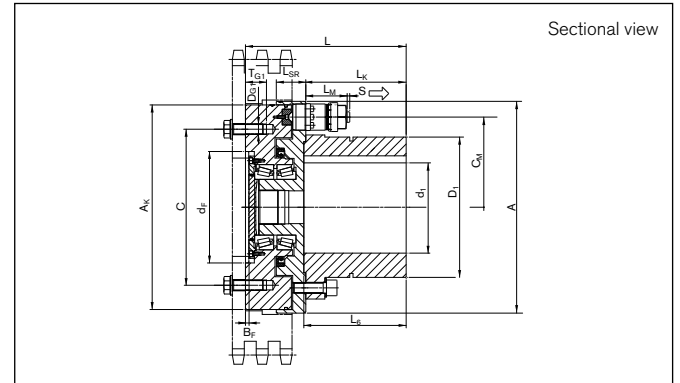


**TSCHAN® Backlash-free Safety Couplings**

# Type TNT 2420

with flange-hub and keyway-hub


**Dimensions / Technical data**

<b>n<sub>M</sub></b> = Number of modules	<b>A</b> = Max. outer diameter	<b>L</b> = Overall length
<b>MO</b> = Modul version	<b>A<sub>K</sub></b> = Outer contour	<b>L<sub>6</sub></b> = Length of basic part
<b>d<sub>1kmin</sub></b> = Min. bore diameter with keyway acc. DIN 6885-1	<b>B<sub>F</sub></b> = Available depth	<b>L<sub>K</sub></b> = Length of coupling hub
<b>d<sub>1kmax</sub></b> = Max. bore diameter with keyway acc. DIN 6885-1	<b>C</b> = Pitch circle diameter	<b>L<sub>M</sub></b> = Protruding module length
<b>T<sub>KNmin</sub></b> = Min. adjustment value for transmissible torque	<b>C<sub>M</sub></b> = Pitch circle diameter of module range	<b>LSR</b> = Outer length shift ring
<b>T<sub>KNmax</sub></b> = Max. adjustment value for transmissible torque	<b>d<sub>F</sub></b> = Center diameter	<b>S</b> = Disengagement travel
	<b>D<sub>1</sub></b> = Outer diameter hub	<b>n<sub>max</sub></b> = Max. rotation speed
	<b>T<sub>G1</sub></b> = Depth of thread G1	<b>Gw</b> = Weight
	<b>D<sub>G1</sub></b> = Thread	

Size	n <sub>M</sub>	MO	d <sub>1kmin</sub>	d <sub>1kmax</sub>	T <sub>KNmin</sub>	T <sub>KNmax</sub>	A	A <sub>K</sub>	B <sub>F</sub>	C	C <sub>M</sub>	d <sub>F</sub>	D <sub>1</sub>	T <sub>G1</sub>	D <sub>G1</sub>	L	L <sub>6</sub>	L <sub>K</sub>	L <sub>M</sub>	LSR	S	n <sub>max</sub>	Gw
	pcs.		mm	mm	Nm	Nm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	1/min	kg
058-090	4	a	25	90	670	1.950	200	190	4,5	162	154	110	120	24	12xM12	180	92	102	63	40	4	3.000	40
058-090	4	b	25	90	1.350	3.900	200	190	4,5	162	154	110	120	24	12xM12	180	92	102	63	40	4	3.000	40
058-090	4	c	25	90	2.000	5.800	200	190	4,5	162	154	110	120	24	12xM12	180	92	102	63	40	4	3.000	40
110-120	3	a	40	120	640	1.850	242	234	5,5	200	194	140	165	24	12xM12	200	119	116	63	40	4	2.700	48
110-120	3	b	40	120	1.850	5.500	242	234	5,5	200	194	140	165	24	12xM12	200	119	116	63	40	4	2.700	48
110-120	6	a	40	120	3.850	11.000	242	234	5,5	200	194	140	165	24	12xM12	200	119	116	63	40	4	2.700	48
227-160	3	a	55	160	880	2.600	312	300	5,5	250	266	170	214	32	12xM16	245	156	153	63	45	4	2.300	95
227-160	3	b	55	160	2.600	7.550	312	300	5,5	250	266	170	214	32	12xM16	245	156	153	63	45	4	2.300	95
227-160	6	a	55	160	5.300	15.200	312	300	5,5	250	266	170	214	32	12xM16	245	156	153	63	45	4	2.300	95
227-160	9	a	55	160	7.900	22.700	312	300	5,5	250	266	170	214	32	12xM16	245	156	153	63	45	4	2.300	95
424-200	3	a	70	200	1.200	3.550	420	410	6,5	334	372	200	262	34	12xM20	292	196	193	63	45	4	1.900	180
424-200	3	b	70	200	3.550	10.600	420	410	6,5	334	372	200	262	34	12xM20	292	196	193	63	45	4	1.900	180
424-200	6	a	70	200	7.350	21.200	420	410	6,5	334	372	200	262	34	12xM20	292	196	193	63	45	4	1.900	180
424-200	9	a	70	200	11.000	31.800	420	410	6,5	334	372	200	262	34	12xM20	292	196	193	63	45	4	1.900	180
424-200	12	a	70	200	14.700	42.400	420	410	6,5	334	372	200	262	34	12xM20	292	196	193	63	45	4	1.900	180

**Ordering example: TNT 2420**

Type	Size	d <sub>1</sub>	Nm	MO	n <sub>M</sub>	Further details
TNT 2420	058-090	60	1850	a	3	*

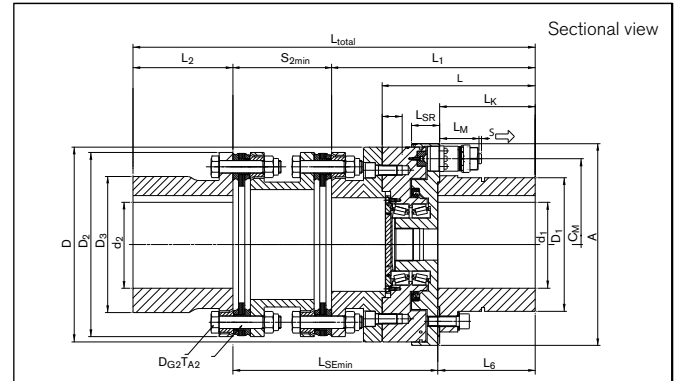
\* Switch disc optional

Subject to technical changes.

**TSCHAN® Backlash-free Safety Couplings**

# Type TNT 2424

rigid disc coupling with keyway-hubs


**Dimensions**
**n<sub>M</sub>** = Number of modules

**MO** = Modul version

**d<sub>1kmin</sub>** = Min. bore diameter with keyway  
acc. DIN 6885-1

**d<sub>1kmax</sub>** = Max. bore diameter with keyway  
acc. DIN 6885-1

**d<sub>2kmin</sub>** = Min. bore diameter with keyway

**d<sub>2kmax</sub>** = Max. bore diameter with keyway

**A** = Max. outer diameter

**C<sub>M</sub>** = Pitch circle diameter of module range

**D** = Outer diameter

**D<sub>1</sub>** = Outer diameter hub

**D<sub>2</sub>** = Outer diameter hub

**D<sub>3</sub>** = Outer diameter hub

**L<sub>total</sub>** = Total length (several parts)

**L** = Overall length

**L<sub>1</sub>** = Length of coupling

**L<sub>2</sub>** = Length of the hub

**L<sub>6</sub>** = Length of basic part

**L<sub>K</sub>** = Length of coupling hub

**L<sub>M</sub>** = Protruding module length

**L<sub>SR</sub>** = Outer length shifting ring

**L<sub>SEmin</sub>** = Min. shaft distance

Size	n <sub>M</sub>	MO	d <sub>1kmin</sub>	d <sub>1kmax</sub>	d <sub>2kmin</sub>	d <sub>2kmax</sub>	A	C <sub>M</sub>	D	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	L <sub>total</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>6</sub>	L <sub>K</sub>	L <sub>M</sub>	L <sub>SR</sub>	L <sub>SEmin</sub>
	pcs.		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
058-090	4	a	25	90	30	110*	200	154	198,5	120	198,5	141	424	180	236	90	92	102	63	40	229
058-090	4	b	25	90	30	110*	200	154	198,5	120	198,5	141	424	180	236	90	92	102	63	40	229
058-090	4	c	25	90	30	110*	200	154	198,5	120	198,5	141	424	180	236	90	92	102	63	40	229
110-120	3	a	40	110	40	120	242	194	234	148	234	169	512	200	265	125	119	116	63	40	268
110-120	3	b	40	110	40	120	242	194	234	148	234	169	512	200	265	125	119	116	63	40	268
110-120	6	a	40	110	40	120	242	194	234	148	234	169	512	200	265	125	119	116	63	40	268
227-160	3	a	55	160	60	160	312	266	300	214	300	218	644	245	326	160	156	153	63	55	328
227-160	3	b	55	160	60	160	312	266	300	214	300	218	644	245	326	160	156	153	63	55	328
227-160	6	a	55	160	60	160	312	266	300	214	300	218	644	245	326	160	156	153	63	55	328
227-160	9	a	55	160	60	160	312	266	300	214	300	218	644	245	326	160	156	153	63	55	328
424-200	3	a	70	200	80	200	420	372	364	262	345	274	776	292	387	200	196	193	63	70	380
424-200	3	b	70	200	80	200	420	372	364	262	345	274	776	292	387	200	196	193	63	70	380
424-200	6	a	70	200	80	200	420	372	364	262	345	274	776	292	387	200	196	193	63	70	380
424-200	9	a	70	200	80	200	420	372	364	262	345	274	776	292	387	200	196	193	63	70	380
424-200	12	a	70	200	80	200	420	372	364	262	345	274	776	292	387	200	196	193	63	70	380

To continue see next page

**TSCHAN® Backlash-free Safety Couplings**
**Type TNT 2424**
**Dimensions / Technical Data**

<b>S</b> = Disengagement travel	<b>T<sub>KNmax</sub></b> = Max. adjustment value for transmissible torque	<b>ΔKw</b> = Max. permissible angularly deviation
<b>S<sub>2min</sub></b> = Min. distance between shaft ends	<b>η<sub>max</sub></b> = Max. rotation speed	<b>ΔKr</b> = Max. permissible radial deviation
<b>D<sub>G2</sub></b> = Thread	<b>T<sub>max</sub></b> = Max. transmissible torque	<b>Gw</b> = Weight
<b>T<sub>A2</sub></b> = Tightened torque of clamping screw D <sub>G2</sub>	<b>ΔKa</b> = Max. permissible axial deviation	
<b>T<sub>KNmin</sub></b> = Min. adjustment value for transmissible torque		

Size	S	S <sub>2min</sub>	D <sub>G2</sub>	T <sub>A2</sub>	T <sub>KNmin</sub>	T <sub>KNmax</sub>	η <sub>max</sub>	T <sub>max</sub>	ΔKa	ΔKw	ΔKr	Gw
	mm	mm	mm	Nm	Nm	Nm	1/min	Nm	mm	Degree	mm	kg
058-090	4	98	M14	210	670	1.950	3.000	5.800	2	1,4	1,4	65
058-090	4	98	M14	210	1.350	3.900	3.000	5.800	2	1,4	1,4	65
058-090	4	98	M14	210	2.000	5.800	3.000	5.800	2	1,4	1,4	65
110-120	4	122	M16	280	640	1.850	2.700	11.400	2,4	1	1,8	86
110-120	4	122	M16	280	1.850	5.500	2.700	11.400	2,4	1	1,8	86
110-120	4	122	M16	280	3.850	11.000	2.700	11.400	2,4	1	1,8	86
227-160	4	158	M20	540	880	2.600	2.300	28.000	1,6	1	1,2	188
227-160	4	158	M20	540	2.600	7.550	2.300	28.000	1,6	1	1,2	188
227-160	4	158	M20	540	5.300	15.200	2.300	28.000	1,6	1	1,2	188
227-160	4	158	M20	540	7.900	22.700	2.300	28.000	1,6	1	1,2	188
424-200	4	189	M24	950	1.200	3.550	1.900	46.000	1,8	1	1,4	350
424-200	4	189	M24	950	3.550	10.600	1.900	46.000	1,8	1	1,4	350
424-200	4	189	M24	950	7.350	21.200	1.900	46.000	1,8	1	1,4	350
424-200	4	189	M24	950	11.000	31.800	1.900	46.000	1,8	1	1,4	350
424-200	4	189	M24	950	14.700	42.400	1.900	46.000	1,8	1	1,4	350

**Ordering example: TNT 2424**

Type	Size	d <sub>1</sub>	d <sub>2</sub>	Nm	MO	η <sub>M</sub>	Further details
TNT 2424	058-085	80	85	1850	b	4	*

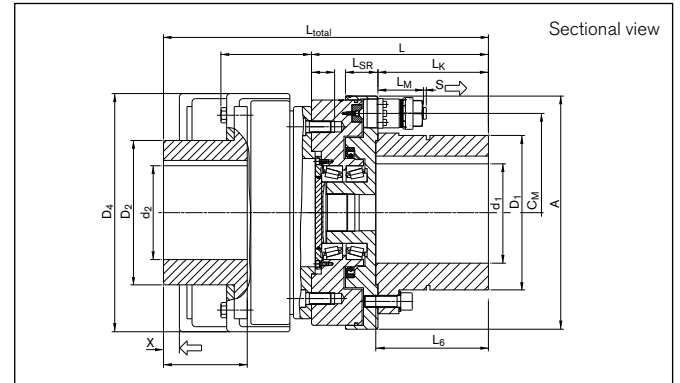
\* Switch disc optional

Subject to technical changes.

**TSCHAN® Backlash-free Safety Couplings**

# Type TNT 2425

flexible coupling with keyway-hubs


**Dimensions / Technical data**

<b><math>n_M</math></b> = Number of modules	<b><math>T_{KNmax}</math></b> = Max. adjustment value for transmissible torque	<b><math>L_M</math></b> = Protruding module length
<b>MO</b> = Modul version	<b>A</b> = Max. outer diameter	<b><math>L_{SR}</math></b> = Outer length shift ring
<b><math>d_{1kmin}</math></b> = Min. bore diameter with keyway acc. DIN 6885-1	<b><math>C_M</math></b> = Pitch circle diameter of module range	<b>S</b> = Disengagement travel
<b><math>d_{1kmax}</math></b> = Max. bore diameter with keyway acc. DIN 6885-1	<b><math>D_1</math></b> = Outer diameter hub	<b>X</b> = Overhanging length
<b><math>d_{2kmin}</math></b> = Min. bore diameter with keyway acc. DIN 6885-1	<b><math>D_2</math></b> = Outer diameter hub	<b><math>n_{max}</math></b> = Max. rotation speed
<b><math>d_{2kmax}</math></b> = Max. bore diameter with keyway acc. DIN 6885-1	<b><math>D_4</math></b> = Outer diameter hub	<b><math>T_{max}</math></b> = Max. transmissible torque
<b><math>T_{KNmin}</math></b> = Min. adjustment value for transmissible torque	<b><math>L_{total}</math></b> = Total length (several parts)	<b><math>\Delta Ka</math></b> = Max. permissible axial deviation
	<b>L</b> = Overall length	<b><math>\Delta Kw</math></b> = Max. permissible angularly deviation
	<b><math>L_6</math></b> = Length of basic part	<b><math>\Delta Kr</math></b> = Max. permissible radial deviation
	<b><math>L_K</math></b> = Length of coupling hub	<b><math>H_{es}</math></b> = Hardness of the elastomeric spider
		<b>Gw</b> = Weight

Size	$n_M$	MO	$d_{1kmin}$	$d_{1kmax}$	$d_{2kmin}$	$d_{2kmax}$	$T_{KNmin}$	$T_{KNmax}$	A	$C_M$	$D_1$	$D_2$	$D_4$	$L_{total}$	L	$L_6$	$L_K$	$L_M$	$L_{SR}$	S	X	$n_{max}$	$T_{max}$	$\Delta Ka$	$\Delta Kw$	$\Delta Kr$	$H_{es}$	Gw
	pcs.		mm	mm	mm	mm	Nm	Nm	mm													1/min	Nm	mm	deg	mm		kg
058-085	4	a	25	90	30	85	670	1.950	200	154	120	130	223	323	180	92	102	63	40	4	14	3.000	4.400	1,4	1,8	1	78 SH A	57
058-085	4	b	25	90	30	85	1.350	3.900	200	154	120	130	223	323	180	92	102	63	40	4	14	3.000	4.400	1,4	1,8	1	78 SH A	57
058-085	4	c	25	90	30	85	2.000	5.800	200	154	120	130	223	353	180	92	102	63	40	4	14	3.000	4.400	1,4	1,8	1	78 SH A	57
058-100	4	a	25	90	40	100	670	1.950	200	154	120	145	252	339	180	92	102	63	40	4	18	3.000	5.800	1,6	2	1,2	78 SH A	69
058-100	4	b	25	90	40	100	1.350	3.900	200	154	120	145	252	339	180	92	102	63	40	4	18	3.000	5.800	1,6	2	1,2	78 SH A	69
058-100	4	c	25	90	40	100	2.000	5.800	200	154	120	145	252	339	180	92	102	63	40	4	18	3.000	5.800	1,6	2	1,2	78 SH A	69
110-120	3	a	40	120	50	120	640	1.850	242	194	165	160	290	378	200	119	116	63	40	4	22	2.700	11.400	1,6	2,3	1,5	78 SH A	98
110-120	3	b	40	120	50	120	1.850	5.500	242	194	165	160	190	378	200	119	116	63	40	4	22	2.700	11.400	1,6	2,3	1,5	78 SH A	98
110-120	6	a	40	120	50	120	3.850	11.000	242	194	165	160	290	378	200	119	116	63	40	4	22	2.700	11.400	1,6	2,3	1,5	78 SH A	98
227-140	3	a	55	160	60	140	880	2.600	312	266	214	200	330	450	245	156	153	63	45	4	26	2.300	17.000	1,5	2,5	1,5	78 SH A	150
227-140	3	b	55	160	60	140	2.600	7.550	312	266	214	200	330	450	245	156	153	63	45	4	26	2.300	17.000	1,5	2,5	1,5	78 SH A	150
227-140	6	a	55	160	60	140	5.300	15.200	312	266	214	200	330	450	245	156	153	63	45	4	26	2.300	17.000	1,5	2,5	1,5	78 SH A	150
227-140	9	a	55	160	60	140	7.900	22.700	312	266	214	200	330	450	245	156	153	63	45	4	26	2.300	17.000	1,5	2,5	1,5	78 SH A	150
227-160	3	a	55	160	60	160	880	2.600	312	266	214	225	378	475	245	156	153	63	45	4	29	2.000	27.000	2	2,6	1,6	78 SH A	180
227-160	3	b	55	160	60	160	2.600	7.550	312	266	214	225	378	475	245	156	153	63	45	4	29	2.000	27.000	2	2,6	1,6	78 SH A	180
227-160	6	a	55	160	60	160	5.300	15.200	312	266	214	225	378	475	245	156	153	63	45	4	29	2.000	27.000	2	2,6	1,6	78 SH A	180
227-160	9	a	55	160	60	160	7.900	22.700	312	266	214	225	378	475	245	156	153	63	45	4	29	2.000	27.000	2	2,6	1,6	78 SH A	180

To continue see next page

**TSCHAN® Backlash-free Safety Couplings**
**Type TNT 2425**

Size	n <sub>M</sub>	MO	d <sub>1</sub> kmin	d <sub>1</sub> kmax	d <sub>2</sub> kmin	d <sub>2</sub> kmax	T <sub>KN</sub> min	T <sub>KN</sub> max	A	C <sub>M</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>4</sub>	L <sub>total</sub>	L	L <sub>6</sub>	L <sub>K</sub>	L <sub>M</sub>	L <sub>SR</sub>	S	X	n <sub>max</sub>	T <sub>max</sub>	ΔKa	ΔKw	ΔKr	H <sub>es</sub>	Gw
	pcs.		mm	mm	mm	mm	Nm	Nm	mm													1/min	Nm	mm	deg	mm		kg
424-180	3	a	70	200	80	180	1.200	3.550	420	372	262	255	432	552	292	196	193	63	45	4	40	1.900	43.200	1,7	2,7	2	78 SH A	300
424-180	3	b	70	200	80	180	3.550	10.600	420	372	262	255	432	552	292	196	193	63	45	4	40	1.900	43.200	1,7	2,7	2	78 SH A	300
424-180	6	a	70	200	80	180	7.350	21.200	420	372	262	255	432	552	292	196	193	63	45	4	40	1.900	43.200	1,7	2,7	2	78 SH A	300
424-180	9	a	70	200	80	180	11.000	31.800	420	372	262	255	432	552	292	196	193	63	45	4	40	1.900	43.200	1,7	2,7	2	78 SH A	300
424-180	12	a	70	200	80	180	14.700	42.400	420	372	262	255	432	552	292	196	193	62	45	4	40	1.900	43.200	1,7	2,7	2	78 SH A	300
424-200	3	a	70	200	90	200*	1.200	3.550	420	372	262	275	485	652	292	196	193	63	45	4	60	1.760	67.500	1,8	2,9	2,1	78 SH A	400
424-200	3	b	70	200	90	200*	3.550	10.600	420	372	262	275	485	652	292	196	193	63	45	4	60	1.760	67.500	1,8	2,9	2,1	78 SH A	400
424-200	6	a	70	200	90	200*	7.350	21.200	420	372	262	275	485	652	292	196	193	63	45	4	60	1.760	67.500	1,8	2,9	2,1	78 SH A	400
424-200	9	a	70	200	90	200*	11.000	31.800	420	372	262	275	485	652	292	196	193	63	45	4	60	1.760	67.500	1,8	2,9	2,1	78 SH A	400
424-200	12	a	70	200	90	200*	14.700	42.400	420	372	262	275	485	652	292	196	193	63	45	4	60	1.760	67.500	1,8	2,9	2,1	78 SH A	400

**Ordering example: TNT 2425**

Type	Size	d <sub>1</sub>	d <sub>2</sub>	Nm	MO	n <sub>M</sub>	Further details
TNT 2425	058-085	80	85	1850	b	4	*

\* Switch disc optional

Subject to technical changes.