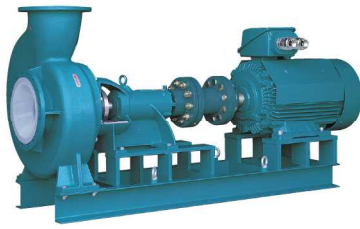


Large-capacity fluoro resin mechanical seal pumps (TSX)

TSX series

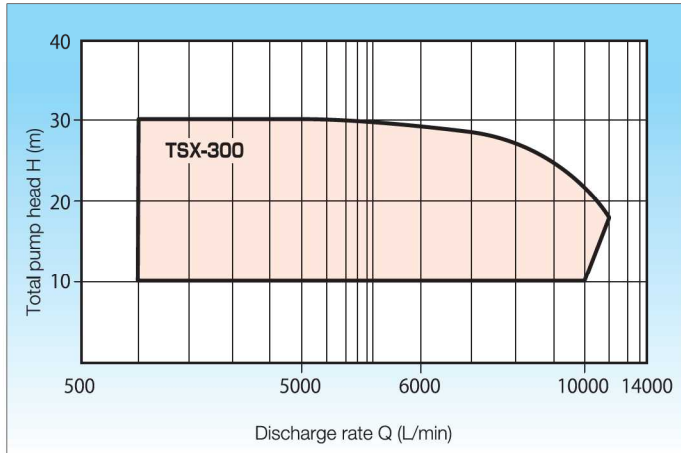


This series of large-capacity mechanical seal pumps has liquid contact parts made of fluoro resin, thus providing high temperature resistance (90°C max.) and high corrosion resistance. The material of liquid contact parts can be changed to HTPVC, PVDF, etc., to match operating conditions.

Standard specifications

Structure	Drive: Motor direct-driven type Shaft seal: Mechanical seal / Packing seal Impeller: Closed type Bearing: Oilless sealed ball bearing
Operating temperature range	PVC: 0 to 50°C HTPVC: 0 to 80°C PVDF: 0 to 90°C
Rotating direction	Clockwise (When viewed from motor side)
Flange	Equivalent to JIS 10K RF
Motor	General-purpose horizontal motor with base
Paint color	Equivalent to Munsell 2.5B4/8 (Metal exposed parts, except for pump shaft)

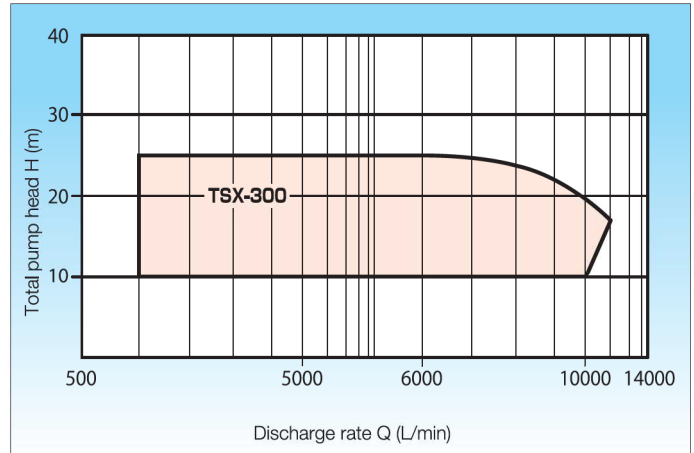
Capacity chart and specification table: 50 Hz (4P)



Model	Bore diameter (Suction × Dis.) (mm)	Discharge rate (L/min)	Total head (m)	Motor output (kW)	Frame No.
TSX-3001	300×250	9000	15	45	F6
TSX-3003			20	55	

Motor output is given for liquids with a specific gravity of 1.0 at the target point.

Capacity chart and specification table: 60 Hz (6P)



Model	Bore diameter (Suction × Dis.) (mm)	Discharge rate (L/min)	Total head (m)	Motor output (kW)	Frame No.
TSX-3002	300×250	9000	15	45	F6
TSX-3004			20	55	

Motor output is given for liquids with a specific gravity of 1.0 at the target point.

Model identification

TSX - 300 1 F 50 S A 1 1

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Name
- ② Bore diameter
- ③ Frame No.
- ④ O-ring material F: FPM E: EPDM Z: Other
- ⑤ Motor output
25: 18.5 kW 30: 22 kW 40: 30 kW
50: 37 kW 60: 45 kW 70: 55 kW
100: 75 kW
- ⑥ Body material (Casing, casing cover, etc.)

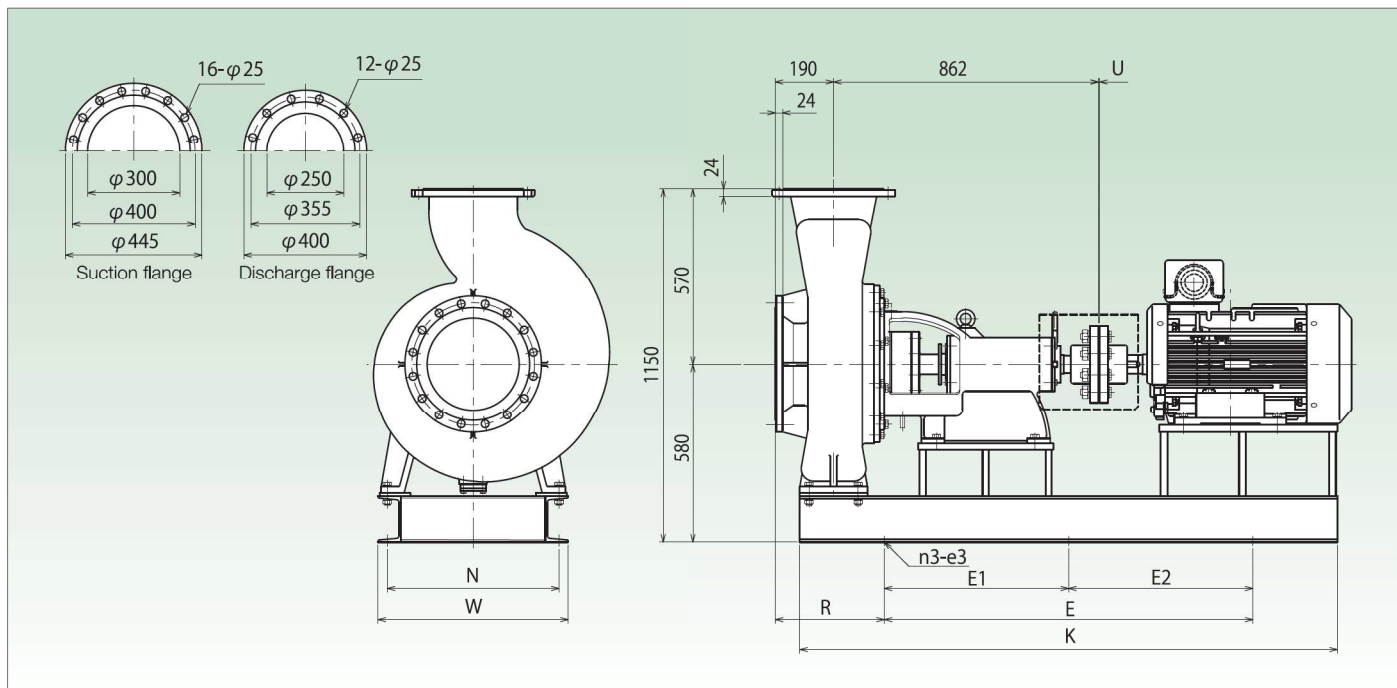
Code	Impeller	Casing cover	Stuffing box
S	HTPVC	PVC	HTPVC
H	HTPVC	HTPVC	HTPVC
V	PVDF	PVDF	PVDF
Z	Other	Other	Other

- ⑦ Shaft seal structure
- ⑧ Shaft seal type

A: External mechanical seal	B: Internal mechanical seal	P: Packing seal
1: MA1	1: MB1	S: Internally cooled
W: MAW	2: MB1Q1	W: Externally cooled
Z: Other	3: MB1Q2	
	D: DEM	
	Z: Other	
Rotating ring	Stationary ring	1: SUS316 (Straight shaft)
1: Resin-impregnated carbon	Alumina	2: Hastelloy C
4: Filler-contained PTFE	Alumina	3: Titanium
6: SiC	SiC	4: SiC
Z: Other than above	Other than above	5: Silicon nitride
		Z: Other than above

- ⑨ Shaft seal configuration

Outer dimensions drawing and table



Model	R	U	E	E1	E2	K	N	W	n3-e3	Motor output (kW)
TSX-300	355	4	1200	—	—	1750	580	620	4-19	37/45×4P
	330			—	625					625
	280		—	750	750	1900			6-19	55×4P/45×6P
			—	750	750	1900				75×4P/55×6P

Cross-sectional drawing

Part No.	Part name	Material	Q'ty
001	Casing	ETFE+FCD450	1
002	Casing cover	PVDF/HTPVC	1
013	Impeller	PVDF/HTPVC	1
018	Shaft	SUS420J2	1
019	Shaft sleeve	PVDF	1
027	Tightening bracket	SS400	1
028	Bracket	FC200	1
029-01	Bearing (Pump)	SUJ2	1
029-02	Bearing (Motor)	SUJ2	1
030-01	Bearing cover (Pump)	FC200	1
030-02	Bearing cover (Motor)	FC200	1
033	Deflector	HTPVC	1
034	Drain pan	PVC	1
102A	Drain flange A	PVDF	1
102B	Drain flange B	SS400	1
102-01	O-ring (Casing)	FPM/EPDM	1
102-02	O-ring (Impeller)	FPM/EPDM	1
102-04	O-ring (Stuffing box)	FPM/EPDM	1
102-12	O-ring (Drain flange)	FPM/EPDM	1
103-01	Oil seal (Pump)	NBR	1
103-02	Oil seal (Motor)	NBR	1
104-19	Bearing nut and washer	SS400	1 set
119	Impeller liner	SUS304	1
301	Base	SS400	1
304	Coupling	FC200	1 set
305	Coupling key	SUS304	1 set
307	Coupling set screw	SCM	1 set
308	Coupling guard	SS400	1
340	Pin and rubber (Coupling)	SS400 & NBR	1 set