



TECHNICAL INFORMATION

DEFLECTION FORCES FOR BELT TENSIONING (LBS)

Use with Deflection Gauges

Belt Type	0-100 RPM		101-1000 RPM		1000-up RPM		
	New Belt	Used Belt	New Belt	Used Belt	New Belt	Used Belt	
EAGLE PD™	Yellow	15	11	12	8	9	7
	White	30	21	24	17	19	13
	Purple	60	43	47	34	38	27
	Blue	54	38	44	31	38	27
	Green	80	57	66	47	57	41
	Orange	107	76	88	63	76	55
Red	161	115	131	94	115	82	
BLACKHAWK®	8MBH 12	12	9	9	7	7	5
	8MBH 22	23	17	16	12	13	10
	8MBH 35	36	26	26	19	21	16
	8MBH 60	62	45	45	33	36	27
	14MBH 20	36	26	27	20	23	17
	14MBH 42	76	55	57	42	49	36
	14MBH 65	117	85	89	65	76	55
	14MBH 90	162	118	123	90	105	77
	14MBH 120	217	157	164	119	139	102
	WHITEHAWK®	8MWH 20	15	11	13	10	12
8MWH 30		23	17	20	15	19	14
8MWH 50		39	29	35	26	32	24
8MWH 85		69	50	61	45	56	51
14MWH 40		47	34	38	28	32	24
14MWH 55		70	51	56	41	48	35
14MWH 85		116	84	93	68	79	58
14MWH115		162	118	130	95	110	80
14MWH170		249	181	201	146	171	125

BELT STRAND TENSION (NEWTONS)

Use only with RSM2000 Tension Meter

Belt Type	0-100 RPM		101-1000 RPM		1000-up RPM		Belt Weight (g/meter)	
	New Belt	Used Belt	New Belt	Used Belt	New Belt	Used Belt		
EAGLE PD™	Yellow	998	713	784	499	570	428	68.5
	White	1995	1354	1568	1070	1212	785	136.9
	Purple	3990	2780	3065	2140	2424	1641	273.8
	Blue	3633	2494	2921	1996	2494	1711	208.3
	Green	5382	3745	4386	3034	3745	2607	312.5
	Orange	7195	4989	5843	4063	4989	3494	416.7
Red	10836	7562	8701	6067	7562	5213	625.0	
BLACKHAWK	8MBH	12796	583	583	441	441	298	58.0
	8MBH 22	1533	1106	1034	750	821	607	107.1
	8MBH 35	2396	1684	1684	1186	1328	972	169.7
	8MBH 60	4128	2918	2918	2064	2277	1637	291.7
	14MBH 20	2458	1746	1817	1319	1533	1106	160.7
	14MBH 42	5191	3696	3839	2771	3269	2344	337.8
	14MBH 65	7989	5712	5996	4288	5071	3577	522.3
	14MBH 90	11063	7931	8287	5938	7006	5013	721.8
	14MBH 120	14821	10551	11049	7847	9270	6637	962.8
	WHITEHAWK	8MWH 20	993	708	851	637	779	566
8MWH 30		1525	1098	1311	955	1240	884	145.8
8MWH 50		2589	1877	2304	1664	2091	1521	242.6
8MWH 85		4593	3241	4024	2885	3668	2600	413.7
14MWH 40		3168	2242	2527	1815	2100	1531	321.4
14MWH 55		4739	3387	3743	2675	3173	2248	442.0
14MWH 85		7879	5602	6242	4463	5246	3751	681.6
14MWH 115		11021	7889	8743	6252	7320	5185	922.7
14MWH 170		16970	12130	13554	9639	11418	8144	1364.7

PART NUMBER

Eagle Pd™ Tension Tester (PN 20039446)
or Small Tension Tester (PN 20044882)



APPLICATION

Eagle Pd Yellow and White 8mm
WhiteHawk Pd™ 20 & 30mm wide
8mm BlackHawk Pd™ 12 & 22mm wide

PART NUMBER

Eagle Pd Tension Tester (PN 20039447)
or Small Tension Tester (PN 20083773)



APPLICATION

Eagle Pd Purple, Blue, Green, Orange & Red
8mm WhiteHawk Pd 50 & 85mm wide
14mm WhiteHawk Pd 40, 55, 85, 115 & 170mm wide
8mm BlackHawk Pd 35 & 60mm wide
14mm WhiteHawk Pd 20, 42, 65, 90 & 120mm wide

PART NUMBER

RSM2000 – Tension Meter

The RSM2000 belt tensioning device can be used to tension Goodyear WhiteHawk Pd and BlackHawk Pd timing belts.



For the meter to read belt strand tension in Newtons, the only inputs required are specific belt mass (in g/meter) and span length (in mm).

The best strand tension in Newtons is provided in the adjacent table along with the specific mass of the belt (in g/meter).

The microcontroller-based RSM2000 measures belt vibrating frequency with a highly sensitive sensor and provides an easy and accurate means of tensioning the belt to the correct installation tension.

- 1) The table values are typically larger than necessary to cover the broad RPM range.
- 2) For drives where hub loads are critical and high speed drives or other drives with special circumstances, the table values (deflection force, installation tension) should be calculated.
- 3) Consult the Web site, accubelt.com, for detailed information on using the frequency-based tension gauges.
- 4) Goodyear offers three different tension gauges for properly tensioning Eagle Pd, WhiteHawk Pd or BlackHawk Pd belts. See your Goodyear sales representative or your local Goodyear Power Transmission distributor for more information on the tension gauges listed on this page.