



FALCON

Accessories catalog



OneProd

FALCON Accessories catalog

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INTRODUCTION

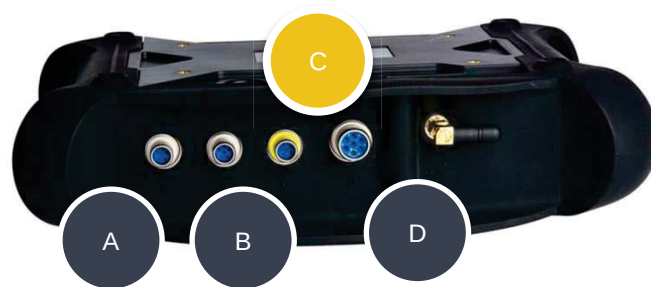
ONEPROD FALCON is a multi-channel portable data collector / analyzer. It can acquire simultaneously measurements coming from 4 sensors, in addition to a tachometer input. Its different functionalities may require the use of various accessories.

This document will present the available accessories.

Pictures shown in this document are non-contractual pictures; technical specifications might change at any time.

FALCON CONNECTORS

Measurement accessories will have to be connected on FALCON top connectors presented below.



- **FALCON Connector A:** Connection of wired accelerometers Channel 1 (& 3 with the use of a Y adapter)
- **FALCON Connector B:** Connection of wired accelerometers Channel 2 (& 4 with the use of a Y adapter)
- **FALCON Connector C:** Connection of an external tachometer, or to a source of power supply through an external adapter
- **FALCON Connector D:** Can be used for the connection of headphones through external adapter, or for the connection to the Ethernet network through an external adapter

FALCON STANDARD PACKAGE ACCESSORIES

Reference	Description
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CAB1412	USB connection cable
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PIK1035	FALCON power supply with EU, US/JP and UK adapters
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FLC1002000	Screen protection frame <i>(do not use with FALCON-EX, may generate electrostatic discharge)</i>
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ACM1370	Shoulder carrying belt
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CPC1214000	Voltage input spring cable with BNC connector for FALCON Channel A or B Used for: - Connection to a monitoring rack - Connection to junction box - Measurement of a process data (DC)
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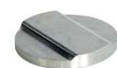
Only included in **FALCON Expert** packages:

CPC1227000	2m Straight cable for BNC tachometer input on FALCON Channel C ECTAc (YELLOW RING) / BNC
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WLS ACCELEROMETER & ACCESSORIES

Reference	Description
FLC3025000	PACK WLS accelerometer with flat magnet including: • 1x WLS Wireless tri axial accelerometer • 1x USB charger • 1x USB cable • 1x Flat magnet • 5x Cementing studs Delivered as standard with all FALCON WLS packages
FLC3075000	PACK WLS accelerometer with Bipolar magnet including: • 1x WLS Wireless tri axial accelerometer • 1x USB charger • 1x USB cable • 1x Bi polar magnet suited for curved shafts • 5x WLS Indexed stud for use with bipolar magnet
FLC3086000	Spare WLS accelerometer with its USB power supply Ø42 x H116 mm 373g M6 threaded hole Stainless steel IP65 80g ± 3 dB (Z): 0.4 Hz–15 kHz ± 3 dB (XY): 0.4 Hz–6 kHz
FLC3089000	Spare power supply for WLS with EU, US/JP and UK adapters and its USB cable
ACA1026000A	Bi-polar magnet for WLS, suited for curved shafts M6 mounting, Ø 35 x H 19 mm. The orientation of the magnet can be adjusted with the captive screw
ACA3119000A 50 units	Cementing studs for bipolar magnet (ACA1026000A)
ACA1024000	Flat magnet for WLS M6 mounting, Ø 35 x H 17 mm
ACA3117000A 100 units	100x M6 cementing stud for WLS sensor, Ø 35 mm, stainless steel
ACA3118000A 50 units	50x M6 cementing studs with X mark for WLS sensor, Ø 35 mm, stainless steel



ASH201-A ACCELEROMETER & ACCESSORIES (3-PIN BAYONET, M6)

Reference	Description
CAP3123000	PACK ASH201-A accelerometer 2m including: • 1x ASH201-A Accelerometer • 1x 2m Spring cable • 1x Flat magnet • 10x Cementing studs Delivered as standard with all FALCON CBL packages
CAP3124000	PACK ASH201-A accelerometer 5m including: • 1x ASH201-A Accelerometer • 1x 5m Straight cable • 1x Flat magnet
FLC3040000	PACK ASH201-A for Channels 3 & 4 including: • 2x ASH201-A Accelerometer • 2x 5m Straight cable • 2x Flat magnet • 2x Y ECTA/ECTA adapter
CAC3110000	Spare ASH201-A IEPE Accelerometer 100mV/g +/-5% 0.5Hz-14kHz @3dB Axial bayonet connector output M6 mounting hole
CPC1213000	2m spring cable for ASH201-A
4611QAA	5m straight cable for ASH201
4611QBA	10m straight cable for ASH201
CPC1220000	15m straight cable for ASH201
ACA1025000	Flat magnet for ASH201-A M6 mounting, Ø 28 x H 17 mm
ACA3120000A 100 units	100x M6 Aluminum cementing studs M6 mounting, Ø 22 mm,
ACA1011000	Contact point, M6 mounting



ASH205-B ACCELEROMETER & ACCESSORIES (2-PIN MIL, 1/4-28)

Reference	Description
FLC3071000	PACK ASH205-B accelerometer 2m including • 1x ASH205-B Accelerometer • 1x 2m Spring cable • 1x Flat magnet • 10x Cementing studs Delivered as standard with all FALCON MIL packages
FLC3070000	PACK ASH205-B accelerometer 5m including • 1x ASH205-B Accelerometer • 1x 5m Straight cable • 1x Flat magnet
FLC3069000	PACK ASH205-B for Channels 3 & 4 including: • 2x ASH205-B Accelerometer • 2x 5m Straight cable • 2x Flat magnet • 2x Y ECTA/ECTA adapter
860238	Spare ASH205-B IEPE Accelerometer 100mV/g +/-5% 0.5Hz-14kHz @3dB MIL-C-5015 2-pins connectors output 1/4-28 mounting hole
CPC1219000A	2m spring cable for ASH205-B
CPC1223000A	5m straight cable for ASH205-B
ACA1032000	Flat magnet for ASH205-B 1/4-28" mounting, Ø 28 x H 17 mm
ACA3122000A 100 units	100x 1/4-28" cementing studs Ø 20 mm, stainless-steel



EXTERNAL TACHOMETER & ACCESSORIES

Reference	Description
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FLC3026000	External tachometer kit including:
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- | | |
|--|--|
| | <ul style="list-style-type: none">• 1x optical laser tachometer• 1x 1.5m straight cable• 1x 5m extension cable• 1x Magnetic holder• 1x 3-finger clamp• 1x reflective tape |
|--|--|



ACC1072000	Optical triggering device with laser sighting
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CPC1228000	1.5m Straight cable for FALCON optical triggering device (ECTAC/M12)
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CPC1226000	5m extension cable (M12/M12)
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850910	Reflective adhesive tape (per m)
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ACC1055000	Magnet holder
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ACC1056000	Three finger clamp
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ACCESSORIES FOR EXPLOSIVE ENVIRONMENTS

Reference	Description
FLC3041000	PACK WLS-EX accelerometer with Flat Magnet • 1x WLS-EX Wireless tri axial accelerometer • 1x USB charger • 1x USB cable • 1x Flat magnet • 5x Cementing studs Delivered as standard with all FALCON-EX WLS packages.
FLC3087000	Spare WLS-EX accelerometer with its USB power supply ATEX II 3 G Ex ic IIC T4 Ga Ex ic IIC T4 Gc Ø42 x H116 mm 373g M6 threaded hole Stainless steel IP65 80g ± 3 dB (Z): 0.4 Hz–15 kHz ± 3 dB (XY): 0.4 Hz–6 kHz
ACC1074000	EX laser tachometer ATEX, IECEx: II 1 G Ex ia op is IIC T4 Ga (-20°C ≤ Ta ≤ +40°C)
FLC3042000	PACK EX External tachometer, including: • 1x optical laser tachometer • 1x 1.5m straight cable • 1x 5m extension cable • 1x Magnetic holder • 1x 3-finger clamp • 1x reflective tape
CAP3064000	PACK ASH201-EX accelerometer 2m • 1x ASH201-EX Accelerometer • 1x 2m Spring cable • 1x Flat magnet • 10x Cementing studs Delivered as standard with all FALCON-EX CBL packages



- CAP3129000 PACK ASH201-EX accelerometer 5m including:
- 1x ASH201-EX Accelerometer
 - 1x 5m Straight cable
 - 1x Flat magnet



- FLC3044000 PACK ASH201-EX for Channels 3 & 4 including:
- 2x ASH201-EX Accelerometer
 - 2x 5m Straight cable
 - 2x Flat magnet
 - 2x Y ECTA/ECTA adapter



- 860450 Spare ASH201-EX IEPE Accelerometer
100mV/g +/-5%,
0.6Hz-15kHz@3dB,
axial bayonet connector output,
M6 mounting hole



- FLC3080000 PACK ASH205-B-EX accelerometer 2m including
- 1x ASH205-B-EX Accelerometer
 - 1x 2m Spring cable
 - 1x Flat magnet
 - 10x Cementing studs

Delivered as standard with all **FALCON-EX MIL** packages



- FLC3040000 PACK ASH205-B-EX accelerometer 5m including
- 1x ASH205-B-EX Accelerometer
 - 1x 5m Straight cable
 - 1x Flat magnet



- FLC3085000 PACK ASH205-B-EX for Channels 3 & 4 including:
- 2x ASH205-B-EX Accelerometer
 - 2x 5m Straight cable
 - 2x Flat magnet
 - 2x Y ECTA/ECTA adapter



- CAC3198000 Spare ASH205-B-EX: IEPE Accelerometer,
100mV/g +/-5%,
0.5Hz-14kHz@3dB,
MIL-C-5015 2-pins connectors output,
1/4-28 mounting hole



CURRENT CLAMP

AVI1009000 Current clamp,
1mV/A,
30 Hz to 5 kHz,
cable diameter 52 mm

To be connected to FALCON with BNC cable
input CPC1214000 (not included)



INSTRUMENTED IMPACT HAMMERS

Instrumented Impact hammers can be connected to the FALCON with the BNC Input cable CPC1214000. The reference measurement channel will always be the **Channel 1 (connector A)**

REFERENCE	CAC3106000	CAC3107000	CAC3108000
			
Performance			
Sensitivity ($\pm 15\%$)	0.23 mV/N	0.23 mV/N	0.23 mV/N
Measurement Range	$\pm 22,000$ N pk	$\pm 22,000$ N pk	$\pm 22,000$ N pk
Frequency Range (-10 dB) [1][2]			
(Hard Tip)	5 kHz	1 kHz	750 Hz
(Medium Tip)	1.7 kHz	700 Hz	650 Hz
(Soft Tip)	250 Hz	450 Hz	350 Hz
(Super Soft Tip)	150 Hz	400 Hz	250 Hz
Resonant Frequency	≥ 22 kHz	≥ 12 kHz	≥ 5 kHz
Non-Linearity	$\leq 1\%$	$\leq 1\%$	$\leq 1\%$
Electrical			
Excitation Voltage	18 to 30 VDC	18 to 30 VDC	18 to 30 VDC
Constant Current Excitation	2 to 20 mA	2 to 20 mA	2 to 20 mA
Output Impedance [1]	<100 ohms	<100 ohms	<100 ohms
Output Bias Voltage [1]	8 to 12 VDC	8 to 12 VDC	8 to 12 VDC
Discharge Time Constant	≥ 2000 sec	≥ 1400 sec	≥ 2000 sec
Physical			
Sensing Element	Quartz	Quartz	Quartz
Sealing	Epoxy	Hermetic	Hermetic
Hammer Mass	0.32 kg	1.1 kg	5.5 kg
Head Diameter	2.5 cm	5.1 cm	7.6 cm
Tip Diameter	0.63 cm	5.1 cm	7.6 cm
Hammer Length	22.7 cm	37 cm	89 cm
Electrical Connection Position	Bottom of Handle	Bottom of Handle	Bottom of Handle
Extender Mass Weight	200 gm		
Electrical Connector	BNC Jack	BNC Jack	BNC Jack
Model	086D05	086D20	086D50
Supplied accessories			
Extender - steel, 1.0" diameter	✓		
Tip - super soft	✓	✓	✓
Adaptor for Tip - super soft	✓		
Hard Tip	✓	✓	✓
Medium Tip	✓	✓	✓
Soft tip	✓	✓	✓

FALCON AUDIO LISTENING

The headphone adapter is necessary to be able to listen to vibration signals or to record audio comments. It is plugged on the **channel D** at the top of the FALCON. No firmware option is needed.

CPC1229000 Adapter for headphone
(For 3.5 mm jack, AHJ standard: 1 and 2 audio, 3 ground, 4 micro phone)



To use it, see instrument user manual (§ ‘ Listening to the signal’ and § ‘ Vocal note’)

FALCON ACCESSORIES FOR HARSH ENVIRONMENT

External power supply and network adapters are available and allow for charging FALCON and connecting FALCON to the network in industrial environment, as it doesn't need to open the trapdoor to access to the standard power supply connector.

- | | |
|------------|--|
| FLC1009000 | External Power supply adapter for connection on FALCON channel C ECTAc (YELLOW RING) /Jack length 0.2m |
| FLC1010000 | External Network cable adapter for connection on FALCON channel D ECTAd/Jack, length 0.2m |
| FLC1013000 | Set of FALCON connector protection
3 small size for connectors A, B and C and 1 large for connector D |



FALCON 4-CHANNEL MEASUREMENT ACCESSORIES

- | Reference | Description |
|------------|---|
| FLC1003000 | 20cm Y ECTA / ECTA Adapter for FALCON channel 3 or 4
2 units needed for 4-channel measurements |
| FLC1004000 | 20cm Y ECTA / BNC Adapter for FALCON channel 3 or 4
2 units needed for 4-channel measurements |



Note that the use of multiple analog channels is controlled by the firmware options.

All FALCON Essential & Smart packages come with 1 analog channel activated.

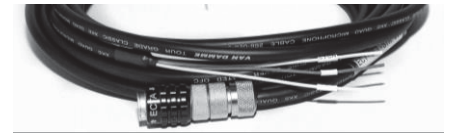
All FALCON Expert packages come with 4 analog channels activated.

FALCON PROXIMITY PROBES ACCESSORIES

FLC1005000 5 m straight cable FALCON signal input/Proximity probe

ECTA/(Com, Sig, -24VDC)

To be used if the driver of the proximity probe is has its own power supply, the driver can be connected to channel A or B using the following cable



FLC1006000 5 m straight cable for FALCON channel C input/Proximity probe

ECTAc (YELLOW RING) /(Com, Sig, -24VDC)

To be used if the driver does not have its own power supply, the driver can be connected to channel C (yellow ring) using the following cable. FALCON will provide the necessary power supply to the driver.



FALCON SPARE PARTS

Reference	Description
FLC1007000	FALCON & FALCON-EX Spare battery LI-Ion battery pack for 8h measurement activity. A 2.5mm hex wrench will be required to open the side battery cover. Refer to FALCON user manual for the detailed procedure.
FLC3088000 5 units	FALCON – Spare Pack of 5 screen protection frames FLC1002000 Cannot be used with FALCON-EX
FLC1017000	FALCON connector trapdoor Cannot be used with FALCON-EX
FLC1018000	FALCON-EX connector trapdoor
FLC1019000	FALCON & FALCON-EX Spare set of straps
FLC1020000	FALCON & FALCON-EX Spare rubber protection
FLC1022000	FALCON & FALCON-EX Spare Wifi antenna
FLC1023000	WLS & WLS-EX spare rubber cap



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