

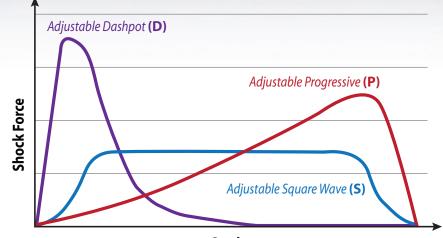
## KynSHOC STAINLESS STEEL

Versatile Patented Damping Solutions FROM THE ENERGY ABSORPTION TECHNOLOGY LEADER

## **ONE UNIT** Three Selectable Damping Configurations

#### Configuration and Adjustability

All these energy profiles are available in a SINGLE DEVICE





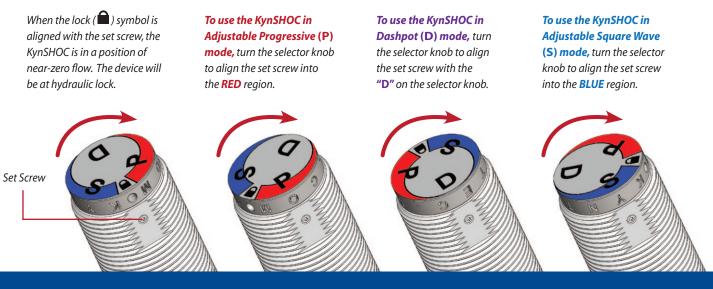
#### Unleashing the Versatility of KynSHOC

## Every standard KynSHOC comes from the factory capable of delivering three distinct energy absorption profiles:

Adjustable Square Wave (S) damping, where deceleration forces remain relatively constant over the full length of the shock absorber stroke. Square wave damping yields the most efficient energy absorption while imparting the lowest peak deceleration forces.

Adjustable Progressive (P) damping, where deceleration forces start low, then build through the shock absorber stroke. Such "soft catch" applications are common when working with more fragile loads which need to be stopped.

**Dashpot (D) damping**, is the simplest form of damping, involving a fixed orifice through the entire shock absorber stroke. Dashpot damping allows for relatively high amounts of energy to be removed in relatively shorter strokes, but with higher deceleration forces being imparted to the impact load.



#### For more information visit us at www.kyntec.com or call 1.855.652.6666

## ORDERING Your KynSHOC

#### **Model Numbering Guidelines:**

KYN

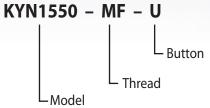
Model

## **Button**



N: No Button **U: Urethane Button** S: Stainless Steel Button

#### **Example:**



#### Selecting Your KynSHOC

1) Calculate the amount of energy to be absorbed per cycle.

2) Calculate the amount of energy to be absorbed per hour.

3) Select the appropriate model from the Performance Data and Envelope Data tables, selecting the unit with the NEXT HIGHEST energy capability.



#### Performance Data

Small Se								
MODEL	Stroke (in)	E Max (in-lbs/cycle)	E Max (in-lbs/hr)					
KYN80	0.25	27	50 000					
KYN100	0.28	53	110 000					
KYN150	0.41	89	250 000					
KYN250	0.63	240	350 000					
KYN500	0.88	490	475 000					
KYN1000	1.00	800	625 000					

#### **Large Series**

Weight

0.6 oz

1.1 oz

2.2 oz

2.6 oz

5.0 oz

10.8 oz

21.5 oz

21.5 oz

26.8 oz

26.8 oz

675 000

810 000

880 000

991 500

MODEL	Stroke (in)	E Max (in-lbs/cycle)	E Max (in-lbs/hr)	Weight
KYN1525	1.00	3250	1 120 000	2.2 lbs
KYN1550	2.00	6505	1 478 000	2.5 lbs
KYN1575	3.00	10000	1 780 000	2.9 lbs
KYN2050	2.00	16500	2 400 000	6.3 lbs
KYN2100	4.00	33015	3 204 000	7.6 lbs
KYN2150	6.00	50000	3 730 000	9.7 lbs
KYN3050	2.00	20500	3 293 000	15.8 lbs
KYN3100	4.00	38000	5 930 000	21.7 lbs
KYN3150	6.00	63725	9 736 000	28.7 lbs
KYN4050	2.00	33630	13 720 000	33.1 lbs
KYN4100	4.00	69035	16 820 000	40.6 lbs
KYN4150	6.00	106210	19 030 000	46.3 lbs
KYN4200	8.00	141610	21 670 000	67.9 lbs
KYN4250	10.00	177015	24 340 000	75.0 lbs

2.00 Specifications subject to change without notice.

1.00

1.00

2.00

KYN1115

KYN1125

KYN1215

KYN1225

Visit www.kyntec.com for the most up to date information.

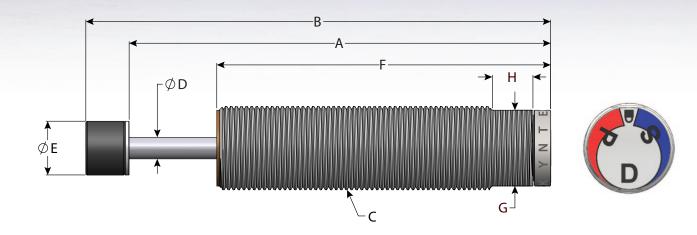
1726

1726

3408

3408

## **ENVELOPE** Ordering Data



#### **Small Series**

MODEL	Length without Button (A)	Length with Button (B)	Thread (C)	Rod Dia. (D)	Button Dia. (E)	Cylinder (F)	Flat Width (G)	Flat Length (H)
KYN80 IF	1.85	2.25	3/8 - 32 UNEF	0.098	0.268	1.61	-	-
KYN100 IF	2.50	2.75	7/16 - 28 UNEF	0.118	0.340	2.00	-	-
KYN150 IF KYN150 IC	2.50	2.85	7/16 - 28 UNEF 1/2 - 20 UNEF	0.118	0.400	2.00	0.43	0.30
KYN250 IF KYN250 IC	3.90	4.37	1/2 - 20 UNF 9/16 - 18 UNF	0.157	0.400	3.40	0.47	0.45
KYN500	4.75	5.16	3/4 - 16 UNF	0.197	0.500	2.13	0.70	0.50
KYN1000 IF	5.12	5.62	1 - 12 UNF	0.252	0.620	4.00	0.90	0.50
KYN1115 IF	6.00	6.10	1 1/4 - 12 UNF	0.374	1.200	3.65	1.20	0.60
KYN1125 IF	6.00	6.10	1 3/8 - 12 UNF	0.374	1.200	3.65	1.30	0.60
KYN2115 IF	8.50	8.70	1 1/4 - 12 UNF	0.374	1.200	5.25	1.20	0.60
KYN2125 IF	8.50	8.70	1 3/8 - 12 UNF	0.374	1.200	5.25	1.30	0.60

#### Large Series

KYN1525 IC	5.70	6.40	1-3/4 - 12 UN	0.512	1.732	3.60	1.60	0.80
KYN1550 IC	7.70	8.40	1-3/4 - 12 UN	0.512	1.732	4.75	1.60	0.80
KYN1575 IC	9.70	10.40	1-3/4 - 12 UN	0.512	1.732	5.70	1.60	0.80
KYN2050 IC	8.90	9.60	2-1/2 - 12 UN	0.750	2.250	5.50	2.75	1.00
KYN2100 IC	12.90	13.60	2-1/2 - 12 UN	0.750	2.250	7.50	2.75	1.00
KYN2150 IC	18.10	18.60	2-1/2 - 12 UN	0.750	2.250	9.50	2.75	1.00
KYN3050 IC	9.65	10.40	3-3/8 - 12 UN	0.866	3.000	5.50	-	-
KYN3100 IC	13.40	14.40	3-3/8 - 12 UN	0.866	3.000	8.00	-	-
KYN3150 IC	16.20	20.00	3-3/8 - 12 UN	0.866	3.000	9.00	-	-
KYN4050 IC	12.30	13.10	4 1/2 - 12 UN	1.375	3.750	8.00	-	-
KYN4100 IC	16.30	17.10	4 1/2 - 12 UN	1.375	3.750	10.00	-	-
KYN4150 IC	20.25	21.10	4 1/2 - 12 UN	1.375	3.750	12.00	-	-
KYN4200 IC	25.40	26.20	4 1/2 - 12 UN	1.375	3.750	14.00	-	-
KYN4250 IC	29.30	30.10	4 1/2 - 12 UN	1.375	3.750	16.00	-	-

Specifications subject to change without notice. Visit www.kyntec.com for the most up to date information.

#### Additional Ordering Information is Available online at www.kyntec.com

# S LL

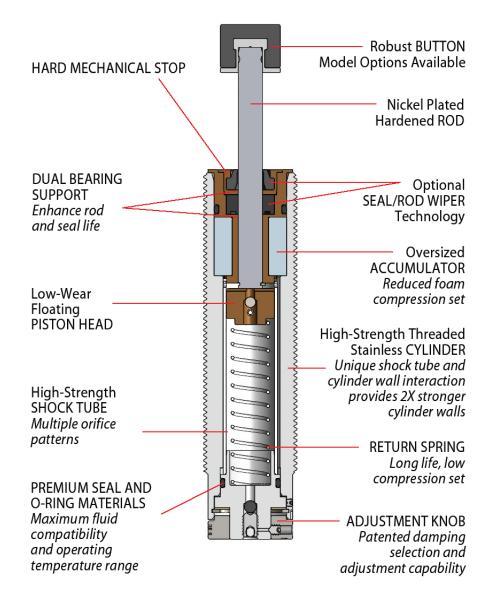
Custom Design Models Contact KYNTEC at 1.855.652.6666

with your special requirements.

MAXIMUM FLEXIBILITY for all applications and unmatched inventory economies are yours with the innovative KynSHOC series of hydraulic shock absorbers. Each model adjusts easily to replace multiple individual shock absorber configurations. A turn of the adjustment knob is all that is required to deliver a variety of force vs. stroke profiles.

The patented design uses two close-fit cylinder bodies to either allow or limit fluid flow through selectable orifice patterns. Multiple adjustable progressive, adjustable square wave, and dashpot damping profiles are all available. All models are of stainless steel construction, ideal for all applications, but especially for harsh, corrosive or sanitary environments.

- Multiple damping profiles in one device for maximum application **flexibility** and **inventory reduction**.
- Greater range of energy absorption for low, medium & high velocity applications.
- Simple model selection because of individual device versatility.
- Long cycle life and durability in all environments. Our unique design allows for millions of cycles without failure.



### **Custom Design Specialists**

The experts at KYNTEC have been supplying engineered custom solutions for the most demanding industrial, aerospace, and defense applications in the world for decades. Our variety of energy absorption technologies are used to best solve your technical challenges while respecting your budget. For advanced applications, we will blend technologies, yielding truly custom performance for your operations.

- **Specialists** in high-strength stainless steels, Inconel, titanium, aluminum, and bronze.
- The latest **3D solid modeling** CAD technologies, finite element analysis, dynamic simulation, and cutting edge integrated quality control.

#### Contact us with your special requirements. Let our engineers give you the confidence of a custom solution for your exact challenge.

**Engineered Protection** 

**KYNTEC:** Our personnel have decades of experience as leaders in the global kinetic energy management field. Solving shock, vibration and motion control problems is what we do best and we hold ourselves to the highest standards. Our company culture encourages engineering excellence and innovation in providing you with real world solutions. We embrace change, while adhering to core values of honesty and respect for others.

Contact KYNTEC directly or your local representative



KYNTEC Corporation Amherst, New York USA

Phone: 1.855.652.6666 Fax: 1.716.616.3631 e-mail: techsales@kyntec.com

www.kyntec.com





