

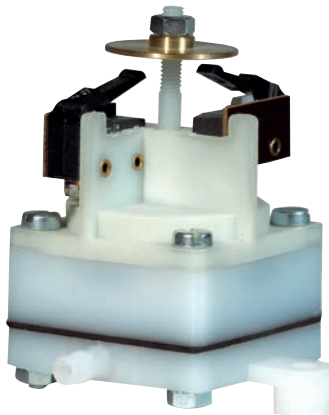
Accessories for Vacuum Pumps & Compressors



UVS 100



VDM 300 R



MB 40

- Pressure Measuring Instruments
- Pressure Switches
- Pressure Relief Valves
- Vibration Dampers
- Silencers
- Intake Filters
- Explosion Suppression
- Threaded Connectors
- Tube Connectors



Digital Measuring Device for Pressure and Vacuum VDM 300 R



Part number 49007001

Instrument with operating instructions, does not include carrying case and accessories

Part number 49007028

Includes carrying case and accessories:

- PVC tube 4 mm x 2mm x 1m
- 15 cm silicone tube 6 x 3 mm
- Reducer 4 x 6 mm
- Spare battery 9 V

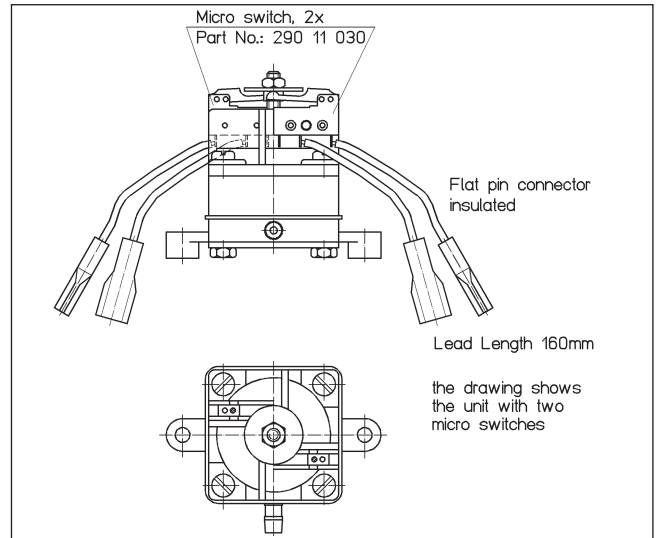
Part number 49007029

Interface converter for PC hook-up with 24/9-pole adapter and installation CD

Technical data

Measuring range	-1000 mbar to +2000 mbar
Resolution	1 mbar
Deviation	≤ 0.4%
Sensor	Piezoresistive relative pressure sensor. Suitable for air and inert gases. Pressure measurements for liquids possible when using an air buffer.
Temperature range	0 to 50 °C
Storage temperature	-20 to +70 °C
Power supply	9 V compound battery (Power supply can be connected)
Control panel	6 key pads
Adjustable display	bar – mbar – kPa – mmHg or PSI
Differential pressure measurement	Adjustable from 1 up to 120 min
Automatic turn-off	Adjustable from 1 up to 120 min
Dimensions	142 x 71 x 26 mm
Housing	ABS, the key pad is according to IP 65

Diaphragm Pressure Switch MB 40



The diaphragm pressure switch MB 40 is available for overpressure and negative pressure. The standard version has one micro switch with on, off or switch-over capability. The diaphragm pressure switch can be built with a second micro switch. Different springs are required for different pressure ranges. Other materials are available for special requirements.

Standard materials in contact with the medium	Vacuum	Pressure
Diaphragm	NBR	FKM (Viton) [®]
Plunger	PA	Brass
Plastic parts	PA	PA
Spring	Stainless steel	Stainless steel

The basic adjustment is by means of a pressure disc, against which the lever of the micro switch is pressed. For fine adjustment there is an adjustment screw in the lever. The hysteresis between the on and off position cannot be changed, it is dependent on the micro switch and amounts to about 10% of the switching point.

The diaphragm switch can be mounted directly on the head of the pumps series 5010, 7010 and 7011.

Part number	Vacuum switch
70400023	-100 mbar bis -900 mbar

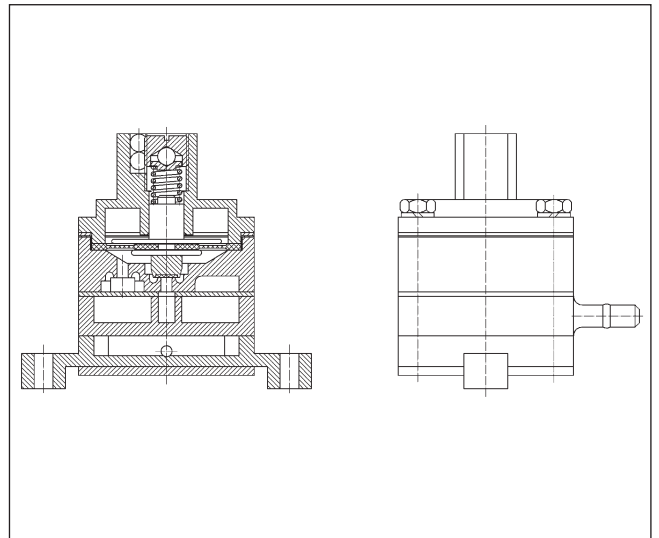
Part number	Pressure switch MB40D
70400002	0.10 bar to 0.80 bar
70400053	0.80 bar to 1.50 bar
70400005	2.60 bar to 4.00 bar

Technical data		
Protection class	IP00	
Duration of the contact	6 A Ohm resistive load	1A inductive load
Expected cycle life (at 10 % load)	1,000,000	100,000



Under – Over Pressure Valve: UVS 100

Bypass valve



The bypass and pressure control valve UVS 100 is a servo-valve. The valve can also be used as a bypass. (Especially when mounted directly onto the pump)
It is suitable for applications with gas flows of up to 10 l/min.
Different springs are required for different pressure ranges.
Other materials are available for special requirements.

Standard materials in contact with the medium	Pressure
Diaphragm	FKM (Viton) [®]
Plastic parts	PA

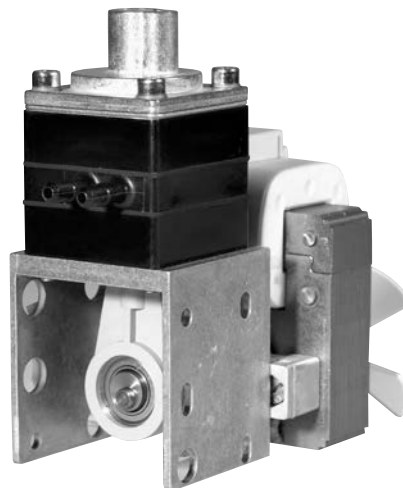
The adjustment is by means of an adjustment screw in the middle of the valve.
The spring force is therefore regulated which keeps the bleed valve closed.
The pressure works on a diaphragm that opens blow-off valve when reaching the adjusted value.

Like the manometric switch, the UVS can also be mounted directly on the head of the pumps series 5010, 7010 and 7011.

With this arrangement the valve can be used as a bypass or as a bleed valve.

Part number	Pressure range
71000037	0.10 bar to 0.80 bar
71000054	2.80 bar to 3.20 bar

UVS 100 D mounted on a diaphragm pump 7010



Check Valves and Filters

Check valve

Part number	29021134
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Check valve for vacuum and pressure up to 0.9 bar.

An outstanding feature of the check valve is that even with a pressure difference of 50 mbar the valve is very tight.

The valve has tube connectors (Ø3,5 mm) on both sides.

Housing plastic, Elastomer EPDM

Connection 4 mm

suitable for diaphragm pump series 2002 to 5002

rotary vane pump series G 01 and 02



Push-on filter

Push-on filter

Part number		Pump type
29005486		5002
29005487		7010/7011

The push-on filter is for the suction of air, but also reduces the suction noise.

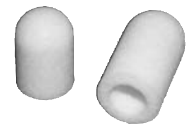
In a transparent plastic housing there is a foam filter.

The air is sucked in through a piece of Merino felt.

The filter can be mounted directly on the intake port.

Poroplast SD/Filter

Part number		for Ø
29005402		4 mm
29005410		5 mm



Suction filters and silencers

Triple filter

Triple filter

Part number	49003410
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Triple filter for vacuum and pressure up to 1 bar.

Connections double-sided for tube 4 mm.

suitable for diaphragm pump series 2002 to 7015

WOB-L compressor series 8003 to 8009



Screw-in filter

Screw-in filter

Part number		Pump type
59021156		For pressure outlet, with felt filling
29021240		For pressure outlet, with cotton filling and felt washer
29021154		For suction intake, with cotton wool filling

Aluminium housing with different filter inserts.

Connection G 1/8" male thread. Usable on the suction side as a filter, on the pressure side as a silencer.

On pumps and compressors with internal thread connections the filter/silencer is screwed directly onto the head.

On pumps with tube connectors the filter is connected with a piece of silicon tubing.

suitable for all pumps and compressors up to 30 l/min



Silencer

The push on filter and screw in-filter can also be used on the outlet side for reducing the pneumatic noise.

Resonance silencer

Part number	29021226
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for tubing diametre 6 mm

PP-housing/diametre 30x35 mm

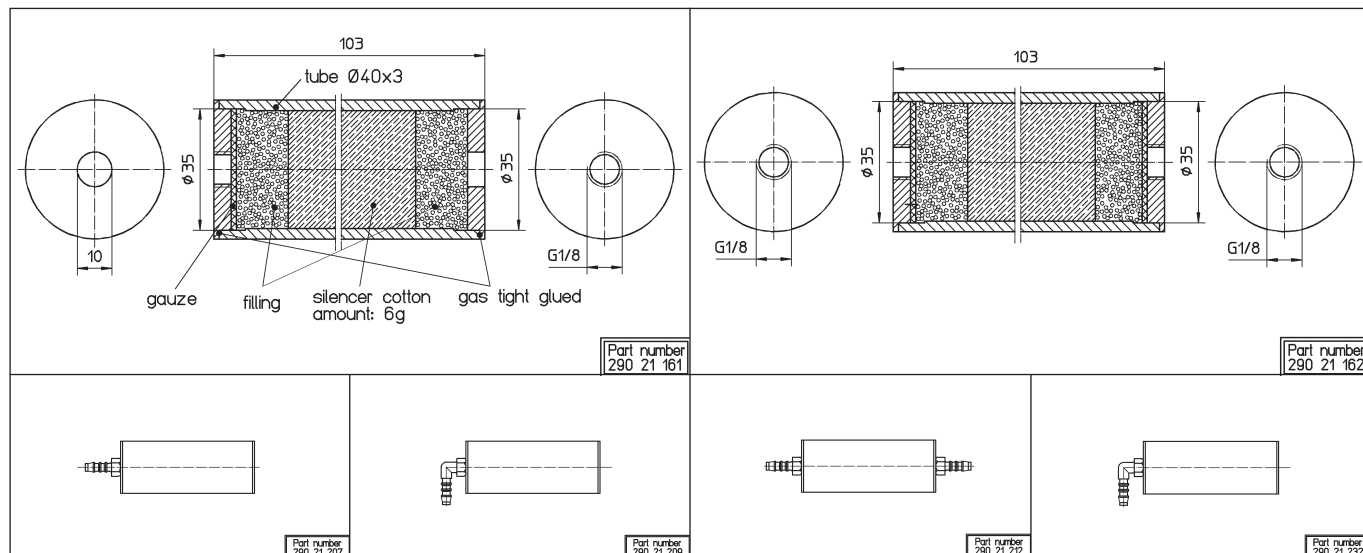


Suction filter for pumps and compressors up to 60 l/min

Red PVC pipe, filled with mineral wool or cotton.
 In different designs as inline filter with G 1/8" threads (female) on both ends, or as suction filter with a thread on one end and a bore on the other side.
 Different plastic tubing connectors are available.
 Material: red PVC tubing – circumference 40 mm with vacuum-tight glued ends.



Material: red PVC pipe, diameter 40 mm, with caps cemented vacuum tight.



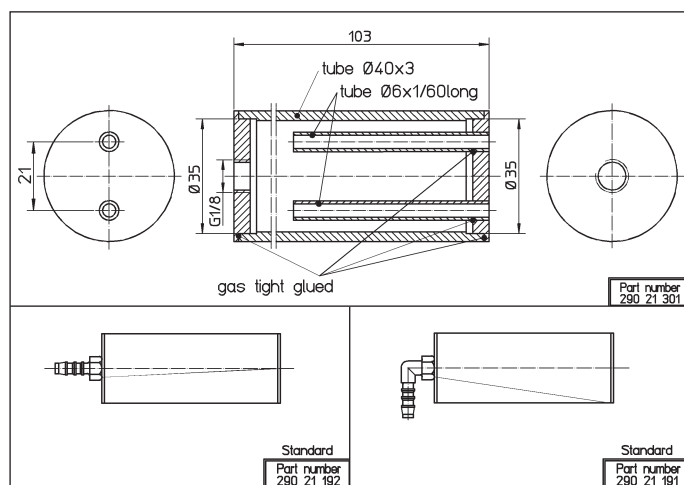
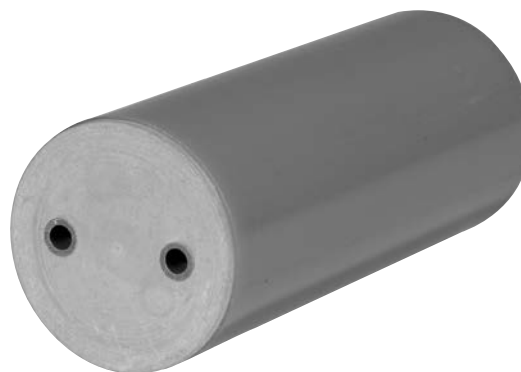
All connections are 6 mm

Resonance silencer

Deflection pipes within the silencer help to significantly reduce the noise level of compressors and diaphragm pumps.

Technical Data and design

Housing red PVC pipe, 40 mm diameter, both ends sealed with caps.



All connections are 6 mm

Detonation guard DS20

EG-type examination test ATEX 4022 X PTB 99/PTB-inspection report Ex-40022

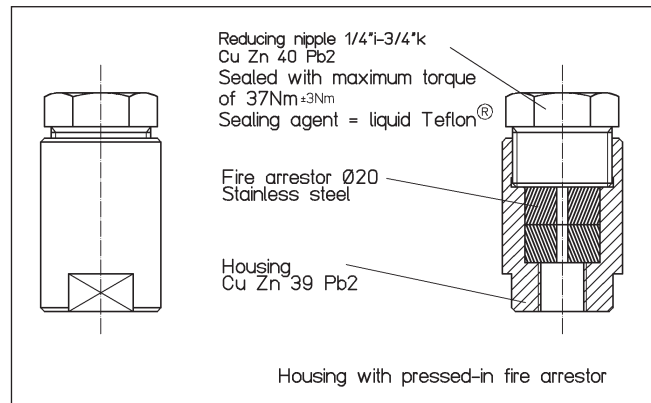
Brass	Part number	42001003
Stainless steel	Part number	42001004

The detonation guard is used in piping and prevents an exit of a potential flame while extracting gases; for example from the measuring cell of analytical systems.



Design
Two fire arrestors contained within a stainless steel or brass housing prevent an exit of the flame from the closed system.

Technical Data
Suitable for media listed under explosion group II A
Operating pressure maximum 1.1 bar abs (100 mbar overpressure)
Maximum temperature 60 °C
Connection thread G 1/4"



42001003 and 42001004

Detonation guard DS21

EG-type examination test ATEX 4025 X PTB 02/inspection report PTB Ex 02-40059

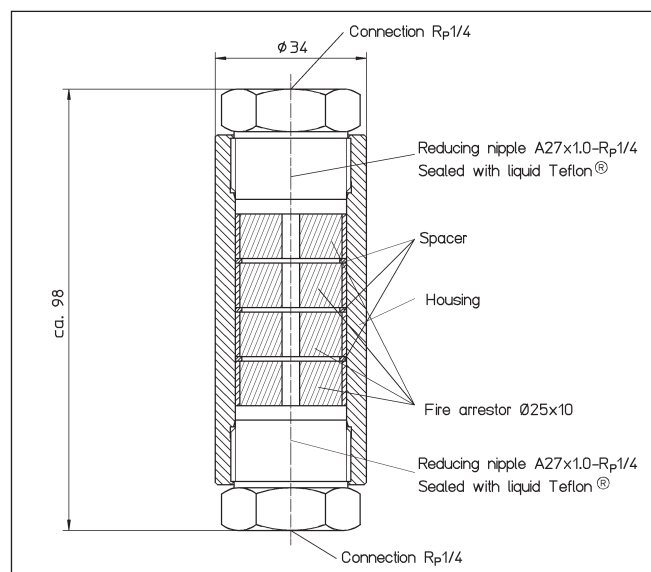
Stainless steel	Part number	49004087
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The detonation guard DS21 is used in piping as well. It prevents an exit of a potential flame while extracting gases classified for higher danger zones.



Design
Design like DS20, but with four fire arrestors.

Technical Data
Suitable for media listed under explosion groups II 1, II B1, II B2 and II B3.
Operating pressure maximum 1.1 bar abs. (100 mbar overpressure)
Maximum temperature 60 °C
Connection thread G 1/4"



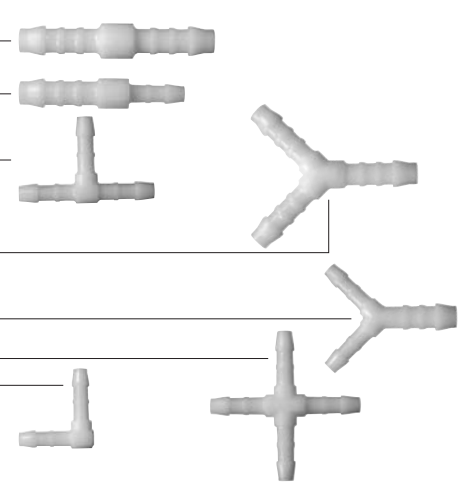
49004087

Connectors, adapters and threaded connections

PLASTIC CONNECTORS – barbed

InletØ - outletØ / thread size
in mm

29022688	straight	GS 3	3 - 3
49002100	straight	GS 4	4 - 4
49005590	straight	GS 6	6 - 6
49007079	straight reduction	GRS 4/6	4 - 6
49007110	T-fitting	TS 4	4 - 4 - 4
49000610	T-fitting	TS 6	6 - 6 - 6
29022680	T-fitting	TRS 4-6-4	4 - 6 - 4
49005630	T-fitting	TRS 8-4-8	8 - 4 - 8
49000640	Y-fitting	YS 4	4 - 4 - 4
49005580	Y-fitting	YS 6	6 - 6 - 6
29022685	Y-fitting	YS 8	8 - 8 - 8
49000790	Y-fitting	YRS 4-6-4	4 - 6 - 4
49000795	Y-fitting	YRS 6-8-6	6 - 8 - 6
39022700	Cross piece	KS 4	4 - 4 - 4 - 4
49005624	Elbow 90°	WS 4	4 - 4



PLASTIC CONNECTORS – threaded

49005160	straight	GES	4 - R 1/4"
49005610	straight	GES	4 - R 1/8"
49005650	straight	GES	6 - R 1/8"
49005670	straight	GES	8 - R 1/4"
49005701	Elbow	WES	10 - R 1/4"



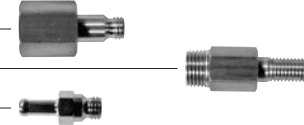
Adapters and threaded connectors for the 8009 series – plastic

624569	red	1/4 x 28 UNF
624568	white	1/4 x 28 UNF



Adapters and threaded connectors for the 8009 series – metal

59000801	thread adapter	1/4 x 28 UNF/G 1/8" inside	long
59002730	Double nipple	1/4 x 28 UNF/G 1/8" outside	(without conical seal)
59022050	Tubing with thickening end	1/4 x 28 UNF/NW 4 x 10	

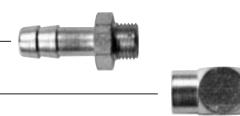


METAL for soft tubing

Metal bright/nickel plated

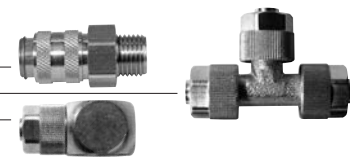
InletØ - outletØ / thread size
in mm

29022574	Threaded nozzle	8 - G 1/8"	Counter bore 5,5 mm	Brass nickel plated
29022550	Threaded nozzle	8 - G 1/8"		Brass nickel plated
29023110	Ring (piece)	for tube 8 x 3	322M - 1/8" - 1/8"	Brass nickel plated



Compression fitting for stiff tubing (PU)

29022800	Socket coupler	5 - G 1/4"	Brass nickel plated
29024410	Threaded T-fitting tubing	37780	Brass nickel plated
29023121	Ring (piece)	for tube G 1/8" - 8/6	Brass nickel plated



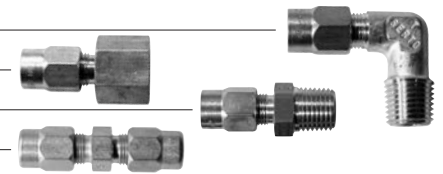
Threaded connector

29024500	T-fitting	2 x 1/4" female, 207M - 1/4"K - 1/4" 1 x 1/8" male	Brass nickel plated
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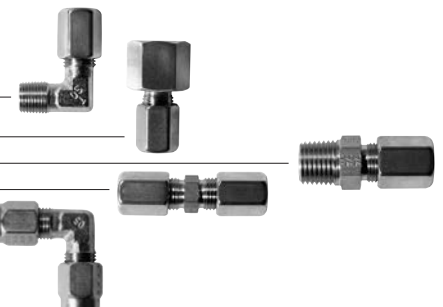
"Serto" piping, brass

49003923	Elbow	Serto	6 - G 1/4"	Cone	Brass
49003938	straight	Serto	6 - G 1/4"		Brass
49003924	straight	Serto	6 - G 1/4"	Cone	Brass
49003925	straight	Serto	6 - G 1/4"	Cone	Brass
49002771	straight	Serto	6 - 6		Brass
49003942	straight	Serto	8 - 6		Brass



"Swagelok" and "Serto", stainless steel

49003955	Elbow	Serto	6 - G 1/8"	Cone	VA, 1.4571
49002927	Elbow	Serto	8 - G 1/4"	Cone	VA, 1.4571
49002929	straight	Serto	6 - G 1/4"		VA, 1.4571
49002910	straight	Serto	8 - G 1/4"	Cone	VA, 1.4571
49003954	straight	Serto	6 - 6		VA, 1.4571
49002926	Elbow	Serto	8 - 8		VA, 1.4571



Tubing

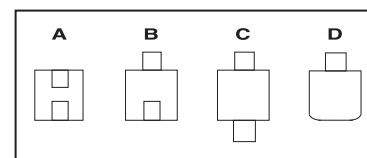
	Dimensions Inside diameter	Wall thickness	Colour	Part number
PU tubing	4	1	transparent	29021834
	4	1	blue	29021835
	4	1	black	29021836
	6	1	green	29021846
PVC tubing	4	2	glassy	29021757
	4	1,5	glassy	49000191
	6	1,5	glassy	29021826
	6	2	glassy	49000690
	4	2	glassy red	49000192
	4	2	glassy green	49000193
PVC tubing – reinforced	4	3		49000197
	6	3		29022100
	8	3		29022110
Silicone tubing*	1,5	1	natural	29021880
	6	3	natural	49000485
Minimum quantity 10 m				

* The Silicone tubings are not suitable for our peristaltic pumps.

Compatible tubes are shown in the brochure "Peristaltic pumps SR10 – SR25".

Vibration absorbers and rubber feet

Form



Part number	Diameter	Height	Thread	Depth of thread	Length of bolt	°Shores	Form
29023500	15	15	4	4/4		60	A
29023505	15	15	4	4	8	40	B
29023507	15	15	4	4	8	40	B
29023525	15	10	4	4	8	60	B
29023577	15	25	4	4	6	45	B
59023521	15	20	4	4	5	45	B
29023506	15	15	4		8/8	60	C
29023610	20	25	6		10/18	45	C
29023629	O-Form	17	4		6,5/6,5	30	C
29023630	6	6	3		6/6	55	C

Vibration absorber set, complete with nuts and screws

98010528	Complete with nut and screw	4 pieces 29023505	B
97011505	Complete with nut for 7011 pump	2 pieces 59023521 + 1 St 29023507	B

Condensate trap

The top of the condensate trap (thread size G 3/4") is the same for all models.

Due to different heights the sight gauges also have different volumes.

The top is equipped with a hose connector that protrudes into the condensate tank.

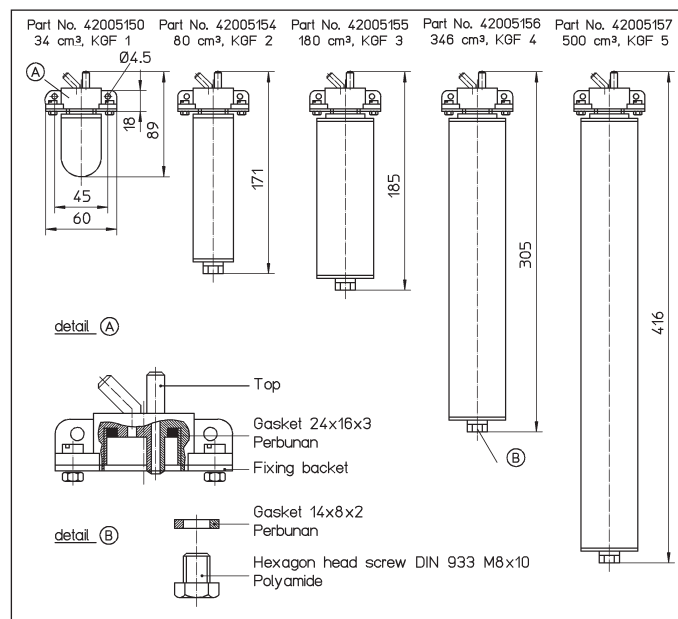
Condensate within an air stream is withheld by inserting a tube that reaches the bottom of the respective tank.

Some of the sight gauges have threaded connectors at the bottom. This enables drainage of the tank via a separate valve or pump.

When filled with Silicate, the condensate trap can also be used as an air dryer.

Design			
Top	"Makrolon"®	Polycarbonate	PC
Inspection glass	"Luran"®	Polystyrene-acrylonitrile	SAN
Gasket	"Perbunan"®	Acrylonitrile-butadiene-cautchouk	NBR

Accessories	
Fixing bracket for wall mounting of one trap	Zinc plated sheet steel
Fixing bracket for wall mounting of three traps	Plastic



Notes



THOMAS

by Gardner Denver

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