



# Compressed air preparation and handling accessories



#### About us

With highly developed torque systems for controlled fastener tightening, ZEMO supports the efficiency of industrial manufacturing processes. This includes selected assembly tools and innovative measuring technology in recognised industrial quality. From tried and tested torque wrenches to excellent testing devices, powerful pneumatic tools and ultra-modern EC tightening systems to individual special solutions according to drawings.

In particular, ZEMO offers you profound personal advice as well as far-reaching service – from individual demonstrations and competent on-site support to authorised calibration and certification to expert repair and maintenance.

The renowned brand tools have been used successfully for decades in vehicle assembly, in mechanical engineering, but also in the aerospace industry and many other branches of industry.

ZEMO's high-class product line reflects the tools preferred in industrial manufacturing and is complemented by reliable pneumatic wrenches for maintenance and repair work (automotive).

#### **Service Features**

- ► Proven torque application tools and top-class EC tightening systems
- Profound personal Advice
- Competent support on site
- ► Effective user training
- ► Individual demonstration. trial installation, commissi-
- Authorised testing, calibration and certification
- ► Professional maintenance /
- ► Information newsletter (@)

#### **Customer references (selection)**











JOHN DEERE



**DUNGHEINRICH** 

Rrosenbauer SIEMENS





### **Product Groups**

#### Torque Application Tools

- Screwdrivers
- Clicker wrenches
- Digital wrenches

#### Impulse Tools

- Battery tools
- Pneumatic tools
- EC tools

### Torque Measurement

- Torque gauges
- Analyzers & transducers
- Calibration equipment

#### Specials

- Pneumatic pliers
- Auxiliaries
- Special adaptors

#### Power Sockets

- magnetic / non-magnetic
- with sleeve drive
- Adaptors

# Insert Bits

- Bits, holders
- Nutsetter - Adaptors

- Spiral hoses, couplings
- Balancers, holster

#### Air Treatment & Handling

- Air preparation

# **▶** Controlled tightening results

**▶** Efficient bolting technology

- **▶** Lean production
- ► Service Quality Competence







# **Table of contents**



**Know How** 



Spiral hoses 



Hose couplings & plug-in nozzles NW 7.8 ......10



Hose couplings & plug-in nozzles NW 10 ......11



Compressed air treatment 



Spring balancers 



Spring balancers 



Tool holders 

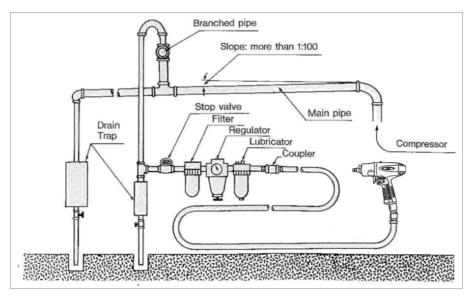


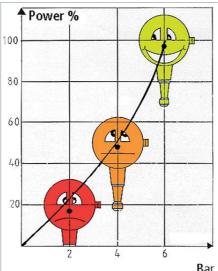
Other accessories 





# **Compressed Air** – energy with know how





### How can a good compressed air system help your entire system?

By choosing the right products for your compressed air system, such as air filters, pressure regulators and boosters you can ensure that your compressed air is clean, dry, and stable, and that your pneumatic equipment operates smoothly and reliably. This will help you achieve a higher efficiency in your productive process.

#### **Air Treatment**

By installing an SMC water separator, 99% of the water is separated from the compressed air in the simplest way. The water separators are light and compact. Connection size 1/8" to 2" - so also very suitable for compressors (1-75 kW). Standard with automatic drain for continuous use. Thanks to a largemesh special filter element, no filter change is necessary. For optimal functioning of the filter, it should be mounted as far away from the compressor as possible.

SMC air filters have a very large air passage and ensure safe, high and uniform air quality through very precise filtration by separating moisture by means of a centrifugal action and filtering out dust particles.

Regulators keep a preset pressure in a compressed air system constant within narrow

Air lubricators are used for uniform lubrication of the machine components. From type 30, the oilers can be refilled under full line pressure. They have a simple setting. Oil is nebulised even with a small amount of air.

Modular combinations consist of filter, regulator and lubricator or filter/regulator combination plus lubricator.

# Why is compressed air treatment so important?

Atmospheric air contains impurities that remain in the system if they are not removed. Furthermore, there are not only external sources of impurities, but also those added during the compression and feeding of the air. Choosing the right air treatment solution can therefore make the difference between an unstable process with frequent interruptions and product losses and a durable, high-qua-

### What is ISO 8573-1 and how does it affect air treatment?

There are no rules to define which air quality class is appropriate for each individual application, but the ISO 8573-1 standard establishes a scale depending on the concentration of each substance in the air. It uses three numbers in its classification to set limits for particulate matter, moisture and oil pollution.

Class 1, 1, 1 represents the cleanest, purest air within the standard, while class -, -, would represent air that is too polluted to meet the standard.

ISO 8573-1 can therefore be used to set standards for different types of applications based on their air purity requirements.

# Optimum flow pressure

The performance and accuracy of impulse wrenches is only optimal when the air pressure is optimal. Too low operating pressure can result in the screwing time and thus the production time being extended. Too low flow pressure always means loss of performance! Too low operating pressure is mostly caused by:

- ► Insufficient compressor capacity.
- ► inadequately dimensioned pipeline
- ▶ large leakages,
- ▶ faulty or incorrect maintenance units,
- ► Hose or coupling diameters too small.

#### Compressed air quality

Poor compressed air quality (moisture and dirt) leads to premature failure of the screwdriver. Poor compressed air quality can be caused by:

- missing maintenance unit,
- ▶ improper installation or inferior quality of the maintenance unit.
- outdated or poorly maintained maintenance unit,
- undersized piping.

Good compressed air quality does not mean a large investment, as the costs are quickly amortised (trouble-free operation and longer service life).





# Compressed Air – energy with know how

## **Commissioning of impulse** wrenches

Before operation, fill a few drops of acid- and resin-free compressed air oil into the air inlet of the screwdriver. Clean the coupling and the hose by briefly blowing them free.

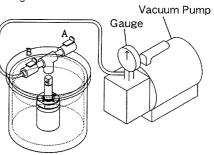
Compressed air hoses are rarely chosen too large but very often too small. Make sure that the plug-in sleeves and couplings have the same cross-section as the hoses (internal diameter).

It is important that the compressed air is clean and dry. We recommend a central oil unit for optimal lubrication of the screwdrivers. For good lubrication, we advise you to use a maximum of 8 metres of hose between the lubricator and the screwdriver. If you need to use a longer hose, then fit a jet lubricator. This has a range of up to 200 metres.

The flow pressure of the air should be 0.6 MPa when the nutrunner is to be operated. The correct hose diameter is necessary to achieve the desired performance.

#### Impulse wrench maintenance

Hydraulic impulse wrenches should be serviced regularly to guarantee a permanently good tightening result. As the power is transmitted hydraulically, the hydraulic fluid (HF) should be replaced at regular intervals. Depending on the application (hard or soft tightening) and on the model, this can last approx. 100,000 - 120,000 tightening operations or 1 year. If a screwdriving operation requires more than about 25 impulses from the impulse wrench, it may be necessary to change the HF sooner.



Correct filling of the impulse cell is also imperative for trouble-free operation of the nutrunner. Vacuum filling stations ensure filling without air entrapment.

In addition to many years of experience, ZEMO has all the necessary assembly/disassembly tools and offers regular maintenance for your impulse wrenches.



## Clean "oil change"

Trapped air bubbles can be pulled out of the impulse cell under vacuum even without a special vacuum pump and "panning" in the expansion tank.

Thus no personal contact with the hydraulic fluid. Later, no HF swirling around on the inner wall of the impulse cell housing due to rotation and thus no supposed leakage.

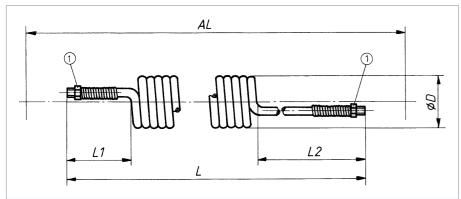
Simply apply compressed air, regulate at the bottom of the adjusting wheel, observe the bubbles in the sight glass and then later draw off a little of the maximum filling with the cannula. Done.





# **PU spiral hoses** – for indoor compressed air applications





#### Raw material

The high-quality hoses made of the raw material "Elastollan" offer the best mechanical properties (especially a very high pressure resistance over a wide temperature range) as well as excellent continuous use properties.

Many manufacturers mostly use so-called "re-granulate" (raw material that has been processed several times) and cannot match this high quality. As a result, the mechanical properties (i.e. pressure resistance especially

at higher temperatures, abrasion behaviour, recovery properties, etc.) of the hose are significantly reduced.

#### Manufacturing tolerances

All materials are subject to the tightest manufacturing tolerances. Strict adherence to these tolerances ensures the use of the products over the entire length of the hose for the respective applications. Individual manufacturing tolerances can be requested and agreed depending on the quantity required.

### MODY spiral hoses made of polyurethane

Equipped with kink protection on both axial

Special versions available on request.

These spiral hoses have excellent material properties for flexible compressed air supply and find their way back to their original shape even after the most severe deformation. Despite their enormous range, they make a significant contribution to occupational safety. We recommend mounting from the ceiling and using high-quality, reusable and rotatable connection fittings with appropriate kink

- ▶ Permanent return force of the spiral
- ► High abrasion, pressure, wear and buckling resistance
- ► Space-saving despite long range
- ► Plasticiser-, heavy metal- and siliconefree, recyclable, petrol-, oil- and antifreeze-resistant

### Calibration

The outer diameter and wall thickness of each individual hose are calibrated. The MODY spiral hoses can therefore be used with various plug-in or screw connection systems. The ovality of the hoses is also within narrow limits suitable for plug-in connections. This ensures a consistently high pressure load capacity with comparatively large internal diameters.

# PU spiral hose, yellow

Hose Ø	Item No.	External thread	AL	L	L1	L2	ø D
11036 \$2	Tieni No.	Hose outlet	m	mm	mm	mm	mm
NW 6	351710	$R 1/4 \times R 1/4$	3	900	100	400	40
(inner Ø 6.5)	351711	R 1/4 × R 1/4	5	1150	100	400	40
(outer Ø 10)	351714	R 1/4 × R 1/4	7.5	2250	100	1000	40
	351720	R 1/4 × R 1/4	3	1000	100	500	60
	351721	$R 1/4 \times R 1/4$	5	1200	100	500	60
NW 8	351727	R 1/4 × R 1/4	7.5	2250	100	1000	60
(inner $\varnothing$ 8) (outer $\varnothing$ 12)	351723	R 3/8 × R 3/8	3	1000	100	500	60
(00101 \$2 12)	351724	R 3/8 × R 3/8	5	1200	100	500	60
	351728	R 3/8 × R 3/8	7.5	2250	100	1000	60
NW 9	351740	R 3/8 × R 3/8	3	1150	120	600	65
(inner Ø 9)	351741	R 3/8 × R 3/8	5	1350	120	600	65
(outer Ø 13)	351743	R 3/8 × R 3/8	7.5	2300	120	1000	65



AL = operating lengthL = Total length unwound





# **PU spiral hoses** – customized



### MODY spiral hoses made of polyurethane

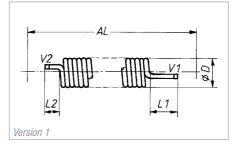
Manufactured in special design to suit your requirements - with or without axial outlet, thread equipment as required, etc.

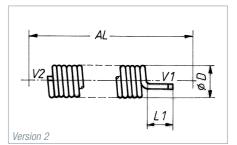
Note down the desired details in the table below and send us your enquiry. We will be happy to provide you with an individual offer.

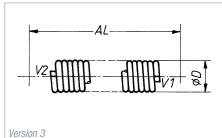
#### Standard dimensions

Hose Ø	AL	L1	L2	ø D
mm	m	mm	mm	mm
NW 4	18	100	100	40
NW 6	16	100	100	60
NW 8	12	100	100	70
NW 9	12	100	100	90
NW 12	10	150	150	155

- ▶ Permanent return force of the spiral
- ► High abrasion, pressure, wear and buckling resistance
- ► Space-saving despite long range
- ► Plasticiser-, heavy metal- and siliconefree, recyclable, petrol-, oil- and antifreeze-resistant







PU spiral hose in	PU spiral hose in required version, blue						
In this table you can not	e the data	Version 1	Version 2	Version 3			
Hose ∅	e Ø NW						
Operating length	AL						
Avial langth	L1			n. a.			
Axial length	L2		n. a.	n. a.			
	R" External thread						
Hose outlet	R" External thread, rotatable						
V1	R" Internal thread						
	R" Internal thread, rotatable						
	R" External thread						
Hose outlet	R" External thread, rotatable						
V2	R" Internal thread						
	R" Internal thread, rotatable						
Spiral ∅	D						
Item No.	Special version						

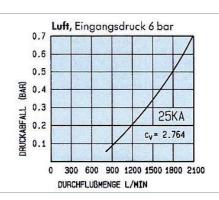




# **Hose couplings ND 7.8** – single shut-off



couplings suitable for compressed air applications with above average compressed air requirements. These European profile couplings have a high flow rate and are available in a variety of configurations and materials that allow for optimal adaptation to the requirements of pneumatic installations.



European standard profile hose Premium quick release coupling system with **no-** Features minal width 7.8 for pneumatic and fluid handling applications up to 35 bar. Universal 3/8" industrial coupling with European standard profile.

> The series is a coupling system with one-hand operation. UltraFlo valve for optimum flow performance and low pressure drop. The series is characterised by its robust design and long service life even under the toughest conditions.

- ► Pressure range PB = 35 bar, maximum static operating pressure (without pulsation) with min. quadruple static safety.
- ► Temperature range\* -20°C to +100°C (NBR) -40°C bis +120/150°C (EPDM) -15°C to +200°C (FKM) in each case depending on the flow medium.

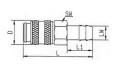
\* For temperatures below -20°C and above +100°C a special version is required (on request).

- · Industrial coupling with European standard pro-
- One-hand operation for easy and quick coupling
- · UltraFlo valve for optimal flow and low pressure

## Compatibility

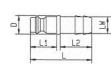
- RECTUS 26, 1600/1625; TEMA 1600; CEJN 320: JWL 520, 530: various German makes.

## Couplings – w hose connector



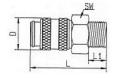
Item	LW	A/F		D	L1
No.	mm	mm	mm	mm	mm
743088	6	19	74	23	25
743089	8	19	74	23	25
743090	10	19	74	23	25
743091	13	19	74	23	25

### Fittings – w hose connector



Item	LW	L	L1	L2	D
No.	mm	mm	mm	mm	mm
743099	6	48	n.a.	25	12
743100	8	48	n.a.	25	12
743101	10	48	n.a.	25	12
743102	13	48	n.a.	25	15

#### Couplings - w external thread



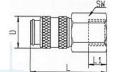
Item No.	conn.	A/F mm	L mm	D mm	L1 mm
	R 1/8				
743092	R 1/4	19	60	23	12
743093	R 3/8	19	60	23	12
743094	R 1/2	22	61	23	17

### Fittings – w external thread



Item No.	conn.	A/F mm	L mm	L1 mm	L2 mm
743203	R 1/8	13	33	n.a.	9
743104	R 1/4	14	37	n.a.	12
743105	R 3/8	17	37	n.a.	12
743106	R 1/2	22	43	n.a.	17

#### Couplings – w internal thread



Item No.	conn.	A/F mm	L mm	D mm	L1 mm
a. A.	G 1/8	n.a.	n.a.	n.a.	n.a.
743095	G 1/4	19	56	23	10
743096	G 3/8	19	55	23	9
743097	G 1/2	24	58	23	12

# Fittings – w internal thread

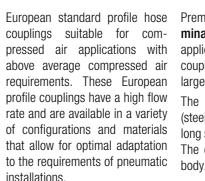


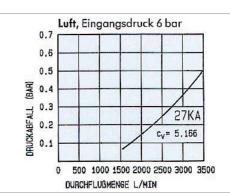
Item No.	conn.	A/F mm	L mm	L1 mm	L2 mm
743107	G 1/8	14	30	n.a.	5
743108	G 1/4	17	39	n.a.	12
743109	G 3/8	19	40	n.a.	12
743110	G 1/2	24	44	n.a.	14



# **Hose couplings ND 10** – single shut-off







Premium quick release coupling system with **no- Features** minal width 10 for pneumatic and fluid handling applications up to 35 bar. Universal 1/2" industrial coupling with European standard profile for use with large pneumatic consumers.

The series is characterised by its robust design (steel release sleeve), extremely high flow rate and long service life even under the toughest conditions. The collar design minimises damage to the valve

#### ► Pressure range PB = 35 bar, maximum static operating pressure (without pulsation) with min. quadruple static safety.

► Temperature range\* -20°C to +100°C (NBR) -40°C bis +120/150°C (EPDM) -15°C to +200°C (FKM) in each case depending on the flow medium.

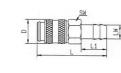
\* For temperatures below -20°C and above +100°C a special version is required (on request).

- One-hand operation for easy and quick coupling
- · Higher operating pressure compared to compe-
- UltraFlo valve for optimal flow and low pressure

#### Compatibility

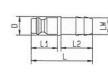
- RECTUS 41, 1700, 1727; TEMA 1700; CEJN 410.

### Couplings - w hose connector



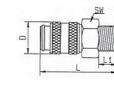
Item	LW	A/F	L	D	L1
No.	mm	mm	mm	mm	mm
743111	8	24	76	27	25
743112	10	24	76	27	25
743113	13	24	76	27	25
743114	16	24	76	27	25
743115	19	24	76	27	25

### Fittings – w hose connector



Item	LW	L	L1	L2	D
No.	mm	mm	mm	mm	mm
743123	8	48	n.a.	25	15
743124	10	48	n.a.	25	15
743125	13	48	n.a.	25	15
743126	16	48	n.a.	25	18
743127	19	48	n.a.	25	21

#### Couplings – w external thread



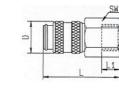
	Item No.	conn.	A/F mm	L mm	D mm	L1 mm
	#	R 1/4	24	63	27	12
Q.	743116	R 3/8	24	60	27	12
-	743117	R 1/2	24	65	27	17
1	743118	R 3/4	27	65	27	17

### Fittings – w external thread



Item No.	conn.	A/F mm	L mm	L1 mm	L2 mm
743128	R 1/4	17	40	n.a.	12
743129	R 3/8	17	40	n.a.	12
743130	R 1/2	22	45	n.a.	17
743131	R 3/4	27	48	n.a.	19

### Couplings - w internal thread



Item No.	conn.	A/F mm	L mm	D mm	L1 mm
#	G 1/4	24	56	27	10
743119	G 3/8	24	56	27	11
743120	G 1/2	24	56	27	12
743121	G 3/4	27	60	27	16

# Fittings – w internal thread



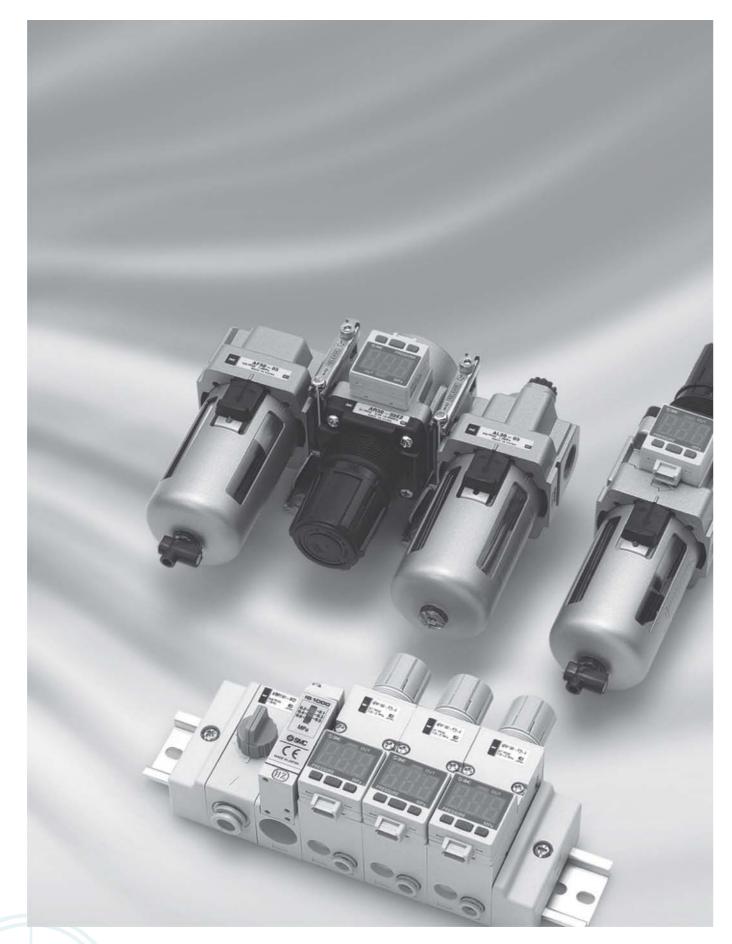
Item No.	conn.	A/F mm	L mm	L1 mm	L2 mm
743132	G 1/4	17	33	n.a.	9
743133	G 3/8	19	33	n.a.	12
743134	G 1/2	24	37	n.a.	12
743135	G 3/4	32	42	n.a.	16









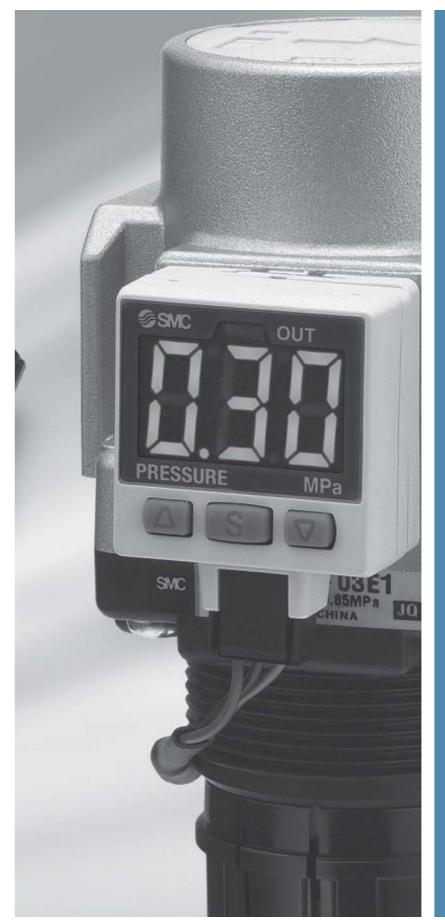












Bad compressed air quality (moisture and dirt) leads to premature failure of the machine. Good compressed air quality does not mean a big investment, as the costs are quickly amortised (trouble-free work and longer service life).

Poor compressed air quality is caused by:

- ► Lack of the required maintenance units.
- ► Poor quality and/or incorrect installation of the maintenance units.
- ► Lack of maintenance of the maintenance
- ▶ Piping that is too thin.

### **Water Separators**

By installing a water separator (AMG series), 99% of the water is separated from the compressed air in the simplest way. The water separators are light and compact. Connection size 1/8" to 2", so also very suitable for compressors (1-75 kW). Standard with automatic drain for continuous use.

### **Filters**

The SMC filters have a very large air passage and provide very accurate filtration. For safe, high and uniform air quality by separating moisture by means of a centrifugal action and filtering out dust particles.

### Regulators

The regulators keep a preset pressure in a compressed air system constant within narrow

### **Oilers**

For uniform lubrication of the machine combe refilled under full line pressure. They have a simple setting. Oil is nebulised even with a small amount of air.

#### **Modular Kits**

The maintenance units consist of AF (filter), AR (regulator) and AL (lubricator) or AW (filter/regulator combination) and AL (lubricator).







# **Water separators & Pressure boosters**





AMG – Water separators

Туре	Compressor kW	Flow rate I/min	Connector Rc	Weight kg	Mounting bracket	Filter elements
AMG150C-F02C	2.2	300	1/4	0.38	BM51	AMG-EL150
AMG250C-F03D	5.5	750	3/8	0.55	BM52	AMG-EL250
AMG350C-F04D	11	1500	1/2	0.9	BM53	AMG-EL350
AMG450C-F06D	15	2200	3/4	1.4	BM54	AMG-EL450
AMG550C-F10D	22	3500	1	2.1	BM55	AMG-EL550
AMG650-F14D	37	6000	1 1/2	4.2	BM56	AMG-EL650
AMG850-F20D	75	12000	2	10.5	BM57	AMG-EL850

Inlet pressure: 1.5 - 1.0 MPa / Temperature range: -5°C to 60°C.

Accessories such as mounting brackets and filter elements are available on request.

By installing an AMG water separator, 99% of the water is separated from the compressed air in the simplest way. The AMG water separators are lightweight and compact.

#### Features

- · Lightweight and compact.
- 99% separation efficiency for water droplets.
- Flow capacity from 300 to 12000 I/min
- Connection size 1/8" to 2".
- · Standard with automatic drain for continuous use.
- Thanks to a large-mesh special filter element, no filter change is necessary.

## **Applications**

When...

- 1. you do not need 100% dry air,
- 2. an air dryer cannot be used,
- 3. you are looking for an inexpensive solution.

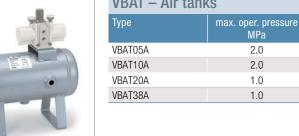
For optimal functioning of the filter, mount it as far away from the compressor as possible.



#### **VBA** – Pressure boosters

Туре	Op. Pressure MPa	Flow rate I/min	Connector	Pressure
VBA10A-F02	0.2 - 2.0	230	G 1/4	≤ 2:1
VBA11A-F02	0.2 - 2.0	700	G 1/4	≤ 4:1
VBA20A-F03	0.2 - 1.0	1000	G 3/8	≤ 2:1
VBA40A-F04	0.2 - 1.0	1900	G 1/2	≤ 2:1
VBA43A-F04	0.2 - 1.6	1600	G 1/2	≤ 2:1





The VBA and VBAT series can increase incoming pressure up to 4 times, no other power source needed, reduces heat and is easy to

#### **Features**

- Inlet pressure 0.1-1 MPa
- · Quadrupling the inlet pressure
- No cooling required
- · easy assembly
- Separate power connection not required
- horizontal mounting

## **Applications**

Ideal together with pressure booster; With the supplied mounting set, this air tank can be easily connected to the pressure booster.



12





# Filter-Regulator-Oiler Kit (Modular)



SMC's AC-B series consists of modular air filter sets, pressure regulators and lubricators that allow you to optimise the air quality and operating pressure of your

#### **Features**

- Double-walled construction: container protection made of transparent polycarbonate. Visible 360° all around, lighter weight and corrosion protected.
- Interchangeable with existing AC series by assembling individual components.
- · Element construction integrated into the container, element and cup form a whole. Built-in pressure gauge and switch of your choice:
- Square, built-in pressure gauge
- Attached, round pressure gauge
- Digital pressure regulator
- Material of the container of your choice:
- Polycarbonate standard model
- Metal model with and without level indicator
- Nylon

#### **Advantages**

- Transparent container: clearly visible liquid level
- · Quick filter change and easy filling with oil
- Cup with bayonet closure: easy operation, quick and easy maintenance
- Nylon container: resistant to chemicals and other substances
- · Metal container: robust, shockproof and resistant to chemicals
- Built-in pressure gauge: solid construction without protruding parts

#### **Applications**

All equipment for air treatment in all sectors with pneumatic applications. Important industrial sectors:

- · Vehicle construction
- Workshops
- Mechanical Engineering

### **Options**

- ► Further connection combinations
- ► Automatic drain (type + DE instead of E). For proper functioning, the drain line should have a diameter of at least 8 mm and be no longer than 5 m.
- ► Filter fineness 2, 10, 20, 40, 70, 100 μm
- ► Metal or nylon containers

In the case of the most severe, mechanical and/ or chemical stress, it is recommended to use metal containers, which offer a very high level of protection (a.A.).

Polycarbonate containers can be attacked by certain acids.



AC-B -	Combina	ation	of filter	AF, regul	ator AR,	lubricator	AL an	d pressure	gauge

Туре	Connection Inch	Flow rate I/min	Filter µm	Oper. pressure MPa	Container	Container protection with bayonet lock 1)
AC20-F02E-B	1/4	300	5	0.05 - 0.85	Polycarbonat	0
AC30-F03E-B	3/8	1500	5	0.05 - 0.85	Polycarbonat	S
AC40-F03E-B	3/8	1800	5	0.05 - 0.85	Polycarbonat	S
AC40-F04E-B	1/2	2200	5	0.05 - 0.85	Polycarbonat	S
AC40-F06E-B	3/4	2500	5	0.05 - 0.85	Polycarbonat	S
AC50-F06E-B	3/4	3000	5	0.05 - 0.85	Polycarbonat	S
AC50-F10E-B	1	3500	5	0.05 - 0.85	Polycarbonat	S
AC60-F10E-B	1	4000	5	0.05 - 0.85	Polycarbonat	S

<sup>1)</sup> o = option; s = standard / max. test pressure: 1.2 MPa / max. inlet pressure: 1.0 MPa / temperature range: -5°C to 60°C



# C-series – combination of filter/regulator AW, lubricator AL and pressure gauge

Тур	Anschluss Zoll	Flow rate   I/min	Filter µm	Oper. pressure MPa	Container	Container protection with bayonet lock <sup>1)</sup>
AC20A-F02E-B	1/4	300	5	0.05 - 0.85	Polycarbonat	0
AC30A-F03E-B	3/8	1500	5	0.05 - 0.85	Polycarbonat	S
AC40A-F04E-B	1/2	2000	5	0.05 - 0.85	Polycarbonat	S
AC50A-F06E-B	3/4	3000	5	0.05 - 0.85	Polycarbonat	S
41			10110 /		1 0 1 1 1 1	500 / 0000

<sup>1)</sup> o = option; s = standard / max. test pressure: 1.2 MPa / max. inlet pressure: 1.0 MPa / temperature range: -5°C to 60°C



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#### AF – Filters

Туре	Connection inch	Flow rate I/min	Filter µm	Container	Container protection with bayonet lock 1)	Mounting bracket
AF20-F02-A	1/4	1100	5	Polycarbonat	\$	AF22P-050AS
AF30-F02-A	1/4	2200	5	Polycarbonat	\$	AF32P-050AS
AF30-F03-A	3/8	2600	5	Polycarbonat	\$	AF32P-050AS
AF40-F03-A	3/8	4000	5	Polycarbonat	\$	AF42P-050AS
AF40-F04-A	1/2	4300	5	Polycarbonat	\$	AF42P-050AS
AF40-F06-A	3/4	5000	5	Polycarbonat	\$	AF42P-070AS
AF50-F06-A	3/4	7000	5	Polycarbonat	\$	AF52P-050AS
AF50-F10-A	1	7000	5	Polycarbonat	\$	AF52P-050AS
AF60-F10-A	1	8500	5	Polycarbonat	\$	AF52P-050AS
AF800-12	1 1/4	12000	5	Polycarbonat	\$	-
AF800-14	1 1/2	12000	5	Polycarbonat	\$	_
AF900-20	2	16000	5	Polycarbonat	S	-

<sup>↑</sup> o = option, s = standard / max. test pressure: 1.2 MPa / max. inlet pressure: 1.0 MPa / temperature range: -5°C to 60°C

#### **Options**

▶ Automatic drain (type AFxx-FxxD-A; not possible with AF800-12, AF800-14, AF900-20. For proper functioning, the drain line should be at least

8 mm in diameter and no longer than 5 m.

- ► Filter fineness: Standard 5μ, others on request.
- ► Metal or nylon container



AFM – Microfilters											
Туре	Connection inch	Flow rate I/min	Filter µm	Container	Container protection with bayonet lock 1)	Mounting bracket					
AFM20-F02-A	1/4	200	0.3	Polycarbonat	0	AF22P-050AS					
AFM30-F02-A	1/4	400	0.3	Polycarbonat	S	AF32P-050AS					
AFM30-F03-A	3/8	400	0.3	Polycarbonat	S	AF32P-050AS					
AFM40-F03-A	3/8	900	0.3	Polycarbonat	S	AF42P-050AS					
AFM40-F04-A	1/2	1000	0.3	Polycarbonat	S	AF42P-050AS					
AFM40-F06-A	3/4	1000	0.3	Polycarbonat	S	AF42P-070AS					

 $^{1}$ 0 = option, s = standard / max. test pressure: 1.2 MPa / max. inlet pressure: 1.0 MPa / temperature range: -5°C to 60°C

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Туре	Connection inch	Flow rate I/min	Filter µm	Container	Container protection with bayonet lock 1)	Mounting bracket
AFD20-F02-A	1/4	120	0.01	Polycarbonat	0	AF22P-050AS
AFD30-F02-A	1/4	270	0.01	Polycarbonat	S	AF32P-050AS
AFD30-F03-A	3/8	270	0.01	Polycarbonat	S	AF32P-050AS
AFD40-F03-A	3/8	600	0.01	Polycarbonat	S	AF42P-050AS
AFD40-F04-A	1/2	600	0.01	Polycarbonat	S	AF42P-050AS
AFD40-F06-A	3/4	600	0.01	Polycarbonat	S	AF42P-070AS

<sup>1)</sup> o = option, s = standard / max. test pressure: 1.2 MPa / max. inlet pressure: 1.0 MPa / temperature range: -5°C to 60°C

#### **Options**

- ► Automatic drain (type AFxx-FxxD-A).
- ► For proper functioning, the drain line should have
- a diameter of at least 8 mm and be no longer than 5 m.
- Metal or nylon container.



In the case of the most severe, mechanical and/or chemical stress, it is recommended to use metal containers, which offer a very high level of protection (a.A.). Polycarbonate containers can be attacked by certain acids.





# **Air Filters / Regulators**





# AW - Filter/Regulator

Туре	Conn. inch	Flow rate I/min	Press. gauge conn.	Operat. pressure MPa	Filter µm	Con- tainer	Fixing nut	Container protection with bayonet lock <sup>3)</sup>	Mounting bracket + fixing nut
AW20-F02E-B	1/4	500	integr.	0.05 - 0.85	5	PC	AR23P-260S	0	AW23P-270AS 1)
AW30-F03E-B	3/8	1300	integr.	0.05 - 0.85	5	PC	AR33P-260S	S	AR33P-270AS 1)
AW40-F04E-B	1/2	1900	integr.	0.05 - 0.85	5	PC	AR43P-260S	S	AR43P-270AS 1)
AW40-F06E-B	3/4	2500	integr.	0.05 - 0.85	5	PC	AR43P-260S	S	AR43P-270AS 1)
AW60-F10E-B	1	8000	intear.	0.05 - 0.85	5	PC	_	S	AW62P-270AS 2)

"Supplied with fixing nut / 2 Supplied with fixing screws / 3 o = Option, s = Standard / max. Test pressure: 1,5 MPa / max. inlet pressure: 1,0 MPa / Adjustment range: 0,05 to 0,85 MPa / Temperature range: -5°C to 60°C.

### **Options**

- ► Filter fineness: Standard 5μ, others on request.
- ► Automatic drain (type AWxx-FxxDE-B). For proper functioning, the drain line should be at least 8 mm in diameter and no longer than 5 m.

	Metal	or	nylon	container.
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# AR – Regulators

Туре	Connection inch	Flow rate I/min	Manometer connection	Operating pressure MPa	Fixing nut	Mounting bracket + fixing nut
AR20-F02E-B	1/4	650	integriert	0.05 - 0.85	AR23P-260S	AW23P-270AS 1)
AR30-F03E-B	3/8	1500	integriert	0.05 - 0.85	AR33P-260S	AR33P-270AS 1)
AR40-F03E-B	3/8	2500	integriert	0.05 - 0.85	AR43P-260S	AR43P-270AS 1)
AR40-F04E-B	1/2	3000	integriert	0.05 - 0.85	AR43P-260S	AR43P-270AS 1)
AR40-F06E-B	3/4	5000	integriert	0.05 - 0.85	AR43P-260S	AR43P-270AS 2)
AR50-F06E-B	3/4	4000	integriert	0.05 - 0.85	-	AR52P-270AS 2)
AR50-F10E-B	1	4000	integriert	0.05 - 0.85	_	AR52P-270AS 2)
AR60-F10E-B	1	5000	integriert	0.05 - 0.85	-	-
AR825-12	1 1/4	14000	R 1/4	0.05 - 0.85	_	_
AR825-14	1 1/2	14000	R 1/4	0.05 - 0.85	-	-
AR925-20	2	17000	R 1/4	0.05 - 0.85	-	_

<sup>&</sup>lt;sup>1)</sup> Supplied with fixing nut / <sup>2)</sup> Supplied with fixing screws / max. Test pressure: 1,5 MPa / max. inlet pressure: 1,0 MPa / Adjustment range: 0,05 to 0,85 MPa / Temperature range: -5°C to 60°C.



# AR – High pressure regulators

The stage process of games of									
Туре	Connection inch	Flow rate I/min	Manometer connection	Operating pressure MPa	Fixing nut	Mounting bracket + fixing nut			
AR40-F03-B-X425	3/8	3000	R 1/4	0.05 - 1.6	AR40P-260S	AR40P-270AS 1)			
AR40-F04-B-X425	1/2	3300	R 1/4	0.05 - 1.6	AR40P-260S	AR40P-270AS 1)			
AR60-F10-B-X425	1	5000	R 1/4	0.05 - 1.6	_	AR50P-270AS 2)			

<sup>&</sup>lt;sup>9</sup> Supplied with fixing nut /<sup>2</sup> Supplied with fixing screws / max. Test pressure: 3 MPa / max. inlet pressure: 2,0 MPa / Adjustment range: 0,05 to 0,85 MPa / Temperature range: -5°C to 60°C.







# SMC lubricators (AL series) for precise lubrication of machine parts

From size 30, the oil supply can be topped up under pressure. Simple and precise adjustment. With a small air inlet spraying takes place.

For optimum functioning of the lubricator, the hose length between the lubricator and the air tool is a maximum of 8 meters. With longer hoses or when using a hose reel, the lubricator does not lubricate the air motor.

**Automatic lubrication** ensures steady lubrication in the right quantity and saves you the purchase of lubricants through metering. In addition, this means less scrap and maintenance of your pneumatic tools or machines, i.e. fewer malfunctions and costs. This benefits safety in the factory and also protects the environment.

SMC's **ALDU series** is a central lubrication with a spray range of up to 200 meters. This means that you only need to set and monitor 1 lubricator. This prevents errors and can reduce oil consumption by 80-90%. Good for your air tools, wallet and environment. You can also continue to use your hose reels in this way.

Do you have an oiler in a hard-to-reach place, e.g. high on a pneumatic hoist? Then we recommend the combination **ALF / ALT series** from SMC. The ALF oiler is automatically filled from the ALT oil tank.

#### Not

See also SMC filters and pressure regulators for proper compressed air preparation. Consider the air consumption of your machine when properly selecting your SMC combination. Refer to the technical specification: NI / min (Normal liters per minute). Take into account the use of several compressed air tools at the same time.



AL – Lubric	AL – Lubricators										
Туре	Connect. inch	Flow rate I/min	Nebulizes from I/min	Sight glass	Con- tainer	Container protection with bayonet lock <sup>1)</sup>	Mounting bracket				
AL20-F02-A	1/4	2400	15	AL20P-080AS	PC	S	AF22P-050AS				
AL30-F03-A	3/8	4500	30	AL20P-080AS	PC	S	AF32P-050AS				
AL40-F03-A	3/8	6000	40	AL20P-080AS	PC	S	AF42P-050AS				
AL40-F04-A	1/2	5800	40	AL20P-080AS	PC	S	AF42P-050AS				
AL40-F06-A	3/4	6000	40	AL20P-080AS	PC	S	AF42P-070AS				
AL50-F06-A	3/4	7500	190	AL20P-080AS	PC	S	AF52P-050AS				
AL50-F10-A	1	7500	190	AL20P-080AS	PC	S	AF52P-050AS				
AL60-F10-A	1	10500	220	AL20P-080AS	PC	S	AF52P-050AS				
AL800-12	1 1/4	13000	460	12316	PC	S	_				
AL800-14	1 1/2	13000	650	12316	PC	S	-				
AL900-20	2	20000	1800	12316	PC	S	_				

<sup>&</sup>lt;sup>1)</sup> o = Option, s = Standard

/ max. test pressure: 1,5 MPa / max. inlet pressure: 1,0 MPa / temperature range: -5°C to 60°C.



ALDU – Lubricators									
Туре	Connect. inch	Max. I/min	Filter µm	Oper. pressure MPa	Container capacity cm <sup>3</sup>				
EALDU600-10	1	6000	5	0.15 - 1.0	2000				
EALDU900-20	2	15000	5	0.15 - 1.0	5000				
max. test pressure: 1	max. test pressure: 1,5 MPa / max. inlet pressure: 1,0 MPa / temperatur range: -5°C to 60°C.								







# **Air Lubricators**





ALF/ALT – Lubricators with autom. feed										
Туре	Connect. inch	max. oper. pressure MPa	min. flow rate I/min	Container capacity cm³	Container	Weight kg				
ALF400-F02	1/4	0.7	65	-	PC	0.85				
ALF400-F03	3/8	0.7	100	_	PC	0.85				
ALF400-F06	3/4	0.7	120	_	PC	0.88				
ALF500-F06	3/4	0.7	190	-	PC	1				
ALF600-F10	1	0.7	220	_	PC	1.15				
ALF800-F12	1 1/4	0.7	460	-	PC	1.85				
ALF800-F14	1 1/2	0.7	650	_	PC	1.85				
ALF800-F20	2	0.7	1800	_	PC	1.9				

The ALF lubricators are automatically filled from the ALT tank.



Oil tank for automatic lubrication										
Туре	Connect.		max.	min. flow rate	Container capacity	Container	Weight			
	Air	0il	oper. pressure MPa	I/min	cm <sup>3</sup>		kg			
ALT-5	1/4	3/8	1.0	n.v.t.	5000	Metall	12.6			
ALT-5-IS-1 *	1/4	3/8	1.0	n.v.t.	5000	Metall	13.2			
ALT-9	1/4	3/8	1.0	n.v.t.	9000	Metall	26.0			
ALT-IS-1 *	1/4	3/8	1.0	n.v.t.	9000	Metall	26.6			

with float switch





Temperatur range: -5 to  $60^{\circ}\text{C}$  / Recommended oil standard: ISO VG32

# **Container & Assemblies**





Container for the FRL series										
for series	Container for		0-ring							
	lubricators	Polycarbonate	Polycarbonate with automatic drain	Nylon	Metal	for lubricator or filter				
20	C2SL-A	C2SF-A	AD27-C-A	C2SF-6-A	C2SF-2-A	C2FP-260S				
30	C3SL-A	C3SF-A	AD37-A	C3SF-6-A	C3SF-2-A	C3FP-260S				
40	C4SL-A	C4SF-A	AD47-A	C4SF-6-A	C4SF-2-A	C42FP-260S				
50	C4SL-A	C4SF-A	AD47-A	C4SF-6-A	C4SF-2-A	C42SFP-260S				
60	C4SL-A	C4SF-A	AD47-A	C4SF-6-A	C4SF-2-A	C42SFP-260S				

In the case of the most severe, mechanical and/or chemical stress, it is recommended to use metal containers, which offer a very high level of protection (a.A.). Polycarbonate containers can be attacked by certain acids.









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for series	Connect. inch	Spacer	Spacer with fastener	Intermediate outlet	End piece
20	1/4	Y200-A	Y200T-A	Y210-F02-A	E200-F02-A
30	3/8	Y300-A	Y300T-A	Y310-F02-A	E300-F03-A
40	1/2	Y400-A	Y400T-A	Y410-F03-A	E400-F04-A
40	3/4	Y500-A	Y500T-A	Y500-F03-A	E500-F06-A
50	3/4	Y600-A	Y600T-A	Y610-F04-A	E600-F06
50	1	Y600-A	Y600T-A	Y610-F04-A	E600-F10
60	3/4	Y600-A	Y600T-A	Y610-F04-A	E600-F6
60	1	Y600-A	Y600T-A	Y610-F04-A	E600-F10

Pipe connections for easy (dis)assembly of the modular combinations.

Intermediate pieces with fastening element for wall mounting of the modular combinations.

Intermediate pieces for connecting the combinations without wall mounting.

Mounting brackets for fixing the separate components can be found with the respective product series.







# Miscellaneous



# EAD - automatic condensate drain

Туре	for series	Connect. inch	Control	Flow rate I/min	Noise filter	Operating pressure MPa	ø mm
AD402-F02C-A	_	1/4	pneum.	-	_	_	-
AD402-F03D-A	-	3/8	pneum.	-	-	-	_
AD402-F04D-A	_	1/2	pneum.	-	_	_	-
EAD600-F10	-	1	pneum.	-	-	-	-
ADM200-045	_	1/2	electr. (220V)	_	_	_	_



## AKM - Intermediate outlet with check valve

Туре	for series	Connect. inch	Control	Flow rate I/min	Noise filter	Operating pressure MPa	ø mm
AKM2000-F02-A	20	1/4	_	750	-	-	_
AKM3000-F02-A	30	3/8	-	1700	_	-	-
AKM4000-F03-A	40	1/2	_	3150	_	_	_



### VHS - Manual shut-off valve

Туре	for series	Connect. inch	Control	Flow rate I/min	Noise filter	Operating pressure MPa	ø mm
VHS20-F02-A	20	1/4	_	750	AN103-01	_	-
VHS30-F03-A	30	3/8	-	1700	AN200-02	-	-
VHS40-F04-A	40	1/2	_	3150	AN300-03	_	_



### K – External pressure gauges

Туре	for series	Connect. inch	Control	Flow rate I/min	Noise filter	Operating pressure MPa	ø mm
KB-10-40	20/30	1/8	-	-	-	0 - 1	40
KB-10-50	40/50/60	1/4	-	-	-	0 - 1	50



### GC – internal pressure gauges for AR/RW series

	The state of the s										
Туре	for series	Connect. inch	Sontrol	Flow rate I/min	Noise filter	Operating pressure MPa	ø mm				
G27-10-R1	10	1/16	-	_	_	0 - 1	26				
GC3-10AS	20/30/40/50/60	_	_	-	-	0 - 1	24				



## ISE35 – Integrated pressure gauge with pressure switch and cable

IOLOO IIII	integrated procedure gauge with procedure ewitern and easie										
Туре	for series	Supply voltage	Cable length m	Degree of protection	Display	Set pressure range MPa	outlet				
ISE35-N-65-LA	20/30/40/50/60	12-24V DC	2	IP40	2-farb. LED	-0,01 - 1	PNP				
ISE35-N-25-LA	20/30/40/50/60	12-24V DC	2	IP40	2-farb. LED	-0,01 - 1	NPN				



## Loose filter elements for AF/AW series

Series	Standard 5 µm
20	AF20P-060S
30	AF30P-060S
40	AF40P-060S
50	AF50P-060S
60	AF60P-060S



Series	Connect.
AN10-01	1/8
AN20-02	1/4
AN30-03	3/8
AN40-04	1/2
AN500-05	3/4
AN600-10	1
AN700-12	1 1/4
AN800-14	1 1/2



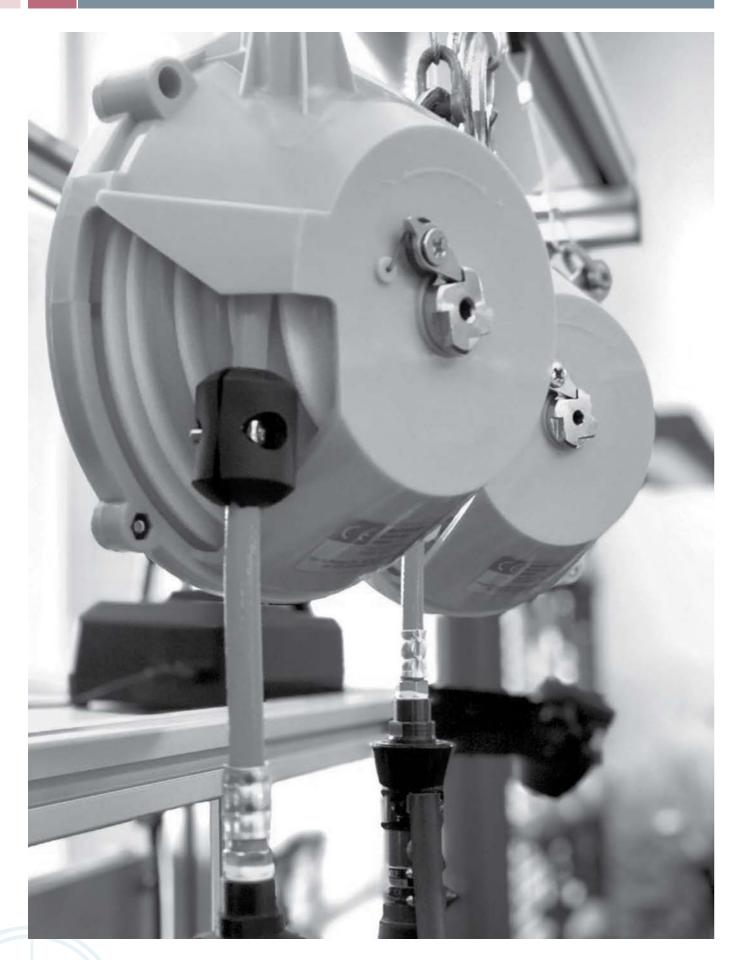








# **Handling Accessories**











Of course, our product range is completed by a range of accessories for tool handling:

- Balance
- Hose balancers
- Nutrunner holste
- Tool holders
- Lubricants

# Spring Balancers

Safety and health are among the most important criteria in the workplace. Wire rope hoists play a major role in making working with heavy tools much easier and at the same time increasing safety and efficiency. Rope spring hoists return the hand-guided work tool attached to them to its original position after use by means of a spring-loaded system.

Work can be done faster, better and longer. Unused tools are simply and safely parked "floating", i.e. they are within reach but not in the way. During use, the tools have practically no weight of their own and thus relieve the workers. The accident rate is significantly reduced because the tools can no longer fall down. Damage to the tools or parts to be processed is also avoided. They can be used in a wide variety of workplaces, in workshops and on assembly lines.

### Nutrunner quiver/holster

Your (pneumatic) tools are always within reach by means of a permanently mountable tool holder. The holder locks the tool securely and the plastic protection ensures that your tool is not damaged.





# **Spring Balancers & Retractors**





No power source is required when holding

The zero-gravity balancer makes the tools feel virtually weightless and maximises efficiency and accuracy when working. Tension and cable length are adjustable. Keeps the

**Features TW series** 

- ► Main suspension can be rotated 360°
- ► Additional tool clips are attached to the top and bottom sides
- ► Prevents the tool from falling freely should a spring break
- ► Measuring device to check the voltage



spring exerts a constant pull on the cable. This causes the tool to immediately return to its rest position when the operator releases it. Overall, this useful tool increases efficiency and safety in the workplace while delaying operator fatigue.

#### working environment safe and the workplace and stabilising tools. Ergonomically benefifree of tools, fixtures, etc. cial/efficient by delaying tool weight and wor-Material: aluminium housing and drum, steel ker fatigue when performing repetitive tasks.

The **retractor** is one of the most common and easiest to use balancers. The worker can pull down the tool attached to a cable that rolls up inside the retractor housing. An internal

# Retractors

Model	Capacity		Stroke		Weight		Fall-arrest	Drum lock
	lbs	kg	ft.		lbs	kg	device	device
RW-0	1.1 - 3.3	0.5 - 1.5	6.56	2.0	1.1	0.5	_	_
RW-3	2.2 - 6.6	1.0 - 3.0	6.56	2.0	1.5	0.7	-	-
RW-5	6.6 - 11	3.0 - 5.0	6.56	2.0	2.0	0.9	_	_

#### **Spring Balancers**

opinig Dai	d::00:0							
Model	Capacity		Str	oke	We	icht	Fall-arrest	Drum lock
Model	lbs	kg	ft.	m	lbs	kg	device	device
TW-0	1.1 - 3.3	0.5 - 1.5	3.28	1.0	1.1	0.5	_	_
TW-3	2.2 - 6.6	1.0 - 3.0	4.27	1.3	3.1	1.4	-	-
TW-5	5.5 - 11	2.5 - 5.0	4.27	1.3	3.3	1.5	_	_
TW-9	9.9 - 19.8	4.5 - 9.0	4.27	1.3	7.5	3.4	-	•
TW-15	19.8 - 33.1	9 - 15	4.27	1.3	8.4	3.8	_	•
TW-22	33.1 - 48.5	15 - 22	4.92	1.5	15.9	7.2	_	•
TW-30	48.5 - 66.1	22 - 30	4.92	1.5	16.8	7.6	_	•
TW-40	66.1 - 88.2	30 - 40	4.92	1.5	21.6	9.8	_	•
TW-50	88.2 - 110.3	40 - 50	4.92	1.5	22.9	10.4	_	•
TW-60	110.3 - 132.3	50 - 60	4.92	1.5	25.6	11.6	-	•
TW-70	132.3 - 154.3	60 - 70	4.92	1.5	26.0	11.8	_	•
TW-90	154 - 198	70 - 90	6.9	1.5	59	27	-	•
TW-105	187 - 231	85 - 105	4.9	1.5	64	29	_	•
TW-120	220 - 264	100 - 120	6.9	1.5	66	30	-	•



The types ETP, ELF and TW from TW-9 upwards are equipped with a blocking device. This offers more safety in case of spring breakage. These models also have a locking knob for easy tool change.



# **Spring Balancers & Hose Balancers**







- · Improves work efficiency and delays fatiaue of workers.
- · Keeps the position of a tool stable and contributes to accurate work.
- Ensures that a tool does not get damaged.
- · No electrical or pneumatic energy is required and safe working is guaranteed.



,ENDO' balancers with ratchet mechanism are useful for switching a suspended tool on and off. They are also advantageous for frequent load changes.

The ratchet mechanism allows you to stop the wire rope at any position, even when the balancer is not loaded.

- · When suspended loads are replaced fre-
- For hanging washed objects.



The balancer function has been added to the hose reel so that you can effortlessly control the vertical position of air tools and similar equipment. The balancer can be used as a suspension rope as well as an air hose, eliminating messy, hard-to-organise hoses. The housing and reel are made of a special synthetic resin and are robust and lightweight in construction. The hose is made of high quality urethane and is very durable. The air hose has a diameter of 9 mm at the inlet and a 1/4" internal thread at the outlet.

# Spring Balancers w Extended Rope

Model	Capacity kg	Stroke m	Rope ∅ mm	Weight kg	Fall-arrest device	Drum lock device
ELF-3	1.5 - 3.0	2.5	3.0	4.6	•	•
ELF-5	3.0 - 5.0	2.5	3.0	4.8	•	•
ELF-9	5.0 - 9.0	2.5	3.0	5.4	•	•
ELF-15	9.0 - 15	2.5	4.76	10.0	•	•
ELF-22	15 - 22	2.5	4.76	10.2	•	•
ELF-30	22 - 30	2.5	4.76	11.0	•	•
ELF-40	30 - 40	2.5	4.76	14.0	•	•
ELF-50	40 - 50	2.5	4.76	14.5	•	•
ELF-60	50 - 60	2.5	4.76	17.1	•	•
ELF-70	60 - 70	2.5	4.76	18.0	•	•

### **Balancers w Ratcheting Mechanism**

Model	Capacity kg	Stroke m	Rope Ø mm	Weight kg	Fall-arrest device	Drum lock device
RSB-15	9.0 - 15	1.5	5.0	7.4	•	-
RSB-22	15 - 22	1.5	5.0	7.7	•	-
RSB-30	22 - 30	1.5	5.0	8.1	•	_
RSB-40	30 - 40	1.5	5.0	8.5	•	_

# **Hose Balancers**

Model	Capacity kg	Hose Length m	Hose Ø mm	Air Flow I/min	Pipe Thread inch	Weight kg	Fall-arrest device	Drum lock device
ATB-0	0.5 - 1.5	1.3	6.35	700	PT 1/4	1.58	_	-
ATB-1	1.5 - 3.0	1.3	6.35	700	PT 1/4	1.66	-	_
ATB-2	3.0 - 5.0	1.3	6.35	700	PT 1/4	1.73	_	-







# **Tool Holster**

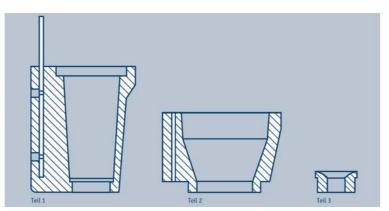


### **Rubber Holster**

Universal tool holster for all machine-driven tools such as straight screwdrivers, angle screwdrivers, pistol screwdrivers, The holster tapers towards the bottom and is grinders, etc.

The tools stored in the holder are always within reach and are advantage that it can be individually notched, protected from external influences at the same time. A free e.g. so that the trigger/starter of a deposited workspace ensures increased safety. The holder is made of impulse wrench would not be activated unsolid rubber and tapers towards the bottom.

For slim tools (e.g. straight screwdrivers) there is an optional the quiver to run ahead of itself. special insert for narrowing the holder.



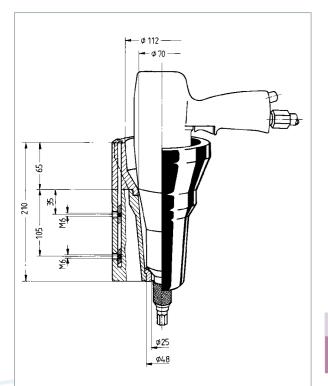
- ► Hard rubber with steel core.
- ➤ 3-piece (standard).
- ► Weight approx. 1.5 kg.
- ► Fixing with 2 screws M6.

made of solid rubber. This material has the intentionally, causing the screwdriving tool in

The rubber guiver is always supplied in 3 parts; thus, depending on the dimensions of the tool, the upper and/or lower rubber part can be omitted. The fastening, e.g. to a workbench, is done by means of two M6 screws.







Rubber Holster					
Model	Item No.	Weight kg	Variant (pcs)		
WK-3	793106	1	3		







# **Tool Holder**





With this tool holder, your tools are always within reach. The holder locks the tool securely and the plastic protection ensures that your tool is not damaged. The cup is adjustable, but is locked in place by a safety pin.

TH - Tool	H – Tool Holder		
Model	Item No.	ø mm	for type
TH001	Y61022-001	42	RRI-SP0502, RRI-SP11602, RRI-SP10902, RRI-SP21704, RRI-SP21104, RRI-SP20705, RRI-SP31706, RRI-SP31108, RRI-SP30710, RRI-SP30511, Y-41A(JQ), Y-46A(E)(JQ), Y-56A(E)(JQ), Y-61A(E)
TH002	Y61022-002	47	YS-E600, YS-E800, YS-E900, YS-E950, TKa60(A), TKa70(A), TKa80(A), YEX120(A), YEX150(A), RRI-30T(AT), RRI-40T(AT), RRI-50T(AT), RRI-60T(AT), RRI-30(A), RRI-40X(AX), RRI-50X(A), RRI-60(AX), YLTX50A, YLTX60A, YLTX50E, YLTX60E, YLT60AL(EL), YLTX70A(E), YLT70AL(EL), YLa60A(JQ), YLa70A(JQ), YLa80A(JQ), YLa60E(JQ), YLa70E(JQ), YLa80E(JQ)
TH003	Y61022-003	58	RRI-BS3, RRI-BS6, RRI-BS9, RRI-BI32T, RRI-BI55T, RRI-BI100T RRI-BI120T, RRI-BIM15(A)T, RRI-BIM25(A)T, RRI-BIM35T, RRI-BIM45T, TKa600(A), TKa700(A), TKa800, TKa90, TKa110, TKa120, RRI-70T(AT), RRI-80T, RRI-90T, RRI-70(A)/80/90, YLTX80E, YLT80EL, YLTX110E, YLT110EL, YLa90E, YLa110E, YLa120E, Y70E(JQ)
TH004	Y61022-004	73	YS-M500, YS-M700, YS-M900, YS-M1100, TKa1110, TKa1200, TKa1400, TKa1500, TKa150, YEX-1400, RRI-100T, RRI-130T, RRI-150T, YLTX120E, YLT120EL, YLTX140E, YLT140EL, YLa140E, Y-140(JQ)



TH - Tool Ho	Fool Holder		
Model	Item No.	for type	
TH005	Y61022-005	RRI-BIM Series	
		RRI-BS Series	
		RRI-BI Series	
		RRI-BA Series	







# Other accessories

### Lubricants

Good quality compressed air is vital for every pneumatic tool. The air must always be clean and dry and usually also lightly oiled. Low-oil tools can save up to 80% compressed air oil, which also improves the quality of the breathing air accordingly.

Before putting an impulse wrench into operation, please add 1-3 drops of acid- and resinfree compressed air oil to the air inlet of the tool.



All pneumatic tools

ATLUB – Compressed-air oil			
for Type	Item No.		

353010

ATLUB is the ideal lubricant for pneumatic tools. ATLUB is a synthetic, water-soluble lubricant to which special additives have been added to achieve the following properties:

- Good protection against corrosion, oxidation and wear,
- Prevention of icing in the outlet valves of pneumatic tools and machines,
- Prevention of sedimentation in compressed air systems,
- mild but cleansing effect,
- no damage to rubber and/or plastic machine parts.

ATLUB is used as an oil mist lubricant for air tools such as hammers, drills, air motors and air hammers. ATLUB cannot be mixed with other mineral oils; however, the equipment does not need to be cleaned. ATLUB makes it possible to carry out work even at a temperature of -25°C without the air tools freezing.



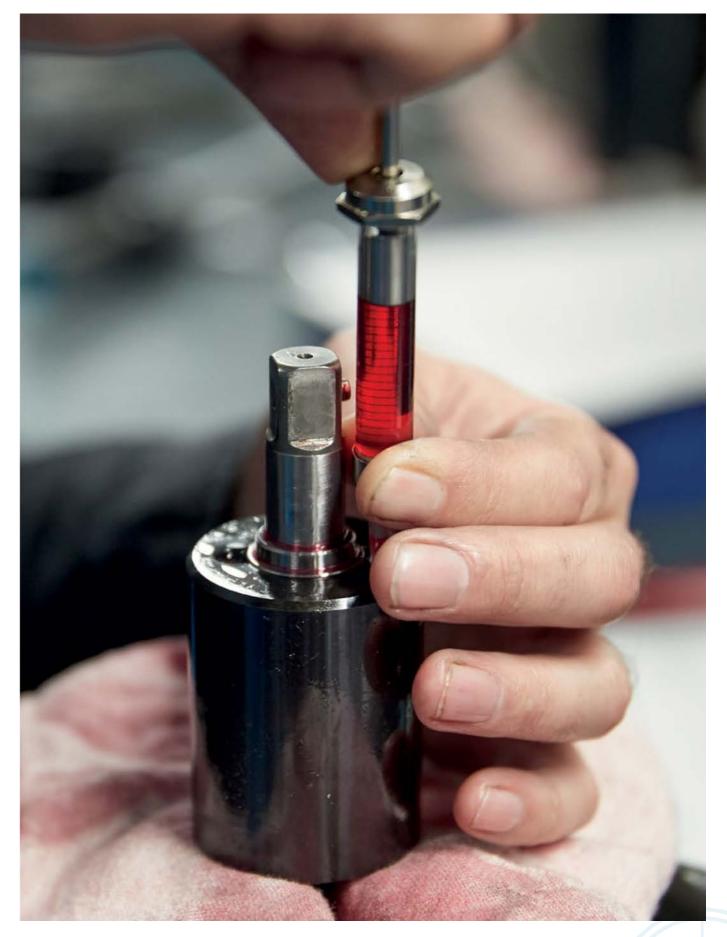
	Hydraulic fluid for impulse cell		
	for Type	Item No.	
RRI impulse tools		01-0507	
	Yokota impulse tools	792156	

# ZENO www.zemo-tools.de





# Maintenance service upon request







# **Product Groups**

### Torque Application Tools

- Signaling
- Indicating
- Electronically monitored

### Impulse Tools

- Battery tools
- Pneumatic tools
- EC systems

### Torque Measurement

- Gauges
- Testers & Sensors
- Calibration equipment

#### Pneumatic Pliers

- Cutting
- Squeezing
- Assembling

#### Power Sockets

- w/o or with magnet
- w Sleeve Drive
- Adaptors

#### Insert-Bits

- Bits & Holders
- Nutsetter
- Adaptors

### Handling Accs

- Air treatment
- Hoses & couplings
- Balancers

This catalogue replaces all previous editions. Images and technical specifications are correct at the time of going to press. Errors/changes excepted.

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