

Transeals Pty Ltd

A.B.N. 29 008 902 163

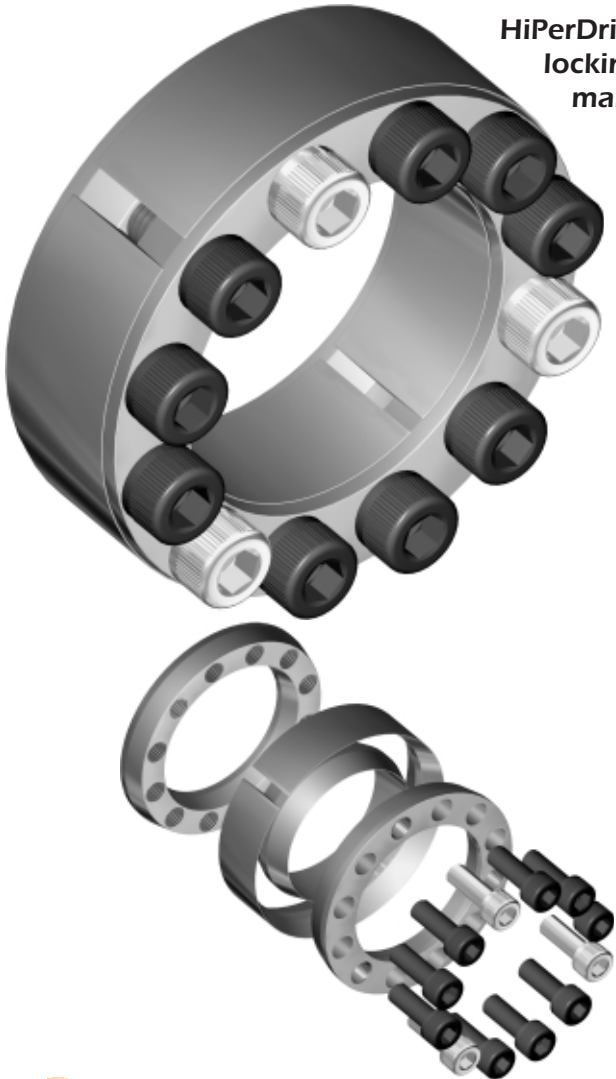
Power Transmission Equipment
Hydraulic Seals Specialists



Locking Assemblies

June 2002 Edition

HiPerDrive® Locking Assemblies offer an economical method of locking shafts and hubs together to transmit forces, giving many advantages over traditional methods including:



- High transmissible torque values superior to most other types of connection;
- Fast, easy installation and removal of any hub based component from the shaft;
- Cutting of keyways is eliminated thus reducing expense;
- Location and indexing of cams, gear-wheels and other components can be infinitely adjusted on the shaft to provide the required position;
- Elimination of play and backlash in shaft-to-hub connection;
- Use of a torque wrench to achieve a shrink fit connection without using heat;
- Close machining tolerances are unnecessary and no special tools are required for installation;
- Suitable for use on conveyor drums, gear wheels, chain sprockets, flywheels, cams, pulleys, couplings, rotors, fans, clutches, impellers and numerous other applications.

Installation Instructions

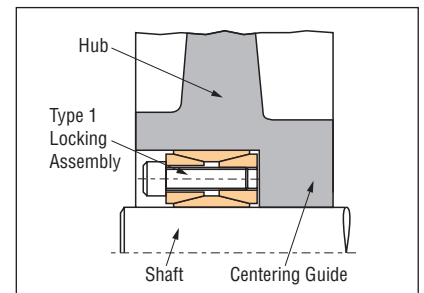
All HiPerDrive® Locking Assemblies require the same simple procedure:

1. Clean the Locking Assembly, shaft and hub bore.
2. Lightly lubricate the Locking Assembly, shaft and hub bore with a light oil.
WARNING: Do not use oils containing molybdenum disulphide.
3. Working diagonally across the Locking Assembly, progressively tighten the locking screws to the required torque (starting from hand tight).
4. Check that run out of the hub is within tolerance.

HiPerDrive® Type 1 Locking Assemblies

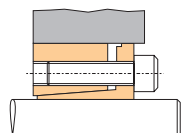
HiPerDrive® Type 1 Locking Assemblies are the most popular series of Locking Assembly used in general industry. Locking Assemblies provide excellent torque transmission and are a robust design. Only a basic housing and simple tools for installation. Locking Assemblies resist the ingress of dirt and provide reliable performance and may be easily removed and reused as required.

- Preferred Shaft Tolerance h8.
- Preferred Hub Tolerance H8.
- Tolerances up to h11 and H11 can be accommodated.
- A surface finish no rougher than 16µm is required.
- Type 1 Locking Assemblies may be mounted in tandem. Where this is the case, transmissible torque is approximately 1.8 times that of a single assembly.
- Type 1 Locking Assemblies are not self centering. A centering guide must be provided.
- Locking Assemblies will slip when rated torque values are exceeded. In this regard they can provide overload protection but should not be used primarily for this purpose.



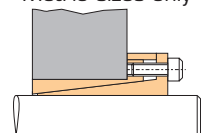
HiPerDrive Type 5 Locking Assembly

Precise self centering
High transmissible torque
Metric sizes only



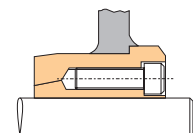
HiPerDrive Type 3 Locking Assembly

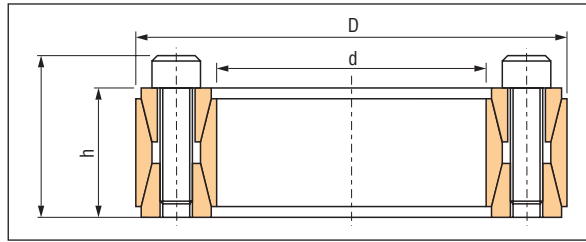
Precise self centering
Permits small diameter hub
High transmissible torque
Metric sizes only



Taperfix Weld-On Hub & Bush

Hub is welded to driven component
Tapered bush clamps on to shaft
Metric and imperial sizes.





Specifications

	Shaft Size <i>d</i>	Dimensions			Ratings		Contact Pressure		Locking Screws			Removal Screws	
		<i>D</i>	<i>H</i>	<i>h</i>	Transmissible Torque	Axial Force (kN)	Shaft (Mpa)	Hub (Mpa)	Qty	Size	Torque on bolt (Nm)	Qty	Screws
LA20T1	20.0	47.0	27.5	20.0	269	27	207	88	8	M6x18	14	2	M8
LA22T1	22.0	47.0	27.5	20.0	296	27	189	88	8	M6x18	14	2	M8
LA24T1	24.0	50.0	27.5	20.0	363	30	194	93	9	M6x18	14	3	M8
LA25T1	25.0	50.0	27.5	20.0	378	30	187	93	9	M6x18	14	3	M8
LA28T1	28.0	55.0	27.5	20.0	471	34	185	94	10	M6x18	14	3	M8
LA30T1	30.0	55.0	27.5	20.0	504	34	173	94	10	M6x18	14	3	M8
LA32T1	32.0	60.0	27.5	20.0	646	40	194	104	12	M6x18	14	3	M8
LA35T1	35.0	60.0	27.5	20.0	706	40	178	104	12	M6x18	14	3	M8
LA38T1	38.0	65.0	27.5	20.0	874	46	191	112	14	M6x18	14	3	M8
LA40T1	40.0	65.0	27.5	20.0	920	46	181	112	14	M6x18	14	3	M8
LA42T1	42.0	75.0	33.5	24.0	1476	70	220	123	12	M8x22	35	3	M10
LA45T1	45.0	75.0	33.5	24.0	1582	70	205	123	12	M8x22	35	3	M10
LA48T1	48.0	80.0	33.5	24.0	1687	70	193	116	12	M8x22	35	3	M10
LA50T1	50.0	80.0	33.5	24.0	1757	70	185	116	12	M8x22	35	3	M10
LA55T1	55.0	85.0	33.5	24.0	2255	82	196	127	14	M8x22	35	3	M10
LA60T1	60.0	90.0	33.5	24.0	2460	82	180	120	14	M8x22	35	3	M10
LA65T1	65.0	95.0	33.5	24.0	3046	94	190	130	16	M8x22	35	3	M10
LA70T1	70.0	110.0	39.5	28.0	4546	130	209	133	14	M10x25	70	3	M12
LA75T1	75.0	115.0	39.5	28.0	4871	130	195	127	14	M10x25	70	3	M12
LA80T1	80.0	120.0	39.5	28.0	5195	130	183	122	14	M10x25	70	3	M12
LA85T1	85.0	125.0	39.5	28.0	6309	148	197	134	16	M10x25	70	3	M12
LA90T1	90.0	130.0	39.5	28.0	6600	147	186	129	16	M10x25	70	3	M12
LA95T1	95.0	135.0	39.5	28.0	7838	165	198	139	18	M10x25	70	3	M12
LA100T1	100.0	145.0	47.0	33.0	9638	193	187	129	14	M12x30	125	3	M16
LA110T1	110.0	155.0	47.0	33.0	10602	193	170	120	14	M12x30	125	3	M16
LA120T1	120.0	165.0	47.0	33.0	13218	220	178	129	16	M12x30	125	3	M16
LA130T1	130.0	180.0	52.0	38.0	17565	270	165	119	20	M12x35	125	3	M16
LA140T1	140.0	190.0	52.0	38.0	20808	297	168	124	22	M12x35	125	3	M16
LA150T1	150.0	200.0	52.0	38.0	24321	324	171	129	24	M12x35	125	3	M16
LA160T1	160.0	210.0	52.0	38.0	28104	351	174	133	26	M12x35	125	3	M16
LA170T1	170.0	225.0	60.0	44.0	33104	389	157	119	22	M14x40	190	4	M18
LA180T1	180.0	235.0	60.0	44.0	38238	425	162	124	24	M14x40	190	4	M18
LA190T1	190.0	250.0	68.0	52.0	47090	496	151	115	28	M14x45	190	4	M18
LA200T1	200.0	260.0	68.0	52.0	51277	513	149	114	30	M14x45	190	4	M18
LA220T1	220.0	285.0	74.0	56.0	67712	616	151	116	26	M16x50	295	4	M20
LA240T1	240.0	305.0	74.0	56.0	85231	710	159	125	30	M16x50	295	4	M20
LA260T1	260.0	325.0	74.0	56.0	103400	795	165	132	34	M16x50	295	4	M20
LA280T1	280.0	355.0	86.5	66.0	126459	903	147	116	32	M18x60	405	4	M22
LA300T1	300.0	375.0	86.5	66.0	153597	1024	149	119	36	M18x60	405	4	M22

	Shaft Size <i>d</i>	Dimensions			Ratings		Contact Pressure		Locking Screws			Removal Screws	
		<i>D</i>	<i>H</i>	<i>h</i>	Transmissible Torque	Axial Force (kN)	Shaft (Mpa)	Hub (Mpa)	Qty	Size	Torque on bolt (Nm)	Qty	Screws
LAI150T1	1 1/2"	65.00	27.5	20.0	876	46	190	112	14	M6x18	14	3	M8
LAI175T1	1 3/4"	75.00	33.5	24.0	1562	70	208	123	12	M8x22	35	3	M10
LAI200T1	2"	85.00	33.5	24.0	2083	82	212	127	14	M8x22	35	3	M10
LAI225T1	2 1/4"	90.00	33.5	24.0	2343	82	189	120	14	M8x22	35	3	M10
LAI250T1	2 1/2"	95.00	33.5	24.0	2976	94	194	130	16	M8x22	35	3	M10
LAI275T1	2 3/4"	110.15	38.9	27.4	4536	130	214	136	14	M10x25	70	3	M12
LAI300T1	3"	120.00	39.5	28.0	4949	130	192	122	14	M10x25	70	3	M12
LAI350T1	3 1/2"	130.00	39.5	28.0	6520	147	188	129	16	M10x25	70	3	M12
LAI400T1	4"	148.40	47.0	33.0	9609	189	170	116	14	M12x30	125	3	M16
LAI500T1	5"	180.00	52.0	38.0	17160	270	169	119	20	M12x35	125	3	M16
LAI600T1	6"	210.00	52.0	38.0	26769	351	183	133	26	M12x35	125	3	M16

All values are in mm unless otherwise stated

- Larger metric sizes and additional inch sizes available on request.
- Hub pressures may be reduced by reducing the torque on the locking screws. The ratings will be reduced in direct proportion to the reduced screw torque.
- Ratings assume correct installation of HiPerDrive® locking assemblies.
- While all care has been taken in compiling this data, we cannot accept any responsibility for errors in this catalogue. We reserved the right to modify this information and withdraw sizes from production without notice.

Other Products Available

Hydraulic Seals

Product Range

Hydraulic Cylinder Seals
Custom and Standard Seal kits
CNC Machined Seals
Rod Wipers
Single and Double Acting Seals
Energised Piston and Rod Rings
Vee Packings
Wear Rings and Bearing Strip
Pneumatic Cylinder Seals
Custom Moulded Seals
O'Rings, X'Rings
Backup Washers

Core Brands

Hallite
Seal Maker
SSI
Dynamic Seals
CDI Seals
Polypac Balsele
Gapi
Parmargon

Additional Brands

Macrotec Polyseal
Claron
Merkel
Dowty

Power Transmission

Product Range

Vee & Wedge Belts, Drives & Pulleys
Synchronous Belts, Drives & Pulleys
Roller Chain Drives & Sprockets
Custom Length Vee & Wedge Belts
Shaft Copulings. Flexible & Rigid
Locking Assemblies
TaperFix and DuoFix products
Speed Reducing Gear Boxes
Variable Speed Drives

Core Brands

BeltCorp
HiPerDrive
Dayco
Resatec
Centa

Additional Brands

Arcusaflex
Lovejoy
Stromag
UCC
Rotex

Telephone

+61 (08) 9451 6011

Email

sales@transeals.com.au

Facsimile

+61 (08) 9458 5766

Web

www.transeals.com.au

Head Office

1 Atlas Court
Welshpool WA 6106
Perth Western Australia

