

50Hz



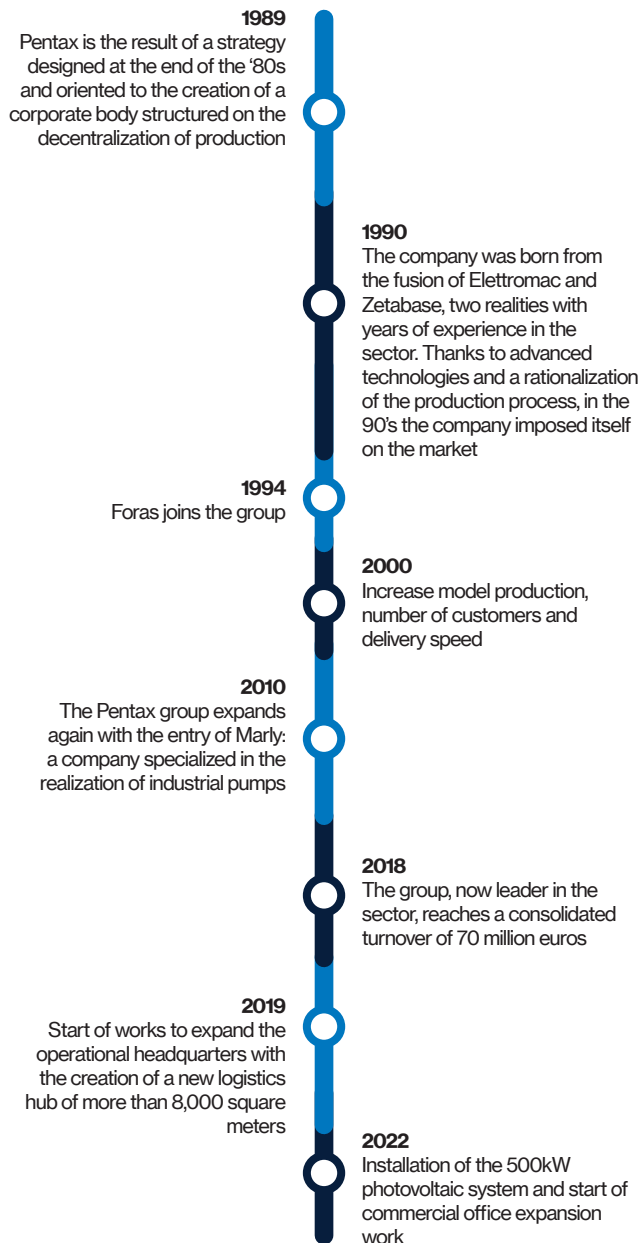
GENERAL CATALOGUE

www.pentax-pumps.it



HISTORY

For many years **Pentax** has held a large share of the world market for motorized pumps. The sales department is constantly working to better serve existing customers and to open up new markets. This is possible thanks to the wide range of products available which allows to cover most of the applications in the pump field. Special attention is also paid to market surveys, so that any new requirements can be immediately transferred to the research and development department: the best way to properly develop and forecast future scenarios.



MISSION

After more than **20 years of activity** we can finally trace the guidelines that have governed and directed the industrial development of **Pentax Industries SpA**. Actions and processes that have intersected with the obvious aim of creating value, benefits to be redistributed to the various components of the production and distribution process.

A rational allocation of available resources, together with a refined program of production decentralization have allowed the company to adapt to changing market conditions, each time with extreme rapidity.

Maximum attention to the markets, therefore, with the commitment to respond in real time to the specific needs of the different markets, paying particular attention to technological progress. All this in the perspective of a careful policy for **customer satisfaction**.



“Creating value is our main goal”

Gianluigi Pedrollo, Chair man

VALUES



Reliability

Choosing Pentax means choosing safety at every stage

Quality

Where there is control, there is reliability: the basis for success

Speed

Impeccable delivery time

Flexibility

Pentax studies each case thoroughly, identifies the best solution and then takes action with security

Variety

The best service: a wide range of Pentax products, one for every need



OFFICIAL JOURNAL OF THE EUROPEAN UNION

Regulation UE 547/2012

ANNEX II

«The benchmark for most efficient water pumps is $MEI \geq 0,70$ ».

«The efficiency of a pump with a trimmed impeller is usually lower than that of a pump with the full impeller diameter. The trimming of the impeller will adapt the pump to a fixed duty point, leading to reduced energy consumption. The minimum efficiency index (MEI) is based on the full impeller diameter».

«The operation of this water pump with variable duty points may be more efficient and economic when controlled, for example, by the use of a variable speed drive that matches the pump duty to the system».

Information on benchmark efficiency is available at:

www.europump.org/efficiencycharts.



MSV-4MSV

Industrial Line

Multi-stage centrifugal pumps that guarantee high pressure. Particularly suitable for civil and industrial applications, in particular pressurisation, fire fighting and washing systems.

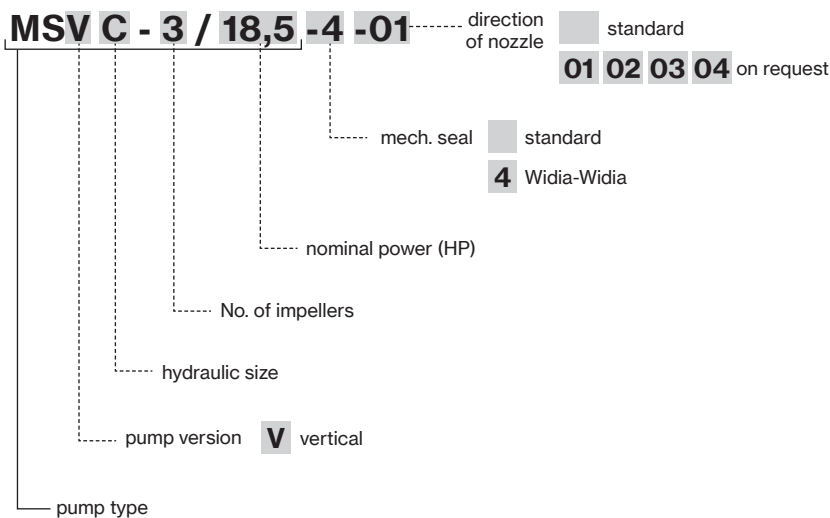


Construction features

Pump body	cast iron
Motor bracket	cast iron
Impeller	brass
Mechanical seal	ceramic-graphite-NBR
Shaft	stainless steel AISI 304
Liquid temperature	-10 ÷ +90 °C
Operating pressure	max 30 bar

Motor

2 and 4 poles induction motor	3~ 230/400V - 50Hz P ≤ 4kW 3~ 400/690V - 50Hz P > 4kW
Insulation class	F
Protection degree	IPX5



MSV ~2900 rpm

TYPE		P2		P1 kW	I(A) 3- 400V	Q (m³/h - l/min - l/s)							
						0	6	9	12	15	18	21	24
		100	150	200	250		300	350	400				
		1,67	2,5	3,33	4,17		5	5,83	6,67				
		HP	kW			H (m)							
MSVA	-3/5,5					7,5	5,5	6,0	10,1	88,2	86,3	83,7	78,6
	-4/7,5	10	7,5	7,8	13,0	118,0	116,7	113,0	106,5	96,8	85,2	73,1	59,7
	-5/9,2	12,5	9,2	9,8	16,4	148,2	145,9	138,8	130,0	119,8	105,2	90,7	73,8
	-6/11	15	11	11,8	19,6	177,5	174,2	168,9	158,9	144,2	126,7	107,9	88,0
	-8/15	20	15	15,5	26,3	237,8	233,4	227,0	213,8	194,8	171,4	146,0	119,5

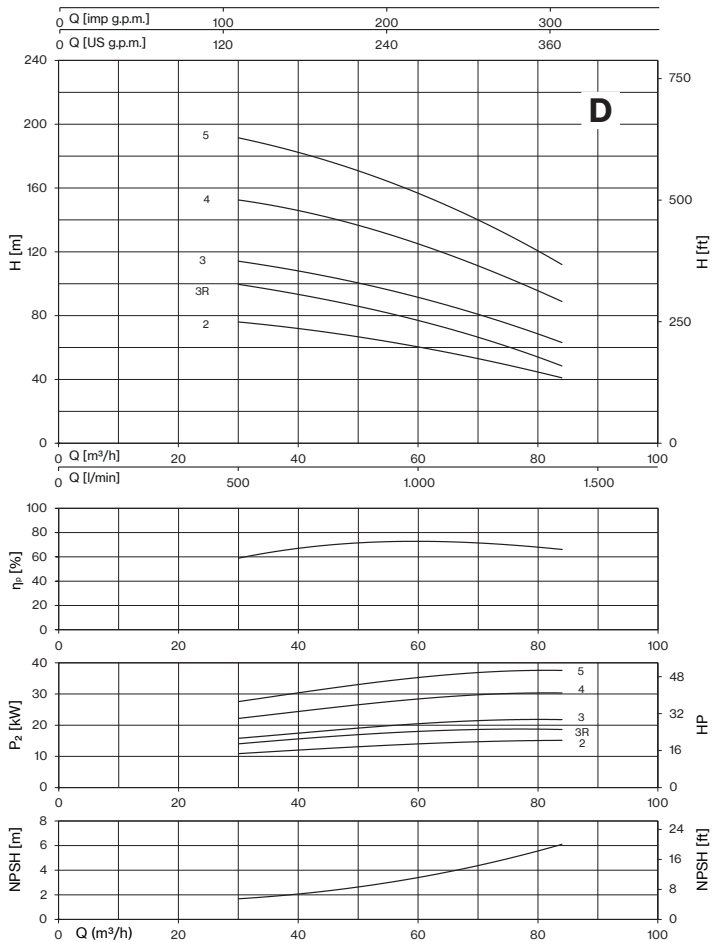
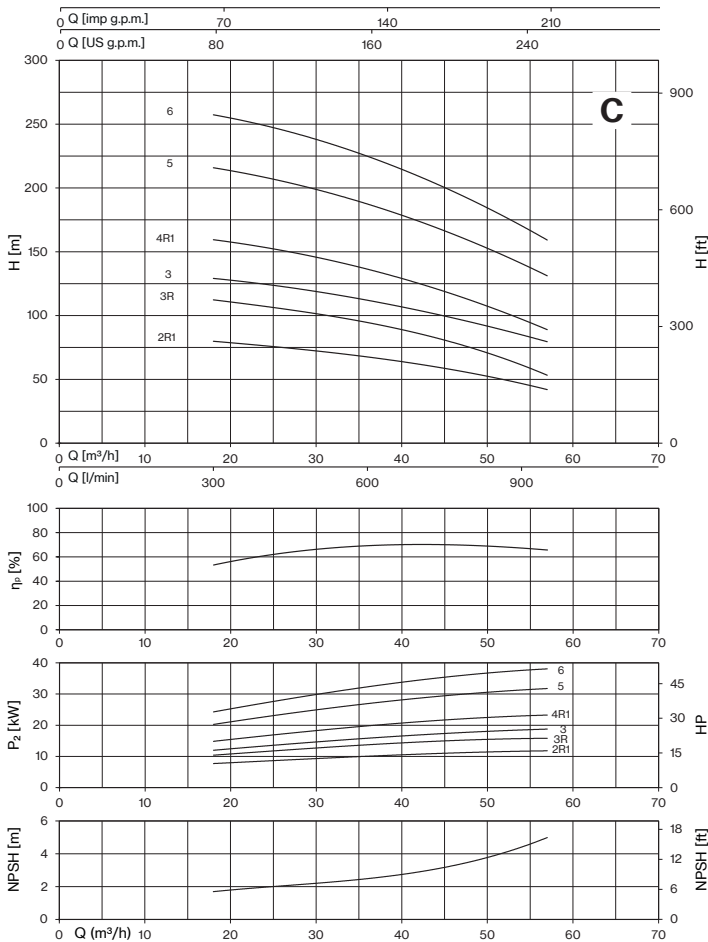
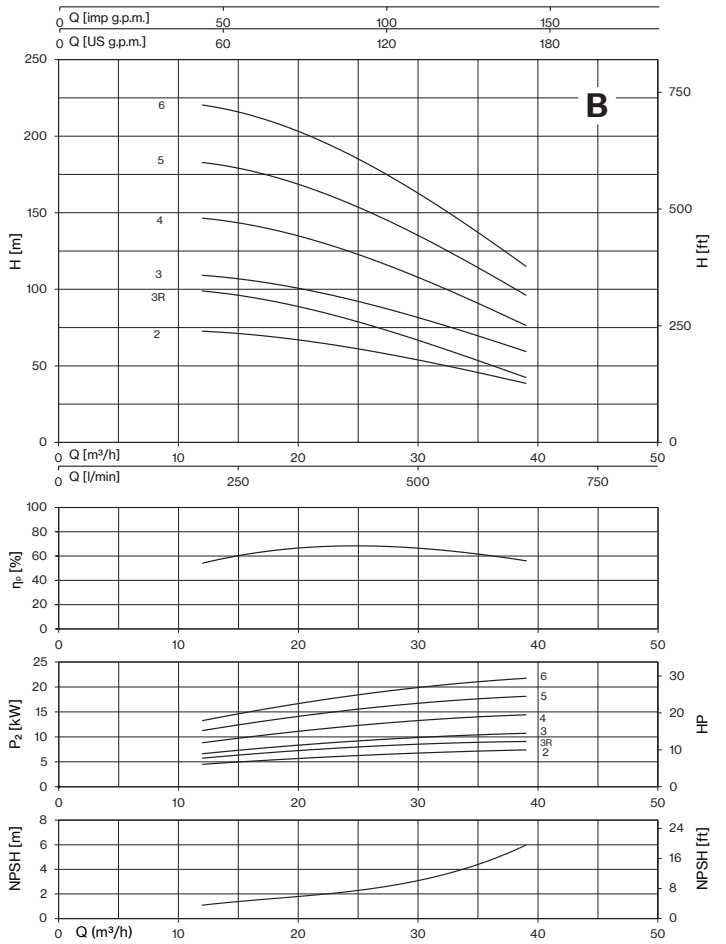
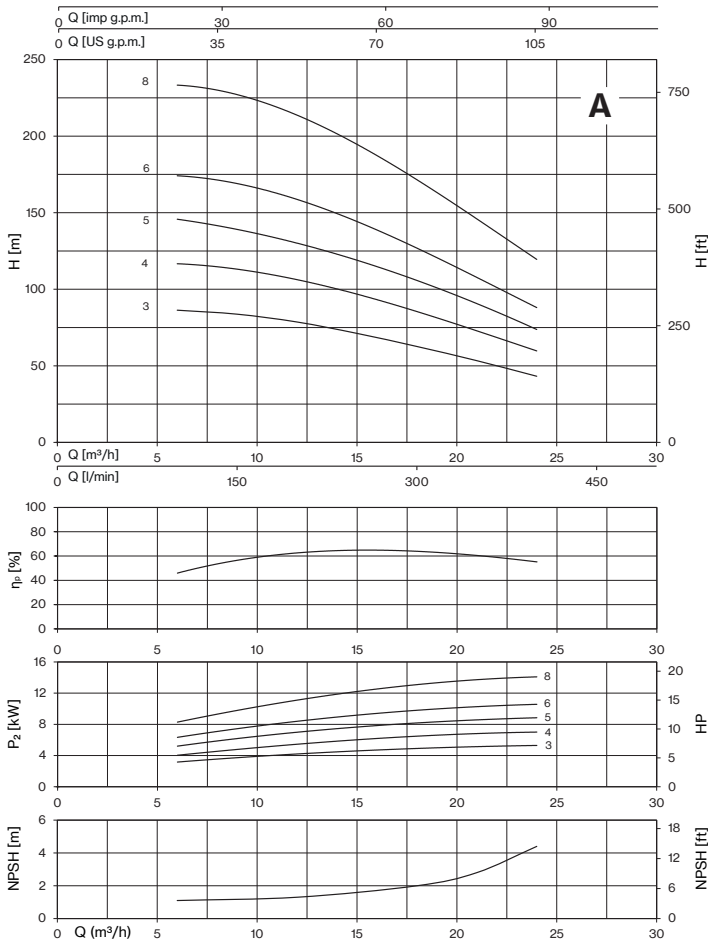
TYPE		P2		P1 kW	I(A) 3- 400V	Q (m³/h - l/min - l/s)										
						0	12	15	18	21	24	27	30	33	36	39
		200	250	300	350		400	450	500	550	600	650				
		3,33	4,17	5	5,83		6,67	7,5	8,33	9,17	10	10,83				
		HP	kW			H (m)										
MSVB	-2/7,5					10	7,5	8,2	13,4	74,5	72,7	71,1	68,7	66,1	62,4	58,3
	-3R/9,2	12,5	9,2	10,0	16,7	101,8	98,9	96,2	91,4	87,4	81,0	74,3	66,5	58,8	50,8	42,4
	-3/11	15	11	11,8	19,6	112,7	109,2	106,9	102,9	99,6	94,1	88,1	81,3	74,5	67,2	59,3
	-4/15	20	15	15,9	26,5	149,7	146,5	143,4	138,2	133,4	125,4	117,1	107,4	97,8	87,7	76,2
	-5/18,5	25	18,5	19,8	33,0	187,7	182,9	179,2	172,3	166,7	157,2	146,7	134,9	122,7	109,9	96,2
	-6/22	30	22	23,6	38,8	225,9	220,4	216,3	207,1	201,1	189,6	176,6	162,5	147,5	131,7	115,1

TYPE		P2		P1 kW	I(A) 3- 400V	Q (m³/h - l/min - l/s)								
						0	18	24	30	36	42	48	54	57
		300	400	500	600		700	800	900	950				
		5	6,67	8,33	10		11,67	13,33	15	15,83				
		HP	kW			H (m)								
MSVC	-2R1/11					15	11	13,0	21,4	78,4	79,5	76,3	72,3	67,6
	-3R/15	20	15	17,4	28,9	110,4	111,9	107,2	101,5	94,5	85,8	75,3	61,5	53,0
	-3/18,5	25	18,5	20,5	34,0	127,6	128,8	124,7	118,8	111,9	104,0	95,1	85,3	79,2
	-4R1/22	30	22	25,3	41,5	159,5	159,0	153,6	145,7	136,3	125,0	112,2	98,1	88,3
	-5/30	40	30	34,6	59,4	214,7	215,7	208,6	198,9	187,2	173,9	158,5	141,2	130,9
	-6/37	50	37	41,2	72,8	256,5	257,1	249,2	238,2	224,6	209,0	191,3	170,7	158,9

TYPE		P2		P1 kW	I(A) 3- 400V	Q (m³/h - l/min - l/s)										
						0	30	36	42	48	54	60	66	72	78	84
		500	600	700	800		900	1000	1100	1200	1300	1400				
		8,33	10	11,67	13,33		15	16,67	18,33	20	21,67	23,33				
		HP	kW			H (m)										
MSVD	-2/15					20	15	16,6	27,6	75,9	75,9	73,8	71,0	67,8	64,3	60,4
	-3R/18,5	25	18,5	20,3	33,7	99,6	99,6	96,0	91,7	87,5	82,7	77,1	70,8	64,0	56,6	48,5
	-3/22	30	22	23,7	39,3	113,1	113,9	110,8	106,7	102,0	96,9	91,4	85,4	78,8	71,2	63,0
	-4/30	40	30	33,0	57,2	152,0	152,5	148,9	144,1	138,7	132,4	125,1	117,0	108,1	98,8	89,0
	-5/37	50	37	40,6	71,9	189,6	191,4	186,4	179,9	173,3	165,7	157,0	147,0	136,0	124,5	112,3



MSV ~2900 rpm



4MSV ~1450 rpm

TYPE		P2		Q (m³/h - l/min - l/s)								
				0	3	4,5	6	7,5	9	10,5	12	13,5
		HP	kW		50	75	100	125	150	175	200	225
				0,83	1,25	1,67	2,08	2,50	2,92	3,33	3,75	
				H (m)								
4MSVA	-8/2,2	3	2,2	56,0	55,7	54,2	51,3	46,3	40,2	33,4	25,7	16,2

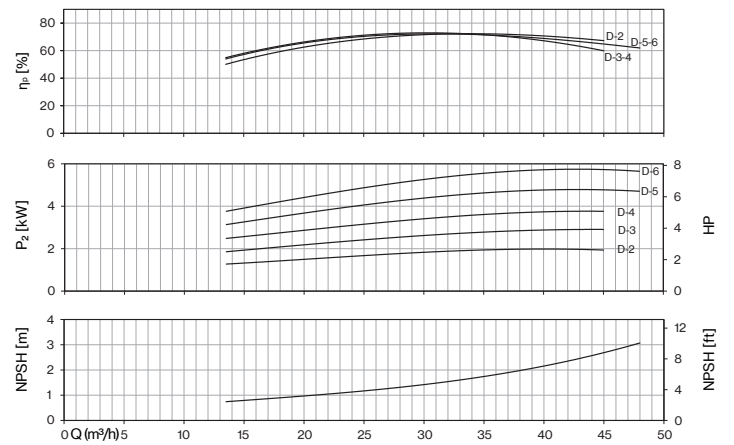
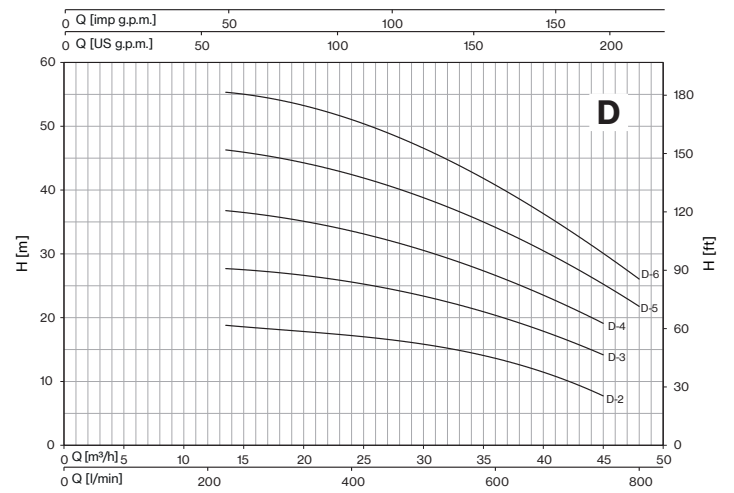
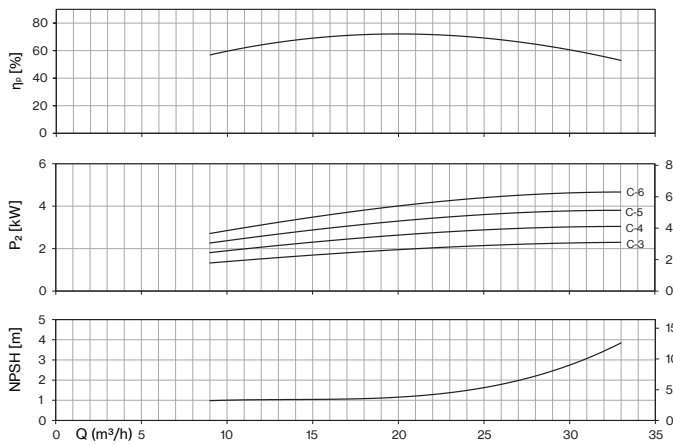
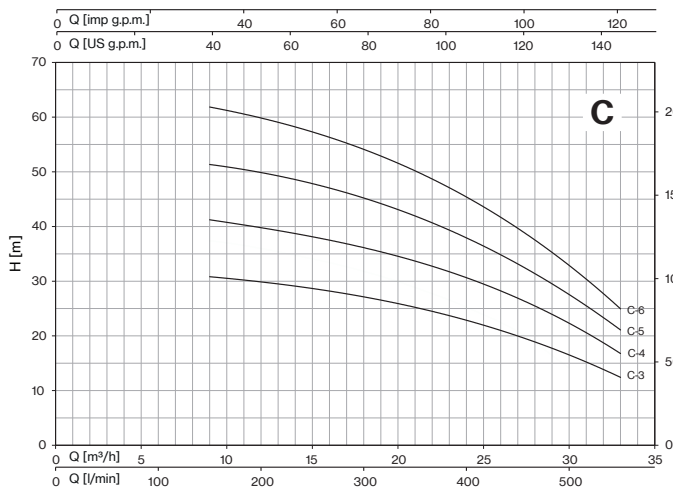
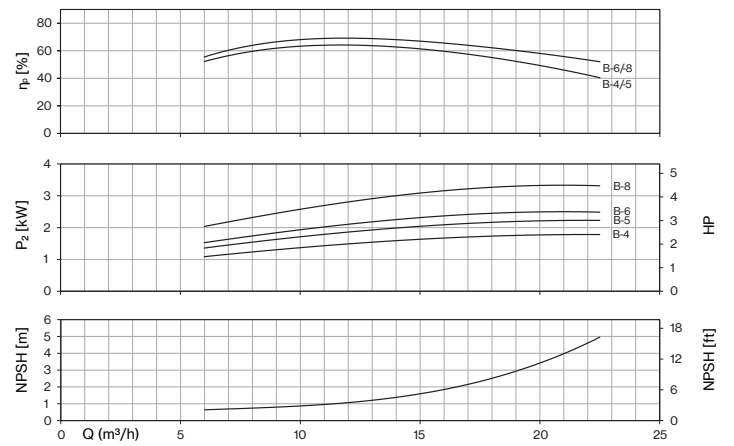
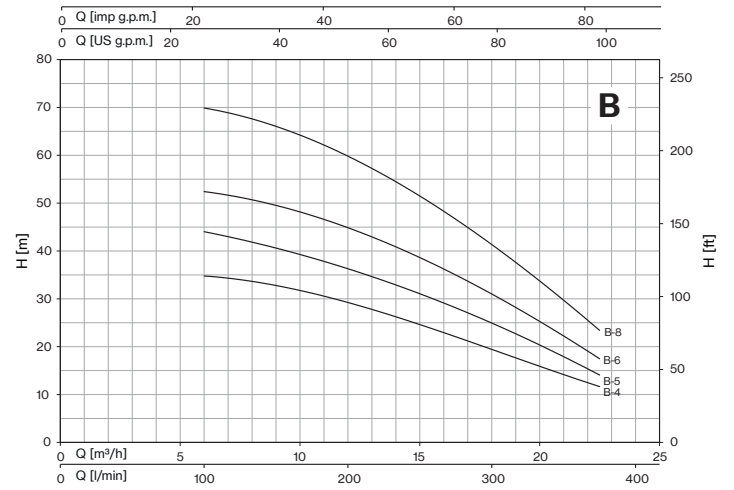
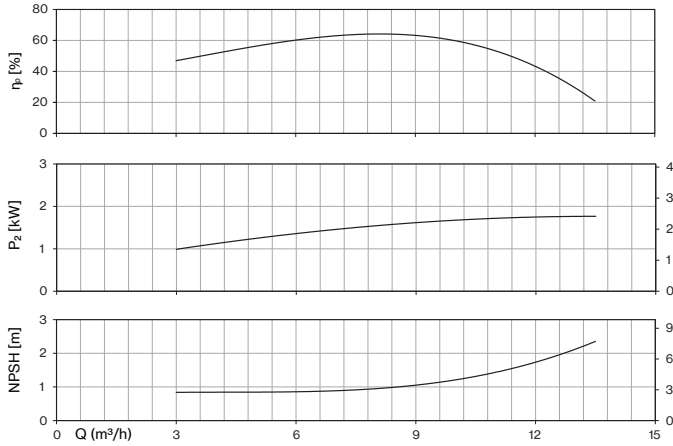
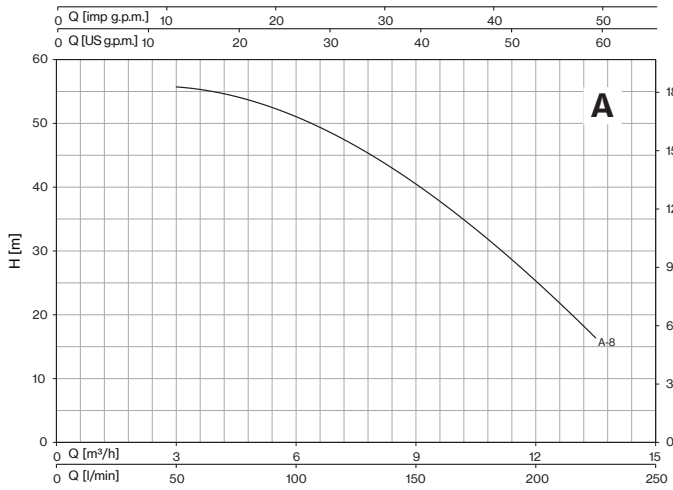
TYPE		P2		Q (m³/h - l/min - l/s)									
				0	6	7,5	9	10,5	12	13,5	16,5	19,5	22,5
		HP	kW		100	125	150	175	200	225	275	325	375
				1,67	2,08	2,50	2,92	3,33	3,75	4,58	5,42	6,25	
				H (m)									
4MSVB	-4/2,2	3	2,2	35,4	34,8	34,0	32,8	31,2	29,3	27,0	22,0	16,9	11,6
	-5/2,2	3	2,2	44,3	43,5	42,5	41,0	39,0	36,6	33,8	27,5	21,1	14,6
	-6/3	4	3	53,2	52,2	51,3	49,9	47,8	44,7	41,5	34,4	27,7	17,2
	-8/4	5,5	4	70,9	69,6	68,3	66,5	63,7	59,7	55,3	45,9	36,9	23,0

TYPE		P2		Q (m³/h - l/min - l/s)											
				0	9	10,5	12	13,5	16,5	19,5	22,5	24	27	30	33
		HP	kW		150	175	200	225	275	325	375	400	450	500	550
				2,50	2,92	3,33	3,75	4,58	5,42	6,25	6,67	7,50	8,33	9,17	
				H (m)											
4MSVC	-3/2,2	3	2,2	30,2	30,7	30,5	30,0	29,4	27,9	26,2	24,0	22,8	20,0	16,7	12,3
	-4/3	4	3	40,1	41,0	40,6	39,9	39,1	37,3	35,0	32,0	30,3	26,9	23,1	16,4
	-5/4	5,5	4	50,1	51,3	50,8	49,9	48,8	46,6	43,8	40,0	37,8	33,0	27,8	21,0
	-6/5,5	7,5	5,5	60,3	61,7	61,0	59,9	58,7	55,9	52,3	47,7	45,1	39,6	33,6	24,6

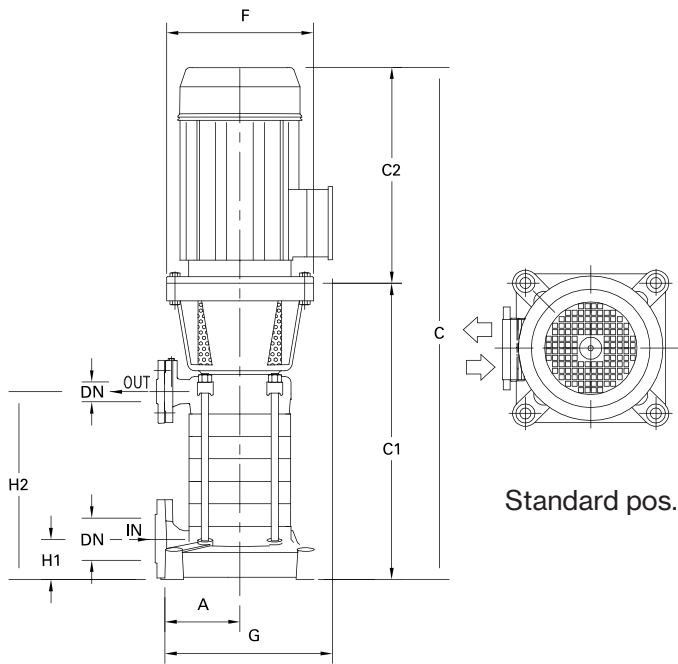
TYPE		P2		Q (m³/h - l/min - l/s)											
				0	13,5	16,5	19,5	22,5	24	27	30	33	39	45	48
		HP	kW		225	275	325	375	400	450	500	550	650	750	800
				3,75	4,58	5,42	6,25	6,67	7,50	8,33	9,17	10,83	12,50	13,33	
				H (m)											
4MSVD	-2/2,2	3	2,2	18,3	18,7	18,4	18,0	17,5	17,2	16,5	15,7	14,7	12,3	7,6	
	-3/3	4	3	27,1	27,7	27,3	26,7	26,0	25,6	24,6	23,5	22,0	18,4	14,2	
	-4/4	5,5	4	36,2	36,8	36,1	35,2	34,1	33,6	32,3	30,6	28,7	24,2	19,2	
	-5/5,5	7,5	5,5	45,2	46,3	45,4	44,4	43,2	42,6	41,0	39,0	36,6	30,9	25,3	22,0
	-6/7,5	10	7,5	54,2	55,5	54,5	53,2	51,9	51,1	49,1	46,8	43,9	37,0	30,3	26,0



4MSV ~1450 rpm



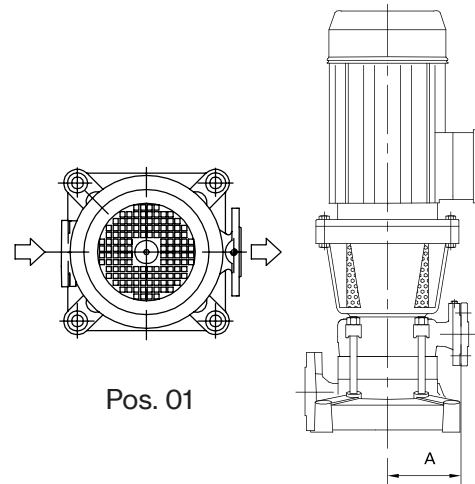
MSV-4MSV



Standard pos.

STANDARD

Not available for pump type: MSVB 2/7.5, MSVC-2R1/11, MSVD-2/15, 4MSVD-2/2.2

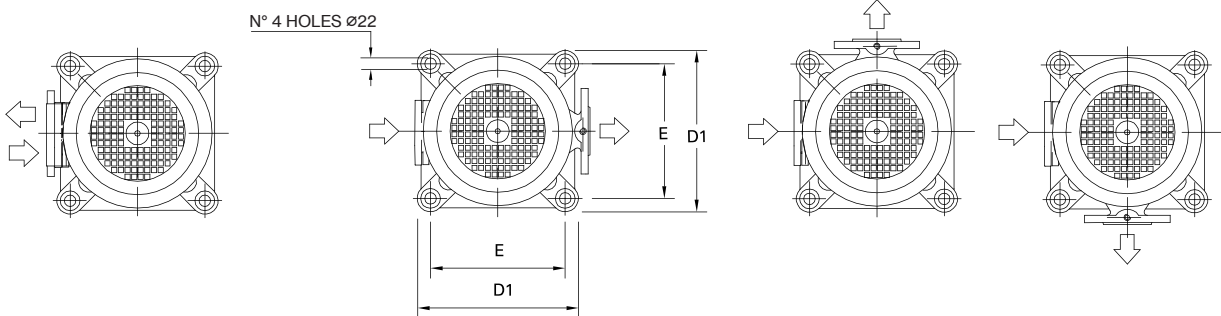


Pos. 01

STANDARD FOR:

MSVB-2/7.5
MSVC-2R1/11
MSVD-2/15
4MSVD-2/2.2

Direction of nozzles



Standard pos.

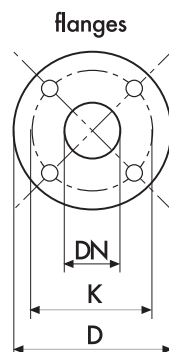
Not available for pump type: MSVB 2/7.5, MSVC-2R1/11, MSVD-2/15, 4MSVD-2/2.2

Pos. 01



Pos. 02

Pos. 03



DIMENSIONS (mm)				
DN	D	K	holes	
			n°	ø
40	150	110	4	18
50	165	125	4	18
65	185	145	4	18
80	200	160	8	18



MSV ~2900 rpm


TYPE	DN IN	DN OUT	N. STAGE	DIMENSIONS (mm)													
				A	C	C1	C2	D1	E	F	G	H1	H2	I	L		M
MSVA -3/5,5	(UNI PN 16) 50	(UNI PN 40) 40	3	175	921,5	544,5	377	306	256	300	355	82	255,5	1100	400	500	139,5
MSVA -4/7,5			4		972,5	595,5	377			300	355		306,5	1100	400	500	156
MSVA -5/9,2			5		1062,5	646,5	416			300	355		357,5	1100	400	500	173
MSVA -6/11			6		1113,5	697,5	416			300	355		408,5	1100	400	500	192
MSVA -8/15			8		1297,5	799,5	498			350	410		510,5	1400	500	500	259
MSVB -2/7,5	(UNI PN 16) 50	(UNI PN 40) 40	2	175	870,5	493,5	377	306	256	300	355	82	204,5	1100	400	500	136,5
MSVB -3R/9,2			3		931	515	416			300	335		255,5	1100	400	500	153,5
MSVB -3/11			3		931	515	416			300	355		255,5	1100	400	500	157,5
MSVB -4/15			4		1013	515	498			350	410		306,5	1400	500	500	220,5
MSVB -5/18,5			5		1056	515	541			350	410		357,5	1400	500	500	245
MSVB -6/22			6		1056	515	541			350	410		408,5	1400	500	500	265
MSVC -2R1/11	(UNI PN 16) 65	(UNI PN 40) 50	2	200	944	528	416	332	282	300	380	95	233	1100	400	500	167
MSVC -3R/15			3		1086	588	498			350	435		293	1100	400	500	234
MSVC -3/18,5			3		1129	588	541			350	435		293	1400	500	500	249
MSVC -4R1/22			4		1189	648	541			350	435		353	1400	500	500	273
MSVC -5/30			5		1276	708	568			350	450		413	1400	500	500	321,5
MSVC -6/37			6		1376	768	608			350	450		473	1400	500	500	360,5
MSVD -2/15	(UNI PN 16) 65	(UNI PN 40) 50	2	200	1026	528	498	332	282	350	435	95	233	1400	400	500	219
MSVD -3R/18,5			3		1129	588	541			350	435		293	1400	500	500	247
MSVD -3/22			3		1129	588	541			350	435		293	1400	500	500	257,5
MSVD -4/30			4		1216	648	568			350	450		353	1400	500	500	305
MSVD -5/37			5		1316	708	608			350	450		413	1400	500	500	342,5


4MSV ~1450 rpm

TYPE	DN IN	DN OUT	N. STAGE	DIMENSIONS (mm)													
				A	C	C1	C2	D1	E	F	G	H1	H2	I	L		M
4MSVA -8/2,2	(UNI PN 16) 50	(UNI PN 40) 40	8	175	1078	762,5	315	306	256	250	345	82	510,5	1100	400	500	183
4MSVB -4/2,2	(UNI PN 16) 50	(UNI PN 40) 40	4	175	874	558,5	315	306	256	250	345	82	306,5	1100	400	500	136
4MSVB -5/2,2			5		925	609,5	315			250	345		357,5	1400	500	500	140
4MSVB -6/3			6		976	660,5	315			250	345		408,5	1400	500	500	171
4MSVB -8/4			8		1103	762,5	340			250	368		511	1400	500	500	200
4MSVC -3/2,2	(UNI PN 16) 65	(UNI PN 40) 50	3	200	866	551	315	332	282	250	370	95	293	1100	400	500	192
4MSVC -4/3			4		926	611	315			250	370		353	1100	400	500	194
4MSVC -5/4			5		1011	671	340			250	393		413	1100	400	500	202
4MSVC -6/5,5			6		1116	731	385			300	423		473	1400	500	500	206
4MSVD -2/2,2	(UNI PN 16) 65	(UNI PN 40) 50	2	200	806	491	315	332	282	250	370	95	233	1100	400	500	135
4MSVD -3/3			3		866	551	315			250	370		293	1100	400	500	167
4MSVD -4/4			4		951	611	340			250	393		353	1100	400	500	189
4MSVD -5/5,5			5		1056	671	385			300	423		413	1100	400	500	194
4MSVD -6/7,5			6		1156	731	425			300	423		473	1400	500	500	218



MSV-4MSV Serie-Mechanical seal and bearings

MECHANICAL SEAL	PUMP MODEL	SHAFT Ø		STANDARD MATERIAL	OPTIONAL
					4
	MSVA-3/5,5-132S MSVB-2/7,5-132S 4MSVA-8/2,2 4MSVB-4/2,2 4MSVB-5/2,2 4MSVB-6/3 4MSVB-8/4	25mm	Rotating face Stationary face Elastomer	Ceramic Graphite NBR	Widia Widia NBR
	MSVC-2R1/11-132M MSVD-2/15-160M 4MSVC-3/2,2 4MSVC-4/3 4MSVC-5/4 4MSVC-6/5,5-132S 4MSVD-2/2,2 4MSVD-3/3 4MSVD-4/4 4MSVD-5/5,5-132S 4MSVD-6/7,5-132St	35mm	Rotating face Stationary face Elastomer	Ceramic Graphite NBR	Widia Widia NBR
	MSVA-4/7,5-132S MSVA-5/9,2-132M MSVA-6/11-132M MSVA-8/15-160M MSVB-3R/9,2-132M MSVB-3/11-132M MSVB-4/15-160M MSVB-5/18,5-160L MSVB-6/22-160L	25mm / Balanced seal	Rotating face Stationary face Elastomer	Widia Graphite NBR	Widia Widia NBR
	MSVC-3R/15-160M MSVC-3/18,5-160L MSVC-4R1/22-160L MSVC-5/30-180M MSVC-6/37-180L MSVD-3R/18,5-160L MSVD-3/22-160L MSVD-4/30-180M MSVD-5/37-180L	35mm / Balanced seal	Rotating face Stationary face Elastomer	Widia Graphite NBR	Widia Widia NBR

BEARINGS	PUMP MODEL	TYPE	
	4MSVA-8/2,2 4MSVB-4/2,2 4MSVB-5/2,2 4MSVC-3/2,2 4MSVD-2/2,2	6205-ZZ C3	6205-ZZ C3
	4MSVB-6/3 4MSVB-8/4 4MSVC-4/3 4MSVC-5/4 4MSVD-3/3 4MSVD-4/4	6206-ZZ C3	6206-ZZ C3
	MSVA-3/5,5-132S MSVA-4/7,5-132S MSVA-5/9,2-132M MSVA-6/11-132M MSVB-2/7,5-132S MSVB-3R/9,2-132M MSVB-3/11-132M MSVC-2R1/11-132M	6206-ZZ C3	6308-ZZ C3
	4MSVC-6/5,5-132S 4MSVD-5/5,5-132S 4MSVD-6/7,5-132S	6208-ZZ C3	6208-ZZ C3
	MSVA-8/15-160M MSVB-4/15-160M MSVB-5/18,5-160L MSVB-6/22-160L MSVC-3R/15-160M MSVC-3/18,5-160L MSVC-4R1/22-160L MSVD-2/15-160M MSVD-3R/18,5-160L MSVD-3/22-160L	6308-ZZ C3	6309-ZZ C3
	MSVC-5/30-180M MSVC-6/37-180L MSVD-4/30-180M MSVD-5/37-180L	6309-ZZ C3	3310-ZZ C3

