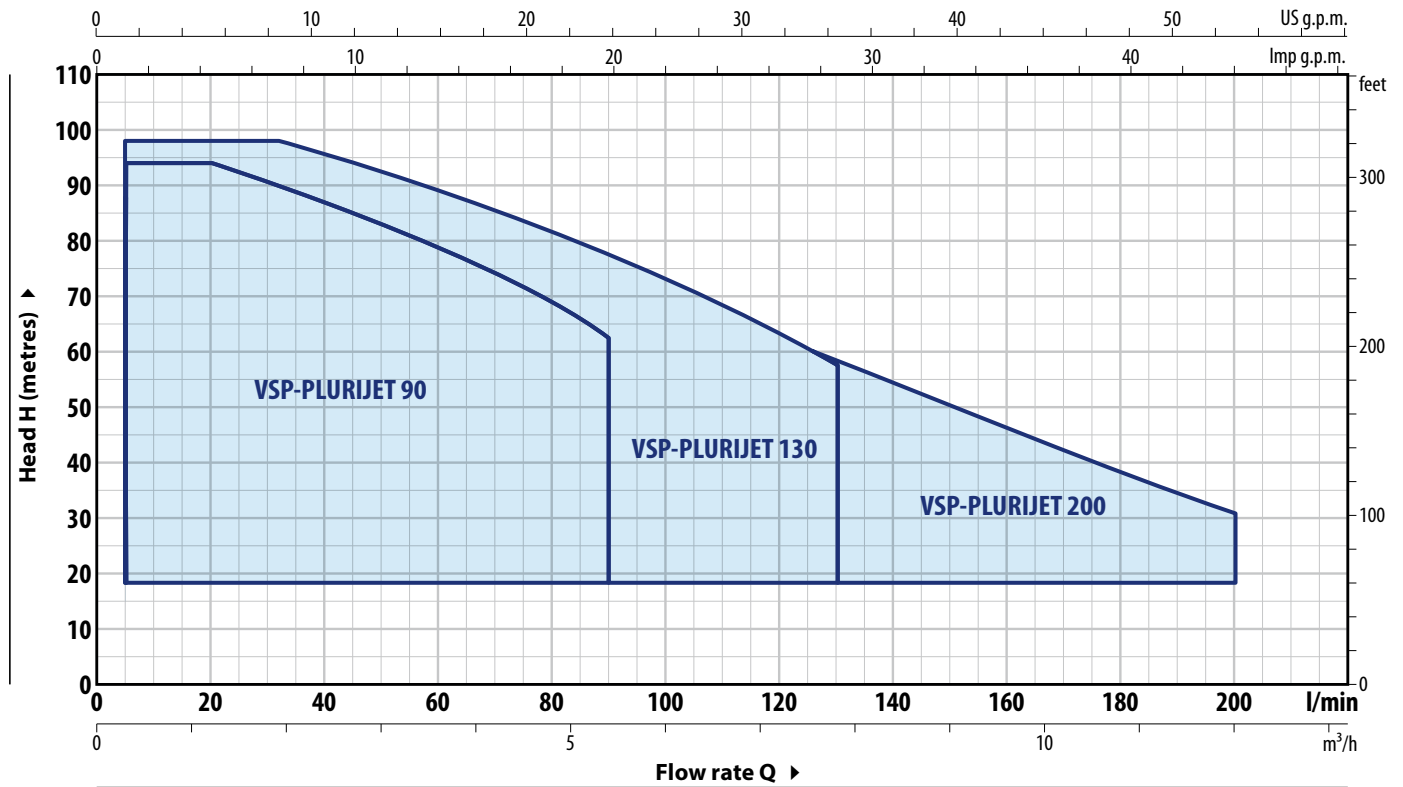
VSP – FCR

DIMENSIONS AND WEIGHT



TYPE		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	

PERFORMANCE RANGE



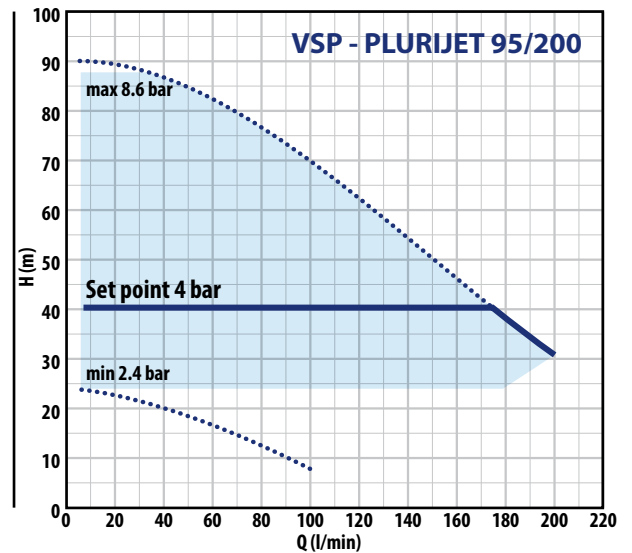
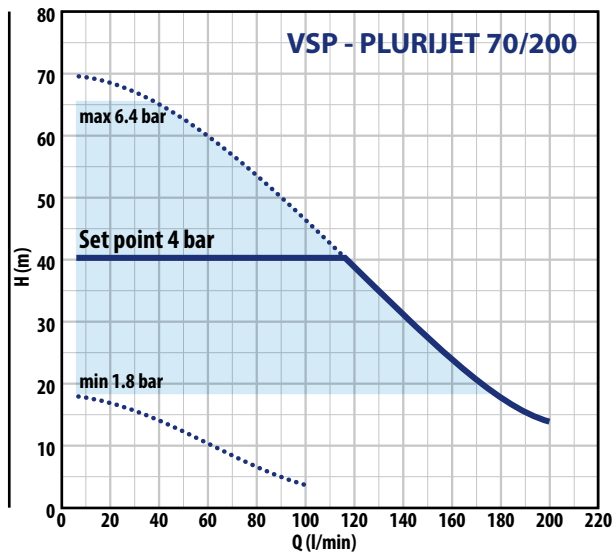
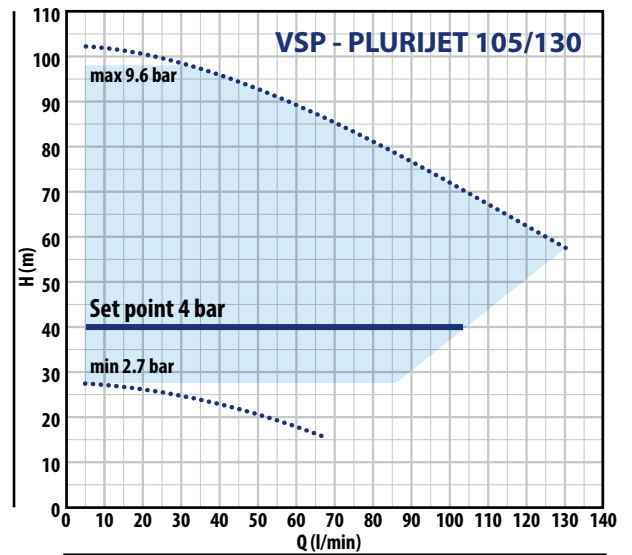
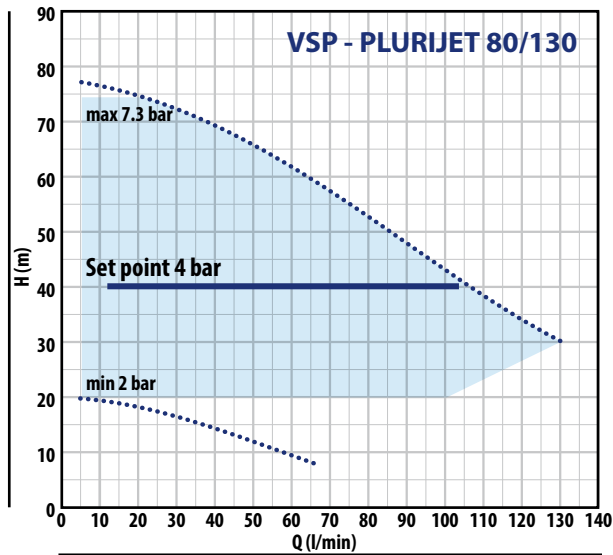
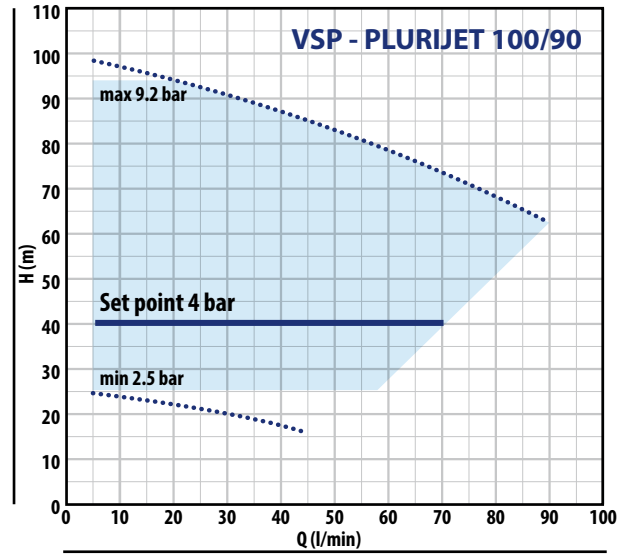
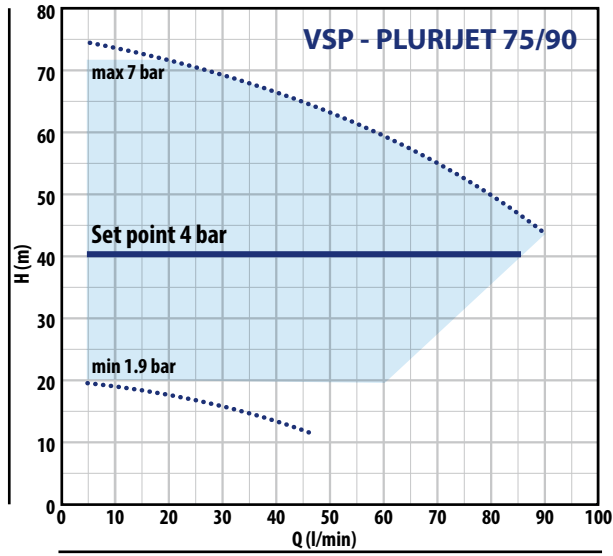
TYPE		POWER P ₂		Q	m ³ /h								
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3	3.6	4.8	5.4	
VSPm - PJ 75/90	VSP - PJ 75/90	1.5	2	H m	0	5	20	40	50	60	80	90	
-	VSP - PJ 100/90	2.2	3		71.5	71.5	71	66	63	59.5	49.5	43.5	
-	VSP - PJ 100/90	2.2	3	H m	94	94	94	87.5	83	78.5	68	62.5	

TYPE		POWER P ₂		Q	m ³ /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	0	5	20	40	60	80	100	120	130			
-	VSP - PJ 105/130	2.2	3		74.5	74.5	74.5	69.5	62	52.5	43	34	30			
-	VSP - PJ 105/130	2.2	3	H m	98	98	98	96	89.5	81	72	62	57.5			

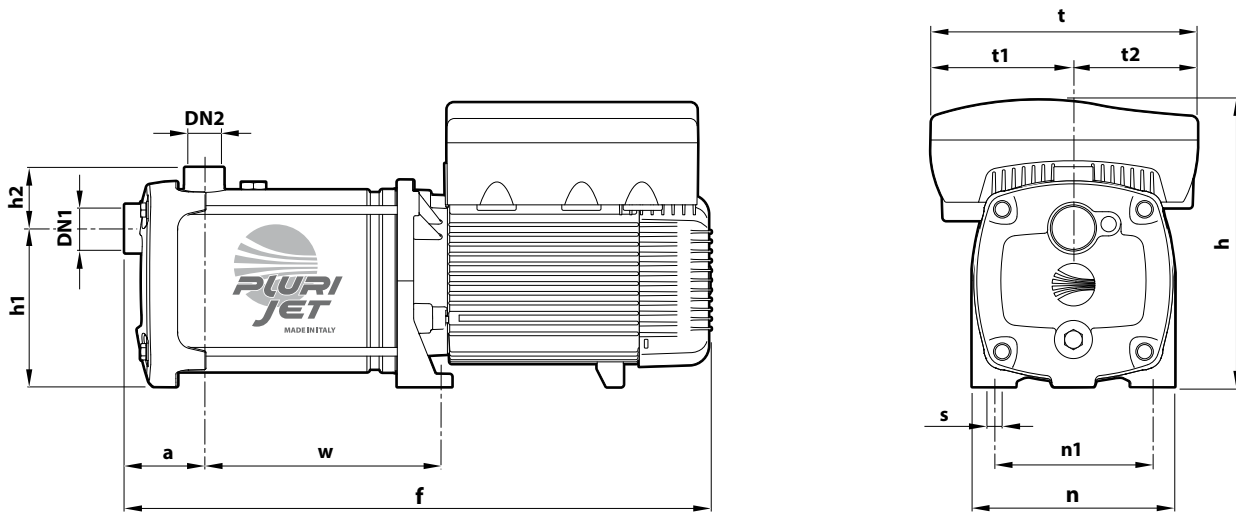
TYPE		POWER P ₂		Q	m ³ /h												
Single-phase	Three-phase	kW	HP		0	0.3	1.2	2.4	3.6	4.8	6	7.2	9	10.2	12		
VSPm - PJ 70/200	VSP - PJ 70/200	1.5	2	H m	0	5	20	40	60	80	100	120	150	170	200		
-	VSP - PJ 95/200	2.2	3		65.5	65.5	65.5	65	60	53.5	46	38.5	27.5	21	14		
-	VSP - PJ 95/200	2.2	3	H m	87.5	87.5	87.5	87	82.5	76.5	70	62.5	50.5	42	31		

VSP - PLURIJET

PERFORMANCE CURVES



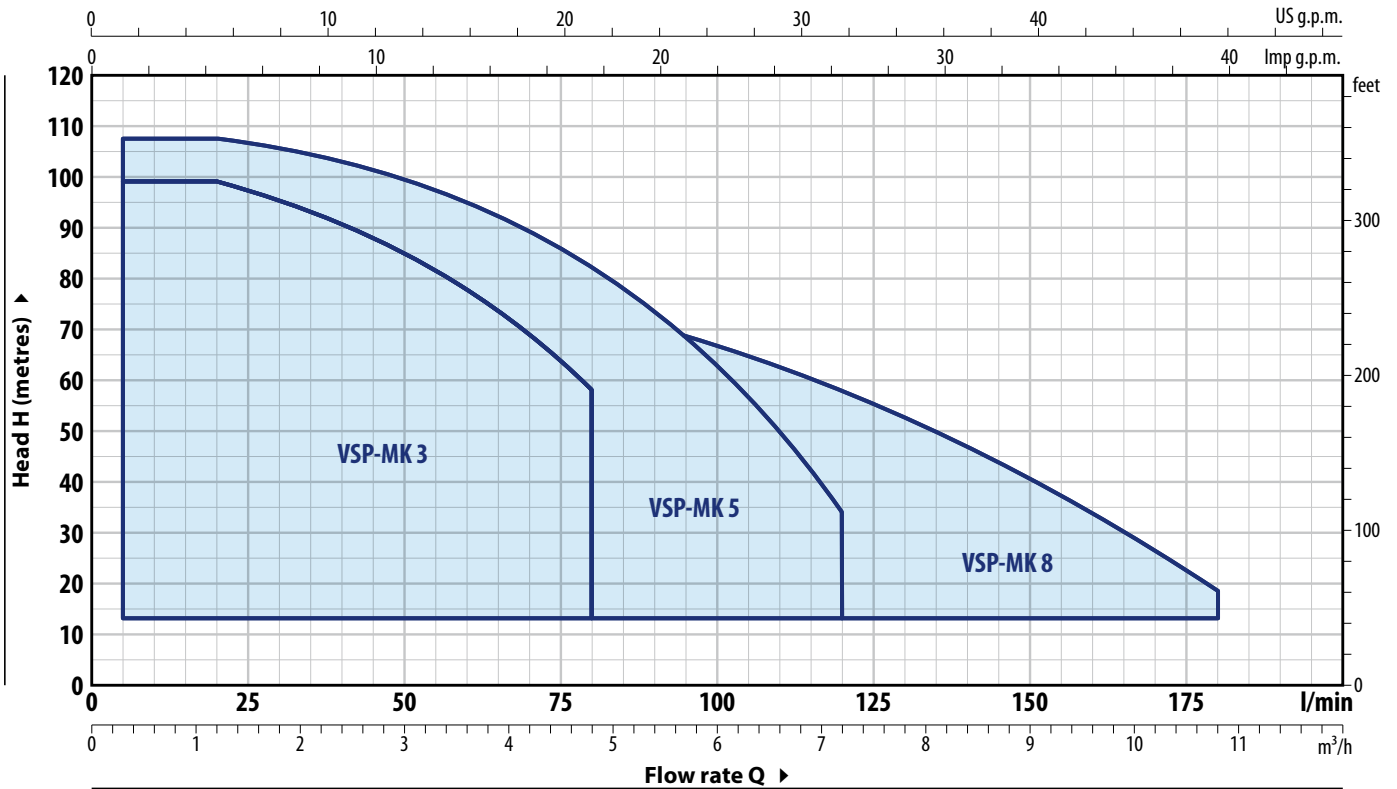
DIMENSIONS AND WEIGHT



Single-phase	TYPE	PORTS		DIMENSIONS mm											kg				
	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		191											21.9	21.9	
-	VSP - PLURIJET 105/130			523		217	75		260	145	59	242	129	113	185	145	11	-	24.1
VSPm - PLURIJET 70/200	VSP - PLURIJET 70/200			497		191											21.9	21.9	
-	VSP - PLURIJET 95/200			523		217											-	24.0	

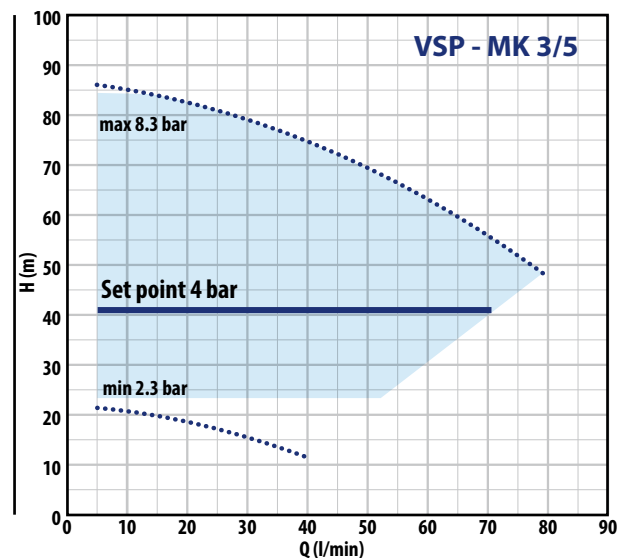
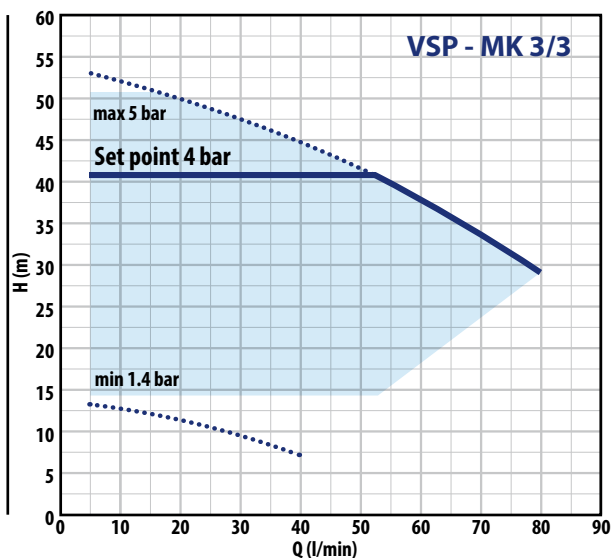
VSP - MK

PERFORMANCE RANGE

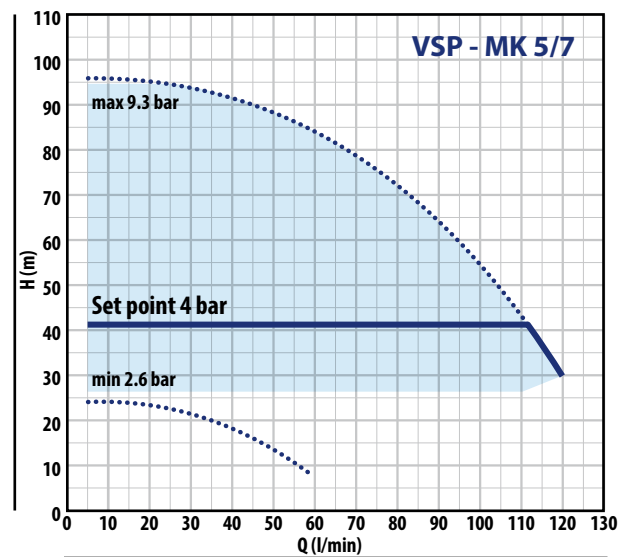
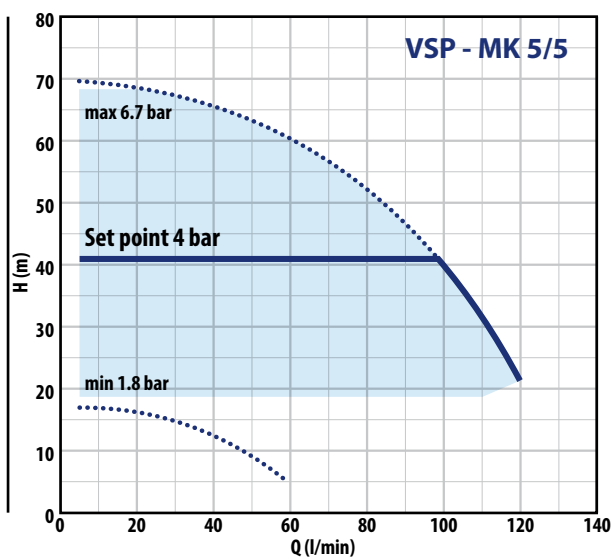
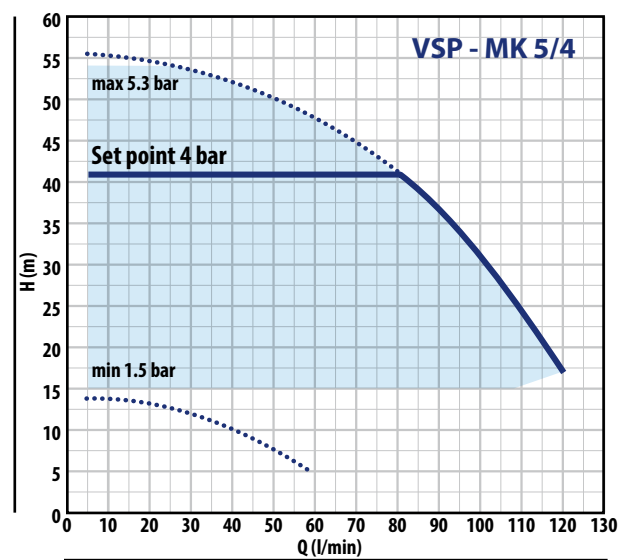
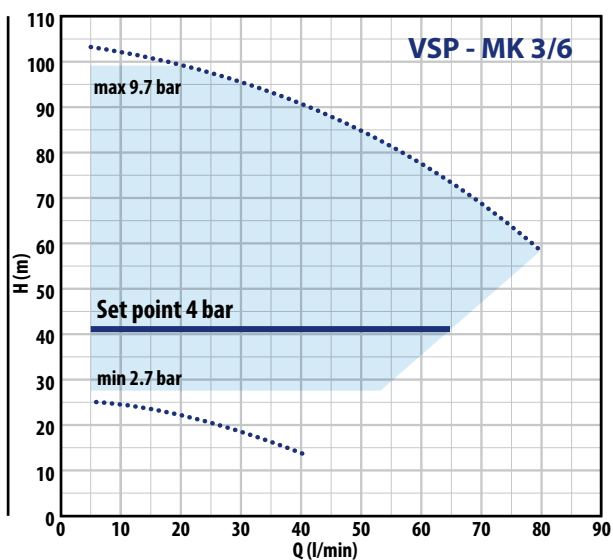
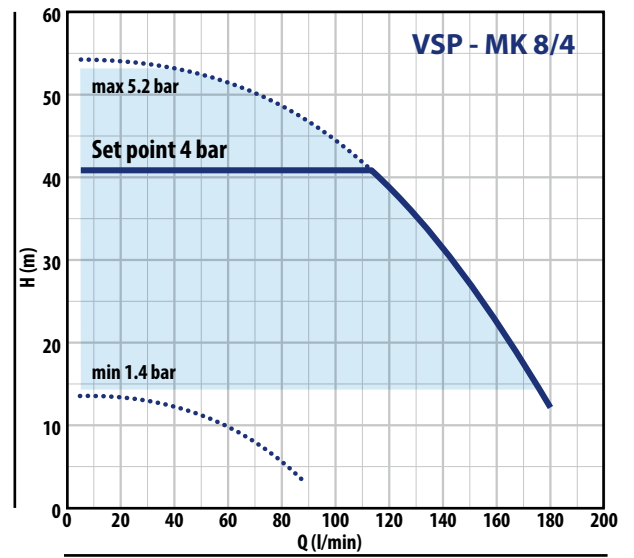
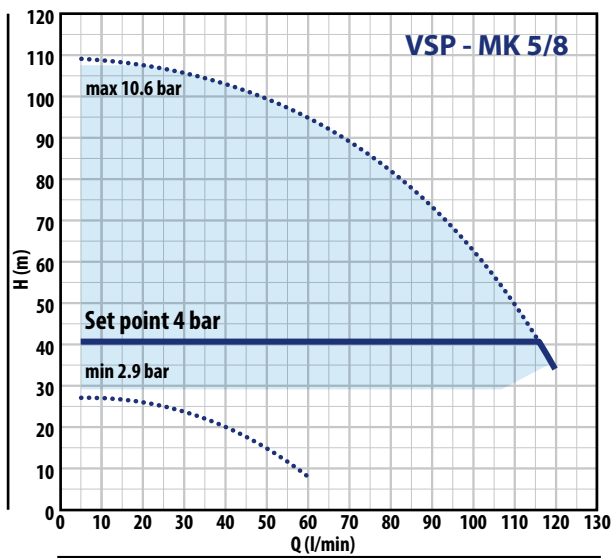


TYPE		POWER P ₂		Q	H m										
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.6	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6
				l/min	0	5	20	40	60	80	100	120	140	160	180
VSPm - MK 3/3	VSP - MK 3/3	0.75	1	H m	51	51	50	45	38.5	29					
VSPm - MK 3/5	VSP - MK 3/5	1.1	1.5		84.5	84.5	83	75	64	48					
VSPm - MK 3/6	VSP - MK 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

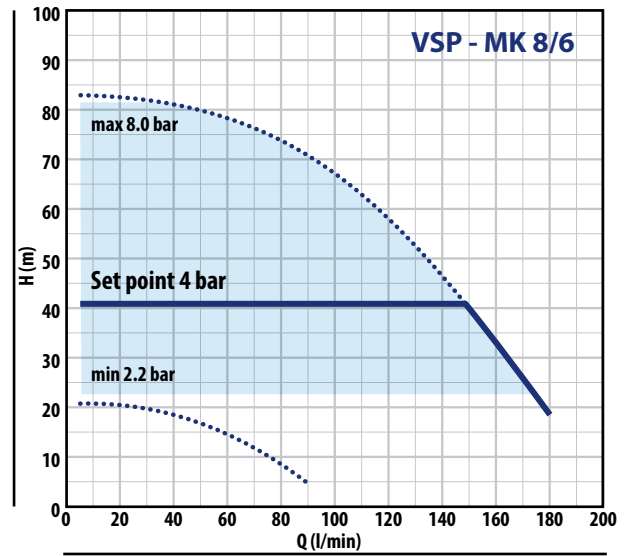
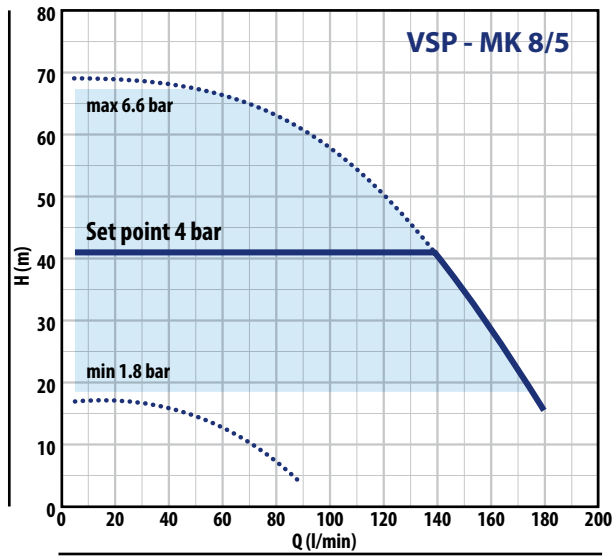


PERFORMANCE CURVES

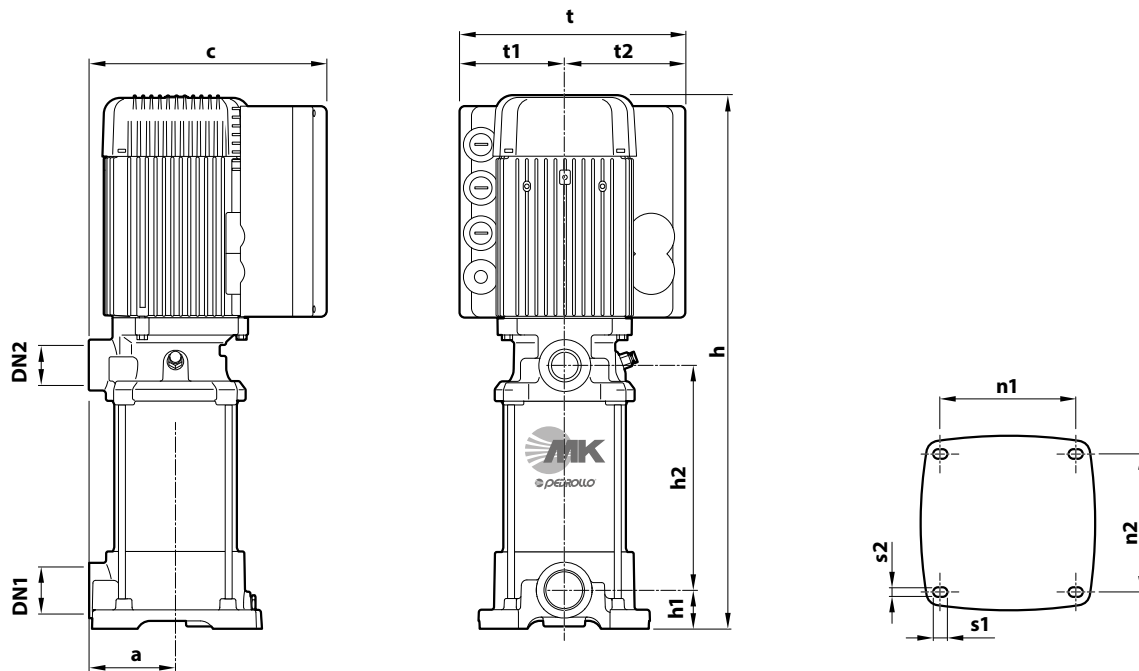


VSP - MK

PERFORMANCE CURVES

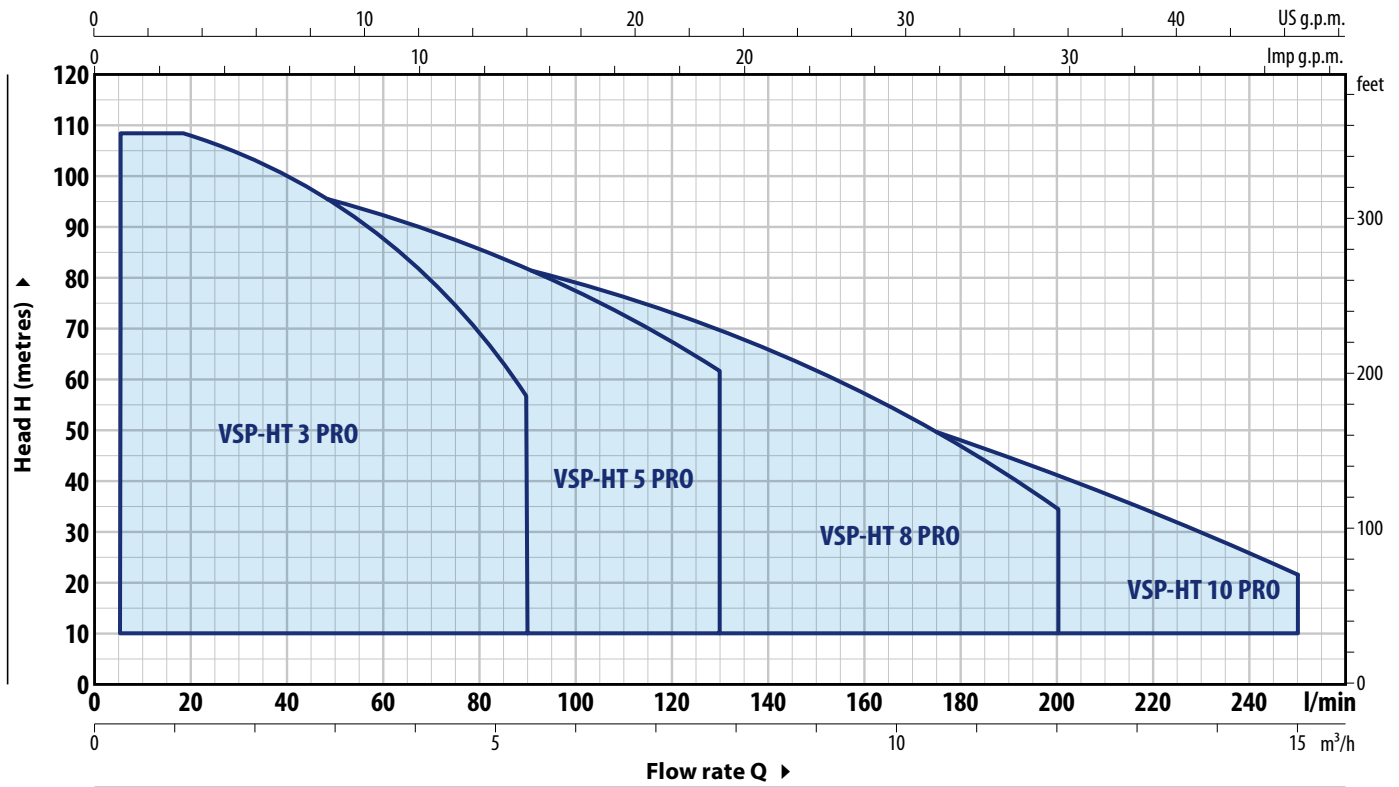


DIMENSIONS AND WEIGHT



TYPE		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	1 1/4"	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

PERFORMANCE RANGE



TYPE		POWER P ₂		Q										
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.3	1.2	1.8	2.4	3	3.6	4.2	4.8
				l/min	0	5	20	30	40	50	60	70	80	90
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

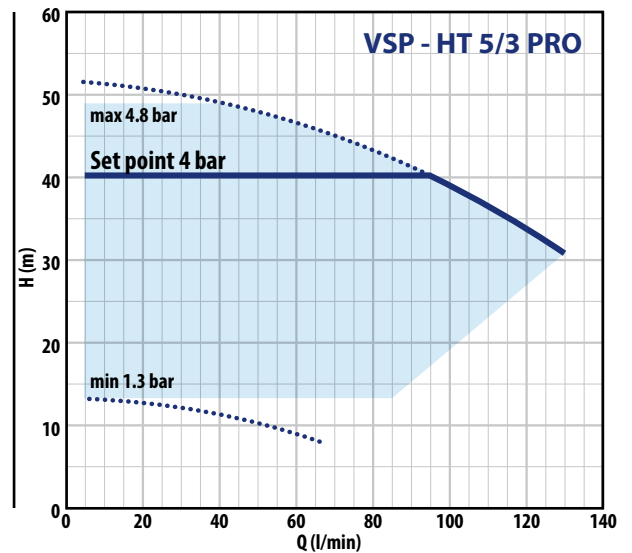
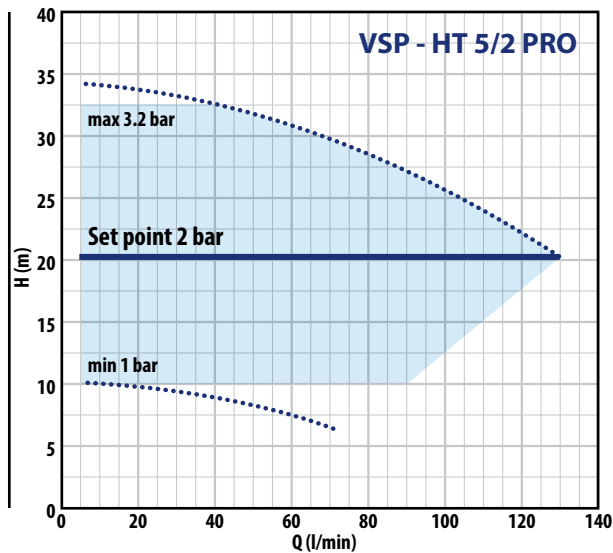
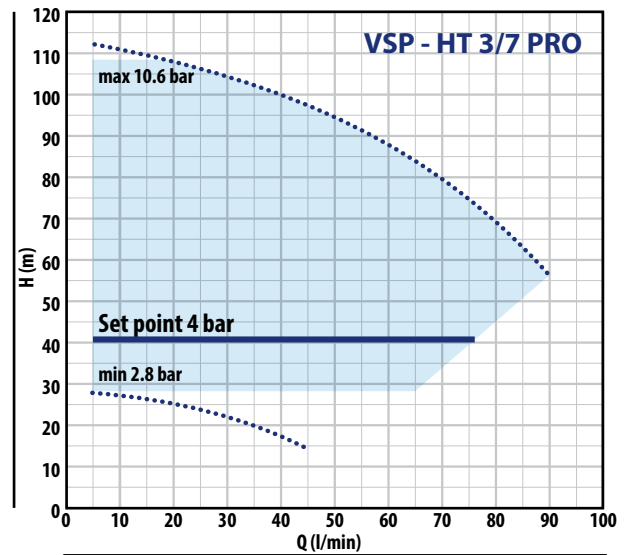
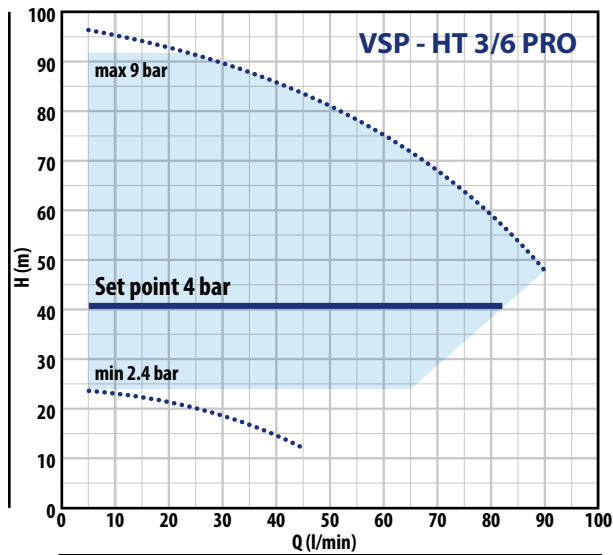
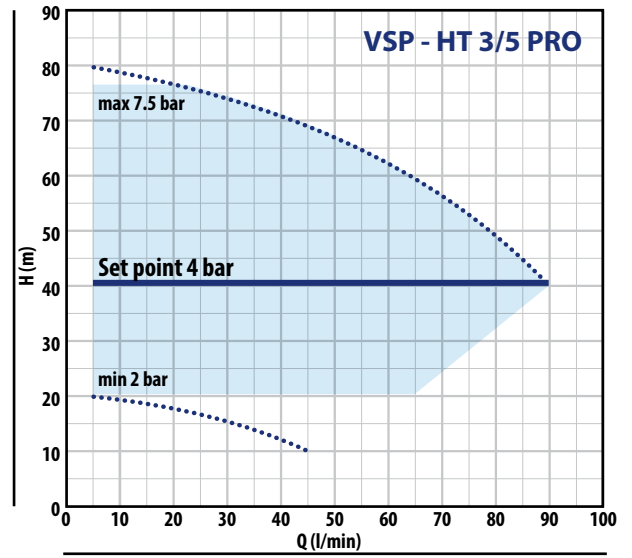
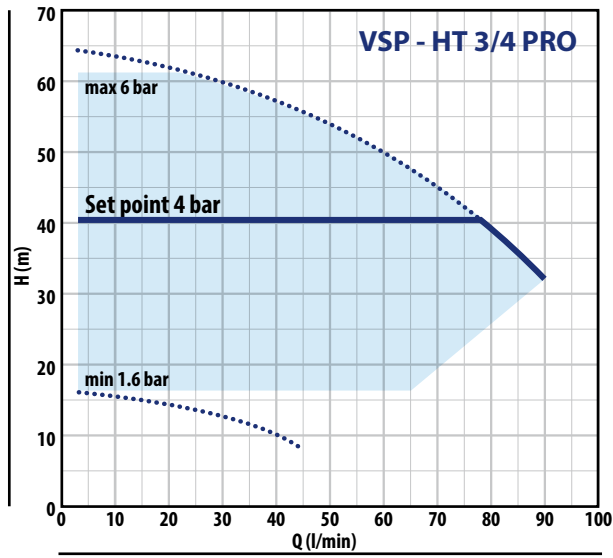
TYPE		POWER P ₂		Q									
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.3	2.4	3.6	4.8	5.4	6	7.8
				l/min	0	5	40	60	80	90	100	130	
VSPm - HT5/2 PRO	VSP - HT5/2 PRO	0.75	1	H m	32.5	32.5	32.5	31	28.5	27.5	26	20.5	
VSPm - HT5/3 PRO	VSP - HT5/3 PRO	1.1	1.5		49	49	49	46.5	43	41	39	31	
VSPm - HT5/4 PRO	VSP - 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		

TYPE		POWER P ₂		Q											
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.3	2.4	3.6	4.8	5.4	7.2	9	10.8	12
				l/min	0	5	40	60	80	90	120	150	180	200	
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	

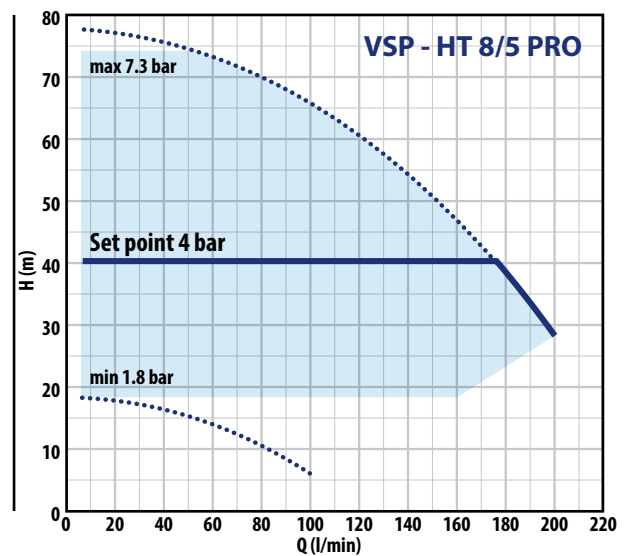
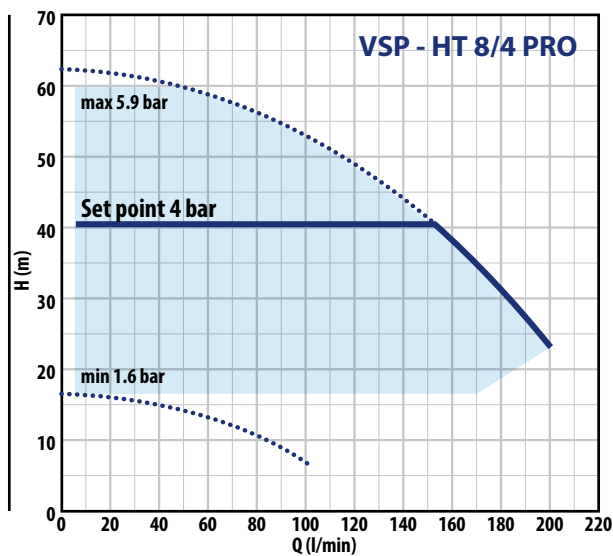
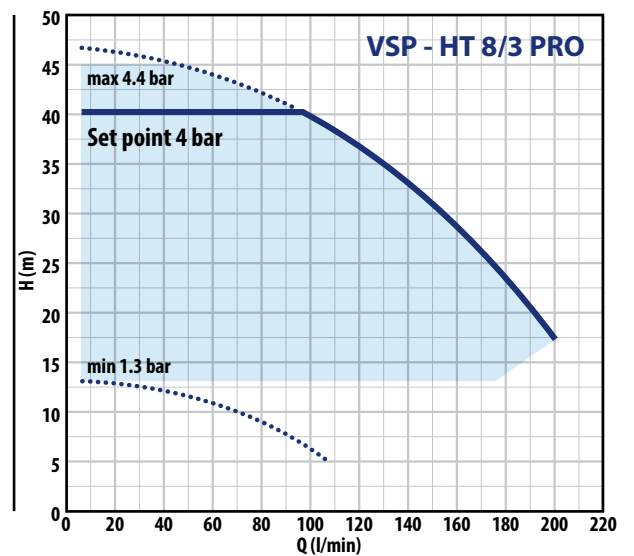
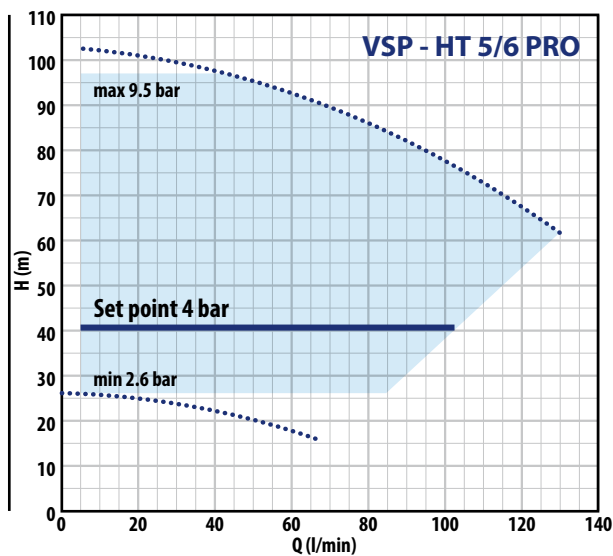
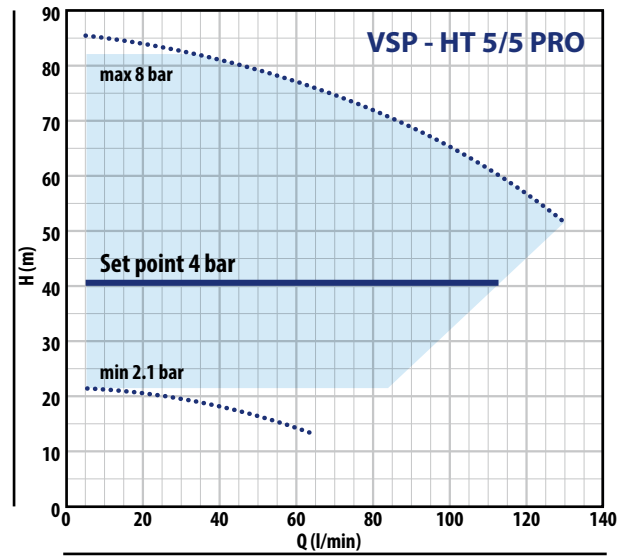
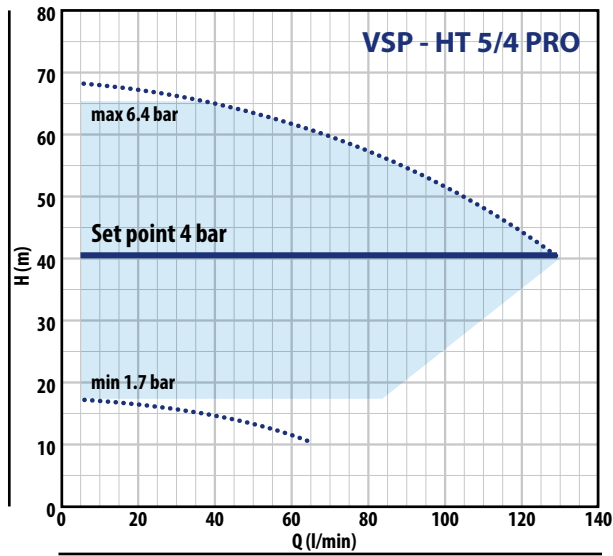
TYPE		POWER P ₂		Q												
Single-phase	Three-phase	kW	HP		m ³ /h	0	0.3	2.4	3.6	4.8	6	7.2	9	11.4	13.2	15
				l/min	0	5	40	60	80	100	120	150	190	220	250	
VSPm - HT10/3 PRO	VSP - HT10/3 PRO	1.5	2	H m	45	45	45	43.5	42	40	38	33.5	26.5	20.5	13	
-	VSP - HT10/4 PRO	1.8	2.5		60	60	60	58	56	53.5	50.5	45	35.5	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	

VSP - HT-PRO

PERFORMANCE CURVES

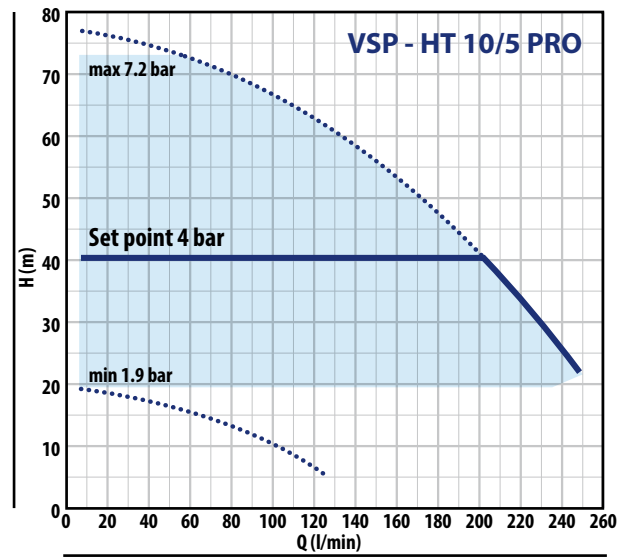
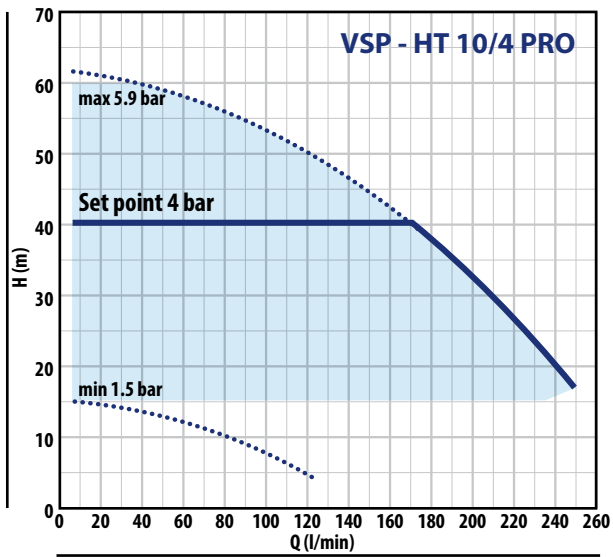
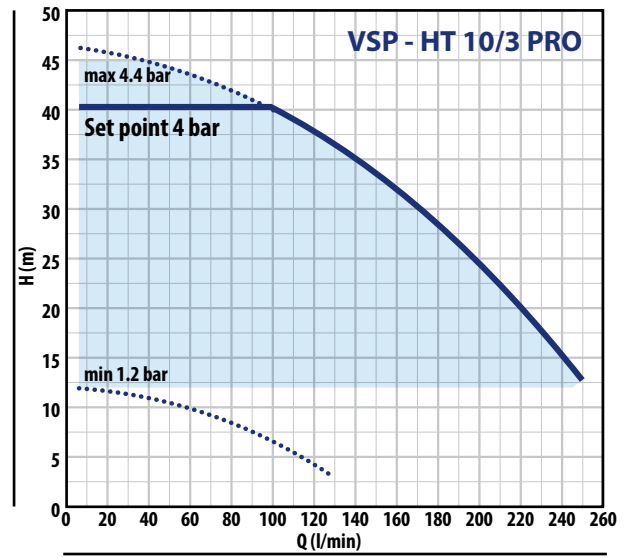
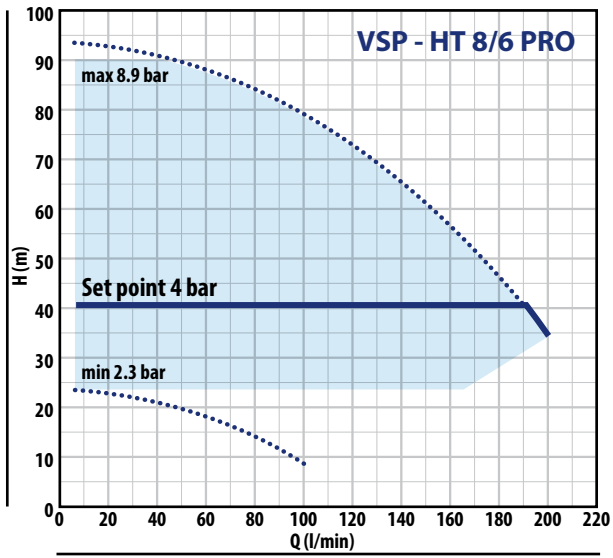


PERFORMANCE CURVES

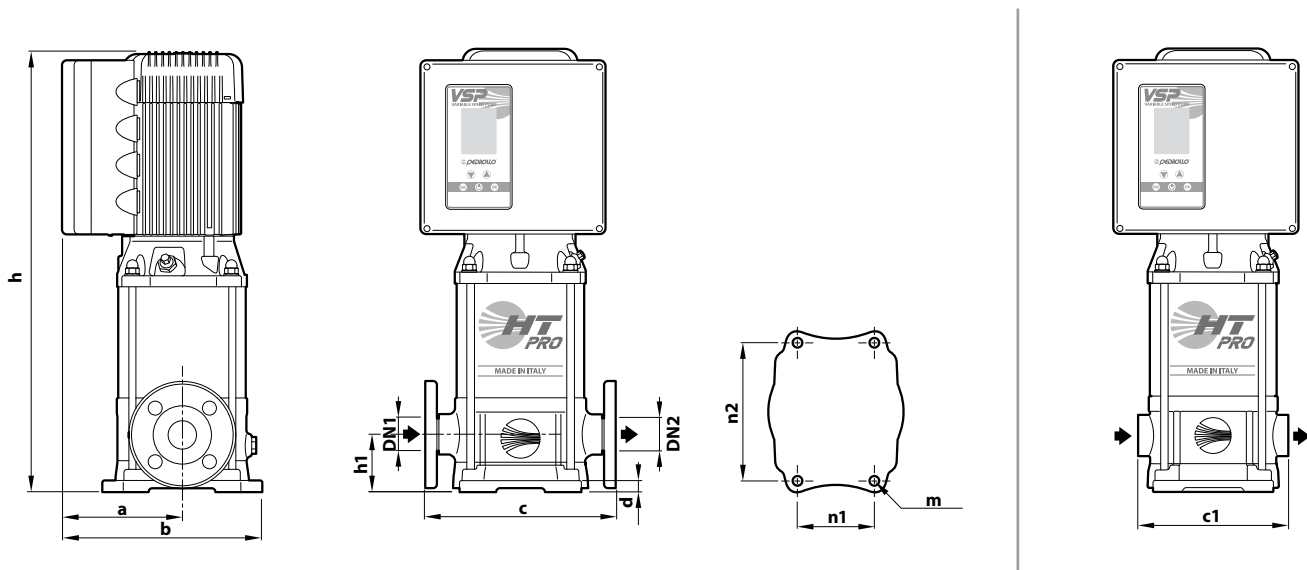


VSP - HT-PRO

PERFORMANCE CURVES



DIMENSIONS AND WEIGHT



TYPE		PORTS		DIMENSIONS mm									kg		
Single-phase	Three-phase	DN1	DN2	a	b	c	c1	d	h	h1	n1	n2	m	1~	3~
VSPm - HT 3/4 PRO	VSP - HT 3/4 PRO	DN25 or 1"	DN25 or 1"	164	269	250	212	15	509	75	100	180	Ø 13	35.3	34.8
VSPm - HT 3/5 PRO	VSP - HT 3/5 PRO								535					35.5	35.0
VSPm - HT 3/6 PRO	VSP - HT 3/6 PRO								561					36.2	37.1
-	VSP - HT 3/7 PRO								607					-	41.2
VSPm - HT 5/2 PRO	VSP - HT 5/2 PRO	DN32 or 1¼"	DN32 or 1¼"						457					33.2	33.2
VSPm - HT 5/3 PRO	VSP - HT 5/3 PRO								483					33.4	33.4
VSPm - HT 5/4 PRO	VSP - HT 5/4 PRO								509					35.3	35.4
-	VSP - HT 5/5 PRO								555					-	39.1
-	VSP - HT 5/6 PRO	581	-			40.1									
VSPm - HT 8/3 PRO	VSP - HT 8/3 PRO	DN40 or 1½"	DN40 or 1½"			488	33.9	33.9							
VSPm - HT 8/4 PRO	VSP - HT 8/4 PRO					514	35.8	35.9							
-	VSP - HT 8/5 PRO					560	-	39.4							
-	VSP - HT 8/6 PRO					586	-	40.2							
VSPm - HT 10/3 PRO	VSP - HT 10/3 PRO					488	34.0	34.0							
-	VSP - HT 10/4 PRO					534	-	36.0							
-	VSP - HT 10/5 PRO	560	-			39.5									

FLANGED

TYPE	DN	D	K	Ø
VSP	mm	mm	mm	mm
HT 3	25	115	85	14
HT 5	32	140	100	18
HT 8	40	150	110	

