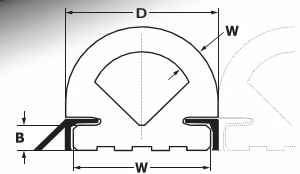
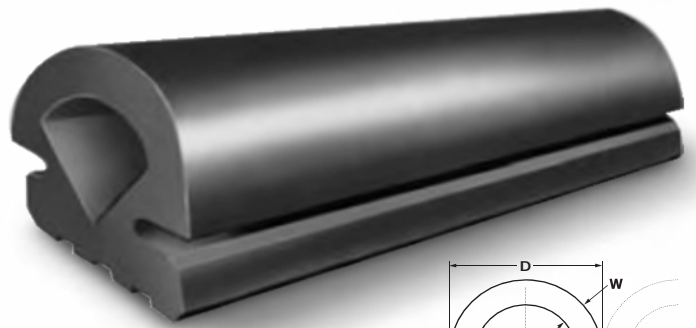


# MARINE FENDERS and DOCK BUMPERS

## FAN NOSE STYLE

For a professional looking D-shaped installation try our fan nose bumper. Held on the vessel, truck or dock in an angle iron channel, no mounting holes are necessary.



Offered in EPDM colors: black and non-marking grey.

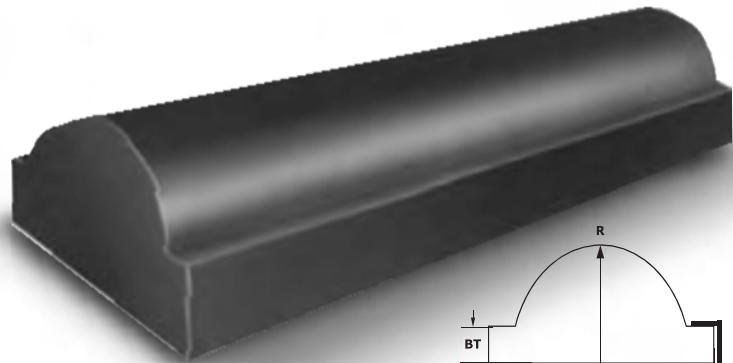


CODE NO.	BASE WIDTH (W)	BASE THICKNESS (BT)	OUTSIDE DIAM. (D)	WALL THICKNESS WT.	WT./FT.	LENGTH UP TO
SDS-503	2 1/2"	17/32"	3"	5/8"	2.5LBS.	60 FT.
SDS-504	3 3/4"	25/32"	4 1/4"	3/4"	4.7LBS.	60 FT.
SDS-506	5 7/16"	1"	6"	1"	9.0LBS.	20 FT.
SDS-508	7 1/4"	13/16"	8"	1 1/2"	15.5 LBS.	20 FT.
SDS-510	9 1/4"	1 11/16"	10"	1 1/2"	24.8 LBS.	20 FT.
SDS-512	11"	2"	12"	2"	28.6 LBS.	20 FT.



## WING TYPE SOLID

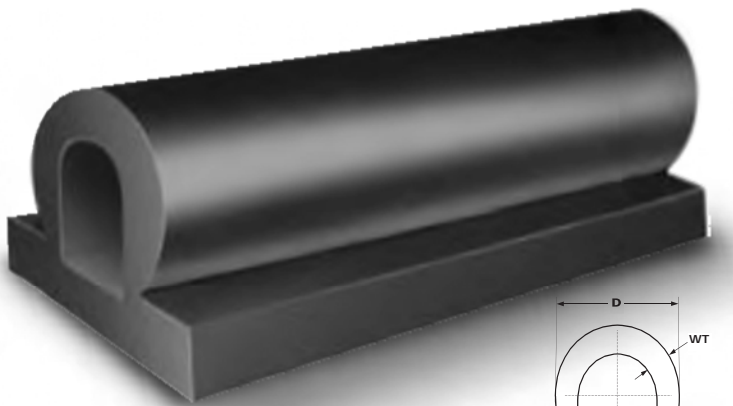
Manufactured in black and non-marking gray EPDM



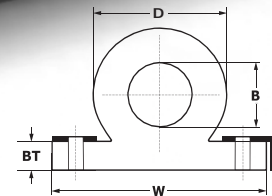
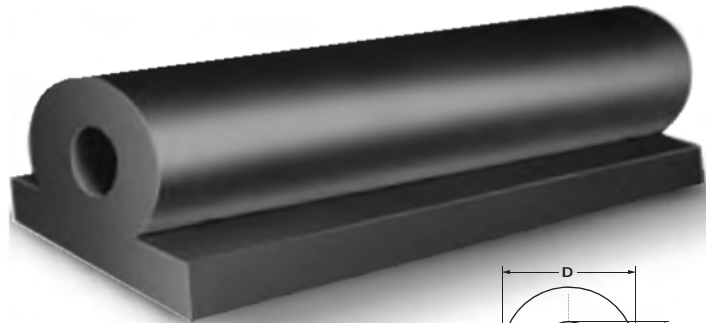
PART NO.	BASE WIDTH (W)	BASE THICKNESS (BT)	RADIUS (R)	WT./FT.	LENGTH UP TO
SDS-460	10"	1 1/4"	4"	14.6	20 FT.

## WING TYPE D-BORE

Manufactured in black and non-marking grey EPDM



CODE NO.	BASE WIDTH (W)	BASE THICKNESS (BT)	OUTSIDE DIAM. (D)	WALL THICKNESS (WT.)	WT./FT.	LENGTH UP TO
SDS-440	9-1/2"	1-1/4"	6"	1"	14.9 LBS.	20 FT.



## WING TYPE O-BORE

Designed for easy attachment to vessels and docks.

Drill and bolt fender to structure using the integral wings.

Eliminates need for mounting holes on the facing. Offered

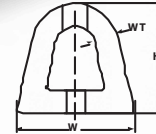
in EPDM colors: black and non-marking grey.

CODENO.	BASE WIDTH (W)	BASE THICKNESS (BT)	OUTSIDE DIAM. (D)	BORE DIAM.	WT./FT.	LENGTH UP TO
SDS-404	4"	1/2"	2 1/2"	1"	3.5 LBS.	60 FT.
SDS-405	5"	1/2"	2 1/2"	1"	4 LBS.	60 FT.
SDS-406	6"	3/4"	3"	1"	5.3 LBS.	60 FT.
SDS-407	6 1/2"	1"	4"	2"	7 LBS.	60 FT.
SDS-408	6 1/2"	1"	4"	1"	8.9 LBS.	60 FT.
SDS-409	9"	1 1/2"	6"	3"	15.3 LBS.	20 FT.
SDS-409A	9"	1 1/2"	6"	2"	17.4 LBS.	20 FT.
SDS-410	9 1/2"	1 1/2"	6"	2"	17.7 LBS.	20 FT.
SDS-412	12"	2"	8"	4"	27 LBS.	20 FT.
SDS-416	16"	2 1/2"	10"	4"	47.5 LBS.	20 FT.
SDS-418	18"	3"	12"	6"	61 LBS.	20 FT.



## TAPERED D-SHAPE / D-BORE

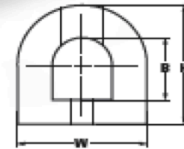
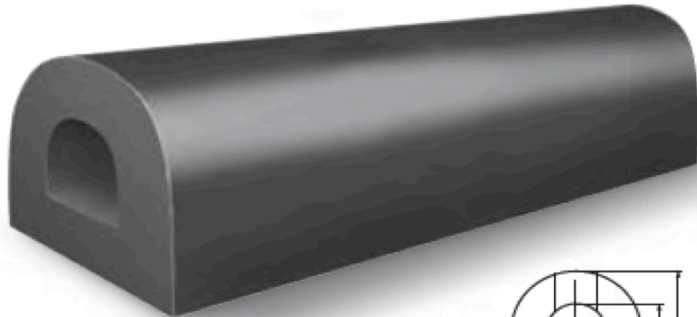
Tapered D-shape offers a slightly different look than the Key-bore cross sections. Also used in marine and industrial applications. Offered in three EPDM colors: black, non-marking grey and white.



PART NO.	BASE WIDTH (W)	HEIGHT (H)	WALL THICKNESS (WT)	WT./FT.	LENGTH UP TO
SDS-101	4 1/4"	3 7/8"	3/4"	4.6 LBS.	60 FT.
SDS-115	4 1/2"	3 3/4"	3/4"	4.7 LBS.	60 FT.
SDS-125	6 3/4"	6"	1 1/2"	13.6 LBS.	20 FT.
SDS-150	9 1/2"	8"	1 1/2"	19.5 LBS.	20 FT.

## D-SHAPED / D-BORE

Square D-shaped, D-bore fenders are designed for general purpose. Mount by drilling an access hole through the top of the D and a base hole through the flat part of the D. Offered in three EPDM colors: black, non-marking grey and white.

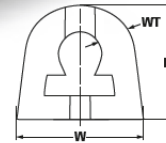
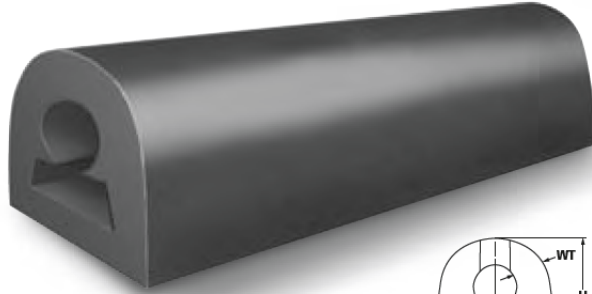


PART NO.	BASE WIDTH (W)	HEIGHT (H)	BORE (B)	WT./FT.	LENGTH UP TO
SDS-954	4"	4"	2" x 2"	6 LBS.	20 FT.
SDS-956	6"	6"	3" x 3"	12.5 LBS.	20 FT.
SDS-958	8"	8"	4" x 4"	22.5 LBS.	20 FT.
SDS-960	10"	10"	5" x 5"	35.1 LBS.	20 FT.
SDS-962	12"	12"	6" x 6"	50.5 LBS.	20 FT.
SDS-964	14"	14"	7" x 7"	72 LBS.	20 FT.



## TAPERED D-SHAPE / KEY BORE

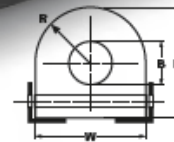
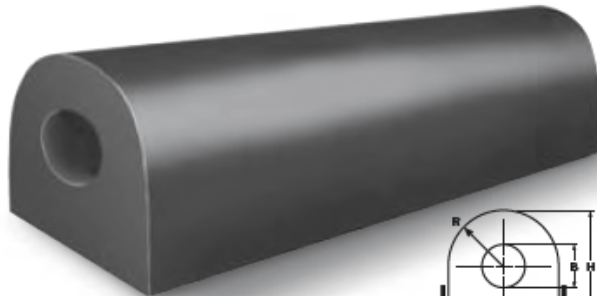
The Duramax® Tapered D-shaped, Key-bore is designed for marine and industrial applications. Provides protection for small vessels, docks, loading docks, trucks and other equipment. Offered in three EPDM colors: black, non-marking grey, and white.



PART NO.	BASE WIDTH (W)	HEIGHT (H)	WALL THICKNESS (WT)	WT./FT.	LENGTH UP TO
SDS-50	2 1/8"	2"	7/16"	1.2 LBS.	60 FT.
SDS-75	3 1/8"	2 7/8"	11/16"	2.6 LBS.	60 FT.
SDS-100	4 1/4"	3 7/8"	3/4"	5.1 LBS.	60 FT.

## D-SHAPED / O-BORE

Great all purpose, rugged D-shaped fenders mount by drilling a through hole across the base. Offered in three EPDM colors: black, non-marking grey and white.



PART NO.	BASE WIDTH (W)	BASE HEIGHT (H)	BORE (B)	RADIUS (R)	WT./FT.	LENGTH UP TO
SDS-906	5"	6"	2 1/2"	2 1/2"	11.7 LBS.	20 FT.
SDS-906A	6"	6"	3"	3"	13 LBS.	20 FT.
SDS-908	8"	8"	3"	4"	26.2 LBS.	20 FT.
SDS-909	8"	10"	3"	4"	34 LBS.	20 FT.
SDS-909B	9 1/4"	10"	3"	5"	40 LBS.	20 FT.
SDS-910	10"	10"	3"	5"	43 LBS.	20 FT.
SDS-910A	10"	10"	4"	5"	41.7 LBS.	20 FT.
SDS-912	12"	12"	4"	6"	66 LBS.	20 FT.
SDS-912A	12"	12"	5"	6"	65 LBS.	20 FT.
SDS-912B	12"	14"	5"	6"	69.6 LBS.	20 FT.
SDS-912C	12"	14"	4"	6"	73.3 LBS.	20 FT.
SDS-914	14"	14"	6"	7"	76.8 LBS.	20 FT.
SDS-914B	14"	12"	6"	7"	60 LBS.	20 FT.
SDS-914C	13.5"	12"	6"	6.75"	60 LBS.	20 FT.



High Performance Black EPDM Compound

Military Specification — MIL-R-3065C, MIL Std 417, Type R, Class RS, Grade 720 A, B, C<sub>1</sub>, F<sub>2</sub>, Z<sub>1</sub>, Z<sub>2</sub>, and Z<sub>3</sub>

ASTM Designation — D-2000 3BA 720A<sub>14</sub>, B<sub>13</sub>, C<sub>12</sub>, F<sub>19</sub>, Z<sub>1</sub>, Z<sub>2</sub>, and Z<sub>3</sub>

Black SBR Compound

Military Specification — MIL-R-3065C, MIL Std 417, Type R, Class RS, Grade 720 A, B, C<sub>1</sub>, F<sub>1</sub>, Z<sub>1</sub>, Z<sub>2</sub>, and Z<sub>3</sub>

ASTM Designation — D-2000 4AA 720 A<sub>13</sub>, B<sub>13</sub>, C<sub>12</sub>, EA<sub>14</sub>, F<sub>17</sub>, Z<sub>1</sub>, and Z<sub>2</sub>

Non-Marking Gray EPDM Compound

ASTM Designation — D-2000 3BA710A<sub>14</sub>, C<sub>12</sub>, F<sub>19</sub>, Z<sub>1</sub>, Z<sub>2</sub>, Z<sub>3</sub>, and Z<sub>4</sub>

PROPERTY	TEST METHOD	BLACK EPDM	BLACK SBR	GRAY EPDM
Min. Tensile Strength	ASTM D-412	2000 PSI	2000 PSI	1000 PSI
Min. Elongation	ASTM D-412	300%	300%	200%
Hardness-Shore A Durometer	ASTM D-412	70 ± 5	70 ± 5	70 ± 5
Modulus @ 400% Elongation	ASTM D-412	900 PSI Min.	900 PSI Min.	300 PSI Min.
Heat Resistance	ASTM D-573 A <sub>14</sub> 70 h @ 212°F A <sub>13</sub> 70 h @ 158°F			
	Max. Change in Hardness	+ 10 Pts.	+ 10 Pts.	+ 10 Pts.
	Max. Change in Tensile	- 25%	- 25%	- 25%
	Max. Change in Ultimate Elongation	- 25%	- 25%	- 25%
Compression Set	ASTM D-395 Method B B <sub>13</sub> & Z <sub>4</sub> 22 h @ 158°F	25% Max.	25% Max.	50% Max.
Ozone Resistance	ASTM D-1171 C <sub>12</sub> 100°F @ 50 pphm	No Cracks	No Cracks	No Cracks
Water Resistance	ASTM D-471 EA <sub>14</sub> 70 h @ 212°F Z <sub>3</sub> 166 h @ 212°F	10% Max. Swell	10% Max. Swell	10% Max. Swell
Low Temperature Brittleness	ASTM D-2137 Method A, 9.3.2 F <sub>17</sub> Non-brittle after 3 min. @ - 40°F F <sub>19</sub> Non-brittle after 3 min. @ - 67°F	Passes	Passes	Passes
Load Deflection	ASTM D-575 Method A Z <sub>1</sub> 20% Deflection	300 ± 70 PSI	300 ± 70 PSI	250 ± 70 PSI
Tear Resistance	ASTM D-624 Z <sub>2</sub> Die B	200 PPI Min.	200 PPI Min.	150 PPI Min.