# V3V + FR + LUB SUNTESi.

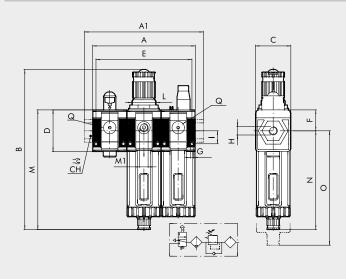
For full details and list of components refer to the sections about shut-off valve, filter-regulator and lubricator.



TECHNICAL DATA		V3	BV + FR	+ LUB	SY1		V3V + FR	R + LUB SY	2	
Threaded port		1/8′	1	/4″	3/8″	3/8″	1/2″	3/4″		1″
Degree of filtration	μm			5 (	yellow) - outpu	t air purity cla	s ISO8573-1: 3	3.7		
	-						ss ISO8573-1: 4			
				50	) (blue) - output	air purity clas	s ISO8573-1: 5	5.7		
Max. inlet pressure	bar			15				13		
	MPa			1.5				1.3		
	psi			217				188		
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min			250				200		
(P In=10 bar)	scfm			9				12.5		
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min			050				000		
(Pln=10 bar)	scfm			37				41.5		
Relief valve flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min			70				100		
	scfm			2.5	•			3.5		
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C			10 to +5	0			10 to +50		
Full outflow with zero inlet pressure	NIL /			luded				luded		
Drain flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min			500				000		
Padlockable knob	scfm			18				71		
						rith both V3V c				
Upstream pressure compensation		598		-02	584	ed, via balanc 1479		1440		1.407
Weight Fluid	g	398	2	593			1452	1448		1436
			Va	rtical	Compress	ed air or othe		ertical		
Mounting position Additional air take-off, for pressure gauges or fittings			1/8″, fro					ont and rear		
Additional air take-off flow rate at 6.3 bar	Nl/min				450 (LUB)	1	500 (V3V) - 14		ען דו / כ	
(0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	scfm		(30) - 18 (3V) - 18				53 (V3V) - 49			
Filter bowl capacity	cm <sup>3</sup>	10 ( V		30				.5 (i k) - 20 (i 70	100	
Quantity of filled oil	cm <sup>3</sup>			50 60				130		
Condensate drain	ciii	RWG			nual condensati	 e discharge ar	d automatic dis		o press	ure
							ndependent of p			
							ig internal diam			
							pressure drop			
							version must			
Recommended oils						SO and UNI FE				
					(Energol HPL:	Spinesso: Mol	oil DTE; Tellus oi	l)		
Wall fixing screws			No. 2	M4 screv		/		M5 screws		
						1				



### **OVERALL DIMENSIONS**



			SIZE 1			SIZ	Έ 2	
H (threaded por	rt)	1/8″	1/4″	3/8″	3/8″	1/2″	3/4″	1″
Α			126			18	1.5	
A1		-	-	128	-	-	217	217
В	RMSA		198			24	16	
	RA/SAC		202			25	50	
С			44			6	1	
СН			-		-	-	32	36
D			51.5			70	).5	
E			117.1			16	8.5	
F			25.8			38		
G		Hole	for M4 so	crews		Hole for N	15 screw	s
I.			16			22	.5	
L			M30x1.5			M3	8x2	
Μ	RMSA		148			17	78	
	RA/SAC		152				32	
M1 (pressure ga			1/8″			1/		
Ν	RMSA		122.2			13	9.8	
	RA/SAC		126.2			14	3.8	
0	RMSA		202			24	45	
	RA/SAC		206			24		
Q (no. 2 additio			1/8″			1/	4″	
air takes-off								

## **KEY TO CODES**

56	1		V	10	В		L	10	
SYNTESI	SIZE	THREADED INPUT CONNECTION	ELEMENT	TYPE	ELEMENT	DEGREE OF FILTRATION, TYPE OF CONDENSATE DRAIN AND SETTING RANGE	ELEMENT	OIL FILLING	THREADED OUTPUT CONNECTION
56 Syntesi 5X Syntesi anti-corrosion	1 Size 1 2 Size 2	1 1/8" port 2 1/4" port 3 3/8" port 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port	<b>V</b> V3V	<ul> <li>10 Manual with Ø3.5 hole for padlocks</li> <li>11 Manual with Ø7 hole for padlock</li> </ul>	B Filter- regulator	<ul> <li>10 5 μm, RMSA, 0 to 2 bar</li> <li>20 μm, RMSA, 0 to 2 bar</li> <li>30 50 μm, RMSA, 0 to 2 bar</li> <li>40 5 μm, RA, 0 to 2 bar</li> <li>50 20 μm, RA, 0 to 2 bar</li> <li>50 50 μm, RA, 0 to 2 bar</li> <li>60 50 μm, RA, 0 to 2 bar</li> <li>11 5 μm, SAC, 0 to 2 bar</li> <li>21 20 μm, SAC, 0 to 2 bar</li> <li>31 50 μm, SAC, 0 to 2 bar</li> </ul>	L Lubricator	10 Manual filling from the top	1 1/8" port 2 1/4" port 3 3/8" port 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port
						<ul> <li>12 5 μm, RMSA, 0 to 4 bar</li> <li>22 0 μm, RMSA, 0 to 4 bar</li> <li>32 50 μm, RMSA, 0 to 4 bar</li> <li>42 5 μm, RA, 0 to 4 bar</li> <li>42 5 μm, RA, 0 to 4 bar</li> <li>52 20 μm, RA, 0 to 4 bar</li> <li>52 50 μm, RA, 0 to 4 bar</li> <li>43 5 μm, SAC, 0 to 4 bar</li> <li>43 50 μm, SAC, 0 to 4 bar</li> <li>43 50 μm, SAC, 0 to 4 bar</li> </ul>			
						14         5 μm, RMSA, 0 to 8 bar           24         20 μm, RMSA, 0 to 8 bar           34         50 μm, RMSA, 0 to 8 bar           34         5 μm, RA, 0 to 8 bar           54         20 μm, RA, 0 to 8 bar           54         20 μm, RA, 0 to 8 bar           54         20 μm, RA, 0 to 8 bar           55         50 μm, RA, 0 to 8 bar           15         5 μm, SAC, 0 to 8 bar           25         20 μm, SAC, 0 to 8 bar           35         50 μm, SAC, 0 to 8 bar			
Version con the lower po	ersion availal manual conde Irain with cor aveys the drai ort. Irain with cor	ble only in size 1.	, independen ne pipe havin	it of pressure and ig internal diamete	flow rate. er 6 mm in	35         50 μm, SAC, 0 to 8 b dar           16         5 μm, RMSA, 0 to 12 bar           26         20 μm, RMSA, 0 to 12 bar           36         50 μm, RMSA, 0 to 12 bar           36         50 μm, RA, 0 to 12 bar           37         50 μm, SAC, 0 to 12 bar           37         50 μm, SAC, 0 to 12 bar			

UNITS

N.B. Besides the below mentioned codes	, vou can order e	elements composed	at your wil	Il accordina to the key to codes.

Code	Description	Code	Description		
V3V + FR + LU	B Syntesi <sub>®</sub> SY1	V3V + FR + LUB	Syntesi <sub>®</sub> SY2	NOTE	
5611V10B24L	101 V3V+FR+LUB SY1 1/8 20 08 RMSA	5623V10B24L1	03 V3V+FR+LUB SY2 3/8 20 08 RMSA	Anti-corrosion version	
5611V10B54L	101 V3V+FR+LUB SY1 1/8 20 08 RA	5623V10B54L1	03 V3V+FR+LUB SY2 3/8 20 08 RA	5 <mark>X</mark>	
5612V10B24L	102 V3V+FR+LUB SY1 1/4 20 08 RMSA	5624V10B24L1	04 V3V+FR+LUB SY2 1/2 20 08 RMSA	Example	
5612V10B54L	102 V3V+FR+LUB SY1 1/4 20 08 RA	5624V10B54L1	04 V3V+FR+LUB SY2 1/2 20 08 RA	5X11V10B54L101 V3V+FR+	LUB SY1 1/8 20 08 RA
5613V10B24L	103 V3V+FR+LUB SY1 3/8 20 08 RMSA	5625V10B24L1	05 V3V+FR+LUB SY2 3/4 20 08 RMSA	anti-corro	sion
5613V10B54L	103 V3V+FR+LUB SY1 3/8 20 08 RA	5625V10B54L1	05 V3V+FR+LUB SY2 3/4 20 08 RA		
		5626V10B24L1	06 V3V+FR+LUB SY2 1 20 08 RMSA		
		5626V10B54L1	06 V3V+FR+LUB SY2 1 20 08 RA		

NOTES

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CONTINUE DRACKET FU		PRESSURE GAUGES		
	OR REG. AND FR KNOB			<b>-</b>
C	Code Description		Code	Description
	9200701 SF100 - BIT-ND 1/4 - SY1	$\langle \rangle$	9700101	M 40 1/8 012
$+ \varphi + \varphi + +$	9400701 SF200 - ND-3/8 1/2 - SY2	( June )	9700102	M 40 1/8 04
		W III - FI	9800101	M 50 1/8 012
			9800102	M 50 1/8 04
			9900102	M 63 1/4 012
			9900101	M 03 1/4 012
	Code A B C D E			
	<b>9200701</b> 32 20 12 5.5 14.2			
$\forall$	<b>9400701</b> 42 40 12 5.5 15	$\sim$		
			9700109	M 40x40 1/8 04
			9700110	M 40x40 1/8 012
OUNTING BRACKET			7700110	M 40X40 1/ 0 012
	Vertical mounting			
	venical mounting			
	Col Col			-
		ADAPTERS FOR PRESSUR	RE GAUGES (SY)	2)
rizontal mounting			Code	Decarintian
	N			Description
	No Alternation		9210005	1/4 adapter for 1/8 pressure gauge
ь Н				
D C				
		e		
G.				
	KAT THA			
	K VO	COIL 22 mm FOR APR A		
		COIL 22 mm FOR APR A	ND V3V ELPN	
			Code	Description
	M			Coil 22 Ø 8 BA 2W-12VDC
5-	$\prec$	$\langle \bigcirc \rangle$		
				Coil 22 Ø 8 BA 2W-24VDC
				Coil 22 Ø 8 BA 3.5VA-24VAC
de Description		YU J	W0215000121	Coil 22 Ø 8 BA 3.5VA-110VAC
00716X Mounting brac	:ket SY1		W0215000131	Coil 22 Ø 8 BA 3.5VA-220VAC
00717X Mounting brac				
ote: Supplie complete with screv	us and washers			
ix torque 0.8 Nm for SY1 - M				
des to be used tor units in the s	standard and the anti-corrosion version			
de A B	C D E F G H L M N		00 mm	
de AB	C         D         E         F         G         H         L         M         N           12.7         5.5         7         3         0.8         25         43.8         46.5         47	"UL" AND "CSA" COILS	22 mm	
de A B 00716X 41.5 20	12.7 5.5 7 3 0.8 25 43.8 46.5 47			Description
le A B 00716X 41.5 20	C         D         E         F         G         H         L         M         N           12.7         5.5         7         3         0.8         25         43.8         46.5         47           12.7         5.5         8         3         1.3         30         57.5         58.3         59.5		Code	Description
le A B 00716X 41.5 20	12.7 5.5 7 3 0.8 25 43.8 46.5 47	"UL" AND "CSA" COILS	Code W0215000251	Coil 22 Ø 8 BA 2W-12VDC UR
A         B           00716X         41.5         20           00717X         60         40	12.7         5.5         7         3         0.8         25         43.8         46.5         47           12.7         5.5         8         3         1.3         30         57.5         58.3         59.5		Code W0215000251 W0215000201	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR
le A B 00716X 41.5 20 00717X 60 40	12.7 5.5 7 3 0.8 25 43.8 46.5 47		Code W0215000251 W0215000201 W0215000211	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le A B 00716X 41.5 20 00717X 60 40	12.7         5.5         7         3         0.8         25         43.8         46.5         47           12.7         5.5         8         3         1.3         30         57.5         58.3         59.5		Code W0215000251 W0215000201 W0215000211	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR
le A B 00716X 41.5 20 00717X 60 40	12.7         5.5         7         3         0.8         25         43.8         46.5         47           12.7         5.5         8         3         1.3         30         57.5         58.3         59.5		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le A B 00716X 41.5 20 00717X 60 40	12.7       5.5       7       3       0.8       25       43.8       46.5       47         12.7       5.5       8       3       1.3       30       57.5       58.3       59.5         IS ON THE BAR (DIN EN50022)		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le A B 00716X 41.5 20 00717X 60 40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le A B 00716X 41.5 20 00717X 60 40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
A         B           00716X         41.5         20           00717X         60         40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le A B 00716X 41.5 20 00717X 60 40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le         A         B           00716X         41.5         20           00717X         60         40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
A         B           00716X         41.5         20           00717X         60         40	12.7 5.5 7 3 0.8 25 43.8 46.5 47 $12.7 5.5 8 3 1.3 30 57.5 58.3 59.5$ <b>IS ON THE BAR (DIN EN50022)</b> $60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -$		Code W0215000251 W0215000201 W0215000211 W0215000221	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
le         A         B           00716X         41.5         20           00717X         60         40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	C SN US	Code W0215000251 W0215000201 W0215000211 W0215000221 W0215000231	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-110VAC UR
le         A         B           00716X         41.5         20           00717X         60         40	12.7 5.5 7 3 0.8 25 43.8 46.5 47 $12.7 5.5 8 3 1.3 30 57.5 58.3 59.5$ <b>IS ON THE BAR (DIN EN50022)</b> $60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -$		Code W0215000251 W0215000201 W0215000211 W0215000221 W0215000231	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR
Je         A         B           00716X         41.5         20           00717X         60         40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	C SN US	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-110VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR
A         B           00716X         41.5         20           00717X         60         40	12.7 5.5 7 3 0.8 25 43.8 46.5 47 $12.7 5.5 8 3 1.3 30 57.5 58.3 59.5$ <b>IS ON THE BAR (DIN EN50022)</b> $60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-110VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR
Je         A         B           00716X         41.5         20           00717X         60         40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Description Coil 30 Ø 8 2W-24VDC
le     A     B       00716X     41.5     20       00717X     60     40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Description Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ
de A B 00716X 41.5 20 00717X 60 40 ONNECTION BRACKET	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Description Coil 30 Ø 8 2W-24VDC
le     A     B       20716X     41.5     20       20717X     60     40	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ Coil 30 Ø 8 3.5VA-110VAC 50/60 HZ
Image: legendress of the second se	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ Coil 30 Ø 8 3.5VA-110VAC 50/60 HZ
$\frac{1}{2} \frac{1}{2} \frac{1}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Description Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ
le A B DO716X 41.5 20 do 40 DONNECTION BRACKET	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ Coil 30 Ø 8 3.5VA-110VAC 50/60 HZ
le     A     B       D0716X     41.5     20       D0717X     60     40         DNNECTION BRACKET         Image: Comparison of the security of	12.7 5.5 7 3 0.8 25 43.8 46.5 47 $12.7 5.5 8 3 1.3 30 57.5 58.3 59.5$ <b>IS ON THE BAR (DIN EN50022)</b> $60 - 60 - 60 - 60 - 60 - 60 - 60 - 60 -$	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ Coil 30 Ø 8 3.5VA-110VAC 50/60 HZ
le A B D0716X 41.5 20 00717X 60 40 DNNECTION BRACKET Comparison Compariso	12.7 5.5 7 3 0.8 25 43.8 46.5 47 12.7 5.5 8 3 1.3 30 57.5 58.3 59.5 <b>IS ON THE BAR (DIN EN50022)</b> 60 60 M5 (SY2) M4 (SY1) 31,5 5,5 5,5 (SY2)	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ Coil 30 Ø 8 3.5VA-110VAC 50/60 HZ
le A B DO716X 41.5 20 do 40 DONNECTION BRACKET	12.7 5.5 7 3 0.8 25 43.8 46.5 47 12.7 5.5 8 3 1.3 30 57.5 58.3 59.5 <b>IS ON THE BAR (DIN EN50022)</b> 60 60 M5 (SY2) M4 (SY1) 31,5 5,5 5,5 (SY2)	COIL 30 mm FOR APR A	Code W0215000251 W0215000201 W0215000221 W0215000221 W0215000231 ND V3V ELPN Code W0210010100 W0210011100 W0210012100	Coil 22 Ø 8 BA 2W-12VDC UR Coil 22 Ø 8 BA 2W-24VDC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-24VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 22 Ø 8 BA 3.5VA-220VAC UR Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 2W-24VDC Coil 30 Ø 8 3.5VA-24VAC 50/60 HZ Coil 30 Ø 8 3.5VA-110VAC 50/60 HZ

8 8 99.2

**KIT FOR COIL EEXM** 

#### Description

Kit for coil 30 24 VDC EEXMT5 cable 3m 0227606913 0227606915 Kit for coil 30 24 VDC EEXMT5 cable 5m 0227608013 Kit for coil 30 24 VAC EEXMT5 cable 3m 0227608015 Kit for coil 30 24 VAC EEXMT5 cable 5m 0227608023 Kit for coil 30 110 VAC EEXMT5 cable 3m 0227608025 Kit for coil 30 110 VAC EEXMT5 cable 5m 0227608033 Kit for coil 30 230 VAC EEXMT5 cable 3m Kit for coil 30 230 VAC EEXMT5 cable 5m 0227608035

According to Atex 2014/34/EU rule, 🐼 II 2G Ex mb IIC T4/T5 Gb € II 2D Ex tb IIIC T130/T95 °C IP66 Db N.B.: Supplied complete with adapter for Ø8 mm sleeve

#### ELECTRIC CONNECTOR 22 mm FOR APR AND V3V ELPN Coc

ELECTRIC CONNECTOR 30 mm FOR APR AND V3V ELPN Code

Code



Code	Description
W0970510011	Connector standard
W0970510012	Connector 22 LED 24V
W0970510013	Connector 22 LED 110V
W0970510014	Connector 22 LED 220V
W0970510015	Connector 22 LED VDR 24V
W0970510016	Connector 22 LED VDR 110V
W0970510017	Connector 22 LED VDR 220V
W0970510070	Connector 22 II 2 GD ATEX

Description

W0970520033 Connector 30 STD

W0970520034 Connector 30 LED 24V

W0970520035 Connector 30 LED 110V

W0970520036 Connector 30 LED 220V

W0970520037 Connector 30 LED VDR 24V

W0970520038 Connector 30 LED VDR 110V

W0970520039 Connector 30 LED VDR 220V



**KIT COIL SIDE 22 IP65** 

Code

Code

9210000

9210010

9210000X

9210010X

0222100100

to atmospheric agents.

Code	Description
9210001	Kit IN OUT 1/8 SY1
9210002	Kit IN OUT 1/4 SY1
9210003	Kit IN OUT 3/8 SY1
9210011	Kit IN OUT 3/8 SY2
9210012	Kit IN OUT 1/2 SY2
9210013	Kit IN OUT 3/4 SY2
9210014	Kit IN OUT 1 SY2
9210001X	Kit IN OUT 1/8 SY1 anti-corrosion
9210002X	Kit IN OUT 1/4 SY1 anti-corrosion
9210003X	Kit IN OUT 3/8 SY1 anti-corrosion
9210011X	Kit IN OUT 3/8 SY2 anti-corrosion
9210012X	Kit IN OUT 1/2 SY2 anti-corrosion
9210013X	Kit IN OUT 3/4 SY2 anti-corrosion
9210014X	Kit IN OUT 1 SY2 anti-corrosion

Description

Kit for coils 22 - IP65

Improved IP65 protection, even after prolonged exposure

Max torque 0.4 Nm for SY1 Max torque 2.5 Nm for SY2

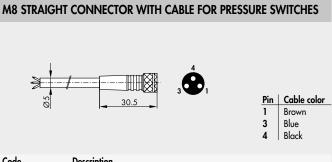
#### **CONNECTING NIPPLE KIT**



Description Connecting nipple kit SY1 Connecting nipple kit SY2 Connecting nipple kit SY1 anti-corrosion Connecting nipple kit SY2 anti-corrosion

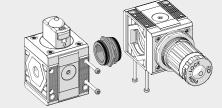
Max torque 0.4 Nm for SY1 Max torque 2.5 Nm for SY2

#### 90° CONNECTING ELEMENT KIT



Code	Description
02400A0100	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 1 m
02400A0250	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 2.5 m
02400A0500	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 5 m
02400A1000	M8 female 3 PIN HIGH FLEX CL6 connector with cable L = 10 m

Mobile laying cable, class 6 according to IEC 60228

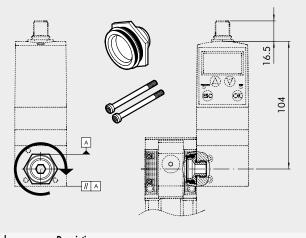


Code Description	
9210009 90° SY1 connection eleme	nt kit
9210019 90° SY2 connection eleme	nt kit
9210009X 90° anti-corrosion SY1 cc	nnection element kit
9210019X 90° anti-corrosion SY2 cc	nnection element kit

Max torque 0.4 Nm for SY1 Max torque 2.5 Nm for SY2



## KIT CONNECTING REGTRONIC 1/4 (PAGE C6.10) AND GS REGULATOR (PAGE C6.2)



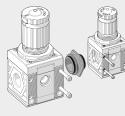
Code 9210004 Description Adapter for regtronic 1/4 SY1

#### Max torque for screw, 0.4 Nm

#### Instructions:

- 1) Screw the connecting bushing onto the REGTRONIC 1/4 as far as it will go. Use sealant on the G1/4 thread to provide a further seal.
- 2) Unscrew the bushing slightly until two surfaces of the hexagon are parallel to the body of REGTRONIC 1/4 (see diagram).
- 3) Insert the bushing into the Syntesi® unit.
- 4) Tighten the two self-tapping screws in the Syntesis unit to a torque of 0.4 Nm max.

### SY1 - SY2 SIZE ADAPTER



Code	Description
9210006	SY1 - SY2 size adapter
9210006X	SY1 - SY2 size adapter anti-corrosion

Max torque for screw, 0.4 Nm for SY1 Max torque for screw, 2.5 Nm for SY2

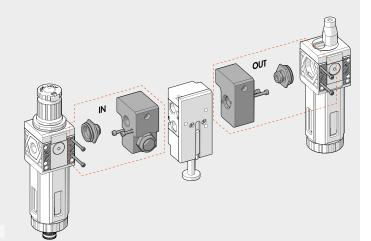
### SY1 - SY2 KIT FOR CONNECTION TO FLUX 1 - 2



Code Description 900099A002 Adapter FLUX 1 - SY1 900099A003 Adapter FLUX 2 - SY2

Max torque for screw, 0.4 Nm for SY1 Max torque for screw, 2.5 Nm for SY2 See page C6.33 for the assembly diagram.

#### SY1 - SY2 KIT FOR CONNECTION TO SERIE 70 SAFE AIR® VALVES



Code	Description
9210015	IN 1/4 SY1 block accessory
9210016	OUT 1/4 SY1 block accessory
9210022	IN 3/8 SY1 block accessory
9210023	OUT 3/8 SY1 block accessory
9210017	IN 3/8 SY2 block accessory
9210018	OUT 3/8 SY2 block accessory
9210020	IN 1/2 SY2 block accessory
9210021	OUT 1/2 SY2 block accessory

Max torque for screw, 0.4 Nm for SY1 Max torque for screw, 2.5 Nm for SY2

See page **B1**.151 for the assembly diagram.

#### BOWL DISASSEMBLY SPANNER



9170601 9210050

Code

Code

Code

Description CS TF - TL BIT/SY1 CS TF - TL SY2

#### WALL-FIXING SCREW

0

Description M4 x 55 fixing screw SY1 9210030 9210031 M5 x 75 fixing screw SY2

Max torque 0.8 Nm for SY1 Max torque 2.0 Nm for SY2

### PADLOCK



Description 9062401 Padlock

## SUNTESI. SPARE PARTS



	Code 9210210 9210230 9210210X 9210230X	Description Poppet REG SY1 Poppet REG SY2 Poppet REG SY1 anti-corrosion Poppet REG SY2 anti-corrosion	
POPPET FOR FR	Code 9210211 9210212 9210213 9210231	<b>Description</b> Poppet FR 5µm SY1 Poppet FR 20µm SY1 Poppet FR 50µm SY1 Poppet FR 5µm SY2	
CNOMO CONTROL FOR	9210232 9210233 /3V AND AF Code	Poppet FR 20µm SY2 Poppet FR 50µm SY2	
	9453922	Elpn Cnomo control kit, manual bistable	
NOTES			

NOTES

POPPET FOR REG

## GENERAL TECHNICAL DATA SUNTESI.

Syntesi® is an important milestone achieved by Metal Work, the result of thirty years' experience producing air-treatment units. It has been studied in minute detail to obtain the best possible performance in a reduced space and with limited weight. The capacity is much higher than that of other units of the same size.

This modular unit features a very simple yet effective system that requires no brackets, stay bolts or yoke for assembling the elements. The basic version of Syntesi® incorporates numerous functions that are not provided or are only optional with traditional units. Examples are padlockable knobs, additional pneumatic ports on the front and back, flow options from left to right or vice versa, regulators with compensation system - which are accurate even when the upstream pressure changes, with rapid downstream pressure relief - full indelible marking, automatic condensate drain even in size 1, and 360° visual inspection of oil and condensate levels. The basic materials, technopolymer and nickelplated brass have excellent corrosion resistance. An anti-corrosion version is available with stainless steel components (screws, plates) or Geomet<sup>®</sup>reated ones (regulator springs).



TECHNICAL DATA		SIZE 1			SIZE 2				
Threaded port		1/8″	1/4″	3/8″	3/8″	1/2″	3/4″	1″	
Max. input pressure	bar		15			. 1	13		
	MPa		1.5			-	.3		
	psi		217			-	88		
Flow rate		See catalogue of the various elements							
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C	from -10 to +50			from -10 to +50				
Padlockable knob		The knobs of the regulators, filter regulators and standard sectioning valves can all be padlocked							
Fluid		Compressed air or other inert gases							
Mounting position		See catalogue of the various elements							
Direction of flow		Flow options right to left or vice versa							
Additional air take-off, for pressure gauges or fittings		1/8", front and rear, on all modules			1/4", front and rear, on all modules				
Wall fixing screws		No. 2 M4 screws No. 2 M5 screws							
Certification for potentially explosive atmosphere according to Atex 2014/34/EU rule		(€x)    3G Ex h   C T5 Gc -10°C < Ta < 50°C    3D Ex h   IC T100 °C Dc							

#### ANTI-CORROSION VERSION

Differences compared to the standard version:

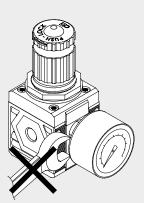
- stainless steel screws
- stainless steel plate for R, FR, V3V knobs
- Geomet®-treated regulator spring and filter-regulator

UNITS

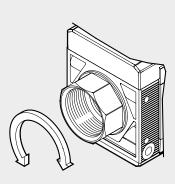
GENERAL TECHNICAL DATA Syntesi®



#### FIXING TO FRONT PORTS



Do not use a spanner for fixing taper threaded elements to the front ports. Mount by hand and apply a liquid sealant (not teflon<sup>®</sup>).



**ROTARY BUSHINGS** 

3/4" and 1" bushings in Size 2 rotate freely to facilitate assembly operations.



The following is marked indelibly on the body:

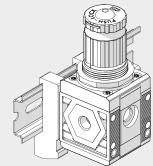
Metal Work trademark

LASER MARKING

- Code
- Maximum pressure and temperature
- Degree of filtration or pressure range, where relevant
  - Week and year of manufacture
- Atex category
- Made in Italy

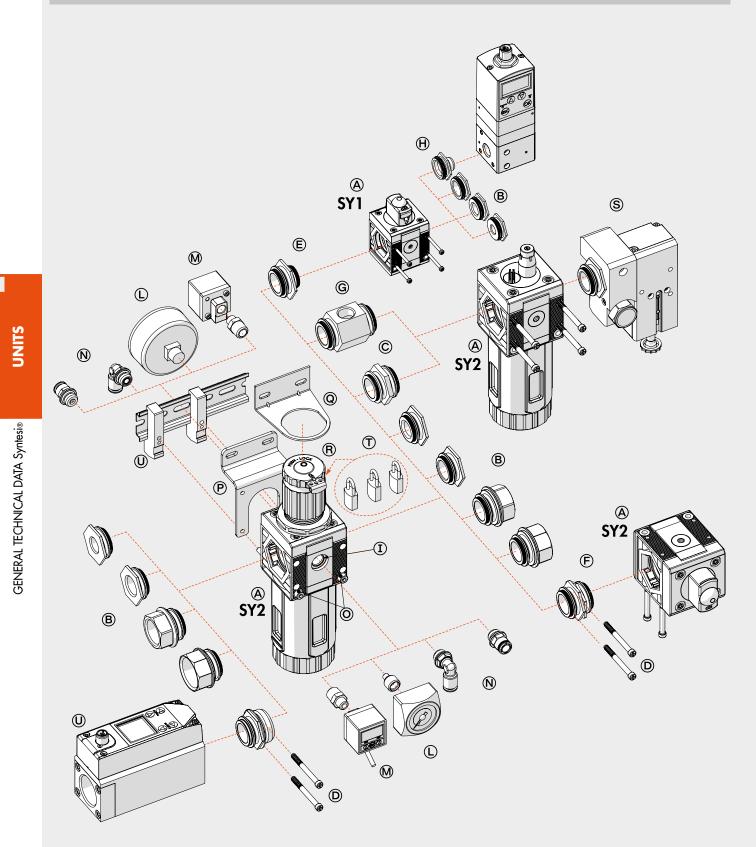
#### **MOUNTING OPTIONS**

On a panel
Using knob bracket
Using knob bracket
Using a brack



The bracket can be secured in any position, and the fittings can be mounted on the pressure gauge air intake at the back of the unit.

## MODULARITY AND FLEXIBILITY





The various elements of Syntesi® (a) can be connected to the air feed and delivery circuit using pneumatic nickel brass or passivated aluminium ports (B) and can be fixed together using nipples (C).

The nipples and ports are easy to remove by unscrewing the two front screws D. This solution has numerous advantages:

- Reduced overall dimensions.

- Free composition of multiple elements, without the need for brackets, stay bolts or yoke.
- The threads for the fittings are metallic, allowing high tightening torques, also for tapered threads.
- Maximum flexibility: a unit can be transformed at any time by adding an element or replacing a port with another one, e.g. 1/4" instead of 1/8".
- The air intake port can be the same or different from the outlet port, as desired.

Standard Syntesi® ports are: 1/8", 1/4", 3/8" for size 1; 3/8", 1/2", 3/4", 1" for size 2.

It may be necessary to use a vice to insert the bushes into size 2.

The nipples have different functions:

- Nipple  $\ensuremath{\mathbb{C}}$  joins two elements of the same size together.
- Size adaptor (E) can be used to connect an element in the Syntesis 2 series with one in the Syntesis 1 series.
- The 90° adaptor (E) can be used to connect two 90° angled elements. For example, it can help directing the regulator knob or the control knob of a sectioning valve towards the user.
- The two-way air intake © is a simple and cost-effective system which, besides connecting two elements together, has 2 opposing threaded air intakes.
  The adaptor for Regtronic ⊕ can be used to fix the Regtronic 1/4" proportional valve to a Syntesi® size 1 element.

Additional ports ①. On the front and back of ALL Syntesie elements there is a port (1/8" for size 1, 1/4" for size 2) that can be used for pressure gauges ①, pressure switches ⑩ or, given the high flow rate, as additional air take-off ⑩. These ports are downstream of the element, so, for example, a regulator port can supply air at a set pressure or a filter port can supply filtered air (not valid for activated carbon filter and depurator).

Wall fixing. Only two through screws @ are needed. No bulky brackets or additional flanges are required. The bracket P can be used to separate the unit from the fixing wall, e.g. to mount a fitting to the rear port.

Fixing on a DIN EN50022 bar. Can be done using the bracket kit ().

Regulator fixing bracket @. Regulators and filter-regulators can also be fixed using a steel bracket @ that embraces the bell.

**Padlockable knob** (B). The knobs of regulators, filter-regulator and sectioning valves can all be padlocked. The steel plate is included in the supply. You can insert up to two 3 mm diameter padlocks (T) on size 1 and three padlocks on size 2. As an alternative, the sectioning valve can have a steel plate suitable for a single 6 mm diameter padlock.

Safety valve (S). The unit can incorporate a series 70 SAFE AIR® safety valve.

Flowmeter series FLUX 1-2 (). The unit can incorporate a series FLUX 1 or FLUX 2 flow meter.