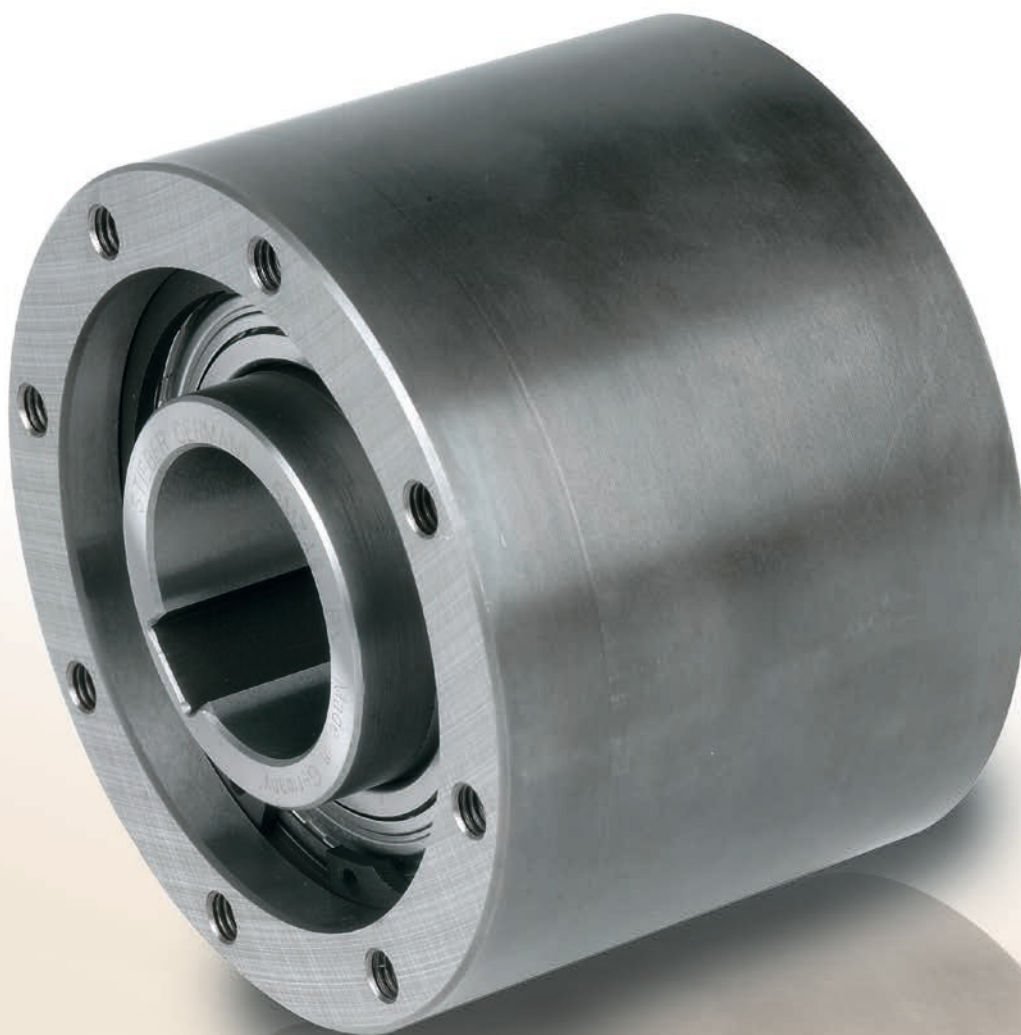


SMZ



TYPE



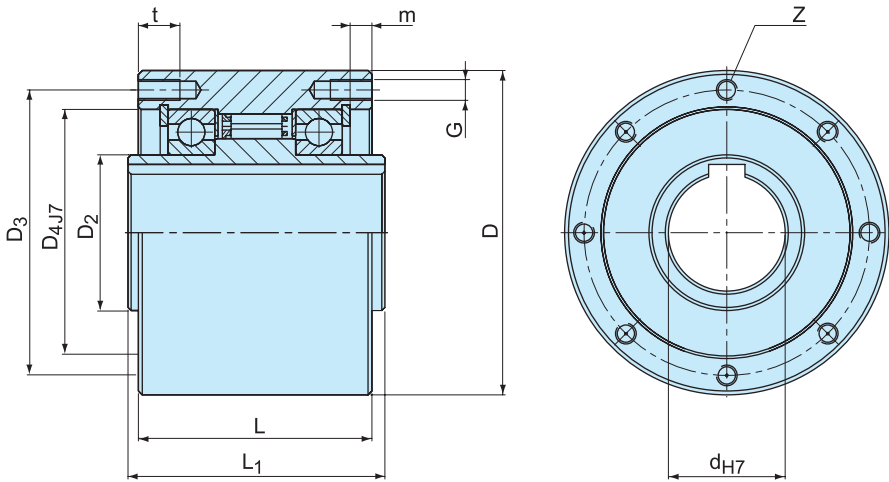
Type SMZ is a sealed, sprag type freewheel, bearing supported using two 60..ZZ series grease lubricated bearings.

Units are delivered grease lubricated ready for installation. SMZ units are intended as multipurpose, to be used in various applications. A typical mounting

arrangement is shown on the following page. The inner race is keyed to the shaft. The inside diameter of the outer race (dimension D4) should be used as the mounting register for the connected parts (sprocket, pulley, gear, torque arm...). The mounting spigot should be to g6 tolerance.

Self-Contained Freewheels

SMZ



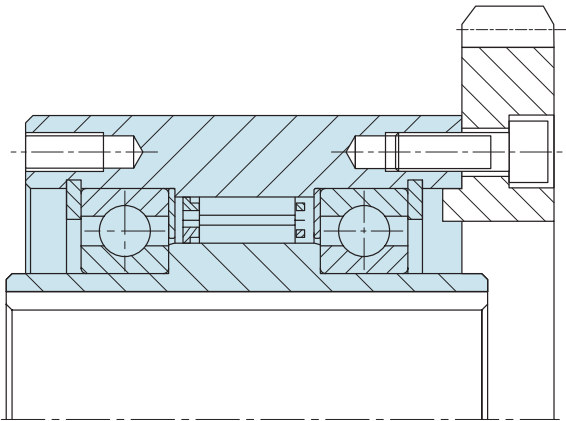
SMZ

Type	Size	Overrunning speeds										Number			Weight
	d_{H7} [mm]	$T_{KN}^{1)}$ [Nm]	$n_{imax}^{2)}$ [min ⁻¹]	$n_{amax}^{3)}$ [min ⁻¹]	D [mm]	D ₂ [mm]	D ₃ [mm]	D _{4 J7} [mm]	L [mm]	L ₁ [mm]	G [mm]	z [mm]	t [mm]	m [mm]	[kg]
SMZ	20	300	1600	700	80	30	68	55	65	67	M6	6	12	7,6	2
	30	1035	1500	500	100	45	88	75	80	82	M8	6	16	8,9	3,7
	35	1100	1400	300	110	50	95	80	85	87	M8	6	16	8,7	4,8
	45	1750	1300	300	125	60	110	95	90	92	M8	8	16	8,4	6,2
	60	3400	1100	250	155	80	140	125	100	102	M8	8	16	9,1	10,2
	70	4300	1000	250	175	95	162	140	103	105	M8	8	16	8,6	13,2

NOTES

- $T_{max} = 2 \times T_{KN}$
» Refer to Selection page 7 to 11
 - Inner race overruns
 - Outer race overruns
Keyway to DIN 6885.1
- » Refer to mounting and maintenance instructions page 12 to 13

MOUNTING EXAMPLE



Self-Contained Freewheels

FSO 300-700, FSO-GR 300-700, HPI 300-700



TYPE

FSO..GR



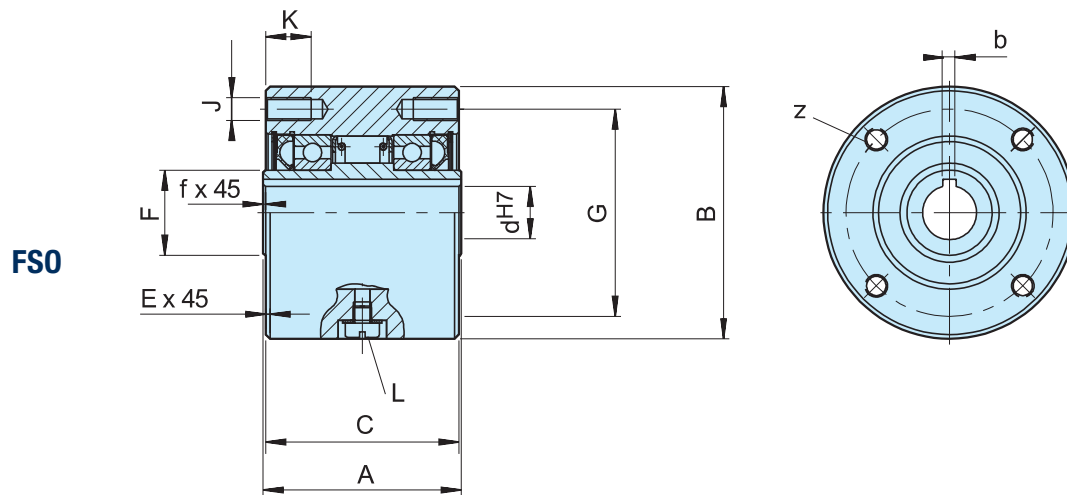
Types FSO, FSO-GR, and HPI 300 to 700 are sprag type freewheels self-contained, sealed and bearing supported, using two ball bearings.

Units are delivered oil or grease lubricated according to the type. It is a Formsprag USA design with a »full sprag complement« that gives a very high torque for a

given diameter. Any overload is resisted by a sprag to sprag abutment, avoiding a sprag tilt over. Types FSO and HPI are oil lubricated and use standard shaft lip seals. Type FSO-GR is grease lubricated and can be equipped with contact free labyrinth seals. Type HPI is specially designed for high speed indexing applications.

Self-Contained Freewheels

FSO, FSO-GR, HPI 300-700

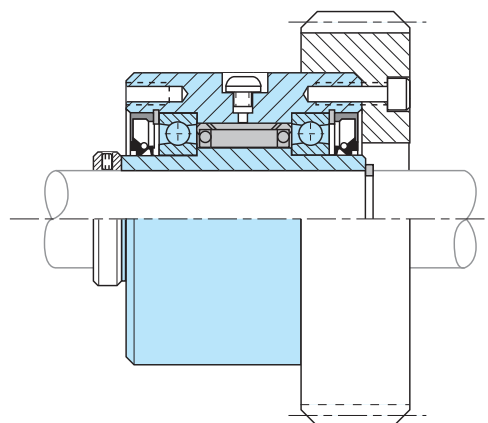


Type	Size	Overrunning speeds											Number				Lubricant				Weight	Drag torque
FSO FSO-GR HPI			FSO	FSO-GR	d ^{H7} -bxh	d ⁴⁾	A	B	C	E	F	G	z	J	K	L	f	FSO	FSO..GR	HPI		T _R
		T _{KH} ¹⁾	n _{max} ²⁾	n _{max} ³⁾		min-max		-0,05														
		[Nm]	[min ⁻¹]	[min ⁻¹]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]		[mm]	[ml]	[ml]	[ml]	[kg]	[Ncm]
	300	379	3000/900	3600/900	15-5x5	12... 19	63,50	76,20	60,45	1,6	28,58	66,67	4	M8	13	M6	0,8	7	10	14	1,6	18
	400	407	2800/850	3600/850	18-6x6	12... 22	69,85	88,90	68,07	1,6	30	73	4	M8	13	M6	0,8	10	20	20	2,7	27
	500	1621	2500/800	3000/800	30-8x7	19... 33	88,90	107,95	85,73	1,6	45	92	4	M8	16	M6	1,5	22	35	35	4,8	31
	600	3105	2200/750	2400/750	40-12x8	24... 57	95,25	136,525	92,2	1,6	63,5	120,6	6	M8	16	M6	1,6	52	84	84	8,6	62
					45-14x9																	
					50-14x6																	
					50-14x9																	
	700	6900	1600/450	2000/450	60-18x11	48... 82	127,00	180,975	123,85	1,6	90	158,75	8*	M10*	20	M6	1,6	168	280	280	19	156
					65-18x11																	
					70-20x12						101,6 ⁵⁾											

NOTES

- 1) $T_{max} = 1.2 \times T_{KN}$
» Refer to Selection page 7 to 11
- 2) Inner race/outer raceg
- 3) Inner race/outer race labyrinth seal
- 4) Inch bore available on request
- 5) Only for oversize bore
Size 600 > 50 mm
Size 700 > 75 mm
- *) 6 holes equally spaced at 60° plus
2 extra-holes at 180°
- » Refer to mounting and maintenance instructions
page 12 to 13

MOUNTING EXAMPLE



Self-Contained Freewheels

FS 750-1027, FSO 750-1027, HPI 750-1027



TYPE

FSO



Types FS, FSO, and HPI 750 to 1027 are sprag type freewheels self-contained, sealed and bearing supported, using two ball bearings.

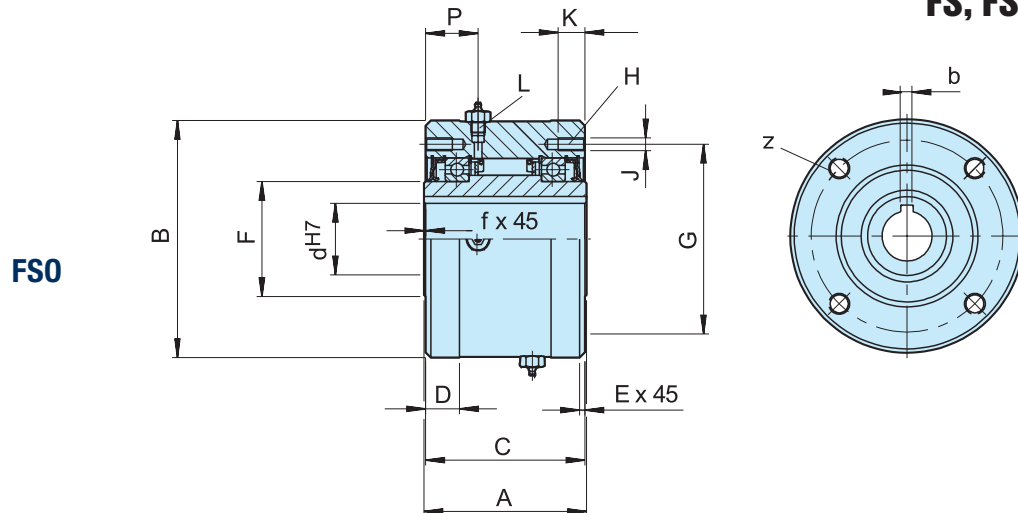
Units are delivered oil or grease lubricated according to the type. It is a Formsprag USA design that uses tall sprags with multi-radius active surfaces. Designed specially for large size freewheels to compensate for any eccentricity due to bearing wear. Types FS and HPI are

oil lubricated and use standard shaft lip seals. Type FSO is grease lubricated and equipped with special grease seals.

Type HPI is specially designed for high speed indexing applications. Each of the different models show a range of standard metric bore diameters. We can supply any bore size between the minimum and maximum specified in the table, including imperial sizes.

Self-Contained Freewheels

FS, FSO, HPI 750-1027



Type	Size		Overrunning speeds												Number								Lubricant			Weight	Drag torque
FSO FS HPI			FSO	FS	d ¹⁷ -bxh	d ⁴⁾	A	B ⁵⁾	C	D	E	F	G	z	J	K	L	P	f	FSO	HPI	FS		T _R			
		T _{KN} ¹⁾ [Nm]	n _{max} ²⁾ [min ⁻¹]	n _{max} ³⁾ [min ⁻¹]	[mm]	min-max [mm]	[mm]	-0,05 [mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]			[mm]	[inch]	[mm]	[mm]	[ml]	[ml]	[ml]	[kg]	[Ncm]		
	750	9660	1800/650	1000/650	65-18x11	57–87	152,4	222,25	149,2	31,7	1,6	107,74	177,8	8*	M12*	25	1/2-20	49,2	1,6	222	384	207	38	5,08			
					70-20x12																						
					75-20x12																						
					80-22x14																						
					85-22x14																						
	800	17940	1500/525	850/525	80-22x14	66–112	152,4	254,00	149,2	31,7	1,6	139,70	227,0	8	M12	25	1/2-20	49,2	1,6	222	444	251	46	7,12			
					90-25x14																						
					100-28x16																						
					110-28x16																						
	900	24408	1350/500	700/500	100-28x16	92–138	161,9	304,80	158,7	34,9	1,6	161,92	247,65	10	M16	32	1/2-20	54	1,6	532	473	340	71	8,47			
					110-28x16																						
					120-32x18																						
					130-32x18																						
	1027	36612	700/375	500/375	130-32x18	125-177	168	381,00	165,1	34,9	3,2	228,60	298,45	12	M16	32	1/2-20	54	3,2	651	946	473	113	13,56			
				150-36x20																							
				175-45x25																							

NOTES

- 1) $T_{max} = 1.2 \times T_{KN}$
» Refer to Selection page 7 to 11
- 2) Inner race/outer race
- 3) Inner race/outer race
- 4) Inch bore available on request
- *) 6 holes equally spaced at 60° plus 2 extra-holes at 180°
- 5) Tolerance for sizes 900 and 1027: -0,08

MOUNTING EXAMPLE

