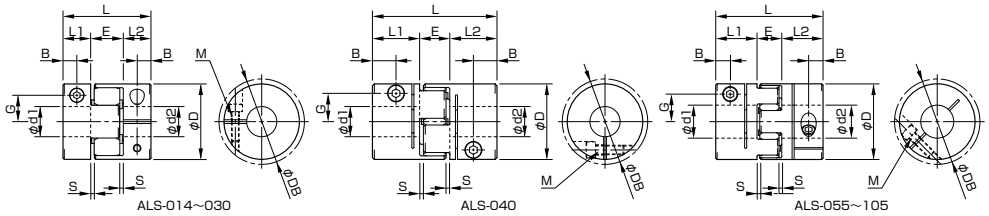
STARFLEX ALS (ARN) - Datasheet

Specifications

Model	Torque		Misalignment			Max. rotation speed [min^{-1}]	Static torsional stiffness [N·m/rad]	Radial stiffness [N/mm]	Moment of inertia [kg·m^2]	Mass [kg]
	Nominal [N·m]	Max. [N·m]	Parallel [mm]	Angular [°]	Axial [mm]					
ALS-014ARN	(2)	(4)	0.10	1	0 ~ +0.6	10000	21	380	1.98×10^{-7}	0.007
ALS-020ARN	(5)	(10)	0.10	1	0 ~ +0.8	10000	43	400	1.09×10^{-6}	0.019
ALS-030ARN	(12.5)	(25)	0.10	1	0 ~ +1.0	10000	136	650	6.19×10^{-6}	0.045
ALS-040ARN	(17)	(34)	0.10	1	0 ~ +1.2	10000	1550	1700	4.01×10^{-5}	0.16
ALS-055ARN	(60)	(120)	0.10	1	0 ~ +1.4	7000	2000	1350	1.63×10^{-4}	0.34
ALS-065ARN	(160)	(320)	0.10	1	0 ~ +1.5	5900	3100	1400	3.69×10^{-4}	0.54
ALS-080ARN	(325)	(650)	0.10	1	0 ~ +1.8	4800	6000	1710	1.04×10^{-3}	1.00
ALS-095ARN	(450)	(900)	0.10	1	-0.5 ~ +2.0	4000	10000	4200	2.25×10^{-3}	1.50
ALS-105ARN	(525)	(1050)	0.15	1	-0.9 ~ +2.0	3700	12000	5000	3.75×10^{-3}	2.05

- Check the Standard Bore Diameter and Rated Transmission Torque list as there maybe limitations on the nominal and max. torque caused by the holding power of the coupling shaft section.
- Axial displacement is not allowed in the negative direction.
- Higher rpm possible with balancing.
- Stiffness values given are from measurements taken at 20 ℃ .
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Unit [mm]

Model	d1 • d2		D	DB	L	L1 • L2	E	S	B	G	M Quantity – Nominal dia.	Tightening torque [N·m]
	Min.	Max.										
ALS-014ARN	3	7	14	16.4	22	7	8	1	3.5	5	1-M2	0.4
ALS-020ARN	4	10	20	21.7	30	10	10	1	5.	7.5	1-M2.5	1
ALS-030ARN	6	16	30	30	35	11	13	1.5	5.5	10.5	1-M3	1.5
ALS-040ARN	8	24	40	47 (45.1)	66	25	16	2	8 (6.5)	15	1-M6 (1-M5)	14 (7)
ALS-055ARN	10	30	55	56	78	30	18	2	8	20.5	1-M6	14
ALS-065ARN	14	38	65	70.7	90	35	20	2.5	11.5	25	1-M8	30
ALS-080ARN	19	45	80	80	114	45	24	3	11.5	30	1-M8	30
ALS-095ARN	20	55	95	98.5	126	50	26	3	12.5	37	1-M10	68
ALS-105ARN	25	60	105	105	140	56	28	3.5	12.5	40	1-M10	68

- The øDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
- The nominal diameter for the clamping bolt M is equal to the quantity – the nominal diameter of the screw threads, where the quantity is for a hub on one side.
- The values in ( ) in the above table are for ALS-040 hole diameters ø22 and ø24, øDB: 45.1 mm, B: 6.5 mm, M: 1-M5, clamping bolt tightening torque: 7 N·m.

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Standard bore diameter and rated transmission torque

Unit [mm]

Model	Torque	Standard bore diameter d1, d2 [mm] and rated transmission torque [N·m]																														
		3	4	5	6	6.35	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	56	60
ALS-014ARN	Nominal	0.5	0.9	1.3	1.5	1.7	1.9																									
	Max.	0.5	0.9	1.3	1.5	1.7	1.9																									
ALS-020ARN	Nominal		2.1	2.2	2.7	2.7	3.0	3.5	4.5																							
	Max.		2.1	2.2	2.7	2.7	3.0	3.5	4.5																							
ALS-030ARN	Nominal				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																		
	Max.				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																		
ALS-040ARN	Nominal							17	17	17	17	17	17	17	17	17	17	17	17													
	Max.							22	27	29	31	34	34	34	34	34	34	30	32													
ALS-055ARN	Nominal								34	38	41	49	53	57	60	60	60	60	60	60	60	60										
	Max.								34	38	41	49	53	57	65	69	72	80	88	92	104	111										
ALS-065ARN	Nominal											54	61	68	82	89	96	109	123	130	151	160	160	160	160							
	Max.											54	61	68	82	89	96	109	123	130	151	165	179	199	220							
ALS-080ARN	Nominal															105	111	124	137	143	162	175	188	207	226	238	251	270				
	Max.															105	111	124	137	143	162	175	188	207	226	238	251	270				
ALS-095ARN	Nominal																215	295	365	400	450	450	450	450	450	450	450	450	450	450		
	Max.																215	295	365	400	506	575	646	716	786	856	900	900	900	900		
ALS-105ARN	Nominal																			525	525	525	525	525	525	525	525	525	525	525	525	525
	Max.																			590	630	660	689	733	800	870	950	1050	1050	1050	1050	1050

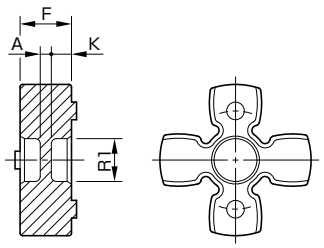
- Bore diameters whose fields contain numbers are supported as the standard bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated transmission torque by the holding power of the shaft connection component. The numbers indicate the rated transmission torque value [N·m].
- The recommended processing tolerance for paired mounting shafts is the h7 (HA) class. However, for a shaft diameter of ø35, the tolerance is $^{+0.010}_{-0.025}$.
- Bore diameters between the minimum and maximums shown in the dimensions table are compatible, but bore diameters other than those shown in the above table require other arrangements. Contact Miki Pulley for details.

How to Place an Order

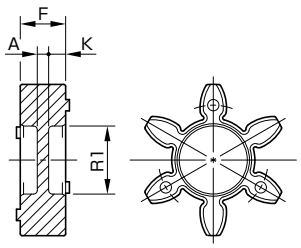
ALS-055-ARN-24BHA-28BHA

- Size
- Element type
  R: Hardness, 97 JIS A
  Tight-fit type
- Bore dia. d1 (Small dia.)
- Supported shaft tolerance
  HA: h7(h6,g6) shaft ($^{+0.010}_{-0.025}$ for ϕ35)
  (KA: k6 shaft Option)
- Bore specifications
  B: Clamp type
- Bore dia. d2 (Large dia.)

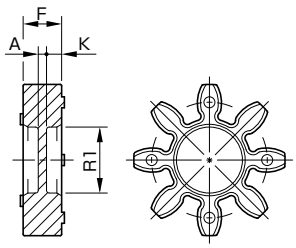
Dimensions Spider



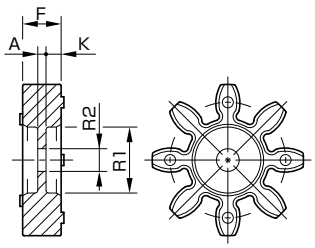
ALS-014 ~ 030-R-EL



ALS-040-R-EL



ALS-055 ~ 065-R-EL



ALS-080 ~ 105-R-EL

Model	F (mm)	R1 (mm)	R2 (mm)	K (mm)	A (mm)
ALS-014-R-EL	6.2	3.5	–	2.5	1.2
ALS-020-R-EL	8.2	6.2	–	3.4	1.4
ALS-030-R-EL	10.2	8.5	–	4	2.2
ALS-040-R-EL	12	18	–	4.5	3
ALS-055-R-EL	14	24	–	5.5	3
ALS-065-R-EL	15	30	–	5.5	4
ALS-080-R-EL	18	37	15	7	4
ALS-095-R-EL	20	43	20	8	4
ALS-105-R-EL	21	50	20	8.5	4

How to Place an Order

ALS-055-R-EL

- Size
- Element only
- Element type
  R: Hardness 97 JIS A; Tight-fit type

Material: Polyurethane elastomer

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JAW COUPLINGS

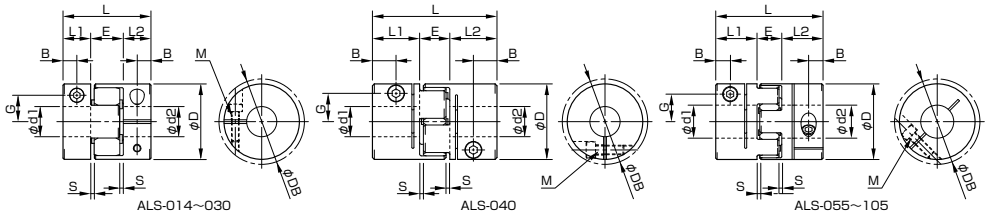
STARFLEX ALS (AYN) - Datasheet

Specifications

Model	Torque		Misalignment			Max. rotation speed [min^{-1}]	Static torsional stiffness [N·m/rad]	Radial stiffness [N/mm]	Moment of inertia [kg·m^2]	Mass [kg]
	Nominal [N·m]	Max. [N·m]	Parallel [mm]	Angular [°]	Axial [mm]					
ALS-014AYN	(1.2)	(2.4)	0.10	1	0 ~ +0.6	10000	12	200	1.98×10^{-7}	0.007
ALS-020AYN	(3)	(6)	0.15	1	0 ~ +0.8	10000	24	210	1.09×10^{-6}	0.019
ALS-030AYN	(7.5)	(15)	0.15	1	0 ~ +1.0	10000	73	330	6.19×10^{-6}	0.045
ALS-040AYN	(10)	(20)	0.10	1	0 ~ +1.2	10000	760	940	4.01×10^{-5}	0.16
ALS-055AYN	(35)	(70)	0.15	1	0 ~ +1.4	7000	1400	1160	1.63×10^{-4}	0.34
ALS-065AYN	(95)	(190)	0.15	1	0 ~ +1.5	5900	2100	1200	3.69×10^{-4}	0.54
ALS-080AYN	(190)	(380)	0.15	1	0 ~ +1.8	4800	4000	1430	1.04×10^{-3}	1.00
ALS-095AYN	(265)	(530)	0.15	1	-0.5 ~ +2.0	4000	6000	2400	2.25×10^{-3}	1.50
ALS-105AYN	(310)	(620)	0.20	1	-0.9 ~ +2.0	3700	7000	4000	3.75×10^{-3}	2.05

- Check the Standard Bore Diameter and Rated Transmission Torque list as there maybe limitations on the nominal and max. torque caused by the holding power of the coupling shaft section.
- Axial displacement is not allowed in the negative direction.
- Higher rpm possible with balancing.
- Stiffness values given are from measurements taken at 20 ℃ .
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Unit [mm]

Model	d1 • d2		D	DB	L	L1 • L2	E	S	B	G	M Quantity – Nominal dia.	Tightening torque [N·m]
	Min.	Max.										
ALS-014AYN	3	7	14	16.4	22	7	8	1	3.5	5	1-M2	0.4
ALS-020AYN	4	10	20	21.7	30	10	10	1	5.	7.5	1-M2.5	1
ALS-030AYN	6	16	30	30	35	11	13	1.5	5.5	10.5	1-M3	1.5
ALS-040AYN	8	24	40	47 (45.1)	66	25	16	2	8 (6.5)	15	1-M6 (1-M5)	14 (7)
ALS-055AYN	10	30	55	56	78	30	18	2	8	20.5	1-M6	14
ALS-065AYN	14	38	65	70.7	90	35	20	2.5	11.5	25	1-M8	30
ALS-080AYN	19	45	80	80	114	45	24	3	11.5	30	1-M8	30
ALS-095AYN	20	55	95	98.5	126	50	26	3	12.5	37	1-M10	68
ALS-105AYN	25	60	105	105	140	56	28	3.5	12.5	40	1-M10	68

- The øDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
- The nominal diameter for the clamping bolt M is equal to the quantity – the nominal diameter of the screw threads, where the quantity is for a hub on one side.
- The values in ( ) in the above table are for ALS-040 hole diameters ø22 and ø24, øDB: 45.1 mm, B: 6.5 mm, M: 1-M5, clamping bolt tightening torque: 7 N·m.

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Standard bore diameter and rated transmission torque

Unit [mm]

Model	Torque	Standard bore diameter d1, d2 [mm] and rated transmission torque [N·m]																															
		3	4	5	6	6.35	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	56	60
ALS-014AYN	Nominal	0.5	0.9	1.2	1.2	1.2	1.2																										
	Max.	0.5	0.9	1.3	1.5	1.7	1.9																										
ALS-020AYN	Nominal		2.1	2.2	2.7	2.7	3.0	3.0	3.0																								
	Max.		2.1	2.2	2.7	2.7	3.0	3.5	4.5																								
ALS-030AYN	Nominal				3.6	3.6	4.1	4.9	7.0	7.5	7.5	7.5	7.5	7.5																			
	Max.				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																			
ALS-040AYN	Nominal							10	10	10	10	10	10	10	10	10	10	10	10														
	Max.							20	20	20	20	20	20	20	20	20	20	20	20														
ALS-055AYN	Nominal								34	35	35	35	35	35	35	35	35	35	35	35	35	35											
	Max.								34	38	41	49	53	57	65	69	70	70	70	70	70	70											
ALS-065AYN	Nominal											54	61	68	82	89	95	95	95	95	95	95	95	95	95								
	Max.											54	61	68	82	89	96	109	123	130	151	165	179	190	190								
ALS-080AYN	Nominal															105	111	124	137	143	162	175	188	190	190	190	190	190					
	Max.															105	111	124	137	143	162	175	188	207	226	238	251	270					
ALS-095AYN	Nominal																215	265	265	265	265	265	265	265	265	265	265	265	265	265	265		
	Max.																215	295	365	400	506	530	530	530	530	530	530	530	530	530	530		
ALS-105AYN	Nominal																			310	310	310	310	310	310	310	310	310	310	310	310	310	310
	Max.																			590	620	620	620	620	620	620	620	620	620	620	620	620	620

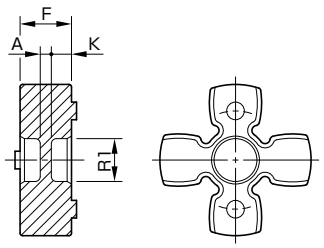
- Bore diameters whose fields contain numbers are supported as the standard bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated transmission torque by the holding power of the shaft connection component. The numbers indicate the rated transmission torque value [N·m].
- The recommended processing tolerance for paired mounting shafts is the h7 (HA) class. However, for a shaft diameter of ø35, the tolerance is $^{+0.010}_{-0.025}$.
- Bore diameters between the minimum and maximums shown in the dimensions table are compatible, but bore diameters other than those shown in the above table require other arrangements. Contact Miki Pulley for details.

How to Place an Order

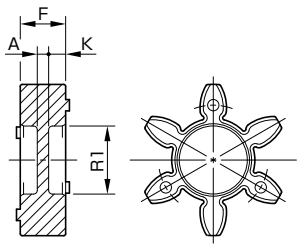
ALS-055-AYN-24BHA-28BHA

- Size
- Element type
  Y: Hardness, 90 JIS A
  Tight-fit type
- Bore dia. d1 (Small dia.)
- Supported shaft tolerance
  HA: h7(h6,g6) shaft ($^{+0.010}_{-0.025}$ for ϕ35)
  (KA: k6 shaft Option)
- Bore specifications
  B: Clamp type
- Bore dia. d2 (Large dia.)

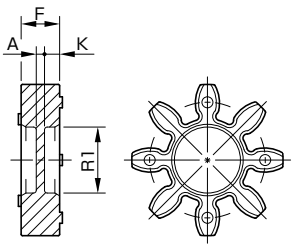
Dimensions Spider



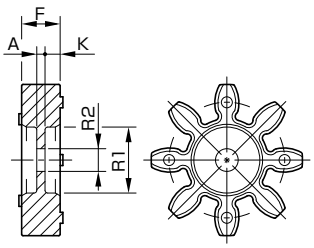
ALS-014 ~ 030-Y-EL



ALS-040-Y-EL



ALS-055 ~ 065-Y-EL



ALS-080 ~ 105-Y-EL

Model	F (mm)	R1 (mm)	R2 (mm)	K (mm)	A (mm)
ALS-014-Y-EL	6.2	3.5	–	2.5	1.2
ALS-020-Y-EL	8.2	6.2	–	3.4	1.4
ALS-030-Y-EL	10.2	8.5	–	4	2.2
ALS-040-Y-EL	12	18	–	4.5	3
ALS-055-Y-EL	14	24	–	5.5	3
ALS-065-Y-EL	15	30	–	5.5	4
ALS-080-Y-EL	18	37	15	7	4
ALS-095-Y-EL	20	43	20	8	4
ALS-105-Y-EL	21	50	20	8.5	4

How to Place an Order

ALS-055-Y-EL

- Size
- Element only
- Element type
  Y: Hardness 90 JIS A; Tight-fit type

Material: Polyurethane elastomer

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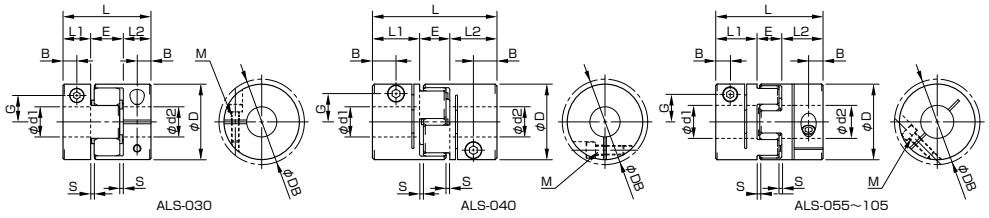
STARFLEX ALS (ABN) - Datasheet

Specifications

Model	Torque		Misalignment			Max. rotation speed [min^{-1}]	Static torsional stiffness [N·m/rad]	Radial stiffness [N/mm]	Moment of inertia [kg·m^2]	Mass [kg]
	Nominal [N·m]	Max. [N·m]	Parallel [mm]	Angular [°]	Axial [mm]					
ALS-030ABN	(12.5)	(25)	0.17	1	-0.2 ~ +1.0	10000	90	460	6.07×10^{-6}	0.043
ALS-040ABN	(17)	(34)	0.20	1	-0.5 ~ +1.2	10000	400	640	4.00×10^{-5}	0.16
ALS-055ABN	(60)	(120)	0.22	1	-0.2 ~ +1.4	7000	1150	400	1.63×10^{-4}	0.34
ALS-065ABN	(160)	(320)	0.25	1	-0.6 ~ +1.5	5900	2000	800	3.69×10^{-4}	0.54
ALS-080ABN	(325)	(650)	0.28	1	-0.9 ~ +1.8	4800	4550	600	1.04×10^{-3}	1.00
ALS-095ABN	(450)	(900)	0.32	1	-0.5 ~ +2.0	4000	12000	800	2.25×10^{-3}	1.50
ALS-105ABN	(525)	(1050)	0.36	1	-0.9 ~ +2.0	3700	15000	2000	3.75×10^{-3}	2.05

- Check the Standard Bore Diameter and Rated Transmission Torque list as there maybe limitations on the nominal and max. torque caused by the holding power of the coupling shaft section.
- Axial displacement is not allowed in the negative direction.
- Higher rpm possible with balancing.
- Stiffness values given are from measurements taken at 20 ℃ .
- The moment of inertia and mass are specified for the maximum bore diameter.

Dimensions



Unit [mm]

Model	d1 • d2		D	DB	L	L1 • L2	E	S	B	G	M Quantity – Nominal dia.	Tightening torque [N·m]
	Min.	Max.										
ALS-030ABN	6	16	30	30	35	11	13	1.5	5.5	10.5	1-M3	1.5
ALS-040ABN	8	24	40	47 (45.1)	66	25	16	2	8 (6.5)	15	1-M6 (1-M5)	14 (7)
ALS-055ABN	10	30	55	56	78	30	18	2	8	20.5	1-M6	14
ALS-065ABN	14	38	65	70.7	90	35	20	2.5	11.5	25	1-M8	30
ALS-080ABN	19	45	80	80	114	45	24	3	11.5	30	1-M8	30
ALS-095ABN	20	55	95	98.5	126	50	26	3	12.5	37	1-M10	68
ALS-105ABN	25	60	105	105	140	56	28	3.5	12.5	40	1-M10	68

- The øDB value is measured assuming that the head of the clamping bolt is larger than the external diameter of the hub.
- The nominal diameter for the clamping bolt M is equal to the quantity – the nominal diameter of the screw threads, where the quantity is for a hub on one side.
- The values in ( ) in the above table are for ALS-040 hole diameters ø22 and ø24, øDB: 45.1 mm, B: 6.5 mm, M: 1-M5, clamping bolt tightening torque: 7 N·m.

Standard bore diameter and rated transmission torque

Unit [mm]

Model	Torque	Standard bore diameter d1, d2 [mm] and rated transmission torque [N·m]																														
		3	4	5	6	6.35	7	8	10	11	12	14	15	16	18	19	20	22	24	25	28	30	32	35	38	40	42	45	48	50	55	56	60
ALS-030ABN	Nominal				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																			
	Max.				3.6	3.6	4.1	4.9	7.0	7.5	8.2	9.7	10	11																			
ALS-040ABN	Nominal							17	17	17	17	17	17	17	17	17	17	17	17													
	Max.							22	27	29	31	34	34	34	34	34	34	30	32													
ALS-055ABN	Nominal								34	38	41	49	53	57	60	60	60	60	60	60	60	60										
	Max.								34	38	41	49	53	57	65	69	72	80	88	92	104	111										
ALS-065ABN	Nominal											54	61	68	82	89	96	109	123	130	151	160	160	160	160							
	Max.											54	61	68	82	89	96	109	123	130	151	165	179	199	220							
ALS-080ABN	Nominal															105	111	124	137	143	162	175	188	207	226	238	251	270				
	Max.															105	111	124	137	143	162	175	188	207	226	238	251	270				
ALS-095ABN	Nominal																215	295	365	400	450	450	450	450	450	450	450	450	450	450	450	
	Max.																215	295	365	400	506	575	646	716	786	856	900	900	900	900	900	
ALS-105ABN	Nominal																			525	525	525	525	525	525	525	525	525	525	525	525	525
	Max.																			590	630	660	689	733	800	870	950	1050	1050	1050	1050	1050

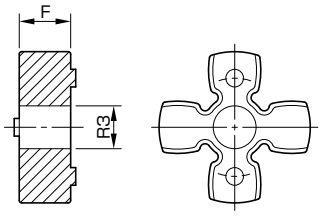
- Bore diameters whose fields contain numbers are supported as the standard bore diameters.
- Bore diameters whose fields contain numbers are restricted in their rated transmission torque by the holding power of the shaft connection component. The numbers indicate the rated transmission torque value [N·m].
- The recommended processing tolerance for paired mounting shafts is the h7 (HA) class. However, for a shaft diameter of ø35, the tolerance is $^{+0.010}_{-0.025}$.
- Bore diameters between the minimum and maximums shown in the dimensions table are compatible, but bore diameters other than those shown in the above table require other arrangements. Contact Miki Pulley for details.

How to Place an Order

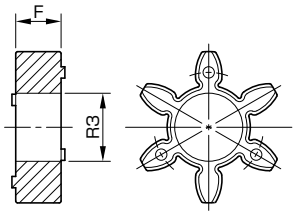
ALS-055-ABN-24BHA-28BHA

- Size
- Element type
  R: Hardness, 97 JIS A
  Loose-fit type
- Bore dia. d1 (Small dia.)
- Supported shaft tolerance
  HA: h7(h6,g6) shaft ($^{+0.010}_{-0.025}$ for ϕ35)
  (KA: k6 shaft Option)
- Bore specifications
  B: Clamp type
- Bore dia. d2 (Large dia.)

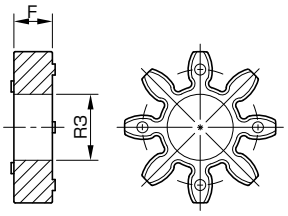
Dimensions Spider



ALS-030-B-EL



ALS-040-B-EL



ALS-055 ~ 105-B-EL

Model	F (mm)	R3 (mm)
ALS-030-B-EL	10.2	10.5
ALS-040-B-EL	12	18.5
ALS-055-B-EL	14	27.5
ALS-065-B-EL	15	32
ALS-080-B-EL	18	41
ALS-095-B-EL	20	47
ALS-105-B-EL	21	50

How to Place an Order

ALS-055-Y-EL

- Size
- Element only
- Element type
  Y: Hardness 90 JIS A; Tight-fit type

Material: Polyurethane elastomer

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