



Basic-PSA

VARIABLE SPRING HANGERS



Basic-PSA

The Basic-PSA Inc. Variable Spring Hanger Design provides a modern compact and functional means of supporting piping which is subject to vertical thermal movement and for which a constant hanger is not required.

Each Basic-PSA, Inc. Variable Spring Hanger features enclosed construction in which a guided spring is pre-compressed in a rugged, durable steel case which protects the spring from damage or weather conditions. Permanent spring alignment is maintained by the hanger's piston cap which serves as a centering device or guide. The case is slotted so that the unit's load indicator is clearly visible assuring easy, accurate reading of the supported piping load and spring deflection on the scale plate attached to the case.

Pre-compression of the spring in the case makes the hanger compact, thus requiring less headroom. Because pre-setting of the spring is to within one-half inch of its cold position, installation time is minimized, and the

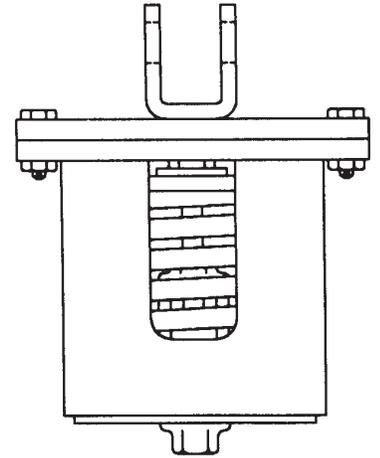
variation of the supporting force will not exceed design parameters.

Basic-PSA, Inc. Variable Spring Hangers are manufactured in our plant in five series, seven types and as many as twenty-five sizes for handling loads up to 50,000 lbs. These hangers are also produced with a finish for corrosion-resistant and weather-resistant.

All Basic-PSA, Inc. Hangers are manufactured in conformance with government regulations and industry codes where applicable. Among these are Federal Specification WWH-171D, Manufacturers Standardization Society MSS-SP58, American National Standards Institute Cope for Pressure Piping ANSI B31.1 and ASME Section III.

Through engineering, careful material selection and control, and qualified fabrication by qualified craftsmen assure continued, dependable service from each Basic-PSA, Inc. Hanger. Our Engineering staff, experienced in all phases of power and industrial piping, will provide assistance on request in the proper

VARIABLE SPRING HANGERS



selection and installation of standard hangers, or in the development of special hangers for unusual piping support problems.

Corrosion Resistant:

Basic-PSA, Inc. offers corrosion-resistant and weather-resistant per-engineered variable spring hangers to fill vital needs in chemical and refinery industries as well as in modern outdoor power plant construction.

Basic-PSA, Inc. offers a choice:

1.) For Protection against severe weather conditions or moderate corrosive conditions, the parts of the hanger are galvanized per ASTM Specifications A-153, except the spring which is neoprene coated

and the load column for Type F which is electrogalvanized.

2.) For highly corrosive conditions, all parts of the hanger, including the spring, are neoprene coated except the load column for Type F which is stainless steel.

HOW TO ORDER VARIABLE SPRING HANGERS

On your order for Basic PSA, Inc. Variable Spring Hangers, please specify for each spring unit:

- 1.) Series identification (Examples: BE 402).
 - 2.) Type (Example: Type A).
 - 3.) Size (Example: Size 9).
 - 4.) Direction and magnitude of piping movement (from cold to hot & operating position).
 - 5.) Hot load (calculated load to be supported in operating position).
 - 6.) Type of preset (if required).
- (Specify either "preset in cold position" or "with travel stop").
- 7.) Your hanger identification or mark number. if required.

Special ordering instructions:

- 1.) Type F – Specify "with load flange, if required.
- 2.) Type G – Specify load per side and center to center rod dimension.
- 3.) For corrosion resistant – Specify "completely neoprene coated" or "galvanized with neoprene coated spring coil".



TYPICAL APPLICATIONS OF ALL TYPES

SELECTION OF HANGER

Selection of a variable spring hanger depends upon consideration of specific factors which influence the hanger's series, type and size. The principle factors are the physical arrangements of the piping layout, distance from supporting building structure to the piping, vertical thermal movement of the piping under operating conditions and total piping weight to be supported.

DETERMINING THE SERIES

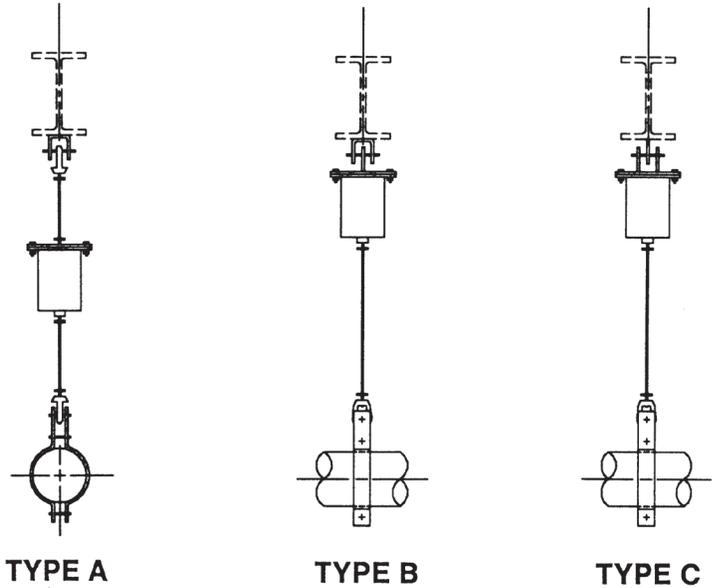
The series of Basic-PSA, Inc. Variable Spring Hangers used depends upon the calculated piping movement from cold to hot (operating) position and the permissible percentage load variation. Both the hot and cold calculations should fall within the hanger's working range. The hangers listed herein provide travel ranges that handle virtually all of the piping support problems for which a variable spring hanger is applicable. Illustrations of the five standard series BE 401, BE 402, BE 403, BE 400 and BE 399, along with the principle characteristics are available within this brochure.

DETERMINING THE TYPE

The type of Basic-PSA, Inc. Variable Spring Hanger to be selected depends upon the physical characteristics of the support situation, including headroom available, whether the piping is to be supported above or below the hanger, etc. There are seven types produced in each of the five series. Typical applications of these types - identified "A through "G" - and description of installation and adjustment, are given within this brochure.

DETERMINING THE SIZE

The size of the Basic-PSA, Inc. Variable Spring Hanger selected depends upon the total piping load supported, and the piping movement relative to the working range of the spring. Complete sizing information is given on the Hanger Selection Table (page 5) and accompanying instructions listed within this brochure. This selection information is applicable to sizing hangers of all series and types. As shown on the Hanger Selection Table, the heavy black lines delineate the limits of the recommended working range of the spring. As indicated on the Hanger Selection Table, a reserve is provided above and below the working range.



TYPE A - DESIGNED FOR USE WHERE HEADROOM IS UNLIMITED.

Hanger top is furnished to accommodate threaded Size "A" rod (not furnished). The rod is threaded into the top of the hanger with the amount of rod engagement "G", and then locked with a jam nut. The load bolt's lower end is fitted with a turnbuckle, topped to receive threaded Size "a" rod (not furnished). After this rod is connected to the pipe attachment, and the upper rod is connected to the structural attachment, the turnbuckle is rotated to adjust the spring until the load indicator is at the cold set position noted on the load and travel scaled attached to the hanger case. After adjustment, the turnbuckle must be locked with a jam nut.

TYPE B - DESIGNED FOR USE WHERE HEADROOM IS LIMITED.

Hanger top plate has a single lug welded to it which permits attachment, with bolt or pin, to a clevis or BE 200 welded beam attachment. The load bolt's lower end it fitted with a turnbuckle tapped to receive threaded Size "A" rod (not furnished). After the rod is connected to the pipe attachment, the turnbuckle is rotated to adjust the spring until the load indicator is at the cold set position noted on the load and travel scale attached to the hanger case. After adjustment, the turnbuckle must be locked with a jam nut.

TYPE C - DESIGNED FOR USE WHERE HEADROOM IS LIMITED AND THE STRUCTURAL ATTACHMENT CONSISTS OF A SINGLE VERTICAL PLATE.

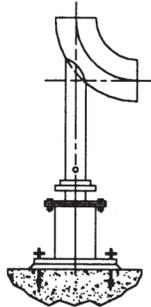
Identical to design and operation to Type B, with the exception that the hanger's top plate has two lugs welded to it. The lugs are connected to a plate welded to the building structure with a bolt or pin.



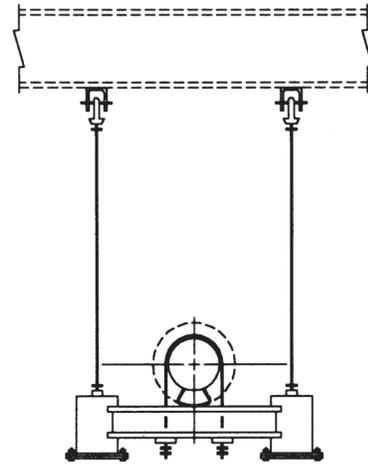
TYPE D



TYPE E



TYPE F



TYPE G

TYPE D - DESIGNED FOR USE WHERE VARIABLE SPRING HANGER IS POSITIONED ABOVE SUPPORTING STRUCTURE WITH SPRING ADJUSTMENT MADE FROM TOP.

Hanger Spring load plate has a tube welded to it which accommodates Size "A" rod (not furnished). The rod, inserted through the hanger, uses an adjustment nut and a jam nut at its top end. After connecting the rod to the pipe attachment, suspended below, the adjusting nut is rotated to adjust the spring unit until the load indicator is at the cold set position noted on the load and travel scale attached to the hanger case, then locked with a jam nut, No turnbuckle is needed.

TYPE E - DESIGNED FOR USE WHERE SPRING ADJUSTMENT MUST BE BELOW THE STRUCTURE ON WHICH THE SPRING CASE CAN BE SUPPORTED.

Hanger spring load plate is drilled to receive size "A" rod (not furnished). The rod, extend-

ed from above the hanger's top plate and through the hanger, uses a hex nut at the top. The hex nut is to be tack welded before and adjustment is made to the hanger. A standard turnbuckle is engaged with the top rods bottom end and is then tack welded. The lower end of the turnbuckle is then engaged with lower rod Size "a" (not furnished). The other end of the lower rod is connected to the pipe attachment. The spring is adjusted to the cold set position by adjusting the turnbuckle to the load indicated on the load and travel scale attached to the hanger case. After spring adjustment is complete, the turnbuckle must be locked with a jam nut.

TYPE F - DESIGNED FOR SUPPORTING PIPING FROM BELOW.

Furnished with a base plate having bolt holes for attaching the hanger case to the structure, the hanger's spring load plate is fitted with a load column which extends above the hanger's top. A load flange, for mounting on the load column, as well as a longer load column, a stainless steel load column, or radically slotted holes in the base plate, can be furnished on order .

Spring adjustments is made by inserting a bar in holes provided in the column until the load indicator is at its cold set position as indicated on the load and travel scale at-

tached to the hanger case. The load column is designed for adjustment. The available adjustment is in excess of the amount needed for load adjustment and provides length adjustment for the installer.

TYPE G - DESIGNED FOR USE WHERE HEADROOM IS LIMITED, OR WHERE AN OBSTRUCTION PROHIBITS THE USE OF A SINGLE ROD SPRING HANGER.

Furnished as a welded assembly comprising two standard hangers connected with two channels back-to-back. Each spring carries one-half the load. Thus, one half the total load should be used when selecting the spring size from the Hanger Selection Table. When selecting size, the weight of the unit selected should be added to calculated load. When the supported piping is off center between the hangers, each spring load should be carefully calculated. The turnbuckle at the top of each hanger is rotated to adjust the spring unit until the load indicator is at its cold set position as indicated on the load and travel scale attached to the hanger case. After adjustment, each turnbuckle must be locked with a jam nut.



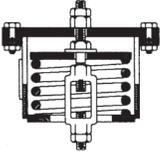
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VARIABLE SPRING HANGERS



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BE 401—SERIES

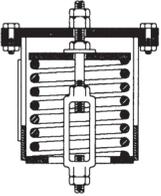


Spring deflection working range — 0" through 1 1/4".

Maximum variation in supporting force per one-half inch spring deflection — 21% of rated capacity.

For specifications see pages 134 through 137

BE 402—SERIES

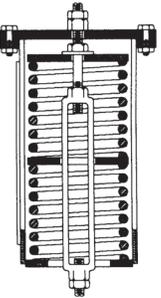


Spring deflection working range — 0" through 2 1/2".

Maximum variation in supporting force per one-half inch spring deflection — 10 1/2% of rated capacity.

For specifications see pages 138 through 141

BE 403—SERIES

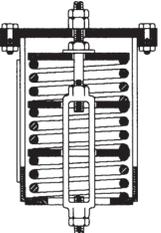


Spring deflection working range — 0" through 5".

Maximum variation in supporting force per one-half inch spring deflection — 5 1/4% of rated capacity.

For specifications see pages 142 through 145

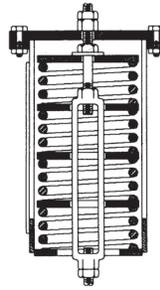
BE 400—SERIES



Spring deflection working range — 0" through 7 1/2".

Maximum variation in supporting force per one-half inch spring deflection — 3 1/2% of rated capacity.

For specifications see pages 146 through 149

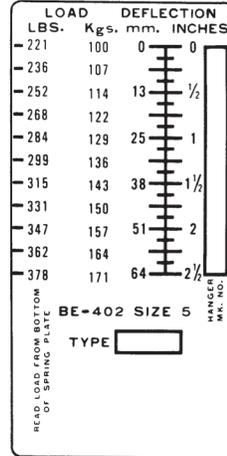


BE 399—SERIES

Spring deflection working range — 0" through 10".

Maximum variation in supporting force per one-half inch spring deflection — 2 3/4% of rated capacity.

For specifications see pages 150 through 153



LOAD AND TRAVEL SCALE

Basic-PSA, Inc. Variable Spring Hangers are furnished with an easy-to-read weatherproof stainless steel scale, securely attached to the hanger case. This scale is indexed to indicate spring travel and piping load for all positions within the working range of the unit. The cold set position of the load plate is indicated by a "C" stamped into the tag adjacent to the appropriate load and spring deflection on the scale. The hot position of the load plate, similarly, is indicated by an "H". Space is also provided for recording of the hanger identification or mark number.

LOAD PRESET BAR OR TRAVEL STOP (Available Upon Request)

The design of the Basic-PSA, Inc. Variable Spring Hanger permits the incorporation of either a load preset bar or a complete travel stop, both of which are factory installed.

The purpose of the load preset bar is to position the spring load plate in its cold set position. To remove the positioned, the spring load must be increased slightly by compressing the spring with the adjustments means provided.

the purpose of the travel stop is to both preset the unit to its cold set position, and to serve as a down limit stop which locks the spring so that it functions as a rigid hanger during erection, hydrostatic testing, chemical cleaning, etc. To remove this travel stop, first remove the steel banding and the down limit stops. Next remove the load preset bar as described above. The travel stop is designed to carry two times the maximum load for the spring unit.

The load preset bar and travel stop are provided with the attached "Caution" tag which calls to the fact that the device must be removed before the piping system is placed in operation.

After the load preset bar or travel stop have been removed, the spring unit should be adjusted to its exact cold set position. The hanger is now ready for operation.



HANGER SELECTION TABLE (LOADS IN POUNDS)

Basic-PSA

Use of Table: After determining movement and actual (hot) load, select the series and type of spring suited for your purpose:

- 1.) Find the hot load in one of the size columns of the table below.
- 2.) Read across to the working range column for the series of spring selected.
- 3.) For up movement (from cold to hot), move down this column the number of increments equivalent to the amount of the movement. For down movement (from cold to hot), move up this column the number of increments equivalent to the amount of the movement.
- 4.) From this new position, read across to the original hanger size column to find the cold set load.
- 5.) If cold set is outside the limits of the working range, select an adjacent size column and repeat steps 1 through 4, to determine if both the hot and cold load will fall within the working range.
- 6.) If the movement or load variation requirements cannot be satisfied in steps 1 through 5, select a spring series with a greater working range and repeat steps 1 through 5.

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15	20	27	36	48	63	84	112	150	200	267	356	475	633	844	1125	1500	2000	2667	3556	4741	6321	8248	15	20	27	36	48	63	84	112	150	200	267	356	475	633	844	1125	1500	2000	2667	3556	4741	6321	8248																																																																																																																																																																																																																								
7.5	10	13.5	18	24	31.5	42	56	75	100	133.5	178	237.5	316.5	422	562.5	750	1000	1333.5	1778	2370.5	3160.5	4124	7.5	10	13.5	18	24	31.5	42	56	75	100	133.5	178	237.5	316.5	422	562.5	750	1000	1333.5	1778	2370.5	3160.5	4124																																																																																																																																																																																																																								
5	6.7	9	12	16	21	28	37.3	50	66.7	89	118.7	158.3	211	281.3	375	500	666.7	889	1185.3	1580.3	2107.2	2749.3	5	6.7	9	12	16	21	28	37.3	50	66.7	89	118.7	158.3	211	281.3	375	500	666.7	889	1185.3	1580.3	2107.2	2749.3																																																																																																																																																																																																																								
3.75	5	6.75	9	12	15 1/4	21	28	37 1/2	50	66.75	89	118.75	158.25	211.25	281.25	375	500	666.75	889	1185.75	1580.75	2062	3.75	5	6.75	9	12	15 1/4	21	28	37 1/2	50	66.75	89	118.75	158.25	211.25	281.25	375	500	666.75	889	1185.75	1580.75	2062																																																																																																																																																																																																																								



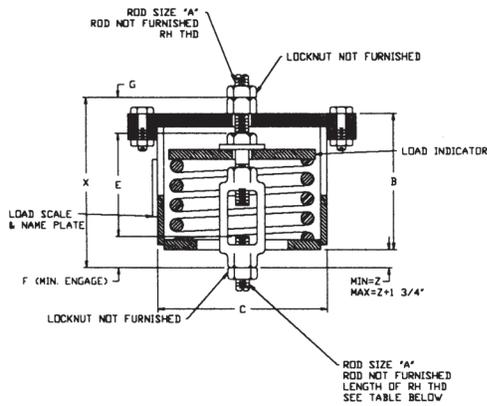
Basic-PSA

VARIABLE SPRING HANGERS

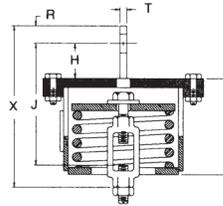


Basic-PSA

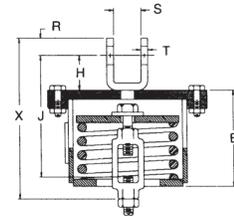
BE 401 SHORT SPRING



TYPE A



TYPE B



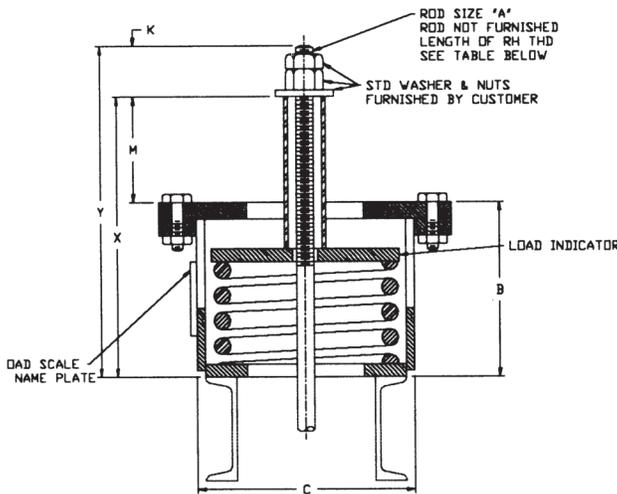
TYPE C

See pages 2 & 3 for typical applications.

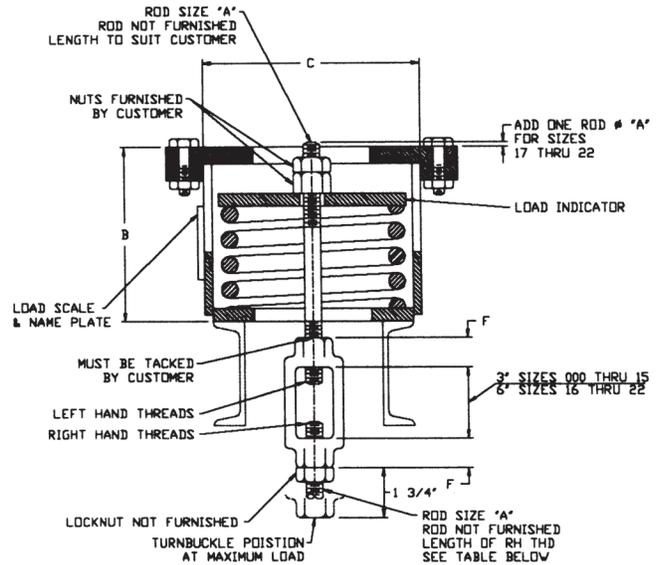
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. L'GTH.	CASING LENGTH B	CASING DIAM. C	MIN. TH'D. ENGAGEMENT F	ROD ENGAGEMENT G	HEIGHT OF PIN H	R	S	T	LUG HOLE DIA.	ROD TAKE-OUT		OVERALL LENGTH X				Z
													E	J	TYPE A		TYPES B&C		
															MIN.	MAX.	MIN.	MAX.	
0	7	1/2	3 1/2	5 1/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	4 3/8	6 3/4	6 1/4	7 7/8	8 1/2	10 1/4	1/2
1	8	1/2	3 1/2	5 3/8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	4 5/8	7	6 3/8	8 1/4	8 3/4	10 1/2	1/2
2	9	1/2	3 1/2	6	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	5 1/4	7 5/8	7	8 3/4	9 3/8	11 1/4	1/2
3	12	1/2	3 1/2	5 7/16	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	4 1 1/16	7 1/16	6 7/16	8 3/16	8 3 3/16	10 9/16	1/2
4	13	1/2	3 1/2	5 13/16	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	5 1/16	7 7/16	6 13/16	8 9/16	9 3/16	10 15/16	1/2
5	14	1/2	3 1/2	6 3/16	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	5 7/16	7 13/16	7 3/16	8 15/16	9 9/16	11 5/16	1/2
6	20	5/8	4	6 5/16	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	5 1/2	7 7/8	7 9/16	9 5/16	9 15/16	11 11/16	5/8
7	20	5/8	4	6 13/16	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	6 1/8	8 1/2	8 3/16	9 15/16	10 9/16	12 3/16	5/8
8	22	5/8	4	7 3/16	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	6 3/8	8 3/4	8 7/16	10 3/16	10 13/16	12 9/16	5/8
9	40	3/4	4	7 1/4	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	6 3/16	8 13/16	8 3/4	10 1/2	11 1/8	12 7/8	3/4
10	43	3/4	4	7 3/4	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	6 1 1/16	9 5/16	9 1/4	11	11 5/8	13 3/8	3/4
11	50	3/4	5	7	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	5 15/16	8 9/16	8 1/2	10 1/4	10 7/8	12 5/8	3/4
12	57	1	5	7 9/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	6 1 1/16	10 5/16	9 13/16	11 9/16	13 5/16	15 1/16	1 1/4
13	64	1	5	8 1/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	7 5/16	10 15/16	10 7/16	12 3/16	13 15/16	15 1 1/16	1
14	68	1 1/4	5	8 15/16	8 5/8	1 7/8	1 7/8	3	2	2 1/2	5/8	1 1/2	7 1 1/16	11 5/16	11 7/16	13 3/16	15 3/16	16 15/16	1 1/4
15	88	1 1/4	5	10 1/16	8 5/8	1 7/8	2 1/8	3	2	2 1/2	5/8	1 1/2	8 9/16	12 7/16	12 9/16	14 5/16	16 5/16	18 1/16	1 1/4
16	106	1 1/2	6	10 13/16	8 5/8	2 1/4	2 3/8	4	2 1/2	3	3/4	1 3/4	9 3/16	14 1/16	13 13/16	15 9/16	18 13/16	20 9/16	1 1/2
17	143	1 3/4	7	12 1/2	8 5/8	2 5/8	2 5/8	5	2 3/4	3 3/4	3/4	2	10 3/4	16 5/8	16	17 3/4	22	23 3/4	1 3/4
18	251	2	7	14	12 3/4	2 7/8	3 1/8	5	3 1/4	3 3/4	3/4	2 3/8	12	18 1/8	18	19 3/4	24 1/4	26	2
19	284	2 1/4	8	15 1/4	12 3/4	3 1/2	3 3/8	4 1/2	3	2 3/4	3/4	2 5/8	12 7/8	18 1/2	19 3/4	21 1/2	25	26 3/4	2 1/4
20	387	2 1/2	9	18 3/8	12 3/4	3 7/8	4 1/8	4 1/2	4	3	1	2 7/8	15 3/8	21 1/2	23 3/8	25 1/8	29 3/8	31 1/8	2 1/2
21	430	2 3/4	9	19 3/4	12 3/4	4 3/8	4 3/8	4 1/2	4	3 1/4	1	3 1/8	16 5/8	22 3/4	25 1/4	27	31	32 3/4	2 3/4
22	577	3	9	24 1/4	12 3/4	3 7/8	4 5/8	5	4	3 1/2	1	3 3/8	21 3/4	28 3/8	30 1/4	32	36 1/4	38	3

SHORT SPRING BE 401



TYPE D



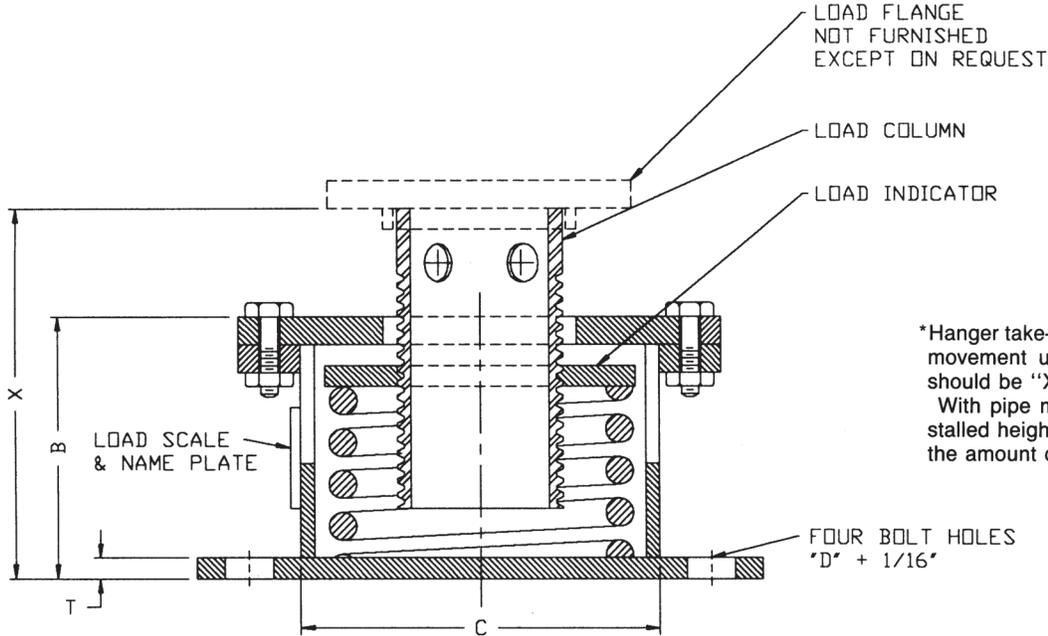
TYPE E

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ALLOWANCE FOR NUTS K	HEIGHT OF SPACER M (MAX)	ROD LENGTH Y (MAX)	OVERALL LENGTH X	
										TYPE D	
										MIN.	MAX.
0	6	1/2	3	4 1/2	4 1/2	3/4	1 1/4	1 11/16	7 7/16	4 7/16	6 3/16
1	6	1/2	3	4 3/4	4 1/2	3/4	1 1/4	1 11/16	7 11/16	4 11/16	6 7/16
2	7	1/2	3	5 3/8	4 1/2	3/4	1 1/4	1 11/16	8 5/16	5 5/16	7 1/16
3	10	1/2	3	4 13/16	5 9/16	3/4	1 1/4	1 11/16	7 3/4	4 3/4	6 1/2
4	11	1/2	3	5 3/16	5 9/16	3/4	1 1/4	1 11/16	8 1/8	5 1/8	6 7/8
5	12	1/2	3	5 9/16	5 9/16	3/4	1 1/4	1 11/16	8 1/2	5 1/2	7 1/4
6	18	5/8	4	5 9/16	6 5/8	15/16	1 1/2	1 3/4	8 13/16	5 9/16	7 5/16
7	17	5/8	4	6 3/16	6 5/8	15/16	1 1/2	1 3/4	9 7/16	6 3/16	7 5/16
8	20	5/8	4	6 7/16	6 5/8	15/16	1 1/2	1 3/4	9 11/16	6 7/16	8 3/16
9	36	3/4	4	6 3/8	8 5/8	1 1/8	1 3/4	1 5/8	9 3/4	6 1/4	8
10	39	3/4	4	6 7/8	8 5/8	1 1/8	1 3/4	1 5/8	10 1/4	6 3/4	8 1/2
11	46	3/4	4	6 1/8	8 5/8	1 1/8	1 3/4	1 5/8	9 1/2	6	7 3/4
12	50	1	5	6 3/8	8 5/8	1 1/2	2 1/4	1 3/8	10	6	7 3/4
13	57	1	5	7 1/4	8 5/8	1 1/2	2 1/4	1 3/8	10 7/8	6 7/8	8 5/8
14	59	1 1/4	5	7 1/2	8 5/8	1 9/16	2 1/2	1 3/8	11 3/8	7 1/8	8 7/8
15	77	1 1/4	5	8 1/2	8 5/8	1 9/16	3	1 3/8	12 7/8	8 1/8	9 7/8
16	95	1 1/2	6	9	8 5/8	1 7/8	3 1/2	1 3/8	13 7/8	8 5/8	10 3/8
17	128	1 3/4	6	10 3/8	8 5/8	2 3/16	4	1 3/4	16 1/8	10 3/8	12 1/8
18	230	2	7	11 1/2	12 3/4	2 1/2	4 9/16	1 3/4	17 13/16	11 1/2	13 1/4
19	258	2 1/4	7	12 1/2	12 3/4	3 3/4	5	1 3/4	19 1/4	12 1/2	14 1/4
20	342	2 1/2	8	14 7/8	12 3/4	3 3/4	5 9/16	1 3/4	22 3/16	14 7/8	16 5/8
21	379	2 3/4	9	16 1/4	12 3/4	4 1/8	6 1/4	1 5/8	24 1/8	16 1/8	17 7/8
22	485	3	10	20 1/2	12 3/4	4 1/2	6 5/8	1 3/4	28 7/8	20 1/2	22 1/4

BE 401 SHORT SPRING



*Hanger take-out or installed height: With pipe movement up, cold to hot, installed height should be "X" dimension.
 With pipe movement down, cold to hot, installed height should be "X" dimension plus the amount of vertical movement.

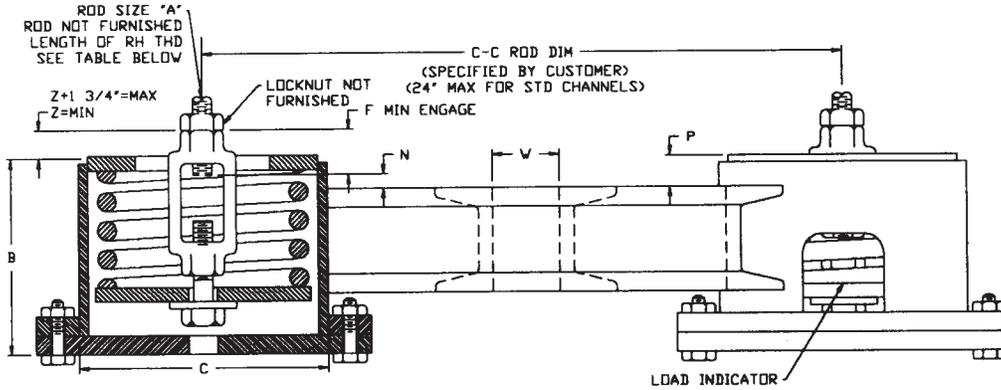
TYPE F

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	CASING LENGTH B	CASING DIAMETER C	BOTTOM FLANGE SQUARE	BOTTOM FLANGE BOLT CIRCLE	THK. T	BOLT DIAMETER D	*X-DIMENSION	LOAD COLUMN DIAMETER	LOAD FLANGE DIAMETER	LOAD FLANGE THK.
0	12	4 ⁷ / ₈	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	6	1 ¹ / ₂	4 ¹ / ₂	1/4
1	12	5 ¹ / ₈	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	6 ¹ / ₄	1 ¹ / ₂	4 ¹ / ₂	1/4
2	13	5 ³ / ₄	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	6 ⁷ / ₈	1 ¹ / ₂	4 ¹ / ₂	1/4
3	18	5 ⁵ / ₁₆	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	6 ¹ / ₂	2 ¹ / ₂	5 ¹ / ₂	1/4
4	20	5 ¹¹ / ₁₆	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	6 ⁷ / ₈	2 ¹ / ₂	5 ¹ / ₂	1/4
5	21	6 ¹ / ₁₆	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	7 ¹ / ₄	2 ¹ / ₂	5 ¹ / ₂	1/4
6	33	6 ³ / ₁₆	6 ⁵ / ₈	10	9	3/8	3/4	7 ¹ / ₂	3	6 ¹ / ₂	1/4
7	33	6 ¹³ / ₁₆	6 ⁵ / ₈	10	9	3/8	3/4	8 ¹ / ₈	3	6 ¹ / ₂	1/4
8	35	7 ¹ / ₁₆	6 ⁵ / ₈	10	9	3/8	3/4	8 ³ / ₈	3	6 ¹ / ₂	1/4
9	68	7 ⁵ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	9 ¹ / ₄	4	8	1/2
10	71	8 ¹ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	9 ³ / ₄	4	8	1/2
11	74	6 ⁷ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	8 ¹ / ₂	4	8	1/2
12	78	7 ¹ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	8 ³ / ₄	4	8	1/2
13	81	8 ¹ / ₂	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	10 ¹ / ₈	4	8	1/2
14	84	8 ³ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	10 ³ / ₈	4	8	1/2
15	98	9 ¹ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	10 ⁹ / ₄	4	8	1/2
16	113	10 ¹ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	11 ⁷ / ₈	4	8	1/2
17	138	11 ¹ / ₂	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	13 ¹ / ₈	4	8	1/2
18	253	12	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	13 ³ / ₄	5	12	1/2
19	271	13	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	14 ³ / ₄	5	12	1/2
20	337	15 ¹ / ₈	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	16 ⁷ / ₈	5	12	1/2
21	356	16 ¹ / ₄	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	18	5	12	1/2
22	443	20 ¹ / ₂	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	22 ¹ / ₄	5	12	1/2

SHORT SPRING BE 401



TYPE G

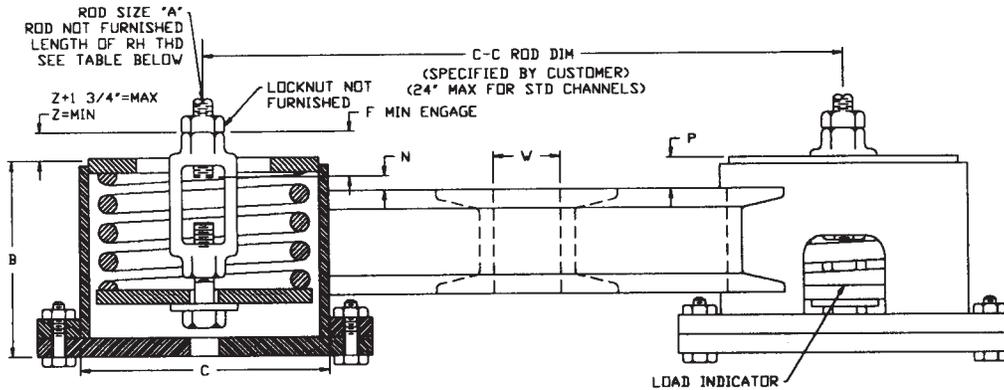
*WEIGHT BASED ON 24 INCH CENTER-TO-CENTER DIMENSION

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	*WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ROD TAKE-OUT N	SPACE BETWEEN CHANNELS W	P	Z
0	25	1/2	3 1/2	5 1/8	4 1/2	7/8	5/8	5/8	1	1/2
1	25	1/2	3 1/2	5 3/8	4 1/2	7/8	5/8	5/8	1	1/2
2	26	1/2	3 1/2	6	4 1/2	7/8	5/8	5/8	1	1/2
3	32	1/2	3 1/2	5 7/16	5 9/16	7/8	5/8	3/4	1	1/2
4	35	1/2	3 1/2	5 13/16	5 9/16	7/8	5/8	3/4	1	1/2
5	37	1/2	3 1/2	6 3/16	5 9/16	7/8	5/8	3/4	1	1/2
6	49	5/8	4	6 5/16	6 5/8	1 1/16	9/16	1	1	5/8
7	48	5/8	4	6 15/16	6 5/8	1 1/16	9/16	1	1	5/8
8	53	5/8	4	7 3/16	6 5/8	1 1/16	9/16	1	1	5/8
9	86	3/4	4	7 1/4	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
10	92	3/4	4	7 3/4	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
11	109	3/4	5	7	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
12	121	1	5	7 9/16	8 5/8	1 1/2	1 1/4	1 1/2	1 1/2	1 1/4
13	138	1	5	8 7/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
14	144	1 1/4	5	8 15/16	8 5/8	1 7/8	7/8	1 1/2	1 1/2	1 1/4
15	190	1 1/4	5	10 1/16	8 5/8	1 7/8	7/8	2 1/8	1 1/2	1 1/4
16	226	1 1/2	6	10 13/16	8 5/8	2 1/4	3/4	2 1/8	1 1/2	1 1/2
17	300	1 3/4	7	12 1/2	8 5/8	2 5/8	5/8	2 1/8	1 1/2	1 3/4
18	518	2	7	14	12 3/4	2 7/8	1/8	2 3/8	1	2
19	582	2 1/4	8	15 1/4	12 3/4	3 1/2	3/4	2 5/8	2	2 1/4
20	763	2 1/2	9	18 3/8	12 3/4	3 7/8	1 5/8	2 7/8	3	2 1/2
21	874	2 3/4	9	19 3/4	12 3/4	4 1/4	1 1/2	3 1/8	3	2 3/4
22	1163	3	9	24 1/4	12 3/4	3 7/8	2 5/8	3 3/8	3 1/2	3

SHORT SPRING **BE 401**



TYPE G

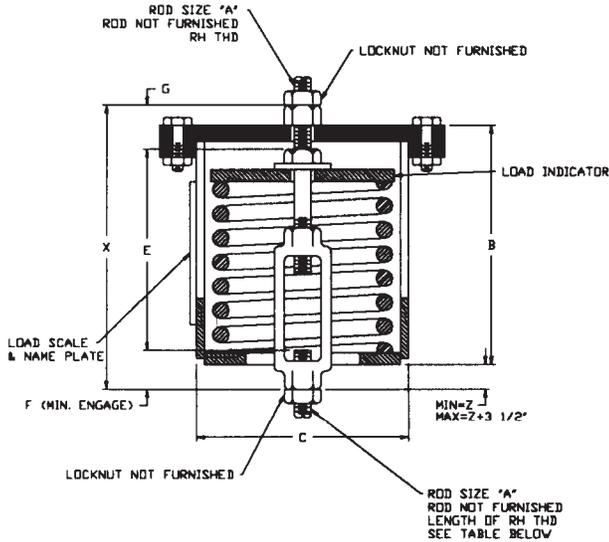
*WEIGHT BASED ON 24 INCH CENTER-TO-CENTER DIMENSION

See pages 2 & 3 for typical applications.

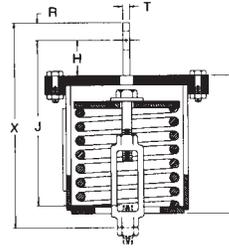
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	*WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ROD TAKE-OUT N	SPACE BETWEEN CHANNELS W	P	Z
0	25	1/2	3 1/2	5 1/8	4 1/2	7/8	5/8	5/8	1	1/2
1	25	1/2	3 1/2	5 3/8	4 1/2	7/8	5/8	5/8	1	1/2
2	26	1/2	3 1/2	6	4 1/2	7/8	5/8	5/8	1	1/2
3	32	1/2	3 1/2	5 7/16	5 9/16	7/8	5/8	3/4	1	1/2
4	35	1/2	3 1/2	5 13/16	5 9/16	7/8	5/8	3/4	1	1/2
5	37	1/2	3 1/2	6 3/16	5 9/16	7/8	5/8	3/4	1	1/2
6	49	5/8	4	6 5/16	6 5/8	1 1/16	9/16	1	1	5/8
7	48	5/8	4	6 15/16	6 5/8	1 1/16	9/16	1	1	5/8
8	53	5/8	4	7 3/16	6 5/8	1 1/16	9/16	1	1	5/8
9	86	3/4	4	7 1/4	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
10	92	3/4	4	7 3/4	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
11	109	3/4	5	7	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
12	121	1	5	7 9/16	8 5/8	1 1/2	1 1/4	1 1/2	1 1/2	1 1/4
13	138	1	5	8 7/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
14	144	1 1/4	5	8 15/16	8 5/8	1 7/8	7/8	1 1/2	1 1/2	1 1/4
15	190	1 1/4	5	10 1/16	8 5/8	1 7/8	7/8	2 1/8	1 1/2	1 1/4
16	226	1 1/2	6	10 13/16	8 5/8	2 1/4	3/4	2 1/8	1 1/2	1 1/2
17	300	1 3/4	7	12 1/2	8 5/8	2 5/8	5/8	2 1/8	1 1/2	1 3/4
18	518	2	7	14	12 3/4	2 7/8	1/8	2 3/8	1	2
19	582	2 1/4	8	15 1/4	12 3/4	3 1/2	3/4	2 5/8	2	2 1/4
20	763	2 1/2	9	18 3/8	12 3/4	3 7/8	1 5/8	2 7/8	3	2 1/2
21	874	2 3/4	9	19 3/4	12 3/4	4 1/4	1 1/2	3 1/8	3	2 3/4
22	1163	3	9	24 1/4	12 3/4	3 7/8	2 5/8	3 3/8	3 1/2	3

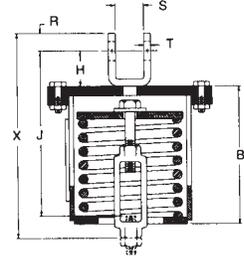
BE 402 STANDARD SPRING



TYPE A



TYPE B



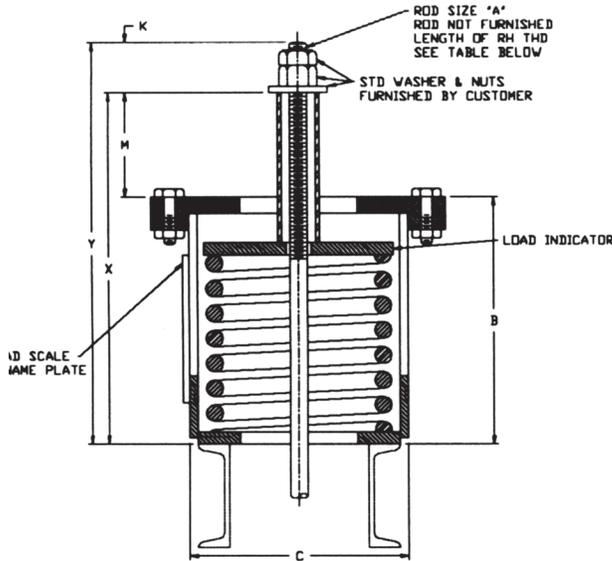
TYPE C

See pages 2 & 3 for typical applications.

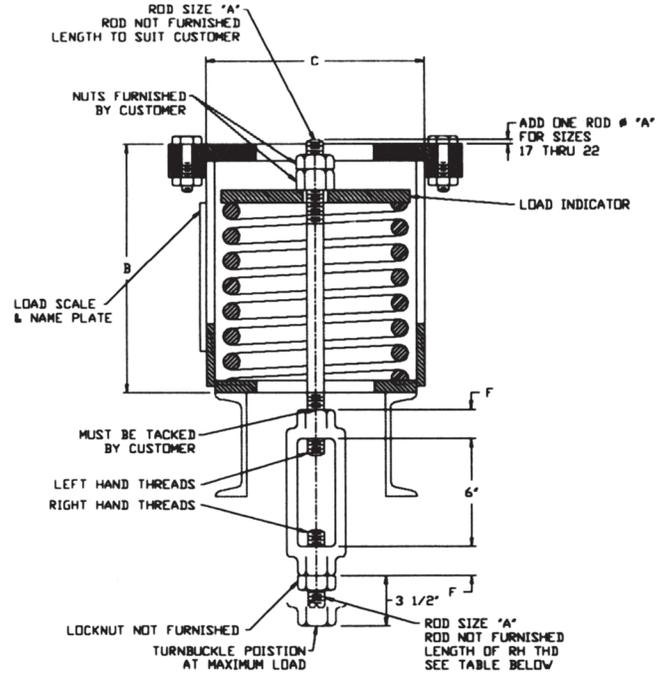
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R. H. TH'D. L'GTH.	CASING LENGTH B	CASING DIAM. C	MIN. TH'D. ENGAGEMENT F	ROD ENGAGEMENT G	HEIGHT OF PIN H	ROD TAKE-OUT				OVERALL LENGTH X				Z		
									R	S	T	LUG HOLE DIA.	TYPE A		TYPES B&C				
													E	J	MIN.	MAX.		MIN.	MAX.
000	7	1/2	5	6 3/8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	5 5/8	8	7 3/8	10 7/8	9 3/4	13 1/4	1/2
00	8	1/2	5	8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	7 1/4	9 5/8	9	12 1/2	11 3/8	14 7/8	1/2
0	10	1/2	5	7 1/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	6 1/2	8 7/8	8 1/4	11 3/4	10 5/8	14 1/8	1/2
1	11	1/2	5	8 1/8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	7 3/8	9 3/4	9 1/8	12 5/8	11 1/2	15	1/2
2	12	1/2	5	8 7/8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	8 1/8	10 1/2	9 7/8	13 3/8	12 1/4	15 3/4	1/2
3	17	1/2	5	7 7/8	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	7 1/8	9 1/2	8 7/8	12 3/8	11 1/4	14 3/4	1/2
4	19	1/2	5	8 1/2	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	7 3/4	10 1/8	9 1/2	13	11 7/8	15 3/8	1/2
5	20	1/2	5	9 3/16	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	8 7/16	10 3/4	10 3/16	13 11/16	12 9/16	16 1/16	1/2
6	28	5/8	6	9 1/4	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	8 7/16	10 13/16	10 1/2	14	12 3/4	16 1/4	5/8
7	29	5/8	6	10 1/4	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	9 7/16	11 13/16	11 1/2	15	13 3/4	17 1/4	5/8
8	32	5/8	6	10 1 1/16	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	9 7/8	12 1/4	11 15/16	15 7/16	14 3/16	17 1 1/16	5/8
9	54	3/4	6	10 3/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	9 5/16	11 15/16	11 7/8	15 3/8	14 1/4	17 3/4	3/4
10	67	3/4	6	11 5/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	10 9/16	13 3/16	13 3/8	16 5/8	15 1/2	19	3/4
11	68	3/4	6	9 7/16	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	8 5/8	11 1/4	11 3/16	14 1 1/16	13 3/16	17 1 1/16	1
12	76	1	6	10 3/8	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	9 1/4	12 7/8	12 3/8	15 7/8	15 7/8	19 3/8	1
13	85	1	7	12 15/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	11 13/16	15 7/16	14 15/16	18 7/16	18 7/16	21 15/16	1
14	90	1 1/4	7	13 5/16	8 5/8	1 7/8	1 7/8	3	2	2 1/2	5/8	1 1/2	12 1/16	15 1 1/16	15 13/16	19 5/16	19 5/16	23 1/16	1 1/4
15	120	1 1/4	7	13 1 1/16	8 5/8	1 7/8	2 1/8	3	2	2 1/2	5/8	1 1/2	12 3/16	16 1/16	16 3/16	19 1 1/16	19 15/16	23 7/16	1 1/4
16	156	1 1/2	8	16 1/4	8 5/8	2 1/4	2 3/8	4	2 1/2	3	3/4	1 3/4	14 5/8	19 1/2	19 1/4	22 3/4	24 1/4	27 3/4	1 1/2
17	211	1 3/4	8	18 3/4	8 5/8	2 5/8	2 5/8	5	2 3/4	3 3/4	3/4	2	17	22 7/8	22 1/4	25 3/4	28 1/4	31 3/4	1 3/4
18	338	2	9	19 1/4	12 3/4	2 7/8	3 1/8	5	3 1/4	3 3/4	3/4	2 3/8	17 1/4	23 3/8	23 3/4	26 3/4	29 1/2	33	2
19	382	2 1/4	10	21 3/4	12 3/4	3 1/2	3 3/8	4 1/2	3	2 3/4	3/4	2 5/8	19 3/8	25	26 1/4	29 3/4	31 1/2	35	2 1/4
20	546	2 1/2	10	26	12 3/4	3 7/8	4 1/8	4 1/2	4	3	1	2 7/8	23	29 1/8	31	34 1/2	37	40 1/2	2 1/2
21	601	2 3/4	11	28 15/16	12 3/4	4 1/4	4 3/8	4 1/2	4	3 1/4	1	3 1/8	25 13/16	31 15/16	34 7/16	37 15/16	40 3/16	43 1 1/16	2 3/4
22	811	3	11	35 5/16	12 3/4	3 7/8	4 5/8	5	4	3 1/2	1	3 3/8	32 13/16	39 7/16	41 5/16	44 13/16	47 5/16	50 13/16	3

STANDARD SPRING BE 402



TYPE D



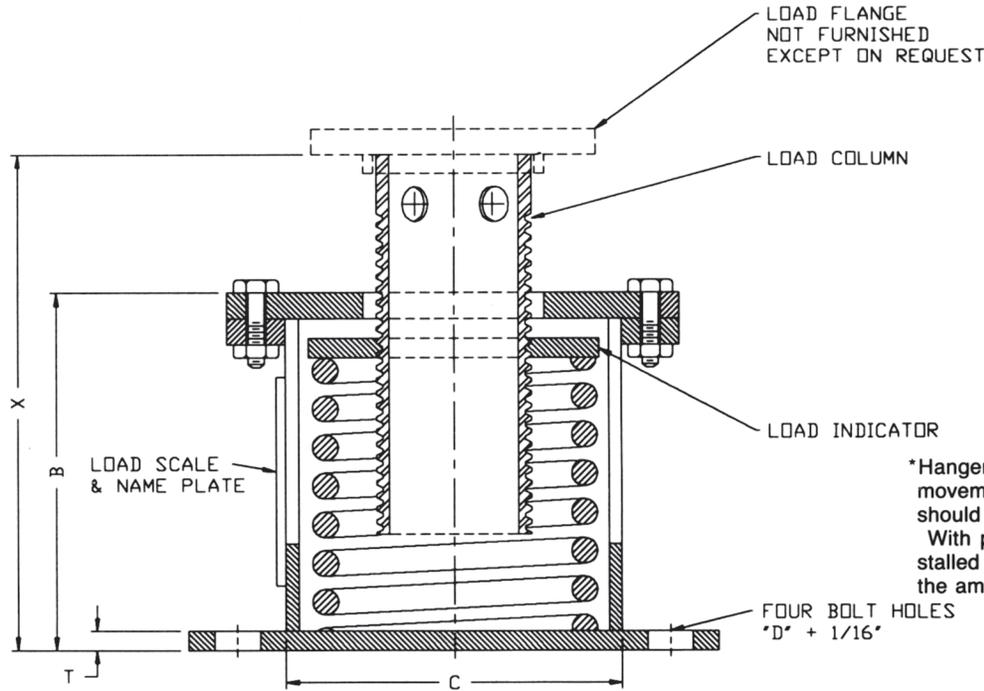
TYPE E

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R. H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ALLOWANCE FOR NUTS K	HEIGHT OF SPACER M (MAX)	ROD LENGTH Y (MAX)	OVERALL LENGTH X	
										MIN.	MAX.
000	5	1/2	5	5 3/4	4 1/2	3/4	1 1/4	2 15/16	9 15/16	5 3/16	8 1 1/16
	6	1/2	5	7 3/8	4 1/2	3/4	1 1/4	2 15/16	11 9/16	6 3 3/16	10 5/16
0	8	1/2	5	6 5/8	4 1/2	3/4	1 1/4	2 15/16	10 13/16	6 1/16	9 9/16
1	9	1/2	5	7 1/2	4 1/2	3/4	1 1/4	2 15/16	11 11/16	6 5 1/16	10 7/16
2	10	1/2	5	8 1/4	4 1/2	3/4	1 1/4	2 15/16	12 7/16	7 1 1/16	11 3/16
3	14	1/2	5	7 1/4	5 9/16	3/4	1 1/4	2 15/16	11 7/16	6 1 1/16	10 3/16
4	16	1/2	5	7 7/8	5 9/16	3/4	1 1/4	2 15/16	12 1/16	7 5/16	10 13/16
5	19	1/2	5	8 9/16	5 9/16	3/4	1 1/4	2 15/16	12 3/4	8	11 1/2
6	25	5/8	5	8 1/2	6 5/8	15/16	1 1/2	3	13	8	11 1/2
7	25	5/8	5	9 1/2	6 5/8	15/16	1 1/2	3	14	9	12 1/2
8	29	5/8	5	9 15/16	6 5/8	15/16	1 1/2	3	14 7/16	9 7/16	12 5/16
9	50	3/4	6	9 1/2	8 5/8	1 1/8	1 3/4	2 7/8	14 1/8	8 7/8	12 3/8
10	54	3/4	6	10 3/4	8 5/8	1 1/8	1 3/4	2 7/8	15 3/8	10 7/8	13 3/8
11	64	3/4	6	8 9/16	8 5/8	1 1/8	1 3/4	2 7/8	13 3/16	7 5/16	11 7/16
12	70	1	6	9 3/16	8 5/8	1 1/2	2 1/4	2 5/8	14 1/16	8 5/16	11 3 3/16
13	79	1	7	11 3/4	8 5/8	1 1/2	2 1/4	2 5/8	16 5/8	10 7/8	14 3/8
14	84	1 1/4	7	11 7/8	8 3/8	1 9/16	2 1/2	2 5/8	17	11	14 1/2
15	111	1 1/4	7	12 1/8	8 5/8	1 9/16	3	2 5/8	17 3/4	11 1/4	14 3/4
16	142	1 1/2	8	14 3/8	8 5/8	1 7/8	3 1/2	2 5/8	20 9/16	13 9/16	17 1/16
17	190	1 3/4	8	16 5/8	8 5/8	2 3/16	4	3	23 5/8	16 1/8	19 5/8
18	311	2	9	16 3/4	12 3/4	2 1/2	4 9/16	3	24 5/16	16 1/4	19 3/4
19	348	2 1/4	9	19	12 3/4	3 3/4	5	3	27	18 1/2	22
20	487	2 1/2	10	22 1/2	12 3/4	3 3/4	5 9/16	3	31 1/16	22	25 1/2
21	534	2 3/4	10	25 7/16	12 3/4	4 1/8	6 1/4	2 7/8	34 9/16	24 13/16	28 5/16
22	714	3	11	31 9/16	12 3/4	4 1/2	6 5/8	3	41 3/16	31 1/16	34 9/16

BE 402 STANDARD SPRING



*Hanger take-out or installed height: With pipe movement up, cold to hot, installed height should be "X" dimension.
With pipe movement down, cold to hot, installed height should be "X" dimension plus the amount of vertical movement.

TYPE F

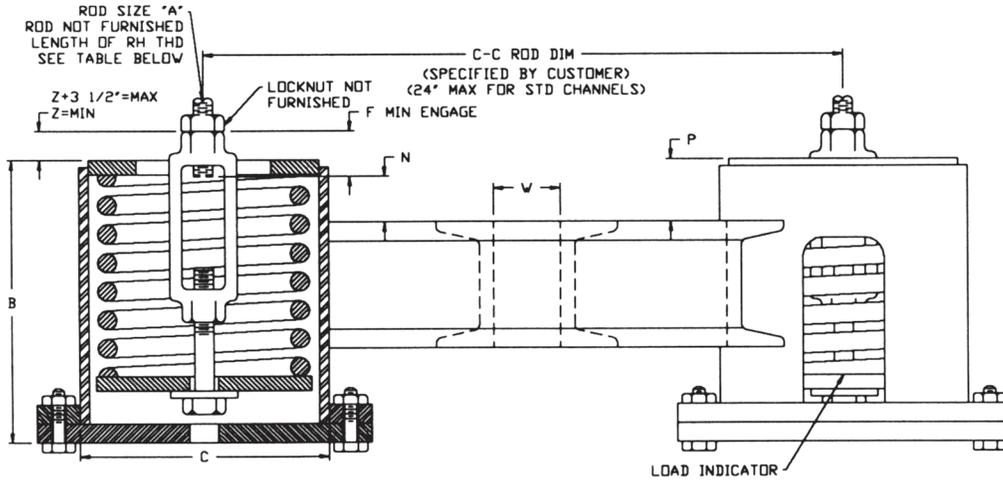
See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	CASING LENGTH B	CASING DIAMETER C	BOTTOM FLANGE SQUARE	BOTTOM FLANGE BOLT CIRCLE	THK. T	BOLT DIA. D	*X-DIMENSION	LOAD COLUMN DIAMETER	LOAD FLANGE DIAMETER	LOAD FLANGE THK.
000	12	6	4½	9	7½	¼	⅝	7⅞	1½	4½	¼
00	13	7¾	4½	9	7½	¼	⅝	8⅞	1½	4½	¼
0	15	7	4½	9	7½	¼	⅝	8⅞	1½	4½	¼
1	15	7⅞	4½	9	7½	¼	⅝	9	1½	4½	¼
2	16	8⅝	4½	9	7½	¼	⅝	9¾	1½	4½	¼
3	23	7¾	5⅞	9	7½	¼	¾	8⅞	2½	5½	¼
4	26	8⅜	5⅞	9	7½	¼	¾	9½	2½	5½	¼
5	27	9⅞	5⅞	9	7½	¼	¾	10¼	2½	5½	¼
6	42	9⅞	6⅝	10	9	⅜	¾	10⅜	3	6½	¼
7	42	10⅞	6⅝	10	9	⅜	¾	11⅜	3	6½	¼
8	46	10⅞	6⅝	10	9	⅜	¾	11⅞	3	6½	¼
9	83	10¾	8⅝	12	11½	½	¾	12⅜	4	8	½
10	88	12	8⅝	12	11½	½	¾	13⅝	4	8	½
11	93	9⅞	8⅝	12	11½	½	¾	11½	4	8	½
12	100	10⅞	8⅝	12	11½	½	¾	12⅞	4	8	½
13	104	13	8⅝	12	11½	½	¾	14⅝	4	8	½
14	110	13⅞	8⅝	12	11½	½	¾	14¾	4	8	½
15	134	13⅞	8⅝	12	11½	½	¾	15	4	8	½
16	162	15⅞	8⅝	12	11½	½	¾	17⅜	4	8	½
17	203	17¾	8⅝	12	11½	½	¾	19⅞	4	8	½
18	337	17¼	12¾	16	15½	⅝	¾	19	5	12	½
19	366	19½	12¾	16	15½	⅝	¾	21¼	5	12	½
20	485	22¾	12¾	16	15½	⅝	¾	24½	5	12	½
21	513	25⅞	12¾	16	15½	⅝	¾	27¼	5	12	½
22	675	31⅞	12¾	16	15½	⅝	¾	33⅞	5	12	½

VARIABLE SPRING HANGERS

STANDARD SPRING **BE 402**



TYPE G

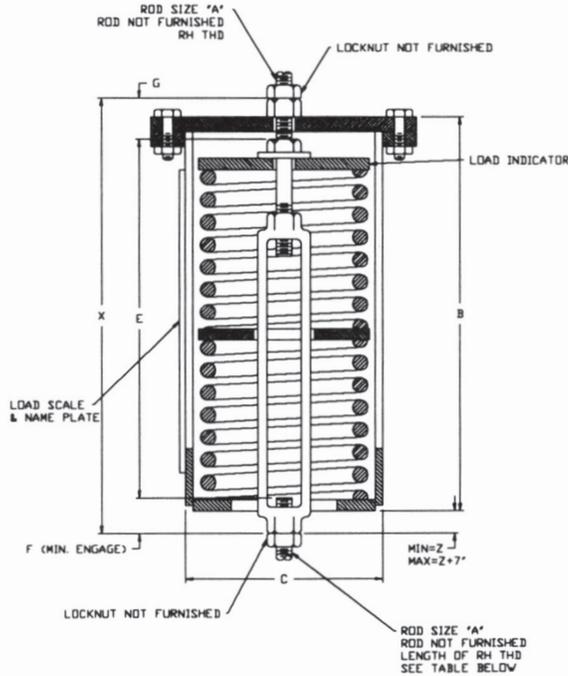
*WEIGHT BASED ON 24 INCH
CENTER-TO-CENTER DIMENSION

See pages 2 & 3 for typical applications.

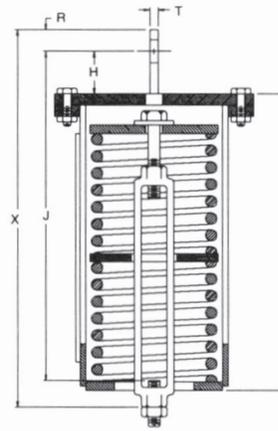
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	*WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ROD TAKE-OUT N	SPACE BETWEEN CHANNELS W	P	Z
000	26	1/2	5	6 3/8	4 1/2	7/8	5/8	5/8	1	1/2
00	28	1/2	5	8	4 1/2	7/8	5/8	5/8	1	1/2
0	30	1/2	5	7 1/4	4 1/2	7/8	5/8	5/8	1	1/2
1	30	1/2	5	8 1/8	4 1/2	7/8	5/8	5/8	1	1/2
2	33	1/2	5	8 7/8	4 1/2	7/8	5/8	5/8	1	1/2
3	41	1/2	5	7 7/8	5 9/16	7/8	5/8	3/4	1	1/2
4	46	1/2	5	8 1/2	5 9/16	7/8	5/8	3/4	1	1/2
5	51	1/2	5	9 3/16	5 9/16	7/8	5/8	3/4	1	1/2
6	63	5/8	6	9 1/4	6 5/8	1 1/16	9/16	1	1	5/8
7	62	5/8	6	10 1/4	6 5/8	1 1/16	9/16	1	1	5/8
8	71	5/8	6	10 1 1/16	6 5/8	1 1/16	9/16	1	1	5/8
9	113	3/4	6	10 3/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
10	123	3/4	6	11 5/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
11	143	3/4	6	9 7/16	8 5/8	1 3/16	1 5/16	1 1/4	1 1/2	1
12	161	1	6	10 3/8	8 5/8	1 1/2	1	1 1/2	1 1/2	1
13	182	1	7	12 15/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
14	191	1 1/4	7	13 5/16	8 5/8	1 7/8	7/8	1 1/2	1 1/2	1 1/4
15	260	1 1/4	7	13 1 1/16	8 5/8	1 7/8	7/8	2 1/8	1 1/2	1 1/4
16	327	1 1/2	8	16 1/4	8 5/8	2 1/4	3/4	2 1/8	1 1/2	1 1/2
17	437	1 3/4	8	18 3/4	8 5/8	2 5/8	5/8	2 1/8	1 1/2	1 3/4
18	691	2	9	19 1/4	12 3/4	2 7/8	1/8	2 3/8	1	2
19	778	2 1/4	10	21 3/4	12 3/4	3 1/2	3/4	2 5/8	2	2 1/4
20	1081	2 1/2	10	26	12 3/4	3 7/8	1 5/8	2 7/8	3	2 1/2
21	1216	2 3/4	11	28 15/16	12 3/4	4 1/4	1 1/2	3 1/8	3	2 3/4
22	1632	3	11	35 5/16	12 3/4	3 7/8	2 5/8	3 3/8	3 1/2	3

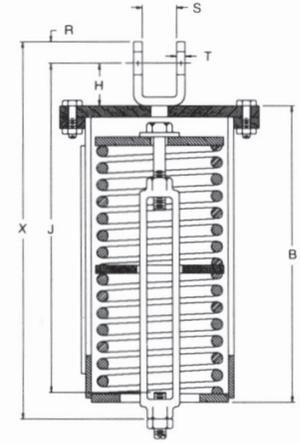
BE 403 DOUBLE SPRING



TYPE A



TYPE B



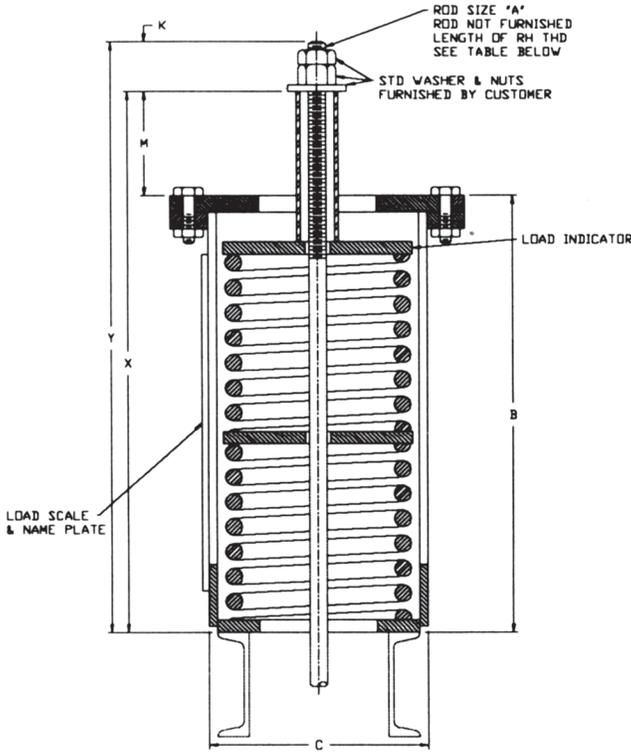
TYPE C

See pages 2 & 3 for typical applications.

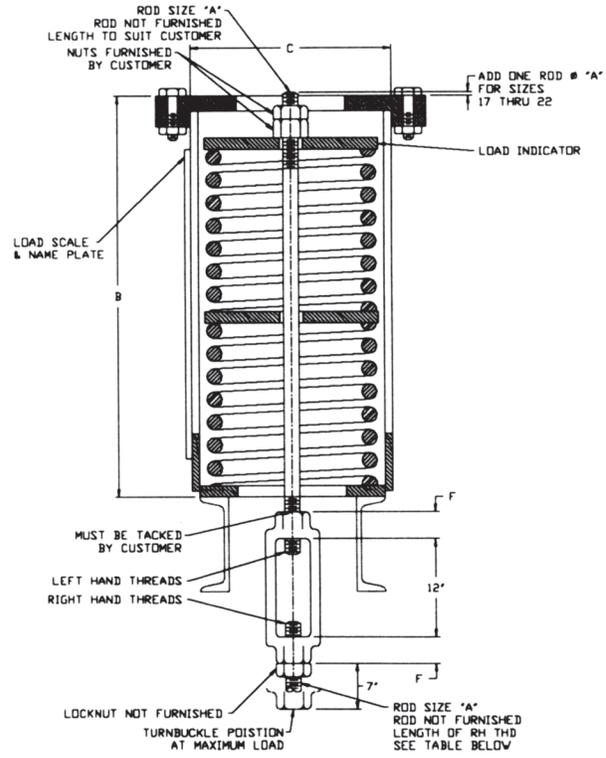
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. L'GTH.	CASING LENGTH B	CASING DIAM. C	MIN. TH'D. ENGAGEMENT F	ROD ENGAGEMENT G	HEIGHT OF PIN H	ROD TAKE-OUT			OVERALL LENGTH X				Z			
									R	S	T	TYPE A		TYPES B&C					
												E	J	MIN.	MAX.		MIN.	MAX.	
0	16	1/2	9	13 1/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	13 1/2	15 7/8	15 1/4	22 1/4	17 5/8	24 5/8	1 1/2
1	17	1/2	9	15	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	14 1/4	16 5/8	16	23	18 3/8	25 3/8	1/2
2	19	1/2	9	16 1/2	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	15 3/4	18 1/8	17 1/2	24 1/2	19 7/8	26 7/8	1/2
3	26	1/2	9	14 1/2	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	13 3/4	16 1/8	15 1/2	22 1/2	17 7/8	24 7/8	1/2
4	31	1/2	9	15 3/4	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	15	17 3/8	16 3/4	23 3/4	19 1/8	26 1/8	1/2
5	34	1/2	9	17 1/8	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	16 3/8	18 3/4	18 1/8	25 1/8	20 1/2	27 1/2	1/2
6	45	5/8	9	17	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	16 3/16	18 9/16	18 1/4	25 1/4	20 5/8	27 5/8	5/8
7	44	5/8	9	19	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	18 3/16	20 9/16	20 1/4	27 1/4	22 5/8	29 5/8	5/8
8	53	5/8	9	19 7/8	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	19 1/16	21 1/16	21 1/8	28 1/8	23 1/2	30 1/2	5/8
9	87	3/4	9	18 5/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	17 9/16	20 3/16	20 1/8	27 1/8	22 1/2	29 1/2	3/4
10	97	3/4	9	21 1/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	20 1/16	22 1/16	22 5/8	29 5/8	25	32	3/4
11	115	3/4	10	16 3/4	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	15 1 1/16	18 5/16	18 1/4	25 1/4	20 5/8	27 5/8	3/4
12	129	1	10	18 5/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	17 3/16	20 13/16	20 5/16	27 5/16	23 13/16	30 13/16	1
13	146	1	11	23 7/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	22 5/16	25 15/16	25 7/16	32 7/16	28 15/16	35 15/16	1
14	156	1 1/4	11	23 15/16	8 5/8	1 7/8	1 7/8	3	2	2 1/2	5/8	1 1/2	22 1 1/16	26 3/16	26 7/16	33 7/16	30 3/16	37 3/16	1 1/4
15	212	1 1/4	11	24 7/16	8 5/8	1 7/8	2 1/8	3	2	2 1/2	5/8	1 1/2	22 15/16	26 13/16	29 15/16	33 15/16	30 1 1/16	37 1 1/16	1 1/4
16	280	1 1/2	11	29 5/16	8 5/8	2 1/4	2 3/8	4	2 1/2	3	3/4	1 3/4	27 1 1/16	32 1/16	32 5/16	39 5/16	37 5/16	44 5/16	1 1/2
17	374	1 3/4	12	33 3/8	8 5/8	2 5/8	2 5/8	5	2 3/4	3 3/4	3/4	2	32 1/8	38	37 3/8	44 3/8	43 3/8	50 3/8	1 3/4
18	570	2	12	34 1/8	12 3/4	2 7/8	3 1/8	5	3 1/4	3 3/4	3/4	2 3/8	32 1/8	38 1/4	38 1/8	45 1/8	44 3/8	51 3/8	2
19	661	2 1/4	13	38 7/8	12 3/4	3 1/2	3 3/8	4 1/2	3	2 3/4	3/4	2 5/8	36 1/2	42 1/8	43 3/8	50 3/8	48 5/8	55 5/8	2 1/4
20	943	2 1/2	14	46 3/8	12 3/4	3 7/8	4 1/8	4 1/2	4	3	1	2 7/8	43 3/8	49 1/2	51 3/8	58 3/8	57 3/8	64 3/8	2 1/2
21	1036	2 3/4	14	51 3/4	12 3/4	4 1/4	4 3/8	4 1/2	4	3 1/4	1	3 1/8	48 5/8	54 3/4	57 1/4	64 1/4	63	70	2 3/4
22	1423	3	14	64 1/4	12 3/4	3 7/8	4 5/8	5	4	3 1/2	1	3 3/8	61 3/4	68 3/8	70 1/4	77 1/4	76 1/4	83 1/4	3

DOUBLE SPRING BE 403



TYPE D



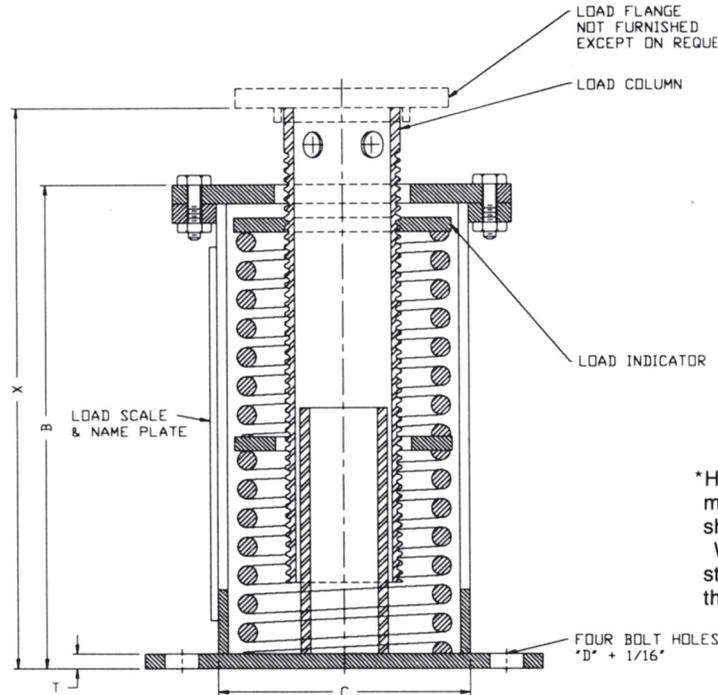
TYPE E

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ALLOWANCE FOR NUTS K	HEIGHT OF SPACER M (MAX)	ROD LENGTH Y (MAX)	OVERALL LENGTH X	
										MIN.	MAX.
0	15	1/2	9	12 ⁵ / ₈	4 ¹ / ₂	3/4	1 ¹ / ₄	5 ⁷ / ₁₆	19 ⁵ / ₁₆	11 ¹ / ₁₆	18 ¹ / ₁₆
1	15	1/2	9	14 ³ / ₈	4 ¹ / ₂	3/4	1 ¹ / ₄	5 ⁷ / ₁₆	21 ¹ / ₁₆	12 ¹³ / ₁₆	19 ¹³ / ₁₆
2	18	1/2	9	15 ⁷ / ₈	4 ¹ / ₂	3/4	1 ¹ / ₄	5 ⁷ / ₁₆	22 ⁹ / ₁₆	14 ⁵ / ₁₆	21 ⁵ / ₁₆
3	24	1/2	9	13 ⁷ / ₈	5 ⁹ / ₁₆	3/4	1 ¹ / ₄	5 ⁷ / ₁₆	20 ⁹ / ₁₆	12 ⁵ / ₁₆	19 ⁵ / ₁₆
4	29	1/2	9	15 ¹ / ₈	5 ⁹ / ₁₆	3/4	1 ¹ / ₄	5 ⁷ / ₁₆	21 ¹³ / ₁₆	13 ⁹ / ₁₆	20 ⁹ / ₁₆
5	32	1/2	9	16 ¹ / ₂	5 ⁹ / ₁₆	3/4	1 ¹ / ₄	5 ⁷ / ₁₆	23 ³ / ₁₆	14 ¹⁵ / ₁₆	21 ¹⁵ / ₁₆
6	43	5/8	9	16 ¹ / ₄	6 ⁵ / ₈	15 ¹ / ₁₆	1 ¹ / ₂	5 ¹ / ₂	23 ¹ / ₄	14 ³ / ₄	21 ³ / ₄
7	42	5/8	9	18 ¹ / ₄	6 ⁵ / ₈	15 ¹ / ₁₆	1 ¹ / ₂	5 ¹ / ₂	25 ¹ / ₄	16 ³ / ₄	23 ³ / ₄
8	51	5/8	9	19 ¹ / ₈	6 ⁵ / ₈	15 ¹ / ₁₆	1 ¹ / ₂	5 ¹ / ₂	26 ¹ / ₈	17 ⁵ / ₈	24 ⁵ / ₈
9	84	3/4	9	17 ³ / ₄	8 ⁵ / ₈	1 ¹ / ₈	1 ³ / ₄	5 ³ / ₈	24 ⁷ / ₈	16 ¹ / ₈	23 ¹ / ₈
10	94	3/4	9	20 ¹ / ₄	8 ⁵ / ₈	1 ¹ / ₈	1 ³ / ₄	5 ³ / ₈	27 ³ / ₈	18 ⁵ / ₈	25 ⁵ / ₈
11	96	3/4	9	15 ⁷ / ₈	8 ⁵ / ₈	1 ¹ / ₈	1 ³ / ₄	5 ³ / ₈	23	14 ¹ / ₄	21 ¹ / ₄
12	103	1	10	17 ¹ / ₈	8 ⁵ / ₈	1 ¹ / ₂	2 ¹ / ₄	5 ¹ / ₈	24 ¹ / ₂	15 ¹ / ₄	22 ¹ / ₄
13	139	1	10	22 ¹ / ₄	8 ⁵ / ₈	1 ¹ / ₂	2 ¹ / ₄	5 ¹ / ₈	29 ⁵ / ₈	20 ³ / ₈	27 ³ / ₈
14	149	1 ¹ / ₄	10	22 ¹ / ₂	8 ⁵ / ₈	1 ⁹ / ₁₆	2 ¹ / ₂	5 ¹ / ₈	30 ¹ / ₈	20 ⁵ / ₈	27 ⁵ / ₈
15	200	1 ¹ / ₄	10	22 ⁷ / ₈	8 ⁵ / ₈	1 ⁹ / ₁₆	3	5 ¹ / ₈	31	21	28
16	261	1 ¹ / ₂	11	27 ¹ / ₂	8 ⁵ / ₈	1 ⁷ / ₈	3 ¹ / ₂	5 ¹ / ₈	36 ¹ / ₈	25 ⁵ / ₈	32 ⁵ / ₈
17	343	1 ³ / ₄	12	31 ³ / ₄	8 ⁵ / ₈	2 ³ / ₁₆	4	5 ¹ / ₂	41 ¹ / ₄	30 ¹ / ₄	37 ¹ / ₄
18	533	2	12	31 ⁵ / ₈	12 ³ / ₄	2 ¹ / ₂	4 ⁹ / ₁₆	5 ¹ / ₂	41 ¹¹ / ₁₆	30 ¹ / ₈	37 ¹ / ₈
19	615	2 ¹ / ₄	13	36 ¹ / ₈	12 ³ / ₄	3 ³ / ₄	5	5 ¹ / ₂	46 ⁵ / ₈	34 ⁵ / ₈	41 ⁵ / ₈
20	850	2 ¹ / ₂	14	42 ⁷ / ₈	12 ³ / ₄	3 ³ / ₄	5 ⁹ / ₁₆	5 ¹ / ₂	53 ¹⁵ / ₁₆	41 ³ / ₈	48 ³ / ₈
21	937	2 ³ / ₄	14	48 ¹ / ₄	12 ³ / ₄	4 ¹ / ₈	6 ¹ / ₄	5 ³ / ₈	59 ⁷ / ₈	46 ⁵ / ₈	53 ⁵ / ₈
22	1277	3	15	60 ¹ / ₂	12 ³ / ₄	4 ¹ / ₂	6 ⁵ / ₈	5 ¹ / ₂	72 ⁵ / ₈	59	66

BE 403 DOUBLE SPRING



*Hanger take-out or installed height: With pipe movement up, cold to hot, installed height should be "X" dimension.
 With pipe movement down, cold to hot, installed height should be "X" dimension plus the amount of vertical movement.

TYPE F

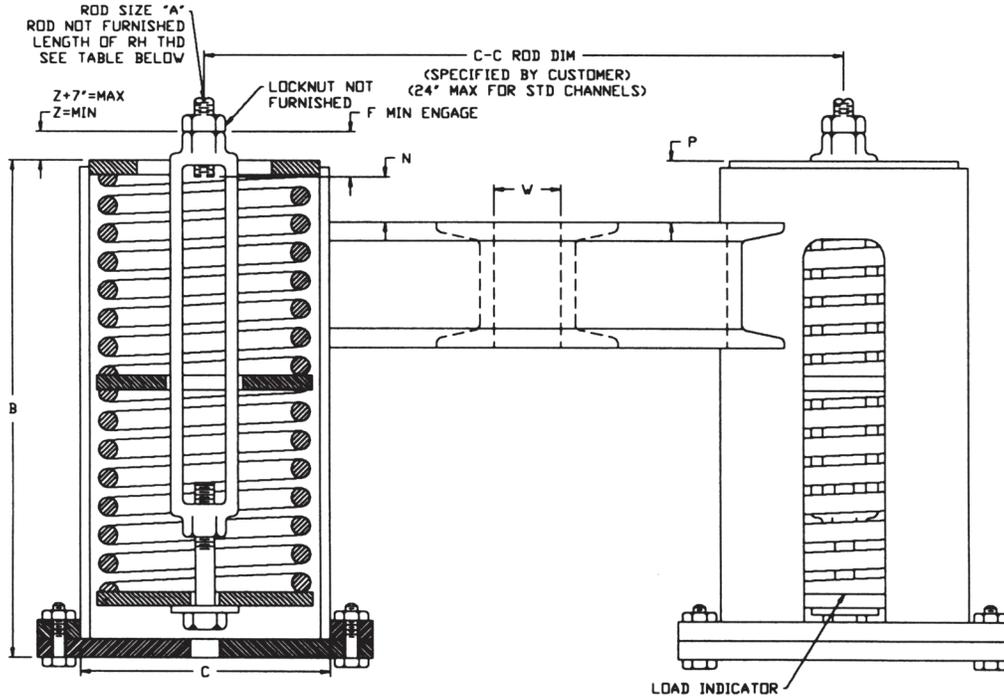
See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	CASING LENGTH B	CASING DIAMETER C	BOTTOM FLANGE SQUARE	BOTTOM FLANGE BOLT CIRCLE	THK. T	BOLT DIAMETER D	*X-DIMENSION	LOAD COLUMN DIAMETER	LOAD FLANGE DIAMETER	LOAD FLANGE THK.
0	23	13	4½	9	7½	¼	⅝	14⅞	1½	4½	¼
1	23	14¾	4½	9	7½	¼	⅝	15⅞	1½	4½	¼
2	26	16¼	4½	9	7½	¼	⅝	17⅞	1½	4½	¼
3	38	14⅜	5⅙	9	7½	¼	¾	15½	2½	5½	¼
4	43	15⅝	5⅙	9	7½	¼	¾	16¾	2½	5½	¼
5	46	17	5⅙	9	7½	¼	¾	18⅞	2½	5½	¼
6	62	16⅞	6⅝	10	9	⅜	¾	18⅞	3	6½	¼
7	61	18⅞	6⅝	10	9	⅜	¾	20⅞	3	6½	¼
8	70	19¾	6⅝	10	9	⅜	¾	21	3	6½	¼
9	120	18¾	8⅝	12	11½	½	¾	20⅞	4	8	½
10	131	21½	8⅝	12	11½	½	¾	23⅞	4	8	½
11	142	17⅞	8⅝	12	11½	½	¾	18¾	4	8	½
12	156	18⅞	8⅝	12	11½	½	¾	20	4	8	½
13	166	23½	8⅝	12	11½	½	¾	25⅞	4	8	½
14	175	23¾	8⅝	12	11½	½	¾	25⅞	4	8	½
15	224	24	8⅝	12	11½	½	¾	25⅞	4	8	½
16	281	28¾	8⅝	12	11½	½	¾	30⅞	4	8	½
17	378	32⅞	8⅝	12	11½	½	¾	34½	4	8	½
18	562	32	12¾	16	15½	⅝	¾	33¾	5	12	½
19	617	36⅝	12¾	16	15½	⅝	¾	38⅞	5	12	½
20	855	41⅞	12¾	16	15½	⅝	¾	44⅞	5	12	½
21	910	48¼	12¾	16	15½	⅝	¾	50	5	12	½
22	1231	60½	12¾	16	15½	⅝	¾	62¼	5	12	½

VARIABLE SPRING HANGERS

DOUBLE SPRING BE 403



TYPE G

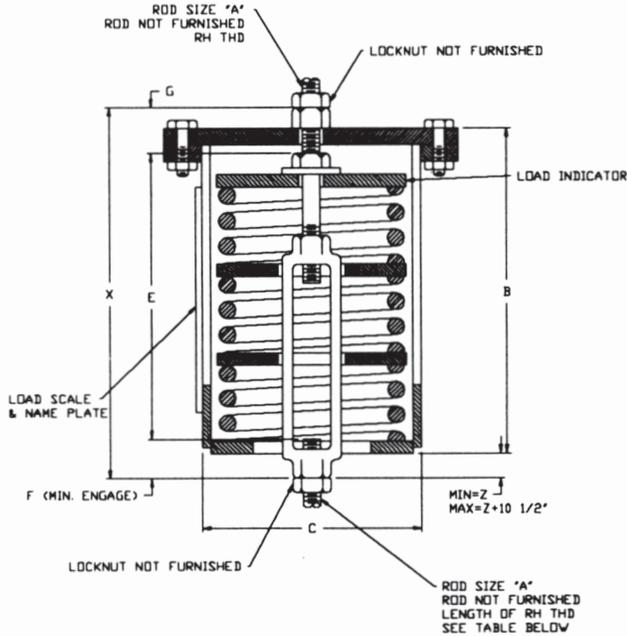
*WEIGHT BASED ON 24 INCH CENTER-TO-CENTER DIMENSION

See pages 2 & 3 for typical applications.

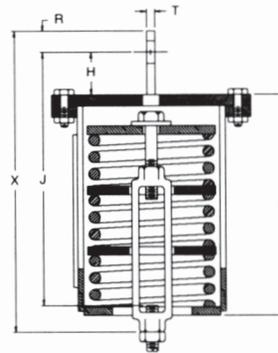
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	*WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ROD TAKE-OUT N	SPACE BETWEEN CHANNELS W	P	Z
0	42	1/2	9	13 1/4	4 1/2	7/8	1 5/8	5/8	1	1 1/2
1	43	1/2	9	15	4 1/2	7/8	5/8	5/8	1	1/2
2	48	1/2	9	16 1/2	4 1/2	7/8	5/8	5/8	1	1/2
3	61	1/2	9	14 1/2	5 9/16	7/8	5/8	3/4	1	1/2
4	71	1/2	9	15 3/4	5 9/16	7/8	5/8	3/4	1	1/2
5	77	1/2	9	17 1/8	5 9/16	7/8	5/8	3/4	1	1/2
6	100	5/8	9	17	6 5/8	1 1/16	9/16	1	1	5/8
7	98	5/8	9	19	6 5/8	1 1/16	9/16	1	1	5/8
8	116	5/8	9	19 7/8	6 5/8	1 1/16	9/16	1	1	5/8
9	184	3/4	9	18 5/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
10	204	3/4	9	21 1/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
11	241	3/4	10	16 3/4	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
12	272	1	10	18 5/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
13	304	1	11	23 7/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
14	324	1 1/4	11	23 15/16	8 5/8	1 7/8	7/8	1 1/2	1 1/2	1 1/4
15	445	1 1/4	11	24 7/16	8 5/8	1 7/8	7/8	2 1/8	1 1/2	1 1/4
16	573	1 1/2	11	29 5/16	8 5/8	2 1/4	3/4	2 1/8	1 1/2	1 1/2
17	762	1 3/4	12	33 7/8	8 5/8	2 5/8	5/8	2 1/8	1 1/2	1 3/4
18	1155	2	12	34 1/8	12 3/4	2 7/8	1/8	2 3/8	1	2
19	1336	2 1/4	13	38 7/8	12 3/4	3 1/2	3/4	2 5/8	2	2 1/4
20	1874	2 1/2	14	46 3/8	12 3/4	3 7/8	1 5/8	2 7/8	3	2 1/2
21	2086	2 3/4	14	51 3/4	12 3/4	4 1/4	1 1/2	3 1/8	3	2 3/4
22	2856	3	14	64 1/4	12 3/4	3 7/8	2 5/8	3 3/8	3 1/2	3

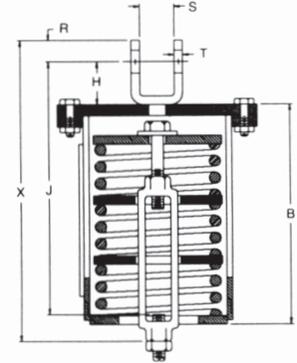
BE 400 TRIPLE SPRING



TYPE A



TYPE B



TYPE C

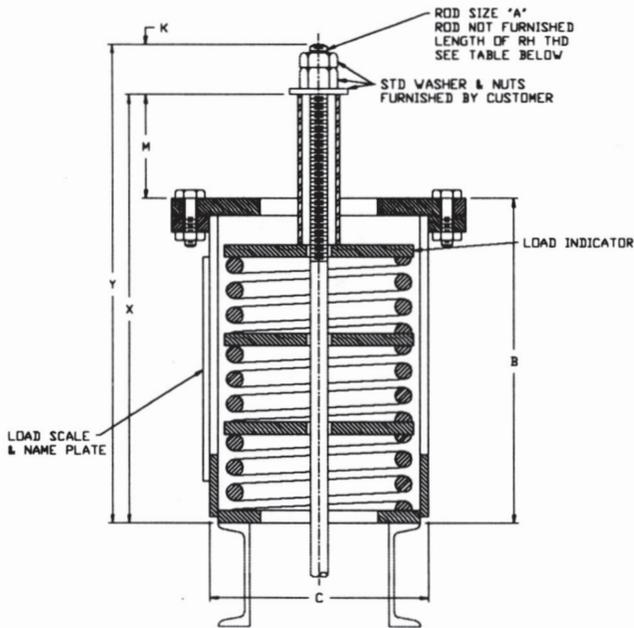
See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

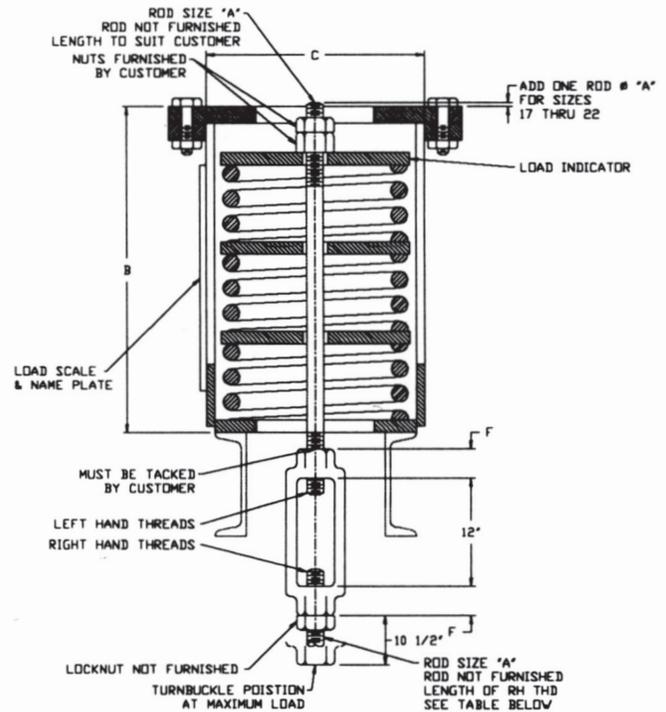
HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. L'GTH.	CASING LENGTH B	CASING DIAM. C	MIN. TH'D. ENGAGEMENT F	ROD ENGAGEMENT G	HEIGHT OF PIN H	ROD TAKE-OUT				OVERALL LENGTH X				Z			
									TYPE A		TYPES B&C		TYPE A		TYPES B&C					
									E	J	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.				
0	22	1/2	12	19 1/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	18 1/2	20 7/8	20 1/4	30 3/4	22 5/8	33 1/8	33 1/8	1/2
1	23	1/2	12	21 7/8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	21 1/8	23 1/2	22 7/8	33 3/8	25 1/4	35 3/4	35 3/4	1/2
2	26	1/2	12	24 1/8	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	23 3/8	25 3/4	25 1/8	35 5/8	27 1/2	38	38	1/2
3	35	1/2	12	21 1/8	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	20 3/8	22 3/4	22 1/8	32 5/8	24 1/2	35	35	1/2
4	43	1/2	12	23	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	22 1/4	24 5/8	24	34 1/2	26 3/8	36 7/8	36 7/8	1/2
5	48	1/2	12	25 1/16	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	24 5/16	26 1 1/16	26 1/16	36 9/16	28 7/16	38 15/16	38 15/16	1/2
6	64	5/8	13	24 3/4	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	23 15/16	26 5/16	26	36 1/2	28 3/8	38 7/8	38 7/8	5/8
7	63	5/8	13	27 3/4	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	26 15/16	29 5/16	29	39 1/2	31 3/8	41 7/8	41 7/8	5/8
8	75	5/8	13	29 1/16	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	28 1/4	30 5/8	30 5/16	40 13/16	32 1 1/16	43 3/16	43 3/16	5/8
9	123	3/4	13	26 7/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	25 13/16	28 7/16	28 3/8	38 7/8	30 3/4	41 1/4	41 1/4	3/4
10	139	3/4	13	30 5/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	32 3/16	34 1/2	32 1/8	42 5/8	34 1/2	45	45	3/4
11	163	3/4	13	24 1/16	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	23	25 5/8	25 9/16	36 1/16	27 15/16	38 7/16	38 7/16	3/4
12	185	1	13	26 1/4	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	25 1/8	28 3/4	28 1/4	38 3/4	31 3/4	42 1/4	42 1/4	1
13	210	1	14	33 15/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	32 13/16	36 7/16	35 15/16	46 7/16	39 7/16	49 5/16	49 5/16	1
14	224	1 1/4	14	34 9/16	8 5/8	1 7/8	1 7/8	3	2	2 1/2	5/8	1 1/2	33 5/16	36 15/16	37 1/16	47 9/16	40 13/16	51 5/16	51 5/16	1 1/4
15	300	1 1/4	14	35 3/16	8 5/8	1 7/8	2 1/8	3	2	2 1/2	5/8	1 1/2	33 11/16	37 9/16	37 11/16	48 3/16	41 7/16	51 15/16	51 15/16	1 1/4
16	403	1 1/2	15	42 3/8	8 5/8	2 1/4	2 3/8	4	2 1/2	3	3/4	1 3/4	40 3/4	45 5/8	45 5/8	55 7/8	50 3/8	60 7/8	60 7/8	1 1/2
17	535	1 3/4	15	49	8 5/8	2 5/8	2 5/8	5	2 3/4	3 3/4	3/4	2	47 1/4	53 3/8	52 1/2	63	58 1/2	69	69	1 3/4
18	783	2	16	49	12 3/4	2 7/8	3 1/8	5	3 1/4	3 3/4	3/4	2 3/8	47	53 3/8	53	63 1/2	59 1/4	69 3/4	69 3/4	2
19	929	2 1/4	17	56	12 3/4	3 1/2	3 3/8	4 1/2	3	2 3/4	3/4	2 5/8	53 5/8	59 1/4	60 1/2	71	65 3/4	76 1/4	76 1/4	2 1/4
20	1342	2 1/2	17	66 3/4	12 3/4	3 7/8	4 1/8	4 1/2	4	3	1	2 7/8	63 3/4	69 7/8	71 3/4	82 1/4	77 3/4	88 1/4	88 1/4	2 1/2
21	1842	2 3/4	18	74 9/16	12 3/4	4 1/4	4 3/8	4 1/2	4	3 1/4	1	3 1/8	71 1/16	77 9/16	80 1/16	90 9/16	85 13/16	96 5/16	96 5/16	2 3/4
22	2350	3	18	93 3/16	12 3/4	3 7/8	4 5/8	5	4	3 1/4	1	3 3/8	90 1 1/16	97 5/16	99 3/16	109 1 1/16	105 3/16	115 1 1/16	115 1 1/16	3

VARIABLE SPRING HANGERS

TRIPLE SPRING BE 400



TYPE D



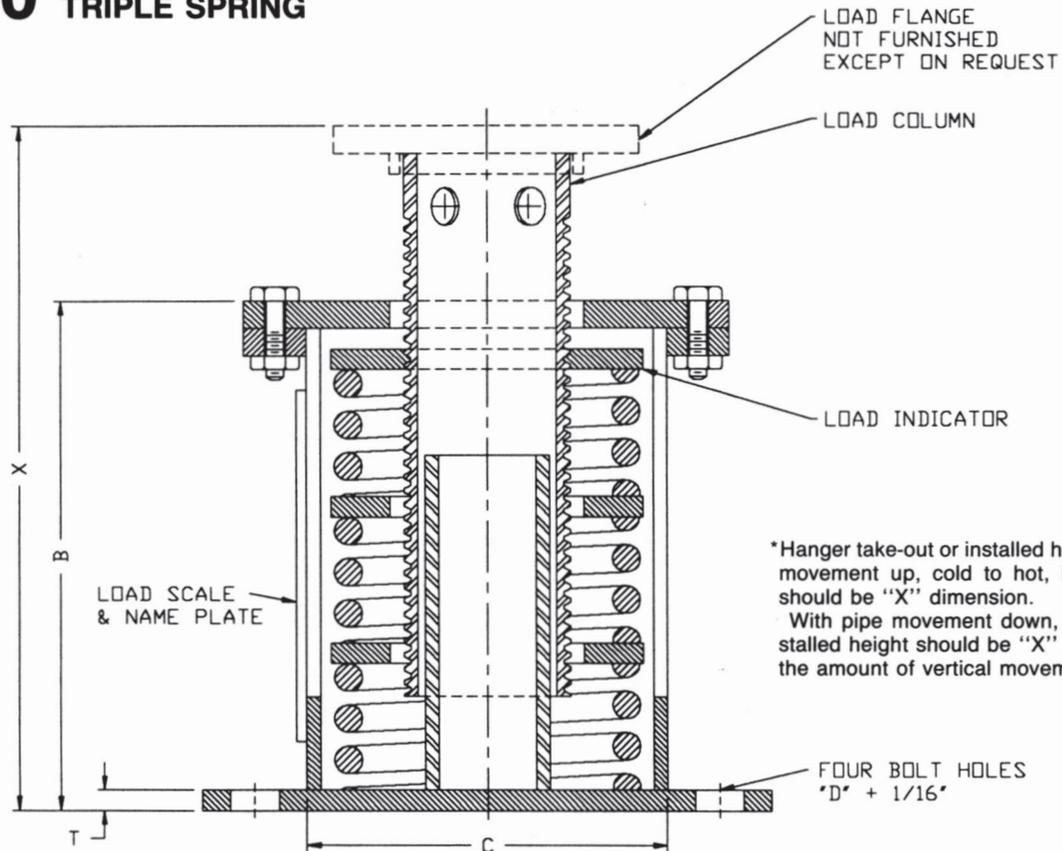
TYPE E

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ALLOWANCE FOR NUTS K	HEIGHT OF SPACER M (MAX)	ROD LENGTH Y (MAX)	OVERALL LENGTH X	
										TYPE D	
										MIN.	MAX.
0	21	1/2	12	18 5/8	4 1/2	3/4	1 1/4	8 7/16	28 5/16	16 9/16	27 1/16
1	22	1/2	12	21 1/4	4 1/2	3/4	1 1/4	8 7/16	30 15/16	19 3/16	29 11/16
2	25	1/2	12	23 1/2	4 1/2	3/4	1 1/4	8 7/16	33 3/16	21 7/16	31 5/16
3	34	1/2	12	20 1/2	5 9/16	3/4	1 1/4	8 7/16	30 3/16	18 7/16	28 15/16
4	42	1/2	12	22 3/8	5 9/16	3/4	1 1/4	8 7/16	32 1/16	20 5/16	30 13/16
5	46	1/2	12	24 7/16	5 9/16	3/4	1 1/4	8 7/16	34 1/16	22 3/8	32 7/8
6	62	5/8	13	24	6 5/8	15/16	1 1/2	8 1/2	34	22	32 1/2
7	60	5/8	13	27	6 5/8	15/16	1 1/2	8 1/2	37	25	35 1/2
8	73	5/8	13	28 5/16	6 5/8	15/16	1 1/2	8 1/2	38 5/16	26 5/16	36 13/16
9	119	3/4	13	25 3/4	8 5/8	1 1/8	1 3/4	8 1/2	36	23 3/4	34 1/4
10	135	3/4	13	29 1/2	8 5/8	1 1/8	1 3/4	8 1/2	39 3/4	27 1/2	38
11	157	3/4	13	23 3/16	8 5/8	1 1/8	1 3/4	8 5/8	33 3/16	21 1/16	31 9/16
12	178	1	13	25 1/16	8 5/8	1 1/2	2 1/4	8 1/8	35 7/16	22 11/16	33 3/16
13	198	1	14	32 3/4	8 5/8	1 1/2	2 1/4	8 1/8	43 1/8	30 3/8	40 7/8
14	212	1 1/4	14	33 1/8	8 5/8	1 9/16	2 1/2	8 1/8	43 3/4	30 3/4	41 1/4
15	285	1 1/4	14	33 5/8	8 5/8	1 9/16	3	8 1/8	44 3/4	31 1/4	41 3/4
16	375	1 1/2	15	40 9/16	8 5/8	1 7/8	3 1/2	8 1/8	52 3/16	38 3/16	48 11/16
17	491	1 3/4	15	46 7/8	8 5/8	2 3/16	4	8 1/2	59 5/8	44 7/8	55 5/8
18	732	2	16	46 3/8	12 3/4	2 1/2	4 9/16	8 1/2	59 7/16	44 3/8	54 7/8
19	863	2 1/4	16	53 1/4	12 3/4	3 3/4	5	8 1/2	66 3/4	51 1/4	61 3/4
20	1225	2 1/2	17	63 1/8	12 3/4	3 3/4	5 9/16	8 1/2	77 3/16	61 1/8	71 5/8
21	1662	2 3/4	18	71 1/16	12 3/4	4 1/8	6 1/4	8 1/4	85 9/16	68 13/16	79 5/8
22	2232	3	18	89 7/16	12 3/4	4 1/2	6 5/8	8 1/4	104 5/16	87 3/16	97 11/16

BE 400 TRIPLE SPRING



*Hanger take-out or installed height: With pipe movement up, cold to hot, installed height should be "X" dimension.
 With pipe movement down, cold to hot, installed height should be "X" dimension plus the amount of vertical movement.

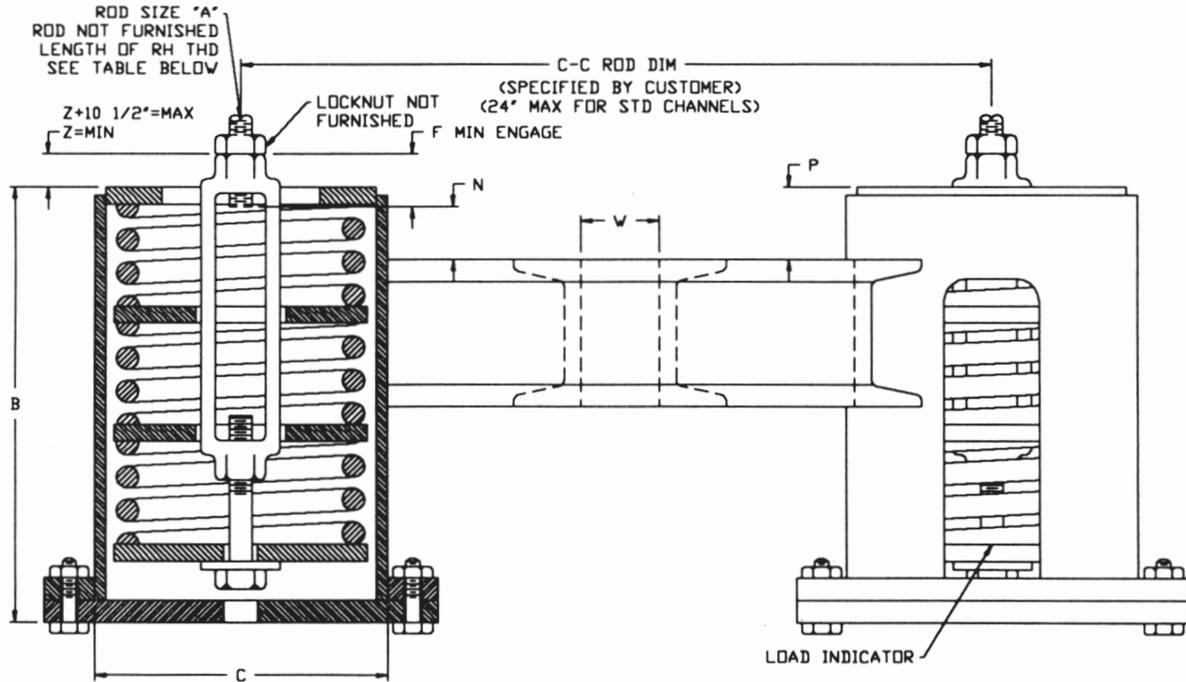
TYPE F

See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	CASING LENGTH B	CASING DIAMETER C	BOTTOM FLANGE SQUARE	BOTTOM FLANGE BOLT CIRCLE	THK. T	BOLT DIAMETER D	*X-DIMENSION	LOAD COLUMN DIAMETER	LOAD FLANGE DIAMETER	LOAD FLANGE THK.
0	31	18 ³ / ₄	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	19 ⁷ / ₈	1 ¹ / ₂	4 ¹ / ₂	1/4
1	31	21 ³ / ₈	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	22 ¹ / ₂	1 ¹ / ₂	4 ¹ / ₂	1/4
2	35	23 ⁵ / ₈	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	24 ³ / ₄	1 ¹ / ₂	4 ¹ / ₂	1/4
3	51	20 ³ / ₄	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	21 ⁷ / ₈	2 ¹ / ₂	5 ¹ / ₂	1/4
4	59	22 ⁵ / ₈	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	23 ³ / ₄	2 ¹ / ₂	5 ¹ / ₂	1/4
5	64	24 ¹¹ / ₁₆	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	25 ⁷ / ₈	2 ¹ / ₂	5 ¹ / ₂	1/4
6	92	24 ³ / ₈	6 ⁵ / ₈	10	9	3/8	3/4	25 ⁵ / ₈	3	6 ¹ / ₂	1/4
7	90	27 ³ / ₈	6 ⁵ / ₈	10	9	3/8	3/4	28 ⁵ / ₈	3	6 ¹ / ₂	1/4
8	104	28 ¹¹ / ₁₆	6 ⁵ / ₈	10	9	3/8	3/4	30	3	6 ¹ / ₂	1/4
9	171	26 ³ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	28 ³ / ₈	4	8	1/2
10	188	30 ¹ / ₂	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	32 ¹ / ₈	4	8	1/2
11	207	23 ¹⁵ / ₁₆	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	25 ⁵ / ₈	4	8	1/2
12	229	25 ¹³ / ₁₆	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	27 ¹ / ₂	4	8	1/2
13	246	33 ¹ / ₂	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	35 ¹ / ₈	4	8	1/2
14	261	33 ⁷ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	35 ¹ / ₂	4	8	1/2
15	335	34 ¹ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	35 ⁷ / ₈	4	8	1/2
16	428	41 ³ / ₁₆	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	42 ⁷ / ₈	4	8	1/2
17	542	47 ³ / ₈	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	49	4	8	1/2
18	805	47	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	48 ³ / ₄	5	12	1/2
19	826	53 ³ / ₄	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	55 ¹ / ₂	5	12	1/2
20	1178	63 ¹ / ₂	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	65 ¹ / ₄	5	12	1/2
21	1425	71 ¹ / ₁₆	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	72 ⁷ / ₈	5	12	1/2
22	1700	89 ⁷ / ₁₆	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	91 ¹ / ₄	5	12	1/2

TRIPLE SPRING BE 400



TYPE G

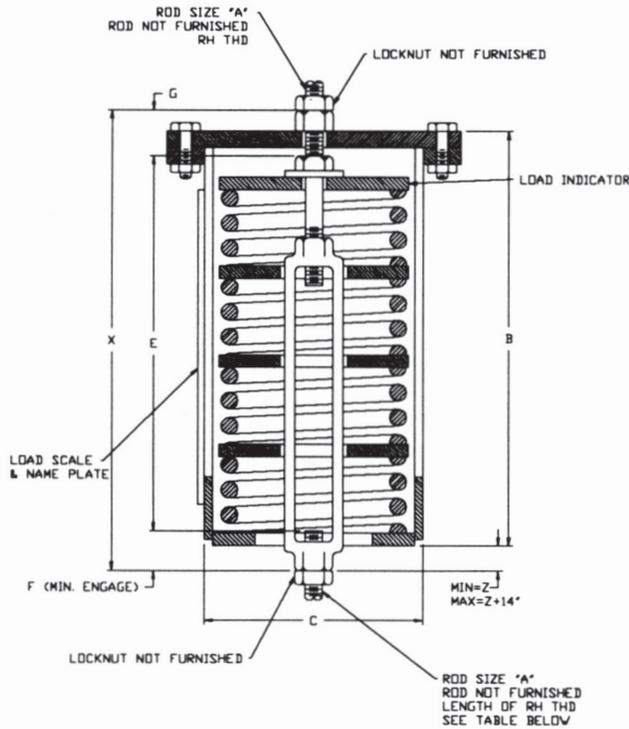
*WEIGHT BASED ON 24 INCH
CENTER-TO-CENTER DIMENSION

See pages 2 & 3 for typical applications.

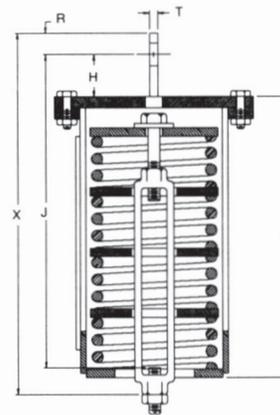
DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	*WEIGHT APPROX. EACH LBS.	ROD SIZE A	R. H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ROD TAKE-OUT N	SPACE BETWEEN CHANNELS W	P	Z
0	55	1/2	12	19 1/4	4 1/2	7/8	5/8	5/8	1	1/2
1	57	1/2	12	21 7/8	4 1/2	7/8	5/8	5/8	1	1/2
2	64	1/2	12	24 1/8	4 1/2	7/8	5/8	5/8	1	1/2
3	81	1/2	12	21 1/8	5 9/16	7/8	5/8	3/4	1	1/2
4	99	1/2	12	23	5 9/16	7/8	5/8	3/4	1	1/2
5	106	1/2	12	25 1/16	5 9/16	7/8	5/8	3/4	1	1/2
6	139	5/8	13	24 3/4	6 5/8	1 1/16	9/16	1	1	5/8
7	135	5/8	13	27 3/4	6 5/8	1 1/16	9/16	1	1	5/8
8	162	5/8	13	29 1/16	6 5/8	1 1/16	9/16	1	1	5/8
9	255	3/4	13	26 7/8	8 5/8	1 1/16	1 1/16	1 1/4	1 1/2	3/4
10	287	3/4	13	30 5/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
11	336	3/4	13	24 1/16	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
12	384	1	13	26 1/4	8 5/8	1 1/2	1	1 1/2	1 1/2	1
13	432	1	14	33 15/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
14	460	1 1/4	14	34 9/16	8 5/8	1 7/8	7/8	1 1/2	1 1/2	1 1/4
15	621	1 1/4	14	35 3/16	8 5/8	1 7/8	7/8	2 1/8	1 1/2	1 1/4
16	821	1 1/2	15	42 3/8	8 5/8	2 1/4	3/4	2 1/8	1 1/2	1 1/2
17	1085	1 3/4	15	49	8 5/8	2 5/8	5/8	2 1/8	1 1/2	1 3/4
18	1582	2	16	49	12 3/4	2 7/8	1/8	2 3/8	1	2
19	1870	2 1/4	17	56	12 3/4	3 1/2	3/4	2 5/8	2	2 1/4
20	2668	2 1/2	17	66 3/4	12 3/4	3 7/8	1 5/8	2 7/8	3	2 1/2
21	3560	2 3/4	18	74 9/16	12 3/4	4 1/4	1 1/2	3 1/8	3	2 3/4
22	4600	3	18	93 3/16	12 3/4	3 7/8	2 5/8	3 3/8	3 1/2	3

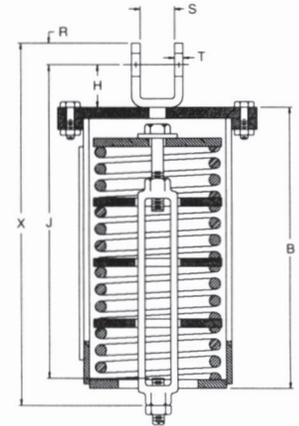
BE 399 QUADRUPLE SPRING



TYPE A



TYPE B



TYPE C

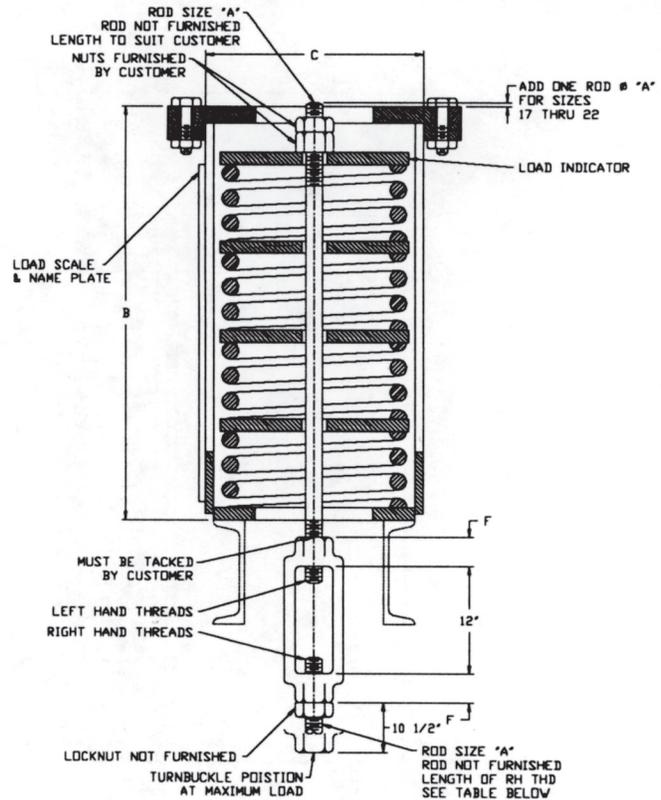
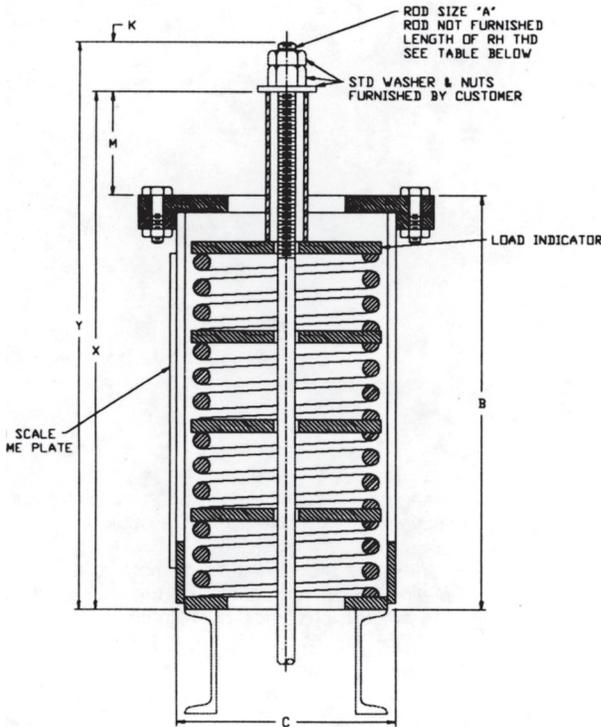
See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R.H. TH'D. L'GTH.	CASING LENGTH B	CASING DIAM. C	MIN. TH'D. ENGAGEMENT F	ROD ENGAGEMENT G	HEIGHT OF PIN H	R	S	T	LUG HOLE DIA.	ROD TAKE-OUT		OVERALL LENGTH X				Z
													E	J	TYPE A		TYPES B&C		
															MIN.	MAX.	MIN.	MAX.	
0	32	1/2	16	25 1/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	24 1/2	26 7/8	26 1/4	40 1/4	28 5/8	42 5/8	1/2
1	34	1/2	16	28 3/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	28	30 3/8	29 3/4	43 3/4	32 1/8	46 1/8	1/2
2	38	1/2	16	31 3/4	4 1/2	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	31	33 3/8	32 3/4	46 3/4	35 1/8	49 1/8	1/2
3	52	1/2	16	27 3/4	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	27	29 3/8	28 3/4	42 3/4	31 1/8	45 1/8	1/2
4	62	1/2	16	30 1/4	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	29 1/2	31 7/8	31 1/4	45 1/4	33 5/8	47 5/8	1/2
5	68	1/2	16	33	5 9/16	7/8	7/8	2	7/8	1 1/4	1/4	1 1/16	32 1/4	34 5/8	34	48	36 3/8	50 3/8	1/2
6	90	5/8	16	32 1/2	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	31 11/16	34 1/16	33 3/4	47 3/4	36 1/8	50 1/8	5/8
7	88	5/8	16	36 1/2	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	35 11/16	38 1/16	37 3/4	51 3/4	40 1/8	54 1/8	5/8
8	106	5/8	16	38 1/4	6 5/8	1 1/16	1	2	1	1 1/4	1/4	1 3/16	37 1/16	39 13/16	39 1/2	53 1/2	41 7/8	55 7/8	5/8
9	170	3/4	16	35 1/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	34 1/16	36 11/16	36 5/8	50 5/8	39	53	3/4
10	187	3/4	16	40 1/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	39 1/16	41 11/16	41 5/8	55 5/8	44	58	3/4
11	219	3/4	16	31 3/8	8 5/8	1 3/16	1 3/8	2	1 1/8	1 1/2	3/8	1 5/16	32 15/16	32 15/16	32 7/8	46 7/8	35 1/4	49 1/4	3/4
12	253	1	17	34 3/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	33 1/16	36 11/16	36 3/16	50 3/16	39 11/16	53 11/16	1
13	287	1	17	44 7/16	8 5/8	1 1/2	1 5/8	3	1 1/2	2	1/2	1 1/4	43 5/16	46 5/16	46 7/16	60 7/16	49 5/16	63 5/16	1
14	303	1 1/4	18	45 3/16	8 5/8	1 7/8	1 7/8	3	2	2 1/2	5/8	1 1/2	43 15/16	47 9/16	47 11/16	61 11/16	51 7/16	65 7/16	1 1/4
15	420	1 1/4	18	45 5/16	8 5/8	1 7/8	2 1/8	3	2	2 1/2	5/8	1 1/2	44 7/16	48 5/16	48 7/16	62 7/16	52 3/16	66 3/16	1 1/4
16	550	1 1/2	18	55 7/16	8 5/8	2 1/4	2 3/8	4	2 1/2	3	3/4	1 3/4	53 3/16	58 11/16	58 7/16	72 7/16	63 7/16	77 7/16	1 1/2
17	733	1 3/4	19	64 1/8	8 5/8	2 5/8	2 5/8	5	2 3/4	3 3/4	3/4	2	62 3/8	68 1/4	67 5/8	81 5/8	73 5/8	87 5/8	1 3/4
18	1122	2	19	63 3/8	12 3/4	2 7/8	3 1/8	5	3 1/4	3 3/4	3/4	2 3/8	61 7/8	68	67 7/8	81 7/8	74 7/8	88 1/8	2
19	1310	2 1/4	20	73 1/8	12 3/4	3 1/2	3 3/8	4 1/2	3	2 3/4	3/4	2 5/8	70 3/4	76 3/8	77 5/8	91 5/8	82 7/8	96 7/8	2 1/4
20	1872	2 1/2	21	87 7/8	12 3/4	3 7/8	4 1/8	4 1/2	4	3	1	2 7/8	84 1/8	90 1/4	92 1/8	106 1/8	98 1/8	112 1/8	2 1/2
21	2052	2 3/4	21	97 3/8	12 3/4	4 1/4	4 3/8	4 1/2	4	3 1/4	1	3 1/8	94 1/4	100 3/8	102 7/8	116 7/8	108 5/8	122 5/8	2 3/4
22	2831	3	21	122 1/8	12 3/4	3 7/8	4 5/8	5	4	3 1/2	1	3 3/8	119 5/8	126 1/4	128 1/8	142 1/8	134 1/8	148 1/8	3

VARIABLE SPRING HANGERS

QUADRUPLE SPRING BE 399

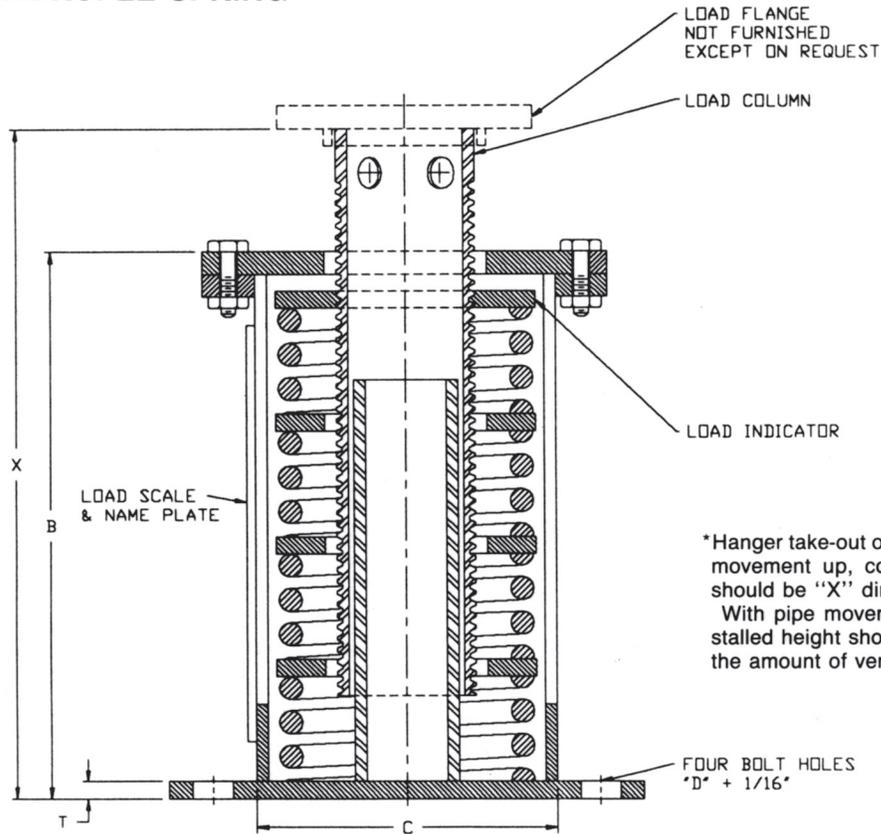


See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	ROD SIZE A	R. H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ALLOWANCE FOR NUTS K	HEIGHT OF SPACER M (MAX)	ROD LENGTH Y (MAX)	OVERALL LENGTH X		
										TYPE D		
											MIN.	MAX.
0	30	1/2	16	24 5/8	4 1/2	3/4	1 1/4	12	37 7/8	22 5/8	36 5/8	
1	30	1/2	16	28 1/8	4 1/2	3/4	1 1/4	12	41 3/8	26 1/8	40 1/8	
2	36	1/2	16	31 1/8	4 1/2	3/4	1 1/4	12	44 3/8	29 1/8	43 1/8	
3	48	1/2	16	27 1/8	5 9/16	3/4	1 1/4	12	40 3/8	25 1/8	39 1/8	
4	58	1/2	16	29 5/8	5 9/16	3/4	1 1/4	12	42 7/8	27 5/8	41 5/8	
5	64	1/2	16	32 3/8	5 9/16	3/4	1 1/4	12	45 5/8	30 3/8	44 3/8	
6	81	5/8	16	31 3/4	6 5/8	15/16	1 1/2	12	45 1/4	29 3/4	43 3/4	
7	80	5/8	16	35 3/4	6 5/8	15/16	1 1/2	12	49 1/4	33 3/4	47 3/4	
8	98	5/8	16	37 1/2	6 5/8	15/16	1 1/2	12	51	35 1/2	49 1/2	
9	161	3/4	16	34 1/4	8 5/8	1 1/8	1 3/4	12	48	32 1/4	46 1/4	
10	183	3/4	16	39 1/4	8 5/8	1 1/8	1 3/4	12	53	37 1/4	51 1/4	
11	191	3/4	16	30 1/2	8 5/8	1 1/8	1 3/4	12	44 1/4	28 1/2	42 1/2	
12	196	1	17	33	8 5/8	1 1/2	2 1/4	12	47 1/4	31	45	
13	260	1	17	43 1/4	8 5/8	1 1/2	2 1/4	12	57 1/2	41 1/4	55 1/4	
14	278	1 1/4	18	43 3/4	8 5/8	1 9/16	2 1/2	12	58 1/4	41 3/4	55 3/4	
15	386	1 1/4	18	44 3/8	8 5/8	1 9/16	3	12	59 3/8	42 3/8	56 3/8	
16	502	1 1/2	18	53 5/8	8 5/8	1 7/8	3 1/2	12	69 1/8	51 5/8	65 5/8	
17	672	1 3/4	19	62	8 5/8	2 3/16	4	12	78	60	74	
18	1046	2	19	61 3/8	12 3/4	2 1/2	4 9/16	12	77 15/16	59 3/8	73 3/8	
19	1212	2 1/4	20	70 3/8	12 3/4	3 3/4	5	12	87 3/8	68 3/8	82 3/8	
20	1682	2 1/2	21	83 3/8	12 3/4	3 3/4	5 9/16	12	101 3/16	81 5/8	95 5/8	
21	1854	2 3/4	21	93 7/8	12 3/4	4 1/8	6 1/4	12	112 1/8	91 7/8	105 7/8	
22	2534	3	21	118 3/8	12 3/4	4 1/2	6 5/8	12	137	116 3/8	130 3/8	

BE 399 QUADRUPLE SPRING



*Hanger take-out or installed height: With pipe movement up, cold to hot, installed height should be "X" dimension.
With pipe movement down, cold to hot, installed height should be "X" dimension plus the amount of vertical movement.

TYPE F

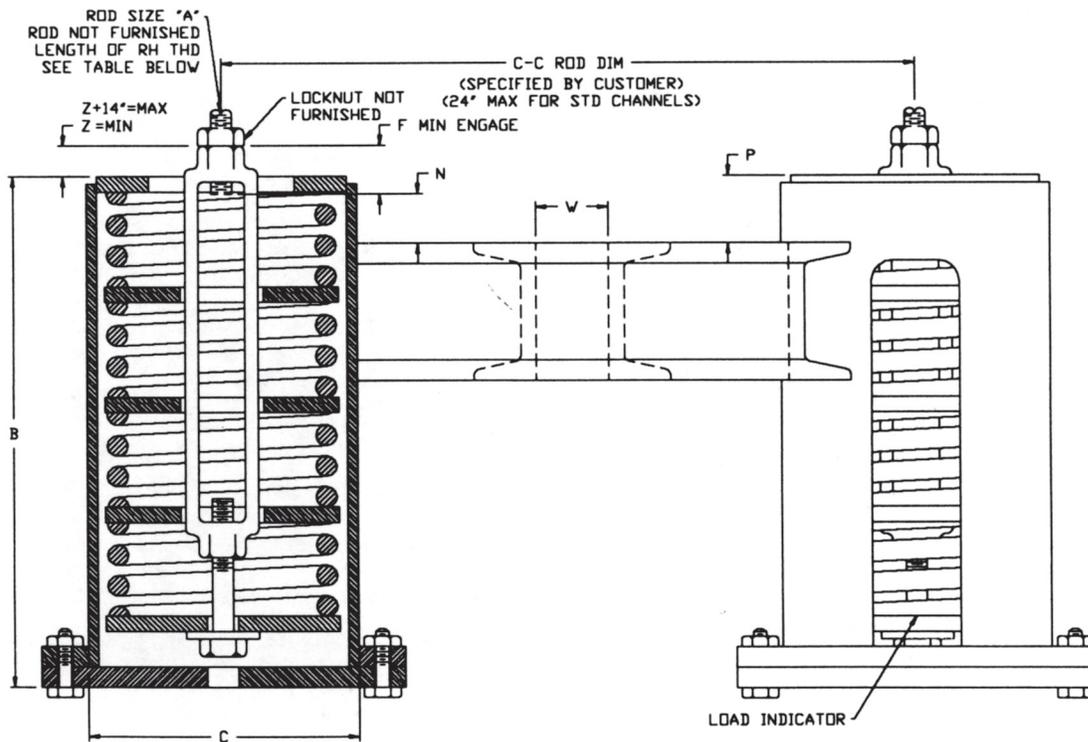
See pages 2 & 3 for typical applications.

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	WEIGHT APPROX. EACH LBS.	CASING LENGTH B	CASING DIAMETER C	BOTTOM FLANGE SQUARE	BOTTOM FLANGE BOLT CIRCLE	THK. T	BOLT DIAMETER D	*X-DIMENSION	LOAD COLUMN DIAMETER	LOAD FLANGE DIAMETER	LOAD FLANGE THK.
0	46	24 ³ / ₄	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	25 ⁷ / ₈	1 ¹ / ₂	4 ¹ / ₂	1/4
1	46	28 ¹ / ₄	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	29 ³ / ₈	1 ¹ / ₂	4 ¹ / ₂	1/4
2	52	31 ¹ / ₄	4 ¹ / ₂	9	7 ¹ / ₂	1/4	5/8	32 ³ / ₈	1 ¹ / ₂	4 ¹ / ₂	1/4
3	75	27 ³ / ₈	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	28 ¹ / ₂	2 ¹ / ₂	5 ¹ / ₂	1/4
4	85	29 ⁷ / ₈	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	31	2 ¹ / ₂	5 ¹ / ₂	1/4
5	91	32 ⁵ / ₈	5 ⁹ / ₁₆	9	7 ¹ / ₂	1/4	3/4	33 ³ / ₄	2 ¹ / ₂	5 ¹ / ₂	1/4
6	123	32 ¹ / ₈	6 ⁵ / ₈	10	9	3/8	3/4	33 ³ / ₈	3	6 ¹ / ₂	1/4
7	122	36 ¹ / ₈	6 ⁵ / ₈	10	9	3/8	3/4	37 ³ / ₈	3	6 ¹ / ₂	1/4
8	136	37 ⁷ / ₈	6 ⁵ / ₈	10	9	3/8	3/4	39 ¹ / ₈	3	6 ¹ / ₂	1/4
9	236	35	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	36 ⁵ / ₈	4	8	1/2
10	257	40	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	41 ⁵ / ₈	4	8	1/2
11	278	31 ¹ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	32 ⁷ / ₈	4	8	1/2
12	303	33 ³ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	35 ³ / ₈	4	8	1/2
13	321	44	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	45 ⁵ / ₈	4	8	1/2
14	337	44 ¹ / ₂	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	46 ¹ / ₈	4	8	1/2
15	430	45	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	46 ⁵ / ₈	4	8	1/2
16	553	54 ¹ / ₄	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	55 ⁷ / ₈	4	8	1/2
17	741	62 ¹ / ₂	8 ⁵ / ₈	12	11 ¹ / ₂	1/2	3/4	64 ¹ / ₈	4	8	1/2
18	1108	61 ⁷ / ₈	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	63 ⁵ / ₈	5	12	1/2
19	1214	70 ⁷ / ₈	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	72 ⁵ / ₈	5	12	1/2
20	1690	83 ⁷ / ₈	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	85 ⁵ / ₈	5	12	1/2
21	1800	93 ⁷ / ₈	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	95 ⁵ / ₈	5	12	1/2
22	2441	118 ³ / ₈	12 ³ / ₄	16	15 ¹ / ₂	5/8	3/4	120 ⁷ / ₈	5	12	1/2

VARIABLE SPRING HANGERS

QUADRUPLE SPRING BE 399



TYPE G

See pages 2 & 3 for typical applications.

*WEIGHT BASED ON 24 INCH CENTER-TO-CENTER DIMENSION

DIMENSIONS (INCHES) • WEIGHTS • LOADS

HANGER SIZE	*WEIGHT APPROX. EACH LBS.	ROD SIZE A	R. H. TH'D. LENGTH	CASING LENGTH B	CASING DIAMETER C	MIN. TH'D. ENGAGEMENT F	ROD TAKE-OUT N	SPACE BETWEEN CHANNELS W	P	Z
0	84	1/2	16	25 1/4	4 1/2	7/8	5/8	5/8	1	1/2
1	86	1/2	16	28 3/4	4 1/2	7/8	5/8	5/8	1	1/2
2	96	1/2	16	31 3/4	4 1/2	7/8	5/8	5/8	1	1/2
3	122	1/2	16	27 3/4	5 9/16	7/8	5/8	3/4	1	1/2
4	142	1/2	16	30 1/4	5 9/16	7/8	5/8	3/4	1	1/2
5	154	1/2	16	33	5 9/16	7/8	5/8	3/4	1	1/2
6	198	5/8	16	32 1/2	6 5/8	1 1/16	9/16	1	1	5/8
7	196	5/8	16	36 1/2	6 5/8	1 1/16	9/16	1	1	5/8
8	230	5/8	16	38 1/4	6 5/8	1 1/16	9/16	1	1	5/8
9	365	3/4	16	35 1/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
10	403	3/4	16	40 1/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
11	477	3/4	16	31 3/8	8 5/8	1 3/16	1 1/16	1 1/4	1 1/2	3/4
12	538	1	17	34 3/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
13	600	1	17	44 7/16	8 5/8	1 1/2	1	1 1/2	1 1/2	1
14	641	1 1/4	18	45 3/16	8 5/8	1 7/8	7/8	1 1/2	1 1/2	1 1/4
15	881	1 1/4	18	45 15/16	8 5/8	1 7/8	7/8	2 1/8	1 1/2	1 1/4
16	1138	1 1/2	18	55 7/16	8 5/8	2 1/4	3/4	2 1/8	1 1/2	1 1/2
17	1515	1 3/4	19	64 1/8	8 5/8	2 5/8	5/8	2 1/8	1 1/2	1 3/4
18	2298	2	19	63 7/8	12 3/4	2 7/8	1 1/8	2 3/8	1	2
19	2661	2 1/4	20	73 1/8	12 3/4	3 1/2	1 1/2	2 5/8	2	2 1/4
20	3736	2 1/2	21	87 1/8	12 3/4	3 7/8	2 1/8	2 7/8	3	2 1/2
21	4160	2 3/4	21	97 3/8	12 3/4	4 1/4	1 5/8	3 1/8	3	2 3/4
22	5692	3	21	122 1/8	12 3/4	3 7/8	2 3/4	3 3/8	3 1/2	3