## **TOMY ENG General catalogue**





### TEN-P/V Magnetic pumps with small capacity



#### Model constitution

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#### Features

- Magnetic pumps to suitable for wide range chemical.
- High reliability and long life faithfully following basic performance.
- Models with 6W 250W of various motor output.

#### Material

- General purpose small capacity magnetic pump TEN type • • • GFR-PP
- \*Glassfiber-reinforced polypropylene
- Chemical resistance magnetic pump TEN-V type • • • CFR-PVDF

	• •		
*Carbon-	reinforced	polyvinylidene	fluoride(2F)

① Series	2 Material	3 Connection	④ Phase	⑤ Voltage	6 Frequency
	P…GFB-PP		1 Single	1…100V	
E . 0E0	r Mrn-rr	T Thread		2…200V	
5~250			a Three	3…380V	EEOU-only
		F··· Flange	3 Three	4…400V	550H20IIIy

#### **Dimensions list**





#### Things to be aware of when using

- 1. Do not race magnetic pumps
- 2. Do not operate magnetic pumps with slurry.
- 3. Magnetic pumps can not suck fluid by self.
- Use magnetic pump within the following fluid temperature.

TEN-P/TEX-P	0~70℃
TEN-V	0~80℃
TEX-F/C	0~90℃

	*									mm
MODEL	W	Н	L	А	В	С	D	E	F	G
TEN-5P	74	83	130	-	30	74	60	36	31	17
TEN-15P/15V	95	113	179	-	50	116	68	56	38	23
TEN-25P/25V	85	117	205	30	50	127	68	56	34	29
TEN-25PZ/25VZ	85	126	211	30	50	134	68	56	40	40
TEN-45P/45V	120	130	250	40	64	167	100	60	48	30
TEN-45PZ/45VZ	120	134	230	40	64	151	100	64	40	40
TEN-70P/70V	120	130	274	40	64	168	100	60	48	30
TEN-70PZ/70VZ	120	151	237	40	64	157	100	60	39	45
TEN-110P/110V										
TEN-110P3/110V3	100	100	075	45	75	107	100		FC	40
TEN-110P15/110V15	120	162	275	45	/5	187	100	66	56	43
TEN-110P35/110V35										
TEN-150P/150V	140	150	070	70	0.0	100	100		50	10
TEN-150P3/150V3	142	159	273	70	96	180	108	66	56	43
TEN-150PZ/150VZ	140	100	050	70	0.0	100	100		44	4.0
TEN-150PZ3/150VZ3	142	166	252	70	96	163	108	66	41	48
TEN-250P/250V										
TEN-250P3/250V3	150	174	000	70	100	100	110	74		4.4
TEN-250P15/250V15	156	174	322	70	100	196	110	/4	00	44
TEN-250P35/250V35										

· Please note that structure and dimension may change without prior notice

· When designing, request drawing and reconfirm



No.	Part name	TEN-P	TEN-V				
1	Front casing	GFR-PP	CFR-PVDF				
1-1	Front bearing	Special PTFE					
2	Inpeller(magnet can)	GFR-PP	CFR-PVDF				
2-1	spindle	Alumina ceramic					
2-2	Front thrust	nt thrust Alumina ceramic					
2-3	Rear thrust	Alumina	ceramic				
3	Rear casing	GFR-PP	CFR-PVDF				
3–1	Rear bearing	Special	PTFE				
4	O-ring	FKM / EPDM /	Special				

150PZ

45P

30 40 50 60 70 80

150P

110P

250P

120

90 100 110

DIscharge Rate (L/min)

60Hz

45PZ

70PZ

15P

20

25P

20

18

16

14

12

10

8

4

2

0

0

5P

10

Head (m)

#### Performance Curve





		Hose	Thre	ead	Flange	MAX Rate	MAX Hed	Stn. S	Spc.	Mot	or (50/60	Hz)	Weight
MODEL	Frequency Hz	IN / OUT	Suc/Dis	Union	JIS10K	L/min	m	L/min	m	Rated Output (W	Power (W)	Power Supply (V)	(Kg)
TEN-5P	50	14A/14A	-	_	_	11	1.5	5	1	6	11	1-phase	0.9
	50					16	2.1	8			22	1. phono	-
TEN-15P/15V	60	14A/14A	G3/4	16A	_	19	3.4	12	1.5	15	30	100/200	1.6
TEN-25P/25V	50 60	18A/18A	G3/4	16A	-	27 32	3.1 4.3	17 22	2	25	<u>35</u> 50	1-phase 100/200	2
TEN-25PZ/25VZ	50 60	17A/17A	G3/4	16A	—	13 14	5 6.5	7	4	25	35 50	1-phase 100/200	2.1
TEN-45P/45V	50 60	20A/20A	G3/4	16A	—	33 38	3.8 5.4	16 25	2.5	45	50 70	1-phase 100/200	3.4
TEN-45PZ/45VZ	50 60	17A/17A	G3/4	16A	—	15 15	8 10	- 5	7	45	50 70	1-phase 100/200	3.3
TEN-70P/70V	50 60	20A/20A	G3/4	16A	—	45 52	4.6	22 34	4	70	95 140	1-phase 100/200	5.1
TEN-70PZ/70VZ	50 60	20A/20A	G3/4	16A	—	22	10 13.5	10	8 12	70	95 140	1-phase 100/200	4
TEN-110P/110V	50					60	5.6	40			130	1-phase	
TEN TIOT/TION	60					70	8.2	55			190	100/200	-
TEN-110P3/110V3	60					60	5.6	40	1.		130	200/400	
TEN-110P15/110V15		26A/26A	G1	20A	_		0.2		4	110	100	1-phase 100/200	7.1
TEN-110P35/110V35	50					70	8.2	55			190	3-phase 200/400	1
TEN-150P/150V	50					80	9.5	- 50	7.5	150	210	1-phase	
	50	26A/26A	G1	20A	25A	80	9.5		10	1/0	210	100/200 3-phase	6.6
TEN-150P3/150V3	60					100	13	- 50	10	170	310	200/400	
TEN-150PZ/150VZ	50					40	14	20	-	160	260	1-phase	
	50	20A/20A	G3/4	16A	_	43	14	20	12	190	260	3-phase	6.6
TEN-150PZ3/150VZ3	60					43	20	30	1	190	360	200/400	
TEN-250P/250V	50					100	8.6	50	7		290	1-phase	
	50					120	11.6	70	8		400	100/200 3-phase	-
TEN-250P3/250V3	60	00 0 /00 0		004	05.4	120	11.6	70	8	250	400	200/400	0.7
TEN-250P15/250V15	50	20A/26A		20A	ZOA	120	11.5	70			005	1-phase 100/200	0./
TEN-250P35/250V35	50					120	11.5	70	ð		395	3-phase 200/400	

 $\boldsymbol{\cdot}$  Please note that structure and dimension may change without prior notice

· When designing, request drawing and reconfirm

### **TEX-P/F/C** Magnetic pumps with medium capacity





#### Features

- $\boldsymbol{\cdot}$  Magnetic pumps with medium capacity for wide range chemicals line up
- $\boldsymbol{\cdot}$  Leak free, seal-less construction for magnetic drive
- $\boldsymbol{\cdot}$  liquid end material combination support for wide range chemicals
- $\boldsymbol{\cdot}$  Casting cover installed for suitable use for high temperature and pressure
- $\boldsymbol{\cdot}$  Outdoor motor installed as standard.
- · High resistance to idle running and long life.

#### Material

- TEX-P type GFR-PP Glassfiber-reinforced polypropylene
- TEX-F type CFR-ETFE Carbon- reinforced ETFE
- TEX-C type CFR-ETFE Carbon- reinforced ETFE \* ETFE is nearly equal chemical resistance with PTFE(Teflon®). \* Teflon® is trademark registration of DuPont USA.

Model constitution

•	TEX-	<b>·44</b>	0	<b>P</b> -	<b>C</b>	V	5	A
1	1	(2)	3	<u>(4)</u>	(5)	6	$\overline{7}$	(8)

① Series	2 Bore	③ Motor		④ Material	5 Bearing	6 O-Ring	⑦ Hz	8 Specific	gravity limit
	2…25A	0…0.4kW	3…2.2kW	P…GFR-PP	c…Carbon	V…FKM	55047	A…1.1	D…1.9
	4…40A			R…PTFE		0 00112			
TEX	550A	1…0.75kW	5…3.7kW	F…CFR-ETFE	A···· Aluminina ceramic	E…EPDM		B…1.3	H…1.0
	0 00/1					C. Special	6…60Hz	0.45	0.0
	6…65A	21.2KVV		C···FCD+CFR-ETFE	S····SiC	5special		C···1.5	S• Special

#### Construction



1	Front Casing	GFR-PP	CFR-ETFE/FC+CFR-ETFE
2	Shaft(Spindle)	Aluminina ceramic	SiC
3	Impeller Assy	GFR-PP+PP/ Carbon GFR-PP+PP/ Ceramic	CFR-ETFE+ETFE/ Carbon CFR-ETFE+ETFE/ Ceramic
	(Mg can Bearing)	GFR-PP+PP/SiC	CFR-ETFE+ETFE/SiC
4	O-Ring	FKM/EF	PDM/SPCIAL
5	Rear Casing	GFR-PP	CFR-ETFE
6	Bracket	FC /	PPG
7	Drive Magnet	Ferrite /	Neodymium
8	Motor	_	-





	4	≯								>			mm
MODEL	INLET / OUTLET	W	Н	L	A	В	С	D	E	F	G	K	Р
TEX-220P/F	25A/25A	160	255	449	130	210	171	130	115	90	65	120	12
TEX-221P/F	25A/25A	160	255	479	130	210	171	130	115	90	65	127	12
TEX-420C	40A/25A	140	225	442	98	200	149	110	95	87	55	120	12
TEX-440P/F	40A/40A	140	226	444	98	200	151	110	95	88	54	120	12
TEX-441P/F	40A/40A	160	258	489	130	210	187	130	115	106	72	127	12
TEX-542P/F/C	50A/40A	260	283	500	200	300	159	204	120	91	80	150	14
TEX-543P/F/C	50A/40A	260	283	525	200	300	159	204	120	91	80	150	14
TEX-545P/F/C	50A/40A	250	325	593	300	360	147	220	162	91	80	168	14
TEX-653P/F	65A/50A	260	289	532	200	300	165	204	120	92	80	150	14
TEX-653C	65A/50A	250	333	532	300	360	158	220	162	94	80	150	14
TEX-655P/F/C	65A/50A	250	331	600	300	360	153	220	162	92	80	168	14
	1.11		1				1 1		. 1		1	0	

 $\boldsymbol{\cdot}$  Please note that structure and dimension may change without prior notice.

• When designing, request drawing and reconfirm.

#### Standard Specifications

	BORE	MOTOR		5	50Hz	6	0Hz
MODEL				Head	Discharge rate	Head	Discharge rate
	INLET / OUTLET	KVV	SIZE	m	L/min	m	L/min
			Δ	13	60	12	60
			B	10	50	11	50
TEX-220 P/F	25A/25A	0.4	C	9	50	10	50
			D	7	50	8	50
			A	17	80	20	80
			<u></u>	16	80	17	80
TEX-221 P/F	25A/25A	0.75	Ċ	14	80	15	80
			D	10	80	12	80
			A	10	100	9	100
TEX 400 0	40 4 /05 4	0.4	В	8	90	8	90
1EX-420 C	40A/25A	0.4	С	7	80	7	80
			D	6	50	6	50
			Α	9	110	10	100
	404/404	0.4	B	8	90	9	90
1EX-440 P/F	40A/40A	0.4	C	7	80	8	80
			D	6	50	7	50
			Α	13	150	13	150
	400/400	0.75	B	12	120	12	120
	407/407	0.75	C	11	120	10	120
			D	10	100	8	120
			<u> </u>	18	210	18	210
TEX-542 P/F/C	50A/40A	15	B	16	160	16	180
	00/040/0	1.0	<u> </u>	14	160	14	180
			D	12	150	12	150
TEX-542H P/F/C	50A/40A	1.5	н	26	100	29	100
			A	24	220	25	200
			B	22	200	22	200
TEX-543 P/F/C	50A/40A	2.2	C	20	180	20	180
			D	17	160	18	150
TEX-543H P/F/C	50A/40A	2.2	н	33	150	33	150
			A	30	240	36	200
	500/400	0.7	В	30	240	32	200
IEX-545 P/F/C	50A/40A	3.7	С	27	220	29	200
			D	22	220	24	200
			A	13	480	14	450
	GEA/EOA	0.0	B	11	450	12	450
1 1 2 - 0 3 5 F/F/C	AUC/ACO	2.2	C	10	400	10	450
			D	8	320	9	400
			A	20	600	18	600
TEX-655 D/E/C	654/504	37	B	16	600	16	600
	000/000	0.7	C	14	600	14	600
			1 1)	12	500	12	500

 $\boldsymbol{\cdot}$  Please note that structure and dimension may change without prior notice

· When designing, request drawing and reconfirm

#### Performance Curve 50Hz





Specific gravity limit 1.9 Impeller-D



#### Performance Curve 60Hz



Impeller-B

Specific gravity limit 1.5 Impeller-C Specific gravity limit 1.9

Impeller-D



600

(m)

0

750

400

40 200 Minimum flow

600

(L/min) Discharge Rate

 $\square$ 

500

0

(m)

300

40 150 |Minimum flow

450

(L/min) Discharge Rate

300

(L/min) Discharge Rate

200

100

Minimum flow

400

1000

800

0

(m)

### **TEX-L** Midium to large capacity pump

#### Feature

- Basic liquid-end material for ETFE
- · High corrosion resistance to wide range of chemicals to be transferred
- Outdoor motor installed as standard.

#### Renge of use

- Mortor output(kW) 5.5-18.5
- Discharge rate(L/min) 100-1400
- Head(m) 20-50

Model constitution

#### **TEX-65 07 L - SV 5 A** 1 2 3 4 5 6 7 8



• ETFE is nearly equal chemical resistance with PTFE(Teflon®).
• Teflon® is trademark registration of DuPont USA.

① Series	② B	ore	③ Motor		(4) Material	5 Bearing	6 O-Ring	⑦ Hz	8 Specific	gravity limit	
	440A	6…65A	665A 075.5kW 2015kW CCarbon		C···· Carbon	V…FKM	550Hz	A…1.1	D…1.9		
TEX	_		10…7.5kW	V 25…18.5kW	25…18.5kW L	L····CFR-ETFE		E····EPDM		B1.3	S · Special
	5…50A	8…80A	15…11kW			S····SiC	S…Special	6…60Hz	C…1.5		

#### Construction



#### TEX-8615L/8620L/8625L



No.	Part name	TEX 5407/5410L	TEX-6507/6510L	TEX-8615/8620/8625L					
1	Front casing		CFR-ETFE						
2	Front casing cover		Cast Iron						
3	Impeller		CFR-ETFE						
4	Magnetic can		Natural ETFE						
5	Mouth ring	PTFE / SiC	PTFE / SiC PTFE / SiC SiC						
6	Bearing	PTFE / SiC	PTFE / SiC	SiC					
7	Rear casing	CFR-ETFE							
8	Rear casing cover	Specially reinforced resin							
9	Bearing plate	_	_	FC+ ETFE					
10	Shaft	Ceramic / SiC	Ceramic / SiC	ETFE+SUS304					
11	Shaft sleeve		_	SiC					
12	Front thrust	Ceramic / SiC	Ceramic / SiC	SiC					
13	Rear thrust	Ceramic / SiC	Ceramic / SiC	SiC					
14	Reae ring								
15	O-ring	FKM/EPDM/ Special							
16	Bracket		Cast Iron						

#### **Standard Specifications**

MODEL	BORE INLET/OUTLET	MOTOR (kW)	Head (m) 50/60Hz	Dis. rate (L/min)
TEX-5407	50A/40A	5.5	41	300
TEX-5410	50A/40A	7.5	49	300
TEX-6507	65A/50A	5.5	31	500
TEX-6510	65A/50A	7.5	31/39	500
TEX-8615	80A/65A	11	34	1000
TEX-8620	80A/65A	15	34/45	1000
TEX-8625	80A/65A	18.5	34/53	1000

\*The specific gravity limit varies with the impeller diameter. For details, contact your local distributor.





													•mn
MODEL	INLET / OUTLET	А	В	С	D	Е	F	Н	L	LL	W	d	n
TEX-5407/5410	50A/40A	80	180	280	320	150	540	460	670	800	360	18	4
TEX-6507/6510	65A/50A	80	160	252	320	150	540	412	717	800	360	18	4
TEX-8615/8620/8625	80A/65A	100	180	300	350	190	600	480	887 931	900	390	20	8
									(8625)				

• Please note that structure and dimension may change without prior notice.

When designing, request drawing and reconfirm.



### Magnetic pumps with medium capacitty

#### Features

- The pumps more than 0.75kW use a Neodymium magnet, Small size light weighted magnet can.
- New development impeller , One structure By molding impeller and shroud one, The balance of the impeller improved. Minimized vibration.
- All model resin bracket and pump base.
   Bracket and pump base made by resin superior in corrosion resistance.
   Corrosion resistance improved drastically.
- Outdoor motor installed at standard.





									-							
①Dis.Bore ②Motor						③Material										
4	40A		0	0.4	٢W	3 2.2kW			Р	р		GER-PP				
	10/1		1	0.75	kW	5	3.7k\	N				Sixii				
5	50A		2	1 5	~\\/	-				F			CFR-E	TFE		
	56/1		2	1.5									-			
								_			_					
	④Be	arir	ng		(5	ניס	ング		(	6)Hz		8	Specific	gravi	ty limit	
R		DT	FF		v		- KW	F	_			А	1.1	D	1.9	
I.					F	E			5	50Hz		В	1.3	S	special	
					L .							-				
					S	sp	pecial		6	60Hz		С	1.5			

\* ETFE is nearly equal chemical resistance with PTFE(Teflon®).

\* Teflon<sup>®</sup> is trademark registration of DuPont USA.

### Standard specifications

MODEL	BORE	50Hz	60Hz
TED-400P/F	40A × 40A	8m × 150L/min	8m × 150L/min
TED-401P/F	40A × 40A	12m × 200L/min	12m × 200L/min
TED-402P/F	50A × 40A	12m × 300L/min	12m × 300L/min
TED-403P/F	50A × 40A	18m × 360L/min	17m × 360L/min
TED-405P/F	50A × 40A	25m × 400L/min	26m × 400L/min
TED-505P/F	60A × 50A	20m × 600L/min	20m × 600L/min

#### Di,ensions list

型式	W	Н	L	а	b	С	d	f	g
TED-400	140	216	438	110	51	98	95	87	150
TED-401	160	254	495	130	57.5	130	115	103	185
TED-402	260	255	504	208	65	200	115	89	158
TED-403	260	255	530	208	65	200	115	89	158
TED-405	260	270	578	230	65	200	130	89	158
TED-505	260	298	620	230	65	260	135	110	175





•Please note that structure and dimension may change without prior notice. •When designing , request drawing and reconfirm.

Cpn	struction	50Hz					
No.	Part name	Material					
1	Front casing	GFR-PP / CFR-ETFE					
2	Impeller	GFR-PP / CFR-ETFE					
3	Drive magnet	Ferrite / Neodymium					
4	Mouth ring	PTFE					
5	Bearing	Carbon / Alumina ceramic / PTFE					
6	Rear casing	GFR-PP / CFR-ETFE					
$\overline{\mathcal{O}}$	Shaft	Alumina ceramic					
8	Front thrust	Alumina ceramic					
9	Rear thrust	Alumina ceramic					
10	O-ring	FKM / EPDM					
1	Bracket	GFR-PP					









## 316 STAINLESS VERTICAL VOLUTE PUMP

- · 316 Stainless steel material.
- High efficiency , leak-free operation and easy maintenance.
- Excellent chemical resistance strong alkalinity.
- · CSS-seal is non-contact to a liquid and other part

#### Construction



## 

Things to be aware of when using

suction head less than +4m

• Use inverter must be driving in 40Hz or more.

#### Typical applications

- · Chimical or water recirculation.
- Waste treatment.
- Plating solutions.
- PCB process chemical recirculation

No.	Part name	Material	No.	Part name	Material	No.	Part name	Material
1	Motor		11	Collar	SUS316	52	Bolt	SUS304
2	Separate Collar	S45C	12	Shaft Packing	PTFE	41	O-Ring	FKM
3	CSS-Seal		13	Shaft Key	SUS316	53	Bolt	SUS304
4	Motor Stand	Cast Iron	14	Impeller Nut	SUS316			
5	Shaft	SUS316	51	Bolt	SUS304			
6	Back Casing	SCS14/SUS316	3-1	Packing Flange	SUS316			
7	Impeller	PTFE	3-5	Seal Cover	PMMA			

#### Dimensions list

									_	
MODEL	INLET /OUTLET	Motor kW	А	C	F	н	I	J	К	L
TEK-251TV-32		0.75kW	255	170	303	536	10	280	245	15
TEK-252TV-32	2547254	1.5kW	300	198	303	578	12	200	245	15
TEK-401TV-32		0.75kW		170		536				
TEK-402TV-32	40A/40A	1.5kW	355	198	303	578	12	280	245	15
TEK-403TV-32		2.2kW		198		578				
TEK-503TV-32		2.2kW		198	340	615				
TEK-505TV-32	50A/50A	3.7kW	405	214	347	673	12	315	280	15
— TEK-507TV-32		5.5kW		252	327	697				

 $\boldsymbol{\cdot}$  Please note that structure and dimension may change without prior notice.

• When designing, request drawing and reconfirm.

#### Parformance Curve



#### **Standard Specifications**

50Hz

MODEL	BORE mm	Motor kW	Head m	Dis.Late L/min
TEK-251TV-32	25	0.75	7	120
TEK-401TV-32	40	0.75	7	160
TEK-402TV-32	40	1.5	10	260
TEK-503TV-32	50	2.2	9	350
TEK-505TV-32	50	3.7	10	600

#### 60Hz

MODEL	BORE mm	Motor kW	Head m	Dis.Late L/min
TEK-251TV-32	25	0.75	7	100
TEK-252TV-32	25	1.5	8	160
TEK-402TV-32	40	1.5	8	260
TEK-403TV-32	40	2.2	9	320
TEK-505TV-32	50	3.7	13	400
TEK-507TV-32	50	5.5	16	500

\*Performance based on water @ 70 F (21 C). Fluids with specific gravity other than 1.0 should be reviewed by the factory.

### **Running Monitor**

EOCR monitors the input power to the pump.

Capable of detecting both over-load and under-load conditions. EOCR monitor offers protection from off-design conditions. such as

- Dry running
- Open-phase
- Dead head
- End of curve
- Cavitation
- Excessive bearing wear

Specifications

Relay outpu:2-SPST, 3A/250VAC Resistive.

Supply Voltage: 110 VAC +-15% / 220 VAC +-15%

Frequency: 50 Hz / 60 Hz

Rated Current: Over-Current(oc) 0.5~960A(Over 60A with External CTs)

Under-Current(uc) 0.5~59A/OFF(Over 60A with External CTs)

Current Sensing:3-CT Mounting:35mm DIN-Rail



### SELF-PRIMING VERTICAL VOLUTE CHEMICAL PUMP





- We pump use resin having excellent chemical resistance to various chemicals strong alkalinity and acidity, sable in a wide range.
- $\boldsymbol{\cdot}$  We pump which is most suitable for electroless chemical copper.
- · CSS-seal is non-contact to a liquid and other part.
- The water for self-priming, please supply water only in the first time, Water supply is unnecessary after the 2nd

#### Typical applications

- · Chemical or water recirculation.
- Waste treatment.
- Various plating solutions recirculation.
- PCB Plating solutions
- Wet processing
- Deliver Acids



### Things to be aware of when using

- A resulting rise in temperature of liquid in the pump may cause damage to the pump.
- The pump should never be operated for a lengthy period with the valve closed.
- · Do not run pump Cavitation

#### Construction





No.	Part name	Material	No.	Part name	Material
1	Motor	—	9	Impeller nut	GFR-PP
2	Separete collar	S45C	10	Impeller	PP
3	CSS <sup>*1</sup> -seal	_	11	Chamber	PP
4	Motor satand	FC200	12	Inllet cap	PP
5	Shaft	SUS304	13	Drain cap	PP
6	Back casing	PP	14	Suction cover	PP
7	Sleeve	GFR-PP	15	Casing	PP
8	Seal cover	PMMA			
%1)C	SS•••Centrifugal S	Seal System			

#### **Dimensions list**

													mm
MODEL	INLET /OUTLET	Motor <sub>kW</sub>	А	В	<i>•</i> C	E	F	G	Н	I	J	K	φL
TEK-251S-PP		0.75	400	200	163	140	000	233	531	00	00F	045	15
TEK-252S-PP	204/204	1.5	420	320	187	140	290	275	573	28	325	245	15
TEK-401S-PP	404/404	0.75	500	200	163	170	206	233	559	20	200	205	15
TEK-402S-PP	40A/40A	1.5	500	380	187	170	320	275	601	30	390	305	15
TEK-502,503S-PP	50A/50A	1.5/2.2	500	380	187	170	326	275	601	38	390	305	15
TEK-653S-PP		2.2	560	115	187	220	347	275	637	10	460	260	15
TEK-655S-PP	AC0/AC0	3.7	560	440	202	220	354	326	724	40	400	360	15
TEK-805S-PP	004/004	3.7	560	115	202	220	354	326	724	19	460	260	15
TEK-807S-PP	00A/60A	5.5	560	445	243	220	334	370	733	40	400	300	15

Please note that structure and dimension may change without prior notice
 When designing, request drawing and reconfirm

#### Performance Curve



#### Standard Specifications

MODEL	BORE mm	Motor kW	Head M	Dis.Late L/min
TEK-251S-PP	25	0.75	5	80
TEK-401S-PP	40	0.75	5	150
TEK-402S-PP	40	1.5	6	150
TEK-502S-PP	50	1.5	7	220
TEK-503S-PP	50	2.2	7	245
TEK-653S-PP	65	2.2	8	360
TEK-805S-PP	80	3.7	10	510



MODEL	BORE mm	Motor kW	Head M	Dis.Late L/min
TEK-251S-PP	25	0.75	5	110
TEK-402S-PP	40	1.5	9	150
TEK-503S-PP	50	2.2	10	210
TEK-655S-PP	65	3.7	10	400
TEK-805S-PP	00	3.7	11	450
TEK-807S-PP	60	5.5	13	500

\*Performance based on water @ 70 F (21 °C). Fluids with specific gravity other than 1.0 should be reviewed by the factory.

#### Centrifugal Seal System

· CSS-seal is non-contact to a liquid and other part.

Therefore, abrasion and the heat generation are not generated.

- · While a pump running, a seal impeller encloses a liquid.
- · While a pump stops, CSS-seal encloses a liquid.



#### Things to be aware of when using

- Use inverter must be driving in 40Hz or more.
- suction head less than +4m

self-priming installation



#### non self-priming installation



No problem at any installation

### SELF-PRIMING VERTICAL VOLUTE CHEMICAL PUMP



#### Typical applications

- · Chemical or water recirculation.
- Wwaste treatment.
- Various plating solutions recirculation
- PCB Plating solutions

Construction

- Wet processing
- Deliver Acids

#### Features

- We pump use resin having excellent chemical resistance to various chemicals strong alkalinity and acidity, sable in a wide range.
- $\cdot$  CSS-seal is non-contact to a liquid and other part.
- The water for self-priming, please supply water only in the first time, Water supply is unnecessary after the 2nd

#### Things to be aware of when using

- A resulting rise in temperature of liquid in the pump may cause damage to the pump.
- The pump should never be operated for a lengthy period with the valve closed.
- · Do not run pump Cavitation





	Part name	Mterial	No.	Part name	Mterial	
1	Motor	—	8	Seal cover	PMMA	
2	Separete collar	S45C	9	Impeller nut	GFR-PP	
3	CSS <sup>®1</sup> -seal	—	10	Impeller	HT-PVC	
4	Motor Stand	FC200	11	Chamber	PVC	
5	Shaft	SUS304	12	Inllet cap	PVC	
6	Back casing	HT-PVC	13	Drain cap	PVC	
7	Shaft sleeve	GFR-PP	14	Casing	PVC	

%1) CSS · · · Centrifugal Seal System

#### **Dimensions list**

MODEL	INLET / OUTLET	Motor <sub>kW</sub>	Α	В	φC	E	F	G	Н	I	J	К	φL	М
TEK-251S-P		0.75	050	007	163	140	007	233	500	15	000	045	- 4	<u> </u>
TEK-252S-P	23A/23A	1.5	350	207	187	140	267	275	542	15	280	245	14	60
TEK-401S-P	404/404	0.75	440	010	163	170	007	233	530	4.5	0.40	005	14	<u> </u>
TEK-402S-P	40A/40A	1.5	440	318	187	170	297	275	572	15	340	305	14	60
TEK-502,503S-P	50A/50A	1.5/2.2	440	318	187	170	297	275	572	15	340	305	14	60
TEK-653S-P		2.2			187		357	275	632					
TEK-655S-P	65A/65A	3.7	560	420	202	220	364	326	690	20	400	360	14	80
TEK-657S-P		5.5			243		344	370	714					
TEK-805S-P	004/004	3.7	500	100	202	000	364	326	690	00	400	000		00
TEK-807S-P	80A/80A	5.5	560	420	243	220	344	370	714	20	400	360	14	80
TEK-1007S-P	1004/1004	5.5	000	170	243	000	105	370	835		405	4.40	45	100
TEK-10010S-P	100A/100A	7.5	660	470	243	330	465	370	835	30	485	440	15	100
TEK-403S-PH	40A/40A	2.2	440	318	187	170	297	275	572	15	340	305	14	60
TEK-505S-PH	504/504	3.7	400	070	202	000	364	326	690		0.05	005		
TEK-507S-PH	50A/50A	5.5	490	370	243	220	344	370	714	20	305	325	14	80
TEK-6510S-P	65A/65A	7.5	560	420	243	220	354	370	724	25	400	360	14	100

 $\boldsymbol{\cdot}$  Please note that structure and dimension may change without prior notice

• When designing, request drawing and reconfirm

#### Parformance Curve

#### **Standard Specifications**



MODEL	BORE mm	Motor kW	Head M	Dis.Rate L/min
TEK-251S-P	25	0.75	5	80
TEK-401S-P	40	0.75	7	150
TEK-502S-P	50	1.5	9	230
TEK-653S-P	65	2.2	12	255
TEK-805S-P	80	3.7	14	360
TEK-1007S-P	100	5.5	17	500



MODEL	BORE mm	Motor kW	Head M	Dis.Rate L/min
TEK-251S-P	25	0.75	5	110
TEK-402S-P	40	1.5	7	200
TEK-503S-P	50	2.2	9	290
TEK-655S-P	65	3.7	12	400
TEK-807S-P	80	5.5	14	500
TEK-10010S-P	100	7.5	17	630



MODEL	BORE mm	Motor kW	Head M	Dis.Rate L/min
TEK-403S-PH	40	2.2	15	150
TEK-505S-PH	50	3.7	20	240
TEK-507S-PH	50	5.5	25	250
TEK-6510S-PH	4 65	7.5	28	300



Things to be aware of when using

 $\cdot$  Use inverter must be driving in 40Hz or more.

suction head less than +4m

\*Performance based on water @ 70 F (21 °C). Fluids with specific gravity other than 1.0 should be reviewed by the factory.

# NON-SEAL VERTICAL PUMP







No.	Part name	Material				
1	Motor	_				
2	Base	HT-PVC				
3	counter face	Carbon				
4	V-Ring	NBR				
5	Shaft	SUS304				
6	Body	PVC				
7	Shaft sleeve	HT-PVC				
8	Impeller	HT-PVC				
9	Impeller nut	GFR-PP				
10	Casing	PVC				

#### **Dimensions list**

MODEL	INLET / OUTLET	Motor <sub>kW</sub>	А	В	С	E	F	φG	Н	I	φO	Р	φS	Т
TEK-251V-P	40A/25A	0.75	591	311	24	205	240	190	270	135	140	220	15	24
TEK-402V-P	50A/40A	1.5	678	355	33	225	260	240	320	165	170	250	15	22
TEK-403V-P	50A/40A	2.2	678	355	33	225	260	240	320	165	170	250	15	22
TEK-505V-P	65A/50A	3.7	763	360	33	225	260	240	320	165	170	250	15	22
TEK-657V-P	80A/65A	5.5	857	420	38	270	310	267	380	185	210	300	15	26
TEK-8010V-P	100A/80A	7.5	972	550	23	325	360	295	507	220	250	410	15	14

Please note that structure and dimension may change without prior notice · When designing, request drawing and reconfirm

#### Standard Specifications 50Hz/60Hz

MODEL	Motor kW	Head M	Dis.Rate L/min
TEK-251V-P	0.75	10	75
TEK-402V-P	1.5	12	170
TEK-403V-P	2.2	14	275
TEK-505V-P	3.7	20	330
TEK-657V-P	5.5	22	470
TEK-8010V-P	7.5	24	550



\*Performance based on water @ 70 f (21 °C). Fluids with specific gravity other than 1.0 should be reviewed by the factory.





### TEK-V-U

#### Ultra High Molecular Weight Polyethylene

- UPE construction.
- $\boldsymbol{\cdot}$  Superior in wear resistance
- High efficiency-low operating cost, leekefree operation and easy maintenance.
  No seals and bearings in pump head to wear out.
- Typical applications

#### Typical applications

- · Chemical or water recirculation.
- Waste treatment.
- PCB Plating solutions
- Wet processing
- · Polishing machine
- Jet scrubbing





No.	Part name	Material
1	Motor	_
2	Base	HT-PVC
3	counter face	Carbon
4	V-Ring	NBR
5	Shaft	SUS304
6	Body	PVC
7	Shaft sleeve	HT-PVC
8	Back flange	UPE
9	Impeller	UPE
10	Impeller nut	UPE
11	Casing	UPE

#### **Dimensions list**

**Construction** 

														mm
MODEL	INLET / OUTLET	Motor kW	А	В	С	E	F	φG	н	1	φO	Р	<i>ø</i> S	Т
TEK-251V-U	40A/25A	0.75	589	309	24	205	240	195	280	155	140	205	15	24
TEK-402V-U	40A/40A	1.5	668	345	33	225	260	215	316	165	170	240	15	22
TEK-403V-U	50A/40A	2.2	673	350	33	225	260	235	315	175	170	240	15	22
TEK-505V-U	50A/50A	3.7	763	360	33	225	260	250	320	190	170	240	15	22
TEK-657V-U	80A/65A	5.5	867	430	38	270	310	300	380	225	210	275	15	26

· Please note that structure and dimension may change without prior notice · When designing, request drawing and reconfirm

#### Standard Specifications 50Hz/60Hz

MODEL	Motor kW	Head M	Dis.Rate L/min		
TEK-251V-U	0.75	10	90		
TEK-402V-U	1.5	12	165		
TEK-403V-U	2.2	14	270		
TEK-505V-U	3.7	16	400		
TEK-657V-U	5.5	18	530		



\*Performance based on water @ 70 F (21 °C). Fluids with specific gravity other than 1.0 should be reviewed by the factory.



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