

20mm Ball Bearings



Solid Ring 20mm Metric Series

Slewing rings for medium to heavy duty applications in a wide range of industries



The **S20 Metric Series** comprises a set of slewing rings of constant height (56mm) with solid cross section rings and with external diameters ranging from 486mm to 1166mm.

SUN 20 Series

SIG 20 Series

SEG 20 Series

Solid **UN**geared bearings

Solid Internal **GEAR** bearings

Solid External **GEAR** bearings

Construction

Standard bearings incorporate plastic spacers, but ball spacers, steel or brass spacers or even full complement or caged bearings can be supplied for specific applications.

From 2015 all geared bearings will be made in 42CrMo4 V steel for superior gear strength

Seals

A land riding nitrile rubber seal strip is standard. VITON seals can be supplied to order.

Gearing

Standard metric spur gears with 20 degree pressure angle and no addendum correction.

Suitable pinions (as well as gearboxes and motors) can be specified and supplied.

Lubrication

Bearings are assembled with a Lithium EP2 grease. Special greases can be supplied to order.

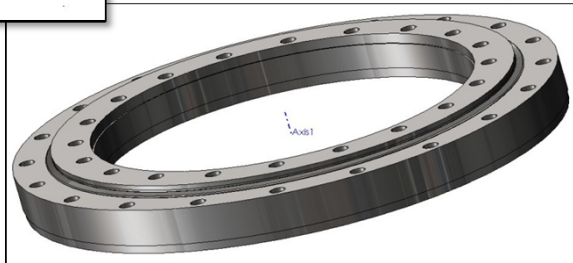
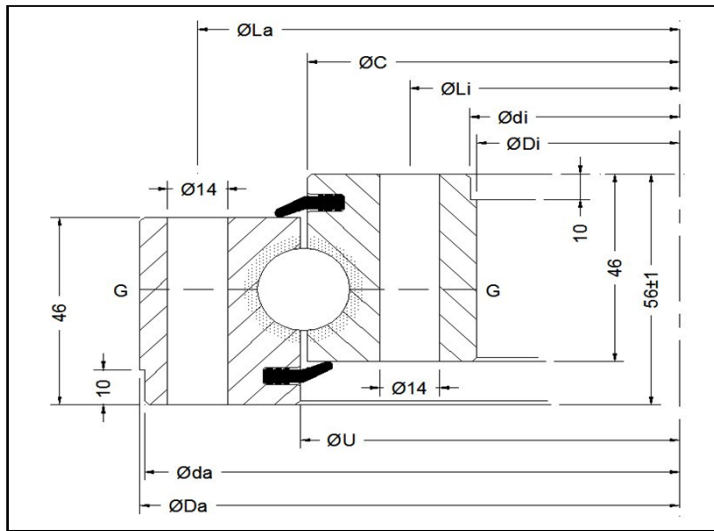
Custom options

- # double or custom drilling patterns
- # higher precision bearings with reduced internal clearance and runouts
- # zinc plating for corrosion protection

Solid section rings offer higher torsional strength and rigidity to the raceways and thus higher load capacities compared to the flanged units and are best suited to medium or heavily loaded applications such as

- Large industrial positioners (e.g. welding and assembly jigs)
- Ship or truck loading chute swivels
- Small cranes
- Conveyors and associated materials handling equipment
- Amusement rides

Solid Ring 20mm ball Ungeared (Metric)



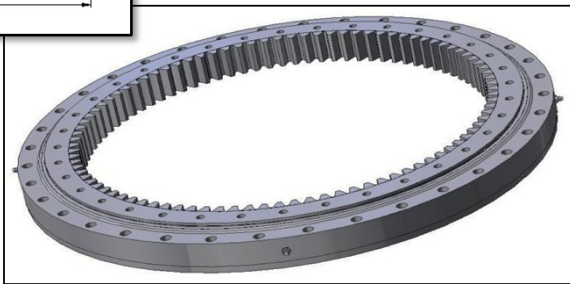
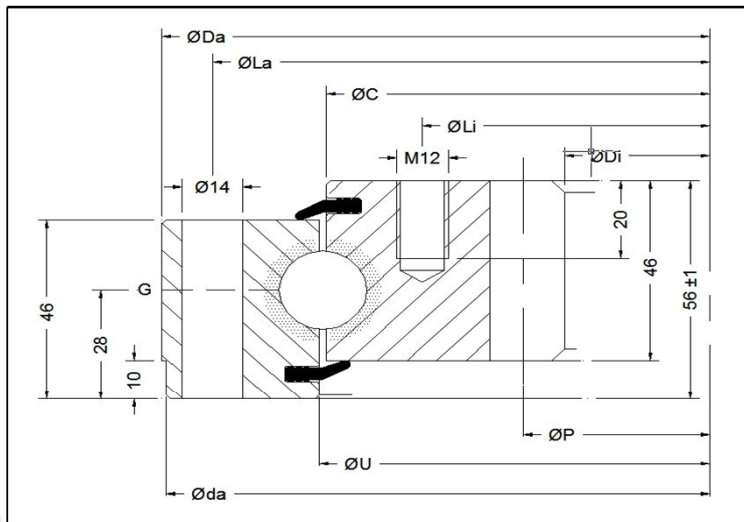
QCB reference	Outline dimensions & weight							
	D_a	D_i	U	C	$d_a f9$	$d_i H9$	Load curve	Weight
	mm	mm	mm	mm	mm	mm		
SUN 486 20 01 CC LM	486	342	415.5	412.5	484	344	14	29
SUN 616 20 01 CC LM	616	472	545.5	542.5	614	474	15	37
SUN 716 20 01 CC LM	716	572	645.5	642.5	714	574	16	44
SUN 816 20 01 CC LM	816	672	745.5	742.5	814	674	17	52
SUN 916 20 01 CC LM	916	772	845.5	842.5	914	774	18	60
SUN 1016 20 01 AA LM	1016	872	945.5	942.5	1014	874	19	67
SUN 1166 20 01 AA LM	1166	1022	1095.5	1092.5	1164	1024	20	77

QCB reference	Outer holes		Inner holes					
	L_a	n_a	L_i	n_i				
	mm		mm					
SUN 486 20 01 CC LM	460	24	368	24				
SUN 616 20 01 CC LM	590	32	498	32				
SUN 716 20 01 CC LM	690	36	598	36				
SUN 816 20 01 CC LM	790	40	698	40				
SUN 916 20 01 CC LM	890	40	798	40				
SUN 1016 20 01 AA LM	990	44	898	44				
SUN 1166 20 01 AA LM	1140	48	1048	48				

Standard grease fitting

at least 2 x M8 on inner and outer rings

Solid Ring 20mm ball Internal Gear (Metric)



QCB reference	Outline dimensions & weight							
	D _a	D _i	U	C	d _a f9	d _i H9	Load curve	Weight
	mm	mm	mm	mm	mm	mm		kg

SIG 486 20 01 AA LM	486	324	415.5	412.5	484		14	31
SIG 616 20 01 AA LM	616	444	545.5	542.5	614		15	42
SIG 716 20 01 AA LM	716	546	645.5	642.5	714		16	50
SIG 816 20 01 AA LM	816	648	745.5	742.5	814		17	58
SIG 916 20 01 AA LM	916	736	845.5	842.5	914		18	69
SIG 1016 20 01 AA LM	1016	840	945.5	942.5	1014		19	76
SIG 1166 20 01 AA LM	1166	984	1095.5	1092.5	1164		20	91

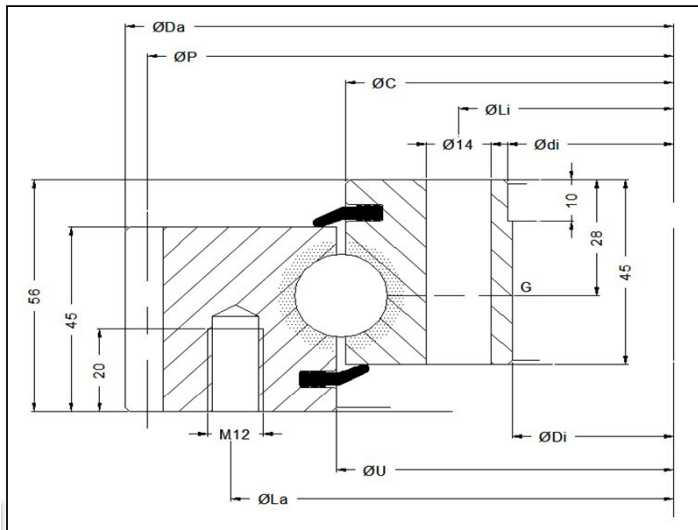
QCB reference	Outer holes		Inner holes		20° spur gear			
	L _a	n _a	L _i	n _i	P	m	z	F _z MAX
	mm		mm		mm			KN

SIG 486 20 01 AA LM	460	24	375	24	335	5	67	22.8
SIG 616 20 01 AA LM	590	32	505	32	456	6	76	27.4
SIG 716 20 01 AA LM	690	36	605	36	558	6	93	27.4
SIG 816 20 01 AA LM	790	40	705	40	660	6	110	27.4
SIG 916 20 01 AA LM	890	40	805	40	752	8	94	36.6
SIG 1016 20 01 AA LM	990	44	905	44	856	8	107	36.6
SIG 1166 20 01 AA LM	1140	48	1055	48	1000	8	125	36.6

Standard grease fitting

at least 2 x M8 on outer ring

Solid ring 20mm ball External gear (Metric)



QCB reference	Outline dimensions & weight							
	D _a	D _i	U	C	d _a f9	d _i H9	Load curve	Weight
	mm	mm	mm	mm	mm	mm		kg

SEG 505 20 01 AA LM	503.3	342	415.5	412.5		344	14	31
SEG 650 20 01 AA LM	640.6	472	545.5	542.5		474	15	43
SEG 750 20 01 AA LM	742.3	572	645.5	642.5		574	16	52
SEG 850 20 01 AA LM	838.1	672	745.5	742.5		674	17	59
SEG 950 20 01 AA LM	950.1	772	845.5	842.5		774	18	71
SEG 1050 20 01 AA LM	1046.1	872	945.5	942.5		874	19	77
SEG 1200 20 01 AA LM	1198.1	1022	1095.5	1092.5		1024	20	91

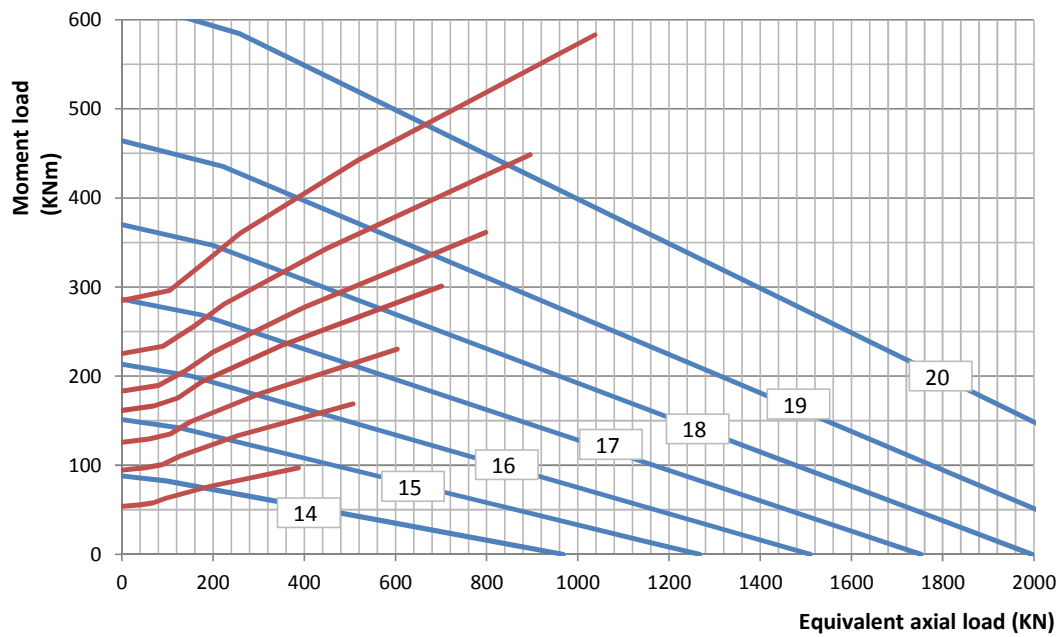
QCB reference	Outer holes		Inner holes		20° spur gear			
	L _a	n _a	L _i	n _i	P	m	z	F _z MAX
	mm		mm		mm			KN

SEG 505 20 01 AA LM	455	20	368	24	495	5	99	21.6
SEG 650 20 01 AA LM	585	28	498	32	630	6	105	26.2
SEG 750 20 01 AA LM	685	32	598	36	732	6	122	26.2
SEG 850 20 01 AA LM	785	36	698	40	828	6	138	26.2
SEG 950 20 01 AA LM	885	36	798	40	936	8	117	35.2
SEG 1050 20 01 AA LM	985	40	898	44	1032	8	129	35.2
SEG 1200 20 01 AA LM	1135	44	1048	48	1184	8	148	35.2

Standard grease fitting

at least 2 x M8 on inner ring

Solid ring 20mm ball Static Load Curves (Metric)



— Raceway load limit
— Bolt limit curve (Grade 10.9 bolt)