



**ATLANTIC**  
Fluid Tech

**SECTION  
16**

Proportional  
Cartridges

## SECTION 16



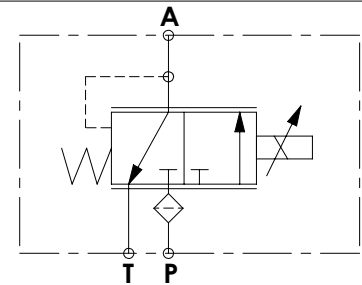
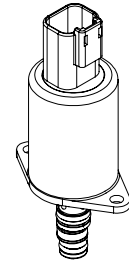
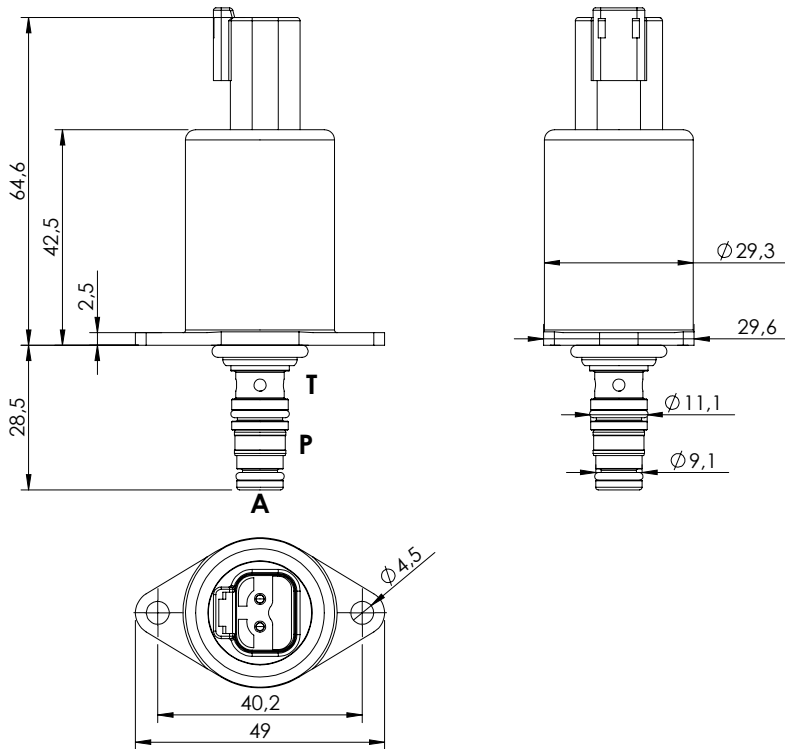
# PROPORTIONAL CARTRIDGES

Hydraulic scheme	Valve description	Valve type	Rated flow (l/min)	Max. pressure (bar)	Installation	Main port size or cavity type	Page
	CECS-005-PRPN	Proportional, direct operated, pressure reducing	5	50	DT04-2P	VP000371	16.01.010
	CECT-080-PRPS	Proportional, pilot operated, reducing and relieving	80	250	Cartridge	SAE-10-3N	16.02.020
	CEBD-005-PLPS	Proportional, poppet type relief	5	350	Cartridge	SAE-08-2N	16.03.030
	CEBT-120-PLPS	Proportional, pilot operated, relieving	120	350	Cartridge	SAE-10-2N	16.04.040
	CEBT-120-PMPS	Proportional, pilot operated, relieving, for fan drive	120	350	Cartridge	SAE-10-2N	16.04.050
	CEBT-300-PLPS	Proportional, pilot operated, relieving	300	350	Cartridge	SAE-16-2N	16.04.060
	CEBT-500-PLPS	Proportional, pilot operated, relieving	500	350	Cartridge	SAE-20-2N	16.04.070
	CECS-020-FSPS	Proportional, non compensated, flow regulator	20	210	Cartridge	SAE-10-3N	16.05.080
	CECS-030-FSPS	Proportional, non compensated, flow regulator	30	210	Cartridge	SAE-10-3N	16.05.080
	CECS-040-FSPS	Proportional, non compensated, flow regulator	40	210	Cartridge	SAE-10-3N	16.05.080
	CECS-140-FRPV	Proportional, direct operated, flow regulator	140	320	Cartridge	SAE-16-3N	16.06.090
	CEBP-070-NCPN	Proportional, non compensated, normally closed	30	350	Cartridge	VP000057	10.07.100
	CEBS-020-PEPS	Proportional, normally closed	20	210	Cartridge	SAE-08-2N	10.08.110
	ELPC-030-SCCB	Proportional electronic controller	-	-	DIN 43650	-	10.09.120

**SOLENOID OPERATED CARTRIDGE**

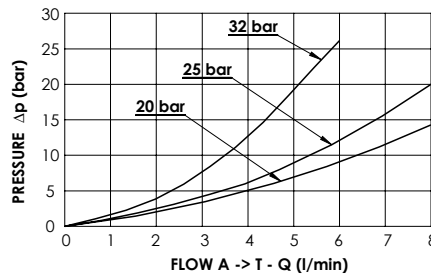
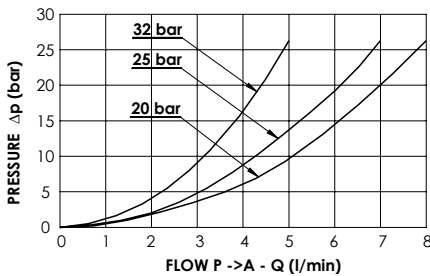
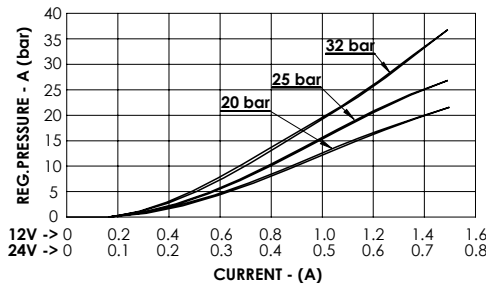
**CECS-005-PRPN**

**PROPORTIONAL VALVES  
DIRECT OPERATED  
PRESSURE REDUCING**



**SPECIFICATIONS**

Max. P pressure:	50 bar
Max. T pressure:	30 bar
Rated flow:	5 l/min
Cavity:	VP000371
Weight:	0,200 kg
Connector type:	Deutsch DT04-2P
Internal leakage:	15 cc/min (@ 25 bar, 46 cst)
Protection class:	Up to IP6K6 / IPX9K
PWM range recommended:	100 Hz
Filter on P port:	125 µm
Mounting screw:	2 x M4x10 class 8.8
Mounting screw torque:	3.5 Nm
Mounting screw not included	
Seal kit:	RC700371



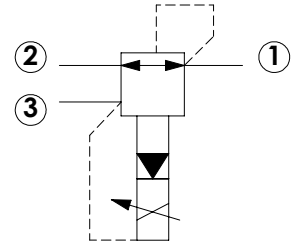
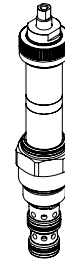
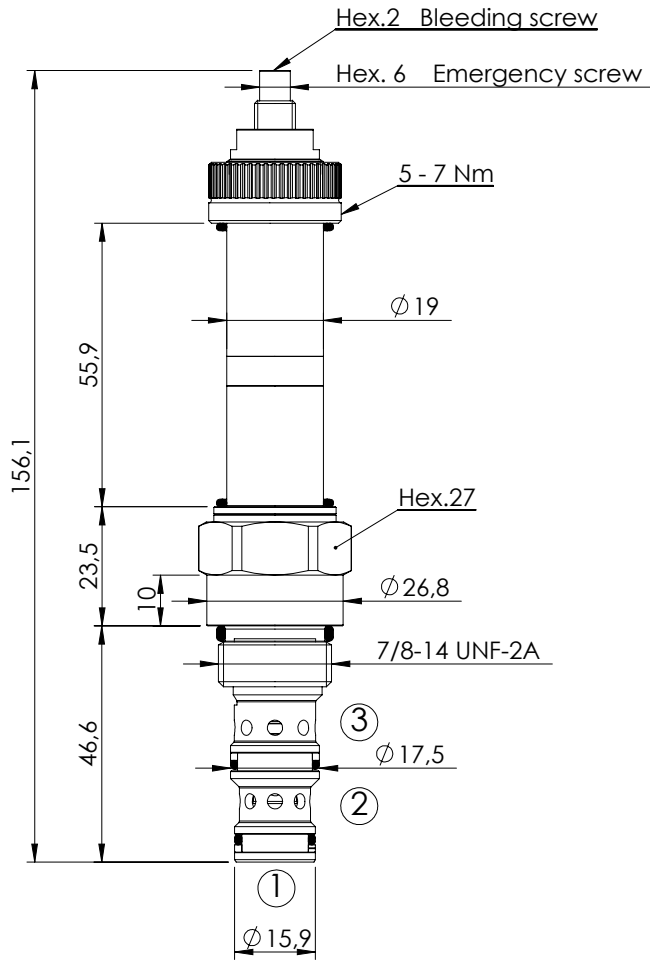
**ORDERING CODES**

Quick code	Description	Regulated pressure range (bar)	Voltage (V)	Current (mA)	Resistance (Ω) ± 5%	Hysteresis (bar) pA
CE000850	CECS-005-PRPN-95-371-N020-12DT	0-20	12	1500	4.72	< 0.4
CE000851	CECS-005-PRPN-95-371-N020-24DT	0-20	24	750	20.8	< 0.4
CE000852	CECS-005-PRPN-95-371-N025-12DT	0-25	12	1500	4.72	< 0.5
CE000853	CECS-005-PRPN-95-371-N025-24DT	0-25	24	750	20.8	< 0.5
CE000893	CECS-005-PRPN-95-371-N032-12DT	0-32	12	1500	4.72	< 0.7
CE000862	CECS-005-PRPN-95-371-N032-24DT	0-32	24	750	20.8	< 0.7

**SOLENOID OPERATED CARTRIDGE**

**CECT-080-PRPS**

**PROPORTIONAL VALVES  
PILOTED OPERATED PRESSURE  
REDUCING AND RELIEVING**

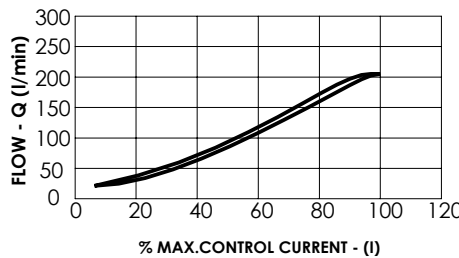
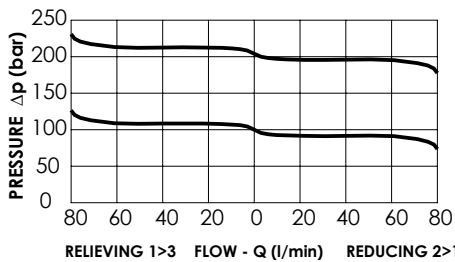


**SPECIFICATIONS**

Max. operating pressure:	250 bar
Rated flow:	80 l/min
Cavity:	SAE-10-3N
Weight:	0,22 kg
Coil type:	M15 type
Installation torque:	55 - 62 Nm
PWM range recommended:	120-150 Hz
Seal kit:	RA100092

**NOTES**

Bleed air before use



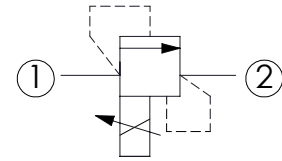
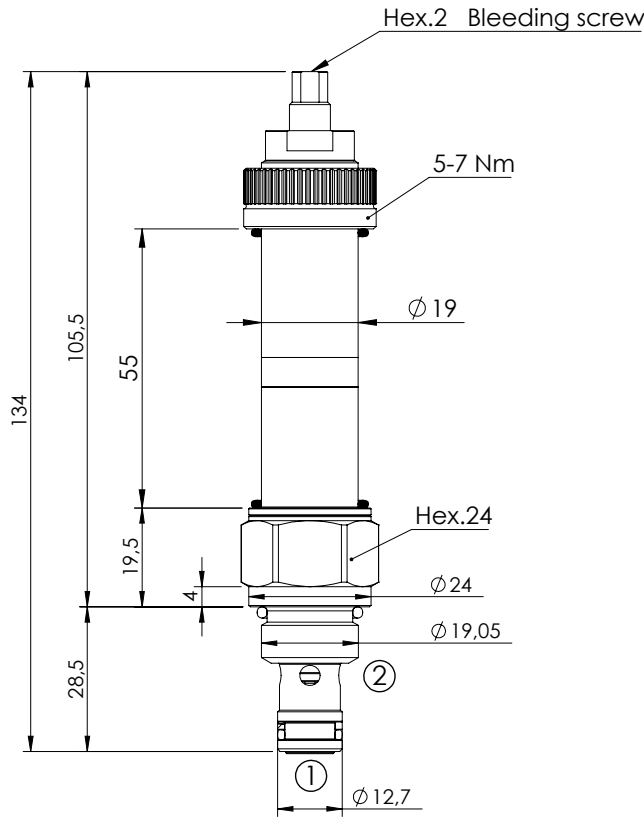
**ORDERING CODES**

Quick code	Description	Regulated pressure range (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000122	CECT-080-PRPS-96-S10-V210	20-220	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style

**SOLENOID OPERATED CARTRIDGE**

**CEBD-005-PLPS**

**PROPORTIONAL VALVES  
POPPET TYPE RELIEF**

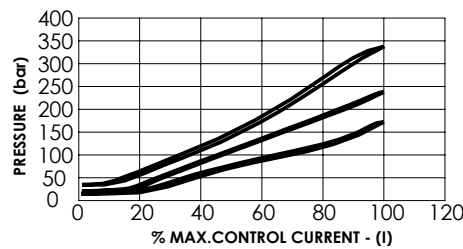
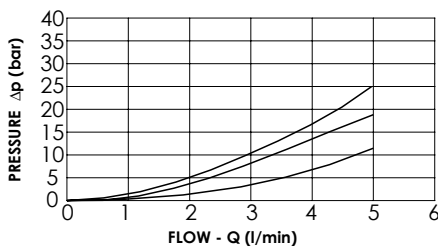


**SPECIFICATIONS**

Max. operating pressure:	350 bar
Rated flow:	5 l/min
Cavity:	SAE-08-2N
Weight:	0,16 kg
Coil type:	M15 type
PWM range recommended:	150-180 Hz
Installation torque:	45 - 50 Nm
Seal kit:	RA100081

**NOTES**

Bleed air before use



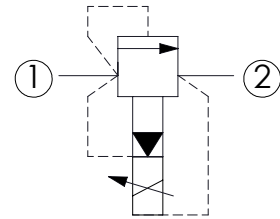
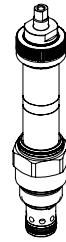
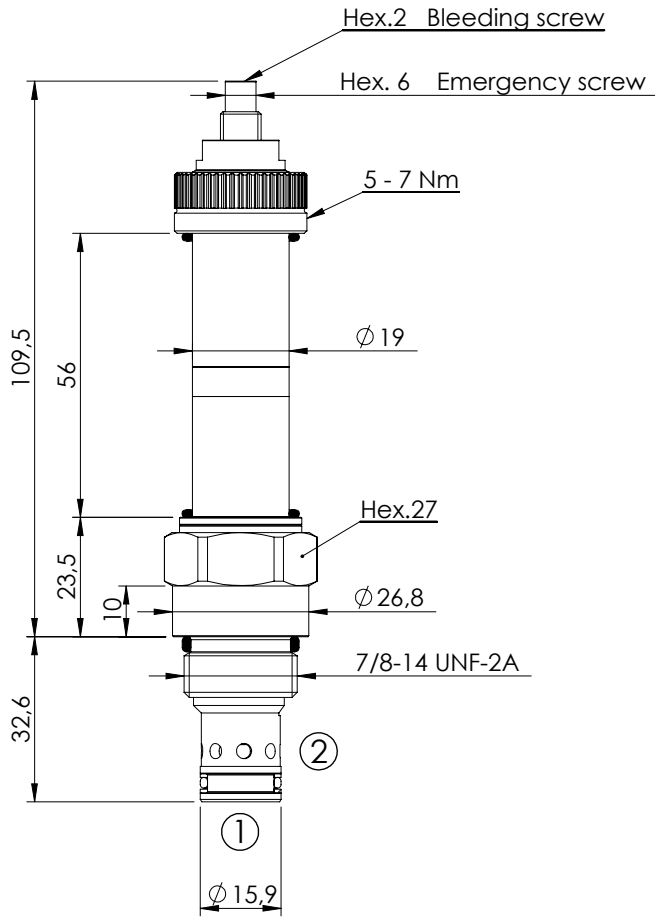
**ORDERING CODES**

Quick code	Description	Setting range (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000910	CEBD-005-PLPS-92-S08-V350	25-340	250 mA (+/-7%)	1800 mA (+/-7%)	Screw style
CE000911	CEBD-005-PLPS-92-S08-V200	17-250	200 mA (+/-7%)	1800 mA (+/-7%)	Screw style
CE000912	CEBD-005-PLPS-92-S08-V100	9-160	200 mA (+/-7%)	1800 mA (+/-7%)	Screw style

**SOLENOID OPERATED CARTRIDGE**

**CEBT-120-PLPS**

**PROPORTIONAL VALVES  
PILOTED RELIEF  
SPOOL TYPE**

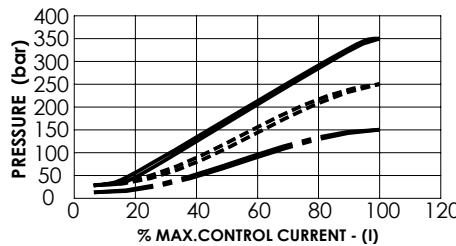
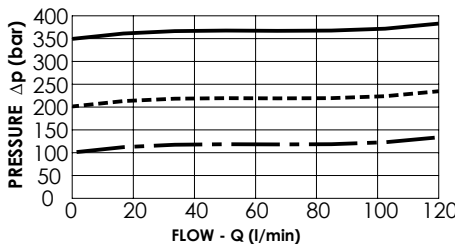


**SPECIFICATIONS**

Max. operating pressure:	350 bar
Rated flow:	120 l/min
Cavity:	SAE-10-2N
Weight:	0,2 kg
Coil type:	M15 type
Max. int. leakage:	200 cm <sup>3</sup> /min (@46 cst)
Installation torque:	55 - 62 Nm
PWM range recommended:	150-180 Hz
Seal kit:	RB100082

**NOTES**

Bleed air before use



CE000119 1>2 ————— CE000120 1>2 - - - - - CE000121 1>2 — — — — —

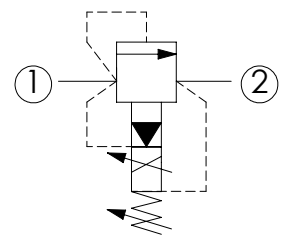
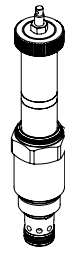
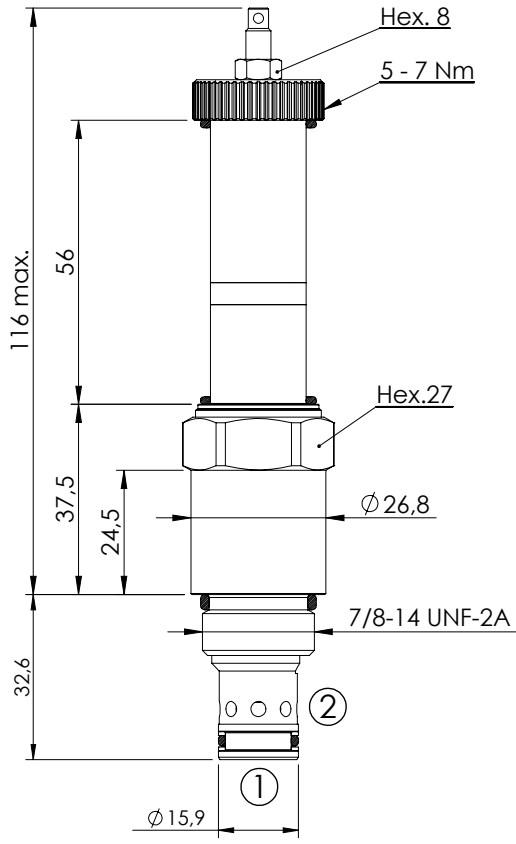
**ORDERING CODES**

Quick code	Description	Setting range (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000119	CEBT-120-PLPS-91-S10-V350	30-350	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style
CE000120	CEBT-120-PLPS-91-S10-V200	20-220	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style
CE000121	CEBT-120-PLPS-91-S10-V100	15-90	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style

**SOLENOID OPERATED CARTRIDGE**

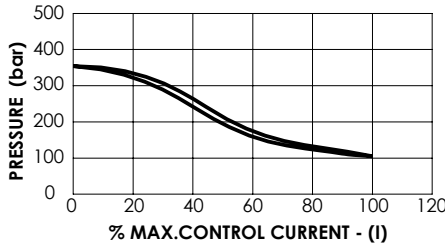
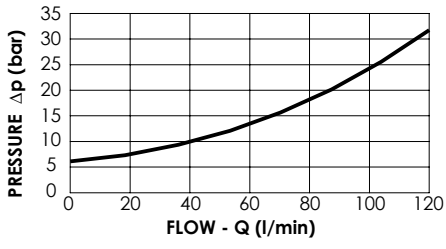
**CEBT-120-PMPS**

**PROPORTIONAL VALVES  
PILOTED RELIEF  
SPOOL TYPE FOR FAN DRIVE**



**SPECIFICATIONS**

Max. operating pressure:	350 bar
Rated flow:	120 l/min
Cavity:	SAE-10-2N
Weight:	0,21 kg
Coil type:	M15 type
Max. int. leakage:	200 cm <sup>3</sup> /min (@46 cst)
Installation torque:	55 - 62 Nm
PWM range recommended:	150-180 Hz
Seal kit:	RB100082



**NOTES**

Pressure decreasing with current increasing.  
Maximum pressure value can be adjusted manually within a range.

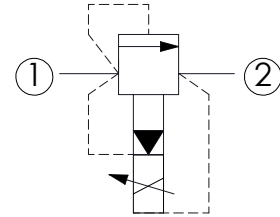
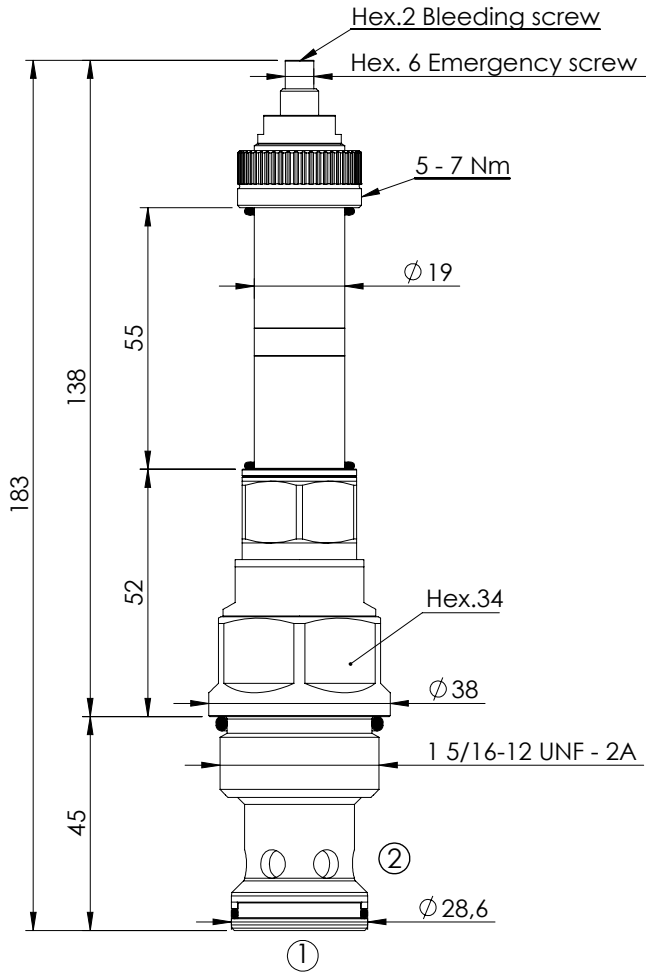
**ORDERING CODES**

Quick code	Description	Minimum pressure (bar)	Max. pressure setting range (bar)	Standard setting (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)
CE000890	CEBT-120-PMPS-91-S10-V350	7	100-350	210	200 mA (+/-7%)	1600 mA (+/-7%)

**SOLENOID OPERATED CARTRIDGE**

**CEBT-300-PLPS**

**PROPORTIONAL VALVES  
PILOTED RELIEF  
SPOOL TYPE**

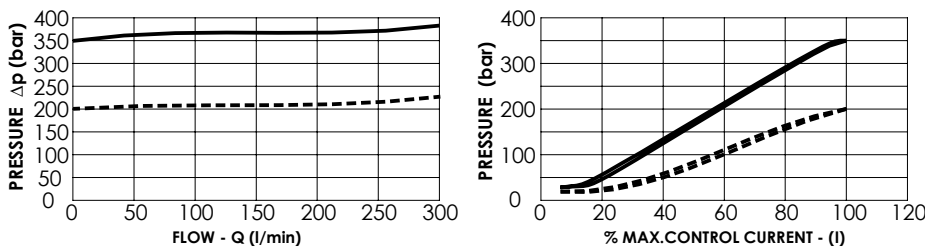


**SPECIFICATIONS**

Max. operating pressure:	350 bar
Rated flow:	300 l/min
Cavity:	SAE-16-2N
Weight:	0,5 kg
Coil type:	M15 type
Max. int. leakage:	200 cm <sup>3</sup> /min (@46 cst)
Installation torque:	118 - 132 Nm
PWM range recommended:	150-180 Hz
Seal kit:	RA100084

**NOTES**

Bleed air before use



CE000880 1>2 ————— CE000895 1>2 - - - - -

**ORDERING CODES**

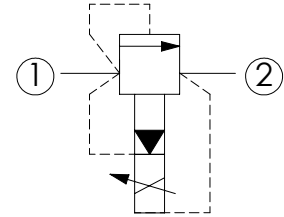
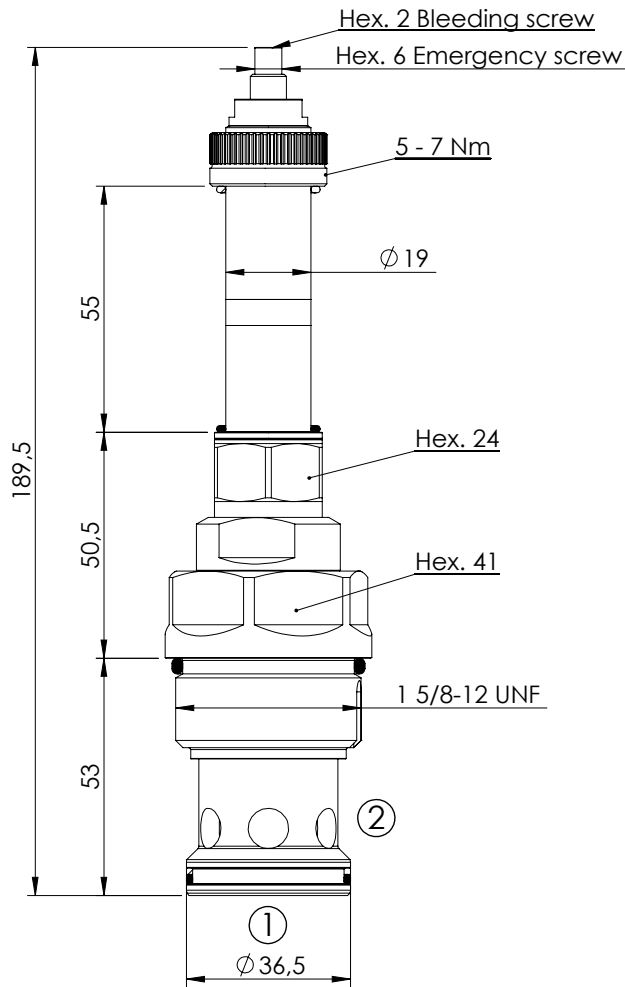
Quick code	Description	Proportional setting range (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000880	CEBT-300-PLPS-91-S16-V350	30-350	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style
CE000895	CEBT-300-PLPS-91-S16-V200	20-200	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style



**SOLENOID OPERATED CARTRIDGE**

**CEBT-500-PLPS**

**PROPORTIONAL VALVES  
PILOTED RELIEF  
SPOOL TYPE**



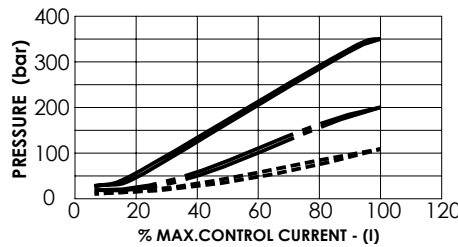
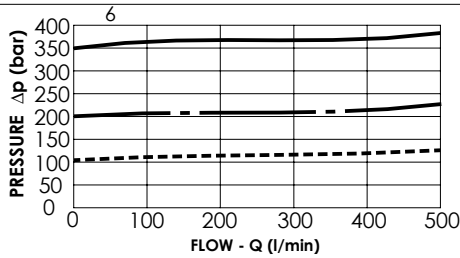
**SPECIFICATIONS**

Max. operating pressure:	350 bar
Rated flow:	500 l/min
Cavity:	SAE-20-2N
Weight:	0,7 kg
Coil type:	M5 type
Max. int. leakage:	200 cm <sup>3</sup> /min (@46 cst)
Installation torque:	230 - 250 Nm
PWM range recommended:	150-180 Hz

Seal kit: RA100085

**NOTES**

Bleed air before use



CE000770 1>2 ———  
 CE000771 1>2 - - - -  
 CE000772 1>2 ·····

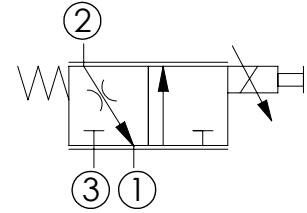
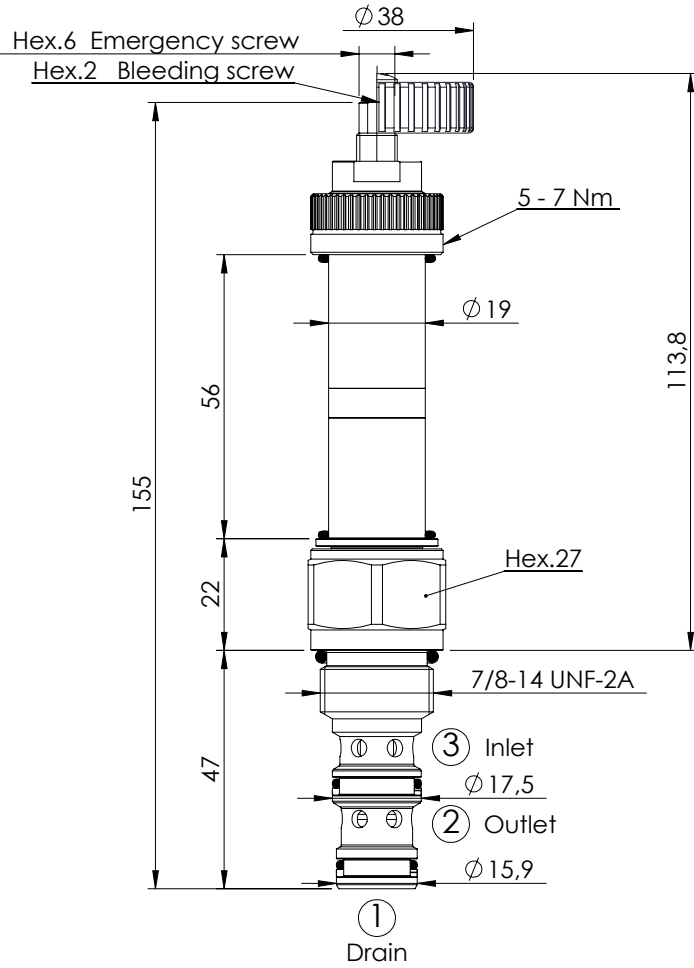
**ORDERING CODES**

Quick code	Description	Setting range (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000770	CEBT-500-PLPS-91-S20-V350	30-350	200 mA (+/-7%)	1600 mA (+/-7%)	Screw style
CE000771	CEBT-500-PLPS-91-S20-V200	20-220	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style
CE000772	CEBT-500-PLPS-91-S20-V100	15-90	200 mA (+/-7%)	1700 mA (+/-7%)	Screw style

**SOLENOID OPERATED CARTRIDGE**

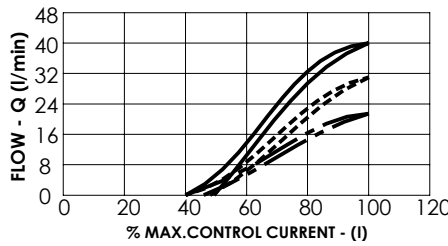
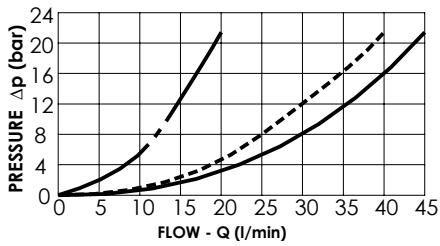
**CECS-040-FSPS**

**PROPORTIONAL VALVES  
NON COMPENSATED  
FLOW REGULATOR**



**SPECIFICATIONS**

Max. operating pressure:	210 bar
Rated flow:	40 l/min
Cavity:	SAE-10-3N
Weight:	0,22 kg
Coil type:	M15 type
Max. int. leakage:	150 cm <sup>3</sup> /min (@46 cSt)
Installation torque:	55 - 62 Nm
Recommended PWM range:	150-180 Hz
Seal kit:	RA100092



CE000111 3>2 ——— CE000112 3>2 - - - - - CE000113 3>2 — - - - -

**NOTES**

Bleed air before use

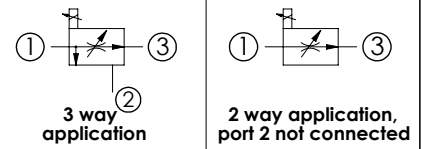
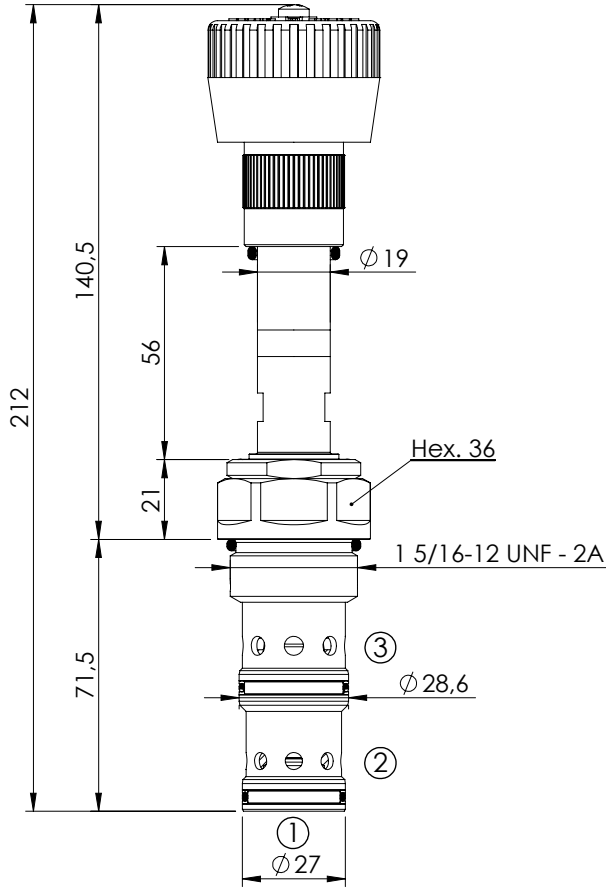
**ORDERING CODES**

Quick code	Description	Rated flow (l/min)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000111	CECS-040-FSPS-85-S10-V210	40	800 mA (+/-7%)	1600 mA (+/-7%)	Screw style
CE000112	CECS-030-FSPS-85-S10-V210	30	700 mA (+/-7%)	1500 mA (+/-7%)	Screw style
CE000113	CECS-020-FSPS-85-S10-V210	20	700 mA (+/-7%)	2400 mA (+/-7%)	Screw style
CE000960	CECS-040-FSPV-85-S10-V210	40	800 mA (+/-7%)	1600 mA (+/-7%)	Handknob style
CE000906	CECS-030-FSPV-85-S10-V210	30	700 mA (+/-7%)	1500 mA (+/-7%)	Handknob style
CE000489	CECS-020-FSPV-85-S10-V210	20	700 mA (+/-7%)	2400 mA (+/-7%)	Handknob style

PROPORTIONAL CARTRIDGE

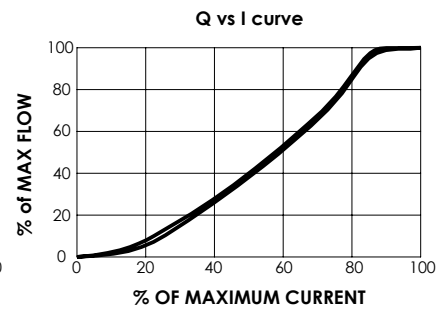
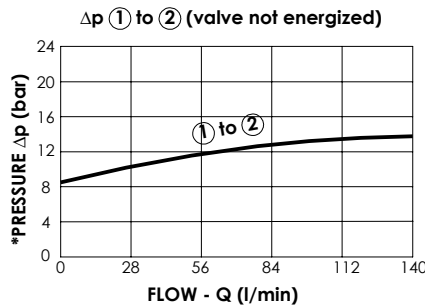
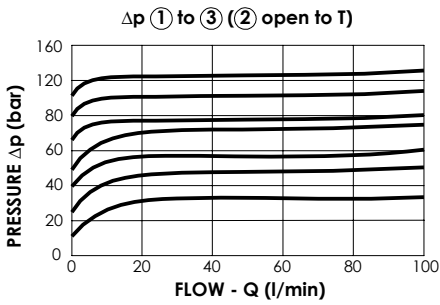
# CECS-140-FRPM

PROPORTIONAL VALVES  
FLOW REGULATOR  
3 WAYS COMBINATION



## SPECIFICATIONS

Max. operating pressure:	320 bar
Maximum flow (in inlet port ①):	140 l/min
Max. flow ① to ③:	100 l/min (regulated)
Pressure differential (① to ③):	7 - 11 bar
Hysteresis (ramp up and down):	1,5 - 3 %
Coil type:	M15
Voltage:	12- 24 V dc
Max current (12 V dc):	1800 mA
Max current (24 V dc):	1200 mA
Coil resistance (12 V dc):	3,3-5,8 $\Omega$
Coil resistance (24 V dc):	7,2-13 $\Omega$
Weight:	0,6 kg
Cavity:	SAE-16-3N
Installation torque:	130 -145 Nm
Surface protection proportional solenoid:	Coating DIN 50962 Fe8//ZiNi with passivation
Seal kit:	RB100094



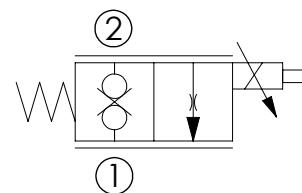
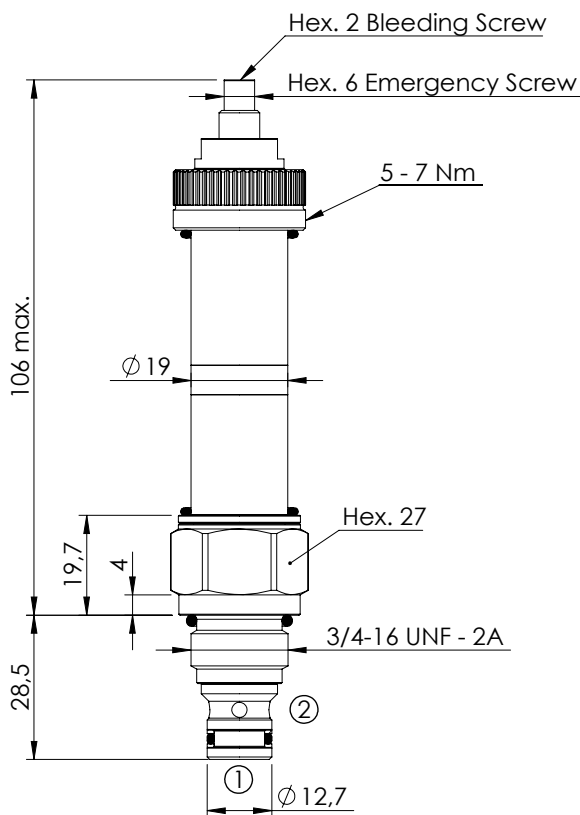
## ORDERING CODES

Quick code	Description	Regulated flow range (l/min)	Adjustment type
CE000831	CECS-140-FRPM-15-S16-V320	0 - 15	Handknob
CE000832	CECS-140-FRPM-25-S16-V320	0 - 25	Handknob
CE000833	CECS-140-FRPM-40-S16-V320	0 - 40	Handknob
CE000834	CECS-140-FRPM-50-S16-V320	0 - 50	Handknob
CE000835	CECS-140-FRPM-65-S16-V320	0 - 65	Handknob
CE000836	CECS-140-FRPM-80-S16-V320	0 - 80	Handknob
CE001034	CECS-140-FRPM-100-S16-V320	0 - 100	Handknob

**SOLENOID OPERATED CARTRIDGE**

**CEBS-020-PEPS**

**PROPORTIONAL VALVE  
NORMALLY CLOSED**

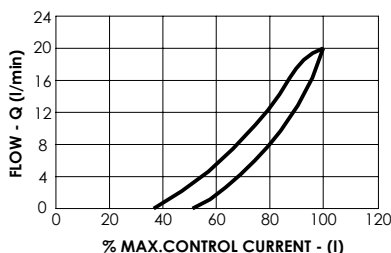
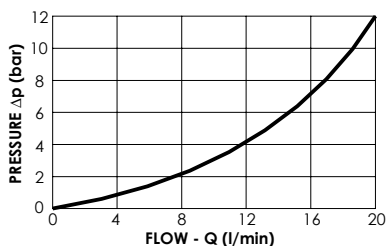


**SPECIFICATIONS**

Max. operating pressure:	210 bar
Rated flow:	20 l/min
Cavity:	SAE-08-2N
Weight:	0,15 kg
Coil type:	M15 type
Installation torque:	45 - 50 Nm
Recommended PWM range:	120-150 Hz
Seal kit:	RA100081

**NOTES**

Bleed air before use



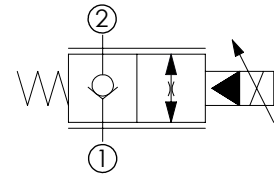
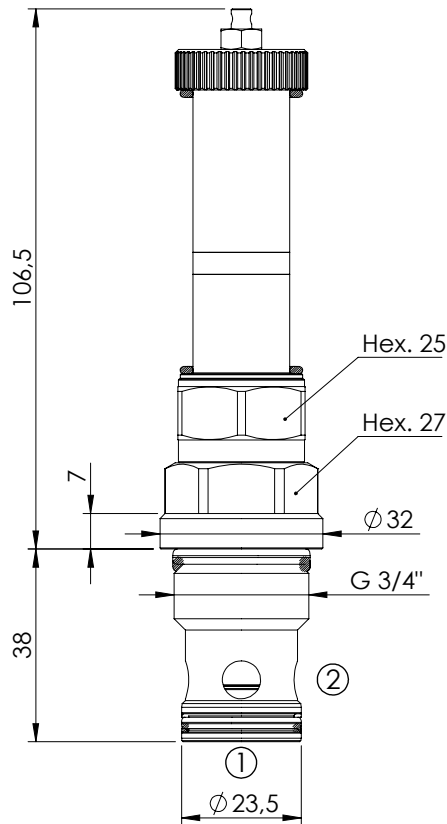
**ORDERING CODES**

Quick code	Description	Rated flow (l/min)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE000943	CEBS-020-PEPS-103-S08-V210	20	1000 mA (+/-7%)	2000 mA (+/-7%)	Screw style

PROPORTIONAL CARTRIDGE

**CEBP-070-NCPN**

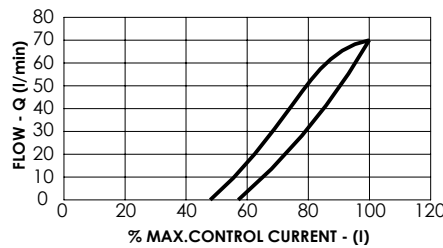
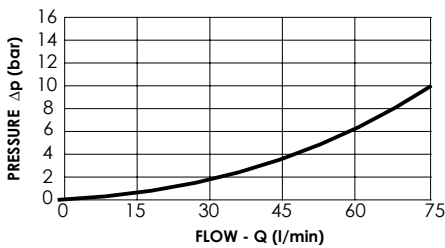
PROPORTIONAL VALVE  
NON COMPENSATED  
NORMALLY CLOSED



**SPECIFICATIONS**

Max. operating pressure:	350 bar
Rated flow:	70 l/min
Cavity:	VP000057
Weight:	0,26 kg
Coil type:	M15
Installation torque:	110 - 130 Nm
PWM range recommended:	150-180 Hz
Seal kit:	RD900057

**NOTES**

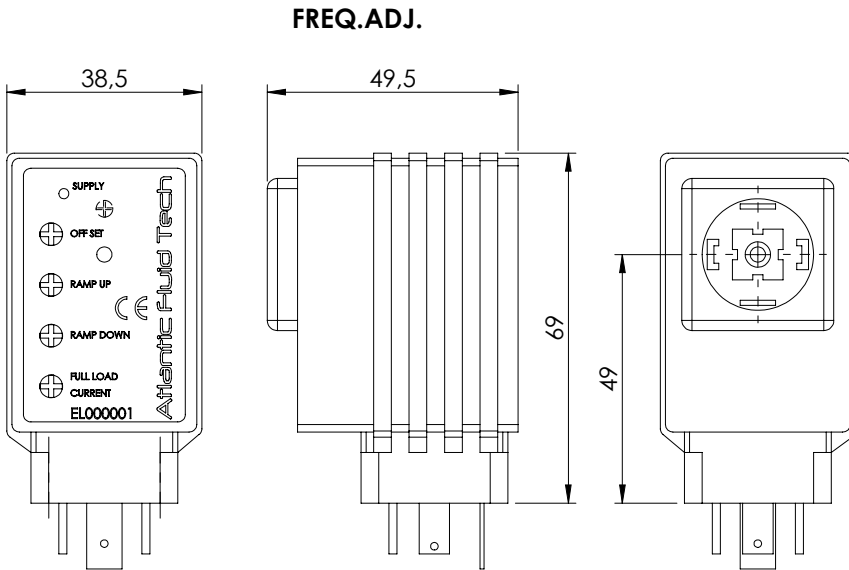
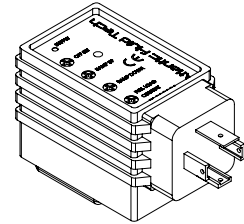


**ORDERING CODES**

Quick code	Description	Setting range (bar)	Threshold current (with 12VDC coil)	Max control current (with 12V DC coil)	Override
CE001026	CEBP-070-NCPN-112-057-N350	20	800 mA (+/-7%)	1800 mA (+/-7%)	Screw style

**PROPORTIONAL VALVE CONTROLLER**

**ELPC-030-SCCB**



**Max torque 0,5 Nm**

**SPECIFICATIONS**

**Supply voltage: 12 - 30 VDC**  
Coil rating must be matched with supply voltage:  
 $R_{coil} < (V_{supply} - 1.5V) / I_{max}$

**Control input signal options:**  
**5KΩ external potentiometer**  
(accepts 2KΩ to 10KΩ), or 0-10 VDC signal  
(see connection diagram)

**Output current: up to 2A**

**Minimum current: 0 - 0,6 A**

**Max current deviation in temperature range: 3%**

**Ramp up / ramp down: 0,1 to 10 sec**  
Ramp setting independent from current range

**PWM frequency: 100 - 500 Hz**

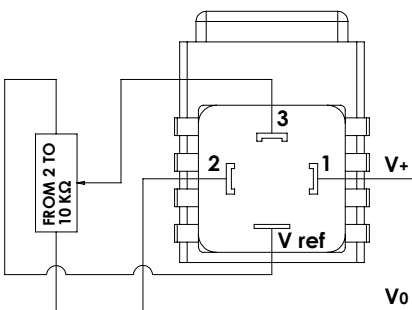
**Operating conditions: -20 TO +70°C**  
0 to 85% relative humidity

**Environmental protection: IP65**  
with cover and seals installed

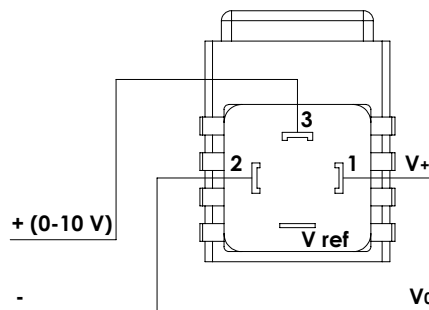
**Connector type: DIN 43650 - ISO 4400**

**IMPORTANT**  
**DO NOT REMOVE controller from solenoid when energized to avoid the risk of damaging it**

**CONNECTION EXAMPLE WITH JOYSTICK OR POTENTIOMETER**



**CONNECTION EXAMPLE WITH ANALOGIC SIGNAL**



**SETTING INSTRUCTIONS**

**SUPPLY:** led is on when current is supplied

**OFFSET:** to be used to set minimum current value (I min), turn clockwise to increase setting

**RAMP UP:** to be used to set the ramp time from minimum (I min) to maximum current value (I max)

**RAMP DOWN:** to be used to set the ramp time from maximum (I max) to minimum current value (I min)

**FULL LOAD CURRENT:** to be used to set maximum current value (I max), turn clockwise to increase setting

**FREQ. ADJ.:** this trimmer is inside the controller and is preset by factory, to be used to modify the PWM frequency

**ORDERING CODES**

Quick code	Description
EL000001	Proportional controller ELPC-030-SCCB