

## UNIVERSAL CENTRAL MANIFOLDS

A single **universal die-cast aluminium central manifold** in four different executions is the core part of all power units for all industrial, mobile and marine applications. It features the **highest integration and flexibility** on the market, with up to **nine devices** which can be fitted in the cavities plus a wide selection of manifold blocks and valves which can be attached externally

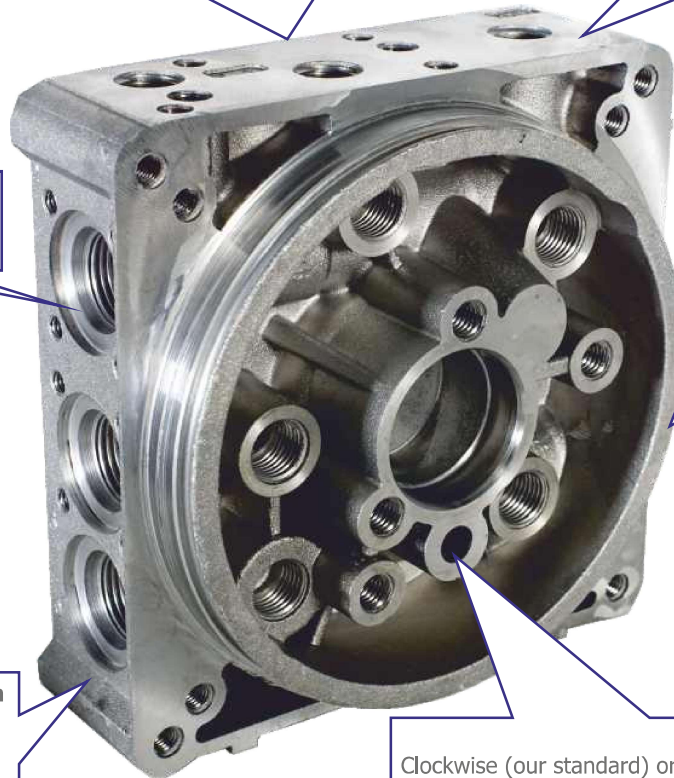
The **interface** to hose fittings or external additional manifolds is **standardised**. The P and T ports are **1/4" BSPP** threaded (International standard) or **9/16-18UNF** (SAE06 - American standard) for direct connection of hose fittings.

Lateral cavities are conform to **SAE08 standard** (3/4-16UNF)

The **interfaces** to tanks and motors are **standardised**. All plastic and steel tanks have the same interface and can be easily interchanged. All AC or DC motors can be fitted easily either directly to the central manifold or through adaptor flanges (B14 IEC or NEMA 56C and 184TC standard motors)

Maximum flow is **25 l/min** (6,5 GPM), with a **low pressure drop**. Maximum motor power is 7,5kW, well above the average of other alternative products on the market

Clockwise (our standard) or counterclockwise tang drive shaft **standard gear pumps** can be mounted. **Double pumps**, including those with an integral **HI-LO circuit**, and **low noise helicoidal gear pumps** are also available



### Q & A

#### Which universal central manifold execution should I choose?

UA type is the most widely applied for single acting or double acting circuits. UB is the real «Universal» central manifold since, in addition to UA type features, there are two extra lateral cavities to mount, for example, an integrated emergency hand pump and an externally adjustable flow control. U4 is recommended for compact and cost effective double acting circuits with a single cylinder, while UR is for bidirectional pumps.

#### Do I need special tools to assemble the components within the central manifold?

No. All the valves are screw-in type in a single piece construction (no loose nuts, washers, springs; nothing difficult to assemble or fall apart). The components can be easily assembled with simple hand tools and hexagon or Allen wrenches.

#### Is the central manifold available as a loose component?

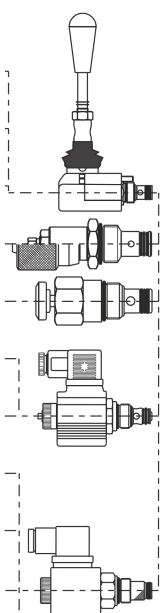
Yes. We can supply either fully assembled and tested power packs or kits of loose components which can be kept in stock by our worldwide distributors and easily assembled to satisfy local market demand quickly and effectively. Central manifolds and other components are 100% tested even when supplied as loose parts.

# SECTION B

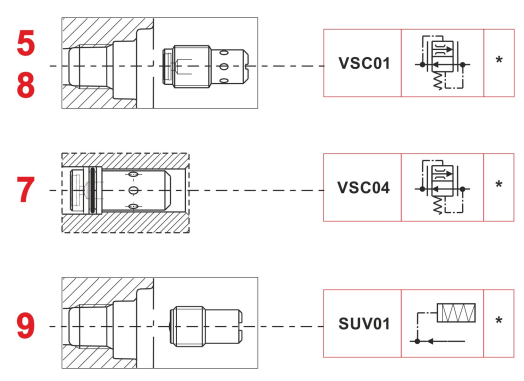
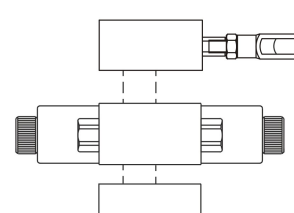


## UNIVERSAL CENTRAL MANIFOLDS «UA» - CAVITIES & INTEGRAL COMPONENTS

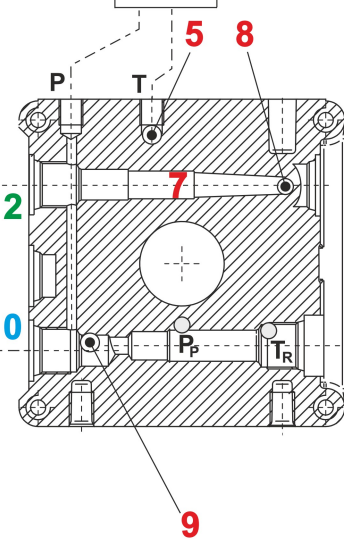
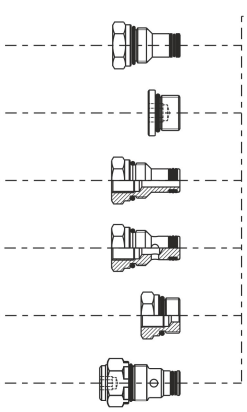
EM		CM04M
E		CM04L
U		PMC02
S		CSB04
Z		CPE04
M		MDV31E
D		MDV30E
Q		MSV31
C		MSV31E
A		MSV30
B		MSV30E
T		CSPC15



Modular blocks  
(See section F)

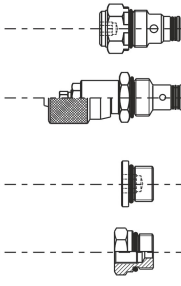


G		E70100005
L		E70100004
P		E70100006
H		E70100003
N		E70100002
J		VUC20

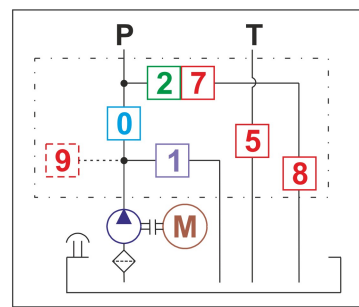


	E70200010		XP
	VMDC20		V*

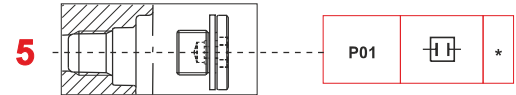
J		VUC20
S		CSB04
L		E70100004
N		E70100002



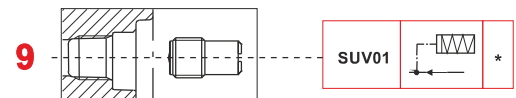
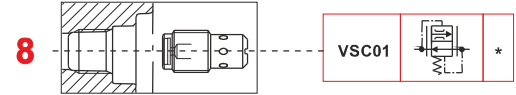
Hydraulic scheme



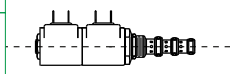
**UNIVERSAL CENTRAL MANIFOLDS «U4» - CAVITIES & INTEGRAL COMPONENTS**



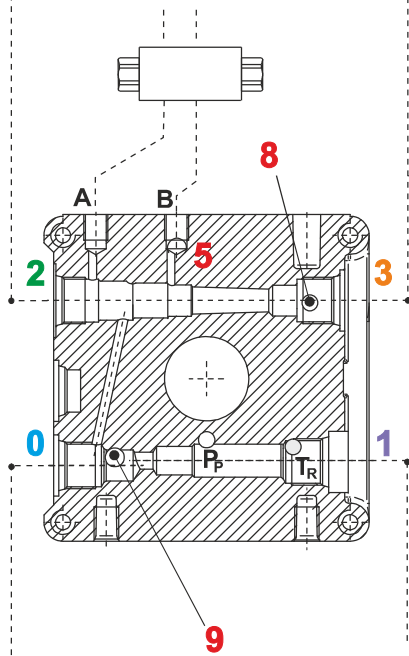
To ensure proper functionality cavity 5 must be always plugged



4VA2		MSV4VA2
4VB2		MSV4VB2
4VC2		MSV4VC2
4VE2		MSV4VE2
4VA11C		MSV4VA11C



Modular manifold with check valves  
(See section F)

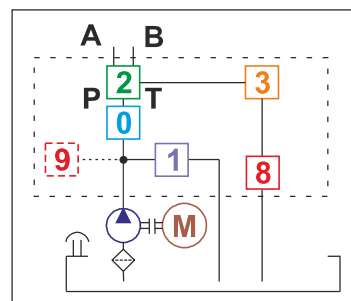


	VCF6		R
	CSB04		S
	E70100004		L
	E70100006		P
	VSC6		F

	E70200010		XP
	VMDC20		V*

J		VUC20	
S		CSB04	
L		E70100004	
N		E70100002	

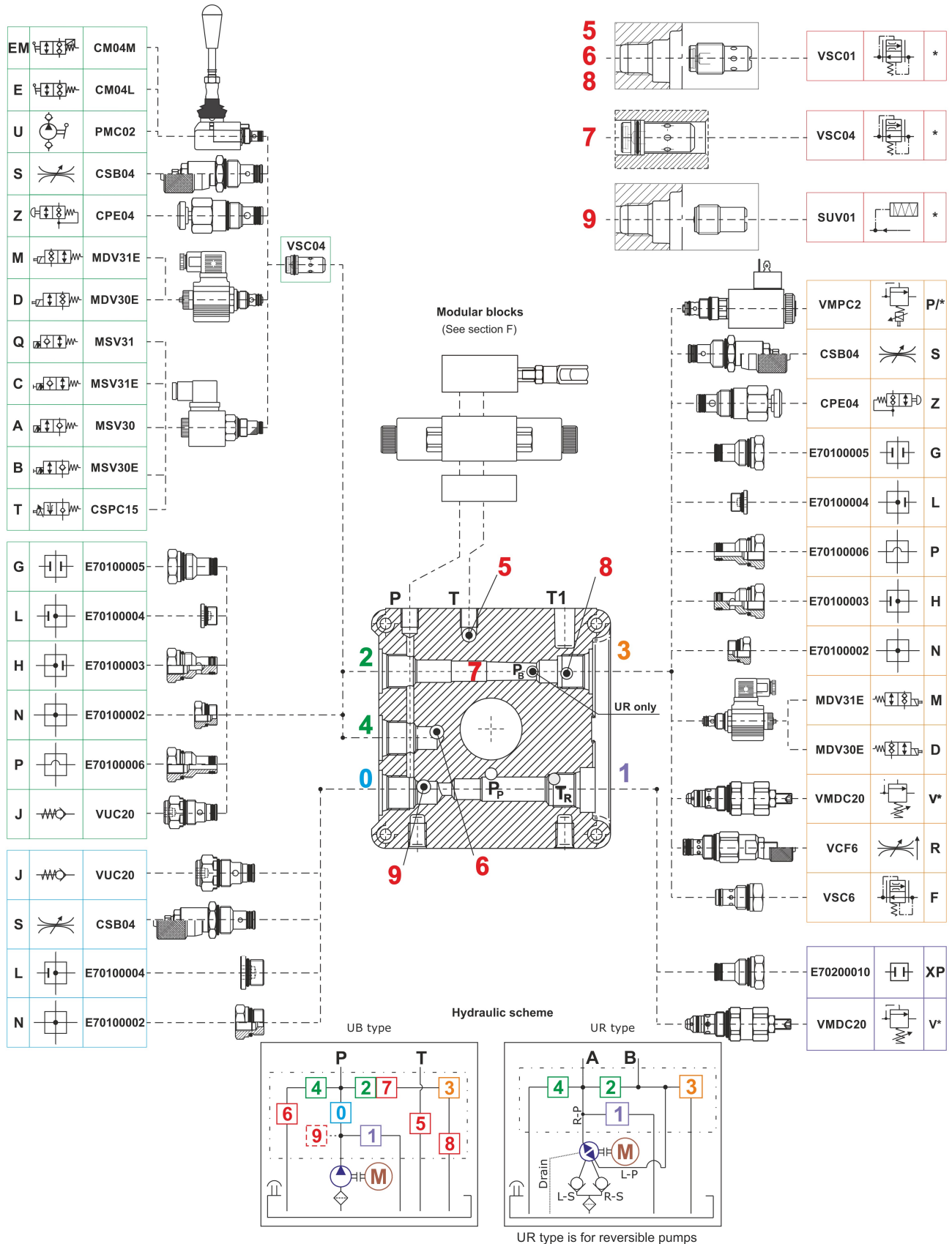
Hydraulic scheme



# SECTION B



## UNIVERSAL CENTRAL MANIFOLDS «UB» - «UR» - CAVITIES & INTEGRAL COMPONENTS



EM		CM04M
E		CM04L
U		PMC02
S		CSB04
Z		CPE04
M		MDV31E
D		MDV30E
Q		MSV31
C		MSV31E
A		MSV30
B		MSV30E
T		CSPC15

G		E70100005
L		E70100004
H		E70100003
N		E70100002
P		E70100006
J		VUC20

J		VUC20
S		CSB04
L		E70100004
N		E70100002

VSC01		*
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VSC04		*
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SUV01		*
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VMPC2		P/*
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CSB04		S
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CPE04		Z
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E70100005		G
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E70100004		L
-----------	--	---

E70100006		P
-----------	--	---

E70100003		H
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E70100002		N
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MDV31E		M
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MDV30E		D
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VMDC20		V*
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VCF6		R
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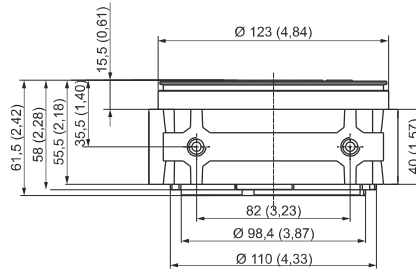
VSC6		F
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E70200010		XP
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VMDC20		V*
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UNIVERSAL CENTRAL MANIFOLDS - OVERALL DIMENSIONS

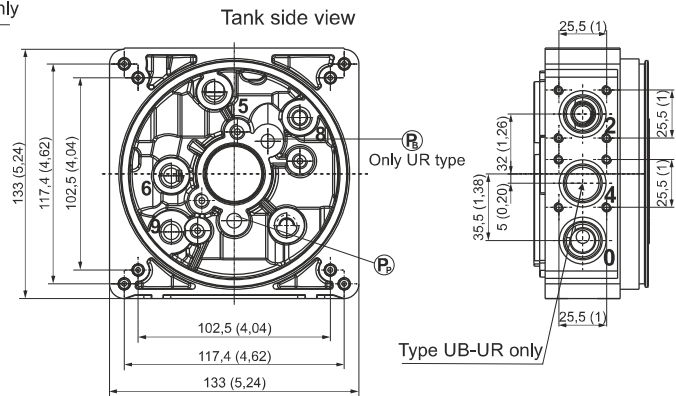
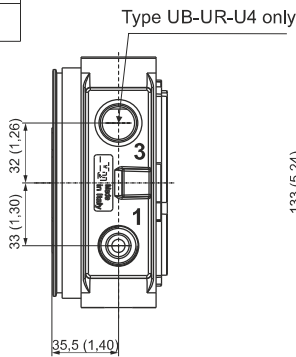
Type	Spare part code
UA	C30401000
UB	C30402000
U4	C30404000
UR	C30405000
UAUS	C30401010
UBUS	C30402010
U4US	C30404010
URUS	C30405010



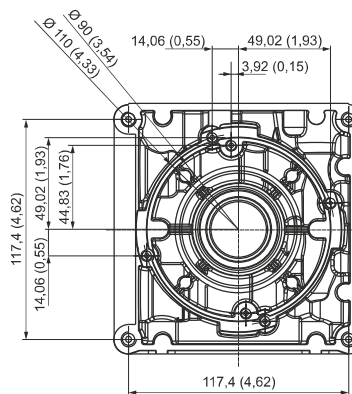
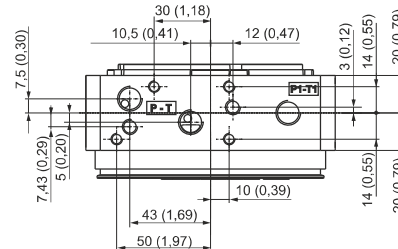
Weight: 1,1 kg (2,42 lb)

Notes:

- codes ending with **US** are according American standards, machined with 9/16-18 UNF (SAE06) P-T exit ports.
- all dimensions in mm (inches)



Cavity	Thread
0, 1, 2, 3, 4	3/4-16 UNF (SAE08)
P-T	1/4 BSP 9/16-18UNF (SAE06 - US type)
P <sub>1</sub> -T <sub>1</sub>	1/4 BSP (threaded on request only)
5, 6, 8, 9	1/4 BSP (cavity 9 threaded on request only)
External manifolds fixings	2 tie rods M8 4 tie rods M6 (UB type only)
Tank fixings	4 screws M6x14
Integral AC motors and B14 flanges fixings	4 screws M8x25
DC motors fixings	2 screws M6x14 or tie rods M6
Pumps fixings	2 screws M8 (see pump lenghts on the relevant tables)
Mounting Foot fixings	2 screws M10x18 3/8-16 UNC US type
PMC hand pump and CM lever valve fixings	4 screws M5x45



Motor side view