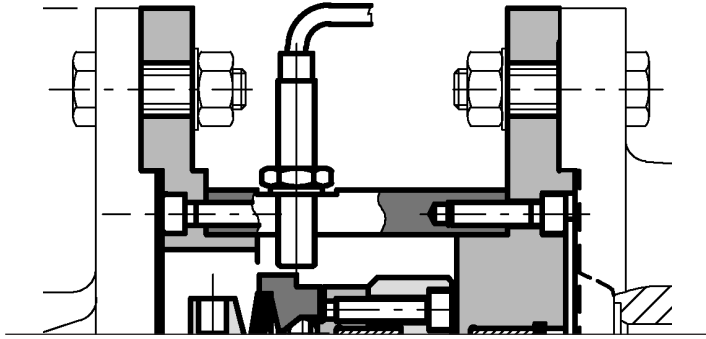
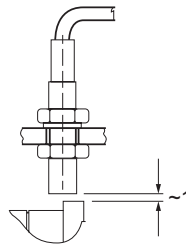
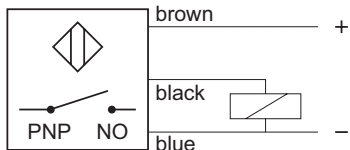


REPLACING THE GTL SENSOR



In the event that the GTL Sensor needs to be replaced please follow these steps:

1. Remove the damaged GTL Sensor.
2. Connect the new sensor to the equipment.
3. Insert the new sensor into the housing.
4. Loosen the lock nut on the new sensor and screw gently until the sensor is in contact with the limiter inside, at this point the LED situated near the top of the sensor will be ON.
5. Back the sensor out until the LED is OFF.
6. Slowly tighten the sensor until the LED is ON, then continue to tighten by turning another 90 Degrees, the LED should still be ON.
7. Tighten the lock nut to keep the sensor in the proper position.
8. The unit switching can be tested by overloading the limiter by blocking the gearbox output. The LED on overload will turn OFF.



7- 30 VCC/Vdc
4000 Hz
M8 PNP – NO

-25°C, +70°C
IP67 DIN40050

Operation Distance: 1.5 mm
Cable: 6.5ft (2m)



For technical assistance:

ae@fennerdrives.com

US and Canada • 1 800 243 3374

Latin America (except Brazil) • 1 717 665 2421

Europe, Asia, Australia, Africa and Brazil • +44 0 870 757 7007



INSTALLATION INSTRUCTIONS

RotoShield GTL – Gearbox Torque Limiters

ⓘ WARNING ⓘ

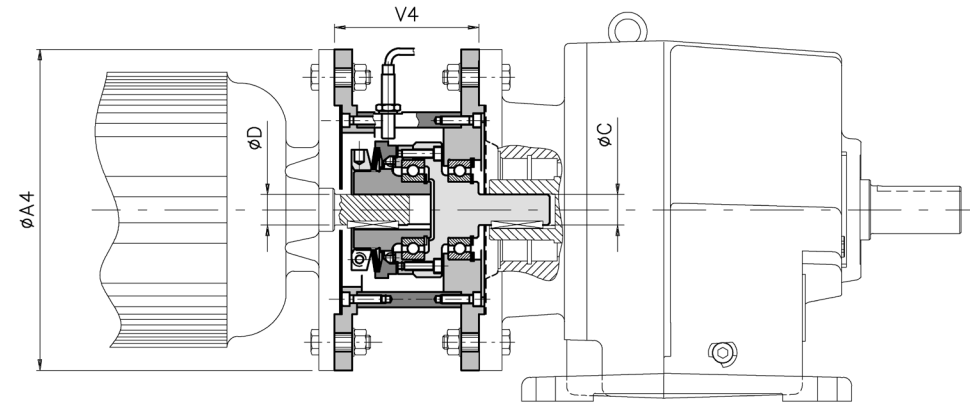
When installing RotoShield Gearbox Torque Limiters always adhere to safety policies including but not limited to:

1. Ensure that all equipment is de-energized following proper lock-out/tag-out procedures.
2. Wear proper personal protective equipment.

RotoShield Gearbox Torque Limiters are designed to be a safety device that prevents damage to equipment by disengaging the motor from the gearbox in the event of an overload. Before installation make sure the specifications of the device meet the needs of the application.

For technical assistance, please call 1-717-665-2421 or email our Applications Engineering Group: ae@fennerdrives.com

RotoShield GTL is maintenance free if installed properly and running under recommended conditions. Consult Fenner Drives if your application is outside the catalog recommendations.



INSTALLATION

1. Mount the RotoShield GTL to the gearbox by aligning the bolt holes on the flange of the torque limiter with the ones on the face-mount input on the gearbox. The units are supplied with a gasket preassembled onto the mounting flange, ensure the face is clean before carefully mounting to the gearbox flange. Minimize rotation while aligning the bolt holes to reduce the risk of damaging or loosening the gasket.

NOTE: Do not apply radial or axial forces to the ball bearing on the shaft of the torque limiter; this can cause damage to the torque limiter.

2. After the bolts have been completely tightened on the gearbox side of the torque limiter, mount the electric motor to the input flange of the RotoShield unit by aligning the bolt holes of the motor with the flange of the torque limiter. The units are supplied with a gasket preassembled onto the mounting flange, ensure the face is clean before carefully mounting with the motor flange. Minimize rotation while aligning the bolt holes to reduce the risk of damaging or loosening the gasket. Completely tighten down on the bolts to ensure the connection is solid.

NOTE: The shaft and hub of RotoShield must match the electric motor and gearbox. RotoShield GTL does not accommodate any misalignment or differences in the shaft and bore.

3. Connect the GTL sensor to the equipment control system.

IMPORTANT NOTE: When an overload occurs it is critical to the longevity of the RotoShield unit that the motor is stopped immediately.

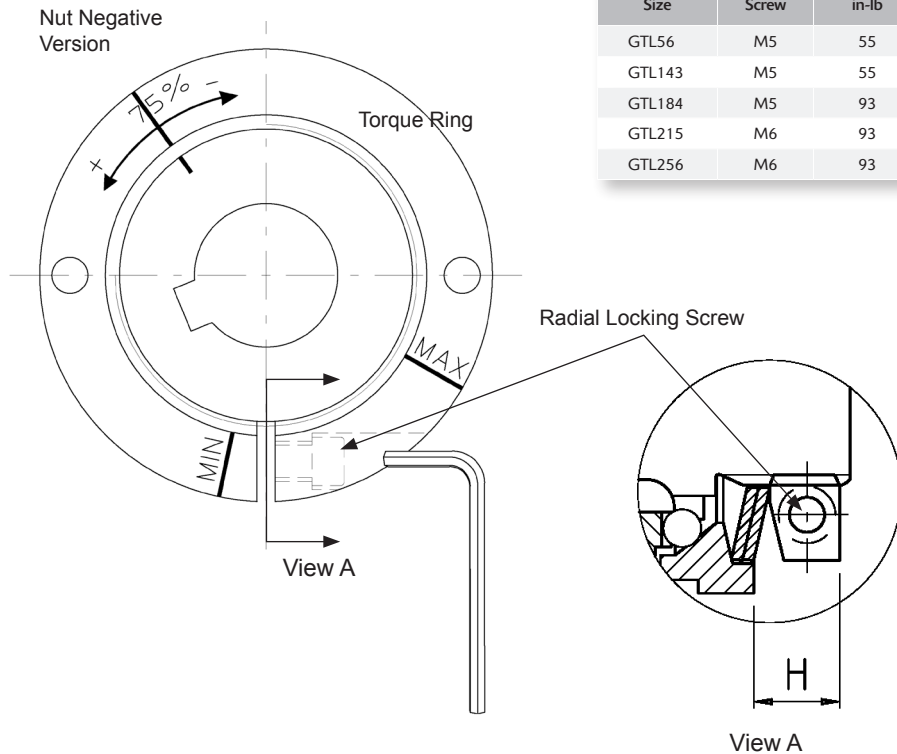
TORQUE SETTING

Unless a torque setting is specified, the devices are supplied set to 75% of the maximum torque for the T2 spring set (See table below). In the event that the application settings have changed and the RotoShield GTL needs to be set to a different torque setting or RotoShield did not come pre-set from the factory please follow these steps to adjust the torque setting.

1. With the RotoShield GTL not connected to the motor or the gearbox, remove the screws on the gearbox flange with a hex key. This will allow you to remove the bulk of the housing giving access to the torque limiter. Do not loosen the O-ring fitted between the gearbox flange and the rest of the housing.
2. Loosen the radial locking screw on the torque ring to allow adjustment of the torque ring.
3. To correctly set the torque find the torque setting you require in the table on the following page and make note of the H dimension and the number of springs that should be installed.
4. Ensure that you have the correct number of springs installed in the torque limiter by loosening the torque nut so that you can count the number of springs. Add or remove springs as necessary.
5. Tighten the torque ring so that it meets the distance specified in the H dimension.
6. Tighten the radial locking screw on the torque ring to the specified tightening torque.
7. After the torque has been set, re-assemble the housing. Make sure the O-ring is in the proper position before assembly.

NOTE: Use of a non-permanent thread locker designed to prevent accidental loosening is recommended for the flange screws.

Nut Tightening Torque		
Size	Screw	in-lb
GTL56	M5	55
GTL143	M5	55
GTL184	M5	93
GTL215	M6	93
GTL256	M6	93



“H” dimension for GTL Sizes 56 to 256.

GTL56 and GTL143 (in-lb)				GTL184 (in-lb)				GTL215 and GTL256 (in-lb)			
H (inch)	T1	T2	T3	H (inch)	T1	T2	T4	H (inch)	T1	T2	T4
0.374	44			0.421	177			0.449	310		
0.382	71			0.429	221			0.461	443		
0.390	89			0.437	257			0.472	558		
0.398	106			0.445	292			0.484	673		
0.406	115	124		0.453	328			0.496	779		
0.413	124	142		0.461	354			0.508	885	664	
0.421		168		0.469	381	372		0.520		885	
0.429		195		0.476	398	460		0.531		1106	
0.437		221		0.484		540		0.543		1328	
0.445		248	212	0.492		620		0.555		1549	
0.453			266	0.500		682		0.567		1770	
0.461			310	0.508		744		0.626			1726
0.469			354	0.516		797		0.638			2124
0.476			398	0.524		841		0.650			2523
0.484			443	0.555			752	0.661			2921
				0.563			903	0.673			3301
				0.571			1062	0.685			3673
				0.579			1204				
				0.587			1328				
				0.594			1478				
				0.602			1611				
				0.610			1770				
75%	93	186	332	75%	297	628	1328	75%	664	1328	2753

SPRINGS CONFIGURATION:

	T1	1 Spring
	T2	2 Springs
	T3	3 Springs
	T4	4 Springs