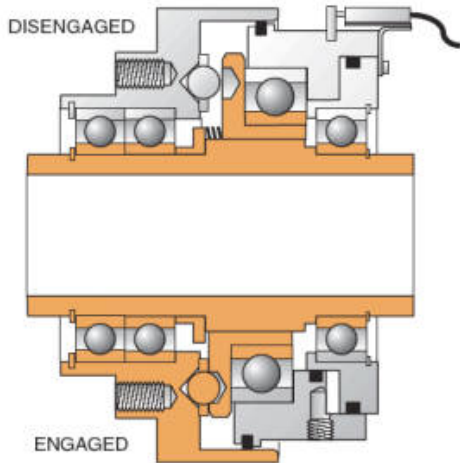


TORQUE LIMITERS





Overload Protection Devices

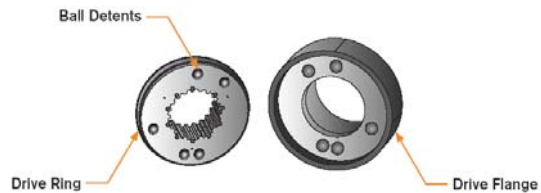
Nexen torque limiters are pneumatic overload protection devices that instantly disconnect at a pre-set torque level. The torque set-point is easily adjusted by adjusting the air pressure.

A proximity sensor installed on the unit senses the overload and immediately sends a signal to the control valve, exhausting the air and disengaging the Torque Limiter, effectively protecting the equipment from damage.

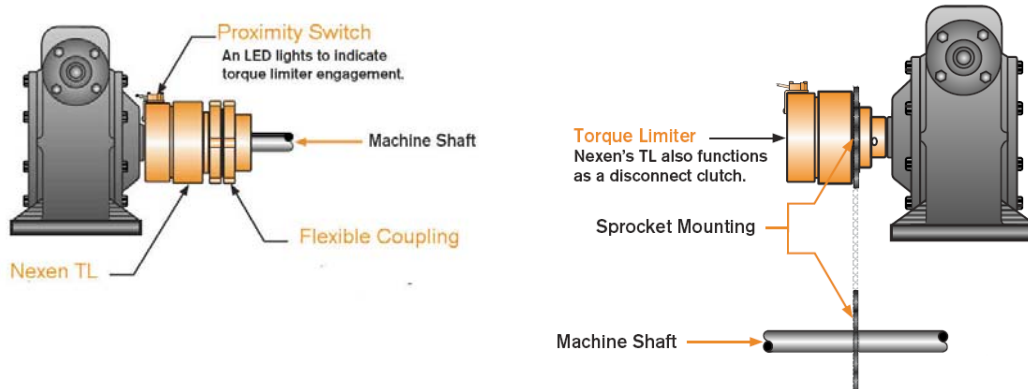
After the cause of the overload is cleared, the unit can be re-engaged with a remote signal, reducing downtime to a minimum.

Single Position

The single position design assures re-engagement of the drive in the same position every time, thus providing exact timing of both components. To avoid damage to the internal parts, re-engagement must only be done at complete stop or in crawl mode.

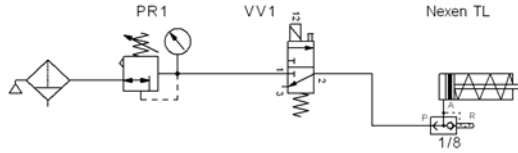


Easy integration

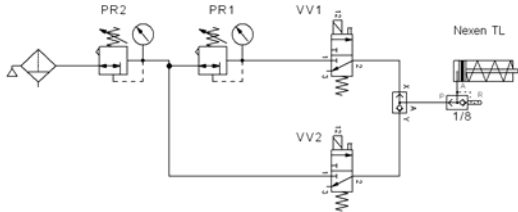


TL Air Connections

Single pressure system

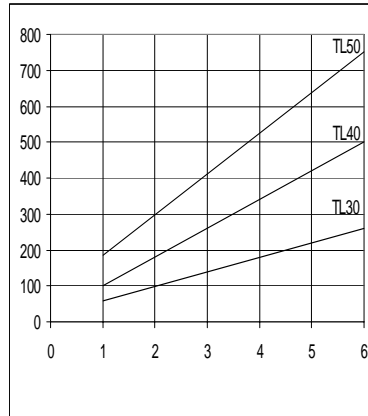
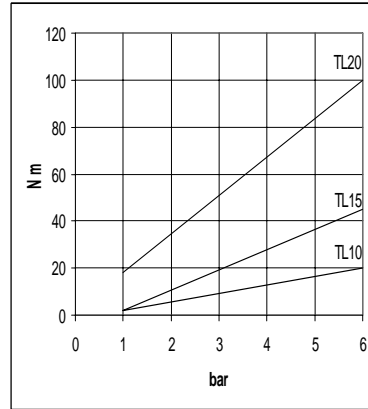


Dual pressure system



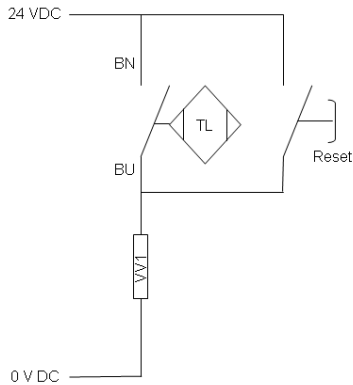
Overload Torque Curves

Overload torque set point can be adjusted by setting the control pressure according to below diagrams.



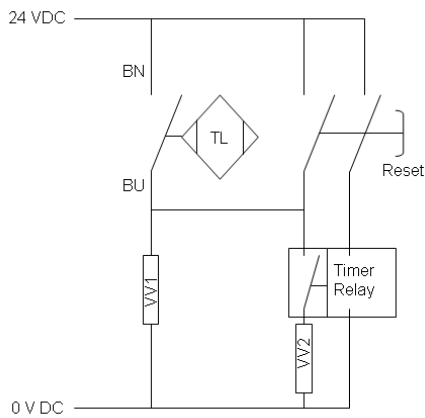
TL Electrical Connections

Single pressure system

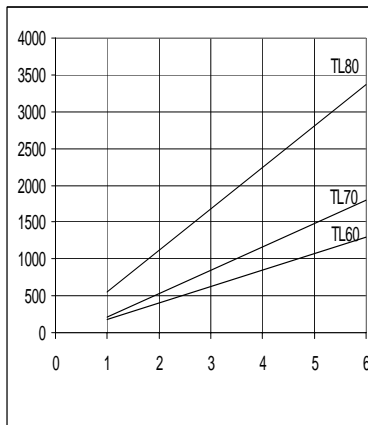


VV1 is controlled by the proximity switch on the torque limiter it will interrupt the air supply as soon as the proximity switch senses an overload. Depending on the characteristics of the valve coil a relay may be required.

Dual pressure system



During start-up the torque set point can be increased by sending a signal to VV2 for a limited time.



TL-A Series

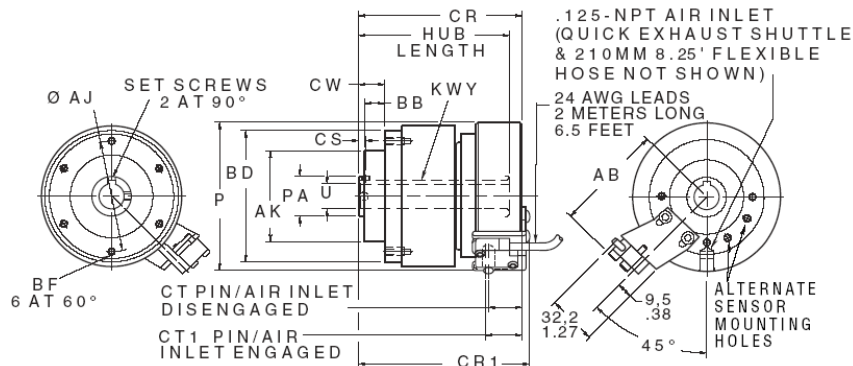
Model	Torque Nm @ 6bar	Max. Speed min ⁻¹		Std.	Bore mm H7		Weight kg
		Engaged	Diseng. ⁽¹⁾		Min. ⁽²⁾	Max.	
TL10-A	20	3000	2000	15	10	15	2.3
TL15-A	45	3000	2000	15	10	15	2.3
TL20-A	100	2000	1800	20	13	25	7.2
TL30-A	260	2000	1650	25	16	32	8.6
TL40-A	500	1500	1350	35	20	42	13.2
TL50-A	750	1500	1200	40	28	50	17.2
TL60-A	1300	1300	1050	45	32	55	22.2
TL70-A	1800	1300	950	55	40	60	32.2
TL80-A	3375	1300	850	75	48	75	49.8

(1) When the clutch is disengaged the maximum operating speed is limited by the maximum allowable speed of the dust seal inside. This speed should not be exceeded if the overload signal is not used to interrupt the power supply to the drive.

The torque limiters are always engaged when stationary!

(2) Pilot bore units are semi-assembled and the hub has a minimum (pilot) bore. The customer has to machine the bore to the desired dimension and finish the assembly.

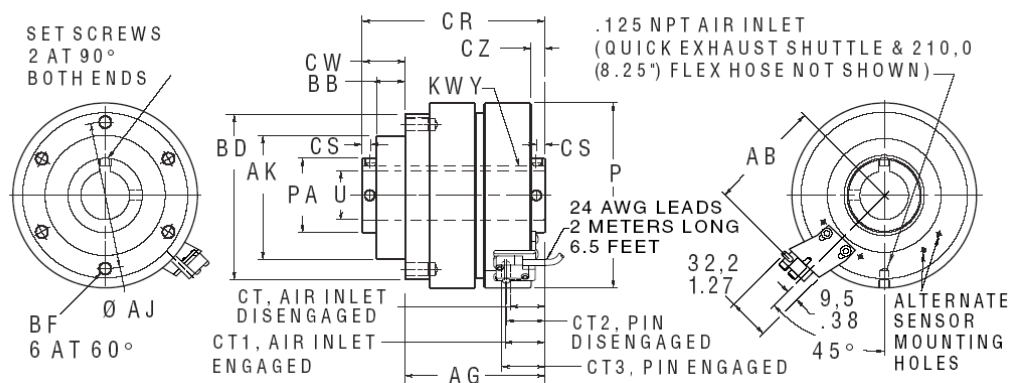
► TL10-A & TL15-A



MODEL	AB	AJ	AK ^{h8}	BB	BD	BF	CR	CR1	CS	CT	CT1	CW	KEYWAY			P	PA	U	HUB LENGTH	SET SCREW
													WD	DP	P					
TL10-A	69	70	57	13	83	M6	107	140	5	22	24	17	80	5	2.3	94	25	10-15	100	M5
TL15-A	69	70	57	13	83	M6	107	140	5	22	24	17	80	5	2.3	94	25	10-15	100	M5

NOTE: Drawings expressed in third angle projection

► TL-A SERIES TORQUE LIMITERS - SET SCREW MOUNTED - APPROXIMATE DIMENSIONS



MODEL	AB	AJ	AK ^{h8}	BB	BD	BF	CR	CS	CT	CT1	CW	KEYWAY			P	PA	U	HUB LENGTH	SET SCREW
												WD	DP	P					
TL20-A	79	90	72	18	104	M8	124	6	28	34	26	6	2.8	116	35	14-25	134	M6	
TL30-A	87	103	88	19	114	M8	125	7	29	35	29	8	3.3	129	45	16-32	136	M6	
TL40-A	99	122	104	24	137	M10	145	8	28	34	36	10	3.3	154	60	20-42	155	M10	
TL50-A	106	136	114	21	156	M12	149	8	29	35	33	12	3.3	167	65	28-50	164	M10	
TL60-A	119	160	133	22	174	M12	160	10	35	41	37	14	3.8	192	75	32-55	175	M12	
TL70-A	128	175	146	23	203	M16	197	10	37	43	35	16	4.3	211	85	40-60	197	M12	
TL80-A	140	215	187	48	-	M16	239	10	70	75	57	20	4.9	235	95	48-75	239	M12	

NOTE: Drawings expressed in third angle projection



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TL-A-E Series

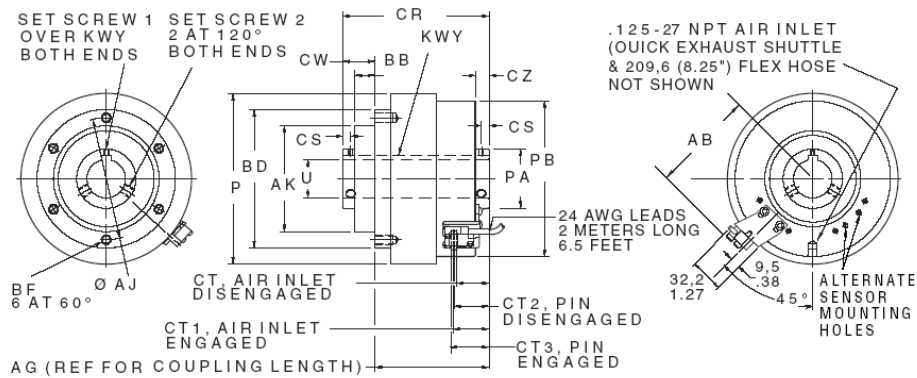
TL-A-E Torque limiters are enclosed and protected against corrosion and can operate in dirty or wet environments.

Model	Torque Nm @ 6bar	Max. Speed min ⁻¹ (1)	Bore mm H7			Weight kg
			Std.	Min. (2)	Max. (2)	
TL20-AE	100	1800	20	14	25	7.2
TL30-AE	260	1650	25	16	32	8.6
TL40-AE	500	1350	35	20	42	13.2
TL50-AE	750	1200	40	28	50	17.2
TL60-AE	1300	1050	45	32	55	22.2

(1) Maximum operating speed is limited by the maximum allowable speed of the rotary seal.

The torque limiters are always engaged when stationary!

(2) Other bore sizes than the standard bore size are available upon request within the above range.



MODEL	AB	AG	AJ	AK ^{h8}	BB	BD	BF	CR	CS	CT	CT1	CW	KEYWAY		P	PA	U	SET SCR1	SET SCR2
													WD	DP					
TL20-AE	82	97	90	72	18	104	M8	123	6	27	31	26	6	2.8	128	35	20	M5	M6
TL30-AE	90	100	103	88	19	114	M8	129	6	27	32	29	8	3.3	156	45	25	M5	M6
TL40-AE	101	113	122	104	20	137	M10	145	8	30	35	32	10	3.3	169	60	35	M5	M10
TL50-AE	109	117	136	114	22	156	M12	152	8	31	35	35	12	3.3	194	65	40	M6	M10
TL60-AE	121	127	160	133	20	174	M12	163	9	37	42	36	14	3.8	214	75	45	M6	M12

NOTE: Drawings expressed in third angle projection

