

EVO DRUM TTXL



USE OF PRODUCT

High-performance hoists are subject to increasingly demanding and intense service conditions. As operating environments grow more challenging, equipment lifetimes are extended, and maintenance strategies shift from planned to predictive.

This also means that components like couplings in the drivetrain may need to be removed or exchanged more frequently than before. Wouldn't it be convenient if disassembly and mounting could be done with ease, and even reuse of your coupling was possible?

This is exactly what EvoDrum is designed to achieve. EvoDrum enhances both CAPEX and OPEX in hoist operations, while contributing to sustainability by enabling component reuse.

Built on the proven and reliable design of the TTXL series, EvoDrum incorporates two key additional features to further optimize performance and durability.



KEY FEATURES OF *EVODRUM TTXL*

01

DUPLEX HUB AND HOUSING KIT

The reusable Duplex Hub can be used twice, saving costs. The housing Kit is shipped from stock – cutting cost and procurement time. No manufacturing is necessary, no back and forth on confirmation drawings or the like. Direct delivery is possible.

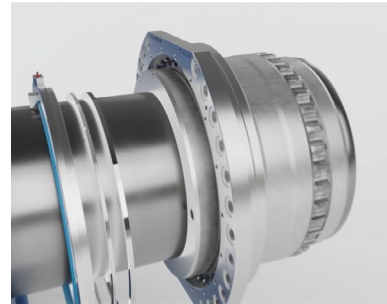
02

SLIDING FIT

EvoDrum comes with the option of sliding fit. This means the coupling will be fitted with a clearance fit, which allows for easy assembly and disassembly. This fit is designed so that there is always a gap (fraction of a mm) between shaft and hub, which makes it easier to slide one part within the other. This is opposed to an interference fit which requires force, heating, cooling or a combination to assemble or disassemble, making the process more complex, failure-prone and time-consuming.

The housing kit contains:

- Housing
- Outer cover
- Thrust ring
- Barrel rollers
- Screws
- Lock washers
- Plug
- Double lip seal
- O-ring
- Retaining ring (Spirolox type)



Other Features

EvoDrum shares the following features with the TTXL product line.

03

ENHANCED PERFORMANCE

Larger allowable bore diameters and reinforced torque and load capacity (up to 25% higher values compared to previous design generation).

04

EASY TO INTEGRATE INTO YOUR SYSTEM

Backwards compatibility with its predecessors.

05

PRECISION WEAR INDICATOR

Precision Wear Indicator to ensure wear allowance is safely and accurately read. Doubles as axial alignment guide during initial installation.

06

EASY TO INSTALL

Accelerated installation and maintenance due to Spirolox retention ring.

Picture shows the removal operation of a coupling fitted with interference fit. In this case, a hydraulic jack is used to remove the coupling. The sliding fit feature of EvoDrum strongly facilitates this operation.



Characteristics

Please refer to the technical tables for details on torque, radial load, weight, and moment of inertia, or contact our team for tailored selection assistance.

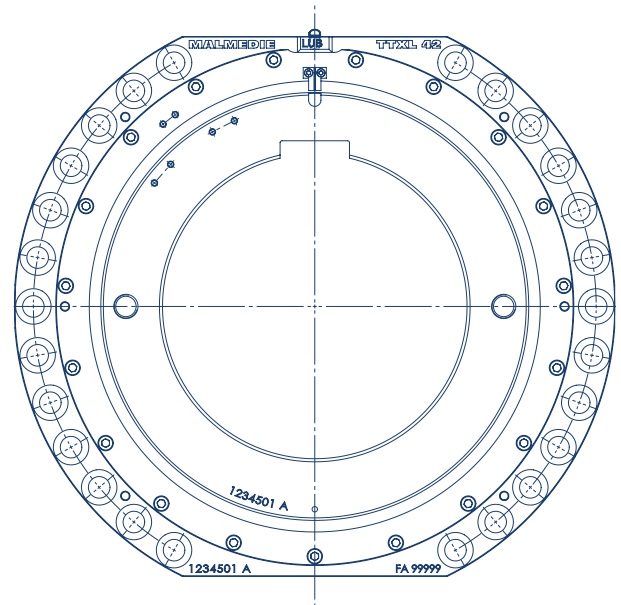
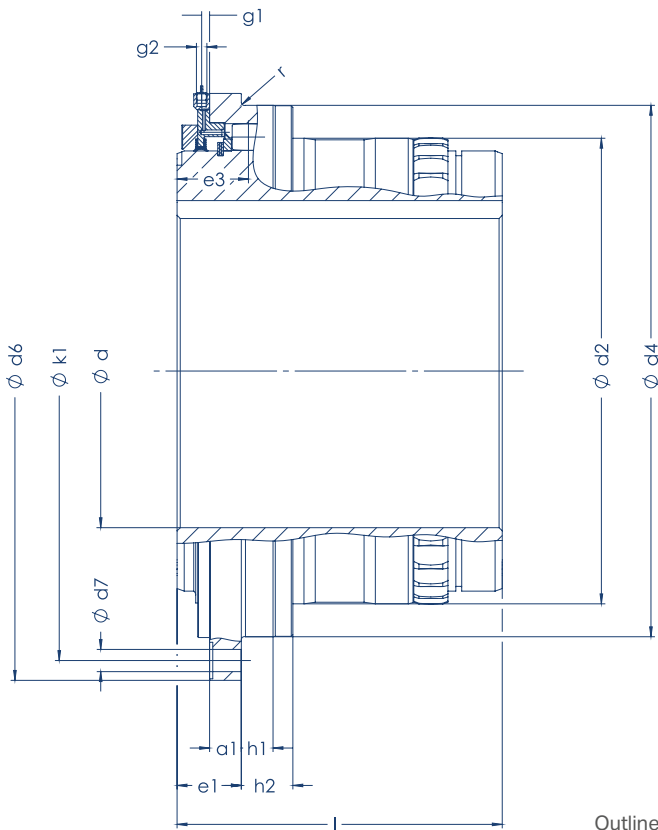
Size	Article number EvoDrum TTXL featuring Duplex Hub	Article number Housing Kit	Torque* Tk max [kNm]	Radial load Fr max [kN]	Weight** [kg]	Moment of inertia** [kgm ²]
5	667010	V-667010	105	135	118	3,1
6	667011	V-667011	145	150	136	4,1
10	667012	V-667012	186	172	167	5,6
15	667013	V-667013	260	207	270	12,4
21	667014	V-667014	385	290	300	13,8
26	667015	V-667015	470	345	332	16
34	667016	V-667016	570	400	410	23
42	667017	V-667017	700	440	550	39
62	667018	V-667018	840	520	720	60
82	667019	V-667019	950	575	925	92
92	667020	V-667020	1200	625	1120	132
102	667021	V-667021	1500	675	1350	195
112	667022	V-667022	1800	750	1600	273

* based on hub design

** with maximum finished bore diameter

Dimensions [mm]

Size	Article number	d min	d max	a1	d2	d4 [h6]	d6	d7	e1	e3	g1	h1	h2	k1	l	r	Axial play. max ±
5	667010	120	220	25	338	400	510	24	60	70	10	30	50	460	220	2,5	8
6	667011	120	240	25	358	420	550	24	60	70	10	30	50	500	240	2,5	8
10	667012	140	260	25	388	450	580	24	60	70	10	30	50	530	260	2,5	8
15	667013	160	300	30	468	530	650	24	65	70	10	30	45	600	315	2,5	8
21	667014	170	305	30	462	545	665	24	65	78	10	35	65	615	330	4	8
26	667015	170	315	30	477	560	680	24	65	78	10	35	65	630	350	4	8
34	667016	230	345	40	517	600	710	28	81	90	10	35	65	660	380	4	10
42	667017	270	395	40	587	670	780	28	81	90	10	40	65	730	410	4	10
62	667018	290	435	40	647	730	850	28	81	90	10	40	65	800	450	4	10
82	667019	320	475	45	697	800	940	28	86	92	10	45	65	875	500	4	12
92	667020	350	510	45	756	860	1025	34	100	110	12,5	50	85	945	500	4	15
102	667021	350	570	45	836	950	1120	34	100	110	12,5	50	85	1040	500	4	15
112	667022	400	625	45	916	1030	1200	34	100	110	12,5	50	85	1120	500	4	15



Outline and front view of EvoDrum TTXL featuring Duplex Hub

Tk max depending on shaft diameter with sliding fit

In the table, choose coupling size and the corresponding diameter size for guidance on torque capacity (Tk max). For example: size 6 and a bore diameter of 200 mm result in 116 kNm Tk max.

Bore diameter		120	140	160	180	200	220	240	260	280	300	320	340	360	380	400	420	440	460	480	500				
[mm] max/min																									
Size	Spline Tk max [kNm]	Keywayed Tk max [kNm]																							
5	105	47	64	78	91	104	105																		
6	145	47	67	87	102	116	133	145																	
10	185				67	95	113	129	148	164	174														
15	260					95	129	163	191	213	227	247	260												
21	385						129	163	203	227	241	263	319												
26	470					129	163	218	245	260	284	346													
34	570								271	288	316	386	412	446											
42	700									348	425	454	494	459	477										
62	840											479	511	558	518	539	648	672							
82	950												582	637	592	616	743	770	797	936					
92	1200													592	616	743	770	797	936	966	996				
102	1500														592	616	743	770	797	936	966	996			
112	1800																743	770	797	936	966	996			

The given values are based on DIN 6885-1, a safety factor (SF) of 2, and the assumption that the hub and shaft are made from 42CrMo4V. The minimum yield strength of the key is 700 N/mm² for shaft diameters up to 400 mm and 600 N/mm² for shaft diameters above 400 mm.

As a general rule, every key connection must be checked for surface pressure. Key ways according to BS 46, ANSI B17.1, or other standards are also possible. We are here to support you.

Alternatively, for high torques and small shaft diameters, a spline connection can be chosen.

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