

Brunel Corporation

OETL—Original Extruder Protection
Torque Limiters



OETL - Original Extruder Torque Limiter



Externally Adjustable / Disconnectable Module *(EAD)

Features & Benefits

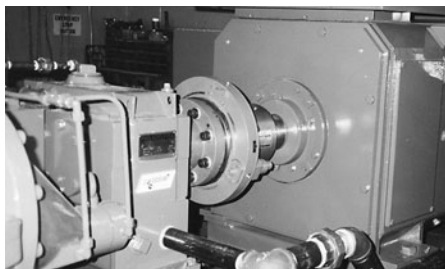
- **Modular Design Simplifies Maintenance**
User can replace Safety Elements (the working components) without removing clutch from shaft
Clutch can be removed (dropped out) without moving motor back
- **Module Designs Available**
 - Standard Internally Adjustable Modules**
 - Externally Adjustable Modules *(EA)**
Torque adjustment by micrometer graduations
Tamper proof externally adjustable design
 - Disconnectable Modules *(D)**
Disconnect motor for testing of motor function and torque limiter function
Tamper proof internally adjustable design
 - Externally Adjustable / Disconnectable Modules *(EAD)**
Incorporates both features above
- **Simple Manual Reset -- without reversing drive**
- **Precision Ball Detent/Belleville Spring Design**
(+0 to -10% repeatability)
- **Adaptable to All Drive Configurations**
- **Eflex Coupling Standard, Other Types Available**
- **Large Torque & Bore Capacity**
- **Turning bar holes standard**

Brunel Safety Element Torque Limiters have been protecting industrial power transmission systems around the world since 1971.

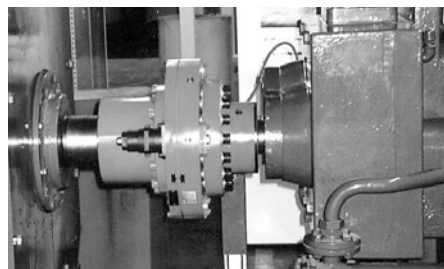
The Extruder Safety Element "SE" Series Torque Limiters are designed specifically for the precision requirements of twin screw extruder applications. They are totally enclosed and made exclusively of steel (except coupling flex elements & seals). The wearing parts in the Safety Element Modules are D-2 tool steel thru hardened to Rc 62 minimum. Tapered roller bearings are incorporated in the design for long life, and are regreaseable through a grease fitting and grease relief valve. Modular construction provides design flexibility and simplified maintenance. Safety Elements

are precision Belleville spring loaded, single ball detent design. A unique over-center mechanism insures complete disengagement on overload and simple, fast manual re-engagement.

Safety Element Torque Limiters completely disengage on overload thus preventing damage and down time to the equipment. When applied on motor output shafts of twin screw extruder drive systems, the "SE" Torque Limiter protects the reducer and twin screws from potential damage upon overload.



400HP Twin Screw Extruder Clutch Coupling Between Motor and Reducer

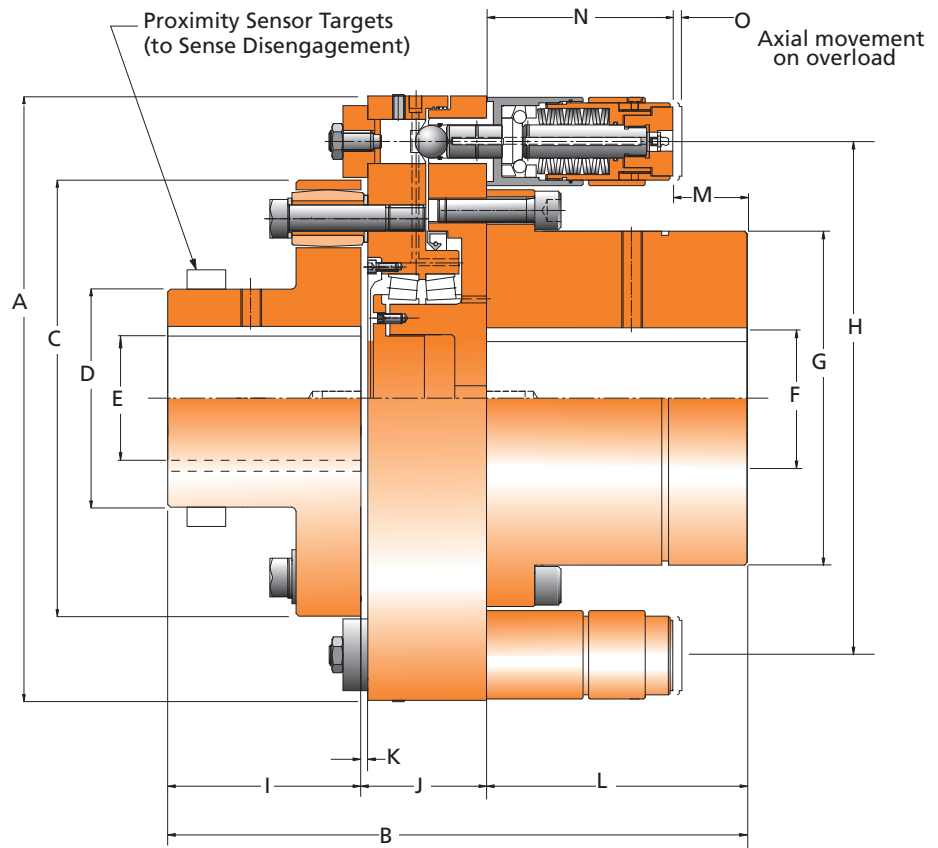


900HP Twin Screw Extruder Clutch Coupling

* part number suffix

Brunel Safety Element Torque Limiters

For Extruder Applications



Brunel - Extruder Torque Limiter Dimensions (millimeters/inches)

Torque Limiter Size	Brunel P/N	Torque Range lb in	Dimensions in mm and inches										DBSE J
			A	B	C	D	Max. Bore E	Max. Bore F	G	H	I		
1	JSE.5-0104MAEAD	3,540-11,328	206	280.29	194.95	120	75	85.73	110	160.28	110	62.34	
			8.110	11.035	7.675	4.724	2.953	3.375	4.311	6.310	4.33	2.454	
2	JSE1-0128MAEAD	9,650-30,530	304.8	338.65	219.88	130	90	104.77	159	250.8	135	83	
			12.000	13.33	8.657	5.118	3.543	4.125	6.260	9.874	5.315	3.268	
3A	JSE1-0129MAEAD	11,284-36,108	360	371.5	240	150	90	136.525	191	300	135	96.8	
			14.173	14.626	9.449	5.906	3.543	5.375	7.50	11.811	5.315	3.811	
3B	JSE1-0129MBEAD	22,568-59,737	360	371.5	240	150	90	136.525	191	300	135	96.8	
			14.173	14.626	9.449	5.906	3.543	5.375	7.50	11.811	5.315	3.811	
4A	JSE2-0241MAEAD	23,895-76,464	470	451.27	339.94	170	130	171.45	260	400	165	98	
			18.5	17.767	13.383	6.693	5.118	6.75	10.236	15.748	6.496	3.858	
4B	JSE2-0241MBEAD	47,790-152,928	470	451.27	339.94	170	130	171.45	260	400	165	98	
			18.5	17.767	13.383	6.693	5.118	6.75	10.236	15.748	6.496	3.858	

Torque Limiter Size	Brunel P/N	Safety Element Size / Qty	Eflex Gap		Max. Installation Misalignment					Max. Operating Misalignment		Max Speed	Weight lb.
			K	L	M	N	O	Angular mm / in	Parallel mm / in	Angular mm / in	Parallel mm / in		
1	JSE.5-0104MAEAD	JSE.5 / 2	5	108	39.5	67.236	3.302	0.3	.05	0.6	0.8	3000	93
			0.197	4.252	1.555	2.647	0.130	0.012	0.024	0.024	0.031		
2	JSE1-0128MAEAD	JSE1 / 2	5	120.65	45	100	5	0.35	0.5	0.7	0.8	2800	167.0
			0.197	4.750	1.772	3.937	0.197	0.014	0.020	0.028	0.031		
3A	JSE1-0129MAEAD	JSE1 / 2	5	139.7	68	100	5	0.4	0.5	0.8	0.8	2500	259.3
			0.197	5.500	2.677	3.937	0.197	0.016	0.020	0.031	0.031		
3B	JSE1-0129MBEAD	JSE1 / 4	5	139.7	68	100	5	0.4	0.5	0.8	0.8	2500	265.3
			0.197	5.500	2.677	3.937	0.197	0.016	0.020	0.031	0.031		
4A	JSE2-0241MAEAD	JSE2 / 2	6	203.2	68	135.7	6.35	.5	.5	1	1	1800	633.7
			0.236	8.000	2.677	5.343	0.250	0.020	0.020	0.039	0.039		
4B	JSE2-0241MBEAD	JSE2 / 4	6	203.2	68	135.7	6.35	.5	.5	1	1	1800	649.3
			0.236	8.000	2.677	5.343	0.250	0.020	0.020	0.039	0.039		



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