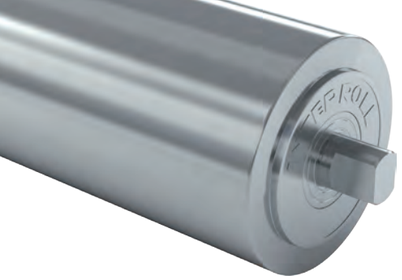


IDLER PULLEY WITH INTEGRAL BEARINGS

Product Description

Characteristics

- ✓ Static shaft
- ✓ Precision-machined shell
- ✓ Integral bearings
- ✓ Dimensions match drum motors

Technical Data

Protection rate	IP66 / IP69k (only for D-Series)
Max. belt tension	See equivalent drum motor
Max. belt speed	See equivalent drum motor
Shell length	See equivalent drum motor
Internal shaft sealing system	Lip seal FPM
External shaft sealing system S-series	Deflection seal, NBR
External shaft sealing system i-series	Labyrinth
External shaft sealing system D-series	Deflection seal PTFE (for IP69K)

Versions

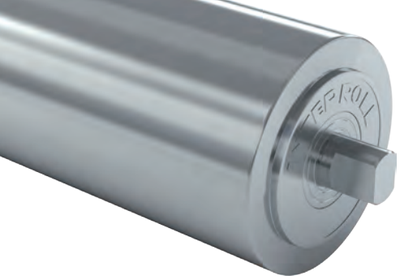
For idler pulleys you can choose the following versions of drum body components:

Component	Option	Series	Material			
			Aluminium	Mild steel	Stainless steel	PTFE
Shell	Crowned	S + i +D		✓	✓	
	Cylindrical	S + i +D		✓	✓	
	Cylindrical + key for using sprockets	i + D		✓	✓	
End housing	Standard	S + i	✓		✓	
		D			✓	
	With grooves and chain sprockets	i only	✓		✓	
Shaft cap	Standard	S	✓			
	Regreasable	S			✓	
Shaft	Standard	i		✓	✓	
		D			✓	
	Cross-drilled thread	i + D		✓	✓	
External seal	Galvanised labyrinth	i		✓		
	Labyrinth	i			✓	
	Labyrinth with FPM	i			✓	
	Deflection seal in PTFE (for IP69k)	D			✓	

Note: For cross-drilled and threaded shaft dimensions refer to the dimensional drawings of the respective drum motor.

Options

- Lagging for friction drive belts, see p 116
- Lagging for plastic modular belts, see p 122
- Lagging for positive drive solid homogeneous belts, see p 126
- Sprockets for plastic modular belts (use cylindrical shell with key), see p 128



IDLER PULLEY WITH INTEGRAL BEARINGS

Dimensions

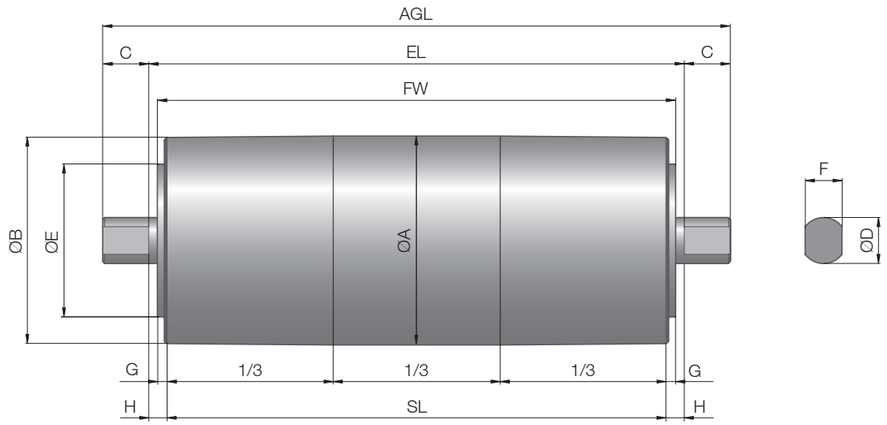


Fig.: Idler i-series

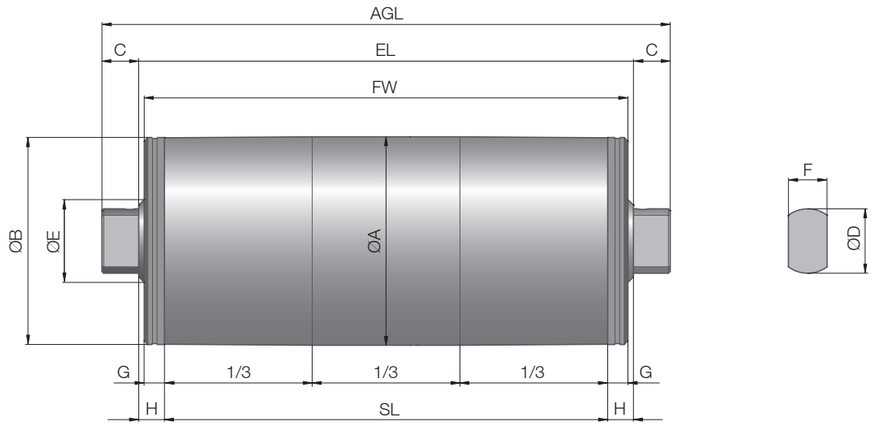


Fig.: Idler S-series

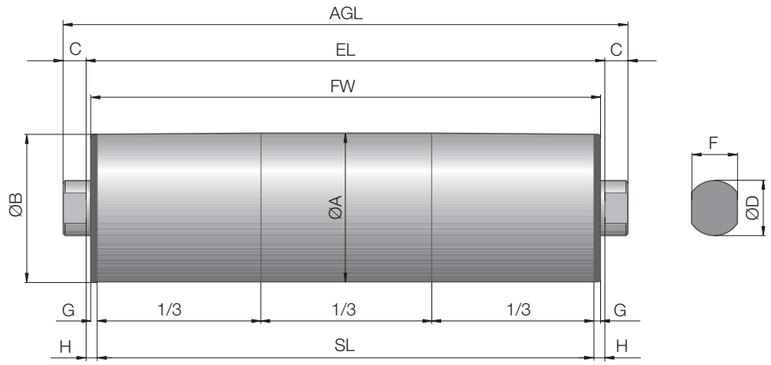


Fig.: Idler D-Series (80D, 113D)

Idler pulley, crowned shell	Ø A mm	Ø B mm	C mm	Ø D mm	Ø E mm	F mm	G mm	H mm
80S with SL 260 mm to 602 mm	81.5	80	20	35	45	21	5	8
80S with SL 603 mm to 952 mm	83	81	20	35	45	21	5	8
80i	81.5	80.5	12.5	17	43	13.5	3.5	6
113S	113.3	112.3	20	35	45	21	11	14
113i	113.5	112	25	25	83	20	5.3	10
138i	138	136	25	30	100	20	6.5	15
165i	164	162	45	40	130	30	8.5	20
217i	217.5	215.5	45	40	130	30	8.5	20
80D	81.5	80.5	12.5	30		25	3.5	6
113D	113.5	112	12.5	30		25	3.5	6

Standard length and weight

The idler pulleys weight depends on its length.

80S

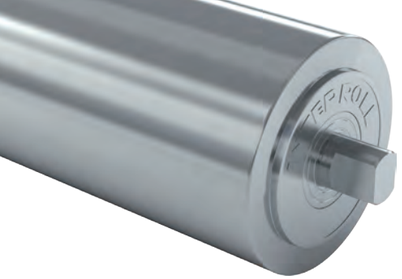
Shell length SL in mm	260	270	285	302	352	402	452	502	552	602	652	702	752
Average weight in kg	2.2	2.3	2.4	2.5	2.85	3.2	3.55	3.9	4.25	4.6	7.0	7.5	8.0
Shell length SL in mm	802	852	902	952									
Average weight in kg	8.5	9.0	9.5	10.0									

80i

Shell length SL in mm	193	243	293	343	393	443	493	543	593	643	693	743	793
Average weight in kg	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.5	5.1	5.7	6.3	6.9
Shell length SL in mm	843	893	943	993	1,043	1,093							
Average weight in kg	7.5	8.1	8.7	9.3	9.9	10.5							

113S

Shell length SL in mm	240	290	340	390	440	490	540	590	640	690	740	790	840
Average weight in kg	3	3.4	3.8	4.2	4.6	5.0	5.4	5.8	6.2	6.6	7.0	7.4	7.8



IDLER PULLEY WITH INTEGRAL BEARINGS

113S

Shell length SL in mm	890	940	990	1,040	1,090
Average weight in kg	8.2	8.6	9.0	9.4	9.8

113i

Shell length SL in mm	250	300	350	400	450	500	550	600	650	700	750	800	850
Average weight in kg	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5
Shell length SL in mm	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400		
Average weight in kg	10.5	11.5	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5		

138i

Shell length SL in mm	300	350	400	450	500	550	600	650	700	750	800	850
Average weight in kg	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0
Shell length SL in mm	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450
Average weight in kg	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	21.5	22.5	23.5
Shell length SL in mm	1,500	1,550	1,600									
Average weight in kg	24.5	25.5	26.5									

165i

Shell length SL in mm	400	450	500	550	600	650	700	750	800	850	900	950
Average weight in kg	14	15.5	17.0	18.5	20.0	21.5	23.0	24.5	26.0	27.5	29.0	30.5
Shell length SL in mm	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550
Average weight in kg	32.0	35.0	38.0	41.0	44.0	47.0	50.0	53.0	56.0	59.0	62.0	65.0
Shell length SL in mm	1,600	1,650	1,700	1,750								
Average weight in kg	68.0	71.0	74.0	77.0								

217i

Shell length SL in mm	500	550	600	650	700	750	800	850	900	950	1,000
Average weight in kg	23	25	27	29	31	33	35	37	39	41	43
Shell length SL in mm	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550
Average weight in kg	47.0	51.0	55.0	59.0	63.0	67.0	71.0	75.0	79.0	83.0	87.0
Shell length SL in mm	1,600	1,650	1,700	1,750							
Average weight in kg	91.0	95.0	99.0	103.0							

80D

Shell length SL in mm	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
Average weight in kg	3.5	4.0	4.4	4.9	5.3	5.8	6.2	6.7	7.1	7.6	8.0	8.5	8.9	9.4	9.8

113D

Shell length SL in mm	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
Average weight in kg	5.4	6.1	6.9	7.6	8.3	9.0	9.7	10.5	11.2	12.0	12.6	13.3	14.0	14.8	15.5