

Micra®

Pompa • Yangın Söndürme Sistemleri • Hidrofor

MİCRA POMPA VE MAKİNA İMALAT LTD. ŞTİ.



SGI SERIES

INLINE CENTRIFUGAL PUMPS

Vertical In-Line Centrifugal Pumps

ENGINEERED FOR
PERFORMANCE
BUILT FOR RELIABILITY



HVAC
SYSTEMS



WATER
SUPPLY



FIRE
FIGHTING



PRESSURE
BOOSTING



INDUSTRIAL
APPLICATIONS



IRRIGATION
SYSTEMS



MICRA POMPA VE MAKİNA İMALAT LTD. ŞTİ.



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ABOUT MICRA POMPA

Micra Pompa was founded in Ankara, Türkiye with the vision of becoming a globally recognized pump manufacturer.

With years of engineering experience, advanced production technologies and a customer-oriented approach, we design and manufacture reliable and efficient pumping solutions for a wide range of applications.

Our products are engineered to deliver high performance, energy efficiency and long service life even under the most demanding conditions.

We continue to invest in innovation, quality and sustainability to create value for our customers and partners worldwide.



WHY CHOOSE MICRA POMPA?



QUALITY

Strict quality control and high standards in every production stage.



RELIABILITY

Durable products designed for continuous and trouble-free operation.



PERFORMANCE

High efficiency and optimized hydraulic design.



CUSTOMER FOCUS

Tailored solutions and strong after-sales support.



GLOBAL VISION

Reliable partner for domestic and international markets.

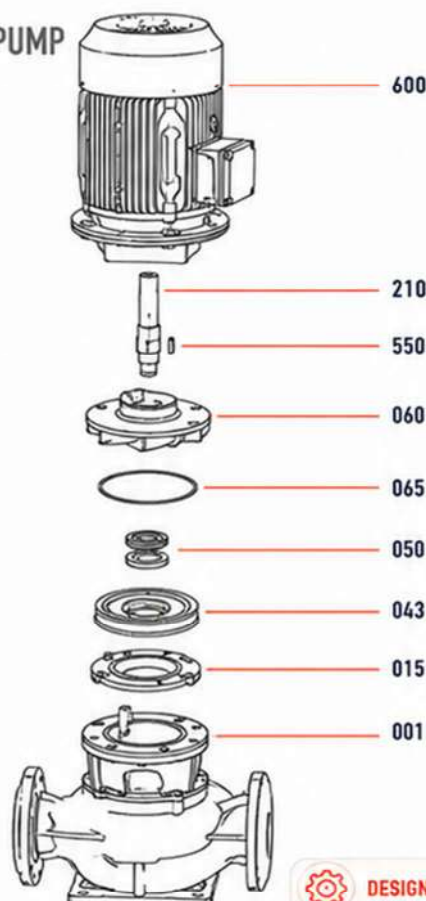


OUR APPLICATION AREAS

- HVAC Systems
- Water Supply & Distribution
- Fire Fighting Systems
- Pressure Boosting Systems
- Industrial Applications
- Irrigation Systems
- Building Services
- Marine & Offshore

SGI ASSEMBLY DRAWINGS

INLINE CENTRIFUGAL PUMP



DESIGN FEATURES

- Single-stage inline centrifugal pump.
- Compact and space saving design.
- High efficiency and low energy consumption.
- Easy maintenance and long service life.

TECHNICAL NOTES

- Pumps are used with high efficiency electric motors according to IEC construction sizes.
- All impellers are balanced dynamically or statically in accordance with ISO 1940 class 6.3.
- The direction of rotation is clockwise when viewed from the motor side.
- For 200-340 model pump; discharge flange is DN 200, while suction flange is DN 300.
- Suction and discharge flanges conform to TS EN 1092-2 / PN 16.
- Axial force is balanced with impeller balancing holes system.
- Optionally, pumps can be manufactured with wear ring and / or shaft bushing.

PUMP CODE

SGI 65-250

_____ Nominal Impeller Diameter (mm)
_____ Discharge Flange (DN)
_____ Pump Type

No.	Description	Material
001	Pump Casing	Cast Iron
015	Front & Back Cover Plate	Cast Iron
043	Seal Cover	Cast Iron
049	Mechanical Seal	Carbon / Ceramic
050	O-Ring	NBR
060	Impeller	Cast Iron / Bronze
065	Bearing	Ball Bearing
088	Washer	Steel

No.	Description	Material
210	Shaft	Stainless Steel
380	Shaft Key	Steel
420	Impeller Key	Steel
550	Name Plate	Stainless Steel
600	Motor	-

TRANSFERABLE LIQUIDS

- Clean or slightly contaminated low viscosity liquids without solid & fibrous particles.

SHAFT SEALING

- Depending on customer request or liquid type, mechanical seals are available.

APPLICATIONS

- Water Treatment and Pressurization
- Heating, Ventilating and Air Conditioning
- Agricultural Irrigation and Drainage
- Food and Beverage Industry
- Marine
- Building Systems

MATERIAL OPTION

PART LIST	25	32	40	50	65	80	100	125	150	200	250
Valve Casing	●	○	○	○	○	○	○	○	○	○	○
Mechanical Seal Cover	●	○	○	○	○	○	○	○	○	○	○
Impeller	●	○	○	○	○	○	○	○	○	○	○
Shaft	●	○	○	○	○	○	○	○	○	○	○
Motor Pedestal	●	○	○	○	○	○	○	○	○	○	○
Wear Ring	●	○	○	○	○	○	○	○	○	○	○
Mech. Seal Spacer Sleeve	●	○	○	○	○	○	○	○	○	○	○
Mechanical Seal(*)	●	○	○	○	○	○	○	○	○	○	○
Bottom Plate	●	○	○	○	○	○	○	○	○	○	○
EN 12756	●	○	○	○	○	○	○	○	○	○	○

- Standard Manufacturing
- Optional

(*) Optional. Depending on customer orders or liquid type, different brands of mechanical seals are applicable.



DESIGN FEATURES

HANDLED LIQUIDS

Clean or slightly contaminated low viscosity liquids without solid & fibrous particles.

TECHNICAL DATA

Discharge Flange	DN 40 DN 200 mm
Capacity	up to 850 m ³ /h(*)
Head	up to 100 m(**)
Speed	up to 3600 rpm(**)
Design Temperature	-10 °C to +140 °C(**)
Casing Pressure (Pmax)	10 bar (16 bar)(**)

(Pmax: Suction Pressure + Shut off Head)

(*) Contact company for higher capacity and head values.

(**) The material of pump differs according to the type of pumped liquid, operating temperature and pressure. Contact for detailed information.



DESIGN FEATURES

- ✓ In-line, closed-coupled, volute casing, single stage centrifugal pump with closed impeller.
- ✓ Complies EU547/2012 regulations.
- ✓ Suction and discharge flanges conform to EN 1092-2 / PN 16.
In case of request, ANSI/ASME flanges can be supplied.
- ✓ Pumps are closed coupled with electric motors of IEC frame sizes with high efficiency class. (IE3-IE4)
- ✓ All impellers are balanced dynamically or statically according to ISO 1940 grade 6.3.
- ✓ Axial thrust is balanced by impeller balancing holes system.
- ✓ Direction of rotation is clockwise viewed from drive end.
- ✓ In case of request, wear ring can be supplied.
- ✓ The pump and motor have separate shafts connected by a rigid coupling or through slide fit shaft. Axial and radial forces are absorbed by electric motor bearings.
- ✓ For 200-340 model pump; discharge flange is DN 200, while suction flange is DN 300.

SHAFT SEALING

Different mechanical seals are available according to customer request or liquid type.

MATERIAL OPTIONS

PART LIST	CAST IRON	DUCTILE IRON	BRONZE
Pump Casing	GG-25	GGG-40/50	G-Cu Sn 10
Impeller	GG-25	GGG-40/50	G-Cu Sn 10
Shaft	X20Cr13	X20Cr13	X20Cr13
Shaft Sleeve	X20Cr13	X20Cr13	X20Cr13
Wear Ring	—	X20Cr13	Bronze
Mechanical Seal Cover	GG-25	GGG-40	Bronze
Lantern Bracket	GG-25	GGG-40	Bronze
Baseplate	GG-25	GG-25	GG-25

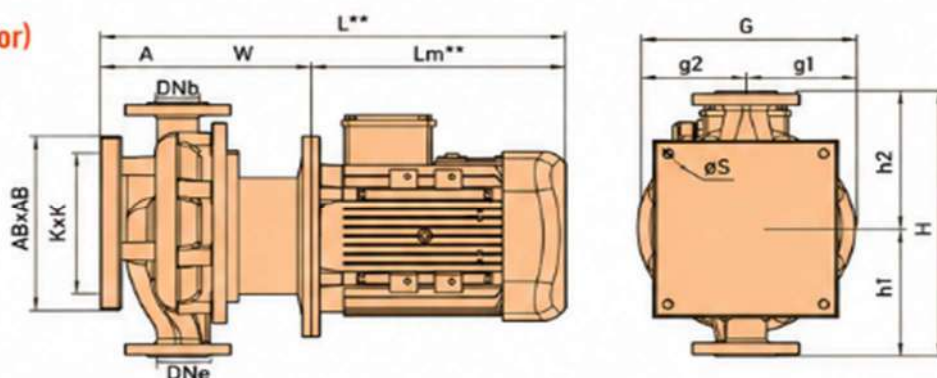
MATERIAL EQUIVALENTS

DESCRIPTION	DIN / EN	SAE / ASTM
Cast Iron	0.6025 EN-GJL-250 (GG25)	A48 Class 40
Ductile Iron Casting	0.7040 EN-GJS-400-15	A536 60-40-18
Ductile Iron Casting	0.7050 EN-GJS-400-18-LT (GGG40)	A536 60-40-18
Bronze Casting (Teninal)	2.1060.01 G-Cu Sn 6	B62 / C90700
Bronze Casting (Impeller)	2.1096.01 Cu-Al 9 Ni B	B148 C95800
Bronze Casting (Leaded)	2.1096.01 G-Cu Sn 5 Zn Pb	BS84 C83600
Chromium Steel	1.4021 X20Cr13	A276 Type 420
Chromium Steel (Heat Treatment)	1.4021 X20Cr13	A276 Type 420+QT
Chrome Nickel Steel	1.4301 X5 Cr NiMo 18-10	A276 Type 304
Chrome Nickel Molybdenum Steel	1.4404 X2 Cr NiMo N 17-12-2	A276 Type 316L
Duplex (Austenitic Ferritic) Steel	1.4462 X2 Cr NiMoN 22-5-3	UNS S32205

Note: Materials can be changed according to request.

OVERALL DIMENSIONS

2900 rpm (2 Pole Motor)

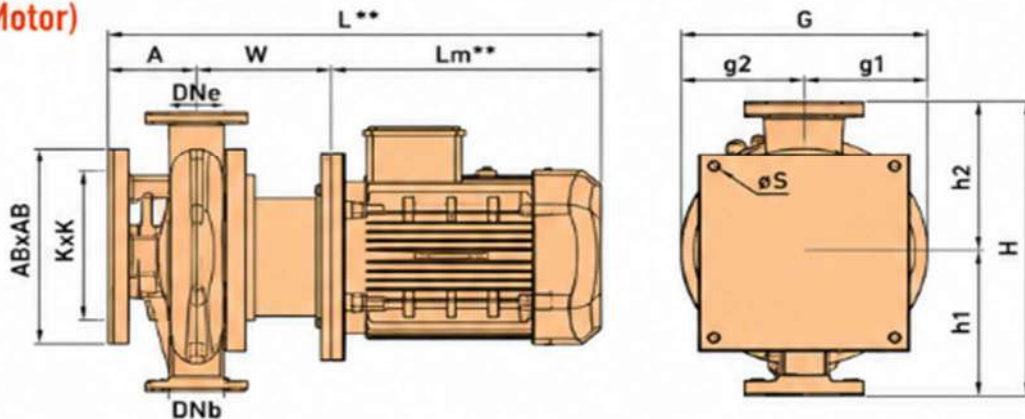


Pump Type	kW	IEC	DN		Dimensions (mm)												
			e	b	A	W	Lm**	L**	H	h1	h2	g2	g1	øS	AB	KXK	T
40-125	1,5	90L	40	109	159	167	532	530	140	160	210	110	100	170	130	14	T0
40-125	2,2	90L	40	109	109	156	532	530	140	160	210	110	100	170	130	14	T0
40-125	3	100L	40	109	109	179	292	580	140	160	210	110	100	200	160	14	T1
40-125	4	112M	40	109	109	179	336	624	140	160	210	110	100	200	160	14	T1
40-160	2,2	90L	40	103	103	156	267	526	340	160	180	130	135	170	624	14	T0
40-160	3	100L	40	103	103	179	292	574	340	160	245	130	133	300	712	14	T1
40-160	4	112M	40	103	103	179	336	618	340	160	245	130	135	200	748	14	T1
40-160	5,5	132S	40	103	103	189	361	652	340	160	280	130	135	200	798	14	T1
40-160	7,5	132M	40	103	103	189	396	652	380	160	200	130	140	380	730	14	T2
40-200	5,5	132S	40	107	107	189	396	657	380	180	200	120	140	460	830	14	T2
40-200	7,5	132M	40	107	107	226	466	992	380	180	200	140	133	260	320	14	T2
50-125	2,2	90L	50	133	133	157	267	556	360	160	200	120	100	200	326	14	T1
50-125	3	100L	50	133	133	179	292	604	360	160	200	120	100	200	378	14	T1
50-125	4	112M	50	133	133	179	336	683	360	160	230	120	100	200	620	14	T1
50-125	5,5	132S	50	133	133	189	361	683	360	160	200	120	100	200	620	14	T0
50-160	4	112M	50	138	138	179	336	633	340	160	255	135	120	565	760	14	T1
50-160	5,5	132S	50	138	138	179	361	687	340	180	255	130	120	200	712	14	T1
50-160	7,5	132M	50	138	138	189	361	724	360	160	255	135	120	400	780	14	T1
50-160	11	160M	50	138	138	189	396	723	360	160	255	120	135	460	330	14	T2
50-200	7,5	132M	65	122	122	189	396	707	425	200	225	145	132	466	420	14	T2
50-200	11	160M	65	122	122	226	466	425	420	200	225	145	132	490	678	14	T2
50-200	15	160L	65	122	122	226	466	425	200	200	220	120	132	466	670	14	T2
50-200	18,5	160L	65	122	122	226	468	383	200	200	220	120	132	555	620	14	T2
50-200	15	160L	65	117	117	226	557	475	440	235	230	130	172	530	620	14	T2
50-200	18,5	160L	65	117	117	289	777	609	240	200	230	130	120	206	620	14	T2
50-250	22	180M	65	117	117	226	641	332	200	200	235	130	135	260	620	18	T2
50-250	30	200L	65	124	124	226	886	475	200	225	230	175	155	260	220	18	T2
50-220	3	100L	65	163	163	226	639	825	360	180	340	140	165	290	330	14	T2
65-225	4	112M	65	163	163	559	809	475	140	180	340	120	190	290	230	14	T1
65-225	5,5	132S	65	163	163	579	869	830	360	180	340	120	100	200	230	14	T2
65-125	7,5	132M	65	163	163	289	566	625	360	160	340	120	130	200	350	14	T2
65-125	5,5	132S	65	163	163	169	551	565	360	180	260	120	130	200	350	14	T1
65-125	7,5	132M	65	147	163	179	355	500	360	180	230	120	100	200	330	14	T2
65-160	15	160L	65	147	163	226	637	520	380	180	250	120	100	200	390	14	T2
80-125	5,5	132S	80	172	147	139	636	138	360	180	230	120	100	200	350	14	T2
80-125	7,5	132M	80	172	162	179	756	199	340	180	230	120	100	230	230	14	T2
80-125	11	160M	80	172	163	179	396	177	340	180	230	120	100	400	230	14	T2
80-200	18,5	160L	80	172	133	294	386	1389	360	180	230	200	135	260	390	14	T2
80-200	4	112M	80	202	222	189	396	389	425	190	280	280	135	260	250	14	T2
80-250	30	200L	80	202	122	189	707	374	425	190	230	280	145	260	250	14	T2
80-250	37	200L	80	209	122	226	466	814	400	180	280	280	145	260	250	14	T2
80-250	45	225M	80	209	122	226	466	425	200	180	230	280	135	260	220	14	T2
100-160	30	200L	80	184	184	226	609	475	229	180	230	250	195	260	350	18	T2
80-250	37	200L	80	184	184	226	609	475	230	180	230	280	165	260	230	14	T1
80-250	55	225M	80	189	184	226	565	475	229	130	350	340	135	320	270	18	T3
100-160	15	160L	100	224	224	266	634	380	560	180	280	195	160	200	330	18	T2
100-160	18,5	160L	100	224	224	466	809	380	560	180	280	195	100	200	230	18	T4
100-160	22	180M	100	224	224	226	559	880	580	180	230	190	180	400	350	18	T4
100-160	30	200L	100	224	224	226	555	965	580	180	350	190	180	400	350	18	T3
100-200	22	180M	100	209	209	294	337	1386	580	180	275	195	180	400	350	18	T4
100-200	30	200L	100	209	204	294	336	1380	580	280	370	195	180	400	350	18	T4
100-250	37	200L	100	209	209	294	396	1389	580	280	375	195	180	400	350	18	T4
100-250	45	250M	100	209	209	294	886	1389	580	280	375	195	180	400	350	18	T4
100-250	90	280M	100	209	209	294	886	1389	580	280	375	195	180	400	350	18	T4

** Dimensions differ due to motor manufacture.

OVERALL DIMENSIONS

1500 rpm (4 Pole Motor)



FORM	Pump Type	MOTOR		DNe DNb mm	Dimensions (mm)													Bottom Plate (*)
		kW	IEC		A	W	Lm**	L**	H	h1	h2	G	g1	g2	ABxAB	KxK	øS	
F1	40-125	0.37	71M	40	109	156	222	467	300	140	160	210	110	100	170	130	14	T0
F1	40-160	0.55	80M	40	109	156	243	509	300	140	160	210	110	100	170	130	14	T0
F1	40-200	0.75	80M	40	103	156	243	462	340	160	190	245	110	115	170	130	14	T0
F2	50-125	0.75	80M	50	109	156	243	503	340	160	190	245	120	115	170	130	14	T0
F1	50-160	1.5	90L	50	109	156	247	503	340	140	180	240	170	115	170	130	14	T0
F1	50-200	1.5	90L	50	103	156	257	533	340	180	180	230	170	135	190	160	14	T1
F2	50-250	2.2	100L	60	103	198	293	638	340	190	190	250	110	135	170	130	14	T1
F1	65-125	2.2	132M	65	127	179	243	638	340	190	190	270	130	130	130	130	14	T1
F1	65-160	3	132M	65	137	156	257	543	360	200	220	290	160	130	190	150	14	T2
F1	65-200	3.2	100L	65	473	198	857	588	340	200	230	290	130	130	170	130	14	T2
F1	65-250	1.3	132M	65	473	179	833	688	350	230	230	490	175	230	230	230	14	T2
F1	65-315	18.5	132M	65	473	199	833	673	350	230	230	490	170	130	230	230	14	T2
F1	65-125	3	90L	80	180	139	252	583	370	250	180	490	130	250	200	130	14	T2
F1	80-160	5	90L	80	473	137	393	583	250	250	330	490	170	270	200	130	14	T2
F1	80-200	15	160L	80	473	198	257	368	250	280	330	490	270	230	200	230	14	T2
F1	80-260	18.5	160L	80	473	179	393	633	230	280	330	490	170	270	200	230	14	T2
F1	80-200	18.5	132M	80	423	196	333	633	350	250	330	490	150	230	200	230	14	T2
F1	80-315	12.5	180M	80	273	198	493	835	730	250	330	490	170	250	200	230	14	T2
F2	80-310	75	150L	100	223	256	808	855	750	350	355	490	250	230	200	130	14	T2
F2	80-310	30	200L	100	223	276	333	688	750	350	355	490	260	230	490	330	14	T3
F1	100-200	37	200L	100	263	273	257	603	250	250	350	490	250	235	440	230	14	T4
F2	100-250	45	225M	100	223	376	853	608	750	250	355	490	260	235	430	330	14	T4
F2	100-315	55	250M	100	223	375	698	603	750	250	355	490	250	270	490	330	14	T4
F2	125-200	75	190L	125	220	336	630	898	755	350	450	645	250	250	443	380	23	T6
F2	125-250	15	100L	125	234	314	507	967	755	400	450	545	295	250	443	330	23	T6
F2	125-315	3.5	200L	130	235	356	799	758	755	360	460	545	290	200	443	380	23	T4
F2	150-200	3.5	180M	150	463	354	446	755	755	400	460	555	290	230	440	380	23	T4
F2	150-250	33	180M	200	268	324	699	705	830	450	450	525	290	250	440	380	23	T5
F2	150-315	30	230M	200	253	346	705	708	856	450	450	525	290	250	443	380	23	T6
F2	200-200	37	200L	200	243	356	755	756	856	450	450	540	300	260	443	380	23	T5
F2	200-250	45	200L	200	263	416	707	701	856	400	450	540	300	200	443	380	23	T5
F2	200-315	55	225M	200	243	416	705	164	755	400	450	540	300	250	443	380	23	T5
F1	200-200	75	280M	200	343	316	985	564	755	450	450	540	390	250	443	380	23	T5
F2	200-310	75	280M	250	340	323	625	796	1050	450	600	631	292	339	580	500	23	-
F1	200-340	75	280M	290	340	329	585	555	1050	450	600	631	292	339	580	500	23	-

** Dimensions differ due to motor manufacture.

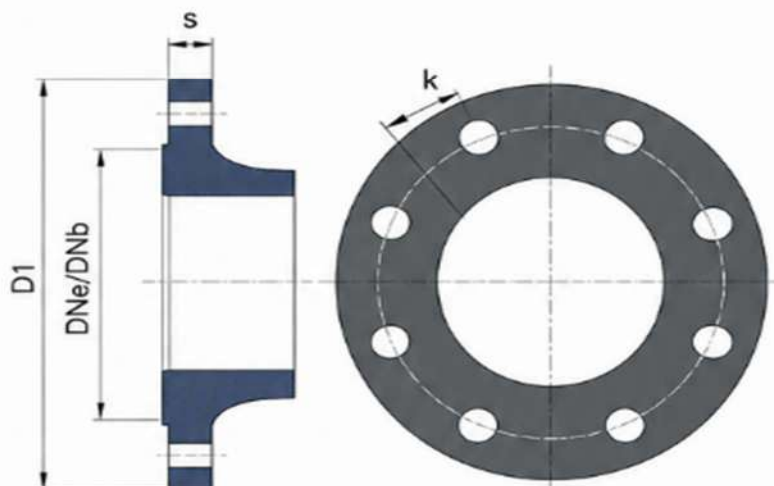
(*) According to motor manufacturer.

FLANGE DIMENSIONS

Suction and discharge flanges conform to PN 16 according to EN 1092-2 standard.

DNe/DNb	Suction & Discharge (PN 16)			
	D1	k	l	n
40	150	110	19	4
50	165	125	19	4
65	185	145	19	4
80	200	160	19	8
100	220	180	19	8
125	250	210	19	8
150	285	240	23	8
200	340	295	23	12
250	405	355	28	12

* n = number of holes



INLINE PUMP

-  High Efficiency
-  Compact Design
-  Easy Installation
-  Low Maintenance
-  Reliable Performance



PUMP RAL COLOR CODE

Standard pump color is RAL 5002 (Ultramarine Blue). Other colors are available upon request.



RAL 5002
Ultramarine Blue



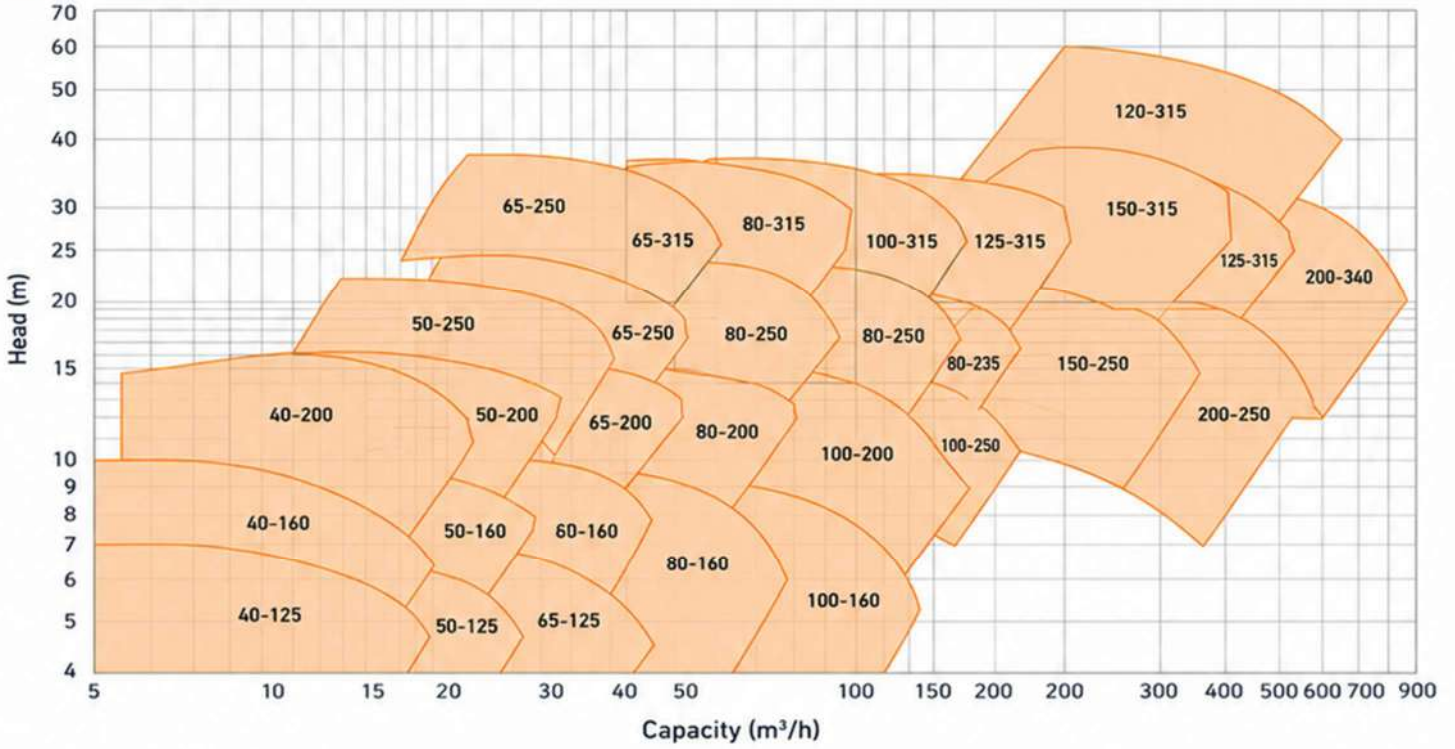
Other RAL Colors
Upon Request



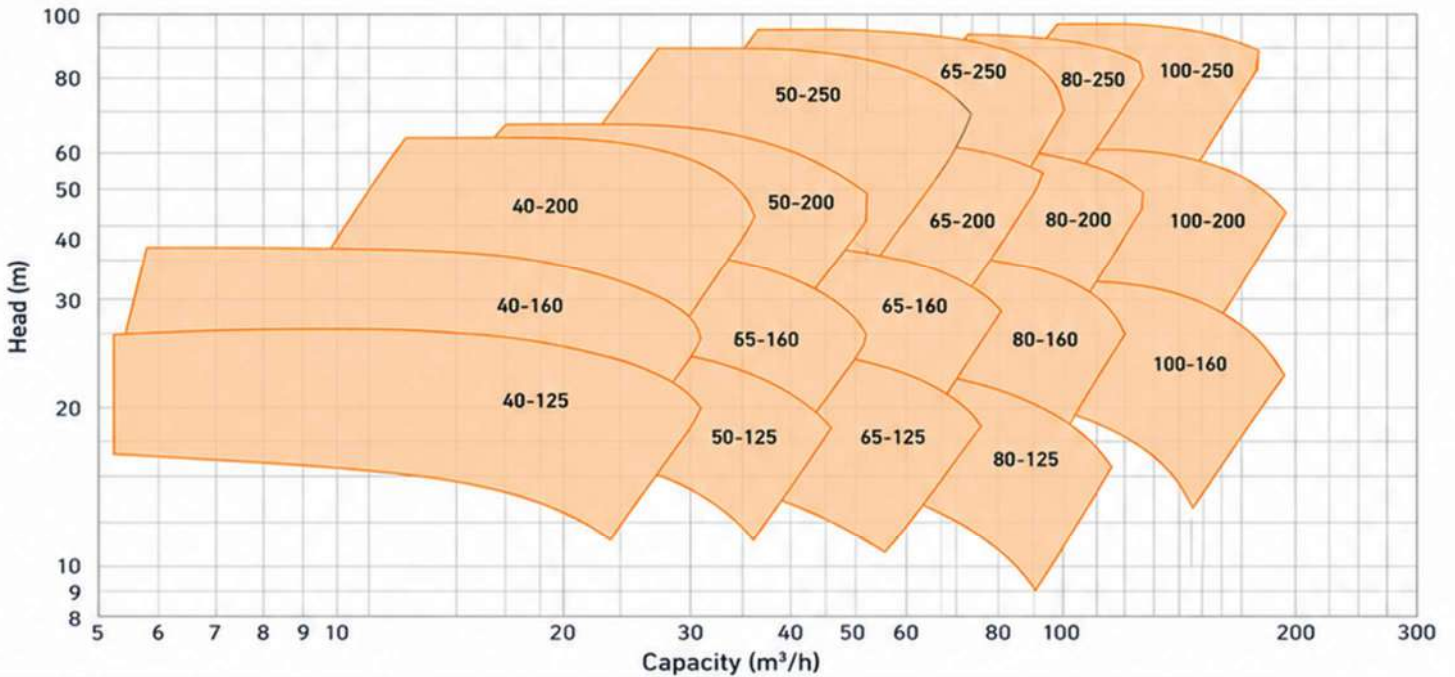
PERFORMANCE RANGES



1450 rpm



2900 rpm



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INLINE CENTRIFUGAL PUMP

High Efficiency • Reliable Performance • Long Service Life



High Efficiency



Reliable
Performance



Easy
Maintenance



Long Service
Life



Industrial
Applications

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MADE IN TÜRKİYE