

Guide-Rail Fittings TOS, TO and TOK Series

Depending on the weight and size of the pumps, Tsurumi provides different guide-rail sets: TOS, TO or TOK.

TOS type guide-rail fittings

Usually available for pumps of up to 150mm discharge bore, (exception is 200B422 and 200B422H) TOS is the basic guide-rail fitting system for Tsurumi pumps. They are available for following series of Tsurumi sewage and wastewater pumps: B, BZ, C, C-CR, SF, SFQ, MG, NH, NHB, NHU, NHC, U and UZ. The parts provided with TOS guide-rail fittings system are as follows:

Guide Support: Part to hold the guide pipes in place at the top of the tank.

Guide Connector: Part to hold the guide pipes in place at the bottom of the tank on the duck-foot bend.

Guide Hook: Part to be attached onto the pump which enables the mounting on the guide pipes. **Duck-foot bend:** The bend part at the bottom of the guide pipes. The horizontal inlet will be connected to pump discharge and the vertical discharge will be connected to site's discharge pipe either via screwed flange or bolted flange.



Chain: Two sets of chains are provided; one to be attached to the lifting system at the site, and another to the pump's eyebolts. (This may vary according to the models)

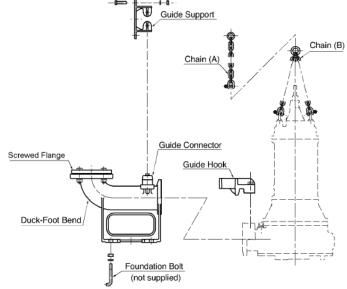
Screwed Flange: Part to be connected to threaded discharge pipes at the site. (Not available for some models)

All the required fasteners (nuts, bolts and washers) are provided except the foundation bolts. Foundation bolts need to be procured at the customer's end.

TO type guide-rail fittings

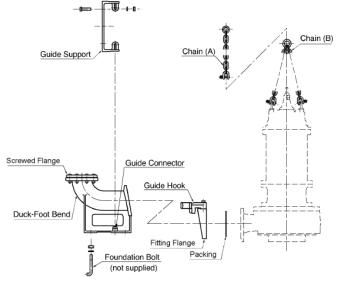
TO type guide-rail fittings are for larger and heavier pumps, usually for 200mm discharge and over (exceptions are 150B437, 150B475, 150NHB437, 150NHB455)

The main difference between TO and TOS type guide-rail fittings system is the shape of the guide hook and the inlet of the duck-foot bend. As TO guide-rail fittings need to accommodate heavier pumps, the surface of contact with duck-foot bend is slanted. Due to this shape of the surface, the stress on the contact surface is reduced. Refer to the image below to visualize this shape.



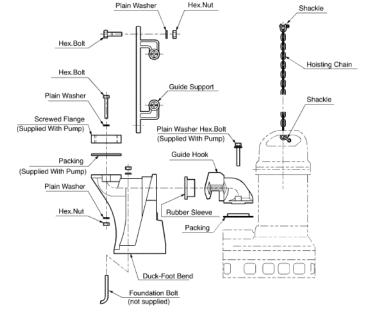


Compared to TOS, TO guide-rail fitting come with additional packing (gasket) between the fitting flange of the guide hook and pump discharge.



TOK type guide-rail fittings are fiberglass reinforced smaller guide-rail fitting accessories, specially designed for smaller Tsurumi pumps. TOK type guide-rail fittings can be used with all models of PU, PN, PSF, PNI (VANCS series) and UT series. It can also be used for U and SF series up to 0.75kW.

TOK has different models for cast iron pumps and VANCS series pump. The difference in these TOK models is the chain specifications. Refer to TOPPI 37 for details.



Hex.Nut

TOK type guide-rail fittings



