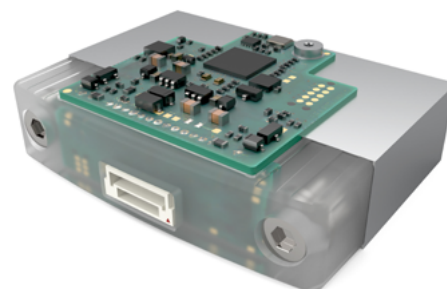


CHIPREG EPC

Electronic Pressure Controller

- Precision closed loop pressure controller
- Features two proportional valves (inlet and exhaust)
- Ultra compact size, <14mm width
- Best performance-to-cost ratio
- For Life Science, Medical and Process Control applications
- Ideal for pressure-driven flow in microfluidic applications



Technical features

Controlled Pressure Range:

Range -1 ... 1 bar
Range 0 ... 4 bar
Range 0 ... 7 bar
Custom pressure range on request

Max. Inlet Pressure:

Range ± 1 bar: 5 bar
Range 0 ... 4 bar: 5 bar
Range 0 ... 7 bar: 8 bar

Operating gas:

Air, N₂, O₂, CO₂, Ar, He, H₂
and other non-corrosive gases

Quality:

ISO 8573-1 [5:4:3]

Global accuracy at 20°C:

$\pm 0,3\%$ of full scale

Analog input/output:

0 ... 5 V d.c.

Digital communication interface:

RS485

Gas temperature:

+10 ... +50°C (*50 ... +122°F)

Ambient temperature:

+10 ... +50°C (*50 ... +122°F)

Settling time:

< 200 ms

Voltage Supply:

24 V d.c. $\pm 10\%$

Current supply:

< 200 mA

Electrical connection:

JST Connector BM06B-GHS-TBT

Dimensions:

13,7 x 47,0 x 35,1 mm

Wetted materials:

Aluminium, stainless steel, brass, FPM
Other materials on request

Mounting:

Manifold
Inline M5

Cleanliness:

Standard: Medical,
Analytical clean option on request

Technical data – standard models

Controlled pressure (barg)	Orifice (mm)	Max. inlet pressure (barg)	Max. flow (l/min)	kv factor	Mounting	Model
-1 ... 1 *1)	0,6	5	10	0,12	Manifold	40E001ACJ1011 1110000
-1 ... 1 *1)	0,6	5	10	0,12	Inline M5 subbase, 3 ports Exhaust collected	40E001ACJ3011 1110010
0 ... 4	0,6	5	10	0,12	Manifold	40E0045CJ1011 1110000
0 ... 4	0,6	5	10	0,12	Inline M5 subbase, 2 ports Exhaust to atmosphere	40E0045CJ3011 1110020
0 ... 4	0,6	5	10	0,12	Inline M5 subbase, 3 ports Exhaust collected	40E0045CJ3011 1110010
0 ... 7	0,2	8	2,4	0,02	Manifold	40E0075CJ1011 1110000
0 ... 7	0,2	8	2,4	0,02	Inline M5 subbase, 2 ports Exhaust to atmosphere	40E0075CJ3011 1110020
0 ... 7	0,2	8	2,4	0,02	Inline M5 subbase, 3 ports Exhaust collected	40E0075CJ3011 1110010

*1) Control modes:

0 ... 1 bar (IN = inlet pressure, OUT= controlled pressure, EXHAUST = exhaust)

-1 ... 0 bar (IN=exhaust, OUT=controlled pressure, EXHAUST= vacuum).

-1 ... 1 bar (IN=inlet pressure, OUT=controlled pressure, EXHAUST=vacuum), user needs to change to polarity mode, only in RS485, see user manual.

File code: LS_DS_CHIPREG-EPC_en/05/24

Starter kit (optional)

- USB hub connector, with possibility to plug up to 3 devices in RS485
- 3x electrical cables with JST connections
- Power supply, universal input voltage range and interchangeable AC blades for global use

S401.0312A

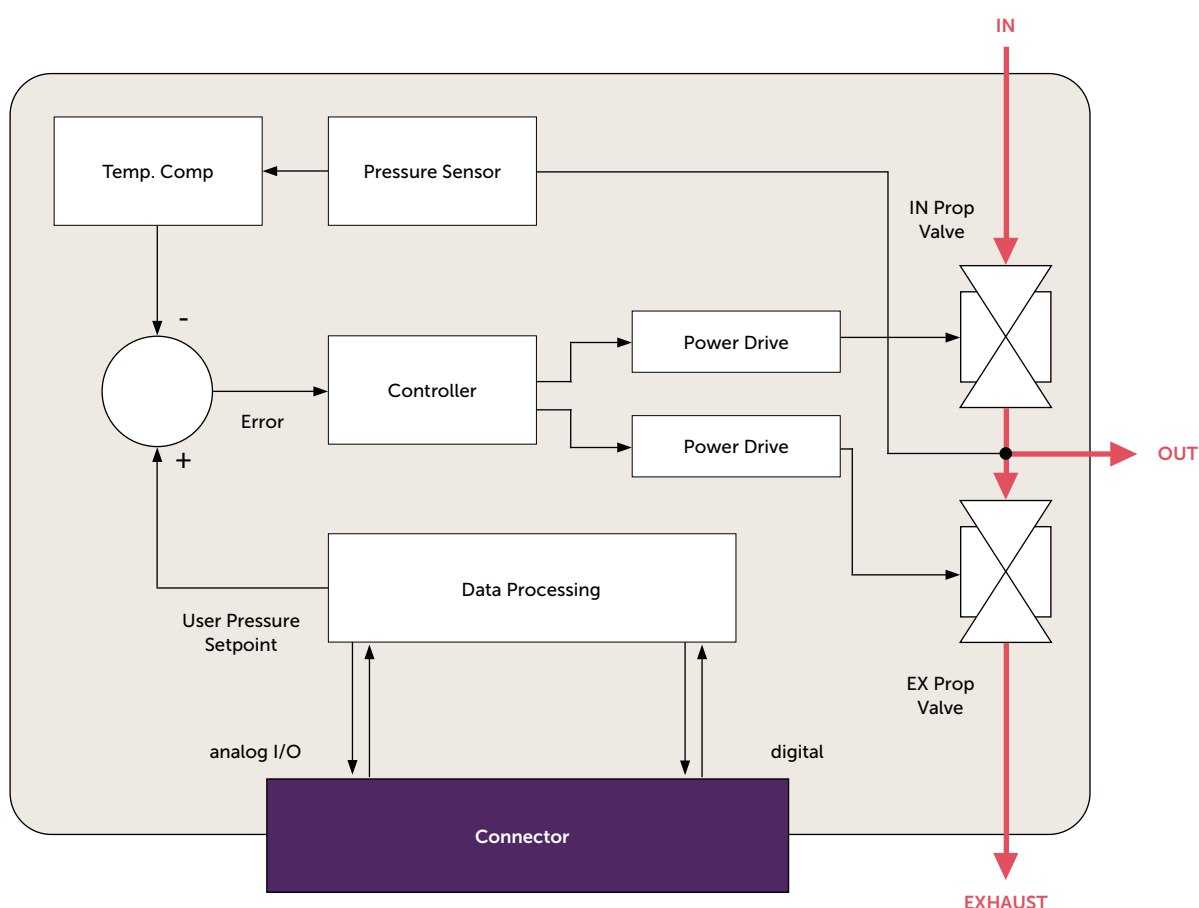
Electrical connection (optional)

Electrical connector
JST GHR-06V-S
with 300 mm flying leads



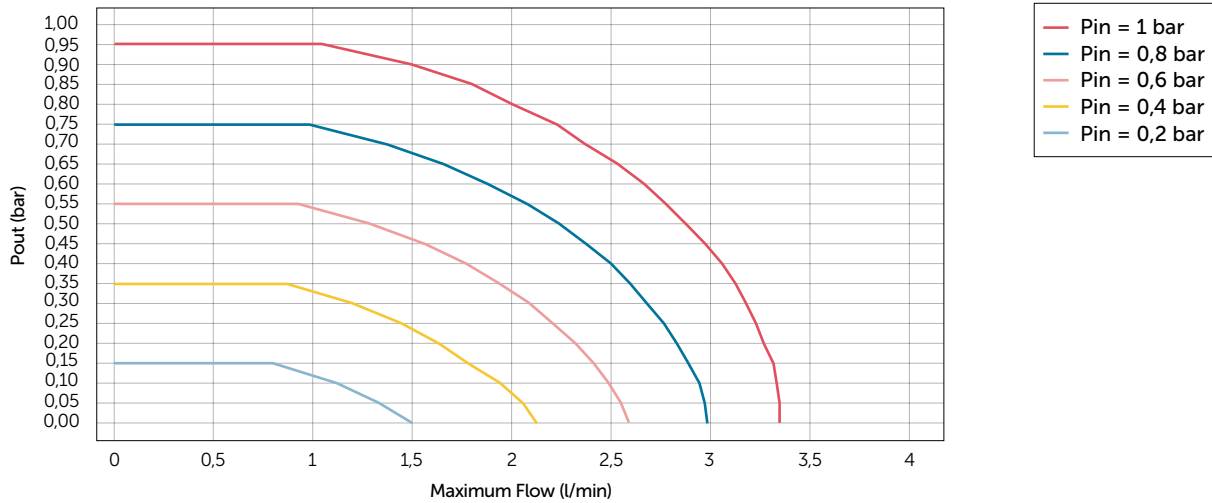
S401.0024

Block diagram

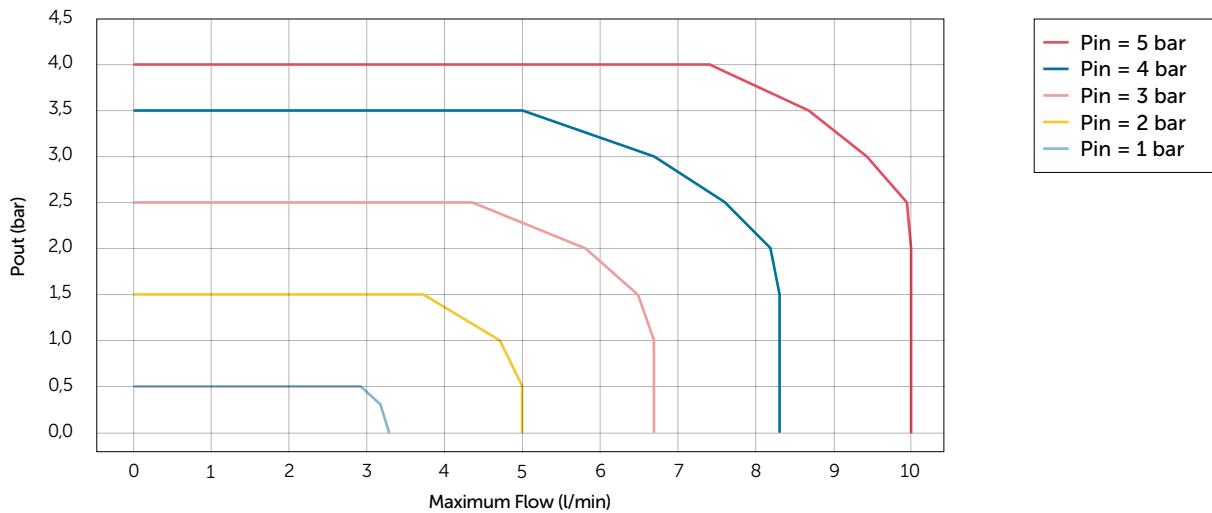


Flow / Pressure diagram

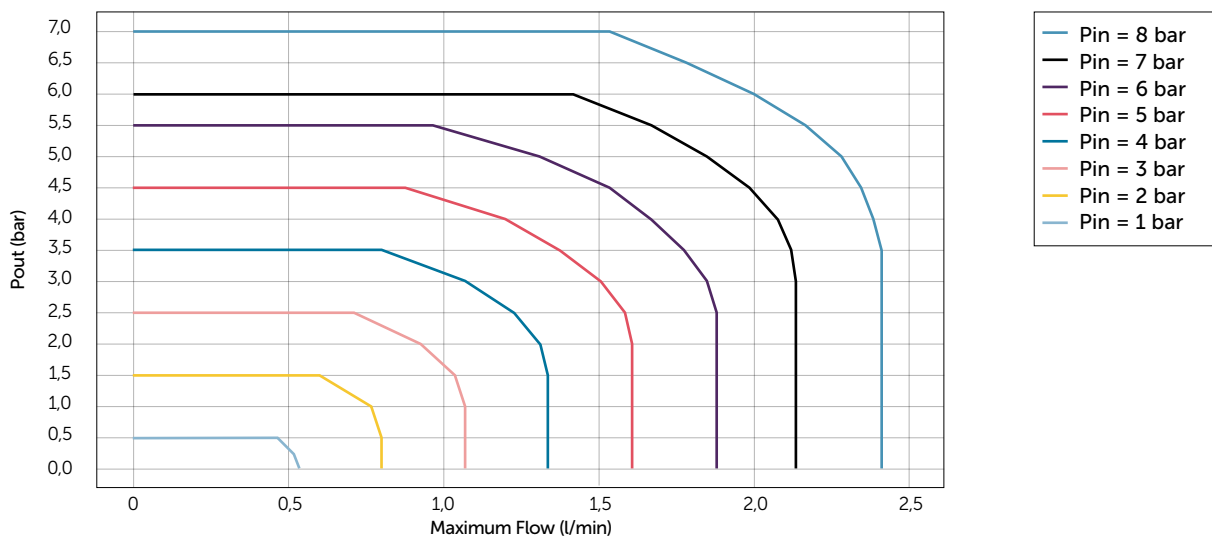
EPC 0 ... 1 bar (air density = 1,21 kg/m³, T = 20°C)



EPC 0 ... 4 bar (air density = 1,21 kg/m³, T = 20°C)

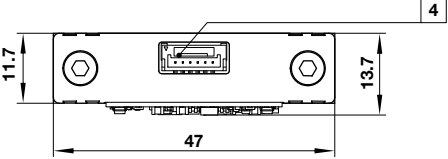
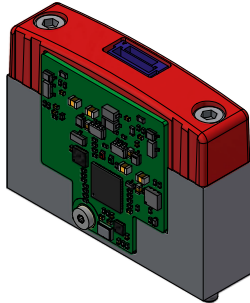
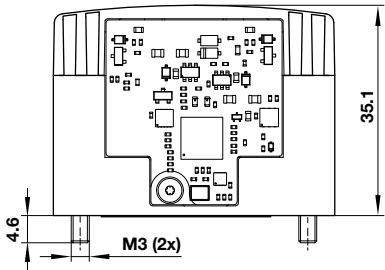
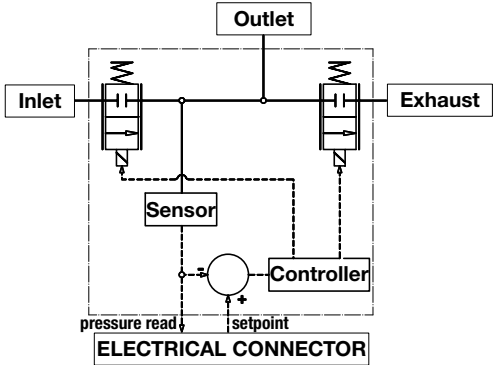
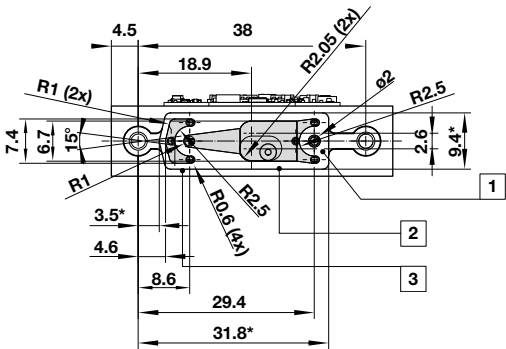


EPC 0 ... 7 bar (air density = 1,21 kg/m³, T = 20°C)



Dimensions
Manifold mount

Dimensions in mm
Projection/first angle



- 1 INLET
 - 2 OUTLET
 - 3 EXHAUST
 - 4 Electrical connector Pin1
- (*) Sealing area

Electrical connection

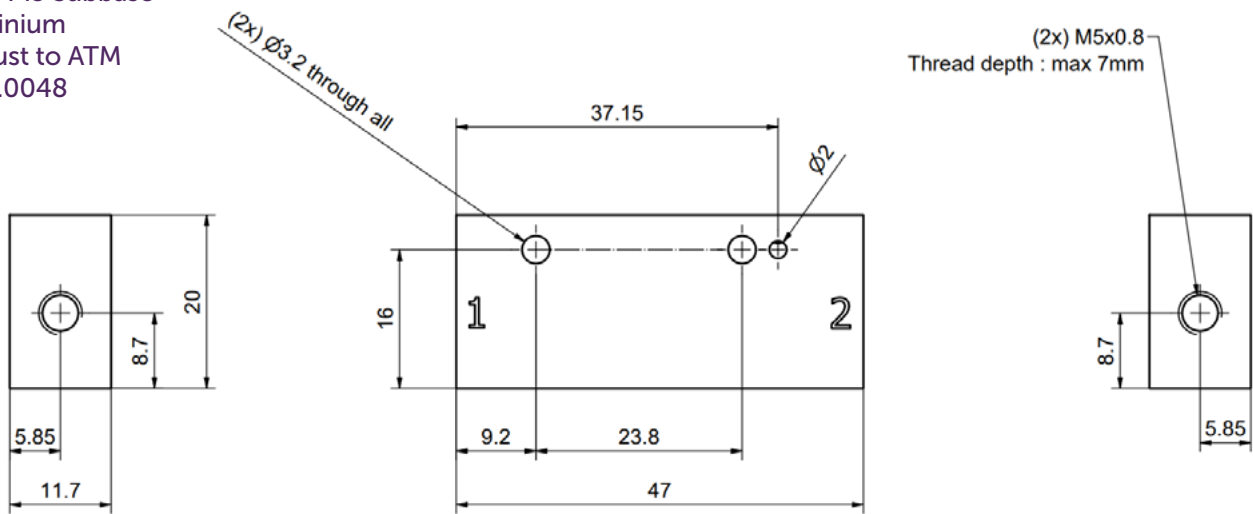
Pin#	Description
1	+24V
2	Ground
3	A (RS485)
4	B (RS485)
5	Analog Out
6	Analog In

Dimensions

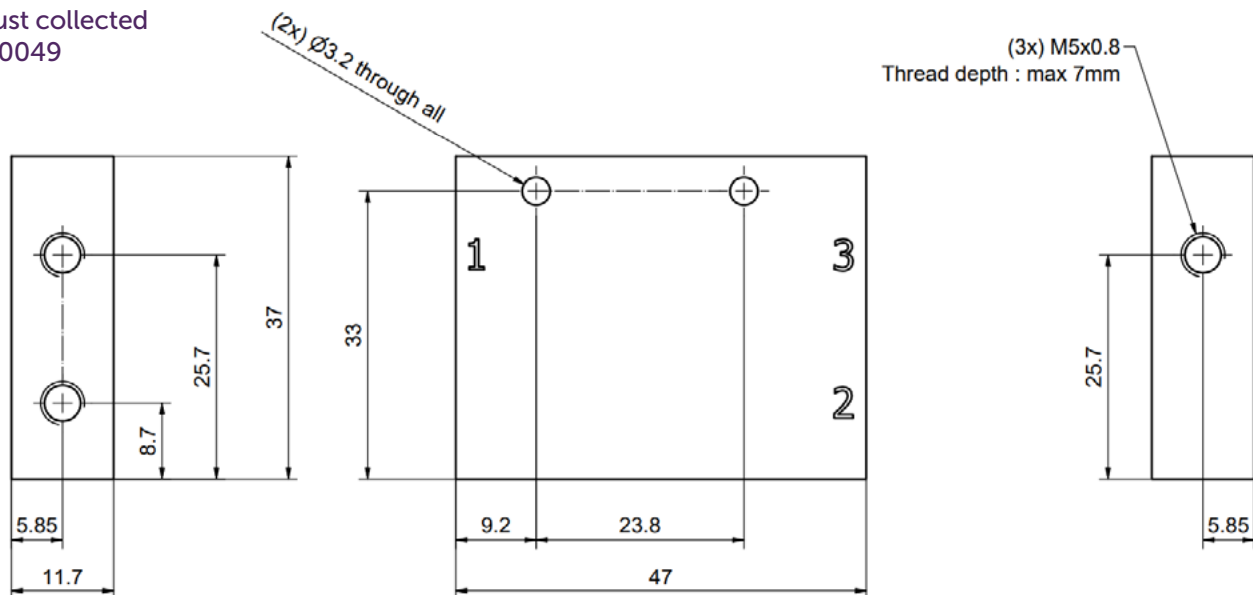
Dimensions in mm
Projection/first angle



Inline M5 Subbase Aluminium Exhaust to ATM S400.0048



Inline M5 Subbase Aluminium Exhaust collected S4000049



Warning

These products are intended for use with aggressive sensitive media, Please contact FAS Medic SA for more compatibility requests. Do not use these products where pressures and temperatures can exceed those listed under "Technical features/data". Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult FAS MEDIC SA.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure. System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.