

3.3 LWRE ACS

Rail guides

LWRE ACS rail guides are identical to LWRE rail guides, but designed for use with anti-creeping LWAKE ACS cages. The non-slip effect is achieved through a patented control gear attached to the cage, which is in mesh between the LWRE ACS rails during operation, thus retaining the rolling element assembly in its defined position. As standard, the rails are teethed over their entire length (→ **chapter 1.3**).

Rolling element assemblies

In principle, LWAKE ACS cages are the same as LWAKE cages, but LWAKE ACS crossed roller assemblies incorporate an additional control gear located at the centre of the cage. The load carrying capacity of LWAKE ACS crossed roller assemblies is also identical with that of LWAKE standard crossed roller assemblies, assuming that they comprise an identical number of rollers. However, consider that due to their additional control gear, LWAKE ACS cages are longer than the corresponding LWAKE cages, even if the number of rollers is identical. Overrunning rolling element assemblies should only be used after consulting Ewellix.

End pieces

End pieces are generally not needed, but for production reasons, the tapped holes on the rail's end face are standard and end pieces can be mounted. LWERE end pieces are generally used for horizontal and vertical applications. An end piece with wiper, LWEREC, is available. All end pieces are supplied with appropriate mounting screws.

The end pieces for LWRE rail guides are also suitable for LWRE ACS rail guides.

Ordering example:

4x LWRE 6200 ACS
2x LWAKE 6x12 ACS
8x LWERE 6



LWRE ACS rail guides in kit packaging

Designation	Load ratings ¹⁾		Stroke ²⁾	Type of rail	Type of rolling element assembly	Type of end piece
	dyn. C N	stat. C ₀				
–			mm	–	2 pieces	8 pieces
LWRE 3050 ACS – Kit	3 465	4 250	17,7	LWRE 3050 ACS	LWAKE 3x5 ACS	LWERE 3
LWRE 3075 ACS – Kit	4 230	5 100	55,2	LWRE 3075 ACS	LWAKE 3x6 ACS	LWERE 3
LWRE 3100 ACS – Kit	6 300	8 500	55,2	LWRE 3100 ACS	LWAKE 3x10 ACS	LWERE 3
LWRE 3125 ACS – Kit	7 731	11 050	67,7	LWRE 3125 ACS	LWAKE 3x13 ACS	LWERE 3
LWRE 3150 ACS – Kit	9 090	13 600	80,2	LWRE 3150 ACS	LWAKE 3x16 ACS	LWERE 3
LWRE 3175 ACS – Kit	9 964	15 300	105,2	LWRE 3175 ACS	LWAKE 3x18 ACS	LWERE 3
LWRE 3200 ACS – Kit	11 653	18 700	105,2	LWRE 3200 ACS	LWAKE 3x22 ACS	LWERE 3
LWRE 4100 ACS – Kit	14 536	16 640	34	LWRE 4100 ACS	LWAKE 4x8 ACS	LWERE 4
LWRE 4150 ACS – Kit	19 944	24 960	70	LWRE 4150 ACS	LWAKE 4x12 ACS	LWERE 4
LWRE 4200 ACS – Kit	26 170	35 360	90	LWRE 4200 ACS	LWAKE 4x17 ACS	LWERE 4
LWRE 4250 ACS – Kit	30 859	43 680	126	LWRE 4250 ACS	LWAKE 4x21 ACS	LWERE 4
LWRE 4300 ACS – Kit	36 452	54 080	146	LWRE 4300 ACS	LWAKE 4x26 ACS	LWERE 4
LWRE 4350 ACS – Kit	41 813	64 480	166	LWRE 4350 ACS	LWAKE 4x31 ACS	LWERE 4
LWRE 4400 ACS – Kit	45 964	72 800	202	LWRE 4400 ACS	LWAKE 4x35 ACS	LWERE 4
LWRE 6100 ACS – Kit	22 826	23 400	34,4	LWRE 6100 ACS	LWAKE 6x6 ACS	LWERE 6
LWRE 6150 ACS – Kit	31 318	35 100	68,4	LWRE 6150 ACS	LWAKE 6x9 ACS	LWERE 6
LWRE 6200 ACS – Kit	39 196	46 800	102,4	LWRE 6200 ACS	LWAKE 6x12 ACS	LWERE 6
LWRE 6250 ACS – Kit	49 056	62 400	114,4	LWRE 6250 ACS	LWAKE 6x16 ACS	LWERE 6
LWRE 6300 ACS – Kit	56 093	74 100	148,4	LWRE 6300 ACS	LWAKE 6x19 ACS	LWERE 6
LWRE 6350 ACS – Kit	65 107	89 700	160,4	LWRE 6350 ACS	LWAKE 6x23 ACS	LWERE 6
LWRE 6400 ACS – Kit	71 640	101 400	194,4	LWRE 6400 ACS	LWAKE 6x26 ACS	LWERE 6

¹⁾ Load ratings are given for a kit of 4 rails and 2 rolling element assemblies in clamped arrangement and the standard stroke.

²⁾ The length of the rolling element assembly is adjustable. A shortened cage causes less rolling elements and reduced load ratings, see chapter 2.4.5.
For max. stroke the cage length must not be shorter than 2/3 of the rail length..

Available lengths ¹⁾																					Maximum rail length
50	75	100	125	150	175	200	225	250	275	300	350	400	450	500	550	600	650	700	800	900	1 000
L																					mm
●	●	●	●	●	●	●	○	○	○	○											400
		○		○		○		○		○		○	○	○	○	○		○			700
		●		●		●		○		●	○	●	○	●	○	○	○	○			1 200
						○				○		○		○		○		○	○	○	1 500

Available lengths ¹⁾									Maximum rail length
80	120	160	200	240	280	320	360	400	
L									
mm									mm
○	○	○	○	○	○	○	○	○	500

¹⁾ Other rail lengths are available on request but new J₁ dimension has to be calculated as described in chapter 4.1.7.

● Prompt delivery

○ Delivery time on request

LWRE ACSM rail guides in kit packaging

Designation	Load ratings ^{1), 2)}		Stroke ³⁾	Type of rail	Type of rolling element assembly
	dyn. C N	stat. C ₀			
–			mm	4 pieces	2 pieces
				–	–
LWRE 3050 ACSM – Kit	2 940	4 080	17,9	LWRE 3050 ACSM	LWAKE 3x5 ACSM
LWRE 3075 ACSM – Kit	3 380	4 900	55,4	LWRE 3075 ACSM	LWAKE 3x6 ACSM
LWRE 3100 ACSM – Kit	5 040	8 160	55,4	LWRE 3100 ACSM	LWAKE 3x10 ACSM
LWRE 3125 ACSM – Kit	6 180	10 610	67,9	LWRE 3125 ACSM	LWAKE 3x13 ACSM
LWRE 3150 ACSM – Kit	7 270	13 060	80,4	LWRE 3150 ACSM	LWAKE 3x16 ACSM
LWRE 3175 ACSM – Kit	7 970	14 690	105,4	LWRE 3175 ACSM	LWAKE 3x18 ACSM
LWRE 3200 ACSM – Kit	9 320	17 950	105,4	LWRE 3200 ACSM	LWAKE 3x22 ACSM
LWRE 6100 ACSM – Kit	18 260	22 460	35,8	LWRE 6100 ACSM	LWAKE 6x6 ACSM
LWRE 6150 ACSM – Kit	25 050	33 700	69,8	LWRE 6150 ACSM	LWAKE 6x9 ACSM
LWRE 6200 ACSM – Kit	31 360	44 930	103,8	LWRE 6200 ACSM	LWAKE 6x12 ACSM
LWRE 6250 ACSM – Kit	39 240	59 900	115,8	LWRE 6250 ACSM	LWAKE 6x16 ACSM
LWRE 6300 ACSM – Kit	44 870	71 140	149,8	LWRE 6300 ACSM	LWAKE 6x19 ACSM
LWRE 6350 ACSM – Kit	52 090	86 110	161,8	LWRE 6350 ACSM	LWAKE 6x23 ACSM
LWRE 6400 ACSM – Kit	57 310	97 340	195,8	LWRE 6400 ACSM	LWAKE 6x26 ACSM

¹⁾ Load ratings are given for a kit of 4 rails and 2 rolling element assemblies in clamped arrangement and the standard stroke.

²⁾ Calculated with HRC 55 due to stainless rails.

³⁾ The length of the rolling element assembly is adjustable. A shortened cage causes less rolling elements and reduced load ratings, see chapter 2.4.5.
For max. stroke the cage length must not be shorter than 2/3 of the rail length.

Available lengths ¹⁾																				Maximum rail length
30	45	50	60	75	90	100	105	120	125	135	150	175	200	225	250	275	300	350	400	
L																				mm
○	○		○	○	○		○	○		○	○									200
		●		●		●			●		●	●	●	●	●	●	●	●	●	400
						○					○		○		○		○		○	400
						●					●		●		●		●	●	●	400
													○				○		●	400

Available lengths ¹⁾										Maximum rail length
80	120	160	200	240	280	320	360	400		
L										mm
○	○	○	○	○	○	○	○	○		400

¹⁾ Other rail lengths are available on request but new J₁ dimension has to be calculated as described in **chapter 4.1.7**.

● Prompt delivery

○ Delivery time on request