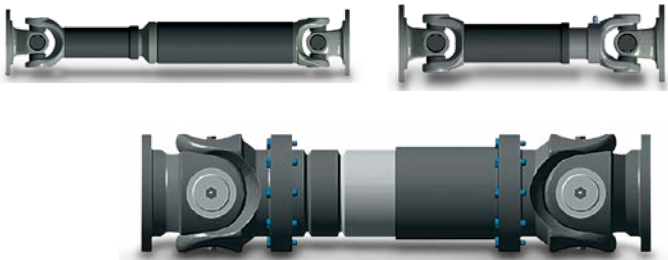


Stromag ACS Cardan Shafts



SIME Brakes Industrial Braking Systems

ACS Cardan Shafts



ACS CARDAN SHAFTS

The best choice for coupling two rotating non-aligned shafts in difficult and challenging operating conditions.

The ACS Cardan Shafts range offers an excellent reliability, high service life and low operating costs.

Seven different designs in a large range of sizes allow to provide the optimal shaft for the requested application.

Innovative and optimised construction features provide performance and advantages of no maintenance requirement.

Applications

- Steel cranes
- Gantry cranes
- Travelling cranes

Benefits






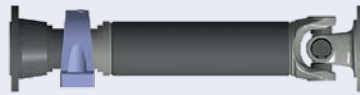

- Long service life: closed bearing yokes
- No costs of maintenance: innovative U-joint for no lubrication
- No machine down time: no lubrication requirement
- Higher torque capacity: perfected geometries
- Lower wear: optimised spline
- Maximum weld seam quality: certification DIN ISO 3834-2 and DIN EN 15085-2 CL1
- Highest possible strength and minimum deformation under load
- Excellent operational safety
- Optimally scaled product portfolio

SIME Brakes Industrial Braking Systems

ACS Cardan Shafts

TECHNICAL DATA / DIMENSIONS

Revision number: T10155-01-B Revision date: 05.11.2018

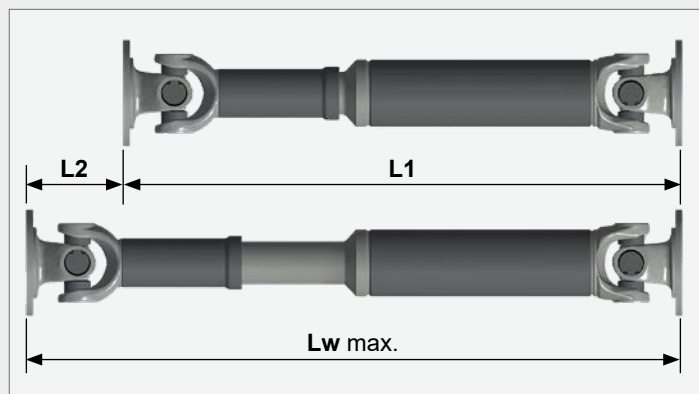
Type	Design	Description
ACS-100		With length compensation
ACS-105		With length compensation in double-flange design
ACS-110		Short couple shaft
ACS-130		Tube shaft without length compensation
ACS-135		Tube shaft without length compensation in double-flange design
ACS-160		Intermediate shaft
ACS-220		Intermediate tube shaft

L1 = compressed length

L2 = maximum possible length compensation

Lw max. = maximum possible working length

Optimal working length = **Lw opt.** = $L1 + \frac{1}{2} L2$









SIME Brakes Industrial Braking Systems

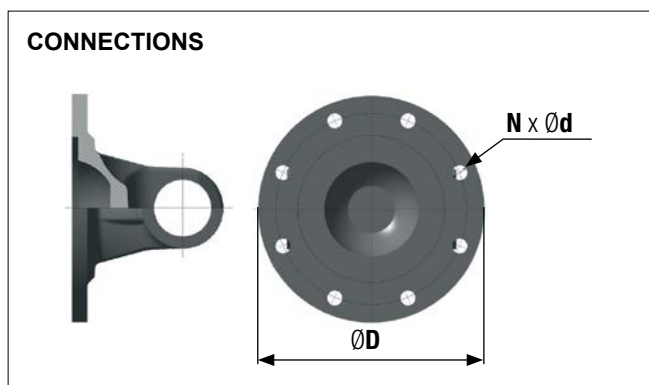
ACS Cardan Shafts

TECHNICAL DATA / DIMENSIONS

Revision number: T10155-01-B Revision date: 05.11.2018

SERIES 1, 2 and 3

Series		1	2				3					
Size		07600	10000	11600	12600	14400	15800	17200	17800	20400		
Bearing Torque	Nm	600	1.400	3.000	5.300	6.000	8.800	12.500	17.000	20.000		
Reversing Fatigue Torque	Nm	300	700	1.500	2.300	2.900	4.400	5.100	8.500	11.000		
Joint Performance Factor	Nm	220	660	990	1.780	2.070	2.400	3.500	4.600	6.800		
Swing Diameter	mm	76	100	116	126	144	158	172	178	204		
DESIGN	 100	L1 min	250	421	451	536	572	630	566	661	746	
		L2 min	40	110	110	110	110	180	110	110	110	
		tube size	50	50 / 76,2	70 / 90	90	100	100	120	120	120	140
	 110	L1 min	214	240	290	340	409	400	430	450	480	
		L2 min	15	15	30	40	45	35	40	40	40	
		L1 max	249	420	450	535	571	559	565	660	745	
		L2 max	40	110	110	110	110	110	110	110	110	
	 130	L1 min	190	218	278	309	369	355	400	353	440	
		tube size	50	50 / 76,2	70 / 90	90	100	120	120	120	120	140
	CONNECTIONS (ØD-N-Ød)	 DIN	75-6-6	90-4-8	100-6-8	120-8-10	150-8-12	150-8-12	180-8-14	180-8-14	180-8-14	180-8-14
			90-4-8	100-6-8	120-8-8	150-8-12	180-8-14	180-8-14	180-8-16	180-8-16	180-8-16	180-8-16
				100-8-8	120-8-10	180-8-10		180-8-16	180-10-16	180-10-16	180-10-16	180-10-16
			120-8-8	150-8-10	180-8-14		180-10-16	225-8-16	225-8-16	225-8-16	225-8-16	
			120-8-10	150-8-12					250-8-18	250-8-18	250-8-18	
 SAE		87-4-8	87-4-8	119-4-11,1	146-4-12,7	174,8-8-9,6	174,8-8-9,6	203,2-8-9,6	203,2-8-9,6	203,2-8-9,6	203,2-12-11,1	
			96,8-4-9,6	149-4-12,7			203,2-8-9,6	203,2-12-11,1	203,2-12-11,1	203,2-12-11,1	244,5-8-16,1	
			119-4-11,1				203,2-12-11,1					
 Cross serration			100-4-8,5	122-4-11	122-4-11	122-4-11	150-4-13	150-4-13	150-4-13	150-4-13	180-4-15	
			122-4-11				150-4-13	180-4-15	180-4-15	180-4-15		








SIME Brakes Industrial Braking Systems

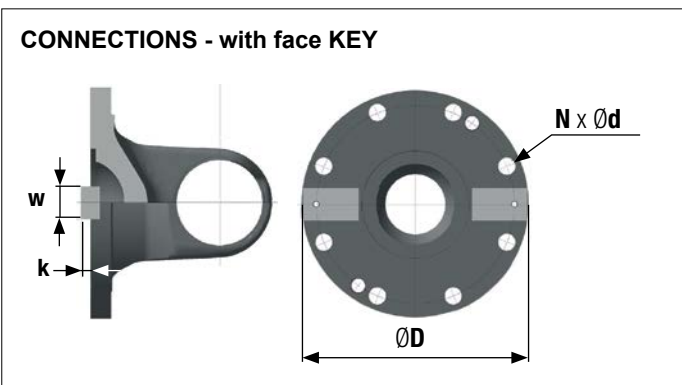
ACS Cardan Shafts

TECHNICAL DATA / DIMENSIONS

Revision number: T10155-01-B Revision date: 05.11.2018

SERIES 4 and 5

Series		4					5				
Size		21500	21510	22580	25080	28580	31510	35000	39000	44000	
DESIGN	Bearing Torque	Nm	26.000	29.000	45.000	70.000	100.000	143.000	210.000	300.000	500.000
	Reversing Fatigue Torque	Nm	13.000	14.500	23.000	35.000	50.000	70.000	100.000	150.000	250.000
	Joint Performance Factor	Nm	8.050	8.350	12.050	18.650	26.200	28.140	40.300	56.800	81.500
	Swing Diameter	mm	220	220	225	250	285	315	350	390	440
		L1 min	797	775	900	995	1.115	1.205	1.295	1.450	1.660
		L2 min	150	140	110	140	140	140	150	170	190
		tube size	144	150	160 / 170	180	200	219	245	273	325
		L1 min	551	580	585	645	990	980	1.175	1.140	1.300
		L2 min	50	40	40	40	50	100	50	80	70
		L1 max	796	650	899	994	1.114	1.204	1.294	1.449	1.659
		L2 max	150	110	140	140	140	140	150	170	190
		L1 min	506	538	615	680	760	890	950	1.040	1.250
		tube size	144	150	160 / 170	180	200	215	245	273	324
	CONNECTIONS (ØD-N-Ød)	DIN 	225-8-16	225-8-16	225-8-16	250-8-18	285-8-20	315-8-22	350-10-22	390-10-24	435-10-27
			250-8-18	250-8-18	250-8-18	285-8-20	315-8-22	350-10-22	390-10-24	435-10-27	
285-8-20			285-8-20	285-8-20	315-8-22						
DIN with face key (w x k) 		225-8-17 (32x9)	225-8-17 (32x9)	225-8-17 (32x9)	250-8-19 (40x12)	285-8-21 (40x15)	315-10-23 (40x15)	350-10-23 (50x16)	390-10-25 (70x18)	435-16-28 (80x20)	
			250-8-19 (40x12,5)	250-8-19 (40x12,5)	285-8-21 (40x15)	315-10-23 (40x15)	350-10-23 (50x16)	390-10-25 (70x18)	435-16-28 (80x20)	480-16-31 (90x22,5)	
				285-8-21 (40x15)							
High-serration 								350-12-1116	390-12-1118	435-16-1118	
								390-12-1118	435-16-1118	480-16-1120	




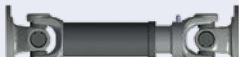





SIME Brakes Industrial Braking Systems

ACS Cardan Shafts

TECHNICAL DATA / DIMENSIONS

Revision number: T10155-01-B Revision date: 05.11.2018

SERIES 5 and 6

Series		5		6				
Size		49000	55000	62000	68000	75000	84000	
DESIGN	Bearing Torque Nm	700.000	1.000.000	1.250.000	1.950.000	2.650.000	3.900.000	
	Reversing Fatigue Torque Nm	345.000	500.000	625.000	950.000	1.350.000	1.850.000	
	Joint Performance Factor Nm	112.000	154.000	210.000	320.000	750.000	2.230.000	
	Swing Diameter mm	490	550	620	680	750	840	
	 100	L1 min	1.810	1.965	2.240			
		L2 min	190	240	250			
		tube size	351	402	445			
	 110	L1 min	1.300	1.770	2.050			
		L2 min	50	55	55			
		L1 max	1.809	1.964	2.239			
		L2 max	190	240	250			
	 130	L1 min	1.360	1.480	1.690			
		tube size	355	406	445			
	 105	L1 min				3.250	4.000	4.250
		L2 min				250	250	250
		tube size				559	609	660
 135	L1 min				1.950	2.400	2.700	
	tube size				559	609	660	
CONNECTION (∅D-N-∅d)	DIN with face key (w x k) 	480-16-31 (90x22,5)	550-16-31 (100x22,5)	620-16-38 (100x25)				
		550-16-31 (100x22,5)	620-16-38 (100x25)					
	High- serration 	480-16-1120	550-11-1122	620-6	680-24-33	750-24-33	840-24-38	
		550-16-24	620-24-26	680-24-33				

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