



TWIN SCREW PUMPS TS series



HYGIENE



BIOTECHNOLOGY



INDUSTRIAL

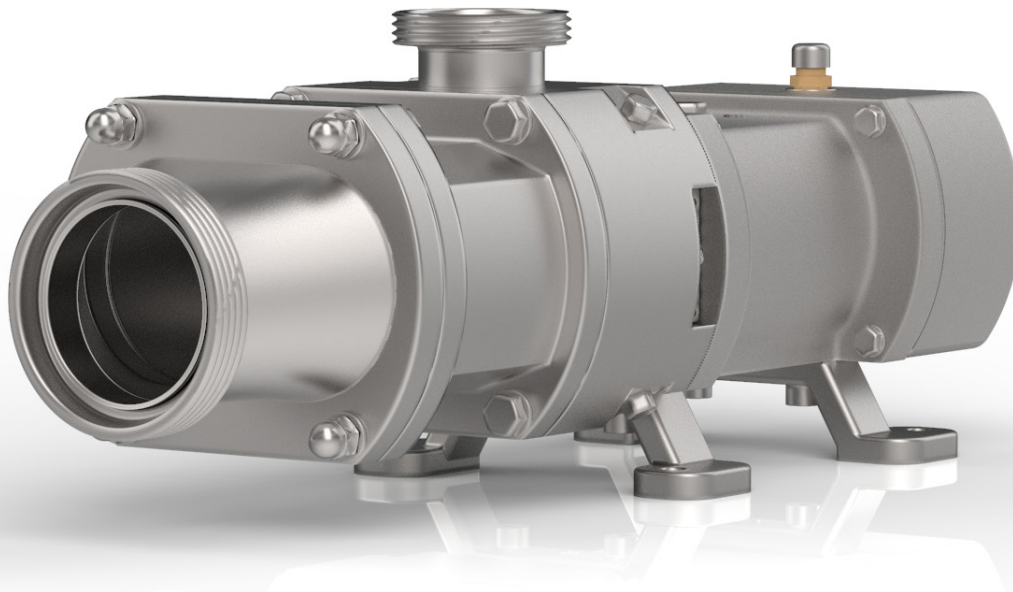
The TS double screw volumetric pump is made entirely of stainless steel with contact surfaces designed according to the latest hygiene design requirements.

Suitable for major industrial applications such as in the food, dairy, cosmetic and pharmaceutical sectors, and for CIP washing and SIP sterilization processes.

Its construction makes it excellent for pumping delicate, viscous liquids, and products containing suspended solids, or for high viscosity fluids.

Suitable for high differential pressures, it has an excellent suction capacity and a reduced level of pulsations; no foaming even with high gas content.

Compact dimensions in relation to the performance provided, high volumetric efficiency, no contamination of the pumped product and no transfer of parts subject to wear.



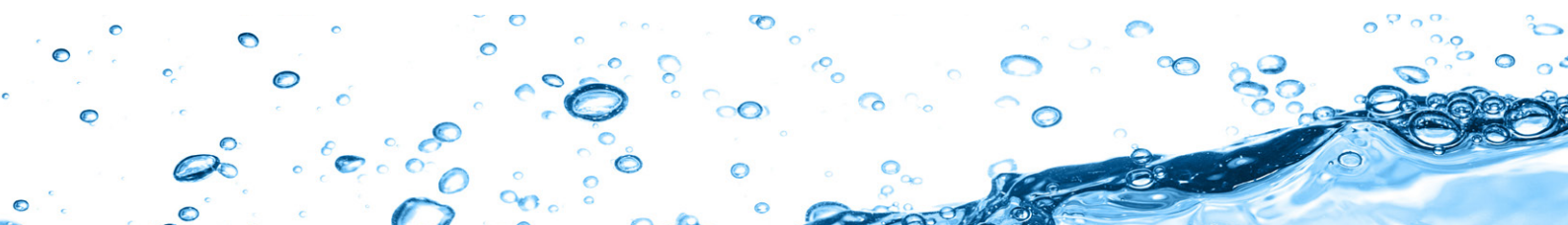
PRODUCTS AND PROCESSES

Pumping applications

- Liquid food and beverages, dairy fluids, confectionery products, pharmaceutical and biotechnological fluids, cosmetics and fine chemicals.
- Fluids with suspended solids that must not be damaged.
- Fluids with suspended gas.

Typical products

- Food sector: fruit and vegetable juices, purees and concentrates, beverages also with suspended particles, syrups, spirits, chopped tomatoes, chopped vegetables, fruit salads, thick soups and gastronomic preparations, chocolate and custards ice creams.
- Dairy sector: milk, cream, soft cheeses, yogurt, curds, ricotta.
- Cosmetic and pharmaceutical sector: general pharmaceutical fluids, cosmetics, creams, gel and shampoos, detergents.

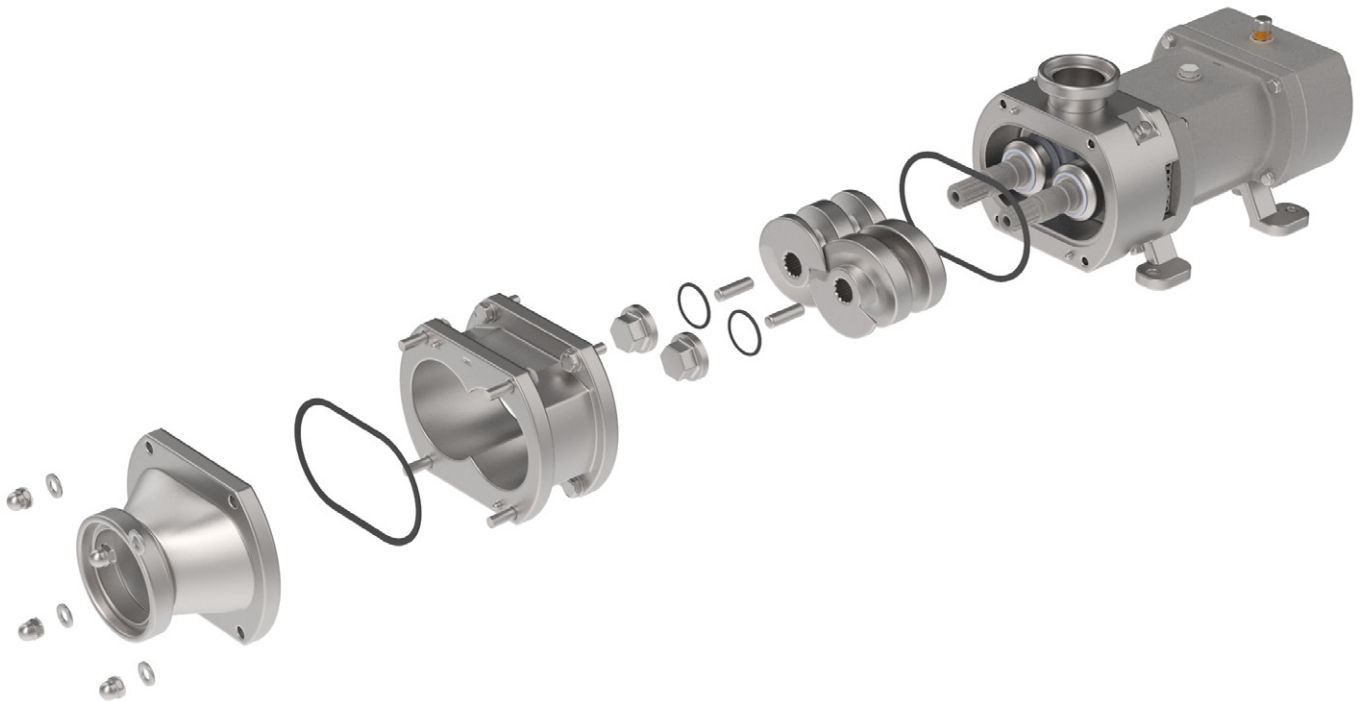


FEATURES

- All parts in contact with the product are made from AISI 316L stainless steel with surface finishes lower than Ra 0.8 micron. They are designed according to the latest hygiene design requirements. EHEDG/3A certified execution on request.



- Support entirely made of AISI 304 stainless steel.
- Shaft synchronisation by means of optimised spiral profile toothed wheels.
- High resistance stainless steel shafts supported by oil bath bearings.
- Single or double flushed, balanced hygienic mechanical seals.
- Connections series DIN 11851, 11864, Clamp (DIN o ISO), SMS, RJT, flanges and special accessories.
- EPDM, FPM and HNBR gaskets compliant with EU Reg. 1935/2004 and FDA; other materials on request.
- Motor shaft with key for coupling with flexible coupling to the motor drive.
- Wide range of optional accessories available to meet all market requirements, such as surface hardening treatments, stainless steel base or carriage installation, version with hollow space, by-pass, flow or pressure sensors.



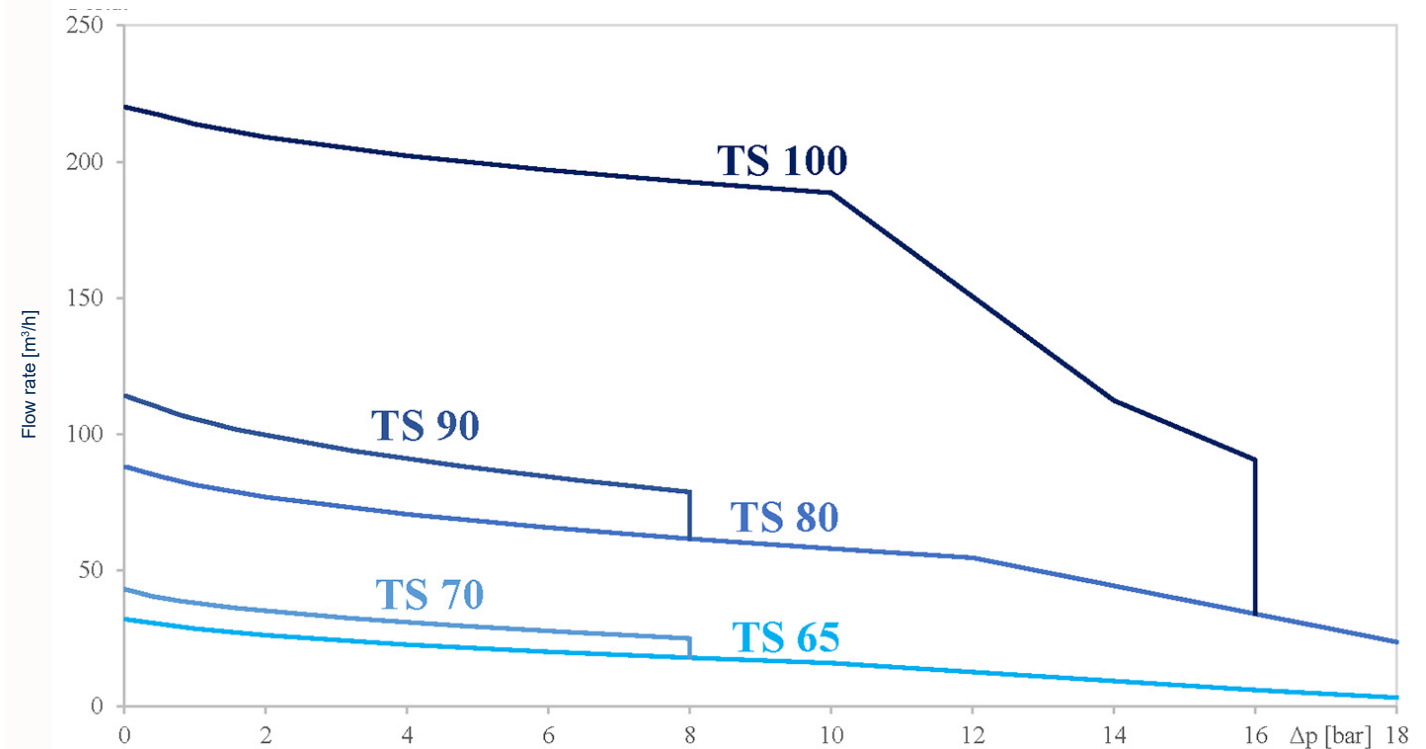
Available with different screw profiles to provide the best performance according to the type of installation.

- For high capacity
- For high pressure
- For delicate fluids with suspended solids



PERFORMANCE AND TECHNICAL DATA

Operating features with clean water at 20°C



Capacity 0 - 20 m³/h TS65;
0 - 30 m³/h TS70;
0 - 50 m³/h TS80;
0 - 80 m³/h TS90;
0 - 150 m³/h TS100.

Maximum pressure 16 bar (up to 25 bar for special execution).

Process temperature -10°C ÷ 140°C

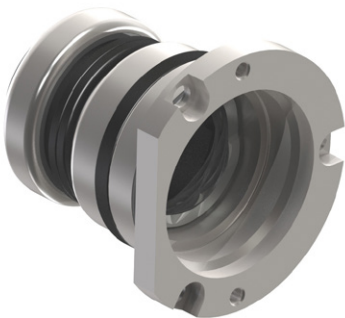
Product viscosity up to 1.000.000 cP

Differential pressure up to 16 bar.

MECHANICAL SEALS

The TS range twin screw pumps can be supplied with different shaft seals according to the application:

A - SINGLE MECHANICAL SEAL



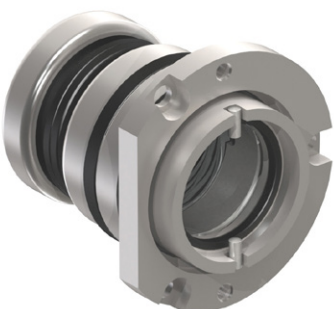
The single mechanical seal is a balanced hygienic cartridge type and is standard for low rotation speed applications and/or with non-viscous products.

MATERIALS:

- Silicon carbide / Silicon carbide
- Moulded gaskets in: EPDM, HNBR, FPM and, on request, FFKM

This execution can also be set up with an external cooling quench, using an optional radial seal ring.

B - DOUBLE FLUSHED MECHANICAL SEAL



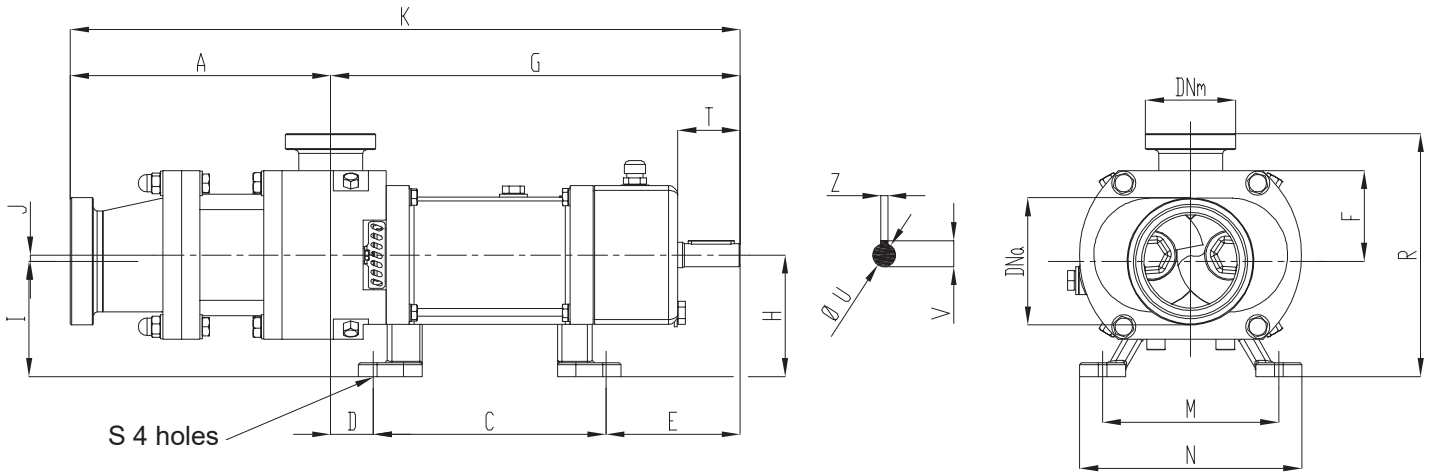
The double mechanical seal is a balanced hygienic cartridge type. The ideal solution for all low speed applications with viscous process fluids and high rotational speed CIP processes.

MATERIALS:

- Silicon carbide / Silicon carbide
- Moulded gaskets in: EPDM, HNBR, FPM and, on request, FFKM

OVERALL DIMENSIONS

Dimensions not binding - DN = DIN 11851 male threaded connections with standard IEC/EN motors



Pump type	DNa	DNm	A	C	D	E	F	G	H	I	J	K	M	N	R	S	T	U	V	Z
TS 65	80	65	225	201	37	116	115.5	354	109	103.5	5.5	579	152	192	219	11	54	20	22.5	6
TS 70	80	65	256	201	37	116	115.5	354	109	103.5	5.5	610	152	192	219	11	54	20	22.5	6
TS 80	100	80	280	283	18	134	147	435	178	164	14	715	300	340	311	14	72	32	35	10
TS 90	100	80	320	283	18	134	147	435	178	164	14	755	300	340	311	14	72	32	35	10
TS 100	125	100	395	308	43	221	199.5	572	192	164	27.5	967	300	340	364	14	129	45	48.5	14



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