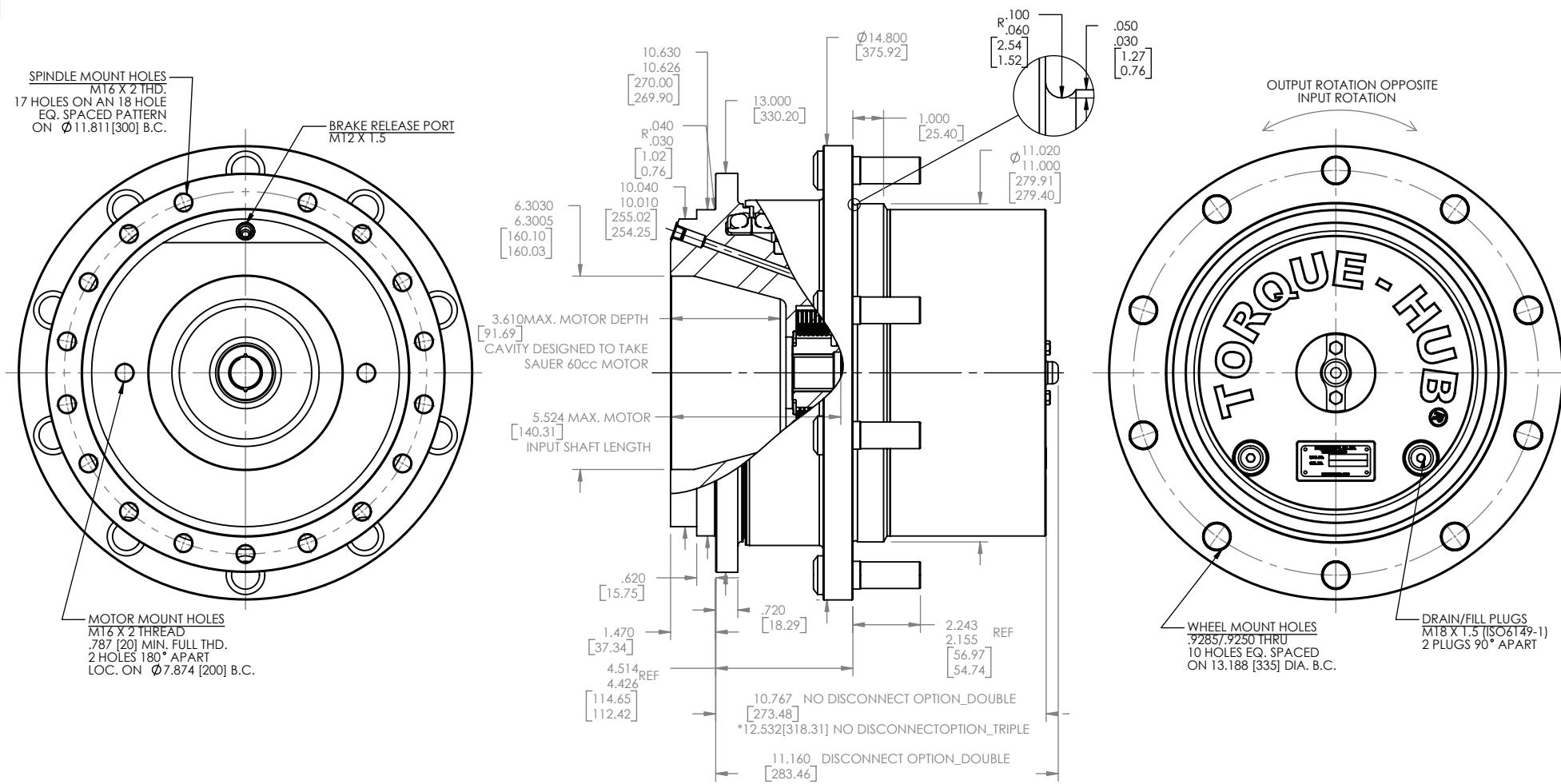


Series

# 18HPA2 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

## 18HPA2

### Performance Data

Continuous	Intermittent	Peak
9,000 Nm	18,000 Nm	Contact Fairfield
79,650 lb-in	159,300 lb-in	

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

### Speed Limitations

Input Speed: 5,000 RPM Maximum Intermittent

### Weight

Approximately: 255 lbs (116 kg)

### Model Formula

18 – 18000 Series Torque Hub

#### Output

H – Hub

#### Motor Input

P – Cartridge Motor

**æerlikon**  
**fairfield**

Fairfield Manufacturing Company, Inc.  
First in Custom Gears and Drive Systems

www.fairfieldmfg.com

#### Spindle Brake

- A – Integral 5000 lb-in [565 Nm]
- B – Integral 4250 lb-in [480 Nm]
- C – Integral 3400 lb-in [385 Nm]
- D – Integral 2940 lb-in [332 Nm]
- X – Empty Brake Cavity

#### Motor Cavity

2 - Saurer 51 Series 60cc

### Oil

Fill to half full with EP-90 oil on most applications.

Approximate Volume: 50 oz. (1,479 cm<sup>3</sup>)

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

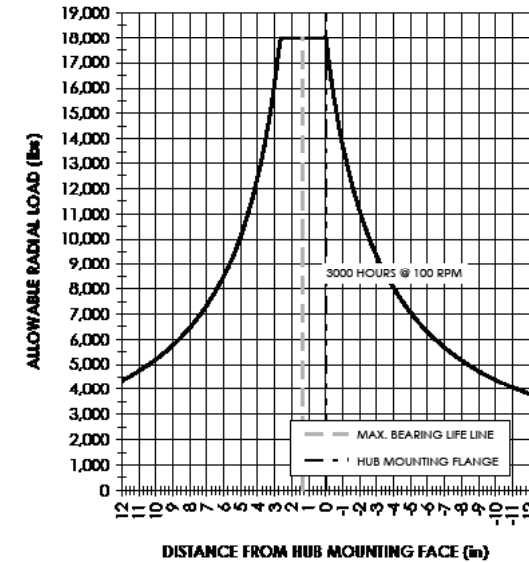
### Conditions of Bearing Curve

Life = 3,000 hours B-10  
Speed = 100 RPM output

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

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

### Bearing Curve



18 H P A 2 1 0 A 0 G 0 048

Reduction	
015	– 14.88:1
018	– 17.97:1
021	– 21.14:1
025	– 24.92:1
029	– 29.24:1
036	– 35.92:1
041	– 40.84:1
048	– 47.60:1
057	– 57.49:1
079	– 78.99:1 (T)
099	– 98.61:1 (T)
121	– 120.60:1 (T)

Options	
0	– None
Z	– Seal Boot

Disengage  
0 – None  
G – Disengage

Special Option  
0 – None

Input Splines  
A – W30 x 2 x 14x 9g

Studs  
0 – None  
H – M22 x 1.5 – 6g by 80.5mm

Flange	B.C.	Mounting	B.C.
Mtg. Dia.		Dia.	
10.630 270.00	(17 on 18 hole pattern)	11.020 279.91	(10) .929/.925 THRU
10.626 269.90	M16 x 2 Thread	11.000 279.40	on 13.187 [335] B.C.
	on 11.811 [300] B.C.		