



Product Overview

Organisation

SMC worldwide

As a worldwide leading expert in pneumatics SMC is counting 260 sales offices in 78 countries. With over 15 000 employees, SMC is never far away from you or your customers. This aligns perfectly with the mission: providing innovative products and services for industrial automation, adding value and fitting the needs of local customers.



SMC Belgium

The availability of SMC products in Belgium and Luxembourg goes back to 1984 and has been substantially extended. Today the comprehensive SMC product range and high quality is acknowledged as one of the best of the Belgium and Luxembourg markets. The unique SMC market approach in Belgium is based on a thorough customer support, a comprehensive service and optimal product availability. In addition, SMC is always committed to have intensive and personal collaboration with its customers.

Quality

SMC aims at providing their customers high quality innovative solutions for industrial automation. To do so, SMC is using the latest pneumatic technology available today. With ISO 9001 and ISO 14001 certification, 29 worldwide established manufacturing facilities guarantee the highest long term quality and reliability of products that are produced in an environmentally conscious way.



Installation and operation

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SMC's modular air treatment system enable significant advantages for warehousing, assembly and service.

Each unit is equipped with connection threads and therefore can also be used for single mounting (no extra adapters needed)

With only a small component stock, a machine can be equipped with both modular units and separate regulators, filter and lubricators. This also means benefits in exchange and repair.

The individual units are combined with spacers that also serve as mounting brackets. Replacement of an individual unit is easily done by releasing the components from the spacers. By using threaded adapters, you can replace units without having to unscrew them. Adapters for pressure switches, extra ports, shut-off valves etc. are available as accessories.

Note

Do not exceed stated maximum pressure and temperature values.

Connection threads

Size 10: M5

Size 20–60: G-thread to ISO 228/1. NPT and Rc on request.

Installation

Before the installation of air preparation unit, make sure that all debris, cutting oil, dust, etc., are removed from the piping.

Mounting position

Regulators: Optional

Filter/filter regulators/lubricators: Bowl facing down.

The units should be mounted following the arrow direction.

Bowl

Polycarbonate bowls must not be exposed to synthetic oils, thinner, trichlorethylene, kerosene or other aromatic hydrocarbons. For cleaning, use neutral detergent.

Automatic drain

Drain condensate with plastic pipe/tubing Ø6/4 with max. length of 5 m. The pipe is installed in a way that condensate is always free to be diverted.



Microfilters

The filter element should be replaced once a year or when the pressure drop over the filter reaches 0.1 Mpa.

Installation

The air is pre-filtered with an AF-filter before the micro-filter (AFM).

Pressure regulators

Pressure setting AR10–60

Pull the adjusting knob straight out. Turn to the desired pressure. Lock the set value by pressing the knob. For unhampered pressure setting, at least 60 mm clearance for the adjusting knob is required.

Maintenance

In case of malfunction, check that:

- A primary pressure is higher than the set output pressure.
 - B main valves seat is not clogged.
 - C membrane or spring have not been damaged.
- If unregulated air streams through the regulator, this is most likely due to diaphragm failure.

Air preparation – modular system

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Medium	Compressed air					
Degree of filtration	Filter, filter regulator: 5 µm Microfilter: 0.3 µm; sub-microfilter: 0.01 µm					
Max. working pressure	1 MPa (10 bar)					
Min. working pressure	Lubricator: 0.05 MPa (0.5 bar); automatic drain: 0.15 MPa (1.5 bar)					
Operating temperature	-5 to 60 °C					
Series	10	20	30	40	50	60
Pressure gauge	1/16	1/8	1/8	1/4	1/4	1/4
Flow	See below					

- New adapters for simplified installation ■ Regulator with improved sensitivity and built-in gauge ■ Ozone-resistant HNBR seals



Filter AF

With manual drain

Part number	Connection	Flow
AF10-M5	M5	120 l _v /min
AF20-F01	G1/8	800 l _v /min
AF20-F02	G1/4	800 l _v /min
AF30-F02	G1/4	2000 l _v /min
AF30-F03	G3/8	2000 l _v /min
AF40-F03	G3/8	3500 l _v /min
AF40-F04	G1/2	3500 l _v /min
AF40-F06	G3/4	4000 l _v /min
AF50-F06	G3/4	7000 l _v /min
AF60-F10	G1	8000 l _v /min

Flow: 7 bar up to 0.3 bar (0.03 MPa) pressure drop.

Elements: We recommend replacement of elements once a year or at Δp 1 bar.

Filter AF

With automatic drain

Part number	Connection	Flow
AF10-M5C	M5	120 l _v /min
AF20-F01C	G1/8	800 l _v /min
AF20-F02C	G1/4	800 l _v /min
AF30-F02D	G1/4	2000 l _v /min
AF30-F03D	G3/8	2000 l _v /min
AF40-F03D	G3/8	3500 l _v /min
AF40-F04D	G1/2	3500 l _v /min
AF40-F06D	G3/4	4000 l _v /min
AF50-F06D	G3/4	7000 l _v /min
AF60-F10D	G1	8000 l _v /min



Filter AF



Regulator AR

Regulator AR

Without pressure gauge

Part number	Connection
AR10-M5	M5
AR20-F01	G1/8
AR20-F02	G1/4
AR25-F02	G1/4
AR30-F02	G1/4
AR30-F03	G3/8
AR40-F04	G1/2
AR40-F06	G3/4
AR50-F06	G3/4
AR60-F10	G1

With built-in pressure gauge

Part number	Connection
AR20-F01E	G1/8
AR20-F02E	G1/4
AR25-F02E	G1/4
AR30-F02E	G1/4
AR30-F03E	G3/8
AR40-F04E	G1/2
AR40-F06E	G3/4
AR50-F06E	G3/4
AR60-F10E	G1

Panel nut not included. For panel nut and bracket, see accessories.

Regulator AR – with back flow

Without pressure gauge

Part number	Connection
AR20K-F01	G1/8
AR20K-F02	G1/4
AR25K-F02	G1/4
AR30K-F02	G1/4
AR30K-F03	G3/8
AR40K-F04	G1/2
AR40K-F06	G3/4
AR50K-F06	G3/4
AR60K-F10	G1

With built-in pressure gauge

Part number	Connection
AR20K-F01E	G1/8
AR20K-F02E	G1/4
AR25K-F02E	G1/4
AR30K-F02E	G1/4
AR30K-F03E	G3/8
AR40K-F04E	G1/2
AR40K-F06E	G3/4
AR50K-F06E	G3/4
AR60K-F10E	G1

Panel nut not included. For panel nut and bracket, see accessories.

Please contact SMC for converting adapter R1/16 to R1/8 AR10 gauge connection.

Air preparation – modular system

Pressure switch IS10M – pressure range: 0.1–0.6 MPa
(max. working pressure: 0.7 MPa)

Part number	Series
IS10M-20-6L	20
IS10M-30-6L	25.30
IS10M-40-6L	40
IS10M-60-6L	50, 55, 60

Pressure switch IS10E – with threaded connection (adapter), pressure range: 0.1–0.6 MPa (max. working pressure: 0.7 MPa)

Part number	Series	Connection
IS10E-20F02-6L	20	G1/4
IS10E-30F03-6L	25.30	G3/8
IS10E-40F04-6L	40	G1/2



Pressure switch IS10M



Pressure switch IS10E



Pressure gauge GP46,
with pressure switch

Pressure gauge G□

Part number	Connection	Series	Pressure
G27-10-R1	R1/16	10	0–1.0 MPa
G36-2-01	R1/8	20, 30	0–0.2 MPa
G36-4-01	R1/8	20, 30	0–0.4 MPa
G36-10-01	R1/8	20, 30	0–1.0 MPa
G36-10-01-L	R1/8	20, 30	0–1.0 MPa
G46-2-02	R1/4	40, 50, 60	0–0.2 MPa
G46-4-02	R1/4	40, 50, 60	0–0.4 MPa
G46-10-02	R1/4	40, 50, 60	0–1.0 MPa
G46-10-02-L	R1/4	40, 50, 60	0–1.0 MPa

Panel mounted pressure gauge G46

Part number	Connection	Port diam.	Pressure
G46-10-01M-C	R1/8 + female M5	48.5 mm	0–1.0 MPa



Pressure
gauge G□



Pressure
gauge G□-L

Please contact SMC for converting adapter R1/16 to R1/8 AR10 gauge connection.

Pressure gauge GP46 – with pressure switch, 0.1–0.8 MPa

Part number	Connection	Pressure
GP46-10-01-Q	R1/8	0–1.0 MPa
GP46-10-02-Q	R1/4	0–1.0 MPa

Panel mounting kit – for GP46

Part number
1305104-4A

Pressure gauge GC3 – square, for panel mounting

Part number	Connection	Series	Pressure
GC3-10AS	Integrated mounting	20, 30, 40, 50, 60	0–1.0 MPa
GC3-2AS	Integrated mounting	20, 30, 40, 50, 60	0–0.2 MPa

Digital pressure switch ISE35

– integrated, including 2 meter cable

Part number ¹	Connection	Series	Pressure
ISE35-N-65-LA	Integrated mounting	20, 30, 40, 50, 60	0–1.0 MPa
ISE35-R-65-LA	Integrated mounting	20, 30, 40, 50, 60	0–1.0 MPa

1. ISE35-N = bottom-mounted cable, ISE35-R = top-mounted cable.



ISE35-N



ISE35-R

Digital pressure
switch ISE35,
mounted on
AR regulator



FR combination – shut-off valve VHS,
filter regulator AW and soft start-up AV

With automatic drain, without pressure gauge

Part number	Connection	Series
AC20XSE-F02C-1000	G1/4	20
AC30XSE-F03D-1001	G3/8	30
AC40XSE-F04D-1002	G1/2	40
AC50XSE-F06D-1003	G3/4	50, 60
AC50XSE-F10D-1004	G1	50, 60

With automatic drain and built-in pressure gauge

Part number	Connection	Series
AC20XSE-F02CE-1005	G1/4	20
AC30XSE-F03DE-1006	G3/8	30
AC40XSE-F04DE-1007	G1/2	40
AC50XSE-F06DE-1008	G3/4	50, 60
AC50XSE-F10DE-1009	G1	50, 60



FR combination

Air preparation – modular system

Accessories and spare parts

2

Connection block

Part number	Series	Connection
E100-M5	10	M5
E200-F01	20	G1/8
E200-F02	20	G1/4
E200-F03	20	G3/8
E300-F03	25, 30	G3/8
E300-F04	25, 30	G1/2
E400-F02	40	G1/4
E400-F03	40	G3/8
E400-F04	40	G1/2
E400-F06	40	G3/4
E600-F06	50, 55, 60	G3/4
E600-F10	50, 55, 60	G1

Output with check valve

– prevents back flow of lubricated air

Part number	Series	Connection
AKM2000-F02	20	G1/4
AKM3000-F02	25, 30	G1/4
AKM4000-F03	40	G3/8

Similar to older 1000–6000 series.

Distribution unit – the main connections are not threaded

Part number	Series	Connection
Y14-M5	10	M5
Y24-F01	20	G1/8
Y24-F02	20	G1/4
Y34-F01	25, 30	G1/8
Y34-F02	25, 30	G1/4
Y44-F02	40	G1/4
Y44-F03	40	G3/8



Connection block



Output with check valve



Distribution unit

Output

Part number	Series	Connection
Y110-M5	10	M5
Y210-F01	20	G1/8
Y210-F02	20	G1/4
Y310-F01	25, 30	G1/8
Y310-F02	25, 30	G1/4
Y410-F02	40	G1/4
Y410-F03	40	G3/8
Y610-F03	50, 55, 60	G3/8
Y610-F04	50, 55, 60	G1/2

Mounting adapter

Part no	Series
Y100	10
Y200	20
Y300	25, 30
Y400	40
Y500	40-06 ¹
Y600	50, 55, 60

Mounting adapter – with T-bracket

Part no	Series
Y100T	10
Y200T	20
Y300T	25, 30
Y400T	40
Y500T	40-06 ¹
Y600T	50, 55, 60

1. Y500 series does not fit the size 50 but is designed for size 40 with 3/4" thread (F06).



Output



Mounting adapter



Mounting adapter with T-bracket

Adapter – FRL

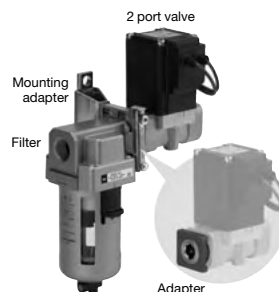
Part number	Connection	Fits mounting adapter
E210-U01	1/8	Y200 & Y200T
E210-U02	1/4	Y200 & Y200T
E310-U02	1/4	Y300 & Y300T
E310-U03	3/8	Y300 & Y300T
E410-U02	1/4	Y400 & Y400T
E410-U03	3/8	Y400 & Y400T
E410-U04	1/2	Y400 & Y400T

Plug – FRL

Part number	Fits mounting adapter
E210-P	Y200 & Y200T
E310-P	Y300 & Y300T
E410-P	Y400 & Y400T



Adapter E□10



Mounting example

Angle adapter – FRL, female taper thread

Part number	Connection	Fits mounting adapter
E300P-070S-02	Rc1/4	Y300 & Y300T
E300P-070S-03	Rc3/8	Y300 & Y300T
E400P-070S-03	Rc3/8	Y400 & Y400T
E400P-070S-04	Rc1/2	Y400 & Y400T

AMG – water separator; AM, AMD & AMH – mist and micro mist separators

2

Medium	Compressed air						
Degree of filtration	See below						
Max. working pressure	1.0 MPa (10 bar)						
Min. working pressure	0.05 MPa (0.5 bar); 0.15 MPa (1.5 bar) with automatic drain						
Operating temperature	5 to 60 °C						
Size	150	250	350	450	550	650	850
Connection	1/8	1/4	3/8	1/2	3/4	1	1 1/2
	1/4	3/8	1/2	3/4	1	1 1/2	2

- Water separator removes 99% of the condensed water (AMG)
- Micro and sub-microfilters
- Automatic drain



Water separator – with automatic drain

Part number	Connection	Flow ¹
AMG150C-F01D	G1/8	300 l _n /min
AMG250C-F02D	G1/4	750 l _n /min
AMG250C-F03D	G3/8	750 l _n /min
AMG350C-F03D	G3/8	1500 l _n /min
AMG450C-F04D	G1/2	2200 l _n /min
AMG550C-F06D	G3/4	3500 l _n /min
AMG650-F10D	G1	6000 l _n /min
AMG850-F14D	G1 1/2	12000 l _n /min

Microfilter – with automatic drain (filtration 0.3 µm)

Part number	Connection	Flow ¹
AM250C-F02D	G1/4	750 l _n /min
AM350C-F03D	G3/8	1500 l _n /min
AM450C-F04D	G1/2	2200 l _n /min
AM550C-F06D	G3/4	3500 l _n /min
AM650-F10D	G1	6000 l _n /min
AM850-F14D	G1 1/2	12000 l _n /min

Sub-microfilter – (filtration 0.01 µm)

Part number	Connection	Flow ¹
AMD250C-F02-T	G1/4	500 l _n /min
AMD350C-F03-T	G3/8	1000 l _n /min
AMD450C-F04-T	G1/2	2000 l _n /min
AMD550C-F06-T	G3/4	3500 l _n /min
AMD650-F10-T	G1	6000 l _n /min
AMD850-F14-T	G1 1/2	12000 l _n /min

Combined micro- and sub-microfilter

– (filtration 0.01 µm)

Part number	Connection	Flow ¹
AMH250C-F02-T	G1/4	500 l _n /min
AMH350C-F03-T	G3/8	1000 l _n /min
AMH450C-F04-T	G1/2	2000 l _n /min
AMH550C-F06-T	G3/4	3500 l _n /min
AMH650-F10-T	G1	6000 l _n /min
AMH850-F14-T	G1 1/2	12000 l _n /min

1. Specified maximum flow is at 0.7 MPa (7 bar).

Filter element

Part number	Part number
AMG-EL150	AMD-EL250
AMG-EL250	AMD-EL350
AMG-EL350	AMD-EL450
AMG-EL450	AMD-EL550
AMG-EL550	AMD-EL650
AMG-EL650	AMD-EL850
AMG-EL850	AMH-EL250
AM-EL250	AMH-EL350
AM-EL350	AMH-EL450
AM-EL450	AMH-EL550
AM-EL550	AMH-EL650
AM-EL650	AMH-EL850
AM-EL850	

Brackets assembly – for AM series

Part number	Size
AM-BM101	150
AM-BM102	250
AM-BM103	350
AM-BM104	450
AM-BM105	550
BM56	650
BM57	850

Mounting adapter

Part number	Series
Y200	AM□150C
Y300	AM□250C
Y400	AM□350C
Y500	AM□450C
Y600	AM□550C

Mounting adapter with T-bracket can **not** be used. Use brackets for wall mounting.
For series 650 or 850, use fittings (see chapter 10).



Mounting adapter

Water separator
AMGMicrofilter and
sub-microfilter AM,
AMD and AMH

IDG – membrane air dryer

Type	1	5	10	20	30	50	60	75	100
Medium	Air								
Pressure range	0.3–0.85 MPa (3–8.5 bar)				0.3–1.0 MPa (3–10 bar)				
Operating temperature	–5 to 55 °C				–5 to 50 °C				
Dew point	–20 °C	–20, –15 °C			–20, –15, –40 °C				
Dew point indicator	—	Req.	Standard						

- No power supply required ■ Compact and lightweight design
- Can be combined with SMC's modular regulators and filters
- Dew point –60 °C on request



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Membrane air dryer – standard, dew point –20 °C, discharge 20%

Part number	Flow, OUT	Connection
IDG1-F02	10 l _n /min	1/4
IDG5-F01	50 l _n /min	1/8
IDG5-F02	50 l _n /min	1/4
IDG10-F02	100 l _n /min	1/4
IDG10-F03	100 l _n /min	3/8
IDG20-F02	200 l _n /min	1/4
IDG20-F03	200 l _n /min	3/8
IDG30A-F02	300 l _n /min	1/4
IDG30A-F03	300 l _n /min	3/8
IDG50A-F02	500 l _n /min	1/4
IDG50A-F03	500 l _n /min	3/8
IDG60-F03	600 l _n /min	3/8
IDG60-F04	601 l _n /min	1/2
IDG75-F04	750 l _n /min	1/2
IDG100-F04	1000 l _n /min	1/2

Membrane air dryer – low discharge, dew point –15 °C, discharge 10%

Part number	Flow, OUT	Connection
IDG5H-F01	50 l _n /min	1/8
IDG5H-F02	50 l _n /min	1/4
IDG10H-F02	100 l _n /min	1/4
IDG10H-F03	100 l _n /min	3/8
IDG20H-F02	200 l _n /min	1/4
IDG20H-F03	200 l _n /min	3/8
IDG30HA-F02	300 l _n /min	1/4
IDG30HA-F03	300 l _n /min	3/8
IDG50HA-F02	500 l _n /min	1/4
IDG50HA-F03	500 l _n /min	3/8
IDG60H-F03	600 l _n /min	3/8
IDG60H-F04	601 l _n /min	1/2
IDG75H-F04	750 l _n /min	1/2
IDG100H-F04	1000 l _n /min	1/2

Membrane air dryer – low dew point, dew point –40 °C, discharge 25%

Part number	Flow, OUT	Connection
IDG30LA-F02	75 l _n /min	1/4
IDG30LA-F03	75 l _n /min	3/8
IDG50LA-F02	110 l _n /min	1/4
IDG50LA-F03	110 l _n /min	3/8
IDG60L-F03	170 l _n /min	3/8
IDG60L-F04	170 l _n /min	1/2
IDG75L-F04	240 l _n /min	1/2
IDG100L-F04	300 l _n /min	1/2

Membrane air dryer – standard with connection for discharge flow, dew point –20 °C, discharge 20%

Part number	Flow, OUT	Connection
IDG1-F02-P	10 l _n /min	1/4
IDG5-F01-P	50 l _n /min	1/8
IDG5-F02-P	50 l _n /min	1/4
IDG10-F02-P	100 l _n /min	1/4
IDG10-F03-P	100 l _n /min	3/8
IDG20-F02-P	200 l _n /min	1/4
IDG20-F03-P	200 l _n /min	3/8
IDG30A-F02-P	300 l _n /min	1/4
IDG30A-F03-P	300 l _n /min	3/8
IDG50A-F02-P	500 l _n /min	1/4
IDG50A-F03-P	500 l _n /min	3/8
IDG60-F03-P	600 l _n /min	3/8
IDG60-F04-P	601 l _n /min	1/2
IDG75-F04-P	750 l _n /min	1/2
IDG100-F04-P	1000 l _n /min	1/2

For connection between old and current series of SMC's modular FRL, please contact SMC.

Facts

Dew Point: Atmospheric dew point.

Flow, OUT: Flow at standard operating conditions.

Discharge: Relationship between flow rate of leakage flow and flow rate of supply at standard operating conditions. Contact SMC for details.

IDFA – dryer

Supply pressure	0.15–1 MPa (1.5–10 bar); K versions: 0.15–1.6 MPa (1.5–16 bar)
Incoming air temperature	5 to 50 °C
Ambient air temperature	2 to 40 °C (relative humidity 85 % or less)
Voltage	230 V, 50 Hz

■ Modern design ensures a constant stable pressure dew point and low power consumption ■ Heat exchangers in stainless steel gives long life combined with low pressure drop



Flow capacity

Type	ISO8573.1 class 4 3 °C dew point	ISO8573.1 class 5 7 °C dew point	ISO8573.1 class 6 10 °C dew point
IDFA3E-23	12 m³/h	15 m³/h	17 m³/h
IDFA4E-23	24 m³/h	31 m³/h	34 m³/h
IDFA6E-23-K	36 m³/h	46 m³/h	50 m³/h
IDFA8E-23-K	65 m³/h	83 m³/h	91 m³/h
IDFA11E-23-K	80 m³/h	101 m³/h	112 m³/h
IDFA15E-23-K	120 m³/h	152 m³/h	168 m³/h
IDFA22E-22-K	182 m³/h	231 m³/h	254 m³/h
IDFA37E-37-K	273 m³/h	347 m³/h	382 m³/h
IDFA55E-23	390 m³/h	432 m³/h	510 m³/h
IDFA75E-23	600 m³/h	720 m³/h	822 m³/h

AF – high flow air filter

Medium	Compressed air	
Degree of filtration	5 µm	
Max. working pressure	1 MPa (10 bar)	
Min. working pressure	0.1 MPa (1 bar)	
Operating temperature	5 to 60 °C	
Size	800	900
Connection	G1 1/2	G2
Flow¹	10000 l _n /min	15000 l _n /min

1. Flow at 7 bar and ΔP 0.02.

■ High flow ■ Degree of filtration 5 µm
■ Ideal filter for supply lines



Air filter – with automatic drain

Part number	Connection
AF811-F14	G1 1/2
AF911-F20	G2

Filter element

Part number	For filter
11345-5B	AF811
11352-5B	AF911

Bowl – with automatic drain (spare part)

Part number
EAD34F

AN – silencer

Medium	Compressed air, lubricated or not lubricated
Max. working pressure	1.0 MPa (10 bar)
Operating temperature	5 to 60 °C

- Effective air silencing, 30 dB (A)
- Size 1/4" and larger has damping elements in polyacetal – no risk of accidents



Silencer

Sintered bronze

Part number	Silencing	Conn.	Flow
AN120-M3	11 dB (A)	M3	0.07 m³/min
AN120-M5	18 dB (A)	M5	0.27 m³/min
AN101-01	13 dB (A)	R1/8	0.5 m³/min
AN110-01	21 dB (A)	R1/8	0.5 m³/min

Standard

Part number	Silencing	Conn.	Flow
AN10-01	30 dB (A)	R1/8	0.8 m³/min
AN20-02	30 dB (A)	R1/4	3 m³/min
AN30-03	30 dB (A)	R3/8	5 m³/min
AN40-04	30 dB (A)	R1/2	8 m³/min
AN500-06	30 dB (A)	R3/4	12 m³/min
AN600-10	30 dB (A)	R1	20 m³/min
AN700-12	30 dB (A)	R1 1/4	30 m³/min
AN800-14	30 dB (A)	R1 1/2	50 m³/min
AN900-20	30 dB (A)	R2	80 m³/min

Compact

Part number	Silencing	Conn.	Flow
AN10-01	25 dB (A)	R1/8	0.8 m³/min
AN15-02	25 dB (A)	R1/4	1 m³/min
AN30-03	25 dB (A)	R3/8	2 m³/min
AN40-04	25 dB (A)	R1/2	4 m³/min

The above stated flow refers to recommended flow at 0.5 MPa (5 bar).

Silencer

Push-in connection

Part number	Silencing	Conn.	Flow
AN10-C06	25 dB (A)	6 mm	0.8 m³/min
AN15-C08	25 dB (A)	8 mm	1 m³/min
AN15-C08	30 dB (A)	8 mm	3 m³/min
AN20-C10	30 dB (A)	10 mm	5 m³/min
AN30-C12	30 dB (A)	12 mm	5 m³/min

Large noise reduction effect

Part number	Silencing	Conn.	Flow
ANB1-01	38 dB (A)	R1/8	1.2 m³/min
ANB1-02	38 dB (A)	R1/4	2.7 m³/min
ANB1-03	38 dB (A)	R3/8	3.8 m³/min
ANB1-04	38 dB (A)	R1/2	7 m³/min
ANB1-06	38 dB (A)	R3/4	12 m³/min
ANB1-10	38 dB (A)	R1	20 m³/min
ANB1-12	38 dB (A)	R1 1/4	32 m³/min
ANB1-14	38 dB (A)	R1 1/2	45 m³/min
ANA1-01	40 dB (A)	R1/8	0.8 m³/min
ANA1-02	40 dB (A)	R1/4	1.2 m³/min
ANA1-03	40 dB (A)	R3/8	2.7 m³/min
ANA1-04	40 dB (A)	R1/2	4.5 m³/min
ANA1-06	40 dB (A)	R3/4	7 m³/min
ANA1-10	40 dB (A)	R1	12 m³/min
ANA1-12	40 dB (A)	R1 1/4	20 m³/min
ANA1-14	40 dB (A)	R1 1/2	32 m³/min
ANA1-20	40 dB (A)	R2	45 m³/min

Series 25 – silencer

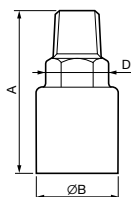
Medium	Air
Working pressure	1 MPa (10 bar)
Operating temperature	5 to 60 °C

- Exhaust only in one direction – prevents the spread of oil mist and noise
- Reduces the risk of clogging



Silencer series 25

Part number	Conn. port R	Recommended max. flow	Dimensions (mm)		
			A	B	D
2504-002	1/4	2200 l/min	62	30	24
2505-003	3/8	3000 l/min	64	30	24
2506-004	1/2	4000 l/min	68	30	24
2507-006	3/4	8000 l/min	88.5	48	35
2508-010	1	10000 l/min	97.5	60	41



For metering silencer ASN, see chapter 3.



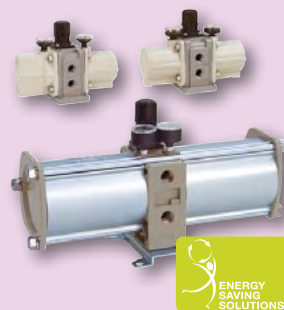
VBA – pressure booster

2

Modell	VBA10A	VBA11A	VBA20A	VBA40A	VBA43A
Medium	Compressed air, not lubricated ¹				
Degree of filtration	Microfilter 0.03 µm (SMC's AM or AFM series)				
Connection	G1/4		G3/8	G1/2	
Inlet pressure	0.1–1 MPa (1–10 bar)				
Secondary pressure	0.2–2 MPa (2–20 bar)		0.2–1 MPa (2–10 bar)		0.2–1.6 MPa (2–16 bar)
Max. pressure boost	2:1				4:1
Flow 1:1	400 l _n /min	100 l _n /min	1000 l _n /min	1900 l _n /min	2300 l _n /min

1. If components after the pressure booster require lubrication, lubricate after pressure booster.

- Raises main line pressure to the preset value
- Requires no wiring
- Ability to reduce the main line pressure



Pressure booster – including pressure gauge

Part number	Connection
VBA10A-F02GN	G1/4
VBA11A-F02GN	G1/4
VBA20A-F03GN	G3/8
VBA40A-F04GN	G1/2
VBA43A-F04GS	G1/2

Pressure tank – designed for booster VBA

Part number	Volume	Pressure
VBAT05AF-SV-Q	5 l	2 MPa (20 bar)
VBAT10AF-SV-Q	10 l	
VBAT20AF-RV-Q	20 l	
VBAT38AF-RV-Q	38 l	1 MPa (10 bar)

Pressure booster ordered separately.



Service set

Part number	Fits
KT-VBA10A-1	VBA10A
KT-VBA11A-20	VBA11A
KT-VBA20A-1	VBA20A
KT-VBA40A-1	VBA40A
KT-VBA43A-1	VBA43A

Pressure gauge – spare part

Part number	Fits
G27-20-01	VBA10A, VBA11A, VBA43A
G36-10-01	VBA20A, VBA40A

Function

Pressure booster VBA raises main line pressure to an adjustable value. A built-in pressure regulator ensures constant output pressure. The time for filling a tank with increased pressure can be reduced by parallel operation with non-return valve. Pressure booster is only activated when tank pressure does not corresponds to main line pressure.

Pilot operated and ATEX versions available on request.

ASV, AQ, KEA, ASD & ASP – quick exhaust valves, speed controller & blocking valve

3

Medium	Compressed air
Degree of filtration	10 µm
Max. working pressure	1.0 MPa (10 bar)
Min. working pressure	ASV, AQ, ASD, ASP: 0.1 MPa (1 bar); EAQ, EVR: 0.05 MPa (0.5 bar)
Operating temperature	-5 to 60 °C
Connection	See below
Flow	See below

- ASV – for fast movements with speed control
- AQ – easy tubing installation, quick exhaust
- ASD – control single-acting cylinder, or rotating cylinder over dead point
- ASP – blocks the cylinder ports at emergency stop to prevent drop



Quick exhaust valve ASV – cylinder mounted

With silencer and connectors

Part number	Tubing diam.	Connection	Flow
ASV120F-M3-04	4	M3	20 l _n /min
ASV220F-M5-04	4	M5	90 l _n /min
ASV220F-M5-06	6	M5	90 l _n /min
ASV310F-01-06S	6	R1/8	520 l _n /min
ASV310F-01-08S	8	R1/8	520 l _n /min
ASV310F-02-06S	6	R1/4	520 l _n /min
ASV310F-02-08S	8	R1/4	520 l _n /min
ASV410F-01-08S	8	R1/8	900 l _n /min
ASV410F-02-08S	8	R1/4	900 l _n /min
ASV410F-03-08S	8	R3/8	900 l _n /min
ASV410F-03-10S	10	R3/8	900 l _n /min
ASV510F-02-10S	10	R1/4	1600 l _n /min
ASV510F-03-10S	10	R3/8	1800 l _n /min
ASV510F-03-12S	12	R3/8	1800 l _n /min
ASV510F-04-10S	10	R1/2	1800 l _n /min
ASV510F-04-12S	12	R1/2	1800 l _n /min

Flow indicates approximate exhaust capacity at 0.5 MPa.

Quick exhaust valve AQ – tubing mounted

Part number	Tubing diam.	Exhaust port	Flow
AQ240F-04-00	4	Direct	136 l _n /min
AQ240F-06-00	6	Direct	150 l _n /min
AQ340F-06-00	6	Direct	220 l _n /min
AQ240F-04-04	4	Ø4	136 l _n /min
AQ340F-06-06	6	Ø6	220 l _n /min

Quick exhaust valve AQ – high flow

Part number	Connection	Flow
AQ1500-M5	M5	150 l _n /min
EAQ2000-F01	G1/8	1360 l _n /min
EAQ2000-F02	G1/4	2180 l _n /min
EAQ3000-F03	G3/8	3810 l _n /min
EAQ5000-F04	G1/2	6260 l _n /min
EAQ5000-F06	G3/4	9815 l _n /min

Exhaust valve KEA – for exhaust of trapped air at emergency stop

Part number	Tubing diam.	Flow
KEA06	6	714 l _n /min
KEA08	8	981 l _n /min
KEA10	10	1607 l _n /min
KEA12	12	2621 l _n /min

Speed controller ASD – bidirectional

Part number	Tubing diam.	Connection	Flow
ASD230F-M5-04	4	M5	75 l _n /min
ASD330F-01-06S	6	R1/8	175 l _n /min
ASD430F-02-06S	6	R1/4	300 l _n /min
ASD530F-02-06S	6	R1/4	500 l _n /min
ASD530F-02-08S	8	R1/4	600 l _n /min
ASD530F-03-10S	10	R3/8	700 l _n /min
ASD630F-04-12S	12	R1/2	1300 l _n /min

Blocking valve ASP – with speed controller

Part number	Tubing diam.	Connection	Flow
ASP330F-01-06S	6	R1/8	180 l _n /min
ASP330F-01-08S	8	R1/8	180 l _n /min
ASP430F-F02-06S	6	R1/4	330 l _n /min
ASP430F-F02-08S	8	R1/4	350 l _n /min
ASP530F-F03-08S	8	R3/8	600 l _n /min
ASP530F-F03-10S	10	R3/8	750 l _n /min
ASP630F-F04-10S	10	R1/2	1100 l _n /min
ASP630F-F04-12S	12	R1/2	1190 l _n /min



KEA – exhaust valve, emergency stop



ASD – speed controller, bidirectional



ASP – blocking valve, speed controller



ASV – quick exhaust valve, cylinder mounted



AQ – quick exhaust valve, tubing mounted



AQ – quick exhaust valve, high flow

AKH, AKB & AK – check valves

Medium	Compressed air
Degree of filtration	10 µm
Max. working pressure	1.0 MPa (10 bar)
Min. working pressure	EAK: 0.02 MPa (0.2 bar); AKH/AKB: 0.005 MPa (0.05 bar)
Operating temperature	-5 to 60 °C
Connection	See below
Flow	See below

- AKH/AKB – very low opening pressure
- Can be used for vacuum
- VR – easily mounted logic valves



Check valve AKH/AKB

Push-in-push-in

Part number	Connection	Flow
AKH04-00	Ø4	150 l _v /min
AKH06-00	Ø6	350 l _v /min
AKH08-00	Ø8	760 l _v /min
AKH10-00	Ø10	1300 l _v /min
AKH12-00	Ø12	1850 l _v /min

Male thread-plug-in

Part number	Connection	Flow
AKH04A-M5	M5-Ø4	150 l _v /min
AKH04A-01S	1/8-Ø4	150 l _v /min
AKH06A-M5	M5-Ø6	350 l _v /min
AKH06A-01S	1/8-Ø6	350 l _v /min
AKH06A-02S	1/4-Ø6	350 l _v /min
AKH08A-01S	1/8-Ø8	760 l _v /min
AKH08A-02S	1/4-Ø8	760 l _v /min
AKH10A-02S	1/4-Ø10	1300 l _v /min
AKH10A-03S	3/8-Ø10	1300 l _v /min
AKH10A-04S	1/2-Ø10	1300 l _v /min
AKH12A-04S	1/2-Ø12	1850 l _v /min

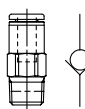
Male thread-female thread

Part number	Connection	Flow
AKB01A-01S	1/8	350 l _v /min
AKB02A-02S	1/4	760 l _v /min
AKB03A-03S	3/8	1300 l _v /min
AKB04A-04S	1/2	1850 l _v /min

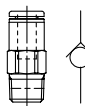
Note! B instead of A for reverse flow direction. Example: AKH06B-01S.

Check valve AK – high flow

Part number	Connection	Flow
EAK2000-F01	G1/8	1050 l _v /min
EAK2000-F02	G1/4	1150 l _v /min
EAK4000-F03	G3/8	4200 l _v /min
EAK4000-F04	G1/2	4500 l _v /min



A
From male thread
to push-in fitting
Example: AKH06A-01



B
From push-in fitting
to male thread
Example: AKH06B-01



AK – check valve,
high flow



AKH – check valve,
push-in-push-in



AKH – check valve,
male thread-
push-in



AKB – check valve,
male thread-
female thread

ASN – metering silencer

Medium	Compressed air, lubricated or not lubricated				
Max. working pressure	1.0 MPa (10 bar)				
Operating temperature	5 to 60 °C				
Size	M5	01	02	03	04
Connection	M5	R1/8	R1/4	R3/8	R1/2
Flow	100 l _v /min	200 l _v /min	320 l _v /min	850 l _v /min	1650 l _v /min
Silencing	20 dB (A)				24 dB (A)

- For speed reduction of cylinders
- For mounting in the valve exhaust port



Metering silencer

Part no	Connection
ASN2-M5	M5
ASN2-01-S	R1/8
ASN2-02-S	R1/4

Part no	Connection
ASN2-03-S	R3/8
ASN2-04-S	R1/2

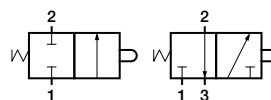
VM, EVM, EVZM, VHK, VH & VR – mechanical, manual valves

Type	3/2 VM1000	3/2 EVM130	5/2 EVZM550	3/2 VHK	4/2, 4/3 VH
Medium	Air, lubricated or not lubricated				
Degree of filtration	10 µm				
Max. working pressure	1 MPa (10 bar)		0.7 MPa (7 bar)	1 MPa (10 bar)	
Min. working pressure	0 MPa (0 bar)		0.15 MPa (1.5 bar)	0 MPa (0 bar)	
Operating temperature	5 to 60 °C				
Flow	54 l _n /min	137 l _n /min	588 l _n /min	See below	
Connection	Tubing Ø4	G1/8	G1/8	See below	



Valve VM1000 – 3/2

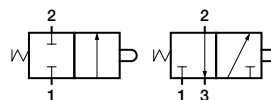
Part number	Actuator
VM1000-4NU-00	Standard, pin
VM1000-4NU-01	Roller
VM1000-4NU-32B	Push button



Valve EVM130 – 3/2

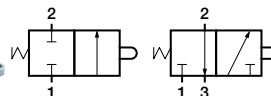
Part number	Actuator
EVM130-F01-00	Standard, pin
EVM131-F01-01	Roller, plastic
EVM131-F01-01S	Roller, steel
EVM130-F01-33	Push button
EVM130-F01-34B	Knob

34B is bistable, others monostable. Knob is black, push button is black, red or green. For other actuators, contact SMC.



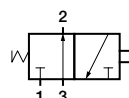
Valve EVM230 – 3/2

Part number	Actuator
EVM230-F02-40	Foot pedal



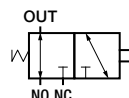
Valve EVM430 – 3/2

Part number	Actuator
EVM430-F01-30R-C1	Emergency stop



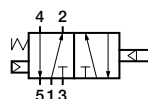
Valve VM830 – 3/2

Part number	Actuator
EVM830-F01-01	Roller lever
EVM830-F01-13	Adjustable roller lever
EVM830-F01-14	Adjustable spike



Valve EVZM550 – 5/2

Part number	Actuator
EVZM550-F01-00	Standard, pin
EVZM550-F01-01	Roller, plastic
EVZM550-F01-01S	Roller, steel
EVZM550-F01-33	Push button
EVZM550-F01-34B	Knob



34B is bistable, others monostable. Knob is black, push button is black, red or green. For other actuators, contact SMC.

VM, EVM, EVZM, VHK, VH & VR – mechanical, manual valves

Valve VHK – 3/2

Part number	Connection	Flow	Weight
VHK3-04F-04F	Ø4	185 l _n /min	15 g
VHK3-06F-06F	Ø6	393 l _n /min	16 g
VHK3-08F-08F	Ø8	529 l _n /min	17 g
VHK3-10F-10F	Ø10	878 l _n /min	29 g
VHK3-12F-12F	Ø12	954 l _n /min	32 g
VHK3-06F-01S	Ø6–1/8 ¹	393 l _n /min	23 g
VHK3-08F-02S	Ø8–1/4 ¹	529 l _n /min	32 g

1. In-out.



Bracket – for VHK

Part number	Fits
VHK-B1A	VHK3-04F-04F
VHK-B1A	VHK3-06F-06F
VHK-B1A	VHK3-08F-08F
VHK-B2A	VHK3-10F-10F
VHK-B2A	VHK3-12F-12F

Time delay valve VR – 3/2 (delayed onset/shut-off)

Part number	Actuator	Function
EVR2110-F01	Knob	NC, delayed onset
EVR2110-F01-X102	Knob	NC/NO, delayed shut-off

Time delay: 0.5–60 s.



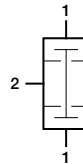
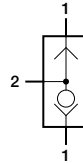
Logic valve VR – tubing mounted

OR function

Part number	Tubing	Flow
VR1210F-23	Ø3.2	150 l _n /min
VR1210F-04	Ø4	210 l _n /min
VR1210F-06	Ø6	420 l _n /min
VR1210F-08	Ø8	480 l _n /min
VR1220F-08	Ø8	680 l _n /min
VR1220F-10	Ø10	1000 l _n /min

AND function

Part number	Tubing	Flow
VR1211F-23	Ø3.2	100 l _n /min
VR1211F-04	Ø4	120 l _n /min
VR1211F-06	Ø6	150 l _n /min



Valve VH – 4/2, 4/3

Part number	Type	Conn.	Flow	Weight
VH210-F02	4/3 closed center	G1/4	400 l _n /min	420 g
VH211-F02	4/3 exhausted center	G1/4	400 l _n /min	420 g
VH212-F02	4/2 bistable	G1/4	400 l _n /min	420 g
VH310-F03	4/3 closed center	G3/8	1100 l _n /min	710 g
VH311-F03	4/3 exhausted center	G3/8	1100 l _n /min	710 g
VH312-F03	4/2 bistable	G3/8	1100 l _n /min	710 g
VH410-F04	4/3 closed center	G1/2	3200 l _n /min	1280 g
VH411-F04	4/3 exhausted center	G1/2	3200 l _n /min	1280 g
VH412-F04	4/2 bistable	G1/2	3200 l _n /min	1280 g



Valve unit VR51 – for pneumatic two-hand control

Part number	EN 574 category
VR51-C06B	III A



KQ2 – standard fittings

Medium		Compressed air
Working pressure		–100 kPa to 1 MPa (–1 bar to 10 bar)
Test pressure		3 MPa (30 bar)
Operating temperature		0 to 60 °C
Connection options	M3/M5, 1/8–1/2	Metric-, conical- and G thread
	tube outer diameter	Nylon, soft nylon, polyurethane
	3.2–16 mm	
Materials	body	Brass, PBT
	stud	Brass
	chuck	Stainless steel
	guide	Brass, stainless steel, PBT
	collet, release bush	PBT
packing		NBR



■ Quick assembly and disassembly

■ Intended for pressure ranges from –100 kPa to 1 MPa ■ For nylon and polyurethane tubing

Straight connector KQ2H – for female thread

Part number	Tube outer diameter	M or R thread
KQ2H23-M5	3.2 mm	M5
KQ2H23-01S	3.2 mm	1/8
KQ2H23-02S	3.2 mm	1/4
KQ2H04-M5	4 mm	M5
KQ2H04-01S	4 mm	1/8
KQ2H04-02S	4 mm	1/4
KQ2H06-M5	6 mm	M5
KQ2H06-01S	6 mm	1/8
KQ2H06-02S	6 mm	1/4
KQ2H06-03S	6 mm	3/8
KQ2H08-01S	8 mm	1/8
KQ2H08-02S	8 mm	1/4
KQ2H08-03S	8 mm	3/8
KQ2H10-01S	10 mm	1/8
KQ2H10-02S	10 mm	1/4
KQ2H10-03S	10 mm	3/8
KQ2H10-04S	10 mm	1/2
KQ2H12-02S	12 mm	1/4
KQ2H12-03S	12 mm	3/8
KQ2H12-04S	12 mm	1/2
KQ2H16-03S	16 mm	3/8
KQ2H16-04S	16 mm	1/2

Straight connector KQ2H – for G thread

Part number	Tube outer diameter	G thread
KQ2H04-G01	4 mm	1/8
KQ2H04-G02	4 mm	1/4
KQ2H06-G01	6 mm	1/8
KQ2H06-G02	6 mm	1/4
KQ2H06-G03	6 mm	3/8
KQ2H08-G01	8 mm	1/8
KQ2H08-G02	8 mm	1/4
KQ2H08-G03	8 mm	3/8
KQ2H10-G01	10 mm	1/8
KQ2H10-G02	10 mm	1/4
KQ2H10-G03	10 mm	3/8
KQ2H10-G04	10 mm	1/2
KQ2H12-G02	12 mm	1/4
KQ2H12-G03	12 mm	3/8
KQ2H12-G04	12 mm	1/2
KQ2H16-G03	16 mm	3/8
KQ2H16-G04	16 mm	1/2



Straight connector
KQ2H



Straight connector
KQ2H – G thread



Straight connector
KQ2S – hex socket

Straight connector
KQ2S – G thread;
hex socket

Straight connector KQ2S – with hex socket

Part number	Tube outer diameter	M or R thread
KQ2S04-M5	4 mm	M5
KQ2S04-01S	4 mm	1/8
KQ2S06-M5	6 mm	M5
KQ2S06-01S	6 mm	1/8
KQ2S06-02S	6 mm	1/4
KQ2S08-01S	8 mm	1/8
KQ2S08-02S	8 mm	1/4
KQ2S08-03S	8 mm	3/8
KQ2S10-01S	10 mm	1/8
KQ2S10-02S	10 mm	1/4
KQ2S10-03S	10 mm	3/8
KQ2S10-04S	10 mm	1/2
KQ2S12-02S	12 mm	1/4
KQ2S12-03S	12 mm	3/8
KQ2S12-04S	12 mm	1/2

Straight connector KQ2S

– for G thread; with hex socket

Part number	Tube outer diameter	G thread
KQ2S04-G01	4 mm	1/8
KQ2S06-G01	6 mm	1/8
KQ2S06-G02	6 mm	1/4
KQ2S08-G01	8 mm	1/8
KQ2S08-G02	8 mm	1/4
KQ2S08-G03	8 mm	3/8
KQ2S10-G01	10 mm	1/8
KQ2S10-G02	10 mm	1/4
KQ2S10-G03	10 mm	3/8
KQ2S10-G04	10 mm	1/2
KQ2S12-G02	12 mm	1/4
KQ2S12-G03	12 mm	3/8
KQ2S12-G04	12 mm	1/2

Pipe fittings

Medium	Air, water and oil
Materials	Nickel plated brass
Sizes	M5–G1"
Operating temperature	Up to 150 °C
Max. working pressure	6 MPa (60 bar)



Double nipple 101

Double nipple 101 – parallel

Part number	Thread	
	a	b
WNH-M5-M5	M5	M5
WNH-M5-F01	M5	G1/8
WNH-F01-F01	G1/8	G1/8
WNH-F01-F02	G1/8	G1/4
WNH-F01-F03	G1/8	G3/8
WNH-F02-F02	G1/4	G1/4
WNH-F02-F03	G1/4	G3/8
WNH-F02-F04	G1/4	G1/2
WNH-F03-F03	G3/8	G3/8
WNH-F03-F04	G3/8	G1/2
WNH-F04-F04	G1/2	G1/2



Double nipple 102

Double nipple 102 – conical

Part number	Thread	
	a	b
WNH-01-01	1/8	1/8
WNH-01-02	1/8	1/4
WNH-01-03	1/8	3/8
WNH-01-04	1/8	1/2
WNH-02-02	1/4	1/4
WNH-02-03	1/4	3/8
WNH-02-04	1/4	1/2
WNH-03-03	3/8	3/8
WNH-03-04	3/8	1/2
WNH-04-04	1/2	1/2
WNH-04-06	1/2	3/4
WNH-06-06	3/4	3/4
WNH-06-10	3/4	1
WNH-10-10	1	1



Socket 103

Socket 103 – parallel

Part number	Thread
WNH-M5V-M5V	M5
WNH-F01V-F01V	G1/8
WNH-F02V-F02V	G1/4
WNH-F03V-F03V	G3/8
WNH-F04V-F04V	G1/2
WNH-F06V-F06V	G3/4



Bushing 104



Bushing 104z

Bushing 104 – conical

Part number	Thread	
	a	b
WNH-02-F01V	1/4	G1/8
WNH-03-F01V	3/8	G1/8
WNH-03-F02V	3/8	G1/4
WNH-04-F01V	1/2	G1/8
WNH-04-F02V	1/2	G1/4
WNH-04-F03V	1/2	G3/8
WNH-06-F03V	3/4	G3/8
WNH-06-F04V	3/4	G1/2
WNH-10-F04V	1	G1/2
WNH-10-F06V	1	G3/4

Bushing 104z – parallel

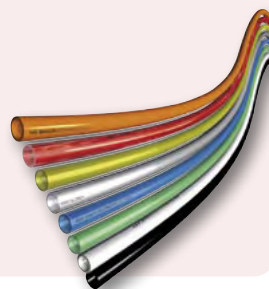
Part number	Thread	
	a	b
WNH-F01-M5V	G1/8	M5
WNH-F02-F01V	G1/4	G1/8
WNH-F03-F01V	G3/8	G1/8
WNH-F03-F02V	G3/8	G1/4
WNH-F04-F01V	G1/2	G1/8
WNH-F04-F02V	G1/2	G1/4
WNH-F04-F03V	G1/2	G3/8
WNH-F06-F03V	G3/4	G3/8
WNH-F06-F04V	G3/4	G1/2

TU, TUH, T & TS – tubing

Materials	Polyurethane (T and TS: polyamide)						
Max. working pressure	TU: 0.8 MPa (8 bar); T: 1.5 MPa (15 bar); TS: 1 MPa (10 bar); TUH see below						
Operating temperature	Air -20 to 60 °C; Water 0 to 40 °C (not TUH)						
Tube outer diameter	3.2 mm	4 mm	6 mm	8 mm	10 mm	12 mm	16 mm
TU	10 mm	10 mm	15 mm	20 mm	27 mm	35 mm	90 mm
Minimum bending radius	TUH	—	10 mm	18 mm	24 mm	30 mm	36 mm
T	—	13 mm	24 mm	48 mm	60 mm	75 mm	100 mm
TS	—	12 mm	15 mm	23 mm	27 mm	31 mm	60 mm

The above figures are at 20 °C and single tubing.

■ Polyurethane tubing – very flexible



Polyurethane tubing TU – for compressed air and water
Single tubing, black; working pressure 0.8 MPa (8 bar)

Part number	Outer diameter	Inner diameter	Length
TIUB01B-20	3.18 mm	2 mm	20 m
TIUB01B-100-X3	3.18 mm	2 mm	100 m
TU0212B-20	2 mm	1.2 mm	20 m
TU0425B-20	4 mm	2.5 mm	20 m
TU0425B-100	4 mm	2.5 mm	100 m
TU0604B-20	6 mm	4 mm	20 m
TU0604B-100	6 mm	4 mm	100 m
TU0805B-20	8 mm	5 mm	20 m
TU0805B-100	8 mm	5 mm	100 m
TU1065B-20	10 mm	6.5 mm	20 m
TU1065B-100	10 mm	6.5 mm	100 m
TU1208B-20	12 mm	8 mm	20 m
TU1208B-100	12 mm	8 mm	100 m
TU1610B-20	16 mm	10 mm	20 m

Polyurethane tubing TU – for compressed air and water
Single tubing, blue; working pressure 0.8 MPa (8 bar)

Part number	Outer diameter	Inner diameter	Length
TIUB01BU-20	3.18 mm	2 mm	20 m
TIUB01BU-100-X3	3.18 mm	2 mm	100 m
TU0212BU-20	2 mm	1.2 mm	20 m
TU0425BU-20	4 mm	2.5 mm	20 m
TU0425BU-100	4 mm	2.5 mm	100 m
TU0604BU-20	6 mm	4 mm	20 m
TU0604BU-100	6 mm	4 mm	100 m
TU0805BU-20	8 mm	5 mm	20 m
TU0805BU-100	8 mm	5 mm	100 m
TU1065BU-20	10 mm	6.5 mm	20 m
TU1065BU-100	10 mm	6.5 mm	100 m
TU1208BU-20	12 mm	8 mm	20 m
TU1208BU-100	12 mm	8 mm	100 m
TU1610BU-20	16 mm	10 mm	20 m

Part number: tubing in other colours

TU0425 BU - 20

Colour	
B	Black
BU	Blue
G	Green
R	Red
W	White
Y	Yellow
C	Transparent
YR	Orange
S1	Silver

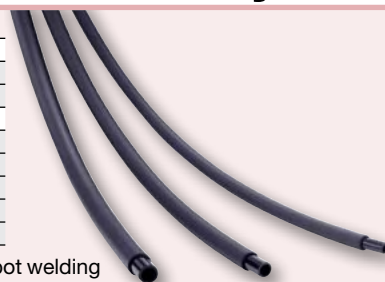
Length/roll	
20	20 meter
100	100 meter

For more colours, contact SMC.

TRBU – flame resistant polyurethane tubing with double layers

Type	TRBU0604	TRBU0805	TRBU1065	TRBU1208
Medium	Air, industrial water			
Max. working pressure	0.8 MPa (8 bar)			
Bending radius	15 mm	20 mm	27 mm	35 mm
Operating temperature	-20 to 60 °C (water: 0 to 40 °C)			
Burst pressure	See below			
Materials - Inner tube	Polyurethane			
Outer layer	Polyolefin			
Colour	Black, white, red			

- Flexible tubing for environments with sparks from, for example, spot welding
- Construction with double layers
- Flame resistant plastic in outer layer



Flame resistant polyurethane tubing – black

Part number	Outer diameter	Inner diameter	Length
TRBU0604B-20	6 mm	4 mm	20 m
TRBU0604B-100	6 mm	4 mm	100 m
TRBU0805B-20	8 mm	5 mm	20 m
TRBU0805B-100	8 mm	5 mm	100 m
TRBU1065B-20	10 mm	6.5 mm	20 m
TRBU1065B-100	10 mm	6.5 mm	100 m
TRBU1208B-20	12 mm	8 mm	20 m
TRBU1208B-100	12 mm	8 mm	100 m

Red and white available on request.

Stripping tool TKS – for TRBU-tubing

Part number	For outer diameter
TKS-06	6 mm
TKS-08	8 mm
TKS-10	10 mm
TKS-12	12 mm



- Easily strips TRBU's outer layer
- Simplifies installation
- Can be powered by a conventional drill

TRTU – flame resistant polyurethane tubing with triple layers

Type	TRTU0604	TRTU0805	TRTU1065	TRTU1208
Medium	Air, water			
Suitable fittings	KFG2, KQB2, KQG2, KR			
Max. working pressure	0.8 MPa (8 bar)			
Bending radius	50 mm	60 mm	70 mm	80 mm
Operating temperature	-20 to 60 °C			
Materials - Inner tube	Polyurethane			
Middle layer	Aluminium film			
Outer layer	Polyolefin			

- Flexible tubing for spark-rich environments
- Flame resistant outer layer
- Reinforced with protective middle layer
- Flame resistance corresponding to UL-94 standard V-0



Flame resistant polyurethane tubing – black

Part number	Outer diameter	Inner diameter	Length
TRTU0604B-20	6 mm	4 mm	20 m
TRTU0604B-100	6 mm	4 mm	100 m
TRTU0805B-20	8 mm	5 mm	20 m
TRTU0805B-100	8 mm	5 mm	100 m
TRTU1065B-20	10 mm	6.5 mm	20 m
TRTU1065B-100	10 mm	6.5 mm	100 m
TRTU1208B-20	12 mm	8 mm	20 m
TRTU1208B-100	12 mm	8 mm	100 m

Stripping tool YS – for TRTU tubing

Part number
YS-100



PA3000 & -5000 – diaphragm pump

	Type	PA3110	PA3120	PA3210	PA3220	PA5110	PA5120	PA5210	PA5220
Conn.	medium	G3/8				G1/2 or 3/4			
	pilot air	G1/4				G1/4			
Materials	media contacts	Aluminum		Stainless steel		Aluminum		Stainless steel	
	diaphragm	PTFE	NBR	PTFE	NBR	PTFE	NBR	PTFE	NBR
	check valve	PTFE, PFA				PTFE, PFA			
	Pump flow	1–20 l/min				5–45 l/min			
Average pump pressure		0–0.6 MPa (0–6 bar)							
Air consumption		Max. 200 l _r /min				Max. 300 l _r /min			
Suction height	dry	Up to 1 m (internally dry)				Up to 2 m (internally dry)			
	wet	Up to 6 m (completely filled with fluid)							
Operating temperature		0 to 60 °C (no freezing)							
Weight		1.7 kg		2.2 kg		3 kg		6.5 kg	

Figures above are valid at room temperature with fresh water.

- Compact membrane pump with large capacity
- Useful with a wide range of media
- Long life time 2–5 times longer than ordinary pumps



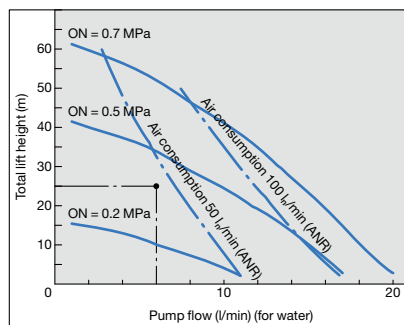
Diaphragm pump PA3000

Part number
PA3110-F03
PA3120-F03
PA3210-F03
PA3220-F03

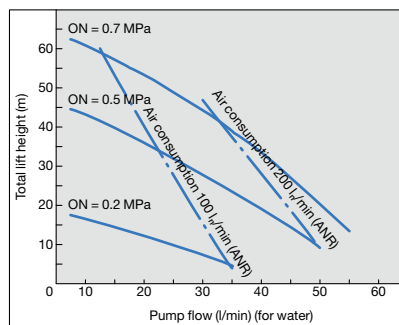
Diaphragm pump PA5000

Part number	Dimension
PA5110-F04	1/2
PA5110-F06	3/4
PA5120-F04	1/2
PA5120-F06	3/4
PA5210-F04	1/2
PA5210-F06	3/4
PA5220-F04	1/2
PA5220-F06	3/4

Flow properties PA3000 (not for PA3300 below)



Flow properties PA5000



PA3300 – fluoropolymer process diaphragm pump



- Corrosion-resistant

Diaphragm pump PA3300 – in fluoropolymer

Part number	Flow
PA3310-F03-B	1–13 l/min
PAP3310-F03-B (cleanroom)	1–13 l/min