

Just 3 steps to perfection.



In 3 steps to the perfect drive train.

We see ourselves as a solution provider that thinks outside the box. We work together with you, applying all of our knowledge and expertise to ensure development of the best possible overall solution. Our primary objective is to make your day-to-day work easy.

We use a 3-step approach to support you on the road to perfect integration of the drive train in your machine. Our Europe-wide sales network also allows us to supply products quickly at short notice.

In 3 steps to perfection.





Our know-how is your benefit.

You already have a machine concept and now want to implement it? With our know-how and many years of experience, we analyse your requirements for the machine you want to build, thus acquiring a profound understanding of what your particular task involves.

We thus create the basis for providing you with the ideal components that you will need to implement your machine concept. Let us know your plans and your goals – We are ready to take on the challenge.



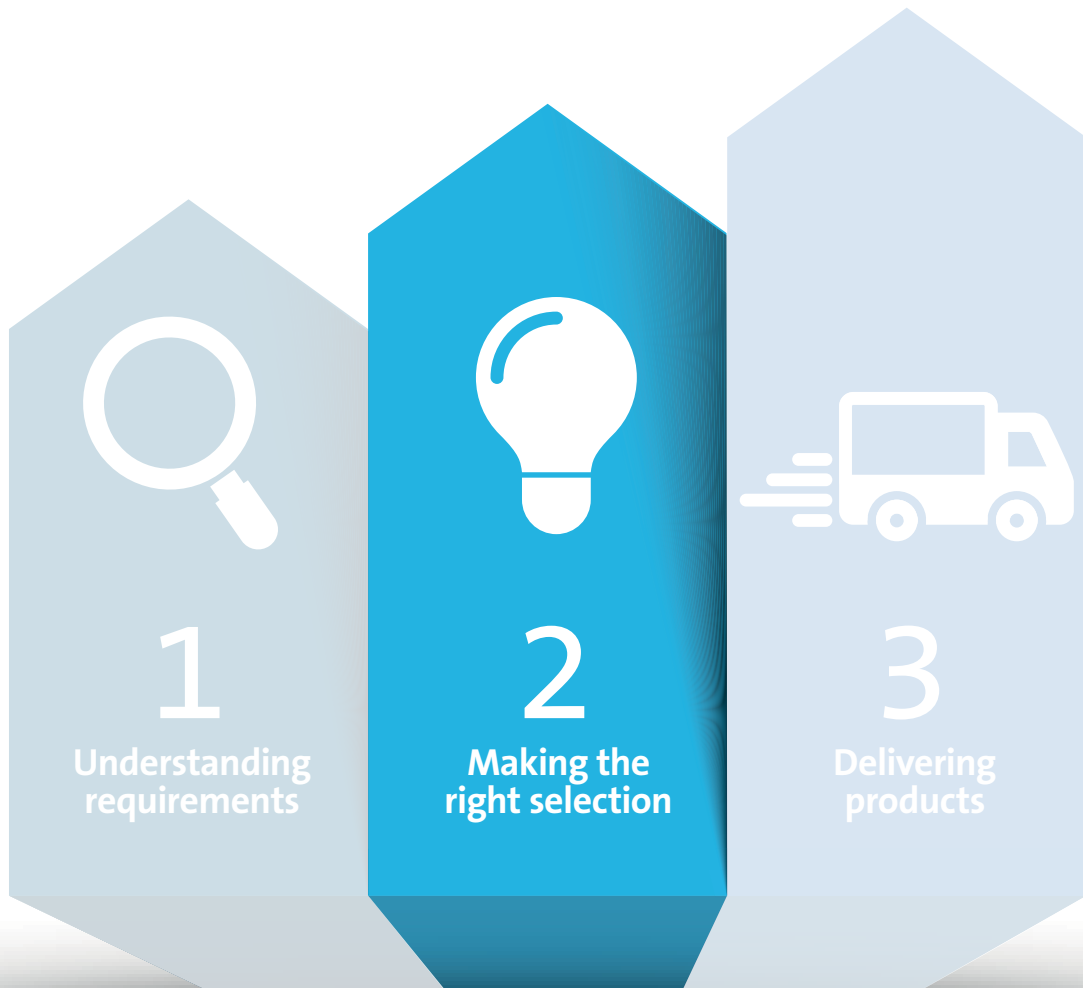
Just the right selection for your drive train.

We help you to build your machine – with our competence in solutions, our knowledge of the industry and our comprehensive product portfolio.

We will work with you to select exactly the right components to make sure that your machine functions efficiently, safely and intelligently in the production process. In this way, we guarantee that your drive train is optimally connected.

And we also offer you individual Service support, with maintenance services individually matched to your specific requirements. It's great when everything is so easy.



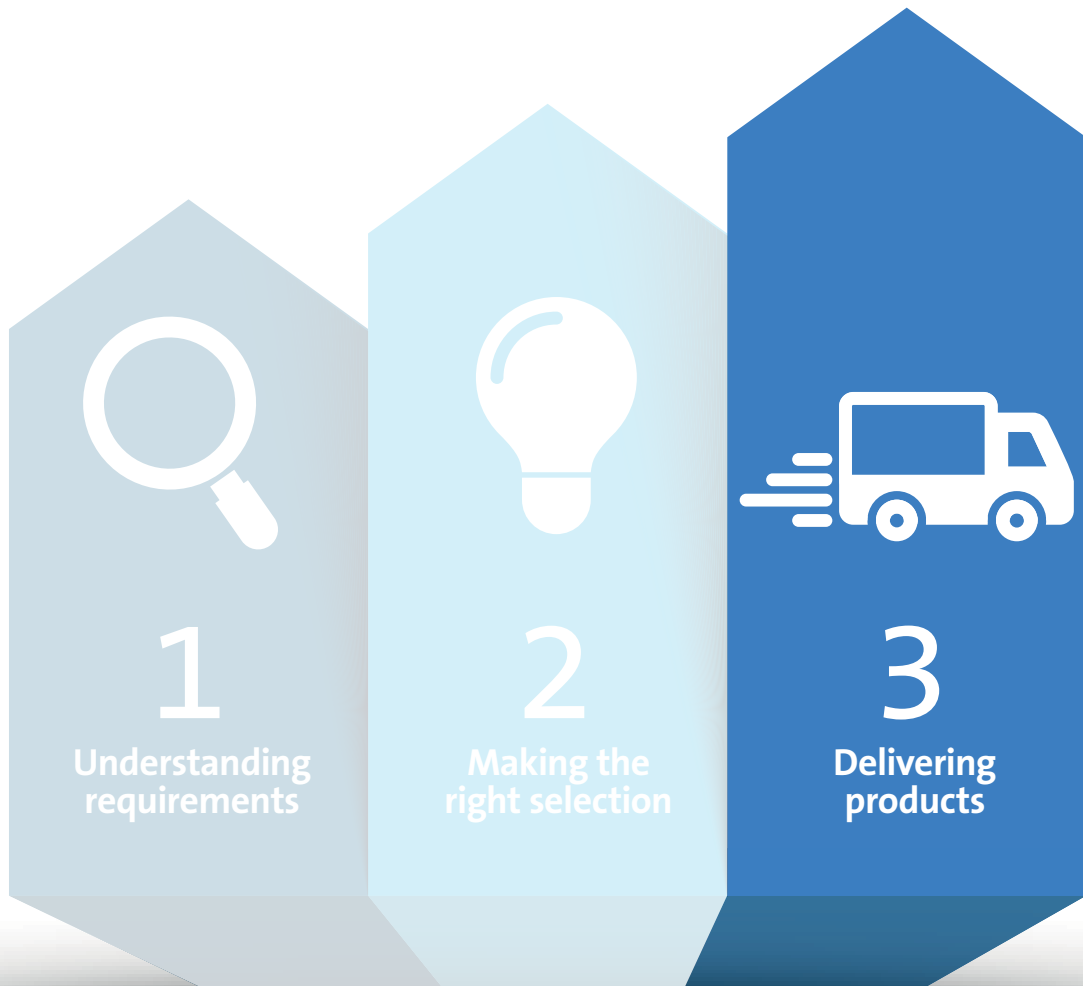


Reliable, punctual, easy. We promise.

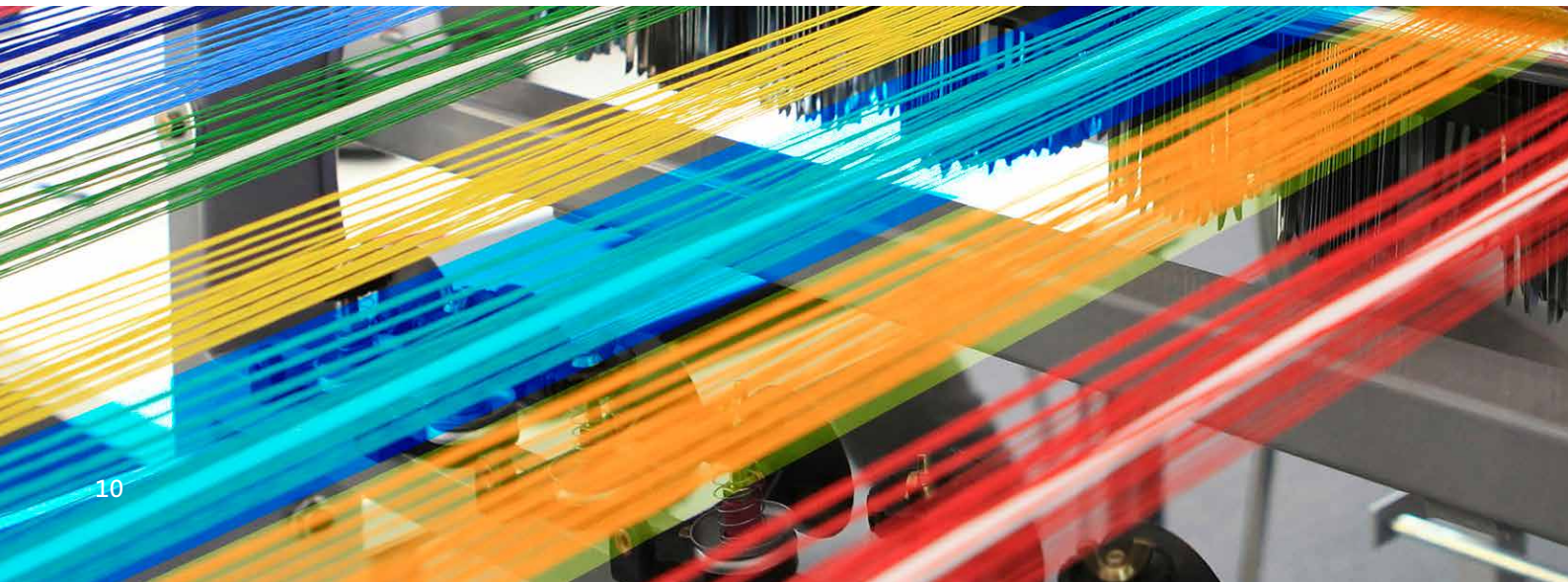
From the initial order to individual warehousing and more: as a logistics partner, we support you throughout the entire supply chain. It doesn't matter whether you need a delivery just in time or an EDI connection – whatever it is, we make it possible.

With our three automated logistics centres and thousands of drive elements in stock, we ensure long-term availability and punctual delivery. We promise.





Drive components are our world.



Electromagnetically actuated clutches and brakes



Shaft couplings



Linear Motion



Belt drives



AC helical geared motors PANASONIC 3-Series



Locking assemblies



Torque limiters



Universal joints



Hydraulic and electromechanical brakes



Hydraulic components



Cooling systems



Lenze
SELECTION

Clutches and brakes






Always ready for any challenge.

We use electromagnetically actuated clutches and brakes for starting, stopping, positioning and securely holding moving masses in place. They are also available as clutch-brake combinations, fitted together in a common housing.

Electromagnetically actuated clutches and brakes are particularly well-suited to applications requiring high levels of rotary and braking torque, fast switching times or the strictest safety standards. They ensure safe standstill even in extreme conditions.

Thanks to our scalable modular system, we can offer you the optimum solution for your specific application.



	Spring-applied brakes 	Electromagnetic clutches and brakes 	Pole-face friction clutches 	Tooth clutches 	Toothed holding brakes 
Products	BFK455, BFK457, BFK458, BFK458-L*, BFK464, BFK468, BFK470, BFK471, BFK518	14.105, 14.115	450	543, 544, 546, 547, 548, 549, 550, 556 M1	560
Rotary/braking torque	0.12 ... 10,000 Nm	7.5 ... 480 Nm	500 ... 2,000 Nm	10 ... 16,000 Nm	20 ... 2,200 Nm
Slip ring				○	
Positive-fit				●	●
Frictionally engaged	●	●	●		
Power to engage		●	●	●	
Power to release	●				
Manual release possible	○				
Protection class	IP66 possible				
Noise reduction	○				
Extremely low maintenance	○		●	●	●
Fields of application	Brake motors, direct drives, storage and handling technology, stage technology, crane and port facilities, hoists, wood processing and textile machinery, wind power facilities, elevators and escalators, forklift trucks, etc.	General mechanical and apparatus engineering, food industry, packaging machines, door drives, folding and printing machines	Robust for fast and secure separation of the drive train, activation and deactivation of various devices, especially suited for torque transmission with initial difference in rotational speed between the drive components	Food industry, medical technology, machine tools, printing machines, door and gate manufacturers	Food industry, medical technology, machine tools, printing machines, door and gate manufacturers

● All products

○ Some versions






* BFK458 L = long-life version





Shaft couplings

For everyone looking to put something in motion.

With our comprehensive range of products, we transmit torque safely and ensure optimum compensation for shaft misalignment (radial, axial and angular misalignment). Whether torsionally rigid or torsionally flexible, backlash-free or with backlash, with an axial plug-in or maintenance-free: our extensive programme offers you many different options that will fit your application perfectly.



	Metal disc coupling	Jaw coupling	Flange coupling	(All-steel) gear coupling	Spring coupling
					
Products	Radex®-N, Radex®-NC, Servoflex, Arcoflex, Rigiflex®-N	Rotex®, Rotex® GS, Poly-Norm®, Poly	Bowex® FLE-PA, Bowex-Elastic®, MONOLASTIC®	BoWex®, GEARex®	Simplaflex, Miniflex
Torque/performance data	1 ... 330,000 Nm	0.2 ... 67,000 Nm	40 ... 19,500 Nm up to 500 kW motor power	5 ... 1,050,000 Nm	0.15 ... 900 Nm
Diameter range	3 ... 400 mm	3 ... 280 mm	20 ... 180 mm	8 ... 450 mm	2 ... 75 mm
Shaft misalignment a/r/t¹⁾	0 ... +5/3.8/1[°]	-3 ... +6.4/0.68/1.2[°]	±5/3.0/1[°]	±1/0.45/0.9[°]	2/4.5/14[°]
Constant temperature range	-30 ... +280 °C	-50 ... +120 °C	up to +130 °C	-40 ... +120 °C	-40 ... +300 °C
Torsionally rigid	●		○	●	
Torsionally flexible		●	○		●
Highly elastic			○		●
Backlash-free	●	○			●
Axial plug-in		●	●	○	○
Easy to replace wearing parts	●	○		○	
Fail-safe	●	○		○	
Maintenance-free	●	○	●	○	●
Single-cardan	○	●	●		●
Double-cardan	●	○		●	
Shaft-shaft	●	●	○	●	●
Flange-shaft	○	○	●	○	○
ATEX	on request	●	○	●	
Fields of application	Printing and packaging machines, test station construction, pump drives for hot media	Mechanical engineering, handling technology, pump industry, measuring and monitoring technology, positioning systems	Internal combustion engines, hydraulic pumps	Heavy mechanical engineering, mechanical engineering and hydraulic applications	Mechanical engineering, laboratory and medical technology, food industry

	Bellows coupling	Flexible disc coupling	Magnetic coupling	Rigid shaft coupling
				
Products	Toolflex®	HexaFlex	Minex®-S	TLK500
Torques	0.1 ... 600 Nm	100 ... 2,250 Nm	0.15 ... 1,000 Nm	200 ... 4,300 Nm
Diameter range	2 ... 65 mm	19 ... 60 mm	5 ... 90 mm	17 ... 80 mm
Shaft misalignment a/r/t¹⁾	±2/0.35/2[°]	5/1/3[°]	No misalignment	No misalignment
Constant temperature range	-30 ... +200 °C	-30 ... +80 °C	up to +300 °C	-30° ... +300 °C
Torsionally rigid	●			●
Torsionally flexible		●	●	
Highly elastic				
Backlash-free	●	●	●	●
Axial plug-in	○		●	●
Easy to replace wearing parts		●		
Fail-safe		●		
Maintenance-free	●	●	●	●
Single-cardan		●	●	
Double-cardan		○		
Shaft-shaft	●	●	●	●
Flange-shaft	●	○	●	
ATEX			●	
Fields of application	Positioning systems, rotary indexing tables, planetary and worm gears with low transmission	Particularly suitable for reversing operations	Hermetic separation of input and output side in pumps and stirrers	Mechanical engineering, handling technology

- All products
- Some versions

Additional information: torque figures correspond to the nominal torque. Performance figures and diameter range correspond to our standard catalogue values.
¹⁾Misalignment values are maximum values that depend on the individual model, and they should not occur simultaneously. In cases of simultaneous radial, axial and angular misalignment, these values should be reduced.





Linear Motion




Linear guide and positioning system – we guide you to your destination.



Whether rail guides, linear axes or complete systems. We develop solutions together with you that are optimally tailored to your requirements.

We are more than happy to dimension (calculate) an axis or even an entire system for a very wide range of applications and various equipment levels. Our linear modules are driven by ball screw or acme screw drives – although toothed belts or rack and pinions are also possible. Mounting rails or idler rollers ensure accurate guidance.



	Linear axes			
				
Products	AXC	AXDL	AXLT	AXS
Sizes	40/60/80/100/120	110/160/240	155/225/325/455	110TA/120T/200M/230M/240TH/280M/280Z/460M
Toothed belt drive	•	•		•
Spindle drive	•	•	•	
Rack drive				•
Max. load toothed belt/spindle/rack and pinion [N]	2,500/9,500/ -	5,000/9,500/ -	- /16,300/ -	4,000/ - /9,500
Max. total length [m]	2.5 ... 10	3.5 ... 6.35	3.2 ... 3.5	3 ... 10

	AXE – standardized modules		
			
Products	AXE-Z	AXE-A	AXE-systems
Sizes	60/80/100/110/160	40/60	A: X 60Z – Y 110Z – Z 40A B: X 80Z – Y 160Z – Z 60A
Drive system	Toothed belt drive	Toothed belt Ω drive	Toothed belt drive Toothed belt Ω drive
Characteristic	Optimised high rigidity aluminium profiles	Low masses in motion, making it optimal for hoist axis applications	Standard combinations for 2 and 3-axis systems Extensive accessories program comprising connecting elements, gearboxes, drive adapters, and limit switches

	Profiled rail systems	
		
Products	Standard mounting rail guide	Miniature mounting rail guide
Sizes	BG - 15/20/25/30/35/45/55	MB - 09/12/15
Designs	Flange/bogie	Bogie
Full ball	•	•
Ball chain	•	
Initial tension [%]	0/2/5/7	0/2
Precision classes	N/H/P/SP/UP	N/H/P



• All products

Belt drives

The master of endurance.

A high degree of cost-effectiveness, maintenance-free nature and low-noise running – there are many good reasons to opt for a belt drive.

The optimum combination of belt and belt pulley ensures a positive-fit, as well as absolutely synchronous and slip-free transmission between two shafts. Whether toothed belts or ribbed V-belts, whether used as power belts in the field of drive or linear technology, transport and materials handling technology – our belt drives are sure to get things moving in the right direction.

We can also offer you special toothed belt pulleys in accordance with your drawing, e.g. with low backlash or a 0-backlash, toothed belts with special profiles or made from the special polyurethane compounds and the corresponding accessories, e.g. belt tension measuring devices.



		Option		Material		Toothed belt pulleys																			
						PowerGrip® HTD®					PowerGrip® GT			Synchro Power®						Poly Chain® GT					
Toothed belts		Coat	Imprint	Weld	Neoprene	PU	3M	5M	8M	14M	20M	3MR	5MR	8MR	T2,5	T5	T10	T20	AT5	AT10	AT20	8MGT	14MGT		
Power Grip® HTD® Twin Power® HTD® Long Length	3M, LL 3M		●		●		●																		
	5M, TP 5M, LL 5M		●		●			●																	
	8M, LL 8M		●		●				●																
	14M, LL 14M		●		●					●															
	20M		●		●						●														
Power Grip® GT Twin Power® GT Long Length	3MGT, LL 3MR		●		●							●													
	5MGT, LL 5MR		●		●								●												
	LL 8MR		●		●									●											
	8MGT, TP 8MGT		●		●				●																
	14MGT, TP 14MGT		●		●					●															
Synchro Power® double- toothed, Long Length	T2,5		●			●									●										
	T5, DL T5, LL T5	●	●			●										●									
	T10, DL T10, LL T10	●	●	○		●											●								
	T20, LL T20	●	●	○		●												●							
	AT5, LL AT5	●	●	○		●													●						
	AT10, LL AT10	●	●	○		●														●					
	AT20, LL AT20	●	●	○		●															●				
	ATL5, LL ATL5	●	●			●																●			
	ATL10, LL ATL10	●	●			●																●			
	ATL20, LL ATL20	●	●			●																	●		
	HTD5, LL HTD5	●	●	○		●	●																		
HTD8, LL HTD8	●	●	○		●		●																		
HTD14, LL HTD14	●	●	○		●			●																	
Mini Poly Chain®, Poly Chain® Poly Chain® Carbon™ Volt® Long Length	8MGT, LL 8MGT		●		●																		●		
	14MGT, LL 14MGT		●		●																			●	

- All products
- Some versions
- LL ... Long length ... By the metre

HTD® teeth profile for PowerGrip® HTD®



AT teeth profile for Synchro Power®



PowerGrip GT3 for PowerGrip® GT



Poly Chain® Carbon™ Volt® for Poly Chain® GT










AC helical geared motors PANASONIC 3-Series

These motors are AC motors for mains operation or operation with a frequency inverter as a variable-speed drive. The motors are available in a power range of 6 to 90 watts and their configuration is as follows: 4-pole, speed of 1,500 rpm at 50 Hz, insulation class E and thermal protection (impedance current limiter at 6 W and thermal switch from 15 W).

The coordinated helical gearboxes are characterized by their high quality, durability (lubricated for life) and low-noise operation. Gearbox reductions ranging from 3:1 to 200:1 are available. In addition, we offer intermediate gears with $i=10$ to implement even larger ratios.



	Geared motors, 3-phase Variable speed drive	Geared motors, 1-phase fixed speed	Geared motors, 1-phase quick reversible	Geared brake motors 1-phase/3-phase
				
Supply voltage	230 V and 400 V	230 V	230 V	230 V 400 V on request
Output	25 to 90 W	6 to 90 W	6 to 90 W	6 to 90 W
Size	80 mm to 90 mm	60 mm to 90 mm	60 mm to 90 mm	60 mm to 90 mm
Operating mode	S1 continuous operation	S1 continuous operation	S2 intermittent operation 30 min	6 and 15 W as well as 25 – 90 W/1-phase S2 intermittent operation 30 min 25 – 90 W/3-phase S1 continuous operation
Further information	IP 54 protection 3-phase motors provide a higher torque than single phase motors. The 230 V types allow variable speeds if an inverter is used. The 400 V types are designed for direct connection to the 3-phase mains.	These three-phase geared motors can be supplied with 1-phase 230V at 50 Hz for applications with a fixed speed applications. The geared motors are compact, quiet and RoHS-compliant	Built-in constant friction brake system Shorter overrun and quick stop Ideal for quick reversible and start-stop applications The brake disk on the rotor is constantly braked with brake pads. If the motor is deenergised, this friction makes for a faster standstill.	Spring-applied brake as holding brake Built-in rectifier (supply voltage = motor voltage) The brake is released automatically when the motor is switched on, there is no friction. If the motor is switched off, the holding brake is once again applied. The overrun is approx. 2-4 revolutions, the brake is designed for up to 6 braking cycles a minute.

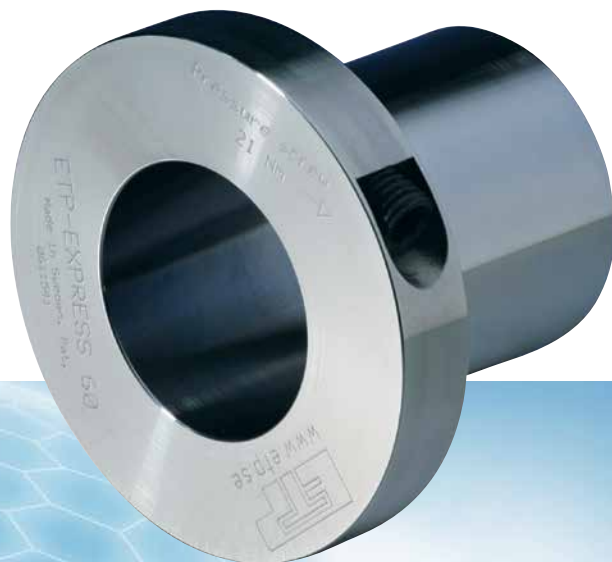
	Gearbox design ... X	Gearbox design ... Z or Y	Gearbox design ... R or P
			
Output	6 to 40 W	60 to 90 W	60 to 90 W
Gear reduction	3:1 - 180:1	3:1 - 200:1	50:1 - 200:1
Max. torque	up to 9.8 Nm	up to 19.6 Nm	up to 29.4 Nm
Flange mounting	Square flange with stud bolt	Square flange with stud bolt (Z) Rectangular flange with lateral fastening (Y)	Square flange with stud bolt (R) Rectangular flange with lateral fastening (P)
Further information			Reinforced gearboxes (HT gearboxes) are used for higher ratios.







Locking assemblies



Meeting individual customer requirements – and keeping everything securely clamped in place.







Locking assemblies are used for force-fit (friction-fit) and backlash-free transmission of torque and axial forces between shafts and hubs or machine components.

Advantages of a frictionally engaged transmission of torque compared with keyway connections include a constant and non-destructive connection, fast, secure and easy installation and absolutely no backlash. Locking assemblies can be positioned axially on the shaft and offer better fatigue factors.



	Hydraulic locking bushes					
						
Product	Express incl. corrosion-free	Techno	Power	Classic incl. corrosion-free	Hydropress	Octopus
Torque range	46 ... 17,000 Nm	50 ... 32,000 Nm	60 ... 1,200 Nm	55 ... 15,500 Nm	29,000 ... 270,000 Nm	140 ... 4,800 Nm
Shaft diameter	15 ... 100 mm	15 ... 130 mm	15 ... 40 mm	15 ... 100 mm	160 ... 300 mm	30 ... 100 mm
Easy installation/ uninstallation	Single-screw solution	Single-screw solution	Single-screw solution		Grease gun	
Radial clamping	●	●	●			
Number of installations	Up to 2,000	Up to 5,000	Up to 500	Up to 100	> 1,000	Up to 500,000
Concentricity	≤ 0.02 mm	≤ 0.006 mm	≤ 0.03 mm	0.03 ... 0.06 mm	0.02 ... 0.04 mm	0.02 ... 0.03 mm
Temperature range	-30° ... +85 °C	-30° ... +110 °C	0° ... +70 °C	-30° ... +85 °C	0 ... 80 °C	-30° ... +80 °C
Corrosion-free	●			●		
Fields of application	Test station construction, mechanical engineering, printing machines, ideal for minimal installation dimensions	Test station construction, mechanical engineering, printing machines, ideal for high concentricity	Mechanical engineering, ideal for high radial loads	Mechanical engineering, handling technology	Mechanical engineering, handling technology	Machine tools, machines for forming technology, etc.

	Hydromechanical locking bushes	Mechanical locking bush
		
Product	Hyloc	Mini incl. corrosion-free
Torque range	800 ... 330,000 Nm	7 ... 66 Nm
Shaft diameter	50 ... 220 mm*	6 ... 14 mm
Easy installation/ uninstallation	Manual/motorised pump	
Radial clamping	●	
Number of installations	Up to 2,000	Up to 100
Concentricity	≤ 0.02 mm	≤ 0.03 mm
Temperature range	-30° ... +150 °C	-30° ... +300 °C
Corrosion-free		●
Fields of application	Heavy mechanical engineering, rolling mills, processing industry, turbine construction	Robotics, food industry, mechanical engineering

	Mechanical locking assemblies					
						
Type/version	Locking assemblies self-centring/axial misalignment	Locking assemblies self-centring/without axial misalignment	Locking assemblies not self-centring/axial misalignment	Locking assemblies not self-centring/without axial misalignment	Rigid shaft coupling	Shrink discs
Product	TLK130, TLK132, TLK139, TLK250L, TLK350, TLK450/451, TLK452	TLK110, TLK131, TLK133, TLK134, TLK400/401	TLK 250, TLK300	TLK200	TLK 500	TLK 601, TLK 602, TLK 603, TLK 622, TLK 623, TLK 681
Torque range	9 ... 926,000 Nm	12 ... 864,000 Nm	2 ... 400,000 Nm	280 ... 1,650,000 Nm	200 ... 4,300 Nm	140 ... 4,800 Nm
Shaft diameter	6 ... 600 mm	6 ... 400 mm	6 ... 540 mm	20 ... 900 mm	17 ... 80 mm	30 ... 100 mm
Temperature range	-30° ... +300 °C	-30° ... +300 °C	-30° ... +300 °C	-30° ... +300 °C	-30° ... +300 °C	-30° ... +300 °C
Axial plug-in	●		●			
Self-centring	●	●			●	●
Fields of application	Mechanical engineering, handling technology	Mechanical engineering, heavy mechanical engineering, mining, handling technology, energy technology	Mechanical engineering, handling technology	Mechanical engineering, handling technology	Mechanical engineering, handling technology	Machine tools, machines for forming technology, etc.

● All products
*On request, up to 400 mm

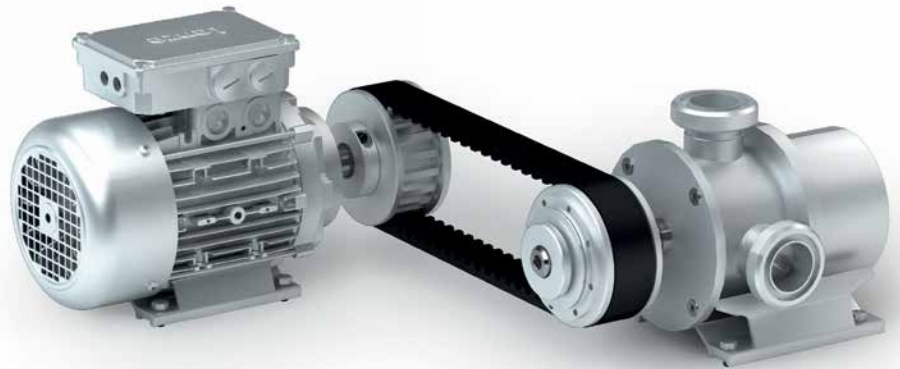
Overload elements and torque limiters

We ensure safety.

Torque limiters provide reliable protection for machine elements in the event of collisions, malfunctions or overload. As such, they guarantee the best possible safety for all applications and guard against extended downtimes.

Torque transmission can be either force-fit or positive-fit. A wide range of versions – disengaging, ratcheting or synchronous – are available as standard for a large torque range.





Frictionally engaged



Positive-fit



	Frictionally engaged	Positive-fit
Products	Ruflex®, multi-plate slip clutch	Syntex®, SI safety clutch, SecMatic, shear pin clutch
Torque range	0.5 ... 6,800 Nm	3 ... 2,440,000 Nm
Range of variation/precision	±30%	SI safety clutch and Syntex® ±10% SecMatic less than 5%
Rotational speed range [1/min]	Up to 10,000	400 ... 4,500
Backlash-free		○
Disengaging/no residual torque		○
Ratcheting		○
Synchronous		○
Locked		○
Shaft-shaft	○	○
Torsionally rigid	○	○
Torsionally flexible	○	○
Force fit	●	
Positive fit		●
ATEX	on request	
Fields of application	Handling technology, gear motors, packaging machines	Packaging machines, machine tools, linear drives, pump industry

- All products
- Some versions

Universal joints and cardan shafts




For precise power transmission in any situation.

Universal joints allow torque to be transmitted between physically separated drives and outputs. Spatial angular offsets and changes in axial length are also reliably and safely compensated.

Depending on the model, speeds of up to 4,000 rpm can be achieved with the shaft joints. Cardan shafts are suitable for use under the most difficult conditions for torques up to 550,000 Nm. Different types of attachment are available, such as flange connection, clamping flange, quick-change systems, bore, bore with keyway according to DIN, etc.

Our application engineers are always happy to advise you so we can work together to find the best solution.



	Single	Double	Telescopic
			
Products	G, GB, S, GR, H, HB, HR, X	GD, GBD, HD, HBD, XD	SA, GA, GBA, HA, HBA, XA
Needle bearing up to 4,000 rpm*	H, HB, HR	HD, HBD	HA, HBA
Stainless steel	X	XD	XA
Quick release	GR, HR		

*Up to 1,000 rpm as standard



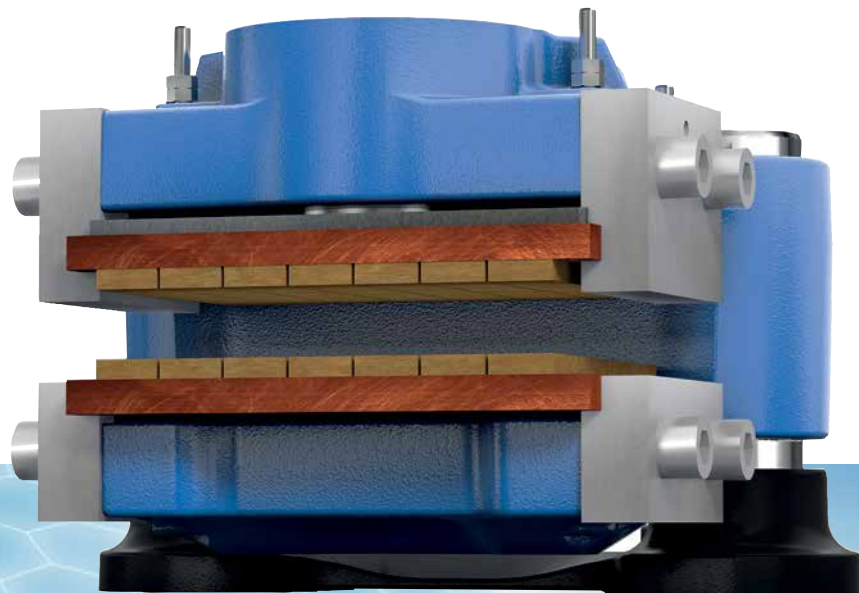
Size	Type	Flange			Maximum torque Mt max
		DIN Ø mm	SAE Ø mm	KV Ø mm	
004	500/505/506/507/513	58-65	-	-	200 Nm
009	505/506/507/511/514/515	58-65-75	-	-	450 Nm
019	500/505/506/507/513	75-90	-	-	650 Nm
077	500/505/506/507/513	90-100-120	97-116	100	1,350 Nm
105	500/505/506/507/513	100-120-150	116-150	120	3,000 Nm
114	500/505/506/513/528	120-150-180	116-150-175	120-150	5,500 Nm
139	500/505/506/513/528	150-180	175-203	150-180	7,400 Nm
152	500/505/506/513/528	150-180	175-203	150-180	10,000 Nm
156	500/505/506/513/528	180-225-250	175-203	150-180	15,200 Nm
160	500/505/506/513/528	180-225-250	203-245	180	24,700 Nm
162	500/505/506/513/528	225-250-285	245-250-276	200	33,000 Nm
163	500/505/506/513/528	250-285	245-250-276	-	37,000 Nm
164	500/505/506/513/528	250-285-315	245-250-276	-	40,000 Nm
234	500/505/506/513/528	285-315-350	-	-	89,000 Nm
232	500/505/506/513/528	315-350-390	-	-	142,000 Nm
233	500/505/506/513/528	350-390-435	-	-	200,000 Nm

Hydraulic & electro-mechanical brakes

Whoever talks about driving must be able to slow down

Hydraulic and electromechanical braking systems are employed worldwide in a wide range of different industries. Customer preferences and the basic conditions of the application determine the selection of the right brake.


With our IntelliRamp®, we offer a fine-tuned electronic control system for our brakes.



				Clamping force min. (kN)	Clamping force max. (kN)
Active fixed caliper brake	Hydraulic braking system		KTR-STOP® M-D	0	203
Active floating caliper brake	Hydraulic braking system		KTR-STOP® XS-A-F	0	16,5
			KTR-STOP® S-A-F	0	55
			KTR-STOP® M-A-F	0	130
	Electromechanical braking system		EMB-STOP XS-A-xx-F	0	12
			EMB-STOP S-A-xx-F	30	60
			EMB-STOP S-A-xx-F Lever	30	60
			EMB-STOP M-A-xxx-F Lever	80	125
			EMB-STOP L-A-xxx-F Lever	125	380
			EMB-STOP L-A-xxx-F	125	375
			EMB-STOP 2L-A-xxx-F	500	700
Passive floating caliper brake	Hydraulic braking system		KTR-STOP® XS-xx-F	0	15
			KTR-STOP® S-xx-F	0	80
			KTR-STOP® M-xxx-F	0	180
			KTR-STOP® L-xxx-F	150	350
			KTR-STOP® XL-xxx-F	300	600
			KTR-STOP® XXL-xxxx-F	800	1,200
	Electromechanical braking system		EMB-STOP XS-P-xx-F	0	12
			EMB-STOP S-P-xx-F	30	50
			EMB-STOP M-P-xx-F	-	160

				Braking torque min. (kNm)	Braking torque max. (kN)
Passive braking system	Thruster brakes		KTR-STOP® TB S	0	17,5
			KTR-STOP® TB T	0	10

			Max. braking torque (kN)
Hub/brake disc combination	KTR-STOP® NBS		10,4

			for shaft diameter (s)	Holding torque (Nm)	Holding load (N)
Hydraulic clamping system	KTR-STOP® NC		12 - 55	12.5 - 810	2,100 - 29,500

Hydraulic components

Hydraulic components for stationary and mobile hydraulics

Regardless of the motions your machines need to perform, or whether for mobile or stationary hydraulics – we have the right hydraulic components.




Pump support	Damping elements	Oil tank
		
<p>Pump support (aluminium) Pump support with rectangular connector Pump support PG (cast iron) Pump support PSG (cast iron) for servo technology</p>	<p>Elastic pipe lead-throughs Damping rings Damping rails</p>	<p>Aluminium tank BAK Steel tank BSK Steel tank BNK Steel tank BEK Oil sumps – Collection basins for BSK and BNK tanks</p>
<p>Bottom flanges, mounting flanges, and seals are available according to requirements</p>	<p>Noise reduction thanks to non-pre-tensioned rubber layer that is vulcanised on</p>	<p>Various detailed configurations available</p>



Cooling systems

Wherever work is done, heat is generated.

In order to dissipate this heat quickly and efficiently, various cooling systems are available for a wide range of application areas. That includes everything from construction machines or hydraulic units, rail technology, the steel and iron industry and wind turbines right through to lifts.

Oil/air cooler		Oil tank	Oil/water cooler	
				
OAC cooler series	OPC oil cooler unit	MMC combi cooler	TAK/T series	PHE series
<p>Can be used with hydraulic oil, gearbox oil, lubricating oil, engine oil, and water-glycol fluid</p> <p>Maintenance-friendly and easy to clean</p> <p>Also available in an eco version</p>	<p>Bypass flow cooling with integrated pump</p> <p>Maintenance-friendly and easy to clean</p> <p>Extendable with a filter at customer's request</p>	<p>Designed for rough operating conditions</p> <p>Designed according to thermal specifications, fin selection optimised for application case</p> <p>Block thicknesses of 32 – 200 mm</p>	<p>Oil cooler as tube bundle heat exchanger</p> <p>High power density up to 340 kW</p> <p>Also available in seawater version</p> <p>Easy cleaning thanks to removable end caps and pull-out tube bundle</p>	<p>For cooling hydraulic oil and other media</p> <p>Compact design with high cooling capability</p> <p>High corrosion resistance thanks to plates made of stainless steel 1.4401 (AISI316) and use of copper solder</p> <p>Maximum operating pressure: 30 bar</p> <p>Maximum operating temperature: 200°C</p>



