

Micra[®]

Pompa · Yangın Söndürme Sistemleri · Hidrofor

MİCRA POMPA VE MAKİNA İMALAT LTD. ŞTİ.



SGM-P SERIES WASTE WATER & PROCESS PUMPS



Dağyaka mah. 614. cadde No:134 Kahramankazan / Ankara

+ 90 312 250 99 99

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www.micrapompa.com

GENERAL INFORMATION

Discharge Flange	DN 40 - DN 300
Capacity	up to 1600 m ³ /h
Head	up to 95 m
Working Temperature	from -10 °C to + 110 °C*
Design Pressure (Pmax)	10 bar (16 bar)*

(Pmax: Suction Pressure + Shut off Head)

(*) Depending on the type of liquid, operating temperature and pressure. The pump material changes. Please contact our company for detailed information.

Shaft Sealing

- In standard production soft packed stung boxes are used.
- Depending on customer request, mechanical seals are available. In this case, pump shaft is always stainless steel.
- Only mechanical seal is applied for vertical type installation.

Applications

Domestic and industrial raw sewage liquid transfer	
Liquid transfer containing sludge and solid particles	
Transfer of viscous liquids and suspensions	
Sewage treatment plants	Transfer of liquids in paint plants
Factory waste water drain	Paper and cellulose industry facilities
Cooling water systems	Iron and steel plants

Transferable liquids

Domestic and industrial waste water, raw sewage, viscous and corrosive liquids, liquids with fibrous and solid substances.



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Pump Code

SGM-P 80 - 160 - ??

Pump Type

Discharge (DN in mm)

Nominal Impeller Diameter (mm)

Impeller Type

DESIGN FEATURES

Horizontal, radially split volute casing, single stage, end suction centrifugal pumps with enclosed or semi-open impeller.

Due to the back-pull-out design, the complete bearing assembly including impeller and casing cover can be dismantled without removing the volute casing from the pipe system. (With spacer coupling application, also possible to take out the rotor group without dismantling the electric motor.)

Discharge flanges conform to EN 1092-2 / PN 10. (EN 1092-1 / PN 10 for steel or stainless steel casing)

All impellers are balanced dynamically or statically according to ISO 1940 class 6.3.

Axial thrust is balanced by impeller back ribs.

Direction of rotation is clockwise viewed from drive end.

Bearings

Oil lubricated or life – time grease lubricated heavy

duty bearing s depending on construction and request



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IMPELLER TYPES

C TYPE IMPELLER

• It is a closed type impellers with large channels, large flow rates and high pressures that can pass large-sized solid particles without clogging. It is mostly applied for 4 pole motors.



C2 TYPE IMPELLER

• It is a closed type impellers. It is mostly applied for 2-pole motors. Solid part sizes are smaller. It is suitable for lower flow rates and higher pressures.



C4 TYPE IMPELLER

• It is a large blade, high flow, low pressure impeller type that can pass large solid particles without clogging. It is mostly applied for 4 pole motors. It is particularly suitable for use in aggressive liquids. It is applied together with the wear plate.



CB TYPE IMPELLER

• It is a closed, 2-blade impeller type that provides the permeability of large solid particles.



VS TYPE IMPELLER

• There are no closed channels in this impeller type. It is a semi-open impeller type that provides free vortex pumping. The impeller is located behind the volute casing. It is generally used for fibrous liquids.



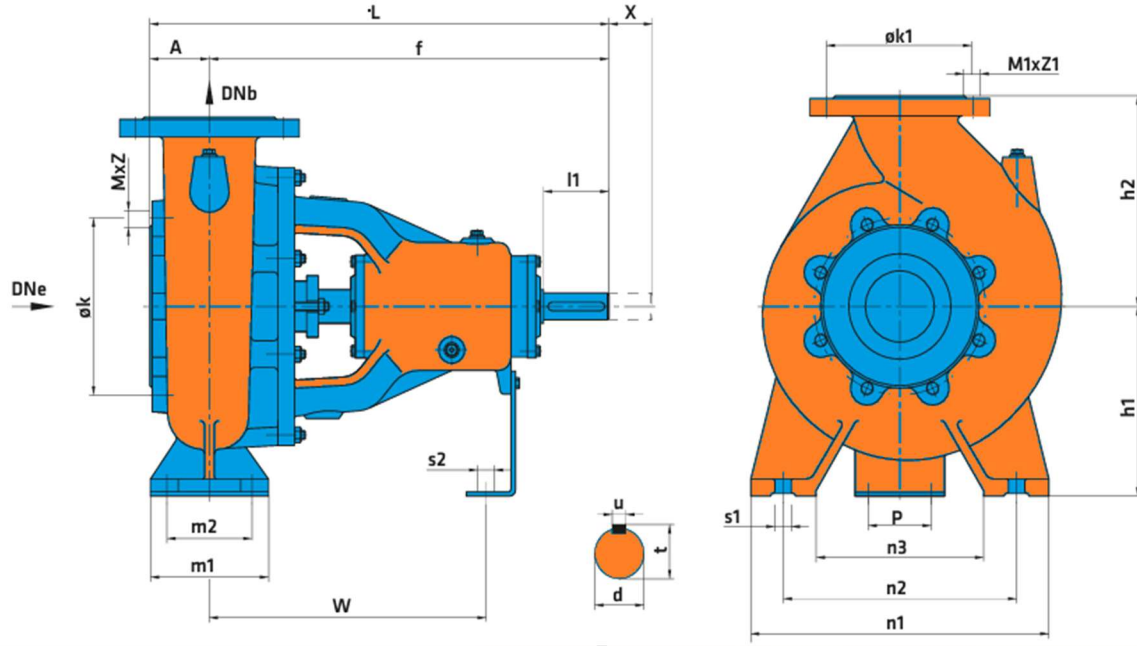
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Dimensions



Pump Type	DNe DNb		Overall Dimensions (mm)					Support & Foot Dimensions (mm)								Shaft (mm)						Flange Dimensions				Weight (kg)
			A	f	L	h1	h2	m1	m2	n1	n2	n3	s1	P	s2	W	d	l1	t	u	x(**)	k	MxZ	k1	M1xZ1	
40-160	50	40	82	348	430	160	180	100	70	240	190	140	14	110	14	247	24	50	27	8	140	125	M16x4	110	18x4	50
50-160	65	50	100	350	450	160	180	100	70	270	212	160	14	110	14	270	24	50	27	8	140	145	M16x4	125	18x4	50
50-200	65	50	105	370	475	160	200	100	95	270	210	160	14	110	14	270	24	50	27	8	140	145	M16x4	125	18x4	60
65-200	80	65	108	372	480	180	225	125	95	330	255	190	14	110	14	260	24	50	27	8	140	160	M16x8	145	18x4	65
80-160	100	80	83	384	467	180	180	120	85	310	250	190	14	110	14	288	24	50	27	8	140	180	M16x8	160	18x8	60
80-200	100	80	83	488	571	180	220	125	90	350	280	215	18	110	14	358	32	80	35	10	140	180	M16x8	160	18x8	70
80-315	100	80	55	480	535	250	310	125	95	400	315	240	18	110	14	350	32	80	35	10	140	180	M16x8	160	18x8	75
100-240	125	100	82	492	574	225	250	160	110	370	280	205	20	110	14	357	32	80	35	10	140	210	M16x8	180	18x8	100
100-270	125	100	97	500	597	275	310	160	110	430	345	270	20	110	14	371	32	80	35	10	140	210	M16x8	180	18x8	110
100-315	125	100	97	500	597	275	310	160	110	430	345	270	20	110	14	371	32	80	35	10	140	210	M16x8	180	18x8	120
150-315	150	150	119	638	757	280	355	200	150	500	400	300	23	110	14	445	42	110	45	12	200	240	M20x8	240	23x8	170
150-500	150	150	126	782	908	425	600	250	200	720	600	435	28	140	20	562	55	110	59	16	200	240	M20x8	240	23x8	580
200-315	200	200	165	707	872	355	450	250	200	600	500	360	24	110	14	543	48	110	51	12	250	295	M20x8	295	23x8	315
200-400	200	200	142	757	899	380	530	250	200	600	500	360	24	140	20	536	55	110	59	16	250	295	M20x8	295	23x8	370
200-500	150	200	126	968	1094	425	600	300	240	720	580	435	28	140	20	700	70	140	74,5	20	170	240	M20x8	295	23x8	600
250-315	200	250	145	1003	1148	335	475	300	230	680	540	400	27	140	20	730	70	140	74,5	20	265	295	M20x12	350	23x12	430
300-400	300	300	201	974	1175	400	560	300	240	720	600	435	27	140	20	730	75	140	79,5	20	285	400	M20x12	400	23x12	675



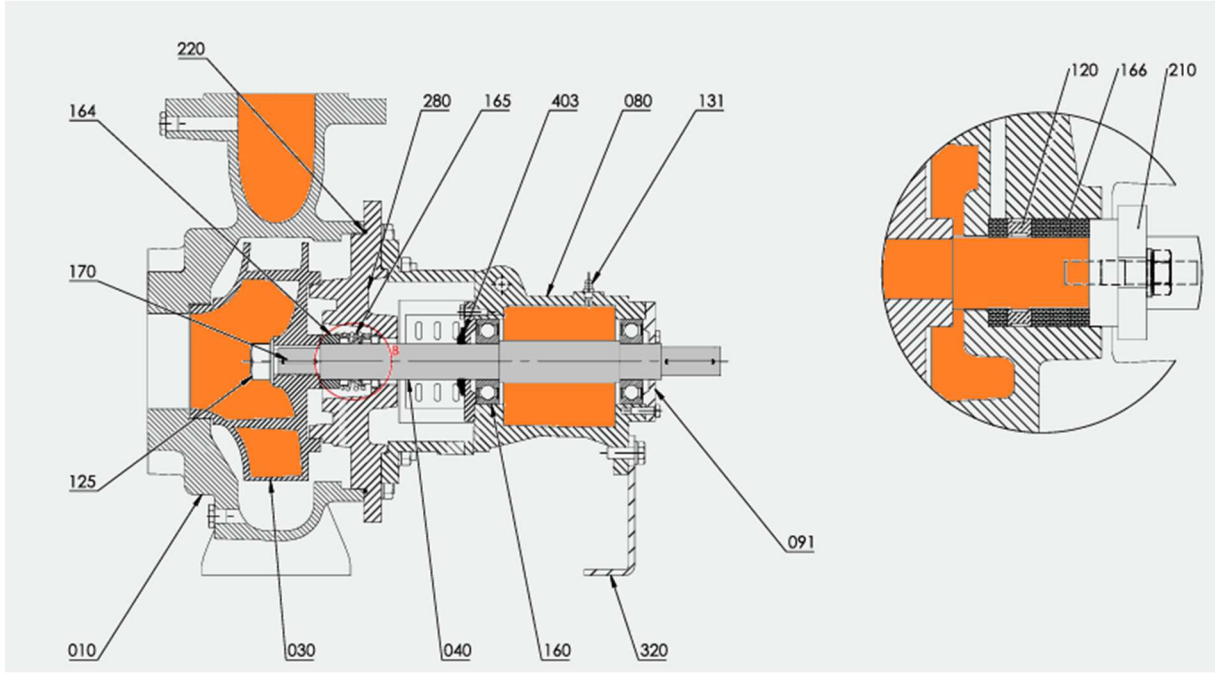
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SECTIONAL VIEW

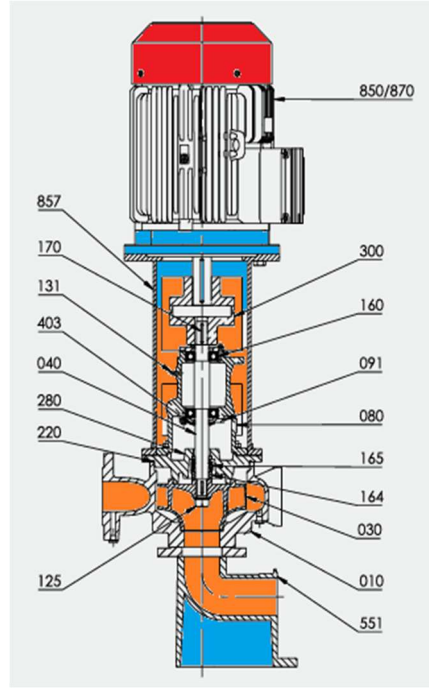


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Volute Casing	010
Volute Casing (Semi Open Impeller App.)	012
Semi Open Impeller	029
Impeller	030
Shaft	040
Bearing Housing	080
Interconnection Cage	081
Bearing Cover (Pump Side)	090
Bearing Cover (Coupling Side)	091
Oil seal	099
Vent Plug	109
Flushing Ring	120
Nut	125
Grease Nipple	131
Bearing	160
Mechanical Seal Setting Sleeve	164
Mechanical Seal	165
Soft Packing	166
Key	170
Connection Support	210
O-Ring	220
Seal Box	280
Coupling	300
Supporting Feet	320
Throw Protection	403
Wear Plate	450
Skid Elbow	551
Suction Flange	600
Electric Motor	850/870
Motor Carrier	857

PART NAME



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MATERIAL OPTION

Part List	0.6025	0.7040	0.7043	1.0619	1.4308	1.4309	1.4408	1.4409	1.4500	1.4517	1.4469	1.4317	1.4008	2.1050.01	2.0975.01	2.1096.01	1.0503	1.4021	1.4021+QT	1.4301	1.4404	1.4460	1.4462
Volute Casing	●	○	○	○	○	○	○	○	○	○	○	○	○	○									
Stuffing Box	●	○	○	○	○	○	○	○	○	○	○	○	○	○									
Impeller	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○						○	
Shaft																	●	○	○	○	○		○
Bearing Housing	●	○	○	○	○	○	○	○															
Front Wear Plate	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							
Back Wear Plate	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							
Space Sleeve																	●	○	○	○	○		○
Mech. Seal (*)	EN 12756 / DIN 24960																						

Mechanical seal can be used in different types and brands depending on working conditions or customer request.

- Standard Manufacturing
- Optional

MATERIAL EQUIVALENTS

DESCRIPTION	DIN	EN	AISI/SAE/ASTM
Cast Iron	0.6025	EN-GJL-250 (GG25)	A48 Class 40B
Ductile Iron Casting	0.7040	EN-GJS-400-15 (GGG40)	A536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG40.3)	A536 60-40-18
Steel Casting	1.0619	GP240GHGS-C25	A216 WCB
Chrome Nickel Steel Casting	1.4308	GX5CrNi19-10	A351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	GX2CrNi19-11	A351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	GX2CrNiMo19-11-2	A351 CF8M
Chrome Nickel Molybdenum Steel Casting (Low Carbon)	1.4409	GX5CrNiMo19-11-2	A351 CF3M
Austenitic Steel Casting	1.4500	GX7NiCrMoCuNb25-20	A351 CN7M
Austenitic-Ferritic Steel Casting (Duplex)	1.4517	GX2CrNiMoCuN25-6-3-3	A890 CD4MCuN
Austenitic-Ferritic Steel Casting (Super Duplex)	1.4469	GX2CrNiMoN26-7-4	A890 CE3MN
Martensitic Stainless Steel Casting	1.4317	GX4CrNi13-4	A352 CA6NM
Martensitic Stainless Steel Casting	1.4008	GX7CrNiMo12-1	A217 CA15
Bronze Casting (Tinned)	2.1050.01	G-CuSn10	B427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-CuAl10Ni	B148 C95500
Bronze Casting (Leaded)	2.1096.01	G-CuSn5ZnPb	B584 C83600
Carbon Steel	1.0503	C45	AISI 1045
Chromium Steel	1.4021	X20Cr13	A276 Type 420
Chrome Steel (Heat Treatment)	1.4021	X20Cr13	A276 Type 420+QT
Chrome Nickel Steel	1.4301	X5CrNi18-10	A276 Type 304
Chrome Nickel Molybdenum Steel (L. C.)	1.4404	X2CrNiMo17-12-2	A276 Type 316L
Duplex (Austenitic-Ferritic) Steel	1.4460	X3CrNiMoN27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2CrNiMoN22-5-3	UNS S32205



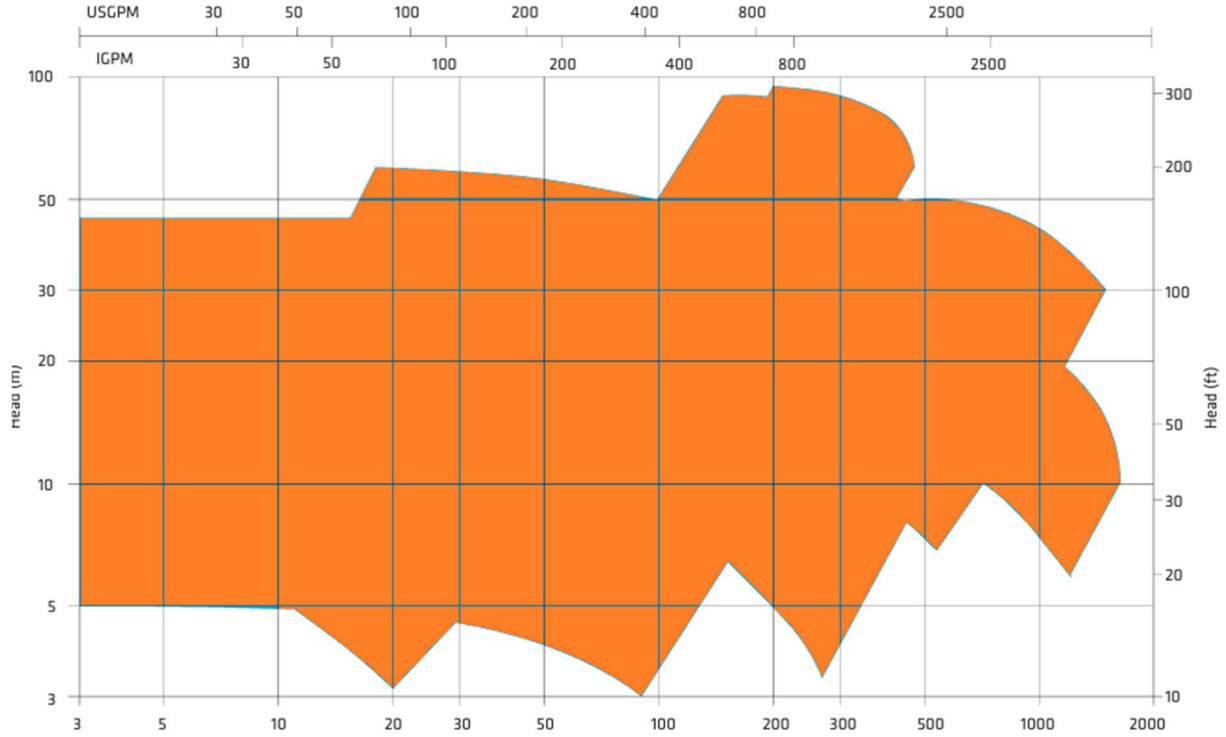
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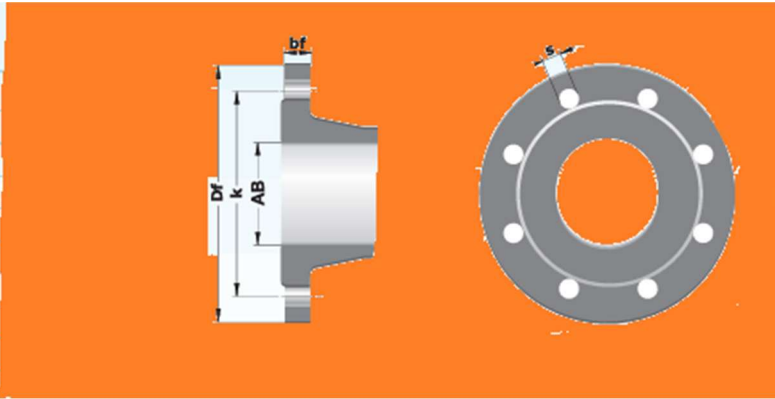
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SELECTION CHARTS



FLANGE DIMENSIONS

Flange Dimensions (PN 10)					
AB	Df	k	s	n	bf
40	150	110	19	4	18
50	165	125	19	4	20
65	185	145	19	4	20
80	200	160	19	8	22
100	220	180	19	8	24
125	250	210	19	8	26
150	285	240	23	8	26
200	340	295	23	8	26
250	495	350	23	12	28
300	445	400	23	12	28



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