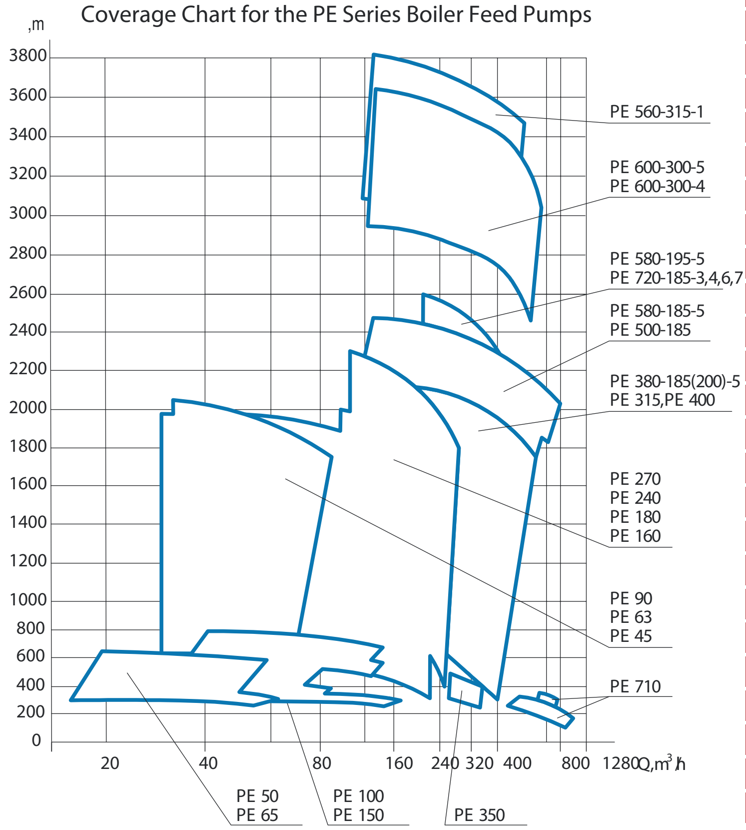
PE 720

Designed for delivering treated water (feed water) into stationary steam boilers of the conventional (fossil-fueled) thermal power stations as well as to supply feedwater into waste-heat boilers at the power stations with combined-cycle and steam power plants.

Motor driven horizontal multistage diffuser centrifugal pumps of segmental or barrel type with a withdrawable cartridge of ring-section type. Single flow impeller arrangement, with all the impellers facing the same way.
May be operated both at the constant and variable speed of rotation.
The pump rotor is carried by the oil-ring or pressure lubricated plain bearings.
Shaft sealing: packed glands or mechanical seals.

Coverage Chart for the PE Series Boiler Feed Pumps



At the Customer's request, the following options can be provided:

- such a construction of studs for casing main joint that enables the use of hydraulic jacks (wrenches) for pre-tensioning the studs by making them only elongate before nuts screwing-on, thus avoiding torsional stresses arisen and ensuring their accurate and even tightening-up;
- equipping with a balance disc-from-seat separation device to ensure the guaranteed axial gap in the balancing device, thus holding pump rotor unbound both during standstill and at start-ups.

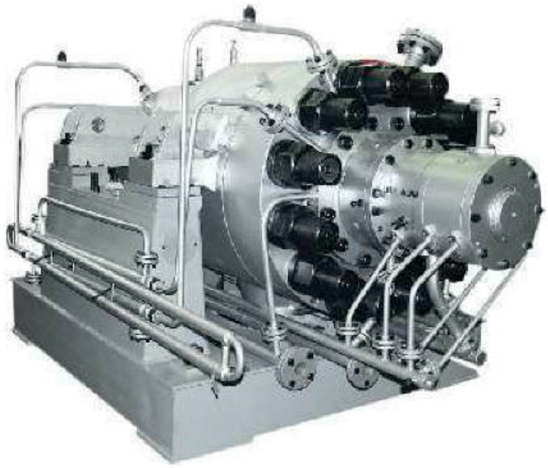
Nos	Pump make	Capacity, m^3/h	Head, m	Rotational speed (synchr.), rpm	Motor nominal power, kW
1	PE 20-16	20	172	3000	30
2	PE 50-70	35	530	3000	160
3	PE 63-90	60	930	3000	250
4	PE 65-28	65	290	2900	110
5	PE 65-40	65	440	3000	132
6	PE 65-40	25	480	3000	110
7	PE 65-40-1	51	425	3000	132
8	PE 65-40-1	65	580	3000	200
9	PE 65-40-1	70	501	3000	160
10	PE 65-40-1	80	580	3000	250
11	PE 65-53	65	580	3000	200
12	PE 65-53	54.14	617.83	3000	200
13	PE 65-53	51.7	615.4	3000	200
14	PE 65-53	80	500	3000	200
15	PE 90-110	90	1100	3000	500
16	PE 90-110	100	1100	3000	500
17	PE 90-180	90	1900	3000	1000
18	PE 100-32	100	330	3000	160
19	PE 100-53	80	580	3000	315
20	PE 145-30	145	293	3000	200
21	PE 150-53	150	580	3000	500
22	PE 150-63	150	700	3000	500
23	PE 160-140	160	1400	3000	1000
24	PE180-80	180	887	3000	630
25	PE 180-140	180	1450	2900	1000
26	PE 240-105	240	1140	3000	1250
27	PE 240-110	240	1210	3000	1250
28	APE 260-100	260	960	3000	1000
29	PE 250-190	250	1950	3000	2000
30	PE 270-150-3	270	1650	3000	2000
31	PE 270-150-4	250	1850	3000	2000
32	PE 270-150-4	248	1524	3000	1600
33	PE 275-100	275	1100	2970	1250
34	PE 310-100	310	1100	3000	2000
35	PE 310-110	310	1200	3000	2000
36	PE 310-140	310	1550	3000	2000
37	PE 310-160	310	1750	3000	2000
38	PE 315-130	315	1394	3000	1600
39	PE 315-140	315	1520	3000	2000
40	PE 315-150	315	1647	3000	2000
41	PE 315-175	315	1900	3000	2500
42	PE 350-45	350	460	3000	630
43	PE 380-185-5	380	2030	3000	3150

PE Series Multistage Segmental /Radially Split Barrel

Nos	Pump make	Capacity, m^3/h	Head, m	Rotational speed (synchr.), rpm	Motor nominal power, kW
44	PE 380-200-5	380	2190	3000	3150
45	PE 400-185	400	1900	3000	3150
46	PE 500-180-5	500	1950	3000	4000
47	PE 560-315-1	560	3500	6000	8000
48	PE 580-185-5	580	2030	3000	4000
49	PE 580-195-5	580	2150	3000	5000
50	PE 600-300-4	600	3290	6300	8000
51	PE 600-300-5	600	3290	6300	8000
52	PE 640-360	640	3670	6000	7000
53	PE 710-280	710	280	3000	800
54	PE 720-185-3	720	2030	3000	5000
55	PE 720-185-4	780	2030	4500	6300
56	PE 720-185-4	735	2030	3000	6300
57	PE 720-185-4	740	2250	3000	6300
58	PE 720-185-4	872	2052	3000	6300
59	PE 720-185-6	720	2030	3000	5000
60	PE 720-185-7	720	2030	3000	5000

PE 400

PE 150



PE 600

MG and MGL Fluid Couplings

Nos	Fluid coupling make	Output shaft speed range, rpm		Power transmitted by the coupling, kW
		from	t	
1	MG-600	2900	600	2000
2	MG-670	2900	600	5000
3	MGL-M-710	6300	1900	7000
4	MG2-600	2900	600	5000
5	MG2L-650	2900	600	7000

Designed for controlling the rotational speed of electrically driven pumping sets in order to vary their head and capacity to meet the system requirements.

The scoop-controlled horizontal hydrodynamic couplings are made in single-chamber version with an integral gear (MGL-M-710) or without it (MG 600 and MG 670) and in double-chamber version (MG2-600 and MG2L-650).

MG 600

MGL-M-710

PD Series Double Flow Axially / Radially Split

The boiler feed booster pumps are installed upstream of boiler feed pumps to deliver feed water with the pumping temperature of max. 165°C at the power units in TPS's to ensure a cavitation-free operation of the main pumps.

PD 650-160: motor-driven horizontal single-stage axially split (radially split in case of PD 650-160-2) volute-casing centrifugal pumps with a double entry radial impeller. Pump nozzles oriented horizontally to the opposite sides. The pump rotor is carried by the oil-ring lubricated plain bearings. Shaft sealing: packed glands.

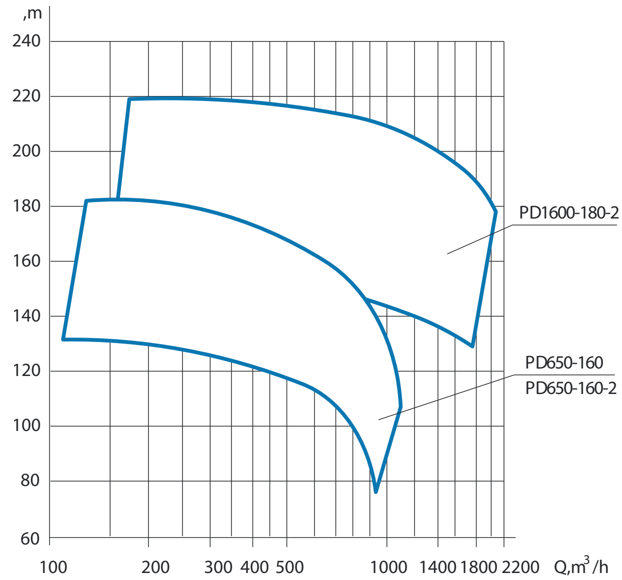
PD 1600-180-2: turbine-driven horizontal single-stage radially split volute-casing centrifugal pumps with a double entry radial impeller. The discharge nozzle horizontally sideward, the suction nozzle vertically to the bottom. The pump rotor is carried by the pressure lubricated plain bearings. Shaft sealing: mechanical seals.

PD

Nos	Pump make	Capacity, m^3/h	Head, m	Rotational speed, rpm	Motor nominal power, kW
1	PD 650-160	650	158	3000 (synchr.)	324
2	PD 650-160-2	650	158	3000	303
3	PD 1600-180-2*	1660	194	2100	954
4	PD 1600-180-2 **	1050	184	2100	633
5	PD 1600-180-2 ***	1240	158	2000	618

* for TPS 800 MW power units
** for TPS 500 MW power units
*** for TPS 320 MW power units

Coverage Chart for the Boiler Feed Booster Pumps PD



CNSg & CNSgM Series Multistage Segmental

Designed for handling water in hot water heating and water supply systems of industrial projects and public utilities (including the delivery of feedwater into the small-size boilers).

Electrically driven horizontal ring-section multistage centrifugal pumps. The pump rotor is carried by the grease-lubricated antifriction bearings. Shaft sealing: packed glands

CNSg

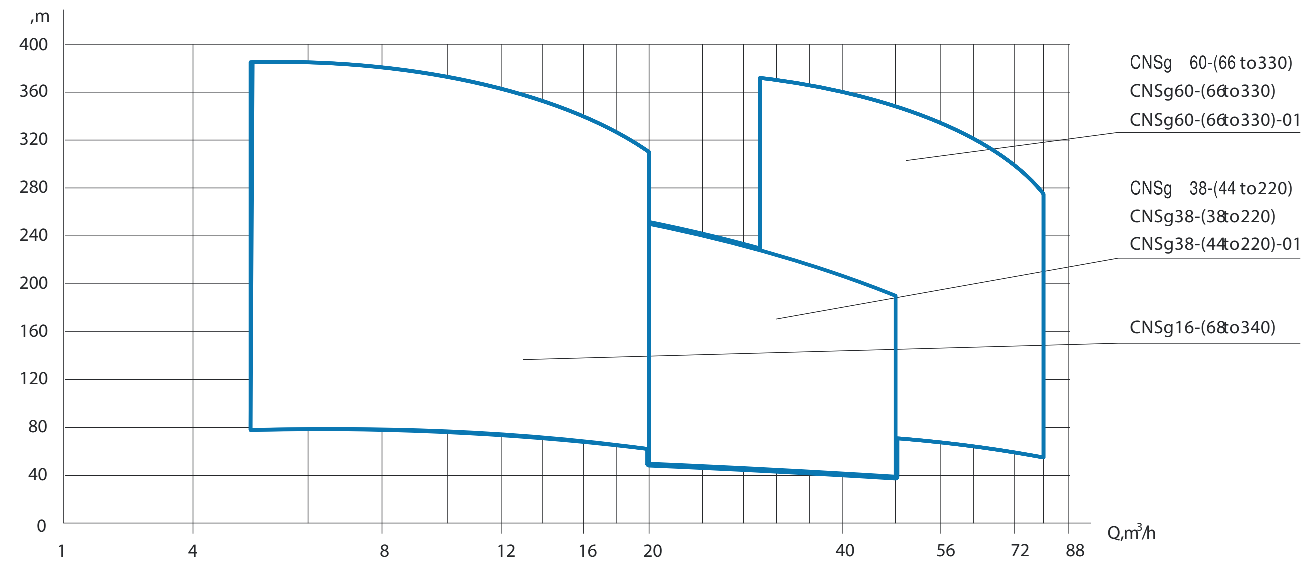
CNSgM

Nos	Pump make	Capacity, m³/h	Head, m	Rotational speed (synchr.),rpm	Motor nominal power, kW
1	CNSg 16-68	16	68	3000	7.5 (11)
2	CNSg 16-102	16	102	3000	11
3	CNSg 16-136	16	136	3000	15
4	CNSg 16-170	16	170	3000	18,5
5	CNSg 16-204	16	204	3000	22
6	CNSg 16-238	16	238	3000	30
7	CNSg 16-272	16	272	3000	30
8	CNSg 16-306	16	306	3000	37
9	CNSg 16-340	16	340	3000	37
10	CNSgM 38-44	38	44	3000	11
11	CNSgì 38-66	38	66	3000	15
12	CNSgì 38-88	38	88	3000	22
13	CNSgì 38-110	38	110	3000	22
14	CNSgì 38-132	38	132	3000	22
15	CNSgì 38-154	38	154	3000	30
16	CNSgì 38-176	38	176	3000	30
17	CNSgì 38-198	38	198	3000	37 (55)
18	CNSgì 38-220	38	220	3000	37 (55)
19	CNSgì 60-66	60	66	3000	22
20	CNSg 60-99	60	99	3000	30
21	CNSg 60-132	60	132	3000	55
22	CNSg 60-165	60	165	3000	55
23	CNSg 60-198	60	198	3000	55
24	CNS 60-231	60	231	3000	75
25	CNSg 60-264	60	264	3000	75
26	CNSg 60-297	60	297	3000	110
27	CNSg 60-330	60	330	3000	110
28	CNSg 38-44	38	44	3000	11
29	CNSg 38-66	38	66	3000	15
30	CNSg 38-88	38	88	3000	18.5
31	CNSg 38-110	38	110	3000	22
32	CNSg 38-132	38	132	3000	30

Nos	Pump make	Capacity, m³/h	Head, m	Rotational speed (synchr.),rpm	Motor nominal power, kW
33	CNSg 38-154	38	154	3000	30
34	CNSg 38-176	38	176	3000	30
35	CNSg 38-198	38	198	3000	37
36	CNSg 38-220	38	220	3000	45
37	CNSg 60-66	60	66	3000	22
38	CNSg 60-99	60	99	3000	30
39	CNSg 60-132	60	132	3000	45
40	CNSg 60-165	60	165	3000	55
41	CNSg 60-198	60	198	3000	55
42	CNSg 60-231	60	231	3000	75
43	CNSg 60-264	60	264	3000	75
44	CNSg 60-297	60	297	3000	90
45	CNSg 60-330	60	330	3000	110
46	CNSg 38-44-01*	38	44	3000	11
47	CNSg 38-66-01*	38	66	3000	15
48	CNSg 38-88-01*	38	88	3000	18.5
49	CNSg 38-110-01*	38	110	3000	22
50	CNSg 38-132-01*	38	132	3000	30
51	CNSg 38-154-01*	38	154	3000	30
52	CNSg 38-176-01*	38	176	3000	30
53	CNSg 38-198-01*	38	198	3000	37
54	CNSg 38-220-01*	38	220	3000	45
55	CNSg 60-66-01*	60	66	3000	22
56	CNSg 60-99/4	27	25	1500	4
57	CNSg 60-99-01*	60	99	3000	30
58	CNSg 60-132-01*	60	132	3000	45
59	CNSg 60-165-01*	60	165	3000	55
60	CNSg 60-198-01*	60	198	2940	55
61	CNSg 60-231-01*	60	231	3000	75
62	CNSg 60-264-01*	60	264	3000	75
63	CNSg 60-297-01*	60	297	3000	90
64	CNSg 60-330-01*	60	330	3000	110

* Explosion-proof version

Coverage Chart for the Boiler Feed Pumps CNSg and CNSgM



MSK Series Twin Suction, Radially Split

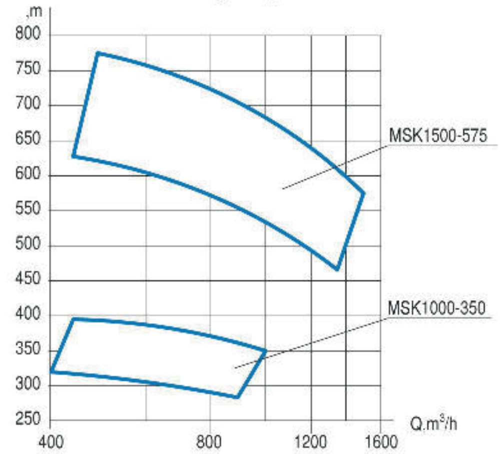
The boiler acid pickling pumps are designed for descaling TPS boilers by pumping an acid solution with the temperature of up to 120°C through them.

Motor driven horizontal near-centerline mounted, double-entry (with two suction nozzles) radially split volute-casing centrifugal pump of ring section type with single-flow impellers in back-to-back arrangement. The pump rotor is carried by the pressure-lubricated plain bearings. Shaft sealing: packed glands.

MSK

Nos	Pump make	Capacity, m^3/h	Head, m	Rotational speed (synchr.), rpm	Motor nominal power, kW
1	MSK1000-350	1000	350	3000	1600
2	MSK 1500-575	1500	575	3000	3150

Coverage Chart of the Boiler Acid Pickling Pumps MSK



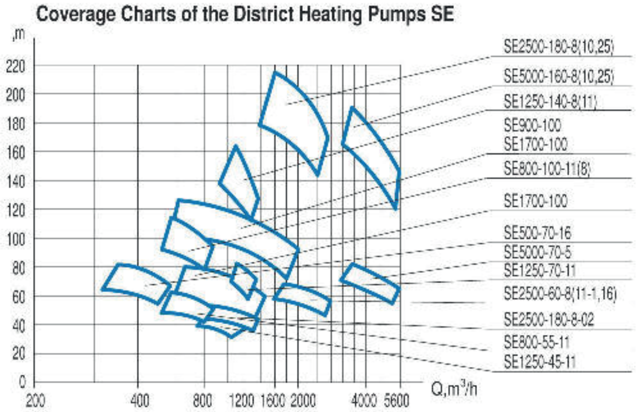
SE Series Double Flow Axially Split

Installed in main plants for hot water circulation in the heating circuit systems within a whole district

Electrically driven horizontal single stage or two-stage (with an interstage crossover for SE 800-100-11, SE 1250-140-11) axially split volute process centrifugal pumps between bearings, with one or two (in case of two-stage pumps) double entry radial impellers. Semicenterline casing support.
The pump rotor is carried by the oil-ring or pressure lubricated plain or antifriction bearings. Shaft sealing: packed glands or mechanical seals.

SE

Coverage Charts of the District Heating Pumps SE



Nos	Pump make	Capacity, m^3/h	Head, m	Rotational speed (synchr.), rpm	Motor nominal power, kW
1	SE 500-70-16	500	70	3000	160
2	SE 800-55-11	800	55	1500	200
3	SE 800-100-8	800	100	3000	315
4	SE 800-100-11	800	100	1500	315
5	SE 900-100	900	100	3000	250
6	SE 1250-45-11	1500	45	1500	200
7	SE 1250-70-11	1250	70	1500	315
8	SE 1250-140-8	1250	140	3000	800
9	SE 1250-140-11	1250	140	1500	630
11	SE 1700-100	1500	70	1500	600
10	SE 1700-100	1700	110	1500	600
12	SE 2500-60-8	2500	60	1500	630
13	SE 2500-60-11-1	2500	60	1500	630
14	SE 2500-60-16	2500	60	1500	630
15	SE 2500-160-8	2500	160	1500	1600
16	SE 2500-180-8	2500	180	3000	1600
17	SE 2500-180-8-02	1250	45	1500	250
18	SE 2500-180-10	2500	180	3000	1600
19	SE 2500-180-25	2500	180	3000	1600
20	SE 5000-70-5	5000	70	1500	1250
21	SE 5000-160-8	5000	160	3000	3150
22	SE 5000-160-10	5000	160	3000	3150
23	SE 5000-160-25	5000	160	3000	3150