# **ELASTOMER SPRING SERIES**

Low cost, compact, all elastomer mounts for vibration and noise control.

### APPLICATIONS

- Punching Dies
- Stamping Dies
- Drawing Dies

#### FEATURES

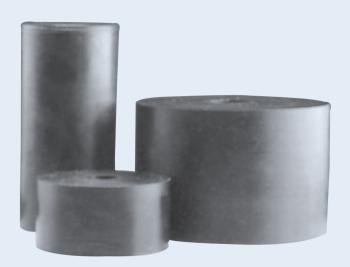
- All elastomer isolators
- · Very slight pressure set
- Minimal wear through abrasion
- Excellent resistance to oil and ozone
- Stackable

### BENEFITS

- Quieter and safer operation than steel
- Eliminates die damage caused by shattered springs
- Longer stroke at same load

#### LOAD RANGE

• Load range up to 15,000 lbs.



When compared to other types of springs, Barry Elastomer Springs have proven to be the safest, most efficient and reliable compression material for punching, stamping and drawing dies. Elastomer Springs can be used in other applications requiring exceptionally high energy storage in a small area.

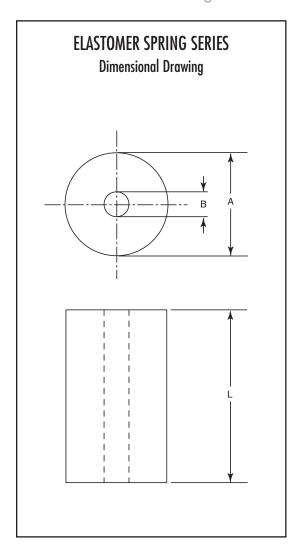
Since Barry Controls introduced elastomer springs, a steadily increasing number of metal fabricators in the aircraft, automobile, appliance and electronics industries are making use of their specific advantages which are: higher loads, increased durability, better performance, freedom from maintenance and a very long life.

### **Environmental Data**

• Neoprene elastomer has an operating temperature range of -20°F to +180°F (-30°C to +82°C) and is resistant to oils, most solvents, salt spray and ozone.

## **ELASTOMER SPRING SERIES:**

## Dimensions & Load Range Data



Dimensions and data are subject to change without notice. For technical, design, or application assistance, call toll free: 1-800-BARRY MA

E-3501   Solution	Part Number	A	В	L	R	D	Ţ
S-S501	ES-3500	.63"	.25"	15/32"	436	.17"	72
E-3502   C-3503   C-3504   C-3505   C-3505   C-3506   C							77
ES-3503							80
E-3511					1		83
ES-3512	ES-3510	.787"	.33"	5/8"	610	.22"	133
ES-3513							132
ES-3520	ES-3512				381	.35"	133
E-3521	ES-3513			1.25"	287	.44"	126
ES-3522   S-3523   S-3524   S-24   S-44"   S-55253   S-3523   S-3522   S-3523   S-3524   S-3523   S-3523   S-3524   S-3523   S-3523   S-3524   S-3523   S-3524   S-3525   S-3526   S-3526   S-3526   S-3525   S-3526   S-3525   S-3526   S-3525   S-3526   S-		1.00"	.41"				215
ES-3523							209
ES-3530					1		229
ES-3531	ES-3523				440	.55″	241
ES-3532   1.969"   651   69"   651   69"   6533533   2.50"   517   87"   651		1.25"	.53"				451
ES-3533         2.50"         517         .87"         4           ES-3540         1.56"         .53"         1.25"         1790         .44"         5           ES-3541         1.578"         1434         .55"         8           ES-3542         1.969"         1148         .69"         8           ES-3543         2.50"         931         .87"         8           ES-3544         3.156         744         1.10"         8           ES-3554         1.578"         2411         .55"         1           ES-3553         2.50"         1.882         .69"         1           ES-3554         3.156"         1192         1.10"         1           ES-3555         2.50"         1.482         .67"         1           ES-3554         3.156"         1192         1.10"         1           ES-3560         2.50"         .66"         1.25"         4565         .44"         1           ES-3561         1.578"         3650         .55"         2         2         2         4665         .44"         1         1         5         3         1         1         3         2         2         2							471
ES-3540 ES-3541 ES-3542 ES-3543 ES-3544 ES-3544 ES-35544 ES-35545 ES-35516 ES-3551 ES-3554 ES-3554 ES-3555 ES-3556 ES-3564 ES-3560 ES-3570 ES-3580 BS-3570 ES-3580 BS-3570 ES-3580 BS-3570 ES-3580 BS-3580 BS-							456
E-3541							452
ES-3542   1.969"		1.56"	.53"		1		783
ES-3543         2.50"         931         .87"         6           ES-3544         3.156         744         1.10"         8           ES-3550         2.00"         .66"         1.25"         2959         .44"         1           ES-3551         1.578"         2411         .55"         1							816
ES-3544         3.156         744         1.10"         6           ES-3550         2.00"         .66"         1.25"         2959         .44"         1           ES-3551         1.578"         2411         .55"         1           ES-3553         2.50"         1.882         .69"         1           ES-3553         2.50"         1.482         .67"         1           ES-3554         3.156"         1192         1.10"         1           ES-3555         3.937"         950         1.38"         1           ES-3560         2.50"         .66"         1.25"         4565         .44"         1           ES-3561         1.578"         3650         .55"         2         2         2           ES-3562         1.969"         2830         .69"         4         2         2         4         2         2         2         4         8"         2         2         2         4         8"         2         2         2         4         8"         2         2         4         2         3         1         1         1         1         1         1         1         1         1							804
ES-3550							815
S   S   S   S   S   S   S   S   S   S							830
ES-3552         1.969"         1852         .69"         1           ES-3553         2.50"         1482         .87"         1           ES-3554         3.156"         1192         1.10"         1           ES-3555         3.937"         950         1.38"         1           ES-3560         2.50"         .66"         1.25"         4565         .44"         1           ES-3561         1.578"         3650         .55"         2           ES-3562         1.969"         2830         .69"         1           ES-3563         2.50"         2286         .87"         2           ES-3564         3.156"         1809         1.10"         2           ES-3565         3.937"         1468         1.38"         2           ES-3570         3.15"         .83"         1.25"         9088         .44"         3           ES-3571         1.578"         7038         .55"         4           ES-3573         2.50"         4572         .87"         4           ES-3574         3.156"         3.93"         2567         1.38"         3           ES-3575         3.937"         2567         1.38"<		2.00"	.66"				1295
ES-3553         2.50"         1482         .87"         1           ES-3554         3.156"         1192         1.10"         1           ES-3555         3.937"         950         1.38"         1           ES-3560         2.50"         .66"         1.25"         4565         .44"         1           ES-3561         1.578"         3650         .55"         1         2830         .69"         1           ES-3563         2.50"         2286         .87"         2         2         2         87"         2         2         88"         1.10"         2         2         3.15"         2         2.50"         2286         .87"         2         2         88"         1.10"         2         2         88"         1.10"         2         2         3.15"         2         3.93""         1.468         1.38"         2         2         3.15"         3.15"         3.83"         1.25"         9088         .44"         3.48         3.15"         3.48         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15"         3.15" <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>1371</td>					1		1371
ES-3554         3.156"         1192         1.10"         1           ES-3555         3.937"         950         1.38"         1           ES-3560         2.50"         .66"         1.25"         4565         .44"         1           ES-3561         1.578"         3650         .55"         2         2         2           ES-3562         1.969"         2830         .69"         2         2         87"         2         2         88"         2         2         2         2286         87"         2         2         88"         2         2         2         2         88"         2         2         2         3         4         4         4 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>1296</td></td<>							1296
ES-3555         3.937"         950         1.38"         1           ES-3560         2.50"         .66"         1.25"         4565         .44"         1           ES-3561         1.578"         3650         .55"         2           ES-3562         1.969"         2830         .69"         2           ES-3563         2.50"         2286         .87"         2           ES-3564         3.156"         1809         1.10"         2           ES-3565         3.937"         1468         1.38"         2           ES-3570         3.15"         83"         1.25"         9088         .44"         3           ES-3571         1.578"         7038         .55"         4         4         2           ES-3573         2.50"         4572         .87"         4         4         2         87"         4         4         2         85.3574         4         3.156"         3.93"         2.50"         4572         .87"         4         4         2         3         3.93"         2.50"         4572         .87"         4         4         2         2         5         5         5         5         1.38"							1297
ES-3560 2.50"							1330
ES-3561         1.578"         3650         .55"         2           ES-3562         1.969"         2830         .69"         1           ES-3563         2.50"         2286         .87"         2           ES-3564         3.156"         1809         1.10"         2           ES-3565         3.937"         1468         1.38"         2           ES-3566         4.922"         1375         1.72"         2           ES-3570         3.15"         .83"         1.25"         9088         .44"         3           ES-3571         1.578"         7038         .55"         4           ES-3572         1.969"         5768         .69"         4           ES-3573         2.50"         4572         .87"         3"           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3583         2.50"         6435         87"         5 <td>ES-3555</td> <td></td> <td></td> <td>3.937"</td> <td>950</td> <td>1.38"</td> <td>1330</td>	ES-3555			3.937"	950	1.38"	1330
ES-3562 ES-3563 ES-3564 ES-3564 ES-3565 ES-3566         1.969" 2.50" 2.286 3.156" 3.93" 1468 4.922" 1375 1.72" 2         2.830 8.8" 2         6.9" 2.286 8.8" 2           ES-3564 ES-3565 ES-3566         3.156" 4.922" 1375 1.72" 2         1.38" 2.5377 1.72" 2         2.250 4.922" 1375 1.72" 2         4.44" 4.83         3.25" 4.969" 5768 1.969" 5768 1.969" 5768 1.969" 4472         4.44" 4.72"		2.50"	.66"				1997
ES-3563         2.50"         2286         .87"         2           ES-3564         3.156"         1809         1.10"         2           ES-3565         3.937"         1468         1.38"         2           ES-3576         3.15"         .83"         1.25"         9088         .44"         3           ES-3570         3.15"         1.578"         7038         .55"         4           ES-3572         1.969"         5768         .69"         4           ES-3573         2.50"         4572         .87"         4           ES-3574         3.156"         3485         1.10"         3           ES-3576         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         6           ES-3581         1.969"         8466         .69"         5         5           ES-3583         2.50"         6435         87"         5           ES-3584         3.156"         346         1.10"         3           ES-3585         3.93"         3440							2076
ES-3564         3.156"         1809         1.10"         2           ES-3565         3.937"         1468         1.38"         2           ES-3566         4.922"         1375         1.72"         2           ES-3570         3.15"         .83"         1.25"         9088         .44"         3           ES-3571         1.578"         7038         .55"         4           ES-3573         2.50"         4572         .87"         4           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         1.7"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4							1981
ES-3565         3.937"         1468         1.38"         2           ES-3566         4.922"         1375         1.72"         2           ES-3570         3.15"         .83"         1.25"         9088         .44"         3           ES-3571         1.578"         7038         .55"         4           ES-3573         2.50"         4572         .87"         4           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3584         3.156"         3.93"         3440         1.38"         4           ES-3585         3.937"         3440         1.38"         4           ES-3590         4.92"         1.06"         1.25"         33815         44"         1           ES-3591         1							2000
ES-3566         4.922"         1375         1.72"         2           ES-3570         3.15"         .83"         1.25"         9088         .44"         3           ES-3571         1.578"         7038         .55"         4           ES-3572         1.969"         5768         .69"         4           ES-3573         2.50"         4572         .87"         4           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3596         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25" <td< td=""><td></td><td></td><td></td><td></td><td>1</td><td></td><td>2018</td></td<>					1		2018
ES-3570 3.15" 83" 1.25" 9088 .44" 3 ES-3571 1.578" 7038 .55" 4 ES-3572 1.969" 5768 .69" 4 ES-3573 2.50" 4572 87" 4 ES-3574 3.156" 3485 1.10" 3 ES-3575 4.922" 2010 1.72" 3 ES-3576 1.578" 10427 .55" 5 ES-3580 3.94" 83" 1.25" 15216 .44" 6 ES-3581 1.969" 8466 .69" 5 ES-3582 1.969" 8466 .69" 5 ES-3583 2.50" 6435 87" 5 ES-3584 5.3584 3.156" 4468 1.10" 5 ES-3586 3.93" 3440 1.38" 4 ES-3586 4.922" 2540 1.72" 4 ES-3590 4.92" 1.06" 1.25" 33815 .44" 1.578" 5 ES-3590 4.92" 1.06" 1.25" 33815 .44" 1.578" 1.57							2055 2406
ES-3571         1.578"         7038         .55"         4           ES-3572         1.969"         5768         .69"         4           ES-3573         2.50"         4572         .87"         3           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         .87"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         1           ES-3591         1.56"         1.578"         22810         .55"         12							
ES-3572         1.969"         5768         .69"         4           ES-3573         2.50"         4572         87"         4           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         .87"         5           ES-3584         3.156"         4648         1.10"         4           ES-3585         3.937"         3440         1.38"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         1           ES-3591         1.578"         22810         .55"         12		3.15"	.83"				3926
ES-3573         2.50"         4572         .87"         4           ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         1.56"         1.72"         3           ES-3576         4.922"         2010         1.72"         3         3         3         4.922"         2010         1.72"         3         3         3         4.4"         6         6         5							4003
ES-3574         3.156"         3485         1.10"         3           ES-3575         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         .87"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         1/2           ES-3591         1.578"         22810         .55"         12							4038
ES-3575         3.937"         2567         1.38"         3           ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         83"         1.25"         15216         .44"         6           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         .87"         110"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3596         4.92"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         16           ES-3591         1.578"         22810         .55"         12							4000
ES-3576         4.922"         2010         1.72"         3           ES-3580         3.94"         .83"         1.25"         15216         .44"         66           ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         .87"         5           ES-3584         3.156"         4648         1.138"         4           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         1/2           ES-3591         1.578"         22810         .55"         12							3889 3594
ES-3580 3.94" 83" 1.25" 15216 .44" 65 ES-3581 1.578" 10427 5.55" 5 ES-3582 1.969" 8466 6.9" 5 ES-3583 2.50" 6435 87" 5 ES-3584 3.156" 4648 1.138" 4 ES-3585 3.937" 3440 1.38" 4 ES-3586 4.922" 2540 1.72" 4  ES-3590 4.92" 1.06" 1.25" 33815 .44" [ES-3591 1.578" 22810 .55" 12							3594
ES-3581         1.578"         10427         .55"         5           ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         .87"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         14"           ES-3591         1.578"         22810         .55"         12							
ES-3582         1.969"         8466         .69"         5           ES-3583         2.50"         6435         87"         5           ES-3584         3.156"         4648         1.10"         1.38"         4           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         1           ES-3591         1.578"         22810         .55"         12		3.94"	.83″				6657
ES-3583         2.50"         6435         .87"         5           ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         1/2"           ES-3591         1.578"         22810         .55"         12					1		5930
ES-3584         3.156"         4648         1.10"         5           ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         14"           ES-3591         1.578"         22810         .55"         12							5926 5631
ES-3585         3.937"         3440         1.38"         4           ES-3586         4.922"         2540         1.72"         4           ES-3590         4.92"         1.06"         1.25"         33815         .44"         14"           ES-3591         1.578"         22810         .55"         12							
ES-3586 4.92" 2540 1.72" 4  ES-3590 4.92" 1.06" 1.25" 33815 .44" 1.  ES-3591 1.578" 22810 .55" 12					1		5186 4816
ES-3590 4.92" 1.06" 1.25" 33815 .44" 1.65" 1.578" 22810 .55" 12							4445
ES-3591 1.578" 22810 .55" 1:							
		4.92"	1.06"				14794
F1-374					1		12973
					1		10372
							9261
							7965 7952
							7932
					1		6853

R = Spring Rate, lbs./inch deflection +/- 20%

D = Maximum recommended deflection -35%L

T = Approximate total load at maximum deflection +/- 20%