

## LSES Lag Screw Expansion Shield

### LSES Product Data and Tension Loads in Normal-Weight Concrete

Item No.	Size (in)	Drill Bit Dia. (in)	Embed Depth (in)	Allowable Tension Load (lbs) $f'c \geq 3000$ psi	Quantity	
					Box	Price/100
MLSS14	1/4 Short	1/2	1	90	100	22.38
MLSS516	5/16 Short	1/2	1 1/4	100	100	31.00
MLSS38	3/8 Short	5/8	1 3/4	220	50	50.00
MLSS12	1/2 Short	3/4	2	250	25	83.00
MLSL14	1/4 Long	1/2	1 1/2	120	50	27.50
MLSL516	5/16 Long	1/2	1 3/4	150	50	32.10
MLSL38	3/8 Long	1/2	1 1/2	120	50	70.00
MLSL12	1/2 Long	3/4	3	310	25	87.50



MLSL



MLSS

1. The allowable loads listed are based on a safety factor of 4.0
2. The minimum concrete thickness is 1 1/2 times the embedment depth.
3. Screw is not included.

## SMSA/DMSA Machine Screw Anchors

### SMSA Product Data

Item No.	Bolt (dia-threads per inch)	Drill Bit Dia. (in)	Embed Depth (in)	Quantity	
				Box	Price/100
MSE14	1/4 - 20	1/2	1 3/8	100	50.00
MSE516	5/16 - 18	5/8	1 5/8	100	78.80
MSE38	3/8 - 16	5/8	1 5/8	50	84.20
MSE12	1/2 - 13	7/8	2 1/2	25	146.90



MSE



MDE

### DMSA Product Data and Tension and Shear Loads in Normal-Weight Concrete

Item No.	Bolt (dia-threads per inch)	Drill Bit Dia. in.	Embed Depth (in.)	Critical Edge Dist. in (mm)	Tension Load			Quantity	
					$f'c \geq 3000$ psi (20.7) MPa	$f'c \geq 4000$ psi (27.6) MPa	$f'c \geq 3000$ psi (20.7) MPa	Box	Price/100
					Allowable lbs. (kN)	Allowable lbs. (kN)	Allowable lbs. (kN)		
MDE14	1/4 - 20	1/2	1 1/2 (38)	3 (76)	265 (1.2)	305 (1.4)	370 (1.6)	100	42.70
MDE516	5/16 - 20	5/8	1 3/4 (44)	3 1/2 (89)	290 (1.3)	335 (1.5)	690 (3.1)	100	76.00
MDE38	3/8 - 16	3/4	2 1/4 (57)	4 1/2 (114)	765 (3.4)	920 (4.1)	1,300 (5.8)	50	111.00
MDE12	1/2 - 13	7/8	2 3/4 (70)	5 1/2 (140)	765 (3.4)	920 (4.1)	1,770 (7.9)	25	201.40

1. The allowable loads listed are based on a safety factor of 4.0
2. 100% of the allowable load is permitted at critical edge distance. No reduction in edge distance is allowed.
3. The minimum concrete thickness is 1 1/2 times the embedment depth.
4. Machine bolt is not included.