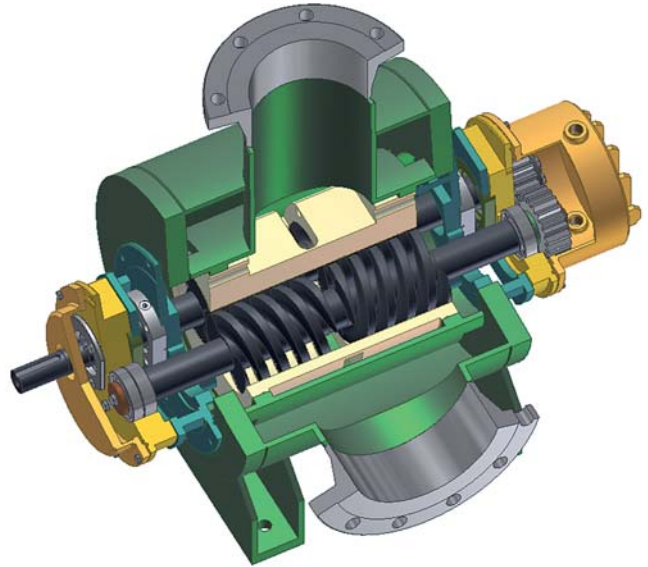


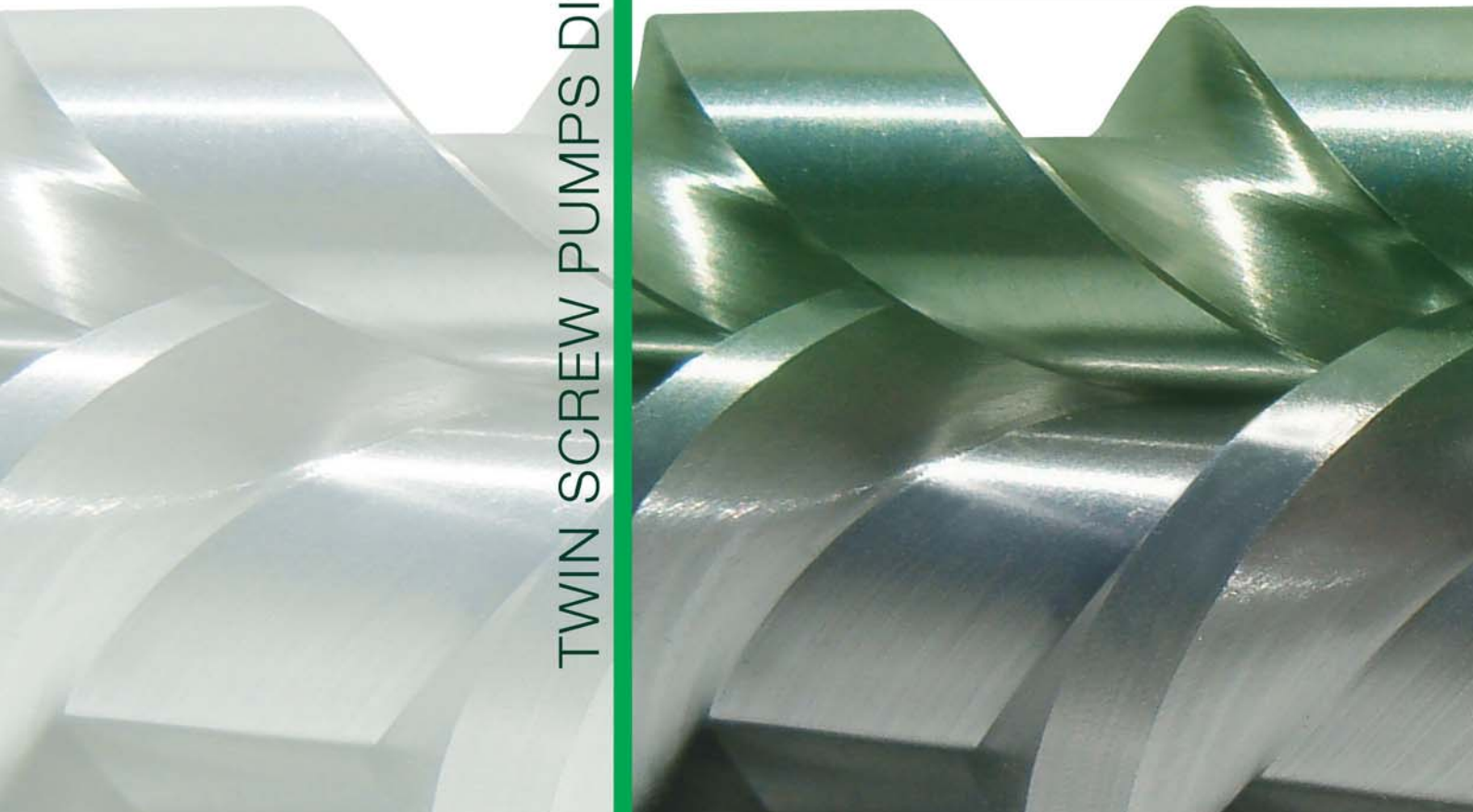


series

2SP



TWIN SCREW PUMPS DIVISION



The new pump 2SP Series by SEIM represent the evolution of more than 35 years of experience in the field of design and construction of screw rotary pumps.

Successful supplies all over the world for more than one and a half million of three rotor pumps, flow meters and relief valves in many market sectors, lead SEIM to extend its competence and knowledge to accomplish new challenges and serve with a complete line up of rotary pumps the market.

The 2SP Series

SEIM is pleased to introduce the new 2SP Series, nowadays available in four different executions, with internal or external timing gears.

The new 2SP Series has been completely designed and conceived in order to build extreme reliable pumps under all working conditions. Thanks to computer assistance for hydraulic, dimensions optimization bring to a compact design and reliable design.

Easy maintenance

Thanks to our long experience in design and construction of volumetric pumps, the peculiarity of this series is also the extremely easy maintenance with easy adjustment and concentring-free manufacturing.

Versatile and compatible design

The 2SP series pumps are at same time extremely versatile and adaptable to any customer requirements and extend the range of potential solutions for specific applications offering most reliable answers in accordance to the severest international rules, such API 676 latest edition.

The 2SP Series pumps are provided with a wear resistant casing insert, which can be casted in a wide range of materials, so to approach and solve any pumping problem. The insert improve also maintenance and replacement problems, up to special surface treatments solving any kind of wear problems.

The pump casing is extremely compact and provided with wide flow passages, flanged in according to international standards (ISO and / or ANSI).

Flanges positions meet client requisition: standard are IN-Line, while Side-Top arrangement are available on request.

The standard casing is designed for working up to 20 bar at 200°C.

Special heating chamber is available on request.

All gaskets are compression confined with wide selection for material of construction, up to severe conditions gasket like spiral wound for high temperature are available.

Screw shaft rotors are forged out of a single bar piece, without spargers and/or special installation fittings.

The bearings, timing gears are positively locked, by means of keys and grooves to allows user friendly and faster maintenance without adjustments.

Over-dimensioned roller bearings series NU on the gear side and ball bearing angular contact type, on the coupling side allow easy mechanical seal maintenance operation.

The standard version has grease lubrication on the coupling side, but oil lubricated version on both side are available.

A wide range of solutions about bearings lubrication and protection are available, from simple V ring up to lasted generation bearing protector IP66.

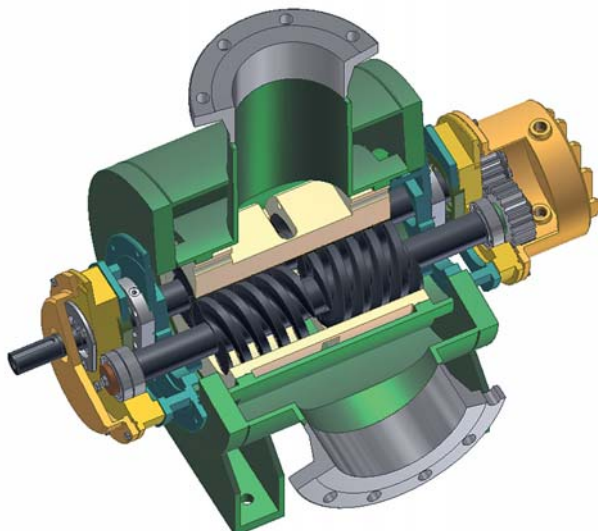
Gears are hardened and rectified to allow silent and high precision, working with oil bath lubrication without any adjustment.

Special lubrication systems are available up to external lube recirculation pump and/or cooler for the most reliable mechanical applications.

All mechanical seal are standardized, API 682.

Cartridge mechanical seal are available upon request, with or without centering plate for a easy maintenance.

All pumps can be supplied with built-on relief valve, that can be customized to respond to peculiar plants requirements and/or according to latest rule such as API 520.

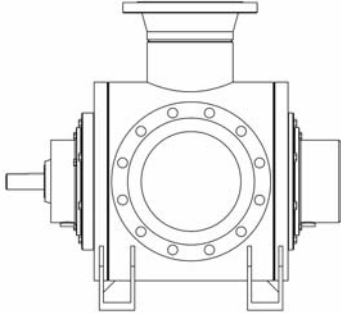


Twin screw pumps 2SP Series are suitable for Marine application and are available with approval by proper: Certification bodies like, but not limited to.

ABS BV DNV GL LR RINA

SEIM Twin Screw Pumps 2SP Series

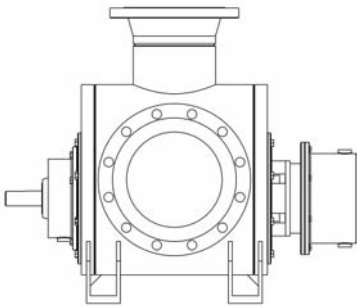
are available in four different arrangements suitable to match most of the applications. On demand, custom versions are available.



L1

**Lube oil Fuel oil Hydraulic Oil
Every fluid with lubricant characteristics**

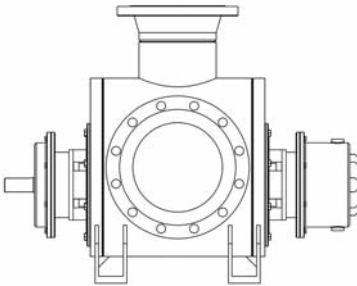
Self priming, double entry design, with internal bearings and sincronism timing gear, no.
One mechanical or packing seal.



L2

**Non lubricating low and medium viscosity
and corrosive fluid**

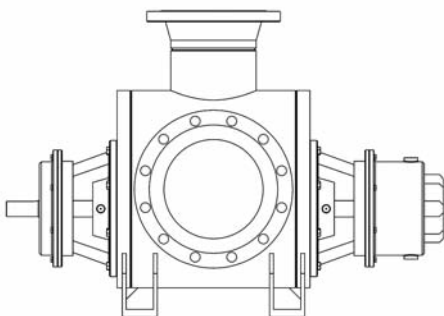
Self priming, double entry design, with external bearings separated by seals. Compact design for a simple maintenance and cheapest solution. Shaft seal shall be single or double.



L3

**Non lubricating low and medium viscosity, corrosive
and dangereous fluids.**

Self priming, double entry design, with external bearings separated by seals. Long shaft design suitable for a wide range of seals configuration. Possibility to install a cartridge design.



L4

**Non lubricating low and medium viscosity, corrosive and dangereous
fluids in heavy duty service with operating more than 3 year.**

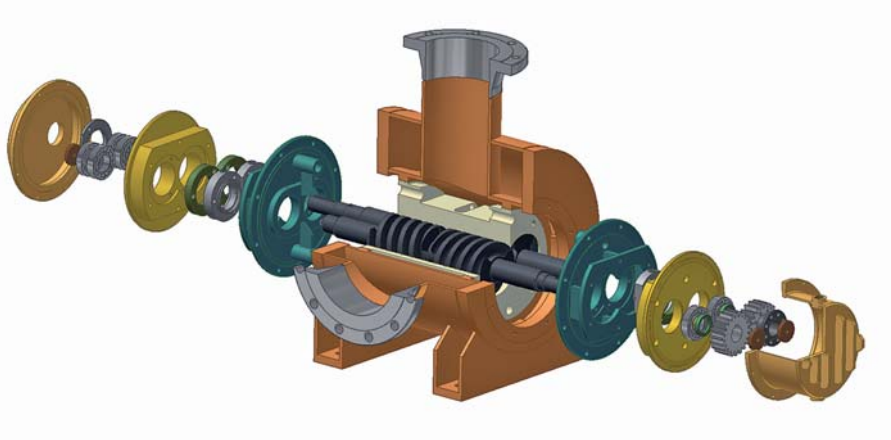
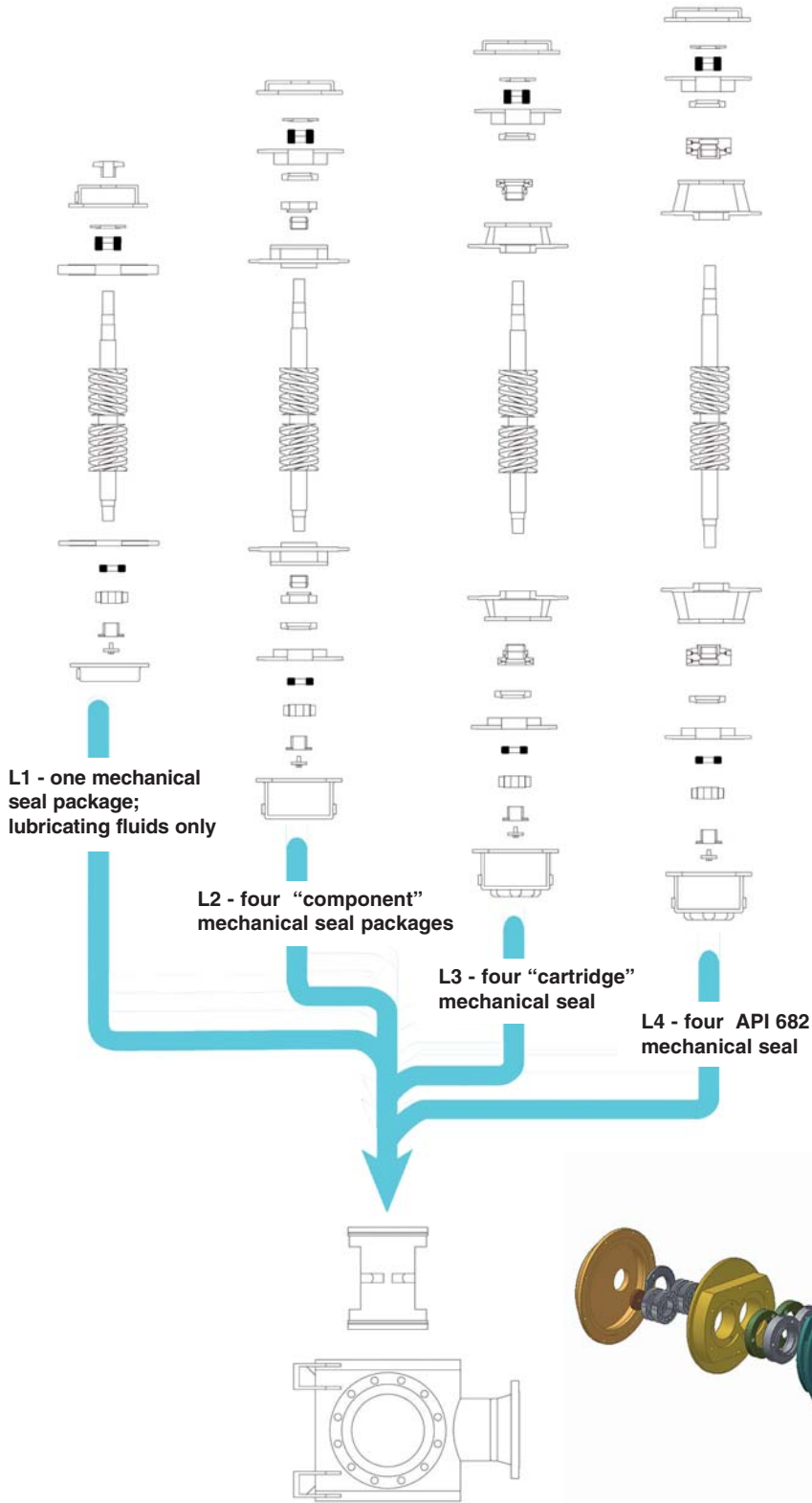
Self priming, double entry design, with external bearings separated by seals. Strong shaft design for all dangereous fluids in all conditions. Design to meet API 676 and all API 682 mechanical seal configurations. Possibility to work in mixed phases.

EXPLODED VIEW, SECTION AND COMPONENTS



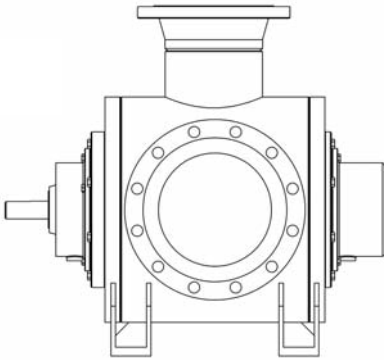
SERIES

L1-L2-L3-L4



PRODUCTS

Lubricant oils, hydraulic oils, fluid with poor or low lubricant capabilities, clean fuel oils.



L1 - one mechanical seal package; lubricating fluids only

Twin screw rotary pump with renewable liner and internal bearings for all lubricant fluids or fluids which do not chemically attack the internal bearings materials.

The journal bearings can be supply in several material and in function of pumping temperature.

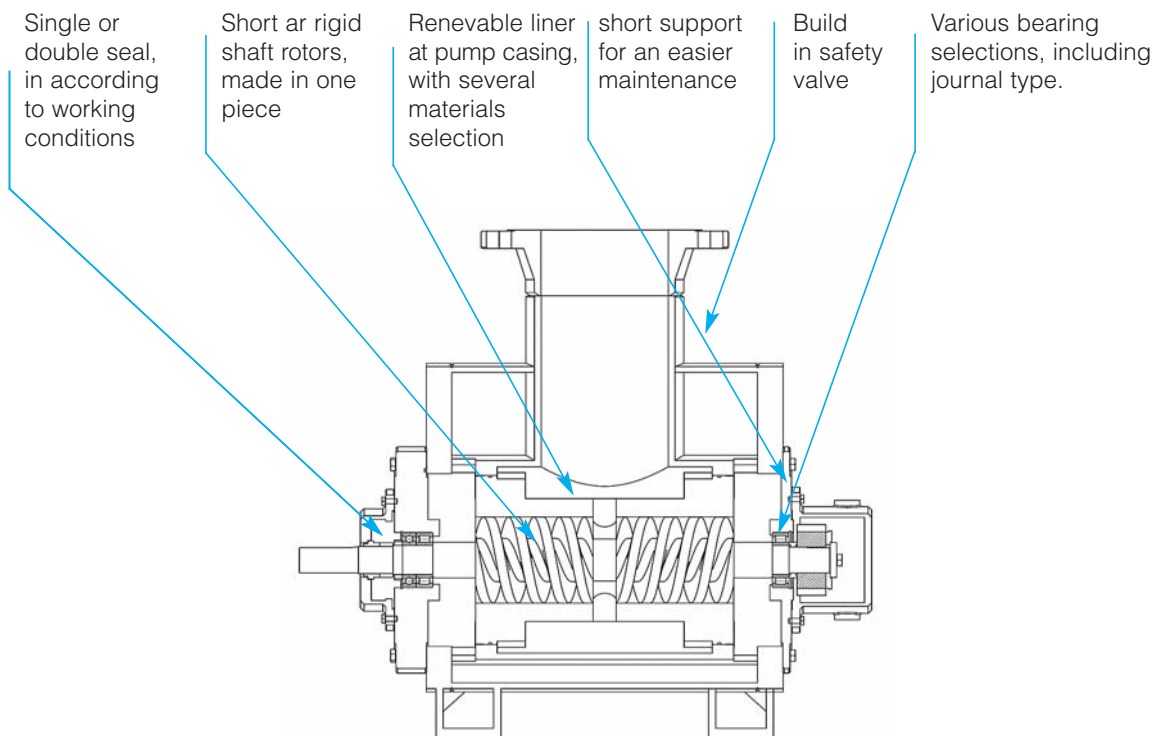
Specially designed for large capacities on lube oil service in marine, off-shore or industrial plants.

PERFORMANCE DATA

Working temperature	up to 100°C
Viscosity range	up to 1500 cst
Inlet pressure	up to 6 Bar
Differential pressure	up to 16 Bar
Speed	up to 3500 rpm

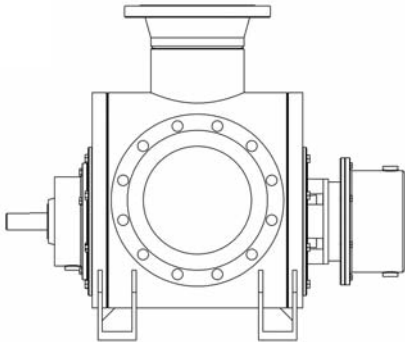
Seals

These pump can be mount all type of seal including cartridge



PRODUCTS

**Water, light chemical and petrochemical products, fuel and heavy fuel oils.
Non lubricating fluids with light or medium viscosity range.**



L2 - four “component” mechanical seal packages

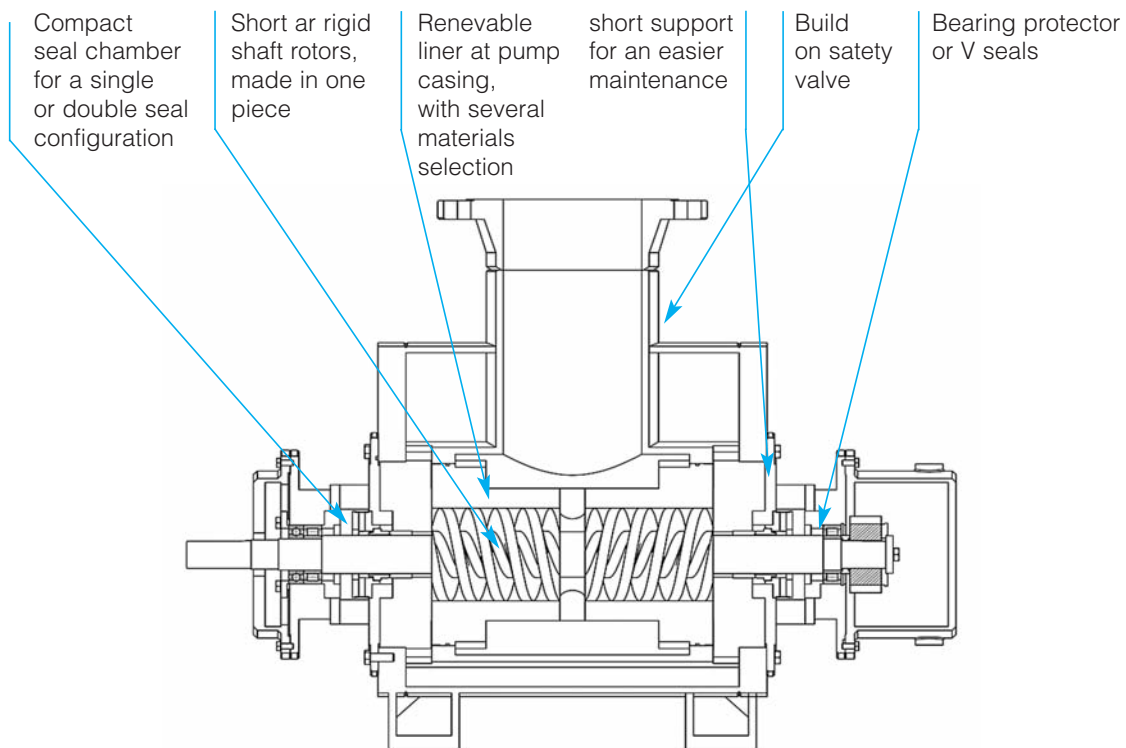
Twin screw rotary pump with replaceable liner and external bearings, in compact design, for all non lubricant fluids with light and medium viscosities. Compact seal chamber according to ISO. Specially designed for industrial plants with low cost impact.

PERFORMANCE DATA

Working temperature	up to 150°C
Viscosity range	up to 1500 cst
Inlet pressure	up to 6 Bar
Differential pressure	up to 16 Bar
Speed	up to 3500 rpm

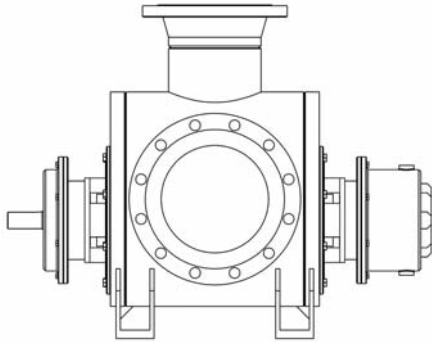
Seals

These pump can be mount only single or double back to back mechanical seal configuration.



PRODUCTS

**Water, light chemical and petrochemical products, fuel and heavy fuel oils.
Non lubricating fluids with light or medium viscosity range.**



L3 - four “cartridge” mechanical seal

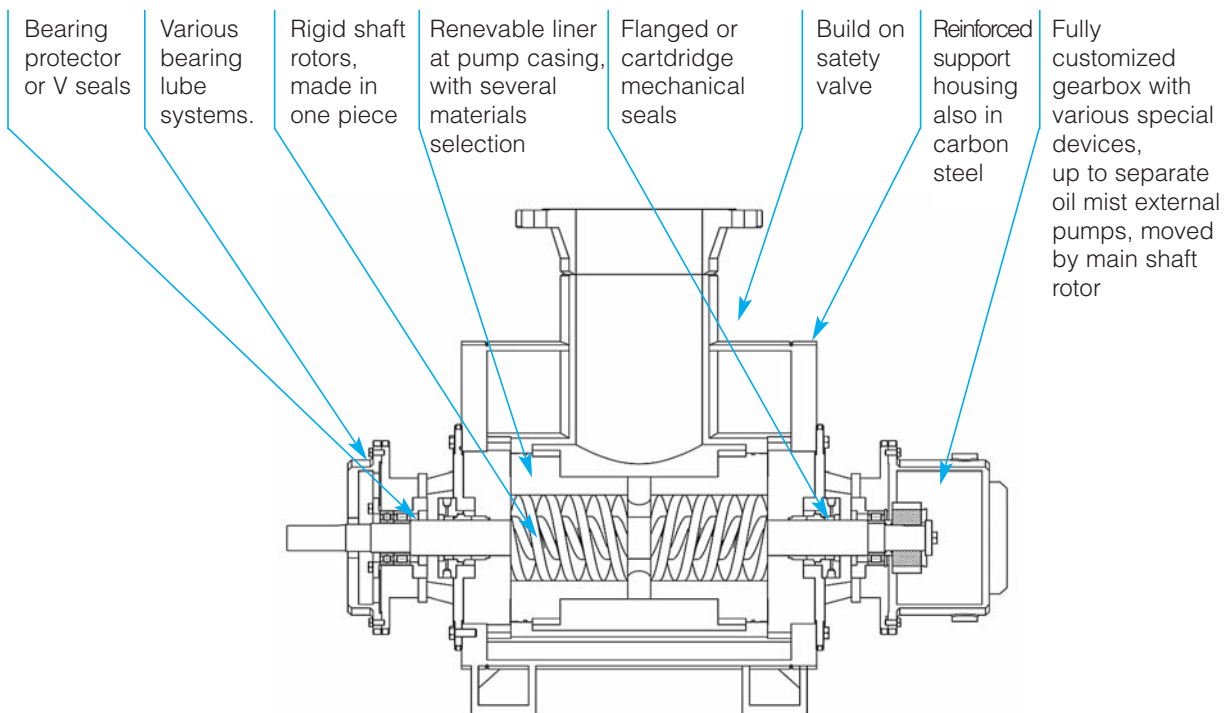
Twin screw rotary pump with replaceable liner and external bearings, for all non lubricant fluids with light and medium viscosities. Supports and seal chamber designed for flanged seal. Possibility to install a wide range of flushing and or quenching pipes. Custom design for bearings housing including cooling, deflectors, bearing protectors, monitoring sensors etc.

PERFORMANCE DATA

Working temperature	up to 200°C
Viscosity range	up to 2500 cst
Inlet pressure	up to 6 Bar
Differential pressure	up to 16 Bar
Speed	up to 3500 rpm

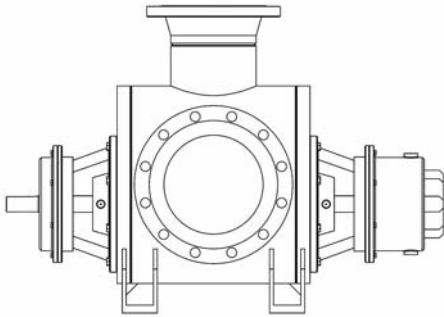
Seals

A wide range of seals shaft design including flanged and cartridge, with flush or quenching pipes. Possibility to install shaft sleeve and throttle bushing for a difficult suction conditions.



PRODUCTS

Dangerous fluids, chemical and petrochemical products, hydrocarbon and process fluids, fuel and heavy fuel oils.
Non lubricating fluids with light or high viscosity range.



L4 - four API 682 mechanical seal

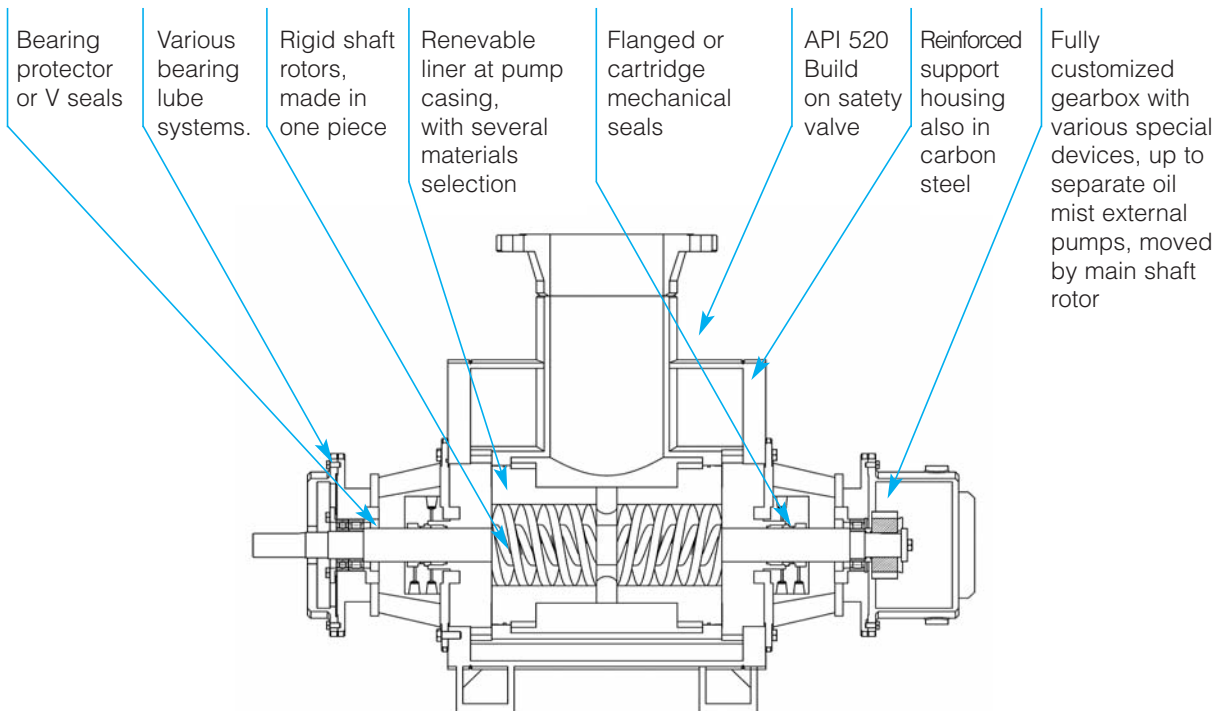
Twin screw rotary pump with renewable liner and external bearings, for all non lubricant fluids with light and medium viscosities, in heavy duty services
 Seal chamber designed for all API 682 mechanical seal configuration.
 Possibility to install a wide range of flushing and or quenching pipes.
 Custom design for bearings housing including cooling, deflectors, bearing protectors, monitoring sensors etc.

PERFORMANCE DATA

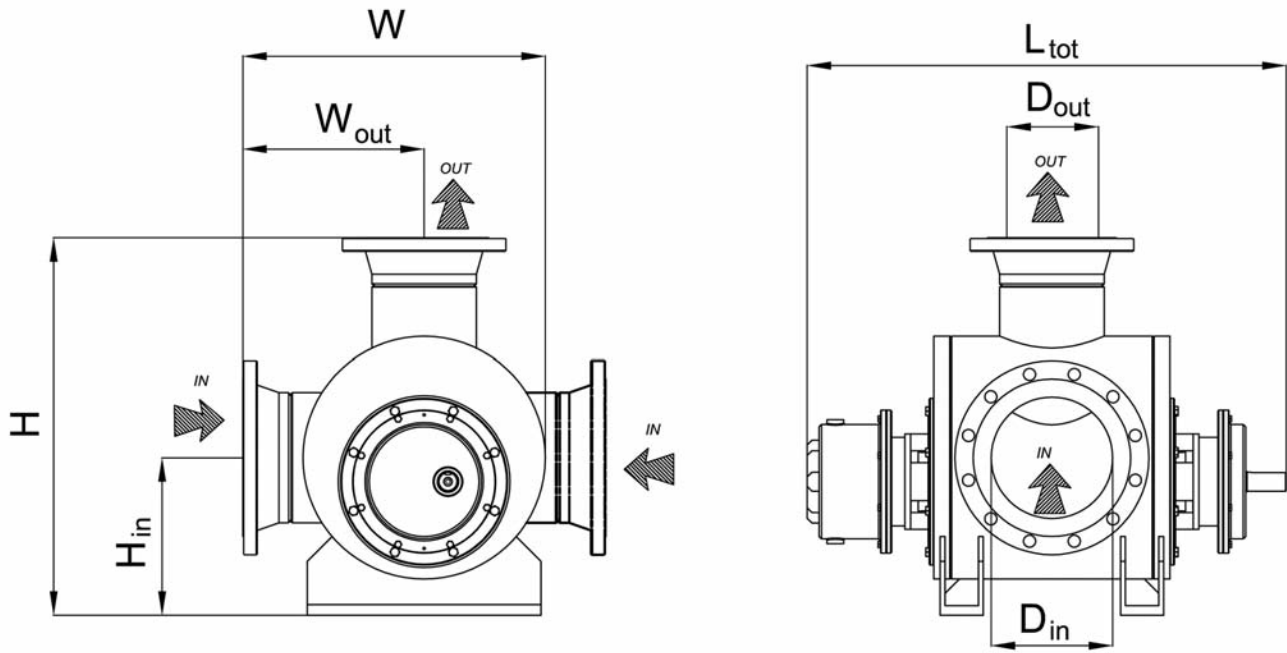
Working temperature	up to 300°C
Viscosity range	up to 15000 cst
Inlet pressure	up to 10 Bar
Differential pressure	up to 40 Bar
Speed	up to 3500 rpm

Seals

Shaft seal and design without compromise, fully API 676 and API 682, with all flushing or quenching pipes, for process and dangerous working conditions.
 Special intermediate flange with several material selection for an easier maintenance.
 Possibility to mount bearing protector for any industrial atmosphere, with dust and pollution to protect bearing.



DIMENSIONAL CHART



DIMENSIONAL CHART (mm)

SIZE MODEL	D IN	D OUT	D IN	D OUT	L TOT	H	W	H in	W out	Weight
	DN	PN 16	ASA 150 lbs		mm	mm	mm	mm	mm	kg
(90)	200	150	8"	6"	1050	800	650	310	360	250
110	200	150	8"	6"	1050	800	650	310	360	300
130	250	200	10"	8"	1100	850	700	330	380	450
170	300	250	12"	10"	1300	1000	900	400	500	800
210	400	300	16"	12"	1500	1100	1000	450	550	1200
270	500	400	20"	16"	1800	1300	1200	520	660	1900

PERFORMANCE CHART



SERIES

2SP

MODEL	980 rpm		5 cSt			50 cSt			500 cSt		
	Pitch	differ-P	flow		power	flow		power	flow		power
	mm	bar	litr/min	m ³ /h	kW	litr/min	m ³ /h	kW	litr/min	m ³ /h	kW
90	30	4	190	11,4	2,3	207	12,4	3,3	214	12,9	5,3
	30	8	160	9,6	3,8	192	11,5	4,7	208	12,5	6,8
	30	12	129	7,7	5,2	178	10,7	6,2	201	12,1	8,3
	30	16	98	5,9	6,7	164	9,8	7,7	194	11,7	9,7
	40	4	251	15,1	2,8	274	16,5	3,9	285	17,1	6,1
	40	8	208	12,5	4,8	254	15,3	5,8	276	16,5	8,0
	40	12	165	9,9	6,8	234	14,1	7,8	266	16,0	10,0
	40	16	121	7,3	8,7	214	12,8	9,8	257	15,4	12,0
	50	4	311	18,7	3,4	342	20,5	4,5	356	21,4	6,8
	50	8	255	15,3	5,8	316	18,9	6,9	344	20,6	9,2
	50	12	198	11,9	8,3	289	17,4	9,4	331	19,9	11,7
	50	16	142	8,5	10,7	263	15,8	11,8	319	19,2	14,2
	60	4	371	22,3	3,9	409	24,5	5,0	426	25,6	7,5
	60	8	301	18,1	6,9	376	22,6	8,0	411	24,7	10,4
60	12	231	13,8	9,8	344	20,6	10,9	396	23,8	13,4	
60	16	160	9,6	12,8	311	18,7	13,9	381	22,9	16,3	
110	38	4	370	22,2	4,2	399	23,9	5,8	412	24,7	9,3
	38	8	317	19,0	7,0	374	22,5	8,7	401	24,0	12,1
	38	12	264	15,8	9,9	350	21,0	11,5	389	23,4	15,0
	38	16	211	12,6	12,7	325	19,5	14,3	378	22,7	17,8
	50	4	483	29,0	5,2	523	31,4	6,9	542	32,5	10,6
	50	8	409	24,6	8,9	489	29,3	10,6	526	31,5	14,3
	50	12	335	20,1	12,6	454	27,3	14,4	510	30,6	18,1
	50	16	261	15,7	16,4	420	25,2	18,1	494	29,6	21,8
	64	4	614	36,8	6,3	667	40,0	8,2	692	41,5	12,1
	64	8	514	30,9	11,1	621	37,3	12,9	671	40,2	16,8
	64	12	415	24,9	15,9	575	34,5	17,7	649	39,0	21,6
	64	16	315	18,9	20,6	529	31,7	22,4	628	37,7	26,4
	75	4	716	42,9	7,2	780	46,8	9,1	810	48,6	13,2
	75	8	595	35,7	12,8	724	43,5	14,7	784	47,1	18,7
75	12	475	28,5	18,4	669	40,1	20,3	758	45,5	24,3	
75	16	354	21,3	23,9	613	36,8	25,8	732	43,9	29,9	
130	46	4	712	42,7	7,7	760	45,6	10,5	782	46,9	16,4
	46	8	622	37,3	13,1	718	43,1	15,8	763	45,8	21,7
	46	12	533	32,0	18,4	677	40,6	21,2	744	44,6	27,1
	46	16	443	26,6	23,7	635	38,1	26,5	724	43,5	32,4
	58	4	892	53,5	9,2	956	57,3	12,1	985	59,1	18,4
	58	8	774	46,4	16,0	901	54,0	18,9	960	57,6	25,1
	58	12	656	39,3	22,7	846	50,7	25,6	934	56,0	31,8
	58	16	537	32,2	29,5	791	47,5	32,3	909	54,5	38,6
	80	4	1220	73,2	12,0	1313	78,8	15,1	1356	81,4	21,8
	80	8	1046	62,7	21,3	1232	73,9	24,4	1319	79,1	31,1
	80	12	872	52,3	30,6	1152	69,1	33,7	1281	76,9	40,4
	80	16	698	41,9	39,9	1071	64,2	43,0	1244	74,6	49,7
	93	4	1412	84,7	13,6	1524	91,4	16,8	1575	94,5	23,8
	93	8	1203	72,2	24,4	1427	85,6	27,6	1530	91,8	34,6
93	12	995	59,7	35,2	1330	79,8	38,4	1486	89,1	45,4	
93	16	786	47,2	46,0	1233	74,0	49,2	1441	86,4	56,2	

PERFORMANCE CHART



MODEL	980 rpm		5 cSt			50 cSt			500 cSt		
	Pitch	differ-P	flow		power	flow		power	flow		power
	mm	bar	litr/min	m ³ /h	kW	litri/min	m ³ /h	kW	litr/min	m ³ /h	kW
170	60	4	1593	95,6	16,2	1686	101,2	21,3	1729	103,8	32,3
	60	8	1420	85,2	28,0	1606	96,3	33,1	1692	101,5	44,1
	60	12	1247	74,8	39,8	1525	91,5	44,9	1655	99,3	55,9
	60	16	1074	64,4	51,5	1445	86,7	56,6	1617	97,0	67,7
	80	4	2111	126,6	20,4	2242	134,5	25,9	2303	138,2	37,6
	80	8	1866	112,0	36,1	2128	127,7	41,6	2250	135,0	53,3
	80	12	1621	97,3	51,8	2015	120,9	57,3	2197	131,8	69,0
	80	16	1377	82,6	67,5	1901	114,1	73,0	2145	128,7	84,7
	100	4	2625	157,5	24,6	2796	167,8	30,3	2875	172,5	42,7
	100	8	2305	138,3	44,2	2647	158,8	50,0	2807	168,4	62,3
	100	12	1985	119,1	63,9	2499	149,9	69,6	2738	164,3	81,9
	100	16	1665	99,9	83,5	2351	141,0	89,2	2669	160,1	101,6
	120	4	3135	188,1	28,7	3348	200,9	34,7	3447	206,8	47,6
	120	8	2737	164,2	52,3	3164	189,8	58,2	3362	201,7	71,1
120	12	2339	140,3	75,8	2979	178,7	81,8	3276	196,6	94,7	
120	16	1941	116,5	99,4	2794	167,6	105,4	3190	191,4	118,2	
210	70	4	2849	170,9	27,9	2995	179,7	36,1	3063	183,8	53,8
	70	8	2576	154,6	48,7	2869	172,1	56,9	3004	180,3	74,6
	70	12	2303	138,2	69,5	2742	164,5	77,8	2946	176,7	95,4
	70	16	2030	121,8	90,4	2615	156,9	98,6	2887	173,2	116,2
	100	4	4041	242,5	37,4	4266	255,9	46,3	4370	262,2	65,4
	100	8	3622	217,3	67,2	4071	244,3	76,0	4280	256,8	95,2
	100	12	3203	192,2	96,9	3877	232,6	105,8	4189	251,4	124,9
	100	16	2784	167,1	126,6	3682	220,9	135,5	4099	245,9	154,6
	130	4	5224	313,4	46,8	5532	331,9	56,2	5674	340,5	76,5
	130	8	4650	279,0	85,5	5265	315,9	94,9	5551	333,0	115,2
	130	12	4076	244,6	124,1	4999	299,9	133,5	5427	325,6	153,8
	130	16	3502	210,1	162,8	4732	283,9	172,2	5303	318,2	192,5
	150	4	6009	360,5	53,0	6374	382,4	62,7	6543	392,6	83,7
	150	8	5327	319,6	97,6	6057	363,4	107,3	6396	383,8	128,3
150	12	4646	278,7	142,2	5741	344,5	151,9	6250	375,0	172,9	
150	16	3964	237,8	186,8	5425	325,5	196,5	6103	366,2	217,5	
270	90	4	5779	346,7	53,8	6043	362,6	67,7	6166	369,9	97,5
	90	8	5285	317,1	95,6	5814	348,8	109,5	6059	363,6	139,4
	90	12	4792	287,5	137,4	5585	335,1	151,3	5953	357,2	181,2
	90	16	4298	257,9	179,3	5356	321,4	193,1	5847	350,8	223,0
	120	4	7666	459,9	68,5	8039	482,4	83,3	8213	492,8	115,2
	120	8	6969	418,1	124,3	7716	462,9	139,1	8062	483,7	170,9
	120	12	6272	376,3	180,1	7392	443,5	194,8	7912	474,7	226,7
	120	16	5575	334,5	235,8	7069	424,1	250,6	7762	465,7	282,4
	160	4	10166	610,0	88,0	10693	641,6	103,7	10938	656,3	137,6
	160	8	9182	550,9	162,3	10237	614,2	178,1	10726	643,6	212,0
	160	12	8198	491,9	236,6	9780	586,8	252,4	10514	630,8	286,3
	160	16	7213	432,8	311,0	9323	559,4	326,7	10302	618,1	360,7
	190	4	12031	721,9	102,4	12679	760,8	118,8	12980	778,8	154,0
	190	8	10822	649,3	190,7	12118	727,1	207,1	12720	763,2	242,3
190	12	9612	576,7	279,0	11556	693,4	295,3	12459	747,5	330,6	
190	16	8402	504,1	367,3	10995	659,7	383,6	12198	731,9	418,9	

PERFORMANCE CHART



SERIES

2SP

MODEL	1450 rpm		5 cSt			50 cSt			500 cSt		
	Pitch	differ-P	flow		power	flow		power	flow		power
	mm	bar	litr/min	m ³ /h	kW	litr/min	m ³ /h	kW	litr/min	m ³ /h	kW
90	30	4	296	17,8	3,6	313	18,8	5,2	320	19,2	8,6
	30	8	265	15,9	5,7	298	17,9	7,4	314	18,8	10,8
	30	12	235	14,1	7,9	284	17,0	9,5	307	18,4	13,0
	30	16	204	12,3	10,1	270	16,2	11,7	300	18,0	15,2
	40	4	392	23,5	4,4	416	24,9	6,1	426	25,6	9,8
	40	8	349	20,9	7,3	395	23,7	9,0	417	25,0	12,7
	40	12	306	18,4	10,2	375	22,5	11,9	408	24,5	15,6
	40	16	263	15,8	13,1	355	21,3	14,8	398	23,9	18,6
	50	4	488	29,3	5,2	518	31,1	7,0	532	31,9	10,9
	50	8	431	25,9	8,8	492	29,5	10,7	520	31,2	14,6
	50	12	375	22,5	12,5	466	27,9	14,3	508	30,5	18,2
	50	16	318	19,1	16,1	440	26,4	17,9	496	29,7	21,8
	60	4	583	35,0	6,0	621	37,2	7,9	638	38,3	12,0
	60	8	513	30,8	10,4	588	35,3	12,3	623	37,4	16,4
	60	12	442	26,5	14,7	555	33,3	16,6	608	36,5	20,7
	60	16	372	22,3	19,1	523	31,4	21,0	593	35,6	25,1
110	38	4	574	34,4	6,5	602	36,1	9,3	615	36,9	15,1
	38	8	520	31,2	10,7	577	34,6	13,4	604	36,2	19,3
	38	12	467	28,0	14,9	553	33,2	17,6	592	35,5	23,5
	38	16	414	24,8	19,1	528	31,7	21,8	581	34,9	27,7
	50	4	751	45,0	8,0	791	47,4	10,9	809	48,5	17,2
	50	8	677	40,6	13,5	756	45,4	16,4	793	47,6	22,7
	50	12	603	36,2	19,0	722	43,3	21,9	777	46,6	28,2
	50	16	529	31,7	24,5	687	41,2	27,4	761	45,7	33,7
	64	4	956	57,4	9,7	1010	60,6	12,8	1034	62,1	19,4
	64	8	857	51,4	16,7	963	57,8	19,8	1013	60,8	26,4
	64	12	757	45,4	23,8	917	55,0	26,8	991	59,5	33,5
	64	16	657	39,4	30,8	871	52,3	33,9	970	58,2	40,5
	75	4	1117	67,0	11,0	1181	70,9	14,2	1211	72,7	21,1
	75	8	996	59,8	19,3	1125	67,5	22,4	1185	71,1	29,3
	75	12	876	52,6	27,5	1070	64,2	30,7	1159	69,6	37,6
	75	16	755	45,3	35,8	1014	60,8	38,9	1134	68,0	45,8
130	46	4	1096	65,8	11,9	1144	68,7	16,5	1166	70,0	26,5
	46	8	1007	60,4	19,8	1103	66,2	24,4	1147	68,8	34,4
	46	12	917	55,0	27,7	1061	63,7	32,4	1128	67,7	42,3
	46	16	828	49,7	35,6	1019	61,2	40,3	1109	66,5	50,2
	58	4	1377	82,6	14,2	1440	86,4	19,1	1470	88,2	29,6
	58	8	1259	75,5	24,2	1385	83,1	29,0	1444	86,6	39,6
	58	12	1140	68,4	34,1	1330	79,8	39,0	1419	85,1	49,5
	58	16	1022	61,3	44,1	1276	76,5	49,0	1393	83,6	59,5
	80	4	1888	113,3	18,3	1981	118,9	23,5	2025	121,5	34,9
	80	8	1714	102,9	32,0	1901	114,0	37,3	1987	119,2	48,6
	80	12	1540	92,4	45,8	1820	109,2	51,0	1950	117,0	62,4
	80	16	1366	82,0	59,5	1739	104,4	64,8	1912	114,7	76,1
	93	4	2189	131,3	20,7	2301	138,0	26,1	2352	141,1	37,8
	93	8	1980	118,8	36,7	2204	132,2	42,1	2308	138,5	53,8
	93	12	1772	106,3	52,7	2107	126,4	58,1	2263	135,8	69,8
	93	16	1564	93,8	68,6	2010	120,6	74,1	2218	133,1	85,8

PERFORMANCE CHART



MODEL	1450 rpm		5 cSt			50 cSt			500 cSt		
	Pitch	differ-P	flow		power	flow		power	flow		power
	mm	bar	litr/min	m ³ /h	kW	litri/min	m ³ /h	kW	litr/min	m ³ /h	kW
170	60	4	2441	146,4	24,9	2533	152,0	33,5	2577	154,6	52,1
	60	8	2267	136,0	42,3	2453	147,2	50,9	2539	152,4	69,5
	60	12	2094	125,6	59,7	2373	142,4	68,4	2502	150,1	86,9
	60	16	1921	115,2	77,2	2292	137,5	85,8	2465	147,9	104,3
	80	4	3240	194,4	31,2	3372	202,3	40,4	3432	205,9	60,2
	80	8	2996	179,7	54,4	3258	195,5	63,6	3380	202,8	83,4
	80	12	2751	165,1	77,7	3144	188,7	86,9	3327	199,6	106,6
	80	16	2506	150,4	100,9	3031	181,8	110,1	3274	196,5	129,9
	100	4	4037	242,2	37,4	4208	252,5	47,1	4288	257,3	67,9
	100	8	3717	223,0	66,5	4060	243,6	76,1	4219	253,1	96,9
	100	12	3397	203,8	95,5	3911	234,7	105,2	4150	249,0	126,0
	100	16	3077	184,6	124,5	3763	225,8	134,2	4081	244,8	155,0
	120	4	4830	289,8	43,6	5043	302,6	53,6	5142	308,5	75,3
	120	8	4432	265,9	78,4	4858	291,5	88,5	5056	303,4	110,2
	120	12	4034	242,0	113,3	4673	280,4	123,3	4970	298,2	145,0
	120	16	3635	218,1	148,1	4489	269,3	158,2	4885	293,1	179,9
210	70	4	4346	260,8	42,8	4493	269,6	56,6	4561	273,6	86,4
	70	8	4073	244,4	73,6	4366	262,0	87,4	4502	270,1	117,2
	70	12	3800	228,0	104,4	4239	254,3	118,2	4443	266,6	148,0
	70	16	3527	211,6	135,2	4112	246,7	149,0	4384	263,0	178,8
	100	4	6180	370,8	57,0	6405	384,3	71,9	6509	390,5	104,2
	100	8	5761	345,7	101,0	6210	372,6	115,9	6419	385,1	148,2
	100	12	5342	320,5	145,0	6016	360,9	159,9	6328	379,7	192,2
	100	16	4923	295,4	188,9	5821	349,3	203,9	6238	374,3	236,2
	130	4	8005	480,3	70,9	8312	498,7	86,8	8455	507,3	121,0
	130	8	7431	445,9	128,1	8046	482,8	144,0	8331	499,9	178,2
	130	12	6857	411,4	185,3	7780	466,8	201,2	8208	492,5	235,4
	130	16	6283	377,0	242,5	7513	450,8	258,4	8084	485,1	292,6
	150	4	9217	553,0	80,2	9582	574,9	96,6	9752	585,1	131,9
	150	8	8536	512,1	146,2	9266	556,0	162,6	9605	576,3	197,9
	150	12	7854	471,2	212,2	8950	537,0	228,6	9458	567,5	263,9
	150	16	7173	430,4	278,2	8633	518,0	294,5	9311	558,7	329,9
270	90	4	8787	527,2	82,1	9051	543,1	105,5	9174	550,4	155,8
	90	8	8293	497,6	144,0	8822	529,3	167,3	9067	544,0	217,7
	90	12	7800	468,0	205,8	8593	515,6	229,2	8961	537,7	279,6
	90	16	7306	438,4	267,7	8364	501,8	291,1	8855	531,3	341,4
	120	4	11676	700,6	104,1	12050	723,0	129,0	12223	733,4	182,6
	120	8	10980	658,8	186,6	11726	703,6	211,5	12073	724,4	265,1
	120	12	10283	617,0	269,0	11403	684,2	294,0	11923	715,4	347,6
	120	16	9586	575,1	351,5	11079	664,8	376,4	11773	706,4	430,1
	160	4	15514	930,8	133,0	16041	962,5	159,5	16286	977,1	216,7
	160	8	14529	871,8	243,0	15584	935,0	269,5	16074	964,4	326,7
	160	12	13545	812,7	353,0	15127	907,6	379,5	15862	951,7	436,7
	160	16	12561	753,7	462,9	14670	880,2	489,5	15650	939,0	546,7
	190	4	18381	1102,9	154,5	19030	1141,8	182,1	19330	1159,8	241,5
	190	8	17172	1030,3	285,1	18468	1108,1	312,7	19070	1144,2	372,1
	190	12	15962	957,7	415,7	17907	1074,4	443,3	18809	1128,6	502,7
	190	16	14753	885,2	546,3	17345	1040,7	573,9	18549	1112,9	633,3

PERFORMANCE CHART



SERIES

2SP

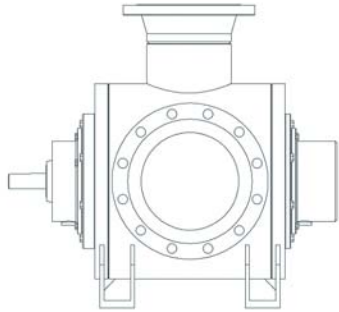
MODEL	1750 rpm		5 cSt			50 cSt			500 cSt		
	Pitch	differ-P	flow		power	flow		power	flow		power
	mm	bar	litr/min	m ³ /h	kW	litr/min	m ³ /h	kW	litr/min	m ³ /h	kW
90	30	4	364	21,8	4,4	380	22,8	6,5	388	23,3	10,9
	30	8	333	20,0	7,0	366	22,0	9,1	381	22,9	13,6
	30	12	302	18,1	9,7	352	21,1	11,7	375	22,5	16,2
	30	16	272	16,3	12,3	337	20,2	14,4	368	22,1	18,8
	40	4	483	29,0	5,4	506	30,3	7,6	516	31,0	12,4
	40	8	439	26,4	8,9	486	29,1	11,1	507	30,4	15,9
	40	12	396	23,8	12,4	466	27,9	14,7	498	29,9	19,4
	40	16	353	21,2	15,9	445	26,7	18,2	488	29,3	22,9
	50	4	601	36,0	6,4	631	37,9	8,7	645	38,7	13,8
	50	8	544	32,6	10,8	605	36,3	13,1	633	38,0	18,2
	50	12	488	29,3	15,2	578	34,7	17,5	621	37,2	22,5
	50	16	431	25,9	19,6	552	33,1	21,9	608	36,5	26,9
	60	4	718	43,1	7,4	756	45,4	9,8	773	46,4	15,1
	60	8	648	38,9	12,6	723	43,4	15,1	758	45,5	20,3
	60	12	578	34,7	17,9	691	41,4	20,3	743	44,6	25,6
	60	16	507	30,4	23,1	658	39,5	25,6	728	43,7	30,9
110	38	4	703	42,2	8,1	732	43,9	11,6	745	44,7	19,1
	38	8	650	39,0	13,1	707	42,4	16,6	734	44,0	24,1
	38	12	597	35,8	18,2	682	40,9	21,7	722	43,3	29,2
	38	16	544	32,6	23,2	658	39,5	26,7	711	42,6	34,2
	50	4	921	55,3	9,9	961	57,7	13,6	980	58,8	21,6
	50	8	847	50,8	16,5	927	55,6	20,2	964	57,8	28,3
	50	12	773	46,4	23,1	892	53,5	26,9	948	56,9	34,9
	50	16	699	42,0	29,8	858	51,5	33,5	932	55,9	41,5
	64	4	1175	70,5	11,9	1228	73,7	15,9	1253	75,2	24,4
	64	8	1075	64,5	20,4	1182	70,9	24,4	1231	73,9	32,9
	64	12	976	58,5	28,9	1136	68,1	32,9	1210	72,6	41,4
	64	16	876	52,6	37,4	1089	65,4	41,3	1188	71,3	49,8
	75	4	1373	82,4	13,5	1437	86,2	17,6	1467	88,0	26,4
	75	8	1252	75,1	23,5	1381	82,9	27,6	1441	86,5	36,4
75	12	1132	67,9	33,4	1326	79,5	37,5	1415	84,9	46,3	
75	16	1011	60,7	43,4	1270	76,2	47,5	1390	83,4	56,3	
130	46	4	1342	80,5	14,7	1390	83,4	20,6	1412	84,7	33,5
	46	8	1252	75,1	24,2	1348	80,9	30,2	1393	83,6	43,0
	46	12	1162	69,7	33,8	1306	78,4	39,7	1373	82,4	52,5
	46	16	1073	64,4	43,3	1265	75,9	49,3	1354	81,2	62,1
	58	4	1686	101,2	17,5	1750	105,0	23,7	1779	106,7	37,2
	58	8	1568	94,1	29,5	1695	101,7	35,8	1753	105,2	49,3
	58	12	1450	87,0	41,5	1640	98,4	47,8	1728	103,7	61,3
	58	16	1331	79,9	53,5	1585	95,1	59,8	1703	102,2	73,3
	80	4	2315	138,9	22,4	2408	144,5	29,2	2451	147,1	43,7
	80	8	2141	128,5	39,0	2327	139,6	45,8	2414	144,8	60,3
	80	12	1967	118,0	55,6	2247	134,8	62,4	2376	142,6	76,9
	80	16	1793	107,6	72,2	2166	130,0	79,0	2339	140,3	93,5
	93	4	2685	161,1	25,3	2797	167,8	32,3	2848	170,9	47,4
	93	8	2476	148,6	44,6	2700	162,0	51,6	2804	168,2	66,6
	93	12	2268	136,1	63,9	2603	156,2	70,9	2759	165,5	85,9
	93	16	2060	123,6	83,2	2506	150,4	90,2	2714	162,8	105,2

PERFORMANCE CHART

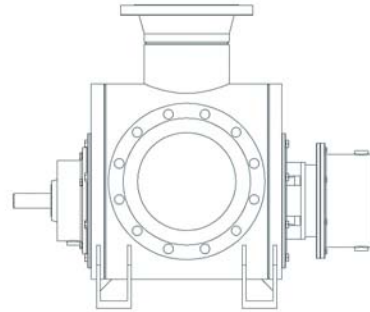


MODEL	1750 rpm		5 cSt			50 cSt			500 cSt		
	Pitch	differ-P	flow		power	flow		power	flow		power
	mm	bar	litr/min	litr/min h	kW	litr/min	m^3/h	kW	litr/min	m^3/h	kW
170	60	4	2981	178,9	30,6	3074	184,5	41,7	3117	187,0	65,5
	60	8	2808	168,5	51,7	2994	179,6	62,7	3080	184,8	86,6
	60	12	2635	158,1	72,7	2913	174,8	83,8	3043	182,6	107,6
	60	16	2462	147,7	93,7	2833	170,0	104,8	3005	180,3	128,6
	80	4	3962	237,7	38,3	4093	245,6	50,1	4154	249,2	75,5
	80	8	3717	223,0	66,3	3979	238,7	78,1	4101	246,0	103,6
	80	12	3472	208,3	94,4	3865	231,9	106,2	4048	242,9	131,6
	80	16	3227	193,6	122,4	3752	225,1	134,2	3995	239,7	159,6
	100	4	4938	296,3	45,8	5109	306,6	58,2	5189	311,3	85,0
	100	8	4618	277,1	80,9	4961	297,7	93,3	5120	307,2	120,0
	100	12	4298	257,9	115,9	4812	288,7	128,3	5051	303,1	155,1
	100	16	3978	238,7	151,0	4664	279,8	163,4	4982	298,9	190,1
	120	4	5911	354,7	53,3	6125	367,5	66,2	6224	373,4	94,1
	120	8	5513	330,8	95,3	5940	356,4	108,3	6138	368,3	136,1
	120	12	5115	306,9	137,4	5755	345,3	150,3	6052	363,1	178,2
	120	16	4717	283,0	179,4	5570	334,2	192,4	5966	358,0	220,2
210	70	4	5302	318,1	52,6	5448	326,9	70,3	5516	331,0	108,6
	70	8	5029	301,7	89,7	5322	319,3	107,5	5457	327,4	145,8
	70	12	4756	285,4	126,9	5195	311,7	144,7	5399	323,9	183,0
	70	16	4483	269,0	164,1	5068	304,1	181,8	5340	320,4	220,1
	100	4	7545	452,7	69,8	7770	466,2	89,0	7874	472,4	130,5
	100	8	7127	427,6	122,9	7575	454,5	142,1	7784	467,0	183,6
	100	12	6708	402,5	176,0	7381	442,9	195,2	7694	461,6	236,7
	100	16	6289	377,3	229,1	7187	431,2	248,3	7603	456,2	289,7
	130	4	9780	586,8	86,7	10087	605,2	107,1	10230	613,8	151,0
	130	8	9206	552,3	155,7	9821	589,3	176,1	10106	606,4	220,1
	130	12	8632	517,9	224,7	9554	573,3	245,1	9983	599,0	289,1
	130	16	8058	483,5	293,8	9288	557,3	314,2	9859	591,5	358,1
	150	4	11265	675,9	97,9	11630	697,8	118,9	11800	708,0	164,3
	150	8	10584	635,0	177,5	11314	678,8	198,6	11653	699,2	244,0
	150	12	9902	594,1	257,2	10998	659,9	278,2	11506	690,4	323,6
	150	16	9221	553,2	336,8	10681	640,9	357,9	11359	681,6	403,2
270	90	4	10707	642,4	100,7	10971	658,3	130,7	11094	665,6	195,4
	90	8	10213	612,8	175,3	10742	644,5	205,4	10987	659,2	270,1
	90	12	9720	583,2	250,0	10513	630,8	280,0	10881	652,9	344,7
	90	16	9226	553,6	324,7	10284	617,0	354,7	10775	646,5	419,4
	120	4	14236	854,2	127,3	14610	876,6	159,3	14783	887,0	228,2
	120	8	13540	812,4	226,8	14286	857,2	258,8	14633	878,0	327,8
	120	12	12843	770,6	326,4	13963	837,8	358,4	14483	869,0	427,4
	120	16	12146	728,7	425,9	13639	818,4	458,0	14333	860,0	526,9
	160	4	18927	1135,6	162,3	19454	1167,3	196,4	19699	1181,9	269,9
	160	8	17943	1076,6	295,0	18997	1139,8	329,1	19487	1169,2	402,6
	160	12	16958	1017,5	427,8	18541	1112,4	461,9	19275	1156,5	535,4
	160	16	15974	958,5	560,5	18084	1085,0	594,6	19063	1143,8	668,1
	190	4	22435	1346,1	188,3	23083	1385,0	223,8	23384	1403,0	300,1
	190	8	21225	1273,5	346,0	22522	1351,3	381,4	23123	1387,4	457,7
	190	12	20016	1200,9	503,6	21960	1317,6	539,0	22863	1371,8	615,4
	190	16	18806	1128,4	661,2	21399	1283,9	696,7	22602	1356,1	773,0

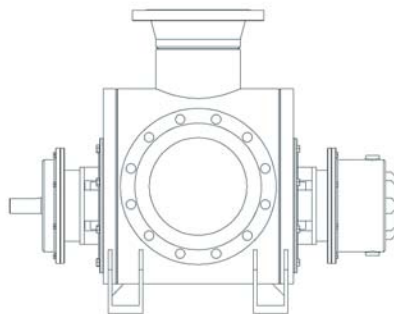
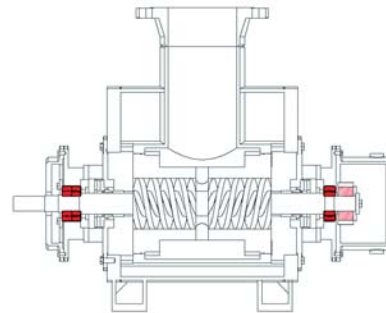
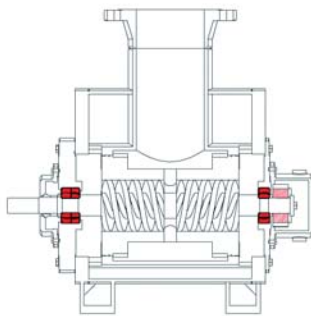
2SP						
MODEL		axial flow velocity (m/s)				
dia nominal	pitch	500	750	1000	1500	1750
mm	mm	rpm	rpm	rpm	rpm	rpm
90	30	0,3	0,4	0,5	0,8	0,9
	40	0,3	0,5	0,7	1,0	1,2
	50	0,4	0,6	0,8	1,3	1,5
	60	0,5	0,8	1,0	1,5	1,8
110	38	0,3	0,5	0,6	1,0	1,1
	50	0,4	0,6	0,8	1,3	1,5
	64	0,5	0,8	1,1	1,6	1,9
	75	0,6	0,9	1,3	1,9	2,2
130	46	0,4	0,6	0,8	1,2	1,3
	58	0,5	0,7	1,0	1,5	1,7
	80	0,7	1,0	1,3	2,0	2,3
	93	0,8	1,2	1,6	2,3	2,7
170	60	0,5	0,8	1,0	1,5	1,8
	80	0,7	1,0	1,3	2,0	2,3
	100	0,8	1,3	1,7	2,5	2,9
	120	1,0	1,5	2,0	3,0	3,5
210	70	0,6	0,9	1,2	1,8	2,0
	100	0,8	1,3	1,7	2,5	2,9
	130	1,1	1,6	2,2	3,3	3,8
	150	1,3	1,9	2,5	3,8	4,4
270	90	0,8	1,1	1,5	2,3	2,6
	120	1,0	1,5	2,0	3,0	3,5
	160	1,3	2,0	2,7	4,0	4,7
	190	1,6	2,4	3,2	4,8	5,5



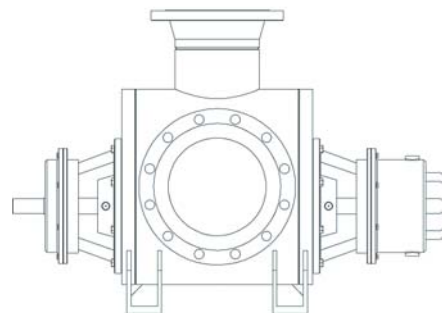
L1



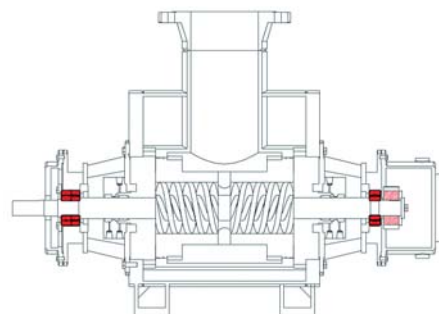
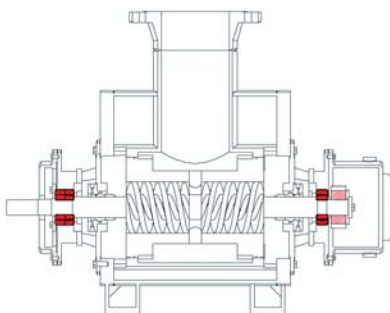
L2



L3



L4



SERIES

PZ



MAIN CHARACTERISTICS

Delivery flow	400 to 5400 LPM (105 to 1425 USGPM)
Admissible delivery pressure	up to 16 bar (232 psi)*
Admissible suction pressure	-0,5 to 10 bar (-7,3 to 145 psi)*
Kinematics viscosity	10 to 400 cSt STD*
Admissible temperature	0 to 120 °C (32 to 248 °F)
Driving speed	1500 to 1800 rpm for other version max. 3000 rpm
Average noise level	65 ÷ 75 dB(A) at 1800 rpm according to pump dimension
Recommended filtration	60 micron max, (not abrasive contaminant) ISO4406 19 / 16 – NAS 10
Direction of rotation	Clockwise, as seen from the driving side

*For different values contact Seim *Reduced pressure limits apply due to fluid viscosity and driving speed. Consult the performance charts for the individual pump size. For different functional characteristics, please contact our sales department.

SERIES

PXF-PXC



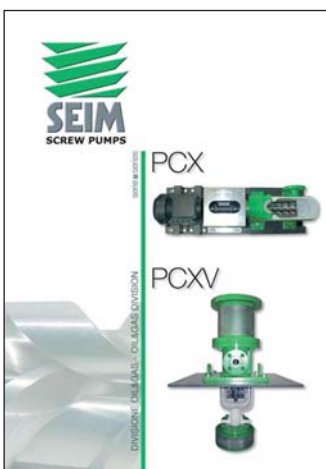
MAIN CHARACTERISTICS

Delivery flow	10 to 3000 LPM (2,6 to 800 USGPM)
Admissible delivery pressure	up to 30 bar (435 psi) continuous*
Admissible suction pressure	-0,5 to 10 bar (-7,3 to 145 psi)*
Kinematics viscosity	10 to 400 cSt*
Admissible temperature	0 to 120 °C (32 to 248 °F)*
Driving speed	750 to 3600 rpm
Average noise level	53 ÷ 68 dB(A) at 2900 rpm according to pump dimension
Recommended filtration	60 micron max, suction side (not abrasive contaminant) ISO4406 19 / 16 – NAS 10
Direction of rotation	Clockwise, as seen from the driving side

*For different values contact Seim. *Standard valve setting mod. B: 7 – 16 bar (102 – 232 psi). *Reduced pressure limits apply due to fluid viscosity and driving speed. Consult the performance charts for the individual pump size. For different functional characteristics, please contact our sales department.

SERIES

PCX-PCXV



MAIN CHARACTERISTICS

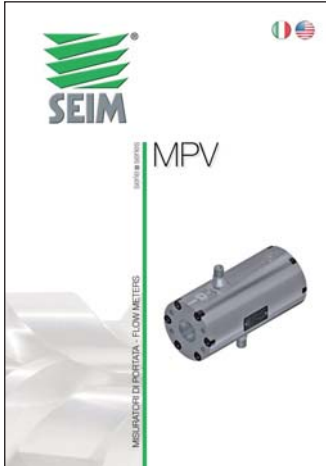
Delivery flow	10 to 5400 LPM (2,6 to 1426 USGPM)*
Admissible delivery pressure	up to 30 bar (435 psi) continuous*
Admissible suction pressure	-0,5 to 10 bar (-7,3 to 145 psi)*
Kinematics viscosity	10 to 1500 cSt*
Admissible temperature	0 to 120 °C (32 to 248 °F)*
Driving speed	750 to 3600 rpm
Average noise level	53 ÷ 68 dB(A) at 2900 rpm according to pump dimension
Recommended filtration	60 micron max, suction side (not abrasive contaminant) ISO4406 19 / 16 – NAS 10
Direction of rotation	Clockwise, as seen from the driving side*

*For different values contact Seim. *Reduced pressure limits apply due to fluid viscosity and driving speed. Consult the performance charts for the individual pump size. For different functional characteristics, please contact our sales department.

SERIES

MPVA

FLOW METERS



MAIN CHARACTERISTICS

Flow rate	0,9 to 900 LPM approx (0,24 to 240 USGPM)*
Pressure	350 bar continuous (base version 200 bar)
Standard operating temperature	-15 to +70 °C*
Viscosity	1 ÷ 5,000 cSt
Types of fluid	lubricant oils and chemically neutral mixes, even with low lubricating power**
Recommended degree of filtration	NAS 10 ÷ 12
Precision	class 0,2% (0,4% on range 30÷1) - see table 1
Standard construction mat'l	aluminium body*
Type of O/P	square wave signal in frequency, direct function of flow rate

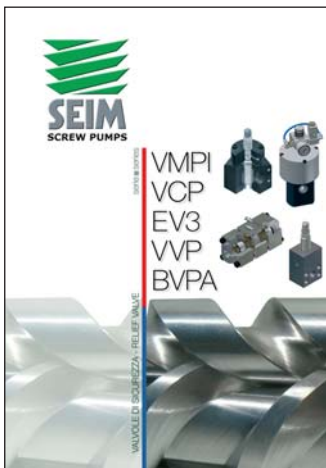
* For different values contact Seim

** Special versions are available for specific applications (flow rates, temperatures and non-standard materials, bi-directional flow reading) as well as customised versions. Contact the SEIM Sales Office.

SERIES

VMPI

PRESSURE RELIEF VALVE



MAIN CHARACTERISTICS

Delivery flow	30 to 10000 LPM (7,9 to 2640 USGPM)
Max pressure*	up to 50 bar (725 psi)
Kinematics viscosity*	3 to 400 cSt*
Admissible temperature*	0 to 100 °C (32 to 212 °F)*
Recommended filtration	60 micron max, (not abrasive contaminant) ISO4406 19 / 16 – NAS 10

* For different values contact Seim

* Reduced pressure limits apply due to fluid viscosity and driving speed. Consult the performance charts for the individual pump size.

* For different functional characteristics, please contact our sales department.