

Part Number	PG	Length		Diameter		Rate		N/mm	Block Height		Travel		Block Load		Weight	
		inch	mm	inch	mm	lbs/inch	kg/mm		inch	mm	inch	mm	lbs	N	lbs	kgs
0400.300.0250S	ERS	4.00	102	3.00 I.D.	76 I.D.	250	4.46	44	1.31	33	2.69	68	673	2,992	0.91	0.41
0400.300.0300S	ERS	4.00	102	3.00 I.D.	76 I.D.	300	5.36	53	1.38	35	2.62	66	785	3,491	1.03	0.46
0400.300.0350S	ERS	4.00	102	3.00 I.D.	76 I.D.	350	6.25	61	1.40	36	2.60	66	909	4,045	1.06	0.48
0400.300.0400S	ERS	4.00	102	3.00 I.D.	76 I.D.	400	7.14	70	1.52	39	2.48	63	994	4,420	1.23	0.56
0400.300.0450S	ERS	4.00	102	3.00 I.D.	76 I.D.	450	8.05	79	1.53	39	2.47	63	1,111	4,936	1.27	0.58
0400.300.0500S	ERS	4.00	102	3.00 I.D.	76 I.D.	500	8.94	88	1.46	37	2.54	65	1,272	5,657	2.20	0.54
0400.300.0550S	ERS	4.00	102	3.00 I.D.	76 I.D.	550	9.84	96	1.69	43	2.31	59	1,272	5,653	1.52	0.69
0400.300.0600S	ERS	4.00	102	3.00 I.D.	76 I.D.	600	10.71	105	1.83	47	2.17	55	1,859	8,261	1.86	0.84
0400.300.0650S	ERS	4.00	102	3.00 I.D.	76 I.D.	650	11.61	114	1.69	43	2.32	59	1,506	6,698	1.54	0.70
0600.300.0100S	ERS	6.00	152	3.00 I.D.	76 I.D.	100	1.78	18	1.31	33	4.69	119	469	2,085	0.78	0.35
0600.300.0150S	ERS	6.00	152	3.00 I.D.	76 I.D.	150	2.68	26	1.61	41	4.39	112	659	2,932	1.12	0.51
0600.300.0200S	ERS	6.00	152	3.00 I.D.	76 I.D.	200	3.57	35	1.78	45	4.24	108	843	3,750	1.37	0.62
0600.300.0250S	ERS	6.00	152	3.00 I.D.	76 I.D.	250	4.46	44	1.85	47	4.16	106	1,039	4,623	1.50	0.68
0600.300.0300S	ERS	6.00	152	3.00 I.D.	76 I.D.	300	5.36	53	1.93	49	4.06	103	1,219	5,422	1.65	0.75
0600.300.0350S	ERS	6.00	152	3.00 I.D.	76 I.D.	350	6.25	61	2.05	52	3.97	101	1,389	6,179	1.83	0.83
0600.300.0400S	ERS	6.00	152	3.00 I.D.	76 I.D.	400	7.14	70	2.20	56	3.79	96	1,514	6,735	2.12	0.96
0600.300.0450S	ERS	6.00	152	3.00 I.D.	76 I.D.	450	8.05	79	2.20	56	3.80	97	1,712	7,615	2.14	0.97
0600.300.0500S	ERS	6.00	152	3.00 I.D.	76 I.D.	500	8.94	88	2.36	60	3.64	92	1,820	8,090	2.44	1.10
0600.300.0550S	ERS	6.00	152	3.00 I.D.	76 I.D.	550	9.84	96	2.36	60	3.62	92	2,002	8,896	2.50	1.13
0600.300.0600S	ERS	6.00	152	3.00 I.D.	76 I.D.	600	10.71	105	2.41	61	3.59	91	2,155	9,576	2.61	1.18
0600.300.0700S	ERS	6.00	152	3.00 I.D.	76 I.D.	700	12.50	123	2.48	63	3.50	89	2,462	10,951	15.18	6.90
0600.300.0800S	ERS	6.00	152	3.00 I.D.	76 I.D.	800	14.28	140	2.55	65	3.45	88	2,759	12,271	2.99	1.36
0700.300.0250	ERS	7.00	178	3.00 I.D.	76 I.D.	250	4.46	44	2.57	65	4.43	112	1,107	4,924	1.94	0.88
0800.300.0100S	ERS	8.00	203	3.00 I.D.	76 I.D.	100	1.78	18	2.01	51	5.99	152	599	2,664	1.69	0.77
0800.300.0150S	ERS	8.00	203	3.00 I.D.	76 I.D.	150	2.68	26	2.06	52	5.94	151	2,107	3,964	1.59	0.72
0800.300.0200S	ERS	8.00	203	3.00 I.D.	76 I.D.	200	3.57	35	2.36	60	5.64	143	1,128	5,015	2.03	0.92
0800.300.0250S	ERS	8.00	203	3.00 I.D.	76 I.D.	250	4.46	44	2.62	67	5.38	137	1,345	5,978	2.45	1.11
0800.300.0300S	ERS	8.00	203	3.00 I.D.	76 I.D.	300	5.36	53	2.66	68	5.34	136	1,604	7,128	2.63	1.19
0800.300.0350S	ERS	8.00	203	3.00 I.D.	76 I.D.	350	6.25	61	2.82	72	5.18	132	1,814	8,061	2.92	1.32

0800.300.0400S	ERS	8.00	203	3.00 I.D.	76 I.D.	400	7.14	70	2.99	76	5.01	127	1,870	8,313	3.25	1.47
0800.300.0450S	ERS	8.00	203	3.00 I.D.	76 I.D.	450	8.05	79	3.16	80	4.84	123	2,179	9,683	3.58	1.62
0800.300.0500S	ERS	8.00	203	3.00 I.D.	76 I.D.	500	8.94	88	3.12	79	4.88	124	2,441	10,847	3.60	1.63
0800.300.0550S	ERS	8.00	203	3.00 I.D.	76 I.D.	550	9.84	96	3.35	85	4.65	118	2,557	11,379	3.98	1.80
0800.300.0600S	ERS	8.00	203	3.00 I.D.	76 I.D.	600	10.71	105	3.36	85	4.64	118	2,788	12,392	4.15	1.88
1000.300.0100S	ERS	10.00	254	3.00 I.D.	76 I.D.	100	1.78	18	2.83	72	7.17	182	716	3,185	2.55	1.16
1000.300.0125S	ERS	10.00	254	3.00 I.D.	76 I.D.	125	2.23	22	2.84	72	7.16	182	894	3,978	2.34	1.06
1000.300.0150S	ERS	10.00	254	3.00 I.D.	76 I.D.	150	2.68	26	2.91	74	7.09	180	1,063	4,728	2.54	1.15
1000.300.0175S	ERS	10.00	254	3.00 I.D.	76 I.D.	175	3.13	31	3.14	80	6.86	174	1,200	5,337	2.91	1.32
1000.300.0200S	ERS	10.00	254	3.00 I.D.	76 I.D.	200	3.57	35	3.07	78	6.93	176	1,382	6,147	2.93	1.33
1000.300.0225S	ERS	10.00	254	3.00 I.D.	76 I.D.	225	4.02	39	3.37	86	6.93	169	1,382	6,639	2.93	1.53
1000.300.0250S	ERS	10.00	254	3.00 I.D.	76 I.D.	250	4.46	44	3.35	85	6.65	169	1,662	7,393	3.43	1.56
1000.300.0300S	ERS	10.00	254	3.00 I.D.	76 I.D.	300	5.36	53	3.31	84	6.69	170	2,008	8,932	3.57	1.62
1000.300.0350S	ERS	10.00	254	3.00 I.D.	76 I.D.	350	6.25	61	3.82	97	6.18	157	2,164	9,624	4.39	1.99
1000.300.0400S	ERS	10.00	254	3.00 I.D.	76 I.D.	400	7.14	70	3.98	101	6.02	153	2,414	10,737	4.76	2.16
1000.300.0450S	ERS	10.00	254	3.00 I.D.	76 I.D.	450	8.05	79	4.17	106	5.83	148	2,623	11,672	5.31	2.40
1000.300.0500S	ERS	10.00	254	3.00 I.D.	76 I.D.	500	8.94	88	4.17	106	5.83	148	2,903	12,922	5.31	2.40
1200.300.0100S	ERS	12.00	305	3.00 I.D.	76 I.D.	100	1.78	18	2.87	73	9.13	232	912	4,057	2.34	1.06
1200.300.0125S	ERS	12.00	305	3.00 I.D.	76 I.D.	125	2.23	22	3.35	85	8.65	220	1,079	4,800	2.98	1.35
1200.300.0150S	ERS	12.00	305	3.00 I.D.	76 I.D.	150	2.68	26	3.19	81	8.81	224	1,319	5,867	2.89	1.31
1200.300.0175S	ERS	12.00	305	3.00 I.D.	76 I.D.	175	3.13	31	3.74	95	8.26	210	1,448	6,441	3.66	1.66
1200.300.0200S	ERS	12.00	305	3.00 I.D.	76 I.D.	200	3.57	35	3.66	93	8.34	212	1,664	7,402	3.70	1.68
1200.300.0225S	ERS	12.00	305	3.00 I.D.	76 I.D.	225	4.02	39	3.94	100	8.06	205	1,815	8,073	4.17	1.89
1200.300.0250S	ERS	12.00	305	3.00 I.D.	76 I.D.	250	4.46	44	3.94	100	8.06	205	2,014	8,959	4.28	1.94
1200.300.0275S	ERS	12.00	305	3.00 I.D.	76 I.D.	275	4.91	48	4.29	109	7.71	196	2,122	9,439	4.87	2.21
1200.300.0300S	ERS	12.00	305	3.00 I.D.	76 I.D.	300	5.36	53	4.33	110	7.67	195	2,305	10,253	5.03	2.28
1200.300.0325S	ERS	12.00	305	3.00 I.D.	76 I.D.	325	5.80	57	4.37	111	7.63	194	2,486	11,058	5.16	2.34
1200.300.0350S	ERS	12.00	305	3.00 I.D.	76 I.D.	350	6.25	61	4.41	112	7.59	193	2,657	11,819	5.36	2.43
1200.300.0375S	ERS	12.00	305	3.00 I.D.	76 I.D.	375	6.70	66	4.49	114	7.51	191	2,815	12,522	5.58	2.53
1200.300.0400S	ERS	12.00	305	3.00 I.D.	76 I.D.	400	7.14	70	4.57	116	7.43	189	2,970	13,211	5.80	2.63
1200.300.0450S	ERS	12.00	305	3.00 I.D.	76 I.D.	450	8.05	79	4.76	121	7.24	184	3,254	14,474	6.28	2.85

1200.300.0500S	ERS	12.00	305	3.00 I.D.	76 I.D.	500	8.94	88	5.00	127	7.00	178	3,503	15,582	6.86	3.11
1200.300.0600S	ERS	12.00	305	3.00 I.D.	76 I.D.	600	10.71	105	5.24	133	6.76	172	4,069	18,100	7.61	3.45
1200.300.0650S	ERS	12.00	305	3.00 I.D.	76 I.D.	650	11.61	114	5.48	139	6.52	166	4,237	18,848	8.38	3.80
1200.300.0700S	ERS	12.00	305	3.00 I.D.	76 I.D.	700	12.50	123	5.65	144	6.35	161	4,443	19,764	8.82	4.00
1400.300.0100S	ERS	14.00	356	3.00 I.D.	76 I.D.	100	1.78	18	3.66	93	10.35	263	1,035	4,605	3.15	1.43
1400.300.0125S	ERS	14.00	356	3.00 I.D.	76 I.D.	125	2.23	22	3.98	101	10.02	255	1,254	5,578	3.77	1.71
1400.300.0150S	ERS	14.00	356	3.00 I.D.	76 I.D.	150	2.68	26	4.25	108	9.75	248	1,464	6,512	4.21	1.91
1400.300.0175S	ERS	14.00	356	3.00 I.D.	76 I.D.	175	3.13	31	4.45	113	9.55	243	1,673	7,442	4.63	2.10
1400.300.0200S	ERS	14.00	356	3.00 I.D.	76 I.D.	200	3.57	35	4.72	120	9.28	236	1,855	8,251	5.18	2.35
1400.300.0225S	ERS	14.00	356	3.00 I.D.	76 I.D.	225	4.02	39	4.65	118	9.35	237	2,103	9,355	5.20	2.36
1400.300.0250S	ERS	14.00	356	3.00 I.D.	76 I.D.	250	4.46	44	5.00	127	9.00	229	2,251	10,013	5.87	2.66
1400.300.0275S	ERS	14.00	356	3.00 I.D.	76 I.D.	275	4.91	48	4.96	126	9.04	230	2,484	11,049	5.95	2.70
1400.300.0300S	ERS	14.00	356	3.00 I.D.	76 I.D.	300	5.36	53	5.39	137	8.61	219	2,581	11,481	6.77	3.07
1400.300.0325S	ERS	14.00	356	3.00 I.D.	76 I.D.	325	5.80	57	5.24	133	8.76	223	2,843	12,646	6.79	3.08
1400.300.0350S	ERS	14.00	356	3.00 I.D.	76 I.D.	350	6.25	61	5.47	139	8.53	217	2,990	13,300	7.12	3.23
1400.300.0400S	ERS	14.00	356	3.00 I.D.	76 I.D.	400	7.14	70	5.59	142	8.41	214	3,362	14,955	7.61	3.45
1400.300.0450S	ERS	14.00	356	3.00 I.D.	76 I.D.	450	8.05	79	5.83	148	8.17	208	3,682	16,378	8.22	3.73
1400.300.0500S	ERS	14.00	356	3.00 I.D.	76 I.D.	500	8.94	88	6.02	153	7.98	203	3,979	17,699	8.89	4.03
1400.300.0550S	ERS	14.00	356	3.00 I.D.	76 I.D.	550	9.84	96	6.38	162	7.62	194	4,200	18,682	9.72	4.41
1400.300.0600S	ERS	14.00	356	3.00 I.D.	76 I.D.	600	10.71	105	6.26	159	7.74	197	4,638	20,631	9.72	4.41
1400.300.0650S	ERS	14.00	356	3.00 I.D.	76 I.D.	650	11.61	114	6.61	168	7.39	188	4,813	21,409	10.63	4.82
1400.300.0700S	ERS	14.00	356	3.00 I.D.	76 I.D.	700	12.50	123	6.57	167	7.43	189	5,198	23,121	10.73	4.87
1600.300.0075S	ERS	16.00	406	3.00 I.D.	76 I.D.	75	1.34	13	3.78	96	12.22	310	916	4,075	3.09	1.40
1600.300.0100S	ERS	16.00	406	3.00 I.D.	76 I.D.	100	1.78	18	4.45	113	11.55	293	1,155	5,138	4.08	1.85
1600.300.0125S	ERS	16.00	406	3.00 I.D.	76 I.D.	125	2.23	22	4.49	114	11.51	292	1,439	6,401	4.36	1.98
1600.300.0150S	ERS	16.00	406	3.00 I.D.	76 I.D.	150	2.68	26	5.08	129	10.92	277	1,638	7,286	5.33	2.42
1600.300.0175S	ERS	16.00	406	3.00 I.D.	76 I.D.	175	3.13	31	5.31	135	10.69	272	1,869	8,314	5.82	2.64
1600.300.0200S	ERS	16.00	406	3.00 I.D.	76 I.D.	200	3.57	35	5.55	141	10.45	265	2,090	9,297	6.41	2.91
1600.300.0225S	ERS	16.00	406	3.00 I.D.	76 I.D.	225	4.02	39	5.47	139	10.53	267	2,368	10,533	6.46	2.93
1600.300.0250S	ERS	16.00	406	3.00 I.D.	76 I.D.	250	4.46	44	5.83	148	10.17	258	2,546	11,325	7.19	3.26
1600.300.0300S	ERS	16.00	406	3.00 I.D.	76 I.D.	300	5.36	53	6.22	158	9.78	248	2,931	13,038	8.20	3.72

1600.300.0350S	ERS	16.00	406	3.00 I.D.	76 I.D.	350	6.25	61	6.46	164	9.54	242	3,342	14,866	8.75	3.97
1600.300.0400S	ERS	16.00	406	3.00 I.D.	76 I.D.	400	7.14	70	6.61	168	9.39	239	3,754	16,699	9.33	4.23
1600.300.0450S	ERS	16.00	406	3.00 I.D.	76 I.D.	450	8.05	79	6.81	173	9.19	233	4,130	18,371	10.39	4.71
1600.300.0500S	ERS	16.00	406	3.00 I.D.	76 I.D.	500	8.94	88	7.52	191	8.48	215	4,241	18,865	11.66	5.29
1600.300.0550S	ERS	16.00	406	3.00 I.D.	76 I.D.	550	9.84	96	7.60	193	8.40	213	4,629	20,591	12.30	5.58
1600.300.0600S	ERS	16.00	406	3.00 I.D.	76 I.D.	600	10.71	105	7.72	196	8.28	210	4,978	22,143	12.59	5.71
1600.300.0650S	ERS	16.00	406	3.00 I.D.	76 I.D.	650	11.61	114	7.85	200	8.15	207	5,292	23,547	13.39	6.09
1600.300.0700S	ERS	16.00	406	3.00 I.D.	76 I.D.	700	12.50	123	8.03	204	7.97	202	5,575	24,799	13.83	6.27
1600.300.0800S	ERS	16.00	406	3.00 I.D.	76 I.D.	800	14.28	140	8.15	207	7.85	199	6,274	27,908	14.88	6.75
1800.300.0100S	ERS	18.00	457	3.00 I.D.	76 I.D.	100	1.78	18	5.33	136	12.67	322	1,267	5,634	5.29	2.40
1800.300.0150S	ERS	18.00	457	3.00 I.D.	76 I.D.	150	2.68	26	6.00	152	12.00	305	1,800	8,007	6.61	3.00
1800.300.0200S	ERS	18.00	457	3.00 I.D.	76 I.D.	200	3.57	35	6.34	161	11.66	296	2,330	10,364	7.81	3.54
1800.300.0250S	ERS	18.00	457	3.00 I.D.	76 I.D.	250	4.46	44	6.82	173	11.18	284	2,775	12,431	8.80	4.00
1800.300.0300S	ERS	18.00	457	3.00 I.D.	76 I.D.	300	5.36	53	7.20	183	10.80	274	3,242	14,421	9.92	4.50
1800.300.0350S	ERS	18.00	457	3.00 I.D.	76 I.D.	350	6.25	61	7.69	195	10.31	262	3,610	16,058	11.22	5.09
1800.300.0400S	ERS	18.00	457	3.00 I.D.	76 I.D.	400	7.14	70	7.76	197	10.24	260	4,100	18,238	11.75	5.33
1800.300.0450S	ERS	18.00	457	3.00 I.D.	76 I.D.	450	8.05	79	8.19	208	9.81	249	4,415	19,639	12.77	5.79
1800.300.0500S	ERS	18.00	457	3.00 I.D.	76 I.D.	500	8.94	88	8.43	214	9.57	243	4,780	21,262	13.63	6.18
1800.300.0550S	ERS	18.00	457	3.00 I.D.	76 I.D.	550	9.84	96	8.50	216	9.50	241	5,231	23,269	14.33	6.50
1800.300.0600S	ERS	18.00	457	3.00 I.D.	76 I.D.	600	10.71	105	8.86	225	9.14	232	5,496	24,447	15.44	7.00
1800.300.0650S	ERS	18.00	457	3.00 I.D.	76 I.D.	650	11.61	114	8.98	228	9.02	229	5,873	26,124	15.77	7.15
1800.300.0700S	ERS	18.00	457	3.00 I.D.	76 I.D.	700	12.50	123	9.09	231	8.91	226	6,227	27,699	16.69	7.57
1800.300.0800S	ERS	18.00	457	3.00 I.D.	76 I.D.	800	14.28	140	9.76	248	8.24	209	6,600	29,358	19.69	8.93
2400.300.0550S	ERS	24.00	610	3.00 I.D.	76 I.D.	550	9.84	96	12.19	310	11.82	300	6,500	28,925	23.76	10.80
2400.300.0600S	ERS	24.00	610	3.00 I.D.	76 I.D.	600	10.71	105	13.23	336	10.79	274	6,476	28,818	27.06	12.30
2400.300.0650S	ERS	24.00	610	3.00 I.D.	76 I.D.	650	11.61	114	13.00	330	11.02	280	7,160	31,864	27.28	12.40
Tender springs																
0350.300.0050	ERT	4.72	120	3.00 I.D.	76 I.D.	50	0.89	9	1.22	31	3.50	89	175	778	1.41	0.64
0500.300.0075S	ERT	5.00	127	3.00 I.D.	76 I.D.	75	1.34	13	0.98	25	4.02	102	301	1,340	0.49	0.22
1000.250.0425S	ERS	10.00	254	2.50 I.D.	64 I.D.	425	7.59	74	4.36	111	5.64	143	2,399	10,671	4.25	1.93
1000.250.0450	ERS	10.00	254	2.50 I.D.	64 I.D.	450	8.05	79	4.16	106	5.84	148	2,630	11,699	4.03	1.83

1000.250.0450S	ERS	10.00	254	2.50 I.D.	64 I.D.	450	8.05	79	4.16	106	5.84	148	2,630	11,699	4.03	1.83
1000.250.0475	ERS	10.00	254	2.50 I.D.	64 I.D.	475	8.50	83	4.29	109	4.53	115	2,711	12,060	4.27	1.94
1000.250.0500	ERS	10.00	254	2.50 I.D.	64 I.D.	500	8.94	88	4.43	113	5.57	141	2,786	12,393	4.52	2.05
1000.250.0500S	ERS	10.00	254	2.50 I.D.	64 I.D.	500	8.94	88	4.43	113	5.57	141	2,786	12,393	4.52	2.05
1000.250.0525	ERS	10.00	254	2.50 I.D.	64 I.D.	525	9.39	92	4.59	117	5.41	137	2,840	12,633	4.80	2.18
1000.250.0550	ERS	10.00	254	2.50 I.D.	64 I.D.	550	9.84	96	4.43	113	5.57	141	3,061	13,616	4.63	2.10
1000.250.0550S	ERS	10.00	254	2.50 I.D.	64 I.D.	550	9.84	96	4.43	113	5.57	141	3,061	13,616	4.63	2.10
1000.250.0575	ERS	10.00	254	2.50 I.D.	64 I.D.	575	10.28	101	4.57	116	5.43	138	3,121	13,883	4.87	2.21
1000.250.0600	ERS	10.00	254	2.50 I.D.	64 I.D.	600	10.71	105	4.74	120	5.26	134	3,158	14,047	5.18	2.35
1000.250.0600S	ERS	10.00	254	2.50 I.D.	64 I.D.	600	10.71	105	4.74	120	5.26	134	3,158	14,047	5.18	2.35
1000.250.0650	ERS	10.00	254	2.50 I.D.	64 I.D.	650	11.61	114	4.77	121	5.23	133	3,401	15,128	5.31	2.41
1000.250.0700	ERS	10.00	254	2.50 I.D.	64 I.D.	700	12.50	123	4.80	122	5.20	132	3,644	16,209	5.44	2.47
1000.250.0700S	ERS	10.00	254	2.50 I.D.	64 I.D.	700	12.50	123	4.80	122	5.20	132	3,644	16,209	5.44	2.47
1000.250.0750	ERS	10.00	254	2.50 I.D.	64 I.D.	750	13.39	131	4.85	123	5.15	131	3,860	17,170	5.62	2.55
1000.250.0750S	ERS	10.00	254	2.50 I.D.	64 I.D.	750	13.39	131	4.85	123	5.15	131	3,860	17,170	5.62	2.55
1000.250.0800	ERS	10.00	254	2.50 I.D.	64 I.D.	800	14.28	140	4.91	125	5.09	129	4,074	18,122	5.80	2.63
1000.250.0800S	ERS	10.00	254	2.50 I.D.	64 I.D.	800	14.28	140	4.91	125	5.09	129	4,074	18,122	5.80	2.63
1200.250.0080	ERS	12.00	305	2.50 I.D.	64 I.D.	80	1.43	14	3.58	91	8.43	214	674	2,999	2.25	1.02
1200.250.0090	ERS	12.00	305	2.50 I.D.	64 I.D.	90	1.61	16	3.82	97	8.18	208	736	3,274	2.51	1.14
1200.250.0100	ERS	12.00	305	2.50 I.D.	64 I.D.	100	1.78	18	3.51	89	8.49	216	849	3,777	2.31	1.05
1200.250.0100S	ERS	12.00	305	2.50 I.D.	64 I.D.	100	1.78	18	3.51	89	8.49	216	849	3,777	2.31	1.05
1200.250.0110	ERS	12.00	305	2.50 I.D.	64 I.D.	110	1.96	19	3.53	90	8.47	215	932	4,146	2.45	1.11
1200.250.0120	ERS	12.00	305	2.50 I.D.	64 I.D.	120	2.14	21	3.66	93	8.34	212	1,001	4,453	2.62	1.19
1200.250.0125	ERS	12.00	305	2.50 I.D.	64 I.D.	125	2.23	22	3.95	100	8.05	204	1,007	4,479	2.92	1.32
1200.250.0125S	ERS	12.00	305	2.50 I.D.	64 I.D.	125	2.23	22	3.95	100	8.05	204	1,007	4,479	2.91	1.32
1200.250.0130	ERS	12.00	305	2.50 I.D.	64 I.D.	130	2.32	23	4.38	111	7.62	194	991	4,408	3.26	1.48
1200.250.0140	ERS	12.00	305	2.50 I.D.	64 I.D.	140	2.50	25	4.01	102	7.99	203	1,118	4,973	3.05	1.38
1200.250.0150	ERS	12.00	305	2.50 I.D.	64 I.D.	150	2.68	26	4.19	106	7.81	198	1,171	5,209	3.29	1.49
1200.250.0150S	ERS	12.00	305	2.50 I.D.	64 I.D.	150	2.68	26	4.19	106	7.81	198	1,171	5,209	3.28	1.49
1200.250.0165	ERS	12.00	305	2.50 I.D.	64 I.D.	165	2.95	29	3.94	100	8.06	205	1,330	5,916	3.00	1.36
1200.250.0175	ERS	12.00	305	2.50 I.D.	64 I.D.	175	3.13	31	4.16	106	7.84	199	1,372	6,103	3.26	1.48

1200.250.0175S	ERS	12.00	305	2.50 I.D.	64 I.D.	175	3.13	31	4.16	106	7.84	199	1,372	6,103	3.26	1.48
1200.250.0185	ERS	12.00	305	2.50 I.D.	64 I.D.	185	3.30	32	3.95	100	8.05	204	1,488	6,619	3.11	1.41
1200.250.0200	ERS	12.00	305	2.50 I.D.	64 I.D.	200	3.57	35	4.07	103	7.93	201	1,585	7,050	3.28	1.49
1200.250.0200S	ERS	12.00	305	2.50 I.D.	64 I.D.	200	3.57	35	4.07	103	7.93	201	1,585	7,050	3.28	1.49
1200.250.0225	ERS	12.00	305	2.50 I.D.	64 I.D.	225	4.02	39	4.46	113	7.54	192	1,696	7,544	3.80	1.72
1200.250.0225S	ERS	12.00	305	2.50 I.D.	64 I.D.	225	4.02	39	4.46	113	7.54	192	1,696	7,544	3.79	1.72
1200.250.0250	ERS	12.00	305	2.50 I.D.	64 I.D.	250	4.46	44	4.43	113	7.57	192	1,893	8,420	3.86	1.75
1200.250.0250S	ERS	12.00	305	2.50 I.D.	64 I.D.	250	4.46	44	4.43	113	7.57	192	1,893	8,420	3.86	1.75
1200.250.0275	ERS	12.00	305	2.50 I.D.	64 I.D.	275	4.91	48	4.48	114	7.52	191	2,067	9,194	4.01	1.82
1200.250.0275S	ERS	12.00	305	2.50 I.D.	64 I.D.	275	4.91	48	4.48	114	7.52	191	2,067	9,194	4.01	1.82
1200.250.0300	ERS	12.00	305	2.50 I.D.	64 I.D.	300	5.36	53	4.96	126	7.04	179	2,112	9,395	4.67	2.12
1200.250.0300S	ERS	12.00	305	2.50 I.D.	64 I.D.	300	5.36	53	4.96	126	7.04	179	2,112	9,395	4.67	2.12
1200.250.0325	ERS	12.00	305	2.50 I.D.	64 I.D.	325	5.80	57	5.02	128	6.98	177	2,270	10,097	4.84	2.20
1200.250.0325S	ERS	12.00	305	2.50 I.D.	64 I.D.	325	5.80	57	5.02	128	6.98	177	2,270	10,097	4.83	2.19
1200.250.0350	ERS	12.00	305	2.50 I.D.	64 I.D.	350	6.25	61	5.12	130	6.88	175	2,408	10,711	5.05	2.29
1200.250.0350S	ERS	12.00	305	2.50 I.D.	64 I.D.	350	6.25	61	5.12	130	6.88	175	2,408	10,711	5.05	2.29
1200.250.0375	ERS	12.00	305	2.50 I.D.	64 I.D.	375	6.70	66	5.22	133	6.78	172	2,542	11,307	5.27	2.39
1200.250.0375S	ERS	12.00	305	2.50 I.D.	64 I.D.	375	6.70	66	5.22	133	6.78	172	2,542	11,307	5.27	2.39
1200.250.0400	ERS	12.00	305	2.50 I.D.	64 I.D.	400	7.14	70	5.32	135	6.68	170	2,670	11,877	5.51	2.50
1200.250.0400S	ERS	12.00	305	2.50 I.D.	64 I.D.	400	7.14	70	5.32	135	6.68	170	2,670	11,877	5.51	2.50
1200.250.0425	ERS	12.00	305	2.50 I.D.	64 I.D.	425	7.59	74	5.43	138	6.57	167	2,794	12,428	5.73	2.60
1200.250.0425S	ERS	12.00	305	2.50 I.D.	64 I.D.	425	7.59	74	5.43	138	6.57	167	2,794	12,428	5.73	2.60
1200.250.0450	ERS	12.00	305	2.50 I.D.	64 I.D.	450	8.05	79	5.22	133	6.78	172	3,052	13,576	5.51	2.50
1200.250.0450S	ERS	12.00	305	2.50 I.D.	64 I.D.	450	8.05	79	5.22	133	6.78	172	3,052	13,576	5.51	2.50
1200.250.0475	ERS	12.00	305	2.50 I.D.	64 I.D.	475	8.50	83	5.34	136	6.66	169	3,162	14,065	5.75	2.61
1200.250.0475S	ERS	12.00	305	2.50 I.D.	64 I.D.	475	8.50	83	5.34	136	6.66	169	3,162	14,065	5.75	2.61
1200.250.0500S	ERS	12.00	305	2.50 I.D.	64 I.D.	500	8.94	88	5.49	139	6.51	165	3,252	14,466	6.06	2.75
1200.250.0525	ERS	12.00	305	2.50 I.D.	64 I.D.	525	9.39	92	5.65	144	6.35	161	3,334	14,830	6.37	2.89
1200.250.0525S	ERS	12.00	305	2.50 I.D.	64 I.D.	525	9.39	92	5.65	144	6.35	161	3,334	14,830	6.37	2.89
1200.250.0550S	ERS	12.00	305	2.50 I.D.	64 I.D.	550	9.84	96	5.83	148	6.17	157	3,390	15,079	6.72	3.05
1200.250.0600S	ERS	12.00	305	2.50 I.D.	64 I.D.	600	10.71	105	5.82	148	6.18	157	3,706	16,485	6.83	3.10

1200.250.0625	ERS	12.00	305	2.50 I.D.	64 I.D.	625	11.16	109	5.62	143	6.38	162	3,985	17,726	6.59	2.99
1200.250.0650S	ERS	12.00	305	2.50 I.D.	64 I.D.	650	11.61	114	5.81	148	6.19	157	4,025	17,904	6.94	3.15
1200.250.0700S	ERS	12.00	305	2.50 I.D.	64 I.D.	700	12.50	123	5.85	149	6.15	156	4,307	19,158	7.12	3.23
1200.250.0750S	ERS	12.00	305	2.50 I.D.	64 I.D.	750	13.39	131	5.88	149	6.12	155	4,586	20,399	7.32	3.32
1200.250.0800S	ERS	12.00	305	2.50 I.D.	64 I.D.	800	14.28	140	5.92	150	6.08	154	4,864	21,636	7.49	3.40
1200.250.0900S	ERS	12.00	305	2.50 I.D.	64 I.D.	900	16.07	158	6.40	163	5.60	142	5,041	22,423	8.60	3.90
1400.250.0080	ERS	14.00	356	2.50 I.D.	64 I.D.	80	1.43	14	3.93	100	10.07	256	806	3,585	2.56	1.16
1400.250.0090	ERS	14.00	356	2.50 I.D.	64 I.D.	90	1.61	16	4.81	122	9.19	233	827	3,679	3.39	1.54
1400.250.0095	ERS	14.00	356	2.50 I.D.	64 I.D.	95	1.70	17	4.59	117	9.41	239	894	3,977	3.24	1.47
1400.250.0100	ERS	14.00	356	2.50 I.D.	64 I.D.	100	1.78	18	4.39	112	9.61	244	961	4,275	3.09	1.40
1400.250.0100S	ERS	14.00	356	2.50 I.D.	64 I.D.	100	1.78	18	4.39	112	9.61	244	961	4,275	3.09	1.40
1400.250.0110	ERS	14.00	356	2.50 I.D.	64 I.D.	110	1.96	19	5.03	128	8.97	228	987	4,390	3.77	1.71
1400.250.0120	ERS	14.00	356	2.50 I.D.	64 I.D.	120	2.14	21	4.55	116	9.45	240	1,134	5,044	3.48	1.58
1400.250.0125S	ERS	14.00	356	2.50 I.D.	64 I.D.	125	2.23	22	5.00	127	9.00	229	1,125	5,004	3.86	1.75
1400.250.0130	ERS	14.00	356	2.50 I.D.	64 I.D.	130	2.32	23	4.84	123	9.16	233	1,190	5,293	3.72	1.69
1400.250.0130S	ERS	14.00	356	2.50 I.D.	64 I.D.	130	2.32	23	4.84	123	9.16	233	1,190	5,293	3.72	1.69
1400.250.0140	ERS	14.00	356	2.50 I.D.	64 I.D.	140	2.50	25	4.53	115	9.47	241	1,326	5,898	3.48	1.58
1400.250.0150	ERS	14.00	356	2.50 I.D.	64 I.D.	150	2.68	26	4.72	120	9.28	236	1,391	6,187	3.72	1.69
1400.250.0150S	ERS	14.00	356	2.50 I.D.	64 I.D.	150	2.68	26	4.72	120	9.28	236	1,391	6,187	3.72	1.69
1400.250.0165	ERS	14.00	356	2.50 I.D.	64 I.D.	165	2.95	29	4.80	122	9.20	234	1,518	6,752	3.90	1.77
1400.250.0165S	ERS	14.00	356	2.50 I.D.	64 I.D.	165	2.95	29	4.80	122	9.20	234	1,518	6,752	3.90	1.77
1400.250.0175	ERS	14.00	356	2.50 I.D.	64 I.D.	175	3.13	31	5.04	128	8.96	228	1,568	6,975	4.21	1.91
1400.250.0175S	ERS	14.00	356	2.50 I.D.	64 I.D.	175	3.13	31	5.04	128	8.96	228	1,568	6,975	4.21	1.91
1400.250.0185	ERS	14.00	356	2.50 I.D.	64 I.D.	185	3.30	32	4.76	121	9.24	235	1,709	7,602	3.99	1.81
1400.250.0200	ERS	14.00	356	2.50 I.D.	64 I.D.	200	3.57	35	4.92	118	9.35	238	1,873	8,331	4.21	1.91
1400.250.0200S	ERS	14.00	356	2.50 I.D.	64 I.D.	200	3.57	35	4.65	118	9.35	238	1,873	8,331	4.21	1.91
1400.250.0225	ERS	14.00	356	2.50 I.D.	64 I.D.	225	4.02	39	5.32	135	8.68	220	1,953	8,687	4.80	2.18
1400.250.0225S	ERS	14.00	356	2.50 I.D.	64 I.D.	225	4.02	39	5.32	135	8.68	220	1,953	8,687	4.80	2.18
1400.250.0250	ERS	14.00	356	2.50 I.D.	64 I.D.	250	4.46	44	5.32	135	8.68	220	2,170	9,653	4.91	2.23
1400.250.0250S	ERS	14.00	356	2.50 I.D.	64 I.D.	250	4.46	44	5.32	135	8.68	220	2,170	9,653	4.91	2.23
1400.250.0275	ERS	14.00	356	2.50 I.D.	64 I.D.	275	4.91	48	5.79	147	8.21	209	2,258	10,044	5.62	2.55

1400.250.0275S	ERS	14.00	356	2.50 I.D.	64 I.D.	275	4.91	48	5.79	147	8.21	209	2,258	10,044	5.62	2.55
1400.250.0300	ERS	14.00	356	2.50 I.D.	64 I.D.	300	5.36	53	5.81	148	8.19	208	2,458	10,934	5.77	2.62
1400.250.0300S	ERS	14.00	356	2.50 I.D.	64 I.D.	300	5.36	53	5.81	148	8.19	208	2,458	10,934	5.77	2.62
1400.250.0325	ERS	14.00	356	2.50 I.D.	64 I.D.	325	5.80	57	5.90	150	8.10	206	2,633	11,712	5.99	2.72
1400.250.0350	ERS	14.00	356	2.50 I.D.	64 I.D.	350	6.25	61	5.96	151	8.04	204	2,812	12,508	6.19	2.81
1400.250.0350S	ERS	14.00	356	2.50 I.D.	64 I.D.	350	6.25	61	5.96	151	8.04	204	2,812	12,508	6.19	2.81
1400.250.0400	ERS	14.00	356	2.50 I.D.	64 I.D.	400	7.14	70	6.19	157	7.81	198	3,123	13,892	6.72	3.05
1400.250.0400S	ERS	14.00	356	2.50 I.D.	64 I.D.	400	7.14	70	6.19	157	7.81	198	3,123	13,892	6.72	3.05
1400.250.0450	ERS	14.00	356	2.50 I.D.	64 I.D.	450	8.05	79	6.48	165	7.52	191	3,385	15,057	7.34	3.33
1400.250.0450S	ERS	14.00	356	2.50 I.D.	64 I.D.	450	8.05	79	6.48	165	7.52	191	3,385	15,057	7.34	3.33
1400.250.0500S	ERS	14.00	356	2.50 I.D.	64 I.D.	500	8.94	88	6.34	161	7.66	195	3,830	17,037	7.34	3.33
1400.250.0550S	ERS	14.00	356	2.50 I.D.	64 I.D.	550	9.84	96	6.68	170	7.32	186	4,026	17,908	8.04	3.65
1400.250.0600S	ERS	14.00	356	2.50 I.D.	64 I.D.	600	10.71	105	6.64	169	7.36	187	4,413	19,630	8.15	3.70
1400.250.0650S	ERS	14.00	356	2.50 I.D.	64 I.D.	650	11.61	114	7.02	178	6.98	177	4,538	20,186	8.97	4.07
1400.250.0700S	ERS	14.00	356	2.50 I.D.	64 I.D.	700	12.50	123	7.20	183	6.81	173	4,764	21,192	9.38	4.26
1600.250.0080S	ERS	16.00	406	2.50 I.D.	64 I.D.	80	1.43	14	5.31	135	10.67	271	848	3,800	3.74	1.70
1600.250.0100S	ERS	16.00	406	2.50 I.D.	64 I.D.	100	1.78	18	4.88	124	11.10	282	1,110	4,937	3.57	1.62
1600.250.0125S	ERS	16.00	406	2.50 I.D.	64 I.D.	125	2.23	22	5.53	140	10.47	266	1,310	5,825	4.38	1.99
1600.250.0150S	ERS	16.00	406	2.50 I.D.	64 I.D.	150	2.68	26	5.75	146	10.24	260	1,537	6,835	4.85	2.20
1600.250.0175S	ERS	16.00	406	2.50 I.D.	64 I.D.	175	3.13	31	6.04	153	9.96	253	1,743	7,751	5.28	2.40
1600.250.0200S	ERS	16.00	406	2.50 I.D.	64 I.D.	200	3.57	35	6.30	160	9.68	246	2,023	8,999	5.33	2.42
1600.250.0225S	ERS	16.00	406	2.50 I.D.	64 I.D.	225	4.03	39	6.34	161	9.66	245	2,175	9,677	5.78	2.70
1600.250.0250S	ERS	16.00	406	2.50 I.D.	64 I.D.	250	4.46	44	6.27	159	9.73	247	2,433	10,822	6.11	2.77
1600.250.0300S	ERS	16.00	406	2.50 I.D.	64 I.D.	300	5.36	53	6.81	173	9.19	233	2,757	12,264	7.12	3.23
1600.250.0350S	ERS	16.00	406	2.50 I.D.	64 I.D.	350	6.25	61	6.94	176	9.06	230	3,173	14,114	7.58	3.44
1600.250.0400S	ERS	16.00	406	2.50 I.D.	64 I.D.	400	7.14	70	7.17	182	8.83	224	3,533	15,715	8.18	3.71
1600.250.0450S	ERS	16.00	406	2.50 I.D.	64 I.D.	450	8.05	79	7.42	188	8.58	218	3,861	17,175	8.82	4.00
1600.250.0500S	ERS	16.00	406	2.50 I.D.	64 I.D.	500	8.94	88	7.77	197	8.23	209	4,117	18,313	9.61	4.36
1600.250.0550S	ERS	16.00	406	2.50 I.D.	64 I.D.	550	9.84	96	8.09	205	7.91	201	4,353	19,363	10.40	4.72
1600.250.0600S	ERS	16.00	406	2.50 I.D.	64 I.D.	600	10.71	105	8.06	205	7.94	202	4,763	21,187	10.58	4.80
1600.250.0650S	ERS	16.00	406	2.50 I.D.	64 I.D.	650	11.61	114	8.00	203	8.00	203	5,200	23,131	10.67	4.84

1600.250.0700S	ERS	16.00	406	2.50 I.D.	64 I.D.	700	12.50	123	8.44	214	7.56	192	5,289	23,527	11.70	5.31
1600.250.0750S	ERS	16.00	406	2.50 I.D.	64 I.D.	750	13.39	131	8.44	214	7.56	192	5,669	25,217	11.90	5.40
1800.250.0100S	ERS	18.00	457	2.50 I.D.	64 I.D.	100	1.78	18	6.06	154	11.94	303	1,194	5,309	4.63	2.10
1800.250.0125S	ERS	18.00	457	2.50 I.D.	64 I.D.	125	2.23	22	6.69	170	11.30	287	1,413	6,290	5.75	2.60
1800.250.0150S	ERS	18.00	457	2.50 I.D.	64 I.D.	150	2.68	26	6.91	176	11.09	282	1,664	7,400	6.17	2.80
1800.250.0175S	ERS	18.00	457	2.50 I.D.	64 I.D.	175	3.13	31	7.22	183	10.78	274	1,887	8,392	6.83	3.10
1800.250.0200S	ERS	18.00	457	2.50 I.D.	64 I.D.	200	3.58	35	7.01	178	10.99	279	2,200	9,792	6.42	3.00
1800.250.0225S	ERS	18.00	457	2.50 I.D.	64 I.D.	225	4.02	39	7.28	185	10.72	272	2,411	10,725	7.27	3.30
Tender springs																
0175.250.0150	ERT	2.64	67	2.50 I.D.	64 I.D.	150	2.68	26	0.79	20	1.85	47	275	1,222	0.77	0.35
0175.250.0200	ERT	3.07	78	2.50 I.D.	64 I.D.	200	3.57	35	1.30	33	1.77	45	350	1,558	1.48	0.67
0175.250.0250	ERT	2.80	71	2.50 I.D.	64 I.D.	250	4.46	44	1.02	26	1.75	44	440	1,958	1.26	0.57
0175.250.0300	ERT	3.15	80	2.50 I.D.	64 I.D.	300	5.36	53	1.38	35	1.75	44	525	2,335	1.57	0.71
0225.250.0150	ERT	3.90	99	2.50 I.D.	64 I.D.	150	2.68	26	1.65	42	2.25	57	334	1,486	1.92	0.87
0225.250.0200	ERT	3.55	90	2.50 I.D.	64 I.D.	200	3.57	35	1.30	33	2.25	57	450	2,000	1.48	0.67
0225.250.0250	ERT	3.94	100	2.50 I.D.	64 I.D.	250	4.46	44	1.61	41	2.36	60	587	2,614	1.96	0.89
0225.250.0300	ERT	3.82	97	2.50 I.D.	64 I.D.	300	5.36	53	1.46	37	2.36	60	709	3,156	1.57	0.71
0350.250.0025	ERT	5.00	127	2.50 I.D.	64 I.D.	25	0.45	4	1.26	32	3.74	95	94	416	1.04	0.47
0350.250.0050	ERT	5.00	127	2.50 I.D.	64 I.D.	50	0.89	9	1.38	35	3.62	92	182	809	1.17	0.53
0350.250.0075	ERT	5.00	127	2.50 I.D.	64 I.D.	77	1.37	13	1.38	35	3.62	92	272	1,210	1.56	0.71
0350.250.0100	ERT	4.72	120	2.50 I.D.	64 I.D.	100	1.78	18	1.17	30	3.56	90	355	1,580	1.23	0.56
Progressive tender springs																
0175.250.600-1300	ERP	3.55	90	2.50 I.D.	64 I.D.	600 / 1300	10.7 / 23.2	105 / 228	1.84	47	1.70	43	1,513	6,731	1.90	0.86
0200.250.1300	ERP	2.01	51	2.50 I.D.	64 I.D.	1,300	23.22	228	1.22	31	0.79	20	947	4,212	0.81	0.37
0200.250.175-550	ERP	4.25	108	2.50 I.D.	64 I.D.	175 / 550	3.13 / 9.82	31 / 96	2.20	56	2.05	52	739	3,287	2.42	1.10
0200.250.175-650	ERP	4.25	108	2.50 I.D.	64 I.D.	175 / 650	3.13 / 11.61	31 / 114	2.20	56	2.05	52	846	3,763	2.42	1.10
0200.250.250-550	ERP	3.46	88	2.50 I.D.	64 I.D.	250 / 550	4.46 / 9.82	44 / 95	1.50	38	1.97	50	877	3,900	1.81	0.82
0200.250.250-650	ERP	4.84	123	2.50 I.D.	64 I.D.	250 / 650	4.46 / 11.61	44 / 114	2.80	71	2.05	52	924	4,112	3.09	1.40