



RS SERIES

Horizontal Multi Stage Centrifugal Pump





GENERAL INFORMATION

Discharge Flange	DN 25 - DN 250
Capacity	Up to 1000 m³/h
Head	UP to 600 m
Frequency	Three Phase 50 Hz - 60 Hz*
Maximum Operating Pressure	Up to 63 bar



Transferable Liquids

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



Shaft Sealing

- In standard production, it is used as soft packing up to 110 °C and soft packing together with refrigerated packing boxes between 110 °C and 140 °C.
- Mechanical seal pumps are also available upon request.



Applications

Water treatment and Pressurization	Power Plants
Heating, Ventilating and Air Conditioning	Oil Industry
Agricultural Irrigation and Drainage	Chemical Industry
Food and Beverage Industry	Mining
Iron and Steel Industry	Marine
Building System	Fire Fighting



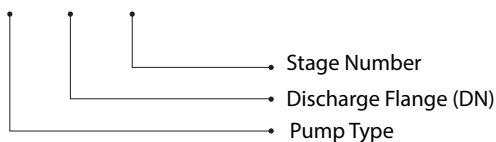
Design Features

- Centrifugal pumps with horizontal shaft, split body, diffuser, multi-stage, closed impeller.
- In standard production, the suction flange is on the coupling side and on the right side, the discharge flange at the other end and top (R 4/2). If flange positions other than standard manufacture are required, this request must be specified at the time of order.
- All impellers are statically and dynamically balanced according to ISO 1940 class 6.3.
- Axial force is balanced by impeller balancing holes system.
- Direction of rotation is clockwise when viewed from the motor side.
- RS type pumps use "grease lubricated" bearings as standard.
- Basic models designed with variety of motors (50Hz - 60Hz) 1000 - 1500 - 3000 RPM, with range up to 680 KW.



Pump Code

RS 150 / 03





DESCRIPTIONS



DIN



EN



AISI/SAE/ASTM

Cast Iron	0.6025	EN-GJL-250 (GG 25)	A 48 Class 40-B
Ductile Iron Casting	0.7040	EN-GJS-400-18-LT (GGG 40)	A 536 60-40-18
Ductile Iron Casting	0.7043	EN-GJS-400-18-LT (GGG 40.3)	A 536 60-40-18
Steel Casting	1.0619	GP 240 GHGS-C25	A216 WCB
Chrome Nickel Steel Casting	1.4308	G-X5 Cr Ni 19-10	A 351 CF8
Chrome Nickel Steel Casting (Low Carbon)	1.4309	G-X2 Cr Ni 19-11	A 351 CF3
Chrome Nickel Molybdenum Steel Casting	1.4408	G-X5 Cr Ni Mo 19-11-2	A 351 CF8M
Chrome Nickel Molybdenum Steel Casting (L.C.)	1.4409	G-X2 Cr Ni Mo 19-11-2	A 351 CF3M
Austenitic Steel Casting	1.4500	G-X7 Cr Ni Mo Cu N 25-6-3-3	A 351 CN7M
Austenitic - Ferritic Steel Casting (Duplex)	1.4517	G-X2 Cr Ni Mo Cu N 25-6-3-3	A 890 CD4MCuN
Austenitic - Ferritic Steel Casting (S.D.)	1.4469	G-X2 Cr Ni Mo N 26-7-4	A 890 CE3MN
Martensitic Stainless Steel Casting	1.4317	G-X4 Cr Ni 13-4	A 352 CA6NM
Martensitic Stainless Steel Casting	1.4008	G-X7 Cr Ni Mo 12-1	A 217 CA15
Bronze Casting (Tinned)	2.1050.01	G-Cu Sn 10	B 427 C90700
Bronze Casting (Nickel Alloy)	2.0975.01	G-Cu Al10 Ni	B 148 C95500
Bronze Casting (Leaded)	2.1096.01	G-Cu Sn 5 Zn Pb	B 584 C83600
Carbon Steel	1.0503	C 45	AISI 1045
Chromium Steel	1.4021	X20 Cr13	A 276 Type 420
Chrome Steel (Heat Treatment)	1.4021	X20 Cr13	A 276 Type 420+QT
Chrome Nickel Steel	1.4301	X5 Cr Ni 18-10	A 276 Type 304
Chrome Nickel Molybdenum Steel (L.C.)	1.4404	X2 Cr Ni Mo 17-12-2	A 276 Type 316L
Duplex (Austenitic-Ferritic) Steel	1.4460	X3 Cr Ni Mo N 27-5-2	AISI 329
Duplex (Austenitic-Ferritic) Steel	1.4462	X2 Cr Ni Mo N 22-5-3	UNS S32205
Ductile Iron Casting	0.7050	EN-GJS-500- 7 -LT (GGG 50)	A 536 70-50-05

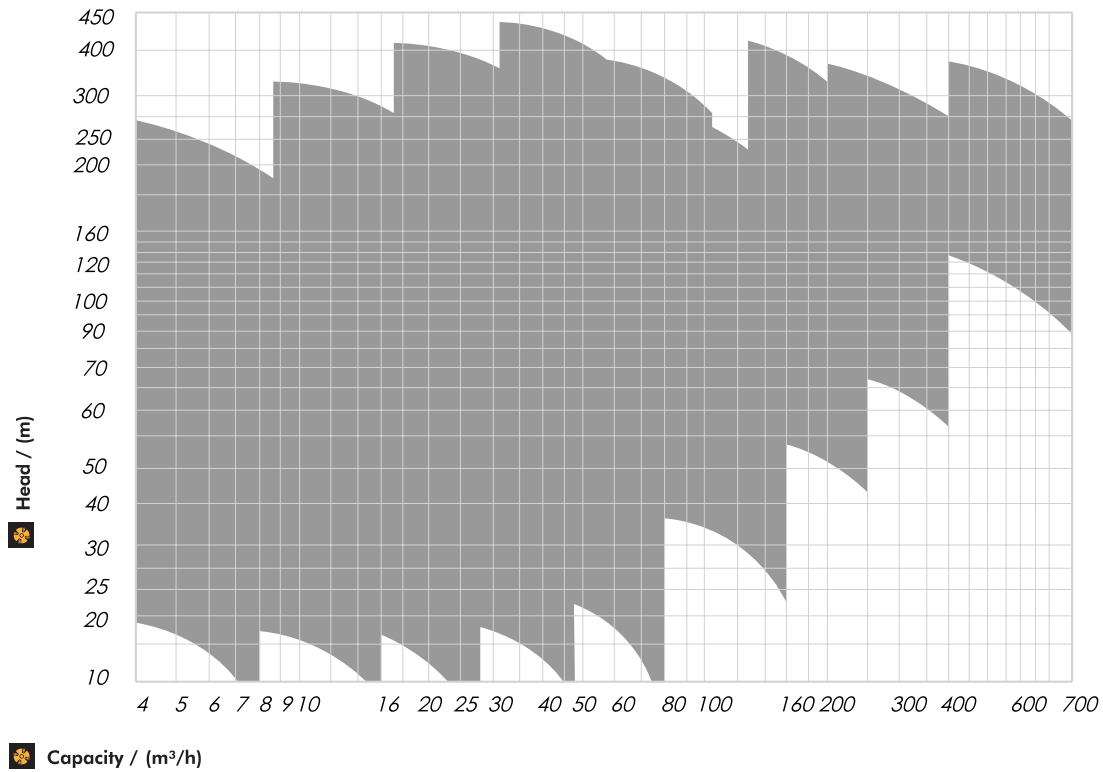




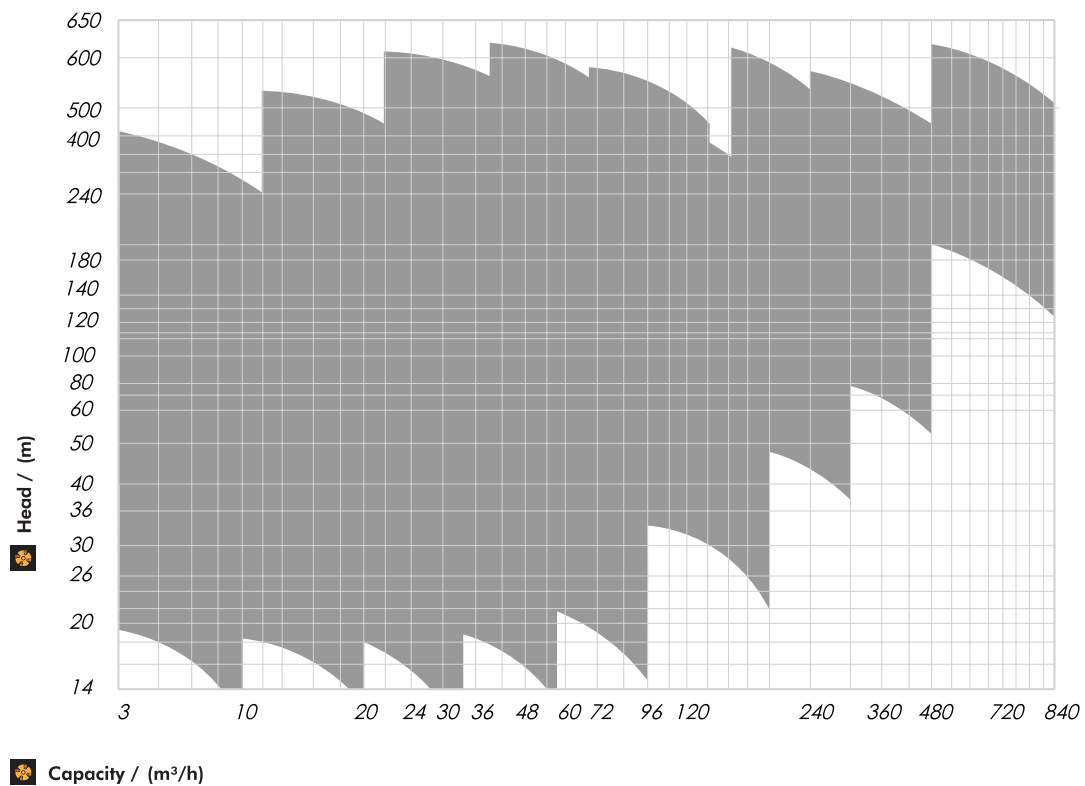
SELECTION CHARTS



(50) Hz



(60) Hz

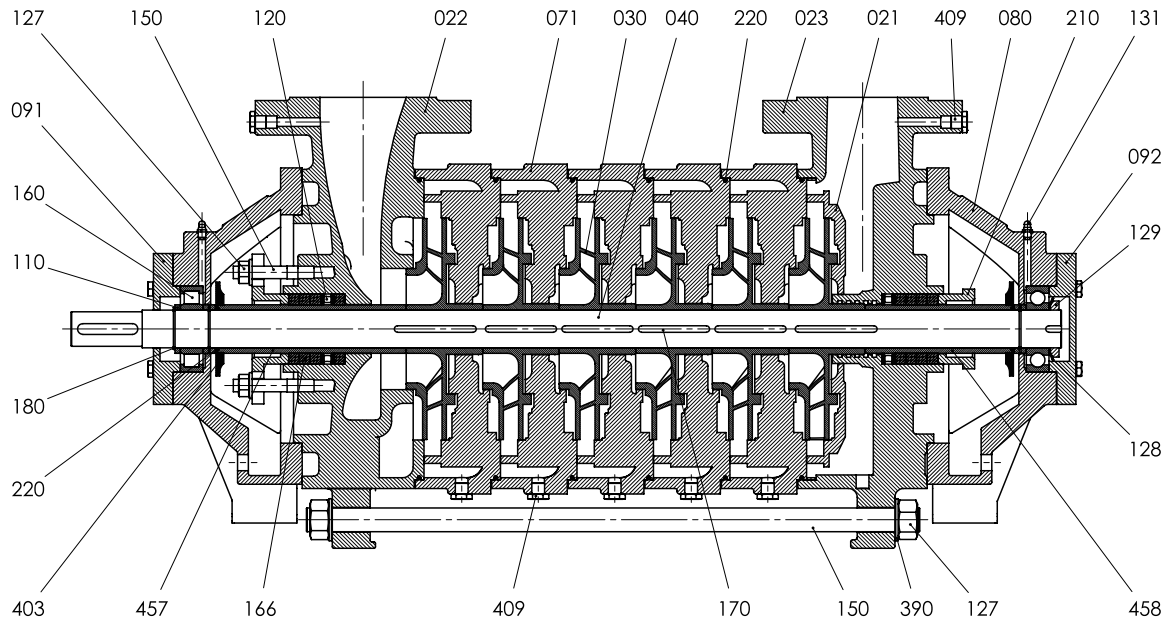




SECTIONAL VIEW



RS 25...65



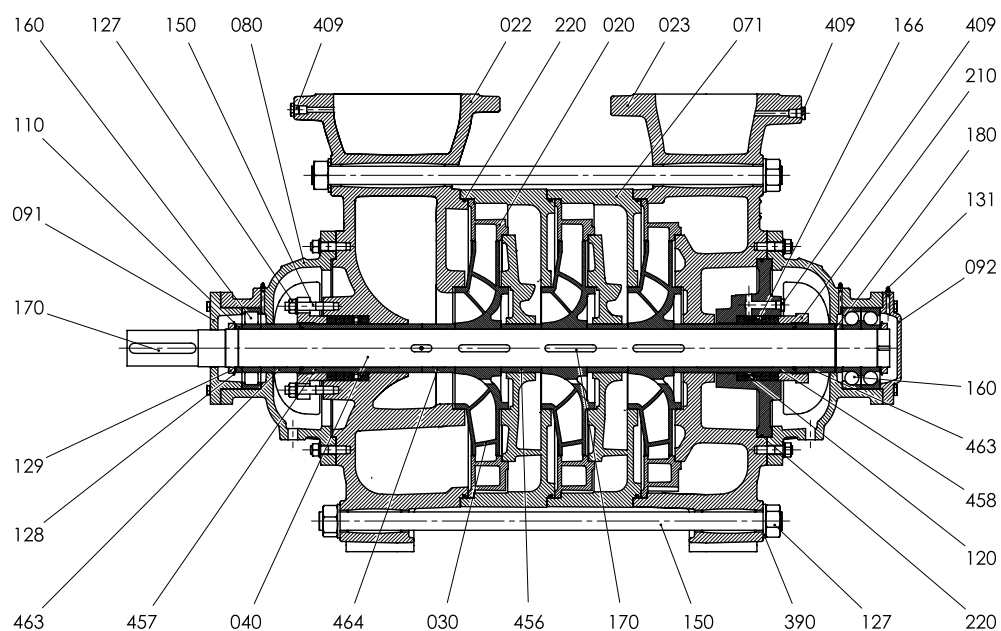
Part List

Discharge Diffuser	021
Suction Body	022
Discharge Body	023
Impeller	030
Shaft	040
Stage Body	071
Bearing Housing	080
Bearing Cover (Coupling)	091
Bearing Cover (Outside)	092
Bearing Setting Sleeve	110
Flushing Ring	120
Nut	127
Protection Sheet	128
Nut	129
Grease Nipple	131
Casing Tiebolt	150
Bearing	160
Soft Packing	166
Pin	170
Ring	180
Connection Support	210
O-Ring	220
Washer	390
Throw Protection	403
Bolt	409
Seal Sleeve (Suction)	457
Seal Sleeve (Discharge)	458



SECTIONAL VIEW

RS 80...200



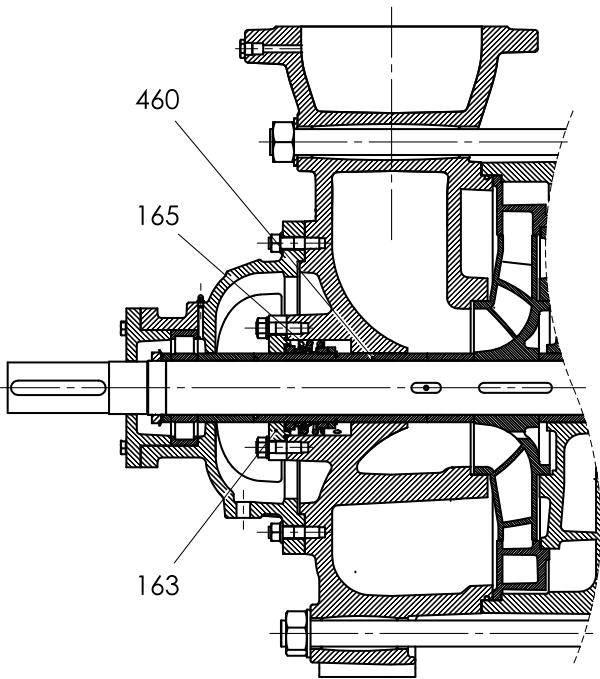
Part List

Diffuser	020
Suction Body	022
Discharge Body	023
Impeller	030
Shaft	040
Stage Body	071
Bearing Housing	080
Bearing Cover (Coupling)	091
Bearing Cover (Outside)	092
Bearing Setting Sleeve	110
Flushing Ring	120
Nut	127
Protection Sheet	128
Nut	129
Grease Nipple	131
Casing Tiebolt	150
Bearing	160
Soft Packing	166
Pin	170
Ring	180
Connection Support	210
O-Ring	220
Washer	390
Bolt	409
Impeller Stage Sleeve	456
Seal Sleeve (Suction)	457
Seal Sleeve (Discharge)	458
Setting Sleeve (Suction & Discharge)	463
Impeller Setting Sleeve	464



 SECTIONAL VIEW

 **RS**



 Part List

Mechanical Seal Cover	163
Mechanical Seal	165
Seal Sleeve	460

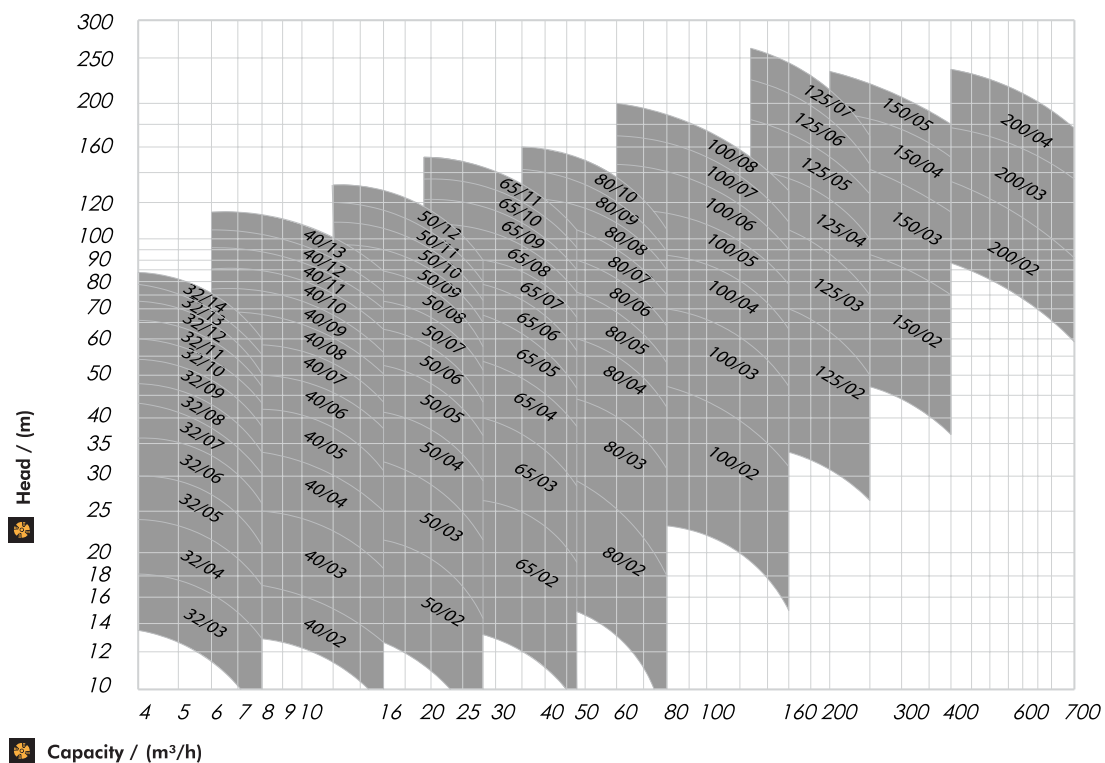




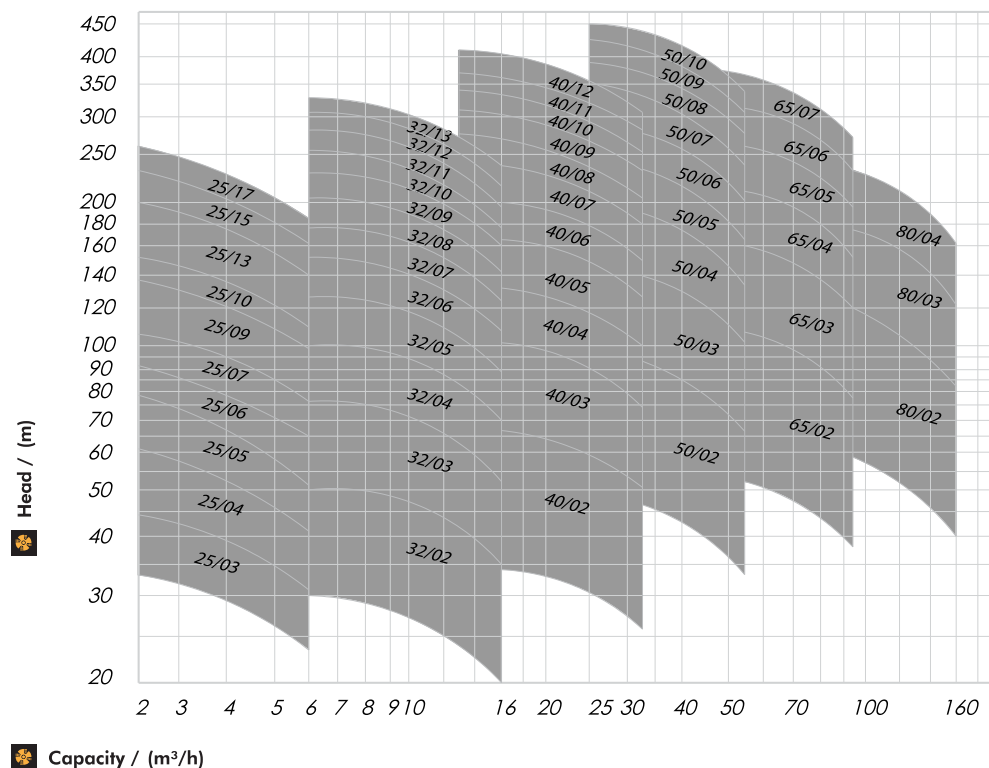
SELECTION CHARTS



1450 rpm / (d/d) (50 Hz)



2900 rpm / (d/d) (50 Hz)



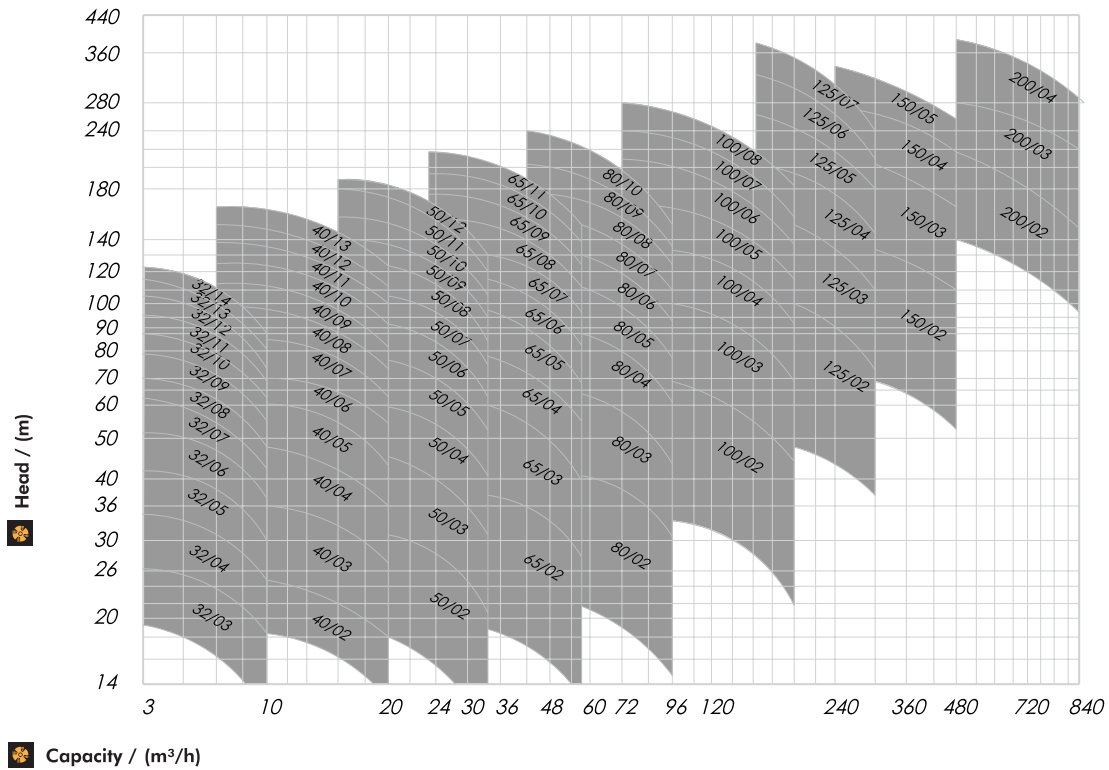
Capacity / (m³/h)



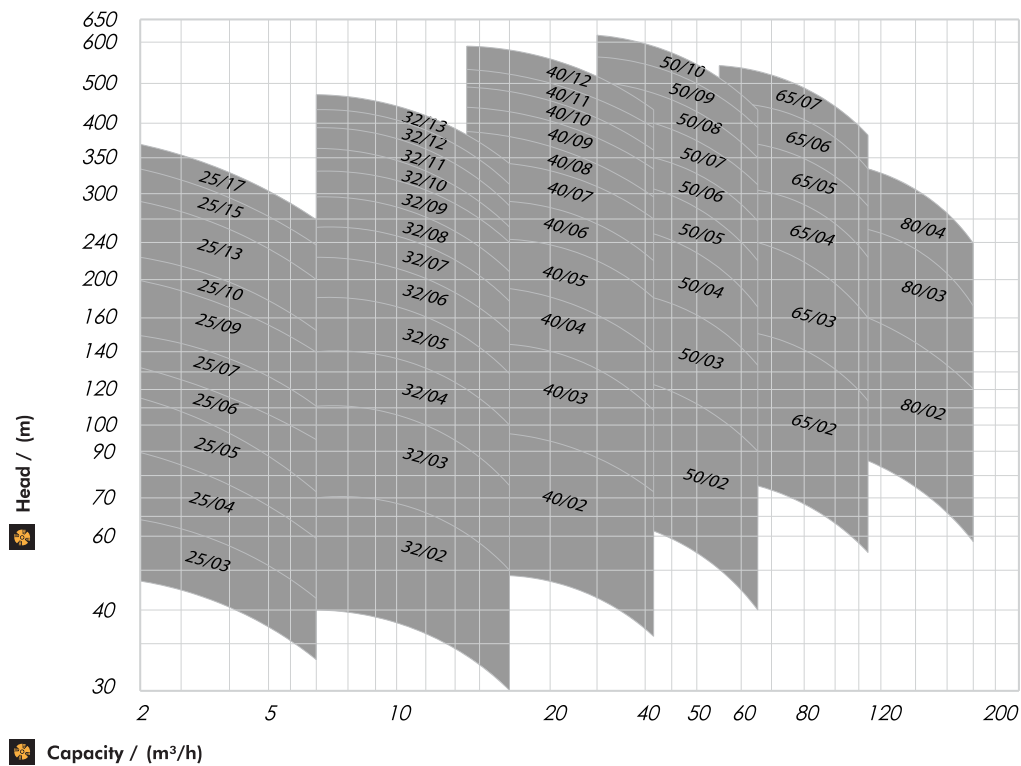


SELECTION CHARTS

1750 rpm / (d/d) (60 Hz)



3500 rpm / (d/d) (60 Hz)

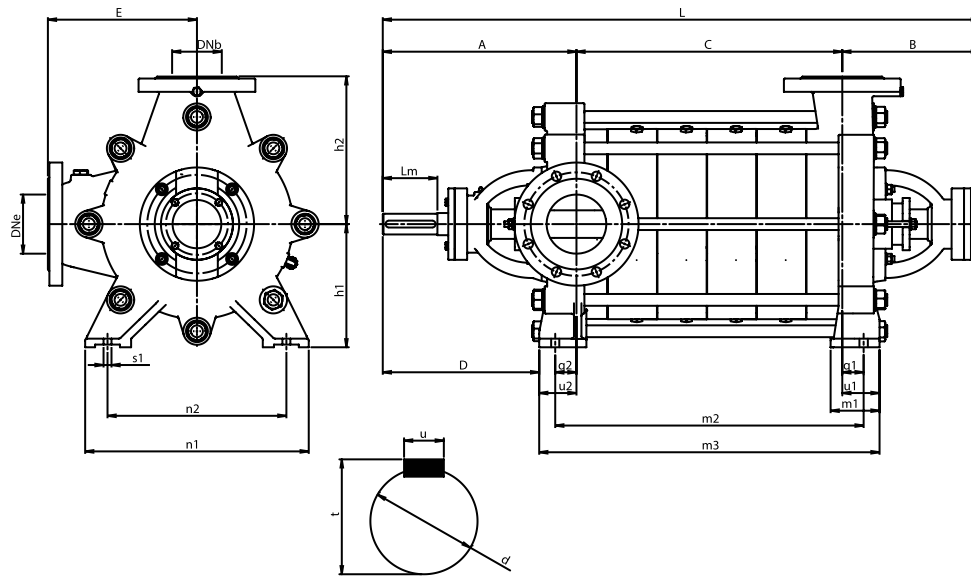




PUMP DIMENSIONS



RS



Pump Type	Dimensions																			Shaft Dimensions			
	DN _e	DN _b	A	B	D	E	L	h ₁	h ₂	q ₁	q ₂	u ₁	u ₂	m ₁	m ₂	m ₃	n ₁	n ₂	s ₁	d	L _m	t	u
25	32	25	238	169	141	135	C+407	112	135	77	77	98	98	65	C+140	C+196	177	120	14	24	60	27	8
32	40	32	242	161	131	152	C+403	132	152	80	87	102	108	60	C+147	C+210	193	135	16	24	60	27	8
40	50	40	239	164	130	175	C+403	160	175	87	87	109	109	62	C+151	C+218	228	174	16	24	60	27	8
50	65	50	254	175	141	190	C+429	160	190	95	91	117	113	60	C+185	C+230	255	198	16	28	65	31	8
65	80	65	271	198	150	215	C+469	180	215	100	97	124	121	60	C+200	C+245	298	241	16	32	65	35	10
80	100	80	323	245	258	265	C+568	210	265	41	40	62	60	90	C+74	C+122	415	340	16	38	80	41	10
100	125	100	390	277	320	300	C+667	250	300	43	43	75	75	100	C+91	C+150	450	360	16	42	110	45	12
125	150	125	414	300	317	375	C+714	300	375	51	56	83	88	110	C+97	C+171	565	455	20	48	110	51,5	14
150	200	150	485	358	384	425	C+843	350	425	59	60	101	101	140	C+108	C+202	663	545	22	55	110	59	16
200	250	200	531	384	431	500	C+915	400	500	50	50	100	100	133	C+85	C+200	673	550	28	70	140	74,5	20
250	300	250	691	484	560	627	C+1175	500	627	75	75	131	131	156	C+135	C+262	775	625	33	100	210	106	28

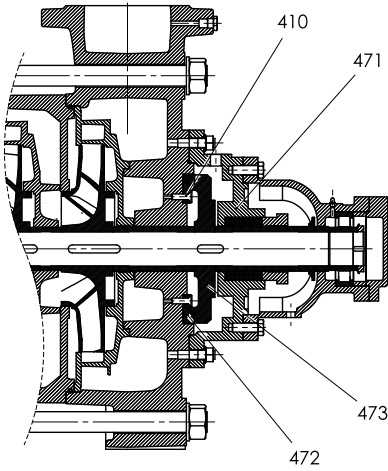
Weight Calculation : $G + (s \cdot g)$ (s: Number of Stage)

Pump Type	“C” Dimensions By Stage (mm)															
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
25	107	146	185	224	263	302	341	380	419	458	497	536	575	614	653	692
32	112	155	198	241	284	327	370	413	456	499	542	585	628			
40	133	188	243	298	353	408	463	518	573	628	683	738				
50	152	214	276	338	400	462	524	586	648	710	772					
65	180	251	322	393	464	535	606									
80	198	281	364	447	530	613	696									
100	235	335	435	535	635	735										
125	279	394	509	624	739											
150	369	514														
200	438	608														
250	518	720	922													



 SECTIONAL VIEW

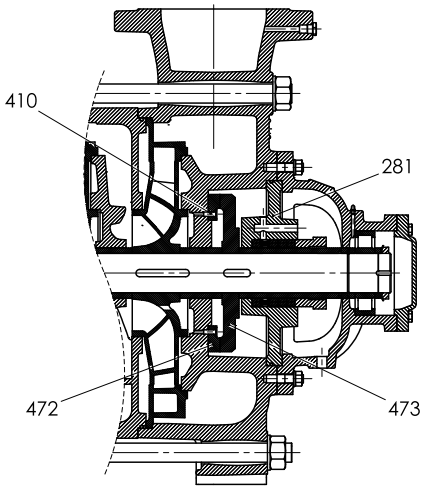
 RS-DD 65...150



 Part List

Bolt	410
Disc Body	471
Disc (Stable)	472
Disc	473

 RS-DD 200



 Part List

Seal Box	281
Bolt	410
Disc (Stable)	472
Disc	473

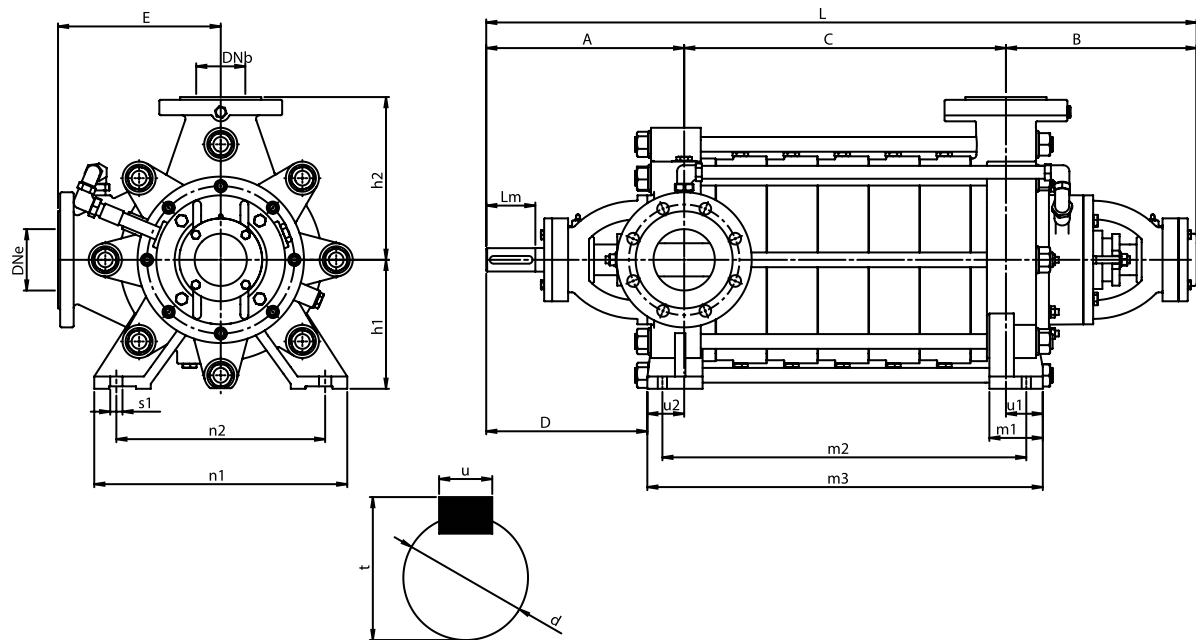




PUMP DIMENSIONS



RS-DD



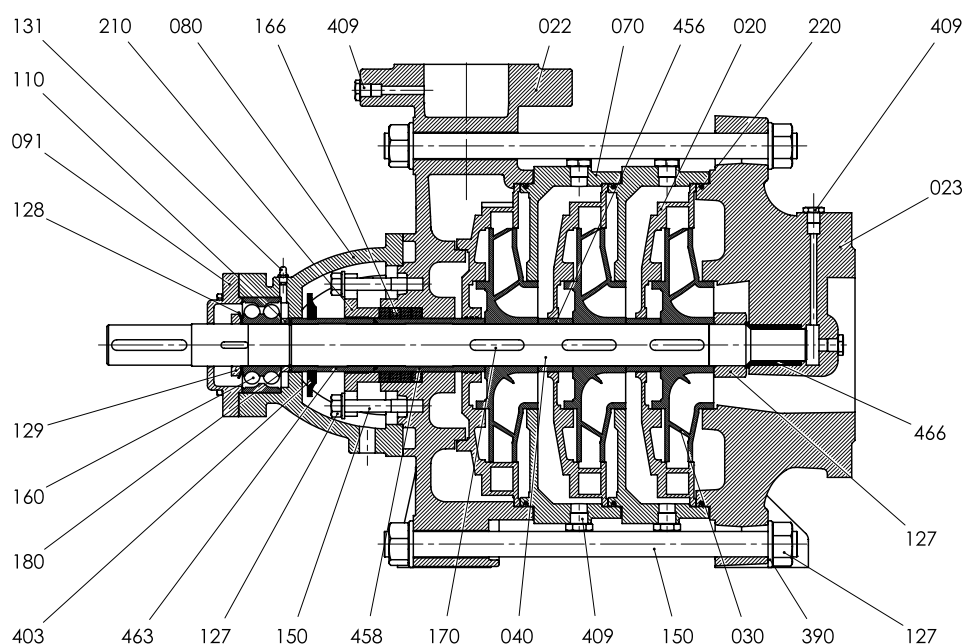
Pump Type	Dimensions (mm)																	Shaft Dimensions			
	DN _e	DN _b	A	B	D	E	L	h ₁	h ₂	u ₁	u ₂	m ₁	m ₂	m ₃	n ₁	n ₂	s ₁	d	L _m	t	u
65	80	65	271	269	150	215	C+540	180	215	195	120	60	C+270	C+315	300	241	16	32	66	35	10
80	100	80	323	311	262	265	C+634	210	265	60	60	87	C+313	C+120	415	340	20	38	80	41	10
100	125	100	383	361	308	300	C+744	250	300	80	75	93	C+90	C+155	450	360	16	42	110	45	12
125	150	125	414	384	326	375	C+798	300	375	85	88	110	C+136	C+173	565	455	20	48	110	51,5	14
150	200	150	485	455	384	425	C+940	350	425	101	101	140	C+120	C+202	663	545	22	55	110	59	16
200	250	200	531	384	431	500	C+915	400	500	100	100	133	C+100	C+200	675	550	28	70	140	74,5	20

Pump Type	"C" Dimensions By Stage (mm)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
65					393	464	535	606	677	748	819						
80					441	524	607	690	773	856	939	1022	1105	1188			
100								835	935	1035	1135	1235	1335	1435	1535		
125							854	969	1084	1199	1314	1429					
150				656	801	946	1091	1236	1381	1526							
200				778	948	1118											



SECTIONAL VIEW

RS-U



Part List

Diffuser	020
Suction Body	023
Discharge Body	022
Impeller	030
Shaft	040
Stage Body	070
Bearing Housing	080
Bearing Cover (Coupling)	091
Bearing Setting Sleeve	110
Nut	127
Protection Sheet	128
Nut	129
Grease Nipple	131
Casing Tiebolt	150
Bearing	160
Soft Packing	166
Pin	170
Ring	180
Connection Support	210
O-Ring	220
Washer	390
Throw Protection	403
Bolt	409
Impeller Stage Sleeve	456
Seal Sleeve (Discharge)	458
Setting Sleeve (Suction & Discharge)	463
Suction Housing	466

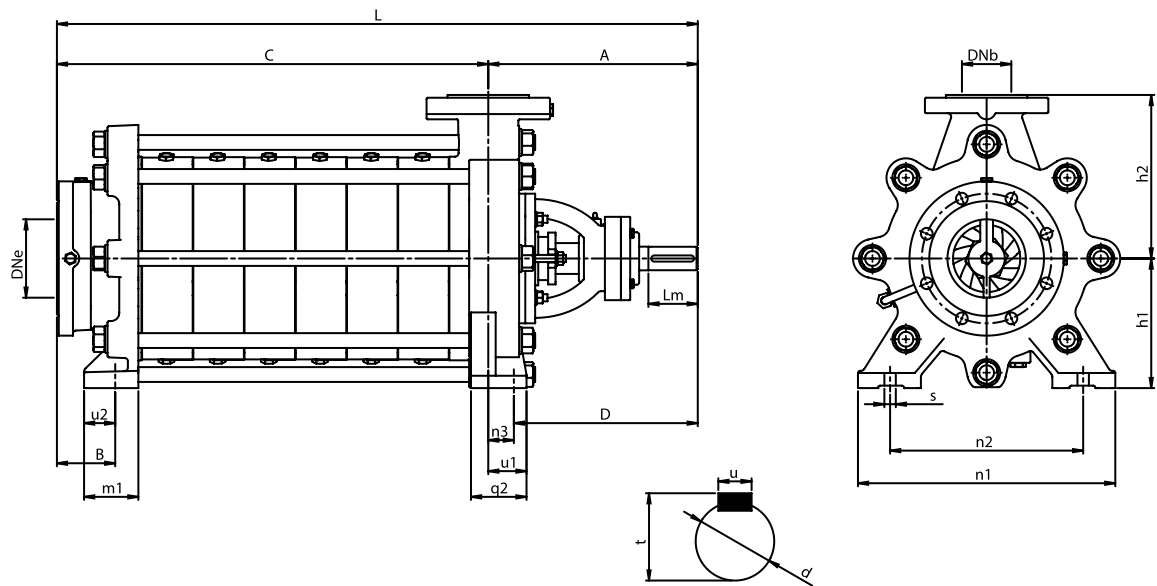




PUMP DIMENSIONS



RS-U



Pump Type	Dimensions															Shaft Dimensions			
	DNe	DNb	A	B	D	L	h1	h2	q2	u1	u2	m1	n1	n2	s	d	Lm	t	u
40	65	40	239	25	130	C+239	160	175	87	109	22	77	236	177	16	24	60	27	8
50	80	50	258	27	163	C+258	160	190	60	117	24	87	260	203	16	28	65	31	8
65	100	65	273	34	170	C+273	180	215	60	125	24	91	298	244	16	32	65	35	10
80	125	80	340	72	298	C+340	210	265	90	62	28	88	413	340	16	38	80	37	10
100	150	100	390	100	320	C+390	250	300	90	65	32	100	450	360	16	42	110	45	12
125	200	125	414	73	317	C+414	300	375	110	80	34	110	565	455	20	48	110	51,5	14
150	200	150	485	62	384	C+485	350	425	130	105	34	135	663	545	22	55	110	59	16

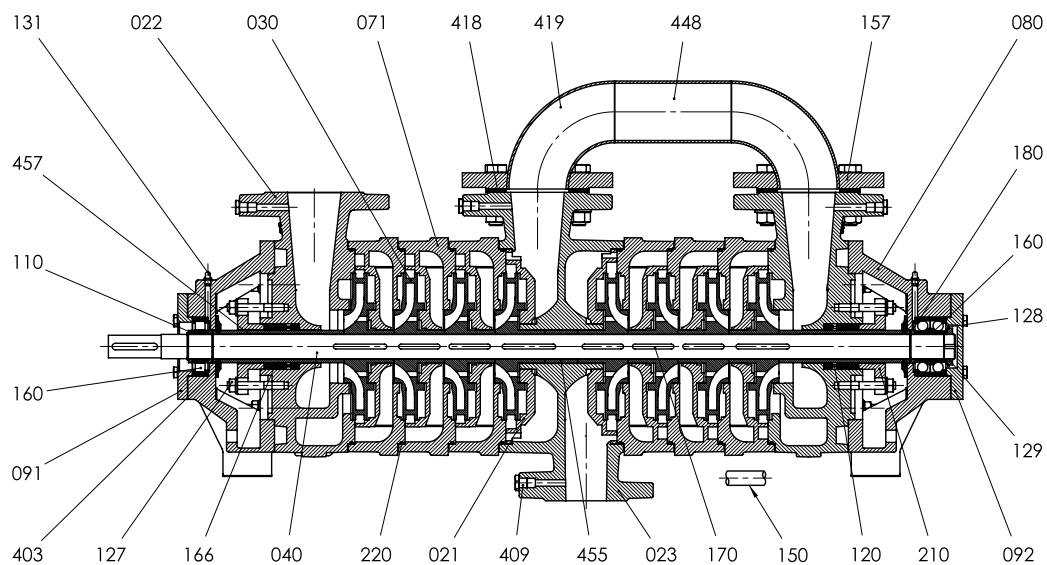
Weight Calculation : G+(s*g) (s: Number of Stage)

Pump Type	"C" Dimensions By Stage (mm)											
	2	3	4	5	6	7	8	9	10	11	12	13
40	187	242	297	352	407	462	517	572	627	682	737	792
50	212	274	336	398	460	522	584	646	708	770	832	
65	247	318	389	460	531	602	673	744	815	886		
80	287	367	450	533	616	699	782	865	948	1031		
100	347	447	547	647	474	847	947	1047				
125	364	479	594	709	824	939						
150	437	582	727	872								



SECTIONAL VIEW

RS-KC



Part List

Discharge Diffuser	021
Suction Body	022
Discharge Body	023
Impeller	030
Shaft	040
Stage Body	071
Bearing Housing	080
Bearing Cover (Coupling)	091
Bearing Cover (Outside)	092
Bearing Setting Sleeve	110
Flushing Ring	120
Nut	127
Protection Sheet	128
Nut	129
Grease Nipple	131
Casing Tiebolt	150
Flange	157
Bearing	160
Soft Packing	166
Pin	170
Ring	180
Connection Support	210
O-Ring	220
Throw Protection	403
Bolt	409
Flange Gasket	418
Elbow	419
Connection Pipe	448
Discharge Centering Sleeve	455
Seal Sleeve (Suction)	457

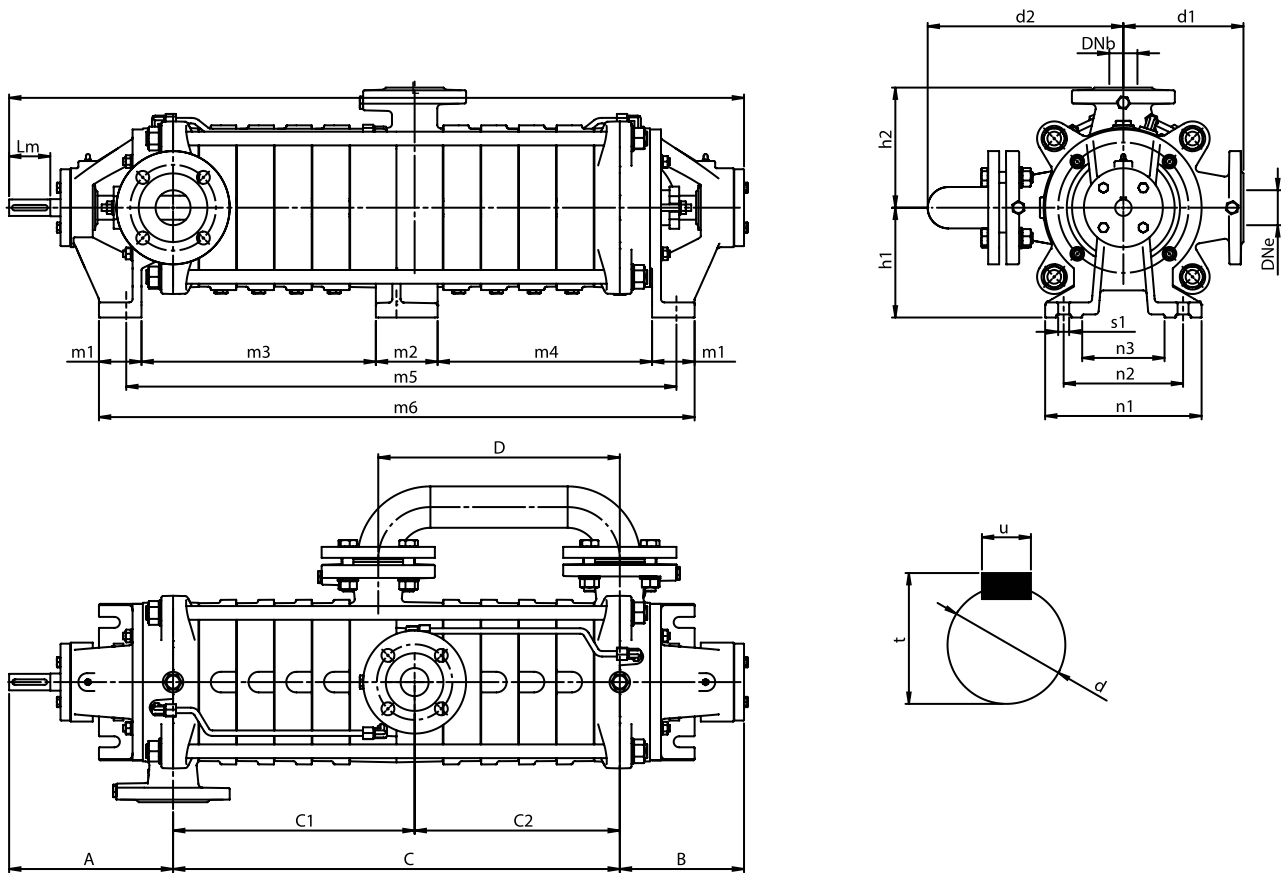




PUMP DIMENSIONS



RS-KC



Pump Type	Dimensions (mm)																							Shaft Dimensions				
	DN _e	DN _b	A	B	D	d1	d2	L	C1	C2	C	h1	h2	H	m1	m2	m3	m4	m5	m6	n1	n2	n3	s1	d	Lm	t	u
40-10	50	40	239	181	352	175	286	1071	352	299	651	160	175	335	62	90	342	312	824	869	228	174	120	16	24	60	27	8
40-12	50	40	239	181	407	175	286	1181	407	354	761	160	175	335	62	90	397	369	934	979	228	174	120	16	24	60	27	8
40-14	50	40	239	181	462	175	286	1291	462	409	871	160	175	335	62	90	452	422	1044	1088	228	174	120	16	24	60	27	8

Pump Type	Dimensions (mm)																							Shaft Dimensions				
	DN _e	DN _b	A	B	D	d1	d2	L	C1	C2	C	h1	h2	H	m1	m2	m3	m4	m5	m6	n1	n2	n3	s1	d	Lm	t	u
50-08	65	50	254	190	334	190	327	1053	275	274	609	160	190	350	60	100	327	287	790	834	255	198	140	16	28	65	31	8
50-10	65	50	254	190	396	190	327	1177	337	336	733	160	190	350	60	100	389	349	914	958	255	198	140	16	28	65	31	8
50-12	65	50	254	190	458	190	327	1301	399	398	857	160	190	350	60	100	451	411	1038	1082	255	198	140	16	28	65	31	8



BEARING TYPES

Bearing Type 1500-1800 rpm / (d/d)			
Pump Type	Stage Number	Bearing Type	
		S	D
RS 32	2...14	NU 305	6305
RS 40	2...13	NU 305	6305
RS 50	2...12	NU 306	6306
RS 65	2...8	NU 307	6307
RS 80	2...8	NU 308	3308
RS 100	2...7	NU 309	3309
RS 125	2...6	NU 310	3310
RS 150	2...3	NU 312	3312
RS 200	2...3	NU 315	2x7315
RS 250	2...4	NU 321	2x7321

Bearing Type 1500-1800 rpm / (d/d)			
Pump Type	Stage Number	Bearing Type	
		S	D
RS-DD 65	9...11	NU 307	NU 307
RS-DD 80	9...14	NU 308	NU 308
RS-DD 100	8...15	NU 309	NU 309
RS-DD 125	7...12	NU 310	NU 310
RS-DD 150	4...10	NU 312	NU 312
RS-DD 200	4...6	NU 315	NU 315

Bearing Type 1500-1800 rpm / (d/d)			
Pump Type	Stage Number	Bearing Type	
		S	D
RS-U 40	2...13	-	6305
RS-U 50	2...12	-	6306
RS-U 65	2...8	-	6307
RS-U 80	2...8	-	6308
RS-U 100	2...7	-	3309
RS-U 125	2...6	-	3310
RS-U 150	2...3	-	3312

Bearing Type 3000-3600 rpm / (d/d)			
Pump Type	Stage Number	Bearing Type	
		S	D
RS-KC 40	10...14	NU 305	2x7305
RS-KC 50	8...12	NU 306	2x7306
RS-KC 65	6...10	NU 307	2x7307



BEARING TYPES

Bearing Type 3000-3600 rpm / (d/d)			
Pump Type	Stage Number	Bearing Type	
		S	D
RS 25	2...17	NU 305	6305
RS 32	2...9	NU 305	6305
RS 32	10...13	NU 305	6405
RS 40	2...6	NU 305	6305
RS 40	7...9	NU 305	6405
RS 50	2...5	NU 306	6306
RS 50	6...7	NU 306	6406
RS 65	2...4	NU 307	6307
RS 80	2...4	NU 308	3308

Bearing Type 3000-3600 rpm / (d/d)			
Pump Type	Stage Number	Bearing Type	
		S	D
RS-DD 65	5...10	NU 307	NU 307
RS-DD 80	5...8	NU 308	NU 308

Bearing Type 3000-3600 rpm / (d/d)			
Pump Type / Pompa Tipi	Stage Number	Bearing Type	
		S	D
RS-U 40	2...6	-	6305
RS-U 50	2...5	-	6306
RS-U 65	2...4	-	6307
RS-U 80	2...4	-	3308

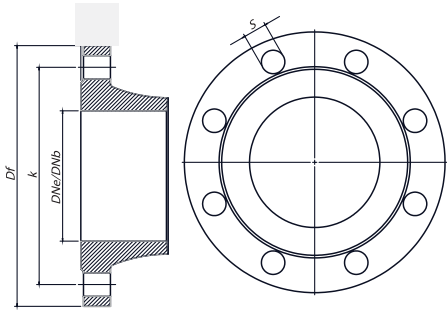
 Suction : S
 Discharge : D



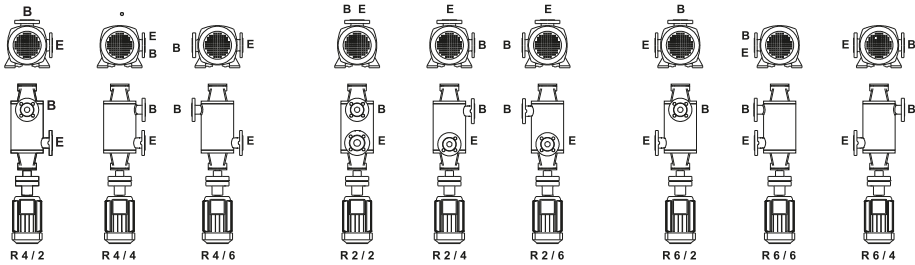
FLANGE DIMENSIONS

Pump Type	Suction & Discharge (PN 16)				Suction & Discharge (PN 40)			
	Df	k	s	n	Df	k	s	n
25	115	85	16	4	115	85	16	4
32	140	100	19	4	140	100	19	4
40	150	110	19	4	150	110	19	4
50	165	125	19	4	165	125	19	4
65	185	145	19	4	185	145	19	8
80	200	160	19	8	200	160	19	8
100	220	180	19	8	235	190	23	8
125	250	210	19	8	270	220	28	8
150	285	240	23	8	300	250	28	8
200	340	295	23	12	375	320	31	12
250	405	355	23	12	450	385	34	12
300	460	410	23	12	515	450	34	16

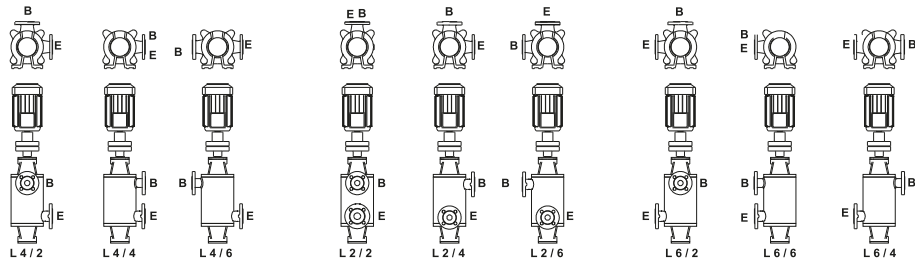
○ TS EN 1092-2
 ○ "n" Number of Holes



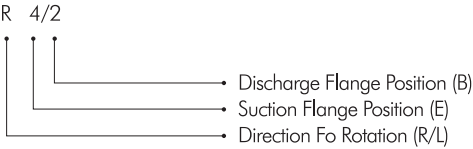
FLANGE POSITIONS



○ Clockwise rotation viewed from driver
 (Suction flange is on the motor side)



○ Counter clockwise rotation viewed from driver
 (Discharge flange is on the motor side)



○ Direction of rotation viewed from driver end.
 R : Right
 L : Left