TECHNICAL SHEET

DYNAFOR® PRO

Wireless digital dynamometer

Ref.: T-4129
Revision: 0
Date: 12/2021

The Dynafor® Pro, designed and manufactured by Tractel, is a versatile and robust wireless digital dynamometer, used in various weighing and force measurement applications.

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, the Dynafor® Pro 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 smartdevice equipped with our free Dynafor® app on iOS or Android

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

APPLICATIONS

- Overhead weighing
- Force measurement testing
- Water bag load testing
- Towing applications
- Safety and lifting applications
- Heavylift projects
- Research and development projects
- Load monitoring on lifting equipments

ACCESSORIES

The Dynafor® Pro offers a large array of wireless accessories and software:

- 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 HHD
- Monitoring software, in use with HHD for real-time monitoring
- Dynafor® app available on any iOS and Android device
- Dynafor® DMU for threshold management
- Standard bow shackle and swivel hooks

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

From 2,000 to 500,000 lb. (1 to 250 t)

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

Up to 100 ft. (30 m)

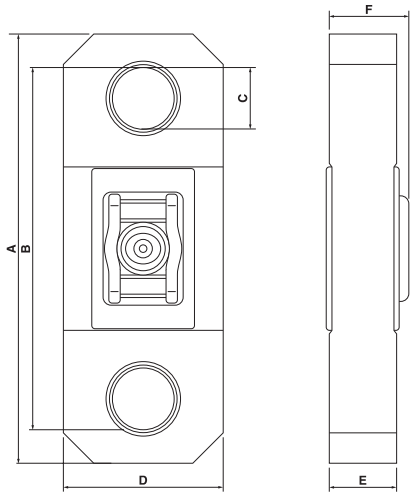
0.2% accuracy

3 x AA batteries

IP64 Water resistant

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

TECHNICAL CHARACTERISTICS



MODEL		Pro 1 t	Pro 3.2 t	Pro 6.5 t	Pro 15 t	Pro 25 t	Pro 50 t	Pro 100 t	Pro 250 t
CODE		293369	293379	293389	293399	293409	293419	293429	293439
EAN CODE		3600232933694	3600232933892	3600232933793	3600232933991	3600232934097	3600232934196	3600232934295	3600232934394
MAXIMUM CAPACITY		2,000 lb. (1 t)	6,400 lb. (3.2 t)	13,000 lb. (6.5 t)	30,000 lb. (15 t)	50,000 lb. (25 t)	100,000 lb. (50 t)	200,000 lb. (100 t)	500,000 lb. (250 t)
TEST LOAD		3,000 lb. (1.5 t)	9,600 lb. (4.8 t)	19,500 lb. (9.75 t)	45,000 lb. (22.5 t)	75,000 lb. (37.5 t)	150,000 lb. (75 t)	300,000 lb. (150 t)	750,000 lb. (375 t)
SAFETY COEFFICIENT		Minimum 4							
MINIMUM LOAD		10% of maximum capacity							
PRECISION		0.2% at 70°F (21°C) full scale							
		6 lb. (2 kg)	12.8 lb. (6.4 kg)	26 lb. (13 kg)	60 lb. (30 kg)	100 lb. (50 kg)	200 lb. (100 kg)	400 lb. (200 kg)	750 lb. (375 kg)
RESOLUTION		0.4 lb. (0.2 kg)	1 lb. (0.5 kg)	2 lb. (1 kg)	10 lb. (5 kg)	20 lb. (10 kg)	40 lb. (20 kg)	100 lb. (50 kg)	200 lb. (100 kg)
SAMPLE RATE		4 Hz – up to 32 Hz in "Peak Hold Mode"							
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							
NET WEIGHT		1.5 lb. (0.7 kg)	1.9 lb. (0.86 kg)	3.5 lb. (1.6 kg)	8.1 lb. (3.66 kg)	11.8 lb. (5.33 kg)	25.2 lb. (11.45 kg)	60.6 lb. (27.48 kg)	216 lb. (97.98 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							
IP PROTECTION		IP 64 (IP 67 in option)							
WORKING TEMPERATURE		-4°F to 120°F (-20°C to 50°C)							
SENSOR MATERIAL		Aluminium				HR aluminium			
BATTERIES		3 x AA							
DIMENSIONS	A	8½ in. (216 mm)	8½ in. (216 mm)	9 49/64 in. (248 mm)	12 9/16 in. (319 mm)	14 1/16 in. (357 mm)	17 9/16 in. (446 mm)	2 1/64 in. (559 mm)	31 3/8 in. (797 mm)
	B	7 19/32 in. (192.8 mm)	7⅝ in. (193.8 mm)	8 27/64 in. (214.1 mm)	10⅝ in. (269.8 mm)	11⅞ in. (301.6 mm)	14⅝ in. (371.6 mm)	17⅞ in. (454.2 mm)	23 63/64 in. (609.1 mm)
	C	27/32 in. (21.5 mm)	27/32 in. (21.5 mm)	1 9/64 in. (28.8 mm)	1⅞ in. (46.5 mm)	2 17/64 in. (57.4 mm)	3 7/64 in. (78.8 mm)	4 15/64 in. (107.6 mm)	6⅜ in. (162.1 mm)
	D	3 7/64 in. (79 mm)	3⅝ in. (92 mm)	4 29/64 in. (113 mm)	4 11/16 in. (119 mm)	5 13/64 in. (132 mm)	5 63/64 in. (152 mm)	7 23/32 in. (196 mm)	12 61/64 in. (329 mm)
	E	29/32 in. (23 mm)	29/32 in. (23 mm)	1 17/64 in. (32 mm)	2 1/64 in. (51 mm)	2 13/32 in. (61 mm)	3 35/64 in. (90 mm)	5 5/64 in. (129 mm)	7 3/32 in. (180 mm)
	F	1 17/32 in. (39 mm)	1 17/32 in. (39 mm)	1 17/32 in. (39 mm)	2 7/16 in. (62 mm)	2 9/16 in. (65 mm)	3 37/64 in. (91 mm)	5¼ in. (133.5 mm)	–

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