

PRECISION QUALITY  
STYLE "E"  
MULTIPLE RATIOS

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

**> MATERIAL:**

- Housing** - Aluminum Alloy, Black Anodized
- Shafts - Input** - Carbon Steel, Integral with Worm  
**Output** - Mild Steel
- Gears - Worm** - Hardened Carbon Steel with  
Polished Right-Hand Threads
- Worm Wheel** - Phosphor Bronze
- Bearings - Input** - Precision Ball  
**Output** - Self-Lubricating

**> LUBRICATION:**

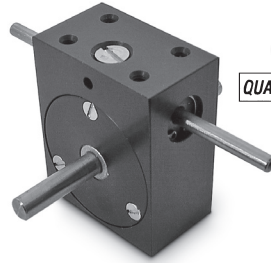
Packed with grease at assembly having temperature range of -20°C to +150°C.

**> SPECIFICATIONS:**

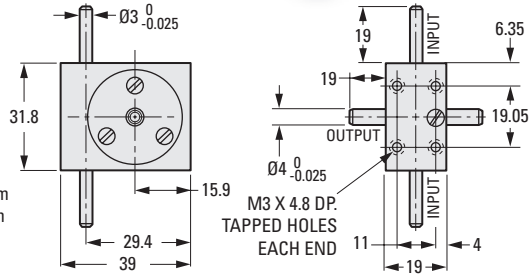
- Input Speed:** 6000 rpm Max.
- Backlash at Output:** 0°30'
- Torque:**
- Max. starting torque at input shaft:**  $5 \times 10^{-4} \text{ N} \cdot \text{m}$
- Max. cont. output torque @ 1800 rpm:**  $0.51 \text{ N} \cdot \text{m}$

**> WEIGHT:**

0.08 kg



**QUALITY CLASS**



The projections shown are per ISO convention.

**METRIC COMPONENT**

Catalog Number	Ratio to 1
A 2Z17ME0080	8
A 2Z17ME0100	10
A 2Z17ME0125	12.5
A 2Z17ME0166	16.67
A 2Z17ME0200	20
A 2Z17ME0250	25
A 2Z17ME0300	30
A 2Z17ME0500	50
A 2Z17ME0600	60
A 2Z17ME0800	80

**NOTE:**

Also available in other styles where special shaft diameters or extensions are required. These speed reducers are available with anti-backlash gears. Input speed, however, is limited to 3000 rpm with a maximum continuous output torque of  $0.009 \text{ N} \cdot \text{m}$ . Maximum starting torque at input shaft is  $60 \times 10^{-4} \text{ N} \cdot \text{m}$ .

PRECISION QUALITY

STYLE "E"

MULTIPLE RATIOS

INPUT SPEEDS UP TO 6000 rpm

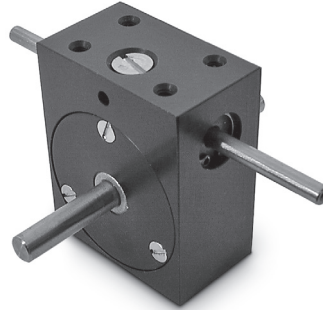
PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



QUALITY CLASS

### › MATERIAL:

- Housing** - Aluminum Alloy, Black Anodized
- Shafts - Input** - Carbon Steel, Integral with Worm
- Output** - Mild Steel
- Gears - Worm** - Hardened Carbon Steel with Polished Right-Hand Threads
- Worm Wheel** - Phosphor Bronze
- Bearings - Input** - Precision Ball Bearings
- Output** - Self-Lubricating Bearings



### › LUBRICATION:

Packed with grease at assembly having temperature range of -20°C to +150°C.

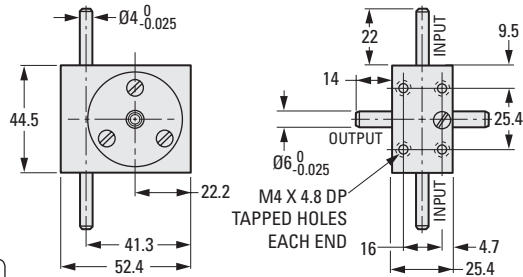
### › SPECIFICATIONS:

- Input Speed:** 6000 rpm Max.
- Backlash at Output:** 0°30'
- Torque:**
- Max. starting torque at input shaft:**  $12 \times 10^{-4}$  Nm
- Max. cont. output torque @ 1800 rpm:** 1.47 Nm

### › WEIGHT:

0.2 kg

Other ratios are available on special order.



The projections shown are per ISO convention.

### NOTE:

Also available in other styles where special shaft diameters or extensions are required. These speed reducers are available with anti-backlash gears. Input speed, however, is limited to 3000 rpm with a maximum continuous output torque of 0.17 Nm. Maximum starting torque at input shaft is  $250 \times 10^{-4}$  Nm.

### METRIC COMPONENT

Catalog Number	Ratio to 1
A 2Z18ME0080	8
A 2Z18ME0100	10
A 2Z18ME0120	12
A 2Z18ME0150	15
A 2Z18ME0160	16
A 2Z18ME0200	20
A 2Z18ME0320	32
A 2Z18ME0360	36
A 2Z18ME0480	48
A 2Z18ME0500	50
A 2Z18ME0600	60
A 2Z18ME1000	100

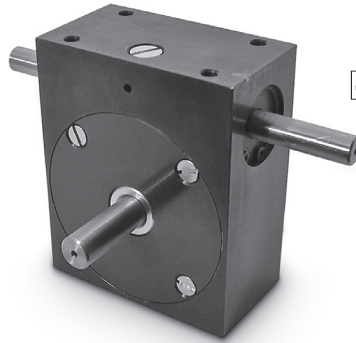


PRECISION QUALITY  
STYLE "E"  
MULTIPLE RATIOS

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



QUALITY CLASS



**› MATERIAL:**

- Housing** - Aluminum Alloy, Black Anodized
- Shafts - Input** - Carbon Steel
- Output** - Mild Steel
- Gears - Worm** - Hardened Carbon Steel with Polished Right-Hand Threads
- Worm Wheel** - Phosphor Bronze
- Bearings - Input** - Precision Ball
- Output** - Self-Lubricating

**› LUBRICATION:**

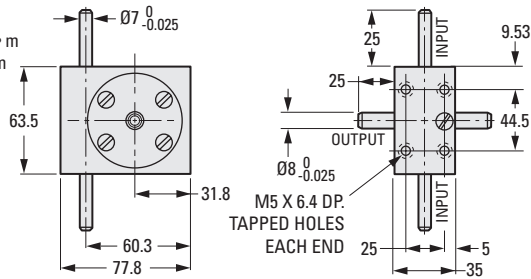
Packed with grease at assembly having temperature range of -20°C to +150°C.

**› SPECIFICATIONS:**

- Input Speed:** 6000 rpm Max.
- Backlash at Output:** 0°30'
- Torque:**
- Max. starting torque at input shaft:**  $80 \times 10^{-4} \text{ N} \cdot \text{m}$
- Max. cont. output torque @ 1800 rpm:**  $4.41 \text{ N} \cdot \text{m}$

**› WEIGHT:**

0.6 kg



The projections shown are per ISO convention.

**METRIC COMPONENT**

Catalog Number	Ratio to 1
A 2Z19ME0060	6
A 2Z19ME0100	10
A 2Z19ME0200	20
A 2Z19ME0250	25
A 2Z19ME0300	30
A 2Z19ME0360	36
A 2Z19ME0500	50
A 2Z19ME0700	70
A 2Z19ME1000	100

**NOTE:**

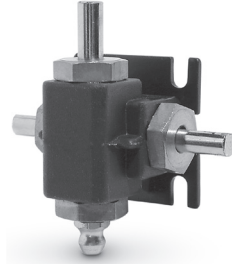
Also available in other styles where special shaft diameters or extensions are required. These speed reducers are available with anti-backlash gears. Input speed, however, is limited to 3000 rpm with a maximum continuous output torque of  $0.29 \text{ N} \cdot \text{m}$ . Maximum starting torque at input shaft is  $1225 \times 10^{-4} \text{ N} \cdot \text{m}$ .

# RIGHT ANGLE HELICAL GEAR SPEED REDUCERS

# SDP/SI

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM

MULTIPLE RATIOS  
 RATED SPEEDS UP TO 1800 RPM  
 BASE-MOUNTED  
 LIGHT-DUTY



**> MATERIAL:**

**Housing and Base** - Aluminum Alloy, Black Anodized  
**Gears** - Hardened Steel Helical  
**Shafts** - Steel-Plated

**> SPECIFICATIONS:**

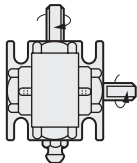
**Backlash:** 3° Nominal  
 8° Including End Play

**> APPROX. WEIGHT:**

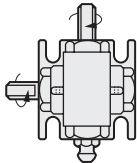
113 grams

For 1:1 ratio, any shaft may be used as input.

Output Power @ 1800 rpm Input		
Duty	From 1:1 to 5:1 Ratio	From 10:1 to 25:1 Ratio
Intermittent	93W (1/8 HP)	62W (1/12 HP)
Continuous	50W (1/15 HP)	37W (1/20 HP)

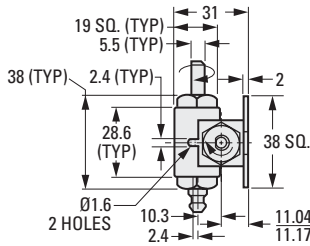


2RR SERIES



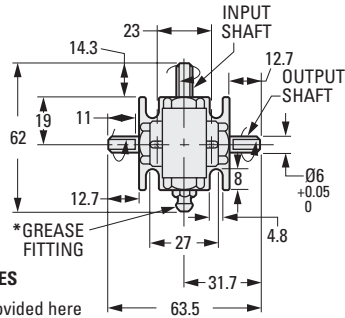
2SR SERIES

The projections shown are per ISO convention.



3DR SERIES

\*Shaft extension may be provided here in lieu of grease fitting (special item).



**METRIC COMPONENT**

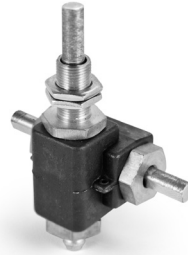
Catalog Number	Shaft Extension	Gear Ratio	Torque Capacity N • m		
			Ultimate Static	Manual	Dynamic
A 2222M3DR0106	Left & Right	1:1	4	3.2	0.5
A 2222M2SR0106	Left	1:1	4	3.2	0.5
A 2222M2RR0106	Right	1:1	4	3.2	0.5
A 2222M3DR0206	Left & Right	2:1	4	3.2	0.5
A 2222M2SR0206	Left	2:1	4	3.2	0.5
A 2222M2RR0206	Right	2:1	4	3.2	0.5
A 2222M3DR0306	Left & Right	3:1	4	3.2	0.5
A 2222M2SR0306	Left	3:1	4	3.2	0.5
A 2222M2RR0306	Right	3:1	4	3.2	0.5
A 2222M3DR0406	Left & Right	4:1	4	3.2	0.5
A 2222M2SR0406	Left	4:1	4	3.2	0.5
A 2222M2RR0406	Right	4:1	4	3.2	0.5
A 2222M3DR0506	Left & Right	5:1	4	3.2	0.5
A 2222M2SR0506	Left	5:1	4	3.2	0.5
A 2222M2RR0506	Right	5:1	4	3.2	0.5
A 2222M3DR1006	Left & Right	10:1	2.8	2.3	0.35
A 2222M2SR1006	Left	10:1	2.8	2.3	0.35
A 2222M2RR1006	Right	10:1	2.8	2.3	0.35
A 2222M3DR1506	Left & Right	15:1	2.8	2.3	0.35
A 2222M2SR1506	Left	15:1	2.8	2.3	0.35
A 2222M2RR1506	Right	15:1	2.8	2.3	0.35
A 2222M3DR2506	Left & Right	25:1	2.8	2.3	0.35
A 2222M2SR2506	Left	25:1	2.8	2.3	0.35
A 2222M2RR2506	Right	25:1	2.8	2.3	0.35

# RIGHT ANGLE HELICAL GEAR SPEED REDUCERS



MULTIPLE RATIOS  
 RATED SPEEDS UP TO 1800 RPM  
 PANEL-MOUNTED  
 LIGHT-DUTY

PHONE: 516.328.3300 • FAX: 516.326.8827 • WWW.SDP-SI.COM



**> MATERIAL:**

- Housing and Base - Aluminum Alloy, Black Anodized
- Gears - Hardened Steel Helical
- Shafts - Steel-Plated

**> SPECIFICATIONS:**

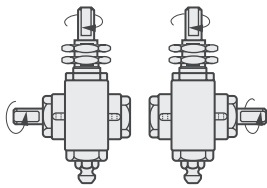
- Backlash: 3° Nominal
- 8° Including End Play

**> APPROX. WEIGHT:**

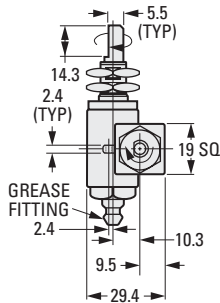
113 grams

For 1:1 ratio, any shaft may be used as input.

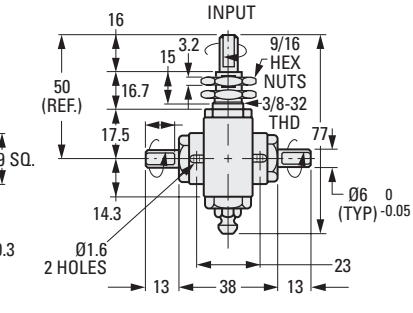
The projections shown are per ISO convention.



2SR SERIES 2RR SERIES



Output Power @ 1800 rpm Input		
Duty	From 1:1 to 5:1 Ratio	From 10:1 to 25:1 Ratio
Intermittent	93W (1/8 HP)	62W (1/12 HP)
Continuous	50W (1/15 HP)	37W (1/20 HP)



3DR SERIES

**METRIC COMPONENT**

Catalog Number	Shaft Extension	Gear Ratio	Torque Capacity N • m		
			Ultimate Static	Manual	Dynamic
A 2223M3DR0106	Left & Right	1:1	4	3.2	0.5
A 2223M2SR0106	Left	1:1	4	3.2	0.5
A 2223M2RR0106	Right	1:1	4	3.2	0.5
A 2223M3DR0206	Left & Right	2:1	4	3.2	0.5
A 2223M2SR0206	Left	2:1	4	3.2	0.5
A 2223M2RR0206	Right	2:1	4	3.2	0.5
A 2223M3DR0306	Left & Right	3:1	4	3.2	0.5
A 2223M2SR0306	Left	3:1	4	3.2	0.5
A 2223M2RR0306	Right	3:1	4	3.2	0.5
A 2223M3DR0406	Left & Right	4:1	4	3.2	0.5
A 2223M2SR0406	Left	4:1	4	3.2	0.5
A 2223M2RR0406	Right	4:1	4	3.2	0.5
A 2223M3DR0506	Left & Right	5:1	4	3.2	0.5
A 2223M2SR0506	Left	5:1	4	3.2	0.5
A 2223M2RR0506	Right	5:1	4	3.2	0.5
A 2223M3DR1006	Left & Right	10:1	2.8	2.3	0.35
A 2223M2SR1006	Left	10:1	2.8	2.3	0.35
A 2223M2RR1006	Right	10:1	2.8	2.3	0.35
A 2223M3DR1506	Left & Right	15:1	2.8	2.3	0.35
A 2223M2SR1506	Left	15:1	2.8	2.3	0.35
A 2223M2RR1506	Right	15:1	2.8	2.3	0.35
A 2223M3DR2506	Left & Right	25:1	2.8	2.3	0.35
A 2223M2SR2506	Left	25:1	2.8	2.3	0.35
A 2223M2RR2506	Right	25:1	2.8	2.3	0.35

1

R

T

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

A