TECHNICAL SHEET

DYNAFOR® EXPERT

Wireless digital dynamometer

Ref.: T-4126
Revision: 0
Date: 12/2021

The Dynafor® Expert, designed and manufactured by Tractel, is a wireless digital dynamometer, used in high precision applications. With its unique design, it allows to reach extreme precision.

Based on the principle of strain gauge extension measurement, the sensor generates an electrical signal which is processed and analyzed by a built-in microprocessor, which transmits the information to a wireless accessory.

Equipped with radio 2.4 GHz (RF) and Bluetooth (BLE) chipsets available all time, the Dynafor® Expert provides a wireless range of:

- 1,300 ft. (400 m) to Tractel Dynafor® HHD, large displays AL128 and software accessories
- 100 ft. (30 m) to any smartphone equipped with our free Dynafor® app on iOS or Android

Compatible with standard bow and clevis shackles, the Dynafor® Expert ensures a perfect implementation in your applications.

APPLICATIONS

- Overhead weighing
- Force measurement testing
- Towing applications
- Safety and lifting applications
- Load balancing
- Research and development projects
- Load monitoring on lifting equipments

ACCESSORIES

The Dynafor® Expert offers a large array of wireless accessories and softwares:

- Dynafor® HHD for a remote display with extended functionalities
- Wireless Dynafor® AL128 for a high visibility display
- Loader software to unload data saved into the Dynafor® HHD
- Monitoring software, in use with Dynafor® HHD for real-time monitoring
- Dynafor® application available on any iOS and Android device
- Dynafor® DMU for threshold management
- Standard bow and clevis shackles

From 1,000 to 20,000 lb. (0,5 to 10 t)

RF up to 1,300 ft. (400 m)

Up to 100 ft. (30 m)

0.1% accuracy

3 x AA batteries

IP64 Water resistant

APPLICABLE STANDARDS

- Machinery
  - 2006/42/CE
- Radio
  - RED 2014/53/UE
  - EN300440 V2.1.1
  - EN300328 V2.2.2
  - ETSI 203367 V1.1.0
- Health
  - EN62479 (2010)
- EMC
  - EN61326-1 (2013)
  - EN301 489- 1 & 17 Part 1 V2.2.3 and Part 17 V3.1.1
- Electrical safety
  - IEC/EN61010-1 (Amd 1 Ed 3)
- UL and CSA approval
  - FCC part 15
  - RSS-GEN and RSS-210
  - CES-003

Specifications are subject to change without notice. Images are for illustrative purposes only.

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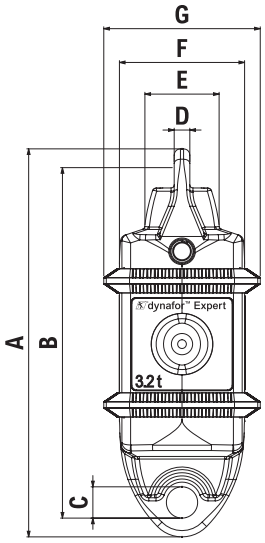
TECHNICAL CHARACTERISTICS



MODEL		Expert 0.5 t	Expert 1 t	Expert 2 t	Expert 3.2 t	Expert 5 t	Expert 6.3 t	Expert 10 t
CODE		293299	293309	293319	293329	293339	293349	293359
EAN CODE		3600232932994	3600232933090	3600232933199	3600232933298	3600232933397	3600232933496	3600232933595
MAXIMUM CAPACITY		1,000 lb. (0.5 t)	2,000 lb. (1 t)	4,000 lb. (2 t)	6,400 lb. (3.2 t)	10,000 lb. (5 t)	12,600 lb. (6.3 t)	20,000 lb. (10 t)
TEST LOAD		1,500 lb. (0.75 t)	3,000 lb. (1.5 t)	6,000 lb. (3 t)	9,600 lb. (4.8 t)	15,000 lb. (7.5 t)	19,200 lb. (9.6 t)	30,000 lb. (15 t)
MINIMUM CHARGE		10% of maximum capacity						
SAFETY COEFFICIENT		Minimum 4						
PRECISION		0.1% at 70°F (21°C) full scale (IP 67 = 0.2%)						
		1 lb. (0.5 kg)	2 lb. (1 kg)	4 lb. (2 kg)	6.4 lb. (3.2 kg)	10 lb. (5 kg)	12.6 lb. (6.3 kg)	20 lb. (10 kg)
RESOLUTION		0.2 lb. (0.1 kg)	0.4 lb. (0.2 kg)	1 lb. (0.5 kg)	1 lb. (0.5 kg)	2 lb. (1 kg)	2 lb. (1 kg)	4 lb. (2 kg)
MAXIMUM DISPLAY		110% of maximum capacity						
CONVERSION FACTOR		1 kg = 0.98083 daN = 2.20462 lb.						
AUTONOMY		From 300 to 1,000 hours depending on usage						
BATTERIES		3 x AA						
WEIGHT		5.1 lb. (2.3 kg)				7.4 lb. (3.35 kg)		14.2 lb. (6.45 kg)
RF TECHNOLOGY		2.4 GHz proprietary, range up to 1,300 ft. (400 m) in open field						
BLUETOOTH TECHNOLOGY		BLE 4.0 range up to 100 pi (30 m) in open field						
OPERATING TEMPERATURE		-4°F to 120°F (-20°C to 50°C)						
SAMPLE RATE		4 Hz, up to 32 Hz in “Peak Hold”						
IP PROTECTION		IP 64 (IP 67 in option)						
SENSOR HEAD MATERIAL		Steel						
SENSOR BODY MATERIAL		Aluminium						Steel
DIMENSIONS	A	9 49/64 in. (248 mm)				11 27/64 in. (290 mm)		1 11/32 in. (341 mm)
	B	8 13/16 in. (224 mm)				10 in. (254 mm)		10 in. (296 mm)
	C	Ø 25/32 in. (Ø20 mm)				1 7/64 in. (Ø28 mm)		1 37/64 in. (Ø40 mm)
	D	25/64 in. (10 mm)				5/8 in. (16 mm)		25/32 in. (20 mm)
	E	15/16 in. (24 mm)				1 3/8 in. (35 mm)		2 1/8 in. (54 mm)
	F	3 5/32 in. (80 mm)						
	G	3 15/16 in. (100 mm)						

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