

# Flexible Couplings RUPEX Series

8



8/2	<a href="#">Overview</a>
8/2	<a href="#">Benefits</a>
8/2	<a href="#">Application</a>
8/2	<a href="#">Design</a>
8/4	<a href="#">Function</a>
8/4	<a href="#">Technical data</a>
8/6	<b>Type RWN</b> <b>hub material grey cast iron</b> <a href="#">Selection and ordering data</a>
8/8	<b>Type RWS</b> <b>hub material steel</b> <a href="#">Selection and ordering data</a>
8/10	<b>Type RFN</b> <b>with hub in grey cast iron</b> <a href="#">Selection and ordering data</a>
8/11	<b>Type RFS</b> <b>in steel</b> <a href="#">Selection and ordering data</a>
8/12	<b>Type RWB</b> <b>with brake disk to DIN 15432</b> <a href="#">Selection and ordering data</a>
8/14	<b>Type RBS</b> <b>with brake disk to DIN 15432</b> <b>Sizes 144 to 360</b> <a href="#">Selection and ordering data</a>
8/16	<b>Type RBS</b> <b>with brake disk to DIN 15432</b> <b>Sizes 400 to 1000</b> <a href="#">Selection and ordering data</a>
8/18	<b>Type RWB</b> <b>with brake drum to DIN 15431</b> <a href="#">Selection and ordering data</a>
8/19	<b>Type RBS</b> <b>with brake drum to DIN 15431</b> <a href="#">Selection and ordering data</a>
8/20	<b>Spare and wear parts</b> <a href="#">Selection and ordering data</a>

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

### General information

#### Overview



Coupling suitable for potentially explosive environments.  
Complies with Directive 94/9/EC for:

**CE Ex II 2 G T4 / T5 / T6 D120 °C**  
 $-30^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C} / +50^{\circ}\text{C} / +40^{\circ}\text{C}$

**CE Ex I M2**

RUPEX pin and bush couplings link machine shafts and compensate for shaft misalignment with weak restorative forces. The torque is conducted through elastomer buffers, so the coupling has typically flexible rubber properties. Thanks to their robust design, RUPEX couplings are also suitable for rough operating conditions.

#### Benefits

RUPEX couplings can also hold loads when overloaded and are therefore especially suitable for drives for special safety and reliability requirements.

Torque shock loads and changing loads are no problem for robust, compact flexible RUPEX couplings.

The steel variant is also especially suitable for high-speed drives.

8

#### Application

RUPEX couplings are available as a catalog standard in 26 sizes with a rated torque of between 200 Nm and 1300000 Nm.

The coupling is suitable for use at ambient temperatures of between  $-30^{\circ}\text{C}$  and  $+80^{\circ}\text{C}$ . By using alternative elastomer buffers, the permissible ambient temperature range can be extended to between  $-50^{\circ}\text{C}$  and  $+100^{\circ}\text{C}$ .

Frequently, the coupling is used to connect the gear shaft to the driven machine. In the case of drives without gear units, the cou-

RUPEX couplings are fitted by putting together the coupling halves. Fitting with low torsional backlash is simplified by the barrel-shaped geometry of the buffers.

RUPEX couplings require little maintenance. Only the elastomer buffers, as wear parts, need be replaced and the coupled machines need not be moved to do so.

RUPEX couplings are suitable for reversing operation and horizontal and vertical fitting or fitting at any required angle.

pling is particularly suitable for operation in rough conditions or heavy-duty drives with electric motor drive. Ventilator drives with high ventilator mass and drives in the cement industry are typical applications.

Examples of particularly safety-relevant areas of application are cable railway drives, lifting gear for crane drives or escalator drives.

#### Design

A RUPEX coupling comprises two hub sections which are mounted on the machine shafts. The hub parts are connected positively by steel pins and elastomer buffers. The coupling can be fitted with add-on parts such as brake disks or brake drums. Up to size 360, the pins and buffers are fitted on one side. From size 400 up, the pins and buffers are fitted in the hubs on alternate sides.

#### Materials

##### Hubs

- Types RWN and RWB made of grey cast iron EN-GJL-250
- Types RWS and RBS made of steel with yield point higher than 400 N/mm<sup>2</sup>

##### Flange

- Types RFN, RFS made of steel

##### Pin

Material steel 42CrMo4, surface fine-machined

#### Buffer material

Material/description	Hardness	Identification	Ambient temperature
NBR standard type	80 ShoreA	Buffer black	$-30^{\circ}\text{C} \dots +80^{\circ}\text{C}$
NBR electrically insulating	80 ShoreA	Buffer green	$-30^{\circ}\text{C} \dots +80^{\circ}\text{C}$
NBR soft	65 ShoreA	Buffer black with green dot	$-30^{\circ}\text{C} \dots +80^{\circ}\text{C}$
NBR hard	90 ShoreA	Buffer black with magenta dot	$-30^{\circ}\text{C} \dots +80^{\circ}\text{C}$
Nitril for low temperature	80 ShoreA	Buffer black with white dot	$-50^{\circ}\text{C} \dots +50^{\circ}\text{C}$
Hrubit high temperature	80 ShoreA	Buffer black with red dot	$-10^{\circ}\text{C} \dots +100^{\circ}\text{C}$

#### Brake disks

- Type RWB made of EN-GJS-400 spheroidal graphite cast iron
- Type RBS made of steel

#### Brake drums

- Type RWB made of EN-GJL-250 grey cast iron
- Type RBS made of steel

# FLENDER Standard Couplings

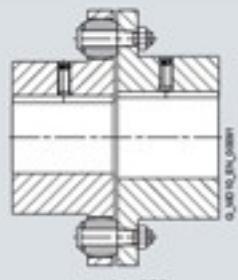
## Flexible Couplings – RUPEX Series

### General information

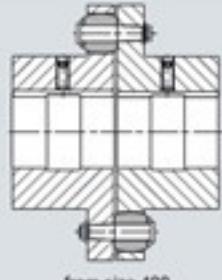
#### RUPEX pin and bush coupling types

Type	Description
RWN	Coupling made of grey cast iron
RWS	Coupling made of steel
RWB	Coupling made of grey cast iron with brake drum or brake disk
RBS	Coupling made of steel with brake drum or brake disk
RFN	Coupling made of grey cast iron in flange-shaft variant
RFS	Coupling made of steel in flange-shaft variant

Further application-related coupling types are available. Dimension sheets for and information on these are available on request.

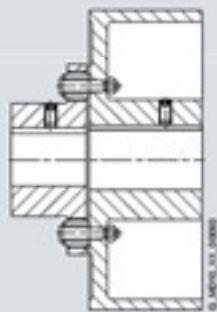


up to size 360

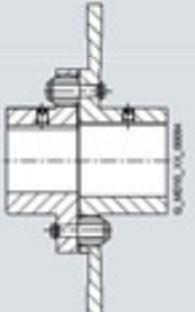


from size 400

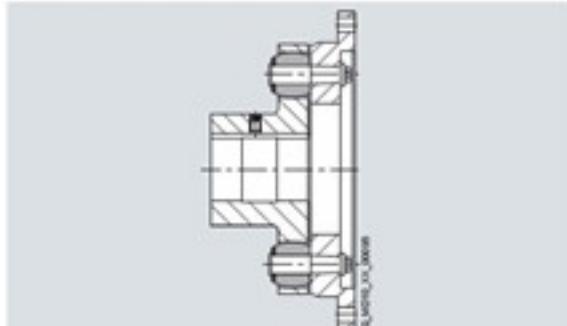
Types RWN/RWS – One-sided arrangement of pins and buffers



Types RWB/RBS with brake drum



Types RWB/RBS with brake disk



Types RFN, RFS

#### RUPEX pin and bush coupling types on request

Type	Description
All	Coupling with axial backlash limitation
All	Coupling with pretensioned buffers
All	Coupling with lengthened pins and spacer sleeves
FeCS	Coupling for engaging/disengaging during standstill
RWNAH	Coupling with extension piece
RWSH	
RBM	Coupling with lengthened pins for sliding rotor motors
RAK	Coupling combination RUPEX with ARPEX all-steel membrane coupling

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

### General information

#### Function

The motor torque is transmitted to the hub on the drive side via the shaft-hub connection, which is mostly designed as a keyway connection. With the aid of elastomer buffers mounted on steel pins, the torque is conducted to the hub on the output side.

The hub on the output side further transmits the torque to the driven machine or a gear unit located in between. Because of the primarily compression-loaded buffers, the coupling has a progressive torsional stiffness.

#### Technical data

##### Power ratings

Size	Rated torque for buffer type			Torsional stiffness at 50 % capacity utilization for buffer type			Assembly	Permitted shaft misalignment at speed $n = 1500 \text{ rpm}$ <sup>1)</sup>		
	65 ShoreA	80 ShoreA	90 ShoreA	65 ShoreA	80 ShoreA	90 ShoreA		Axial	Radial	Angle
	$T_{Kv}$ Nm	$T_{Kv}$ Nm	$T_{Kv}$ Nm	$C_{Tdyn\ 50\%}$ kNm/rad	$C_{Tdyn\ 50\%}$ kNm/rad	$C_{Tdyn\ 50\%}$ kNm/rad		$\Delta S$ mm	$\Delta K_x$ mm	$\Delta K_y$ mm
105	120	200	200	5	13	21	1.0	0.2	0.2	0.11
125	210	350	350	9	25	37	1.0	0.2	0.2	0.10
144	300	500	500	15	43	64	1.0	0.23	0.23	0.09
162	450	750	750	20	55	83	1.5	0.25	0.25	0.09
178	570	950	950	31	85	130	1.5	0.27	0.27	0.09
198	780	1300	1300	43	123	187	1.5	0.29	0.29	0.08
228	1300	2200	2200	65	184	270	1.5	0.3	0.3	0.08
252	1650	2750	2750	92	256	380	1.5	0.34	0.34	0.08
285	2600	4300	4300	141	390	560	1.5	0.36	0.36	0.07
320	3300	5500	5500	195	540	790	1.5	0.4	0.4	0.07
360	4700	7800	7800	276	610	940	1.5	0.43	0.43	0.07
400	7500	12500	12500	410	1130	1710	1.5	0.48	0.48	0.07
450	11000	18500	18500	570	1600	2380	1.5	0.52	0.52	0.07
500	15000	25000	25000	860	2350	3600	1.5	0.57	0.57	0.07
560	23500	39000	39000	1130	3070	4700	2.0	0.62	0.62	0.06
630	31000	52000	52000	1640	4600	7400	2.0	0.68	0.68	0.06
710	50000	84000	84000	2560	7200	10500	2.0	0.75	0.75	0.06
800	66000	110000	110000	3900	10700	16700	2.0	0.84	0.84	0.06
900	90000	150000	150000	5200	14300	22500	2.5	0.93	0.93	0.06
1000	115000	195000	195000	7700	21300	33000	2.5	1.03	1.03	0.06
1120	160000	270000	270000	9800	27300	44000	2.5	1.14	1.14	0.06
1250	205000	345000	345000	14000	39000	62000	2.5	1.26	1.26	0.06
1400	320000	530000	530000	22800	62000	97000	3.0	1.39	1.39	0.06
1600	450000	750000	750000	37000	103000	160000	3.0	1.55	1.55	0.06
1800	585000	975000	975000	48000	133000	206000	4.0	1.76	1.76	0.06
2000	780000	1300000	1300000	73000	201000	314000	4.0	2.17	2.17	0.06

All product codes listed below apply to standard buffers of NBR material in the 80 ShoreA variant.

<sup>1)</sup> The maximum speed of the respective type must be noted. For further information on permissible shaft misalignment, please see the operating instructions.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

### General information

For maximum coupling torque:

$$T_{K\max} = 3.0 \cdot T_{KN}$$

For overload torque:

$$T_{KOI} = 4 \cdot T_{KN}$$

For coupling fatigue torque:

$$T_{KW} = 0.20 \cdot T_{KN}$$

The axial misalignment may occur dynamically at frequencies up to 10 Hz.

For fitting, a maximum gap dimension of  $S_{\max.} = S + \Delta S$  and a minimum gap dimension of  $S_{\min.} = S - \Delta S$  are permitted.

#### Torsional stiffness and damping

The values stated in the above table apply to a capacity utilization of 50 %, an excitation amplitude of 10 %  $T_{KN}$  with the frequency 10 Hz and an ambient temperature of 20 °C. Dynamic torsional stiffness is dependent on load and increases in proportion to capacity utilization. The following table shows the correction factors for different nominal loads.

$$C_{Td\text{yn}} = C_{Td\text{yn} 50\%} \cdot FKC$$

	Capacity utilization $T_N / T_{KN}$							
	20 %	40 %	50 %	60 %	70 %	80 %	90 %	100 %
Correction factor FKC	0.51	0.83	1.00	1.18	1.38	1.58	1.80	2.03

65/80/90 ShoreA

#### Permitted shaft misalignment

The permitted shaft misalignment depends on the operating speed. As the speed increases, lower shaft misalignment values are permitted. The following table shows the correction factors for different speeds.

The maximum speed for the respective coupling size and type must be observed!

$$\Delta K_{\text{perm}} = \Delta K_{1500} \cdot FKV$$

Correction factor FKV	Speed in rpm			
	500	1000	1500	3000
	1.60	1.20	1.0	0.70

The axial misalignment may occur dynamically at frequencies up to 10 Hz. For fitting, a maximum gap dimension of  $S_{\max.} = S + \Delta S$  and a minimum gap dimension of  $S_{\min.} = S - \Delta S$  are permitted. Shaft misalignments  $\Delta K_a$ ,  $\Delta K_i$  and  $\Delta K_w$  may occur simultaneously.

#### The damping coefficient is $\Psi = 1.4$

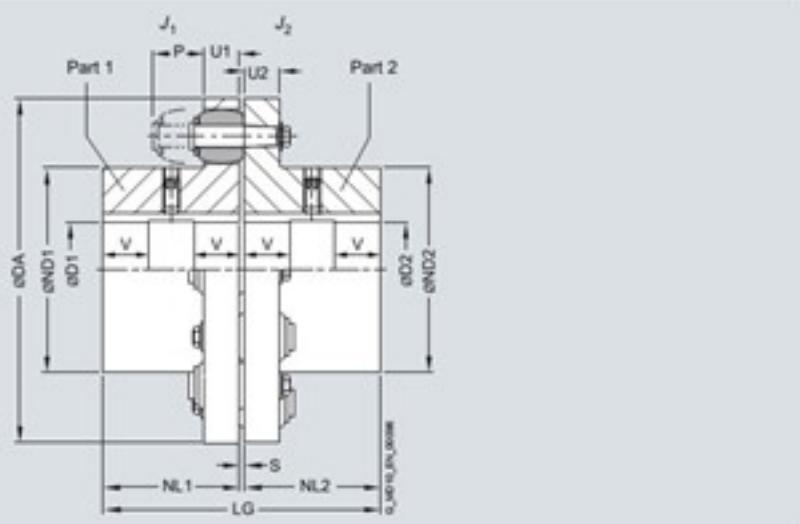
Furthermore, torsional stiffness and damping depend on the ambient temperature and the frequency and amplitude of the torsional vibration excitation. More precise torsional stiffness and damping parameters on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RWN - hub material grey cast iron

## Selection and ordering data



Size	Rated torque buffer 80 ShorsA	Speed $\text{N}_{\text{max}}$	$\text{N}_{\text{max}}$	Dimensions in mm										Mass moment of inertia $\text{kgm}^2$	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight kg		
				D1 min.	D2 max.	DA min.	ND1 max.	ND2 min.	NL1/ NL2 min./ max.	S	U1	U2	P	LG				
105 <sup>1)</sup>	200	7000	—	32	—	38	105	53	59	45	3	13	12	30	93	0.001 0.001	2LC0130-1AA ■■■■■ -0AA0	1.9
125 <sup>1)</sup>	350	6000	—	40	—	48	125	65	68	50	3	16	15	35	103	0.003 0.003	2LC0130-2AA ■■■■■ -0AA0	3.2
144	500	5250	—	45	—	55	144	76	84	55	3	16	15	35	113	0.004 0.006	2LC0130-3AA ■■■■■ -0AA0	4.5
162	750	4650	—	50	—	60	162	85	92	60	3.5	20	18	40	123.5	0.007 0.013	2LC0130-4AA ■■■■■ -0AA0	6.7
178	950	4200	—	60	—	70	178	102	108	70	3.5	20	18	40	143.5	0.014 0.022	2LC0130-5AA ■■■■■ -0AA0	9.7
198	1300	3750	—	70	—	80	198	120	128	80	3.5	20	18	40	163.5	0.022 0.030	2LC0130-6AA ■■■■■ -0AA0	12.9
228	2200	3300	—	80	—	90	228	129	140	90	3.5	26	24	50	183.5	0.038 0.071	2LC0130-7AA ■■■■■ -0AA0	19
252	2750	3000	—	90	—	100	252	150	160	100	3.5	26	24	50	203.5	0.07 0.12	2LC0130-8AA ■■■■■ -0AA0	26.3
285	4300	2650	48	100	48	110	265	164	175	110	4.5	32	30	60	224.5	0.13 0.22	2LC0131-0AA ■■■■■ -0AA0	39
320	5500	2350	55	110	55	120	320	180	192	125	4.5	32	30	60	254.5	0.23 0.30	2LC0131-1AA ■■■■■ -0AA0	53
360	7800	2100	65	120	65	130	360	200	210	140	4.5	42	42	75	284.5	0.41 0.70	2LC0131-2AA ■■■■■ -0AA0	78
400	12500	2050	75	140	75	140	400	230	230	160	4.5	42	42	75	324.5	0.87 0.87	2LC0131-3AA ■■■■■ -0AA0	105
450	18500	1800	85	160	85	160	450	260	260	180	5.5	52	52	90	365.5	1.7 1.7	2LC0131-4AA ■■■■■ -0AA0	156
500	25000	1600	95	180	95	180	500	290	290	200	5.5	52	52	90	405.5	2.8 2.8	2LC0131-5AA ■■■■■ -0AA0	200
560	39000	1450	100	140	100	140	560	250	250	220	6	68	68	120	446	4.6 4.6	2LC0131-6AA ■■■■■ -0AA0	280
			140	180	140	180		300	300						5	5	2LC0131-6AA ■■■■■ -0AA0	290
			180	200	180	200		320	320						5.1	5.1	2LC0131-6AA ■■■■■ -0AA0	295
630	52000	1280	100	140	100	140	630	250	250	240	6	68	68	120	486	7.2 7.2	2LC0131-7AA ■■■■■ -0AA0	345
			140	180	140	180		300	300						7.7	7.7	2LC0131-7AA ■■■■■ -0AA0	370
			180	220	180	220		355	355						8.4	8.4	2LC0131-7AA ■■■■■ -0AA0	400
710	84000	1150	110	160	110	160	710	290	290	260	7	80	80	140	527	13 13	2LC0131-8AA ■■■■■ -0AA0	510
			160	200	160	200		330	330						14	14	2LC0131-8AA ■■■■■ -0AA0	515
			200	240	200	240		365	365						15	15	2LC0131-8AA ■■■■■ -0AA0	540

- (D1): Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes  
 Without finished bore from size 560 for 2nd diameter range D1 – Without order codes  
 Without finished bore from size 710 for 3rd diameter range D1 – Without order codes  
 With finished bore – With order codes for diameter and tolerance (product code without -Z)

- (D2): Without finished bore up to size 500, from size 560 for 1st diameter range D2 – Without order codes  
 Without finished bore from size 560 for 2nd diameter range D2 – Without order codes  
 Without finished bore from size 710 for 3rd diameter range D2 – Without order codes  
 With finished bore – With order codes for diameter and tolerance (product code without -Z)

1) Hub material EN-GJS 400 spheroidal graphite cast iron.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

### Type RWN - hub material grey cast iron

Size	Rated torque buffer 80 ShoreA	Speed $n_{\text{max}}$	Dimensions in mm												Mass moment of inertia $\text{kgm}^2$	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight m			
			Bore with keyway to DIN 6885			DA	ND1	ND2	NL1 / S	NL2	U1	U2	P	LG						
			D1	D2	min. max. min. max.															
800	110000	1000	125 180 125 180	800	320 320 290	7	80	80	140	587	22	22	2LC0132-0AA	■ ■ -0AA0	670					
			180 220 180 220		360 360						23	23	2LC0132-0AA	■ ■ -0AA0	690					
			220 260 220 260		420 420						24.5	24.5	2LC0132-0AA	■ ■ -0AA0	730					
900	150000	900	140 220 140 220	900	360 360 320	7.5	90	90	160	647.5	39	39	2LC0132-1AA	■ ■ -0AA0	940					
			220 260 220 260		425 425						41	41	2LC0132-1AA	■ ■ -0AA0	960					
			260 290 260 290		465 465						43	43	2LC0132-1AA	■ ■ -0AA0	1030					
1000	195000	810	150 240 150 240	1000	395 395 350	7.5	90	90	160	707.5	60	60	2LC0132-2AA	■ ■ -0AA0	1200					
			240 280 240 280		460 460						63	63	2LC0132-2AA	■ ■ -0AA0	1250					
			280 320 280 320		515 515						68	68	2LC0132-2AA	■ ■ -0AA0	1310					
1120	270000	700	160 200 160 200	1120	360 360 380	8.5	100	100	180	768.5	98	98	2LC0132-3AA	■ ■ -0AA0	1470					
			200 250 200 250		410 410						100	100	2LC0132-3AA	■ ■ -0AA0	1510					
			250 300 250 300		495 495						105	105	2LC0132-3AA	■ ■ -0AA0	1600					
			300 350 300 350		560 560						110	110	2LC0132-3AA	■ ■ -0AA0	1690					
1250	345000	650	180 230 180 230	1250	410 410 420	8.5	100	100	180	848.5	150	150	2LC0132-4AA	■ ■ -0AA0	1850					
			230 280 230 280		460 460						155	155	2LC0132-4AA	■ ■ -0AA0	1900					
			280 330 280 330		540 540						165	165	2LC0132-4AA	■ ■ -0AA0	2025					
			330 380 330 380		610 610						175	175	2LC0132-4AA	■ ■ -0AA0	2210					
1400	530000	570	200 260 200 260	1400	465 465 480	9	120	120	210	969	290	290	2LC0132-5AA	■ ■ -0AA0	2820					
			260 320 260 320		525 525						300	300	2LC0132-5AA	■ ■ -0AA0	2900					
			320 380 320 380		620 620						310	310	2LC0132-5AA	■ ■ -0AA0	3180					
			380 440 380 440		700 700						330	330	2LC0132-5AA	■ ■ -0AA0	3260					
1600	750000	500	260 320 260 320	1600	565 565 540	9	120	120	210	1069	490	490	2LC0132-6AA	■ ■ -0AA0	3780					
			320 380 320 380		625 625						500	500	2LC0132-6AA	■ ■ -0AA0	3870					
			380 440 380 440		720 720						530	530	2LC0132-6AA	■ ■ -0AA0	4150					
			440 480 440 480		770 770						550	550	2LC0132-6AA	■ ■ -0AA0	4290					
1800	975000	450	320 380 320 380	1800	660 660 660	12	140	140	240	1212	850	850	2LC0132-7AA	■ ■ -0AA0	5550					
			380 440 380 440		720 720						930	930	2LC0132-7AA	■ ■ -0AA0	5630					
			440 500 440 500		820 820						960	960	2LC0132-7AA	■ ■ -0AA0	6000					
			500 540 500 540		870 870						1050	1050	2LC0132-7AA	■ ■ -0AA0	6250					
2000	1300000	400	380 440 380 440	2000	760 760 660	12	140	140	240	1332	1350	1350	2LC0132-8AA	■ ■ -0AA0	6800					
			440 500 440 500		820 820						1400	1400	2LC0132-8AA	■ ■ -0AA0	7000					
			500 560 500 560		920 920						1500	1500	2LC0132-8AA	■ ■ -0AA0	7350					
			560 600 560 600		960 960						1550	1550	2LC0132-8AA	■ ■ -0AA0	7620					

- (D1): • Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes  
 • Without finished bore from size 560 for 2nd diameter range D1 – Without order codes  
 • Without finished bore from size 560 for 3rd diameter range D1 – Without order codes  
 • Without finished bore from size 1120 for 4th diameter range D1 – Without order codes  
 • With finished bore – With order codes for diameter and tolerance (product code without -Z)

- (D2): • Without finished bore up to size 500, from size 560 for 1st diameter range D2 – Without order codes  
 • Without finished bore from size 560 for 2nd diameter range D2 – Without order codes  
 • Without finished bore from size 560 for 3rd diameter range D2 – Without order codes  
 • Without finished bore from size 1120 for 4th diameter range D2 – Without order codes  
 • With finished bore – With order codes for diameter and tolerance (product code without -Z)

From size 560 bores D1 and D2 are each provided with a recess of  $D = +1$  mm halfway along the hub.  $V = 1/3$  NL

The hub diameter of the component part is assigned according to the diameter of the finished bore. Where bore diameters overlap, the component with the smaller hub diameter is always selected.

Weight and mass moments of inertia apply to maximum bore diameters.

#### Ordering example:

RUPEX RWN coupling, size 710,

Part 1: hub left with bore 180H7 mm, with keyway to DIN 6885

and set screw.

Part 2: hub right with bore 200H7 mm, with keyway to DIN 6885

and set screw.

#### Product code:

2LC0131-8AA99-0AA0

L2B+M2D

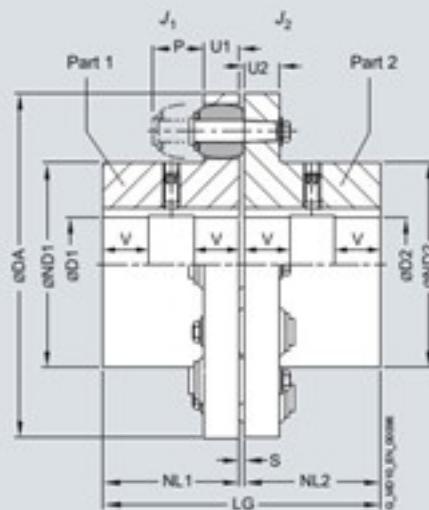
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RWS - hub material steel

## Selection and ordering data



Size	Rated torque buffer 80 ShorsA	Speed $\text{N}_{\text{max}}$	Dimensions in mm Bore with keyway to DIN 6865											Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight kg	
				D1 min.	D2 max.	DA min.	DA max.	ND1 min.	ND1 max.	ND2 min.	ND2 max.	NL1 min.	NL1 max.	NL2 min.	NL2 max.	U1	U2
105	200	10000	– 32 – 38 105 53 59 45 3 13 12 30 93	0.001	0.001	2LC0130-1AB	■ ■ ■ -0AA0	1.9									
125	350	9000	– 42 – 48 125 65 68 50 3 16 15 35 103	0.003	0.003	2LC0130-2AB	■ ■ ■ -0AA0	3.2									
144	500	7800	– 50 – 60 144 76 84 55 3 16 15 35 113	0.004	0.006	2LC0130-3AB	■ ■ ■ -0AA0	4.5									
162	750	6900	– 55 – 65 162 85 92 60 3.5 20 18 40 123.5	0.007	0.013	2LC0130-4AB	■ ■ ■ -0AA0	6.7									
178	950	6300	– 70 – 75 178 102 108 70 3.5 20 18 40 143.5	0.014	0.022	2LC0130-5AB	■ ■ ■ -0AA0	9.7									
198	1300	5600	– 80 – 85 198 120 128 80 3.5 20 18 40 163.5	0.022	0.030	2LC0130-6AB	■ ■ ■ -0AA0	12.9									
228	2200	4900	– 85 – 95 228 129 140 90 3.5 26 24 50 183.5	0.038	0.071	2LC0130-7AB	■ ■ ■ -0AA0	19									
252	2750	4400	– 100 – 110 252 150 160 100 3.5 26 24 50 203.5	0.07	0.12	2LC0130-8AB	■ ■ ■ -0AA0	26.3									
285	4300	3900	48 110 48 120 265 164 175 110 4.5 32 30 60 224.5	0.13	0.21	2LC0131-0AB	■ ■ ■ -0AA0	39									
320	5500	3500	55 125 55 130 320 180 192 125 4.5 32 30 60 254.5	0.23	0.32	2LC0131-1AB	■ ■ ■ -0AA0	53									
360	7800	3100	65 135 65 140 360 200 210 140 4.5 42 42 75 284.5	0.41	0.69	2LC0131-2AB	■ ■ ■ -0AA0	78									
400	12500	2800	75 150 75 150 400 230 230 160 4.5 42 42 75 324.5	0.92	0.92	2LC0131-3AB	■ ■ ■ -0AA0	110									
450	18500	2500	85 170 85 170 450 260 260 180 5.5 52 52 90 365.5	1.7	1.7	2LC0131-4AB	■ ■ ■ -0AA0	163									
500	25000	2200	95 190 95 190 500 290 290 200 5.5 52 52 90 405.5	2.8	2.8	2LC0131-5AB	■ ■ ■ -0AA0	217									
560	39000	2000	100 165 100 165 560 250 250 220 6 68 68 120 446	4.8	4.8	2LC0131-6AB	■ ■ ■ -0AA0	274									
			165 200 165 200 300 300			2LC0131-6AB	■ ■ ■ -0AA0	292									
			200 210 200 210 320 320			2LC0131-6AB	■ ■ ■ -0AA0	305									
630	52000	1800	100 165 100 165 630 250 250 240 6 68 68 120 486	7.6	7.6	2LC0131-7AB	■ ■ ■ -0AA0	352									
			165 200 165 200 300 300			2LC0131-7AB	■ ■ ■ -0AA0	370									
			200 235 200 235 355 355			2LC0131-7AB	■ ■ ■ -0AA0	400									
710	84000	1600	110 190 110 190 710 290 290 260 7 80 80 140 527	14.4	14.4	2LC0131-8AB	■ ■ ■ -0AA0	507									
			190 220 190 220 330 330			2LC0131-8AB	■ ■ ■ -0AA0	530									
			220 250 220 250 365 365			2LC0131-8AB	■ ■ ■ -0AA0	560									
D1:				Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes											1		
				Without finished bore from size 560 for 2nd diameter range D1 – Without order codes											2		
				Without finished bore from size 560 for 3rd diameter range D1 – Without order codes											3		
				With finished bore – With order codes for diameter and tolerance (product code without -Z)											9		
D2:				Without finished bore up to size 500, from size 560 for 1st diameter range D2 – Without order codes											1		
				Without finished bore from size 560 for 2nd diameter range D2 – Without order codes											2		
				Without finished bore from size 560 for 3rd diameter range D2 – Without order codes											3		
				With finished bore – With order codes for diameter and tolerance (product code without -Z)											9		

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RWS - hub material steel

Size	Rated torque buffer 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885										Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight m		
			T <sub>IN</sub>	N <sub>max</sub>	D1 min.	D2 max.	DA min.	DA max.	NL1 NL2	S	U1 U2	P	LG				
			Nm	rpm													
<b>800</b>	110000	1400	125	210	125	210	800	320	320	290	7	80	140	587	23.1	23.1	<b>2LC0132-0AB</b> ■■■■■-0AA0 683
			210	240	210	240		360	360						23.3	23.3	<b>2LC0132-0AB</b> ■■■■■-0AA0 715
			240	280	240	280		420	420						25.7	25.7	<b>2LC0132-0AB</b> ■■■■■-0AA0 762
<b>900</b>	150000	1250	140	210	140	210	900	320	320	320	7.5	90	160	647.5	40	40	<b>2LC0132-1AB</b> ■■■■■-0AA0 907
			210	240	210	240		360	360						41	41	<b>2LC0132-1AB</b> ■■■■■-0AA0 903
			240	280	240	280		425	425						44	44	<b>2LC0132-1AB</b> ■■■■■-0AA0 1000
			280	310	280	310		465	465						45	45	<b>2LC0132-1AB</b> ■■■■■-0AA0 1025
<b>1000</b>	195000	1100	150	230	150	230	1000	355	355	350	7.5	90	160	707.5	63	63	<b>2LC0132-2AB</b> ■■■■■-0AA0 1170
			230	260	230	260		395	395						64	64	<b>2LC0132-2AB</b> ■■■■■-0AA0 1208
			260	300	260	300		460	460						68	68	<b>2LC0132-2AB</b> ■■■■■-0AA0 1290
			300	340	300	340		515	515						70	70	<b>2LC0132-2AB</b> ■■■■■-0AA0 1343
<b>1120</b>	270000	1000	160	240	160	240	1120	360	360	380	8.5	100	180	768.5	105	105	<b>2LC0132-3AB</b> ■■■■■-0AA0 1560
			240	270	240	270		410	410						106	106	<b>2LC0132-3AB</b> ■■■■■-0AA0 1660
			270	330	270	330		495	495						109	109	<b>2LC0132-3AB</b> ■■■■■-0AA0 1730
			330	370	330	370		560	560						119	119	<b>2LC0132-3AB</b> ■■■■■-0AA0 1870
<b>1250</b>	345000	900	180	270	180	270	1250	410	410	420	8.5	100	180	848.5	168	168	<b>2LC0132-4AB</b> ■■■■■-0AA0 2000
			270	300	270	300		460	460						172	172	<b>2LC0132-4AB</b> ■■■■■-0AA0 2150
			300	360	300	360		540	540						179	179	<b>2LC0132-4AB</b> ■■■■■-0AA0 2200
			360	400	360	400		610	610						189	189	<b>2LC0132-4AB</b> ■■■■■-0AA0 2420
<b>1400</b>	530000	800	200	310	200	310	1400	465	465	480	9	120	210	969	316	316	<b>2LC0132-5AB</b> ■■■■■-0AA0 3020
			310	350	310	350		525	525						322	322	<b>2LC0132-5AB</b> ■■■■■-0AA0 3120
			350	410	350	410		620	620						337	337	<b>2LC0132-5AB</b> ■■■■■-0AA0 3350
			410	460	410	460		700	700						357	357	<b>2LC0132-5AB</b> ■■■■■-0AA0 3570
<b>1600</b>	750000	700	260	370	260	370	1600	565	565	540	9	120	210	1089	540	540	<b>2LC0132-6AB</b> ■■■■■-0AA0 3890
			370	410	370	410		625	625						554	554	<b>2LC0132-6AB</b> ■■■■■-0AA0 4270
			410	480	410	480		720	720						587	587	<b>2LC0132-6AB</b> ■■■■■-0AA0 4300
			480	510	480	510		770	770						611	611	<b>2LC0132-6AB</b> ■■■■■-0AA0 4630
<b>1800</b>	975000	600	320	440	320	440	1800	660	660	600	12	140	240	1212	1043	1043	<b>2LC0132-7AB</b> ■■■■■-0AA0 6230
			440	480	440	480		720	720						1072	1072	<b>2LC0132-7AB</b> ■■■■■-0AA0 6460
			480	540	480	540		820	820						1122	1122	<b>2LC0132-7AB</b> ■■■■■-0AA0 6770
			540	580	540	580		870	870						1143	1143	<b>2LC0132-7AB</b> ■■■■■-0AA0 7030
<b>2000</b>	1300000	550	380	500	380	500	2000	760	760	660	12	140	240	1332	1628	1628	<b>2LC0132-8AB</b> ■■■■■-0AA0 8140
			500	540	500	540		820	820						1664	1664	<b>2LC0132-8AB</b> ■■■■■-0AA0 8430
			540	610	540	610		920	920						1735	1735	<b>2LC0132-8AB</b> ■■■■■-0AA0 8860
			610	640	610	640		960	960						1793	1793	<b>2LC0132-8AB</b> ■■■■■-0AA0 9050

- (D1):
- Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes
  - Without finished bore from size 560 for 2nd diameter range D1 – Without order codes
  - Without finished bore from size 560 for 3rd diameter range D1 – Without order codes
  - Without finished bore from size 900 for 4th diameter range D1 – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)
- (D2):
- Without finished bore up to size 500, from size 560 for 1st diameter range D2 – Without order codes
  - Without finished bore from size 560 for 2nd diameter range D2 – Without order codes
  - Without finished bore from size 560 for 3rd diameter range D2 – Without order codes
  - Without finished bore from size 900 for 4th diameter range D2 – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)

From size 560 bores D1 and D2 are each provided with a recess of D = +1 mm halfway along the hub, V = 1/3 NL.

The hub diameter of the component part is assigned according to the diameter of the finished bore. Where bore diameters overlap, the component with the smaller hub diameter is always selected.

Weight and mass moments of inertia apply to maximum bore diameters.

#### Ordering example:

RUPEX RWS coupling, size 710,

Part 1: Hub left with bore 180H7 mm, with keyway to DIN 6885

and set screw,

Part 2: Hub right with bore 200H7 mm, with keyway to DIN 6885

and set screw.

Coupling balanced G6.3 in accordance with the half parallel key standard.

#### Product code:

**2LC0131-8AB99-0AA0-Z**

L2B+M2D+W02

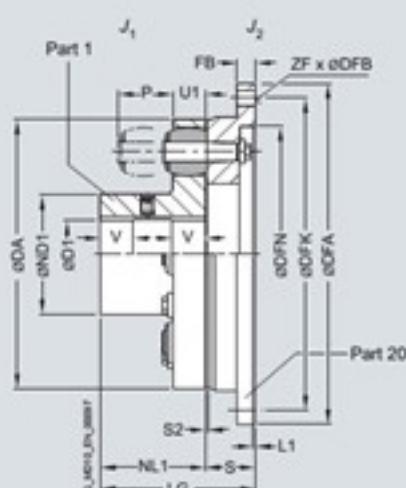
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RFN with hub in grey cast iron

### Selection and ordering data



For dimensions U1, P and S2, see type RWN.

Size	Rated torque buffer 80 ShoreA	Speed $\text{N}_{\text{max}}$	Dimensions in mm Bore with keyway to DIN 6885	Flange connection						Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight kg									
				T <sub>kv</sub>	P <sub>max</sub>	D1 min., max.	DA	ND1	NL1	S	LG	DFA	FB	DFN	L1	DFK	ZF	DFB	J <sub>1</sub>	J <sub>2</sub>	
105	200	7000	–	32	105	53	45	26	71	158	10	142	6	9	0.001	0.005	2LC0130-1AJ	■ 1-GAA0	2.3		
125	350	6000	–	42	125	65	50	31	81	180	13	160	6	11	0.003	0.012	2LC0130-2AJ	■ 1-GAA0	4.2		
144	500	5250	–	45	144	76	55	31	86	200	13	180	7	11	0.004	0.018	2LC0130-3AJ	■ 1-GAA0	5.0		
162	750	4650	–	50	162	85	60	37.5	97.5	220	13	200	8	11	0.007	0.032	2LC0130-4AJ	■ 1-GAA0	7.3		
178	950	4200	–	60	178	102	70	37.5	107.5	248	16	224	8	14	0.014	0.055	2LC0130-5AJ	■ 1-GAA0	10		
198	1300	3750	–	70	198	120	80	37.5	117.5	274	16	250	8	14	0.022	0.080	2LC0130-6AJ	■ 1-GAA0	13		
228	2200	3300	–	80	228	129	90	45.5	135.5	314	20	282	8	18	0.038	0.18	2LC0130-7AJ	■ 1-GAA0	20		
252	2750	3000	–	90	252	150	100	45.5	145.5	344	20	312	8	18	0.07	0.26	2LC0130-8AJ	■ 1-GAA0	25		
285	4300	2650	48	100	285	164	110	55.5	165.5	380	22	348	9	18	0.13	0.46	2LC0131-0AJ	■ 1-GAA0	38		
320	5500	2350	55	110	320	180	125	55.5	175.5	430	25	390	9	22	0.23	0.76	2LC0131-1AJ	■ 1-GAA0	50		
360	7800	2100	65	120	360	200	140	70.5	210.5	480	25	440	10	22	0.41	1.4	2LC0131-2AJ	■ 1-GAA0	76		
400	12500	2050	75	140	400	230	160	74.5	234.5	520	50	380	4	480	10	22	0.87	1.8	2LC0131-3AJ	■ 1-GAA0	125
450	18500	1800	85	160	450	260	180	85.5	265.5	575	45	428	6	528	12	26	1.7	3.2	2LC0131-4AJ	■ 1-GAA0	170
500	25000	1600	95	180	500	290	200	85.5	285.5	620	45	475	6	570	12	26	2.8	4.3	2LC0131-5AJ	■ 1-GAA0	205
560	39000	1450	100	140	560	250	220	106	326	700	65	532	8	650	16	26	4.6	8.2	2LC0131-6AJ	■ 1-GAA0	330
			140	180	300												5		2LC0131-6AJ	■ 1-GAA0	330
			180	200	320												5.1		2LC0131-6AJ	■ 1-GAA0	340
630	52000	1280	100	140	630	250	240	106	346	785	60	602	8	725	16	33	7.2	13.8	2LC0131-7AJ	■ 1-GAA0	390
			140	180	300												7.7		2LC0131-7AJ	■ 1-GAA0	400
			180	220	355												8.4		2LC0131-7AJ	■ 1-GAA0	420
710	84000	1150	110	160	710	290	260	127	387	875	80	675	10	815	18	33	13	26	2LC0131-8AJ	■ 1-GAA0	550
			160	200	330												14		2LC0131-8AJ	■ 1-GAA0	550
			200	240	385												15		2LC0131-8AJ	■ 1-GAA0	570
800	110000	1000	125	180	800	320	290	127	417	1000	70	765	10	900	16	39	22	45	2LC0131-9AJ	■ 1-GAA0	680
			180	220	360												23		2LC0131-9AJ	■ 1-GAA0	690
			220	260	420												24.5		2LC0131-9AJ	■ 1-GAA0	710

- GD1:
- Without finished bore up to size 560 for 1st diameter range D1 – Without order codes
  - Without finished bore from size 560 for 2nd diameter range D1 – Without order codes
  - Without finished bore from size 560 for 3rd diameter range D1 – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)

From size 560 bore D1 is provided with a recess of  $D = +1$  mm halfway along the hub.  $V \approx 1/3$  NL.

Weight and mass moments of inertia apply to maximum bore diameters.

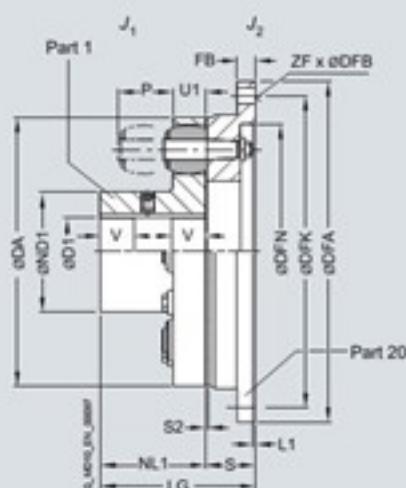
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RFS in steel

### Selection and ordering data



For dimensions U1, P and S2, see type RWS.

Size	Rated torque buffer 80 ShoreA	Speed $\text{N}_{\text{max}}$	Dimensions in mm Bore with keyway to DIN 6885	Flange connection						Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight kg								
				T <sub>tor</sub>	D1	DA	ND1	NL1	S	LG	DFA	FB	DFN	L1	DFK	ZF	DFB	J <sub>1</sub>	J <sub>2</sub>	
		Nm	rpm																	
105	200	10000	–	32	105	53	45	26	71	158	10	142	6	9	0.001	0.005	2LC0130-1AK ■ 1-GAA0	2.3		
125	350	9000	–	42	125	65	50	31	81	180	13	160	6	11	0.003	0.012	2LC0130-2AK ■ 1-GAA0	4.2		
144	500	7800	–	50	144	76	55	31	86	200	13	180	7	11	0.004	0.018	2LC0130-3AK ■ 1-GAA0	5.0		
162	750	6900	–	55	162	85	60	37.5	97.5	220	13	200	8	11	0.007	0.032	2LC0130-4AK ■ 1-GAA0	7.3		
178	950	6300	–	70	178	102	70	37.5	107.5	248	16	224	8	14	0.014	0.055	2LC0130-5AK ■ 1-GAA0	10.0		
198	1300	5600	–	80	198	120	80	37.5	117.5	274	16	250	8	14	0.022	0.080	2LC0130-6AK ■ 1-GAA0	13		
228	2200	4900	–	85	228	129	90	45.5	135.5	314	20	282	8	18	0.038	0.18	2LC0130-7AK ■ 1-GAA0	20		
252	2750	4400	–	100	252	150	100	45.5	145.5	344	20	312	8	18	0.07	0.26	2LC0130-8AK ■ 1-GAA0	25		
285	4300	3900	48	110	285	164	110	55.5	165.5	380	22	348	9	18	0.13	0.46	2LC0131-6AK ■ 1-GAA0	38		
320	5500	3500	55	125	320	180	125	55.5	175.5	430	25	390	9	22	0.23	0.76	2LC0131-1AK ■ 1-GAA0	50		
360	7800	3100	65	135	360	200	140	70.5	210.5	480	25	440	10	22	0.41	1.4	2LC0131-2AK ■ 1-GAA0	76		
400	12500	2800	75	150	400	230	160	74.5	234.5	520	50	380	4	480	10	22	0.92	1.8	2LC0131-3AK ■ 1-GAA0	125
450	18500	2500	85	170	450	260	180	85.5	265.5	575	45	428	6	528	12	26	1.7	3.2	2LC0131-4AK ■ 1-GAA0	175
500	25000	2200	95	190	500	290	200	85.5	285.5	620	45	475	6	570	12	26	2.8	4.3	2LC0131-5AK ■ 1-GAA0	210
560	39000	2000	100	165	560	250	220	106	326	700	65	532	8	650	16	26	4.8	8.2	2LC0131-6AK ■ 1-GAA0	330
			165	200	300												5.2		2LC0131-6AK ■ 1-GAA0	340
			200	210	320												5.4		2LC0131-6AK ■ 1-GAA0	340
630	52000	1800	100	165	630	250	240	106	346	785	60	602	8	725	16	33	7.6	13.8	2LC0131-7AK ■ 1-GAA0	390
			165	200	300												7.9		2LC0131-7AK ■ 1-GAA0	400
			200	235	355												8.7		2LC0131-7AK ■ 1-GAA0	420
710	84000	1600	110	190	710	290	260	127	387	875	80	675	10	815	18	33	14.4	26	2LC0131-8AK ■ 1-GAA0	550
			190	220	330												14.6		2LC0131-8AK ■ 1-GAA0	560
			220	250	365												15.9		2LC0131-8AK ■ 1-GAA0	580
800	110000	1400	125	210	800	320	290	127	417	1000	70	765	10	900	16	39	23.1	45	2LC0131-9AK ■ 1-GAA0	690
			210	240	360												23.3		2LC0131-9AK ■ 1-GAA0	710
			240	260	420												25.7		2LC0131-9AK ■ 1-GAA0	730

- GD1:
- Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes
  - Without finished bore from size 560 for 2nd diameter range D1 – Without order codes
  - Without finished bore from size 560 for 3rd diameter range D1 – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)

From size 560 bore D1 is provided with a recess of  $D = +1$  mm halfway along the hub.  $V \approx 1/3$  NL.

Weight and mass moments of inertia apply to maximum bore diameters.

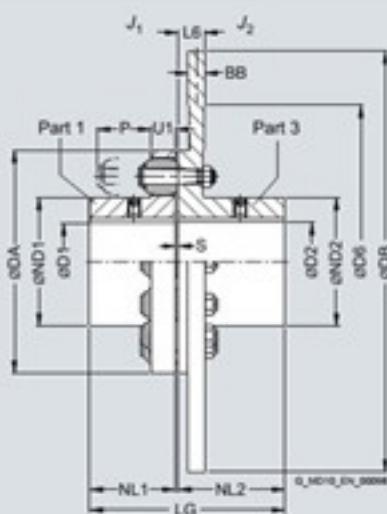
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RWB with brake disk to DIN 15432

## Selection and ordering data



Size	Rated torque buffer 80 ShoreA	Dimensions in mm Bore with keyway to DIN 6885												Brake disk						Product code Plain text specification DB; BB; D6; NL2 required for order code P0Y  Order codes for bore diameters and tolerances are specified in catalog section 3
		T <sub>KN</sub>	D1 min.	D2 max.	DA	ND1	ND2	NL1	NL2	S max.	U1	P	LG	DB max.	DB min.	D6 max.	D6 min.	BB	L6	
Nm																				
<b>144</b>	500	-	45	-	45	144	76	84	55	219	3	16	35	277	500	315	175	30	34	<b>2LC0130-3AE ■ ■ -0ZA0 P0Y</b>
<b>162</b>	750	-	50	-	50	162	85	92	60	219	3.5	20	40	282.5	560	315	175	30	34	<b>2LC0130-4AE ■ ■ -0ZA0 P0Y</b>
<b>178</b>	950	-	60	-	60	178	102	108	70	219	3.5	20	40	292.5	560	355	200	30	34	<b>2LC0130-5AE ■ ■ -0ZA0 P0Y</b>
<b>198</b>	1300	-	70	-	70	198	120	128	80	219	3.5	20	40	302.5	560	355	200	30	34	<b>2LC0130-6AE ■ ■ -0ZA0 P0Y</b>
<b>228</b>	2200	-	80	-	80	228	129	140	90	219	3.5	26	50	312.5	600	450	250	30	34	<b>2LC0130-7AE ■ ■ -0ZA0 P0Y</b>
<b>252</b>	2750	-	90	38	100	252	150	160	100	219	3.5	26	50	322.5	800	500	280	30	34	<b>2LC0130-8AE ■ ■ -0ZA0 P0Y</b>
<b>285</b>	4300	48	100	48	110	285	164	175	110	219	4.5	32	60	333.5	800	560	310	30	34	<b>2LC0131-0AE ■ ■ -0ZA0 P0Y</b>
<b>320</b>	5500	55	110	55	120	320	180	192	125	219	4.5	32	60	348.5	1000	630	350	30	34	<b>2LC0131-1AE ■ ■ -0ZA0 P0Y</b>

- (D1): • Without finished bore – Without order codes  
     • With finished bore – With order codes for diameter and tolerance (product code without -Z) 1
- (D2): • Without finished bore – Without order codes  
     • With finished bore – With order codes for diameter and tolerance (product code without -Z) 9

**Type RWB with brake disk to DIN 15432**

**Brake disk diameter DB in accordance with customer specification.**

Additional sizes are available on request. Further dimensions for part 3 on request.

Maximum speed in rpm:

$$\nu_{kmax} = 1146/DB \text{ DB in m}$$

Observe maximum speed of type RWN!

Mass moments of inertia and weights can be sufficiently precisely determined as follows:

- Mass moments of inertia in kgm<sup>2</sup>:
  - $J_1 = J_1$  from type RWN
  - $J_2 = J_2$  from type RWN +  $710 \cdot BB \cdot DB^4$  BB and DB in m
- Weight in kg:
  - $m = m$  from type RWN +  $5700 \cdot BB \cdot DB^2$  BB and DB in m

Ordering example:

RUPEX RWB coupling, size 252,

Part 1: Bore D1 = 48H7 mm, keyway to DIN 6885-1 and set screw,

Part 3: Brake disk DB = 630; BB = 30 mm; D6 = 350 mm, bore 42H7 mm, keyway to DIN 6885-1 P9 and set screw.

Hub reduced to NL2 = 200 mm

Coupling micro-balanced G6.3 at 1500 rpm in accordance with the half parallel key standard.

Mass moment of inertia:

$$J_1 = 0.07 \text{ kgm}^2$$

$$J_2 = 0.12 \text{ kgm}^2 + 3.3 \text{ kgm}^2 = 3.42 \text{ kgm}^2$$

Weight:

$$m = 26.3 \text{ kg} + 68 \text{ kg} = 94.3 \text{ kg}$$

Product code:

2LC0130-8AE99-0ZAO-Z

L1B+M0X+P0Y+W02

plain text to POY:

DB = 630 mm; BB = 30 mm;

D6 = 350 mm; NL2 = 200 mm

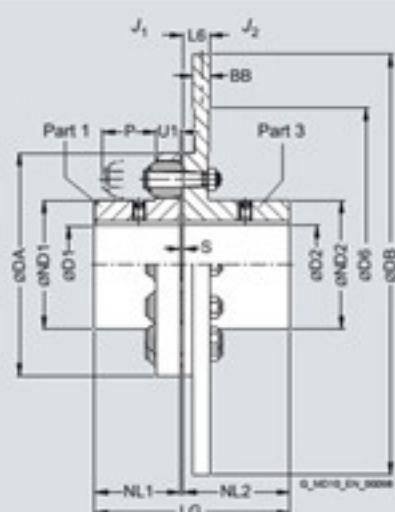
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RBS with brake disk to DIN 15432  
Sizes 144 to 360

### Selection and ordering data



Size	Rated torque buffer 60 ShoreA	Dimensions in mm Bore with keyway to DIN 6885												Brake disk						Product code Plain text specification <b>DB</b> ; <b>BB</b> ; <b>D6</b> ; <b>NL2</b> required for order code <b>P0Y</b> Order codes for bore diameters and tolerances are specified in catalog section 3
		T <sub>kv</sub> Nm	D1 min.	D2 max.	DA	ND1	ND2	NL1	NL2	S max.	U1	P	LG max.	DB min.	D6 min.	BB	L6			
144	500	—	50	—	45	144	76	84	55	219	3	16	35	277	315	175	30	34	2LC0130-3AH ■ ■ -GZA0 P0Y	
162	750	—	55	—	50	162	85	92	60	219	3.5	20	40	282.5	315	175	30	34	2LC0130-4AH ■ ■ -GZA0 P0Y	
178	950	—	70	—	60	178	102	108	70	219	3.5	20	40	292.5	355	200	30	34	2LC0130-5AH ■ ■ -GZA0 P0Y	
198	1300	—	80	—	70	198	120	128	80	219	3.5	20	40	302.5	355	200	30	34	2LC0130-6AH ■ ■ -GZA0 P0Y	
228	2200	—	85	—	60	228	129	140	90	219	3.5	26	50	312.5	450	250	30	34	2LC0130-7AH ■ ■ -GZA0 P0Y	
252	2750	—	100	38	100	252	150	160	100	219	3.5	26	50	322.5	500	280	30	34	2LC0130-8AH ■ ■ -GZA0 P0Y	
285	4300	48	110	48	120	285	164	175	110	219	4.5	32	60	333.5	560	310	30	34	2LC0131-6AH ■ ■ -GZA0 P0Y	
320	5500	55	125	55	130	320	180	192	125	219	4.5	32	60	348.5	600	350	30	34	2LC0131-1AH ■ ■ -GZA0 P0Y	
360	7800	65	135	65	140	360	200	210	140	221	4.5	42	75	365.5	710	390	30	34	2LC0131-2AE ■ ■ -GZA0 P0Y	

- (D1):
  - Without finished bore – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)
 (D2):
  - Without finished bore – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)

1  
9  
1  
9

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RBS with brake disk to DIN 15432

Sizes 144 to 360

**Brake disk diameter DB in accordance with customer specification.**

Additional sizes are available on request. Further dimensions for part 3 on request.

Maximum speed in rpm:

$$\nu_{kmax} = 1528/DB \text{ DB in m}$$

Observe maximum speed of type RWS!

Mass moments of inertia and weights can be sufficiently precisely determined as follows:

- Mass moments of inertia in kgm<sup>2</sup>:
  $J_1 = J_1$  from type RWS  
 $J_2 = J_2$  from type RWS +  $770 \cdot BB \cdot DB^4$  BB and DB in m
- Weight in kg:  
 $m = m$  from type RWS +  $6160 \cdot BB \cdot DB^2$  BB and DB in m

Ordering example:

RUPEX RBS coupling, size 252,

Part 1: Bore D1 = 48H7 mm, keyway to DIN 6885-1 and set screw,

Part 3: Brake disk DB = 630 x BB = 30 mm, D6 = 350 mm, bore 42H7 mm, keyway to DIN 6885-1 P9 and set screw.

Hub reduced to NL2 = 200 mm

Coupling micro-balanced G6.3 at 1500 rpm in accordance with the half parallel key standard.

Mass moment of inertia:

$$J_1 = 0.07 \text{ kgm}^2, J_2 = 0.12 \text{ kgm}^2 + 3.6 \text{ kgm}^2 = 3.72 \text{ kgm}^2$$

Weight:

$$m = 25.8 \text{ kg} + 73 \text{ kg} = 98.8 \text{ kg}$$

Product code:

**2LC0130-8AH99-0ZA0-Z**

**L1B+M0X+P0Y+W02**

plain text to P0Y:

**DB = 630 mm; BB = 30 mm;**

**D6 = 350 mm; NL2 = 200 mm**

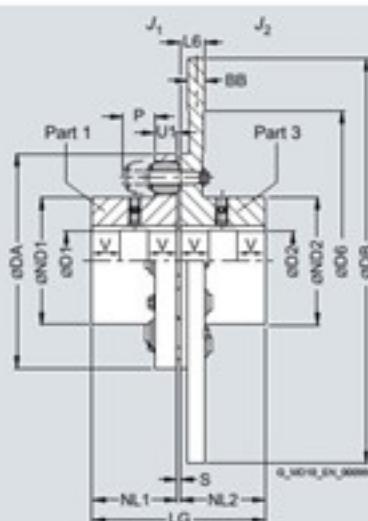
The product code applies to standard buffers of 60 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RBS with brake disk to DIN 15432  
Sizes 400 to 1000

### Selection and ordering data



Size	Rated torque buffer 60 ShoreA	Dimensions in mm Bore with keyway to DIN 6885												Brake disk				Product code Plain text specification <b>D8</b> : <b>BB; D6; NL1; NL2</b> required for order code <b>P0Y</b> Order codes for bore diameters and tolerances are specified in catalog section 3
		T <sub>kv</sub> Nm	D1 min.	D1 max.	D2 min.	D2 max.	DA	ND1	ND2	NL1	NL2	S	U1	P	LG	D6	BB	L6 min.
400	12500	75	150	75	150	400	230	230	160	225	4.5	42	75	389.5	440	30	40	2LC0131-3AH ■■■ -GZAD P0Y
450	18500	85	170	85	170	450	260	260	180	225	5.5	52	90	410.5	500	30	40	2LC0131-4AH ■■■ -GZAD P0Y
500	25000	95	190	95	190	500	290	290	200	225	5.5	52	90	430.5	500	30	40	2LC0131-5AH ■■■ -GZAD P0Y
560	39000	100	165	100	210	560	250	320	220	225	6	68	120	451	560	30	40	2LC0131-6AH ■■■ -GZAD P0Y
		165	200				300											2LC0131-6AH ■■■ -GZAD P0Y
		200	210				320											2LC0131-6AH ■■■ -GZAD P0Y
630	52000	100	165	100	235	630	250	355	240	240	6	68	120	486	630	30	55	2LC0131-7AH ■■■ -GZAD P0Y
		165	200				300											2LC0131-7AH ■■■ -GZAD P0Y
		200	235				355											2LC0131-7AH ■■■ -GZAD P0Y
710	64000	110	190	110	250	710	290	385	260	260	7	80	140	527	710	30	75	2LC0131-8AH ■■■ -GZAD P0Y
		190	220				330											2LC0131-8AH ■■■ -GZAD P0Y
		220	250				385											2LC0131-8AH ■■■ -GZAD P0Y
800	110000	125	210	125	280	800	320	420	290	290	7	80	140	587	800	30	75	2LC0132-0AH ■■■ -GZAD P0Y
		210	240				360											2LC0132-0AH ■■■ -GZAD P0Y
		240	260				420											2LC0132-0AH ■■■ -GZAD P0Y

- D01: • Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes  
• Without finished bore from size 560 for 2nd diameter range D1 – Without order codes  
• Without finished bore from size 560 for 3rd diameter range D1 – Without order codes  
• With finished bore – With order codes for diameter and tolerance (product code without **-Z**)

1  
2  
3  
9

- D02: • Without finished bore up to size 500, from size 560 for 1st diameter range D1 – Without order codes  
• Without finished bore from size 560 for 2nd diameter range D2 – Without order codes  
• Without finished bore from size 560 for 3rd diameter range D2 – Without order codes  
• With finished bore – With order codes for diameter and tolerance (product code without **-Z**)

1  
2  
3  
9

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RBS with brake disk to DIN 15432  
Sizes 400 to 1000

Size	Rated torque buffer 80 ShoreA	Dimensions in mm												Brake disk			Product code Plain text specification DB; BB; D6; NL2 required for order code P0Y Order codes for bore diameters and tolerances are specified in catalog section 3
		Bore with keyway to DIN 6885												D6	BB	L6	
T <sub>KN</sub>	Nm	D1 min.	D2 max.	DA	ND1	ND2	NL1	NL2	S	U1	P	LG	D6 min.	BB	L6		
900	150000	140	210	140	310	900	320	465	320	–	7.5	90	160	647.5	900	30	75
		210	240					360									2LC0132-1AH ■■■ -0ZA0 P0Y
		240	260					425									2LC0132-1AH ■■■ -0ZA0 P0Y
		260	310					465									2LC0132-1AH ■■■ -0ZA0 P0Y
1000	195000	150	230	150	340	1000	355	515	350	–	7.5	90	160	707.5	1000	30	75
		230	260					395									2LC0132-2AH ■■■ -0ZA0 P0Y
		260	300					460									2LC0132-2AH ■■■ -0ZA0 P0Y
		300	340					515									2LC0132-2AH ■■■ -0ZA0 P0Y

- GD1:
- Without finished bore up to size 500; from size 560 for 1st diameter range D1 – Without order codes
  - Without finished bore from size 560 for 2nd diameter range D1 – Without order codes
  - Without finished bore from size 560 for 3rd diameter range D1 – Without order codes
  - Without finished bore from size 900 for 4th diameter range D1 – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)

1

2

3

4

9

- GD2:
- Without finished bore up to size 500; from size 560 for 1st diameter range D1 – Without order codes
  - Without finished bore from size 560 for 2nd diameter range D2 – Without order codes
  - Without finished bore from size 560 for 3rd diameter range D2 – Without order codes
  - Without finished bore from size 900 for 4th diameter range D2 – Without order codes
  - With finished bore – With order codes for diameter and tolerance (product code without -Z)

1

2

3

4

9

From size 560 bore D1 is provided with a recess of D = +1 mm halfway along the hub.  
V = 1/3 NL

### Ordering example:

RUPEX RBS coupling, size 450,  
Part 1: Bore D1 = 130H7 mm, keyway to DIN 6885-1 and set screw,  
Part 3: Brake disk DB = 900; BB = 30 mm; D6 = 500 mm; bore 120H7 mm, keyway to DIN 6885-1 P9 and set screw.

### Brake disk diameter DB in accordance with customer specification.

Additional sizes are available on request. Further dimensions for part 3 on request.

Coupling micro-balanced G6.3 at 1500 rpm in accordance with the half parallel key standard.

Maximum speed in rpm:

$$\nu_{\text{max}} = 1528/\text{DB} \quad \text{DB in m}$$

Observe maximum speed of type RWS!

Mass moment of inertia:

$$J_1 = 1.74 \text{ kgm}^2$$

$$J_2 = 1.74 \text{ kgm}^2 + 15 \text{ kgm}^2 = 16.74 \text{ kgm}^2$$

Weight:

$$m = 25.8 \text{ kg} + 149 \text{ kg} = 174.8 \text{ kg}$$

Product code:

2LC0131-4AH99-0ZA0-Z

L1U+M1S+P0Y+W02

plain text to P0Y:

DB = 900 mm; BB = 30 mm;

D6 = 500 mm; NL2 = 322 mm

Mass moments of inertia and weights can be sufficiently precisely determined as follows:

- Mass moments of inertia in kgm<sup>2</sup>:  
 $J_1 = J_2$  from type RWS  
 $J_2 = J_2$  from type RWS +  $770 \cdot BB \cdot DB^4$  BB and DB in m
- Weight in kg:  
 $m = m$  from type RWS +  $6160 \cdot BB \cdot DB^2$  BB and DB in m

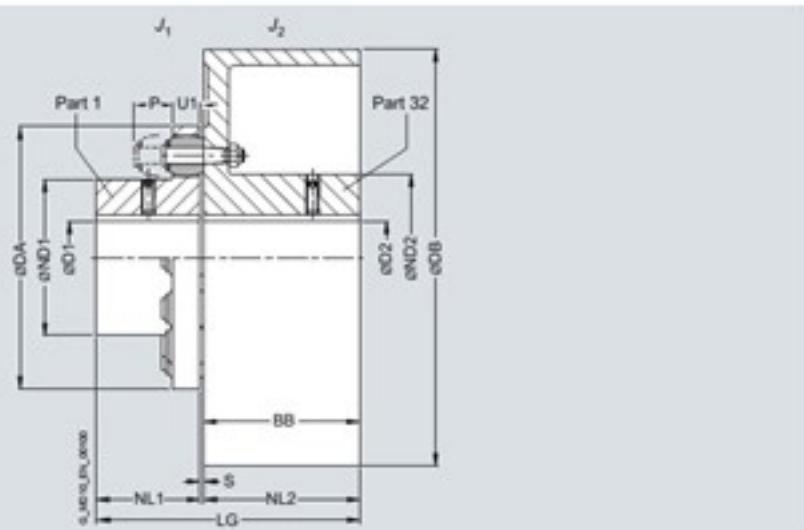
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RWB with brake drum to DIN 15431

## Selection and ordering data



For dimensions U1 and P, see type RWN.

Size	Rated torque Nm	Speed rpm	Dimensions in mm Bore with keyway to DIN 6885								Mass moment of inertia kgm <sup>2</sup>	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight kg				
			D1 min.	D2 max.	DA min.	ND1 min.	ND2 max.	NL1 min.	NL2/ S max.	BB min.							
144	500	3400	—	45	—	55	144	76	84	55	75	3	200	133	0.004	0.04	2LC0130-3AC ■■■ -0BA0 9.5
162	750	2750	—	50	—	60	162	85	92	60	95	3.5	250	158.5	0.007	0.11	2LC0130-4AC ■■■ -0CA0 17
178	950	2750	—	60	—	70	178	102	108	70	95	3.5	250	168.5	0.014	0.12	2LC0130-5AC ■■■ -0CA0 20
		2150								118			315	191.5		0.31	2LC0130-5AC ■■■ -0DA0 28
198	1300	2750	—	70	—	80	198	120	128	80	95	3.5	250	178.5	0.022	0.13	2LC0130-6AC ■■■ -0CA0 24
		2150								118			315	201.5		0.32	2LC0130-6AC ■■■ -0DA0 32
228	2200	1700	—	80	—	90	228	129	140	90	150	3.5	400	243.5	0.038	1.0	2LC0130-7AC ■■■ -0EA0 54
252	2750	1700	—	90	38	100	252	150	160	100	150	3.5	400	253.5	0.07	1.0	2LC0130-8AC ■■■ -0EA0 63
		1400								190			500	293.5		2.8	2LC0130-8AC ■■■ -0FA0 93
285	4300	1400	48	100	48	110	285	164	175	110	190	4.5	500	304.5	0.13	2.8	2LC0131-0AC ■■■ -0FA0 104
		1100								236			630	350.5		7.8	2LC0131-0AC ■■■ -0GA0 157
320	5500	1100	55	110	55	120	320	180	192	125	236	4.5	630	365.5	0.23	7.9	2LC0131-1AC ■■■ -0HA0 172
		950								265			710	394.5		13.9	2LC0131-1AC ■■■ -0HA0 217
360	7800	1100	65	120	65	130	360	200	210	140	236	4.5	630	380.5	0.41	8.1	2LC0131-2AC ■■■ -0GA0 191
		950								265			710	409.5		14.0	2LC0131-2AC ■■■ -0HA0 236

(D1): • Without finished bore – Without order codes  
 • With finished bore – With order codes for diameter and tolerance (product code without -Z)

1  
9

(D2): • Without finished bore – Without order codes  
 • With finished bore – With order codes for diameter and tolerance (product code without -Z)

1  
9

Weight and mass moments of inertia apply to maximum bore diameters.

## Ordering example:

RUPEX RWB coupling, size 252,

Part 1: Bore 48H7 mm, keyway to DIN 6885-1 and set screw,  
Part 3: 500 x 190, bore 42H7 mm, keyway to DIN 6885-1 P9 and set screw.

Coupling micro-balanced G6.3 at 1500 rpm in accordance with the half parallel key standard.

Product code:  
**2LC0130-8AC99-0FA0-Z**  
**L1B+M0X+W02**

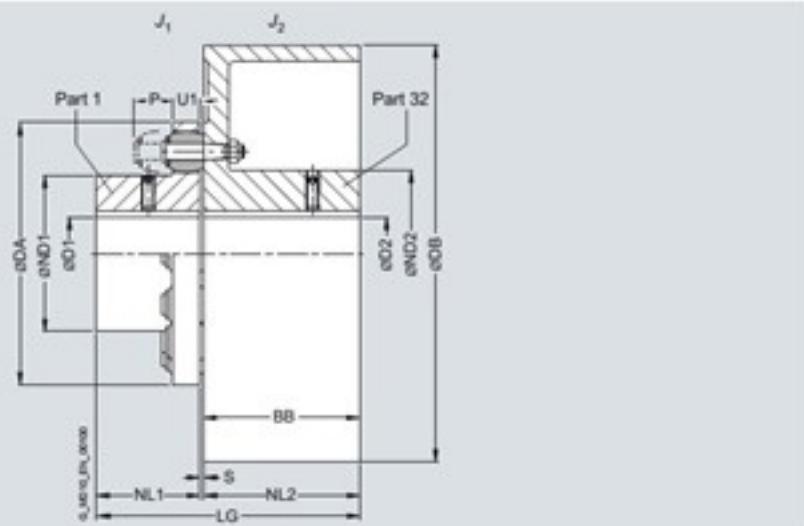
The product code applies to standard buffers of 80 ShoreA; the product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

## Flexible Couplings – RUPEX Series

Type RBS with brake drum to DIN 15431

### Selection and ordering data



For dimensions U1 and P, see type RWS

Size T <sub>kN</sub>	Rated torque buffer 80 ShoreA	Speed P <sub>max</sub>	Dimensions in mm Bore with keyway to DIN 6885								Mass moment of inertia kgm <sup>2</sup>	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight m				
			D1 min.	D2 max.	DA min.	ND1 min.	ND2 max.	NL1 min.	NL2 max.	S min.	BB min.	DB max.	J <sub>1</sub>	J <sub>2</sub>			
144	500	5000	—	50	—	60	144	76	84	55	75	3	200	133	0.004 0.04	2LC0130-3AD ■ ■ -0BA0 10	kg
162	750	5000	—	55	—	65	162	85	92	60	95	3.5	250	158.5	0.007 0.13	2LC0130-4AD ■ ■ -0CA0 18	
178	950	4900	—	70	—	75	178	102	108	70	95	3.5	250	168.5	0.014 0.13	2LC0130-5AD ■ ■ -0CA0 22	
		4350									118		315	191.5	0.34	2LC0130-5AD ■ ■ -0DA0 30	
198	1300	4600	—	80	—	85	198	120	128	80	95	3.5	250	178.5	0.022 0.14	2LC0130-6AD ■ ■ -0CA0 26	
		4350									118		315	201.5	0.35	2LC0130-6AD ■ ■ -0DA0 35	
228	2200	3400	—	85	—	95	228	129	140	90	150	3.5	400	243.5	0.038 1.1	2LC0130-7AD ■ ■ -0EA0 60	
252	2750	3400	—	100	38	110	252	150	160	100	150	3.5	400	253.5	0.067 1.1	2LC0130-8AD ■ ■ -0FA0 68	
		2750				100					190		500	290.5	3.1	2LC0130-8AD ■ ■ -0FA0 103	
285	4300	2750	48	110	48	110	285	164	175	110	190	4.5	500	304.5	0.13	2LC0131-0AD ■ ■ -0FA0 115	
		2150									236		630	350.5	8.5	2LC0131-0AD ■ ■ -0GA0 171	
320	5500	2150	55	125	55	125	320	180	192	125	236	4.5	630	365.5	0.23	2LC0131-1AD ■ ■ -0GA0 185	
		1900									265		710	394.5	14.8	2LC0131-1AD ■ ■ -0GA0 230	
360	7800	2150	65	135	65	135	360	200	210	140	236	4.5	630	380.5	0.41	2LC0131-2AD ■ ■ -0GA0 210	
		1900									265		710	409.5	15.1	2LC0131-2AD ■ ■ -0GA0 255	

2D1: • Without finished bore – Without order codes  
• With finished bore – With order codes for diameter and tolerance (product code without -Z)2D2: • Without finished bore – Without order codes  
• With finished bore – With order codes for diameter and tolerance (product code without -Z)

Weight and mass moments of inertia apply to maximum bore diameters.

Ordering example:

RUPEX RBS coupling, size 252.

Part 1: Bore 48H7 mm, keyway to DIN 6885-1 and set screw,  
Part 3: 500 x 190, bore 42H7 mm, keyway to DIN 6885-1 P9 and  
set screw.

Coupling micro-balanced.

Product code:

2LC0130-8AD99-0FA0-Z  
L1B+M0X+W02The product code applies to standard buffers of 80 ShoreA; the  
product code for alternative buffer types is available on request.

# FLENDER Standard Couplings

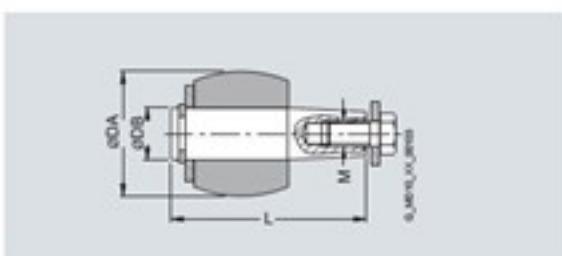
## Flexible Couplings – RUPEX Series

### Spare and wear parts

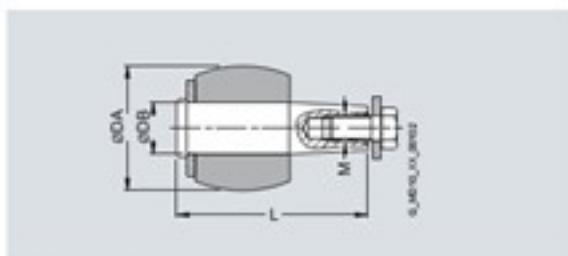
#### Selection and ordering data



Sizes 105 ... 400



Sizes 710 ... 2000



Sizes 450 ... 630

#### Buffers and pins

The buffers of RUPEX couplings are wear parts. The service life depends on the operating conditions.

Size	Identifi- cation	Number per set					Product code for a set of buffers	Weight m	Product code for a set of pins	Weight m
			DA mm	DB mm	L mm	M				
105	105	8	20	8	45	M6	2LC0130-1WA00-0AA0	0.043	2LC0130-1WB00-0AA0	0.14
125	125	8	24	10	53.5	M8	2LC0130-2WA00-0AA0	0.098	2LC0130-2WB00-0AA0	0.28
144	125	10	24	10	53.5	M8	2LC0130-3WA00-0AA0	0.12	2LC0130-3WB00-0AA0	0.35
162	125				59.5		2LC0130-3WB00-0AA0-Z Y99	0.4		
162	162	9	30	12	64.5	M10	2LC0130-4WA00-0AA0	0.17	2LC0130-4WB00-0AA0	0.57
162	162				67.5		2LC0130-4WB00-0AA0-Z Y99	0.60		
178	162	10	30	12	64.5	M10	2LC0130-5WA00-0AA0	0.19	2LC0130-5WB00-0AA0	0.65
178	162				67.5		2LC0130-5WB00-0AA0-Z Y99	0.67		
198	162	12	30	12	64.5	M10	2LC0130-6WA00-0AA0	0.23	2LC0130-6WB00-0AA0	0.76
198	162				67.5		2LC0130-6WB00-0AA0-Z Y99	0.80		
228	228	11	40	16	79	M12	2LC0130-7WA00-0AA0	0.42	2LC0130-7WB00-0AA0	1.40
252	228	12	40	16	79	M12	2LC0130-8WA00-0AA0	0.45	2LC0130-8WB00-0AA0	1.50
285	285	11	48	20	98	M16	2LC0131-0WA00-0AA0	0.81	2LC0131-0WB00-0AA0	2.50
320	285	12	48	20	98	M16	2LC0131-1WA00-0AA0	0.88	2LC0131-1WB00-0AA0	2.80
360	360	10	64	25	123	M18	2LC0131-2WA00-0AA0	1.6	2LC0131-2WB00-0AA0	4.4
400	360	14	64	25	123	M18	2LC0131-3WA00-0AA0	2.2	2LC0131-3WB00-0AA0	6.1
450	450	12	78	32	123	M16	2LC0131-4WA00-0AA0	3.5	2LC0131-4WB00-0AA0	11
500	450	14	78	32	123	M16	2LC0131-5WA00-0AA0	4.0	2LC0131-5WB00-0AA0	13
560	560	12	101	42	158	M20	2LC0131-6WA00-0AA0	7.1	2LC0131-6WB00-0AA0	25
630	560	14	101	42	158	M20	2LC0131-7WA00-0AA0	8.3	2LC0131-7WB00-0AA0	29
710	710	14	120	50	185.5	M24	2LC0131-8WA00-0AA0	14	2LC0131-8WB00-0AA0	49
800	710	16	120	50	185.5	M24	2LC0132-0WA00-0AA0	16	2LC0132-0WB00-0AA0	56
900	900	16	136	55	207.5	M24	2LC0132-1WA00-0AA0	24	2LC0132-1WB00-0AA0	71
1000	900	18	136	55	207.5	M24	2LC0132-2WA00-0AA0	27	2LC0132-2WB00-0AA0	80
1120	1120	18	155	60	232.5	M30	2LC0132-3WA00-0AA0	41	2LC0132-3WB00-0AA0	110
1250	1120	20	155	60	232.5	M30	2LC0132-4WA00-0AA0	45	2LC0132-4WB00-0AA0	125
1400	1400	20	175	70	274	M30	2LC0132-5WA00-0AA0	65	2LC0132-5WB00-0AA0	185
1600	1400	24	175	70	274	M30	2LC0132-6WA00-0AA0	78	2LC0132-6WB00-0AA0	225
1800	1800	22	200	80	327	M36	2LC0132-7WA00-0AA0	115	2LC0132-7WB00-0AA0	320
2000	1800	26	200	80	327	M36	2LC0132-8WA00-0AA0	135	2LC0132-8WB00-0AA0	380

\* Only for type RWB with brake disk and type RBS with brake disk.  
Plain text to Y99: "Type RWB/RBS with brake disk"