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ewo

variobloc

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COMPRESSED GAS, s.r.o.



Polycarbonal Tmax 50°C -

Viac na www.kompresory-servis.sk

Facts - Data - Advantages

The differences lie in the details. When you evaluate offers, you should consider the features listed here are the calculations. Whether ease of handling, performance, or longevity - these ewo-qualities bring you benefits.



Materials used:

Housing, zinc diecasting fastening elements (Z410)
Cap, head (regulator) PA6-GF30
Handwheel POM
Cover ABS
Seals, diaphragm NBR
Filter insert PE sintered

Impact cartridge, cutting wheel

Bowl polycarbonate

POM

Interlock POM

Pressure spring steel galvanized
Against pressure spring stainless steel

Cone, diaphragm plate brass
Oiler dome spez. PA
Oil regulation PU

Metal bowl, zinc diecasting

bezel (Z410)

Sighting tube
(at metal bowl) spez. PA
Bowl protection aluminum

- Safety acc. EN 983
- Modern industrial design
- Robust metal housing
 (Zinc die casting with 2-fold surface protection)
- Thread connection acc. DIN with sealing surface (NPT as Option)
- Bayonet fixing for the plastic and metal bowl
- Retrofit metal bowl protection for the plastic bowl
- Option semi and fully automatic drain valves
- Two combinable connection possibilities (comfort compact)
- Comfort connection with adhesive o-rings
- Integrated T-Bracket as connection module
- Direct wall mounting
- High stiffness / stability of the connection
- Optimal regulation characteristics through roll diaphragms
- Lubricator with enhanced flow rate and nebulisation



Module fixation

with bracket angle (for regulator) or direct wall mounting (2 screws) for all devices



Thread connecting plate

with adhesive sealing rings (also available with bracket) for assembly friendly installation in pipe - or hose systems



Comfort blocking

faster change of components or complete sets with **connection module** (sealing rings adhesive) Result: shorter assembling time (only size I).



Compact connection

with optional integrated T-Bracket





Filter Type 482

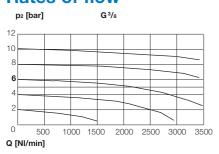
variobloc G¹/₄ - G1

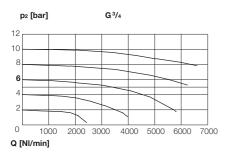




A

Rates of flow





Compressed air filters serve to remove impurities (condensation water, pipe scaling, rust particles) from the air in the working place. The cleansing is done in two stages by means of cycloning (condensation) and PE-Filter-elements (solid contamination). Three opportunities of drain valves are available: manually-operated-, semi-automatic- or fully-automatic (internal- or external) drain valves.

Technical Data I Size II

Thread G 1/4 $G^{3/8}$ G1/2 G3/4 G1*** Nominal rates of flow* 1800 NI/min 2000 NI/min 3200 NI/min 3500 NI/min Wideness of pores (filter) 40μm (optionally: 5μm) Pre-Pressure (p₁) max.* 16bar/20bar with metal bowl 50°C/80°C with metal bowl Max. operating temperature Volume of condensate 25 cm³

manually (opt.: semi-automatic, fully-automatic)

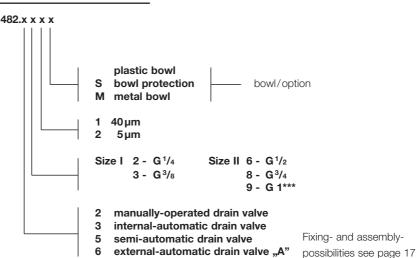
Materialzinc alloyHousingzinc alloyBowlpolycarbonate

Weight 310g 840g (G1 = 1300g)

- * measured at 6 bar pre-pressure (p₁) and $\Delta p = 1$ bar
- ** with internal automatic drain valve between 1 and 12 bar
- *** mounting plates with G1 see page 18 External-automatic drain valve see page 19

special option - how to order:

Drain valve



Accessories and main spare parts I

Filter element 40 µm	480-7	480-219
5µm	480-45	480-220
Plastic bowl with manually-operated drain valve	480-18	480-210
Metal bowl with manually-operated drain valve	480-28	480-213
Plastic bowl with protection cap	480-90	-
Bowl protection	480-25	480-216

Dimensions [mm]

Thread	А	В	С	Е	F	Н	J	K	øL
G 1/4 and G 3/8	48	158	48	22	24	32	43	14,5	4,4
G ¹ / ₂ and G ³ / ₄	70	202	70	26	35	44	62	18	5,4
G 1***	125	202	70	26	35	44	62	18	5,4

Cover:	"private label"
Thread:	NPT

Micro-Filter Type 491

variobloc G¹/₄ - G1





Microborosilicate air filters are suitable for use in all situations in which the required purity of the compressed air is especially high. As the second stage after the standard filter they remove almost without residue the smallest remaining particles of water, oil or dirt to 99,999% (for $0,01\mu m$).

Particle separation**

Residual oil content

Air quality ISO 8573.1

Pre-Pressure (p₁) max.

Max. operating temperature

99,999 %, related to 0,01 µm

0,01 mg/m³

Class 1 dirt, Class 1 oil

16 bar/20 bar with metal bowl

50 °C/80 °C with metal bowl

Volume of condensate10 cm³30 cm³Drain valvemanually (opt.: semi-automatic, fully-automatic)

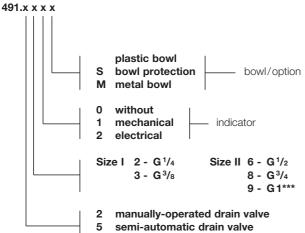
Material

Housing zinc alloy Bowl polycarbonate

Weight 310g 870g (G1 = 1330g)

- * measured at 7 bar pre-pressure (p₁) and $\Delta p = 0,1$ bar
- ** Prefiltration necessary at 5 µm
- *** mounting plates with G1 see page 18 External-automatic drain valve see page 19

special option - how to order:



5 semi-automatic drain valve 6 external-automatic drain valve "A" Fixing- and assembly-possibilities see page 17

Accessories and main spare parts

Filter element with seal	491-4	491-103
Plastic bowl with manually-operated drain valve	491-13	491-108
Metal bowl with manually-operated drain valve	480-28	480-213
Bowl protection	480-25	480-216

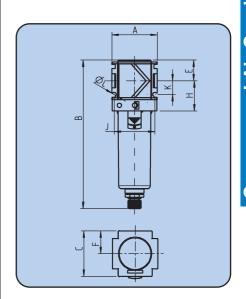
Dimensions [mm]

Thread	А	В	С	Е	F	Н	J	K	øL
G 1/4 and G 3/8	48	158	48	22	24	32	43	14,5	4,4
G 1/2 and G 3/4	70	202	70	26	35	44	62	18	5,4
G1***	125	202	70	26	35	44	62	18	5,4

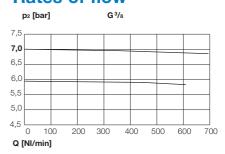
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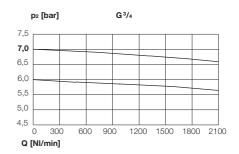
Cover:	"private label"
Thread:	NPT





Rates of flow



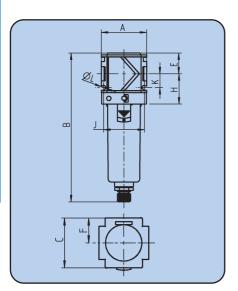


Activated-Charcoal-Filter Type 493

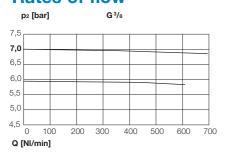
variobloc G¹/₄ - G1

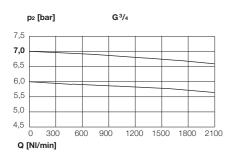






Rates of flow



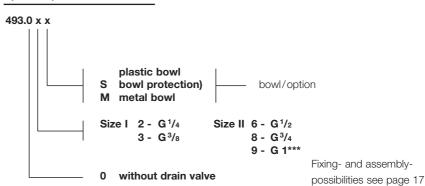


Active-charcoal filters serve to remove oil vapours and other organic pollutants from pressurised air. The active-charcoal fibre (the adsorption capacity of which is sufficient for approx. 1,000 hours of operation) is positioned between two stainless-steel nettings. The air at the inflow opening should be dry and free of particles; this is why the prior attachment of a micro-filter is categorically recommended. Caution! Some hazardous substances are either not at all or only slightly adsorbent, therefore non-removable with active charcoal! Such substances are i.e., carbon dioxide, carbon monoxide, ammonia.

Technical Data Size G 1/4 $G^{3/8}$ $G^{1/2}$ G3/4 G1** Nominal rates of flow* 800 NI/min 1000 NI/min 1200 NI/min 1300 NI/min Residual oil content 0,003 mg/m³ Air quality ISO 8573.1 Class 1 dirt, Class 1 oil 16bar/20bar with metal bowl Pre-Pressure (p₁) max. 50°C/80°C with metal bowl Max. operating temperature **Material** Housing zinc alloy Bowl polycarbonate 320g 900g (G1 = $1400g^{**}$) Weight

- * measured at 7 bar pre-pressure (p₁) and $\Delta p = 0.2$ bar
- ** mounting plates with G1 see page 17

special option - how to order:



Accessories and main spare parts

Filter element with seal	493-2	493-102
Plastic bowl	483-7	483-110
Metal bowl	483-10	483-113
Bowl protection	480-25	480-216

Dimensions [mm]

Thread	А	В	С	Е	F	Н	J	K	øL
G 1/4 and G 3/8	48	142	48	22	24	32	43	14,5	4,4
G 1/2 and G 3/4	70	193	70	26	35	44	62	18	5,4
G1***	125	193	70	26	35	44	62	18	5,4

Cover:	"private label"
Thread:	NPT

Filter Pressure Regulator Type 480

variobloc G¹/₄ - G1



Filter pressure regulators unique in space-saving model the functions of a filter and a requlator in one piece of equipment. (see single definitions).

Size

Technical Data

G1/4 Thread $G^{3/8}$ G1/2 Nominal rates of flow* 2000 NI/min 3000 NI/min 5500 NI/min

Wideness of pores (filter) 40 μm (optionally: 5 μm) Pre-Pressure (p₁) max.* 16bar/20bar with metal bowl Secondary pressure (p2) max. 10bar (optionally: 6, 16bar) Max. operating temperature 50°C/80°C with metal bowl Volume of condensate 25 cm³

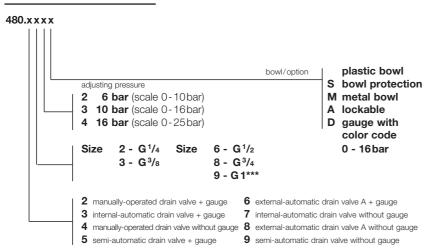
Drain valve manuelly (opt.: semi-automatic, fully-automatic) Material

Housing zinc alloy Seals Plastic bowl polycarbonate

Weight (without gauge) 460 g 1150g (G1=1610g)

- measured at 10 bar pre-pressure (p₁), 6 bar secondary pressure (p₂) and $\Delta p = 1$ bar
- with internal-automatic drain valve between 1,0 and 12 bar
- Fixing- and assemblymounting plates with G1 see page 17 External-automatic drain valve see page 18 possibilities see page 17

special option - how to order:



Accessories and main spare parts

0-10bar	723	55
Gauge scale 0-16bar	734	85
0-25bar	745	96
40µm	480-7	480-219
Filter insert 5 µm (reduced flow)	480-45	480-220
Plastic bowl with manually-operated drain valve	480-18	480-210
Plastic bowl with bowl protection	480-90	-
Metal bowl with manually-operated drain valve	480-28	480-213
Bowl protection	480-25	480-216
Wear parts		

Diaphragm complete with gliding ring	480-92	480-263
Seal cone complete	480-48	480-218

Advice:

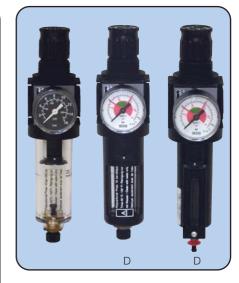
Upon request:

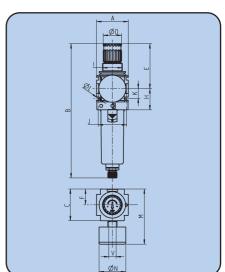
Pressure gauge (self-tightened) added loosely

Cover:	"private label"
Thread:	NPT

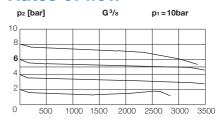
G3/4 G1***

6500 NI/min

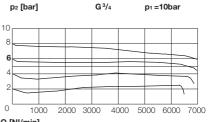




Rates of flow



Q [NI/min]



Q [NI/min]

	-	-												
Thread	А	В	С	øD	Е	F	Н	- 1	J	K	øL	М	øΝ	V
G 1/4 and G 3/8	48	203	48	28	68	24	32	M30x1,5	43	14,5	4,4	84	40	G 1/4
G ¹ / ₂ and G ³ / ₄	70	273	70	39	98	35	44	M42x1,5	62	18	5,4	106	50	G 1/4
G1***	125	273	70	39	98	35	44	M42x1,5	62	18	5,4	106	50	G 1/4

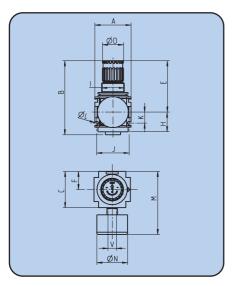
Pressure Regulator Type 481



variobloc G¹/₄ - G1



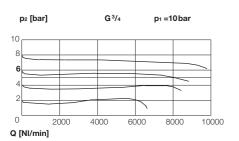




Rates of flow

p ₂ [bar]					G ³ /8					p ₁ = 10bar				
10				_									_	
8	_													
6	_			+					_	_	_		_	
-		=		F	_			=						
4		+		-										
2	_	_											\dashv	
_														
U		500) 1	000	15	00	20	000	25	00	30	000	35	00

Q [NI/min]



Pressure regulators (diaphragm type) of compact block design in two sizes. Facilities on both sides for flange mounting of further units. Panel mounting, direct mounting or bracket mounting on housing or cover. These units are, of course, fitted with a secondary exhaust (self-relieving) and are largely unaffected by fluctuations in primary pressure. Three pressure ranges are available, up to 6, 10 or 16 bar; regulators are also available without pressure gauges. Simple locking of setting by pressing in handwheel. Version available with keylockable handwheel. Pressure gauge can be mounted on either side.

Important: Use of filter always recommended.

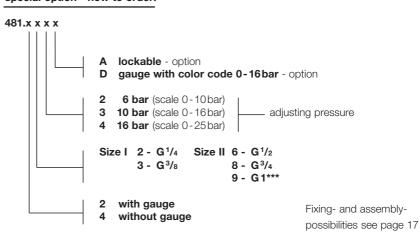
Technical Data Size

G 1/4 G3/8 $G^{1/2}$ G3/4 G1*** Nominal rates of flow* 2000 NI/min 3200 NI/min 7000 NI/min 8000 NI/min Pre-pressure (p₁) max. 25 bar Secondary pressure (p2) max. 10bar (opt. 6, 16bar) 80°C Max. operating temperature Material zinc alloy Housing

Seals **NBR** 390g Weight (without gauge) 950g (G1 = 1410g)

- measured at 10 bar pre-pressure (p₁), 6 bar secondary pressure (p₂) and $\Delta p = 1$ bar after DIN ISO 6953.
- *** mounting plates with G1 see page 17

special option - how to order:



Accessories and main spare parts

	0-10bar		723	55
Gauge scale	0-16bar		734	85
	0-25 bar		745	96

Wear parts

Diaphragm complete with slip ring	480-92	480-263
Seal cone complete	481-17	480-218

Advice:

Pressure gauge (self-tightened) added loosely

Upon request:

Cover:	"private label"
Thread:	NPT

Thread	А	В	С	øD	Е	F	Н	I	J	K	øL	М	øN	V
G 1/4 and G 3/8	48	98	48	28	68	24	26	M30x1,5	43	14,5	4,4	84	40	G 1/4
G ¹ / ₂ and G ³ / ₄	70	134	70	39	98	35	33	M42x1,5	62	18	5,4	106	50	G 1/4
G1***	125	134	70	39	98	35	33	M42x1,5	62	18	5,4	106	50	G 1/4

Battery Regulator Type 490

variobloc G¹/₄ - G³/₈





These kind of regulators are equipped with a continious pressure supply.

The pressure inlet can be selected on left or right side, so that it can be used for a so called "battery mounting".

The attached regulators are offering independent and different pressure adjustments because the supply pressure is existing on both sides of the unit (Connection No. 1).

The working pressure (secondary pressure) which is kept almost constant regardless of pressure fluctuations (inlet pressure) in the system and air consumption, is available on the backside connection (No.2).

The regulator(diaphragm type) is fitted with a secondary exhaust (self-relieving) to reduce the working pressure without air extraction. Contamination and damage could be avoided if a filter of the model 482 is installed. We recommend to use the units port size $G^3/8$ as they have the higher flow capacity. **Important:** Use of filter always recommended.

Technical Data

Material

Housing zinc alloy Seals NBR **Weight** (without gauge) 390 g

* measured from 10 bar inlet pressure (P_1), 6 bar outlet pressure (P_2) and decrease of $\Delta p = 1$ bar according to DINISO 6953

special option - how to order:



Accessories and main spare parts

	0-10bar	723
Gauge scale	0-16bar	734
	0-25bar	745
Plug	G ¹ / ₄	280-127
(with female he	exagon) G ³ / ₈	447-28
Reduction	G ³ / ₈ x G ¹ / ₄	1068

Main spare parts

Diaphragm complete with slip ring	480-92
Seal cone complete	481-17

Advice

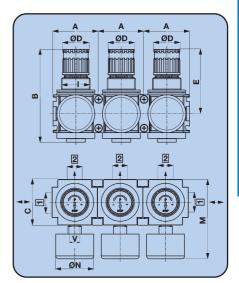
Pressure gauge self-tightened (added loosely)

Upon request

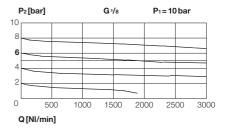
Cover: "private label"

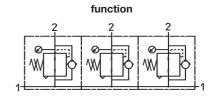
Thread: NPT





Rate of flow





Thread 1	А	В	С	øD	Е	F	1	М	øΝ	V/2
G ¹ / ₄ and G ³ / ₈	48	98	48	28	68	24	M30x1,5	84	40	G 1/4

Lubricator Type 483

variobloc G¹/₄ - G1





Lubricators add a fine oil fog to the compressed air, this effecting a constant and reliable lubrication of pneumatically controlled compressed air tools, valves and cylinders etc... Refilling oil while under pressure is possible. Needle valve for oil adjustment with high drop constancy for long periods of time. Also available with metal sight dome.

Technical Data I Size III Thread G¹/₄ G³/₈ G¹/₂

Thread $G^{1/4}$ $G^{3/8}$ $G^{1/2}$ $G^{3/4}$ G^{1***} Nominal rates of flow* 3400 NI/min 4400 NI/min 4600 NI/min 7500 NI/min Pre-pressure (p1) max. 16bar/20bar with metal bowl

Max. operating temperature 50°C**

 Oil volume
 50 cm³
 125 cm³

 Lubricator function
 from 50l/min
 from 150l/min

 Sort of oil
 according to DIN 51524 - ISO VG 32

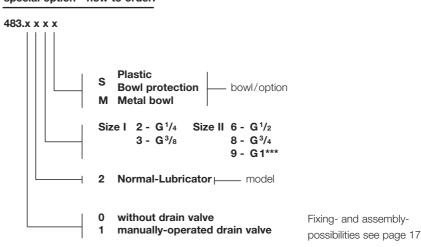
 Material

Housing zinc alloy
Plastic bowl polycarbonate
Seals NBR

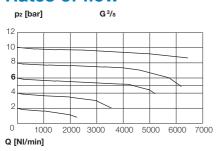
Weight 300g 800g (G1 = 1260g)

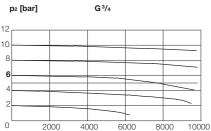
- * measured at 6 bar pre-pressure (p₁), and $\Delta p = 1$ bar
- ** 80°C with metal bowl and oiler dome out of metal
- *** mounting plates with G1 see page 17

special option - how to order:



Rates of flow





Recommended oil see chapter 8

Oil containers made of plastic (polycarbonate) are attached by oil additives, anti-frost or synthetic oils. We therefore recommend normal lubricating oils of approx. 22 to 32 cSt at 40°C (in the case of striking tools up to 68 cSt). Metal containers should be used for other oils, especially for low-temperature oils. Also recommended is a metal lubricator adjusting cap.

Accessories and main spare parts

Oiler dome out of plastic	483-6	423-179
Oiler dome out of metal	483-21	423-65
Plastic bowl without drain valve	483-7	483-110
Plastic bowl with protection cap	483-24	-
Metal bowl without drain valve	483-10	483-113
Metal bowl with manually-operated drain valve	480-28	480-213
Bowl protection	480-25	480-216
Wear parts		

Dimensions [mm]

Regulation insert

Thread	А	В	С	øD	Е	F	Н	J	K	øL
G 1/4 and G 3/8	48	171	48	22	52	24	32	43	14,5	4,4
G 1/2 and G 3/4	70	224	70	22	57	35	44	62	18	5,4
G1***	125	224	70	22	57	35	44	62	18	5,4

Upon request:

Cover:	"private label"
Thread:	NPT

Q [NI/min]

Two-Piece Maintenance Unit Typ 488







The number of possible variations which can be created by the simple block-mounting of individual units to form air treatment units is naturally countless. We have listed some of the most frequently-used versions below. As regards filters, there are options for the bowls and drain valves, while for filter regulators there is generally a pressure range of up to 10 bar; various reservoir options are available for the lubricators.

Technical Data Size **Thread** G 1/4 G3/8 G3/4 G1*** $G^{1/2}$ Nominal rates of flow* 1500 NI/min 1800 NI/min 3400 NI/min 5000 NI/min Wideness of pores (filter) 40 µm (optionally: 5 µm) Pre-Pressure (p₁) max.* 16bar/20bar with metal bowl Secondary-pressure (p2) max. 10bar (opt. 6, 16bar) Max. operating temperature 50°C***

Volume of condensate 85 cm³ 25 cm³ Drain valve manually (opt.: semi-automatic, fully-automatic) Oil volume 50 cm³ 125 cm³ **Lubricator function** from 501/min from 1501/min Material

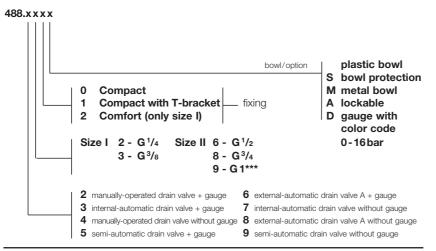
Housing zinc alloy Bowl polycarbonate **NBR** Seals

Weight (without gauge) 720g 2070g (G1 = 2530g)

- measured at 10 bar pre-pressure (p₁), 6 bar secondary pressure (p₂) and $\Delta p = 1$ bar, according tor ISO 6953
- with internal-automatic drain valve between 1,0 and 12 bar
- mounting plates with G1 see page 17
- **** 80 °C with metal bowl and oiler dome out of metal

Fixing- and assembly-External-automatic drain valve see page 18 possibilities see page 17 Recommended oil see page 10

special option - how to order:



Accessories and main spare parts see stand-alone device

Wear parts	I	II
Diaphragm complete (with slip ring)	480-92	480-263
Seal cone complete	480-48	480-218
Regulation insert	483-3	-

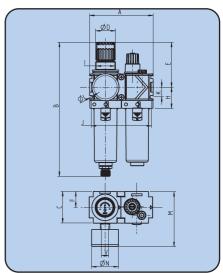
Advice:

Pressure gauge (self tightened) added loosely

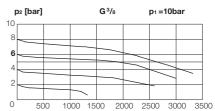
Upon request:

Cover:	"private label"	
Thread:	NPT	

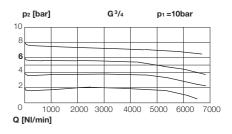




Rates of flow



Q [NI/min]

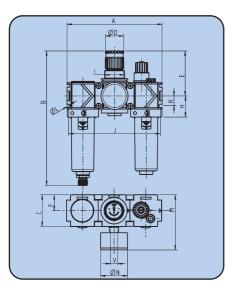


Thread	А	В	С	øD	Е	F	Н	1	J	K	øL	М	øΝ	V
G 1/4 and G 3/8	96	203	48	28	68	24	32	M30x1,5	91	14,5	4,4	84	40	G 1/4
G 1/2 and G 3/4	140	273	70	39	98	35	44	M42x1,5	132	18	5,4	106	50	G 1/4
G1***	195	273	70	39	98	35	44	M42x1,5	132	18	5,4	106	50	G 1/4

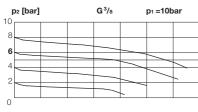
Three-Piece Maintenance Unit Type 489

variobloc G¹/₄ - G1

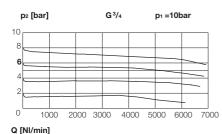




Rates of flow



Q [NI/min]



The number of possible variations which can be created by the simple blockmounting of individual units to form air treatment units is naturally countless. We have listed some of the most frequently-used versions below. As regards filters, there are options for the bowls and drain valves, while for regulators there is generally a pressure range of up to 10 bar; various reservoir options are available for the lubricators.

Technical Data Size **Thread** G3/8 G3/4 G1*** G 1/4 G1/2 Nominal rates of flow* 1500 NI/min 1800 NI/min 3400 NI/min 5000 NI/min Wideness of pores (filter) 40 μm (optionally: 5 μm) Pre-Pressure (p₁) max.** 16bar/20bar with metal bowl Secondary-pressure (p2) max. 10 bar (opt. 6, 16 bar) Max. operating temperature 50°C*** Volume of condensate 25 cm³ 85 cm³ manually (opt.: semi-automatic, fully-automatic) **Drain valve** Oil volume 50 cm³ 125 cm³ **Lubricator function** from 501/min from 1501/min

Materialzinc alloyHousingzinc alloyBowlpolycarbonateSealsNBR

Weight (without gauge) 1220 g 2800 g (G1 = 3260 g)

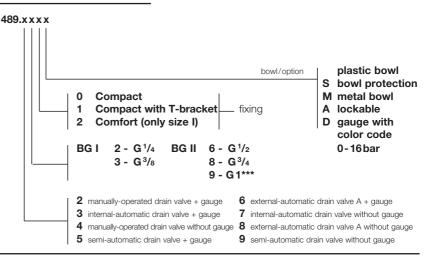
- * measured at 10 bar pre-pressure (p₁), 6 bar secondary pressure (p₂) and $\Delta p = 1$ bar, after ISO 6953
- ** with internal-automatic drain valve between 1,0 and 12 bar
- *** mounting plates with G1 see page 17
- **** 80 °C with metal bowl and oiler dome out of metal

External-automatic drain valve see page 18

Recommended oil see page 10

Fixing- and assemblypossibilities see page 17

special option - how to order:



Accessories and main spare parts see stand-alone device

wear parts	ı	III .
Diaphragm complete (with slip ring)	480-92	480-263
Seal cone complete	481-17	480-218
Regulation insert	483-3	-

Advice:

Pressure gauge (self tightened) added loosely

Upon request:

Cover:	"private label"
Thread:	NPT

	-													
Thread	А	В	С	øD	Е	F	Н	1	J	K	øL	М	øΝ	V
G 1/4 and G 3/8	144	203	48	28	68	24	32	M30x1,5	139	14,5	4,4	84	40	G 1/4
G 1/2 and G 3/4	210	273	70	39	98	35	44	M42x1,5	194	18	5,4	106	50	G 1/4
G1***	265	273	70	39	98	35	44	M42x1,5	194	18	5,4	106	50	G 1/4

Mobile Maintenance Unit Typ 489

variobloc G¹/₂ - G1





To ensure optimal conditions in regard to cleaning and lubrication of pneumatic tools directly on site, this portable maintenance unit was designed with components from our vario-

It is advisable to use it everywhere where to manage distribution and location between air distribution routes over 5 meters.

- Truck workshops
- Machine and plant construction

- Machine and plant construction - Shipbuilding and shipyards									
Technical Data	1	Size II							
Thread	G 1/2	G ³ / ₄	G1						
Nominal rates of flow*	3.400 NI/min	5.000 NI/min	5.000 NI/min						
Max. operating pressure		16bar							
Control range		0,5 - 10bar							
Max. operating temperatu	ıre	50°C							
Widness of pores (filter)		40 µm							

manually (on request: semi-automatic, fully-automatic) **Drain valve**

Volume of condensate 85 cm³ Oil volume 125 cm³ **Lubricator function** from 1501/min

Material

zinc alloy Housing Bowl/Bowl protection polycarbonate/steel NBR Seals Side parts painted steel Feets rubber

Mobile Maintenance Unit 0,5-10 bar

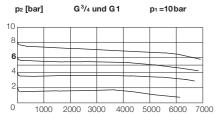
Article	G 1/2	G ³ / ₄	G1	
Mobile Maintenance Unit	489.200	489.100	489.000	

Accessories and main spare parts see stand-alone device

Wear parts

Diaphragm complete (with slip ring)	480-263
Seal cone complete	480-218

Rates of flow

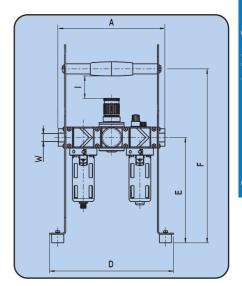


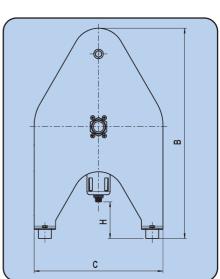
Upon request:

Cover:	"private label"
Thread:	NPT

		•						
Thread	А	В	С	D	Е	F	Н	1
G 1/2 and G 3/4	269	491	300	307	261	431	85,5	55,5
G1	264	491	300	307	261	431	85,5	55,5







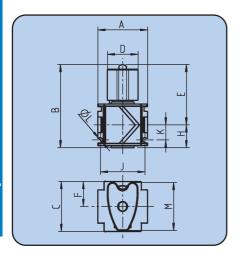
^{*} measured at 6 bar pre-pressure (p₁) and $\Delta p = 1$ bar

Ball Valve Type 487

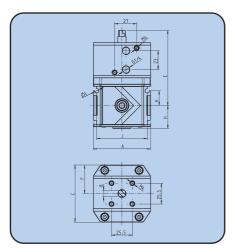
variobloc G1/4 - G1











Ball valves with exhaust (3/2 directional control valves) for flange-mounting to variobloc-FRL's are particularly suitable for use at the start of these as main shut-off valves. Actuation by 90° rotation of lever, marked clearly with switching position: Lever in transverse direction - Valve closed, outlet exhausted (narrower nominal size). Lever in lengthwise: Valve open, exhaust closed. Silencer to reduce exhaust noise. Two sizes with port threads from G¹/4 to G1. Direct mounting or bracket mounting on the housing is possible.

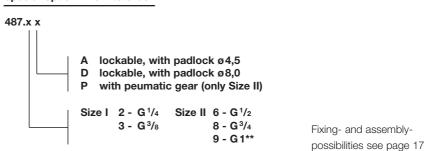
Version with pneumatic gear (onliy size II) enables the application in danger of explosion areas as remote control. The swing construction warrants a high starting linge moment and so a high forming energy (nessesary after long period of down time).

Technical Date	ta	1	Size	II
Thread	G 1/4	G 3/8	G 1/2	G ³ / ₄ G1**
Nominal rates of flow*	4300 NI/min	4400 NI/min	9000 NI/min	11000 NI/min
Max. operating pressur	e	2	5 bar	
Working temperature		8	0°C	
Material				
Housing		zine	c alloy	
Weight	2	95g		11 = 1300 g
Weight (pneumatic gear)		-	1100g (G	31 = 1560g)

- * measured at 6 bar pre-pressure (p₁) and $\Delta p = 1$ bar
- ** mounting plates with G1 see page 17

special option - how to order:

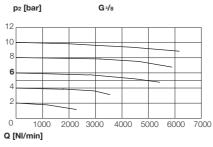
Pressure range (pneumatic gear)

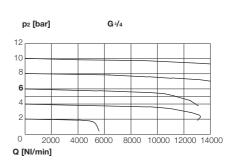


Accessories and main spare parts

Padlock Ø4,5	487-17
Padlock Ø8,0	487-26

Rates of flow





5,6 - 7,4 bar

Dimensions [mm]

Thread	А	В	С	D	Е	F	Н	J	K	øL	М
G ¹ /4, G ³ /8	48	80	48	30	58	24	22	43	14,5	4,4	45
G ¹ / ₂ , G ³ / ₄	70	92	70	30	64	35	28	62	18	5,4	45
G1	125	92	70	30	64	35	28	62	18	5,4	45
G ¹ /2, G ³ /4***	70	120	70	-	92	35	28	62	18	5,4	-
G1***	125	120	70	-	92	35	28	62	18	5,4	-

^{***}pneumatic gear

	Cover:	"private label"
[Thread:	NPT

3/2-Way Starting Valve, electrical Type 485

variobloc G¹/₂ - G1



3/2-way starting valves in modular design for flange-mounting to variobloc-maintenance units. Without electrical power – valve closed, with manual emergency-operation. Port sizes G $^{1}/_{4}$ to G1.

Technical Data	1	Size	П
-----------------------	---	------	---

Max. surrounding temperature 50 °C

Protection class IP65 after DIN 40050

Rated voltage 24V= (opt. 24V/50Hz, 110V/50Hz, 220V/50Hz **Electrical thread** female connector after DIN43650, Form B Ind. PG9

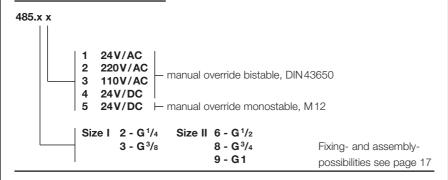
Material

Housing zinc alloy

Weight 445g 980g (G1 = 1440g)

- * measured at 6bar pre-pressure (p₁) and $\Delta p = 1$ bar
- ** higher pressures upon request
- *** mounting plates with G1 Seite 17

special option - how to order:



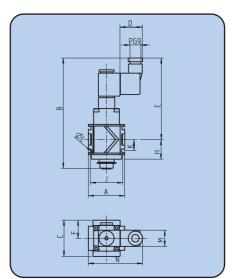
Accessories and main spare parts

24V/AC	447-130
Magnetic coil 220 V/AC	447-74
110V/AC	447-75
24 V/DC, M12	447-133
24V/DC	485-16
24 V/AC	485-17
Magnetic valve 220 V/AC	485-18
110V/AC	485-19
24 V/DC, monostable	485-20
Female connector DIN 43650	447-120

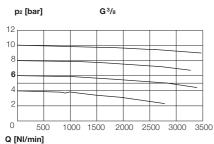
Accepted By a reaction of the reaction of the

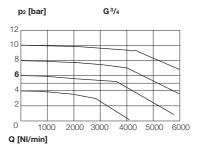
Solenoid valvel

As shutoff vlave with speed exhaus. Combination with starting valve recommended.



Rates of flow





Upon request:

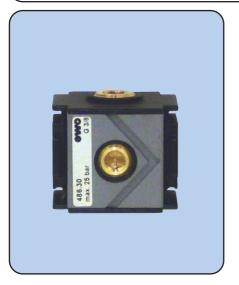
Cover:	"private label"
Thread:	NPT

Thread	Α	В	С	øD	Е	F	Н	J	K	øL	М	N
G ¹ /4, G ³ /8	48	146	48	30	108	24	26	43	14,5	4,4	22	72
G ¹ /2, G ³ /4	70	157	70	30	113	35	33	62	18	5,4	22	82
G1	125	157	70	30	113	35	33	62	18	5,4	22	82

Distributor Type 486







Distributors with non-return valves are ideal for tapping off unlubricated compressed air when flange-mounted upstream of the lubricator. The non-return valve prevents oil from being taken in from the lubricator or lines. This does, however, mean that the system downstream of the non-return valve cannot readily be exhausted. Two sizes with four outlets and port threads from G¹/₄ to G1.

Technical Data		I	Size	II		
Thread	G 1/4	G ³ /8	G 1/2	G ³ / ₄ G1*	*	
Dispatches top / down	G	i ³ /8	G ³ /s	G ³ /8/G ¹ / ₂		
front + rear	G	i ¹ /4	(3 ¹ / ₄		
Nom D o E without NDV*	4200 NII/min	5000 NII/min	0000 NII/min	11000 NII/mir	_	

Nom. R.o.F. without NRV 4200 NI/min 5000 NI/min 5000 NI/min 900 NI/min Nom. R.o.F. with NRV* 900 NI/min 4000 NI/min Max. working pressure 25 bar

80°C Max. operating temperature

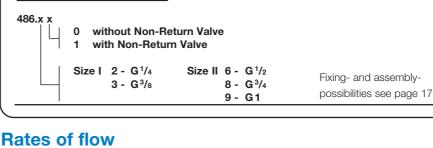
Material

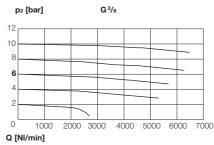
zinc alloy Housing

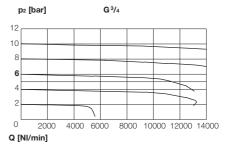
780g (G1 = 1240g)Weight 290 g

- measured at 6 bar pre-pressure (p₁) and $\Delta p = 1$ bar
- ** mounting plates with G1 see page 17

special option - how to order:







Dimensions [mm]

Thread	А	В	С	F	J	K	øL	U	W
G 1/4 and G 3/8	48	44	48	24	43	14,5	4,4	G ³ /8	G ³ /8
G ¹ / ₂ and G ³ / ₄	70	56	70	35	62	18	5,4	G ³ /8	G 1/2
G1	125	56	70	35	62	18	5,4	G ³ /8	G 1/2

Cover:	"private label"
Thread:	NPT

Pneumatic Starting Valve Type 484

variobloc G¹/₄ - G1





Starting valves and filling valves in modular block design serve to raise the pressure gradually in pneumatic systems when they are being started, for example after emergency shut-off. When switched on, throttles release at first only a small orifice. Only when the pressure has reached about 60% of operating pressure is the full orifice opened. In the opposite direction (relieving) the full orifice is opened by means of a non-return valve. In combination with ewo-equipment such as the 3/2-way valve, ball valve or solenoid valve a complete on-and-off unit can be assembled. Port sizes G1/4 to G1.

Only suitable for closed systems!

Technical Data		I Si	ze	II .				
Thread	G 1/4	G 3/8	G 1/2	G ³ / ₄ G1***				
Nominal rates of flow*	1200 NI/min	1400 NI/min	3800 NI/min	4200 NI/min				
Point of dispatch**	about 0,6 x working pressure							
Working pressure range		2 to 2	25 bar					
Max. surrounding temperat	ture	50	°C					
Material								
Housing	zinc alloy							
Weight	295 g 730 g (G1 = 119							
* measured at 6bar pre-pres	ssure (p ₁) and Λ	ιρ = 1 bar.						

- ** profile completely opened
- *** mounting plates G1 see page 17

special option - how to order:

484.x x

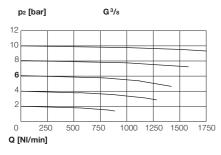
Air regulator adjustable

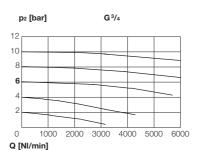
Size I 2 - G1/4 Size II 6 - G 1/2 3 - G3/8 8 - G3/4

9 - G1

Fixing- and assemblypossibilities see page 17

Rates of flow



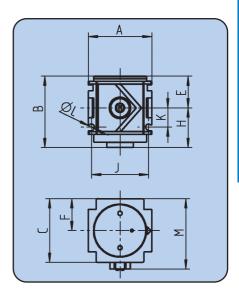


Dimensions [mm]

Threat	А	В	С	Е	F	Н	J	K	øL	М
G ¹ /4, G ³ /8	48	54	48	24	24	30	43	14,5	4,4	53
G ¹ / ₂ , G ³ / ₄	70	72	70	36	35	36	62	18	5,4	75
G 1	125	72	70	36	35	36	62	18	5,4	75

Cover:	"private label"
Thread:	NPT





Fixing- and Assembly-Possibilities

variobloc

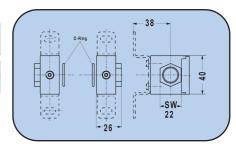
"Plug and Work" - this is the motto after which you can choose your prefered combination from the variety of the fixing- and accessory elements.





Mounting plates set

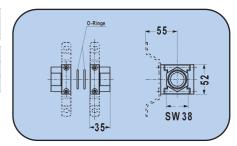
Thread	Orde	r No.
Sizel		with holder
G ¹ / ₄	480-75	480-120
G ³ / ₈	480-37	480-121







Thread	Orde	r No.
SizeII		with holder
G ¹ / ₂	480-283	480-287
G ³ / ₄	480-282	480-288
G1	480-271	480-289

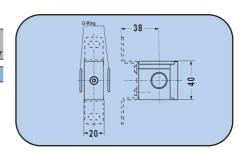






Set Comfort Connection (inside module)

Thread	Orde	r No.
Sizel		with holder
$G^{1/4} + G^{3/8}$	480-38	480-122

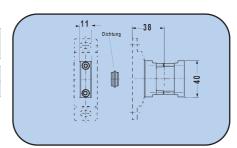






Set Compact Connection

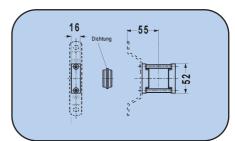
Order No.		
	with holder	
480-57	480-56	
480-36	480-35	
	480-57	

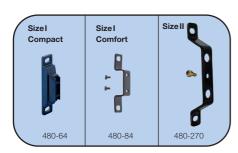






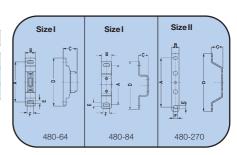
Thread	Orde	r No.
SizeII		with holder
G ¹ / ₂	480-238	480-264
G 3/4	480-237	480-265





T-bracket separately

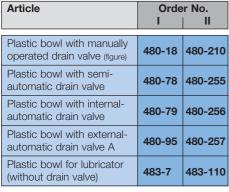
5	Size	Α	В	С	D	Е	F	Order No.
Ξ								
-1		75	19	26	90	6,5	12	480-64
1		75	19	18	90	6,5	12	480-84
1	I	110	16	26	130	6,5	12	480-270



Accessories and Condensate-Drain Valves



variobloc All Sizes and Model Ranges



Metal bowl with manually operated drain valve (20bar)	480-28	480-213
Metal bowl with semi- automatic drain valve (20bar)	480-80	480-258
Metal bowl with internal- automatic drain valve (12bar)	480-81	480-259
Metal bowl with external- automatic drain valve A (16bar)	480-96	480-260
Metal bowl for lubricator (without drain valve) (20bar)	483-10	483-113

Bowl protection for	480-25	480-216
plastic bowl	100-20	400-210



Padlock for ballvalve	S 407.47
Model 487	487-17



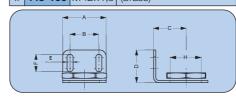
Article		Order No.
Drain Bolt out of plastic	G 1/8	423-110
Semi-automatic drain valv	ve	
with insert for plastic and metal bowl (Ø14)	LW 6	495-100
External-autom. drain valve	4 (4-16 bar)	
for external mounting to e.g. a m		
Housing + cap (brass)	G 1/8	5370.3
Housing (polyamide)	G1/8	5370.4
External-autom. drain valve I	3 (1-12bar)	
Internal-automatic drain valve in housing for external mounting (thread G 1/8)	LW 5	441.11
Internal-autom. drain valve (1	-12bar)	
for bowl with borehole ø 14	LW 5	441.1



Fixing bracket at the handwheel cap with nut

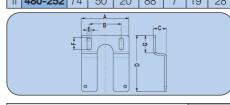
Size	Order No.	Α	В	С	D	Е	F	Н
1	443-36	40	26,5	30	30	5,5	16	30,5
П	443-104	55	35	42,5	40	7	20	43
Pa	Panel mounting (nut)							

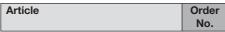
381-32 M30x1,5 (PA6) II **443-106** M42x1,5 (brass)



Fixing on housing

Size	Order No.	Α	В	С	D	Е	F	G
\perp	480-67	50	34	15	71	5,5	16	25
\equiv	480-252	74	50	20	88	7	19	28
$\overline{}$			٨					$\overline{}$





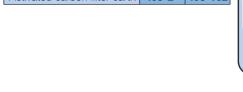
Seal for Compact Connection

I	G ¹ / ₄ G ³ / ₈	form seal	480-85 480-11
II	G ¹ / ₂ G ³ / ₄	sleeve + seal	480-267 480-268



1	(2x M4x40)	480-83
Ш	(2x M5x60)	480-266

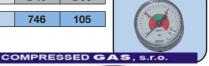
Article	Orde	Order No.		
	- 1	II		
PE-Filter insert 40 µm	480-7	480-219		
PE-Filter insert 5 µm	480-45	480-220		
Micro filter cartridge	491-4	491-103		
Activated carbon filter cartr	493-2	493-102		



Gauge		ø 40	ø50	1
	0-10bar	723	55	l
Gauge scale	0-16bar	734	85	ı
	0-25 bar	745	96	l

Gauge with color code		ø 40	ø50	
Gauge scale	0-16bar	746	105	

Gauge with col	lor code	ø 40	ø50	[
Gauge scale	0-16bar	746	105	







notes