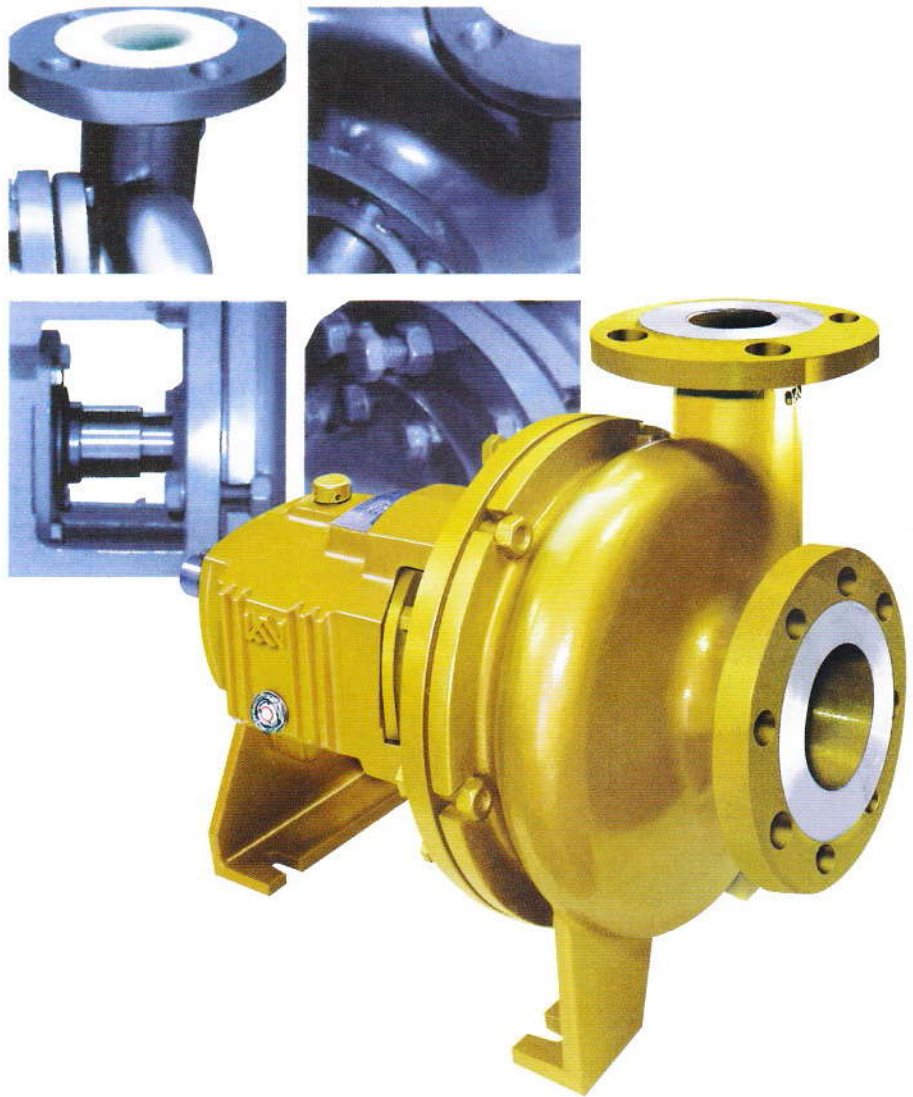


**KEWPUMP®**

*Keeps Pumping*



**KS-SE3**

BACK PULL-OUT END SUCTION  
SOLID HANDLING PUMP



Large solid shaft size for heavy duty performance with minimal bearing overhang, provides superior resistance to deflection and increase lifetime of the mechanical seal.

Heavy duty cast iron construction bearing bracket with enlarge oil reservoir for better dissipation of heat.

Clearance adjusting screw make open impeller close running clearance adjustments easy and accurate to extend pump performance life.

Standard single-acting mechanical seal is generally employed. Dynamic sealing and gland packing system fitted with shaft sleeve also available upon request.

Bulls-eye sight glass for easy accurate monitoring of oil level and condition.

Concentric casing with tangential discharge nozzle design. The impeller and casing is equal at all points. This will reduce turbulence, cavitation and casing life is greatly extended especially in abrasive service.

Full support rear foot to prevent bearing bracket from tipping over when disassembled.

Non-clogging semi-open vane impeller, ideal for handling liquids containing suspended matter or solids. The impeller also consists of multi back vanes to reduce the concentration of solids and also lower the pressure on the sealing chamber area. Closed impeller, fully-open impeller and torque flow impeller also available upon request.

Large bore sealing chamber improves cooling and lubrication of seal faces for extending mechanical seal life.

Casing cover wear plate is bolted to the frame with two bolts, easy to access, convenient and economic to replace.

## Dynamic Sealing

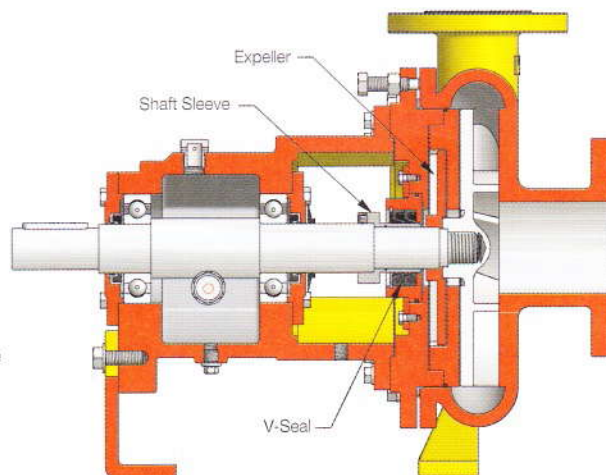
On some tough pumping services like paper stock and slurries, mechanical seals require outside flush and constant, costly attention. Even then, seal failures are common, resulting in downtime. KS-SE3 offers a Dynamic Seal which, simply by fitting an expeller between sealing chamber and impeller, eliminates the need for a mechanical seal.

### Advantages

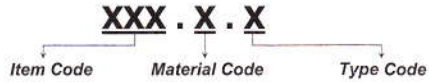
- External seal water not required
- Elimination of pump contamination and product dilution
- Reduces utility cost
- No need to treat seal water
- Eliminate problems associated with piping from a remote source
- Adjustable shaft sleeve design enables the shaft sleeve to be used up to five cycles longer thus saving significant maintenance cost and downtime

### Working Principle

During start-up, expeller acts like an impeller, removing liquid and solids from the sealing chamber. When the pump is stationary, V-Seal or other type of secondary seal prevents pump from leaking.



## Part No. Notations



- Part No. with standard material and type are shown in the parts list.

Example Part No. : 120.1.S (Item = Impeller      Material = SS304      Type = Semi-Open)

### Item Code

- For parts which have no variation in material and type, Part No. contains of Item Code only.

Example Part No. : 440 (Item = Deflector)

### Material Code

For Item Codes 100, 120, 121, 130, 133, 210, 211, 213, and 221.D (for dynamic sealing) only :

1 = SS304	4 = Ni-Hard	7 = Galvanise Steel	10 = CA15
2 = SS316	5 = Cast Iron	8 = Mild Steel	
3 = CA40	6 = Ductile Iron	9 = CD4MCU	

For Item Code 200 only :

A = CA/CE/VT	G = SC/CA/VT
B = CE/CE/VT	H = SC/SC/NBR
C = CA/SC/VT	I = TC/TC/EPDM
D = SC/SC/VT	J = CA/STEEL/VT
E = TC/TC/VT	N = STELLITE/CA/VT
F = TC/SC/VT	O = CE/CA/VT

CA = Carbon	VT = Viton
CE = Ceramic	NBR = Nitrile
SC = Silicon Carbide	EPDM = EPDM
TC = Tungsten Carbide	
STEEL = Steel	
STELLITE = Stellite	

- Available materials for the above items are depended on the product specifications.  
For parts which have no variation in type, Part No. contains of Item Code and Material Code only.

Example Part No. : 213.5 (Item = Gland      Material = Cast Iron)

### Type Code

For Item Code 120 only :  
C = Closed      S = Semi-Open      R = Fully-Open      F = Torque Flow

For Item Codes 133, 210, 211 and 221 only :  
M = Mechanical Sealing      D = Dynamic Sealing      G = Gland Packing

For Item Code 210 only :  
F = for models with torque flow impeller  
Blank = for models with other types of impeller

- Available types for the above items are depended on the product specifications.

Example Part No. : 120.2.C (Item = Impeller      Material = SS316      Type = Closed)

Kewpump (M) Sdn. Bhd. reserves the right to change the materials and types to keep pace with technological progress.

## Model Designation

SEK 50R D

### Model Range

SEK:	Back pull-out, non self priming with max. impeller size 254mm
SEL:	Back pull-out, non self priming with max. impeller size 320mm
SES:	Back pull-out, self priming with max. impeller size 254mm
SEMK:	Closed coupled, non self priming with max. impeller size 254mm
SEML:	Closed coupled, non self priming with max. impeller size 320mm
SEMS:	Closed coupled, self priming with max. impeller size 254mm

### Shaft Sealing Type

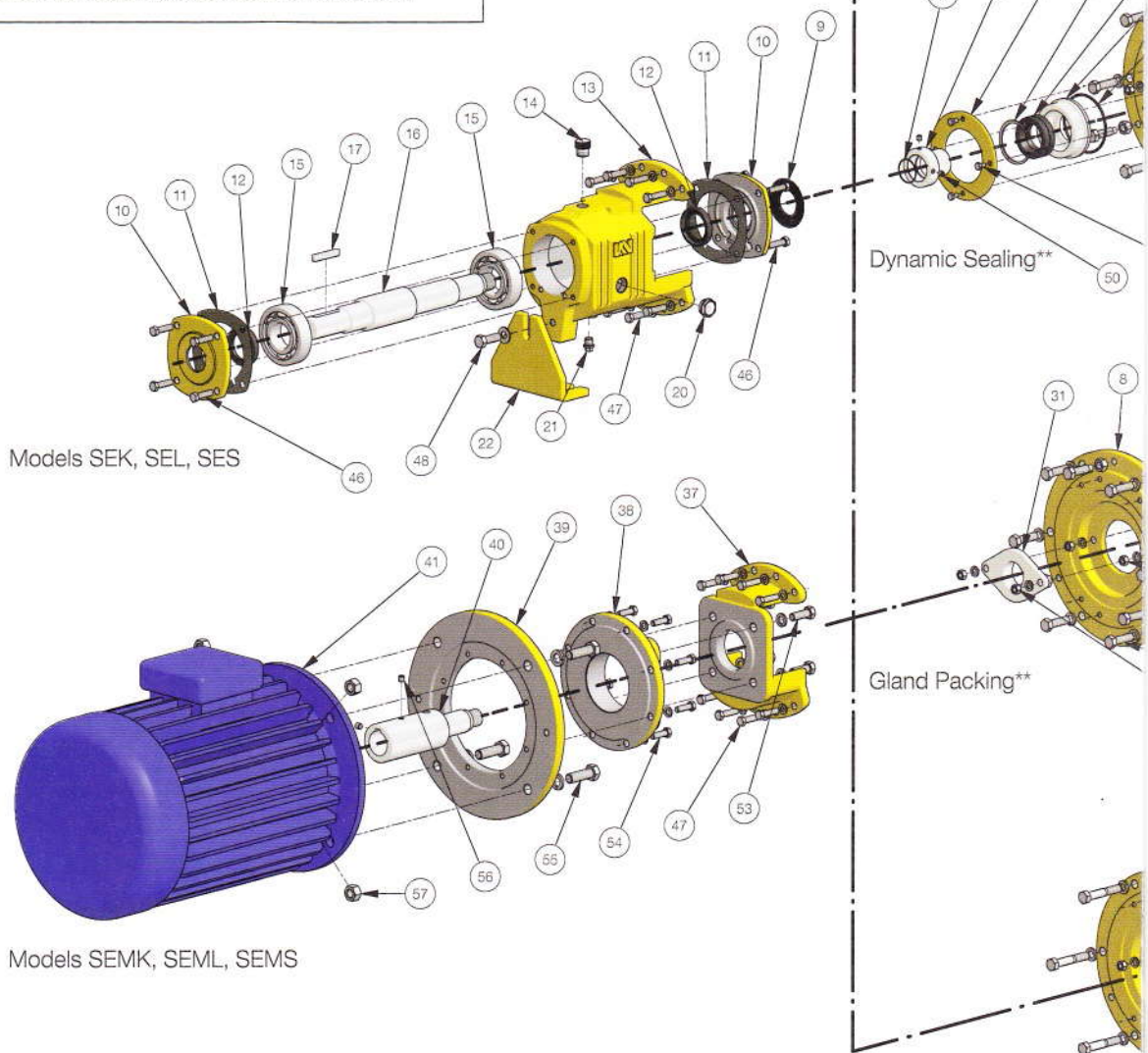
Blank:	Mechanical Sealing (Std.)
D:	Dynamic Sealing
G:	Gland Packing

### Impeller Type

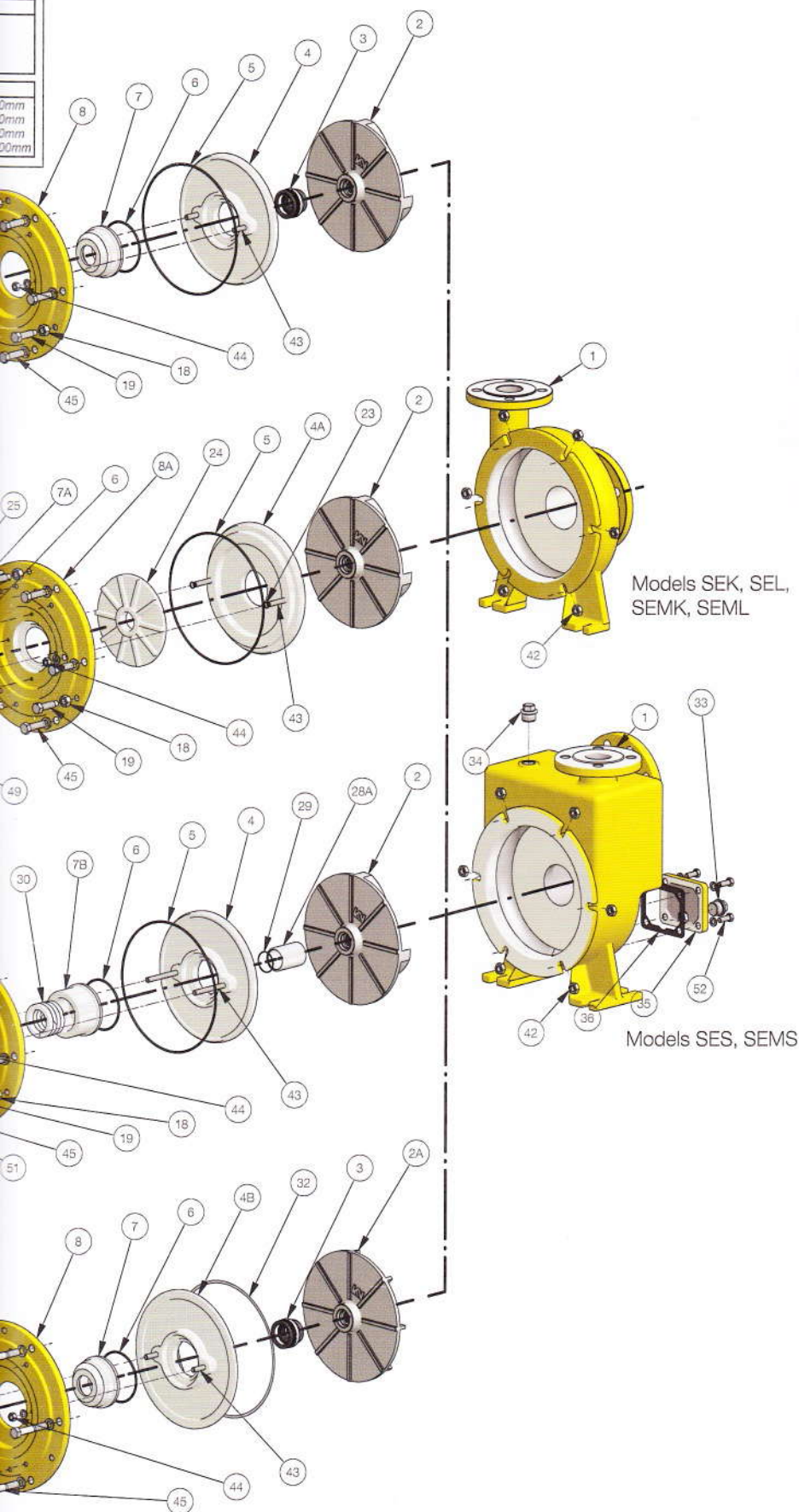
Blank:	Semi-Open (Std.)
C:	Closed
R:	Fully-Open
F:	Torque Flow

### Model Size

40:	Nominal discharge diameter
50:	Nominal discharge diameter
80:	Nominal discharge diameter
100:	Nominal discharge diameter



0mm  
0mm  
0mm  
0mm



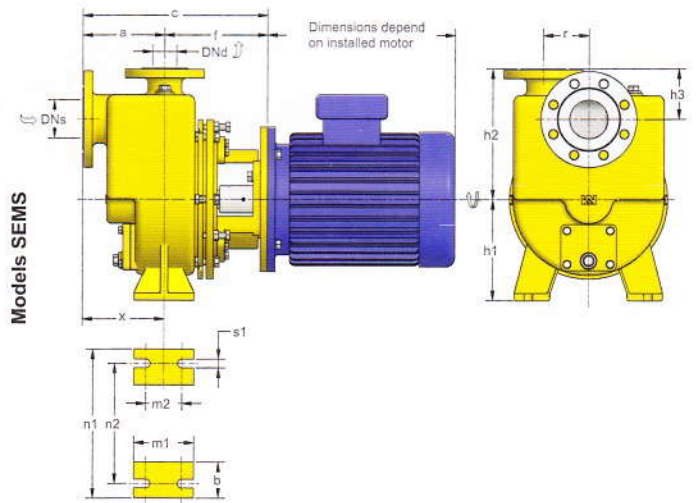
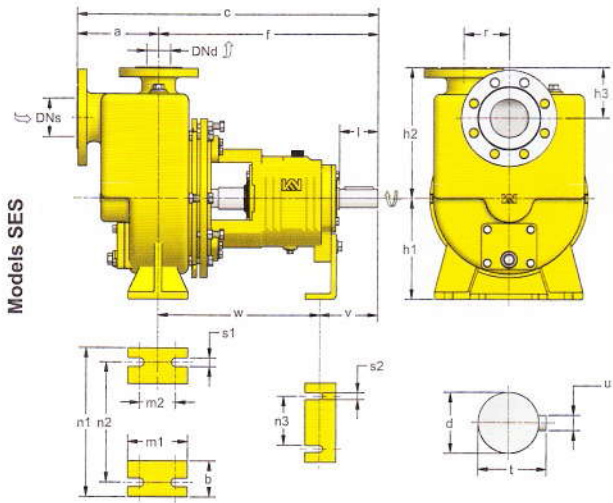
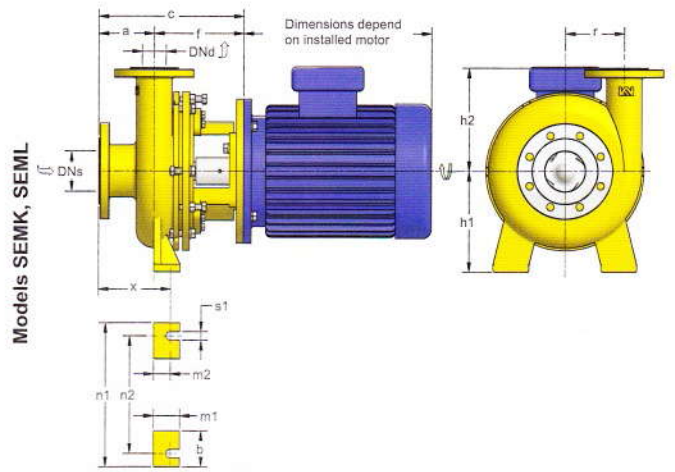
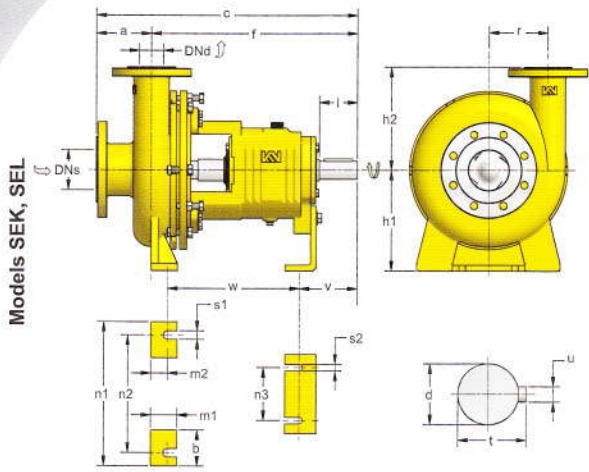
Models SEK, SEL, SEMK, SEML

Models SES, SEMS

Item No.	Part No.	Description	Standard Material
1	100	Casing	Stainless Steel
2	120.S	Semi-Open Impeller	Stainless Steel
2A	120.F	Torque Flow Impeller	Stainless Steel
3	200.A	Mechanical Seal	Carbon vs. Ceramic
4	210.M/G	Casing Cover for Mechanical Sealing and Gland Packing	Stainless Steel
4A	210.D	Casing Cover for Dynamic Sealing	Stainless Steel
4B	210.FM/G	Casing Cover for Torque Flow Impeller with Mechanical Sealing and Gland Packing	Stainless Steel
5	420	Casing Cover "O" Ring	Synthetic Rubber
6	421	Sealing Chamber "O" Ring	Synthetic Rubber
7	211.M	Sealing Chamber for Mechanical Sealing	Stainless Steel
7A	211.D	Sealing Chamber for Dynamic Sealing	Stainless Steel
7B	211.G	Sealing Chamber for Gland Packing	Stainless Steel
8	221.M/G	Adaptor Extension Ring for Mechanical Sealing and Gland Packing	Cast Iron
8A	221.D	Adaptor Extension Ring for Dynamic Sealing	Stainless Steel
9	440	Deflector	Synthetic Rubber
10	320	Bearing Cover	Cast Iron
11	430	Bearing Cover Gasket	Oil Proof Paper
12	321	Oil Seal	Synthetic Rubber
13	301	Bearing Bracket	Cast Iron
14	330	Oil Cover	Aluminium Alloy
15	310	Bearing	Steel
16	130	Shaft	Stainless Steel
17	136	Shaft End Key	Stainless Steel
18	464	Jam Nut	Steel
19	451	Clearance Adjusting Screw	Steel
20	331	Oil Gauge	Plastic Threaded
21	400	Bearing Bracket Drain Plug	Galvanise Steel
22	410	Support Foot	Cast Iron
23	492	Casing Cover Stud "O" Ring	Synthetic Rubber
24	121	Expeller	Stainless Steel
25	202	V-Seal	Synthetic Rubber
26	460	Cir Clip	Steel
27	235	Sealing Chamber Holding Bracket	Cast Iron
28	133.D	Shaft Sleeve for Dynamic Sealing	Stainless Steel
28A	133.G	Shaft Sleeve for Gland Packing	Stainless Steel
29	423	Shaft Sleeve "O" Ring	Synthetic Rubber
30	201	Packing	Cotton
31	213	Gland	Stainless Steel
32	431	Casing Cover Gasket	Asbestos Sheet
33	401	Casing Drain Plug	Stainless Steel
34	402	Venting Plug	Stainless Steel
35	217	Casing Drain Cover	Stainless Steel
36	439	Casing Drain Cover Gasket	Synthetic Rubber
37	220	Frame Adaptor	Cast Iron
38	233*	Motor Frame Adaptor	Cast Iron
39	225	Motor Adaptor Extension Ring	Cast Iron
40	132	Motor Extension Shaft	Stainless Steel
41	501	Flange-Mounted Motor	--
42	--	Casing Nut	Steel
43	--	Casing Cover Stud	Steel
44	--	Casing Cover Nut	Steel
45	--	Casing Bolt	Steel
46	--	Bearing Cover Bolt	Steel
47	--	Adaptor Extension Ring Bolt	Steel
48	--	Support Foot Bolt	Steel
49	--	Sealing Chamber Holding Bracket Bolt	Steel
50	--	Shaft Sleeve Set Screw	Steel
51	--	Gland Nut	Steel
52	--	Casing Drain Cover Bolt	Steel
53	--	Motor Frame Adaptor Bolt	Steel
54	--	Motor Adaptor Extension Ring Bolt	Steel
55	--	Motor Bolt	Steel
56	--	Motor Extension Shaft Set Screw	Steel
57	--	Motor Nut	Steel

\* Only available in models SEMK, SEML and SEMS with motor horsepower 15HP or 20HP

\*\* Only available in models SEK, SEL and SES



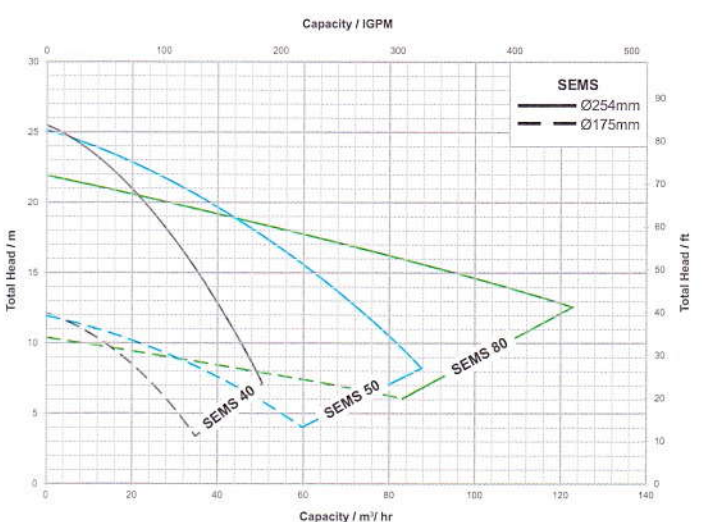
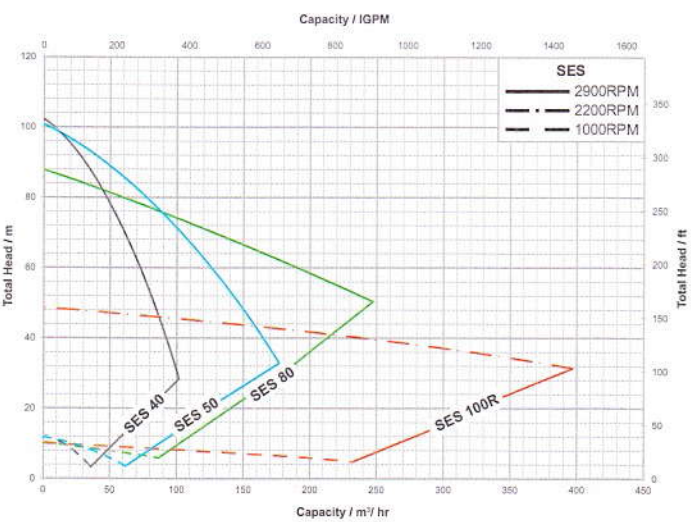
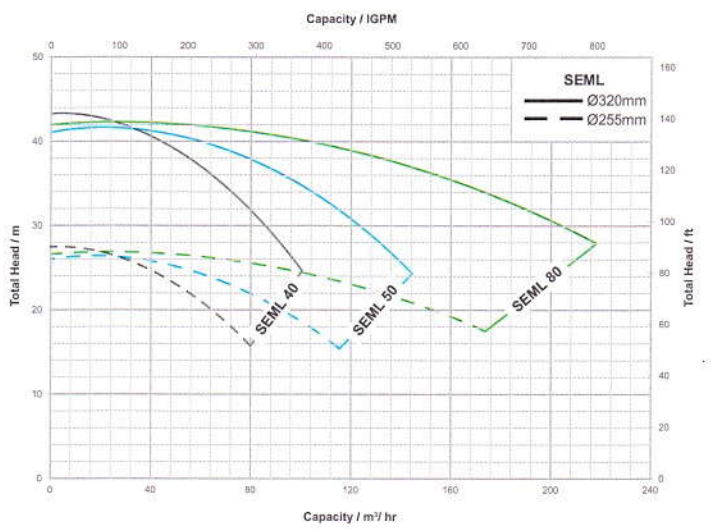
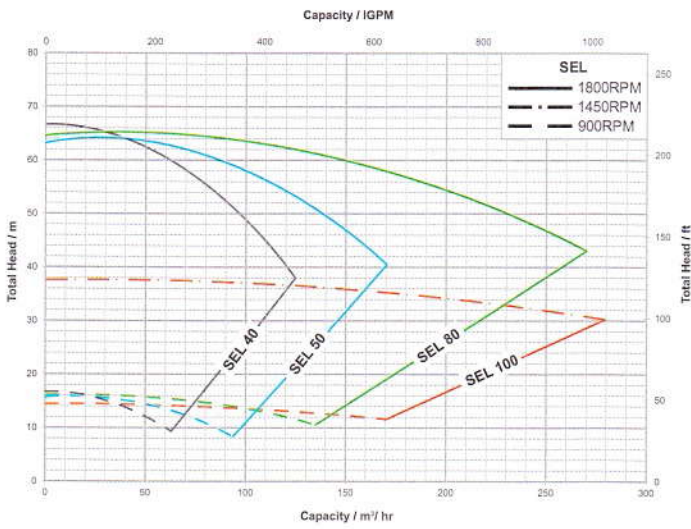
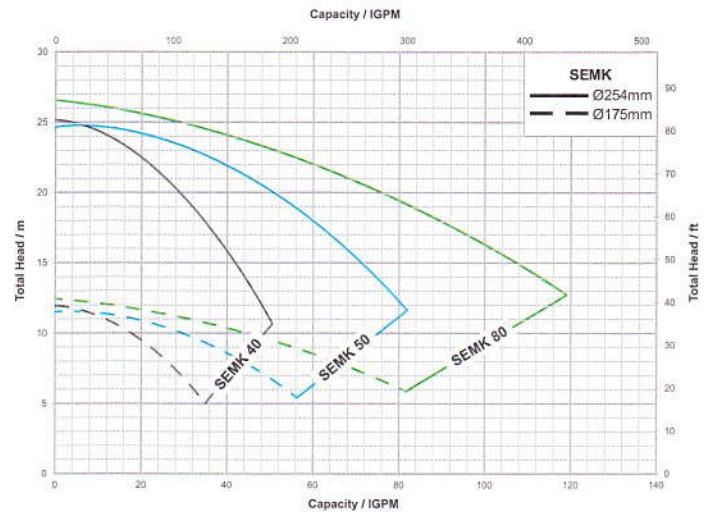
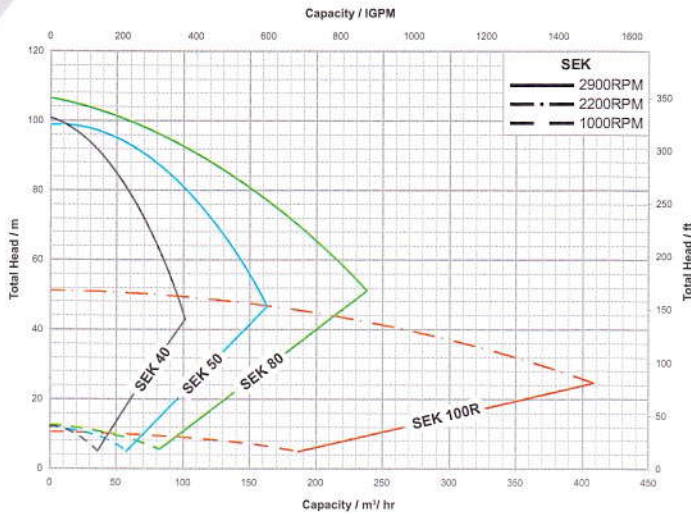
**Models SEK, SEL, SES**

Dimensions in mm																							
PUMP MODEL	Flanges		Pump Dimensions							Foot Dimensions							Shaft End						
	DNd	DNs	a	f	c	h1	h2	h3	r	b	m1	m2	n1	n2	n3	s1	s2	v	w	d	l	t	u
SEK 40	40	65	85	430	515		203		135														
SEK 50	50	80	115	430	545	210	215		123	75	55	35	300	245	110	18	14	130	265	38	80	42.8	9.5
SEK 80	80	100	115	440	555		242		130														
SEK 100R	100	125	125	445	570		262		148														
SEL 40	40	65	90	430	520		254		165														
SEL 50	50	80	120	435	555	250	256		163	75	55	35	380	310	185	18	14	140	255	38	80	42.8	9.5
SEL 80	80	100	115	440	555		260		161														
SEL 100	100	150	155	465	620	265	280		167														
SES 40	40	65	155	455	610		270	95	96														
SES 50	50	80	165	470	635	210	285	110	90	75	120	90	310	250	110	18	14	130	325	38	80	42.8	9.5
SES 80	80	100	230	480	710		350	115	63										340				
SES 100R	100	125	235	490	725		375	130	100										350				
																			360				

**Models SEMK, SEML, SEMS**

Dimensions in mm																	
PUMP MODEL	Flanges		Pump Dimensions							Foot Dimensions							
	DNd	DNs	a	f	c	h1	h2	h3	r	b	m1	m2	n1	n2	s1	x	
SEMK 40	40	65	85	190	275		203		135							120	
SEMK 50	50	80	115	190	305	210	215		123	75	55	35	300	245	18	150	
SEMK 80	80	100	115	200	315		242		130							160	
SEML 40	40	65	90	190	280		254		165							125	
SEML 50	50	80	120	195	315	250	256		163	75	55	35	380	310	18	160	
SEML 80	80	100	115	200	315		260		161							160	
SEMS 40	40	65	155	455	610		270	95	96							155	
SEMS 50	50	80	165	470	635	210	285	110	90	75	120	90	310	250	18	165	
SEMS 80	80	100	230	480	710		350	115	63							230	

Dimensions are based on semi-open / fully-open impeller  
 For closed impeller, dimensions **f**, **c**, and **w** plus (+) another 6mm  
 For torque flow impeller, dimensions **f**, **c**, and **w** plus (+) another 30mm  
 For models SEMK, SEML and SEMS with motor horsepower 15HP or 20HP, dimensions **f** and **c** plus (+) another 40mm  
 Flange dimensions according to ISO2084-PN16 (BS4504-1969 Table 16/11. DIN2501/PN16)



All curves based on semi-open impeller, except SEK 100R and SES 100R (fully-open impeller).  
 For SEK, SEL and SES, curves based on full size impeller for each model.  
 For SEMK, SELM and SEMS, curves based on pump speed 1450rpm for each model.  
 Curves for reference only. For final selection refer to individual pump curve.