

Type No. 211-031-011



MEGA-Line
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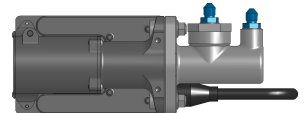
Description / features

The e-clutch is an electro-hydraulic actuator ("clutch-by-wire") that replaces the conventional, foot pedal-driven clutch actuation system.

The unit is driven by an electro motor which is controlled via analog paddles mounted on the steering wheel.

The e-clutch features automatic anti-stall function by being able to open the clutch in approx. 140ms (@ clutch pressure of 40bar). It also offers optional launch control and due to a state of the art controller it also allows to keep the clutch constantly open over time.

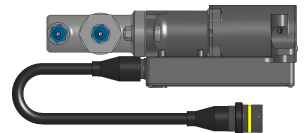
Besides that the unit has an integrated functionality to comply with the FIA safety requirement of being able to externally disconnect the drive train in case of a stranded car with stalled engine.



Technical specifications

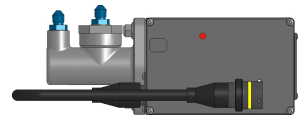
Electronic data:

Operating voltage	12.0..15.6V nom.
Standby current	0.5 A
Peak current	max. 40A
Circuit breaker	not integrated
Recommended external circuit breaker	ETA, 452 K34 FN2 80A



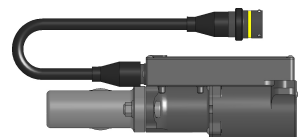
Mechanical data:

Dimensions with master cylinder L x W x H	approx. 201 x 65 x 88 mm
Dimensions without master cylinder L x W x H	approx. 147 x 65 x 78 mm
Weight (incl. master cylinder)	1050 g
Master cylinder	modified AP Racing "CP 2623" clutch cylinder



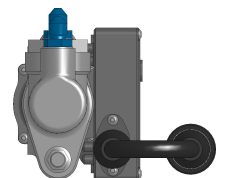
Hydraulic data:

Max. hydraulic clutch pressure	70 bar
Approved fluids	Glycol-ether-/ silicon-based brake fluids (DOT3, DOT4, DOT5.0, DOT5.1) - No hydraulic oil



Connector:

Deutch 37 pin, pig tail	AS114-35PA
Deutch 37 socket, loom side	AS614-35SA
Lenght pig tail	approx. 300mm

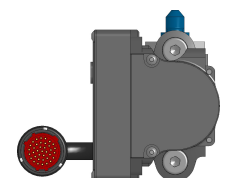


Temperature range:

Ambient	-25 °C ... +80 °C
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Ordering information:

Article no.	211-031-011
Order no.	10796



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Pin assignment

Pin	Function	Dia [AWG]	Type
1	+ 13.5V supply	22	pwr
2	GND supply	22	pwr
3	GND supply	22	pwr
4	GND supply	22	pwr
5	GND supply	22	pwr
6	GND supply	22	pwr
7	Clutch position out	26	analog out
8	AGND	26	pwr
9	+ 5V sensor	26	pwr
10	EMERGENCY INDICATOR	26	digital out
11	not used		
12	not used		
13	not used		
14	not used		
15	CLUTCH paddle #2	26	analog in
16	CLUTCH paddle #1	26	analog in
17	+ 13.5V supply	22	pwr
18	+ 13.5V supply	22	pwr
19	+ 13.5V supply	22	pwr
20	GND supply	22	pwr
21	GND supply	22	pwr
22	GND supply	22	pwr
23	Spare analog out	26	analog out
24	GND sense extern	26	analog in
25	Clutch sensor extern analog	26	analog in
26	Spare in	26	analog in / rev
27	CAN2 low	26	data
28	Flash	26	digital in
29	+ 13.5V supply	22	pwr
30	+ 13.5V supply	22	pwr
31	+ 13.5V supply	22	pwr
32	GND supply	22	pwr
33	CAN1 high	26	data
34	CAN1 low	26	data
35	CAN2 high	26	data
36	+ 13.5V supply	22	pwr
37	+ 13.5V supply	22	pwr

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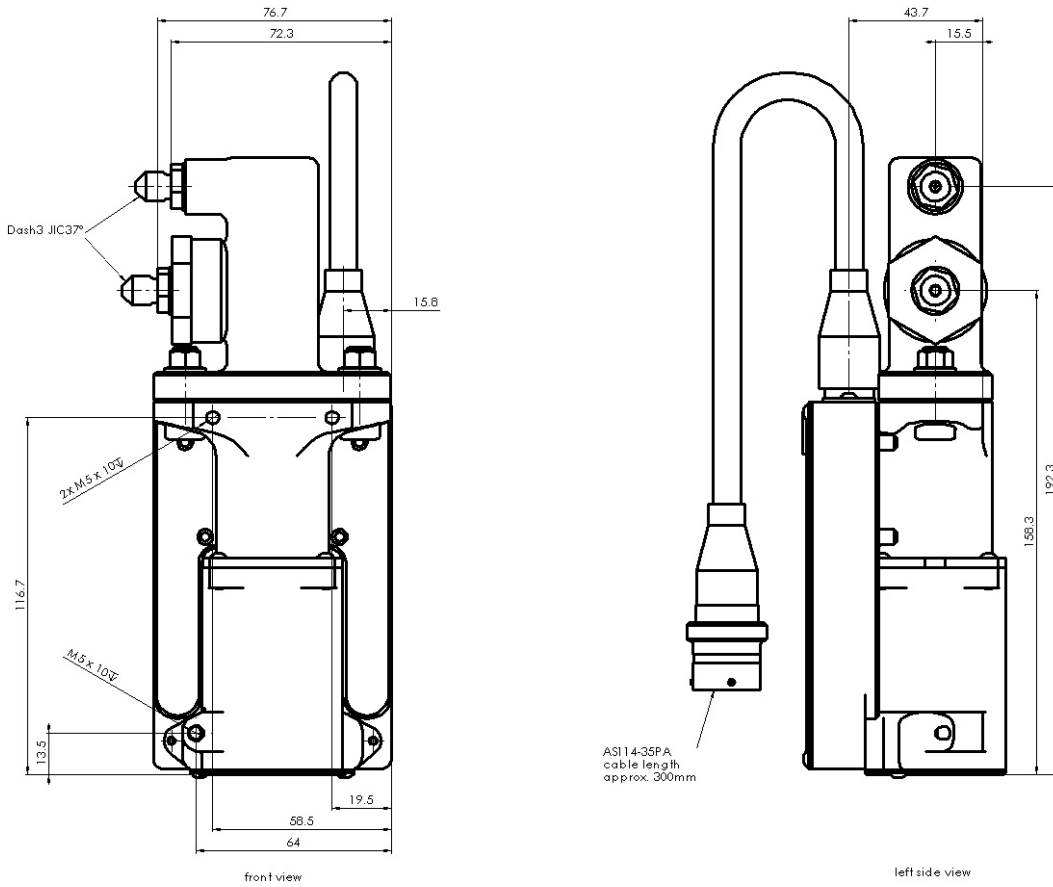
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Assembly dimensions



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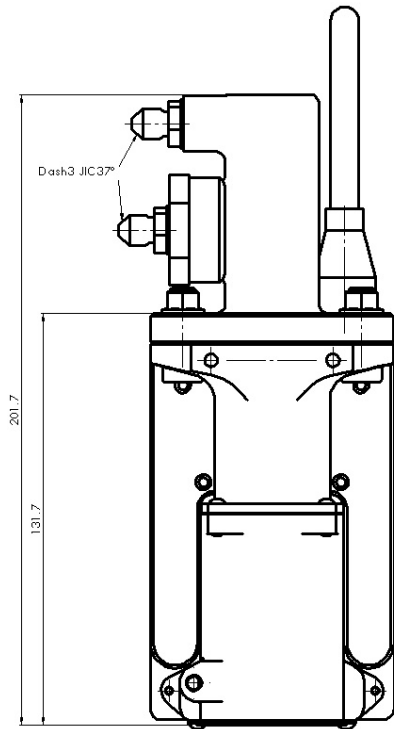
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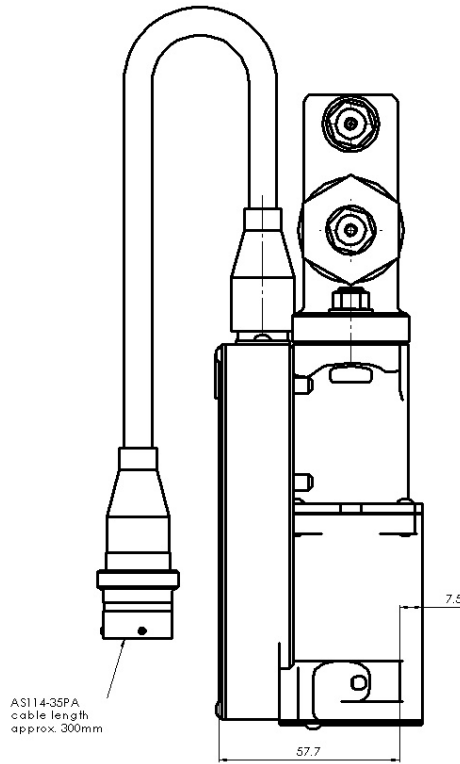
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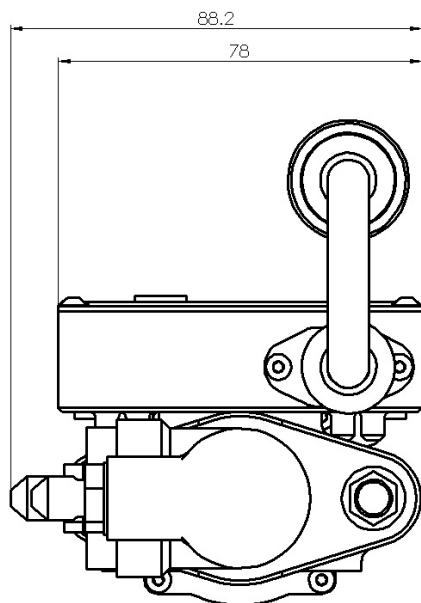
Mechanical dimensions



front view



left side view



top view