

US  
11|2015

**TSCHAN** 

**TNS**

Flexible Couplings



Partner for Performance  
[www.ringfeder.com](http://www.ringfeder.com)

 **RINGFEDER**  
POWER TRANSMISSION



## Welcome to your system supplier for every aspect of power transmission



Today's RINGFEDER POWER TRANSMISSION GMBH was founded in 1922 in Krefeld, Germany as company for Friction Springs. Today we are a global supplier of top-quality products for the power transmission- and damping technology industries.

RINGFEDER POWER TRANSMISSION is one of the leading companies in selected market niches. Through our sustainable, organic growth, targeted acquisitions and attentive proximity to our customers, we are constantly supplementing and developing our range of products in cooperation with our customers and deliver service for the future. Beyond that, RINGFEDER POWER TRANSMISSION is one of the prime addresses in regard to technical know-how for our discerning customers.





Mars Rover:  
Courtesy NASA/  
JPL-Caltech



Our world-renowned German brands RINGFEDER, TSCHAN and GERWAH stand for customer-oriented solutions that fulfil the highest requirements and guarantee our customers a trouble-free system operation. Under the brand name ECOLOC we offer reliable products off the shelf.

The brand RINGFEDER is world's leading in the sector of locking devices and damping technology. The GERWAH brand stands for torsionally rigid, elastic couplings as well as safety couplings in the lower torque range, whereas TSCHAN stands for non-shiftable elastic, highly-elastic and torsionally rigid shaft couplings in the higher torque range. The ECOLOC brand includes cost-efficient alternatives from the premium range available for standard use.

Hence, the product portfolio comprises high-quality products with the best cost-benefit ratio, covering all aspects of power transmission.



# Content

## 02 Pages Corporate Image

---

### Basics

---

## 06 Introduction and dimensioning of coupling

---

## 08 Technical installation instructions

---

## 09 Rough determination of the coupling size

---

## 10 Series

---

## 30 Designation and orders

---

## 32 Online Service

---

## 34 Product range RINGFEDER POWER TRANSMISSION

---

All technical details and information are non-binding and cannot be used as a basis for legal claims. The user is obligated to determine whether the represented products meet his requirements. We reserve the right at all times to carry out modifications

in the interests of technical progress. Upon the issue of this catalogue all previous brochures and questionnaires on the products displayed are no longer valid.



# Series



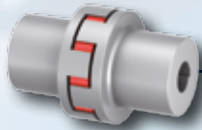
Type S-St

Page 10



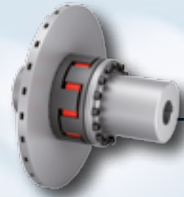
Type SDDL-5-BS

Page 20



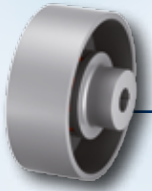
Type S-LSt

Page 12



Type SDDL-5-BSV

Page 24



Type S-BT

Page 14



Type SX

Page 26



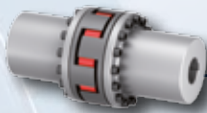
Type SDD-5

Page 16



Type SV

Page 28



Type SDDL-5

Page 18

## Introduction

The rotationally resilient coupling of the TSCHAN® S series is flexible in all directions and therefore compensates for angular, parallel and axial shaft misalignments of the connected machines. Misalignments can be caused for example by inaccurate assembly, heat movements or settling phenomena.

### Avoiding torsional vibration

By virtue of the rotational resilience of the coupling, dangerous torsional vibrations from the operational range of plant machinery can be transfer to rotational speed ranges in which no negative effects are to be expected. The elastic intermediate rings possess a high material damping capability which makes it possible for the couplings to keep the resonance enhancements within limits when passing through dangerous speed ranges, thereby protecting the coupled machines against damage. The couplings also mitigate torque shocks and cause a vibrating system that has been excited by an impact to come to rest very quickly due to the material damping qualities. The conduction of structure-borne noise is prevented.

### Elastomer materials

The elastic TSCHAN® S intermediate rings are made of nitril-butadiene-rubber (Pb82) or polyurethane (VkR, VkW). The black intermediate ring (Pb82) are normally electrically conductive and therefore prevent undesirable electrostatic charges. The red (VkR) and white (VkW) intermediate rings ensure electrical insulation between connected machines as long as there are no other electrically conductive connections. The resilience of the individual elastomer materials is designated by their shore hardness. From these values an indirect conclusion can be drawn with respect to the torques the coupling is able to transmit and its spring stiffness. For further details, please see the technical data sheet.

### Environmental conditions

The employed elastomer materials operate reliably in ambient temperature ranges of -30 °C to +100 °C. Please contact RINGFEDER POWER TRANSMISSION if higher ambient temperatures are involved. The influence of the temperature on the coupling size selection is explained in more detail in the below-mentioned design directives.

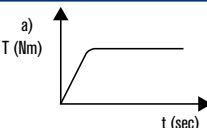
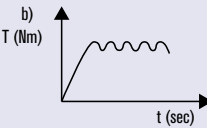
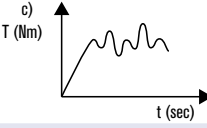
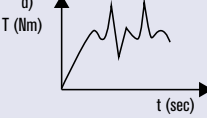
It is only allowed to operate the coupling in normal industrial air. Aggressive media may attack the coupling components, bolts and elastic elements and therefore present a danger to the operational safety of the coupling. The coupling can be certified in accordance with the European Directive 94/9/EC, also known as ATEX 95. Please contact RINGFEDER POWER TRANSMISSION regarding the declaration of conformity according to 94/9/EC and the effects of aggressive ambient media.

Ambient temperature range [°C]	Temperature factor $S_{\text{D}}$ for buffer materials	
	VkR, Vk60D (PUR)	Pb72, Pb82 (NBR)
-30 < $\vartheta$ < +30	1	1
+30 < $\vartheta$ < +40	1,2	1
+40 < $\vartheta$ < +60	1,4	1
+60 < $\vartheta$ < +80	1,8	1,2
+80 < $\vartheta$ < +100	-	1,3
>100	-	On request

$S_{\text{D}}$  = Temperature factor depending on intermediate ring materials

Drive side	Min. load factor $S_{\text{A}}$
E-Motor, turbine	1
Hydraulic motor	1,1
Combustion machine 4 and more cylinders, U-degrees $\leq$ 1:100	1,2 (DSR)*
Combustion machine 1 to 3 cylinders, U-degree > 1:100	1,4 (DSR)*

$S_{\text{A}}$  = Load factor of drive side: \*We recommend for drivers with combustion machines to examine by a 'DSR' - torsional vibration calculation which coupling is suitable for the application!

Torque characteristics at operating point on outside	Torque characteristics	Minimum load factor $S_{\text{L}}$
Constant, uniform, without torque variation		1
Uniform with little variations, slight shocks		1,25
Non-uniform, also API-671, API-610, moderate shocks		1,5
Non-uniform, fluctuant, heavy shocks		1,75
Other torque characteristics		Own specification/ personal vibration calculation

$S_{\text{L}}$  = Load factor of output side

## Dimensioning of coupling - design directives

The dimensioning of the elastic TSCHAN® couplings is based on the nominal torque  $T_{\text{N}}$  and maximum impact torque  $T_{\text{max}}$  of the machines.

$$\begin{aligned}
 T_{\text{N}} &= \text{Nominal torque of machine} && [\text{Nm}] \\
 P_{\text{N}} &= \text{Machine power} && [\text{kW}] \\
 n_{\text{N}} &= \text{Operating speed} && [\text{min}^{-1}]
 \end{aligned}$$

$$T_{\text{N}} = 9550 \cdot P_{\text{N}} / n_{\text{N}} \quad (1)$$

The following equation applies when subjected to the nominal torque:

$$T_{KN} > T_N \cdot S_{\vartheta} \cdot S_f \quad (2)$$

$T_{KN}$  = Nominal torque of coupling [Nm] acc. to catalogue data  
 $T_N$  = Nominal torque of machine [Nm] acc. to equation (1)  
 $S_{\vartheta}$  = Temperature factor [-] according to table  
 $S_f$  = Service factor [-]  $S_A \cdot S_L$   
 $S_A$  = Load factor of drive side  
 $S_L$  = Load factor of output side

### Verifying the maximum torque of the coupling:

The following equation applies for transient impact torques, which occur e.g. by starting an electric motor.

$$T_{Kmax} > T_{max} \cdot S_{\vartheta} \cdot S_z \quad (3)$$

$T_{Kmax}$  = Maximum torque of the coupling [Nm] according to catalogue  
 $T_{max}$  = Maximum impact torque of machine [Nm]  
 (e.g. when starting an electric motor:  $T_{max} = T_{Kipp}$ )  
 $T_{Kipp}$  = Tipping torque by starting with directly engaged asynchronous motor e.g.  $T_{Kipp} \sim 2,5 \cdot T$ ; observe details of motor producer)

Start-ups per hour [1/h]	Start-up factor $S_z$
< 120	1
120 - 140	1,3
>240	On request

$S_z$  = Start-up factor

### Check selected coupling size

- Check whether the **hub bore** is able to accommodate the shaft diameters. The values of the maximum finish bores stated in the tables are applicable for keyed connections according to DIN 6885/1 and must not be exceeded.
- Check the power transmission capability of the **shaft-hub-connection**. The nominal torques stated in the tables will be reliably transmitted by the couplings. The introduction of the torque into the coupling hub has to be verified by the user of the coupling according to recognized rules of technology. If necessary, the second key is to be offset by 180°.
- Observe the **maximum permissible speed** of the coupling.
- Check whether **balancing** is necessary. We advise to balance the coupling parts or sub assemblies if the circumferential speed at the outer diameter exceeds 22 m/s. Balancing can only be performed on couplings with finish-bores. Unless otherwise specified, the half-key convention applies, so that the coupling hubs are balanced prior to producing the keyways.

## Dimensioning example

Example for dimensioning a coupling for a pump drive with electric motor type IEC 355; preselected type: TSCHAN® SDDL-5

Input power $P_N$ =	355 kW	
Operating speed $n_N$ =	1480 min <sup>-1</sup>	
Nominal torque $T_N$ =	$9550 \cdot P_N / n = 2291 \text{ Nm}$	acc. to equation (1)
Ambient temperature $\vartheta$ =	65 °C	
→ Temperature factor $S_{\vartheta}$ =	1,8	for Vkr
Load factor		
Drive motor	Directly engaged asynchronous motor (Δ-connection)	
→ Load factor of drive side $S_A$ =	1	
Working machine	Centrifugal pump - torque characteristics uniform with little variations, slight shocks	Figure b)
→ Load factor of output side $S_L$ =	1,25	
Required nominal torque of the coupling $T_{KN} >$	$T_N \cdot S_{\vartheta} \cdot S_f = 2291 \text{ Nm} \cdot 1,8 \cdot 1,25 = 5155 \text{ Nm}$	acc. to equation (2)

Following the catalogue data the coupling is selected with a coupling size of SDDL-5-360 with intermediate ring Vkr and a nominal coupling torque of 6500 Nm. The dimension of coupling SDDL-5-360 Vkr is OK for the performance data.

The operating speed of 1480 rpm results in a circumferential speed of 27.9 m/s. Therefore it is recommended to balance the coupling parts. If the shaft-hub connections are dimensioned sufficiently, this coupling can be used.

Maximum torque $T_{max} = T_{max} = T_{Kipp}$ = Tipping torque when starting with directly engaged asynchronous motors	$2,5 \cdot T_N = 2,5 \cdot 2291 \text{ Nm} = 5727,5 \text{ Nm}$	
→ Ambient temperature $\vartheta$ =	65 °C	
→ Temperature factor $S_{\vartheta}$ =	1,8	for Vkr
→ Starts per hour	6	
Start-up factor $S_z$ =	1	for Vkr
Required maximum torque of the coupling $T_{Kmax} >$	$T_{max} \cdot S_{\vartheta} \cdot S_z = 5727,5 \text{ Nm} \cdot 1,8 \cdot 1 = 10310 \text{ Nm}$	acc. to equation (3)

### Verifying the dimensioning result

Value	System data	Coupling data SDDL-5-360 Vkr
Nominal torque	5155 Nm (incl. safety factor)	6500 Nm
Maximum torque	10310 Nm (incl. safety factor)	19500 Nm
Speed	1480 rpm	max. 2150 rpm
Shaft diameter motor	95 mm	max. 160 mm
Shaft diameter pump	85 mm	max. 160 mm

## Technical installation instructions

### Arrangement of the coupling parts

The coupling hubs have to be arranged on the shaft ends in accordance with the coupling type. In order to obtain a shaft-hub connection that is capable of carrying the load it is important to ensure that the hubs are pushed onto the shaft until the face of the hub is flush with the shaft end.

### Finished bore

The stated values for the finished bore  $d_{1f\ max}/d_{2f\ max}$  are valid for a keyway according to DIN 6885/1 and must not be exceeded. To ensure true running, select the bore fit in such a manner that, when mating it with the shaft tolerance, a tight fit or light interference fit, such as e.g. H7/m6 or tighter, results.

### Fastening on a shaft

If not specified TSCHAN® couplings are usually supplied with keyways according to DIN 6885/1. In addition, the hub should be axially locked in position, for example by means of a setscrew, or by means of distance rings in case of longer shaft ends. The key must be axially fixed in the shaft.

### Observe restoring forces

The coupling compensates the permissible misalignments with low restoring forces. Please observe the alignment values specified in the assembly and operation manual. If highly loaded bearings are involved, the additional loads resulting from the restoring forces should be taken into consideration. In such cases, please contact RINGFEDER POWER TRANSMISSION for more detailed information.

### Shaft end bearings

The shaft ends to be coupled should be supported by bearings which are directly fitted in front and after the coupling.

### Attention!

In the interest of further development, we reserve the right to make changes which serve technological progress. Carefully observe the actually instructions given in the relevant installation and operation manual, which can be downloaded from our webpage [www.ringfeder.com](http://www.ringfeder.com).

### Data overview:

The technical data tables for the coupling types supplied in this catalogue include elastic elements that are available in different shore hardness values. The higher the hardness of the elastic elements, the higher the torque transmission capability of the coupling and as a result the higher is the spring stiffness. The rated torque  $T_{KN}$  listed in the tables is the torque that the coupling is capable of

transmitting continuously. The maximum torque  $T_{Kmax}$  is the torque that the coupling is able to transmit for short periods, e.g. during start-up.

Torsional vibration analyses (DSR) are performed by specialists to optimize the drive line. To this purpose, a detailed description of the oscillatory system is required, including the mechanical arrangement (spring-mass system) as well as the plant-related excitation functions. The specific coupling data such as stiffness, damping and mass moments of inertia will be supplied on request.

Size	Torque with following buffers							
	Pb72		Pb82		VkR		Vk60D	
	$T_{KN}$	$T_{Kmax}$	$T_{KN}$	$T_{Kmax}$	$T_{KN}$	$T_{Kmax}$	$T_{KN}$	$T_{Kmax}$
	ft-lbs	ft-lbs	ft-lbs	ft-lbs	ft-lbs	Ft-lbs	ft-lbs	ft-lbs
50	3	9	5	16	11	30	---	---
70	12	35	21	64	41	118	---	---
85	18	53	30	89	55	166	81	243
100	30	89	52	155	96	288	144	431
125	52	155	94	284	184	553	273	819
145	89	266	162	487	295	885	443	1328
170	133	398	251	752	465	1401	701	2102
200	243	730	435	1305	811	2434	1217	3651
230	369	1106	664	1991	1254	3798	1903	5709
260	590	1770	1033	3098	1955	5864	2936	8807
300	870	2611	1542	4625	2877	8165	4315	12944
360	1431	4293	2545	7634	4794	14383	7154	21463
400	1969	5908	3503	10510	6564	19693	9847	29540

### Data overview

$T_{KN}$  = Nominal torque of coupling  
 $T_{Kmax}$  = Max. torque of the coupling by one part design

# Basics

## Rough determination of the coupling size

### Notes:

- Version based on type TSCHAN® S-St and flexible element VKR.
- Applies for small and medium moments of inertia on the output side.

**Correlation of TSCHAN® S couplings and standard electric motors** for rough determination of the coupling size in accordance with operating factors.

Size	Motor	n=3.000 min <sup>-1</sup>	Coupling size	n=1.500 min <sup>-1</sup>	Coupling size	n=1.000 min <sup>-1</sup>	Coupling size	n=750 min <sup>-1</sup>	Coupling size	Cyl. shaft end Ø x L by rotary speed of	
		kW		kW		kW		kW		= 3000 min <sup>-1</sup>	≤ 1500 min <sup>-1</sup>
56	-	0,09	50	0,06	50	0,037	50	-	-	9 x 20	9 x 20
56	-	0,12	50	0,09	50	0,045	50	-	-	9 x 20	9 x 20
63	-	0,18	50	0,12	50	0,06	50	-	-	11 x 23	11 x 23
63	-	0,25	50	0,18	50	0,09	50	-	-	11 x 23	11 x 23
71	-	0,37	50	0,25	50	0,18	50	0,09	50	14 x 30	14 x 30
71	-	0,55	50	0,37	50	0,25	50	0,12	50	14 x 30	14 x 30
80	-	0,75	50	0,55	50	0,37	50	0,18	50	19 x 40	19 x 40
80	-	1,1	50	0,75	50	0,55	50	0,25	50	19 x 40	19 x 40
90	S	1,5	50	1,1	50	0,75	50	0,37	50	24 x 50	24 x 50
90	L	2,2	50	1,5	50	1,1	50	0,55	50	24 x 50	24 x 50
100	L	3	70	2,2	70	1,5	70	0,75	70	28 x 60	28 x 60
100	L	-	-	3	70	-	-	1,1	70	28 x 60	28 x 60
112	M	4	70	4	70	2,2	70	1,5	70	28 x 60	28 x 60
132	S	5,5	70	5,5	70	3	70	2,2	70	38 x 80	38 x 80
132	S	7,5	70	-	-	-	-	-	-	38 x 80	38 x 80
132	M	-	-	7,5	85	4	70	3	70	38 x 80	38 x 80
132	M	-	-	-	-	5,5	85	-	-	38 x 80	38 x 80
160	M	11	100	11	100	7,5	100	4	100	42 x 110	42 x 110
160	M	15	100	-	-	-	-	5,5	100	42 x 110	42 x 110
160	L	18,5	100	15	100	11	125	7,5	100	42 x 110	42 x 110
180	M	22	125	18,5	125	-	-	-	-	48 x 110	48 x 110
180	L	-	-	22	125	15	125	11	125	48 x 110	48 x 110
200	L	30	125	30	125	18,5	125	15	125	55 x 110	55 x 110
200	L	37	125	-	-	22	145	-	-	55 x 110	55 x 110
225	S	-	-	37	145	-	-	18,5	145	55 x 110	60 x 140
225	M	45	125	45	145	30	145	22	145	55 x 110	60 x 140
250	M	55	145	55	170	37	170	30	170	60 x 140	65 x 140
280	S	75	145	75	170	45	170	37	170	65 x 140	75 x 140
280	M	90	145	90	200	55	200	45	200	65 x 140	75 x 140
315	S	110	170	110	200	75	200	55	200	65 x 140	80 x 170
315	M	132	170	132	200	90	230	75	230	65 x 140	80 x 170
315	L	160	200	160	230	110	230	90	230	65 x 140	80 x 170
315	L	200	200	200	230	132	230	110	260	65 x 140	80 x 170
315	L	-	-	-	-	160	260	132	260	65 x 140	80 x 170
315	-	250	200	250	260	200	260	160	260	65 x 140	85 x 170
315	-	315	230	315	260	250	300	200	300	65 x 140	85 x 170
355	-	355	230	355	300	315	360	250	360	75 x 140	95 x 170
355	-	400	230	400	300	400	360	315	360	75 x 140	95 x 170
355	-	500	230	500	360	-	-	-	-	75 x 140	95 x 170
400	-	560	260	560	360	450	360	355	360	80 x 170	110 x 210
400	-	630	260	630	360	500	360	400	400	80 x 170	110 x 210
400	-	710	260	710	360	560	400	450	400	80 x 170	110 x 210
450	-	800	-	800	400	630	400	500	400	90 x 170	120 x 210
450	-	900	-	900	400	710	400	560	-	90 x 170	120 x 210
450	-	1000	-	1000	400	800	-	630	-	90 x 170	120 x 210

## Coupling with standard hub

The intermediate ring can be replaced after shifting a shaft with fitted hub.

- Standard material for intermediate ring: Vkr.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

- D<sub>1</sub>** = Outer diameter hub
- T<sub>KN</sub>** = Nom. transmissible torque
- T<sub>Kmax</sub>** = Max. transmissible torque
- n<sub>max</sub>** = Max. rotation speed
- d<sub>1f max</sub>** = Max. bore diameter d<sub>1f</sub> with keyway or other form closure connection
- d<sub>2f max</sub>** = Max. bore diameter d<sub>2f</sub> with keyway or other form closure connection
- D<sub>2</sub>** = Outer diameter hub



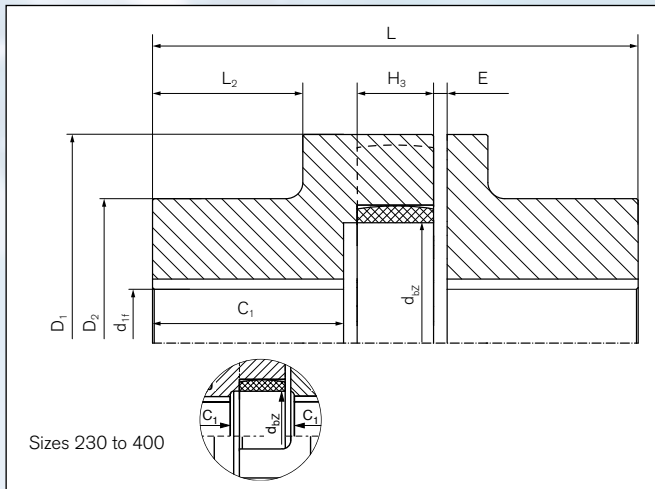
## Dimensions

Identifier	Size	T <sub>KN</sub>	T <sub>Kmax</sub>	n <sub>max</sub>	d <sub>1f max</sub>	d <sub>2f max</sub>	D <sub>2</sub>
	D <sub>1</sub>						
	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch
WS0105	1.969	11	30	15000	0.984	0.984	1.614
WS0107	2.756	41	118	11000	1.496	1.496	2.165
WS0108	3.346	55	166	9000	1.575	1.575	2.362
WS0110	4.134	96	288	7250	1.890	1.890	2.953
WS0112	4.961	184	553	6000	2.165	2.165	3.346
WS0114	5.709	295	885	5250	2.559	2.559	3.740
WS0117	6.693	465	1,401	4500	3.346	3.346	4.724
WS0120	7.874	811	2,434	3750	3.740	3.740	5.315
WS0123	9.055	1,254	3,798	3250	4.134	4.134	5.906
WS0126	10.236	1,955	5,864	3000	4.921	4.921	7.087
WS0130	11.811	2,877	8,630	2500	5.512	5.512	7.874
WS0136	14.173	4,794	14,383	2150	5.906	5.906	8.268
WS0140	15.748	6,564	19,693	1900	6.299	6.299	8.858

## Ordering example: TSCHAN® S-St

Identifier	d <sub>1f</sub>	d <sub>2f</sub>	Further details*)
WS0117	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



## Dimensions

- C<sub>1</sub>** = Guided length in hub boring
- L** = Total length
- L<sub>2</sub>** = Length of the hub
- E** = Gap width between left and right component
- F<sub>E</sub>** = Tolerance of the gap width E
- H<sub>3</sub>** = Length of damping part
- d<sub>bz</sub>** = Inner diameter elastomeric spider
- GW<sub>ub</sub>** = Weight, unbored

## Sectional view

## Dimensions

Identifier	C <sub>1</sub>	L	L <sub>2</sub>	E	F <sub>E</sub>	H <sub>3</sub>	d <sub>bz</sub>	GW <sub>ub</sub>
	inch	inch	inch	inch	inch	inch	inch	lbs
WS0105	1.181	2.953	0.925	0.059	+ 0.039	0.472	0.748	1.76
WS0107	1.516	3.937	1.240	0.098	+ 0.059	0.709	1.024	3.97
WS0108	1.713	4.331	1.378	0.098	+ 0.079	0.709	1.496	5.95
WS0110	1.949	4.921	1.476	0.118	+ 0.079	0.787	1.654	10.80
WS0112	2.224	5.709	1.732	0.138	+ 0.098	0.984	2.126	16.53
WS0114	2.402	6.299	1.870	0.157	+ 0.098	1.181	2.598	23.37
WS0117	2.953	7.480	2.382	0.197	+ 0.118	1.181	3.543	39.68
WS0120	3.898	9.646	3.130	0.236	+ 0.118	1.378	3.937	68.34
WS0123	4.331	10.630	3.484	0.276	+ 0.138	1.378	4.528	95.90
WS0126	4.429	11.220	3.484	0.276	+ 0.157	1.772	5.906	138.89
WS0130	5.177	12.992	4.232	0.276	+ 0.157	1.969	6.378	201.72
WS0136	6.772	16.417	5.512	0.315	+ 0.157	2.165	8.465	322.32
WS0140	6.437	15.748	5.394	0.295	+ 0.157	2.165	9.843	353.62

## Coupling with standard hub

The intermediate ring can be replaced after shifting a shaft with fitted hub.

- Standard material for intermediate ring: Vkr.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

- $D_1$  = Outer diameter hub
- $T_{KN}$  = Nom. transmissible torque
- $T_{Kmax}$  = Max. transmissible torque
- $n_{max}$  = Max. rotation speed
- $d_{1f max}$  = Max. bore diameter  $d_{1f}$  with keyway or other form closure connection
- $d_{2f max}$  = Max. bore diameter  $d_{2f}$  with keyway or other form closure connection
- $D_2$  = Outer diameter hub



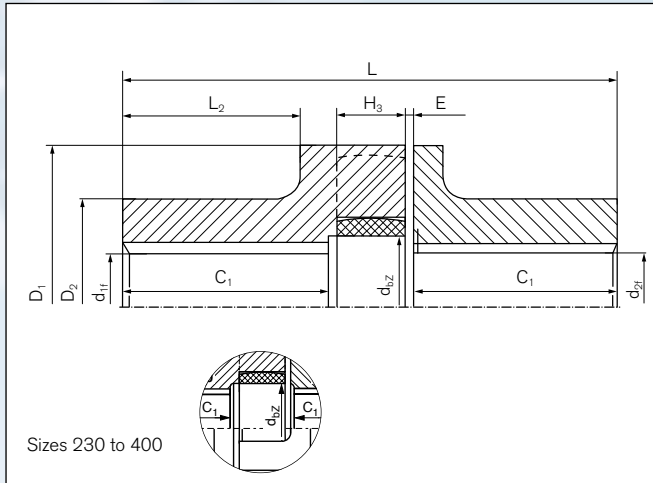
## Dimensions

Identifier	Size	$T_{KN}$	$T_{Kmax}$	$n_{max}$	$d_{1f max}$	$d_{2f max}$	$D_2$
	$D_1$						
	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch
WS0105-L	1.969	11	30	15000	0.984	0.984	1.654
WS0108-L	3.346	55	166	9000	1.575	1.575	2.362
WS0110-L	4.134	96	288	7250	1.654	1.654	2.559
WS0112-L	4.921	184	553	6000	2.165	2.165	3.346
WS0114-L	5.709	295	885	5250	2.559	2.559	3.740
WS0117-L	6.693	465	1,401	4500	3.346	3.346	4.724
WS0120-L	7.874	811	2,434	3750	3.740	3.740	5.315
WS0123-L	9.055	1,254	3,798	3250	4.134	4.134	5.906
WS0126-L	10.236	1,955	5,864	3000	4.921	4.921	7.087
WS0140-L	15.748	6,564	19,693	1900	6.299	6.299	8.858

## Ordering example: TSCHAN® S-LSt

Identifier	$d_{1f}$	$d_{2f}$	Further details*)
WS0117-L	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- C<sub>1</sub>** = Guided length in hub boring
- L** = Total length
- L<sub>2</sub>** = Length of the hub
- E** = Gap width between left and right component
- F<sub>E</sub>** = Tolerance of the gap width E
- H<sub>3</sub>** = Length of damping part
- d<sub>12</sub>** = Inner diameter in the elastomeric spider
- G<sub>wub</sub>** = Weight, unbored

## Dimensions

Identifier	C <sub>1</sub>	L	L <sub>2</sub>	E	F <sub>E</sub>	H <sub>3</sub>	d <sub>12</sub>	G <sub>wub</sub>
	inch	inch	inch	inch	inch	inch	inch	lbs
WSD105-L	1.594	3.780	1.339	0.059	+ 0.039	0.472	0.748	2.20
WSD108-L	3.169	7.244	2.835	0.098	+ 0.079	0.709	1.496	9.48
WSD110-L	3.169	7.362	2.697	0.118	+ 0.079	0.787	1.654	12.79
WSD112-L	4.350	9.961	3.858	0.138	+ 0.098	0.984	2.126	27.12
WSD114-L	4.350	10.197	3.819	0.157	+ 0.098	1.181	2.598	35.49
WSD117-L	5.531	12.638	4.961	0.197	+ 0.118	1.181	3.543	65.26
WSD120-L	5.512	12.913	4.882	0.236	+ 0.118	1.378	3.937	87.30
WSD123-L	6.693	15.354	5.945	0.276	+ 0.138	1.378	4.528	130.07
WSD126-L	6.693	15.748	5.748	0.276	+ 0.157	1.772	5.906	188.05
WSD140-L	7.224	17.323	6.181	0.295	+ 0.157	2.165	9.843	381.40

## Coupling with standard hub and brake drum

The intermediate ring can be replaced after shifting a shaft with fitted hub.

- Version with extended hub possible.
- Standard material of intermediate ring: Vkr.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

<b>D<sub>1</sub></b>	=	Outer diameter hub
<b>A</b>	=	Max. outer diameter
<b>SB</b>	=	Disc width
<b>T<sub>KN</sub></b>	=	Nom. transmissible torque
<b>T<sub>Kmax</sub></b>	=	Max. transmissible torque
<b>T<sub>BR</sub></b>	=	Brake torque
<b>n<sub>max</sub></b>	=	Max. rotation speed
<b>d<sub>1f max</sub></b>	=	Max. bore diameter d <sub>1f</sub> with keyway or other form closure connection
<b>d<sub>2f max</sub></b>	=	Max. bore diameter d <sub>2f</sub> with keyway or other form closure connection
<b>D<sub>2</sub></b>	=	Outer diameter hub
<b>C<sub>1</sub></b>	=	Guided length in hub boring
<b>C<sub>2</sub></b>	=	Guided length in hub boring d <sub>2</sub>
<b>C<sub>B</sub></b>	=	Brake disc distance



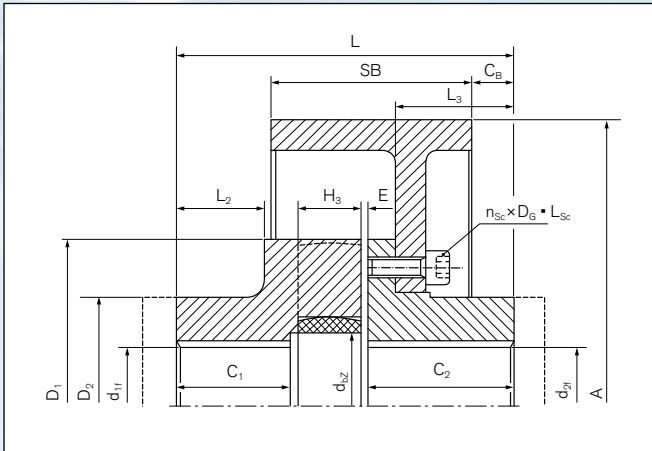
## Dimensions

Identifier	Size	D <sub>1</sub>	A	SB	T <sub>KN</sub>	T <sub>Kmax</sub>	T <sub>BR</sub>	n <sub>max</sub>	d <sub>1f max</sub>	d <sub>2f max</sub>	D <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>B</sub>
	D <sub>1</sub>													
	inch	inch	inch	inch	ft-lbs	ft-lbs	ft-lbs	rpm	inch	inch	inch	inch	inch	inch
WS0510-200	4.134	7.874	2.953	96	288	192	4200	1.890	1.654	2.953	1.949	1.949	0.551	
WS0512-200	4.961	7.874	2.953	184	553	229	4200	2.165	2.165	3.346	2.224	2.224	0.787	
WS0514-200	5.709	7.874	2.953	295	885	538	4200	2.559	2.559	3.740	2.402	2.402	0.827	
WS0514-250	5.709	9.843	3.740	295	885	538	3400	2.559	2.559	3.740	2.402	2.402	0.512	
WS0517-250	6.693	9.843	3.740	465	1,401	885	3400	3.346	3.346	4.724	2.953	2.953	1.063	
WS0517-315	6.693	12.402	4.646	465	1,401	996	2700	3.346	3.346	4.724	2.953	2.953	0.512	
WS0520-315	7.874	12.402	4.646	811	2,434	1,807	2700	3.740	3.740	5.315	3.898	3.898	1.496	
WS0520-400	7.874	15.748	5.906	811	2,434	1,955	2100	3.740	3.740	5.315	3.898	3.898	1.024	
WS0523-400	9.055	15.748	5.906	1,254	3,798	2,803	2100	4.134	4.134	5.906	4.331	4.331	1.417	
WS0523-500	9.055	19.685	7.480	1,254	3,798	2,803	1700	4.134	4.134	5.906	4.331	4.331	0.984	
WS0526-500	10.236	19.685	7.480	1,955	5,864	6,638	1700	4.921	4.921	7.087	4.429	4.429	0.984	
WS0530-630	11.811	24.803	9.291	2,877	8,630	7,744	1360	5.512	5.512	7.874	5.177	5.177	0.787	
WS0530-710	11.811	27.953	10.433	2,877	8,630	8,113	1200	5.512	5.512	7.874	5.177	5.177	0.000	
WS0536-630	14.173	24.803	9.291	4,794	14,383	19,177	1360	5.906	5.906	8.268	6.772	6.772	2.008	
WS0536-710	14.173	27.953	10.433	4,794	14,383	19,177	1200	5.906	5.906	8.268	6.772	6.772	1.339	
WS0540-710	15.748	27.953	10.433	6,564	19,693	25,815	1200	6.299	6.299	8.858	6.437	6.437	1.181	

## Ordering example: TSCHAN® S-BT

Identifier	d <sub>1f</sub>	d <sub>2f</sub>	Further details*)
WS0523-400	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- L** = Total length
- L<sub>2</sub>** = Length of the hub
- L<sub>3</sub>** = Section length of hub
- E** = Gap width between left and right component
- FE** = Tolerance of the gap width E
- H<sub>3</sub>** = Length of damping part
- d<sub>bz</sub>** = Inner diameter in the elastomeric spider
- n<sub>sc</sub>** = Quantity of screws
- D<sub>G</sub>** = Thread
- L<sub>sc</sub>** = Screw length
- F<sub>sc</sub>** = Screw strength class
- T<sub>A</sub>** = Max. tightened torque of the clamping screws
- GW<sub>ub</sub>** = Weight, unbores

## Dimensions

Identifier	L	L <sub>2</sub>	L <sub>3</sub>	E	FE	H <sub>3</sub>	d <sub>bz</sub>	Screws ISO 4762			F <sub>sc</sub>	T <sub>A</sub> <sup>1)</sup>	GW <sub>ub</sub>
								n <sub>sc</sub>	D <sub>G</sub>	L <sub>sc</sub>			
	inch	inch	inch	inch	inch	inch	inch	pcs.	mm	mm		ft-lbs	lbs
WS0510-200	4.921	1.476	1.555	0.118	+ 0.079	0.787	1.654	6	8	20	8.8	18	20.72
WS0512-200	5.709	1.732	1.791	0.138	+ 0.098	0.984	2.126	6	8	20	8.8	18	26.46
WS0514-200	6.299	1.870	1.909	0.157	+ 0.098	1.181	2.598	6	10	25	8.8	36	33.51
WS0514-250	6.299	1.870	1.909	0.157	+ 0.098	1.181	2.598	6	10	25	8.8	36	43.65
WS0517-250	7.480	2.382	2.441	0.197	+ 0.118	1.181	3.543	8	10	25	8.8	36	58.86
WS0517-315	7.480	2.382	2.441	0.197	+ 0.118	1.181	3.543	8	10	30	8.8	36	79.59
WS0520-315	9.646	3.130	3.307	0.236	+ 0.118	1.378	3.937	8	12	30	8.8	63	105.82
WS0520-400	9.646	3.130	3.307	0.236	+ 0.118	1.378	3.937	8	12	35	8.8	63	142.42
WS0523-400	10.630	3.484	3.661	0.276	+ 0.138	1.378	4.528	10	12	35	8.8	63	167.11
WS0523-500	10.630	3.484	3.661	0.276	+ 0.138	1.378	4.528	10	12	35	8.8	63	227.30
WS0526-500	11.220	3.484	3.583	0.276	+ 0.157	1.772	5.906	10	16	40	8.8	155	268.08
WS0530-630	12.992	4.232	4.350	0.276	+ 0.157	1.969	6.378	10	16	45	8.8	155	439.60
WS0530-710	12.992	4.232	4.350	0.276	+ 0.157	1.969	6.378	10	16	50	8.8	155	564.16
WS0536-630	16.417	5.512	5.669	0.315	+ 0.157	2.165	8.465	12	20	50	8.8	313	575.41
WS0536-710	16.417	5.512	5.669	0.315	+ 0.157	2.165	8.465	12	20	55	8.8	313	671.31
WS0540-710	15.748	5.394	5.551	0.295	+ 0.157	2.165	9.843	14	20	50	8.8	313	700.19

<sup>1)</sup> Maximum allowed break torque

## Coupling with detachable claw rings

Coupling with flange hub (SDD-5 short, SDDL-5 long), detachable claw rings and intermediate ring.

- Standard material of intermediate ring: Vkr.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

$D_1$	=	Outer diameter
$T_{KN}$	=	Nom. transmissible torque
$T_{Kmax}$	=	Max. transmissible torque
$n_{max}$	=	Max. rotation speed
$d_{1f max}$	=	Max. bore diameter $d_{1f}$ with keyway or other form closure connection
$d_{2f max}$	=	Max. bore diameter $d_{2f}$ with keyway or other form closure connection
$D_2$	=	Outer diameter hub
$C_1$	=	Guided length in hub boring
L	=	Total length
$L_2$	=	Length of the hub



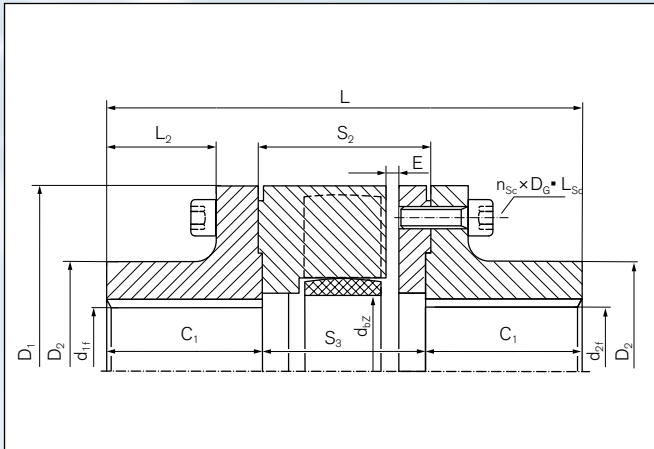
## Dimensions

Identifier	Size	$T_{KN}$	$T_{Kmax}$	$n_{max}$	$d_{1f max}$	$d_{2f max}$	$D_2$	$C_1$	L	$L_2$
	$D_1$									
	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch	inch	inch	inch
WS0710	4.134	96	288	7250	1.772	1.772	2.559	1.929	5.906	1.476
WS0712	4.961	184	553	6000	2.165	2.165	3.150	2.205	6.693	1.673
WS0714	5.709	295	885	5250	2.559	2.559	3.622	2.382	7.441	1.732
WS0717	6.693	465	1,401	4500	2.953	2.953	4.331	2.933	8.543	2.283
WS0720	7.874	811	2,434	3750	3.740	3.740	5.315	3.878	10.787	3.228
WS0723	9.055	1,254	3,798	3250	4.331	4.331	6.299	4.331	11.850	3.543
WS0726	10.236	1,955	5,864	3000	4.921	4.921	7.087	4.429	12.638	3.465
WS0730	11.811	2,877	8,630	2500	5.512	5.512	7.874	5.177	14.803	4.134
WS0736	14.173	4,794	14,383	2150	6.299	5.906	8.858	6.772	18.465	5.610
WS0740	15.748	6,564	19,693	1900	6.299	6.299	8.858	6.772	18.465	5.610

## Ordering example: TSCHAN® SDD-5

Identifier	$d_{1f}$	$d_{2f}$	Further details*)
WS0723	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- S<sub>2</sub>** = Distance between shaft ends
- F<sub>S2</sub>** = Tolerance of distance between the two hubs
- S<sub>3</sub>** = Distance inside between the hubs
- E** = Gap width between left and right component
- d<sub>bz</sub>** = Inner diameter elastomeric spider
- n<sub>Sc</sub>** = Quantity of screws
- D<sub>G</sub>** = Thread
- L<sub>Sc</sub>** = Screw length
- F<sub>Sc</sub>** = Screw strength class
- T<sub>A</sub>** = Max. tightened torque of the clamping screws
- GW<sub>ub</sub>** = Weight, unbored

## Dimensions

Identifier	S <sub>2</sub>	F <sub>S2</sub>	S <sub>3</sub>	E	d <sub>bz</sub>	n <sub>Sc</sub>	Screws ISO 4762		F <sub>Sc</sub>	T <sub>A</sub>	GW <sub>ub</sub>
							D <sub>G</sub>	L <sub>Sc</sub>			
							inch	mm			
WS0710	2.165	+ 0.079	2.047	0.197	1.654	9	8	20	8.8	18	11.68
WS0712	2.402	+ 0.098	2.283	0.197	2.126	9	10	25	8.8	36	19.40
WS0714	2.795	+ 0.098	2.677	0.197	2.598	9	12	30	8.8	63	29.32
WS0717	2.795	+ 0.118	2.677	0.197	3.543	12	12	30	8.8	63	43.87
WS0720	3.189	+ 0.118	3.031	0.236	3.937	12	14	30	8.8	100	77.82
WS0723	3.386	+ 0.138	3.189	0.276	4.528	15	14	35	8.8	100	115.74
WS0726	3.976	+ 0.157	3.780	0.315	5.906	15	16	40	8.8	155	157.63
WS0730	4.646	+ 0.157	4.449	0.315	6.378	15	20	50	8.8	313	240.30
WS0736	5.118	+ 0.157	4.921	0.315	8.465	12	24	55	8.8	538	396.39
WS0740	5.118	+ 0.157	4.921	0.315	9.843	14	24	55	8.8	538	435.85

## Coupling with detachable claw rings

Coupling with flange hub (SDD-5 short, SDDL-5 long), detachable claw rings and intermediate ring.

- Standard material of intermediate ring: Vkr.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

$D_1$	=	Outer diameter hub
$T_{KN}$	=	Nom. transmissible torque
$T_{Kmax}$	=	Max. transmissible torque
$n_{max}$	=	Max. rotation speed
$d_{1f max}$	=	Max. bore diameter $d_{1f}$ with keyway or other form closure connection
$d_{2f max}$	=	Max. bore diameter $d_{2f}$ with keyway or other form closure connection
$D_2$	=	Outer diameter hub
$C_1$	=	Guided length in hub boring
$L$	=	Total length
$L_2$	=	Length of the hub



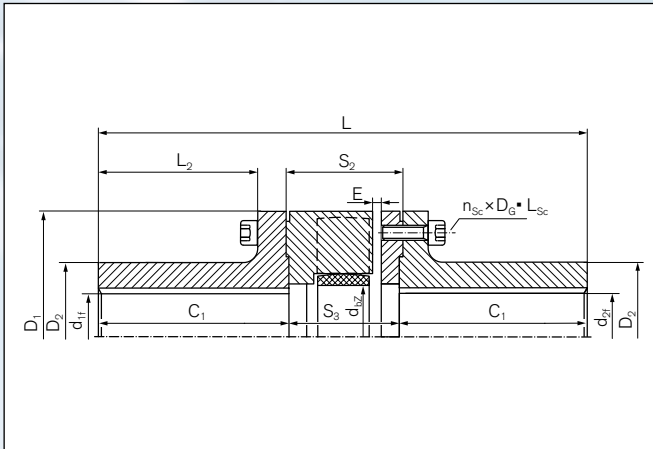
## Dimensions

Identifier	Size	$T_{KN}$	$T_{Kmax}$	$n_{max}$	$d_{1f max}$	$d_{2f max}$	$D_2$	$C_1$	$L$	$L_2$
	$D_1$									
	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch	inch	inch	inch
WS0710-L	4.134	96	288	7250	1.772	1.772	2.559	4.331	10.709	3.878
WS0712-L	4.961	184	553	6000	2.165	2.165	3.150	4.331	10.945	3.799
WS0714-L	5.709	295	885	5250	2.559	2.559	3.622	4.331	11.339	3.681
WS0717-L	6.693	465	1,394	4500	2.953	2.953	4.331	5.512	13.701	4.862
WS0720-L	7.874	811	2,434	3750	3.740	3.740	5.315	6.693	16.417	6.043
WS0723-L	9.055	1,254	3,798	3250	4.331	4.331	6.299	6.693	16.575	5.906
WS0726-L	10.236	1,955	5,864	3000	4.921	4.921	7.087	8.268	20.315	7.303
WS0730-L	11.811	2,877	8,630	2500	5.512	5.512	7.874	8.268	20.984	7.224
WS0736-L	14.173	4,794	14,383	2150	6.299	5.906	8.858	9.843	24.606	8.681
WS0740-L	15.748	6,564	19,693	1900	6.299	6.299	8.858	9.843	24.606	8.681

## Ordering example: TSCHAN® SDDL-5

Identifier	$d_{1f}$	$d_{2f}$	Further details*)
WS0726-L	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- S<sub>2</sub>** = Distance between shaft ends
- F<sub>S2</sub>** = Tolerance of distance between the two hubs
- S<sub>3</sub>** = Distance inside between the hubs
- E** = Gap width between left and right component
- d<sub>bz</sub>** = Inner diameter in the elastomeric spider
- n<sub>Sc</sub>** = Quantity of screws
- D<sub>G</sub>** = Thread
- L<sub>Sc</sub>** = Screw length
- F<sub>Sc</sub>** = Screw strength class
- T<sub>A</sub>** = Max. tightened torque of the clamping screws
- GW<sub>ub</sub>** = Weight, unbored

## Dimensions

Identifier	S <sub>2</sub>	F <sub>S2</sub>	S <sub>3</sub>	E	d <sub>bz</sub>	Screws ISO 4762			F <sub>Sc</sub>	T <sub>A</sub>	GW <sub>ub</sub>
						n <sub>Sc</sub>	D <sub>G</sub>	L <sub>Sc</sub>			
	inch	inch	inch	inch	inch	pcs.	mm	mm		ft-lbs	lbs
WS0710-L	2.165	+ 0.079	2.047	0.197	1.654	9	8	20	8.8	18	18.74
WS0712-L	2.402	+ 0.098	2.283	0.197	2.126	9	10	25	8.8	36	28.88
WS0714-L	2.795	+ 0.098	2.677	0.197	2.598	9	12	30	8.8	63	40.79
WS0717-L	2.795	+ 0.118	2.677	0.197	3.543	12	12	30	8.8	63	65.48
WS0720-L	3.189	+ 0.118	3.031	0.236	3.937	12	14	30	8.8	100	113.10
WS0723-L	3.386	+ 0.138	3.189	0.276	4.528	15	14	35	8.8	100	157.41
WS0726-L	3.976	+ 0.157	3.780	0.315	5.906	15	16	40	8.8	155	243.61
WS0730-L	4.646	+ 0.157	4.449	0.315	6.378	15	20	50	8.8	313	325.84
WS0736-L	5.118	+ 0.157	4.921	0.315	8.465	12	24	55	8.8	538	503.76
WS0740-L	5.118	+ 0.157	4.921	0.315	9.843	14	24	55	8.8	538	543.00

## Coupling with detachable claw rings

Couplings with flange hub, detachable claw rings, intermediate ring and solid brake disc.

- Standard material for intermediate ring: Vk60D.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

### Dimensions

- D<sub>1</sub>** = Outer diameter hub
- A** = Max. outer diameter
- SB** = Disc width
- T<sub>KN</sub>** = Nom. transmissible torque
- T<sub>Kmax</sub>** = Max. transmissible torque
- n<sub>max</sub>** = Max. rotation speed
- d<sub>1f max</sub>** = Max. bore diameter d<sub>1f</sub> with keyway or other form closure connection
- d<sub>2f max</sub>** = Max. bore diameter d<sub>2f</sub> with keyway or other form closure connection
- D<sub>2</sub>** = Outer diameter hub
- C<sub>1</sub>** = Guided length in hub boring
- C<sub>2</sub>** = Guided length in hub boring d<sub>2</sub>
- C<sub>B</sub>** = Brake disc distance
- L** = Total length
- L<sub>2</sub>** = Length of the hub



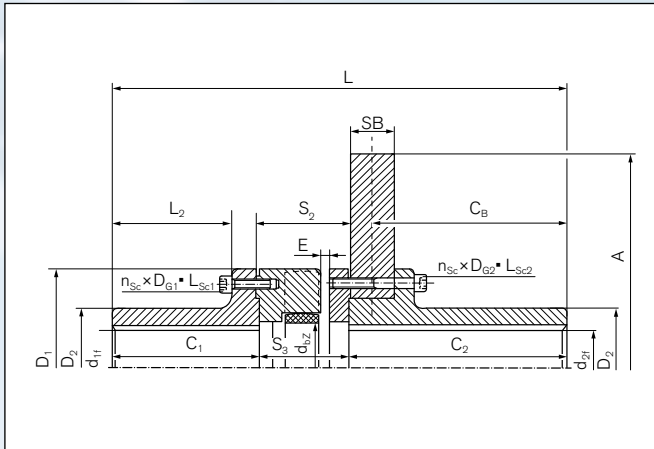
### Dimensions

Identifier	Size													
	D <sub>1</sub>	A	SB	T <sub>KN</sub>	T <sub>Kmax</sub>	n <sub>max</sub>	d <sub>1f max</sub>	d <sub>2f max</sub>	D <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>B</sub>	L	L <sub>2</sub>
	inch	inch	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch	inch	inch	inch	inch	inch
WS5114-0355-30	5.709	13.976	1.181	443	1,328	4800	2.559	2.559	3.622	4.331	6.555	5.906	13.563	3.681
WS5114-0400-30	5.709	15.748	1.181	443	1,328	4300	2.559	2.559	3.622	4.331	6.555	5.906	13.563	3.681
WS5117-0400-30	6.693	15.748	1.181	701	2,102	4300	2.953	2.953	4.331	5.512	6.555	5.906	14.744	4.862
WS5117-0450-30	6.693	17.717	1.181	701	2,102	3750	2.953	2.953	4.331	5.512	6.555	5.906	14.744	4.862
WS5117-0500-30	6.693	19.685	1.181	701	2,102	3400	2.953	2.953	4.331	5.512	6.555	5.906	14.744	4.862
WS5120-0450-30	7.874	17.717	1.181	1,217	3,651	3750	3.740	3.740	5.315	6.693	8.150	7.480	17.874	6.043
WS5120-0560-30	7.874	19.685	1.181	1,217	3,651	3400	3.740	3.740	5.315	6.693	8.150	7.480	17.874	6.043
WS5120-0450-30	7.874	22.047	1.181	1,217	3,651	3000	3.740	3.740	5.315	6.693	8.150	7.480	17.874	6.043
WS5123-0500-30	9.055	19.685	1.181	1,903	5,709	3250	4.331	4.331	6.299	6.693	8.169	7.480	18.051	5.906
WS5123-0560-30	9.055	22.047	1.181	1,903	5,709	3000	4.331	4.331	6.299	6.693	8.169	7.480	18.051	5.906
WS5123-0630-30	9.055	24.803	1.181	1,903	5,709	2700	4.331	4.331	6.299	6.693	8.169	7.480	18.051	5.906
WS5123-0710-30	9.055	27.953	1.181	1,903	5,709	2400	4.331	4.331	6.299	6.693	8.169	7.480	18.051	5.906

### Ordering example: TSCHAN® SDDL-5-BS

Identifier	d <sub>1f</sub>	d <sub>2f</sub>	Further details*)
WS5120-0450-30	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- S<sub>2</sub>** = Distance between shaft ends
- FS<sub>2</sub>** = Tolerance of distance between the two hubs
- S<sub>3</sub>** = Distance inside between the hubs
- E** = Gap width between left and right component
- d<sub>bz</sub>** = Inner diameter in the elastomeric spider
- n<sub>sc</sub>** = Quantity of screws
- D<sub>G1</sub>** = Thread diameter
- L<sub>sc1</sub>** = Length of screw D<sub>G1</sub>
- D<sub>G2</sub>** = Thread diameter
- L<sub>sc2</sub>** = Length of screw D<sub>G2</sub>
- F<sub>sc</sub>** = Screw strength class
- T<sub>A</sub>** = Max. tightened torque of the clamping screws
- GW<sub>ub</sub>** = Weight, unbored

## Dimensions

Identifier	S <sub>2</sub>	FS <sub>2</sub>	S <sub>3</sub>	E	d <sub>bz</sub>	n <sub>sc</sub>	D <sub>G1</sub>	L <sub>sc1</sub>	D <sub>G2</sub>	L <sub>sc2</sub>	Screws ISO 4762		
											F <sub>sc</sub>	T <sub>A</sub>	GW <sub>ub</sub>
	inch	inch	inch	inch	inch	pcs.	mmmm	mm	mm	mm		ft-lbs	lbs
WS5114-0355-30	2.795	+ 0.098	2.677	0.197	1.654	9	12	30	12	60	8.8	63	94.80
WS5114-0400-30	2.795	+ 0.098	2.677	0.197	1.654	9	12	30	12	60	8.8	63	108.69
WS5117-0400-30	2.795	+ 0.118	2.677	0.197	2.126	12	12	30	12	70	8.8	63	132.06
WS5117-0450-30	2.795	+ 0.118	2.677	0.197	2.126	12	12	30	12	70	8.8	63	149.25
WS5117-0500-30	2.795	+ 0.118	2.677	0.197	2.126	12	12	30	12	70	8.8	63	168.65
WS5120-0450-30	3.189	+ 0.118	3.031	0.236	2.598	12	14	30	14	60	8.8	100	132.06
WS5120-0560-30	3.189	+ 0.118	3.031	0.236	2.598	12	14	30	14	60	8.8	100	216.27
WS5120-0450-30	3.189	+ 0.118	3.031	0.236	2.598	12	14	30	14	60	8.8	100	242.29
WS5123-0500-30	3.386	+ 0.138	3.189	0.276	3.543	15	14	35	14	65	8.8	100	261.47
WS5123-0560-30	3.386	+ 0.138	3.189	0.276	3.543	15	14	35	14	65	8.8	100	287.26
WS5123-0630-30	3.386	+ 0.138	3.189	0.276	3.543	15	14	35	14	65	8.8	100	321.43
WS5123-0710-30	3.386	+ 0.138	3.189	0.276	3.543	15	14	35	14	65	8.8	100	365.09

To continue see next page

## Coupling with detachable claw rings

Couplings with flange hub, detachable claw rings, intermediate ring and solid brake disc.

- Standard material for intermediate ring: Vk60D.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

### Dimensions

- D<sub>1</sub>** = Outer diameter hub
- A** = Max. outer diameter
- SB** = Disc width
- T<sub>KN</sub>** = Nom. transmissible torque
- T<sub>Kmax</sub>** = Max. transmissible torque
- n<sub>max</sub>** = Max. rotation speed
- d<sub>1f max</sub>** = Max. bore diameter d<sub>1f</sub> with keyway or other form closure connection
- d<sub>2f max</sub>** = Max. bore diameter d<sub>2f</sub> with keyway or other form closure connection
- D<sub>2</sub>** = Outer diameter hub
- C<sub>1</sub>** = Guided length in hub boring
- C<sub>2</sub>** = Guided length in hub boring d<sub>2</sub>
- C<sub>B</sub>** = Brake disc distance
- L** = Total length
- L<sub>2</sub>** = Length of the hub



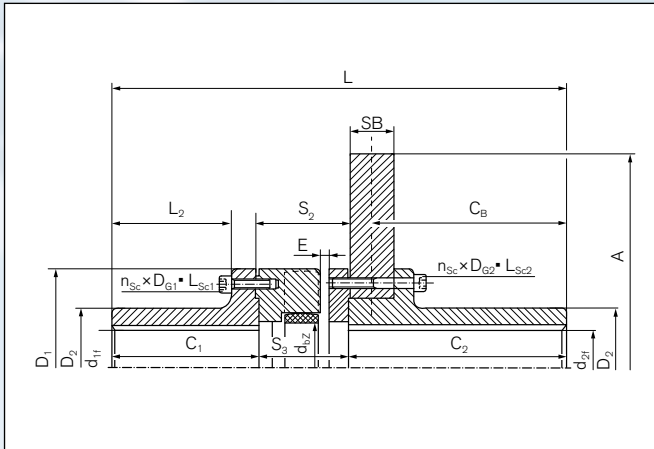
### Dimensions

Identifier	Size		SB	T <sub>KN</sub>	T <sub>Kmax</sub>	n <sub>max</sub>	d <sub>1f max</sub>	d <sub>2f max</sub>	D <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>B</sub>	L	L <sub>2</sub>
	D <sub>1</sub>	A												
	inch	inch	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch	inch	inch	inch	inch	inch
WS5126-0630-30	10.236	24.803	1.181	2,943	8,807	2700	4.921	4.921	7.087	8.268	8.366	7.677	20.413	7.303
WS5126-0710-30	10.236	27.953	1.181	2,943	8,807	2400	4.921	4.921	7.087	8.268	8.366	7.677	20.413	7.303
WS5130-0710-30	11.811	27.953	1.181	4,315	12,944	2400	5.512	5.512	7.874	8.268	8.366	7.677	21.083	7.224
WS5130-0800-30	11.811	31.496	1.181	4,315	12,944	2150	5.512	5.512	7.874	8.268	8.366	7.677	21.083	7.224
WS5130-0800-40	11.811	31.496	1.575	4,315	12,944	2150	5.512	5.512	7.874	8.268	8.366	7.480	21.083	7.224
WS5136-0800-30	14.173	31.496	1.181	7,154	21,463	2150	6.299	6.299	8.858	9.843	9.941	9.252	24.705	8.681
WS5136-0800-40	14.173	31.496	1.575	7,154	21,463	2150	6.299	6.299	8.858	9.843	9.941	9.055	24.705	8.681
WS5136-1000-40	14.173	39.370	1.575	7,154	21,463	1700	6.299	6.299	8.858	9.843	9.941	9.055	24.705	8.681
WS5140-0800-30	15.748	31.496	1.181	9,847	29,540	1900	6.299	6.299	8.858	9.843	9.941	9.252	24.705	8.681
WS5140-0800-40	15.748	31.496	1.575	9,847	29,540	1900	6.299	6.299	8.858	9.843	9.941	9.055	24.705	8.681
WS5140-1000-40	15.748	39.370	1.575	9,847	29,540	1700	6.299	6.299	8.858	9.843	9.941	9.055	24.705	8.681

### Ordering example: TSCHAN® SDDL-5-BS

Identifier	d <sub>1f</sub>	d <sub>2f</sub>	Further details*)
WS5136-0800-40	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- S<sub>2</sub>** = Distance between shaft ends
- FS<sub>2</sub>** = Tolerance of distance between the two hubs
- S<sub>3</sub>** = Distance inside between the hubs
- E** = Gap width between left and right component
- dbz** = Inner diameter in the elastomeric spider
- n<sub>Sc</sub>** = Quantity of screws
- D<sub>G1</sub>** = Thread diameter
- L<sub>Sc1</sub>** = Length of screw D<sub>G1</sub>
- D<sub>G2</sub>** = Thread diameter
- L<sub>Sc2</sub>** = Length of screw D<sub>G2</sub>
- F<sub>Sc</sub>** = Screw strength class
- T<sub>A</sub>** = Max. tightened torque of the clamping screws
- GW<sub>ub</sub>** = Weight, unbored

## Dimensions

Identifier	S <sub>2</sub>	FS <sub>2</sub>	S <sub>3</sub>	E	dbz	n <sub>Sc</sub>	D <sub>G1</sub>	L <sub>Sc1</sub>	D <sub>G2</sub>	L <sub>Sc2</sub>	Screws ISO 4762		
											F <sub>Sc</sub>	T <sub>A</sub>	GW <sub>ub</sub>
	inch	inch	inch	inch	inch	pcs.	mmmm	mm	mm	mm		ft-lbs	lbs
WSS126-0630-30	3.976	+ 0.157	3.780	0.315	5.906	15	16	40	16	70	8.8	155	392.64
WSS126-0710-30	3.976	+ 0.157	3.780	0.315	5.906	15	16	40	16	70	8.8	155	436.52
WSS130-0710-30	4.646	+ 0.157	4.449	0.315	6.378	15	20	50	20	80	8.8	313	515.22
WSS130-0800-30	4.646	+ 0.157	4.449	0.315	6.378	15	20	50	20	80	8.8	313	570.56
WSS130-0800-40	4.646	+ 0.157	4.449	0.315	6.378	15	20	50	20	90	8.8	313	651.91
WSS136-0800-30	5.118	+ 0.157	4.921	0.315	8.465	12	24	55	24	85	8.8	538	744.50
WSS136-0800-40	5.118	+ 0.157	4.921	0.315	8.465	12	24	55	24	95	8.8	538	824.53
WSS136-1000-40	5.118	+ 0.157	4.921	0.315	8.465	12	24	55	24	95	8.8	538	1,020.08
WSS140-0800-30	5.118	+ 0.157	4.921	0.315	9.843	14	24	55	24	85	8.8	538	783.74
WSS140-0800-40	5.118	+ 0.157	4.921	0.315	9.843	14	24	55	24	95	8.8	538	863.77
WSS140-1000-40	5.118	+ 0.157	4.921	0.315	9.843	14	24	55	24	95	8.8	538	1,059.32

### Coupling with detachable claw rings

Couplings with flange hub, detachable claw rings, intermediate ring and solid brake disc.

- SDDL-5-BSP with solid brake disc on request.
- Standard material for intermediate ring: Vk60D.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

#### Dimensions

- D<sub>1</sub>** = Outer diameter hub
- A** = Max. outer diameter
- SB** = Disc width
- T<sub>KN</sub>** = Nom. transmissible torque
- T<sub>Kmax</sub>** = Max. transmissible torque
- n<sub>max</sub>** = Max. rotation speed
- d<sub>1f max</sub>** = Max. bore diameter d<sub>1f</sub> with keyway or other form closure connection
- d<sub>2f max</sub>** = Max. bore diameter d<sub>2f</sub> with keyway or other form closure connection
- D<sub>2</sub>** = Outer diameter hub
- D<sub>3</sub>** = Outer diameter hub
- D<sub>4</sub>** = Outer diameter hub
- C<sub>1</sub>** = Guided length in hub boring
- C<sub>2</sub>** = Guided length in hub boring d<sub>2</sub>
- C<sub>B</sub>** = Brake disc distance
- L** = Total length
- L<sub>2</sub>** = Length of the hub



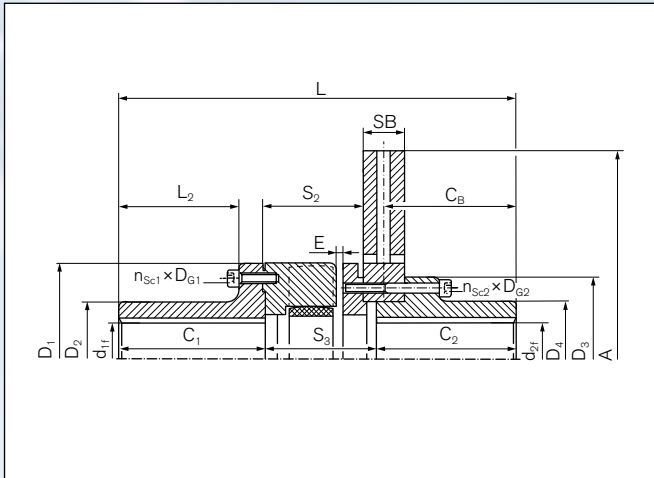
#### Dimensions

Identifier	Size		SB	T <sub>KN</sub>	T <sub>Kmax</sub>	n <sub>max</sub>	d <sub>1f max</sub>	d <sub>2f max</sub>	D <sub>2</sub>	D <sub>3</sub>	D <sub>4</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>B</sub>	L	L <sub>2</sub>
	D <sub>1</sub>	A														
	inch	inch	inch	ft-lbs	ft-lbs	rpm	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch
WS5212-0315V30	4.961	12.402	1.181	273	811	3000	2.165	2.165	3.150	4.921	3.150	4.331	4.213	4.016	11.280	3.799
WS5214-0315V30	5.709	12.402	1.181	443	1,328	3000	2.559	2.165	3.622	4.921	3.150	4.331	4.213	4.016	11.732	3.681
WS5214-0355V30	5.709	13.976	1.181	443	1,328	2700	2.559	2.559	3.622	5.709	3.740	4.331	4.213	4.016	11.732	3.681
WS5217-0400V30	6.693	15.551	1.181	701	2,102	2400	2.953	2.953	4.331	6.496	4.134	5.512	4.213	4.016	13.051	4.862
WS5217-0450V30	6.693	17.520	1.181	701	2,102	2100	2.953	2.953	4.331	6.890	4.331	5.512	5.512	5.315	14.350	4.862
WS5223-0500V30	9.055	19.488	1.181	1,903	5,709	1800	4.331	4.134	6.299	8.661	5.906	6.693	5.512	5.315	16.240	5.906
WS5223-0550V30	9.055	21.654	1.181	1,903	5,709	1800	4.331	4.134	6.299	8.661	5.906	6.693	5.512	5.315	16.240	5.906
WS5226-0550V30	10.236	21.654	1.181	2,936	8,807	1800	4.921	4.134	7.087	8.661	5.906	8.268	5.512	5.315	18.465	7.303
WS5226-0630V30	10.236	24.606	1.181	2,936	8,807	1500	4.921	4.134	7.087	9.252	5.906	8.268	5.512	5.315	18.465	7.303
WS5226-0710V30	10.236	27.756	1.181	2,936	8,807	1300	4.921	4.921	7.087	10.433	7.087	8.268	5.512	5.315	18.465	7.303
WS5230-0630V42	11.811	24.606	1.654	4,315	12,944	1400	5.512	5.906	7.874	11.811	8.268	8.268	5.512	5.551	19.370	7.224
WS5230-0710V30	11.811	27.756	1.181	4,315	12,944	1300	5.512	4.921	7.874	10.433	7.087	8.268	5.512	5.315	18.898	7.224
WS5230-0800V30	11.811	31.299	1.181	4,315	12,944	1200	5.512	5.906	7.874	11.811	8.268	8.268	5.512	5.315	18.898	7.224
WS5236-0630V42	14.173	24.606	1.654	7,154	21,463	1400	6.299	5.906	8.858	11.811	8.268	9.843	5.512	5.551	21.279	8.681
WS5236-0800V30	14.173	31.299	1.181	7,154	21,463	1200	6.299	5.906	8.858	11.811	8.268	9.843	5.512	5.315	20.807	8.681
WS5240-0800V42	15.748	31.299	1.654	9,847	29,540	1000	6.299	7.283	8.858	14.961	10.236	9.843	7.087	7.126	23.169	8.681
WS5240-1000V42	15.748	39.173	1.654	9,847	29,540	900	6.299	7.283	8.858	14.961	10.236	9.843	7.087	7.126	23.169	8.681

#### Ordering example: TSCHAN® SDDL-5-BSV

Identifier	d <sub>1f</sub>	d <sub>2f</sub>	Further details*)
WS5226-0630V30	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



## Dimensions

- S<sub>2</sub>** = Distance between shaft ends
- F<sub>S2</sub>** = Tolerance of distance between the two hubs
- S<sub>3</sub>** = Distance inside between the hubs
- E** = Gap width between left and right component
- d<sub>bZ</sub>** = Inner diameter in the elastomeric spider
- n<sub>Sc1</sub>** = Quantity of clamping screws (D<sub>G1</sub>)
- D<sub>G1</sub>** = Thread diameter
- L<sub>Sc1</sub>** = Length of screw D<sub>G1</sub>
- T<sub>A1</sub>** = Tightened torque of clamping screw (G1)
- n<sub>Sc2</sub>** = Quantity of clamping screws (D<sub>G2</sub>)
- D<sub>G2</sub>** = Thread diameter
- L<sub>Sc2</sub>** = Length of screw D<sub>G2</sub>
- T<sub>A2</sub>** = Tightened torque of clamping screw (G2)
- F<sub>Sc</sub>** = Screw strength class
- GW<sub>ub</sub>** = Weight, unbored

## Sectional view

## Dimensions

Identifier	S <sub>2</sub>	F <sub>S2</sub>	S <sub>3</sub>	E	d <sub>bZ</sub>	n <sub>Sc1</sub>	Screws ISO 4762								F <sub>Sc</sub>	GW <sub>ub</sub>
							D <sub>G1</sub>	L <sub>Sc1</sub>	T <sub>A1</sub>	n <sub>Sc2</sub>	D <sub>G2</sub>	L <sub>Sc2</sub>	T <sub>A2</sub>			
							mm	mm	ft-lbs	pcs.	mm	mm	ft-lbs			
	inch	inch	inch	inch	inch	pcs.	mm	mm	ft-lbs	pcs.	mm	mm	ft-lbs		lbs	
WS5212-0315V30	2.402	+ 0.098	2.736	0.197	2.126	9	10	25	36.141	9	10	70	36.141	8.8	52.91	
WS5214-0315V30	2.854	+ 0.098	3.189	0.197	2.598	9	12	30	62.693	9	10	70	36.141	8.8	60.85	
WS5214-0355V30	2.854	+ 0.098	3.189	0.197	2.598	9	12	30	62.693	9	12	75	62.693	8.8	70.55	
WS5217-0400V30	2.992	+ 0.118	3.327	0.197	3.543	12	12	30	62.693	9	14	75	99.572	8.8	98.33	
WS5217-0450V30	2.992	+ 0.118	3.327	0.197	3.543	12	12	30	62.693	12	16	80	154.890	8.8	113.54	
WS5223-0500V30	3.740	+ 0.138	4.035	0.276	4.528	15	14	35	99.572	12	18	90	221.271	8.8	205.03	
WS5223-0550V30	3.740	+ 0.138	4.035	0.276	4.528	15	14	35	99.572	12	18	90	221.271	8.8	218.26	
WS5226-0550V30	4.390	+ 0.157	4.685	0.315	5.906	15	16	40	154.890	12	18	90	221.271	8.8	267.86	
WS5226-0630V30	4.390	+ 0.157	4.685	0.315	5.906	15	16	40	154.890	12	20	95	313.467	8.8	299.39	
WS5226-0710V30	4.390	+ 0.157	4.685	0.315	5.906	15	16	40	154.890	12	22	100	427.791	8.8	350.09	
WS5230-0630V42	4.823	+ 0.157	5.591	0.315	6.378	15	20	50	313.467	12	24	110	538.426	8.8	409.62	
WS5230-0710V30	4.823	+ 0.157	5.118	0.315	6.378	15	20	50	313.467	12	22	100	427.791	8.8	399.04	
WS5230-0800V30	4.823	+ 0.157	5.118	0.315	6.378	15	20	50	313.467	12	24	100	538.426	8.8	464.96	
WS5236-0630V42	5.157	+ 0.157	5.925	0.315	8.465	12	24	55	538.426	12	24	110	538.426	8.8	510.59	
WS5236-0800V30	5.157	+ 0.157	5.453	0.315	8.465	12	24	55	538.426	12	24	100	538.426	8.8	565.93	
WS5240-0800V42	5.472	+ 0.157	6.240	0.315	9.843	14	24	55	538.426	12	30	120	1,069.477	8.8	720.91	
WS5240-1000V42	5.472	+ 0.157	6.240	0.315	9.843	14	24	55	538.426	12	30	120	1,069.477	8.8	941.37	

## Coupling with standard hub and claw flange

The intermediate ring can be replaced after shifting a shaft with fitted hub.

- Standard material for intermediate ring: Pb82.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

$D_1$	=	Outer diameter hub
$T_{KNPb82}$	=	Coupling nominal torque using element Pb82
$T_{Kmax}$	=	Max. transmissible torque
$n_{max}$	=	Max. rotation speed
$d_{1f max}$	=	Max. bore diameter $d_{1f}$ with keyway or other form closure connection
$A$	=	Max. outer diameter
$d_F$	=	Center diameter
$d_{bZ}$	=	Inner diameter in the elastomeric spider
$D_2$	=	Outer diameter hub
$D_{PC7}$	=	Pitch circle diameter of bore holes $d_7$



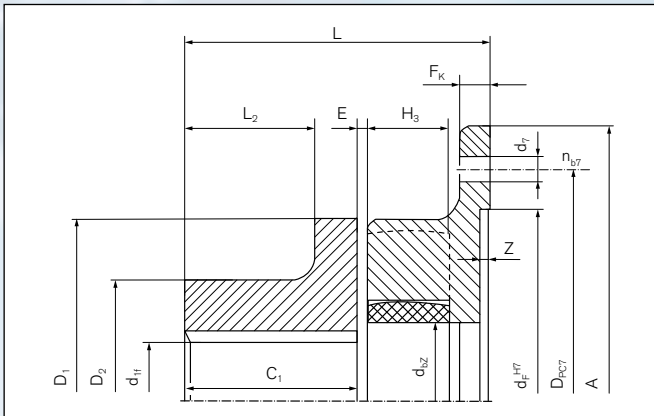
## Dimensions

Identifier	Size	$T_{KNPb82}$	$T_{Kmax}$	$n_{max}$	$d_{1f max}$	A	$d_F$	$d_{bZ}$	$D_2$	$D_{PC7}$
	$D_1$									
	inch	$T_{KNPb82}$	ft-lbs	rpm	inch	inch		inch	inch	inch
WS1010	4.134	52	155	7250	1.890	5.709	3.937	1.654	2.953	5.039
WS1012	4.961	94	284	6000	2.165	6.693	5.118	2.126	3.346	5.827
WS1014	5.709	162	487	5250	2.559	7.638	5.906	2.598	3.740	6.772
WS1017	6.693	251	752	4500	3.346	8.661	6.693	3.543	4.724	7.677
WS1020	7.874	435	1,305	3750	3.740	9.843	7.677	3.937	5.315	8.976
WS1023	9.055	664	1,991	3250	4.134	11.417	8.661	4.528	5.906	10.433
WS1026	10.236	1,033	3,098	3000	4.921	13.189	10.433	5.906	7.087	12.205
WS1030	11.811	1,542	4,625	2500	5.512	15.157	12.402	6.378	7.874	14.173
WS1036-0650	14.173	2,545	7,634	2150	5.906	17.913	14.173	8.465	8.268	16.535
WS1036-0750	14.173	2,545	7,634	2150	5.906	20.236	16.535	8.465	8.268	18.898
WS1040	15.748	3,503	10,510	1900	6.299	20.236	16.535	9.843	8.858	18.898
WS1040-0866	15.748	3,503	10,510	1900	6.299	23.425	19.094	9.843	8.858	21.850
WS1040-1000	15.748	3,503	10,510	1900	6.299	27.165	22.835	9.843	8.858	25.591
WS1040-L	15.748	3,503	10,510	1900	6.299	20.236	16.535	9.843	8.858	18.898
WS1040-L-0866	15.748	3,503	10,510	1900	6.299	23.425	19.094	9.843	8.858	21.850
WS1040-L-1000	15.748	3,503	10,510	1900	6.299	27.165	22.835	9.843	8.858	25.591
WS1040-L-1150	15.748	3,503	10,510	1900	6.299	35.039	30.315	9.843	8.858	33.071
WS1040-L-1150	15.748	3,503	10,510	1900	6.299	35.039	30.315	9.843	8.858	33.071

## Ordering example: TSCHAN® SX

Identifier	$d_{1f}$	$d_{2f}$	Further details*)
WS1036-0750	75	70	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- d<sub>7</sub>** = Bore diameter
- n<sub>b7</sub>** = Quantity of bore d<sub>7</sub>
- C<sub>1</sub>** = Guided length in hub boring
- F<sub>K</sub>** = Flange thickness
- H<sub>3</sub>** = Length of damping part
- L** = Total length
- L<sub>2</sub>** = Length of the hub
- E** = Gap width between left and right component
- Z** = Depth of center value
- GW<sub>ub</sub>** = Weight, unbores

## Dimensions

Identifier	d <sub>7</sub>	n <sub>b7</sub>	C <sub>1</sub>	F <sub>K</sub>	H <sub>3</sub>	L	L <sub>2</sub>	E	Z	GW <sub>ub</sub>
	inch	pcs.	inch	inch	inch	inch	inch	inch	inch	lbs
WS1010	0.354	6	1.949	0.394	0.787	3.327	1.476	0.118	0.079	6.39
WS1012	0.354	6	2.224	0.394	0.984	3.819	1.732	0.138	0.079	9.92
WS1014	0.354	6	2.402	0.472	1.181	4.291	1.870	0.157	0.157	14.11
WS1017	0.531	6	2.953	0.551	1.181	4.980	2.382	0.197	0.157	22.93
WS1020	0.531	8	3.898	0.551	1.378	6.161	3.130	0.236	0.157	38.58
WS1023	0.531	8	4.331	0.551	1.378	6.732	3.484	0.276	0.157	53.79
WS1026	0.531	12	4.429	0.709	1.772	7.402	3.484	0.276	0.157	79.15
WS1030	0.531	16	5.177	0.945	1.969	8.602	4.232	0.276	0.157	117.29
WS1036-0650	0.689	16	6.772	1.102	2.165	10.689	5.512	0.315	0.197	186.07
WS1036-0750	0.689	20	6.772	1.181	2.165	10.768	5.512	0.315	0.197	186.07
WS1040	0.689	20	6.437	1.181	2.165	10.433	5.394	0.295	0.197	208.56
WS1040-0866	0.866	12	6.437	1.181	2.165	10.433	5.394	0.295	0.236	218.70
WS1040-1000	0.866	16	6.437	1.181	2.165	10.551	5.394	0.295	0.236	232.81
WS1040-L	0.689	20	7.224	1.181	2.165	11.220	6.181	0.295	0.197	222.45
WS1040-L-0866	0.866	12	7.224	1.181	2.165	11.220	6.181	0.295	0.236	232.59
WS1040-L-1000	0.866	16	7.224	1.181	2.165	11.339	6.181	0.295	0.236	246.70
WS1040-L-1150	1.181	16	7.224	1.063	2.165	11.102	6.181	0.295	0.236	306.88
WS1040-L-1150	1.181	16	6.437	1.063	2.165	10.315	5.394	0.295	0.236	292.99

## Coupling with inner hub and claw flange

The intermediate ring can be replaced after shifting a shaft with fitted hub.

- Standard material for intermediate ring: Pb82.
- Installed size L must be maintained without fail. Axial displacement must be taken into account through allowances for value L.

## Dimensions

<b>D<sub>1</sub></b>	=	Outer diameter hub
<b>T<sub>KNPb82</sub></b>	=	Coupling nominal torque using element Pb82
<b>T<sub>Kmax</sub></b>	=	Max. transmissible torque
<b>n<sub>max</sub></b>	=	Max. rotation speed
<b>d<sub>1f max</sub></b>	=	Max. bore diameter d <sub>1f</sub> with keyway or other form closure connection
<b>A</b>	=	Max. outer diameter
<b>d<sub>F</sub></b>	=	Center diameter
<b>D<sub>2</sub></b>	=	Outer diameter hub
<b>D<sub>PC7</sub></b>	=	Pitch circle diameter of bore holes d <sub>7</sub>



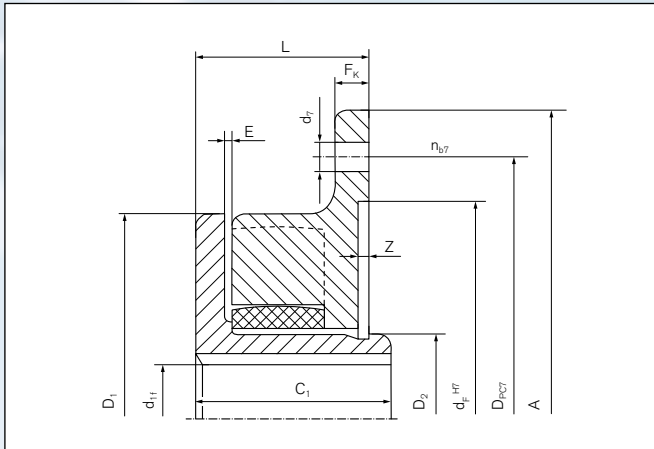
## Dimensions

Identifier	Size	T <sub>KNPb82</sub>	T <sub>Kmax</sub>	n <sub>max</sub>	d <sub>1f max</sub>	A	d <sub>F</sub>	D <sub>2</sub>	D <sub>PC7</sub>
	D <sub>1</sub>								
	inch	ft-lbs		rpm	inch	inch		inch	inch
WS1410	4.134	52	155	7250	1.063	5.709	3.937	1.496	5.039
WS1412	4.961	94	284	6000	1.339	6.693	5.118	1.890	5.827
WS1414	5.709	162	487	5250	1.654	7.638	5.906	2.362	6.772
WS1417	6.693	251	752	4500	2.283	8.661	6.693	3.228	7.677
WS1420	7.874	435	1,305	3750	2.559	9.843	7.677	3.740	8.976
WS1423	9.055	664	1,991	3250	2.756	11.417	8.661	4.016	10.433
WS1426	10.236	1,033	3,098	3000	3.543	13.189	10.433	5.118	12.205
WS1430	11.811	1,542	4,625	2500	4.134	15.157	12.402	5.787	14.173
WS1436-0650	14.173	2,545	7,634	2150	5.512	17.913	14.173	8.268	16.535
WS1436-0750	14.173	2,545	7,634	2150	5.512	20.236	16.535	8.268	18.898
WS1440	15.748	3,503	10,510	1900	6.299	20.236	16.535	9.055	18.898
WS1440-0866	15.748	3,503	10,510	1900	6.299	23.425	19.094	9.055	21.850
WS1440-1000	15.748	3,503	10,510	1900	6.299	27.165	22.835	9.055	25.591
WS1440-1150	15.748	3,526	10,510	1900	6.299	35.039	30.315	9.055	33.071

## Ordering example: TSCHAN® SV

Identifier	d <sub>1f</sub>	d <sub>2f</sub>	Further details*)
WS1436-0750	2.953	2.756	*

\*) Without any other specification, we deliver as a standard: with set screws and keyway acc. to DIN 6885-1, keyway side fit P9, bore tolerance H7



Sectional view

## Dimensions

- d<sub>7</sub>** = Bore diameter
- n<sub>b7</sub>** = Quantity of bore d<sub>7</sub>
- C<sub>1</sub>** = Guided length in hub boring
- F<sub>K</sub>** = Flange thickness
- L** = Total length
- E** = Gap width between left and right component
- Z** = Depth of center value
- GW<sub>ub</sub>** = Weight, unbored

## Dimensions

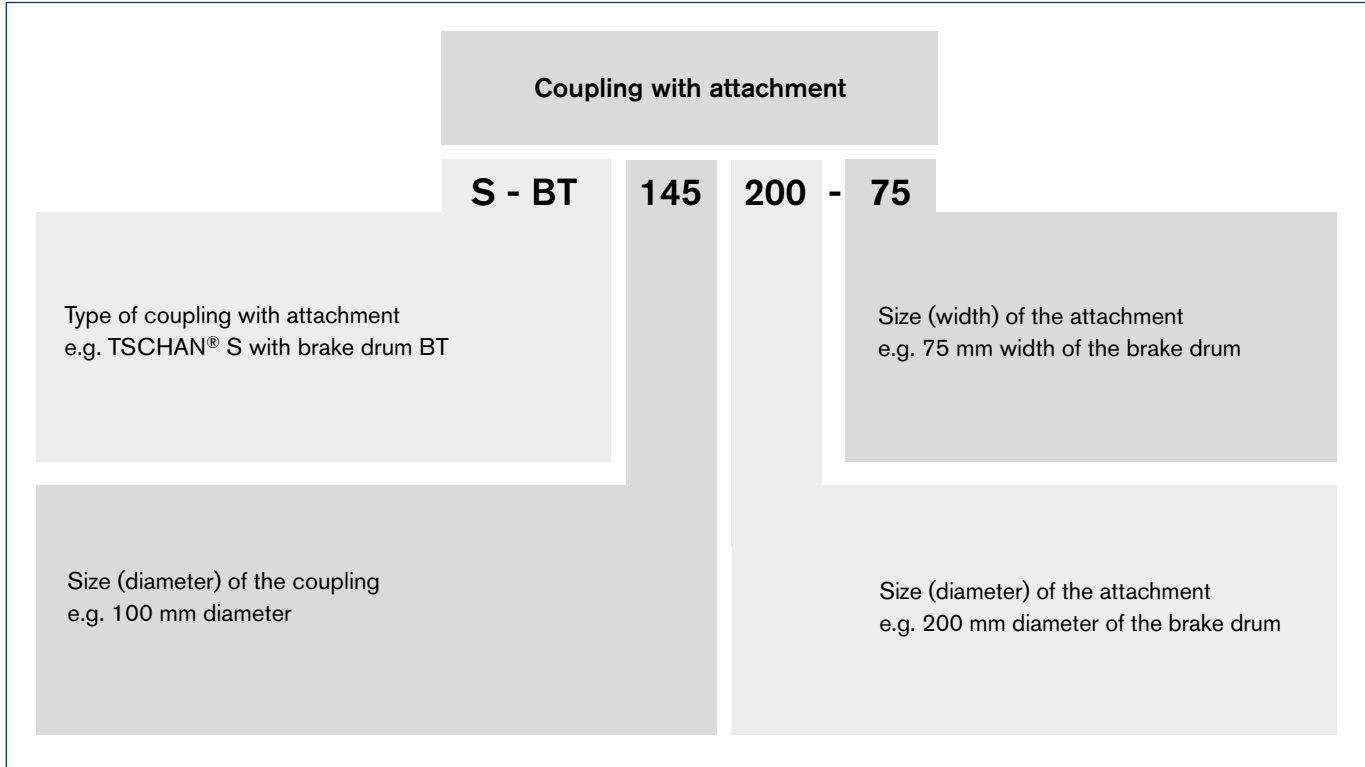
Identifier	d <sub>7</sub>	n <sub>b7</sub>	C <sub>1</sub>	F <sub>K</sub>	L	E	Z	GW <sub>ub</sub>
	inch	pcs.	inch	inch	inch	inch	inch	lbs
WS1410	0.354	6	1.969	0.394	1.654	0.079	0.079	3.75
WS1412	0.354	6	2.244	0.394	1.850	0.079	0.079	6.17
WS1414	0.354	6	2.559	0.472	2.165	0.079	0.157	9.48
WS1417	0.531	6	2.953	0.551	2.362	0.098	0.157	14.99
WS1420	0.531	8	3.346	0.551	2.559	0.098	0.157	22.93
WS1423	0.531	8	3.543	0.551	2.756	0.177	0.157	29.54
WS1426	0.531	12	4.331	0.709	3.366	0.177	0.157	50.27
WS1430	0.531	16	5.118	0.945	3.937	0.177	0.157	79.81
WS1436-0650	0.689	16	6.890	1.102	4.843	0.295	0.197	157.41
WS1436-0750	0.689	20	6.890	1.181	4.921	0.295	0.197	166.23
WS1440	0.689	20	7.087	1.181	4.921	0.295	0.197	209.22
WS1440-0866	0.866	12	7.087	1.181	4.921	0.295	0.236	219.36
WS1440-1000	0.866	16	7.087	1.181	4.921	0.295	0.236	233.47
WS1440-1150	1.181	16	7.087	1.063	4.803	0.295	0.236	293.66

# Designation and orders

## Designation

The following summary illustrates how the designation is made up for individual couplings and their attachments.

The TSCHAN® S-BT 100 200-75 is taken by way of example.



## Ordering

Please use the form on the right for your orders. Even when ordering individual parts, please also provide the information required in section 1 (coupling), so that each individual property of the part is actually compatible with your coupling. Zero should be entered as the quantity in section 1.

## Example

1	Coupling
Type	S-BT
Size (diameter in mm)	145
Quantity	3
Attachment (brake drum in this case)	
Size (Diameter - width in mm)	200-75
Intermediate ring	VkR
Bores $d_{1f} 48^{H7}$ with keyway acc. to DIN 6885/1 tolerance P9	
Bores $d_{2f} 42^{H7}$ with keyway acc. to DIN 6885/1 tolerance P9	
Balancing	
Balanced with grade G 6.3 Input and output sides balanced with half key	

# Order form

## Order

to  
**RINGFEDER POWER  
TRANSMISSION USA CORPORATION  
165 Carver Avenue  
Westwood, NJ 07675, USA**

**Toll free:** +1 888 746 4333  
**Phone:** +1 201 666 3320  
**Fax:** +1 201 664 6053  
**E-mail:** sales.usa@ringfeder.com

from

Company

Name

Department

Address

Fax

## 1 Coupling

Input power  [kW]

Speed  [min<sup>-1</sup>]

Type

Size  
Diameter  [mm]

Quantity

Bore (∅)  
Diameter  [mm]  
Part number

Bore (∅)  
Diameter  [mm]  
Part number

## Attachment

Size  
Diameter-width in mm

## Intermediate ring

Material

Pb 72  Pb 82  Vkr  Vk60D

other

## Balancing

non balanced

balanced with grade DIN/ISO 1940

6,3  2,5

Speed  [min<sup>-1</sup>]

Input side balanced

with half key

with full key

Output side balanced

with half key

with full key

## 2 Individual part

Part number

Quantity

Please also provide the information required in section 1, with quantity 0.

## 3 Information

Please send me

Dimensioned drawing

other:

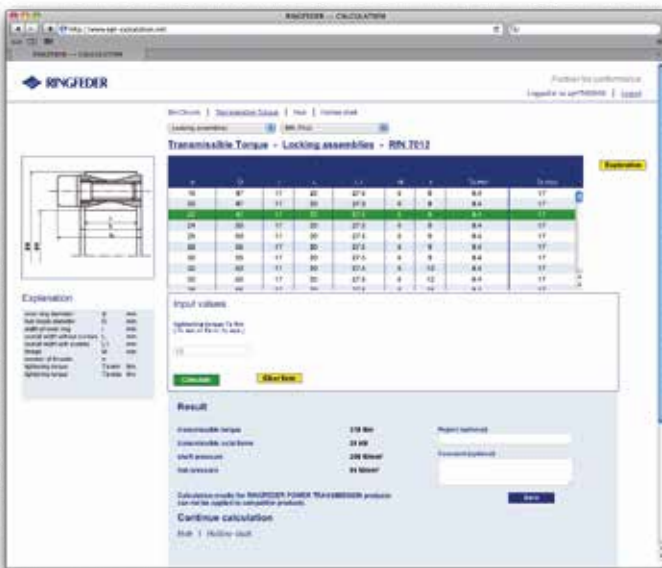
## Calculation program for Locking Assemblies and Locking Elements

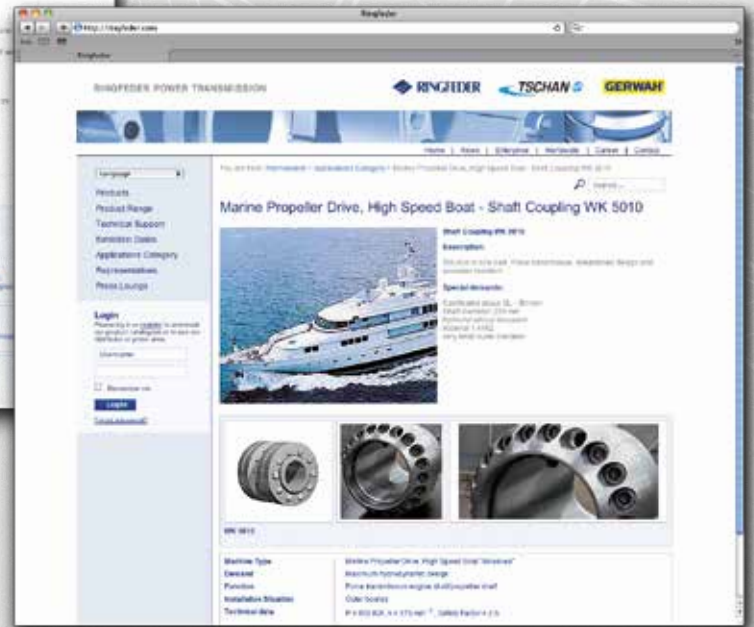
In order to meet the complex requirements on the correct design and selection of RINGFEDER products under practise-relevant demands, RINGFEDER POWER TRANSMISSION has developed a calculation program.

This calculation program offers the engineer a valuable aid in his or her daily work and simplifies the calculation of a wide range of tasks.

Once a product and the desired product size have been selected the program carries out the calculation, taking into account additional user input e.g. **transmissible torque and axial forces, resulting hub and shaft pressure, the outer diameter of the hub, the inner diameter of the hollow shaft** and for special tasks even the **forces and loads under bending moment loads**.

Interested? Visit our Website at [www.ringfeder.com](http://www.ringfeder.com)!





## Our Website

### Easily accessible information.

RINGFEDER POWER TRANSMISSION – one of the top addresses for drive and damping technology in mechanical engineering. You can find first-hand service details and information on our website. It contains both details on our entire range of products and numerous documents such as product catalogues, data sheets and assembly instruction for you to download. Visit [www.ringfeder.com](http://www.ringfeder.com) to get right up to date.



Download area Product Range and catalogues



Available Instructions for Installation, Removal and Maintaining



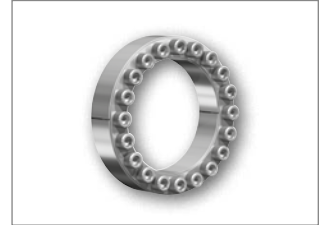
## Locking Devices



Locking Assemblies



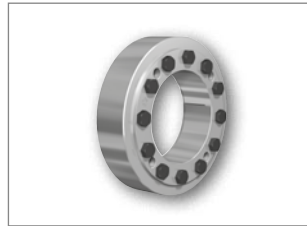
Locking Assemblies for bending moments



Locking Assemblies – Stainless steel



Locking Elements



Shrink Discs



Flange Couplings

## Damping Technology



Friction Springs



DEFORM *plus*®

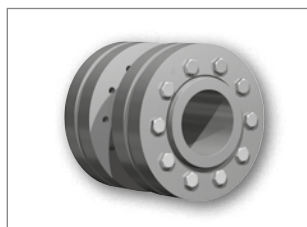


DEFORM *plus*® R

## Special Solutions



Locking Assemblies



Shaft Couplings



Couplings



Torsionally Flexible Couplings



Torsionally Flexible Couplings



Torsionally Flexible Couplings



Torsionally Rigid Gear Couplings



Torsionally Rigid Barrel Coupling



Couplings with variable Stiffness



Couplings



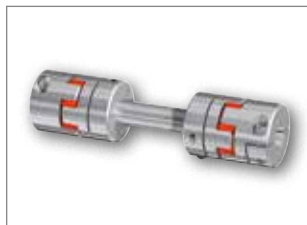
Metal Bellows Couplings



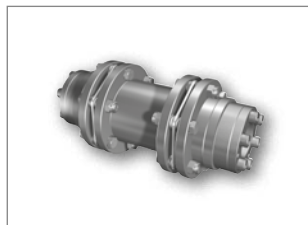
Servo-Insert Couplings



Safety Couplings



Line Shafts



Torsionally Rigid Disc Couplings



**RINGFEDER POWER TRANSMISSION GMBH**

Werner-Heisenberg-Straße 18, D-64823 Groß-Umstadt, Germany · Phone: +49 (0) 6078 9385-0 · Fax: +49 (0) 6078 9385-100  
 E-mail: sales.international@ringfeder.com

**RINGFEDER POWER TRANSMISSION TSCHAN GMBH**

Zweibrücker Strasse 104, D-66538 Neunkirchen, Germany · Phone: +49 (0) 6821 866-0 · Fax: +49 (0) 6821 866-4111  
 E-mail: sales.tschan@ringfeder.com

**RINGFEDER POWER TRANSMISSION USA CORPORATION**

165 Carver Avenue, Westwood, NJ 07675, USA · Toll Free: +1 888 746-4333 · Phone: +1 201 666 3320  
 Fax: +1 201 664 6053 · E-mail: sales.usa@ringfeder.com

**RINGFEDER POWER TRANSMISSION INDIA PRIVATE LIMITED**

Plot No. 4, Door No. 220, Mount - Poonamallee Road, Kattupakkam, Chennai – 600 056, India  
 Phone: +91 (0) 44-2679-1411 · Fax: +91 (0) 44-2679-1422 · E-mail: sales.india@ringfeder.com

**KUNSHAN RINGFEDER POWER TRANSMISSION COMPANY LIMITED**

No. 10 Dexin Road, Zhangpu Town 215321, Kunshan, China  
 Phone: +86 (0) 512-5745-3960 · Fax: +86 (0) 512-5745-3961 · E-mail: sales.china@ringfeder.com