

# TOOLS X

## CP4 PUMP



## **TOOLS FOR PUMP CP4**

### **PULLERS**



**AE0233-CP4** PULLER FOR PUMP CP4 ON **BMW** SERIE 1



**AE0298-CP4** PULLER FOR POMP CP4 ON **BMW**  
Engine: B24



**AE0290-CP4** PULLER FOR PUMP CP4 ON **AUDI**



**AE0276-CR** PULLER FOR PUMP CP4 ON **HYUNDAI SANTA FE**  
With ring-nut 40x1.5mm



**AE0286-CP4** PULLER FOR PUMP CP4 ON **HYUNDAI SANTE FE** and **KIA SPORTAGE**



**AE0295-CR** PULLER FOR PUMP CP4 ON **HONDA 1.6**

## **TOOLS FOR PUMP CP4**



### **AE0288-CP4 PULLER FOR PUMP CP4 ON PEUGEOT AND CITROEN**

Puller for pump CP4 on Peugeot Citroen (PSA group).  
To pull out pulley.



### **AE0299-CP4 PULLER FOR PUMPA CP4 ON LAND ROVER**

Engine : JLR 2.0 Ingenium from 2015 on Land Rover  
Range Rover – Evoque – Discovery – Jaguar F-pace

Engine Code: AJ-200D

204DT

AJ200

204DTD

Similar: JLR-303-1672



### **AE0308-CP4 PULLER FOR PUMPA CP4 ON MERCEDES – ENGINE 656**

Puller to dismantle and assemble pumps CP4 on Mercedes  
- WITH ENGINE SUPPORT -

Engine code 656

## **TOOLS FOR PUMP CP4**

### **TIMING TOOL KIT**



#### **AZ0128-519** TIMING TOOL KIT FOR ENGINE **BMW** CP4 –N47-

Timing tool kit for BMW engine with pump CP4 with back-rotarycon camshaft

Engine: N47 – N47s (DV20A/B)



#### **AZ0128-54** TIMING TOOL KIT **AUDI VW** POMPA CP4 – CP1H3

For AUDI Q7 diesel (2006-03>) 3.0 TDI V6 24V TURBO 4X4 171KW  
Engine code: BUG – Gearshift A6 (2006-03>2009-04)

VAG 2.7 – 3.0 TDI V8 + 4.0 – 4.2 TDI V8



#### **AE0304-CR** TOOL TO DISMANTLE THE PULLEY OF COMMON RAIL PUMP VDO ON **RANGE ROVER\***

For the following models:

DISCOVERY 4 / L319	-	2011, 2012, 2013, 2014, 2015, 2016
Range Rover / L405	-	2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
Range Rover Sport / L320	-	2011, 2012, 2013
Range Rover Sport / L494	-	2014, 2015, 2016, 2017, 2018, 2019, 2020
XF / X250	-	2011, 2012, 2013, 2014, 2015
XF / X260	-	2016, 2017, 2018, 2019, 2020
XJ / X351	-	2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
F-PACE / X761	-	2017, 2018, 2019, 2020
VELAR / L560	-	2018, 2019, 2020

\* To be used with AE0305-CR Timing-tool to block the pulley of VDO pump.

## **TOOLS FOR PUMP CP4**



AE0305-CR      TIMING-TOOL TO BLOCK THE PULLEY OF VDO COMMON RAIL PUMP  
ON **RANGE ROVER\***

For the following models:

DISCOVERY 4 / L319	-	2011, 2012, 2013, 2014, 2015, 2016
Range Rover / L405	-	2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
Range Rover Sport / L320	-	2011, 2012, 2013
Range Rover Sport / L494	-	2014, 2015, 2016, 2017, 2018, 2019, 2020
XF / X250	-	2011, 2012, 2013, 2014, 2015
XF / X260	-	2016, 2017, 2018, 2019, 2020
XJ / X351	-	2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020
F-PACE / X761	-	2017, 2018, 2019, 2020
VELAR / L560	-	2018, 2019, 2020

\* To be used with AE0304-CR tool to dismantle the pulley.

## **TOOLS FOR PUMP CP4**

### **PUMP DISASSEMBLY**



**AE0300-CP4** PULLER TO EXTRACT FLANGE ON PUMP CP4



**AC0532-CP4** WRENCH TO UNLOCK JOINT OF PUMP CP4

Wrench to unlock the joint of pump CP4.  
Similar: 0.986.610.980



**AE0301-CP4** PULLER FOR JOINT WITH 2 TEETH

Puller for joint with 2 teeth on pump CP4.  
Similar: 0.986.613.585





## **TOOLS FOR PUMP CP4**



**AC0530-CP4** WRENCH TO DISASSEMBLE VALVE ON PUMP CP4



**AC0531-CP4** WRENCH FOR JOINT OF PUMP CP4 ON **AUDI**

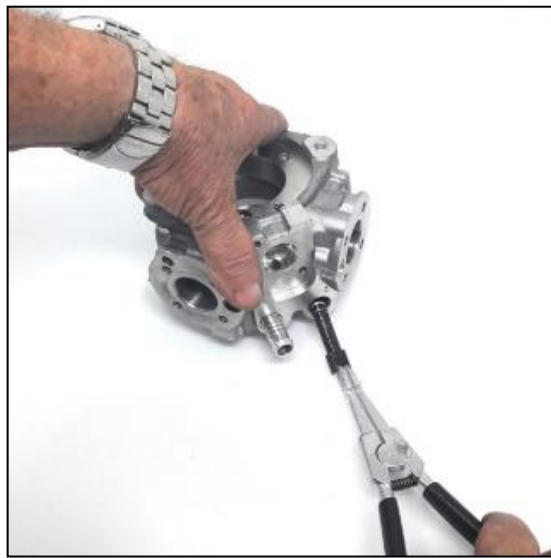


**AE0294-CP4** PULLER FOR HUB CP4-DFP3

Puller for hub on pump CP4 on engine **VW** TDI 2.0 and pump Delphi DFP3 on engine **Audi** and **VW** 1.6.

Similar: VW T10489 – V03839037JQ  
Pump Delphi: 28535928 and similar

## **TOOLS FOR PUMP CP4**



### **AE0303-CP4KIT                      KIT WITH PULLER AND INSERTER FOR BACK-LEAK PIPE ON CP4 PUMP**

On CP4 pumps, that haven't got overflow valve, during the inspection, it is required to extract and wash the filter-valve located under the back-leak pipe of the pump, in order to avoid obstructing the valve and breaking the pump again.

The kit consists of the following parts:

- |              |  |
|--------------|--|
| AE0268-CR    | Puller kit for diesel-inlet-pipe on CP1/CP1H |
| AE0303-CP4   | Adaptor for CP4 pump for AE0268-CR           |
| AAZ034-45    | Pliers to extract the filter-valve           |
| AAZ034-44CP4 | Adaptor to wash the filter-valve             |
| AAZ034-43CP4 | Inserter for back-leak pipe on the pump      |



## **TOOLS FOR PUMP CP4**

### **TOOLS FOR ZME VALVE**



#### **AE0291-CP4** PULLER FOR PRESSURE REGULATOR

Puller to extract the inner valve inside the pressure regulator on pump CP4



#### **AZ0084-CP4**

KIT OF TOOLS TO OPEN THE INNER-VALVE OF THE ZME.

THE TOOLS PERMITS TO OPEN THE INNER-VALVE AND TO ASSEMBLE AGAIN  
WHEN YOU OPEN IT YOU MUST CLEAN IT

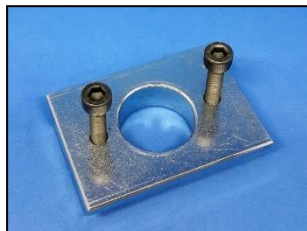
To disassemble the inner-valve from the body of the complete valve ZME you must use our tool AE0291-CP4. (not sold with this kit)

PULLER  
AE0291-CP4



## **TOOLS FOR PUMP CP4**

### **TOOLS FOR ELEMENTS**



**AB0150-CP4** CLAMP X VICE TO DISASSEMBLE ELEMENT OF CP4 PUMP

Clamp to fix on a vice element of CP4 pump.

Similar: 0.986.610.691



**AC0536-CP4** FEMALE TORX WRENCH OF 14

Female Torx wrench 14mm to disassemble elements of CP4 pump.

With connection for torque wrench.



**AC0553-CP4** TORX WRENCH T40 LONG TO DISMANTLE ELEMENT OF CP4 PUMP

Torx wrench T40 long to dismantle element of pump CP4.



**AC0554-CP4** TORX WRENCH T45 LONG TO DISMANTLE ELEMENT OF CP4 PUMP

Torx wrench T45 long to dismantle element of pump CP4.



## **TOOLS FOR PUMP CP4**



**AC0538-CP4** WRENCH TO DISASSEMBLE PRESSURE  
REGULATEUR PLACED ON THE ELEMENT OF CP4  
PUMPS

Octagonal wrench with connection 1/2"

To dismantle pressure regulator (ZMEvalve) directly placed on the element  
of new Bosch CP4 pumps.



## AZ0085-CP4

Kit to clean the outgoing-valve of the element of CP4 pump



During the test on the test bench of a CP4 pump just repaired, sometimes, you will run into some quantity problems.

In this case, it is necessary, to clean the outgoing-valve of the element.

Our kit AZ0085-CP4 includes all the tools needed to extract and to insert again the valve after the cleaning, in a easy and fast way.



BK0042-CP4 Little bush

## **AZ0086-CP4**

### **KIT TO CLEAN VALVE ON CP4 PUMP'S ELEMENT'S HEAD**



### **AZ0086-CP4**

Kit to clean the valve inside the element's head on CP4 pumps.

Tool kit consists of:

AZ0086-CP4 -02 - Tool to pull out the valve

AZ0086-CP4 -01 - Tool to Assemble – Calibrate the valve

The kit allows to open and close the valve to permit the cleaning.

## **TOOLS FOR PUMP CP4**

### **TOOL TO FIX CAM-SHAFTS**

#### **AAZ040-CP4 KIT OF 2 FIXING PLATES FOR CP4 CAMSHAFTS**

Kit with nr. 2 plates to fix correctly the cam-shaft inside the pumps CP4

Nr. 1 tool for camshaft cone 25mm

Similar Bosch: 0.986.613.591

Nr. 1 tool for camshaft cone 20mm

Similar Bosch: 0.986.613.592



If the pump turns left (check on the label of the pump - letter L) insert the tool in horizontal position and turn **45° clockwise** (turn right).

If the pump turns right (check on the label of the pump - letter R) insert the tool in horizontal position and turn **45° counterclockwise** (turn left).



## **TOOLS FOR PUMP CP4**

### **TOOL TO FIX CAM-SHAFTS**

#### **AAZ062-CP4** PROTECTION TO INSERT OIL-SEAL ON CP4 CAM-SHAFT

Cone-Inserter to protect the oil-seal on CP4 camshaft diam. 20mm.  
To save oil-seal during the assembly.  
To avoid risk of oil-seal break.



## **TOOLS FOR PUMP CP4**

### **TOOLS FOR BUSHES**



**AE0287-CP4** KIT PULLER AND INSERTER FOR BUSHES OF CP4

Kit puller + inserter for bushes of CP4



**BB0010-CP4** BUSH FOR COMMON RAIL – CP4-

Bush for pump CP4 with cut  
Dimension: 26X22X22mm.



**BB0011-CP4** BUSH COMMON RAIL – CP4-

Bush for pump CP4 with cut  
Dimension: 26X22X15mm.



**BB0014-CP4** BUSH COMMON RAIL – CP4-

Bush OPEN - CUT for CP4 pump  
Dimension: 29X25X21mm.

## **TOOLS FOR PUMP CP4**

### **AE0307-CP4 KIT PULLER – INSERTER BUSH INSIDE FLANGE OF CP4 PUMPS**



#### **AE0307-CP4 KIT PULLER & INSERTER OF BUSH INSIDE FLANGE OF CP4 PUMPS**

Kit consists of:

- puller(1)
- Inserter(2)

for bush inside flange of CP4 pumps

Bush BB0018-CP4 (3) –not in the kit-  
Bush sold individually



#### **BB0018-CP4 BUSH FOR FLANGE OF CP4 PUMPS**

BUSH: 29x25x25mm

## **TOOLS FOR PUMP CP4**

### **AE0309-CP4 KIT PULLER – INSERTER BUSH IN «LOW» FLANGE OF CP4 PUMPS**

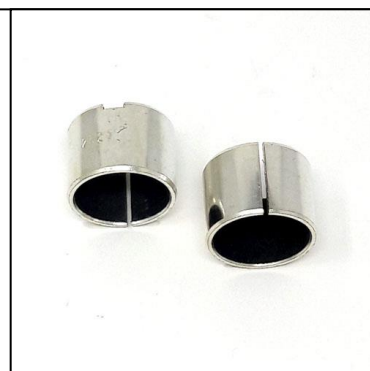


#### **AE0309-CP4**

Kit consisting of:

- puller
- inserter

For inner flange bushing in CP4 pumps



Bushing spare: **BB0014-CP4** –Not in the kit – Sold individually -

## **AAZ039-CP4**

# **KIT OF OIL-SEAL INSERTERS ON FLANGES OF BOSCH CP4 PUMPS**



### **AAZ039-CP4 KIT OF INSERTERS OF OIL-SEALS OF CP4 PUMPS**

The kit is composed of:

- AAZ039-696 Inserter for inner oil-seal on flange with 2 oil-seals. Similar 0.986.610.696.
- AAZ039-697 Inserter for outer oil-seal on flange with 2 oil-seals. Similar 0.986.610.697.
- AAZ039-698 Inserter for oil-seal on short flange with 1 oil-seal. Similar 0.986.610.698.
- AAZ039-0M Push-tool
- AAZ039-0C Protection cone for oil-seals.

Bosch CP4 pumps have two different types of flanges, one long with inside two oil-seals and one short with only one oil-seal.

In the photo on the right it is possible to see, starting from left, long flange with inner oil-seal on, then there is always a long flange with outer oil-seal on and finally short flange with oil-seal assembled.



## **AAZ039-CP4**

# **KIT OF OIL-SEAL INSERTERS ON FLANGES OF BOSCH CP4 PUMPS**



To insert the inner oil-seal on a long flange with two oil-seals use inserter code AAZ034-696. Insert the oil-seal on its inserter paying attention to fix the oil-seal with its lip looking inside the flange. We suggest to use our push-tool to help the assembly.

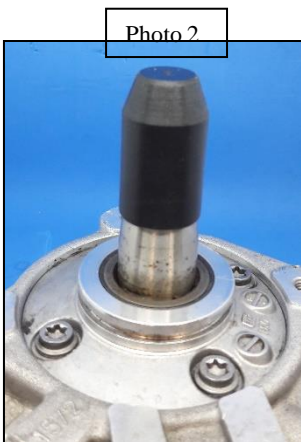
To insert the outer oil-seal on a long flange with two oil-seals use inserter code AAZ034-697. Insert the oil-seal on its inserter paying attention to fix the oil-seal with its lip looking outside the flange. We suggest to use our push-tool to help the assembly.



To insert the oil-seal on a short flange use inserter code AAZ034-698. Insert the oil seal on its inserter paying attention to fix the oil-seal with its lip looking inside the flange. We suggest to use our push-tool to help the assembly.



When proceeding with the pump assembly pay attention to not damage the oil-seal with the grain of the cam-shaft (photo 1); therefore we suggest strongly to use our protection cone code. AAZ039-0C (photo 2 and 3) .





## **TOOLS FOR PUMP CP4**

### **TOOLS FOR OIL-SEALS AND GASKET KIT**



#### **AAZ039-CP4** KIT OF INSERTERS FOR OIL-SEALS OF FLANGE OF CP4 PUMP

Kit composed of:

Nr. 3 inserters (Similar: 0.986.610.696 -0.986.610.697 – 0.986.610.698)

Nr. 1 push-tool

Nr. 1 oil-seal protection cone

For long flange with two oil-seals and for short flange with only one oil-seal.



#### **AE0261-CP4** PULLER FOR OIL-SEAL ON PUMP CP4 – SPECIAL -

Oil-Seal diam: 25mm



#### **AAZ034-60** INSERTER FOR O-RING ON FLANGE OF PUMP CP4 DIAM. 50MM



## **OIL-SEALS**



**BK0042-15** OIL-SEAL IN VITON FOR CP4 PUMP – DIAM. 36MM

Oil-seal for CP4 pump Diam. 36 in Viton

**BK0042-18** OIL-SEAL IN PTFE VITON FOR CP4 PUMP – DIAM. 36MM – ORIGINAL BOSCH

Oil-seal for CP4 pump Diam. 36 in PTFE – Original Bosch

Code: 1.460.C85.001

**BK0042-17** OIL-SEAL IN VITON FOR CP4 PUMP – DIAM. 37MM

Oil-seal for CP4 pump Diam. 37 in Viton

**BK0042-16** OIL-SEAL IN PTFE FOR CP4 PUMP – DIAM. 37MM – ORIGINAL BOSCH

Oil-seal for CP4 pump Diam. 37 in PTFE – original Bosch –

Code: F00N202337

**FOR CAMSHAFT AND ROLLER SEE CATALOGUE CP4 CAMSHAFT & ROLLER**

## **GASKET KIT FOR CP4 PUMP – NR. 1 ELEMENT**



**BK0042-01** GASKET KIT PUMP CP4 – NR. 1 ELEMENT  
WITH NR. 1 OIL-SEAL

For pump CP4 similar 0.445.010.506/507/508/530/543/546/563/580/704



**BK0042-11** GASKET KIT POMP CP4 – WITH OIL-SEAL

For CP4 pump with only 1 element.

**BK0042-12** GASKET KIT SIMILAR BK0042-11 without oil-seal

Gasket kit similar BK0042-11 but WITHOUT OIL-SEAL.

For CP4 pump with only 1 element.



**BK0042-22** GASKET KIT PUMP CP4 – NR. 1 ELEMENT  
WITH NR. 1 OIL-SEAL

For CP4 similar: 0.445.010.516/552/  
0.986.437.430



**BK0042-23** GASKET KIT PUMP CP4 – NR. 1 ELEMENT  
WITH NR. 1 OIL-SEAL

For CP4 similar: 0.445.010.767/768



**BK0042-19** GASKET KIT PUMP CP4  
WITH NR. 2 OIL-SEAL

Gasket kit for CP4S Similar: 0.445.010.512/525/545/559  
0.986.437.437

## **GASKET KIT FOR CP4 PUMP – NR. 2 ELEMENTS**



**BK0042-00** GASKET KIT PUMP CP4 – NR. 2 ELEMENTS  
WITH NR. 2 OIL-SEALS

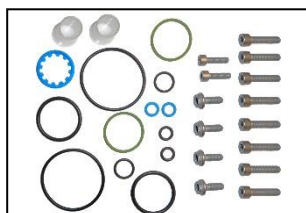
For pump CP4 similar: 0.445.010.611/659/669/673/685

**BK0042-21** GASKET KIT PUMP CP4 – NR. 2 ELEMENTS  
WITH NR. 2 OIL-SEALS (NR. 1 ORIGINAL BOSCH  
IN PTFE)

With nr. 1 oil-seal original code 1.460.C85.001

For pump CP4 similar: 0.445.010.611/659/669/673/685

## **GASKET KIT CP4 SIMILAR BOSCH**



**BK0042-13** GASKET KIT SIMILAR 1.462.C15.999

Similar: 1.462.C15.999



**BK0042-14** GASKET KIT SIMILAR 1.462.C16.997

Similar: 1.462.C16.997

# UNIVERSAL FILTERS FOR DIESEL



## FILTERS FOR DIESEL FUEL

Special filters with magnet to filter Diesel fuel.

These special filters with magnet allow a more thorough cleaning of the fuel.

In addition to the filter, the magnet attracts any metal residues that do not enter in the high pressure circuit.

It is recommended to place the filter between the fuel-filter and the high-pressure pump.

Codes:

BF0001-06	Filter diam. 8	with magnetic quick connection <u>without</u> valve
BF0001-07	Filter diam. 8	with magnetic quick connection <b>with</b> valve
BF0001-08	Filter diam. 10	with magnetic quick connection <u>without</u> valve
BF0001-09	Filter diam. 12	with magnetic quick connection <u>without</u> valve

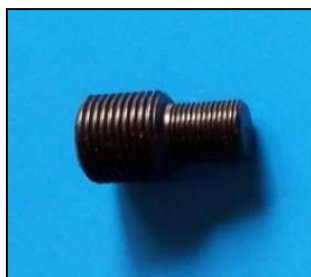
## **TOOLS FOR PUMP CP4**

### **CONTROL AT THE TEST BENCH**



**AG0025-CP4** COUPLING CONE 25 FOR PUMPS CP4.

Motoring coupling composed of: AG0025-02 +  
AG0000-CP4 screw for pump CP4



**AG0000-CP4** SCREW 18x1.5 X COUPLING CONE 25 x PUMP CP4



**AG0022-CP4** COUPLING CONE 22MM X CP4 PUMPS

For Pumps: 0.445.010.530  
0.445.010.704  
0.445.010.763

Camshaft: 1.466.C06.098



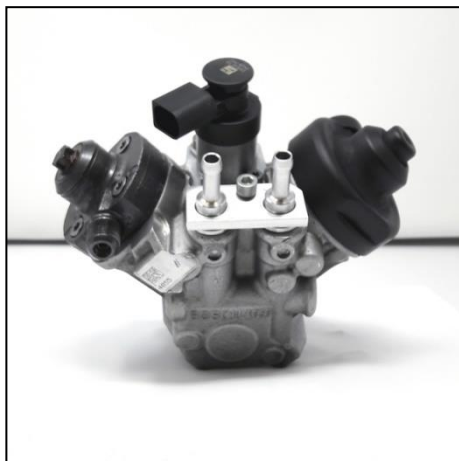
**AAE001-CP4** FLANGE FOR PUMP CP4



**AAZ034-36** DUMMY PRESSURE REGULATOR CP4



## **TOOLS FOR PUMP CP4**



**AAZ026-04-CP4** KIT PLATE + NR. 2 CONNECTIONS OF IN & OUT FOR CP4 PUMP AUDI & VW.

For pumps similar: 0.445.010.805.

## **TOOLS FOR PUMP CP4**

### **PIPES & CONNECTIONS**



**AAZ034-CP4** CONNECTION FOR HIGH PRESSURE JOINT OF CP4 PUMP

To use easily pipes with connection 14mm

Female 16x1mm

Male 14x1,5mm

We suggest to by nr. 2 pieces.



**AAT703-FX** FLEXIBLE HIGH PRESSURE PIPE X CP4 PUMP

Dimensions: 6x2x700mm

Connections: 12x1,5mm – 16x1mm

Joint: shaped 90°



**AAT901-CP4** FLEXIBLE HIGH PRESSURE PIPE X CP4 PUMP

Dimensions: 6x2x1000mm

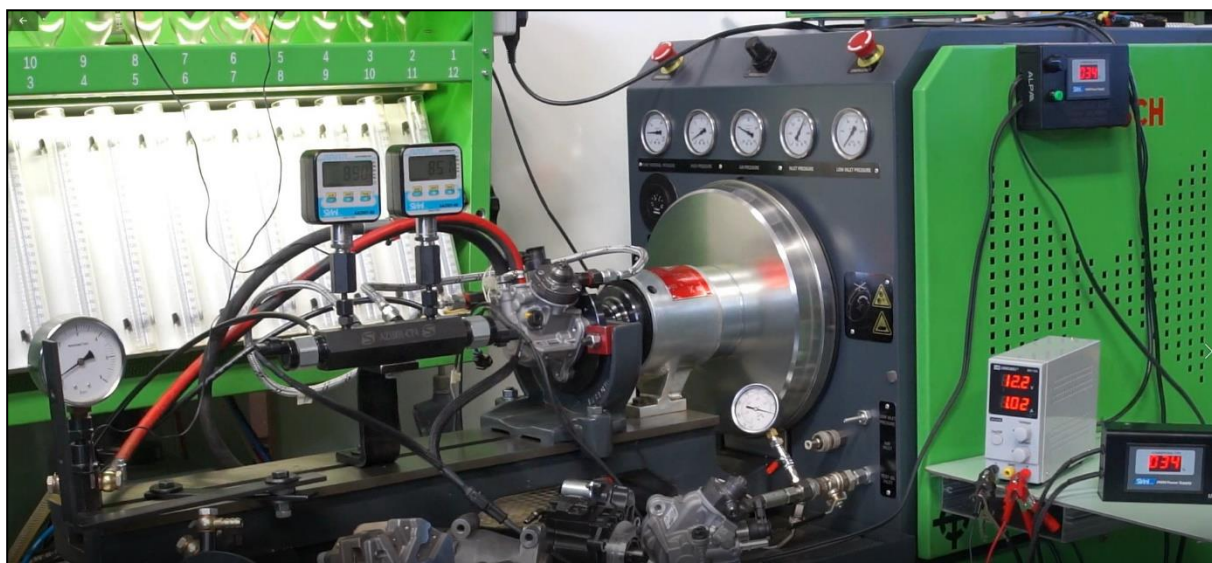
Connections: 16x1,5mm

16x1mm

For test benches Bosch EPS 708 – EPS 815

## **TOOLS FOR PUMP CP4**

### **AZ1000-CP4 TESTER KIT FOR BOSCH PUMP MOD. CP4**



#### **AZ1000-CP4**

NEW KIT TO TEST **ALL** COMMON RAIL PUMPS ON THE TEST BENCH  
**UNIQUE FOR CP4**

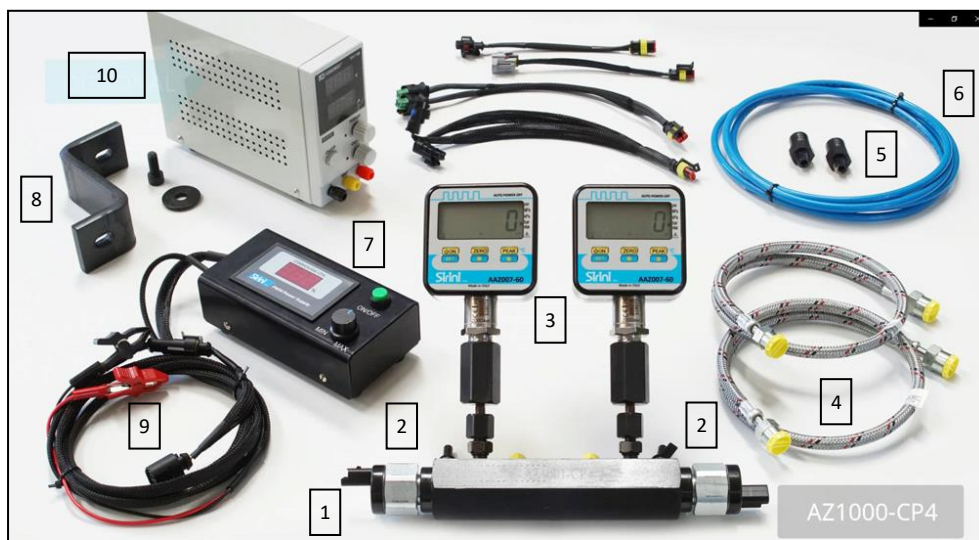
Our AZ1000-CP4 is suitable to test on the test bench (with burette) all kind of common rail pumps now available in the market (Bosch, Delphi, Denso, VDO) included also the new Bosch CP4 pumps currently assembled on millions of vehicles in a fast, precise and easy way.

The decision to develop the kit AZ1000-CP4 has been taken to test CP4 pumps with two elements to discern the pressure and the quantity produced by each single element.

With this idea is born the heart of the kit AZ1000-CP4, a **double-rail**; a rail with 2 separated and independent rooms sold with 2 pressure regulator.

## **AZ1000-CP4**

### **TESTER TO CHECK CP4 PUMP AT THE TEST BENCH**



#### KIT AZ1000-CP4 COMPONENTS:

- Double-Rail (AZ1001-CP4) [1] with caps and fixing plate (AZ1002-CP4) [8]
- Nr. 2 pressure regulators (BA0008-VDO) [2]
- Nr. 2 digital manometer Made in Italy -2500 bar - to check pressure inside the rail [3]
- Nr. 2 flexible high pressure pipes AAT701-FX (length 700mm and connections 14x14) [4]
- Nr. 2 adaptors AAZ010-35 (16X1,5F X 14X1,5M) [5] to connect pump to flexible pipes
- Nr. 2,5 mt of rilsan pipe – blue - diam. 8 (AAT099-CP4) [6]
- Nr. 1 Pwm (power supply) AZ1003-CP4 [7] **with temperature sensor**
- Nr. 1 Pwm (power supply) AZ1013-CP4 (**without** temperature) to control ZME valve. It permits to check all the ZME valves, also the new ones assembled directly on the element of new CP4 pumps.
- Nr. 2 adaptors to fix temperature sensor (AZ1012-CP4)
- Nr. 1 double-cable for pressure regulators (AZ1004-CP4)
- Nr. 1 cable for ZME valve (AZ1005-CP4)
- Nr. 1 cable for ZME valve (AZ1006-CP4)
- Nr. 1 cable for suction-control-valve Denso (AZ1007-CP4)
- Nr. 2 cables with alligator clips (1 red + 1 black) AZ1009-CP4 [9]
- • Optional: Digital Power Supply with continuous adjustment 0-30 Volts–0-10 Amp. (AZ1008-CP4) [10]

**AZ1000-CP4**  
**TESTER TO CHECK CP4 PUMP AT THE TEST BENCH**

**AZ1000-CP4**

**VIDEO** AVAILABLE ON YOU TUBE



**TESTER PROVA POMPE CP4**  
**(per lingua italiana)**

**TESTER TO CHECK CP4 PUMP**  
**(English)**

**FOR CAMSHAFTS AND ROLLERS**  
**ASK FOR CATALOGUE**  
**CP4 CAMSHAFTS & ROLLERS**