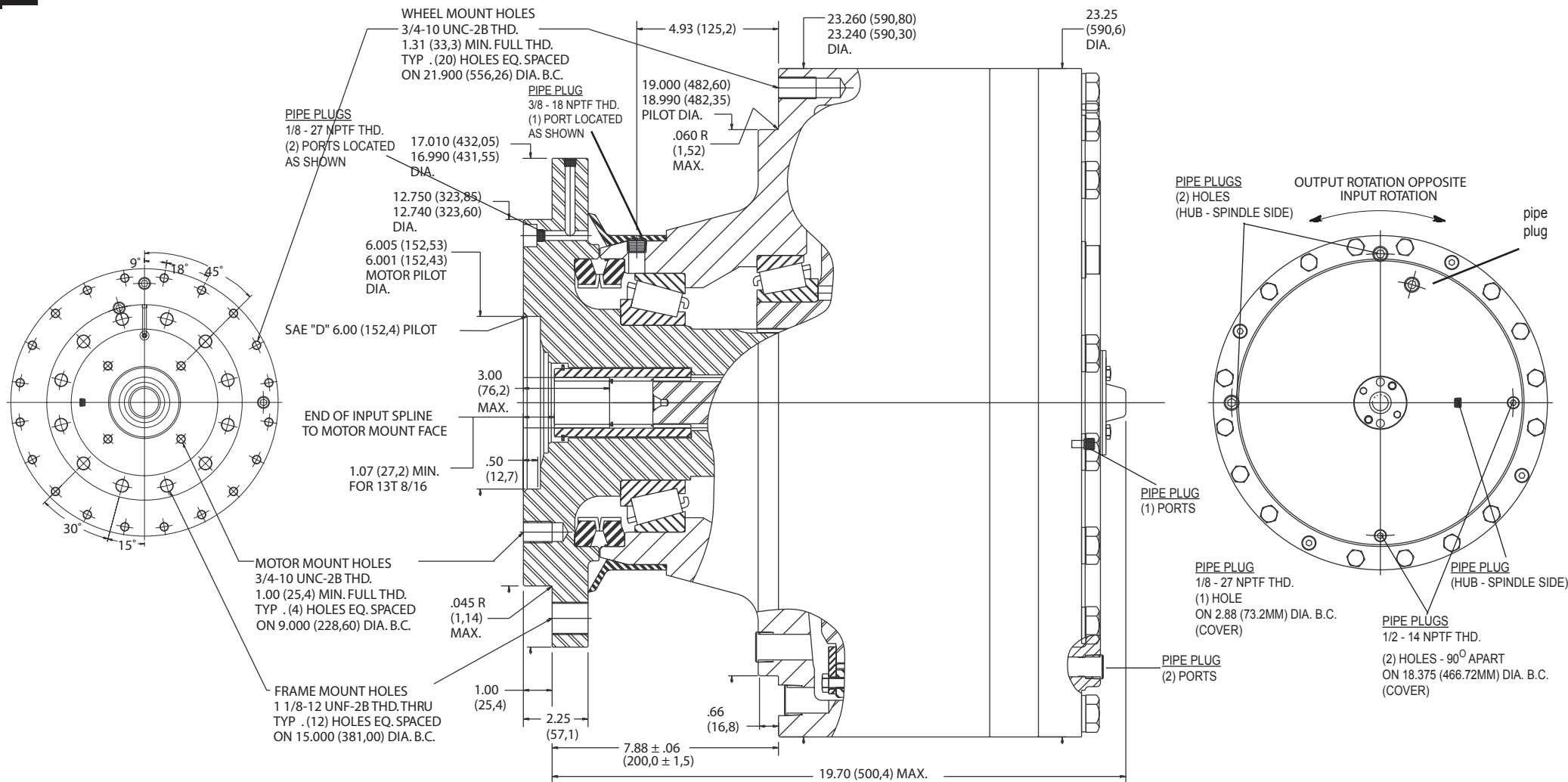


# W20D1 Application Sheet

**TORQUE-HUB**  
Planetary Final Drives



**oerlikon**  
fairfield

Catalog prints are representative of the units.  
Before final design request a certified print from Fairfield.

NOTE: MM SHOWN IN ( )  
MOTOR CAVITY DIMENSIONS VARY WITH MODEL

OTHER MODELS ALSO AVAILABLE  
FAIRFIELD BRAKE AVAILABLE

## W20D1

### Performance Data

Continuous	Intermittent	Peak
250,000 lb-in	500,000 lb-in	Contact Fairfield
20,833 lb-ft	41,667 lb-ft	
28,227 Nm	56,453 Nm	
2,880 kg-m	5,760 kg-m	

For ultimate torque and horsepower capacities, contact a Torque-Hub® representative.

### Speed Limitations

**Input Speed:** 1,500-1,800 RPM Maximum Intermittent

### Weight

**Approximately** 1,250 lbs (563 kg)

Note: Specific models will change weights.

### W20D1 Model Formula

### Oil

Fill to half full with 90 weight gear lube with EP additive on most applications.

**Approximate Volume** 256 oz. (7,573 cm<sup>3</sup>)

Note: Oil level and type will vary with specific model and application.

### Conditions of Bearing Curve

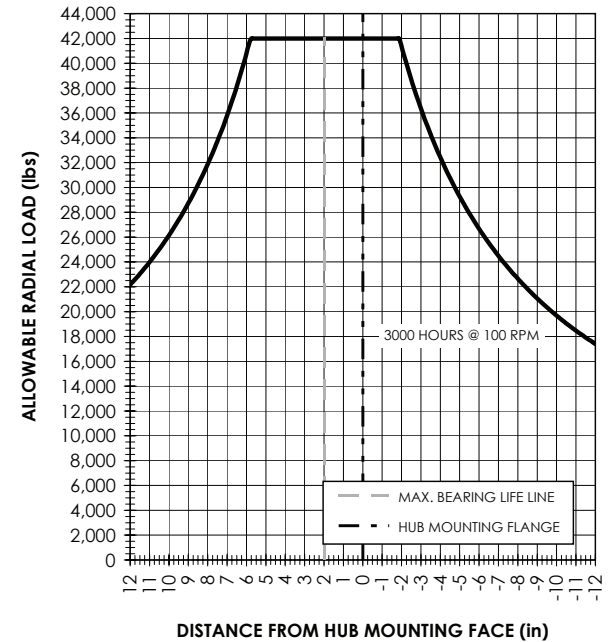
**Life** = 3,000 hours B-10

**Speed** = 100 RPM output

To adjust for loads and speeds other than shown on curve:

$$\text{Adjusted Life (hrs)} = 3,000 \left( \frac{100 \text{ RPM}}{\text{Speed (Adjusted)}} \right) \times \left( \frac{\text{Load (Curve)}}{\text{Load (Adjusted)}} \right)^{10/3}$$

### Bearing Curve



W 20 D1 0 9 5 115 -

**W** – Torque-Hub® Wheel Drive

**20** – Series

Spindle				Hub	
Motor Mount	Flange Mounting Dia.	Motor B.C.	Frame B.C.	Mounting Dia.	Flange B.C.
D1	SAE "D"	(4) 3/4-10 9.000 B.C.	(12) 1 1/8-12 15.000 B.C.	23.260 23.240	(20) 3/4-10 21.900 B.C.

S.A.E. "C" model available. Please contact Fairfield.

**æerlikon**  
**fairfield**

Fairfield Manufacturing Company, Inc.

First in Custom Gears and Drive Systems

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### Options

**0** – Blank  
**Z** – Seal Boot

### Internal Gear

**4** – Reduction 26:1 & 53:1  
**5** – Reduction 36:1 & 61:1  
**9** – Reduction 85:1 & 115:1

### Input

**4** – 14T, 12/24 Spline  
**5** – 13T, 8/16 Spline

### Special Features

**X** – Coupling Subassembly with Antisengage Spacer

### Reduction

**26** – 26.2:1  
**36** – 36.6:1  
**53** – 53.1:1  
**61** – 61.2:1  
**85** – 85.3:1  
**115** – 115.3:1