

VARIO 1-20

BOOSTER SETS - VARIABLE SPEED

- Easy to install
- Low energy consumption
- Pressure remains constant during supply



DESCRIPTION

The new series of variable speed pressurization booster set VARIO 1-20 represents a reliable solution which is easy to use, for residential and industrial applications. The system involves the installation in parallel of two inverters integrated directly on the motor of each pump installed. The two frequency converters communicate and alternate the starting order of each work cycle, always keeping the pressure constant in the distribution system.

APPLICATIONS

- Lifting and distribution of water in domestic systems in continuous or intermittent operation
- Pressurization systems
- Irrigation
- Industry
- Washes

MECHANICAL DATA

Type of liquid	clean water without suspended solids or abrasive material		
----------------	---	--	--

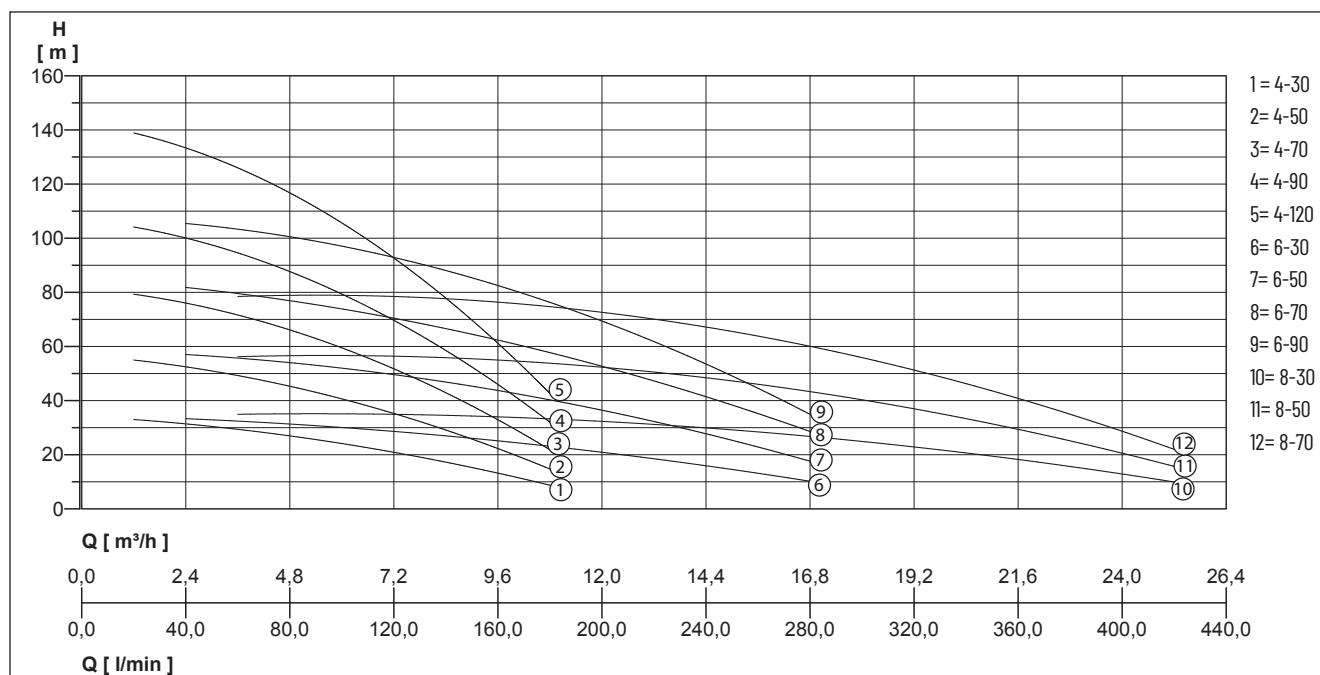
ELECTRICAL DATA

Voltage	1/N/PE~230 V		
---------	--------------	--	--

VARIO 1-20 MULTINOX VE +

BOOSTER SETS - VARIABLE SPEED

PERFORMANCE



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 ISO 9906:2012 - Grade 3B tolerances.

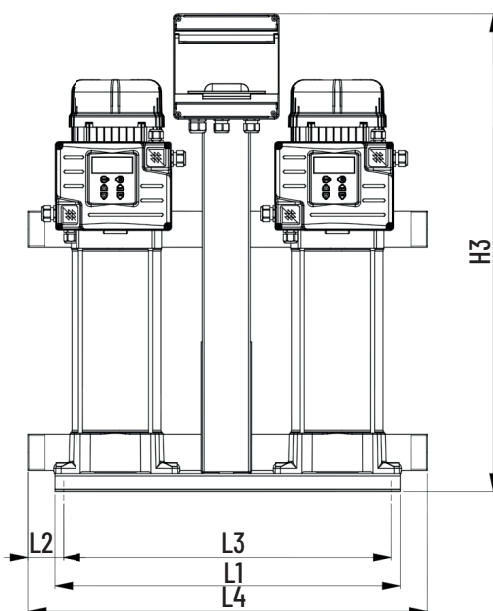
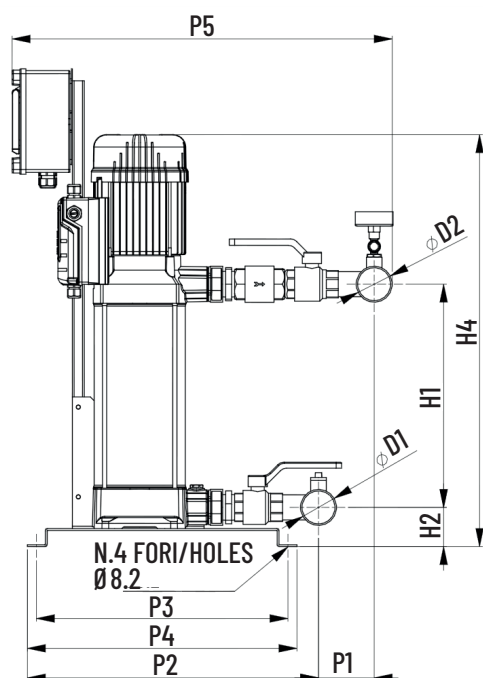
Type	Flow rate Q [m³/h]	1.2	2.4	3.6	4.8	6	7.2	8.4	9.6	10.8	12	14.4	16.8	18	21.6	25.2
VARIO1-20 MULTINOX VE+ 4-30	Delivery head H [m]	33	31	30	27	24	21	17	13	9						
VARIO1-20 MULTINOX VE+ 4-50		55	52	50	45	41	35	29	22	15						
VARIO1-20 MULTINOX VE+ 4-70		79	76	72	67	59	51	43	33	22						
VARIO1-20 MULTINOX VE+ 4-90		104	100	95	88	79	69	59	46	32						
VARIO1-20 MULTINOX VE+ 4-120		138	134	127	117	105	92	78	61	43						
VARIO1-20 MULTINOX VE+ 6-30			34	32	31	30	28	27	26	23	21	16	10			
VARIO1-20 MULTINOX VE+ 6-50			58	56	53	51	49	47	44	41	37	28	17			
VARIO1-20 MULTINOX VE+ 6-70			83	80	77	76	61	68	64	59	55	42	27			
VARIO1-20 MULTINOX VE+ 6-90			107	103	99	97	92	88	83	76	71	54	34			
VARIO1-20 MULTINOX VE+ 8-30				35	35	35	35	35	34	33	32	30	27	25	18	10
VARIO1-20 MULTINOX VE+ 8-50				57	57	56	56	56	54	53	52	50	45	40	28	16
VARIO1-20 MULTINOX VE+ 8-70				80	79	78	78	77	75	74	73	70	60	56	40	22

VARIO 1-20 MULTINOX VE +

Type	Code No.	Motor rating 2xP2	Current 2xI	Type of enclosure	Ambient temperature max.	Operating pressure max.	Temperature of the liquid max.	Weight
VARIO1-20 MULTINOX VE+ 4-30	UI601680	0.7 kW	5.0 A	IP 44	50 °C	16 bar	50 °C	71 kg
VARIO1-20 MULTINOX VE+ 4-50	UI601690	1.3 kW	7.5 A	IP 44	50 °C	16 bar	50 °C	79 kg
VARIO1-20 MULTINOX VE+ 4-70	UI601700	1.3 kW	10.3 A	IP 44	50 °C	16 bar	50 °C	87 kg
VARIO1-20 MULTINOX VE+ 4-90	UI601710	1.5 kW	11.0 A	IP 44	50 °C	16 bar	50 °C	89 kg
VARIO1-20 MULTINOX VE+ 4-120	UI601720	1.5 kW	17.8 A	IP 44	50 °C	16 bar	50 °C	93 kg
VARIO1-20 MULTINOX VE+ 6-30	UI601640	0.7 kW	8.0 A	IP 44	50 °C	16 bar	50 °C	71 kg
VARIO1-20 MULTINOX VE+ 6-50	UI601650	1.3 kW	11.6 A	IP 44	50 °C	16 bar	50 °C	79 kg
VARIO1-20 MULTINOX VE+ 6-70	UI601660	1.5 kW	15.2 A	IP 44	50 °C	16 bar	50 °C	87 kg
VARIO1-20 MULTINOX VE+ 6-90	UI601670	1.5 kW	16.0 A	IP 44	50 °C	16 bar	50 °C	89 kg
VARIO1-20 MULTINOX VE+ 8-30	UI601610	1.3 kW	8.0 A	IP 44	50 °C	16 bar	50 °C	71 kg
VARIO1-20 MULTINOX VE+ 8-50	UI601620	1.5 kW	12.5 A	IP 44	50 °C	16 bar	50 °C	79 kg
VARIO1-20 MULTINOX VE+ 8-70	UI601630	1.5 kW	16.0 A	IP 44	50 °C	16 bar	50 °C	87 kg

VARIO 1-20 MULTINOX VE +

BOOSTER SETS - VARIABLE SPEED



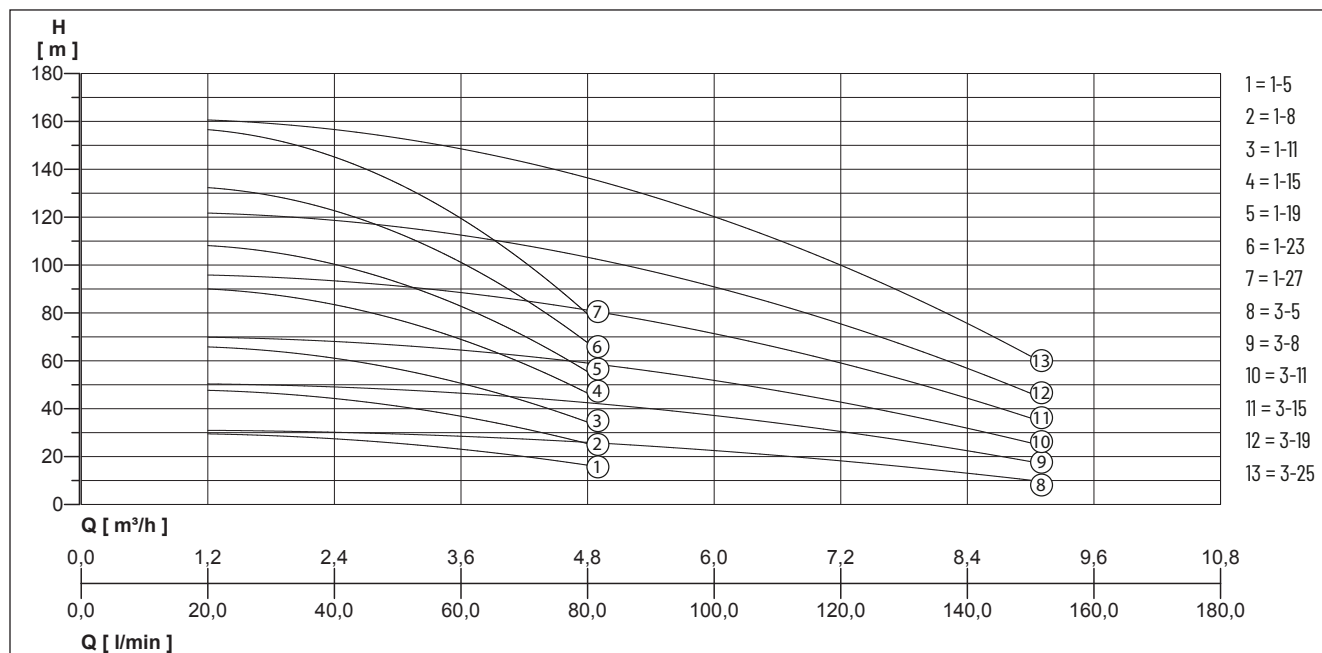
DIMENSIONS [mm]

Type	L1	L2	L3	L4	P1	P2	P3	P4	P5	H1	H2	H3	H4	D1	D2
VARIO1-20 MULTINOX VE+ 4-30	580	70	530	670	90	485	420	450	635	130	65	800	446	2"	2"
VARIO1-20 MULTINOX VE+ 4-50	580	70	530	670	90	485	420	450	635	184	65	800	500	2"	2"
VARIO1-20 MULTINOX VE+ 4-70	580	70	530	670	90	485	420	450	635	238	65	800	554	2"	2"
VARIO1-20 MULTINOX VE+ 4-90	580	70	530	670	90	485	420	450	635	292	65	800	608	2"	2"
VARIO1-20 MULTINOX VE+ 4-120	580	70	530	670	90	485	420	450	635	373	65	800	690	2"	2"
VARIO1-20 MULTINOX VE+ 6-30	580	70	530	670	90	485	420	450	635	130	65	800	446	2"	2"
VARIO1-20 MULTINOX VE+ 6-50	580	70	530	670	90	485	420	450	635	184	65	800	500	2"	2"
VARIO1-20 MULTINOX VE+ 6-70	580	70	530	670	90	485	420	450	635	238	65	800	554	2"	2"
VARIO1-20 MULTINOX VE+ 6-90	580	70	530	670	90	485	420	450	635	292	65	800	608	2"	2"
VARIO1-20 MULTINOX VE+ 8-30	580	70	530	670	90	485	420	450	635	130	65	800	446	2"	2"
VARIO1-20 MULTINOX VE+ 8-50	580	70	530	670	90	485	420	450	635	184	65	800	500	2"	2"
VARIO1-20 MULTINOX VE+ 8-70	580	70	530	670	90	485	420	450	635	238	65	800	554	2"	2"

VARIO 1-20 PVM 1-3

BOOSTER SETS - VARIABLE SPEED

PERFORMANCE



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 ISO 9906:2012 - Grade 3B tolerances.

Type	Flow rate Q [m³/h]	0	1.2	2.4	3.6	4.8	6	7.2	8.4	9
VARIO1-20 PVM 1-5 F	Delivery head H [m]	30.4	29.4	27.7	22.8	16.5				
VARIO1-20 PVM 1-8 F		48.8	47.6	44.5	36.6	25.5				
VARIO1-20 PVM 1-11 F		67.2	65.7	61.4	50.3	34.5				
VARIO1-20 PVM 1-15 F		91.6	89.9	83.8	68.6	46.6				
VARIO1-20 PVM 1-19 F		110.0	108.0	100.7	82.4	55.6				
VARIO1-20 PVM 1-23 F		134.5	132.2	123.1	100.7	67.7				
VARIO1-20 PVM 1-27 F		159.0	156.4	145.6	119.0	79.7				
VARIO1-20 PVM 3-5 F		31.9	31.1	30.0	28.3	26.2	22.6	18.0	13.3	10.0
VARIO1-20 PVM 3-8 F		51.9	50.5	48.9	46.2	42.9	37.3	30.1	22.7	17.8
VARIO1-20 PVM 3-11 F		71.8	70.0	67.9	64.1	59.6	52.1	42.1	32.1	25.7
VARIO1-20 PVM 3-15 F		98.4	96.0	93.2	88.0	81.9	71.7	58.2	44.7	36.1
VARIO1-20 PVM 3-19 F		125.0	121.9	118.4	111.9	104.2	91.3	74.3	57.2	46.5
VARIO1-20 PVM 3-25 F		164.9	160.8	156.3	147.8	137.6	120.8	98.4	76.0	62.1

VARIO 1-20 PVM 1-3

Type	Code No.	Motor rating 2xP2	Current 2xI	Type of enclosure	Ambient temperature max.	Operating pressure max.	Temperature of the liquid max.	Weight
VARIO1-20 PVM 1-5 F	UI602030	0.37 kW	3.4 A	IP 55	50 °C	16 bar	120 °C	60 kg
VARIO1-20 PVM 1-8 F	UI602040	0.55 kW	4.1 A	IP 55	50 °C	16 bar	120 °C	62 kg
VARIO1-20 PVM 1-11 F	UI602050	0.55 kW	4.8 A	IP 55	50 °C	16 bar	120 °C	67 kg
VARIO1-20 PVM 1-15 F	UI602060	0.75 kW	5.8 A	IP 55	50 °C	16 bar	120 °C	73 kg
VARIO1-20 PVM 1-19 F	UI602070	1.10 kW	7.4 A	IP 55	50 °C	16 bar	120 °C	80 kg
VARIO1-20 PVM 1-23 F	UI602080	1.10 kW	8.3 A	IP 55	50 °C	16 bar	120 °C	90 kg
VARIO1-20 PVM 1-27 F	UI602090	1.50 kW	9.9 A	IP 55	50 °C	16 bar	120 °C	94 kg
VARIO1-20 PVM 3-5 F	UI602100	0.37 kW	3.0 A	IP 55	50 °C	16 bar	120 °C	62 kg
VARIO1-20 PVM 3-8 F	UI602110	0.75 kW	4.8 A	IP 55	50 °C	16 bar	120 °C	65 kg
VARIO1-20 PVM 3-11 F	UI602120	1.10 kW	6.6 A	IP 55	50 °C	16 bar	120 °C	73 kg
VARIO1-20 PVM 3-15 F	UI602130	1.10 kW	9.0 A	IP 55	50 °C	16 bar	120 °C	75 kg
VARIO1-20 PVM 3-19 F	UI602140	1.50 kW	11.0 A	IP 55	50 °C	16 bar	120 °C	80 kg
VARIO1-20 PVM 3-25 F	UI602150	2.20 kW	15.0 A	IP 55	50 °C	16 bar	120 °C	90 kg

VARIO 1-20 PVM 1-3

BOOSTER SETS - VARIABLE SPEED

Fig. 1

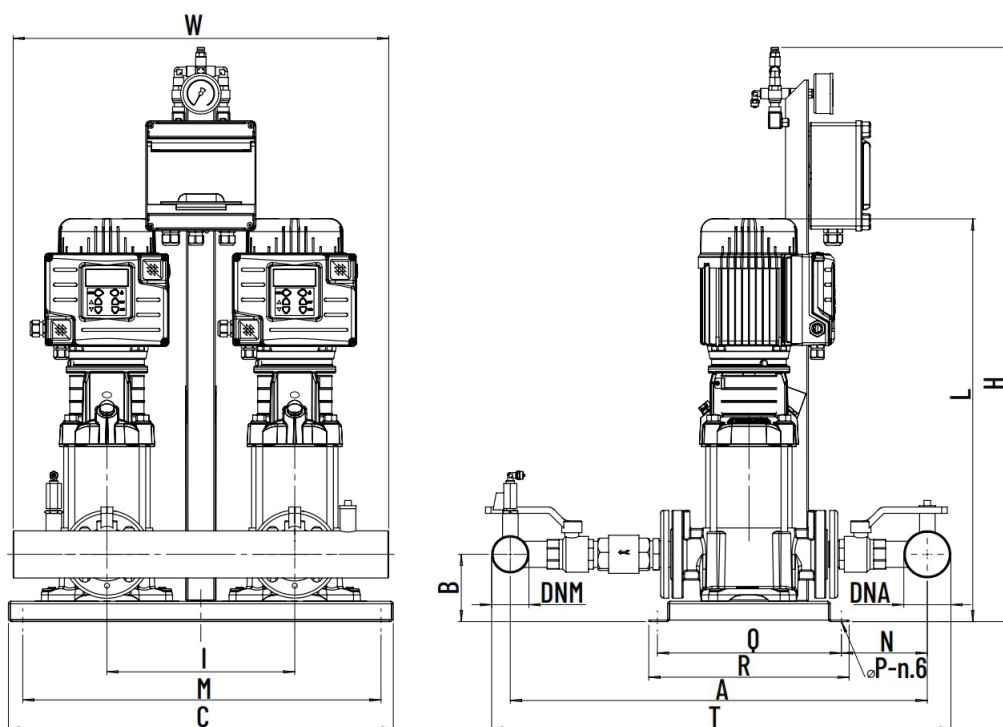
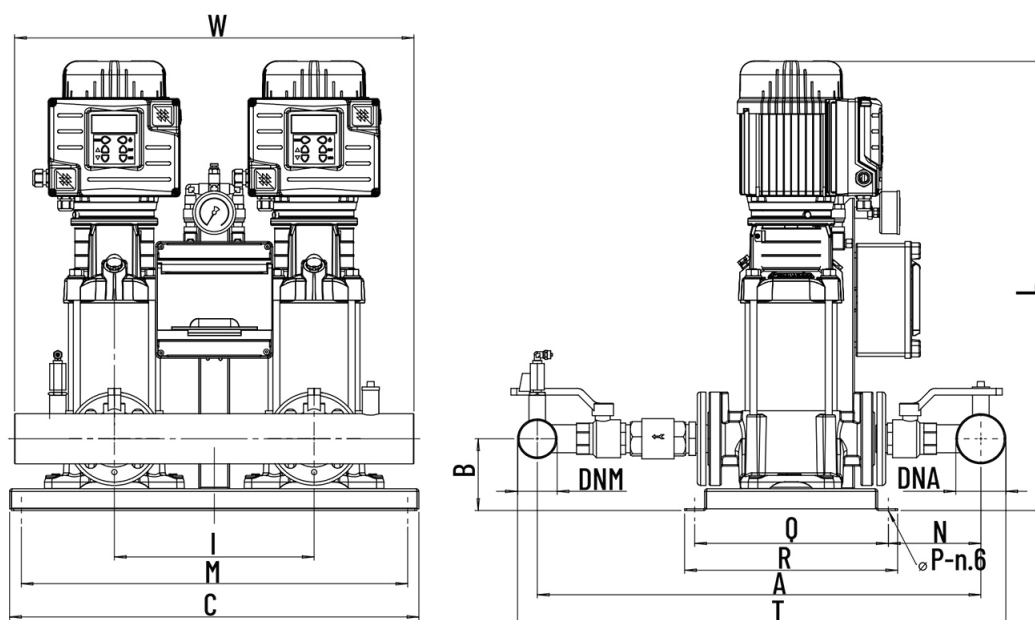


Fig. 2



VARIO 1-20 PVM 1-3

BOOSTER SETS - VARIABLE SPEED

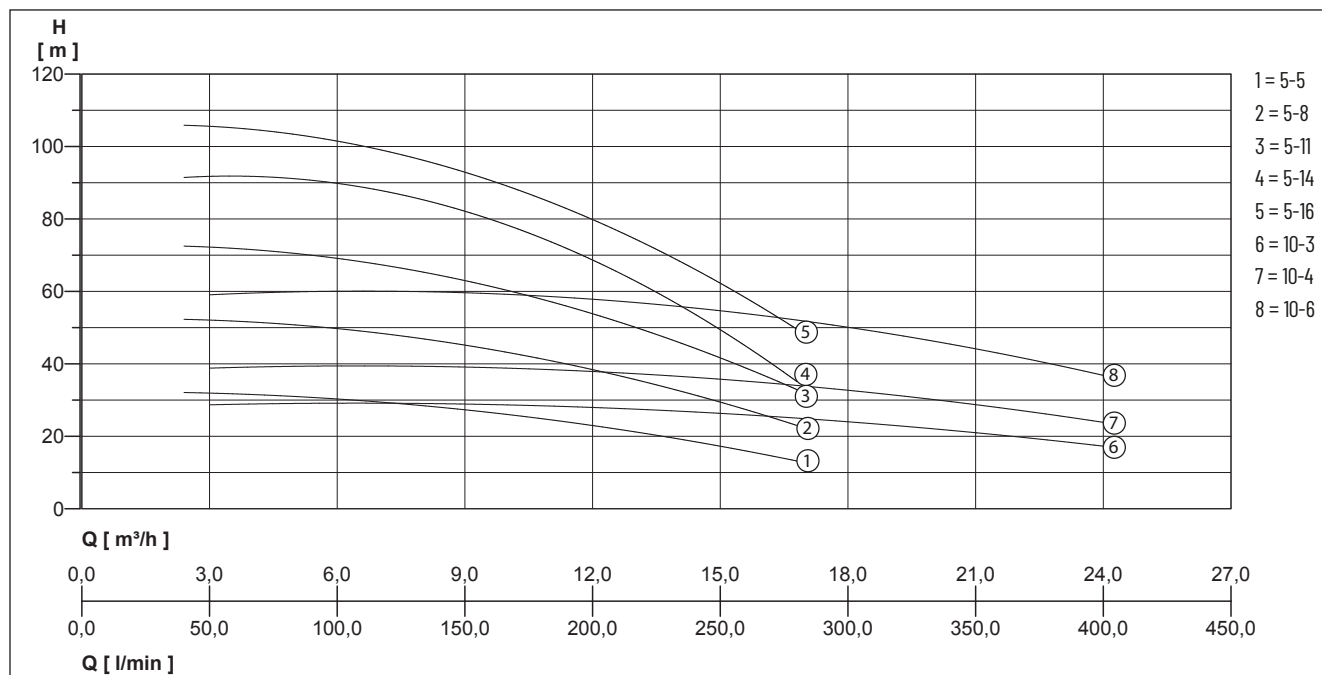
DIMENSIONS [mm]

Type	Fig.	A	B	C	H	I	L	M	N	P	Q	R	T	W	DNA	DNM
VARIO1-20 PVM 1-5 F	1	672	105	615	925	300	558	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 1-8 F	1	672	105	615	925	300	612	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 1-11 F	1	672	105	615	925	300	667	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 1-15 F	2	672	105	615		300	770	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 1-19 F	2	672	105	615		300	843	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 1-23 F	2	672	105	615		300	914	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 1-27 F	2	672	105	615		300	1035	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 3-5 F	1	672	105	615	925	300	558	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 3-8 F	1	672	105	615	925	300	644	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 3-11 F	2	672	105	615		300	699	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 3-15 F	2	672	105	615		300	770	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 3-19 F	2	672	105	615		300	890	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 3-25 F	2	672	105	615		300	997	580	145	8,2	290	320	730	600	2"	2"

VARIO 1-20 PVM 5-10

BOOSTER SETS - VARIABLE SPEED

PERFORMANCE



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 ISO 9906:2012 - Grade 3B tolerances.

Type	Flow rate Q [m³/h]	0	3	4.8	6	7.2	9	9.6	12	14.4	15	16.8	18	21	24
VARIO1-20 PVM 5-5 F	Delivery head H [m]	32.3		31.1		29.4		26.8	22.9	18.0		13.5			
VARIO1-20 PVM 5-8 F		52.9		51.1		48.5		44.3	38.2	30.5		23.6			
VARIO1-20 PVM 5-11 F		73.5		71.1		67.5		61.8	53.5	43.0		33.8			
VARIO1-20 PVM 5-14 F		94.1		91.1		86.6		79.4	68.9	55.8		43.9			
VARIO1-20 PVM 5-16 F		107.8		104.5		99.3		91.0	79.1	64.7		50.7			
VARIO1-20 PVM 10-3 F		28.6	28.9		29.0		28.7		27.8		26.4		24.4	21.0	17.1
VARIO1-20 PVM 10-4 F		38.8	39.1		39.2		38.9		37.7		35.8		33.2	28.8	23.6
VARIO1-20 PVM 10-6 F		59.2	59.4		59.8		59.4		57.5		54.7		50.8	44.2	36.5

VARIO 1-20 PVM 5-10

Type	Code No.	Motor rating 2xP2	Current 2xI	Type of enclosure	Ambient temperature max.	Operating pressure max.	Temperature of the liquid max.	Weight
VARIO1-20 PVM 5-5 F	UI602160	0.75 kW	5.4 A	IP 55	50 °C	16 bar	120 °C	76 kg
VARIO1-20 PVM 5-8 F	UI602170	1.10 kW	8.7 A	IP 55	50 °C	16 bar	120 °C	80 kg
VARIO1-20 PVM 5-11 F	UI602180	2.20 kW	12.0 A	IP 55	50 °C	16 bar	120 °C	92 kg
VARIO1-20 PVM 5-14 F	UI602190	2.20 kW	15.2 A	IP 55	50 °C	16 bar	120 °C	98 kg
VARIO1-20 PVM 5-16 F	UI602200	2.20 kW	17.4 A	IP 55	50 °C	16 bar	120 °C	100 kg
VARIO1-20 PVM 10-3 F	UI602210	1.10 kW	2.4 A	IP 55	50 °C	16 bar	120 °C	100 kg
VARIO1-20 PVM 10-4 F	UI602220	1.50 kW	3.2 A	IP 55	50 °C	16 bar	120 °C	110 kg
VARIO1-20 PVM 10-6 F	UI602230	2.20 kW	4.8 A	IP 55	50 °C	16 bar	120 °C	120 kg

VARIO 1-20 PVM 5-10

BOOSTER SETS - VARIABLE SPEED

Fig. 1

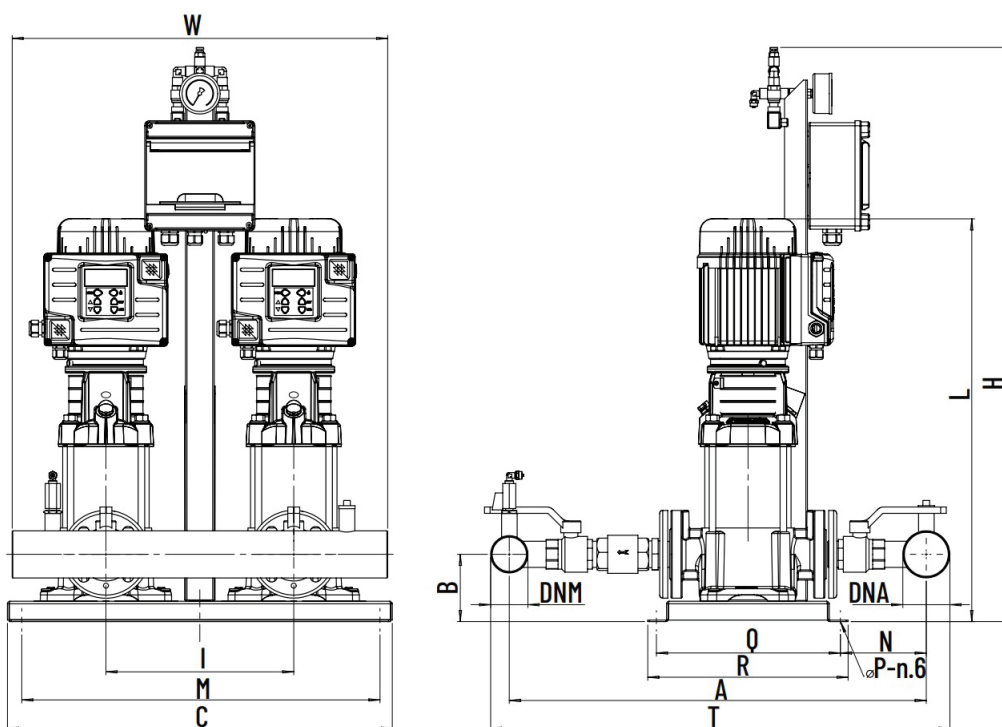
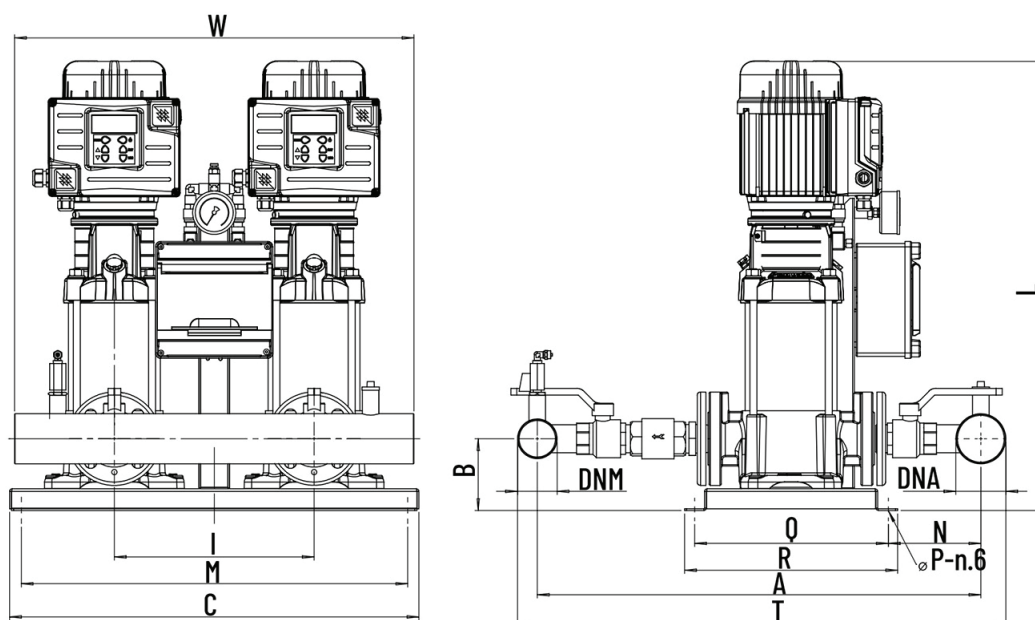


Fig. 2



VARIO 1-20 PVM 5-10

BOOSTER SETS - VARIABLE SPEED

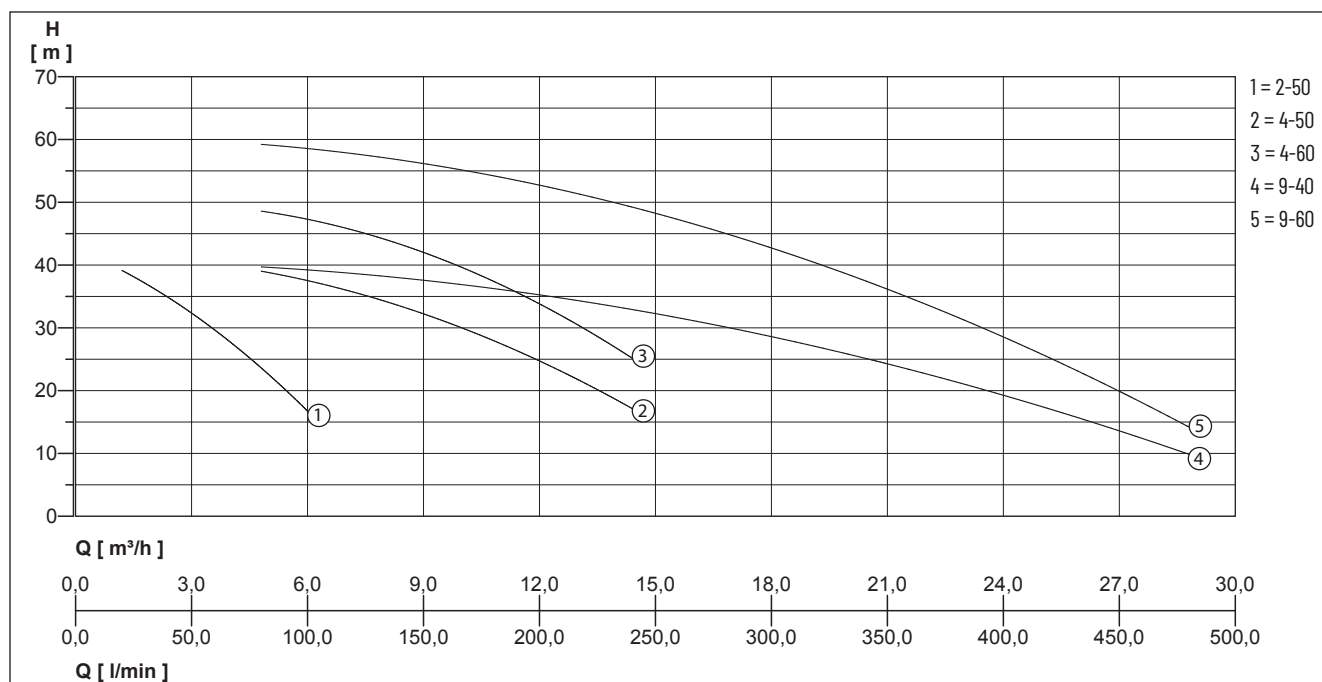
DIMENSIONS [mm]

Type	Fig.	A	B	C	H	I	L	M	N	P	Q	R	T	W	DNA	DNM
VARIO1-20 PVM 5-5 F	1	672	105	615	925	300	636	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 5-8 F	2	672	105	615		300	715	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 5-11 F	2	672	105	615		300	843	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 5-14 F	2	672	105	615		300	924	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 5-16 F	2	672	105	615		300	978	580	145	8,2	290	320	730	600	2"	2"
VARIO1-20 PVM 10-3 F	1	750	113	615	925	300	647	580	176	8,2	290	320	730	600	2 1/2"	2 1/2"
VARIO1-20 PVM 10-4 F	2	750	113	615		300	722	580	176	8,2	290	320	730	600	2 1/2"	2 1/2"
VARIO1-20 PVM 10-6 F	2	750	113	615		300	782	580	176	8,2	290	320	730	600	2 1/2"	2 1/2"

VARIO 1-20 DHR

BOOSTER SETS - VARIABLE SPEED

PERFORMANCE



We reserve the right to change specifications without notice. Pump performance is subject to ISO 9906 ISO 9906:2012 - Grade 3B tolerances.

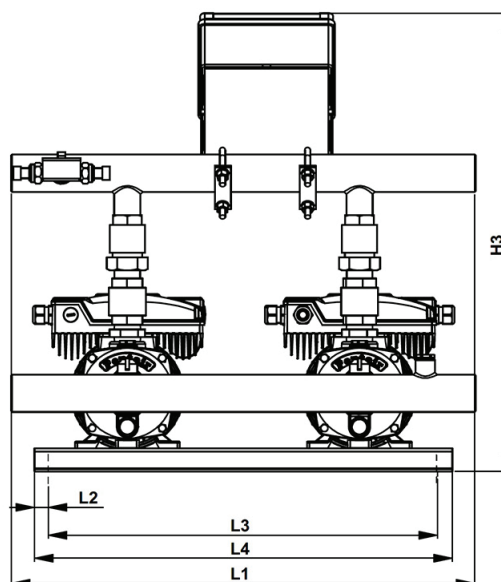
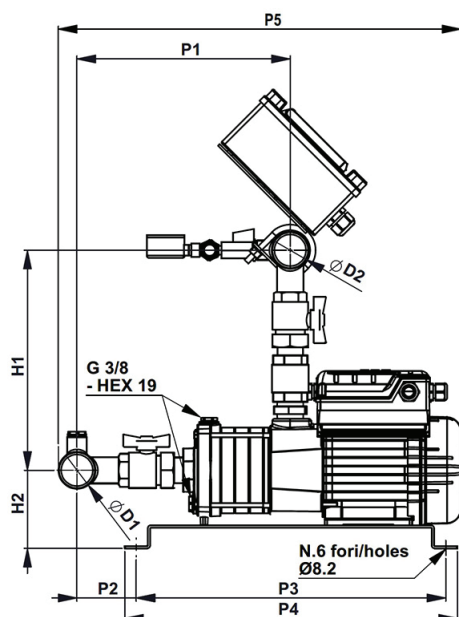
Type	Flow rate Q [m³/h]	1.2	2.4	3.6	4.8	6	7.2	9.6	12	14.4	19.2	24	28.8
VARIO 1-20/DHR 2-50	Delivery head H [m]	39	35	30	23	17							
VARIO 1-20/DHR 4-50					39	38	35	31	25	17			
VARIO 1-20/DHR 4-60					49	47	45	41	34	25			
VARIO 1-20/DHR 9-40					40	39	38	38	35	33	27	19	10
VARIO 1-20/DHR 9-60					60	58	57	56	53	49	40	29	14

VARIO 1-20 DHR

Type	Code No.	Motor rating 2xP2	Current 2xl	Temperature of the liquid max.	Weight
VARIO 1-20/DHR 2-50	UI601860	0.75 kW	5.5 A	90 °C	57 kg
VARIO 1-20/DHR 4-50	UI601870	0.90 kW	9.1 A	90 °C	62 kg
VARIO 1-20/DHR 4-60	UI601880	1.30 kW	9.5 A	90 °C	68 kg
VARIO 1-20/DHR 9-40	UI601890	1.30 kW	12.5 A	90 °C	77 kg
VARIO 1-20/DHR 9-60	UI601900	1.50 kW	18.4 A	90 °C	89 kg

VARIO 1-20 DHR

BOOSTER SETS - VARIABLE SPEED



DIMENSIONS [mm]

Type	L1	L2	L3	L4	P1	P2	P3	P4	P5	H1	H2	H3	D1	D2
VARIO 1-20/DHR 2-50	600	25	490	540	275	77	400	430	516	285	101	592	1 1/2"	1 1/2"
VARIO 1-20/DHR 4-50	600	25	490	540	327	128	400	430	576	285	101	592	2"	1 1/2"
VARIO 1-20/DHR 4-60	600	25	490	540	356	150	400	430	630	265	120	580	2"	1 1/2"
VARIO 1-20/DHR 9-40	600	25	490	540	320	136	400	430	624	338	120	657	2 1/2"	2"
VARIO 1-20/DHR 9-60	600	25	490	540	381	197	400	430	770	338	120	657	2 1/2"	2"

VARIO 1-20

BOOSTER SETS - VARIABLE SPEED