rexroth
A Bosch Company

Compact power modules
KE and KS series

RE 18306-02
Edition: 08.2026
Replaces: 04.2026



Contents

Ordering Details	2
General Technical	6
Compact Power Module Type	9
A.C. Electric Motors	10
D.C. Electric Motors	15
Central Manifold KE	38
Central Manifold KS	56
Built-in Valve	63
Coils - Connectors	69
Gear Pumps Group 1	77
Oil Tanks	79
Mounting position	89
Mounting Brackets	90
Modular Stackable Elements	91
Accessories	116

Ordering Details for Compact Power Modules with A.C. Motor

01	02		03		04		05		06		07		08		09		10		11		12
__	_	-	____	-	____	-	___/__(___)	-	___/___/___/___	-	___/__	-	____	-	_____	-	_/_/_/___	-	___/___/____	-	___/___

Family

01	Power module type	**KE** **KS**

Power module type of motor

02	Without motor	**0**
	With 3ph motor	**2**
	With 1ph motor	**3**

A.C. Electric motor

03	In the Power Module KE-KS type it is possible to assemble every code of AC motor shown in the catalogue.	

Junction Elements

04	The code of the Junction Element is showin in the page after the selected AC motor.	

Central Manifold with Pressure range Relief Valve + Request Setting of the Relief Valve in Bar

05	Select the required Central manifold with the required pressure range of the Relief Valve and put the required setting in bar beetwen bracket.	

Built-in Valves

06	Insert the codes of the required valves following the number progression of the cavity in the Central Manifold (see page after the selected Central Manifold).	

Coil Model and Connector

07	In case of selection of Solenoid Built-in Valve also choose the required coil Voltage and the required Connector. (See page 65-69)	

Gears pump

08	It is possible to select the pump between Standard and Cast iron cover version. (See page 74-76)	

Oil Tank

09	Select the required Oil Tank. (See pag.77-87)	

Mounting Position and Mounting Brackets

10	Select the required working position of the Power Module as well as the position of the therminal box. In case of mounting position V1 also select the position of the oil filler cup. If needed select the Mounting Bracket. (See pag.88-89)	

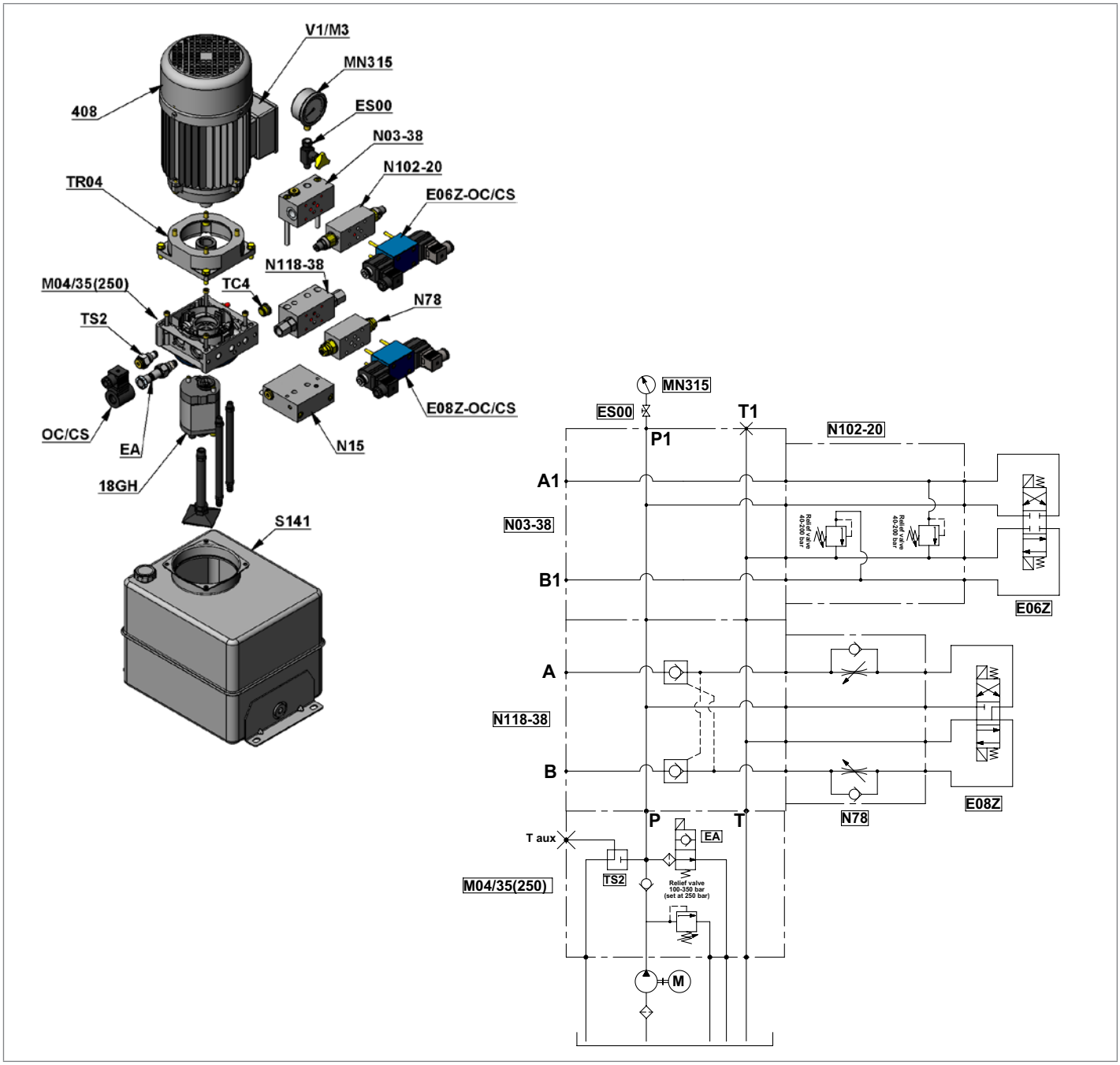
Modular Stackable Elements

11	Select the additional Modular Stackable Elements if needed.	

Accessories

12	Select the additional Accessories if needed.	

Example of Ordering Details for Compact Power Modules with A.C. Motor



Ordering Details for Compact Power Modules with AC Motor

01	02		03		04		05		06		07		08		09		10		11		12
KE	**2**	-	**408**	-	**TR04**	-	**M04/35 (250)**	-	**EA/TC4/ TS2**	-	**OC/CS**	-	**18GH**	-	**S141**	-	**V1/M3**	-	**N15/N118-38/N78/ E08Z-OC/CS/N03-38/ N102-20/E06Z-OC/CS**	-	**ES00/MN315**
Power Module Type	Power Module Type of Motor		AC Electric motor		Junction Element		Central Manifold with Pressure range Relief Valve + Request Setting of the Relief Valve in Bar beetwen bracket		Built-in Valves in cavity n° 03-05-06		Coil Model and Connector		Gear pump		Oil Tank		Mounting Position and Mounting Brackets		Modular Stackable Elements Coil Voltage Connector		Accessories

Ordering Details for Compact Power Modules with D.C. Motor

01	02		03		04		05		06		07		08		09		10		11		12		13		14
__	_	-	____	-	_	-	_	-	____	-	___/__(___)	-	____/____/____/____	-	___/__	-	____	-	_____	-	__/__/__/___	-	____/____/____	-	____/____

Family

01	Power module type	**KE** **KS**

Power module type of motor

02	With DC motor	**1**

D.C. Electric motor

03	In the Power Module KE-KS type is possible to assemble every code of DC motor shown in the catalogue.	

Relay

04	The available relays are shown in the page after the selected DC motor.	

Plastic Protection

05	The possibility to assemble the plastic protection is shown in the page after the selected DC motor.	

Junction Elements

06	The code of the Junction Element is shown in the page after the selected DC motor.	

Central Manifold with Pressure range Relief Valve + Request Setting of the Relief Valve in Bar

07	Select the required Central manifold with the required pressure range of the Relief Valve and put the required setting in bar beetwen bracket.	

Built-in Valves

08	Insert the codes of the required valves following the number progression of the cavity in the Central Manifold. (see page after the selected Central Manifold)	

Coil Model and Connector

09	In case of selection of Solenoid Built-in Valve also choose the required coil Voltage and the required Connector. (See page 65-69)	

Gears pump

10	It is possible to select the pump between Standard and Cast iron cover version. (See page 74-76)	

Oil Tank

11	Select the required Oil Tank. (See pag.77-87)	

Mounting Position and Mounting Brackets

12	Select the required working position of the Power Module as well as the position of Relay. In case of mounting position V1 also select the position of the oil filler cap. If needed select the Mounting Bracket. (See pag.88-89)	

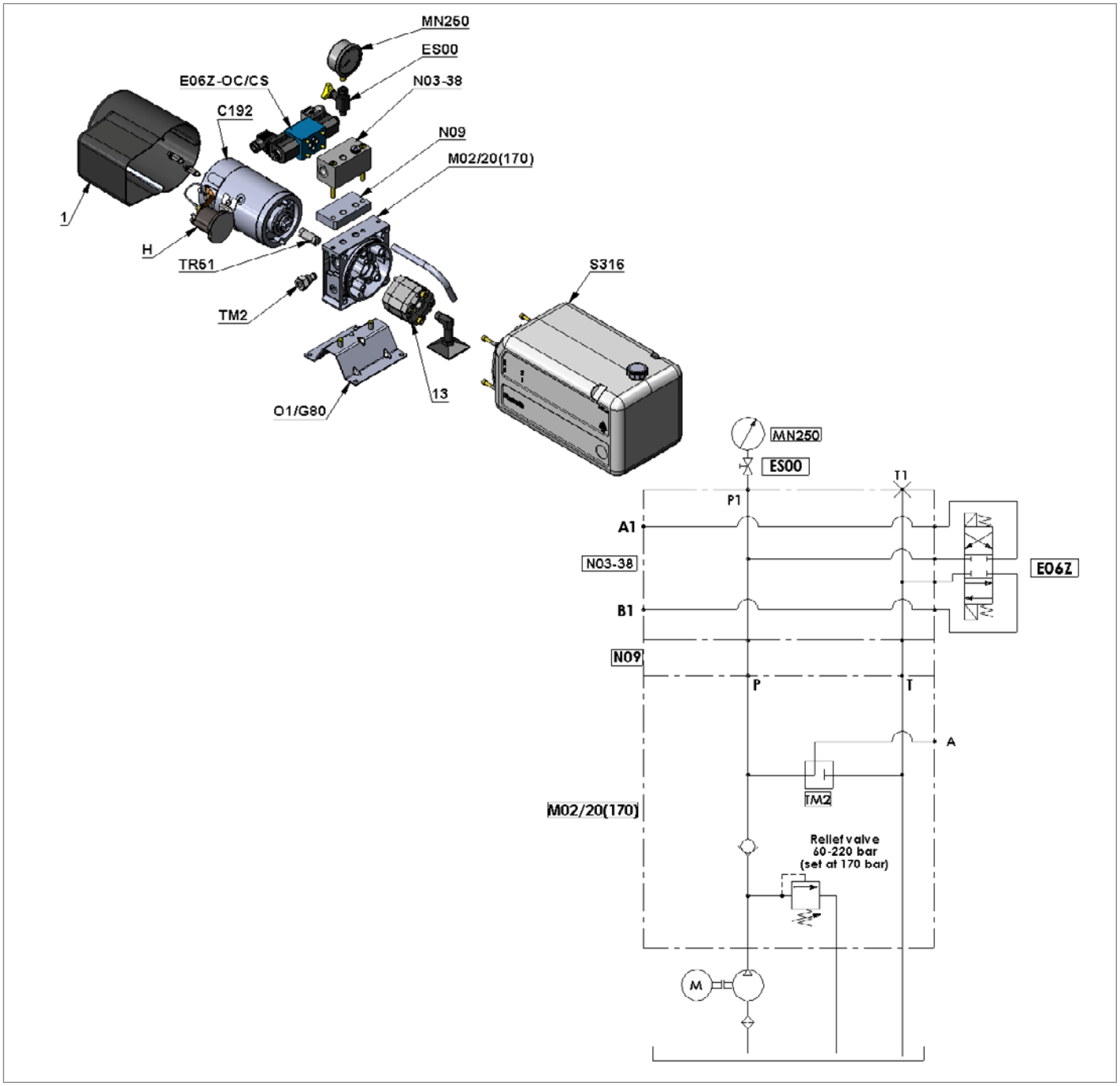
Modular Stackable Elements

13	Select the additional Modular Stackable Elements if needed.	

Accessories

14	Select the additional Accessories if needed.	

Example of Ordering Details for Compact Power Modules KE with D.C. Motor



Ordering Details for Compact Power Modules with AC Motor

01	02		03		04		05		06		07		08		09		10		11		12		13
KE	**1**	**-**	**C192**	**-**	**H**	**-**	**1**	**-**	**TR51**	**-**	**M02/ 20(170)**	**-**	**TM2**	**-**	**13**	**-**	**S316**	**-**	**01/ G80**	**-**	**N09/N03-38/ E06Z-OC/CS**	**-**	**ES00/ MN250**
Power Module Type	Power Module Type of Motor		DC Electric motor		Relay		Plastic Protection		Junction Element		Central Manifold with Pressure range Relief Valve + Request Setting of the Relief Valve in Bar beetwen bracket		Built-in Valves in cavity n° 03		Gear pump		Oil Tank		Mounting Position and Mounting Brackets		Modular Stackable Elements		Accessories

General Technical Data for Compact Power Module KE and KS series

Through the years CH has developed a highly evolved modular system resulting in powerful, flexible and cost effective power pack range, identified as **“compact power modules”**. In its easier configuration, a “compact power module” is an assembly of electric motor, central manifold with valves, pump, oil tank and a few connection elements. The central manifold, with its built-in valves, allows to achieve a large variety of hydraulic control circuits. If more complex circuits are needed, modular integrated blocks can be added by flange mounting, or interfacing, to the central manifold extending the capabilities.

Typical applications
Passenger lift
Fork lift
Car and motorcycle lift
Lift table
Dumper
Tail gate
Scissor lift
Gangway and davits for boats
Material handling
Foods machinery

Power module selection
Choose the circuit which meets your application requirements.
Take note of all dimensions resulting from the basic components chosen for your application.

Note
dimensions may vary slightly and should be confirmed by CH, if the assembly is to be installed in a space with narrow clearance.

The tank capacity and the tank dimensions need to be large enough to assure proper pump suction: there must always be a reserve of oil in the tank when all cylinders are fully extended and avoid overflow when cylinders are fully retracted.
The tank must be evaluated also for best separation of air from oil, and for settling down oil contamination. It should be placed in a space with, at least, natural ventilation and it should permit enough heat dissipation to prevent high fluid temperature.
Select the electric motor by evaluating the power needed and the motor compliance with the heat developed during the expected run time (or “duty cycle”).

Hydraulic fluid for compact power module
Mineral oil based hydraulic fluids suitable for hydraulic systems can be used; they should have physical lubricating and chemical properties as specified by:

- MINERAL OIL BASED HYDRAULIC FLUIDS HL (DIN 51524 part 1)
- MINERAL OIL BASED HYDRAULIC FLUIDS HL P (DIN 51524 part 2)

For use of environmentally friendly fluids please consult CH.

Fluid viscosity, temperature range of the operating fluid, ambient temperature
The fluid viscosity should remain within the range 10 to 300 cSt (centistokes); recommended 15 to 120 cSt.
Permissive cold start viscosity is maximum 2000 cSt.
The fluid temperature should remain within the range -15°C and 80°C (5°F and 176°F).

Note
For compact power module with plastic tank the fluid temperature should remain within the range -15°C and 70°C (5°F and 158°F).
Ambient temperature -15°C +40°C (5°F and 104°F).

Fluid cleanliness requirements and maintenance
We recommend a cleanliness of the operating fluid according to ISO 4406 Class 20/18/15 or cleaner.
All components of the hydraulic circuit , including hoses and actuators, must be flushed and cleaned before assembling, because the compact power module has a suction filter only.
The hydraulic fluid should be replaced after the first 50 hours, and then every 1000 hours, or, at least, once a year.

Power module installation
The mounting position is basically un-restricted; just avoid installations that could compromise the pump suction, it is recommended to support the power module on vibration dampening blocks when the mounting structure is expected to vibrate.

Wiring and starting-up
The wiring between battery and electric motor should be selected in order to avoid excessive voltage drop (recommended less than 1 V).
It is strictly forbidden to allow the backwards rotation of the pump even at the first starting: to prevent reverse

rotation, the wiring polarities must be correctly connected (except for the reversible pumps).
Caution: when energized, the surface temperature of the electric motor could reach temperature levels of 60-80°C (140-176°F): care should be taken to avoid any accidental contact of people with the motor surface.

A.C. motors
The tolerances on the nominal voltage are:
Single phase motor: 230V +/-5% -
Three phase motor: 230-400V +/-10%.
Protection degree : IP54 (protection against dust and water splash).
Insulation class: F (155°C) (311°F).
All motors are aluminum alloy die cast without painting.

Note
Standard Single phase motors have a permanently connected run capacitor. If the motor starts with pressure in the circuit (load in the actuator) we suggest the use of specials dedicated manifolds KE series with integrated Start-Up valve (Manifold code M09 and M19).

D.C. Motors
CH has a wide range of D.C. motors. In the following pages you will find a selection of our standard range.
For further information about our complete range please contact our Sales department.
All the motors shown have clockwise rotation suitable for driving our counter clockwise gear pumps.
For each motor a diagram is shown that enables the customer to select the right pump displacement needed for the required flow and working pressure.
To be sure of selecting the best electric motor for the application, also the duty cycle must be verified.
Following are the definitions of different of duty cycles:
S2 = Short time duty cycle: indicates the number of minutes the motor can operate before reaching the maximum allowable temperature. After this time the motor must cool down until the ambient temperature is reached.
S3 = Intermittent duty cycle: indicates the maximum time percentage (%) based on 10 minute period within the motor can run until reaching the maximum allowable temperature. For example an S3 value of 15% = 1,5 minutes running time every 10 minutes period. For 8,5 minutes the motor is switched-off.
The S2 and S3 values are related to the current draw. On the label of the motor the S2 and S3 values are indicated and refer to the nominal power of the motor.
To check the S2 or S3 value at different conditions is necessary to find the value of current in the motor-pumps diagram and relate it to the represented list.
All the diagrams motor-pumps are obtained at the nominal voltage of 12 or 24 Volt using fluid ISO VG 46 at 20-30°C (68-86°F).

Central manifolds
All the Central Manifolds shown in the catalogue are made in die cast aluminium alloy except for the manifold code 10 (for CPM MR series) that is made out of extruded bar. The validation of the Central Manifolds follows a life-test with 250 bar (3625 psi) pulsed pressure repeated for 300.000 cycles.

Built-in valves
A wide range of cartridge valves and special plugs is available to be assembled in our Central Manifolds. The shown cartridge valves are designed for use in our Compact Power Module and are manufactured using steel with high mechanical strength. Surface treatments protect the exposed parts to the external environment. Standard seals are NBR (BUNA-N) with backup rings in PTFE. The cartridge valves with “leak proof seat design” have an average leakage of 10-15 drops/minute (< 1 cm^3/minute 0.06 in^3/min.) at the maximum pressure using fluid ISO VG46 at 40°C (104°F).
The validation of the cartridge valves follows a life-test at pulsed maximum pressure (indicated for each valve) repeated for 500.000 cycles.
All the solenoid cartridge valves are fitted with protective O-Rings installed between the pole tube and the coil. These O-Rings protect the internal parts from condensation and contaminants , which could cause malfunction.
All the solenoid cartridge valves are designed for operating in D.C only.
Power supply in A.C. requires a connector with bridge rectifier included.

External gear pumps
CH offers a wide range of External Gear Pumps to cover different kinds of applications. The standard versions are suitable for most applications. For few applications requiring higher peaks of pressure (for example Car Lift and Presses) a version with cast iron covers is available. For applications requiring high numbers of Start&Stop the splined shaft version is suggested. All the pumps are pressure compensated to guarantee the best efficiency.

Oil tanks

In this catalogue you will find a wide selection of steel and plastic tanks available as standard product. If a special tank is required please contact our Sales Department. Steel tanks have Black paint finish and are suitable for operating temperature range -15°C / +80°C (5°F / 176°F). Plastic tanks are obtained in one piece in order to avoid welded parts to avoid weak points at extreme temperature and vibrations. Plastic tanks are suitable for operating temperature range -15°C / +70°C (5°F / 158°F).

Note
even if the plastic tank mounting system is designed to avoid oil leakage the tank must be securely anchored when fitted in mobile equipment and when subject to shocks and heavy vibrations. Please check that the anchorages do not stress or deform the tank.

Modular stackable elements

Our modular system offers a wide range of standardised elements. They are divided in two main series:
Modular Elements “N” series: Modular blocks for different mounting position with mechanical valve or interface for CETOP valves to create parallel or series circuits.
Modular Elements “V” series: Modular blocks that incorporate solenoid operated cartridge valves 2,3,4 way.
All the Modular Elements are made in extruded aluminum alloy. In the catalogue you will find a selection of the main used models.

Note
To reduce the complexity of the system and optimize the available space, customized Modular Elements can be designed and manufactured.
In this case please contact our Sales Department.

European machine directive 2006/42/CE

According to the Machine Directive2006/42/CE, a complete power module, made available to the European market, is define as “partly completed machinery”.
Instead, the power module sub-assemblies (motor, pump, reservoir, central manifold,...), when not assembled into a complete power pack, are considered “components” which can be employed in a “machinery” or a “partly completed machinery”. In this case, the CH components and sub-assemblies must be fitted in compliance with all the relevant technical data sheet applicable to the product, and shall not be operated, adjusted or disassembled before the complete machinery where they are incorporated has been declared to be in compliance with the Machine Directive 2006/42/CE.

Note
All the components shown in the catalogue ARE NOT suitable for use in potentially explosive atmosphere.
ATEX 2014/34/EU

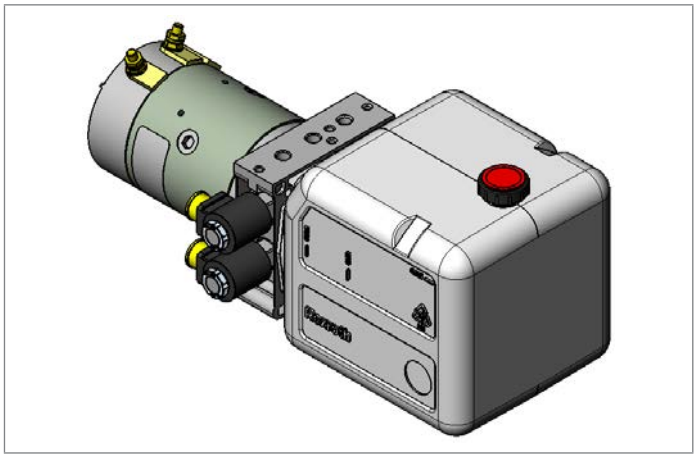
Technical information

Below you will find the most common equations used in hydraulics:

	Common Units	Symbols	Equations
Flow	l/min	Q	$Q = \frac{D \times n}{1000} \times 0{,}95$
Operating pressure	bar	P	$P = \frac{F}{0{,}1 \times A}$
Internal diameter hydraulic cylinder	mm	d	–
Area of hydraulic cylinder	mm^2	A	$A = \frac{\Pi \times d^2}{4}$
Piston force	N	F	–
Drive shaft	rev/min	n	–
Power requirement for motor	kW	N	$N = \frac{P \times Q}{612}$
Pump displacement	cm^3/rev	D	–
Torque requirement	Nm	M	$M = \frac{D \times P}{62{,}8 \times 0{,}87}$

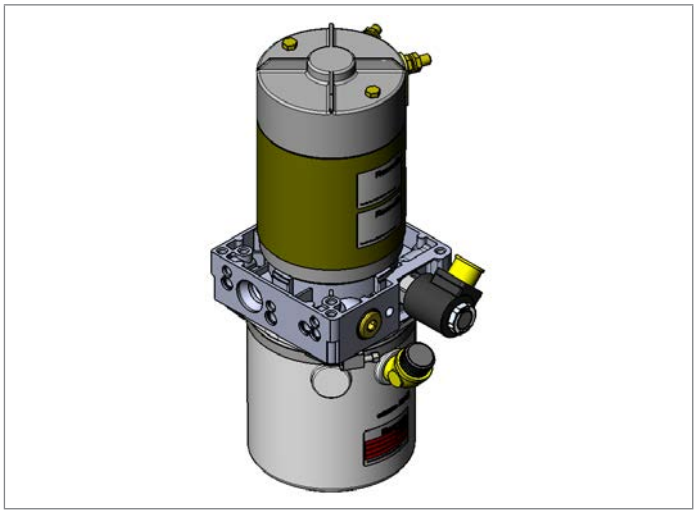
Compact Power Module Type

Standard Type KE series



Complex circuits, direct flange AC motors.
DC motors up to 4000 W (5,5 hp).
AC motors up to 4000 W (5,5 hp).
Pump displacement up to 7,9 cm3 (0,31 inch3).
Pressure up to 300 bar (4350 psi).
Optionals:
Start-up valve.
3-ways solenoid operated valve.
4-ways solenoid operated valve.
AC electric motor with direct coupling for smaller dimensions.
Gear pumps with splined shaft.
Low noise pumps.

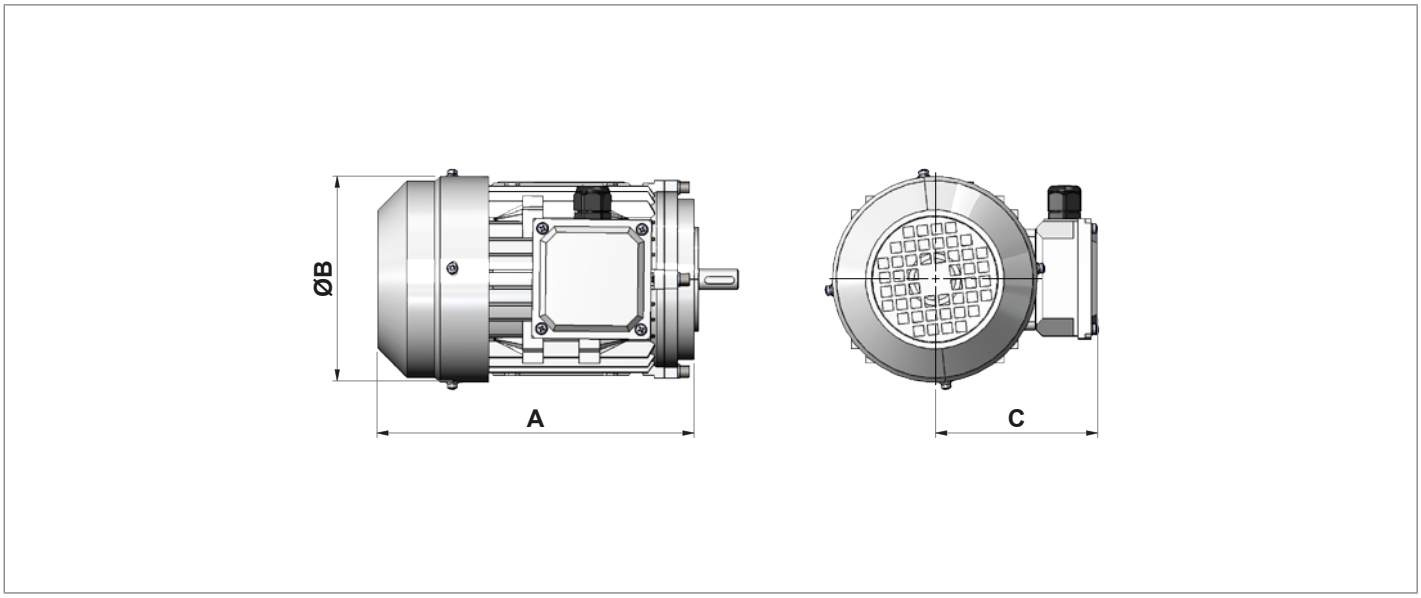
Optional Type KS series



Designed for lifting applications.
Ready solution for simple acting circuits with the possibility of unloading valve.
DC motors up to 4000 W (5,5 hp).
AC motors up to 4000 W (5,5 hp).
Pump displacement up to 7,9 cm3 (0,31 inch3).
Pressure up to 300 bar (4350 psi).

A.C. Electric Motors Standard Flange

Standard A.C. Motors in B14 form.



4 Poles Three Phase

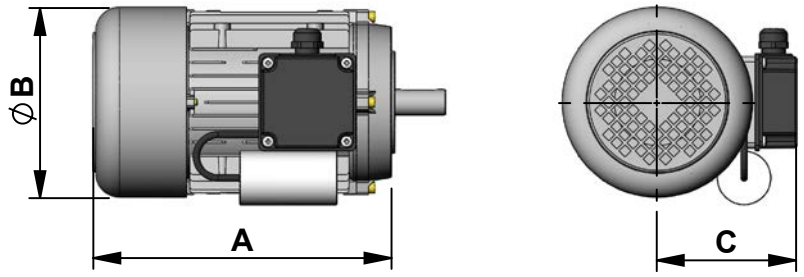
Current Motors 230/400V 50Hz - 278/480V 60Hz Protection IP54 (1450 rpm at 50Hz)

Code	Type	Material Number	Power (kW)	Power (hp)	Size IEC	Duty Cycle	A mm (inch)	ØB mm (inch)	C mm (inch)	Efficiency Classe
402	C1622670DR	R932008027	0,25	0,35	71	S3 75%	213 (8,37)	140 (5,51)	110 (4,33)	IE1
403	C1622680DR	R932006105	0,37	0,5	71	S3 75%	213 (8,37)	140 (5,51)	110 (4,33)	IE1
404	C1622150DR	R932006106	0,55	0,75	80	S3 75%	242 (9,53)	160 (6,3)	130 (5,12)	IE1
405	C1622160DR	R932006107	0,75	1	80	S3 75%	242 (9,53)	160 (6,3)	130 (5,12)	IE1
406	C1622170DR	R932006108	1,1	1,5	90	S3 75%	257 (10,12)	173 (6,81)	136 (5,35)	IE1
407	C1622180DR	R932006109	1,5	2	90	S3 75%	257 (10,12)	173 (6,81)	136 (5,35)	IE1
408	C1622S1034DR	R932006110	2,2	3	90	S3 75%	282 (11,1)	173 (6,81)	136 (5,35)	IE1
409	C1622200DR	R932006111	3	4	100	S3 75%	312 (12,3)	200 (7,87)	156 (6,14)	IE1
410	C1622210DR	R932006112	4	5,5	112	S3 75%	332 (13,07)	222 (8,74)	180 (7,09)	IE1

Note

The electric motors with standard flange shown in this pages are delivered by different certified suppliers.
This means the indicated dimensions could change a little, depending on which manufacturer will be assembled.
On the CPM the choice of the manufacturer is based on our stock availability.

Standard A.C. Motors in B14 form.



4 Poles Single Phase

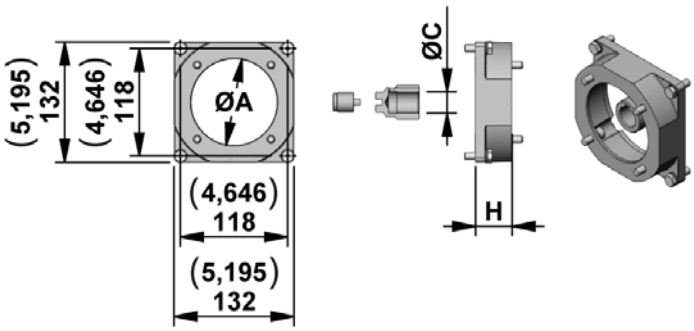
Current Motors 230V 50Hz Form B14 Protection IP54 (1450 rpm at 50Hz)

Code	Type	Material Number	Power (kW)	Power (hp)	Size IEC	Duty Cycle	A mm (inch)	ØB mm (inch)	C mm (inch)
402M	C162271000	R932000496	0,25	0,35	71	S3 75%	218 (8,58)	140 (5,51)	109 (4,29)
403M	C162272000	R932000497	0,37	0,5	71	S3 75%	212 (8,35)	140 (5,51)	113 (4,45)
404M	C162239000	R932000471	0,55	0,75	80	S3 75%	250 (9,84)	156 (6,14)	125 (4,92)
405M	C162240000	R932000472	0,75	1	80	S3 75%	250 (9,84)	156 (6,14)	125 (4,92)
406M	C162241000	R932000473	1,1	1,5	90	S3 75%	260 (10,24)	178 (7,00)	135 (5,32)
407M	C162242000	R932000474	1,5	2	90	S3 75%	282 (11,10)	178 (7,00)	135 (5,32)
408M	C162244000	R932000475	2,2	3	100	S3 75%	309 (12,16)	195 (7,68)	145 (5,71)

Note

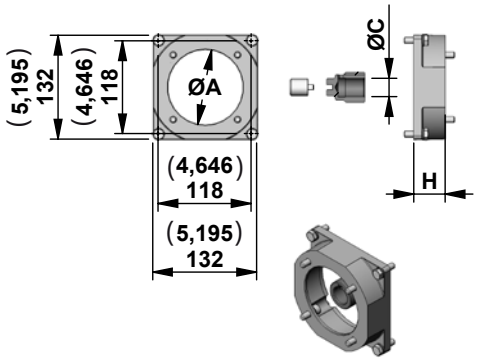
The electric motors with standard flange shown in this pages are delivered by different certified suppliers.
This means the indicated dimensions could change a little, depending on which manufacturer will be assembled.
On the CPM the choice of the manufacturer is based on our stock availability.

Junction Elements for A.C. Electric Motor Standard Flange



Junction Elements (STD COUPLINGS)

Code	Motor Codes	Size IEC	A mm (inch)	C mm (inch)	H mm (inch)	Type	Material Number
TR02	402-402M 403-403M	71	70 (18,50)	14 (0,55)	20,5 (0,81)	K01KE970TR002	R932001894
TR03	404-404M 405-405M	80	80 (3,15)	19 (0,75)	29 (1,14)	K01KE970TR003	R932001895
TR04	406-406M 407-407M 408	90	95 (3,74)	24 (0,95)	40 (1,57)	K01KE970TR004	R932001896
TR05	409-408M 410	100 112	110 (4,33)	28 (1,10)	57 (2,24)	K01KE970TR005	R932001897

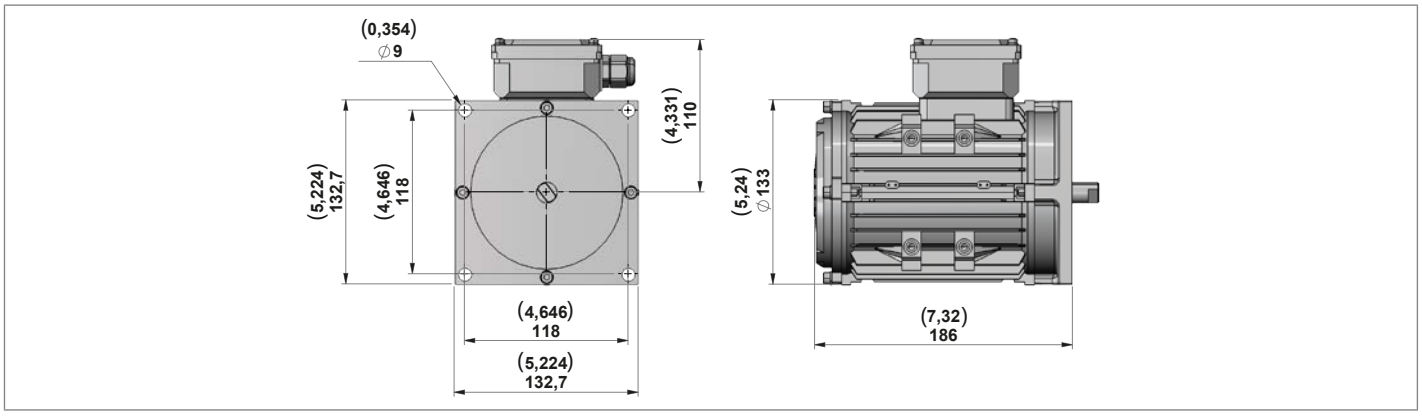


Junction Elements (COUPLINGS FOR SPLINED SHAFT PUMPS)

Code	Motor Codes	Size IEC	A mm (inch)	C mm (inch)	H mm (inch)	Type	Material Number
TR11	402-402M 403-403M	71	70	14	20,5	KE970TR011	R930071160
TR10	404-404M 405-405M	80	80	19	29	KE970TR010	R930071012
TR12	406-406M 407-407M 408	90	95	24	40	KE970TR012	R930071161
TR09	409-408M 410	100 112	110	28	57	KE970TR009	R930042393

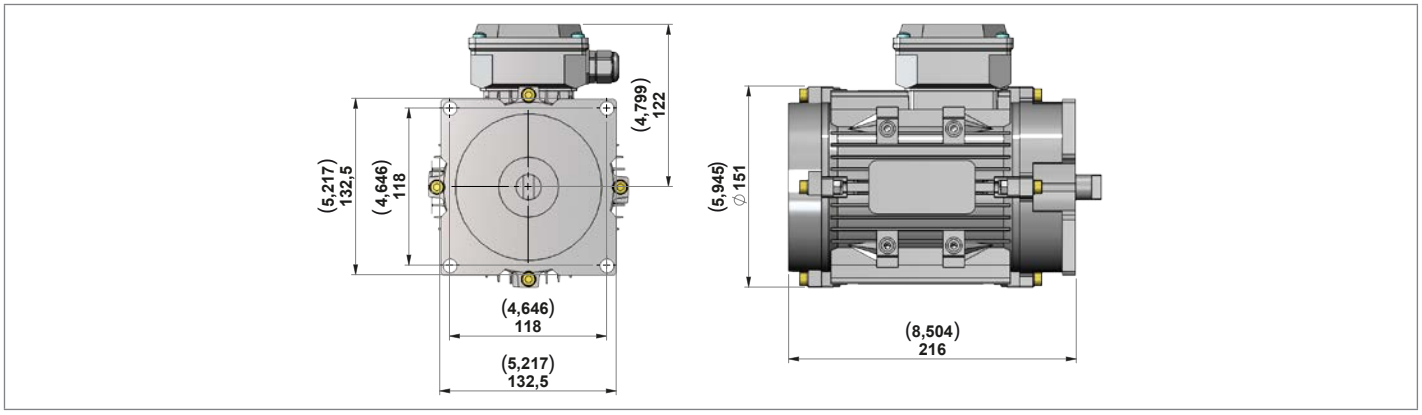
A.C. Electric Motor Compact Mounting Style

These motors are designed to reduce the overall dimensions and the cost of the junction elements.



2 Poles Three Phase Current Motors 230/400V 50/60Hz IP55 (2760 rpm at 50Hz) Size IEC 71

Code	Type	Material Number	Power (kW)	Power (hp)	Duty Cycle	Thermal Switch
724	C1622S1085M	R930090690	0,75	1	S3 30%	no
724T	C1622S1368M	R930100887	0,75	1	S3 30%	yes
725	C1622S1083M	R930090688	1,1	1,5	S3 30%	no
725T	C1622S1374M	R930100888	1,1	1,5	S3 30%	yes

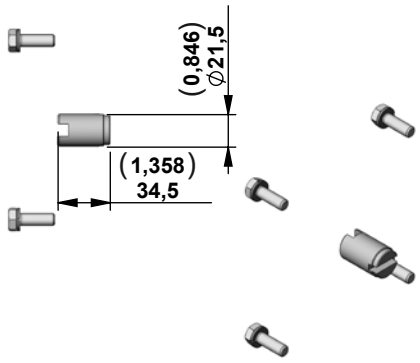


2 Poles Three Phase Current Motors 230/400V 50/60Hz IP55 (2820 rpm at 50Hz) Size IEC 80

Code	Type	Material Number	Power (kW)	Power (hp)	Duty Cycle	Thermal Switch
826T	C1622S1410M	R930070558	1,5	2	S3 20%	yes
827T	C1622S1409M	R930070557	2,2	3	S3 15%	yes
828T	C1622S1417C	R932011319	3,6	4,8	S3 7%	yes

Note
The motors shown in these tables are a selection of our range.
In case of needs of different technical characteristics PLEASE CONTACT OUR SALES DEPARTEMENT.
The electric motors with compact mounting style shown in this pages are delivered by different certified suppliers.
This means the indicated dimensions could change a little, depending on which manufacturer will be assembled.
On the CPM the choice of the manufacturer is based on our stock availability.

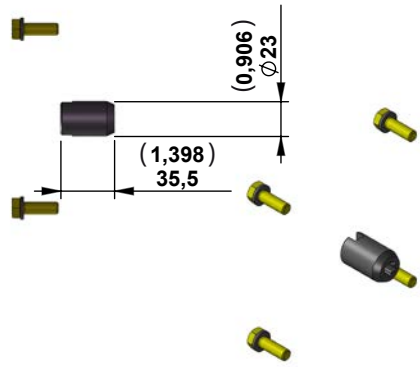
Junction Elements for A.C. Electric Motor Compact Mounting Style



Junction Elements for manifolds KE and KS series

Code	Motor Codes	Type	Material Number
TR08	826T-827T-828T-847T 724-724T-725-725T	K01KE970TR008	R932001900

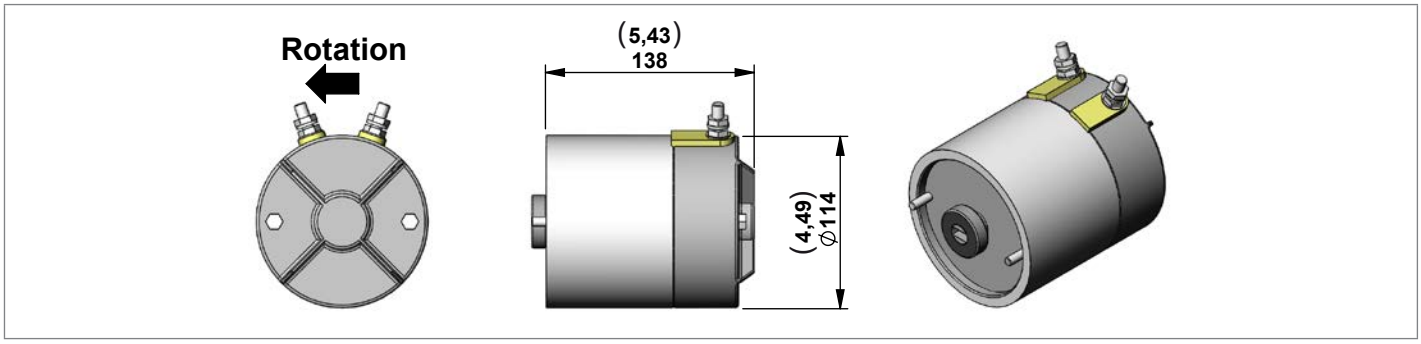
Junction Elements for A.C. Electric Motor Compact Mounting Style with splined shaft pumps



Junction Elements for manifolds KE and KS series

Code	Motor Codes	Type	Material Number
TMT	826T-827T-828T-847T 724-724T-725-725T	K01K3970TR114	R932011170

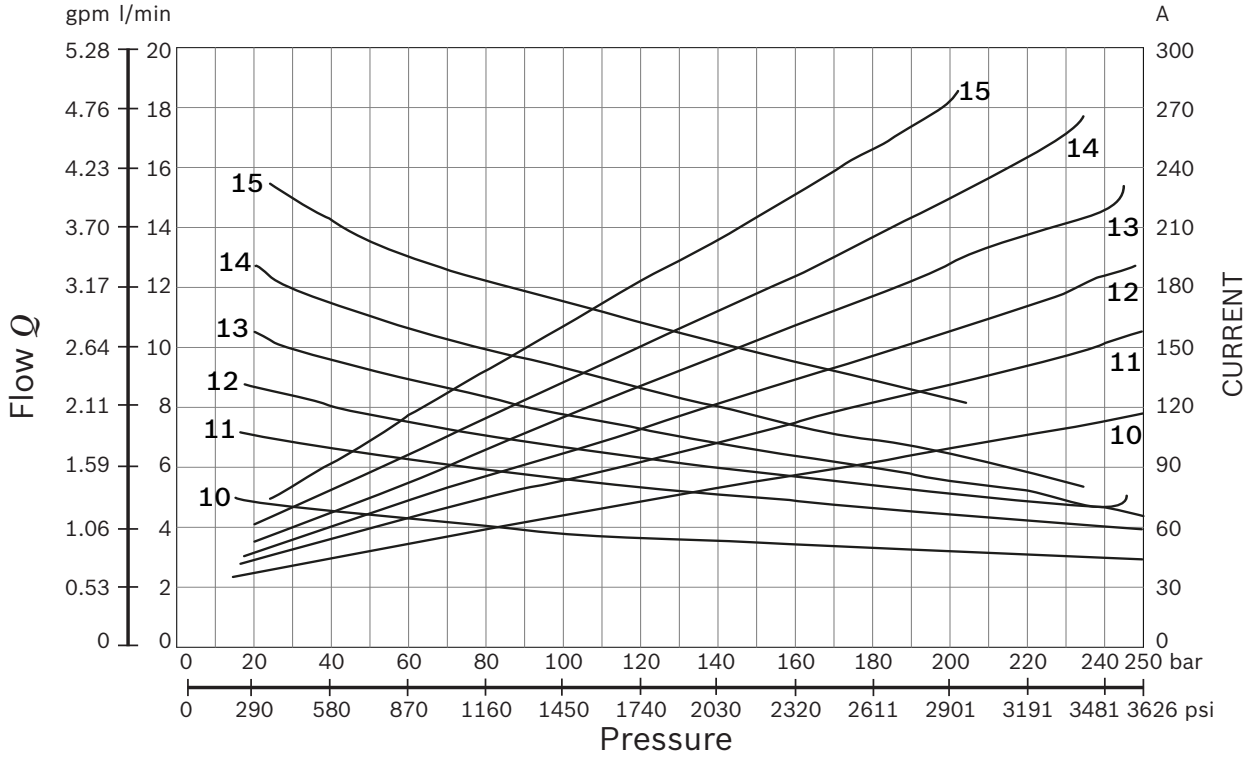
D.C. Electric Motors Compact Mounting Style



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C200	24	1200	4,5% 1,2 min	no	yes	IP 54	C1620S1200	R930059616

BRUSHES KIT: R930059706

Electric Motor C200 (24V – 1300W) Diagrams

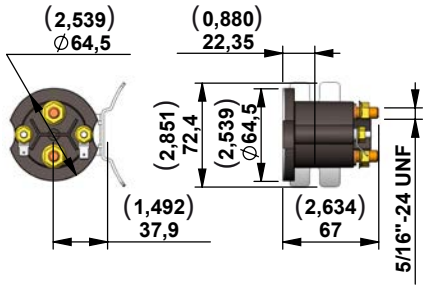


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
75	6	17%
100	4	11%
125	2,4	7,5%
150	1,5	5%
175	1	3,5%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

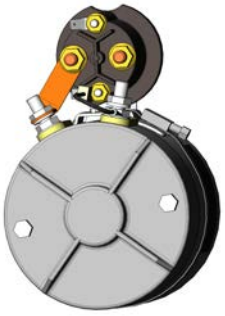
Relay



Starting Relay **Standard Performance**

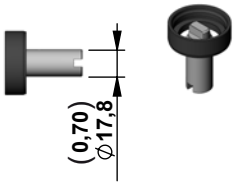
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
H	24	150	350	IP66	NO	C165535000	R932000693

Kit Motor + Relay



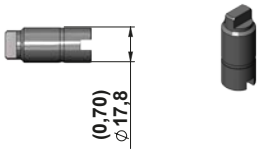
Motor + Relay	Type	Material Number
C200+relay 24V STANDARD performance	K396824200PSF	R930071143

Junction Elements for D.C. Electric motor



Junction Elements for manifolds **KE** and **KS series**

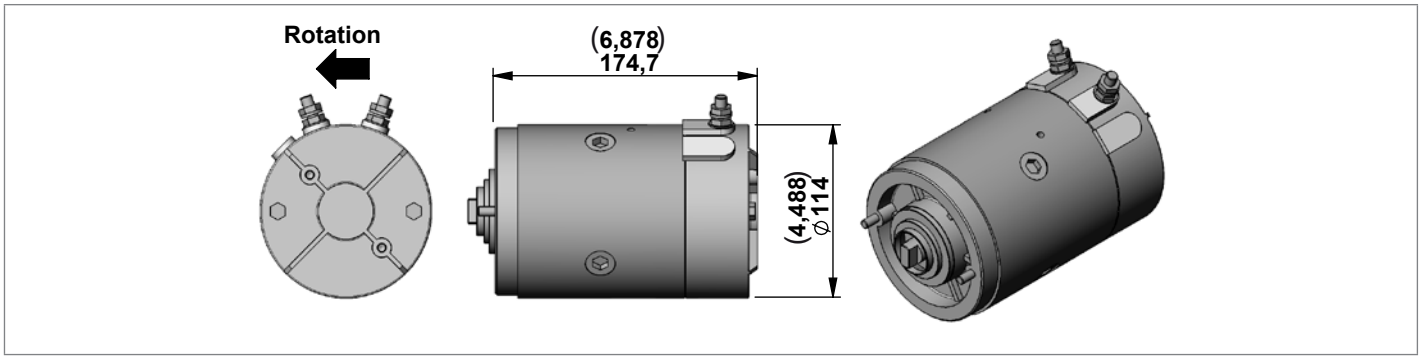
Code	Type	Material Number
TR65	K01KE970TR065	R932001905



Junction Elements for manifold **M03-38** and **M03-SAE**

Code	Type	Material Number
TR58	K01KE970TR058	R930104100

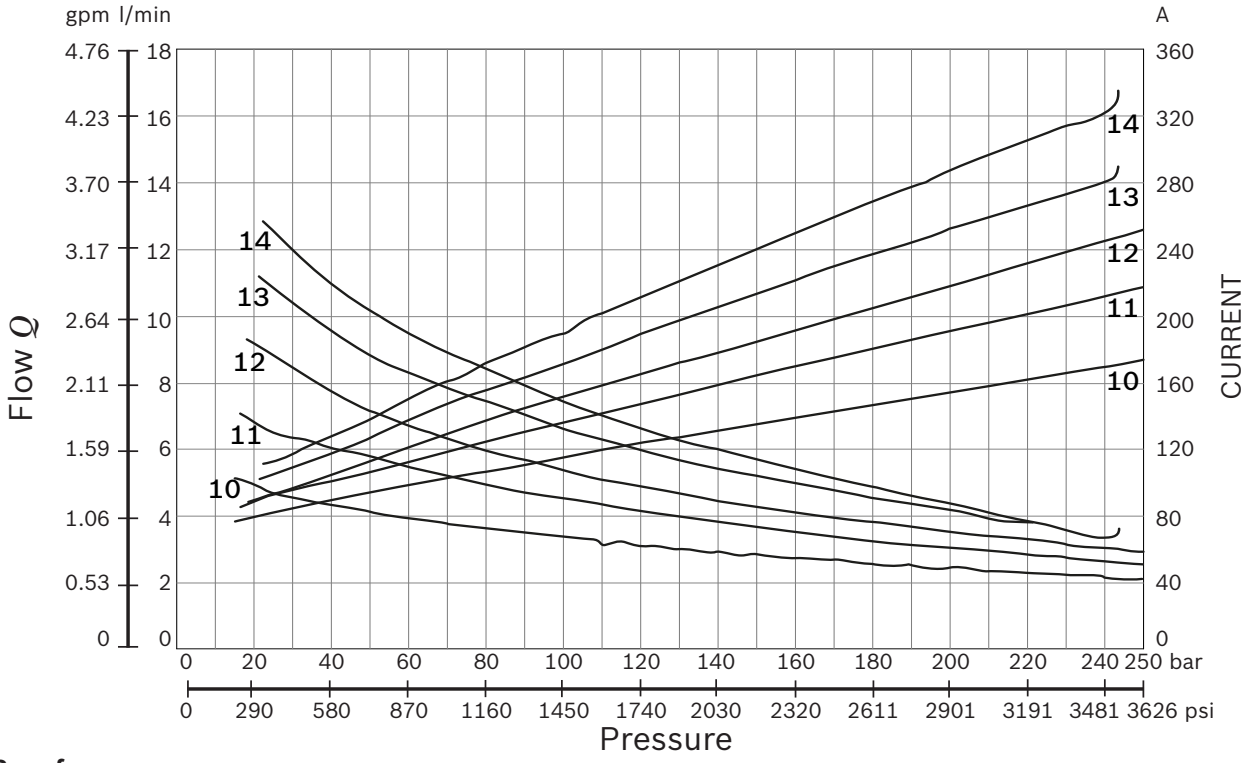
D.C. Electric Motors



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C190	12	1600	5% 2 min	no	yes	IP 54	C1620S1090	R930056392
C191	12	1600	5% 2 min	yes	yes	IP 54	C1620S1091	R930056391

BRUSHES KIT: R930059707

Electric Motor C190-191 (12V – 1600W) Diagrams

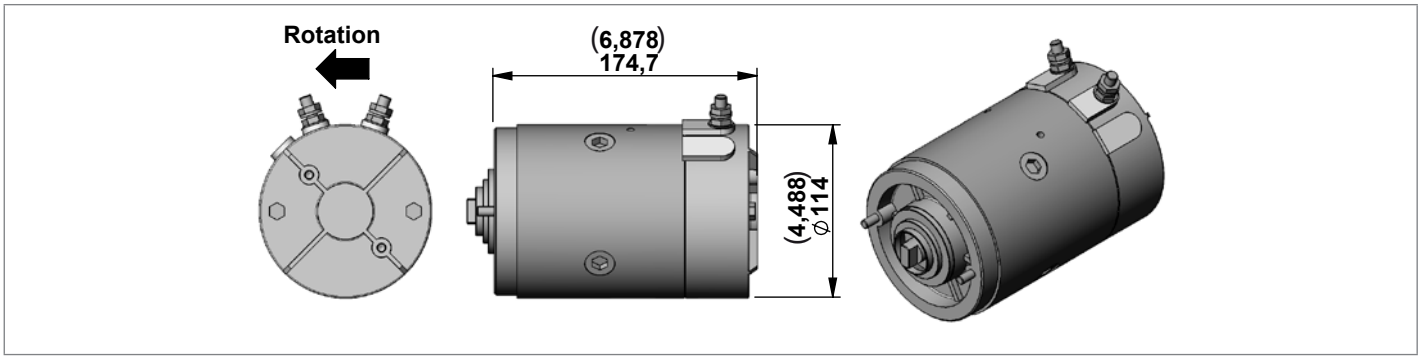


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
150	5,5	12%
200	3,5	8%
250	2	6%
300	1,5	4%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

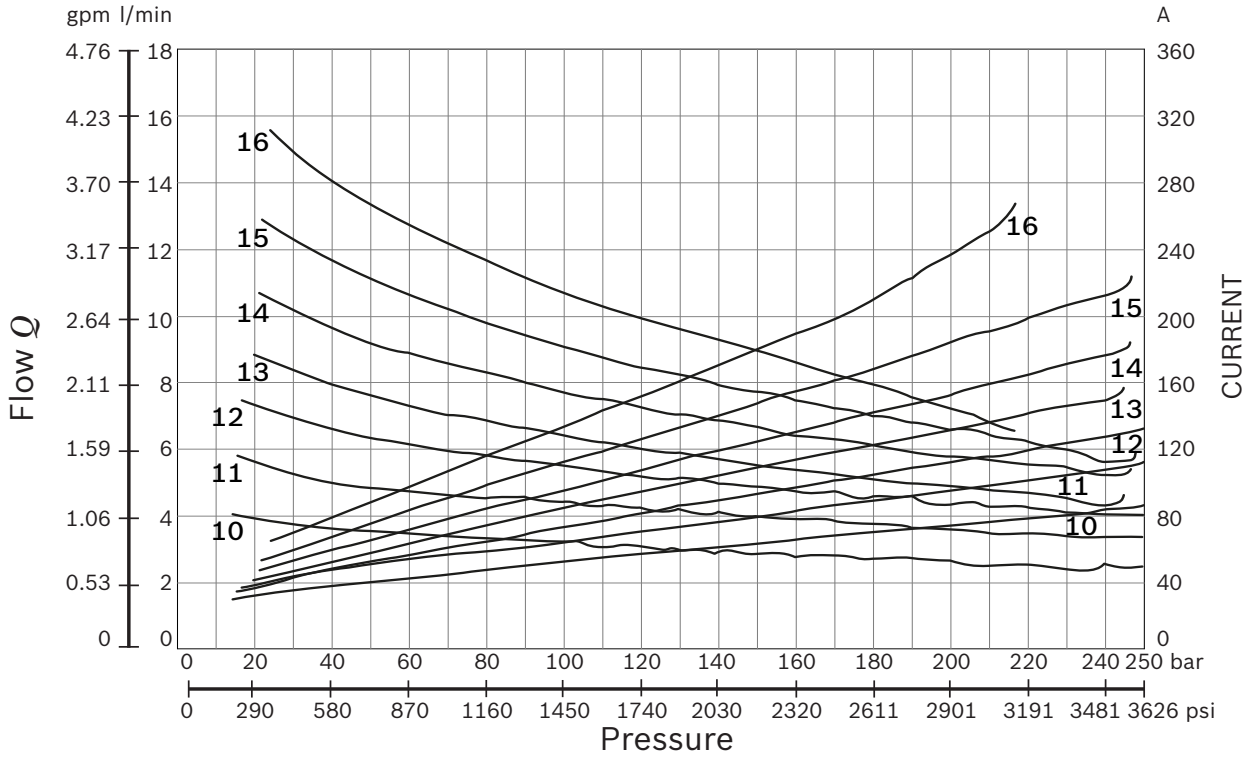
D.C. Electric Motors



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C192	24	2200	5% 2 min	no	yes	IP 54	C1620S1092	R930056390
C193	24	2200	5% 2 min	yes	yes	IP 54	C1620S1093	R930056389

BRUSHES KIT: R930059706

Electric Motor C192 - C193 (24V – 2200W) Diagrams

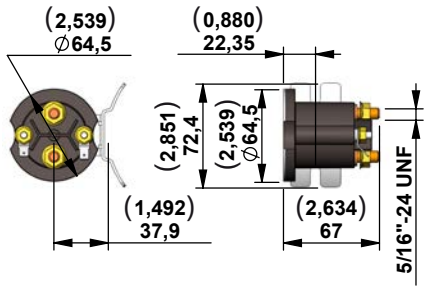


S2 - S3 performance

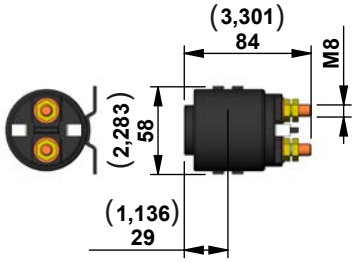
Amps	S2 (min.)	S3(%) (10 min.)
75	5	12%
100	3	7%
125	1,8	5%
150	1	4%
175	0,7	2,5%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

Relay



(Pict. 1)



(Pict. 2)

Starting Relay **Standard Performance** (Pict. 1)

Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
G	12	150	350	IP66	NO	C165534000	R932000692
H	24	150	350	IP66	NO	C165535000	R932000693

Starting Relay **High Performance** (silver plate contact) (Pict. 2)

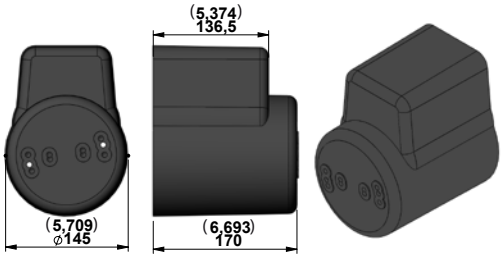
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
C	12	150	350	IP54	YES	C165524000	R932000690
E	24	150	350	IP54	YES	C165525000	R932000691

Kit Motor + Relay



Motor + Relay	Type	Material Number
C190+relay 12V STANDARD performance	K396812190PSCUF	R930034093
C190+relay 12V HIGH performance	K396812190C	R930034094
C191+relay 12V STANDARD performance	K396812191PSCUF	R930034095
C191+relay 12V HIGH performance	K396812191C	R930034097
C192+relay 24V STANDARD performance	K396824192PSCUF	R930035261
C192+relay 24V HIGH performance	K396824192E	R930034101
C193+relay 24V STANDARD performance	K396824193PSCUF	R930034102
C193+relay 24V HIGH performance	K396824193E	R930035252

Plastic Protection

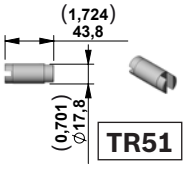


Code		Type	Material Number
0	Without Protection	-	-
1	With Protection	K229701000	R932002246

Kit for assembly plastic protection

Type	Material Number
K01K211565000	R930059147

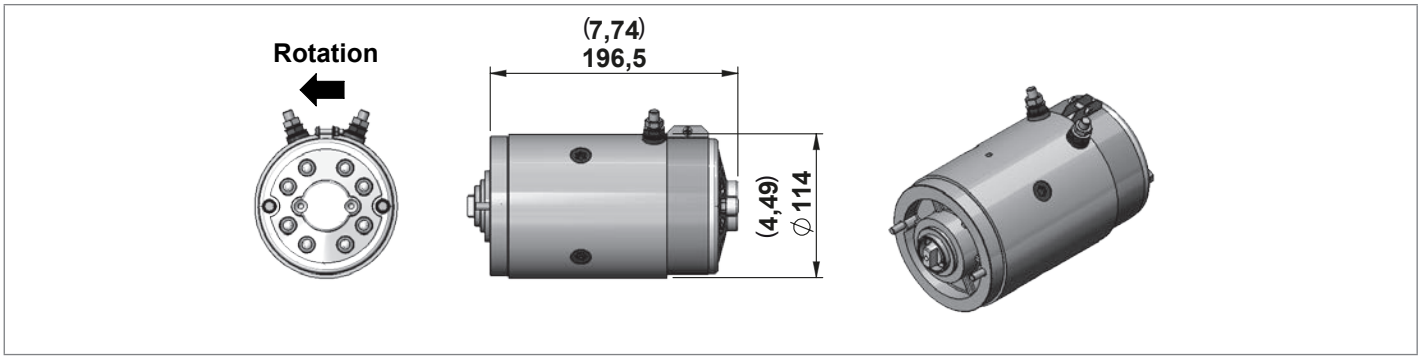
Junction Elements for D.C. Electric Motor



Junction Elements for manifolds

Code	Series	Type	Material Number
TR51	**KE - KS**	K01KE970TR051	R932001901

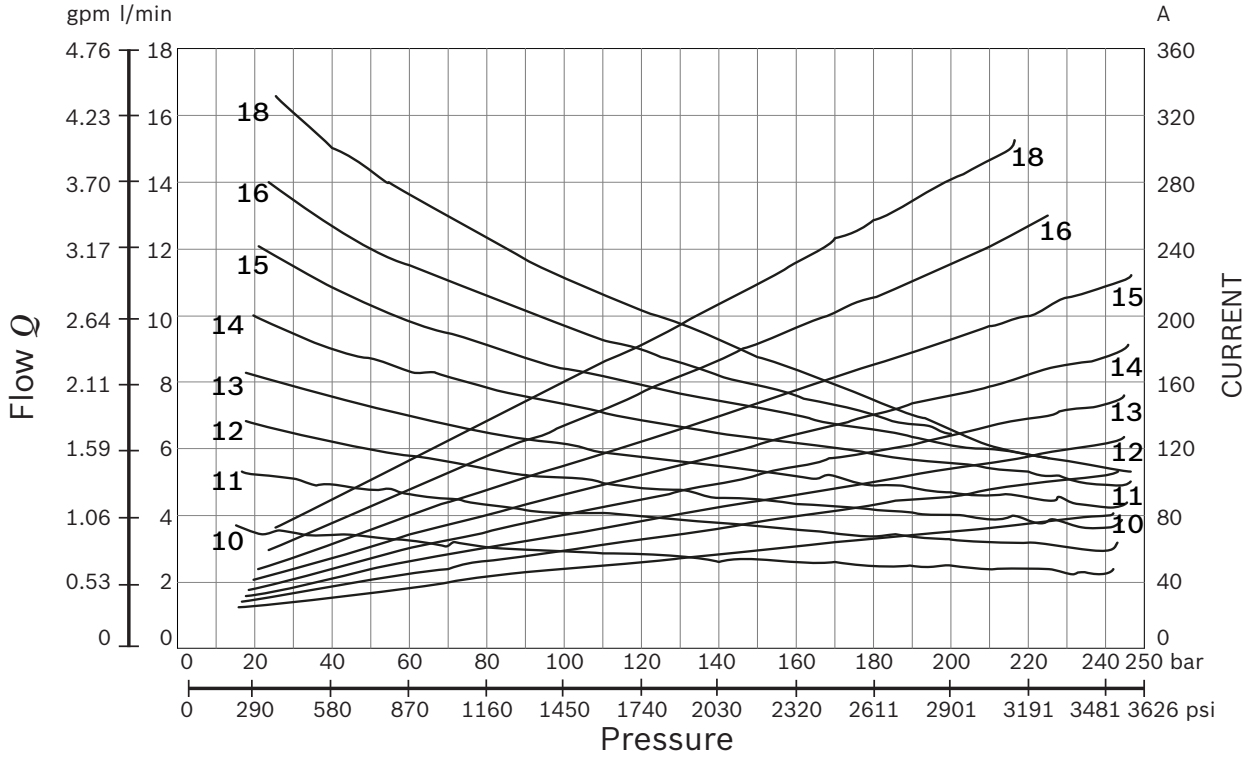
D.C. Electric Motors High Performance



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C209	24	2200	10% 3 min	no	yes	IP 54	C1620S1209	R930066801

BRUSHES KIT: R930104500

Electric Motor C209 (24V – 2200W) Diagrams

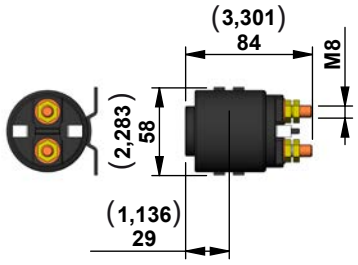


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
75	10	16%
100	4	11%
125	2	7%
150	1	6%
175	0.7	3%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

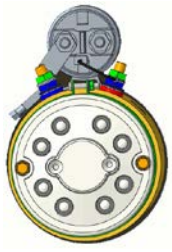
Relay



Starting Relay **High Performance** (silver plate contact)

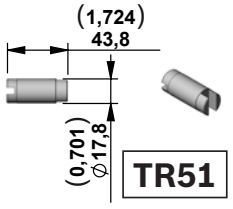
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
E	24	150	350	IP54	YES	C165525000	R932000691

Kit Motor + Relay



Type	Material Number
K396824209E	R930104305

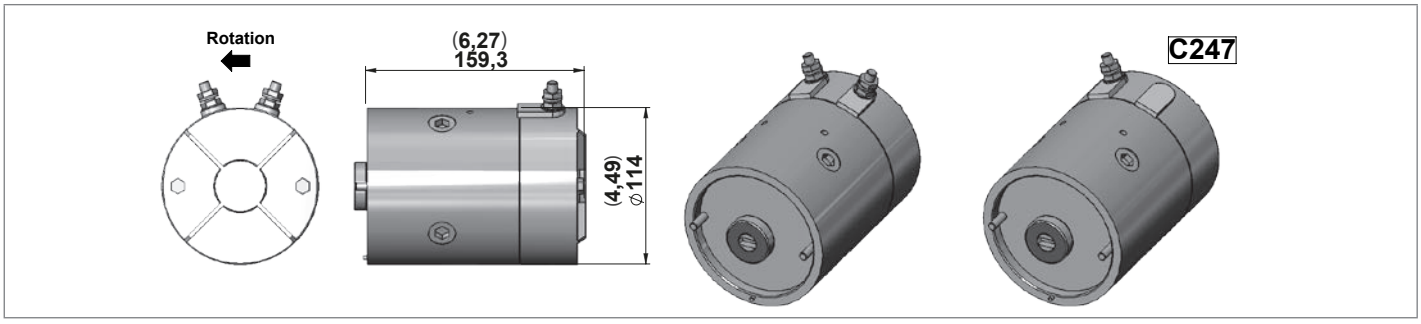
Junction Elements for D.C. Electric Motor



Junction Elements for manifolds

Code	Series	Type	Material Number
TR51	**KE - KS**	K01KE970TR051	R932001901

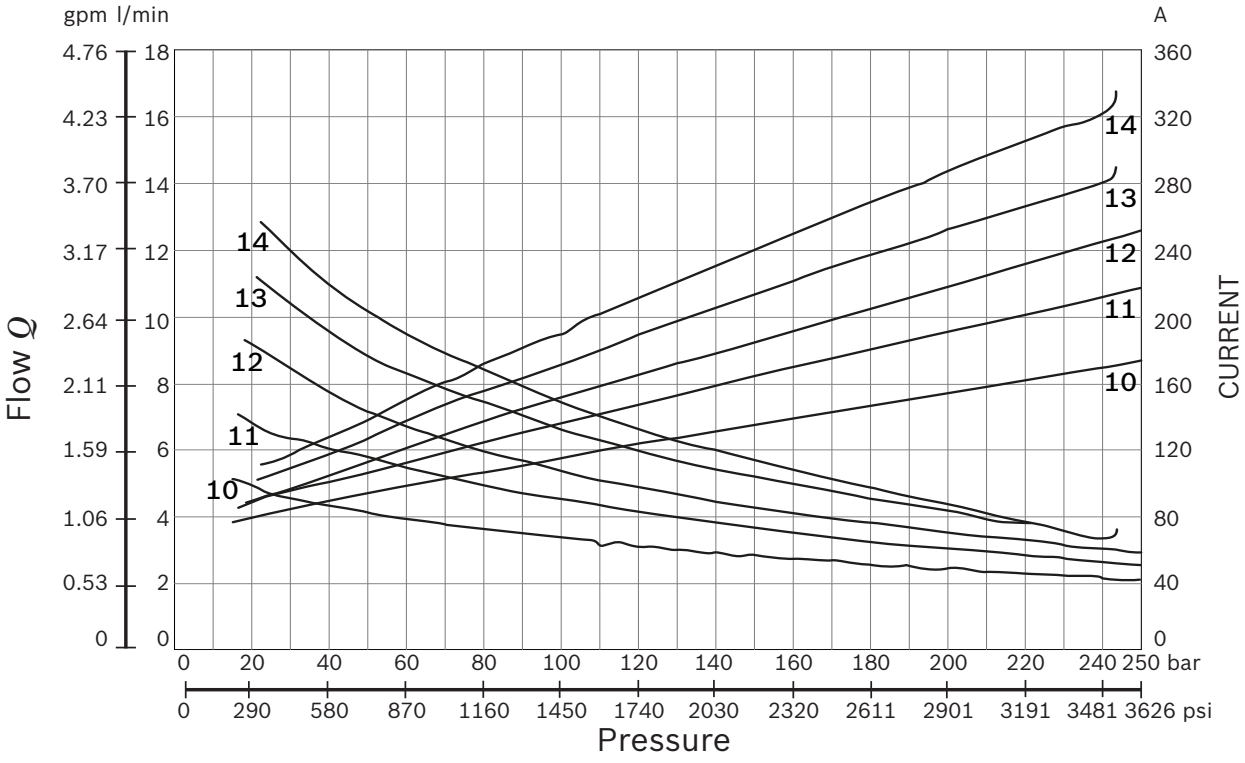
D.C. Electric Motors Compact Mounting Style



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C245	12	1600	5% 2 min	no	yes	IP 54	C1620S1245	R930093403
C260	12	1600	5% 2 min	yes	yes	IP 54	C1620S1260	R930101050
C247	12	1600	5% 2 min	no	yes	IP 54	C1620S1247	R930093664

BRUSHES KIT: R930059707

Electric Motor C245-C260-C247 (12V – 1600W) Diagrams

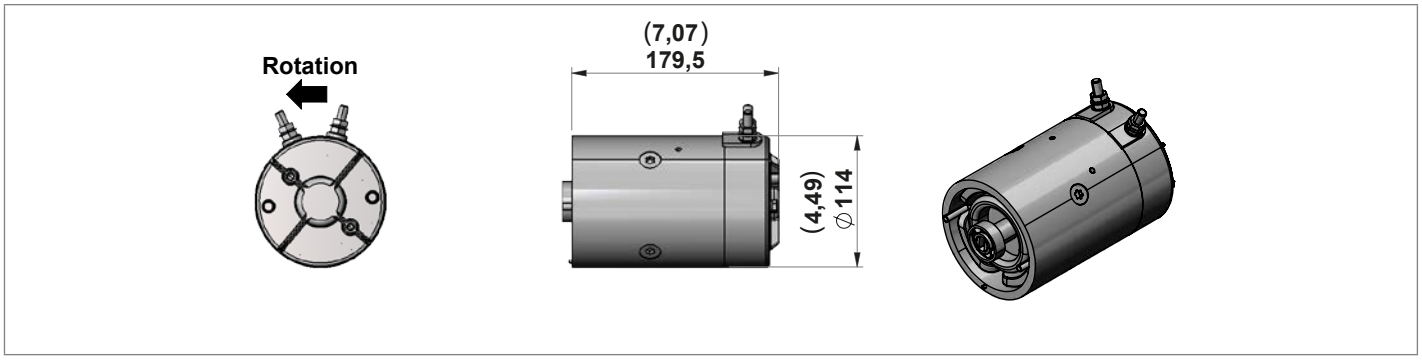


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
150	5,5	12%
200	3,5	8%
250	2	6%
300	1,5	4%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

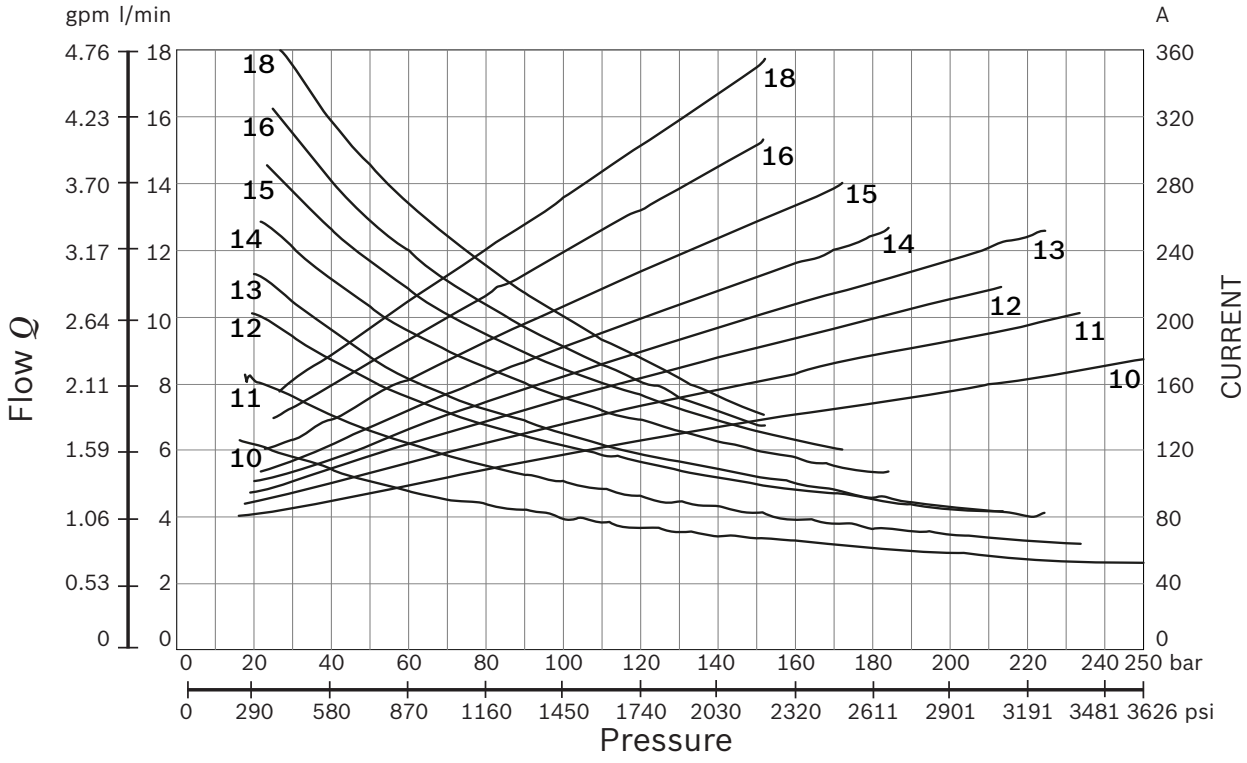
D.C. Electric Motors Compact Mounting Style



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C264	12	2200	15% 6,5 min	no	yes	IP54	C1620S1264	R930102547
C269	12	2200	15% 6,5 min	yes	yes	IP54	C1620S1269	R930104124

BRUSHES KIT: R930059707

Electric Motor C264-C269 (12V – 2200W) Diagrams

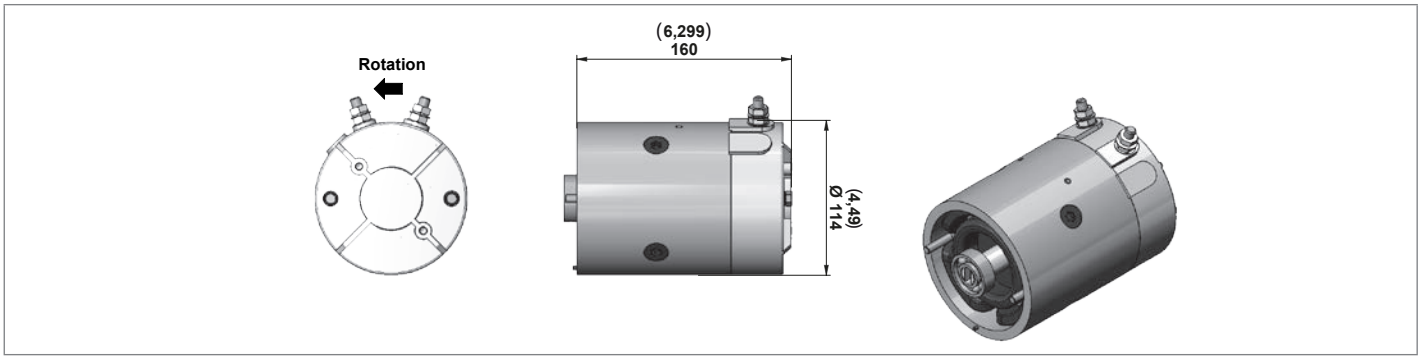


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
150	16	22%
200	7	16%
250	3	11%
300	1	7%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

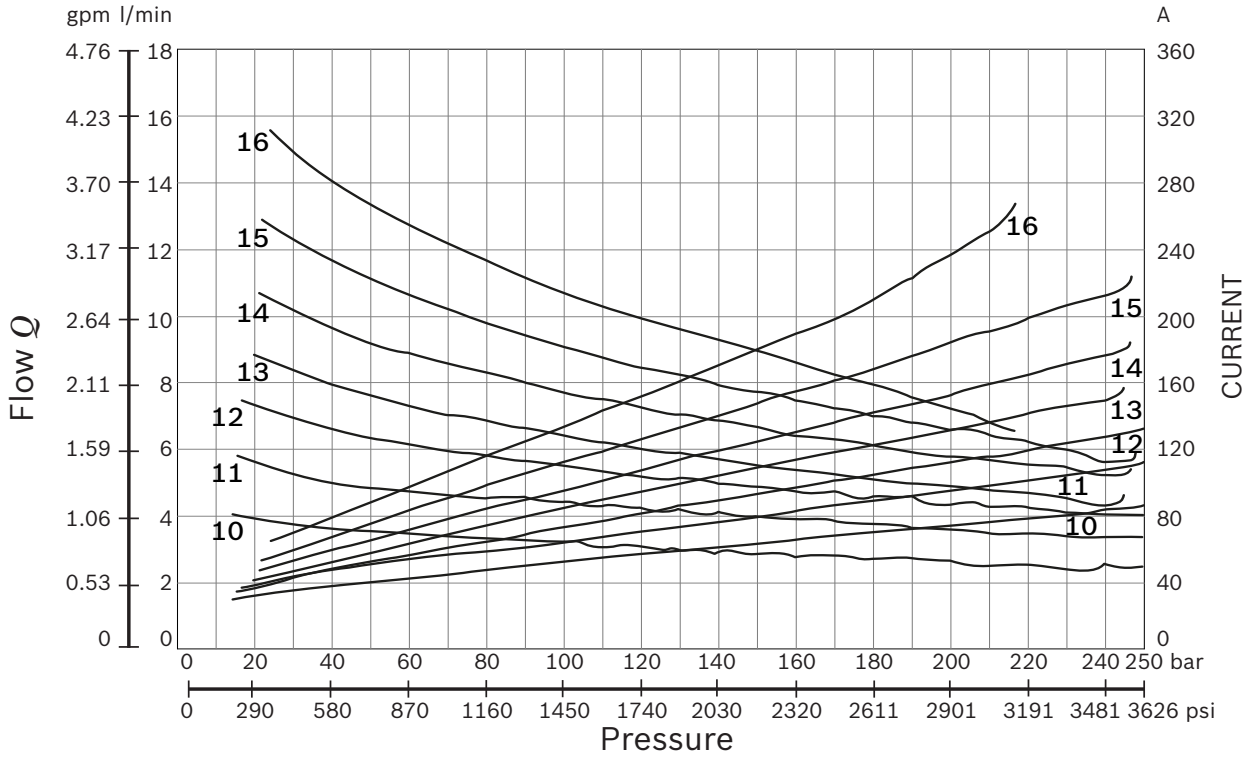
D.C. Electric Motors Compact Mounting Style



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C196	24	2200	5% 2 min	no	yes	IP 54	C1620S1096	R930056684
C253	24	2200	5% 2 min	yes	yes	IP 54	C1620S1253	R930096615

BRUSHES KIT: R930059706

Electric Motor C196-C253 (24V – 2200W) Diagrams

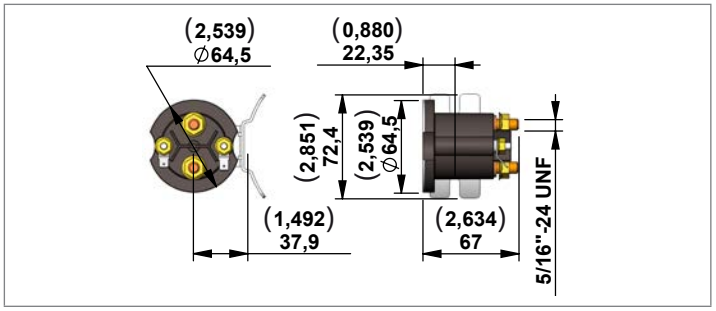


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
75	5	12%
100	3	7%
125	1,8	5%
150	1	4%
175	0,7	2,5%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

Relay



Starting Relay **Standard Performance**

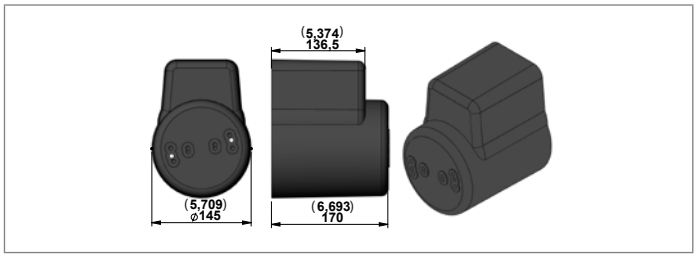
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
G	12	150	350	IP66	NO	C165534000	R932000692
H	24	150	350	IP66	NO	C165535000	R932000693

Kit Motor + Relay



Motor + Relay	Type	Material Number
C245+relay 12V "STANDARD performance"	K396812245PSCUF	R930102627
C260+relay 12V "STANDARD performance"	K396812260PSCUF	R930102628
C264+relay 12V "STANDARD performance"	K396812264PSCUF	R930103901
C269+relay 12V "STANDARD performance"	K396812269PSCUF	R930104191
C196+relay 24V "STANDARD performance"	K396824196PSCUF	R930102633
C253+relay 24V "STANDARD performance"	K396824253PSCUF	R930102634

Plastic Protection

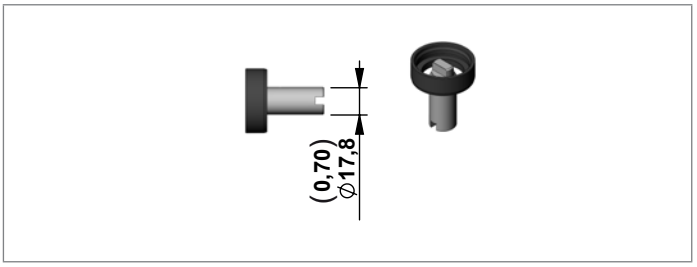


Code		Type	Material Number
0	Without Protection	-	-
1	With Protection	K229701000	R932002246

Kit for assembly plastic protection

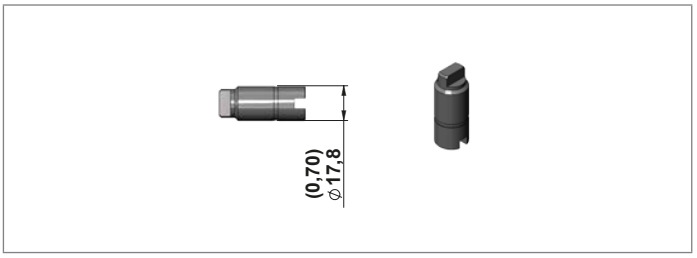
Type	Material Number
K01K211565000	R930059147

Junction Elements for D.C. Electric STD motor flange



Junction Elements for manifolds **KE** and **KS series**

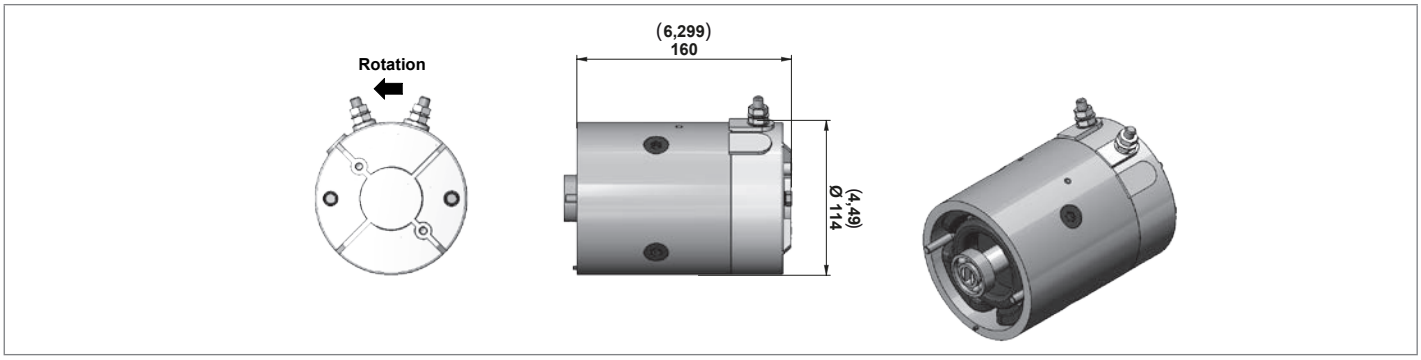
Code	Type	Material Number
TR65	K01KE970TR065	R932001905



Junction Elements for manifold **M03-38** and **M03-SAE**

Code	Type	Material Number
TR58	K01KE970TR058	R930104100

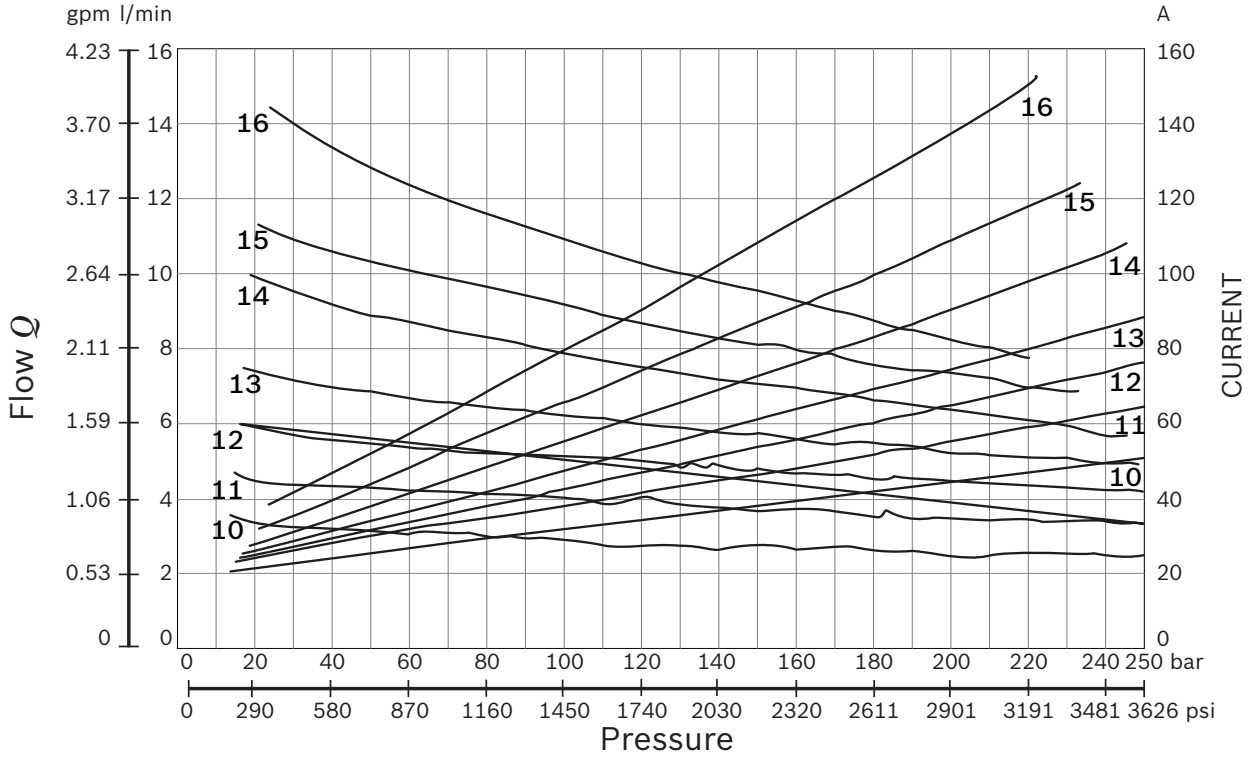
D.C. Electric Motors Compact Mounting Style



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C226	48	2200	8% 2 min	no	yes	IP 54	C1620S1226	R930080944
C242	48	2200	8% 2 min	yes	yes	IP 54	C1620S1242	R930087561

BRUSHES KIT: R930104094

Electric Motor C226-C242 (48V – 2200W) Diagrams

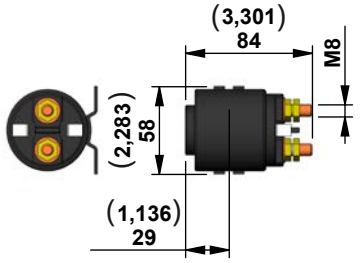


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
50	13	20%
75	7	13%
100	5	10%
125	2	8%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

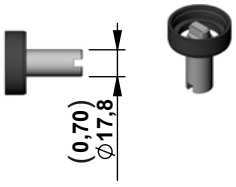
Relay



Starting Relay **Standard Performance** (Pict. 1)

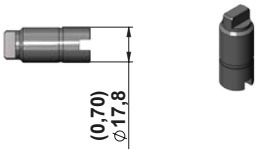
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
F	48	60	200	54	NO	C165522000	R932000689

Junction Elements for D.C. Electric STD motor flange



Junction Elements for manifolds **KE** and **KS series**

Code	Type	Material Number
TR65	K01KE970TR065	R932001905

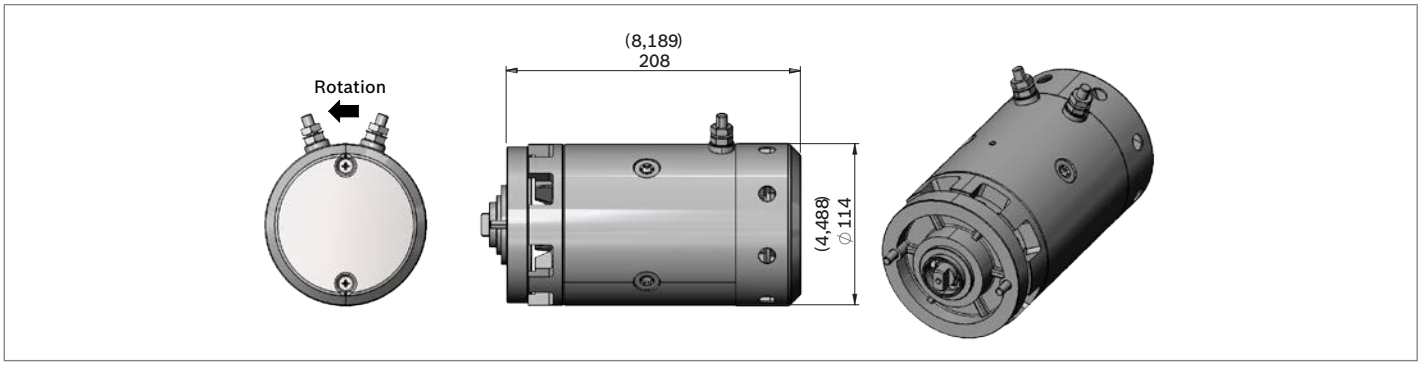


Junction Elements for manifold **M03-38** and **M03-SAE**

Code	Type	Material Number
TR58	K01KE970TR058	R930104100

Note
Suitable for KE and KS only.

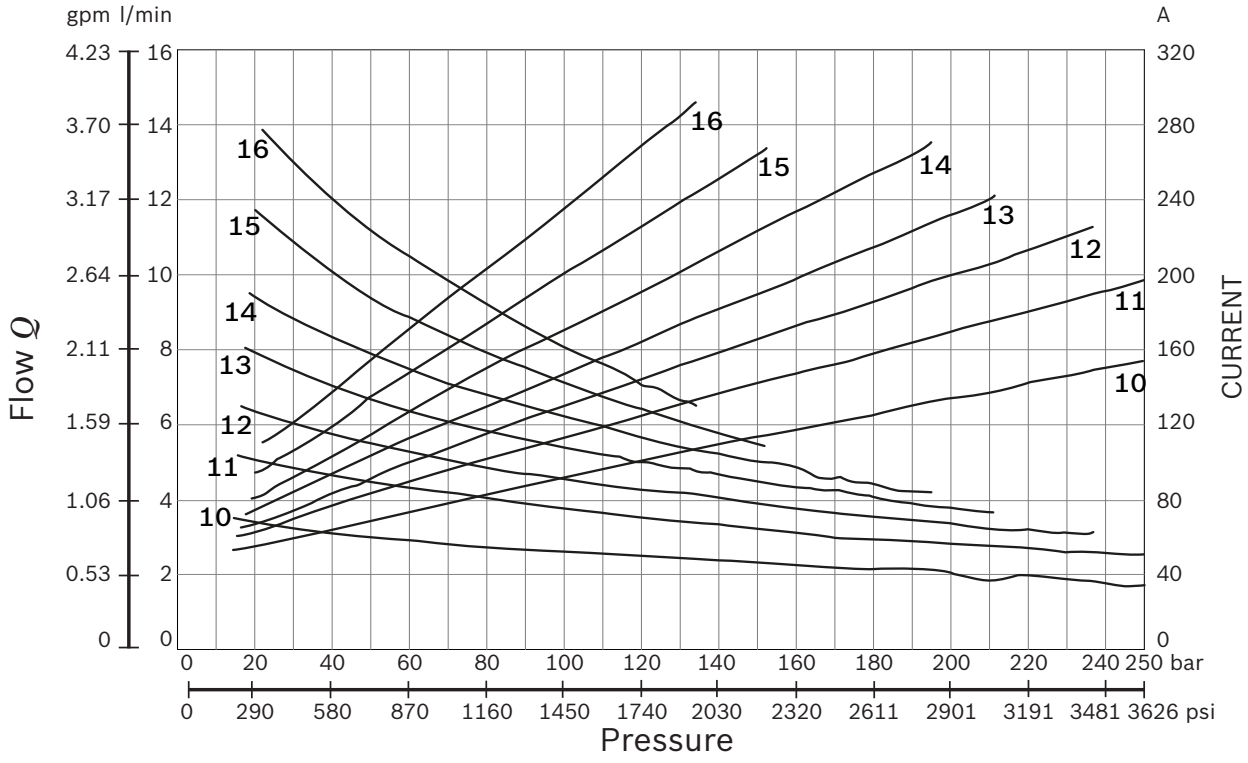
D.C. Electric Motors Fan Cooled



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C78M	12	1500	14% 4 min	no	yes	IP 23	C162077000M	R930098739

BRUSHES KIT: R930104095

Electric Motor C78M (12V – 1500W) Diagrams

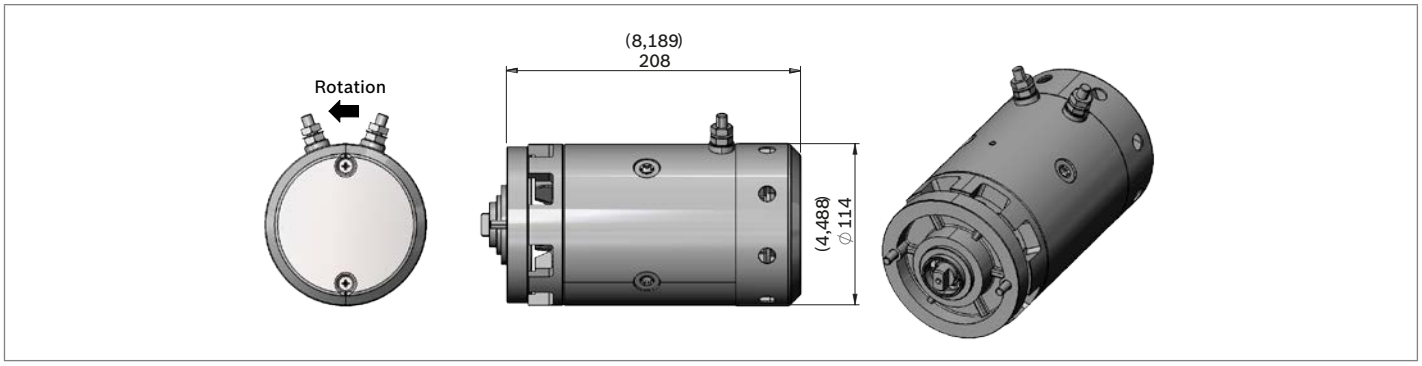


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
150	10	30%
200	4	15%
250	2	7%
300	1	4%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

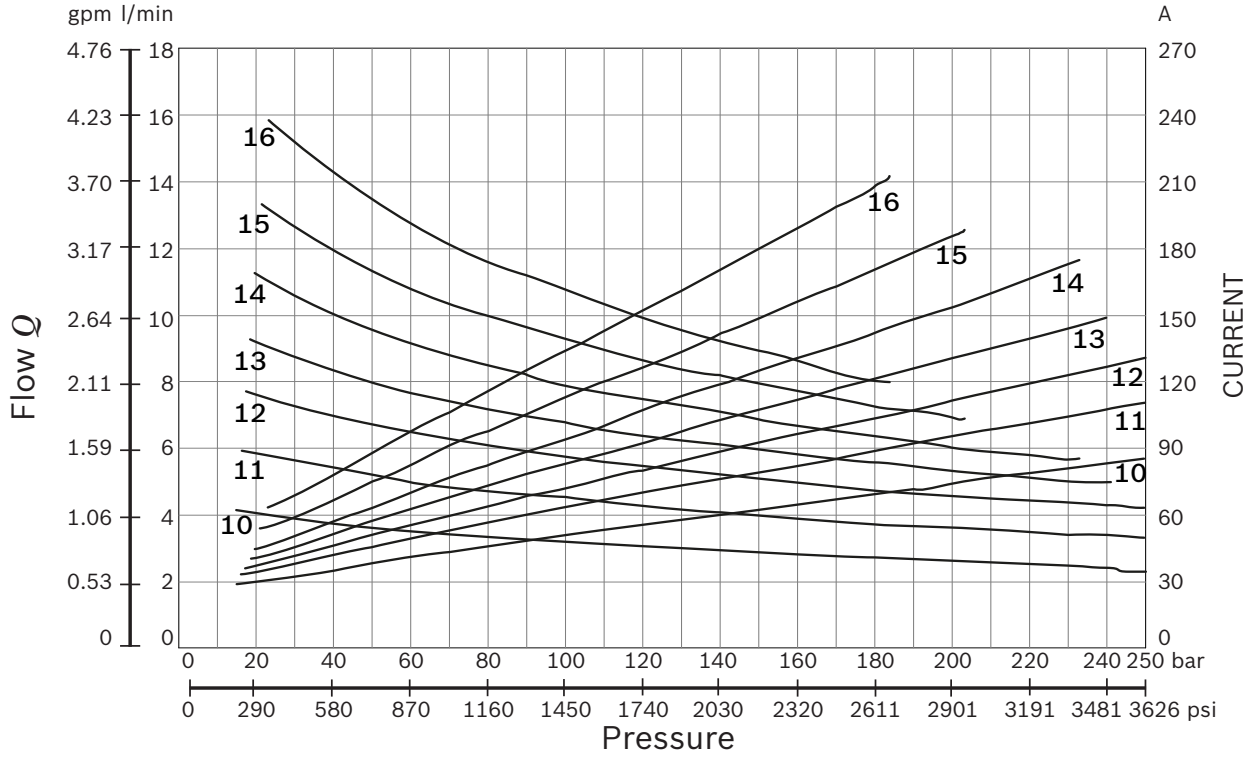
D.C. Electric Motors Fan Cooled



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C79M	24	2000	10% 4,5 min	no	yes	IP 23	C162078000M	R930098740

BRUSHES KIT: R930104096

Electric Motor C79M (24V – 2000W) Diagrams



S2 - S3

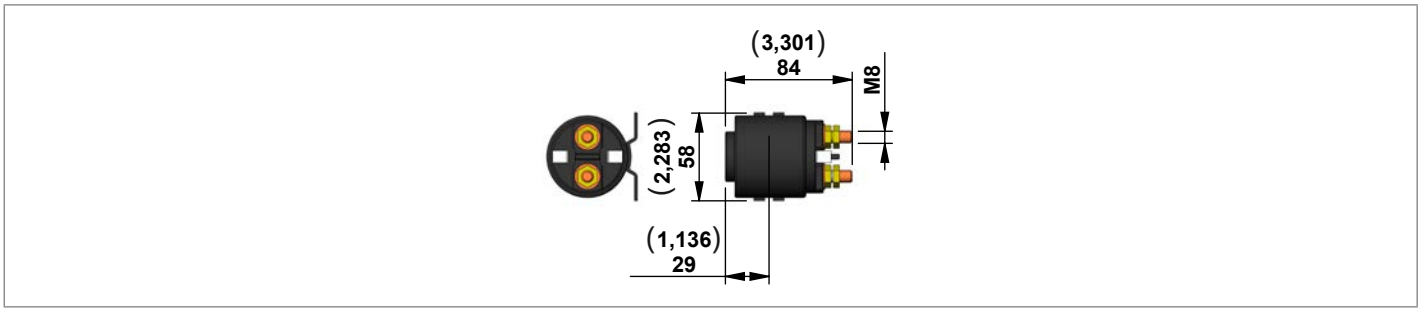
performance

Amps	S2 (min.)	S3(%) (10 min.)
75	14	40%
100	5	15%
125	3,5	10%
150	2	6%
175	1	5%

Note

The values of the curves may change slightly depending on the brand / model of pump that is mounted.

Relay



Starting Relay **High Performance** (silver plate contact)

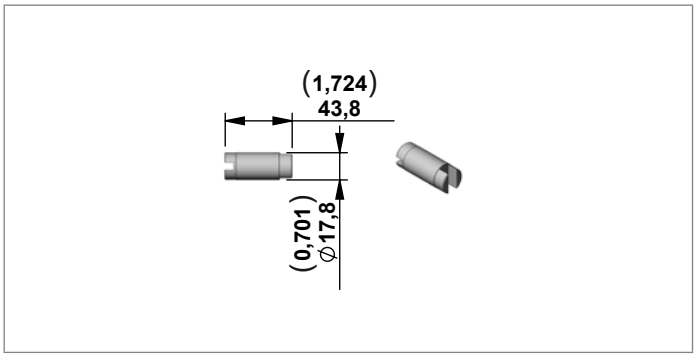
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
C	12	150	350	IP54	no	C165524000	R932000690
E	24	150	350	IP54	no	C165525000	R932000691

Kit Motor + Relay



Motor + Relay	Type	Material Number
C78M+relay 12V HIGH performance	K39681278MCF	R930103191
C79M+relay 24V HIGH performance	K39682479MEF	R930103193

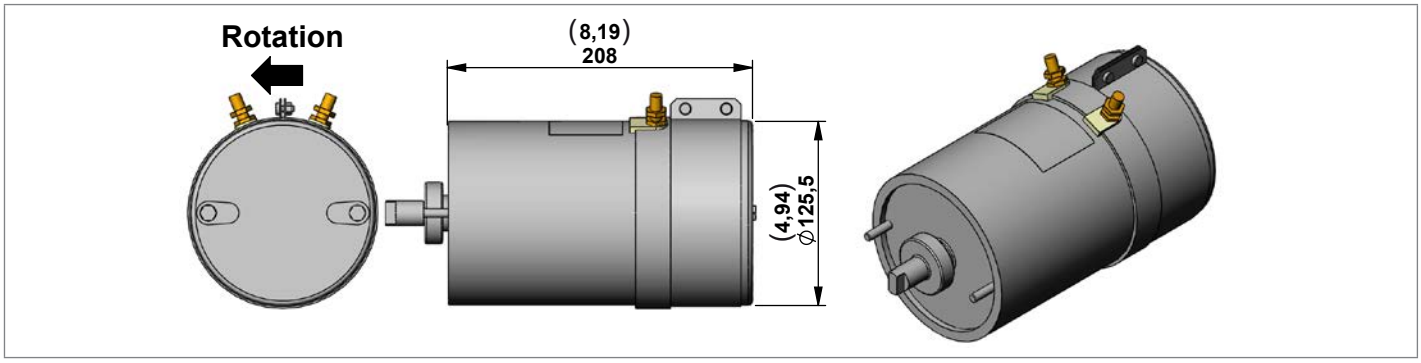
Junction Elements for D.C. Electric Motor



Junction Elements for manifolds

Code	Series	Type	Material Number
TR51	**KE - KS**	K01KE970TR051	R932001901

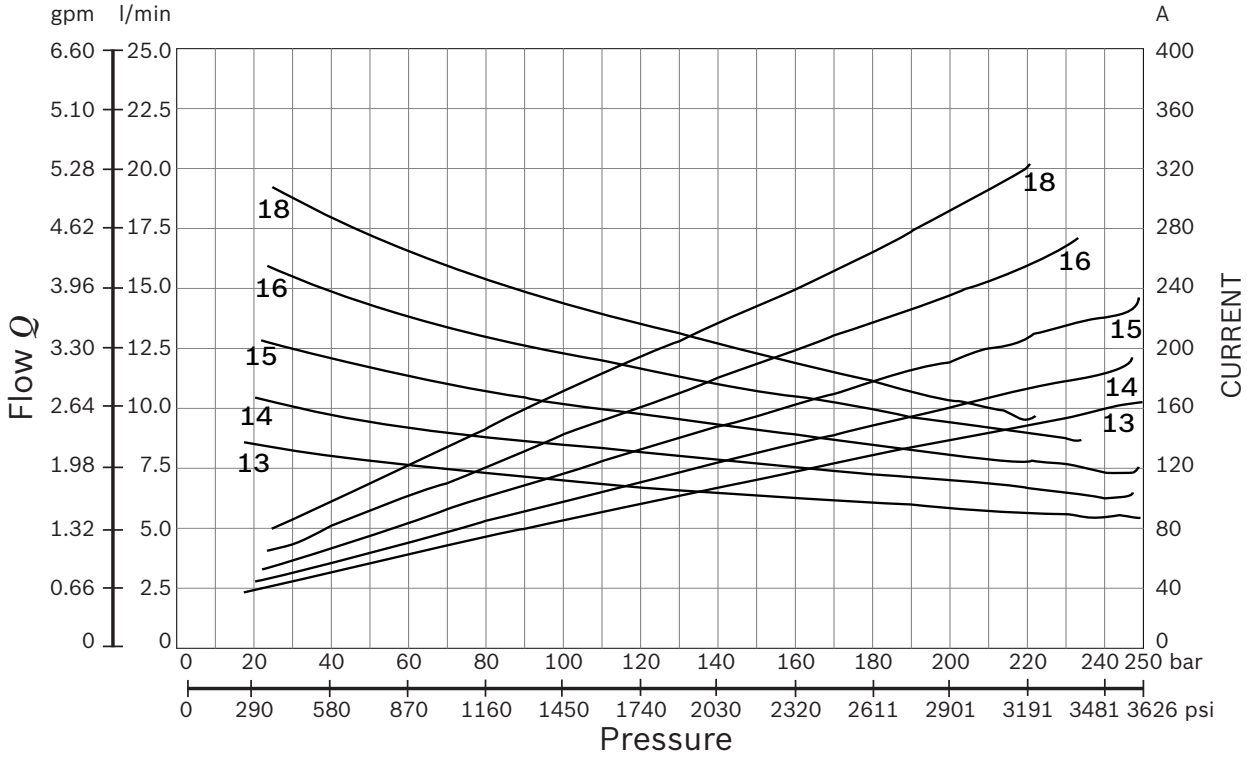
D.C. Electric Motors



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C201	24	3000	9% 5 min.	no	yes	IP 54	C1620S1201	R930059944
C251	24	3000	9% 5 min.	yes	yes	IP 54	C1620S1251	R930094804

BRUSHES KIT: R930086546

Electric Motor C201-C251 (24V – 3000W) Diagrams

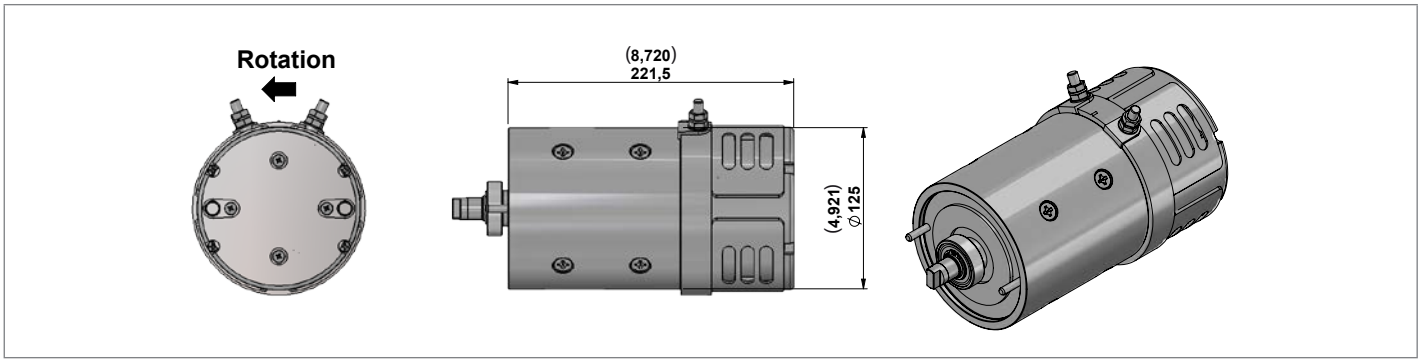


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
125	11	20%
150	7	13%
175	5	10%
200	3,5	8%
250	2,2	5%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

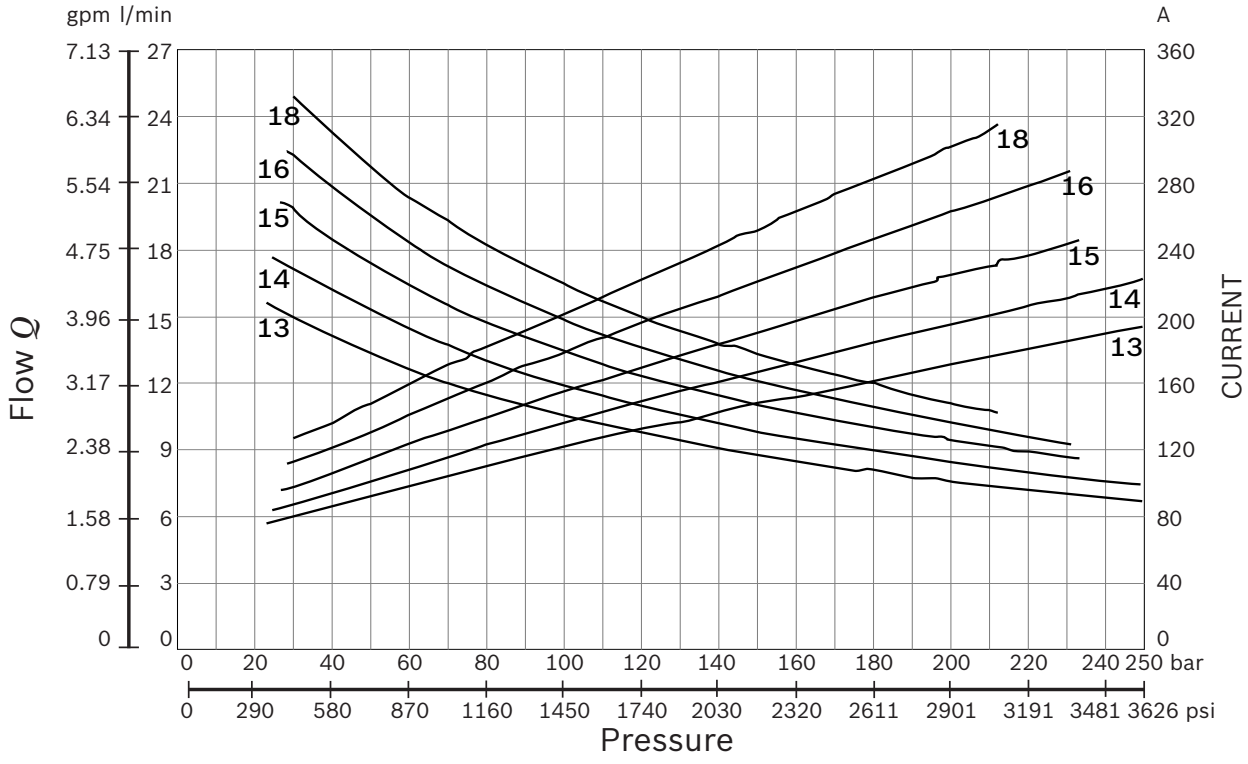
D.C. Electric Motors



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C214	24	3200	13% 5 min	no	no	IP 21	C1620S1214	R930068593

BRUSHES KIT: R930103362

Electric Motor C214 (24V – 3200W) Diagrams

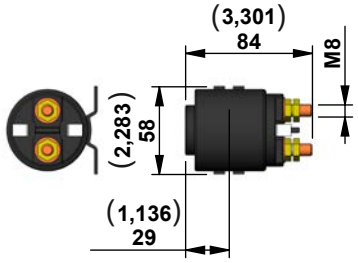


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
125	12.5	24%
150	8.5	18%
175	5	14%
200	4	11%
250	2	7%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

Relay



Starting Relay **High Performance** (silver plate contact)

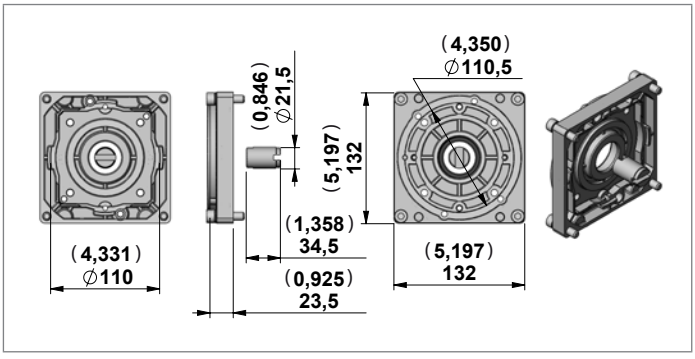
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
E	24	150	350	IP54	YES	C165525000	R932000691

Kit Motor + Relay



Motor + Relay	Type	Material Number
C201+relay 24V HIGH performance	K396824201E	R930071145
C251+relay 24V HIGH performance	K396824251E	R930095043
C214+relay 24V HIGH performance	K396824214E	R930103694

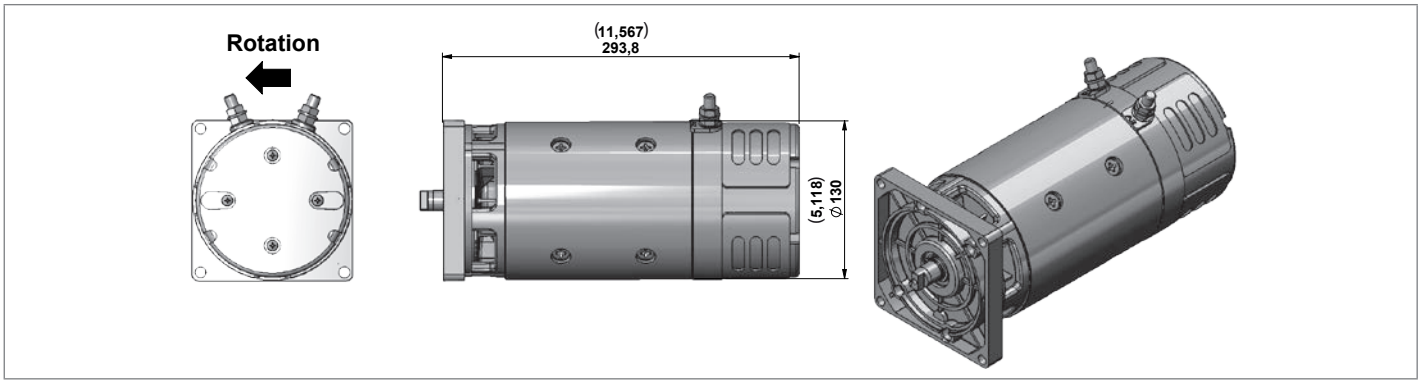
Junction Elements for D.C. Electric Motor Standard Flange



Junction Elements for manifolds **KE** and **KS** series

Code	Type	Material Number
TR57	K01KE970TR057	R930069427

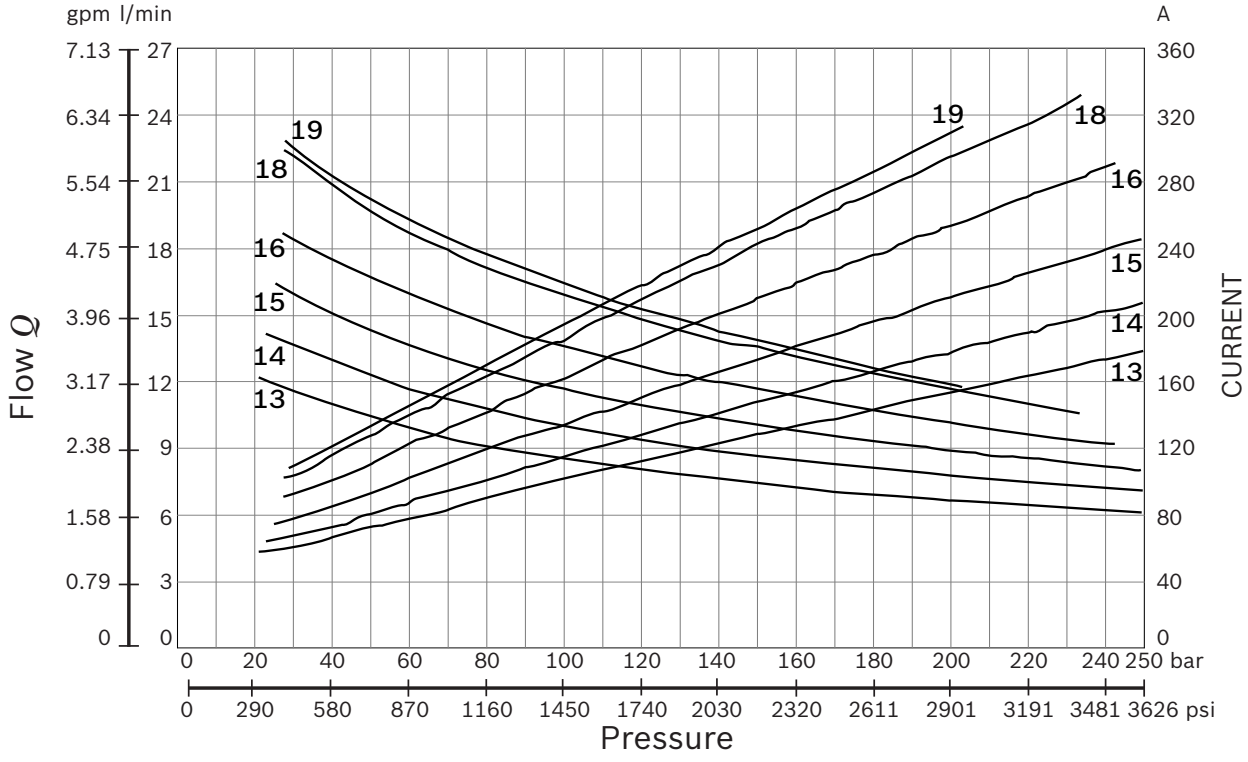
D.C. Electric Motors Fan Cooled



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C237	24	4000	12% 4 min	no	no	IP12	C1620S1237	R930086060

BRUSHES KIT: R932009963

Electric Motor C237 (24V – 4000W) Diagrams

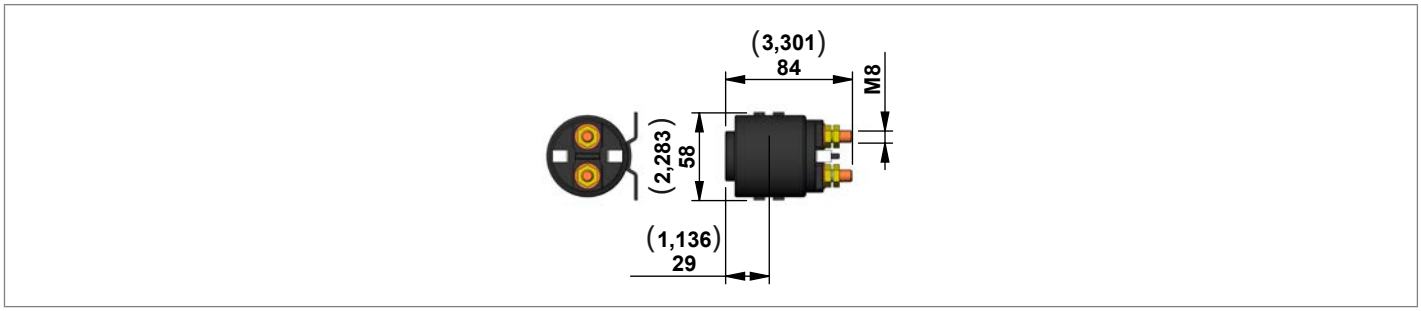


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
125	18	42%
150	16	35%
175	10	20%
200	6.5	15%
250	3.5	10%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

Relay



Starting Relay **High Performance** (silver plate contact)

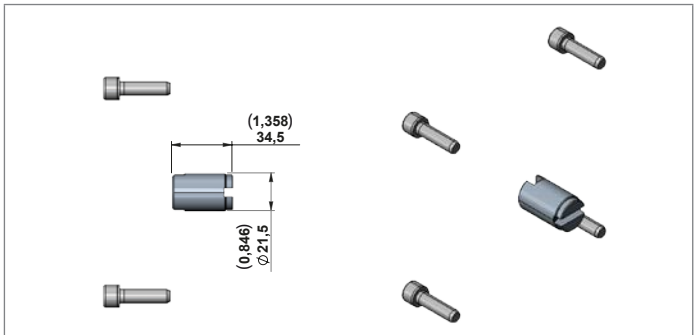
Code	Voltage (V)	Nominal Current (A)	Short time Current (A)	Protection INDEX	UL Certified	Type	Material Number
A	Without Relay						
E	24	150	350	IP54	YES	C165525000	R932000691

Kit Motor + Relay



Motor + Relay	Type	Material Number
C237+relay 24V HIGH performance	K396824237E	R930103650

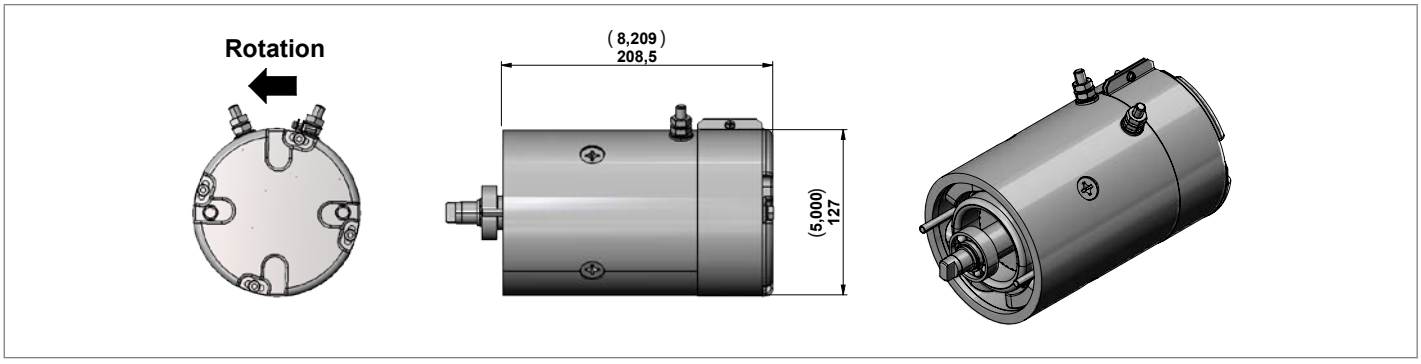
Junction Elements for D.C. Electric Motor Standard Flange



Junction Elements for manifolds **KE** and **KS** series

Code	Type	Material Number
TR237	K01KE970TR237	R930103902

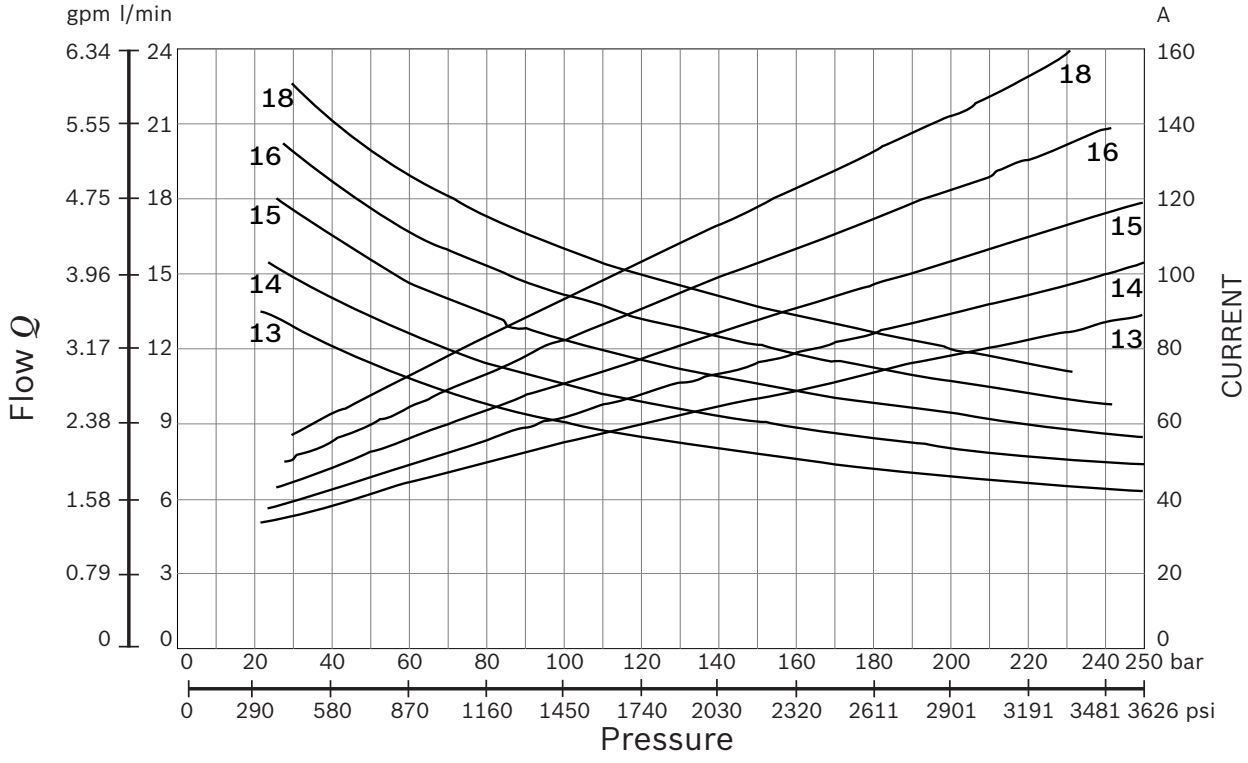
D.C. Electric Motors



Code	Voltage (V)	Power (W)	Duty Cycle S3% S2 min.	Thermal Switch	UL Certified	Protection index	Type	Material Number
C257	48	3200	12% 5 min	NO	NO	IP54	C1620S1257	R930099024

BRUSHES KIT: R930104097

Electric Motor C257 (48V – 3200W) Diagrams

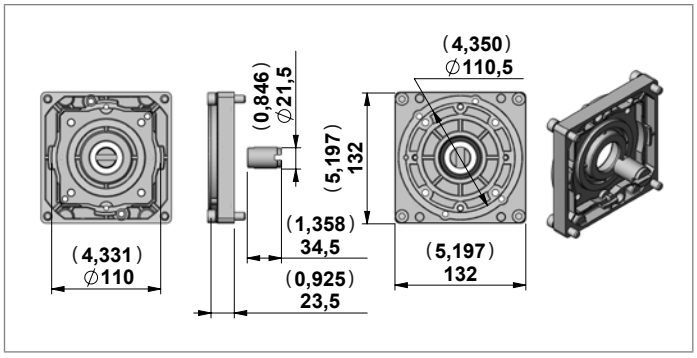


S2 - S3 performance

Amps	S2 (min.)	S3(%) (10 min.)
50	30	32%
75	17	25%
100	9	18%
125	6	12%
150	4	7%

Note
The values of the curves may change slightly depending on the brand / model of pump that is mounted.

Junction Elements for D.C. Electric Motor Standard Flange

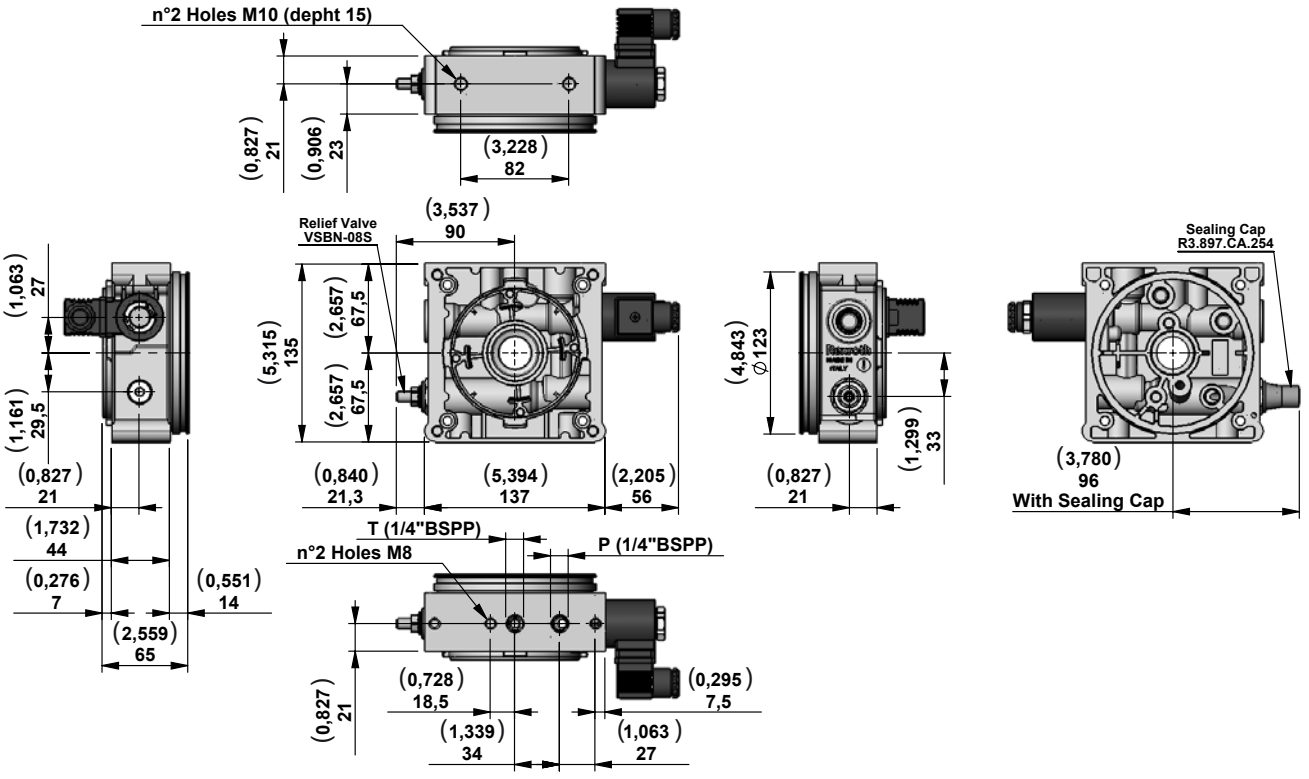


Junction Elements for manifolds **KE** and **KS** series

Code	Type	Material Number
TR57	K01KE970TR057	R930069427

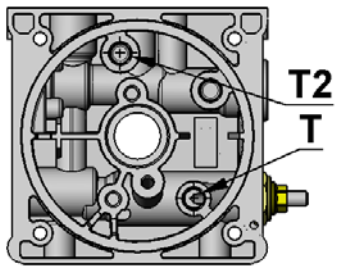
Central Manifold KE

M02

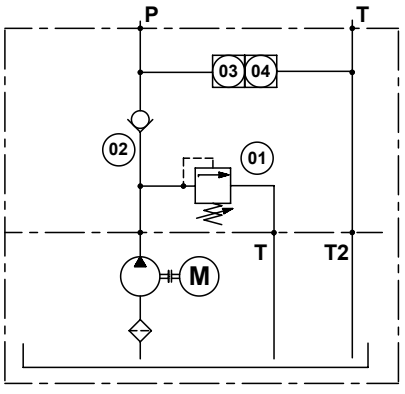


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M02/05	10-55 (145-798)	202A000	R930052187
M02/10	35-100 (508-1450)	202B000	R930052188
M02/20	90-250 (1305-3626)	202C000	R930052190
M02/35	175-345 (2538-5004)	202D000	R930052191

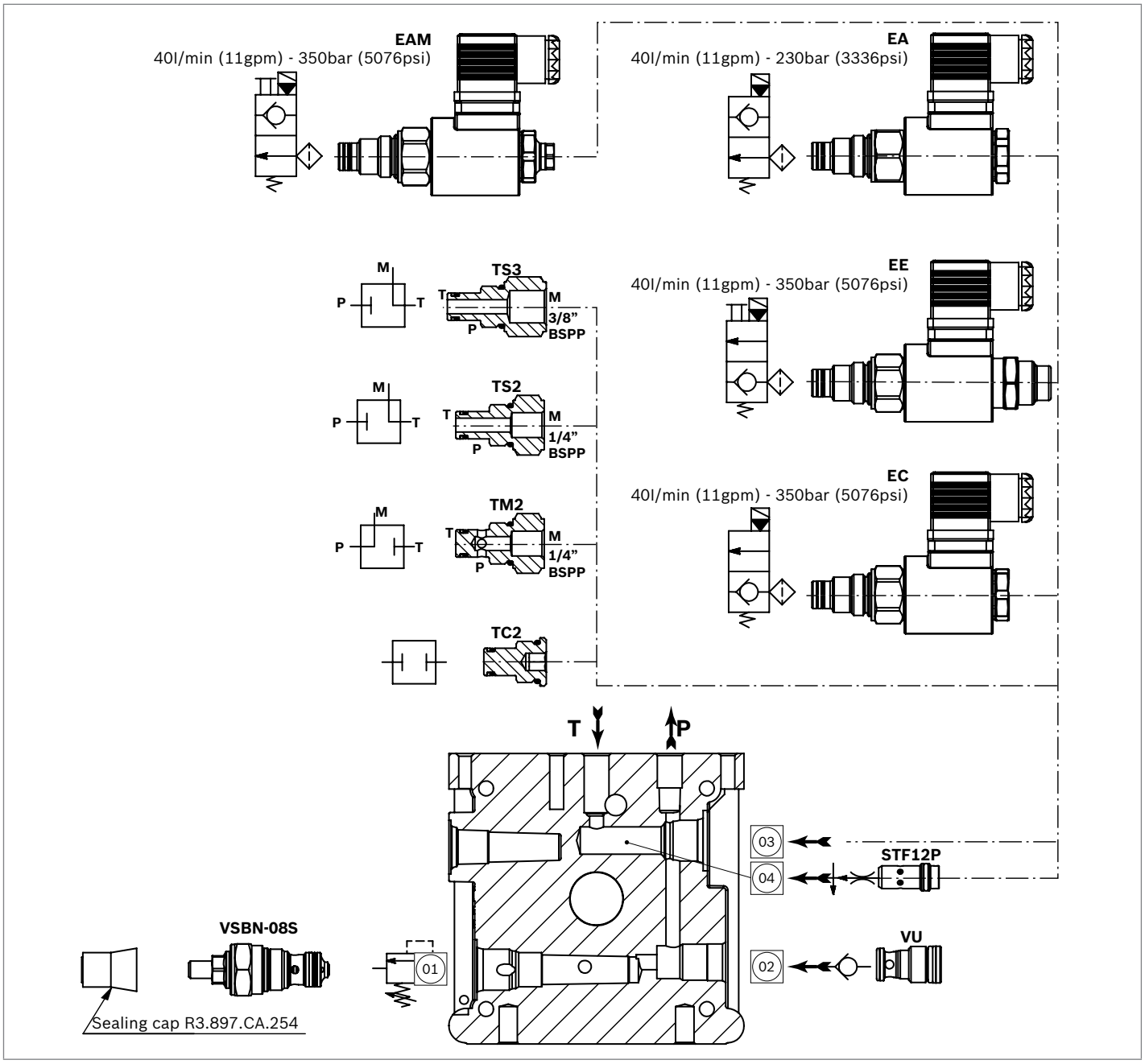
View Manifold Tank side



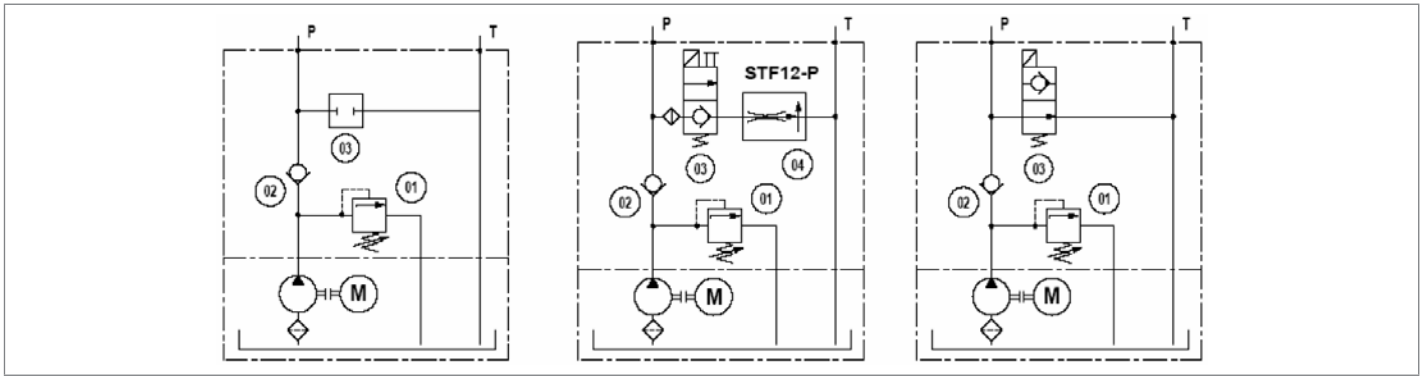
Manifold Hydraulic Diagram



M02 with valves

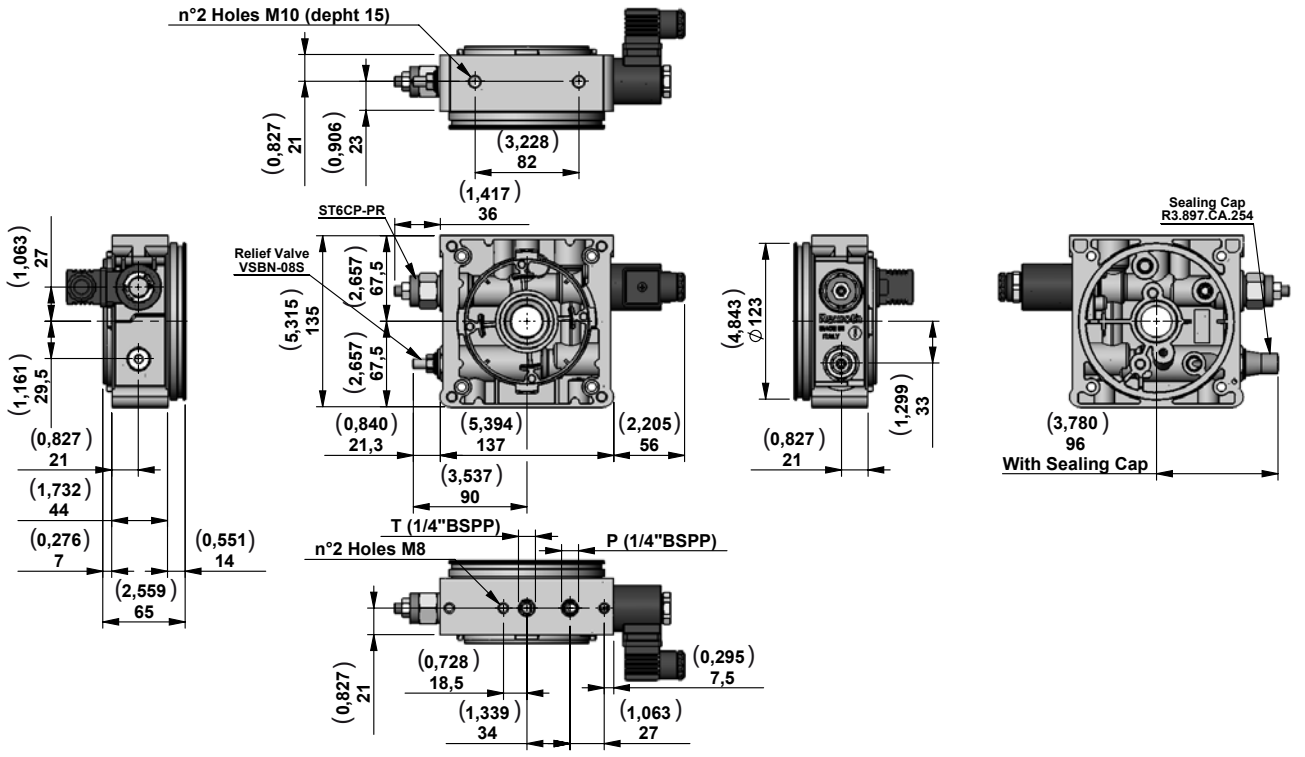


Main Realizable Diagrams



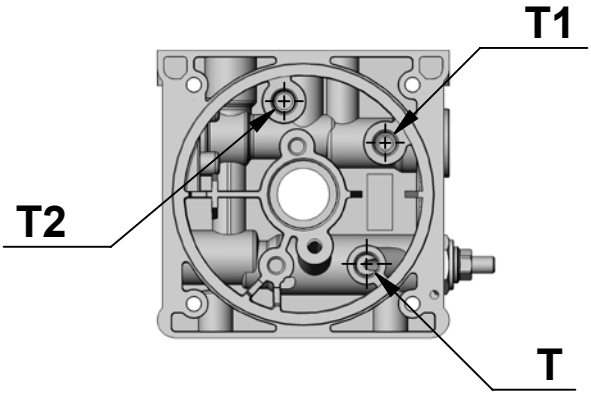
Central Manifold KE

M03

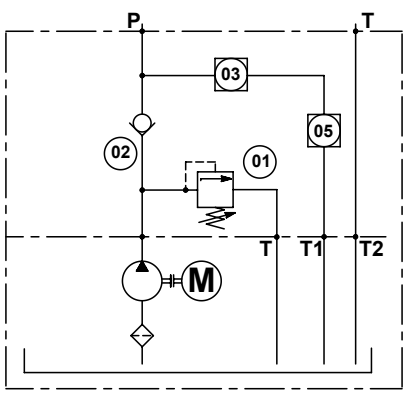


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M03/05	10-55 (145-798)	203A000	R930052192
M03/10	35-100 (508-1450)	203B000	R930052286
M03/20	90-250 (1305-3626)	203C000	R930052193
M03/35	175-345 (2538-5004)	203D000	R930052194

View Manifold Tank side

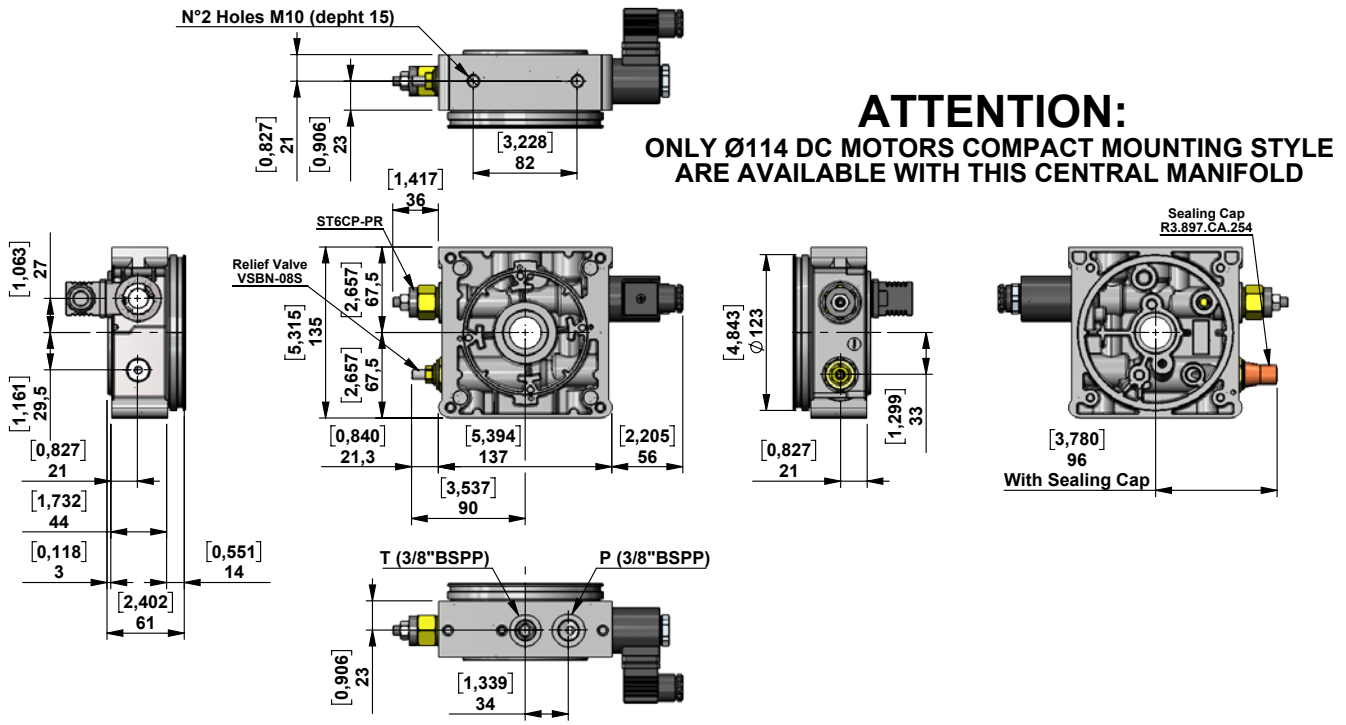


Manifold Hydraulic Diagram



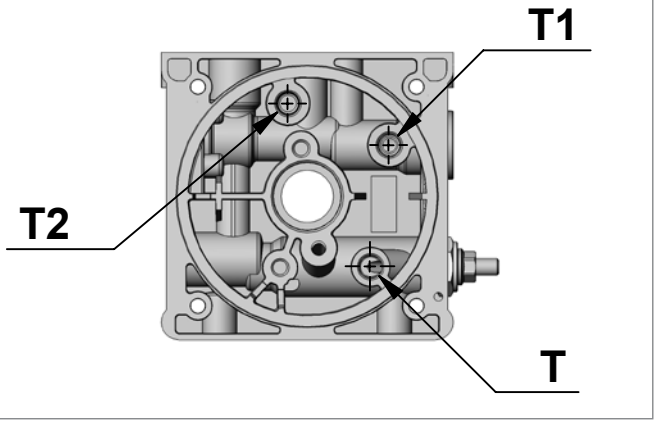
Central Manifold KE

M03-38

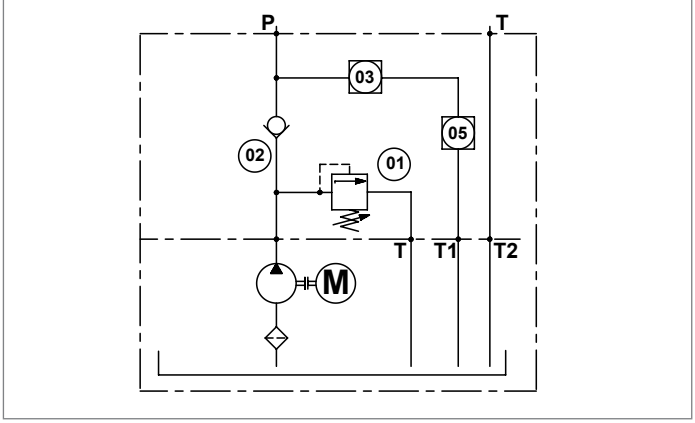


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M03-38/05	10-55 (145-798)	213A000	R930103803
M03-38/10	35-100 (508-1450)	213B000	R930103804
M03-38/20	90-250 (1305-3626)	213C000	R930103805
M03-38/35	175-345 (2538-5004)	213D000	R930103807

View Manifold Tank side

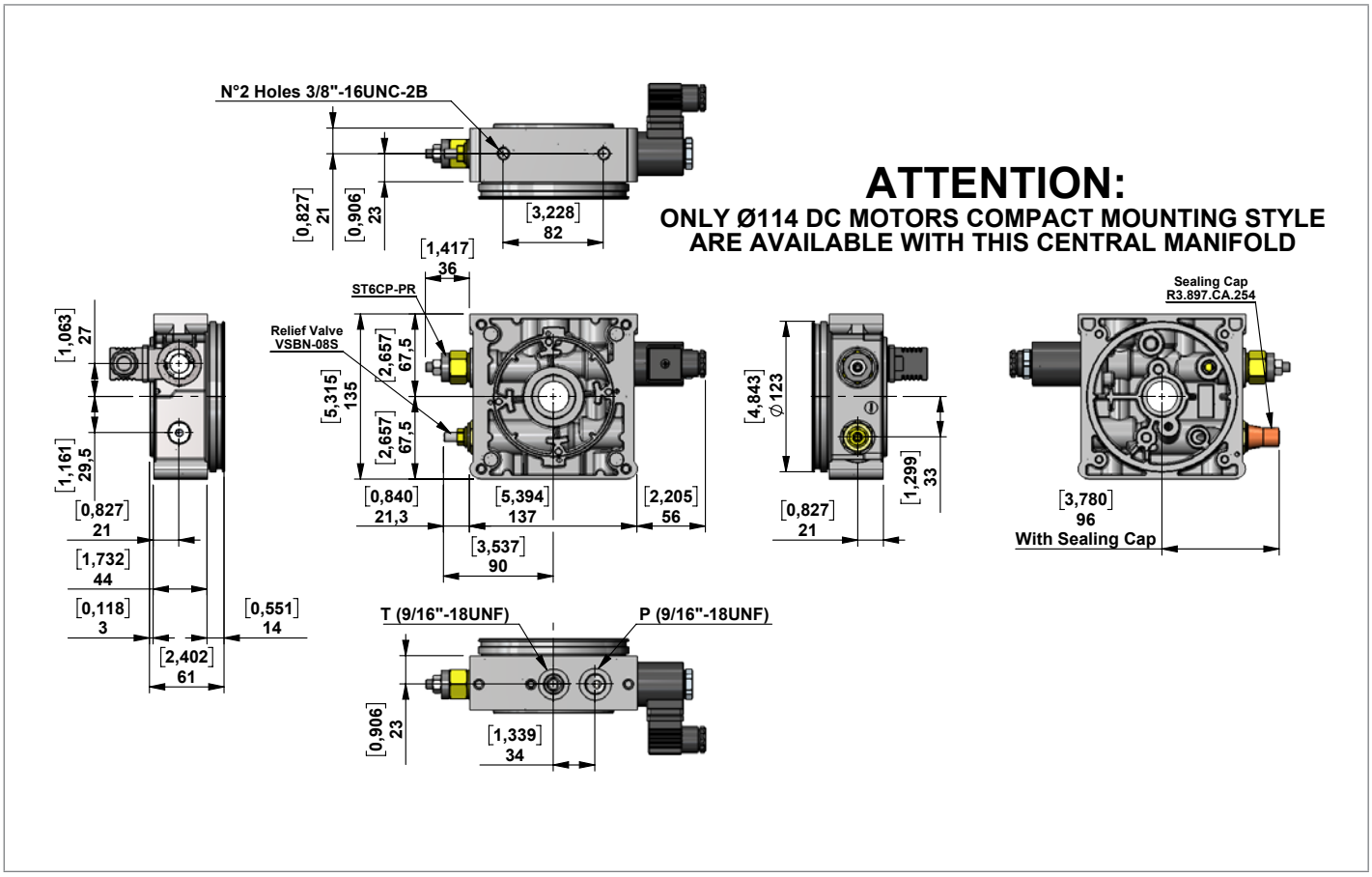


Manifold Hydraulic Diagram



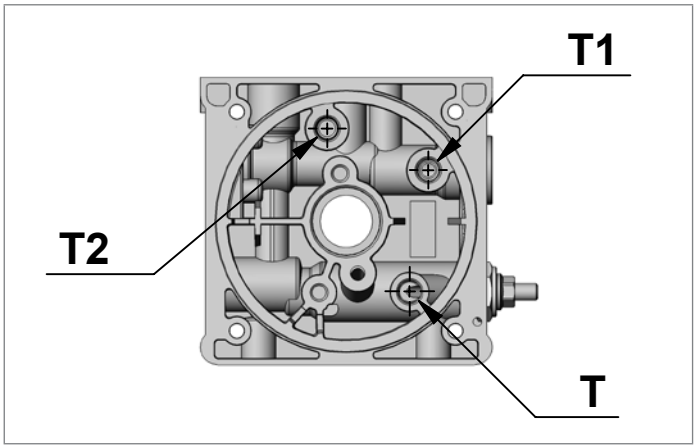
Central Manifold KE

M03-SAE

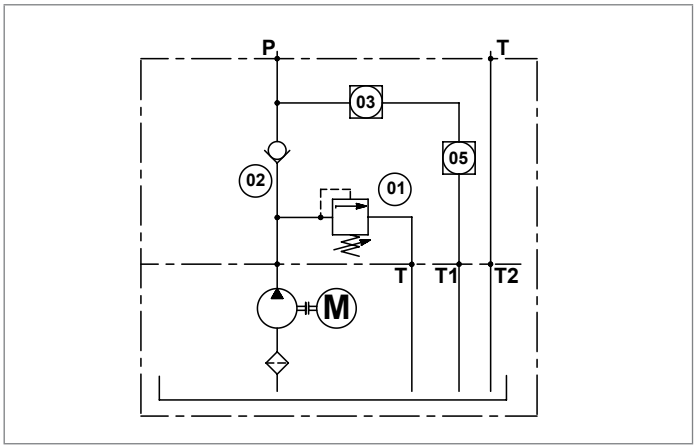


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M03-SAE/05	10-55 (145-798)	214A000	R930103809
M03-SAE/10	35-100 (508-1450)	214B000	R930103811
M03-SAE/20	90-250 (1305-3626)	214C000	R930103812
M03-SAE/35	175-345 (2538-5004)	214D000	R930103813

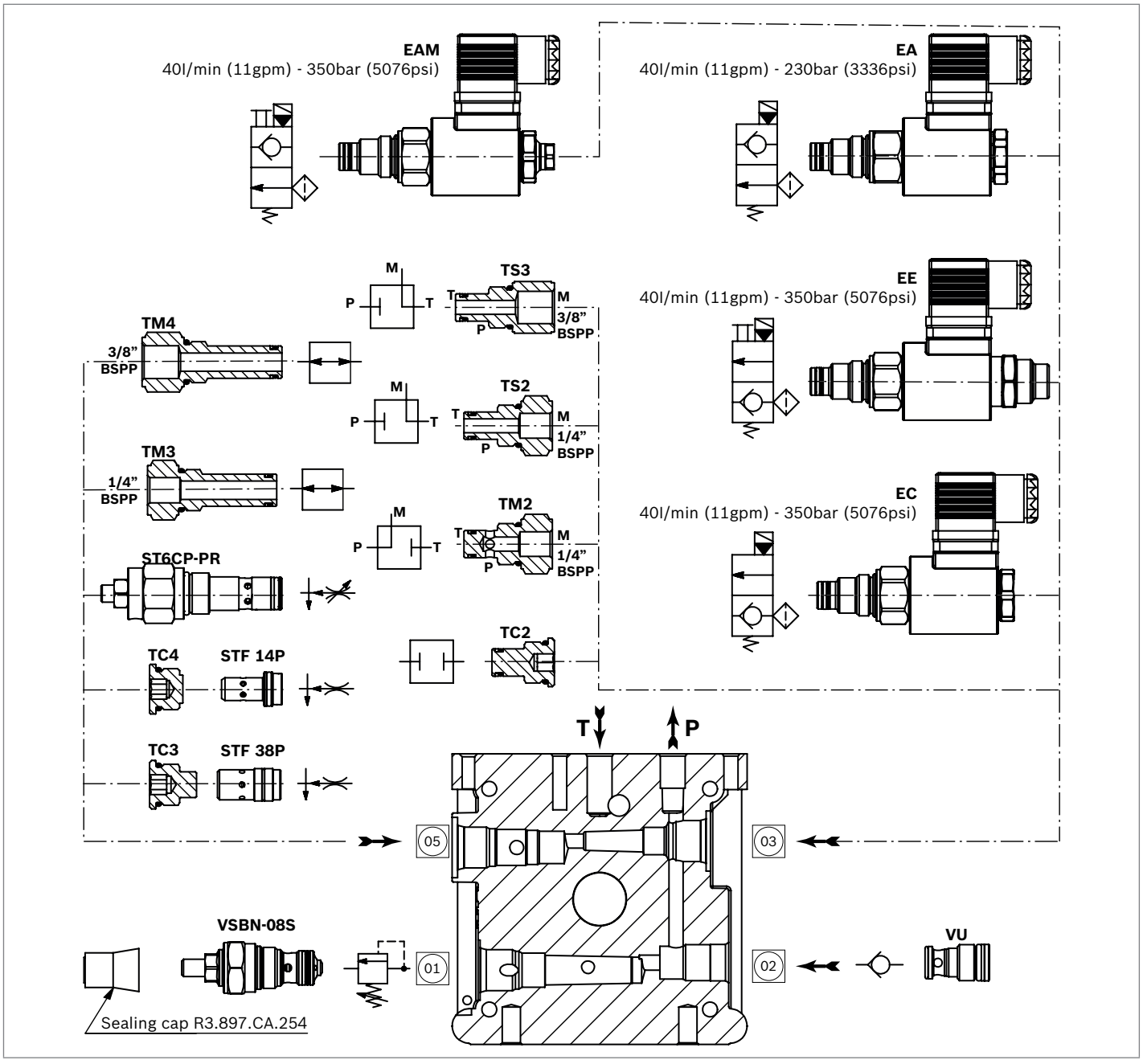
View Manifold Tank side



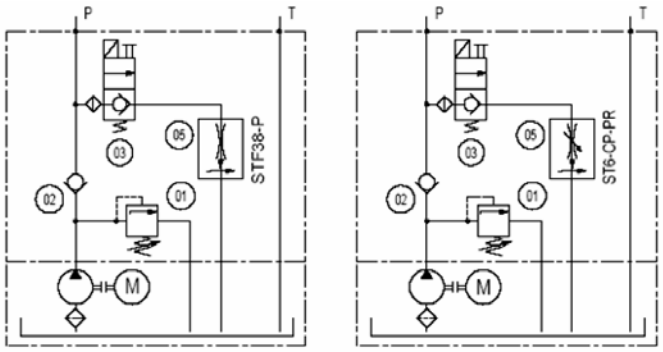
Manifold Hydraulic Diagram



M03 with valves

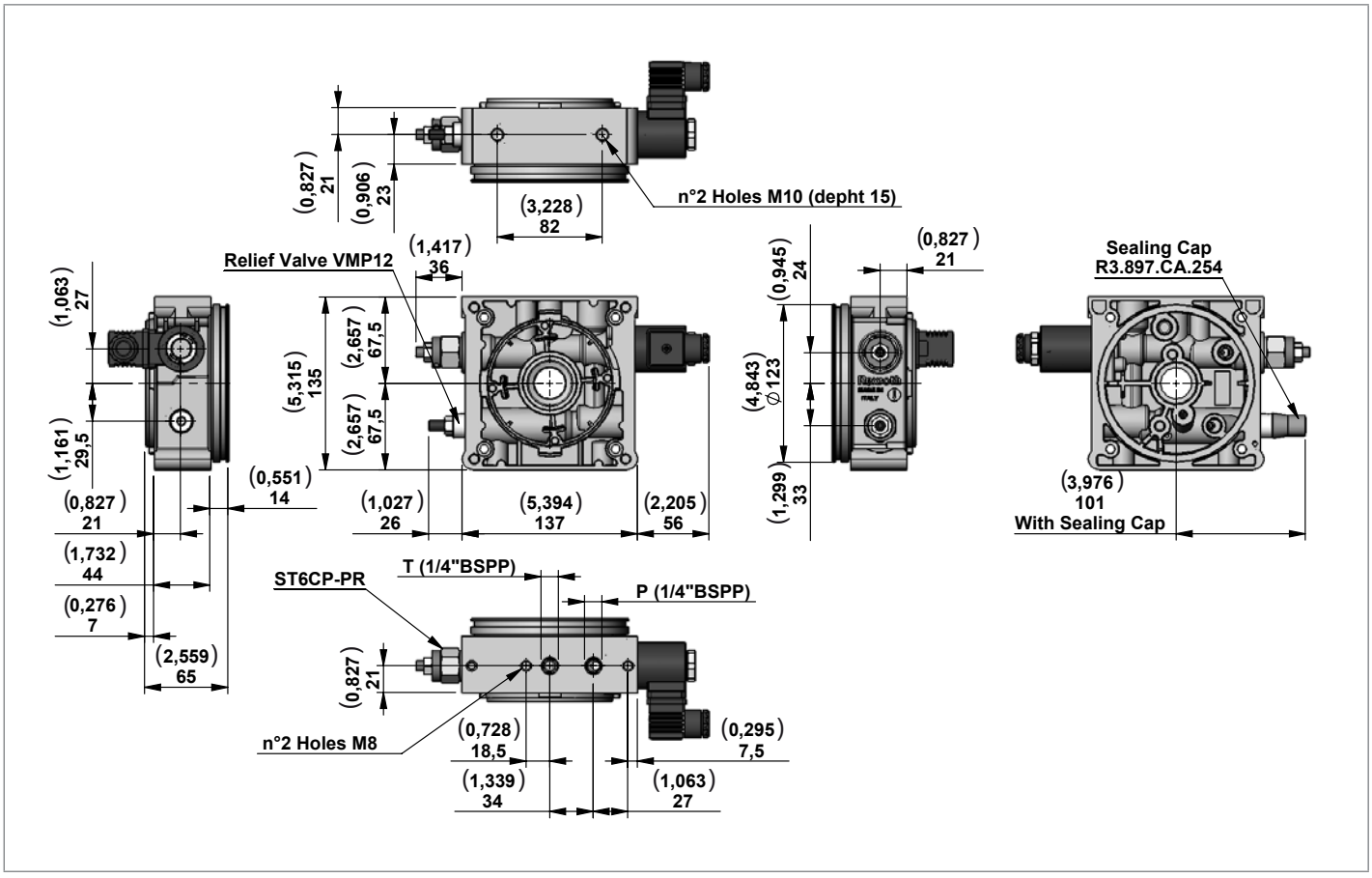


Main Realizable Diagrams



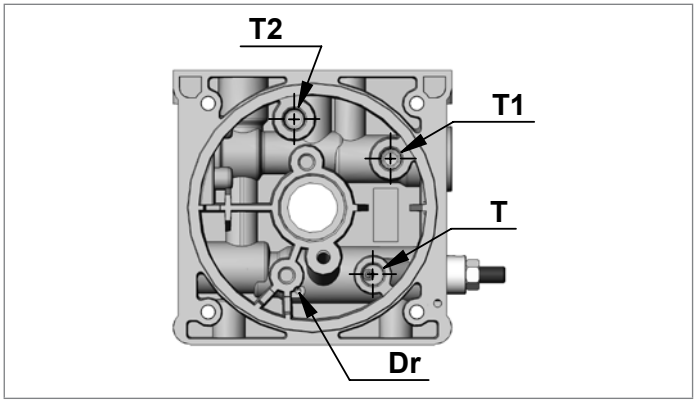
Central Manifold KE

M09

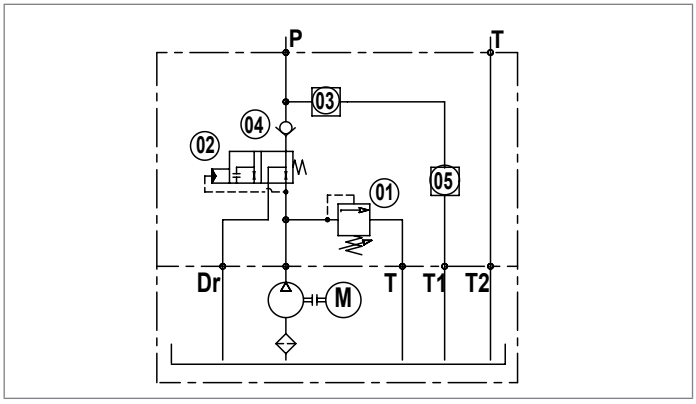


Manifold Code with Relief Valve Pressure Range	Pressure Range bar (psi)	Closing Flow l/min (gpm)	Pump displacement at 1450 rpm cc/rev	Flow at 1450 rpm l/min (gpm)	Pump displacement at 2850 rpm cc/rev	Flow at 2850 rpm l/min (gpm)	Type	Material Number
M09/13	80-300 (1160-4351)	1,1 (0,29)	1,1 (11)	1,6 (0,42)	-	-	209I00013	R932010272
M09/16	80-300 (1160-4351)	1,7 (0,45)	1,6 (12)	2,3 (0,61)	-	-	209I00016	R932008838
M09/17	80-300 (1160-4351)	2 (0,53)	2 (13)	2,9 (0,77)	1,1 (11)	3,2 (0,85)	209I00017	R932008839
M09/18	80-300 (1160-4351)	2,3 (0,61)	2,5 (14)	3,6 (0,95)	-	-	209I00018	R932008840
M09/22	80-300 (1160-4351)	3,5 (0,92)	3,15 (15)	4,6 (1,22)	1,6 (12)	4,6 (1,22)	209I00022	R930052412
M09/25	80-300 (1160-4351)	4,2 (1,11)	4 (16)	5,8 (1,53)	2 (13)	5,7 (1,51)	209I00025	R932010299

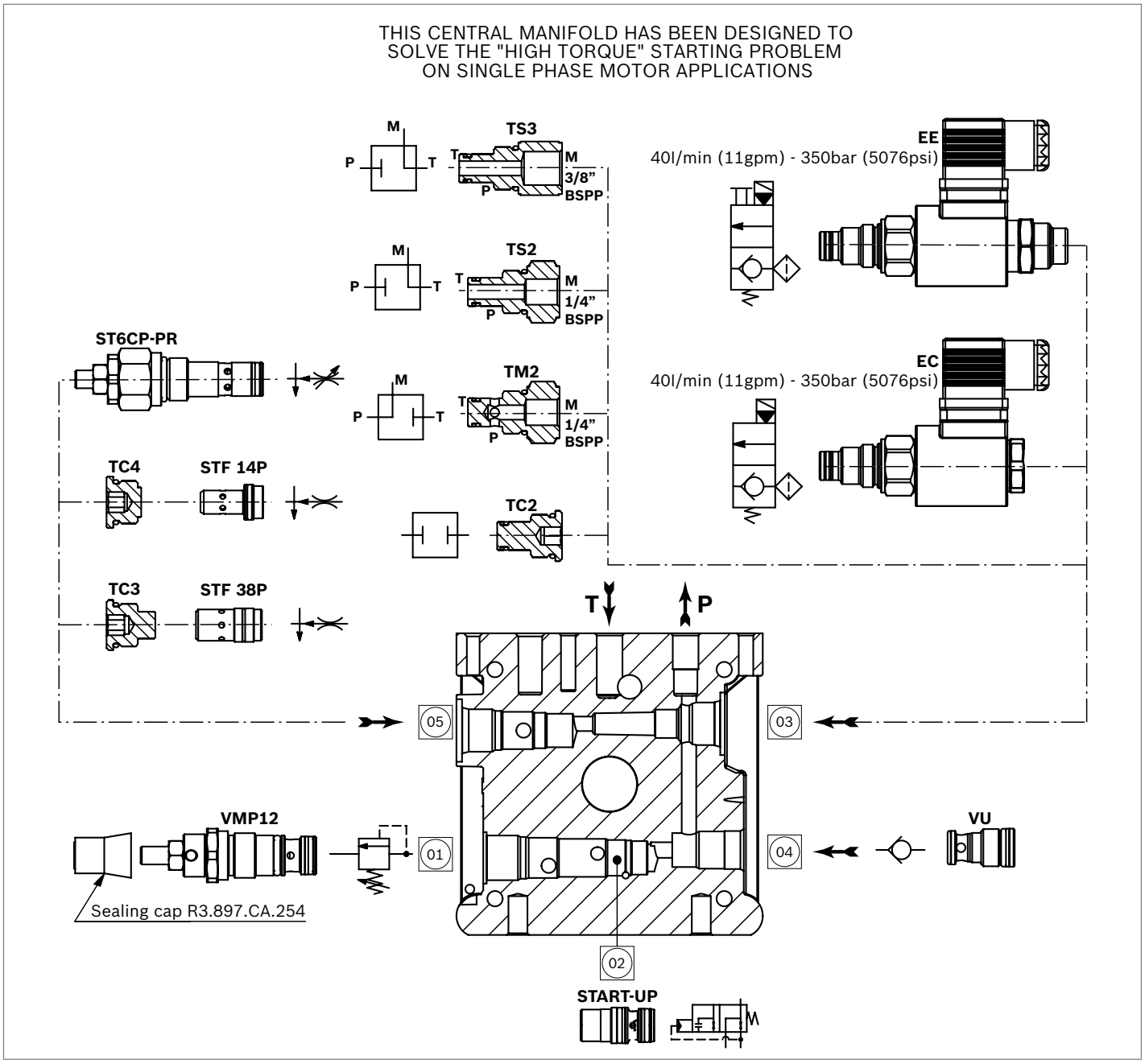
View Manifold Tank side



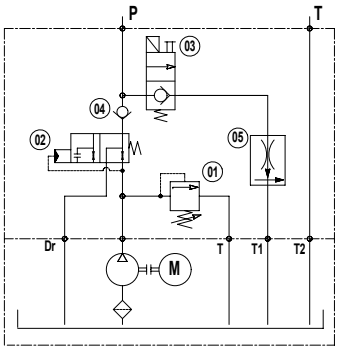
Manifold Hydraulic Diagram



M09 with valves

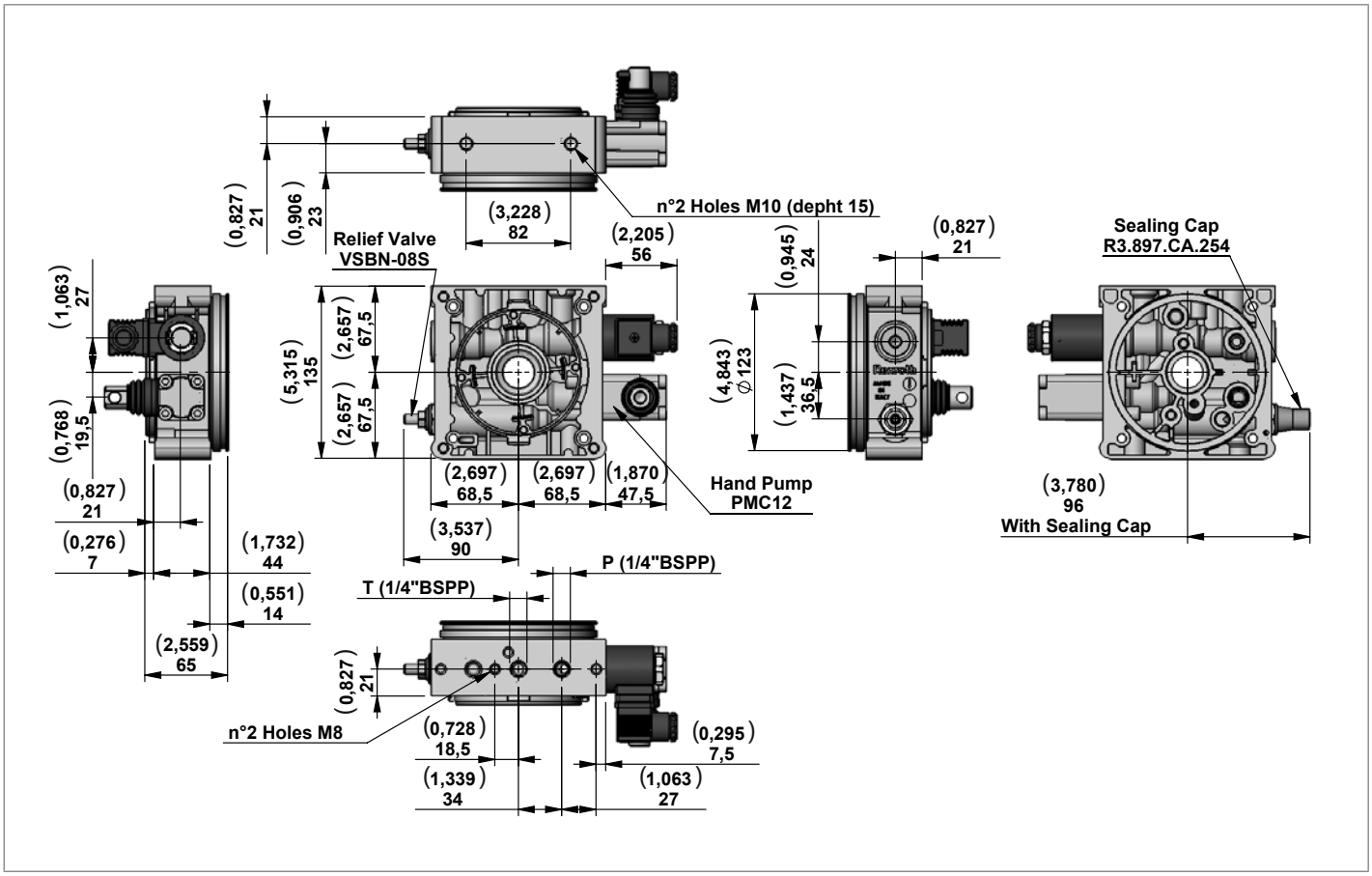


Main Realizable Diagrams



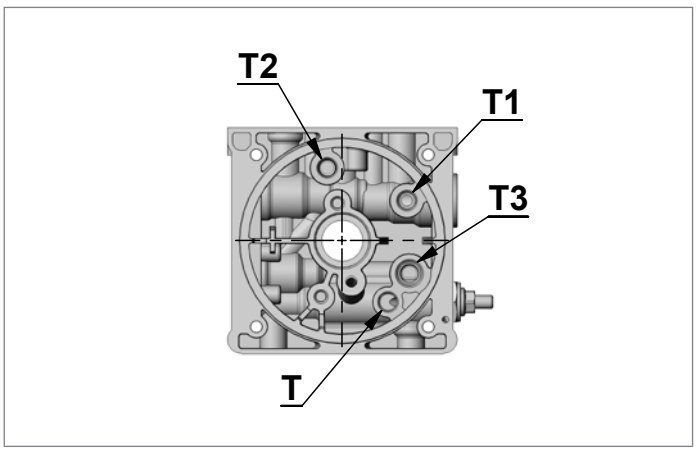
Central Manifold KE

M04

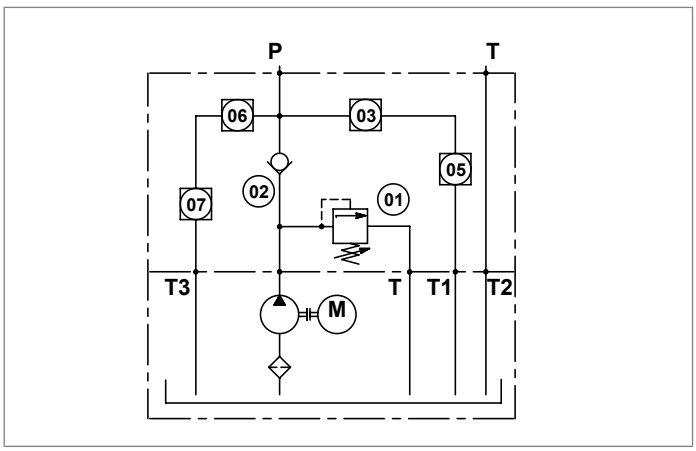


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M04/05	10-55 (145-798)	204A000	R930052195
M04/10	35-100 (508-1450)	204B000	R930052196
M04/20	90-250 (1305-3626)	204C000	R930052197
M04/35	175-345 (2538-5004)	204D000	R930052198

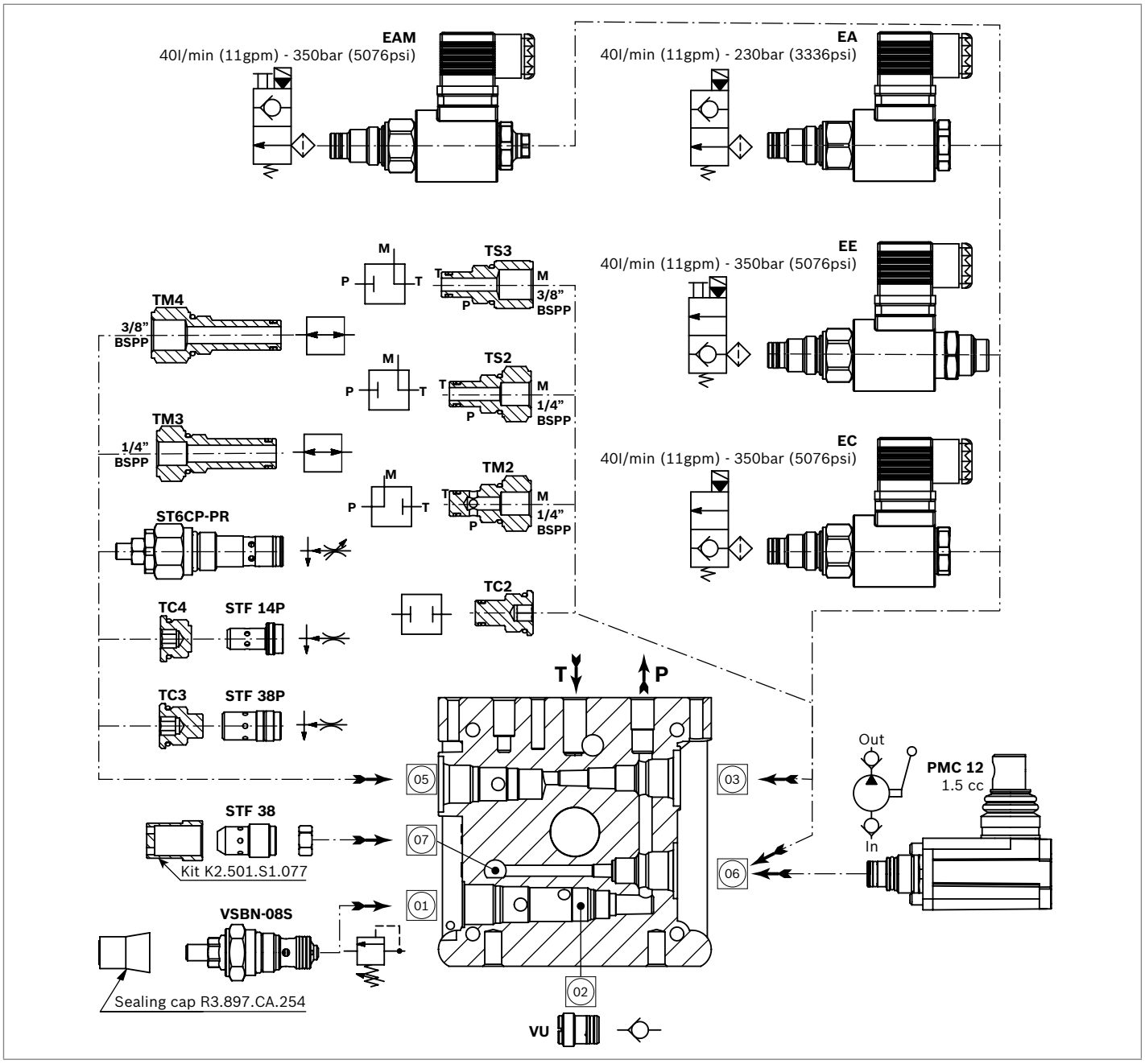
View Manifold Tank side



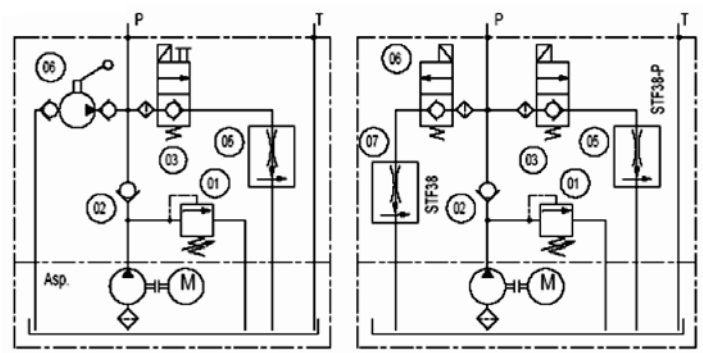
Manifold Hydraulic Diagram



M04 with valves

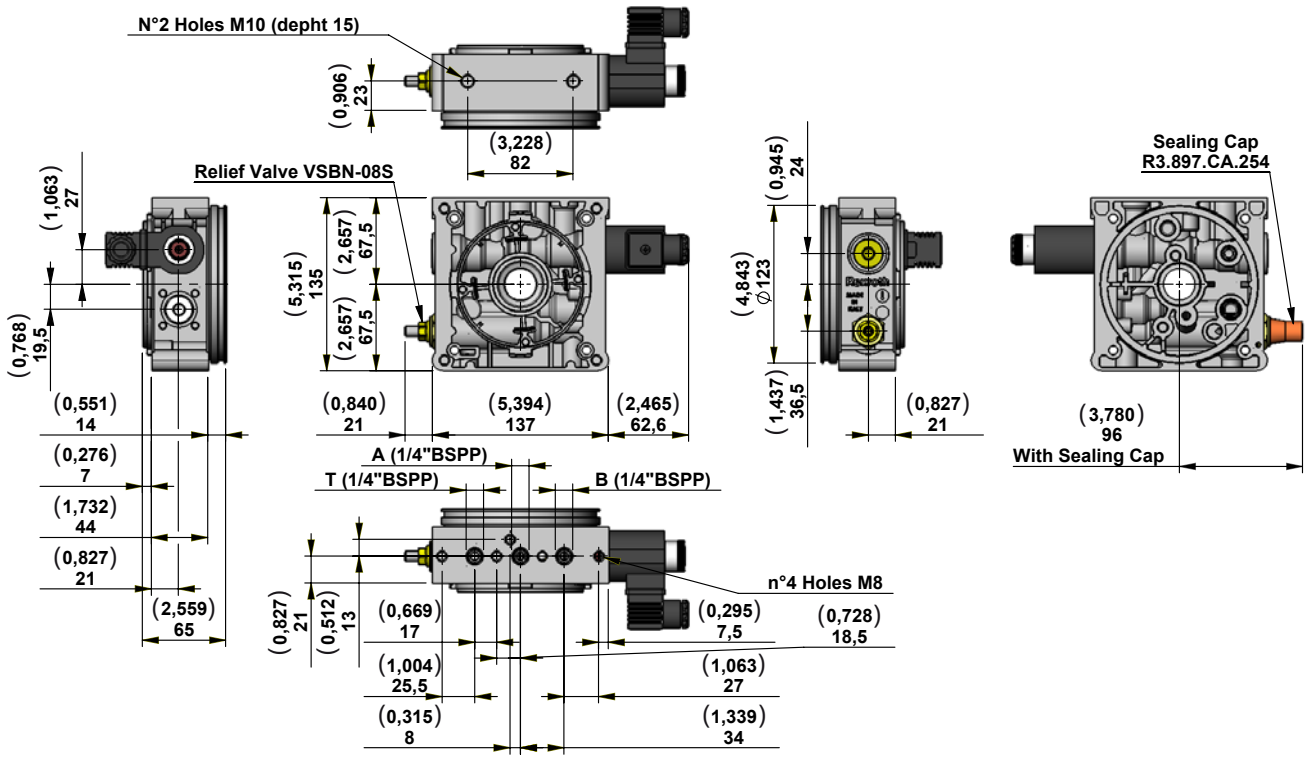


Main Realizable Diagrams



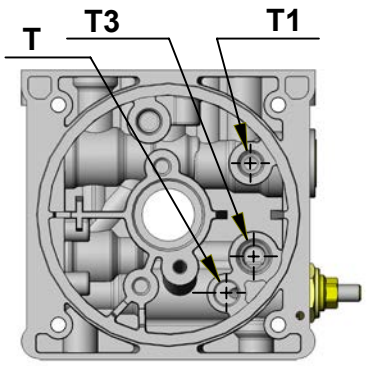
Central Manifold KE

M15

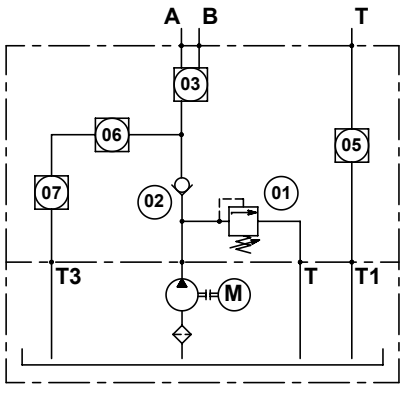


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M15/05	10-55 (145-798)	215A000	R930052205
M15/10	35-100 (508-1450)	215B000	R930052206
M15/20	90-250 (1305-3626)	215C000	R930052207
M15/35	175-345 (2538-5004)	215D000	R930052208

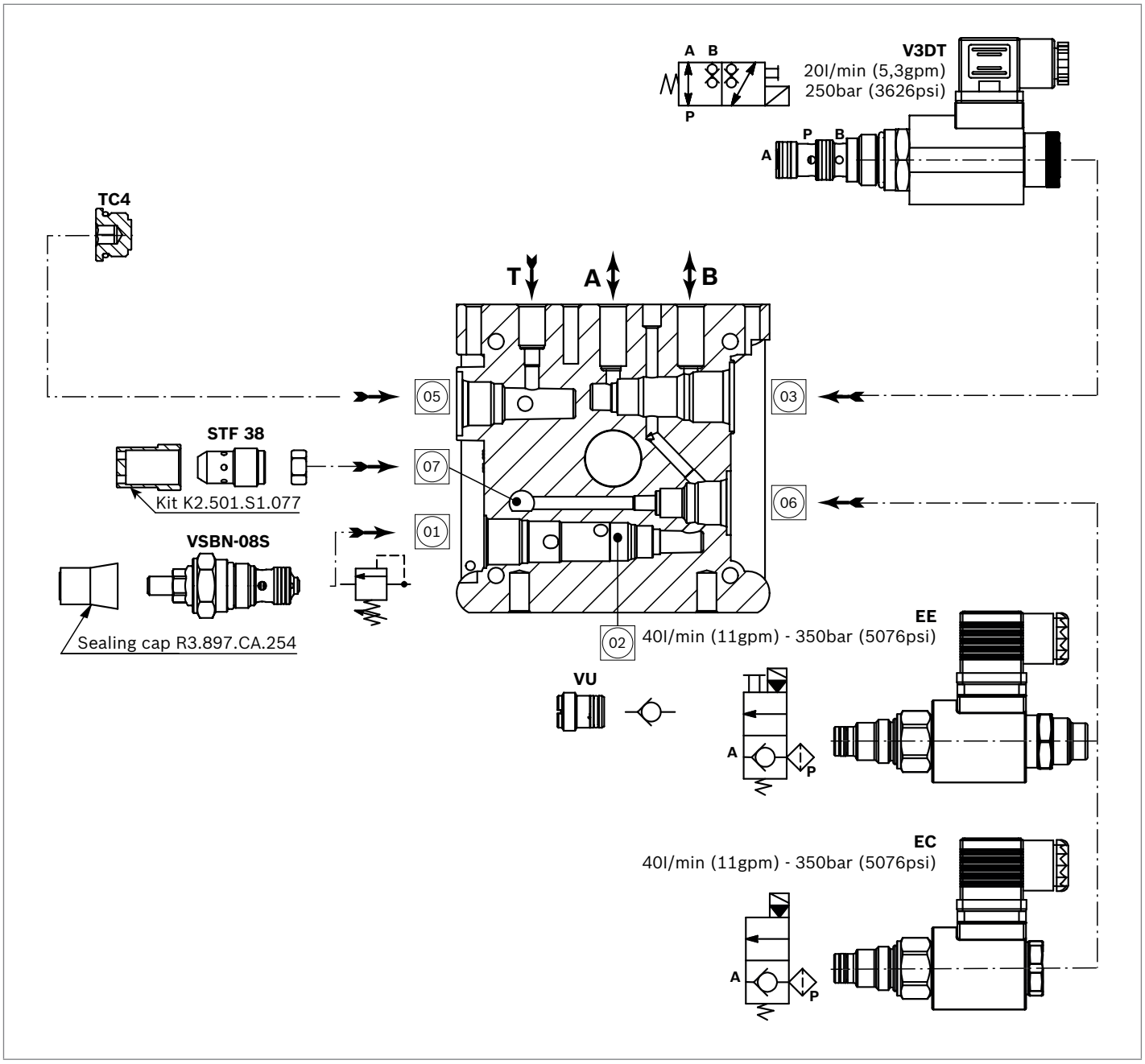
View Manifold Tank side



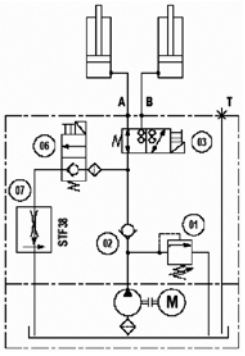
Manifold Hydraulic Diagram



M15 with valves

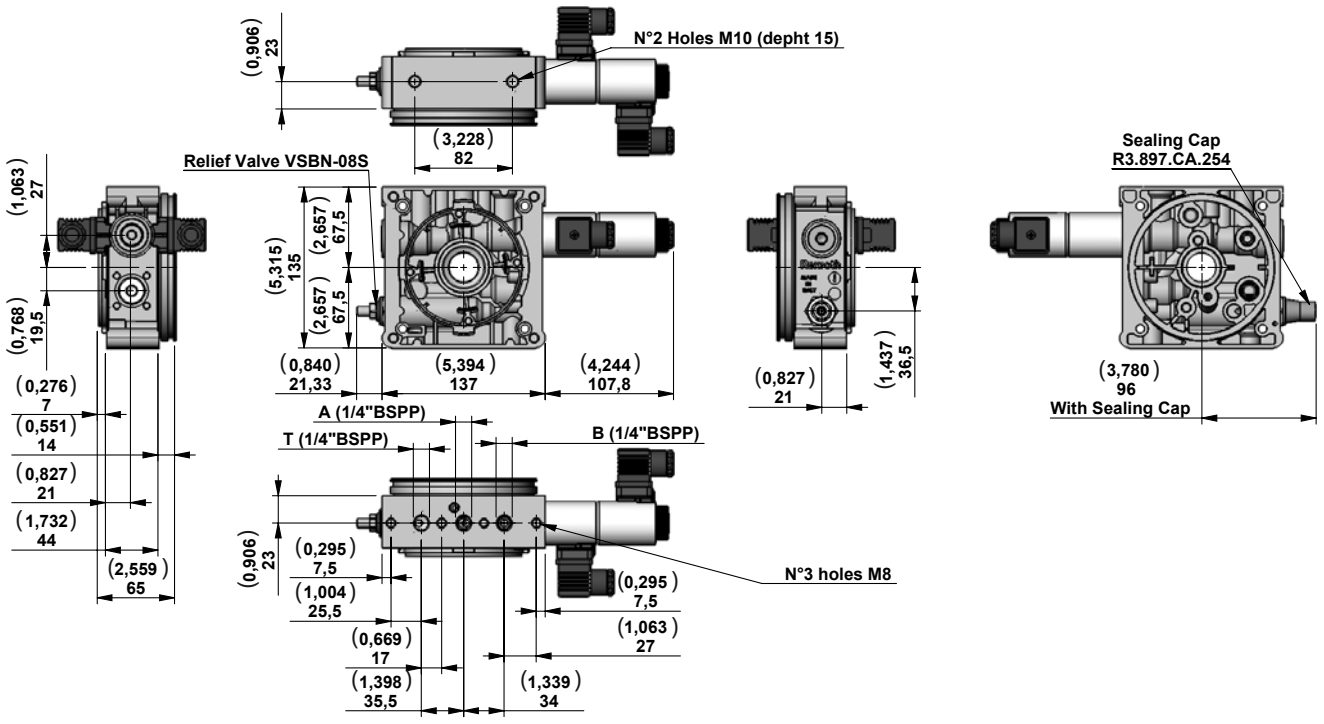


Main Realizable Diagrams



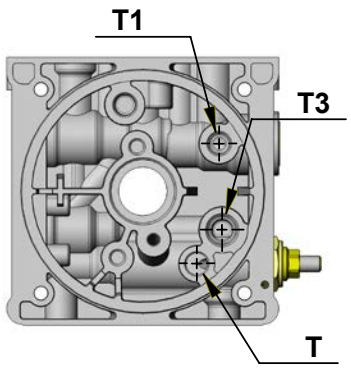
Central Manifold KE

M25

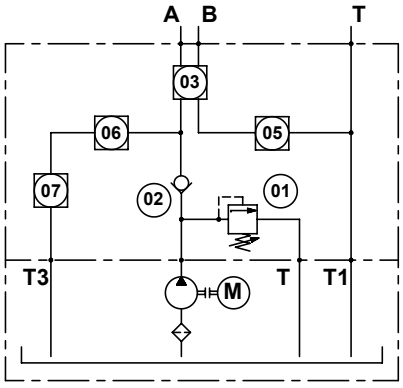


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M25/05	10-55 (145-798)	225A000	R930052221
M25/10	35-100 (508-1450)	225B000	R930052222
M25/20	90-250 (1305-3626)	225C000	R930052223
M25/35	175-345 (2538-5004)	225D000	R930052224

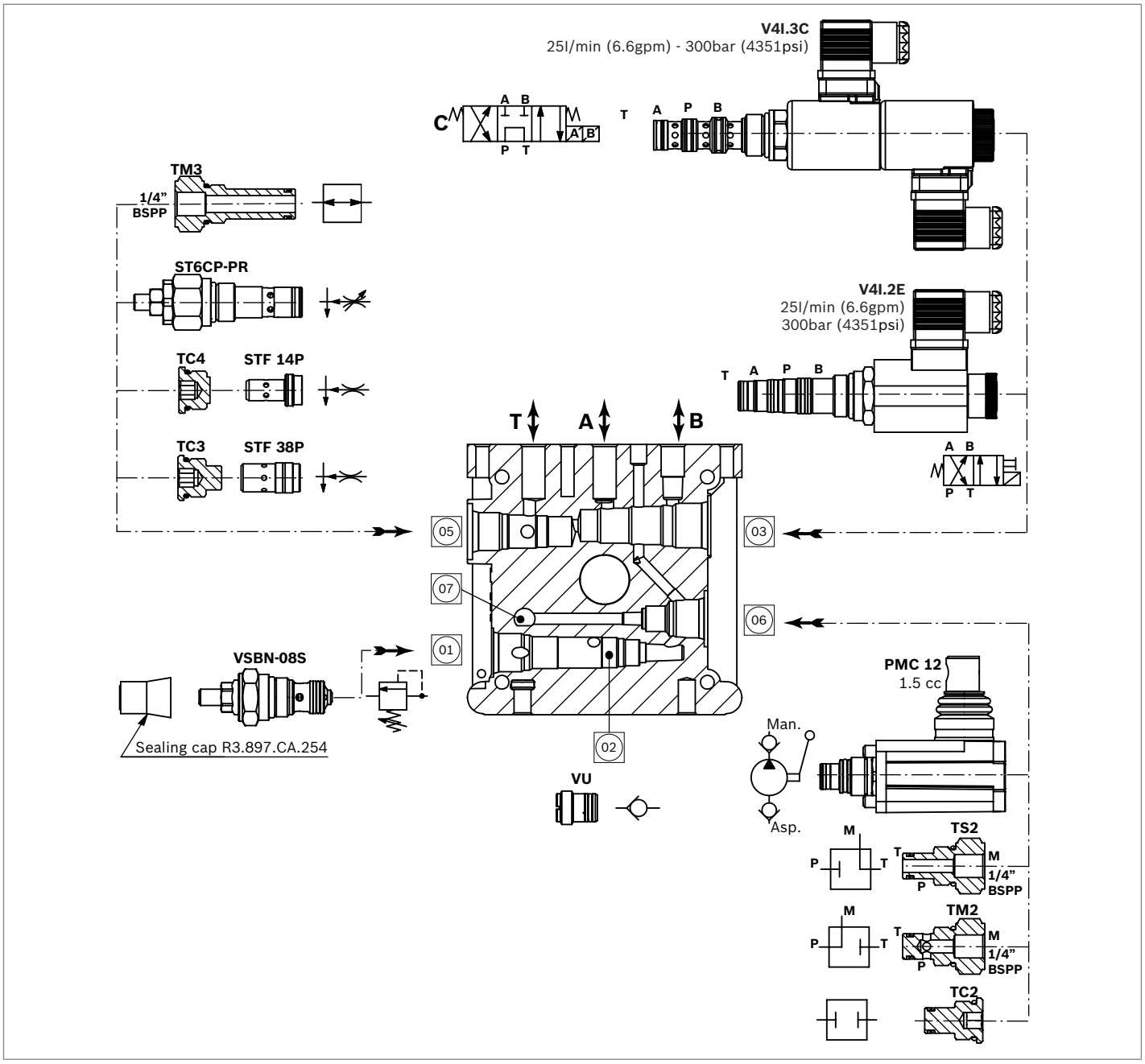
View Manifold Tank side



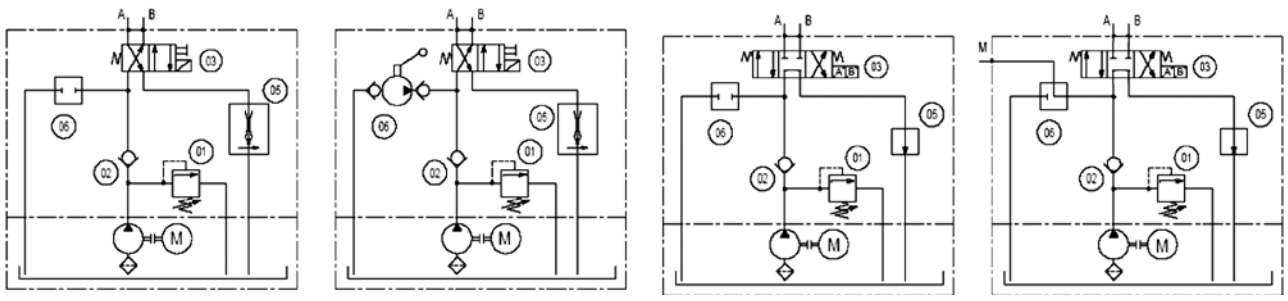
Manifold Hydraulic Diagram



M25 with valves

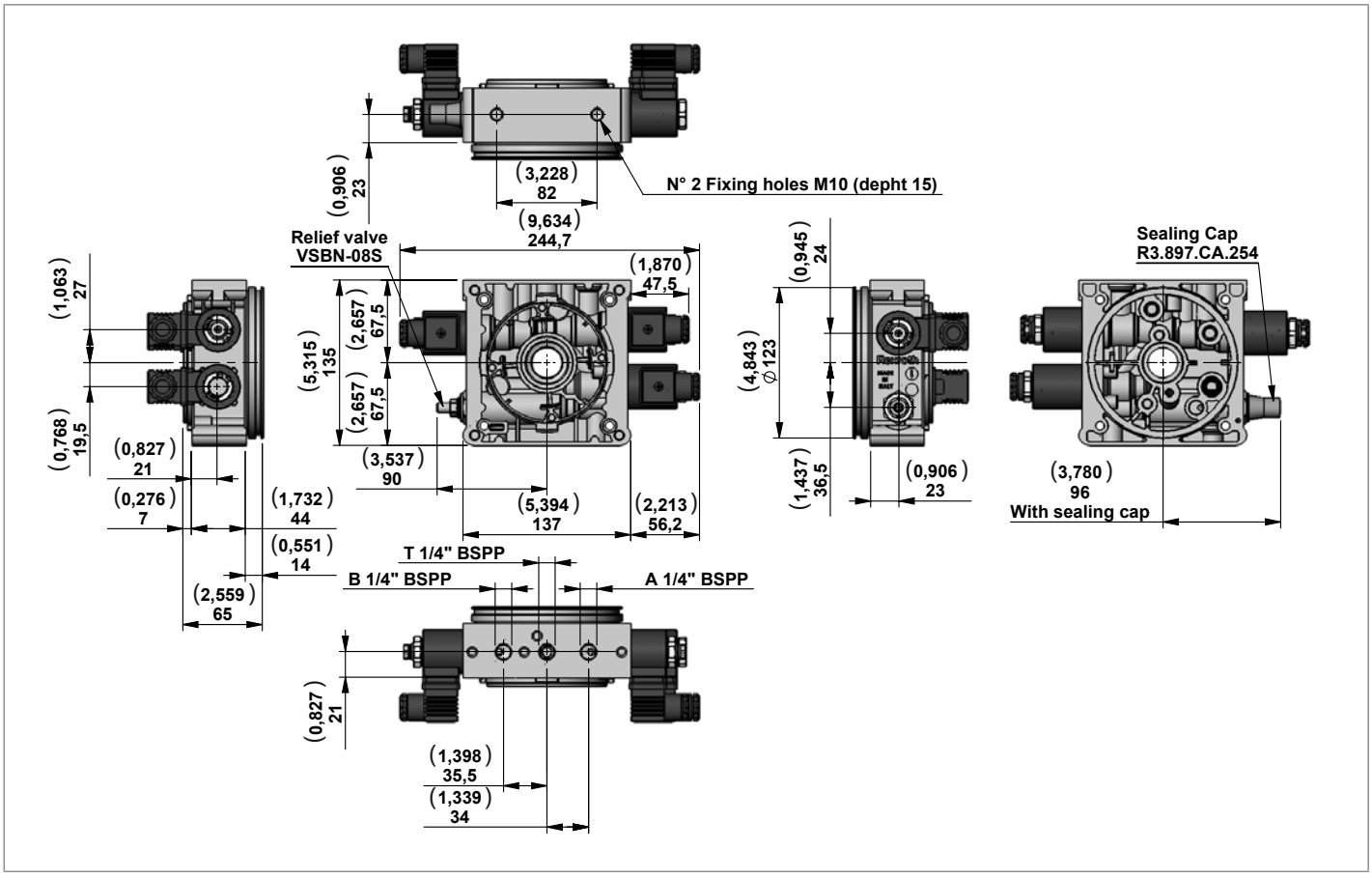


Main Realizable Diagrams



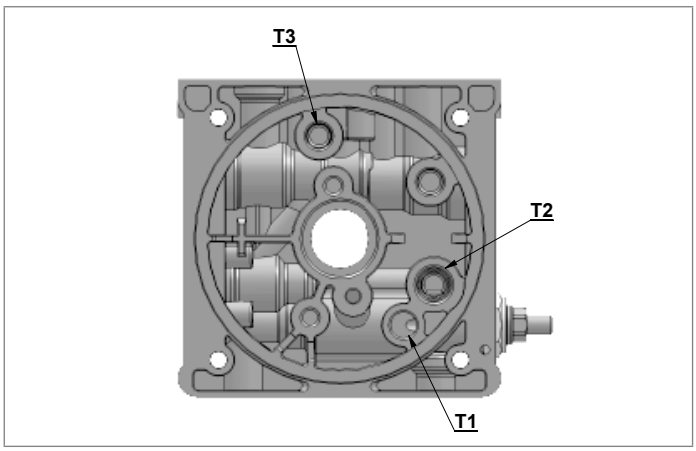
Central Manifold KE

M32

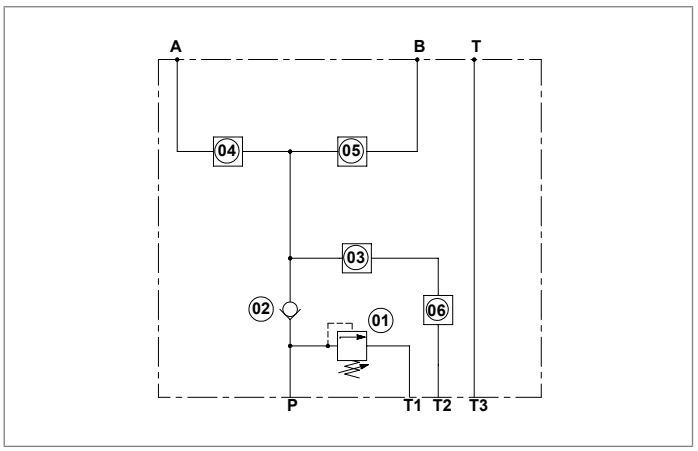


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M32/10	35-100 (508-1450)	232B000	R930052413
M32/20	90-250 (1305-3626)	232C000	R930052414
M32/35	175-345 (2538-5004)	232D000	R930052415

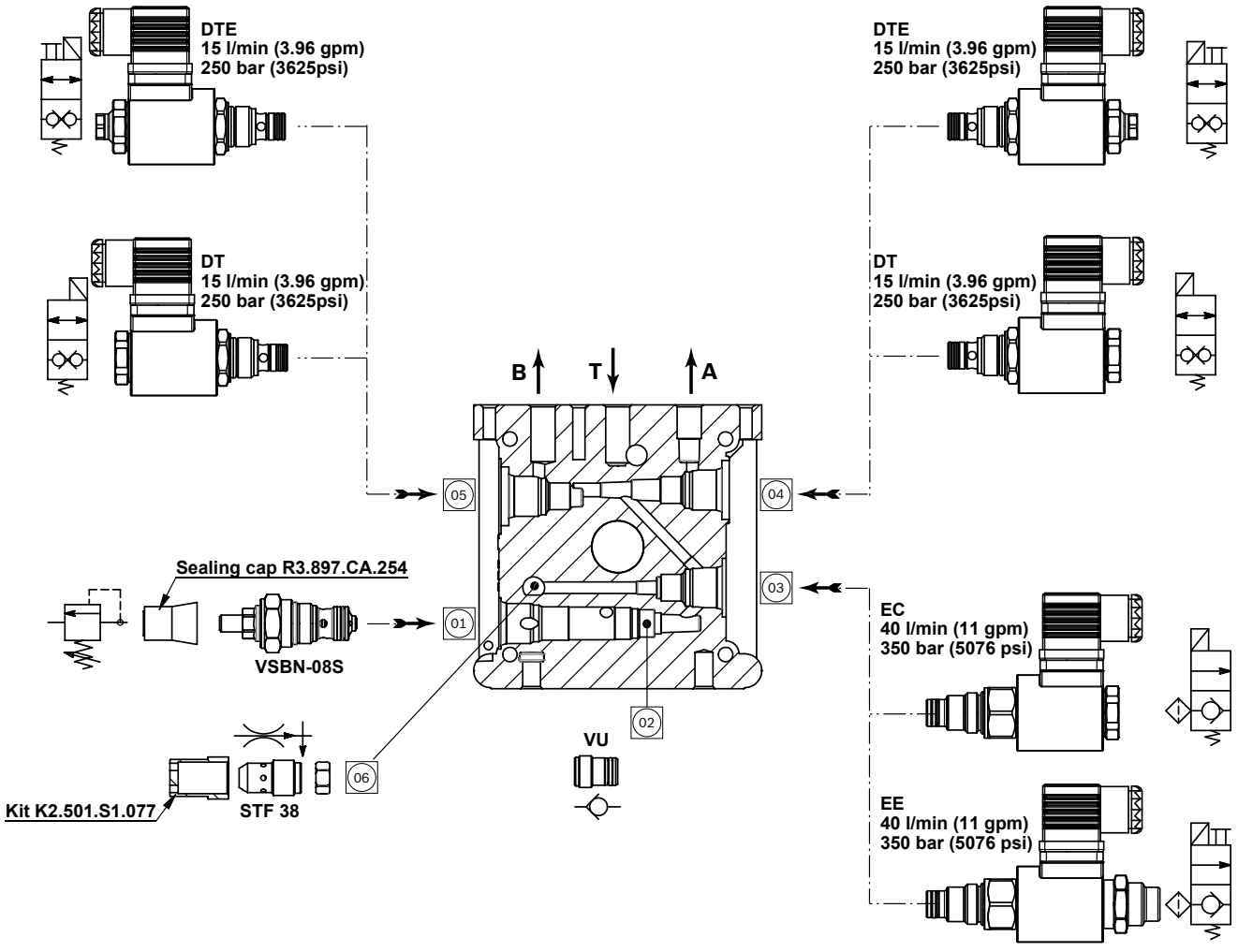
View Manifold Tank side



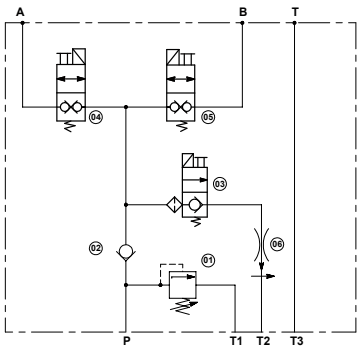
Manifold Hydraulic Diagram



M32 with valves

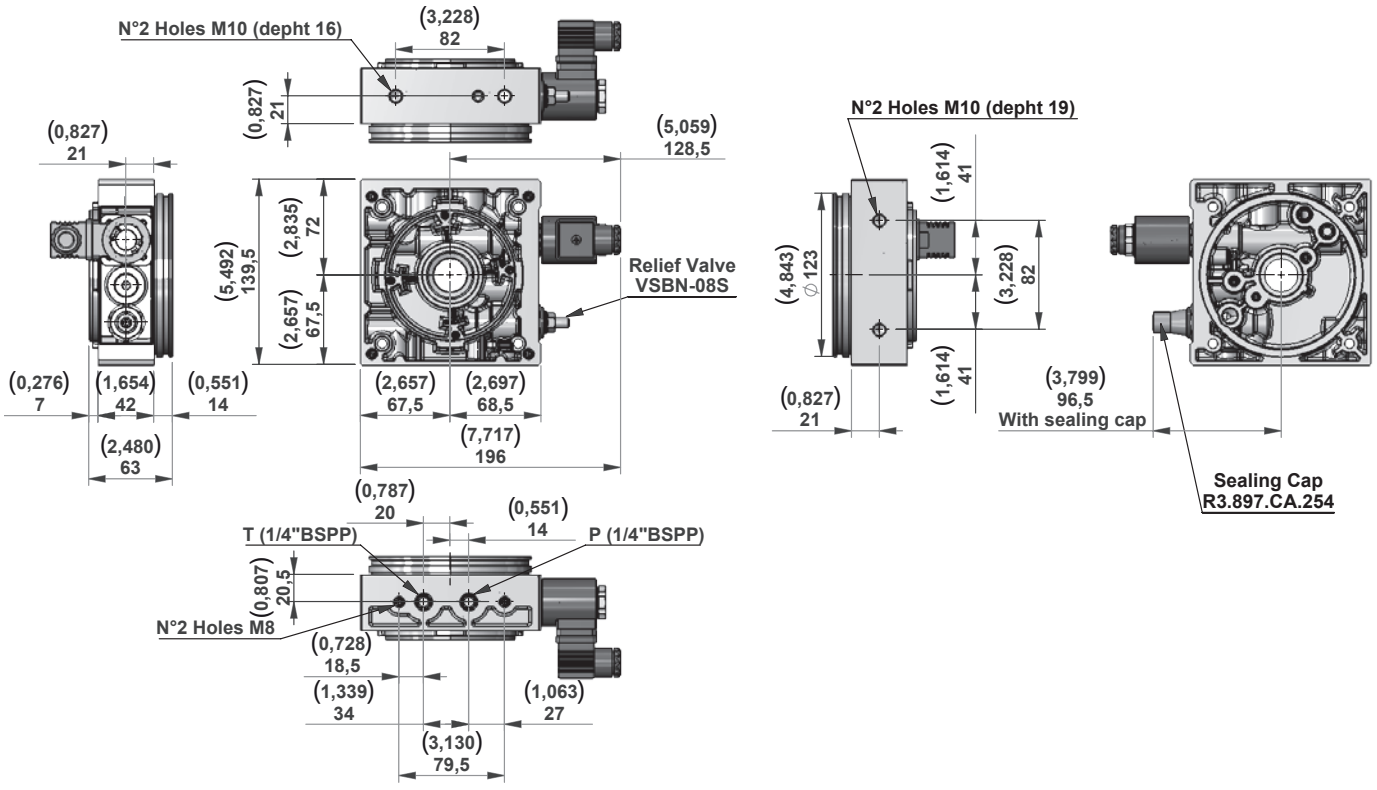


Main Realizable Diagrams



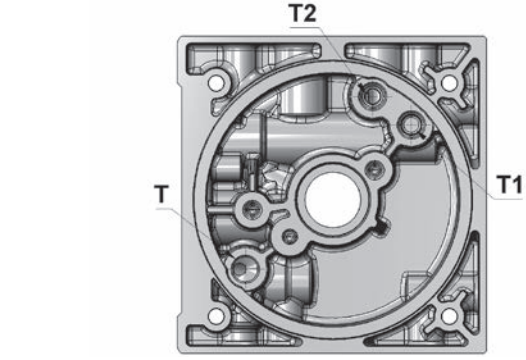
Central Manifold KE

M42

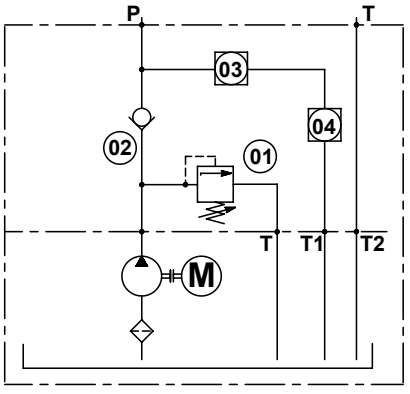


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
M42/05	10-55 (145-798)	242A000	R930102130
M42/10	35-100 (508-1450)	242B000	R930102131
M42/20	90-250 (1305-3626)	242C000	R930102132
M42/35	175-345 (2538-5004)	242D000	R930102133

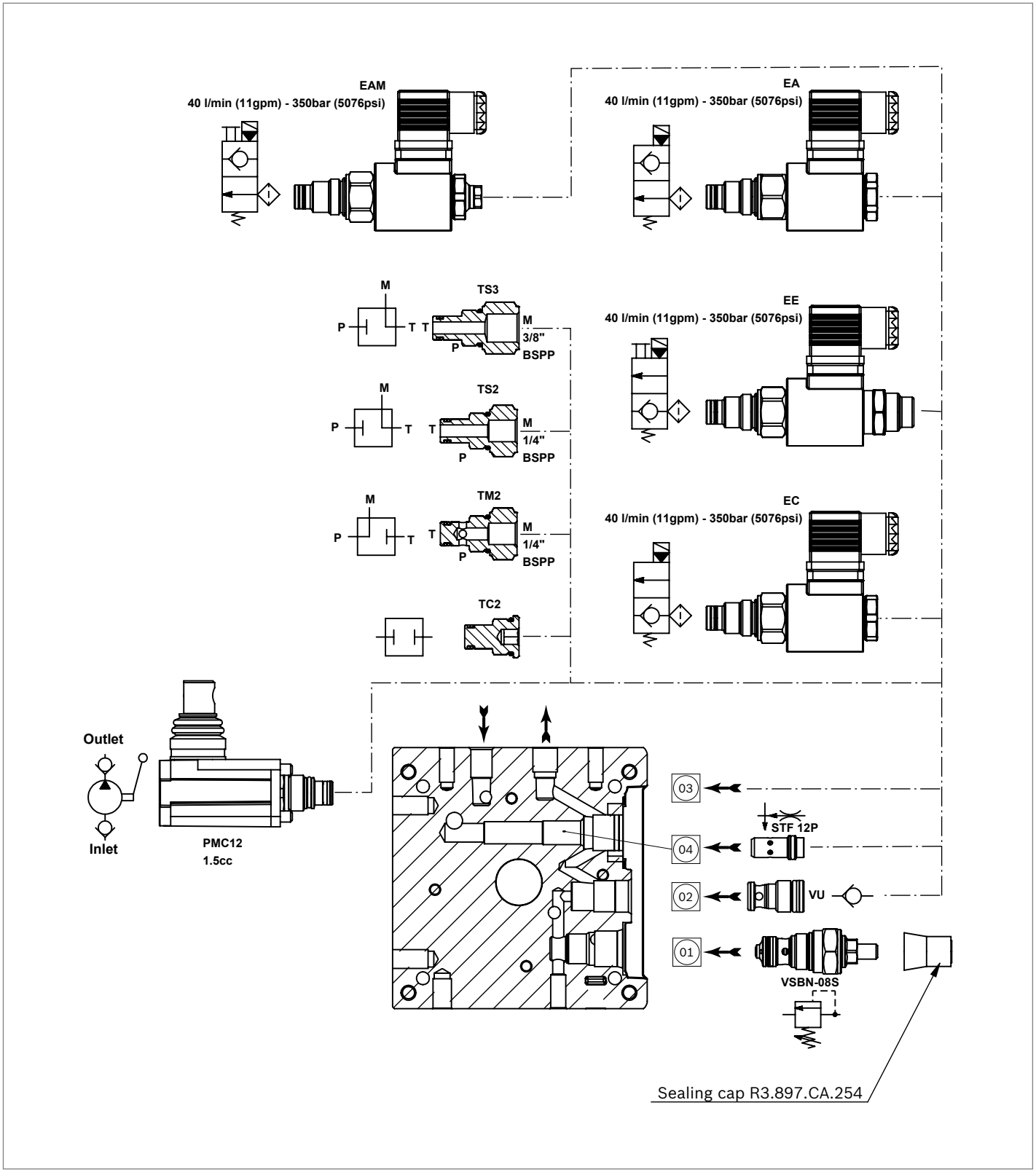
View Manifold Tank side



Manifold Hydraulic Diagram

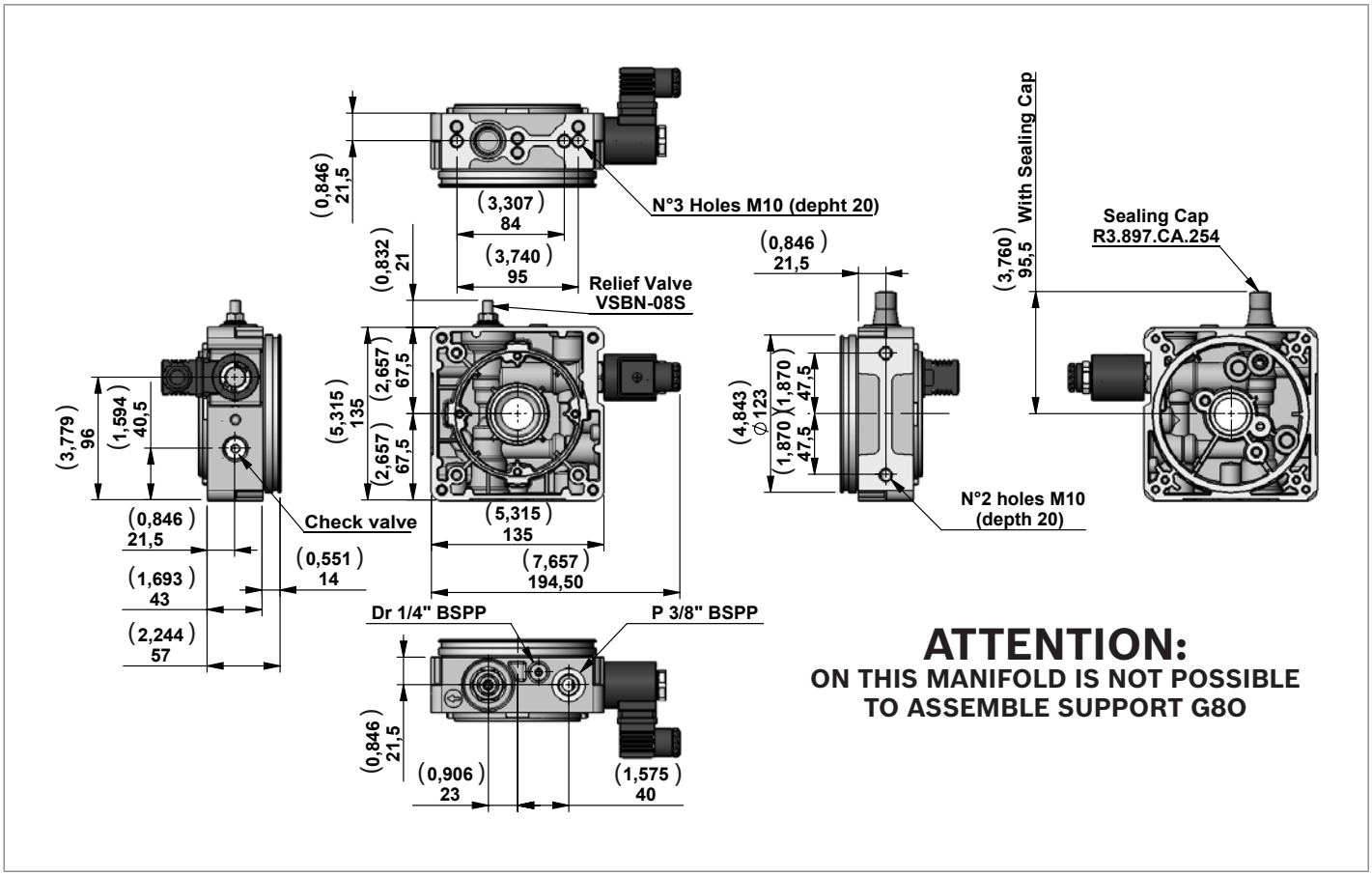


M42 with valves



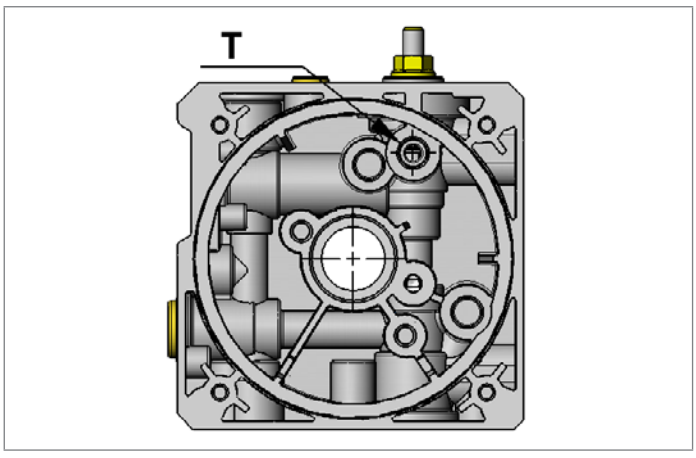
Central Manifold KS

KS05

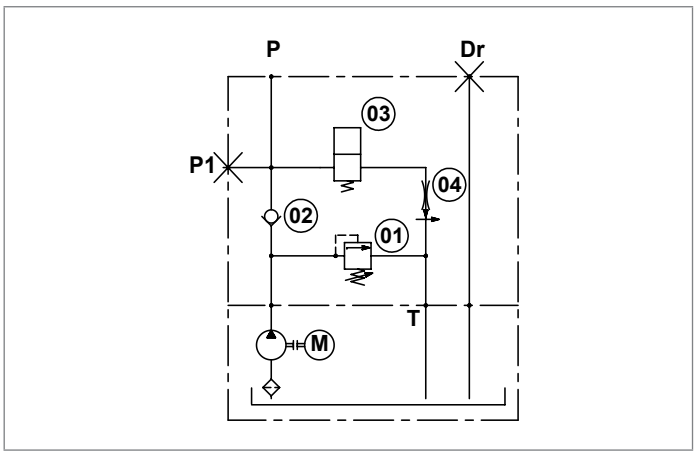


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
KS05/10	35-100 (508-1450)	305B000	R930071232
KS05/20	90-250 (1305-3626)	305C000	R930071231
KS05/35	175-345 (2538-5004)	305D000	R930071230

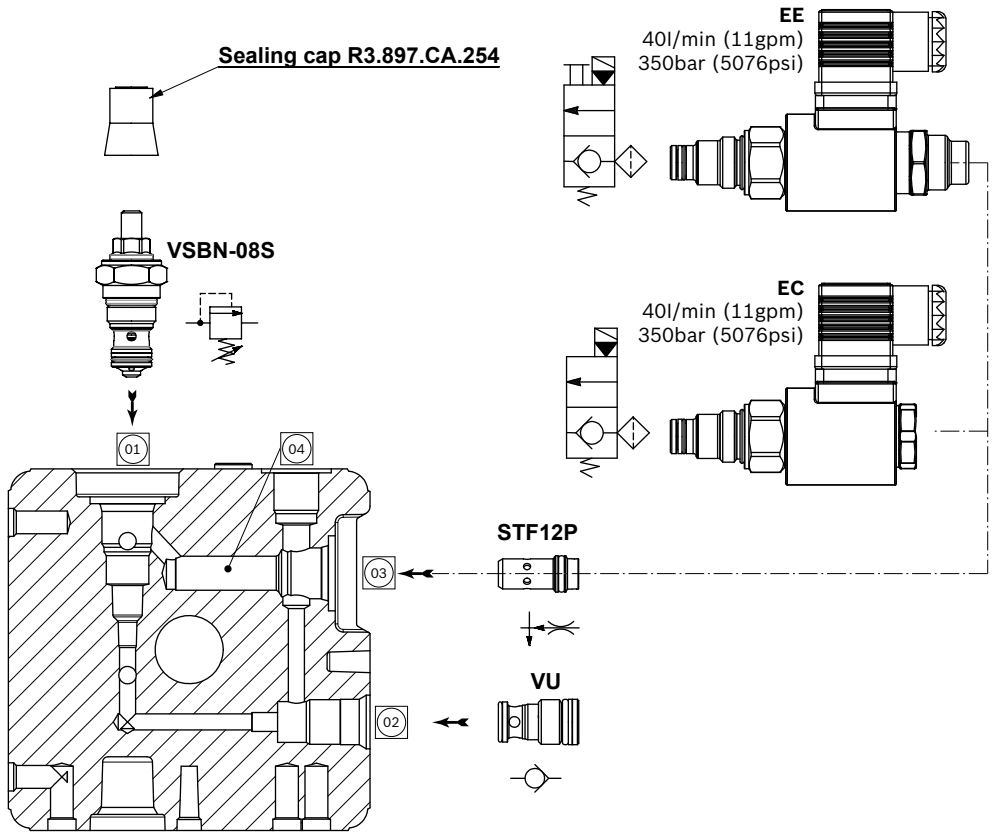
View Manifold Tank side



Manifold Hydraulic Diagram



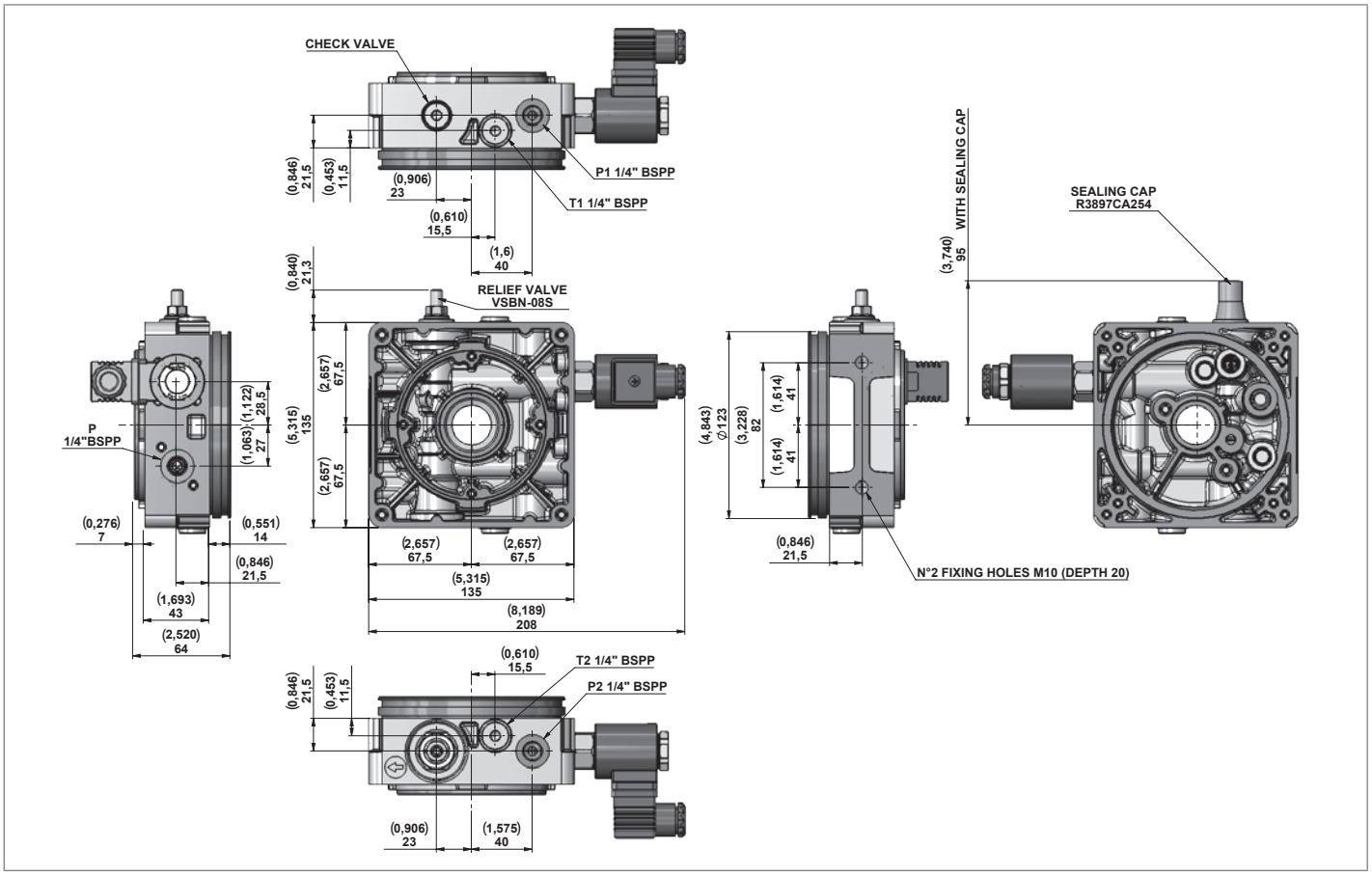
KS05 with valves



Note
Steel tank is not available for central manifold KS type. Please contact our sales department for further information.

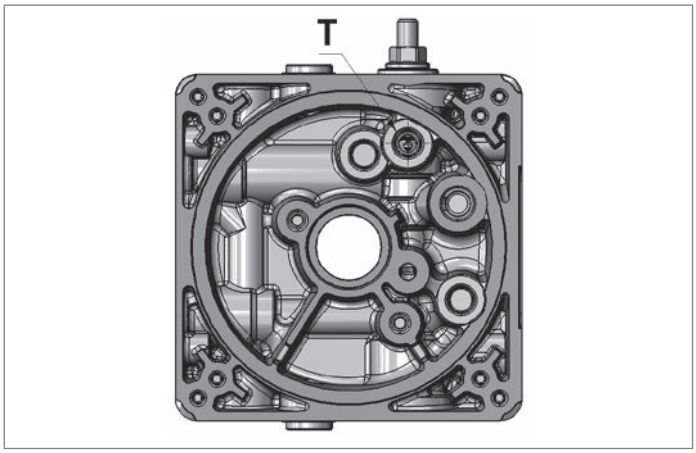
Central Manifold KS

KS07

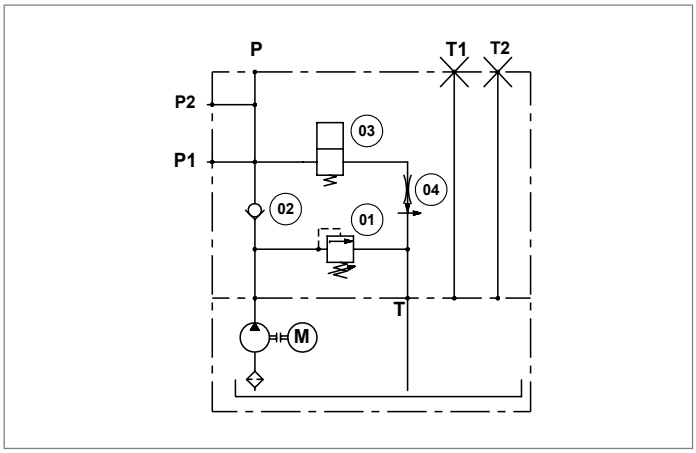


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
KS07/10	35-100 (508-1450)	307B000	R930104613
KS07/20	90-250 (1305-3626)	307C000	R930104614
KS07/35	175-345 (2538-5004)	307D000	R930089099

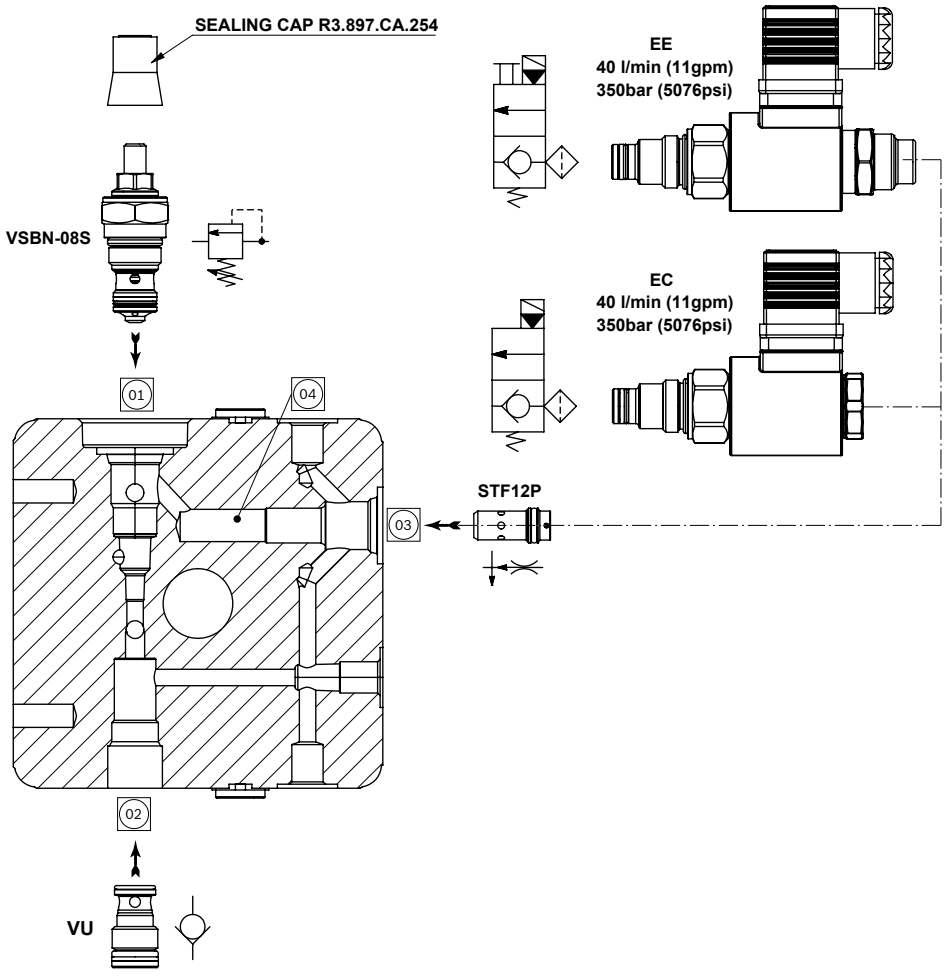
View Manifold Tank side



Manifold Hydraulic Diagram



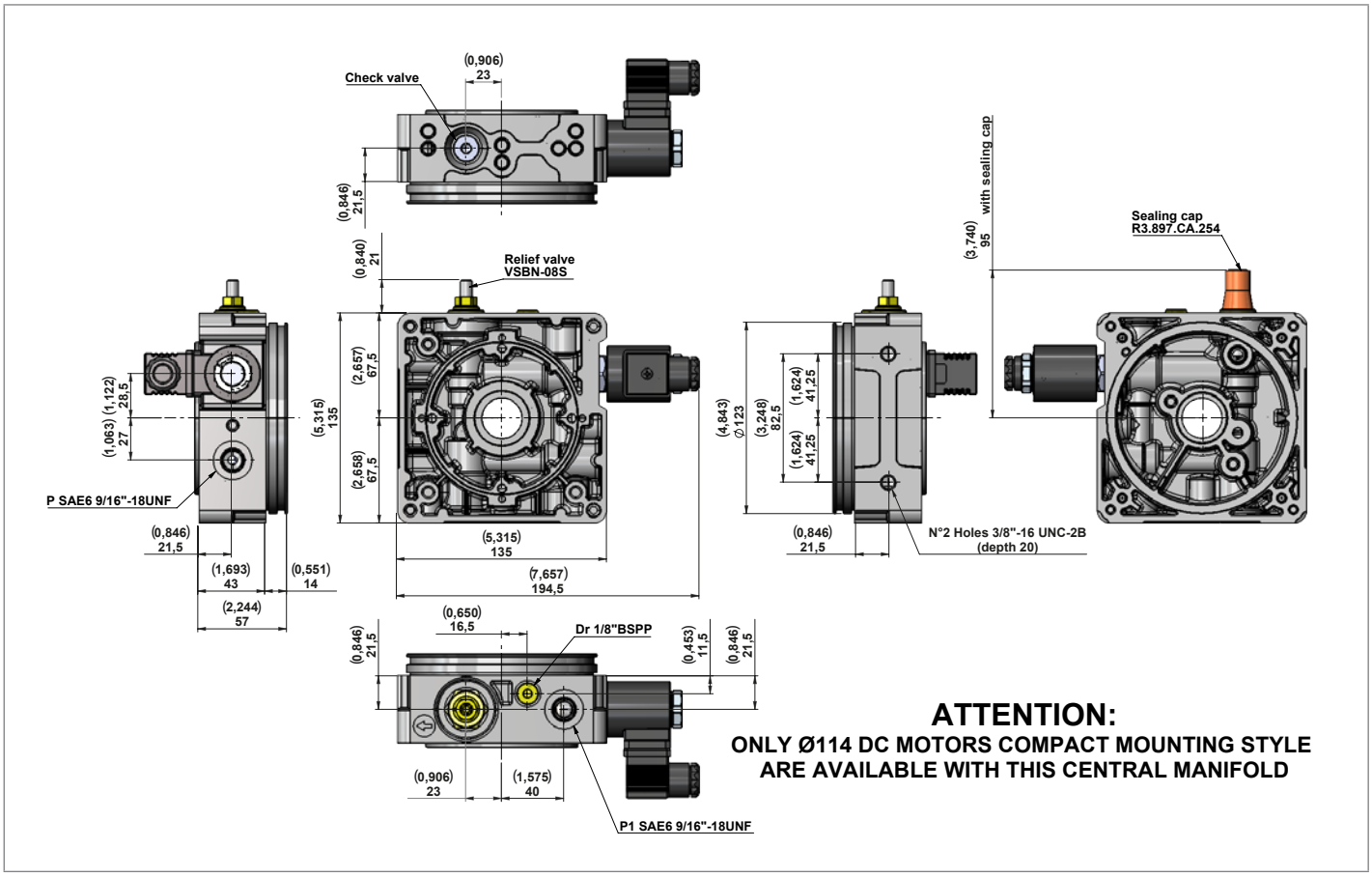
KS07 with valves



Note
Steel tank is not available for central manifold KS type. Please contact our sales department for further information.

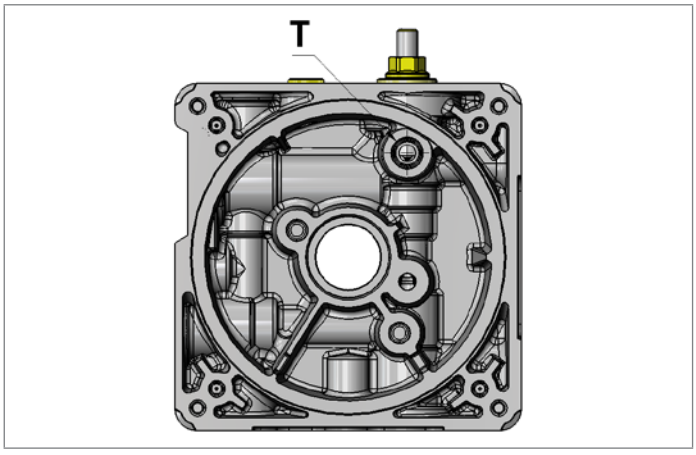
Central Manifold KS

KS08-SAE

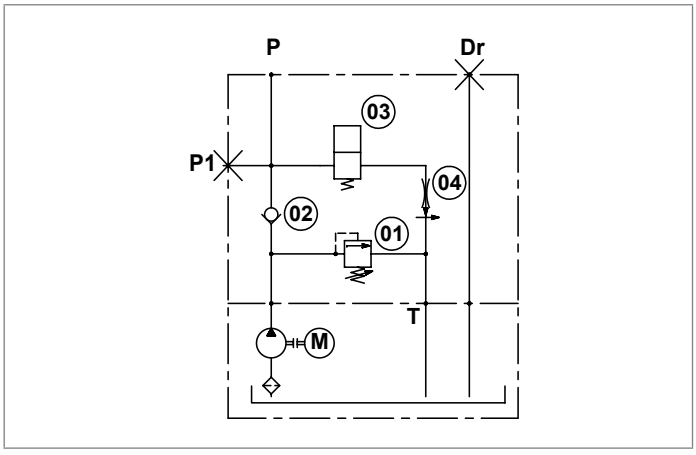


Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
KS08-SAE/05	10-55 (145-798)	308A000	R930104776
KS08-SAE/10	35-100 (508-1450)	308B000	R930104777
KS08-SAE/20	90-250 (1305-3626)	308C000	R930104778
KS08-SAE/35	175-345 (2538-5004)	308D000	R930104779

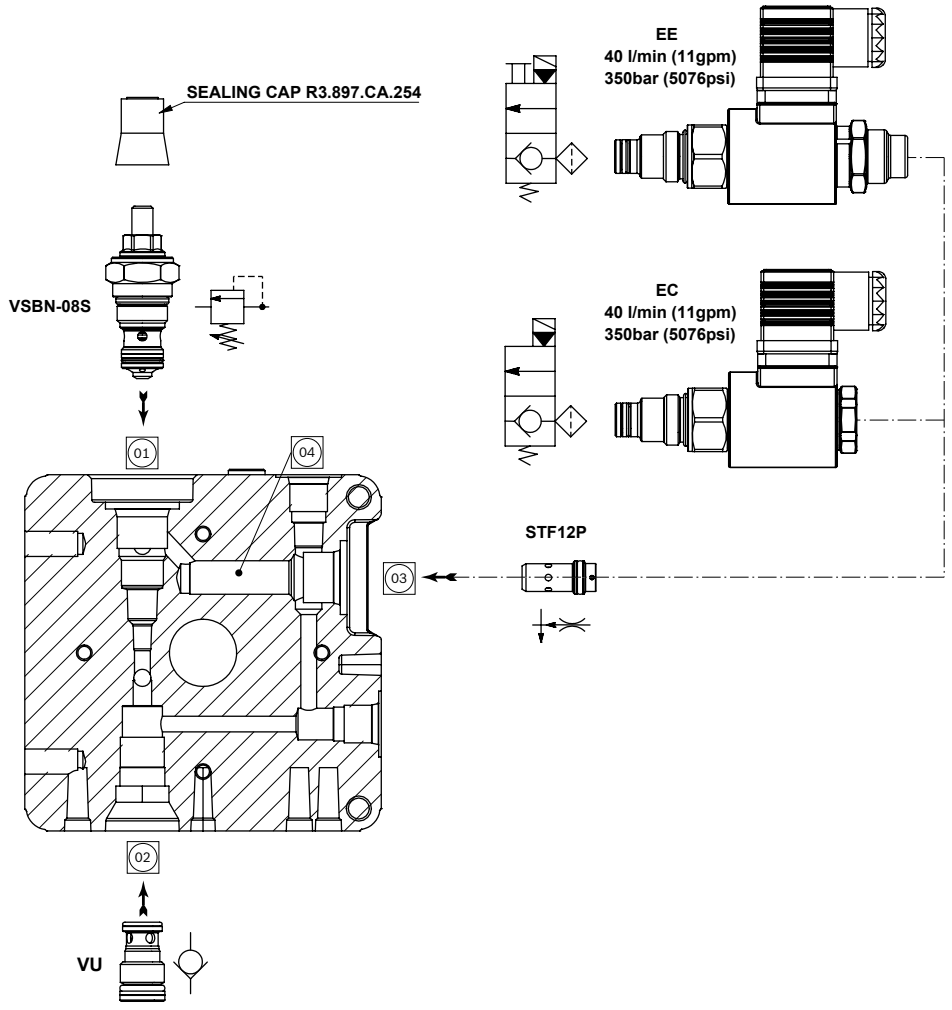
View Manifold Tank side



Manifold Hydraulic Diagram



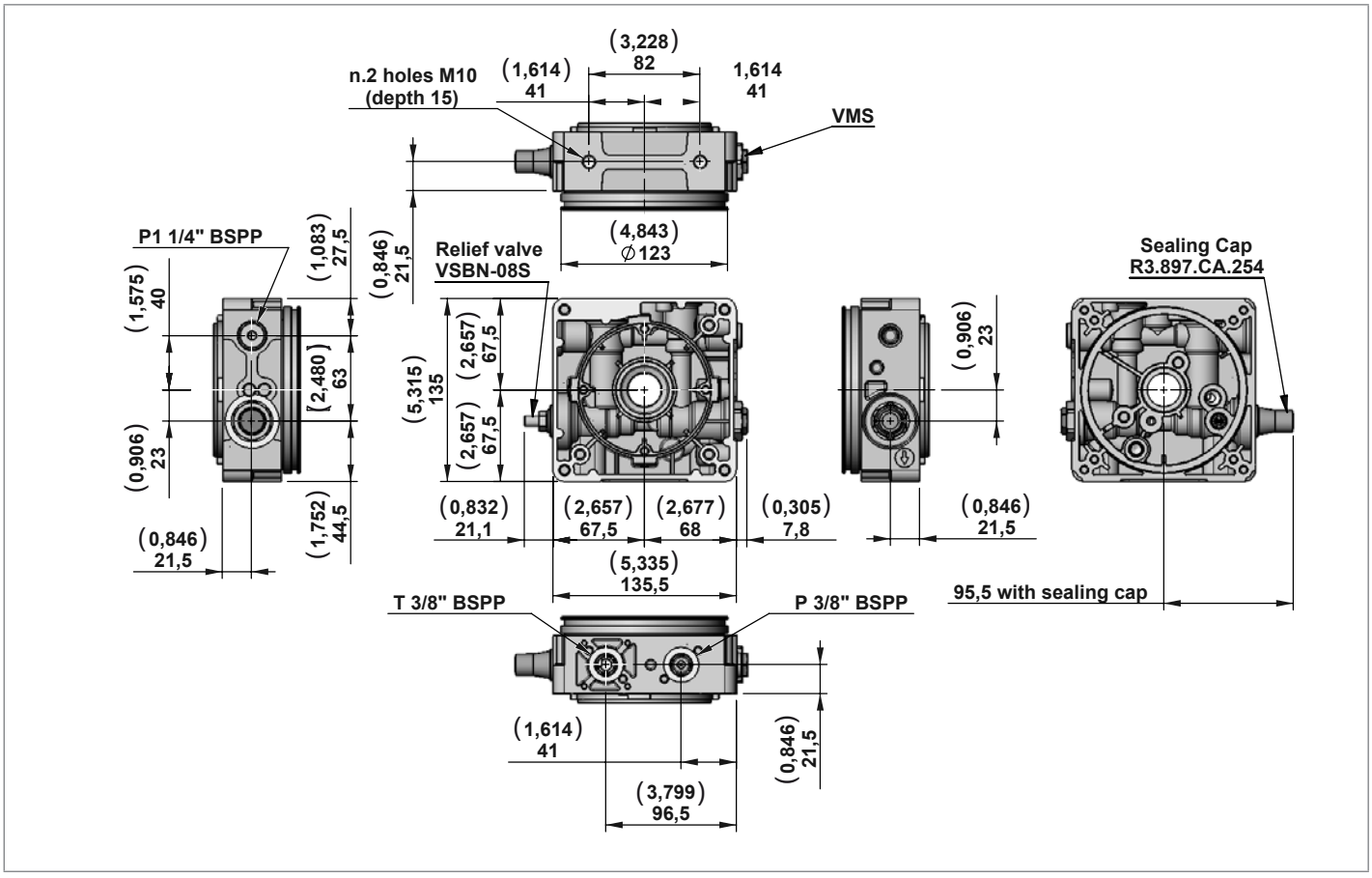
KS08-SAE with valves



Note
Steel tank is not available for central manifold KS type. Please contact our sales department for further information.

Central Manifold KS

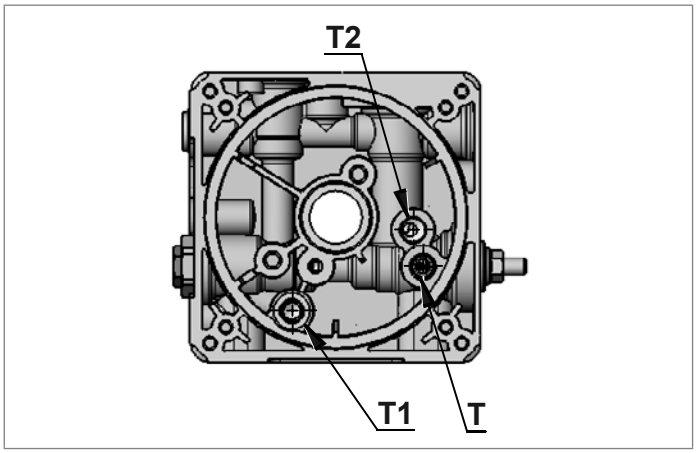
KS02



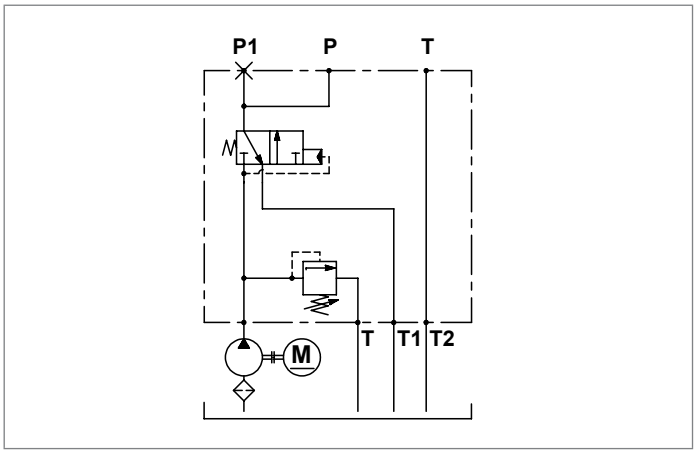
Manifold Code with Relief Valve Pressure Range	Presure Range bar (psi)	Type	Material Number
KS02/10	35-100 (508-1450)	302B000	R932010304
KS02/20	90-250 (1305-3626)	302C000	R932008762
KS02/35	175-345 (2538-5004)	302D000	R932008763

Note
Steel tank is not available for central manifold KS type. Please contact our sales department for further information.

View Manifold Tank side

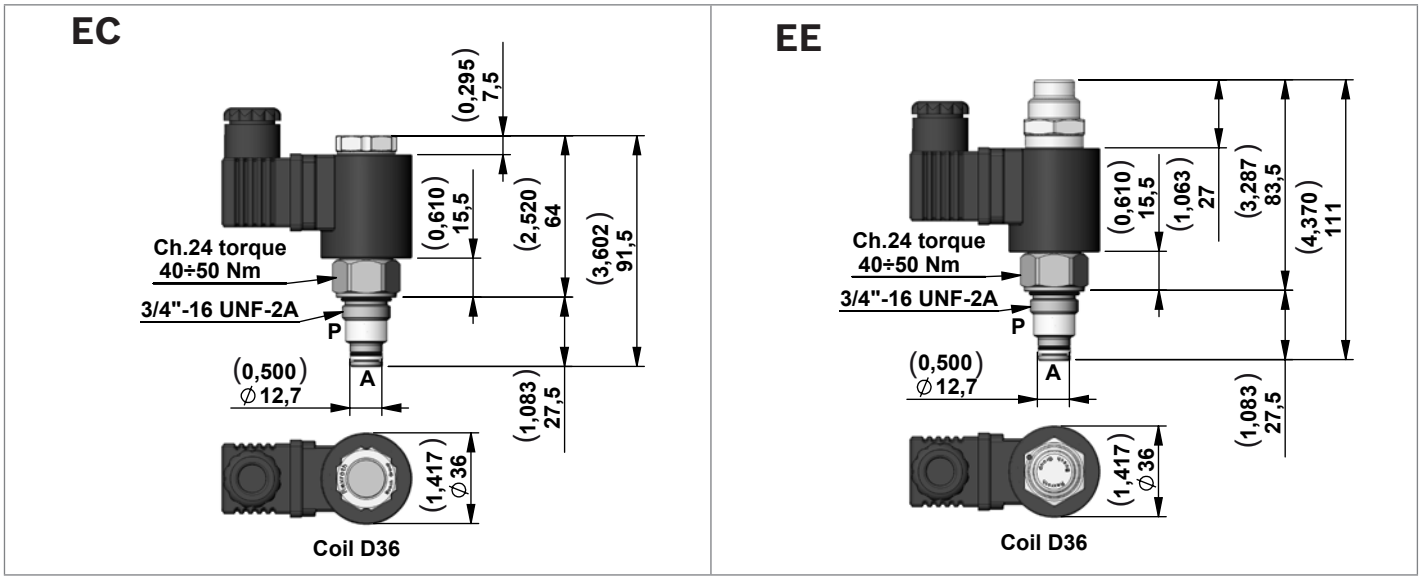


Manifold Hydraulic Diagram



Built-in Valve

EC-EE Series



2 Way Pilot Operated Solenoid Valves, Normally Closed for D.C. current

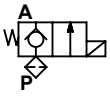
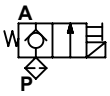
Code	Type	Material Number
EC	OD150718A000000	R930058338
EE	OD150718DP00000	R930058529

Description

This is a standard 2 way pilot operated valves poppet style.

- **Only for D.C. current.**
- Internal leakage: see technical data.
- Minimum operating voltage: 90% of nominal.
- Screen on P 300 Micron.
- Screw Type Emergency on EE.

Valve symbol

Code	Symbol	Operating features with solenoid	
		De-energized	**Energized**
EC		P ⬡ A	P <-> A
EE		P ⬡ A	P <-> A

Technical Data

General		
Operating time	ms	Opening 50
		Closing 100
Max. working pressure	bar (psi)	350 (5076)
Max. flow	l/min (gpm)	40 (11)

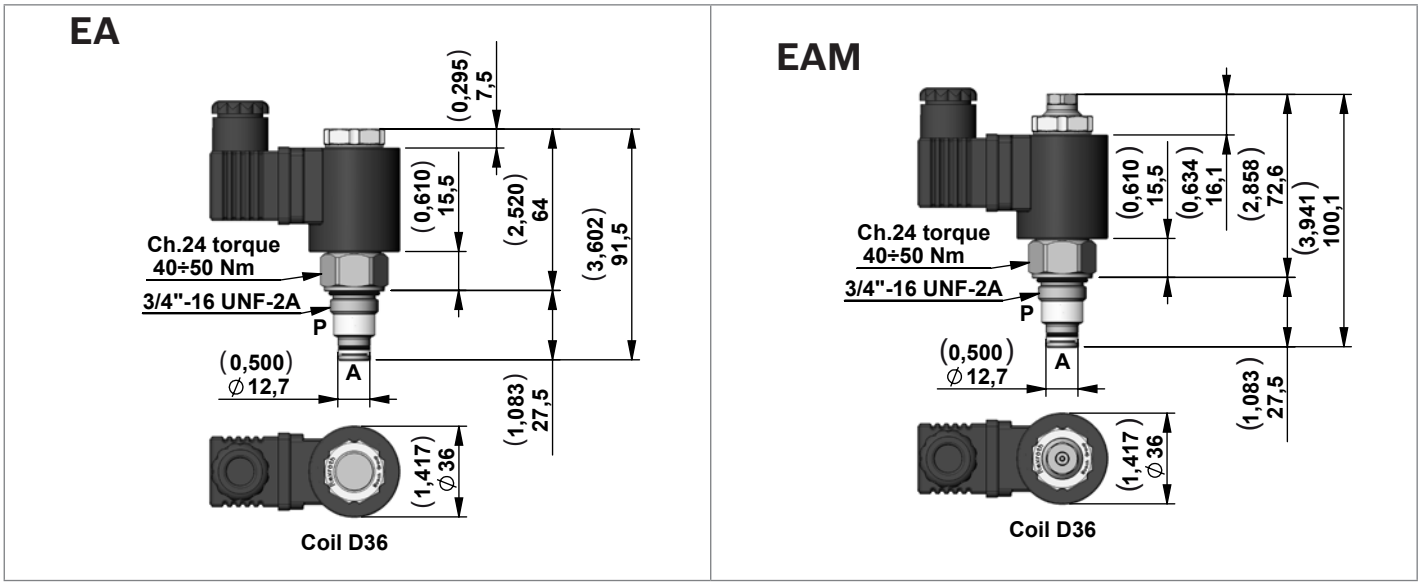
D36 Coil Voltage Available

Voltage
12 Volts D.C.
24 Volts D.C.
48 Volts D.C.
96 Volts D.C.
205 Volts D.C.

Note

For more info see Data Sheet RE18323-25

EA-EAM Series



2 Way Pilot Operated Solenoid Valves, Normally Open

Code	Type	Material Number
EA	OD150818A000000	R930058337
EAM	OD150818B000000	R930058340

Technical Data

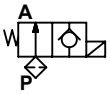
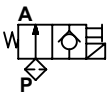
General		
Max. working pressure	bar (psi)	350 (5000)
Max. flow	l/min (gpm)	40 (11)

Description

This is a standard 2 way pilot operated valves poppet style.

- **Only for D.C. current.**
- Internal leakage: see technical data.
- Minimum operating voltage: 90% of nominal.
- Screen on P 300 Micron.
- Push Type Emergency on EAM.

Valve symbol

Code	Symbol	Operating features with solenoid	
		De-energized	**Energized**
EA		P -> A	P ⬡ A
EAM		P -> A	P ⬡ A

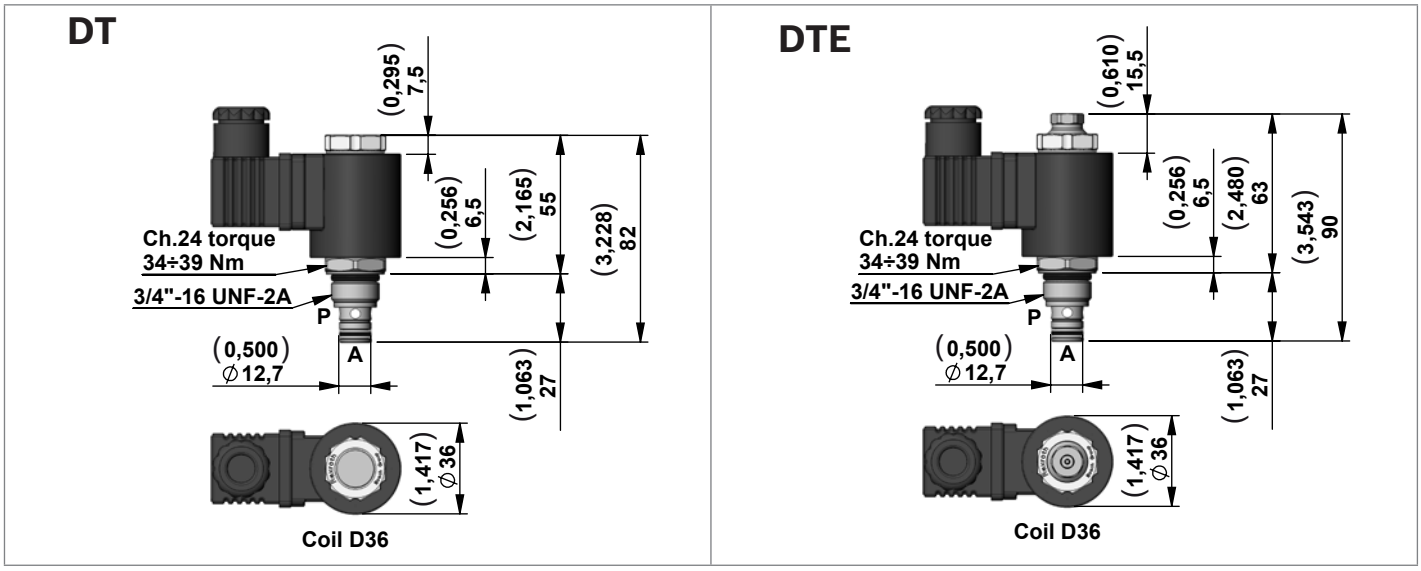
D36 Coil Voltage Available

Voltage
12 Volts D.C.
24 Volts D.C.
48 Volts D.C.
96 Volts D.C.
205 Volts D.C.

Note

For more info see Data Sheet RE18323-26

DT-DTE Series (for manifold M32)



2 Way direct acting double lock Solenoid Valves, Normally Closed for D.C. current

Code	Type	Material Number
DT	OD113118A000000	R930058329
DTE	OD113118B000000	R930058330

Technical Data

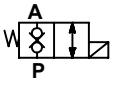
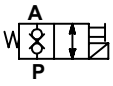
General		
Max. working pressure	bar (psi)	250 (3626)
Max. flow	l/min (gpm)	15 (3,96)

Description

On this valve the oil can pass free or can be perfectly locked on each ports “P” and “A”.

- **Only for D.C. current.**
- Internal leakage: see technical data.
- Minimum operating voltage: 90% of nominal.
- Push Type Emergency on DTE push..

Valve symbol

Code	Symbol	Operating features with solenoid	
		De-energized	Energized
DT		P ⬡ A A ⬡ P	P → A A → P
DTE		P ⬡ A A ⬡ P	P → A A → P

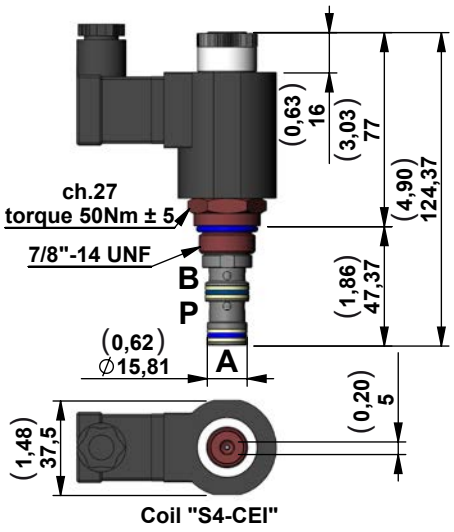
D36 Coil Voltage Available

Voltage
12 Volts D.C.
24 Volts D.C.
48 Volts D.C.
96 Volts D.C.
205 Volts D.C.

Note

For more info see Data Sheet RE18324-02

V3D-DT Series



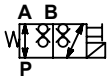
3 Way Direct Acting Poppet Style Solenoid Valves

Code	Type	Material Number
V3DT	K01V389643A00	R932009299

Description

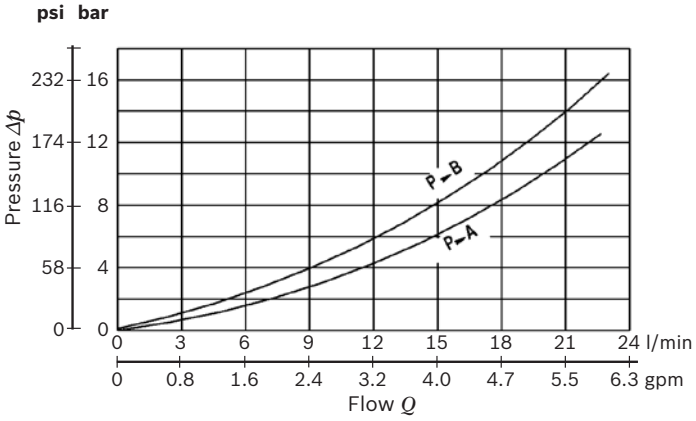
3 Way Direct Acting Poppet Style Solenoid Valves
- **Only for D.C. current.**
- Internal leakage: see technical data.
- Minimum operating voltage: 90% of nominal.
- Push Type Emergency.

Valve symbol

Code	Symbol	Operating features with solenoid	
		De-energized	**Energized**
V3DT		P ↔ A B ○○	P ↔ B A ○○

Technical Data

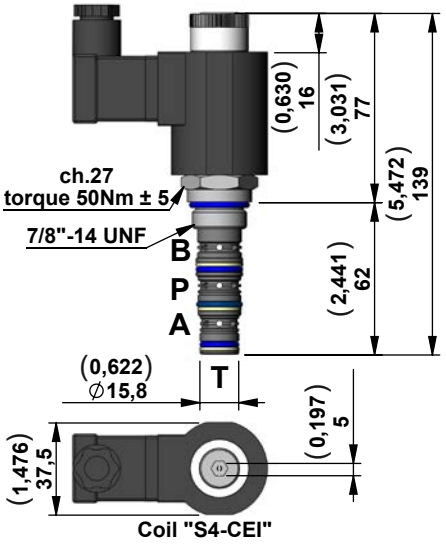
General		
Max. working pressure	bar (psi)	250 (3626)
Max. flow	l/min (gpm)	20 (5,28)



S4-CEI Coil Voltage Available

Voltage
12 Volts D.C.
24 Volts D.C.
24 Volts RAC
110 Volts RAC
220 Volts RAC

V4D-CEI-2P Series



4 Way 2 Position Solenoid Valves Spool Type

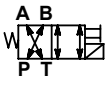
Code	Type	Material Number
V4I.2E	K01V389631A10	R932009302

Description

4 Way 2 Position Solenoid Valves, Spool Type

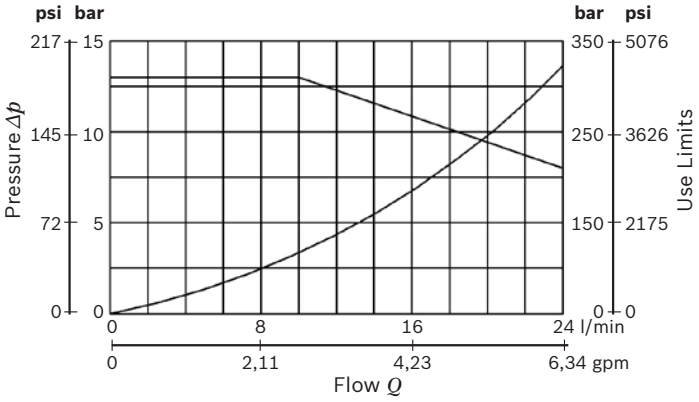
- **Only for D.C. current.**
- Minimum operating voltage: 90% of nominal.
- Push Type Emergency.

Valve symbol

Code	Symbol	Operating features with solenoid	
		De-energized	Energized
V4I.2E		P ↔ B A ↔ T	P ↔ A B ↔ T

Technical Data

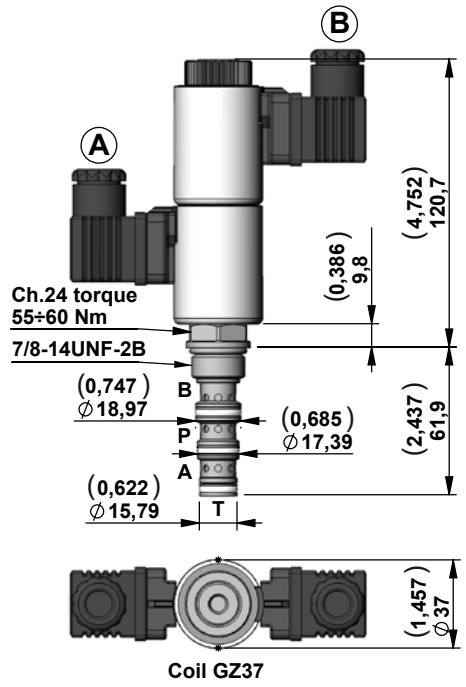
General		
Max. working pressure	bar (psi)	see diagram
Max. flow	l/min (gpm)	25 (6,60)



S4-CEI Coil Voltage Available

Voltage
12 Volts D.C.
24 Volts D.C.
24 Volts RAC
110 Volts RAC
220 Volts RAC

V4I.3C Series



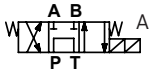
4 Way 3 Position Solenoid Valves Spool Type

Code	Type	Material Number
V4I.3C	R901237591	R901237591

Description

4 Way 3 Position Solenoid Valves, Spool Type
- Only for D.C. current.
- Minimum operating voltage: 90% of nominal.
- Push Type Emergency (only function coil B).

Valve symbol

Code	Symbol	Operating features with solenoid		
		Energized A	De-energized	Energized B
V4I.3C		P → B A → T	A ○ B ○ P → T	P → A B → T

Technical Data

General		
Max. working pressure	bar (psi)	350 (5000)
Max. flow	l/min (gpm)	35 (9)

GZ37 Coil Voltage Available

Voltage
12 Volts D.C.
24 Volts D.C.
48 Volts D.C.
96 Volts D.C.
205 Volts D.C.

Note

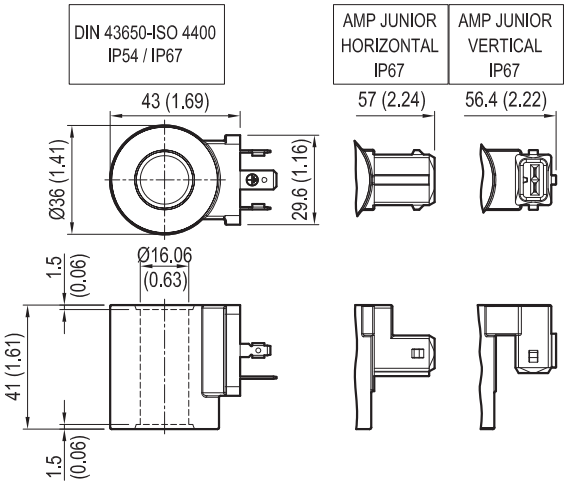
For more info see Data Sheet RE18324-64

Coils - Connectors

Coil D36 - CLASS H - 20 W

Technical Data
Weight: 0.18 kg (0.40 lbs)
Power: 20 W
Heat insulation Class H: 180°C (356°F)
Ambient temperature range: -30/+90°C (-22/+194°F)

Further performance limits in terms of temperature and voltage fluctuations: please refer to data sheet of the solenoid valve where D36 coil is mounted.



Coils D36 DIN 43650

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OB	12 Volts D.C.	H (180 °C) (356 °F)	OD02360130OB00	R901393412
OC	24 Volts D.C.	H (180 °C) (356 °F)	OD02360130OC00	R901393577
OD	48 Volts D.C.	H (180 °C) (356 °F)	OD02360130OD00	R901394117
OU*	96 Volts D.C.	H (180 °C) (356 °F)	OD02360130OU00	R901394229
AH*	205 Volts D.C.	H (180 °C) (356 °F)	OD02360130AH00	R901394231

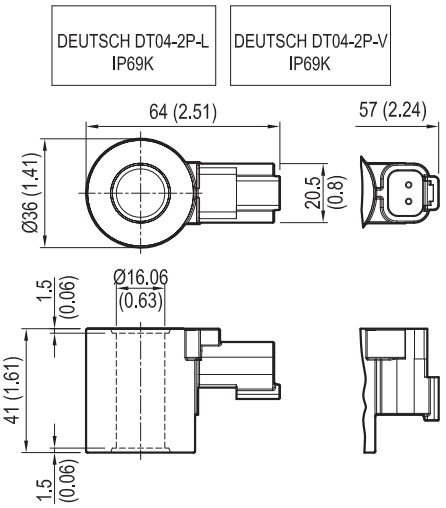
Note
* OU and AH versions especially designed in cases of AC supply voltage (respectively for 110AC and 220 AC) to be used in conjunction with connector with circuit including wave rectifier. Ambient temperature range for OU and AH versions: -30°C / + 75°C

Coils D36 AMP H

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBA	12 Volts D.C.	H (180 °C) (356 °F)	OD02360730OB00	R901435508
OCA	24 Volts D.C.	H (180 °C) (356 °F)	OD02360730OC00	R901435506

Coils D36 AMP V

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBAV	12 Volts D.C.	H (180 °C) (356 °F)	OD0236073POB00	R901394950
OCAV	24 Volts D.C.	H (180 °C) (356 °F)	OD0236073POC00	R901394955

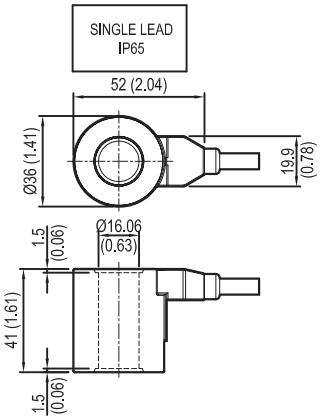


Coils D36 Deutsch L

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBDL	12 Volts D.C.	H (180 °C) (356 °F)	OD02362030OB00	R901435524
OCDL	24 Volts D.C.	H (180 °C) (356 °F)	OD02362030OC00	R901435526

Coils D36 Deutsch V

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBD	12 Volts D.C.	H (180 °C) (356 °F)	OD0236203POB00	R901394391
OCD	24 Volts D.C.	H (180 °C) (356 °F)	OD0236203POC00	R901394393



Coils D36 Single Lead

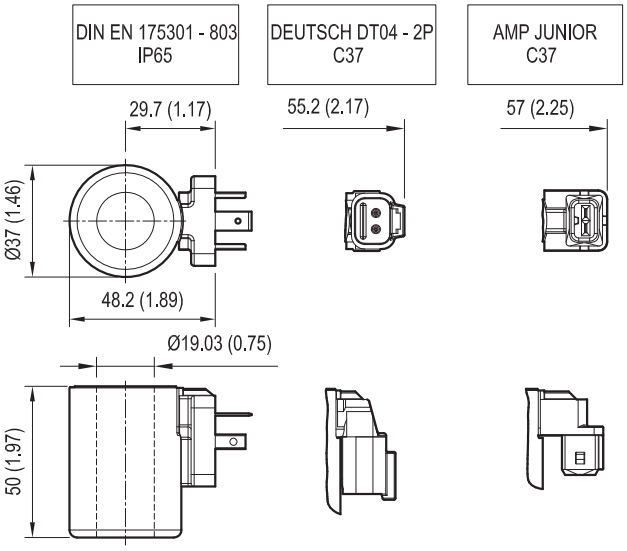
CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBL	12 Volts D.C.	H (180 °C) (356 °F)	OD02360G03OB00	R901435529
OCL	24 Volts D.C.	H (180 °C) (356 °F)	OD02360G03OC00	R901435533

Note
For more info see Data Sheet RE18325-90

Coil GZ37 ON/OFF - CLASS H - 22W

Technical Data
Weight: 0.24 kg (0.53 lbs)
Heat insulation Class H: 180°C (356°F)
Ambient temperature range: -40/+110°C (-40/+230°F)
Inlet voltage fluctuations must not exceed ±15% of nominal voltage to obtain correct operation and long life coils.

Coils are not equipped with suppression diode.
Coating to DIN 50962 - Fe // ZnNi with thick film passivation.
(Salt spray test to DIN 50021 720 h)



Coils GZ37 DIN 43650

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OB	12 Volts D.C.	H (180 °C) (356 °F)	R900991678	R900991678
OC	24 Volts D.C.	H (180 °C) (356 °F)	R900991121	R900991121

Coils GZ37 Deutsch V

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBD	12 Volts D.C.	H (180 °C) (356 °F)	R900729189	R900729189
OCD	24 Volts D.C.	H (180 °C) (356 °F)	R900729190	R900729190

Coils GZ37 AMP V

CODE	VOLTAGE	HEAT INSULATION CLASS	TYPE	MATERIAL NUMBER
OBAV	12 Volts D.C.	H (180 °C) (356 °F)	R900315818	R900315818
OCAV	24 Volts D.C.	H (180 °C) (356 °F)	R900315819	R900315819

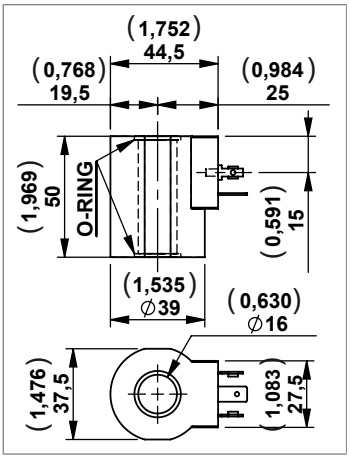
Note
For more info see Data Sheet RE18325-90

COIL Model S4-CEI – 26W – ED 100%

for valves V3D-DT , V4D-CEI-2P , V4D-CEI-3P Series

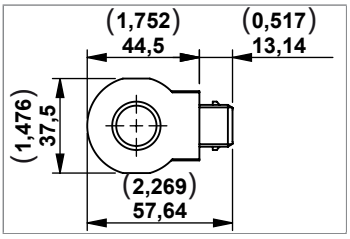
- Coil protection: Polyamide resin with fiber glass for Heat insulation class F (155°C) (311°F).
- Solenoids “S4-CEI” (18 W) are designed for continuos duty ED100%.
- Ambient temperature range: -15°/+40°
- Inlet voltage fluctuations must not exceed +/- 10% of nominal voltage to obtain correct operations and long life coils
- Protection degree: see tables below

DIN 43650 - ISO 4400 IP65 with connector assembled



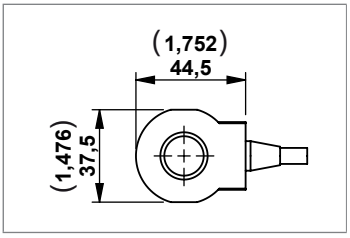
Code	Voltage	Heat Insulation class	Type	Material Number
OB	12 Volts D.C.	F (155°C) (311°F)	C166437OB1	R932000789
OC	24 Volts D.C.	F (155°C) (311°F)	C166437OC1	R932000790
OV	24 Volts RAC	F (155°C) (311°F)	C166437OV1	R932000791
OZ	220 Volts RAC	F (155°C) (311°F)	C166437OZ1	R932000793

AMP JUNIOR IP67



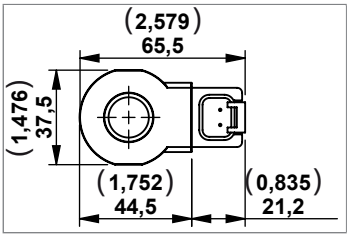
Code	Voltage	Heat Insulation class	Type	Material Number
OCA	24 Volts D.C.	F (155°C) (311°F)	C166471OC1	R932000836

SINGLE LEAD IP54



Code	Voltage	Heat Insulation class	Type	Material Number
OBL	12 Volts D.C.	F (155°C) (311°F)	C166453OB00600F	R932009107
OCL	24 Volts D.C.	F (155°C) (311°F)	C166453OC00600F	R932007009
Cable Lenght 600mm				

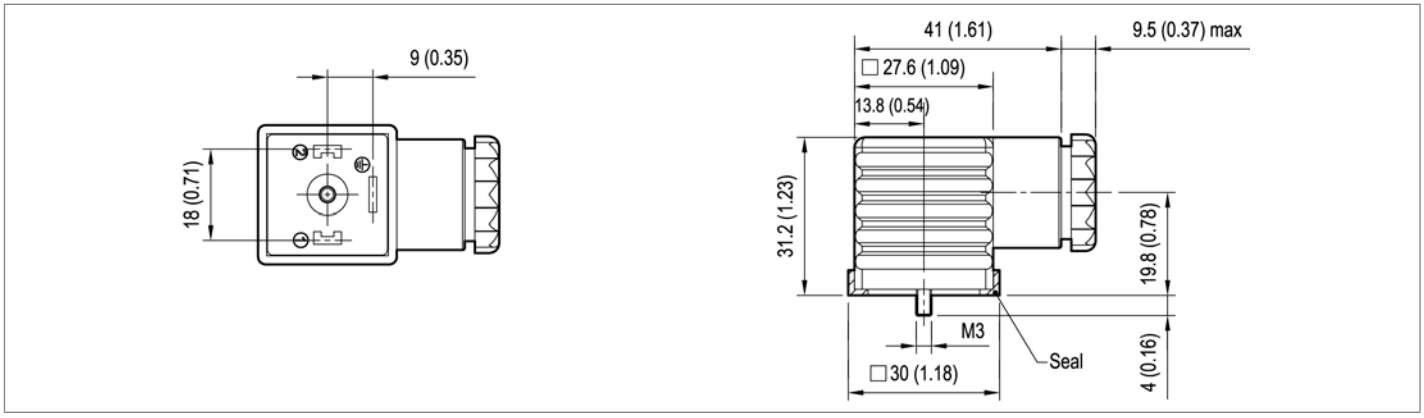
DEUTSCH DT04-2P-V IP67



Code	Voltage	Heat Insulation class	Type	Material Number
OBD	12 Volts D.C.	F (155°C) (311°F)	C166461OB1	R932000818
OCD	24 Volts D.C.	F (155°C) (311°F)	C166461OC1	R932009108

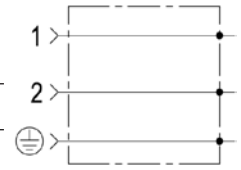
CONNECTOR IP67 - EN175000 (DIN 4350-A) / ISO 4400

Ambient temperature - Standard		°C (°F)	- 20 to + 60 (-4 to +140°F)
Type of protection according to DIN 40050			IP67 with cable socket mounted and locked
Operating voltage		V	Choose the proper ordering code according to the circuit
Maximum operating current	Standard	A	16
	With rectifier	A	1
Number of pins			2 + PE
Clamping range for cables having an outer diameter of		mm (inch)	5, up to 10 (0,2 up to 0,4)
Cable entry			Pg9 / Pg11 (unified)
Maximum cable cross-section		mm^2 ($inch^2$)	1.5 (0,002)



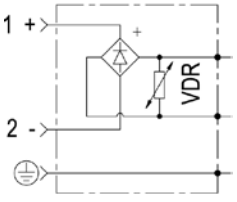
Standard Circuit

Code	Colour	Cable entry	Type	Material Number
WC	Without Connector			
CS	black	Pg9 / Pg11	OD016901000000	R934004344
	grey	Pg9 / Pg11	OD016901000003	R934004346



Circuit with VDR + Wave Rectifier

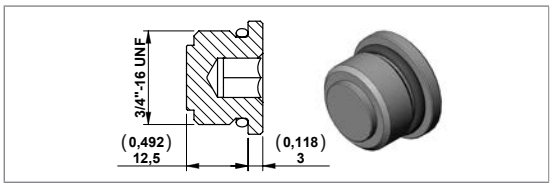
Code	Voltage V		Diode Capacity I max	Colour	Cable entry	Type	Material Number
	AC	DC					
CR	230	/	1A	black	Pg9 / Pg11	OD01690201OZ00	R934004353



Note
Diode with capacity max 1 Amp.

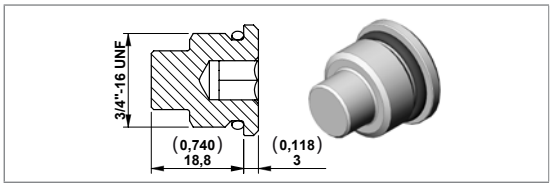
Note
Black is the standard colour. Grey is used in case of valves with 2 coils (V4DS-3P and V4D-CEI-3P Series).

Plug for Cavity



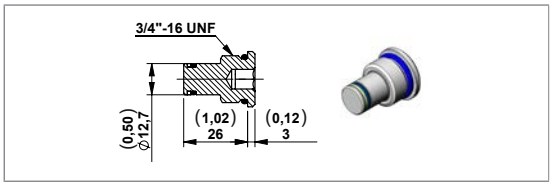
Code	Type	Material Number
TC4	R3897TA226	R932003201

Plug for Cavity



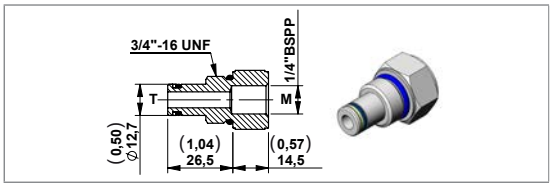
Code	Type	Material Number
TC3	R3897TA301	R932003211

Plug for Cavity



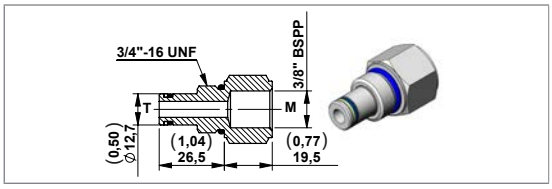
Code	Diagram	Compatibility	Type	Material Number
TC2	P T	KE	R3897TA001	R932003193

1/4” Auxiliary Return Port



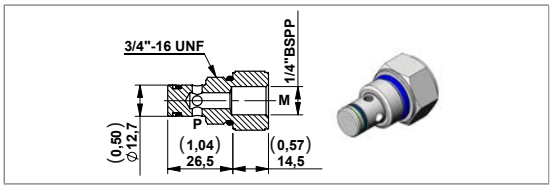
Code	Diagram	Compatibility	Type	Material Number
TS2	M P T	KE	R3897TA304	R932003214

3/8” Auxiliary Return Port



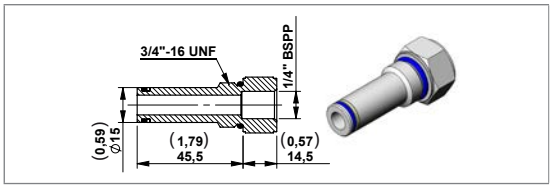
Code	Diagram	Compatibility	Type	Material Number
TS3	M P T	KE	R3897TA147	R932003195

1/4” Auxiliary Pressure Port



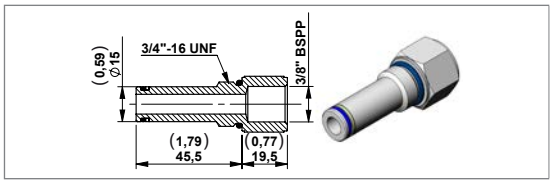
Code	Diagram	Compatibility	Type	Material Number
TM2	M P T	KE	R3897TA305	R932003215

1/4” Auxiliary Pressure Port



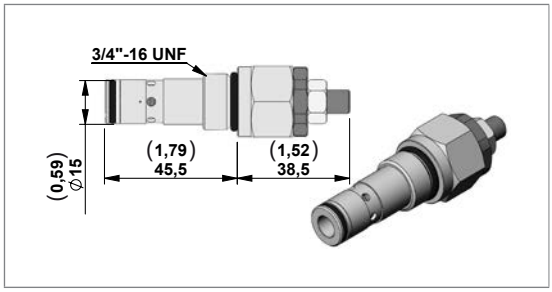
Code	Diagram	Compatibility	Type	Material Number
TM3		KE	R3897TA303	R932003213

3/8” Auxiliary Pressure Port



Code	Diagram	Compatibility	Type	Material Number
TM4		KE	R3897TA311	R932003220

Pressure Compensated Flow Regulator

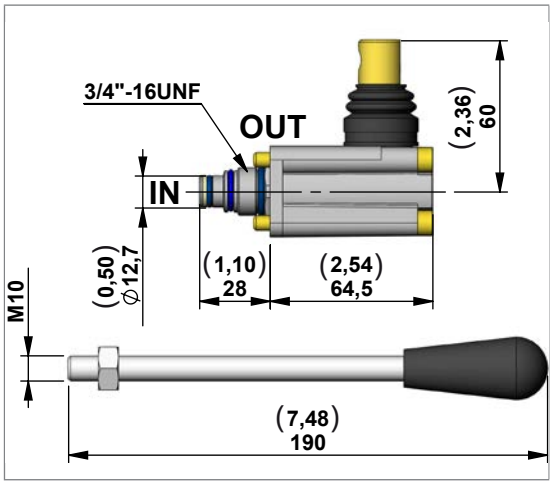


Code	Diagram		Type	Material Number
ST6CP-PR		KE	V389534A00	R932003917

Technical Data

General		
Max. working pressure	bar (psi)	250 (3625)
Regulated Flow Rate	l/min (gpm)	2....16 (0.53...4.23)

PMC12

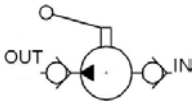


Type	Material Number
K250113000	R932002448

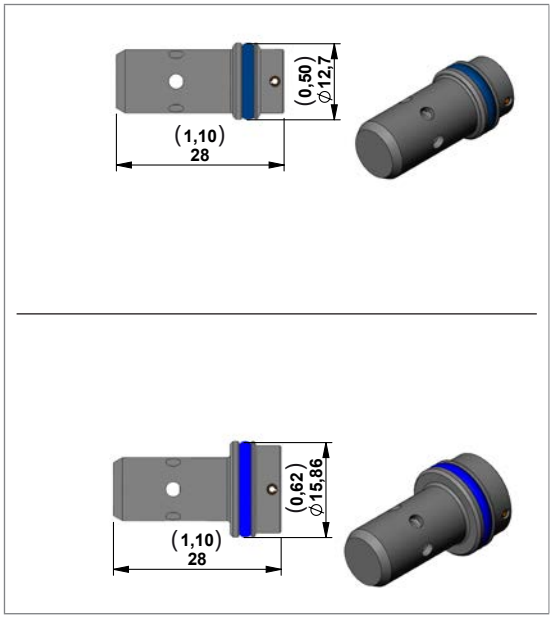
Technical Data

General		
Max. working pressure	bar (psi)	300 (4500)
Displacement	cc	1,5

Hand pump (1.5cc)

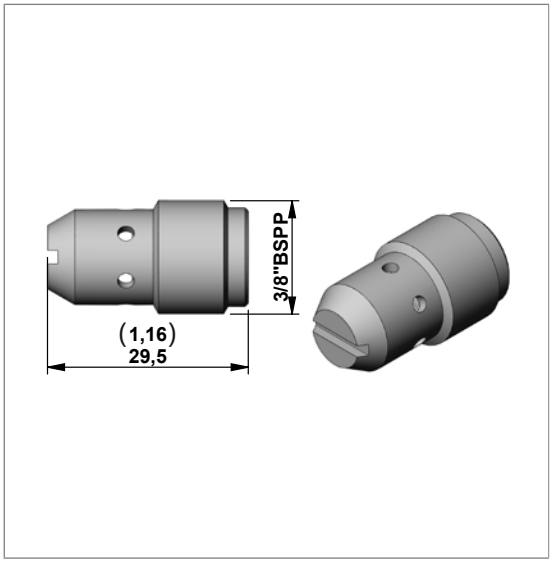
Code	Diagram	Type with lever	Material Number with lever
PMC12		K01V388540LV190	R932009298

Flow Control Valves Pressure Compensated

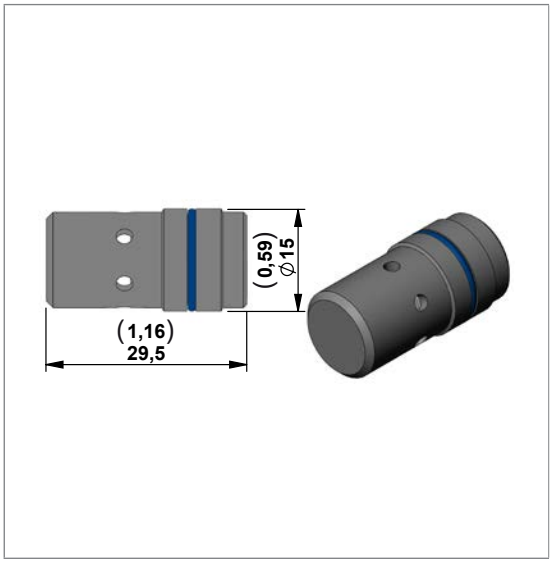


Code		l/min (gpm)	Diagram	Compatibility	Type	Material Number
STF12P	A	1 (0,3)		KE	V38953600A	R932003940
	B	2 (0,5)			V38953600B	R932003941
	C	3 (0,8)			V38953600C	R932003942
	D	4 (1,1)			V38953600D	R932003943
	E	5 (1,3)			V38953600E	R932003944
	F	6 (1,6)			V38953600F	R932003945
	G	7 (1,9)			V38953600G	R932003946
	H	8 (2,1)			V38953600H	R932003947
	I	9 (2,4)			V38953600I	R932003948
	L	10 (2,6)			V38953600L	R932003949
STF14P	A	1 (0,3)		KE - KS	V38951900A	R932003892
	B	2 (0,5)			V38951900B	R932003894
	C	3 (0,8)			V38951900C	R932003895
	D	4 (1,1)			V38951900D	R932003896
	E	5 (1,3)			V38951900E	R932003897
	F	6 (1,6)			V38951900F	R932003898
	G	7 (1,9)			V38951900G	R932003899
	H	8 (2,1)			V38951900H	R932003900
	I	9 (2,4)			V38951900I	R932003901
	L	10 (2,6)			V38951900L	R932003903

Flow Control Valves Pressure Compensated



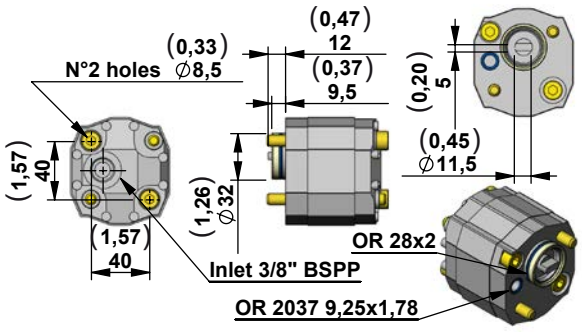
Code		l/min (gpm)	Diagram	Compatibility	Type	Material Number
STF38	B	2 (0,5)		KE	V38951500B	R932003860
	C	3 (0,8)			V38951500C	R932003861
	D	4 (1,1)			V38951500D	R932003862
	E	5 (1,3)			V38951500E	R932003864
	F	6 (1,6)			V38951500F	R932003866
	G	7 (1,9)			V38951500G	R932003868
	H	8 (2,1)			V38951500H	R932003870
	I	9 (2,4)			V38951500I	R932003872
	L	10 (2,6)			V38951500L	R932003876
	M	11 (2,9)			V38951500M	R932003877
	N	12 (3,2)			V38951500N	R932003878
	O	13 (3,4)			V38951500O	R932003879
	P	14 (3,7)			V38951500P	R932003880
	Q	15 (4,0)			V38951500Q	R932003881
	R	16 (4,2)			V38951500R	R932003882
	T	18 (4,7)			V38951500T	R932003884
	Z	20 (5,3)			V38951500Z	R932003888



Code		l/min (gpm)	Diagram	Compatibility	Type	Material Number
STF38P	B	2 (0,5)		KE	V38953500B	R932003918
	C	3 (0,8)			V38953500C	R932003919
	D	4 (1,1)			V38953500D	R932003920
	E	5 (1,3)			V38953500E	R932003921
	F	6 (1,6)			V38953500F	R932003922
	G	7 (1,9)			V38953500G	R932003923
	H	8 (2,1)			V38953500H	R932003924
	I	9 (2,4)			V38953500I	R932003925
	L	10 (2,6)			V38953500L	R932003927
	M	11 (2,9)			V38953500M	R932003928
	N	12 (3,2)			V38953500N	R932003929
	O	13 (3,4)			V38953500O	R932003930
	P	14 (3,7)			V38953500P	R932003932
	Q	15 (4,0)			V38953500Q	R932003933
	R	16 (4,2)			V38953500R	R932003934
	T	18 (4,7)			V38953500T	R932003935
	Z	20 (5,3)			V38953500Z	R932003938

Gear Pumps Group 1

Standard Version

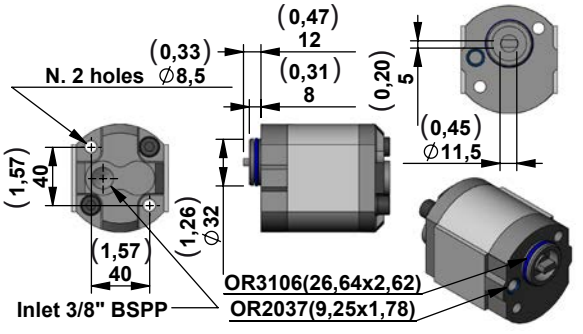


P2: intermittent max Pressure.
P3: peak Max Pressure (max 2 seconds)

Code	Displacement cc/rev	Flow at 1500 rpm l/min (gpm)	P2 bar (psi)	P3 bar (psi)	Type	Material Number
10	0,84	1,26 (0,34)	230(3336)	270(3916)	K01R979151322	R930086748
10/11	1	1,5 (0,4)	230(3336)	270(3916)	K01R979151323	R930086746
11	1,25	1,88 (0,50)	230(3336)	270(3916)	K01R979151324	R930086745
12	1,6	2,4 (0,63)	230(3336)	270(3916)	K01R979151325	R930086744
13	2	3 (0,79)	230(3336)	270(3916)	K01R979151326	R930086743
14	2,5	3,75 (0,99)	230(3336)	270(3916)	K01R979151327	R930086742
15	3,15	4,7 (1,24)	210(3046)	250(3626)	K01R979151328	R930086741
16	4	6 (1,58)	210(3046)	250(3626)	K01R979151329	R930086740
18	5	7,5 (1,98)	210(3046)	250(3626)	K01R979151331	R930086739

High Pressure Gear Pumps Group 1

Cast iron covers version for high pressure applications



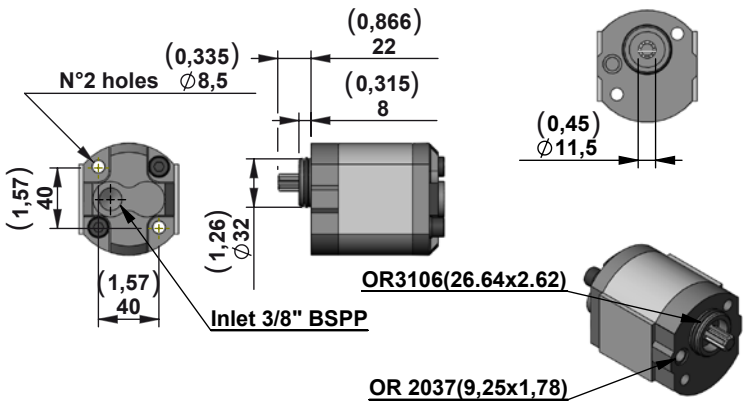
P2: intermittent max Pressure.
P3: peak Max Pressure (max 2 seconds)

Code	Displacement cc/rev	Flow at 1500 rpm l/min (gpm)	P2 bar (psi)	P3 bar (psi)	Type	Material Number
11GH	1,25	1,8 (0,48)	300(4351)	350(5076)	K01CV640S1142C	R932007474
12GH	1,6	2,4 (0,63)	300(4351)	350(5076)	K01CV640S1144C	R932007476
13GH	2	3 (0,79)	300(4351)	350(5076)	K01CV640S1145C	R932007478
14GH	2,5	3,7 (0,98)	300(4351)	350(5076)	K01CV640S1146C	R932007480
15GH	3,15	4,7 (1,24)	280(4061)	330(4786)	K01CV640S1147C	R932007482
16GH	3,65	5,5 (1,45)	250(3626)	300(4351)	K01CV640S1148C	R932007484
17GH	4,2	6,3 (1,66)	230(3336)	280(4061)	K01CV640S1149C	R932007485
18GH	5	7,5 (1,98)	210(3046)	250(3626)	K01CV640S1150C	R932007486
19GH	5,7	8,5 (2,24)	210(3046)	250(3626)	K01CV640S1153C	R932007487
20GH	7,4	11,1 (2,93)	180(2611)	230(3336)	K01CV640S1152C	R932007488

Note: All pumps have anti-clockwise rotation.

Gear Pumps

Gear Pumps Group 1 with Splined Shaft

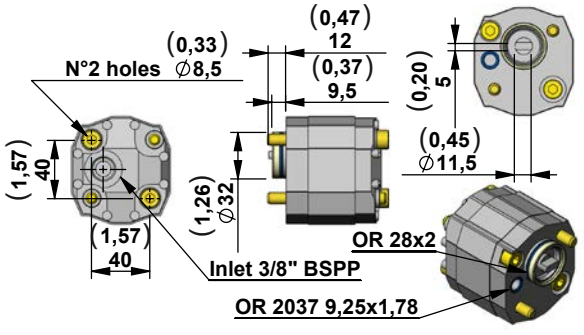


Spline shaft DIN5482
B12x9 - Z=6

P2: intermittent max Pressure.
P3: peak Max Pressure (max 2 seconds)

Code	Displacement cc/rev	Flow at 1500 rpm l/min (gpm)	P2 bar (psi)	P3 bar (psi)	Type	Material Number
11AS	1,25	1,8 (0,48)	250 (3626)	270 (3916)	K01CV640S1260	R932011185
12AS	1,60	2,4 (0,63)	250 (3626)	270 (3916)	K01CV640S1261	R932011186
13AS	2,00	3,0 (0,79)	250 (3626)	270 (3916)	K01CV640S1262	R932011187
14AS	2,50	3,7 (0,98)	250 (3626)	270 (3916)	K01CV640S1263	R932011188
15AS	3,15	4,7 (1,24)	250 (3626)	270 (3916)	K01CV640S1264	R932011189
16AS	3,65	5,5 (1,45)	250 (3626)	270 (3916)	K01CV640S1265	R932011190
17AS	4,20	6,3 (1,66)	230 (3336)	250 (3626)	K01CV640S1266	R932011191
18AS	5,00	7,5 (1,98)	210 (3046)	230 (3336)	K01CV640S1252	R932011192
19AS	5,70	8,5 (2,24)	210 (3046)	230 (3336)	K01CV640S1247	R932011193
20AS	7,40	11,1 (2,93)	180 (2611)	200 (2901)	K01CV640S1249	R932011194

Low noise Gear Pumps Group 1



P2: intermittent max Pressure.
P3: peak Max Pressure (max 2 seconds)

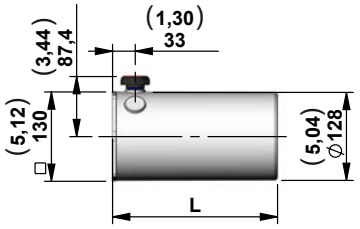
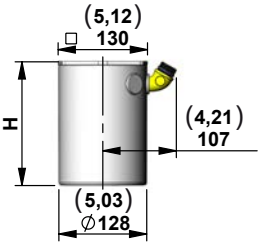
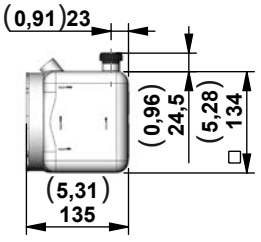
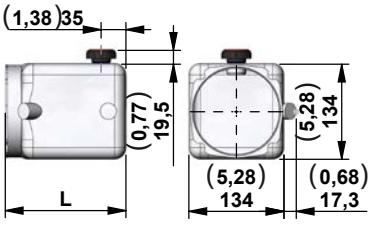
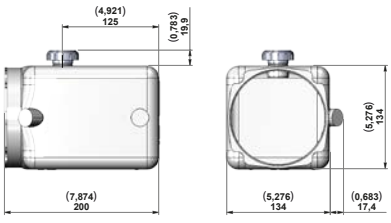
Code	Displacement cc/rev	Flow at 1500 rpm l/min (gpm)	P2 bar (psi)	P3 bar (psi)	Type	Material Number
11LN	1,1	1,65 (0,44)	230 (3336)	270 (3916)	K01R979151336	R930086738
12LN	1,3	1,95 (0,52)	230 (3336)	270 (3916)	K01R979151337	R930086737
14LN	2,5	3,75 (0,99)	230 (3336)	270 (3916)	K01R979151338	R930086736
16LN	3,6	5,4 (1,43)	230 (3336)	270 (3916)	K01R979151339	R930086735

Note
All pumps have anti-clockwise rotation.

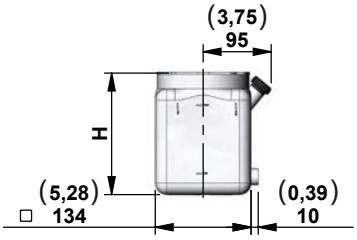
Oil Tanks for KE - KS

Technical Data for Plastic Tanks

Temperature range	°C (°F)	-15....+70 (5....158)
Materials		PE=Polyethylene - PP=Polypropilene

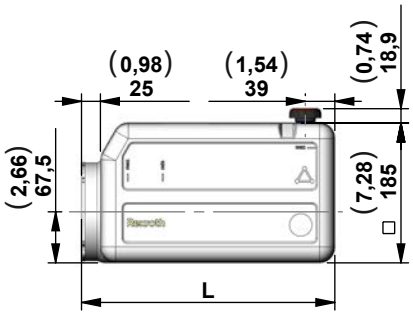
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	Material	Type	Material Number	Drawing
S335	1,0 (0,26)	0,7 (0,18)	140 (5,51)	PP	K01K3976SE372	R932002035	
S336	1,8 (0,48)	1,2 (0,32)	180 (7,09)	PP	K01K3976SE373	R932002036	
S337	2,5 (0,66)	1,7 (0,45)	240 (9,45)	PP	K01K3976SE374	R932002037	
S338	3,0 (0,79)	2,3 (0,61)	285 (11,22)	PP	K01K3976SE375	R932002038	
For these tanks is necessary to use the O-RING Ø112x3 code: C000191000 R-Number: R932000190							
S339	1,0 (0,26)	0,6 (0,16)	140 (5,51)	PP	K01K3976SE376	R932007882	
S340	1,8 (0,48)	1,1 (0,29)	180 (7,09)		K01K3976SE377	R932007883	
S341	2,5 (0,66)	1,7 (0,45)	240 (9,45)		K01K3976SE378	R932007884	
S342	3,0 (0,79)	2,3 (0,61)	285 (11,22)		K01K3976SE379	R932007885	
For these tanks is necessary to use the O-RING Ø112x3 code: C000191000 R-Number: R932000190							
S246	1 (0,26)	0,9 (0,24)	-	PE	K01K3976SE270	R932002016	
For this tank is necessary to use special seal Code: C0001S2168A R-Number: R930071663							
S247	1,8 (0,48)	1,6 (0,42)	170 (6,71)	PE	K01K3976SE271	R932002017	
S248	2,5 (0,66)	2,2 (0,58)	240 (9,45)	PE	K01K3976SE272	R932002018	
For these tanks is necessary to use special seal Code: C0001S2168A R-Number: R930071663							
S453	2,3 (0,61)	2,0 (0,53)	200 (7,87)	PE	K01K3976SE509	R930102112	
For this tank is necessary to use special seal Code: C0001S2168A R-Number: R930071663							

Plastic Tanks

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	Material	Type	Material Number	Drawing
S249	1 (0,26)	0,9 (0,24)	135 (5,31)	PE	K01K3976SE273	R932002019	
S250	1,8 (0,48)	1,6 (0,42)	170 (6,71)	PE	K01K3976SE274	R932002020	
S251	2,5 (0,66)	2,2 (0,58)	240 (9,45)	PE	K01K3976SE275	R932002021	

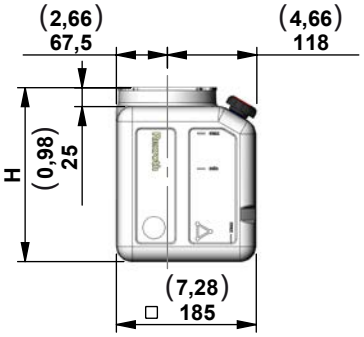
For these tanks is necessary to use O-RING Ø110.7x3.53 Code: 110201203000000 R-Number: R932000188

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	Material	Type	Material Number	Drawing
S448	4 (1,06)	3 (0,79)	205 (8,07)	PE	K01K3976SE504	R930101539	
S343	5 (1,32)	3,8 (1)	230 (9,05)	PE	K01K3976SE380	R932002039	
S450	6 (1,59)	4,5 (1,19)	265 (10,43)	PE	K01K3976SE506	R930101541	
S413	7 (1,85)	5,5 (1,45)	310 (12,20)	PE	K01K3976SE439	R932007873	
S415	8 (2,11)	6,5 (1,72)	335 (13,19)	PE	K01K3976SE441	R932006036	
S316	9 (2,38)	7,3 (1,93)	365 (14,37)	PE	K01K3976SE351	R932002031	
S417	12 (3,17)	10 (2,64)	495 (19,50)	PE	K01K3976SE443	R932006768	
S452	17 (4,49)	14,5 (3,83)	660 (25,98)	PE	K01K3976SE508	R930102111	



For these tanks is necessary to use special seal Code: C0001S2168A R-Number: R930071663

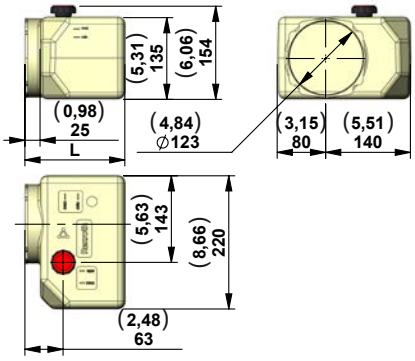
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	Material	Type	Material Number	Drawing
S449	4 (1,06)	3 (0,79)	205 (8,07)	PE	K01K3976SE505	R930101540	
S344	5 (1,32)	3,5 (0,92)	230 (9,05)	PE	K01K3976SE381	R932002040	
S451	6 (1,59)	4,5 (1,19)	265 (10,43)	PE	K01K3976SE507	R930101542	
S419	7 (1,85)	5,5 (1,45)	310 (12,20)	PE	K01K3976SE445	R932007879	
S421	8 (2,11)	6,5 (1,72)	335 (13,19)	PE	K01K3976SE447	R932006037	
S315	9 (2,38)	7,3 (1,93)	365 (14,37)	PE	K01K3976SE350	R932002030	
S423	12 (3,17)	10 (2,64)	495 (19,50)	PE	K01K3976SE449	R932006038	



For these tanks is necessary to use O-RING Ø110.7x3.53 Code: 110201203000000 R-Number: R932000188

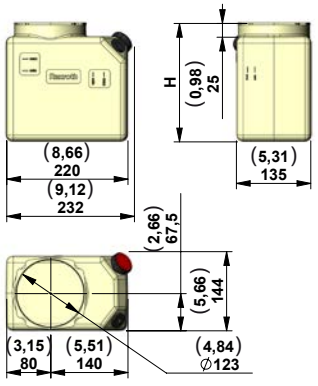
Plastic Tanks

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	Material	Type	Material Number	Drawing
S395	3 (0,79)	1,7 (0,45)	140 (5,51)	PE	K01K3976SE470	R932007903	
S396	3,7 (0,98)	2,2 (0,58)	165 (6,50)	PE	K01K3976SE471	R932007904	
S392	5 (1,32)	3,1 (0,82)	215 (8,46)	PE	K01K3976SE464	R932007365	
S394	8,4 (2,22)	5,5 (1,45)	340 (13,39)	PE	K01K3976SE466	R932007435	
S397	12,7 (3,35)	8,4 (2,2)	500 (19,68)	PE	K01K3976SE472	R932007905	



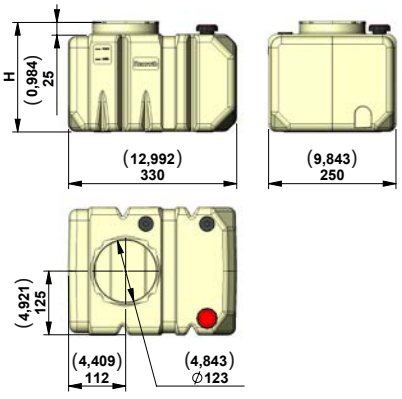
For these tanks is necessary to use special seal Code: C0001S2168A R-Number: R930071663

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	Material	Type	Material Number	Drawing
S434	3 (0,79)	1,7 (0,45)	140 (5,51)	PE	K01K3976SE478	R932007910	
S435	3,7 (0,98)	2,2 (0,58)	165 (6,50)	PE	K01K3976SE479	R932007911	
S436	5 (1,32)	3,1 (0,82)	215 (8,46)	PE	K01K3976SE480	R932007912	
S437	8,4 (2,22)	5,5 (1,45)	340 (13,39)	PE	K01K3976SE481	R932007913	
S438	12,7 (3,35)	8,4 (2,2)	500 (19,68)	PE	K01K3976SE482	R932007914	



For these tanks is necessary to use O-RING Ø110.7x3.53 Code: 110201203000000 R-Number: R932000188

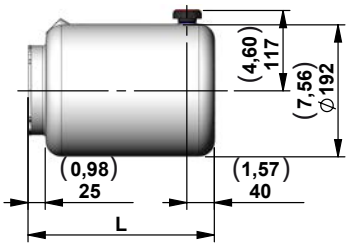
S442	10 (2,64)	7 (1,85)	190 (7,18)	PE	K01K3976SE492	R932010792	
S443	12 (3,17)	9 (2,38)	215 (8,46)	PE	K01K3976SE493	R932010793	
S444	15 (3,96)	12,5 (3,30)	265 (10,43)	PE	K01K3976SE494	R932010794	
S445	20 (5,28)	17,5 (4,62)	330 (12,99)	PE	K01K3976SE495	R932010795	



For these tanks is necessary to use O-RING Ø110.7x3.53 Code: 110201203000000 R-Number: R932000188

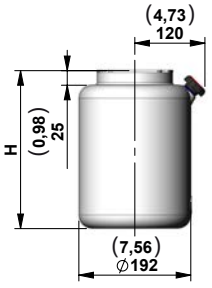
Plastic Tanks

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	Material	Type	Material Number	Drawing
S374	5 (1,32)	4 (1,06)	219 (8,62)	PE	K01K3976SE415	R932002042	
S376	7 (1,85)	5,4 (1,43)	271 (10,67)		K01K3976SE417	R932002044	
S378	8 (2,11)	6,6 (1,74)	323 (12,72)		K01K3976SE419	R932002046	
S380	11 (2,91)	9,6 (2,54)	453 (17,83)		K01K3976SE421	R932002048	



For these tanks is necessary to use special seal Code: C0001S2168A R-Number: R930071663

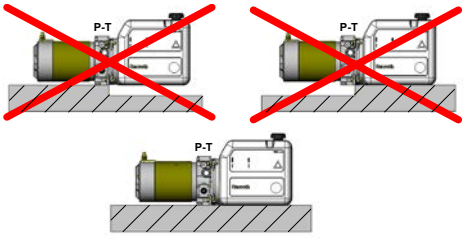
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	Material	Type	Material Number	Drawing
S375	5 (1,32)	4 (1,06)	219 (8,62)	PE	K01K3976SE416	R932002043	
S377	7 (1,85)	5,4 (1,43)	271 (10,67)		K01K3976SE418	R932002045	
S379	8 (2,11)	6,6 (1,74)	323 (12,72)		K01K3976SE420	R932002047	
S381	11 (2,91)	9,6 (2,54)	453 (17,83)		K01K3976SE422	R932002049	



For these tanks is necessary to use O-RING Ø110.7x3.53 Code: 110201203000000 R-Number: R932000188

Assembly Kit for Plastic Tank

Oil Tank	Code for KE	Material Number	Please make sure that the tank and motor are mounted correctly
S335 - S336 - S337 - S338 - S339 - S340 S341 - S342	K2501VT006	R932002436	
S246 - S247 - S248 - S249 - S250 - S251 - S453	K2501VT007	R932002437	
S413 - S419 - S415 - S421 - S344 - S315 - S343 - S316 - S374 - S375 - S376 - S377 - S378 - S379 - S380 - S381 - S417 - S423 - S395 - S396 - S392 - S394 - S397 - S434 - S435 - S436 - S437 - S438 - S428 - S430 - S429 - S442 - S443 - S444 - S445 - S448 - S450 - S452 - S449 - S451	K2501VT014	R932002440	



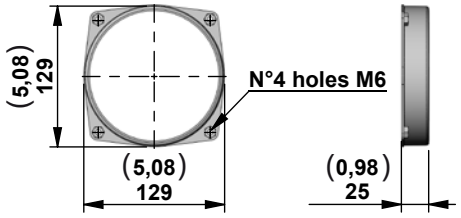
Oil Tank	Code for KS	Material Number
S335 - S336 - S337 - S338 - S339 - S340 S341 - S342	K2501VT016	R932007391
S246 - S247 - S248 - S249 - S250 - S251 - S453	K2501VT015	R932008244
S413 - S419 - S415 - S421 - S344 - S315 - S343 - S316 - S374 - S375 - S376 - S377 - S378 - S379 - S380 - S381 - S417 - S423 - S395 - S396 - S392 - S394 - S397 - S434 - S435 - S436 - S437 - S438 - S428 - S430 - S429 - S442 - S443 - S444 - S445 - S448 - S450 - S452 - S449 - S451	K2501VT026	R930053718

Oil Tanks for KE

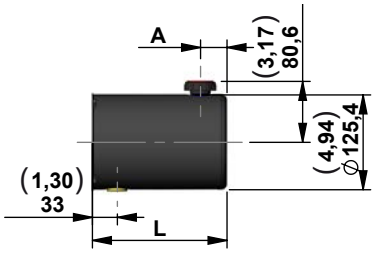
Technical Data for Steel Tanks

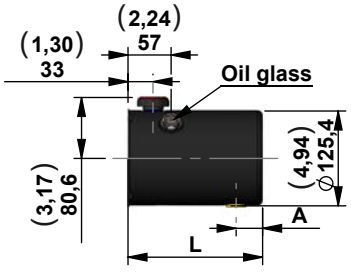
Temperature range	°C (°F)	-15....+80 (5....176)
Materials		Steel
Colors		Black paint finish
Seal		For all the steel tanks is necessary to use the O-RING 4437 (Ø110,7x3,53) Code:110201203000000 - R-Number:R932000188

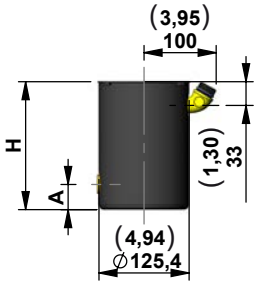
Steel collar for Tanks

Code	Type	Material Number	Drawing
S00	K224201000	R932006279	

Steel Tanks

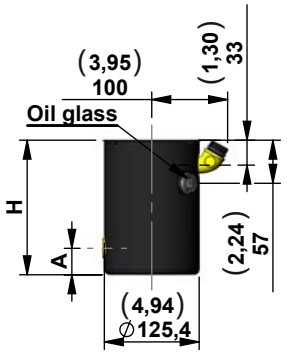
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	A mm (inch)	Type	Material Number	Drawing
S01	1 (0,26)	0,7 (0,18)	133 (5,24)	35 (1,38)	K01K3976SE001	R932001937	
S20	1,8 (0,48)	1,2 (0,32)	178 (7,01)	35 (1,38)	K01K3976SE026	R932001953	
S02	2,5 (0,66)	1,7 (0,45)	238 (9,37)	60 (2,36)	K01K3976SE003	R932001939	
S161	3 (0,79)	2,3 (0,61)	280 (11,02)	60 (2,36)	K01K3976SE186	R932001987	
S107	4 (1,06)	3,2 (0,84)	409 (16,10)	60 (2,36)	K01K3976SE119	R932001970	

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	A mm (inch)	Type	Material Number	Drawing
S144	1,8 (0,48)	1,2 (0,32)	178 (7,01)	35 (1,38)	K01K3976SE168	R932001983	
S142	2,5 (0,66)	1,7 (0,45)	238 (9,37)	60 (2,36)	K01K3976SE166	R932001981	

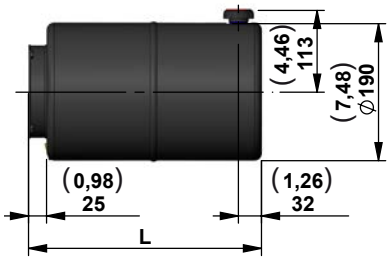
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	A mm (inch)	Type	Material Number	Drawing
S216	1 (0,26)	0,6 (0,16)	133 (5,24)	35 (1,38)	K01K3976SE246	R932002011	
S217	1,8 (0,48)	1,1 (0,29)	178 (7,01)	35 (1,38)	K01K3976SE247	R932002012	
S218	2,5 (0,66)	1,7 (0,45)	238 (9,37)	60 (2,36)	K01K3976SE248	R932009269	
S239	3 (0,79)	2,3 (0,61)	280 (11,02)	60 (2,36)	K01K3976SE269	R932002015	
S107V	4 (1,06)	3,2 (0,84)	409 (16,10)	60 (2,36)	K01K3976SE161	R932001976	

Steel Tanks

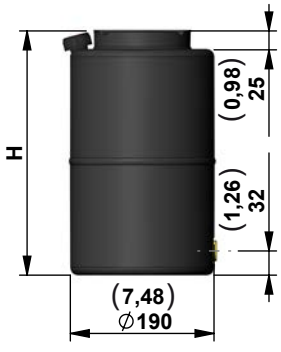
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	A mm (inch)	Type	Material Number	Drawing
S20V	1,8 (0,48)	1,1 (0,29)	178 (7,01)	35 (1,38)	K01K3976SE027	R932001954	
S02V	2,5 (0,66)	1,7 (0,45)	238 (9,37)	60 (2,36)	K01K3976SE004	R932001940	



Code	Tank capacity l (USgal)	Useable capacity l (USgal)	L mm (inch)	-	Type	Material Number	Drawing
S03	5 (1,32)	4 (1,06)	219 (8,62)	-	K01K3976SE005	R932001941	
S34	7 (1,85)	5,4 (1,43)	271 (10,67)	-	K01K3976SE041	R932001956	
S04	8 (2,11)	6,6 (1,74)	323 (12,72)	-	K01K3976SE007	R932001943	
S109	11 (2,91)	9,6 (2,54)	453 (17,83)	-	K01K3976SE172	R932001985	

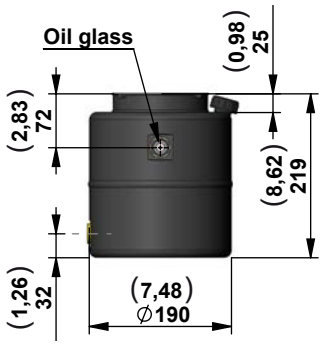


Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	-	Type	Material Number	Drawing
S03V	5 (1,32)	3 (7,9)	219 (8,62)	-	K01K3976SE006	R932001942	
S34V	7 (1,85)	4,4 (1,16)	271 (10,67)	-	K01K3976SE042	R932001957	
S04V	8 (2,11)	5,8 (1,53)	323 (12,72)	-	K01K3976SE008	R932001944	
S109V	11 (2,91)	9,0 (2,38)	453 (17,83)	-	K01K3976SE121	R932001972	

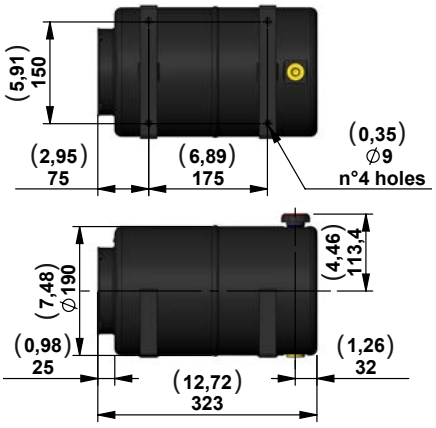


Steel Tanks

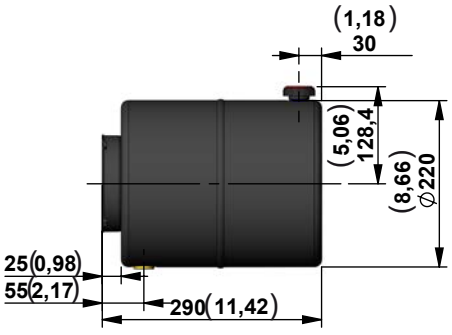
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	Type	Material Number	Drawing
S106	5 (1,32)	3 (7,9)	K01K3976SE215	R932001997	



S94	8 (2,11)	6,6 (1,74)	K01K3976SE106	R932001965	

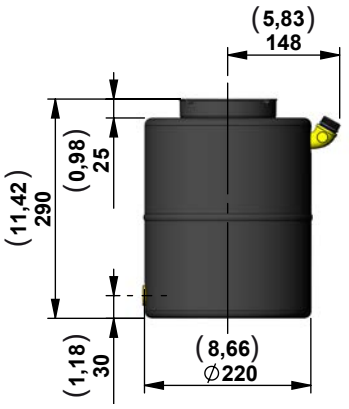


S177	9 (2,38)	7,7 (2,03)	K01K3976SE207	R932001994	

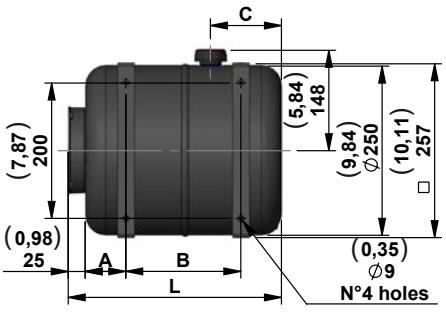


Steel Tanks

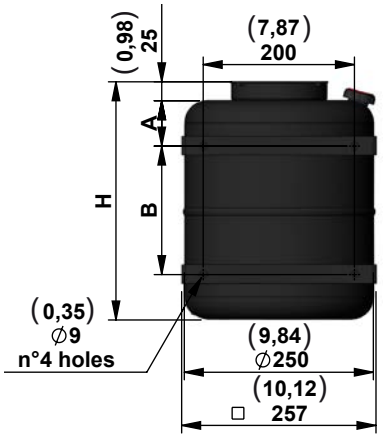
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	Type	Material Number	Drawing
S178	9 (2,38)	6,9 (1,82)	K01K3976SE208	R932001995	



Code	Tank capacity l (USgal)	Useable capacity l (USgal)	A mm (inch)	B mm (inch)	C mm (inch)	L mm (inch)	Type	Material Number	Drawing
S90*	12 (3,17)	10,5 (2,77)	60 (2,36)	170 (6,69)	105 (4,13)	315 (12,40)	K01K3976SE100	R932001961	
S128*	16 (4,23)	13 (3,43)	60 (2,36)	170 (6,69)	158 (6,22)	368 (14,49)	K01K3976SE151	R932001975	
S105*	19 (5,02)	15 (3,96)	52,5 (2,07)	290 (11,42)	158 (6,22)	420 (16,53)	K01K3976SE117	R932001969	
S92*	23 (6,08)	19 (5,02)	102,5 (4,03)	290 (11,42)	158 (6,22)	520 (20,47)	K01K3976SE102	R932001962	

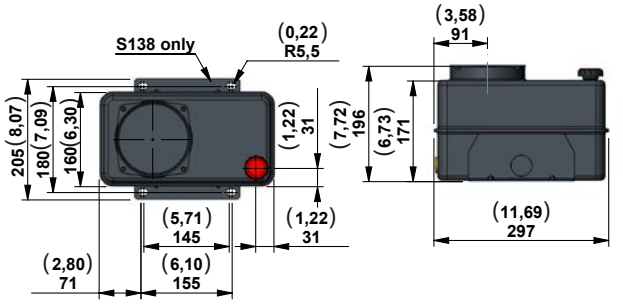
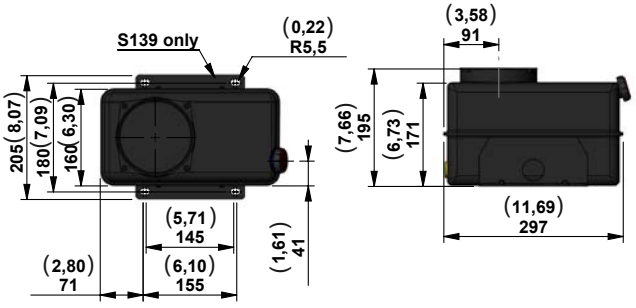


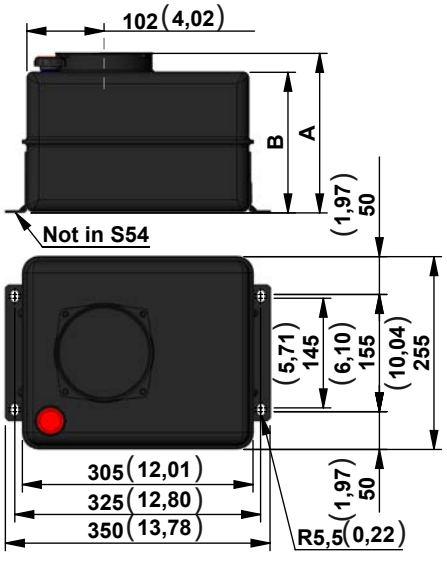
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	H mm (inch)	A mm (inch)	B mm (inch)	Type	Material Number	Drawing
S90V*	12 (3,17)	9 (2,38)	315 (12,40)	60 (2,36)	170 (6,69)	K01K3976SE103	R932001963	
S92V*	23 (6,08)	18 (4,75)	520 (20,47)	102,5 (4,03)	290 (11,42)	K01K3976SE104	R932001964	



***Note**
In order to avoid to support the weight of motor by the collar of the tank when the tanks with fixing brakets are used, it is strongly suggested to support also the central manifold.

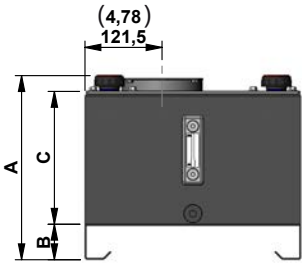
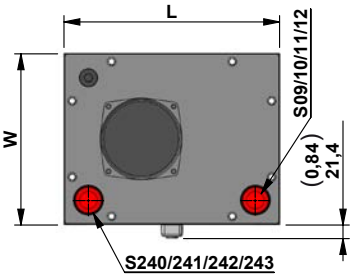
Steel Tanks

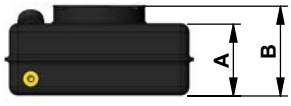
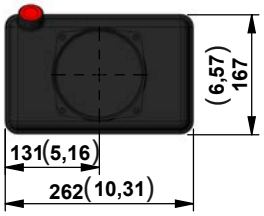
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	Brackets	Type	Material Number	Drawing
S07	6 (1,58)	4 (1,06)	No	K01K3976SE013	R932001945	
S138*	6 (1,58)	4 (1,06)	Yes	K01K3976SE162	R932001977	
S48	6 (1,58)	4 (1,06)	No	K01K3976SE056	R932001959	
S139*	6 (1,58)	4 (1,06)	Yes	K01K3976SE163	R932001978	

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	A mm (inch)	B mm (inch)	Type	Material Number	Drawing
S223*	8 (2,11)	6 (1,58)	156 (6,14)	131 (5,16)	K01K3976SE253	R932002013	
S54	12 (3,17)	9,5 (2,51)	210 (8,27)	186 (7,32)	K01K3976SE063	R932001960	
S140*	12 (3,17)	9,5 (2,51)	210 (8,27)	186 (7,32)	K01K3976SE164	R932001979	
S256*	14 (3,70)	12 (3,17)	235 (9,25)	211 (8,31)	K01K3976SE280	R932002022	
S141*	15 (3,96)	13 (3,43)	261 (10,28)	236 (9,29)	K01K3976SE165	R932001980	
S143*	20 (5,28)	18 (4,75)	329 (12,95)	305 (12,01)	K01K3976SE167	R932001982	

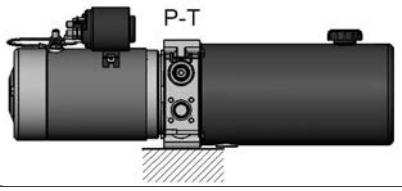
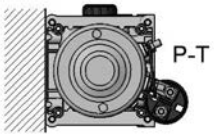
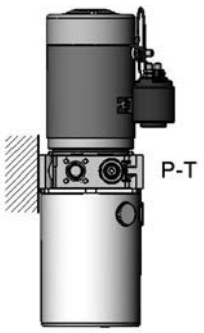
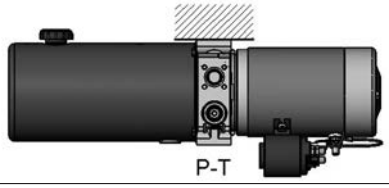
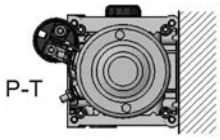
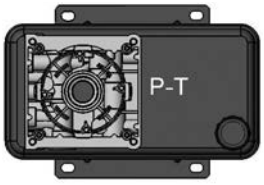
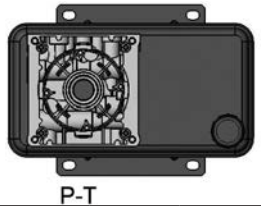
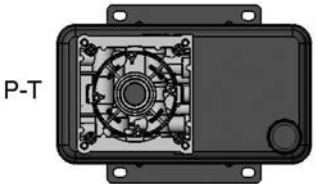
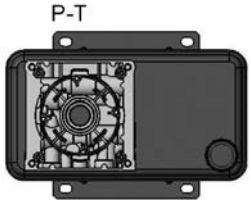
***Note**
In order to avoid to support the weight of motor by the collar of the tank when the tanks with fixing brakets are used, it is strongly suggested to support also the central manifold.

Steel Tanks

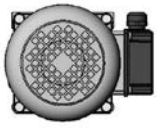
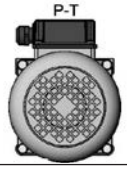
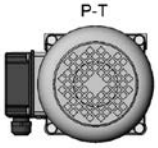
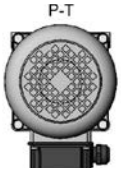
Code	Tank capacity l (USgal)	Useable capacity l (USgal)	A mm (inch)	B mm (inch)	C mm (inch)	L x W mm (inch)	Type	Material Number	Drawing
S09	20 (5,28)	12,5 (3,30)	285 (11,22)	53 (2,09)	207 (8,15)	340x270 (13,4x10,6)	K01K3976SE015	R932001946	
S240	20 (5,28)	12,5 (3,30)	285 (11,22)	53 (2,09)	207 (8,15)	340x270 (13,4x10,6)	K01K3976SE195	R932001989	
S10	30 (7,92)	22,5 (5,94)	405 (15,94)	58 (2,28)	322 (12,68)	340x270 (13,4x10,6)	K01K3976SE016	R932001947	
S241	30 (7,92)	22,5 (5,94)	405 (15,94)	58 (2,28)	322 (12,68)	340x270 (13,4x10,6)	K01K3976SE196	R932001990	
S11	45 (11,89)	30 (7,92)	344 (13,54)	58 (2,28)	261 (10,28)	540x320 (21,3x12,6)	K01K3976SE017	R932001948	
S242	45 (11,89)	30 (7,92)	344 (13,54)	58 (2,28)	261 (10,28)	540x320 (21,3x12,6)	K01K3976SE197	R932001991	
S12	60 (15,85)	44 (11,62)	435 (17,13)	58 (2,28)	352 (13,86)	540x320 (21,3x12,6)	K01K3976SE018	R932001949	
S243	60 (15,85)	44 (11,62)	435 (17,13)	58 (2,28)	352 (13,86)	540x320 (21,3x12,6)	K01K3976SE198	R932001992	

Code	Tank capacity l (USgal)	Useable capacity l (USgal)	A mm (inch)	B mm (inch)	Type	Material Number	Drawing
S211	3,5 (0,92)	3 (0,79)	125 (4,92)	100 (3,94)	K01K3976SE241	R932002009	
S212	8 (2,11)	7 (1,85)	245 (9,65)	220 (8,66)	K01K3976SE242	R932002010	

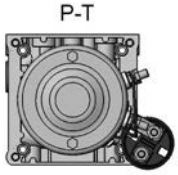
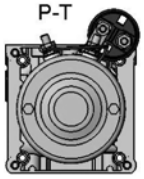
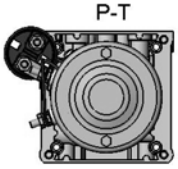
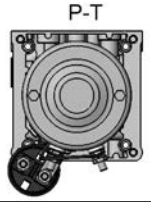
Mounting position

Code		Code		Code	
O1		**O3**		**V1**	
O2		**O4**			
-		**O6**			
O7		**O8**			

Terminal Box Position for A.C. Motors

-		**M2**	
M3		**M4**	

Relay Position for D.C. Motors

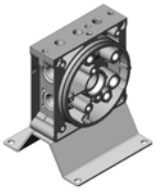
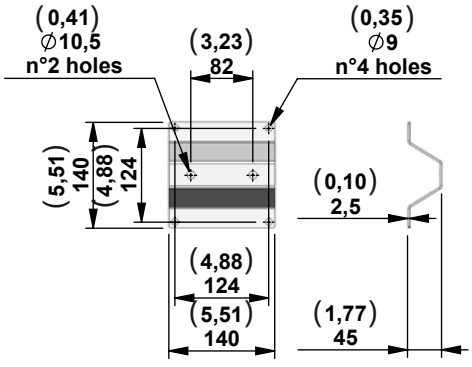
-		**R2**	
R3		**R4**	

Oil Cap Position for V1 only

Code		Code	
-	P-T 	LU	P-T 
LO	P-T 	LP	P-T 

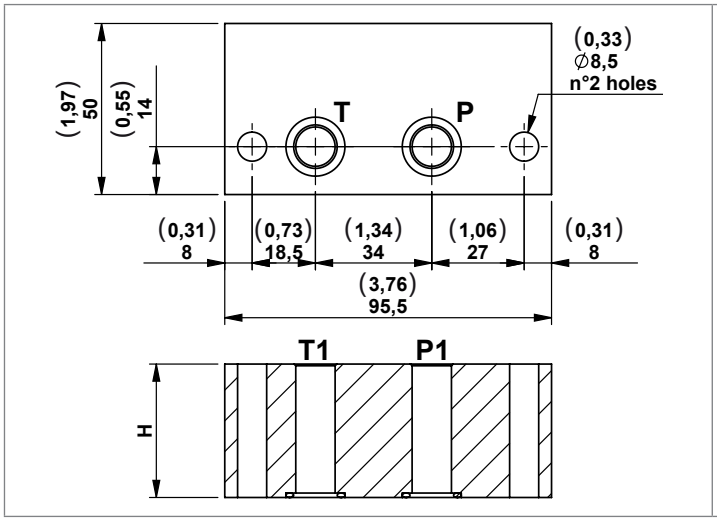
Mounting Brackets

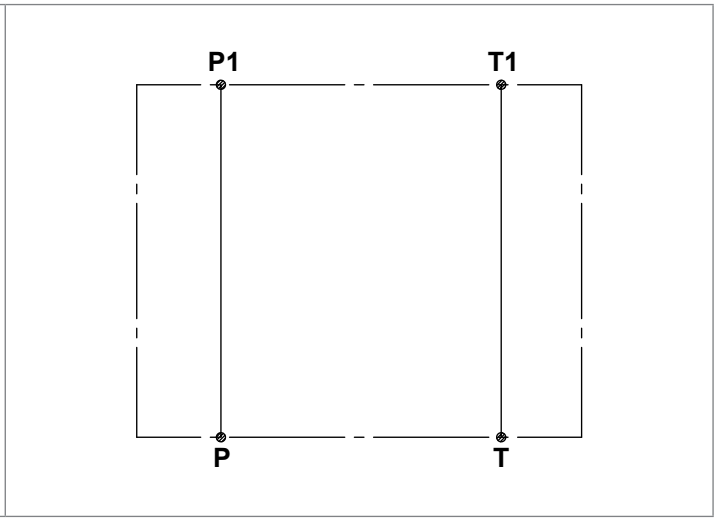
Support for Manifold KE Series

Code	Central manifold	Type	Material number		
G80	KE	K01F331514000	R932009395		

Modular Stackable Elements

Space Modular Block

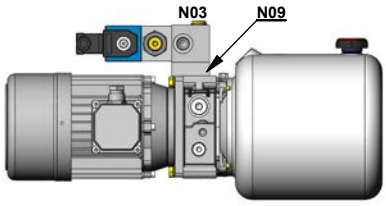




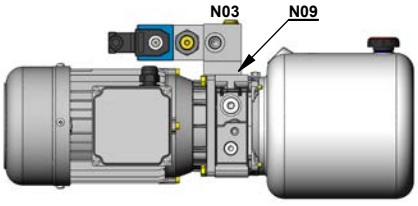
These modular blocks have been designed to have the ability to be assembled as a stack to allow clearence between flanges and motors of different sizes and types. Each block includes 2xO-RING 2056.

Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N09	Space modular block **H=18**	300 (4351)	40 (10,57)	G386010000	R932001058
N01	Space modular block **H=39**	300 (4351)	40 (10,57)	G386001000	R932001005
N02	Space modular block **H=69**	300 (4351)	40 (10,57)	G386038000	R932001122

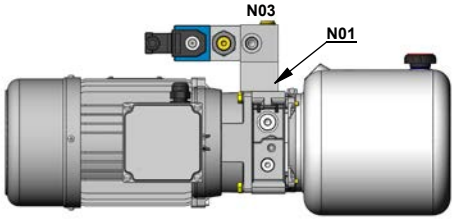
Motor IEC71 frame Coupling TR02



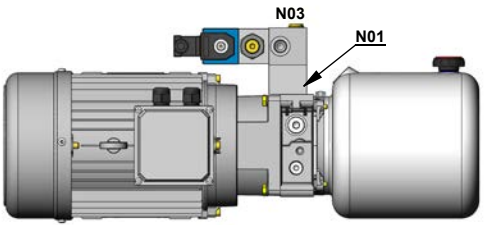
Motor IEC80 frame Coupling TR03



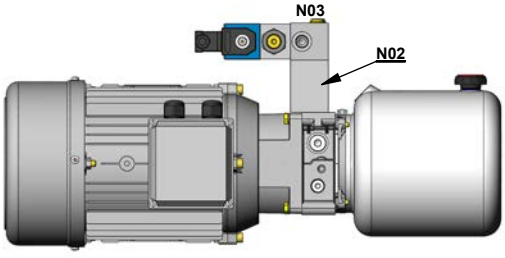
Motor IEC90 frame Coupling TR04



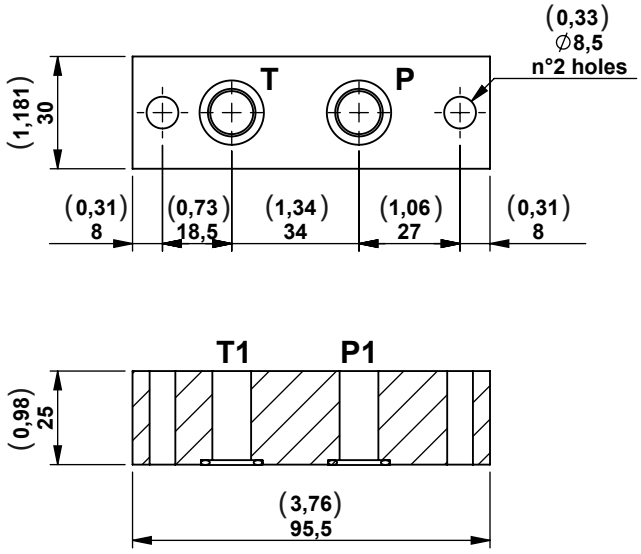
Motor IEC100 frame Coupling TR05

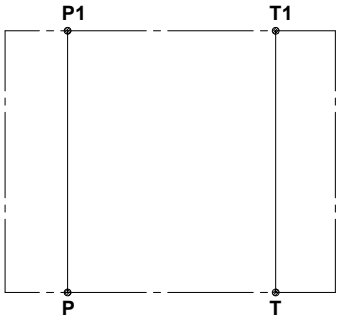


Motor IEC112 frame Coupling TR05



Space Modular Block

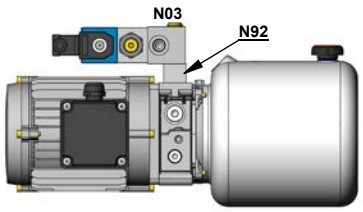




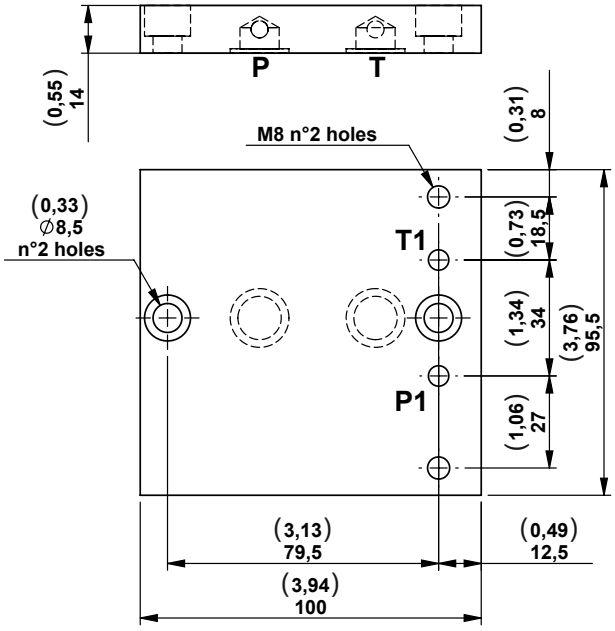
Space Modular Block to fix a compact mounting style electric motor on power module KE type.
This block includes 2x O-Ring 2056.

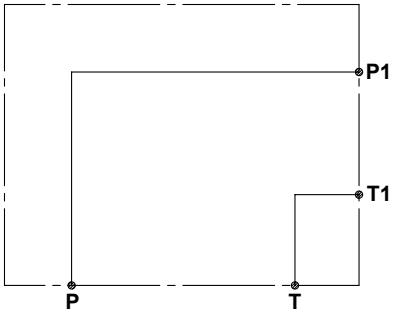
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N92	Space modular block	300 (4351)	40 (10,57)	G386091000	R932001167

Application Example



90° Rotation modular block

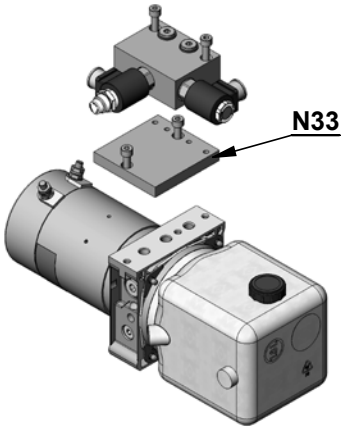




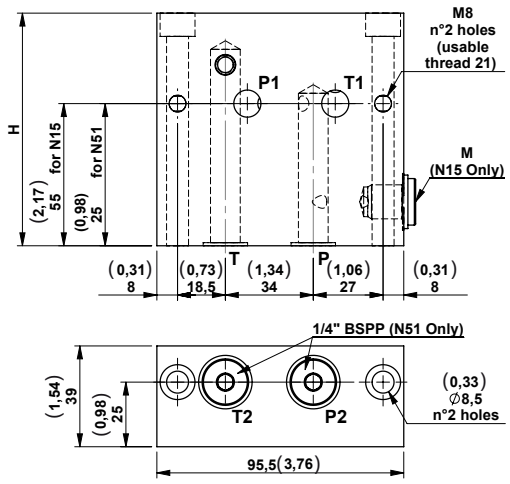
A modular block that is able to have a 90° rotation from our standard OILSISTEM configuration, but keeping the block on the same surface allowing a different position of any other modular block.
Each block includes 2x O-Ring 2056.

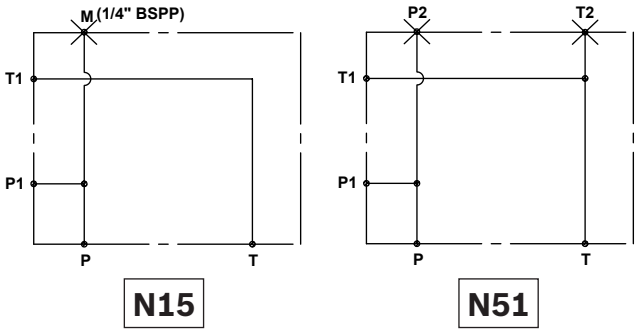
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N33	90° rotation modular block	300 (4351)	20 (5,28)	G386032000	R932001110

Application Example



90° modular block allowing horizontal mounting (motor side)



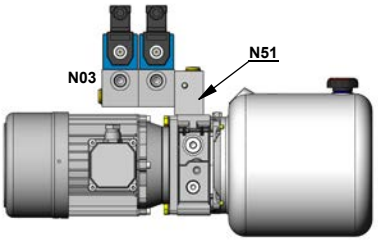


A modular block that is able to turn the standard assembling of 90°, in order to place other manifold blocks over the motor.

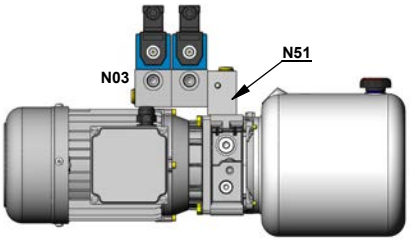
The “N15” block has a 1/4” BSPP port for Pressure Gauge. Each block includes 2x O-Ring 2056.

Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N15	90° modular block allowing horizontal mounting (motor side) **H=90**	300 (4351)	35 (9,25)	G386014000	R932001087
N51	90° modular block allowing horizontal mounting (motor side) **H=60**	300 (4351)	35 (9,25)	G386050000	R932001146

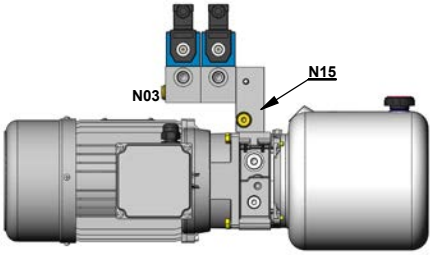
Motor IEC71 frame Coupling TR02



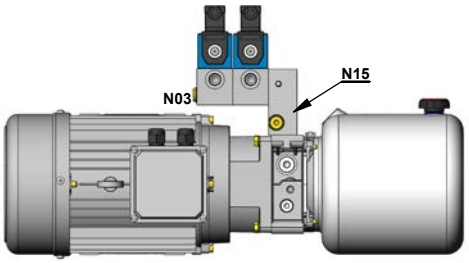
Motor IEC80 frame Coupling TR03



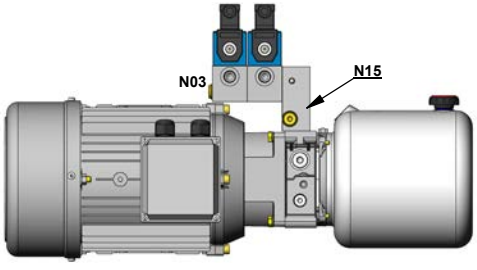
Motor IEC90 frame Coupling TR04



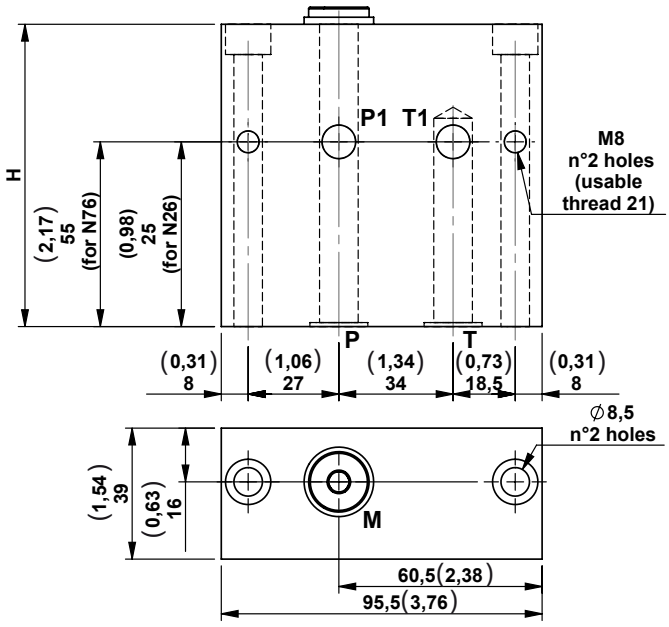
Motor IEC100 frame Coupling TR05

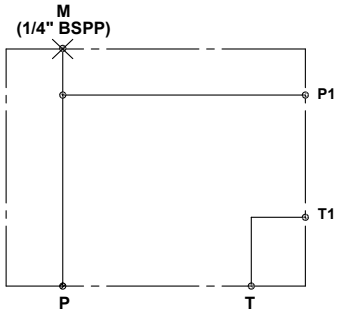


Motor IEC112 frame Coupling TR05



90° modular block allowing horizontal mounting (tank side)

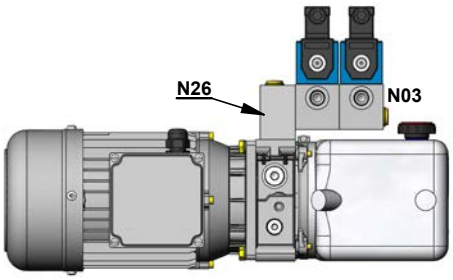




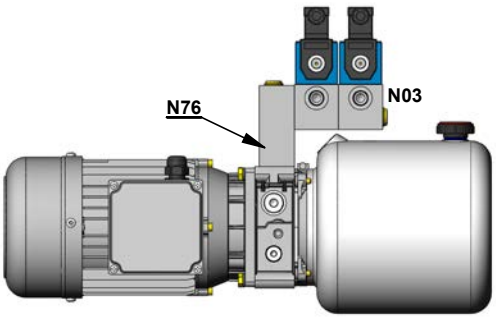
A modular block that is able to turn the standard assembling of 90°, in order to place other blocks over the tank.
The blocks have a 1/4” BSPP port for Pressure Gauge.
Each block includes 2x O-Ring 2056.

Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N76	90° modular block allowing horizontal mounting (tank side) **H=90**	300 (4351)	35 (9,25)	G386075000	R932001153
N26	90° modular block allowing horizontal mounting (tank side) **H=60**	300 (4351)	35 (9,25)	G386025000	R932001100

Tank H=134



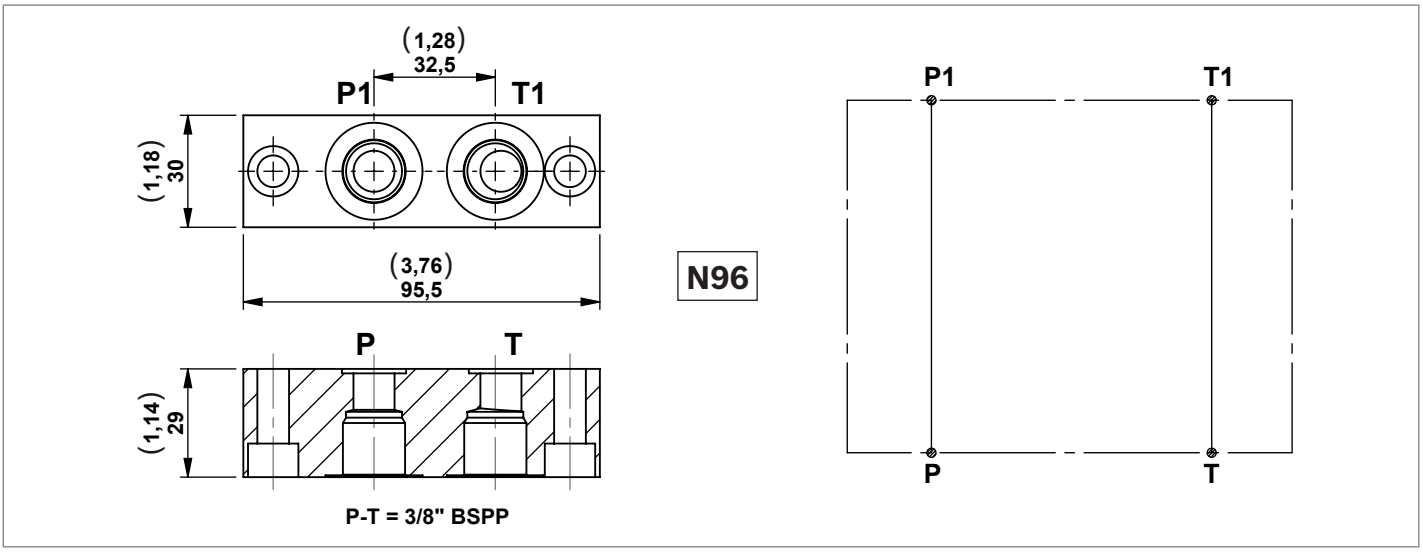
Tank Diameter Ø190

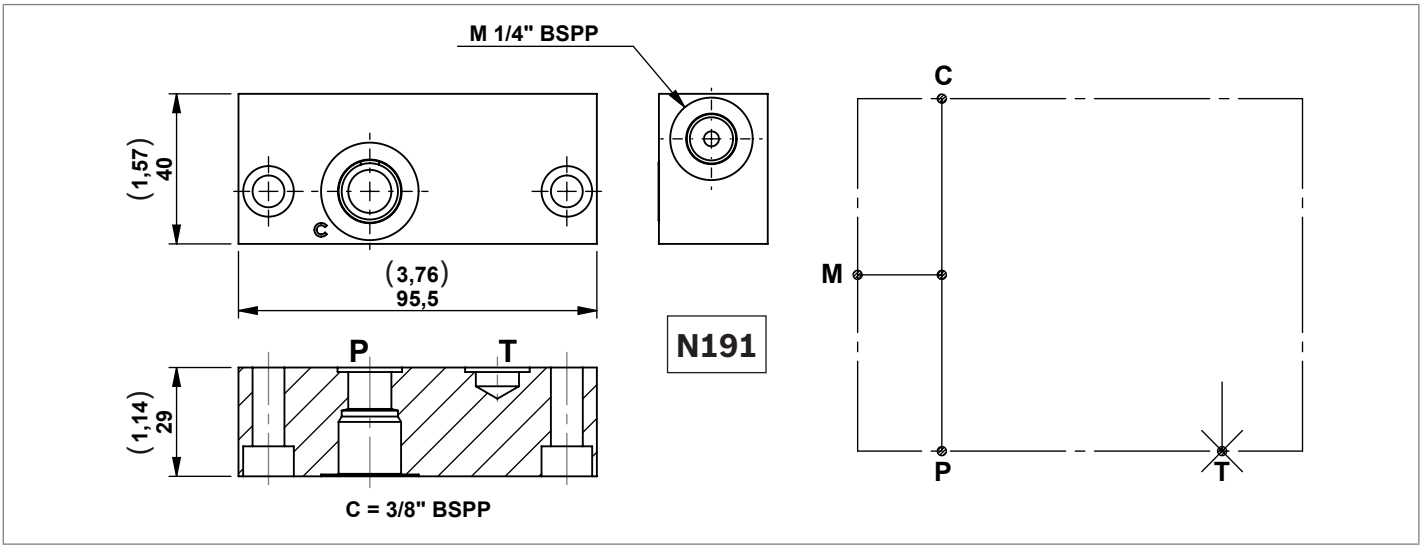


Modular blocks with threaded ports

Modular blocks with exit 3/8” BSPP.

Each block includes 2x O-Ring 2056.



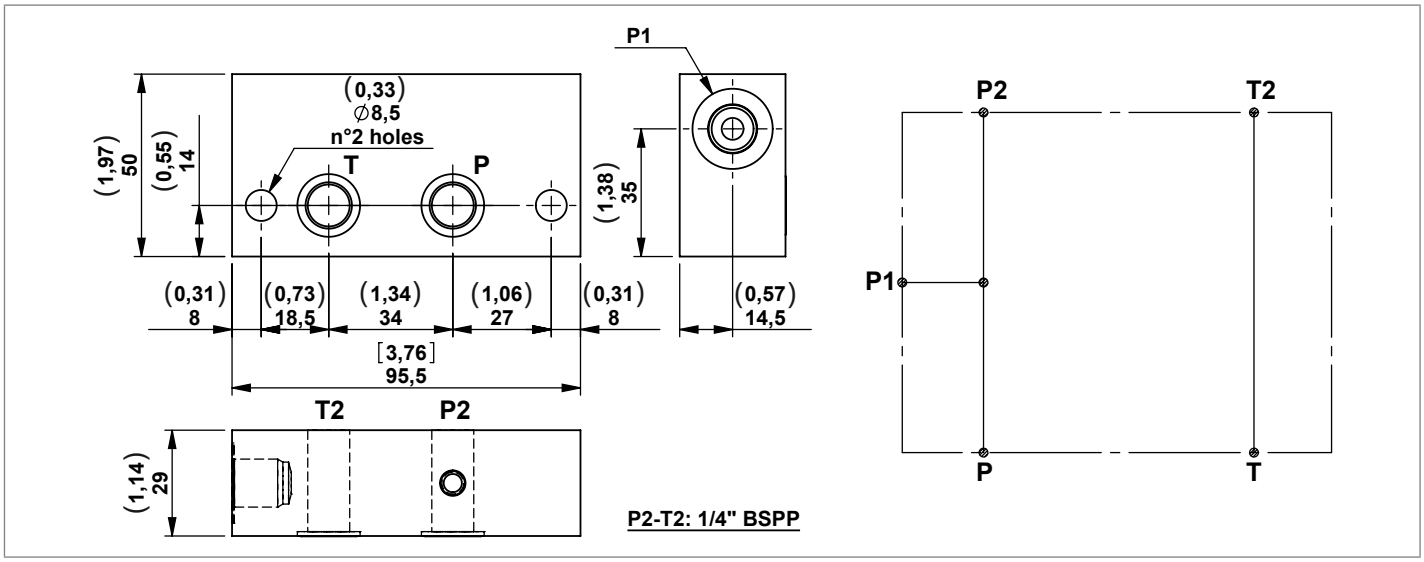


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N96	Modular block with threaded ports	300 (4351)	35 (9,25)	G386095000	R932001173
N191	Modular block with threaded ports	300 (4351)	35 (9,25)	G386191000	R932001284

Modular spacer block with extra “P1” port

A modular block with an extra port.

Each block includes 2x O-Ring 2056.

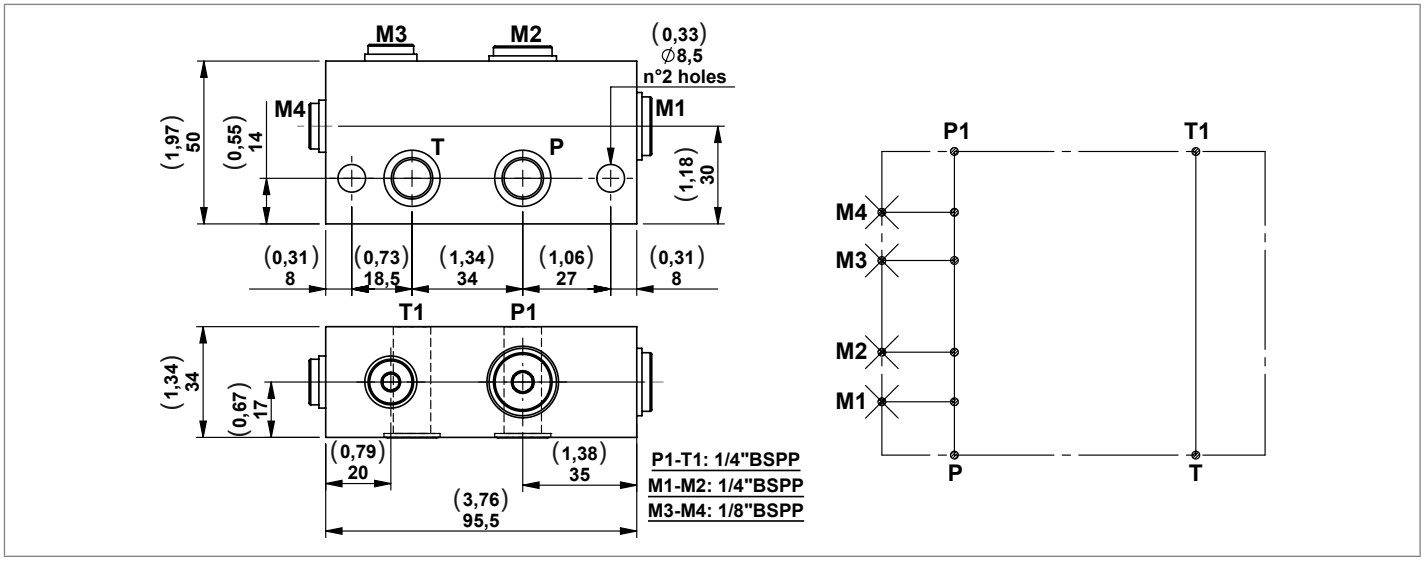


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N46-14	Modular spacer block with extra "P1" **port 1/4"** BSPP	300 (4351)	20 (5,28)	G386045000	R932001142
N46-38	Modular spacer block with extra "P1" **port 3/8"** BSPP	300 (4351)	20 (5,28)	1386000053	R932009506

Modular spacer block with two 1/8” BSPP and two 1/4” BSPP ports

A modular block with 4 extra ports.

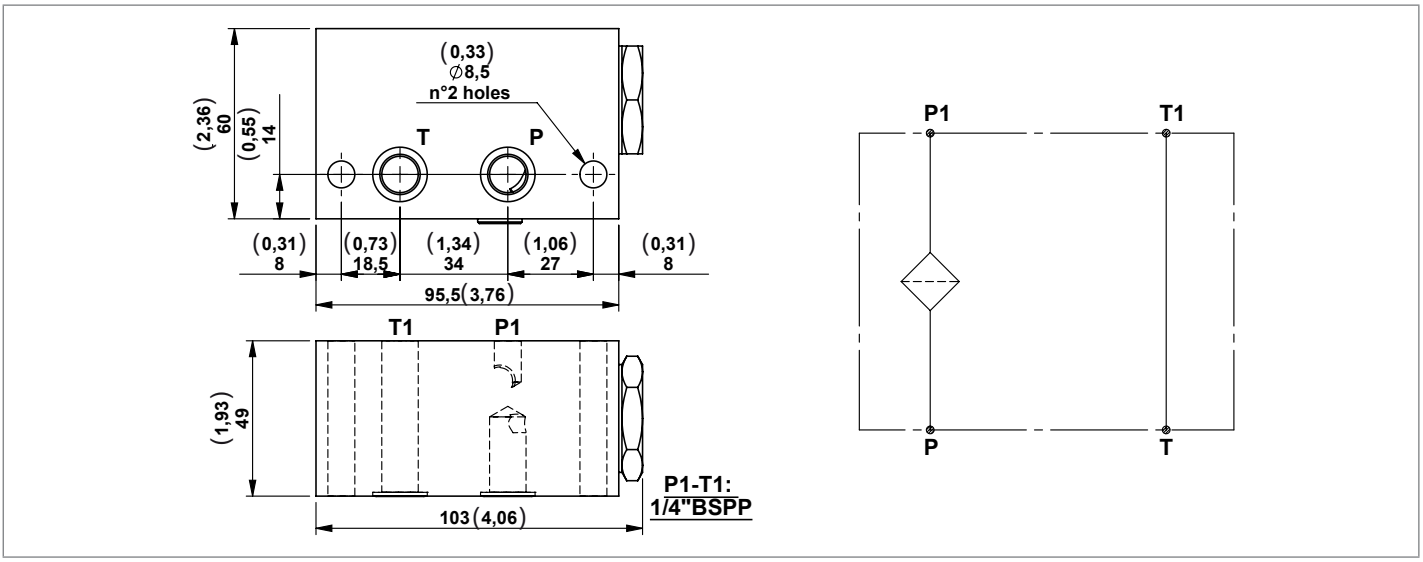
Each block includes 2 OR 2056 gaskets.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N128	Modular spacer plock with two 1/8" BSPP ports and two 1/4" BSPP ports	300 (4351)	35 (9,25)	G386128000	R932001241

Modular block with filter on pressure line

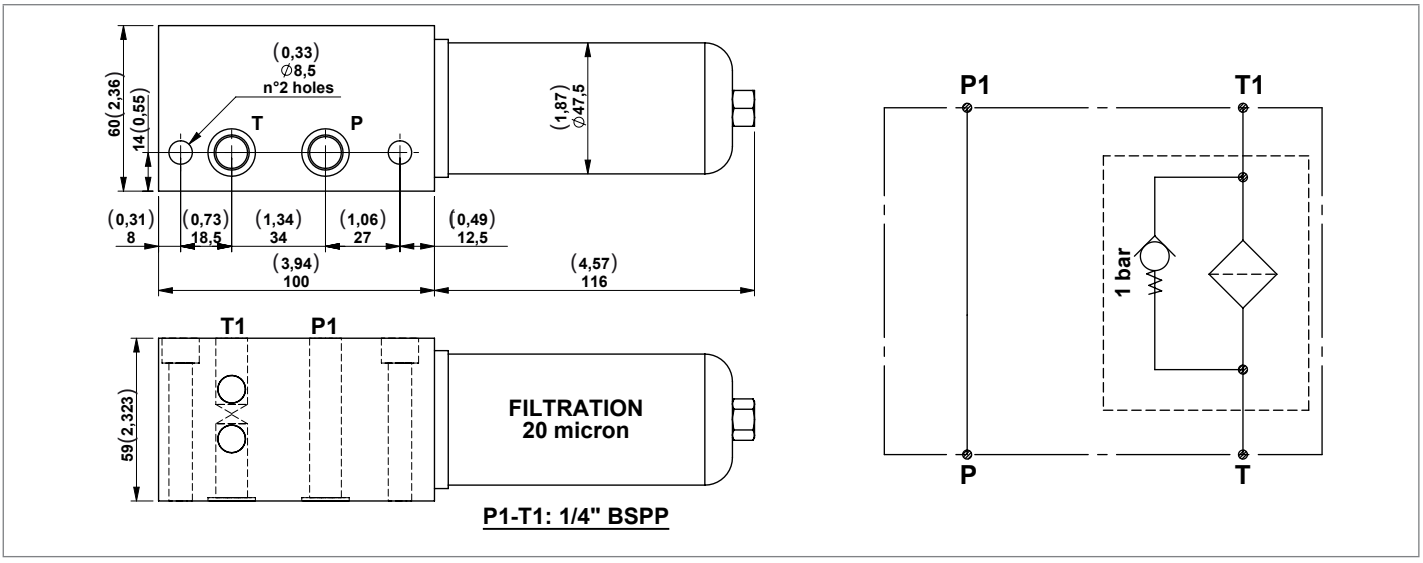
A modular block with a filter on the pressure line. This is recommended for applications where valve may be subjected to contamination.
Each block includes 2x O-Ring 2056.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N39-25	Modular block with filter (**25 micron**) on pressure line	230 (3336)	10 (2,64)	G386038010	R932001123
N39-60	Modular block with filter (**60 micron**) on pressure line	230 (3336)	10 (2,64)	G386038020	R932001124

Modular block with filter on the return line

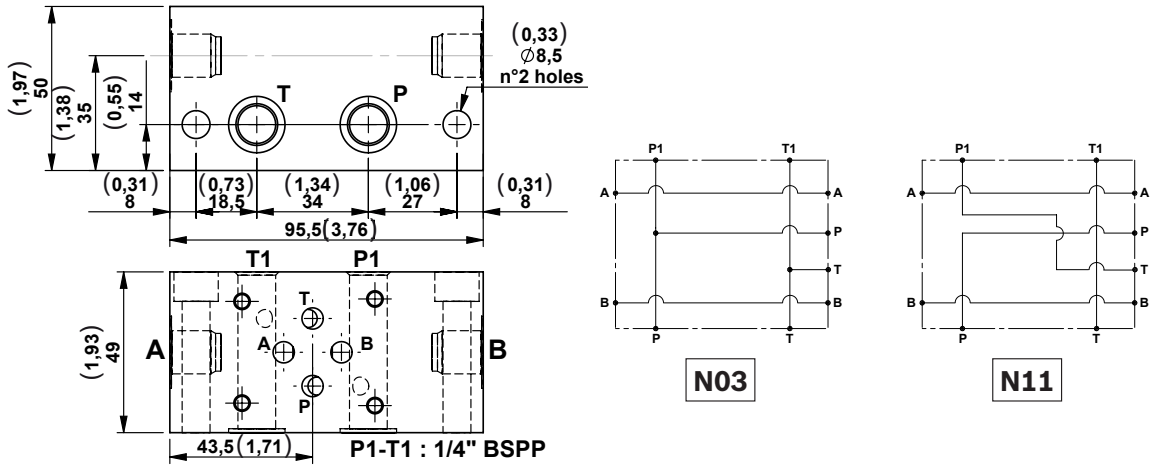
A modular block with filter on return line. This is recommended for applications where valves may be subjected to contamination.
Each block includes 2x O-Ring 2056.
By-pass valve set at a pressure of 1 bar.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N116	Modular block with filter on the return line (20 micron)	6 (87)	20 (5,28)	G386116010	R932001214

Modular block for CETOP 3 (2143) configuration valves

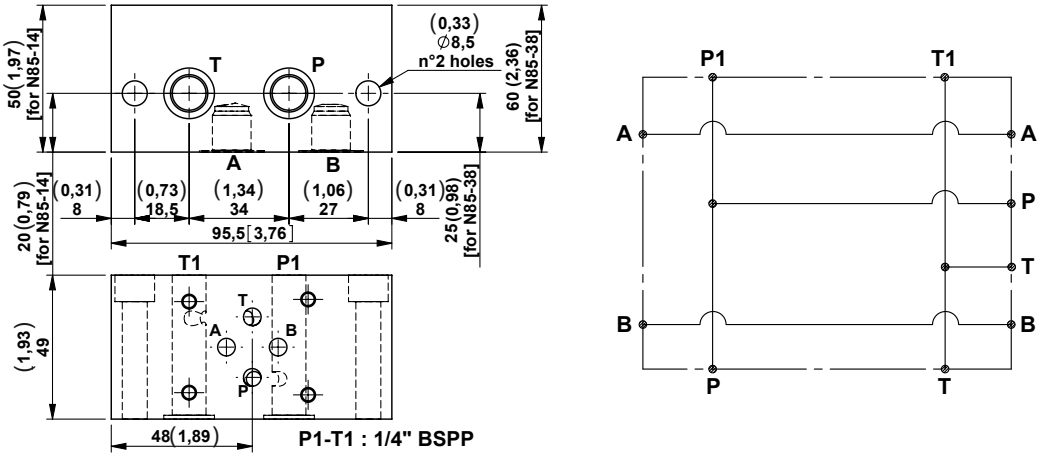
Modular blocks for CETOP 3 (2143) electrovalves for parallel or series circuits.
Each block includes 2x O-Ring 2056.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N03-14	Modular block for CETOP3 (2143) configuration valves with A-B **1/4"** BSPP (**parallel circuit**)	300 (4351)	40 (10,57)	G386002010	R932001010
N03-38	Modular block for CETOP3 (2143) configuration valves with A-B **3/8"** BSPP (**parallel circuit**)	300 (4351)	40 (10,57)	G386002020	R932001011
N11-14	Modular block for CETOP3 (2143) configuration valves with A-B **1/4"** BSPP (**series circuit**)	300 (4351)	40 (10,57)	G386009010	R932001054
N11-38	Modular block for CETOP3 (2143) configuration valves with A-B **3/8"** BSPP (**series circuit**)	300 (4351)	40 (10,57)	G386009020	R932001056

Modular block for CETOP 3 (2143) configuration valves

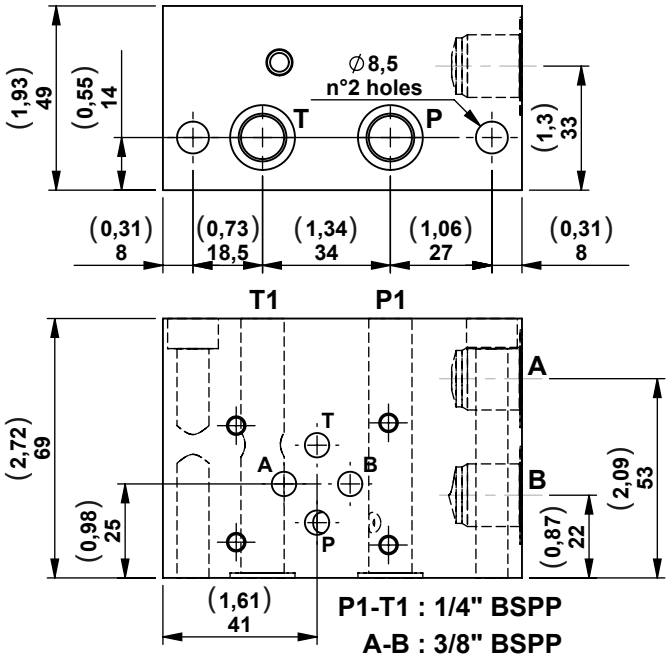
A modular block that is for CETOP 3 (2143) electrovalves for a parallel circuit with ports on the oppsite side of the valve.
Each block includes 2x O-Ring 2056.

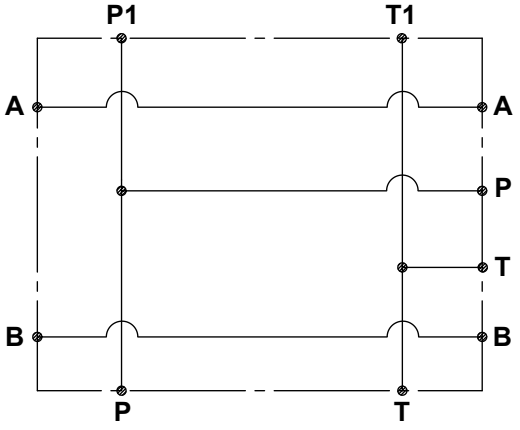


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N85-14	Modular block for CETOP3 (2143) configuration valves with A-B **1/4"** BSPP (parallel circuit)	300 (4351)	40 (10,57)	G386084010	R932001158
N85-38	Modular block for CETOP3 (2143) configuration valves with A-B **3/8"** BSPP (parallel circuit)	300 (4351)	40 (10,57)	G386084020	R932001159

Modular block for CETOP 3 (2143) configuration valves with side ports

A modular block that is for CETOP 3 (2143) electrovalves for parallel circuit with side device ports on one face.
Each block includes 2xO-RING 2056.





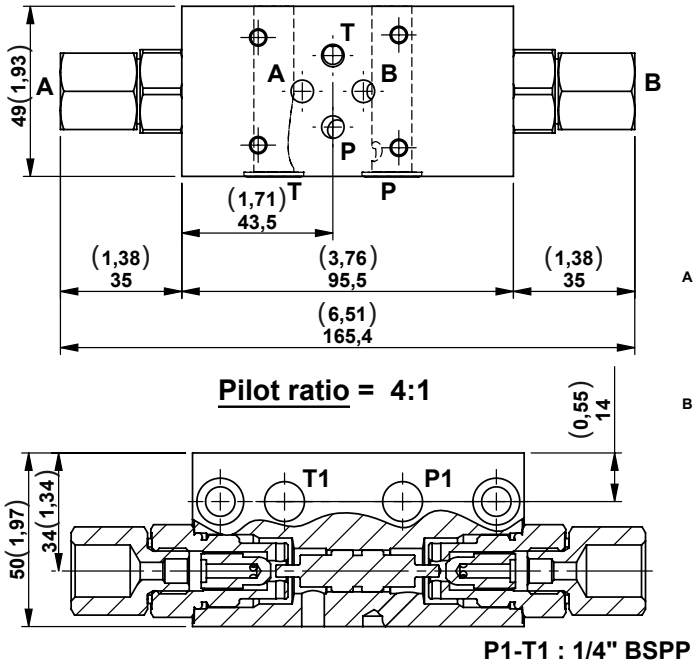
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N142	Modular block for CETOP 3 (2143) confuguration valves with side ports	300 (4351)	40 (10,57)	G386142000	R932001252

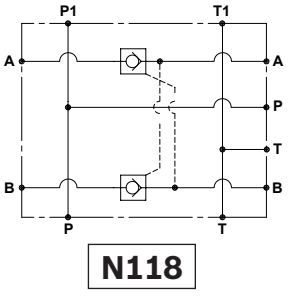
Modular block with poppet type P.O. check valves for CETOP 3 (2143) configuration valves (parallel circuit)

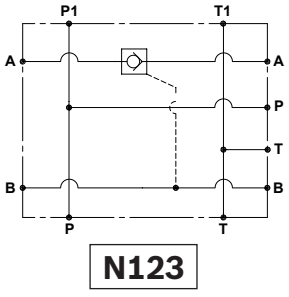
A selection of modular block with P.O. check valves for block CETOP 3 (2143) electrovalves.

Each block includes 2xO-RING 2056.

Possibility to have an OR gasket on the piloting piston for application with low flow.



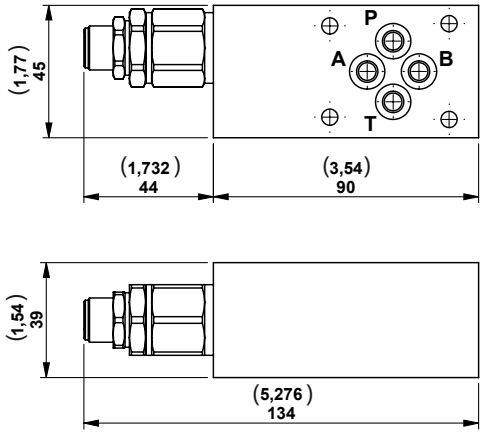


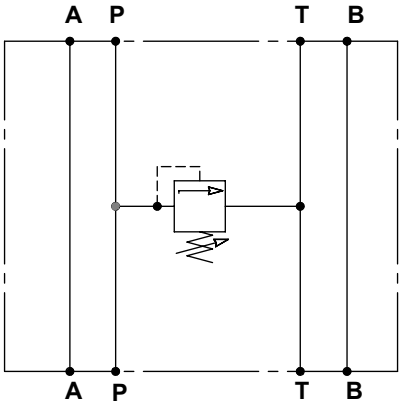


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N118-38	Modular block with poppet type P.O. check valves on A-B for CETOP 3 (2143) configuration valves (**without O-ring** on pilot piston and A-B **3/8"** BSPP)	300 (4351)	20 (5,28)	G386118A02	R932001217
N118G-38	Modular block with poppet type P.O. check valves on A-B for CETOP 3 (2143) configuration valves (**with O-ring** on pilot piston and A-B **3/8"** BSPP)	300 (4351)	20 (5,28)	G386118B02	R932001222
N118-14	Modular block with poppet type P.O. check valves on A-B for CETOP 3 (2143) configuration valves (**without O-ring** on pilot piston and A-B **1/4"** BSPP)	300 (4351)	20 (5,28)	G386118A03	R932001218
N118G-14	Modular block with poppet type P.O. check valves on A-B for CETOP 3 (2143) configuration valves (**with O-ring** on pilot piston and A-B **1/4"** BSPP)	300 (4351)	20 (5,28)	G386118B03	R932001223
N123-38	Modular block with poppet type P.O. check valves on A for CETOP 3 (2143) configuration valves (**without O-ring** on pilot piston and A-B **3/8"** BSPP)	300 (4351)	20 (5,28)	G386123A02	R932001237
N123-14	Modular block with poppet type P.O. check valves on A for CETOP 3 (2143) configuration valves (**without O-ring** on pilot piston and A-B **1/4"** BSPP)	300 (4351)	20 (5,28)	G386123A01	R932001236

Sandwich blocks with poppet type “VMD1“ relief valves for CETOP 3 (2143) configuration valves

Each block includes 4xO-RING 108.

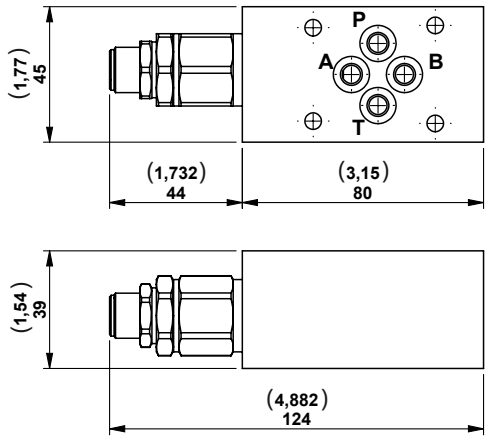


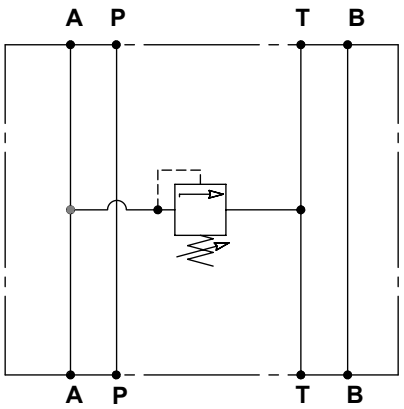


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N99-10	Sandwich block with poppet type "VMD1" relief valve P in T (**25-120 bar**) for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386098A81A	R930071372
N99-20	Sandwich block with poppet type "VMD1" relief valve P in T (**40-200 bar**) for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386098A82A	R930071373
N99-35	Sandwich block with poppet type "VMD1" relief valve P in T (**200-350 bar**) for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386098A83A	R930071376

Sandwich blocks with poppet type “VMD1“ relief valves for CETOP 3 (2143) configuration valves

Each block includes 4xO-RING 108.

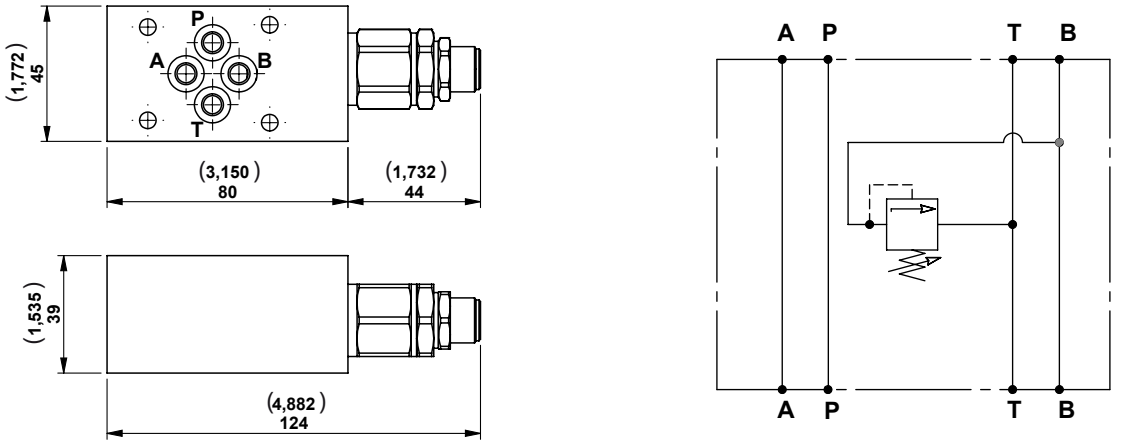




Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N100-10	Sandwich block with poppet type "VMD1" relief valve A in T **(25-120 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386099A81A	R930071377
N100-20	Sandwich block with poppet type "VMD1" relief valve A in T **(40-200 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386099A82A	R930071378
N100-35	Sandwich block with poppet type "VMD1" relief valve A in T **(200-350 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386099A83A	R930071379

Sandwich blocks with poppet type “VMD1“ relief valves for CETOP 3 (2143) configuration valves

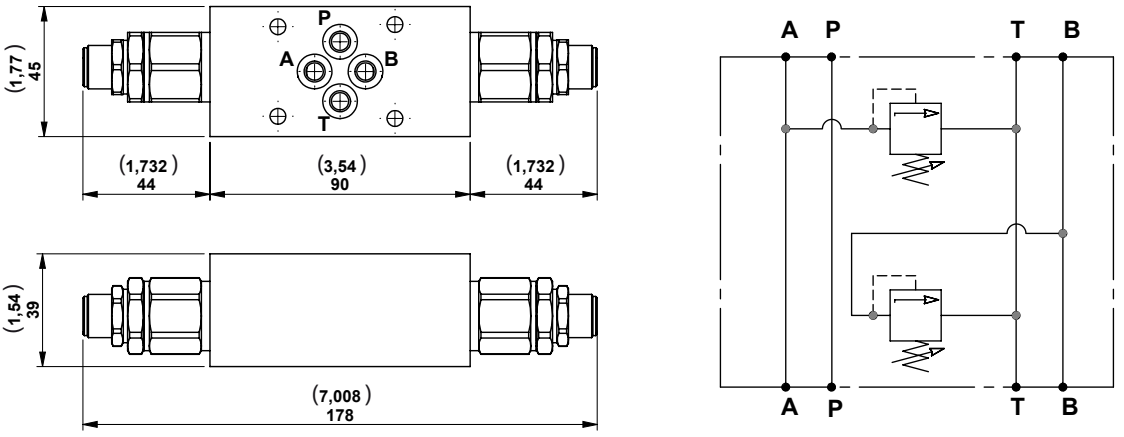
Each block includes 4xO-RING 108.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N101-10	Sandwich block with poppet type "VMD1" relief valve B in T **(25-120 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386101A81A	R930071380
N101-20	Sandwich block with poppet type "VMD1" relief valve B in T **(40-200 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386101A82A	R930071381
N101-35	Sandwich block with poppet type "VMD1" relief valve B in T **(200-350 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386101A83A	R930071382

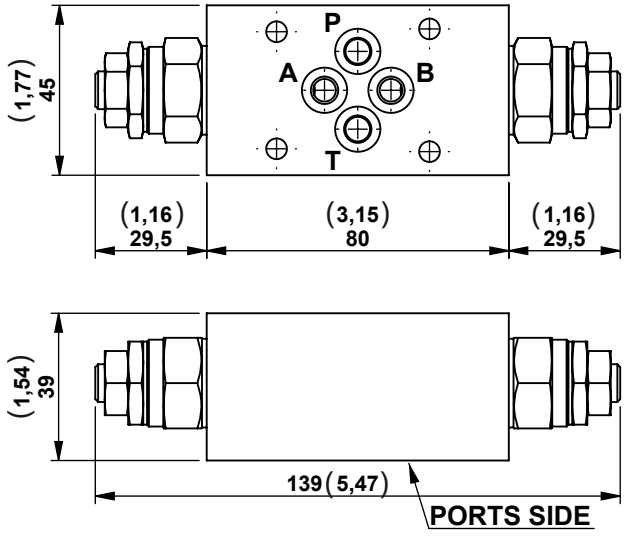
Sandwich blocks with poppet type “VMD1“ relief valves for CETOP 3 (2143) configuration valves

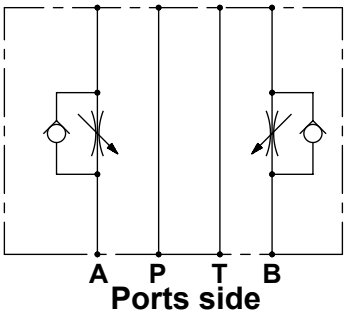
Each block includes 4xO-RING 108.



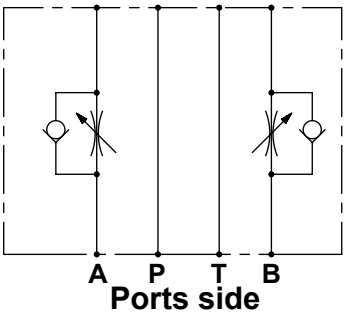
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N102-10	Sandwich block with poppet type "VMD1" relief valves A-B in T **(25-120 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386102A81A	R930071383
N102-20	Sandwich block with poppet type "VMD1" relief valves A-B in T **(40-200 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386102A82A	R930071384
N102-35	Sandwich block with poppet type "VMD1" relief valves A-B in T **(200-350 bar)** for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386102A83A	R930071385

Sandwich blocks with “ST-CU-06” adjustable flow control valves for CETOP 3 (2143) configuration valves
Each block includes 4xO-RING 108.





N78

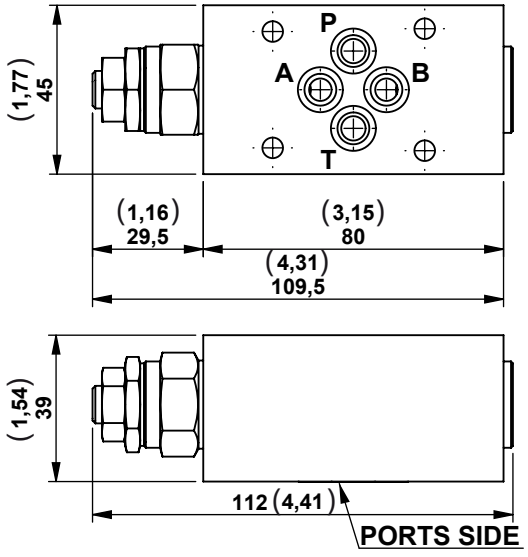


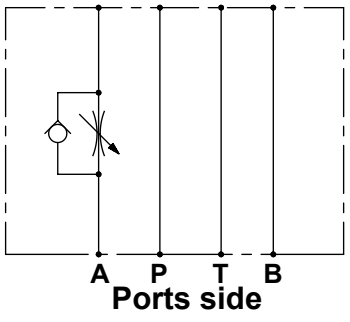
N104

Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N78	Sandwich blocks with ST-CU-06 adjustable flow control valves (that **working on the return to the tank** of the A and B line) for CETOP 3 (2143) configuration valves	300 (4351)	25 (6,60)	G386077A81	R932001156
N104	Sandwich blocks with ST-CU-06 adjustable flow control valves (that **working on the delivery** of the A and B line) for CETOP 3 (2143) configuration valves	300 (4351)	25 (6,60)	G386104A80	R932001205

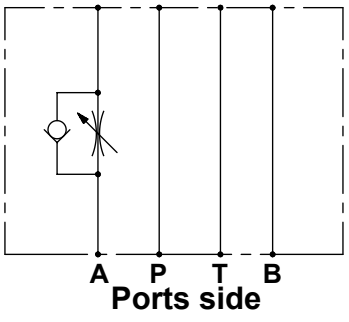
Sandwich blocks with “ST-CU-06” adjustable flow control valves for CETOP 3 (2143) configuration valves

Each block includes 4xO-RING 108.





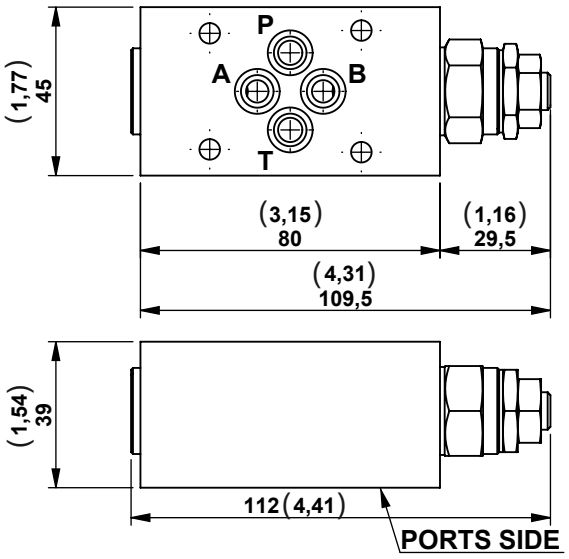
N105

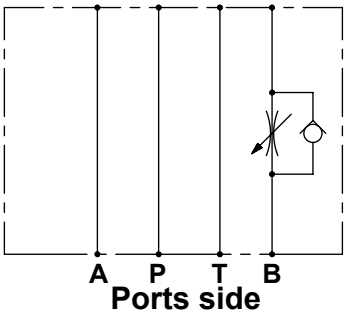


N107

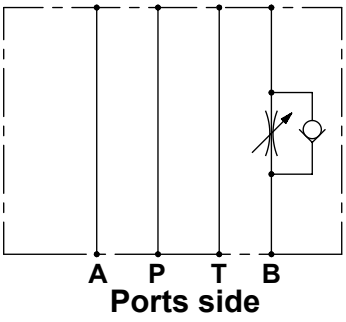
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N105	Sandwich blocks with ST-CU-06 adjustable flow control valves (that **working on the return to the tank** of the A line) for CETOP 3 (2143) configuration valves	300 (4351)	25 (6,60)	G386105A81	R932000183
N107	Sandwich blocks with ST-CU-06 adjustable flow control valves (that **working on the delivery** of the A line) for CETOP 3 (2143) configuration valves	300 (4351)	25 (6,60)	G386107A80	R932001211

Sandwich blocks with “ST-CU-06” adjustable flow control valves for CETOP 3 (2143) configuration valves
Each block includes 4xO-RING 108.





N106

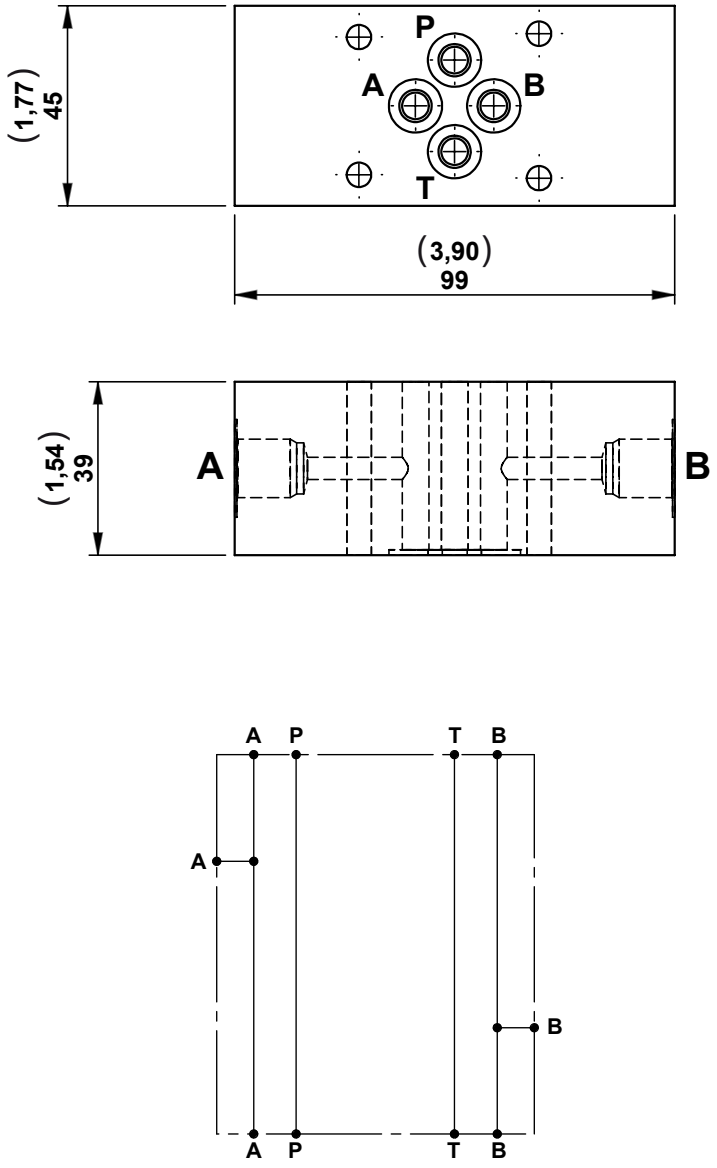


N108

Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N106	Sandwich blocks with ST-CU-06 adjustable flow control valves (that **working on the return to the tank** of the B line) for CETOP 3 (2143) configuration valves	300 (4351)	25 (6,60)	G386106A81	R932000184
N108	Sandwich blocks with ST-CU-06 adjustable flow control valves (that **working on the delivery** of the B line) for CETOP 3 (2143) configuration valves	300 (4351)	25 (6,60)	G386108A80	R932001212

Sandwich block with ports on “A” and “B” line for CETOP 3 (2143) configuration valves

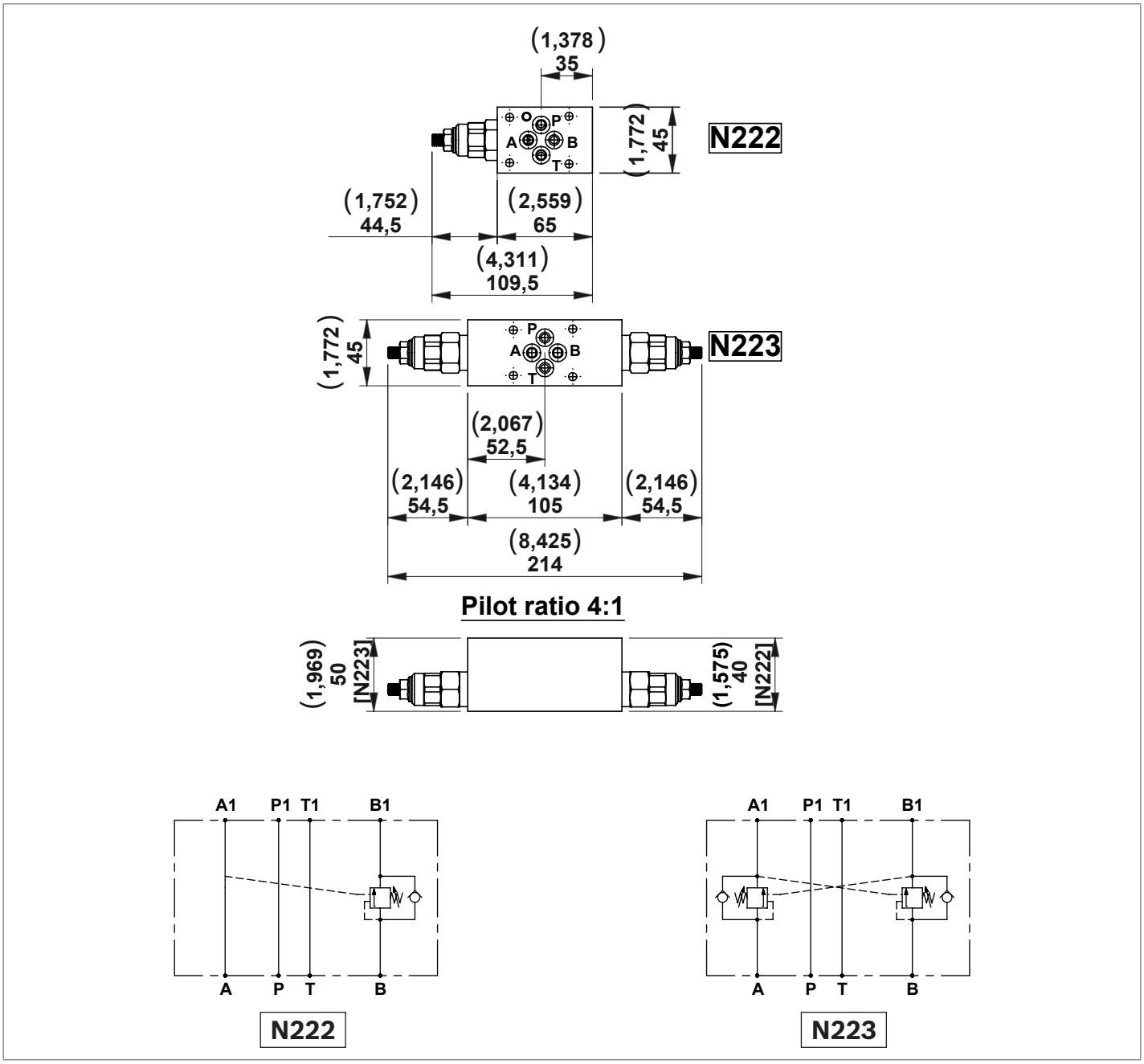
Each block includes 4xO-RING 108.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N19-14	Sandwich block with **1/4"** BSPP ports on A and B line for CETOP3 (2143) configuration valves	300 (4351)	25 (6,60)	G386018010	R932001091

Sandwich blocks with overcenter valves for CETOP 3 (2143) configuration valves

Each block includes 4xO-RING 108.

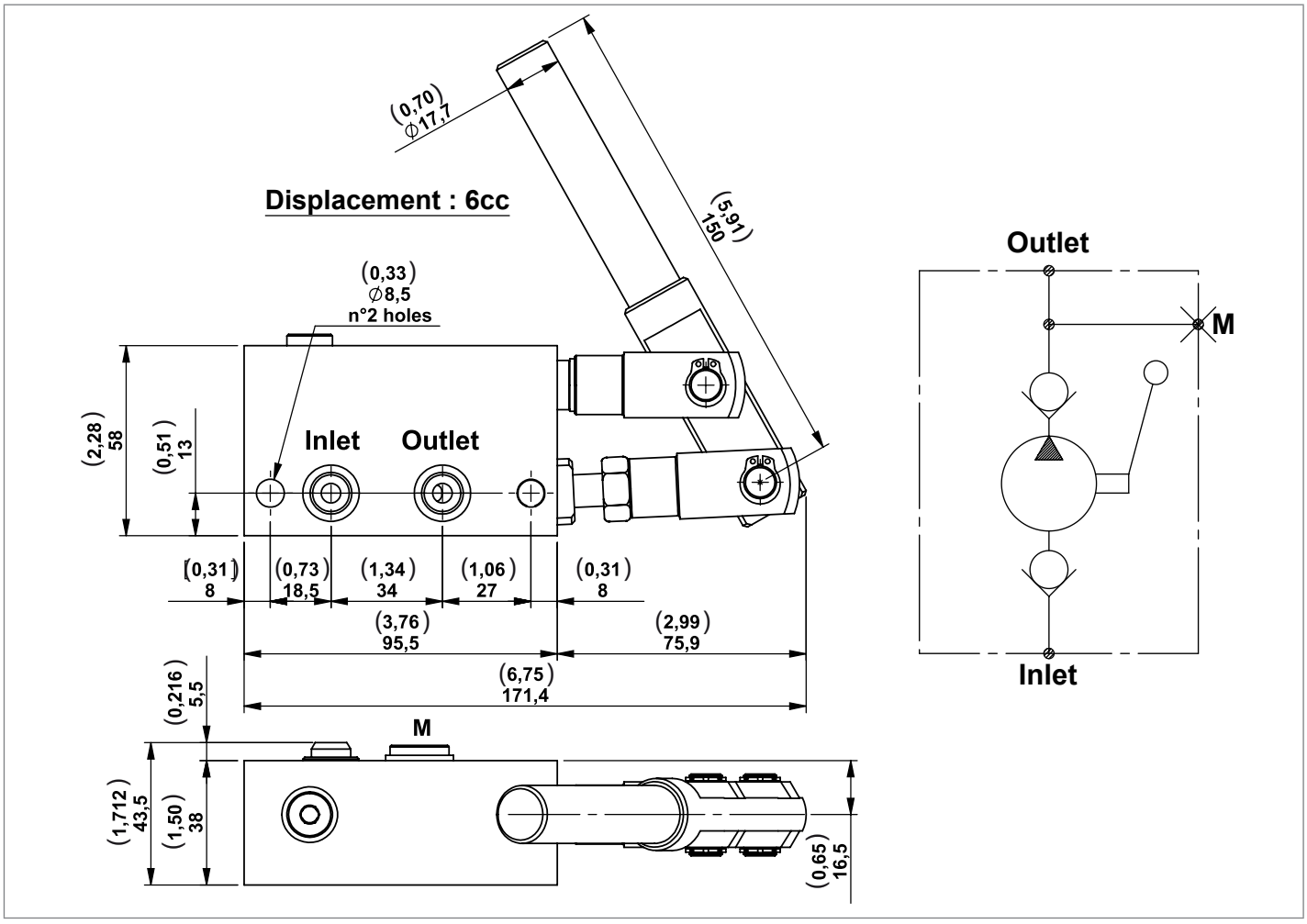


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N222.35	Sandwich block with Overcentre valve VBSN-08AA (**200-350 bar**) **on B** line for CETOP3	300 (4351)	30 (7,93)	G386222003	R932001327
N223.20	Sandwich block with Overcentre valves VBSN-08AA (**100-210 bar**) **on A and B** line for CETOP3	300 (4351)	30 (7,93)	G386223002	R932001329
N223.35	Sandwich block with Overcentre valves VBSN-08AA (**200-350 bar**) **on A and B** line for CETOP3	300 (4351)	30 (7,93)	G386223003	R932001330

Modular hand pump manifold block

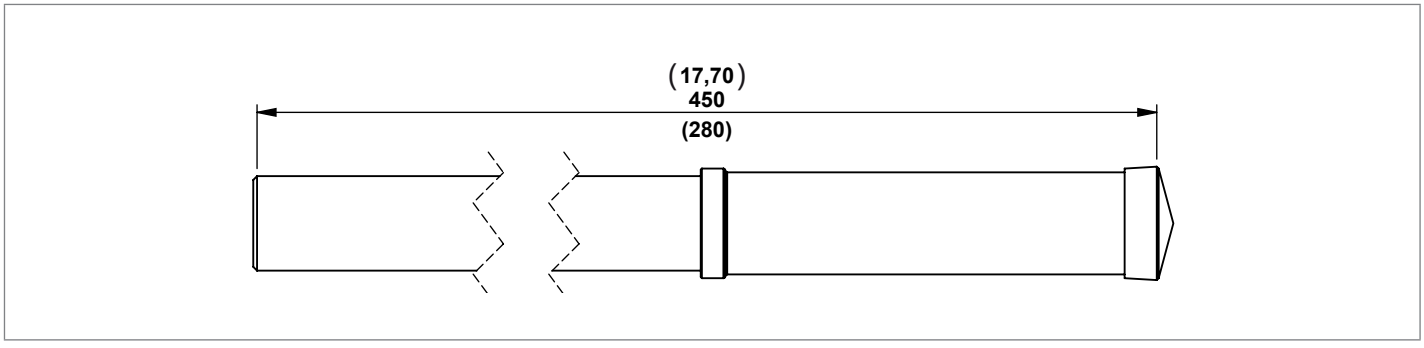
A single acting hand pump usually used for emergency.

Each block includes 5 OR 2050 gaskets.



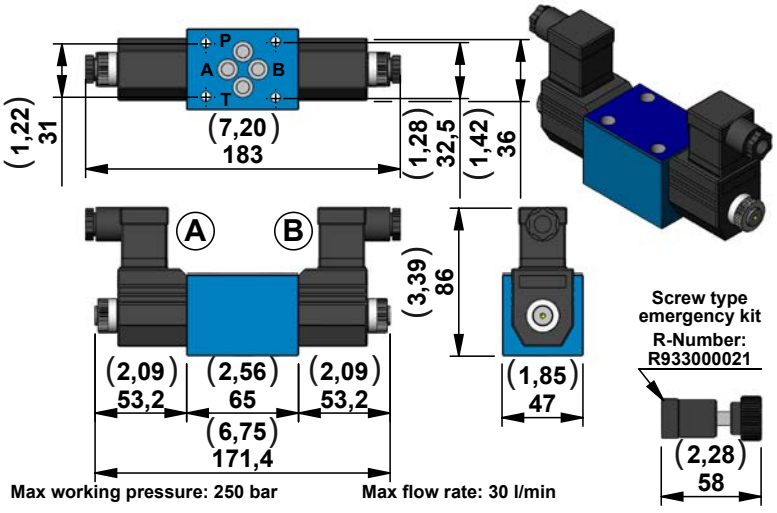
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
N22	Modular hand pump manifold block	350 (5076)	-	G386021A10	R930067575

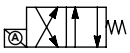
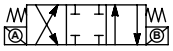
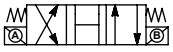
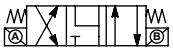
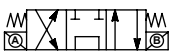
Lever Kit



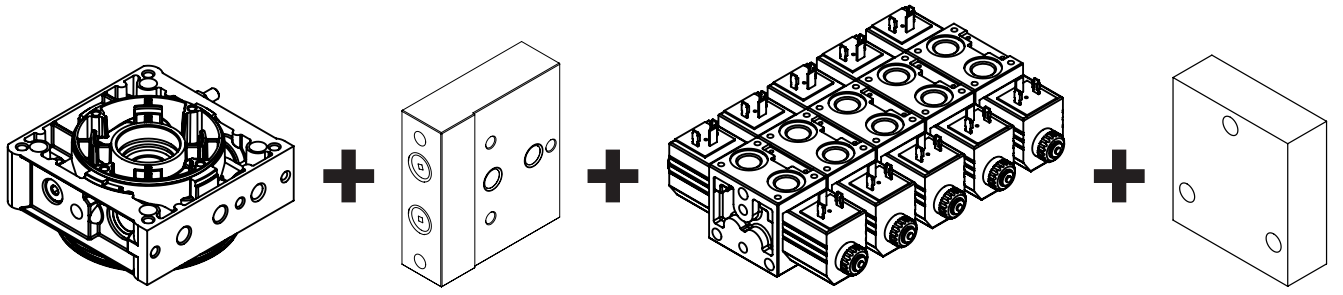
Description	Type	Material number
Lever L= 450	K250133000	R932002452
Lever L= 280	K2501S1058	R932002407

CETOP 2143 [Ø6mm (0,24inch)] Solenoid Valves

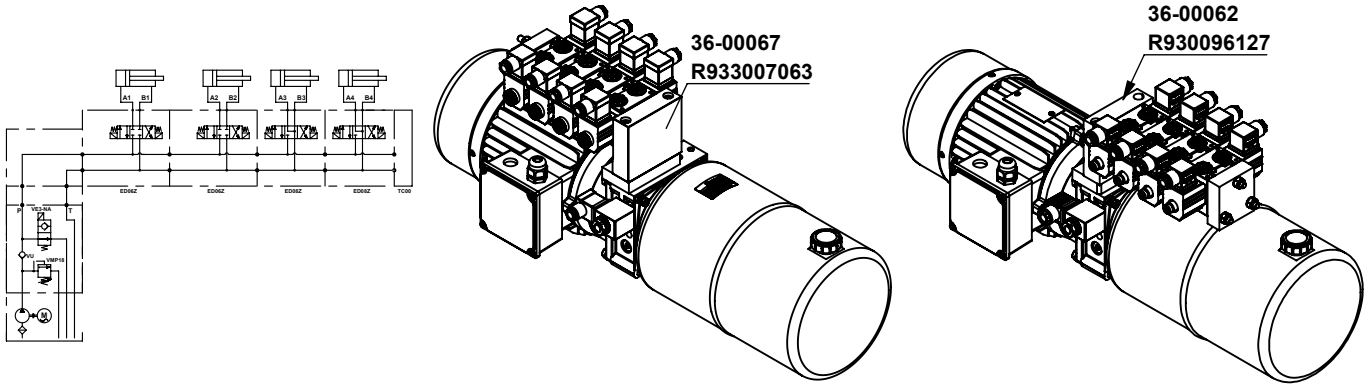


Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Material number	Diagram
E02Z-OB	CETOP3 solenoid valve 12V D.C.	250 (3626)	30 (7,92)	R933004275	
E02Z-OC	CETOP3 solenoid valve 24V D.C.	250 (3626)	30 (7,92)	R933004277	
E02Z-OV	CETOP3 solenoid valve 24V RAC	250 (3626)	30 (7,92)	R933004279	
E02Z-OZ	CETOP3 solenoid valve 220V RAC	250 (3626)	30 (7,92)	R933004281	
E06Z-OB	CETOP3 solenoid valve 12V D.C.	250 (3626)	30 (7,92)	R933004096	
E06Z-OC	CETOP3 solenoid valve 24V D.C.	250 (3626)	30 (7,92)	R933004098	
E06Z-OD	CETOP3 solenoid valve 48V D.C.	250 (3626)	30 (7,92)	R933007830	
E06Z-OV	CETOP3 solenoid valve 24V RAC	250 (3626)	30 (7,92)	R933004102	
E06Z-OW	CETOP3 solenoid valve 110V RAC	250 (3626)	30 (7,92)	R933004103	
E06Z-OZ	CETOP3 solenoid valve 220V RAC	250 (3626)	30 (7,92)	R933004104	
E07Z-OB	CETOP3 solenoid valve 12V D.C.	250 (3626)	30 (7,92)	R933004131	
E07Z-OC	CETOP3 solenoid valve 24V D.C.	250 (3626)	30 (7,92)	R933004133	
E07Z-OD	CETOP3 solenoid valve 48V D.C.	250 (3626)	30 (7,92)	R933004135	
E07Z-OV	CETOP3 solenoid valve 24V RAC	250 (3626)	30 (7,92)	R933004136	
E07Z-OW	CETOP3 solenoid valve 110V RAC	250 (3626)	30 (7,92)	R933004137	
E07Z-OZ	CETOP3 solenoid valve 220V RAC	250 (3626)	30 (7,92)	R933004138	
E08Z-OB	CETOP3 solenoid valve 12V D.C.	250 (3626)	30 (7,92)	R933004191	
E08Z-OC	CETOP3 solenoid valve 24V D.C.	250 (3626)	30 (7,92)	R933004193	
E08Z-OD	CETOP3 solenoid valve 48V D.C.	250 (3626)	30 (7,92)	R933004197	
E08Z-OV	CETOP3 solenoid valve 24V RAC	250 (3626)	30 (7,92)	R933004198	
E08Z-OW	CETOP3 solenoid valve 110V RAC	250 (3626)	30 (7,92)	R933004199	
E08Z-OZ	CETOP3 solenoid valve 220V RAC	250 (3626)	30 (7,92)	R933004200	
E10Z-OB	CETOP3 solenoid valve 12V D.C.	250 (3626)	30 (7,92)	R933004057	
E10Z-OC	CETOP3 solenoid valve 24V D.C.	250 (3626)	30 (7,92)	R933004061	
E10Z-OD	CETOP3 solenoid valve 48V D.C.	250 (3626)	30 (7,92)	R933004063	
E10Z-OV	CETOP3 solenoid valve 24V RAC	250 (3626)	30 (7,92)	R933004065	
E10Z-OW	CETOP3 solenoid valve 110V RAC	250 (3626)	30 (7,92)	R933004067	
E10Z-OZ	CETOP3 solenoid valve 220V RAC	250 (3626)	30 (7,92)	R933004068	

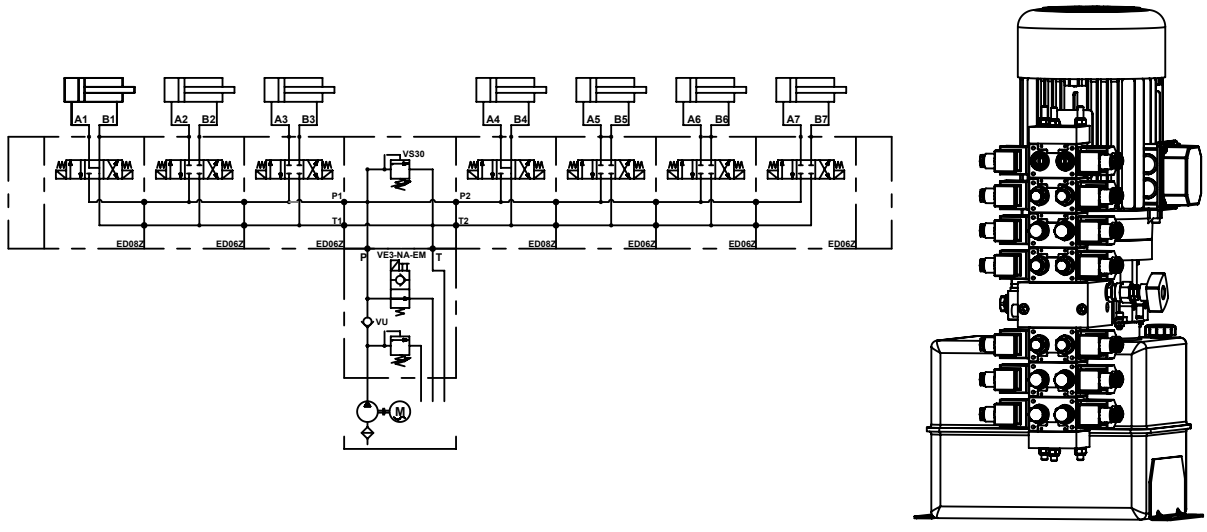
Design



Horizontal Example



CETOP 2143 [Ø6mm (0,24inch)] Solenoid Valves



Note
Please contact our Sales Department for further information.

Modular blocks with two lowering solenoid valves, check valves, and compensated flow control throttle valves (available upon request)

Modular blocks to operate a single acting cylinder in a parallel circuit or a double acting cylinder in regenerative.

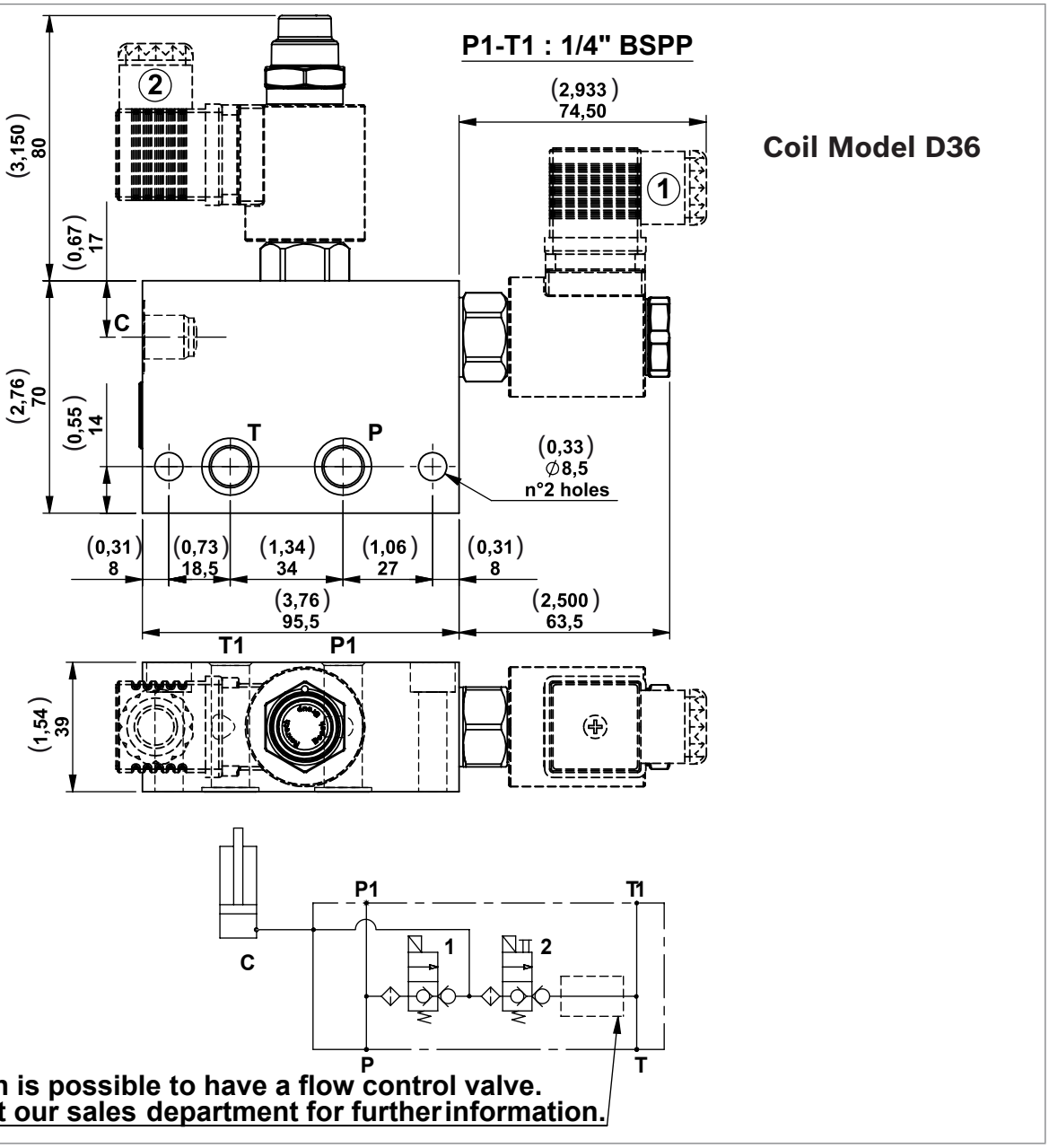
Each block includes 2xO-RING 2056.

Minimum voltage required: 90% of nominal.

Coils not included, must be ordered separately.

For the selection of coil model and voltage please refer to page 69.

For the selection of connectors please refer to page 73.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
V07-14	Modular block with 2 VE with "C" port **1/4"** BSPP	250 (3626)	25 (6,60)	G386507010A	R930062154
V07-38	Modular block with 2 VE with "C" port **3/8"** BSPP	250 (3626)	25 (6,60)	G386507020A	R930064959

Modular blocks with four way three position solenoid valve. Spool type

A selection of modular blocks with 4/3 spool type solenoid valve for small double acting cylinders.

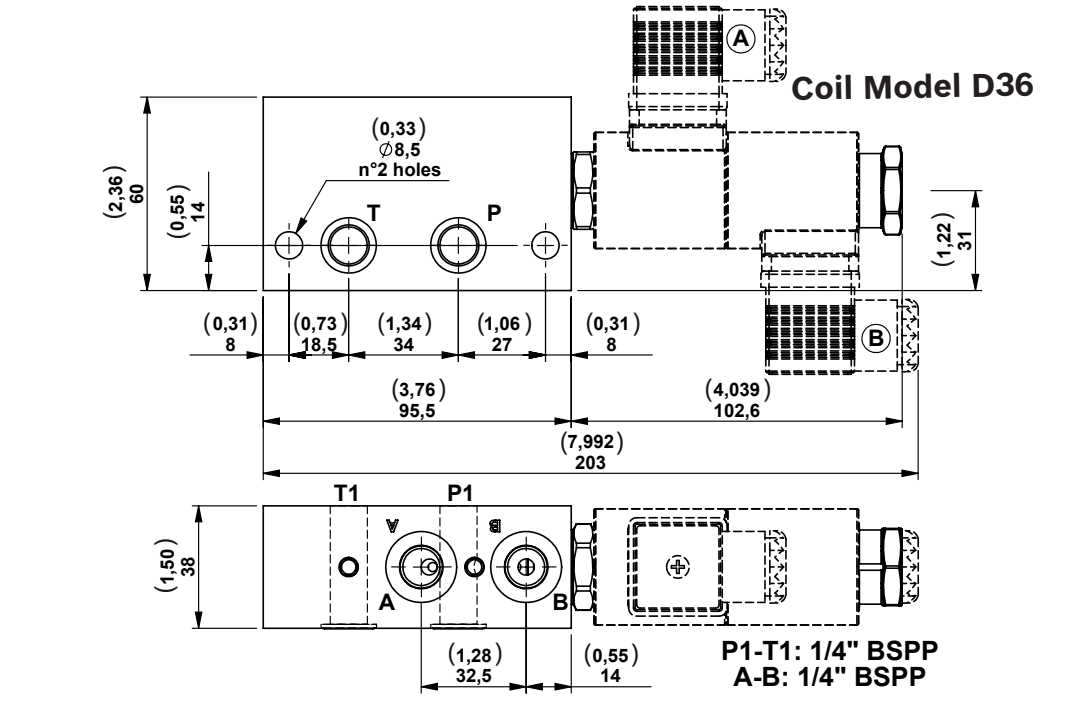
Each block includes 2xO-RING 2056.

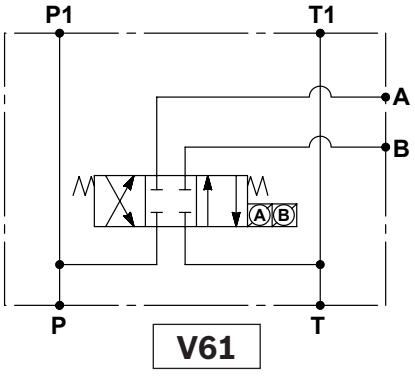
Minimum voltage required: 90% of nominal.

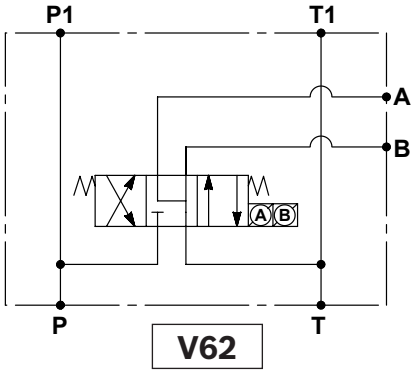
Coils not included, must be ordered separately.

For the selection of coil model and voltage please refer to page 69.

For the selection of connectors please refer to page 73.



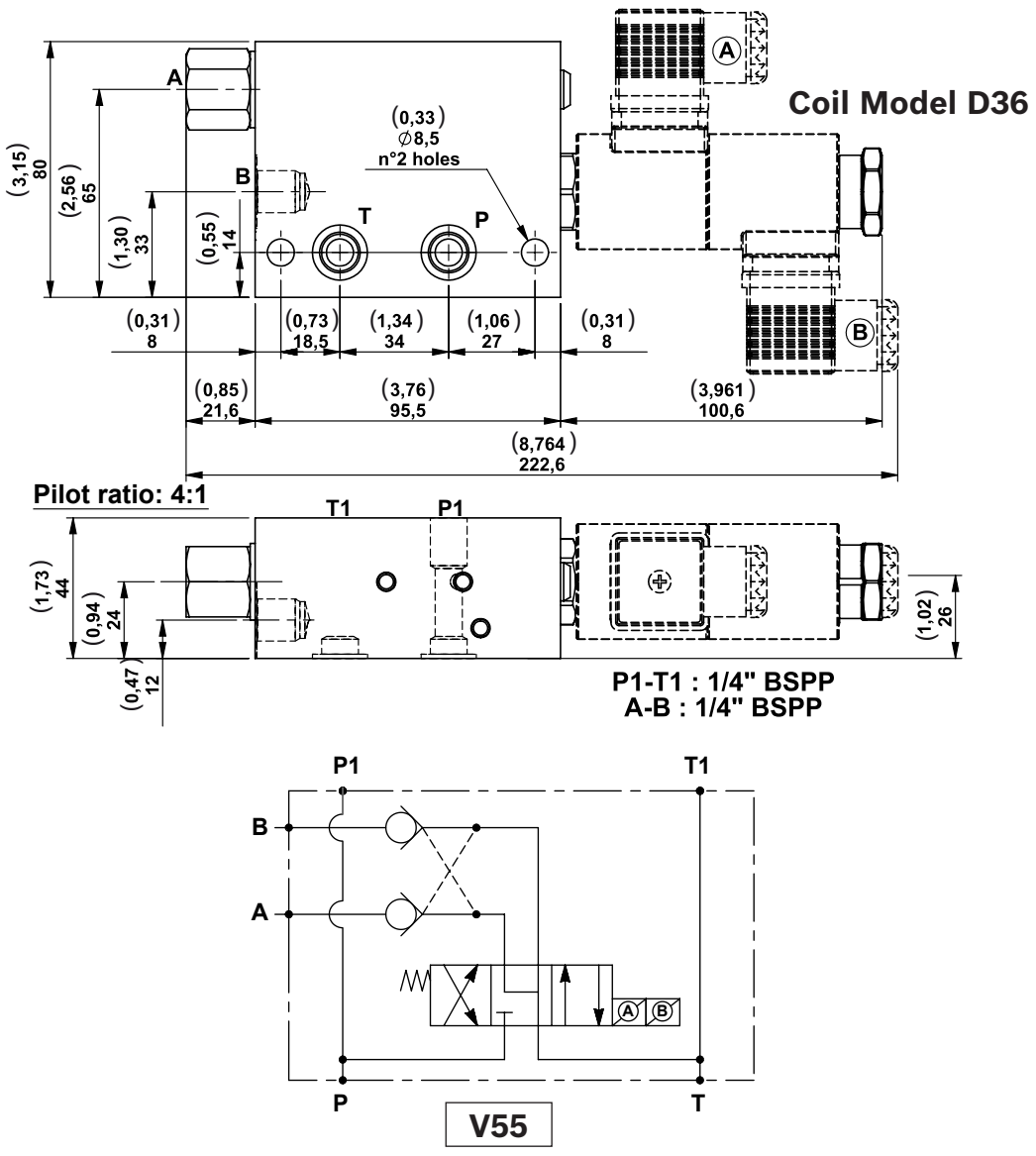




Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
V61	Modular block with 4 way 3 position electric valve (V4.3A)	210 (3046)	10 (2,64)	G386562010A	R930063648
V62	Modular block with 4 way 3 position electric valve (V4.3B)	210 (3046)	10 (2,64)	G386563010A	R930067006

Modular block with four way three position solenoid valve and P.O. check valves on “A” and “B” line

A modular block with 4/3 spool type solenoid valve and P.O. check valves on “A” and “B” line. For small double acting cylinders.
Each block includes 2xO-RING 2056.
Minimum voltage required: 90% of nominal.
Coils not included, must be ordered separately.
For the selection of coil model and voltage please refer to page 69.
For the selection of connectors please refer to page 73.



Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
V55	Modular block with 4 way 3 position electric valve and P.O. check valves on A and B **without O-Ring on pilot piston**	210 (3046)	10 (2,64)	G386591A10A	R930066516

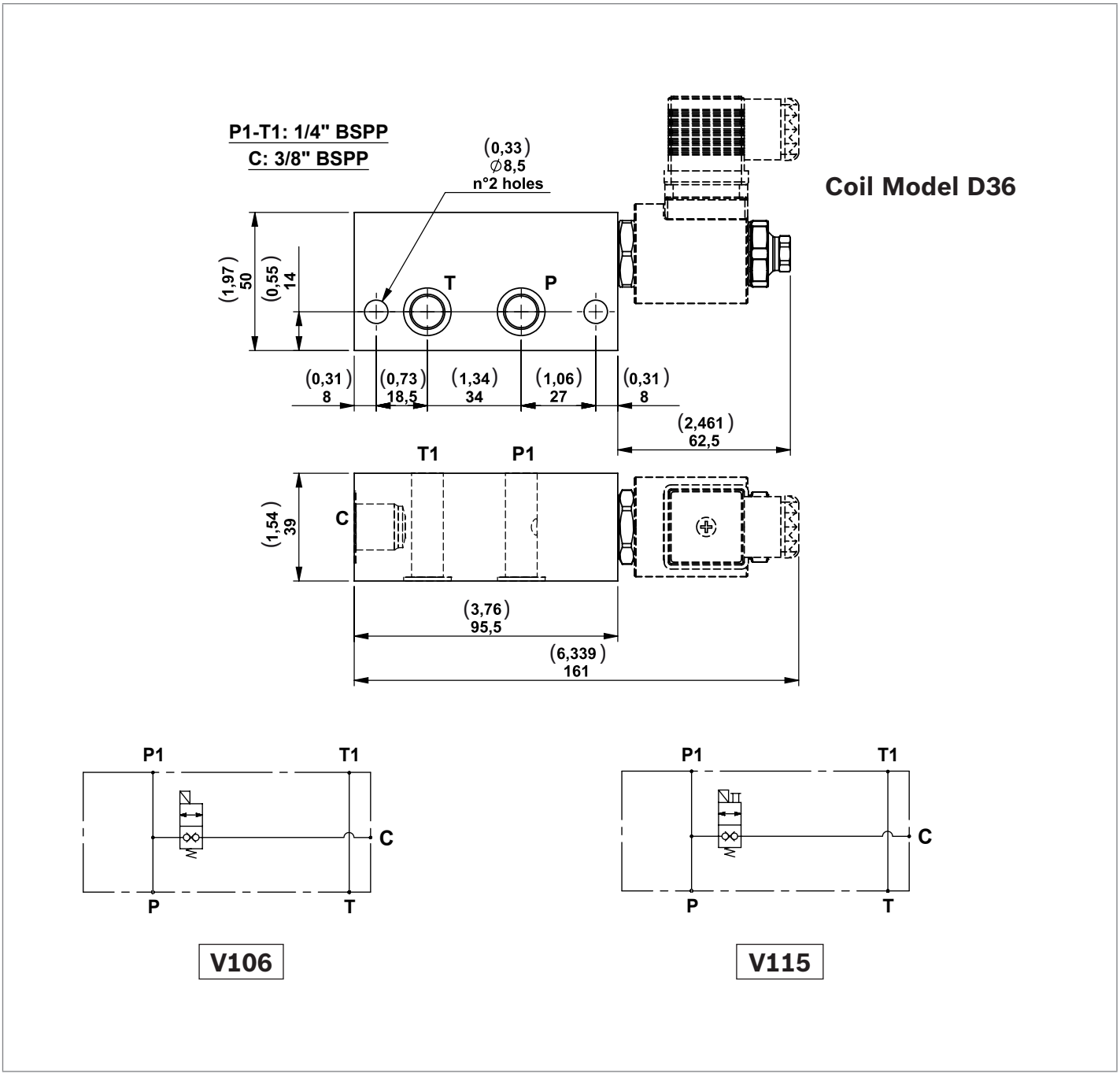
Modular blocks with double locking solenoid valve

Each block includes 2xO-RING 2056.

Coils not included, must be ordered separately.

For the selection of coil model and voltage please refer to page 69.

For the selection of connectors please refer to page 73.

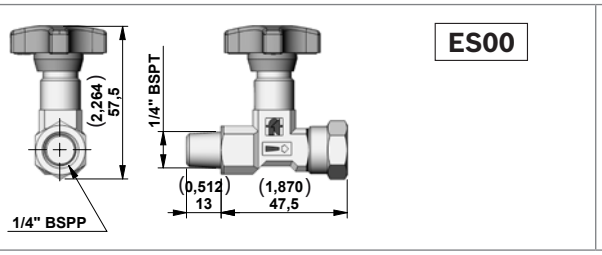


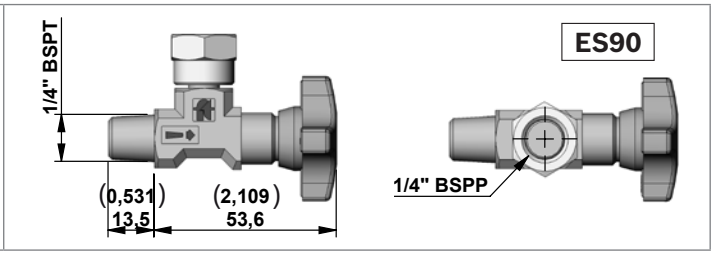
Code	Description	Max working pressure bar (psi)	Max flow l/min (gpm)	Type	Material number
V106	Modular block with DT solenoid valve	250 (3626)	15 (3,96)	G386606020A	R930064757
V115	Modular block with DTE solenoid valve	250 (3626)	15 (3,96)	1586500023A	R930061374

Dimensions [mm (inches)]

Accessories

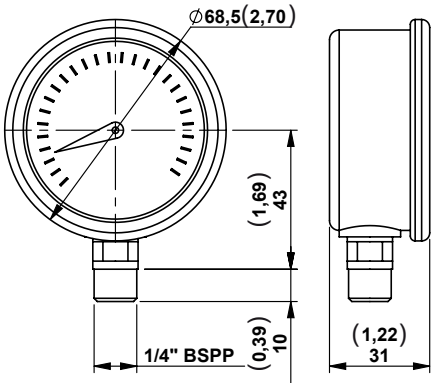
Isolator



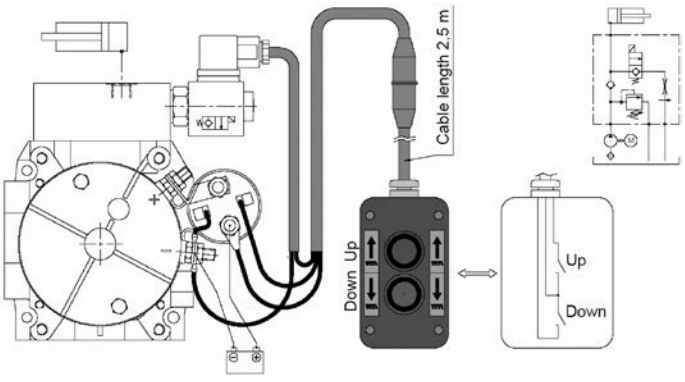


Code	Description	Type	Material Number
ES00	Straight isolator	EM14A	R930069418
ES90	90° isolator	EM14A-T	R930069419

Manometer

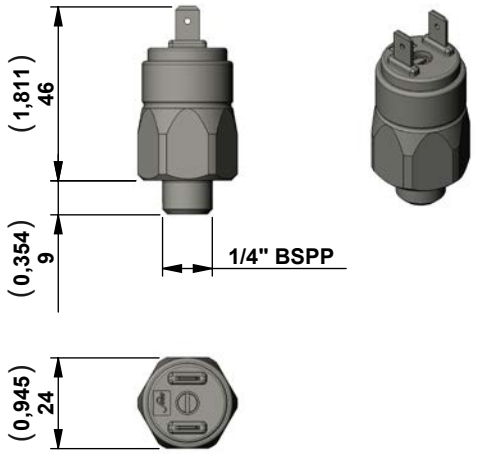


Code	Description	Pressure range bar (psi)	Type	Material Number
MN100	Pressure gauge	0-100 (0-1450)	C163017000	R932000582
MN160	Pressure gauge	0-160 (0-2320)	C163018000	R932000583
MN250	Pressure gauge	0-250 (0-3626)	C163019000	R932000584
MN315	Pressure gauge	0-315 (0-4568)	C163020000	R932000585



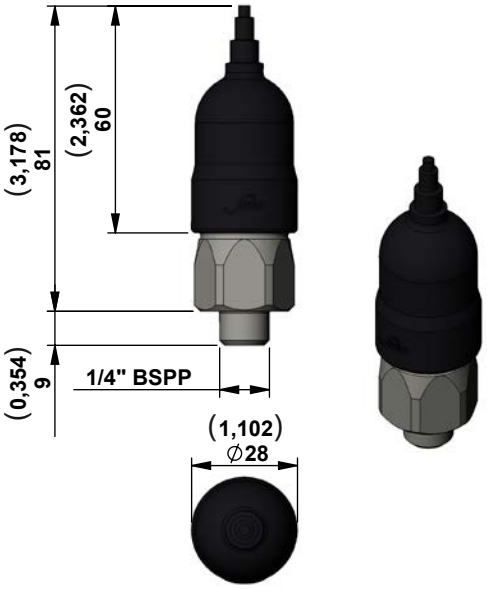
Description	Type	Material Number
Cables for D.C. motor and single acting cilinder	K2.501S1.218	R932002428

Standard Pressure Switches



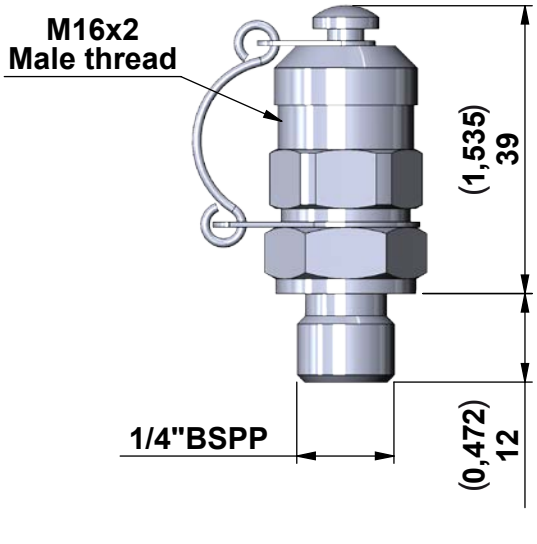
Code	Adjustment Range bar (psi)	Contact Type	Internal Features	Protection (with protective cap assembled)	Type	Material Number
PRNO20	10-20 (145-290)	N.O.	Diaphragm	IP65	C164761000	R932010002
PRNC20	10-20 (145-290)	N.C.	Diaphragm	IP65	C164766000	R932010001
PRNO50	20-50 (290-725)	N.O.	Diaphragm	IP65	C164767000	R932010003
PRNC50	20-50 (290-725)	N.C.	Diaphragm	IP65	C164768000	R932010004
PRNO150	50-150 (725-2175)	N.O.	Piston	IP65	C164769000	R932010005
PRNC150	50-150 (725-2175)	N.C.	Piston	IP65	C164770000	R932010006

Protective Cap for Standard Pressure Switches



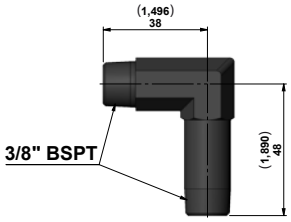
Code	Type	Material Number
CAP	F224013000	R932010000

Test Point ISO 15171-2

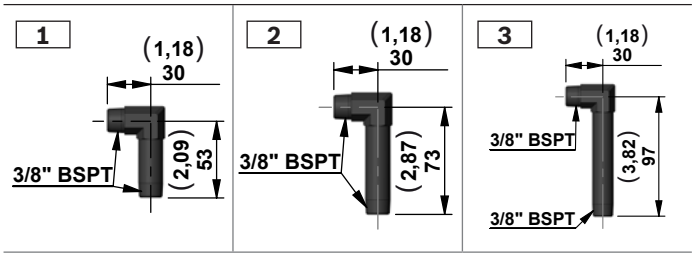


Code	Type	Material Number
TP	R3897PP22	R932008120

Horizontal Suction, Plastic Pipe

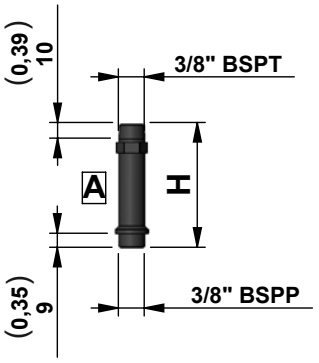


Type	Material Number
K2340S2248	R930098735

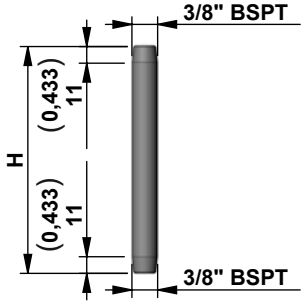


Type	Material Number	Drawing ref.
K2340S2145	R932006771	1
K2340S2146	R932006772	2
K2340S2147	R932006773	3

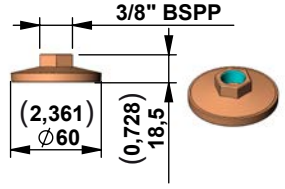
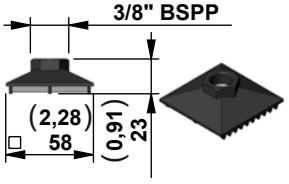
Vertical Suction, Plastic Pipe

Central Manifold	H mm (inch)	Type	Material Number	Drawing ref.	Drawing
KE	32 (1,26)	K234069000	R932002347	B	
	37 (1,46)	K2340S2130	R932002303	A	
	40 (1,58)	K2340S2123	R932002299	A	
	47 (1,85)	K234073000	R932002349	B	
	49 (1,93)	K2340S2118	R932002297	A	
	60 (2,36)	K2340S2129	R932002302	A	
	69 (2,72)	K2340S2172	R932011025	A	
	71 (2,80)	K2340S2131	R932002304	A	
	76 (2,99)	K234074000	R932002350	B	
	80 (3,15)	K2340S2132	R932002305	A	
	90 (3,54)	K2340S2192	R930056927	A	
	98 (3,86)	K234076000	R932002351	B	
	109 (4,29)	K234079000	R932002352	B	
	111 (4,37)	K2340S2133	R932002306	A	
	121 (4,76)	K2340S2110	R932002289	A	
	129 (5,08)	K234072000	R932002348	B	
	134 (5,28)	K2340S2121	R932002298	A	
	144 (5,67)	K234063000	R932002343	B	
	157 (6,18)	K2340S2134	R932002307	A	
	167 (6,58)	K2340S2135	R932002308	A	
	175 (6,89)	K2340S2111	R932002290	A	
	182 (7,17)	K2340S2136	R932002309	A	
	194 (7,64)	K234066000	R932002345	B	
	202 (7,95)	K2340S2137	R932002310	A	
	211 (8,31)	K234064000	R932002344	B	
	222 (8,74)	K2340S2125	R932002300	A	
	237 (9,33)	K2340S2112	R932002291	A	
	245 (9,65)	K2340S2138	R932002311	A	
	255 (10,04)	K2340S2139	R932002312	A	
	284 (11,18)	K2340S2113	R932002292	A	
	297 (11,69)	K2340S2140	R932002313	A	
	317 (12,48)	K2340S2114	R932002293	A	
	334 (13,15)	K2340S2115	R932002294	A	
	345 (13,58)	K2340S2141	R932002314	A	
	355 (13,98)	K2340S2116	R932002295	A	
	373 (14,69)	K2340S2142	R932002315	A	
	382 (15,04)	K2340S2117	R932002296	A	
	402 (15,83)	K2340S2128	R932002301	A	

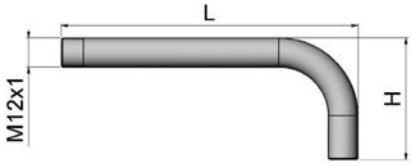
Vertical Suction, Steel Pipe

Central Manifold	H mm (inch)	Type	Material Number	Drawing
KE	86 (3,39)	K234006000	R932009324	
	100 (3,94)	K234081000	R932002353	
	110 (4,33)	K234083000	R932002355	
	117 (4,61)	K2340S2162	R932009323	
	150 (5,91)	K234004000	R932002317	
	160 (6,30)	K2340S2151	R932008456	
	178 (7,01)	K234086000	R932002356	
	212 (8,35)	K234093000	R932002360	
	260 (10,24)	K234087000	R932002357	
	287 (11,30)	K234071000	R932006600	
	348 (13,70)	K2340S2027	R932002272	
	357 (14,05)	K234092000	R932002359	
	385 (15,16)	K234062000	R932002342	
	520 (20,47)	K2340S2047	R932008033	

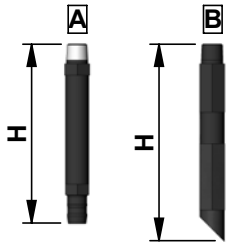
Suction Filter

Compatibility	Filtering Degree (µm)	Max Flow l/min (gpm)	Type	Material Number	Drawing
KE	90	8 (2,11)	K225582000	R932010860	
	90	15 (3,96)	K225566000	R932002243	

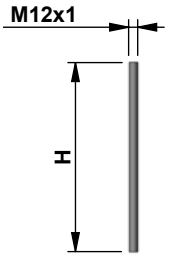
Horizontal Return, Steel Pipe

L mm (inch)	H mm (inch)	Type	Material Number	Drawing
120 (4,72)	45 (1,77)	K234716000	R932002375	
134 (5,28)	90 (3,54)	K234717000	R932002376	
170 (6,69)	90 (3,54)	K234727000	R932002383	
196 (7,719	50 (1,96)	K234792000	R930042237	

Vertical Return, Plastic Pipe

H mm (inch)	Type	Material Number	Drawing ref.	Drawing
100 (3,94)	K234715000	R932002374	A	
110 (4,33)	K234780000	R932011081	B	
120 (4,72)	K234781000	R932011082	B	
150 (5,91)	K234714000	R932002373	A	
160 (6,30)	K234782000	R932011083	B	
200 (7,87)	K234713000	R932002372	A	
250 (9,84)	K234784000	R932011084	B	
300 (11,81)	K234785000	R932011085	B	
400 (15,75)	K234786000	R932011086	B	

Vertical Return, Steel Pipe

H mm (inch)	Type	Material Number	Drawing
250 (9,84)	K234718000	R932002377	
300 (11,81)	K234719000	R932002378	
400 (15,75)	K234722000	R932002379	

Bosch Rexroth Oil Control S.p.A.
Via Artigianale Sedrio, 12
42030 Vezzano sul Crostolo
Reggio Emilia - Italy
Tel. +39 0522 601 801
Fax +39 0522 606 226 / 601 802
compact-hydraulics-cpm@boschrexroth.com
www.boschrexroth.com/compacthydraulics

© This document, as well as the data, specifications and other information set forth in it, are the exclusive property of Bosch Rexroth Oil Control S.p.a.. It may not be reproduced or given to third parties without its consent.
The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.
Subject to change.