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Testing and service devices

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Testing and



service devices





HPP Basic, STG Basic

Good and economic

STRENGTHS AT A GLANCE

- SAFE PRESSURE TEST OF WALL HYDRANTS AND FIRE PRESSURE HOSES
- MOBILE, EASY TO TRANSPORT DEVICES FOR "ON SITE" TEST

- The hydrant testing pump HPP Basic for mobile pressure testing of wet / dry riser pipes shape-stables hoses and fire pressure hoses.

Hydrant testing pump HPP Basic

The **hydrant testing pump HPP Basic** is a compact device with continuously adjustable pressure capacity for mobile use for the pressure test of wet / dry fire extinguishing water lines, wall hydrants and water pressure hoses. A three-plunger water pump provides the pressure which can be continuously adjusted by a pressure regulator. The adjusted pressure can be read at the glycerine-filled manometer.

Additional accessories (surcharge)

1	Art.-No. 186553	Hose closure size C with automatic vent valve
2	Art.-No. 186587	Attachable mobile base parts, approx. 4 kg
3	Art.-No. 186551	Adapter size C - D
4	Art.-No. 186552	Adapter size B - C
5	Art.-No. 186554	Retaining washer size C
6	Art.-No. 186555	Coupling size C on 3/4 inch external thread for water inlet

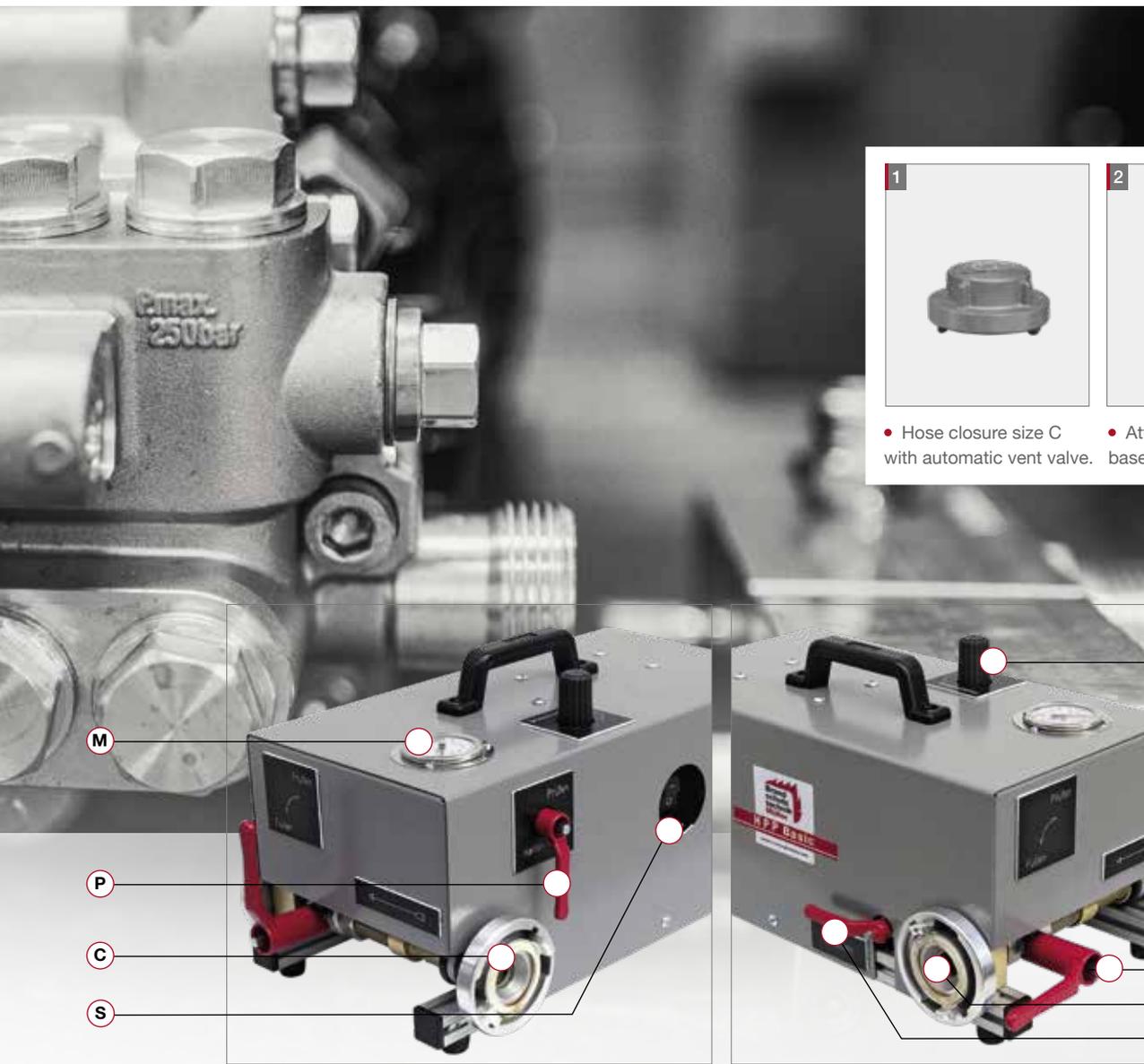
- The hose drying device STG Basic is used to dry fire pressure hoses.

Hose drying device STG Basic

The device is composed of an aluminium profile frame, an electric motor with side channel blower, flanged air heater, and a Storz C coupling connection.

Motor and air heater are protected by a galvanized and coated sheet steel housing. A 5 m cable and cam switch supply the power.





- Hose closure size C with automatic vent valve.
- Attachable mobile base parts, approx. 4 kg.

HANDLING

Connect the HPP Basic via the Storz coupling (C) to the water supply. After the fire pressure hose to be tested has been connected to the coupling (K), it is filled with water by opening the filling ball valve (F). Next, the test ball valve (P) is closed to prevent pressure kickback in the filling line. The test pressure is then built up by switching on the motor at the switch (S). The turning handle (D) regulates the pressure which can be read at the manometer (M). After the test, the fire pressure hose is decompressed by the release ball valve (E).



• Art.-No. 186588 Manifold for simultaneous pressure testing of up to 3 fire hoses, floorstanding model, max. 16 bar.

To dry, one side of the inside wet fire pressure hoses is connected to the Storz C coupling of the **hose drying device STG Basic**. The other end of the hose remains free to discharge air. The device supplies a flow rate of approx. 1600 L/min. The heating capacity is 1200 W.

TECHNICAL DATA

HPP Basic

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)
Art.-No. 186585, Art.-No. 186586

Operating pressure: max. 16 bar, adjustable.
 Operating pressure: max. 30 bar, adjustable.
 Filling power: 11 L/min. Electric motor: 230 V, 50 Hz, 2.2 kW, 1400 rpm 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant.
 Dimensions: 310 mm height, 530 mm width, 280 mm depth. Weight: 24.5 kg, Colour: Grey.

STG Basic

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)
Art.-No. 186534

Flow rate: 1600 L/min. Electric motor: 230 V, 50 Hz, 0.75 kW, 2840 rpm. Air heater: 230 V, 50 Hz, 1200 W 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant. Dimensions: 385 mm height, 300 mm width, 445 mm depth. Weight: 23.5 kg. Colour: Grey. IP rate: IP54

Subject to technical modifications / 03-2020



Hydrant testing pumps HPP and HPP Maxi Mobile, compact, strong

STRENGTHS AT A GLANCE

- STRONG ELECTRIC MOTOR WITH LOW SPEEDS
- NON-HAZARDOUS TESTING WITH WATER PRESSURE
- INTEGRATED MOBILE BASE WITH FOLDING HANDLE
- HIGH-QUALITY ROBUST HOUSING

- The hydrant testing pumps HPP have been designed for mobile use for pressure testing. They are compact devices with high adjustable pressure capacity.

Hydrant testing pumps are compact devices with differing adjustable pressure capacity. They are suitable for mobile use for the pressure test of fire extinguishing water lines, wall hydrant riser pipes and water pressure hoses.

A three-plunger water pump with the **HPP** and a diaphragm pump with the **HPP Maxi** provides the pressure which can be continuously adjusted by a pressure regulator.



- The devices are mounted on a steel pipe transport cart with folding handle. They also have a device for winding up the electric cable.



The adjusted pressure can be read at the glycerine-filled manometer. The automatic non-return valve prevents return flow during pressure build-up. Handling is easy: The test object is filled with water via the ball valve at the device. Then the pressure is built up. After the test, a second ball valve decompresses the pressure.

Water inlet and outlet are fitted with fixed Storz C couplings, or 1 inch external thread for the 60 bar version of the **HPP**. A C coupling with 3/4 inch

HPP Maxi

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186565



Operating pressure: max. 30 bar, adjustable.

Filling power: 35 L/min max.

Electric motor: 230 V, 50 Hz, 2.2 kW, 1400 rpm 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant.

Transport wheels: Ø 200 mm, roller bearing mounted. **Dimensions:** 550 mm transport height, 1035 mm height, 520 mm width, 760 mm depth. **Weight:** 69 kg. **Colour:** Red, RAL 3000. **IP rate:** IP54

Manifold, standard model (surcharge)

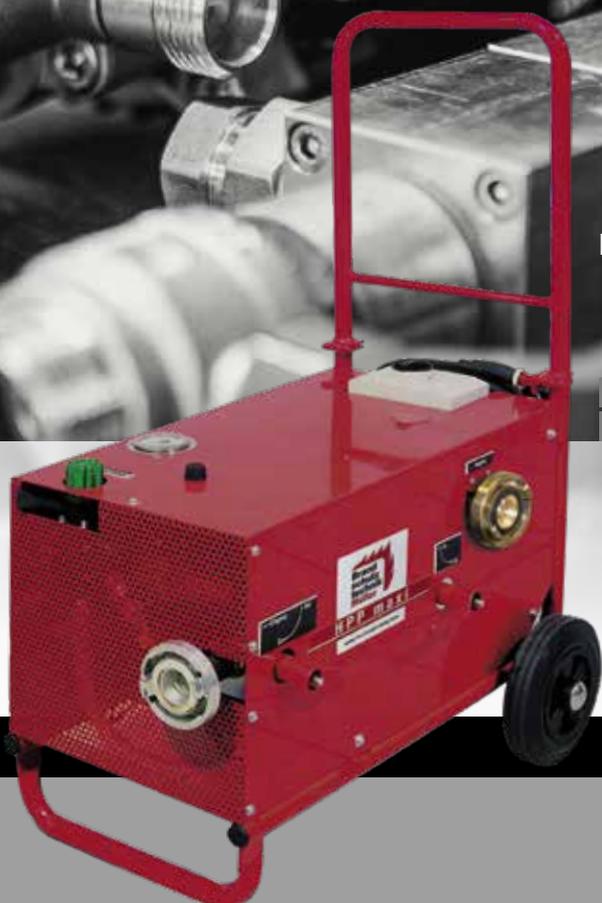
With ball valves for simultaneous connection of up to 3 fire pressure hoses.

Art.-No. 186508

Size C, max. 16 bar.

Art.-No. 186514

Size C, max. 30 bar.



- The hydrant testing pump HPP Maxi has a greater filling power than the HPP.

external thread is also available as accessory for the water inlet. A galvanized and powder-coated sheet steel hood with ventilation perforated plate at the front protects the motor and the pump from dirt and damage.

Manifold, floorstanding model (surcharge)

With ball valves for simultaneous connection of up to 3 fire pressure hoses.

1 **Art.-No. 186588** Size C, max. 16 bar

2 **Art.-No. 186589** Size C, max. 30 bar

Accessories (surcharge)

3 **Art.-No. 186551** Adapter size C - D

4 **Art.-No. 186552** Adapter size B - C

5 **Art.-No. 186553** Hose closure size C with automatic vent valve

6 **Art.-No. 186554** Retaining washer size C

7 **Art.-No. 186555** Coupling size C on 3/4 inch external thread, for water inlet



Hydrant testing pumps HPP

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186500 Operating pressure: max. 16 bar, adjustable. **Filling power:** 12 L/min.

Art.-No. 186515 Operating pressure: max. 30 bar, adjustable. **Filling power:** 12 L/min.

Art.-No. 186517 Operating pressure: max. 60 bar, adjustable. **Filling power:** 13 l/min.

Electric motor: Art. No. 186500 and Art. No. 186515: 230 V, 50 Hz, 1 kW, 1400 rpm Art. No. 186517: 230 V, 50 Hz, 2.2 kW, 1400 rpm 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant. **Transport wheels:** Ø 200 mm, roller bearing mounted. **Dimensions:** Art. No. 186500 and Art. No. 186515: 38 kg, Art. No. 186517: 41 kg 475 mm transport height, 1000 mm height, 460 mm width, 650 mm depth. **Colour:** Red, RAL 3000. **IP rate:** IP54

Subject to technical modifications / 03-2020



Hydrant testing devices HPM, HHP and HPS Mobile and stable device

STRENGTHS AT A GLANCE

- INTEGRATED WATER COLLECTION TANK
- PNEUMATISCHE SCHLAUCHENTLEERUNG
- FLOW RATE DETERMINATION AND PRESSURE TESTING IN ONE

• Manual hydrant testing pump HPM with basic equipment.

The manual **hydrant testing pump HPM** can measure the static and flow pressure of a wall hydrant's fire extinguishing water and determine the flow rate. In addition, wall hydrants and fire pressure hoses can be pressure tested very simply.

The **HPM** has a 50 litre plastic water collection tank with water inlet funnel, vent openings and a ball valve at the bottom for easy draining, and is mounted to a stable mobile base.

Accessories (surcharge)

- 1 **Art.-No. 186580** Collection tank emptying pump with battery and charging power unit, delivers approx. 20 L/min
- 2 **Art.-No. 187570** Nitrogen cylinder 3 L
- 3 **Art.-No. 186581** Pneumatic hose draining for HPM.
(Shut-off ball valve with hose and cylinder holder)
- 4 **Art.-No. 186801** N² pressure reducer, 0 - 20 bar, with quick action coupling and manometer protective caps, max. 200 bar



Art.-No. 186995

Dimensions:

Length complete [mm]: 1500,
Hose length [mm]: 1300.

Transport case:

Height [mm]: 130, Width [mm]:
520, Depth [mm]: 370.
Weight [kg]: 4.5.



Hydrant testing set HPS

The **hydrant testing set HPS** can measure the static and flow pressure of a wall hydrant's fire extinguishing water and determine the flow rate.

Art.-No. 186564



- The **Flowmeter 190** devices are the perfect supplement to the hydrant pump for testing wall hydrants. The **Flowmeter 190** measures the flow rate of 11-190 liters/min.

Art.-No. 186566



- The **Flowmeter 190-D** with analogue pressure gauge measures the flow rate of 11-190 liters/min and the water pressure of 0-10 bar.



- **Hydrant testing pump HPM**: Maximum configuration with emptying pump, pneumatic hose draining, nitrogen cylinder, N₂ pressure reducer.



- **Hydrant testing pump HPM Maxi** with large water collection tank (125 L) for special application purposes.



Art.-No. 187142



Hydrant hand testing pump HHP

Wall hydrants and fire pressure hoses can be pressure tested very simply with the **hydrant hand testing pump HHP**.

Art.-No. 187145



Hydrant hand testing pump HHP-16

Hydrant testing pump HHP-16 with additional clamping device for wall hydrant nozzles.

T E C H N I C A L D A T A

Hydrant testing pump HPM

(EN ISO 12100-1, EN ISO 12100-2)

Art.-No. 186516



Operating pressure: 16 bar max.

Container capacity: 50 L.

Transport wheels: Ø 300 mm.

Dimensions: Height [mm]: 1105, Width [mm]:

450, Depth [mm]: 590. **Weight [kg]: 28.**

Surface: Red (RAL 3000). IP rate: IP54

Hydrant testing pump HHP

(EN ISO 12100-1, EN ISO 12100-2)

Art.-No. 187142



Operating pressure: max. 16 bar.

Hydrant hose with C coupling: 1.5 m.

Dimensions: Height [mm]: 310, Width [mm]:

590, Depth [mm]: 195. **Weight [kg]: 7.**

High-grade steel housing. IP rate: IP54



Hose drying device STG

Effective drying device

STRENGTHS AT A GLANCE

- LARGE ROLLER-BEARING MOUNTED TRANSPORT WHEELS
- INTEGRATED MOBILE BASE WITH FOLDING HANDLE
- EFFECTIVE DRYING DEVICE FOR FIRE PRESSURE HOSES

High hot air capacity for drying

To dry, one side of the inside wet fire pressure hoses is connected to the Storz C coupling of the **hose drying device STG**. The other end of the hose remains free to discharge air. The device has an air moving power of approx. 1600 L/min. The heating capacity is 2200 W.

- Connection to the fire pressure hoses.



- The STG is mounted on a steel pipe transport cart with handle. The handle can be folded down to enable smaller dimensions during transport.



The device is composed of a steel pipe frame with wheels, an electric motor with side channel blower and flanged air heater, an adjustable thermostat and a Storz C coupling connection. Motor, air heater and thermostat are protected by a galvanized sheet steel housing. A 5 m cable and cam switch supply the power.



- The hose drying device STG is used to dry fire pressure hoses. It has an adjustable, thermostatcontrolled air heater.
- Plug-on hose winder for hose drying device STG as accessory.



1 Art.-No. 187215 **Plug-on hose winder for hose drying device STG (surcharge)**

Plug-on hose winder for fire pressure hoses, for attachment to the **hose drying device STG**.

T E C H N I C A L D A T A

Hose drying device STG

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186531



Air moving power: 1600 L/min.

Electric motor:

230 V, 50 Hz, 1.1 kW, 2820 rpm.

Air heater: 230 V, 50 Hz, 2.2 kW

5 m cable feed line H07RN-F 3 G 1.5 mm²,
oil and acid resistant.

Transport wheels:

Ø 200 mm, roller bearing mounted.

Dimensions:

Height [mm]: 1000.

Transport height [mm]: 475.

Width [mm]: 480.

Depth [mm]: 610* without coupling.

Weight [kg]: 36.

Colour: Red, RAL 3000.

IP rate: IP54



Hose testing device SPG Simply safe

STRENGTHS AT A GLANCE

- HIGH OPERATOR PROTECTION THROUGH SHATTER-PROOF POLYCARBONATE HOOD
- PRACTICE-ORIENTED TESTING OF FIRE EXTINGUISHER HOSES

• Art.-No. 186405

The hose testing device SPG can test all fire extinguisher hoses.

Pressure testing of fire extinguisher hoses

The hose testing device SPG can test all fire extinguisher hoses with pistols for pressure resistance and gas-tightness. In the SPG the fire extinguisher hoses are tested in extended length. The device is connected by a high pressure hose (250 bar) to a nitrogen cylinder. The pressure reducer installed in the device is set to the required test pressure.



• Manometers for inlet and test pressure.

Special compressor

Sound-insulated special compressor with max. 20 bar operating pressure.

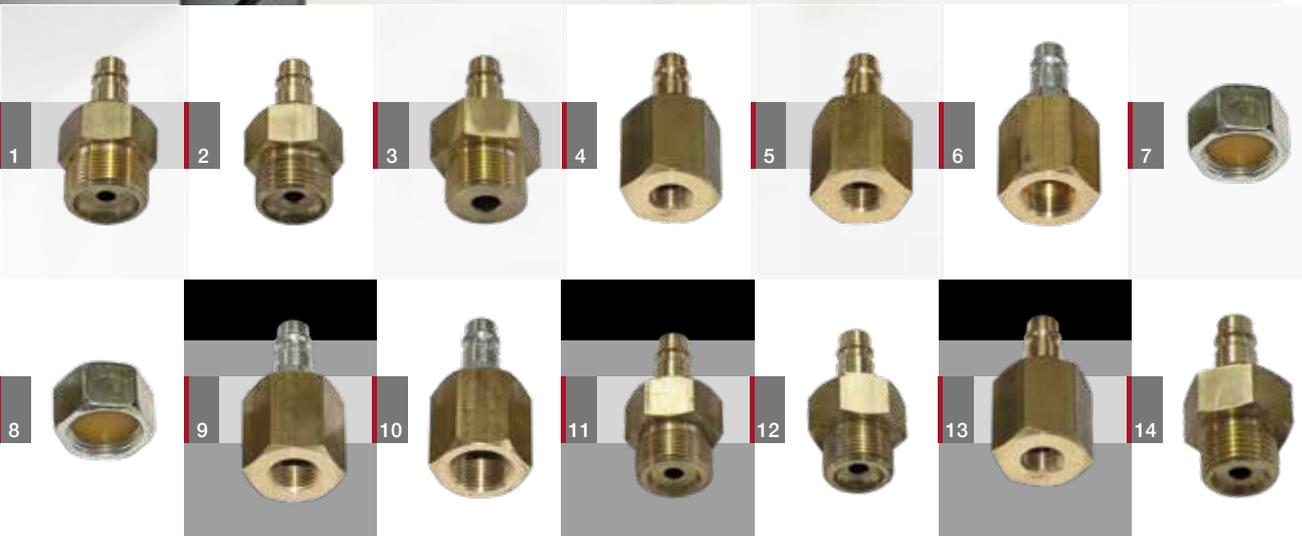
Art.-No. 187067



The fire extinguisher hose to be tested is coupled to the SPG with the matching testing connector. For safety reasons, the transparent safety cover must be closed. The ball valve for testing the fire extinguisher hose can then be opened. After the test the ball valve is closed. The hose vents automatically. The safety cover can be opened to remove the fire extinguisher hose. A hose connection (M22 x 1.5 flat or conically sealing) is included testing connector with the SPG.



• Exact pressure setting.



• Testing connectors. (accessories)



Testing connectors (surcharge)

Description	Art. No.	Description	Art. No.
1 Testing connector M 26x1.5 EXT. for Wintrich, Total P 50	187166	10 Testing connector M 20x1.5 INT. for Neuruppin, Bavaria Quick	187175
2 Testing connector R1/2" EXT. for Weber	187167	11 Testing connector M 22x1.5 EXT. for Gloria, Werner, Total GI	187176
3 Testing connector M 24x1.5 EXT. for Bavaria P 50	187168	12 Testing connector M 20x1.5 EXT. for Total GS	187305
4 Testing con. M 12x1 for Bav. GI INT.	187169	13 Testing connector M 22x1.5 INT. for Jockel P 6 J40	187308
5 Testing connector M 14x1.5 INT. for Vulkan, Wintrich	187170	14 Testing connector G 3/4" EXT. for Gloria P 50	187309
6 Testing connector M 18x1.5 INT. for Minimax, Gloria PS/PE	187171	15 Testing connector M 30x1.5 EXT. for Gloria P 250	187319
7 Testing con. closing cap M 22x1.5 INT.	187172	16 Testing connector M 24x2 EXT. Werner / Sicli MQ / ES	187313
8 Testing con. closing cap M 26x1.5 INT.	187173		
9 Testing connector M 16x1.5 INT. for Döka GI 6/12, Total GX	187174		

T E C H N I C A L D A T A

Hose testing device SPG

(EN ISO 12100-1, EN ISO 12100-2)

Art.-No. 186405



Inlet pressure: max. 200 bar.

Test pressure: max. 30 bar.

Dimensions: Height [mm]: 230, Width [mm]: 1150, Depth [mm]: 215.

Weight [kg]: 18. Surface: zinc plated.

Special compressor

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 187067

Operating pressure: max. 20 bar.

Suction capacity: 160 L/min.

Filling volume: 125 L/min. Electric motor: 230 V, 50 Hz, 1.1 kW, 3000 rpm. Sound pressure level: 60 dB(A) Pressure vessel: 4 l. Dimensions: Height [mm]: 510, Width [mm]: 350, Length [mm]: 570. Weight [kg]: 31.

Subject to technical modifications / 03-2020



SPGV

Hose and valve testing device

Simply safe

STRENGTHS AT A GLANCE

- PRACTICE-ORIENTED TESTING OF FIRE EXTINGUISHER HOSES AND VALVES
- HIGH OPERATOR PROTECTION THROUGH SHATTER-PROOF POLYCARBONATE HOOD

Hose and valve testing device SPGV

Pressure resistance and gas-tightness of all fire extinguisher hoses with and without pistol are tested in the **SPGV**. In addition, this device can also test the safety valves of fire extinguisher valves. The device is connected with a high pressure hose via quick action coupling to a 50 bar pressure reducer of a compressed air or nitrogen cylinder.

Options / accessories (surcharge)

- **Art.-No. 186802** Nitrogen pressure reducer 0 - 50 bar, admission pressure max. 200 bar
- **Art.-No. 186882** Compressed air pressure reducer 0 - 50 bar, admission pressure max. 200 bar
- **Art.-No. 186402** Connecting hose from quick action coupling of the safety valve testing line to the valve testing adapter



The fire extinguisher hose to be tested is screwed into the device. There are five different test connection options installed in the device. Open fire extinguisher hoses without pistol are closed by a nozzle closure for the test.

All fire extinguisher hoses are tested in extended length. To test, the shatter-proof polycarbonate hood must be closed which in turn opens the pressure supply.



• Testing of a stored pressure fire extinguisher hose which is sealed by the longitudinally flexible nozzle closure of the SPGV.



• Testing of a safety valve with a valve testing adapter.

• Testing of a fire extinguisher hose with pistol in extended length.



After the test, all lines are automatically vented when the hood is opened. Various valve testing adapters are available to test the safety valves of the fire extinguisher valves. The safety valve is screwed into the matching valve testing adapter which is connected with the connecting hose to the SPGV.

Valve testing adapters (surcharge)

No.	Description	Art. No.
1	Total Y	186841
2	Bavaria	187064
3	Total	186842
4	Gloria Gi	186840
5	Werner GA	186844
6	Minimax, Total, Bavaria, Jockel, BW, Neuruppin	186843
7	P 50, 1"	186550

• Other valve testing adapters can be manufactured according to a sample safety valve.

T E C H N I C A L D A T A

Hose testing device SPGV

(EN ISO 12100-1, EN ISO 12100-2)

Art.-No. 186401



Inlet pressure: max. 40 bar.

Supply hose with coupling plug: 1.5 m.

Dimensions:

Height [mm]: 220.

Width [mm]: 1100.

Depth [mm]: 225.

Weight [kg]: 18.

Surface: zinc plated.

5 test connections (installed):

M 14 x 1.5 Int. thread.

M 16 x 1.5 Int. thread.

M 18 x 1.5 Int. thread.

M 22 x 1.5 Int. thread.

M 22 x 1.5 Ext. thread, flat or conically sealing Quick action coupling for the safety valve test line.

Subject to technical modifications / 03-2020



Hydrotesting system HTG 500 Safe and flexible

STRENGTHS AT A GLANCE

- NON-HAZARDOUS PRESSURE TESTING OF METALLIC COMPRESSED GAS CYLINDERS
- CLAMP, FILL, TEST AND EMPTY WITH SHORT WORK CYCLES



The hydrotesting system **HTG 500** can simultaneously test up to 5 steel or aluminium compressed gas cylinders with a test pressure of up to 500 bar, e.g. CO₂ fire extinguishers, CO₂ cylinders, breathing apparatus compressed air bottles.

Test adapters for HTG 500 (surcharge)

1	Art.-No. 187101	Test adapter, small conical
2	Art.-No. 187102	Test adapter, large conical
3	Art.-No. 187320	Test adapter, cylindrical M18 x 1.5
4	Art.-No. 187321	Test adapter, cylindrical M25 x 2
5	Art.-No. 187322	Test adapter, cylindrical M30 x 2

- Special test adapter. (upon request)

Further options (surcharge)

- Testing manifold for several CO₂ cartridges and small compressed gas cylinders for use in the test bench (upon request)
- Test bench for 5 additional testing places. (upon request)

- The quick action clamping devices can securely clamp up to 5 compressed gas cylinders during the hydrotest.

Safe and powerful

Before the first test, the collecting tank of the system is filled with water from a water tap via a filling hose. After clamping up to 5 compressed gas cylinders, they are filled with water from the basin via the installed electric pump. A filter will hold back any possible contaminations. The matching test adapters are screwed onto the cylinders and connected to the high pressure hoses with the quick action couplings. Then the delivered water test pressure can be continuously adjusted via





- The exactly adjusted test pressure can be read at the test gauge (Class 1.0).



- The hydrotesting system HTG 500 can test steel or aluminium compressed gas cylinders with an adjustable test pressure of up to 500 bar. The system guarantees the highest possible operator protection because in the event of a bursting cylinder, the water pressure test only releases minor volume for decompression, and the high strength polycarbonate glazing is additional protection. The system can be expanded with an additional test bench, enabling considerable time savings thanks to alternating work.



- Filling.
- Pressure testing.
- Emptying.

- Filling, pressure testing and emptying of up to 5 steel or aluminium compressed gas cylinders.

the pressure reducer which the compressed-air operated test pump, and checked by the manometer (Class 1.0).

After the test the water can be pumped back from the containers to the collecting tank for re-use, or the container can be emptied into the tank by upending.

For the subsequently required drying of the cylinders, the optional cylinder drying device BTG (Art. No. 186532) can be used.

T E C H N I C A L D A T A

Hydrotesting system HTG 500

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186181



Maximum test pressure: 500 bar.

5 Adapters small conical.

5 Adapters large conical.

Water pump: 230 V, 50 Hz, 0,54 kW, 2800 rpm.

Discharge rate: 45L/min, 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant.

Testing pump: Compressed-air operated fluid pump: max. 500 bar. Pressure reducer, adjustable: 0 - 4 bar. Safety valve: 4.5 bar.

Required compressed air: < 10 bar, 300 L/min.

Dimensions: Height [mm]: 1780 or 2200 at opened hood.

Width [mm]: 2850, Depth [mm]: 560.

Weight [kg]: 203. **Colour:** Control panel: High-grade steel Test bench: Aluminium. Collecting tank: High-grade steel. **IP rate:** IP54

Subject to technical modifications / 03-2020



Hydrotesting system HTG 60 Safe and powerful

STRENGTHS AT A GLANCE

- HYDROTESTING OF SEVERAL CONTAINERS IN ONE OPERATING PROCESS
- EINSpannen, FÜllen, PRÜfen UND ENTLEEREN MIT KURZEN ARBEITSTAKTEN



The **hydrotesting system HTG 60** with a test pressure of up to 60 bar can simultaneously test up to five containers of portable powder, water or foam fire extinguishers.

Further test adapters for HTG 60 (surcharge)

1	Art.-No. 187330	Test adapter, M24 x 1.5
2	Art.-No. 187331	Test adapter, M30 x 1.5
3	Art.-No. 187333	Test adapter, M34 x 1.5
4	Art.-No. 187334	Test adapter with cap nut M74 x 2
5	Art.-No. 187335	Test adapter, Unitor
6	Art.-No. 187336	Test adapter, Wintrich USP

- Special test adapters upon request.

- The quick action clamping devices can securely clamp up to 5 containers of portable fire extinguishers during the hydrotest.

Safe and efficient

Before the first test, the collecting tank of the system is filled with water from a water tap connection via a filling hose. After clamping up to 5 portable fire extinguisher containers they are filled with water from the basin via the installed electric pump. A filter will hold back any possible contaminations.

The matching test adapters are screwed onto the containers and connected to the high pressure hoses with the quick action couplings.





- The adjusted test pressure can be exactly read at the test gauge (Class 1.6).



- The hydrotesting system HTG 60 can test containers of portable fire extinguishers with an adjustable test pressure of up to 60 bar. Working with this system is non-hazardous because in case of a bursting cylinder the water pressure test only releases a minor volume for decompression. The system can be expanded with an additional test bench, enabling considerable time savings thanks to alternating work.



- Filling.
- Pressure testing.
- Emptying.

- Filling, pressure testing and emptying of up to 5 containers of portable powder, water or foam fire extinguishers.

Then the delivered water test pressure can be continuously adjusted via the pressure reducer which controls the compressed-air operated test pump, and checked by the manometer (Class 1.6). After the test the water can be pumped back from the containers to the collecting tank for re-use, or the container can be emptied into the tank by upending. For the subsequently required drying of the containers, the optional cylinder drying device **BTG (Art. No. 186532)** can be used.

T E C H N I C A L D A T A

Hydrotesting system HTG 60

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186081



Maximum test pressure: 60 bar.

5 Adapters (please specify make of fire extinguisher). **Water pump:** 230 V, 50 Hz, 0,54 kW, 2800 rpm. **Discharge rate:** 45 L/min, 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant.

Testing pump: Compressed-air operated fluid pump: max. 60 bar. Pressure reducer, adjustable: 0 - 5 bar. Safety valve: 6 bar Required compressed air: < 10 bar, 300 L/min.

Dimensions:

Height [mm]: 1780, Width [mm]: 2850, Depth [mm]: 560. **Weight [kg]:** 165.

Colour: Control panel: High-grade steel Test bench: Aluminium. Collecting tank: High-grade steel. **IP rate:** IP54

Subject to technical modifications / 03-2020



Hydrotesting system HTG 500/60 Safe and efficient

- Control stand with separate operating elements for "HTG 500" and "HTG 60".

STRENGTHS AT A GLANCE

- HYDROTESTING OF SEVERAL CONTAINERS / CYLINDERS IN ONE OPERATING PROCESS
- SAFE PRESSURE TESTING WITH WATER PRESSURE



The **hydrotesting system HTG 500 / 60** can test portable fire extinguisher containers and compressed gas cylinders with different test pressures: either with up to 60 bar, or with up to 500 bar - depending on container type.

Test adapters for HTG 500 (surcharge)

1	Art.-No. 187101	Test adapter, small conical
2	Art.-No. 187102	Test adapter, large conical
3	Art.-No. 187320	Test adapter, cylindrical M18 x 1.5
4	Art.-No. 187321	Test adapter, cylindrical M25 x 2
5	Art.-No. 187322	Test adapter, cylindrical M30 x 2

- Special test adapter. (upon request)

Further options (surcharge)

- Testing manifold for several CO₂ cartridges and small compressed gas cylinders for use in the test bench (upon request)
- Test bench for 5 additional testing places. (upon request)



• Filling.

• Pressure testing.

• Emptying.

For each of the two pressure ranges a separate pressure circuit, an operating panel and the related different high pressure hose connections are installed in the control stand. At each of the 5 testing places the test bench contains respectively 2 non-interchangeable hose connections to the tested containers / cylinders. Operation and function conform to the individual devices **HTG 500** or **HTG 60**.

Hydrotesting system HTG 500/60

Dimensions:

	Pump stand	Controlstand
Height [mm]:	1780	1160
open [mm]:	2200	
Width [mm]:	2500	700
Depth [mm]:	560	610
Weight [kg]:	189	100



- The adjusted test pressure can be exactly read at both test pressure gauges.



- The hydrotesting system HTG 500 / 60 is a combination of the devices HTG 500 and HTG 60. It is a system with allround characteristics which can test all fire extinguisher containers and compressed gas cylinders with the applicable test pressures.



- Filling, pressure testing and emptying of up to 5 containers of portable powder, water or foam fire extinguishers.

Further test adapters for HTG 60 (surcharge)

1	Art.-No. 187330	Test adapter, M24 x 1.5
2	Art.-No. 187331	Test adapter, M30 x 1.5
3	Art.-No. 187333	Test adapter, M34 x 1.5
4	Art.-No. 187334	Test adapter with cap nut M74 x 2
5	Art.-No. 187335	Test adapter, Unitor
6	Art.-No. 187336	Test adapter, Wintrich USP

- Special test adapters upon request.

- Images of special test adaptors you will find on 86 pages no 91.

Hydrotesting system HTG 500/60

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186080



Maximum test pressure: 500 bar.

5 adapters small conical.

5 adapters large conical.

Maximum test pressure: 60 bar. 5 adapters (please specify make of fire extinguisher).

Water pump: 230 V, 50 Hz, 0,54 kW, 2800 rpm.

Discharge rate: 45 L/min 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant.

Testing pumps: Compressed-air operated fluid pump, max. 500 bar. Pressure reducer, adjustable: 0 - 4 bar. Safety valve: 4.5 bar.

Compressed-air operated fluid pump, max. 60 bar. Pressure reducer, adjustable: 0 - 5 bar.

Safety valve: 6 bar. Required compressed air: < 10 bar, 300 L/min. **Colour:** Control stand:

RAL 7032 pebble grey. Test bench: Aluminium
Collecting tank: High-grade steel.

Subject to technical modifications / 03-2020



HTG Computer control Digital documentation

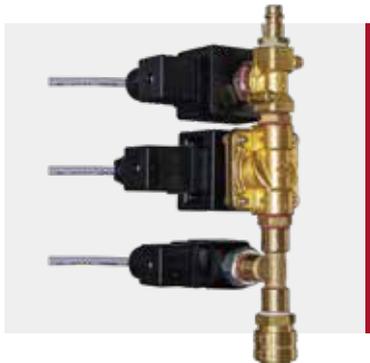
STRENGTHS AT A GLANCE

- AUTOMATED TESTING PROCESS
- LOGGING AND DOCUMENTATION OF THE TESTING CYCLE
- SUITABLE FOR RETROFITTING EXISTING TESTING SYSTEM

• Art. No. 186188 HTG Computer control.

The **HTG** and **HTG Kombi computer control** is suitable for both new and already delivered **HTG's** hydrotesting systems. It consists of hardware and software. The industrial PC with 17-inch touch screen and keyboard is built into a solid steel cabinet that protects it as well.

• Valve block for controlling the HTG.

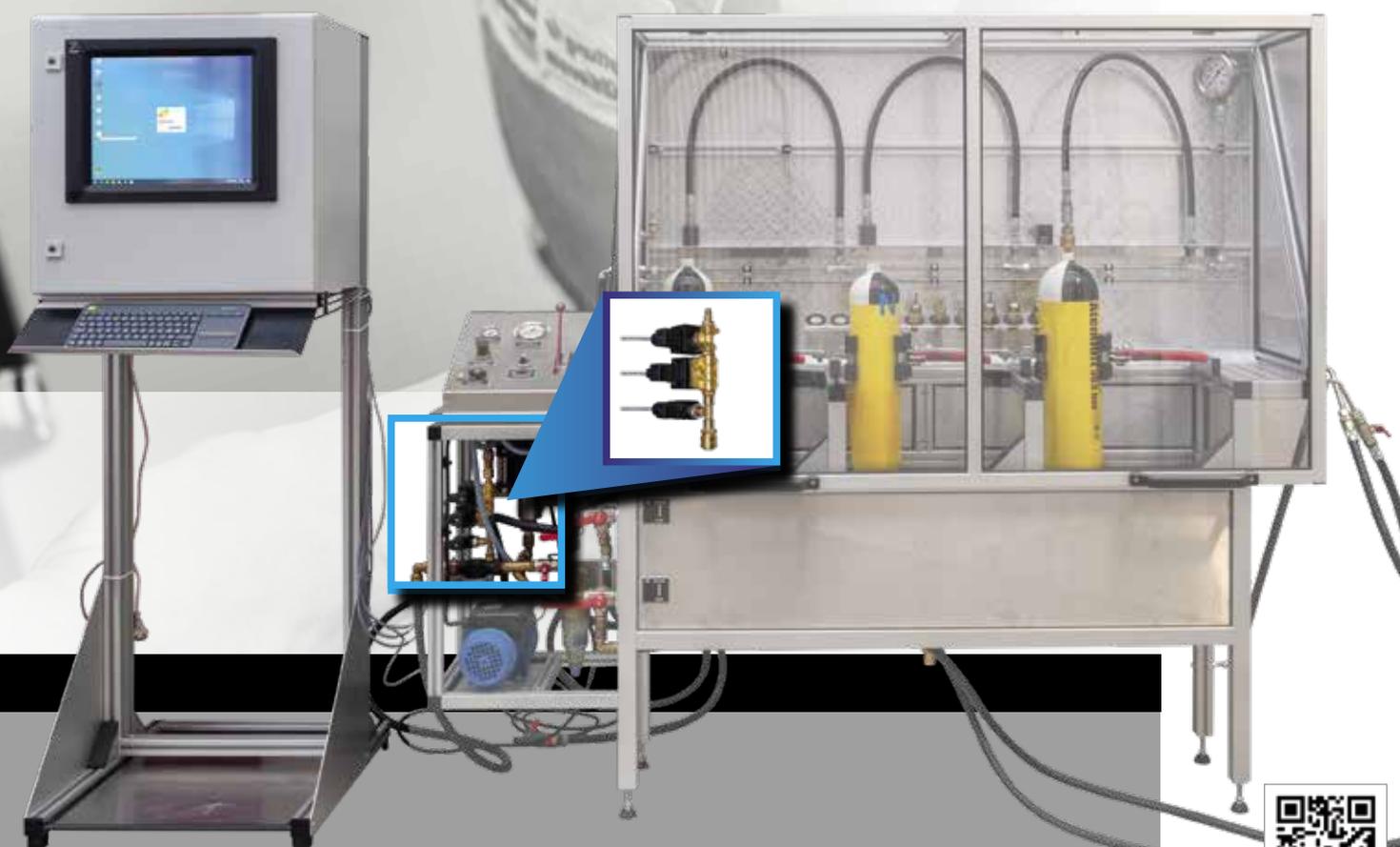


• Software start screen.



Scope of functions

The device is used for the control, visualisation and process data transfer of pressure vessel tests. Data can be exported via a USB or Ethernet connection. The supplied software allows you to establish a bottle and customer database and to create test protocols.



- The valve and sensorblock can easily be retrofitted in every HTG by the user.



- Display and user interface of the HTG test system software. • Layout of log file.

The **HTG computer control** has a **stored program control** as well as a pressure sensor. The valve block has a proportional and shut-off valve and a pressure switch.

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Technical data HTG computer control

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art. No. 186188

Control Beckhoff SPC Line Ethercat with installed PC.

Mains connection: 230 Volt 50 Hz.

Supply voltage: 12 and 24 Volt.

Industrial touch panel: 17 inches.

Operating system: WIN 10 OS.

Pressure sensor: up to 500 bar, accuracy class 0.3.

Logitech wireless keyboard: Wireless K400.

Software: Hydrotest Rev. 2.0.0.6 for the control, data transfer and visualization of the test sequence.

IP rate: IP54



Testing and swivelling devices Big cylinder PSG Practical and universal

STRENGTHS AT A GLANCE

- RAPID AUTOMATIC EMPTYING OF CYLINDERS
- HYDROTESTING OF DIFFERENTLY SIZED STEEL BOTTLES
- VISUAL INSPECTION OF INTERIOR
- ATTACHING OF INSPECTION STAMP

• Art. No. 186184

Testing and swivelling device big cylinders PSG.

The **testing and swivelling device for big cylinders PSG** supports hydrostatic pressure tests with a maximum test pressure of 500 bar for big compressed gas steel bottles of up to 50 litres. The device has been designed as supplement to the **HTG 500** or **HTG Combination 500 / 60**. For customers who only test big cylinders it can also be delivered with its own booster pump.

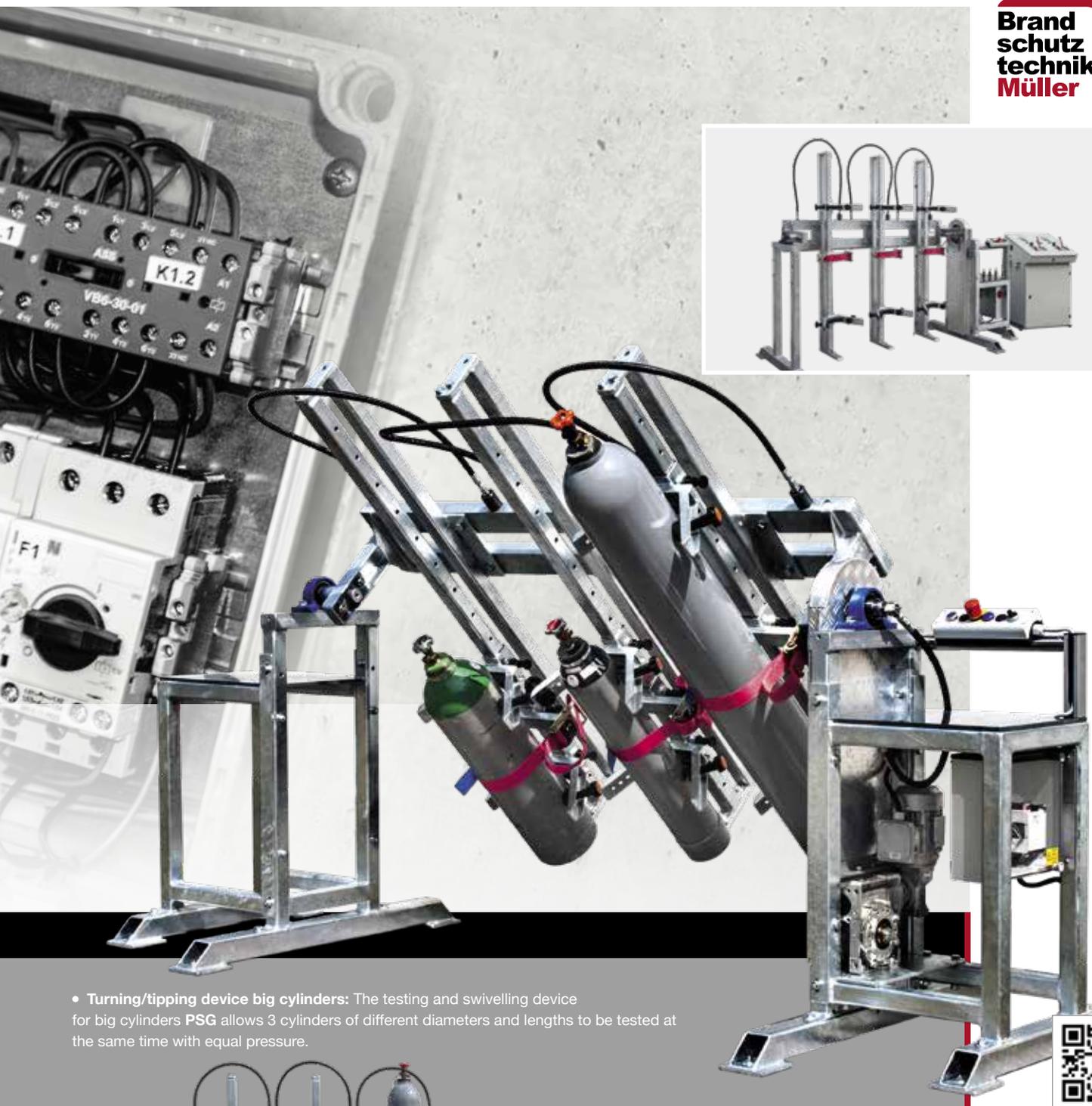


• Testing and swivelling device big cylinder PSG with HTG 500.

The system's clamping device is adjustable in height and diameter, thus allowing the testing of 3 cylinders with different diameters and lengths at the same time with equal pressure.

The near to ground cylinder retainer and included loading cart significantly reduces the employees' physical strain. The mounting device consists of a robust galvanized steel structure with powerful rotary actuator via





- **Turning/tipping device big cylinders:** The testing and swivelling device for big cylinders **PSG** allows 3 cylinders of different diameters and lengths to be tested at the same time with equal pressure.



- Testing and swivelling device big cylinders **PSG** with **HTG 60**.

electric motor and roller chain. The tested cylinders are very easily emptied by turning them 180 degrees in both directions. The used water can be collected and used again with the help of the optionally available collecting tank.

The pressure hoses and lines for pressure testing are permanently installed to the machine and revolve by 360 degrees. After testing, the **PSG** can also be used in conjunction with the test systems of other manufacturers.

T E C H N I C A L D A T A

Testing and swivelling device big cylinders **PSG**

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186184



Maximum test pressure [bar]: 500.

Dimensions (in assembled state):

Height [mm]: 1900 (1900).

Depth [mm]: 1010 (2400)*.

Width [mm]: 3100 (3100).

* (includes safety distance for swivel operation).

Weight: (without gas cylinders) [kg]: 520.

Rotary actuator:

Three-phase worm gear motor:

0.55 kW – 4 pole.

Connection:

230/400V – 50 Hz, nominal current 2.9 A.

Swivel range:

360 degrees, right and left turning, rotating.

Colour: Galvanized.

Subject to technical modifications / 03-2020



Water jacket testing system Professional 2

Volumetric hydrotesting up to 500 bar

STRENGTHS AT A GLANCE

- WITH OWN TEST PRESSURE GENERATOR, OR FOR CONNECTION TO THE 500 BAR PRESSURE GENERATOR OF AN HTG 500
- HIGH-GRADE STEEL CABINET WITH 2 TEST TANKS (Ø 150 AND 240 MM)

• Art.-No. 186615 The water jacket testing system Professional 2 is used to test the expansion of composite compressed gas cylinders under pressure.

Water jacket testing system Professional 2

The **water jacket testing system Professional 2** can subject composite compressed gas cylinders up to 10 L with the prescribed volumetric hydrotest. The water jacket testing method is a volumetric hydro-test of the expansion of a compressed gas cylinder under pressure, where the expansion is measured by way of the water surrounding the cylinder („water jacket“). After the cylinder data are recorded by the computer, the compressed gas cylinder is completely filled with water and connected to the test hose where it is easily lowered by counterweight into the

Pressure generator (optional)

• The optional pressure generator with compressed air operated testing pump enables the continuous adjustment of the required water test pressure up to 450 bar, which can be read at the manometer.



Accessories (surcharge)

Art.-No. 186533

Drying appliance for a big cylinder



test tank corresponding to the cylinder diameter. The test tank is filled with water to the neck of the cylinder to be tested. The computer shows the deviation from the correct fill level. Now the measurement procedure can be started through drift calculation and zero setting. The operating pressure of the cylinder (e.g. 300 bar) is first adjusted at the pressure generator. The expansion of the cylinder for this pressure is displayed and saved by mouse click. Next, the pressure at the pressure generator is increased to the required test pressure (e.g. 450 bar), the expansion of the cylinder

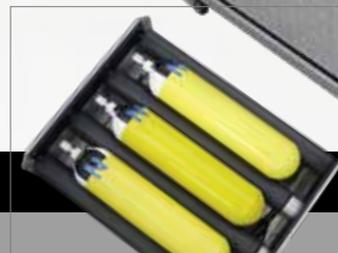
Cylinder drying device BTG

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186532



Side channel compressor: 230 V, 50 Hz, 0.75 kW, 2840 rpm. **Air heater, adjustable:** 230 V, 50 Hz, 2.2 kW 5 m cable feed line H07RN-F 3 G 1.5 mm², oil and acid resistant. **Dimensions:** Height [mm]: 860, Width [mm]: 1340, Depth [mm]: 370. **Weight [kg]:** 55. Aluminium profile frame Collecting tank with draw-off tap: hot-dip galvanized.



• Art. No. 186532

The **cylinder drying device BTG** is a quiet drying system for compressed gas cylinders. The high thermostat-controlled hot air capacity guarantees fast drying.

• Art. No. 186180

The **tumbling device** enables cleaning the inside of up to 3 compressed gas cylinders at the same time. It has been encapsulated in a high-grade steel housing for noise absorption.



under this test pressure is displayed and saved by mouse click. After complete decompression of the pressure generator (test pressure 0 bar), the remaining expansion of the cylinder is displayed after a brief wait time, and saved by mouse click. The remaining expansion may not exceed a specific percentage of the expansion under test pressure (e.g. 5 %). After removing the test object from the test tank and uncoupling it from the test hose, the next compressed gas cylinder can be tested.

Cylinder drying device BTG

The **cylinder drying device BTG** is used to dry steel or aluminium compressed gas cylinders with hot air, e.g. after hydrotesting. Up to 5 containers can be dried simultaneously. The wet containers are placed „upside down“ over the individually closable air pipes. The residual water is collected in the collecting tank. A side channel compressor with heating and thermal monitor blows hot air into the containers. The drying time depends on the temperature set by the control electronics and the size of the containers.

Water jacket testing system Professional 2

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

without pressure generator

Art.-No. 186615

with pressure generator

Art.-No. 186610

Dimensions of test console: Height [mm]: 2000. Table height [mm]: 996, Width [mm]: 1000, Depth [mm]: 700. Test tank Ø [mm]: (2x) 230. **Weight [kg]:** 70. High-grade steel housing.

Tumbling device

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186180



2 electric motors: 230 V, 50/60 Hz, 0.3 kW and 0.4 kW. **Dimensions:** Height [mm]: 855, Width [mm]: 1000, Depth [mm]: 700. **Weight [kg]:** 106. High-grade steel housing.

Subject to technical modifications / 03-2020



• Art.-No. 186780
Pressure difference tester for dry riser pipe DMT 600.

Pressure difference tester for dry riser pipe **DMT 600**

Test in accordance with DIN 14 462

STRENGTHS AT A GLANCE

- WATER, PERSONNEL AND ENERGY-SAVING TESTING OF DRY RISER PIPES
- EXAMINATION OF PRESSURE RESISTANCE AT 16 BAR (STATIC PRESSURE TEST)

Procedure of test

In accordance with **DIN 14 462**, dry riser pipes in buildings must be subjected to inspections at regular intervals. To document the functional capability of the lines, this inspection also includes the points:

- **Examination of pressure resistance at 16 bar.** (static pressure test)
- Test of pressure difference between point of feed and withdrawal. (at a defined rate of flow of 600 L/min)

Once these two tests have been successfully performed it can be assumed that the line is free from defects or contaminations.

Required devices for testing:

- **DMT 600** flow meter with supplied pressure resistant connecting hose B
- **Water collecting container WAB 120** (included)
- **Hydrant testing pump HPP** (not included)
- **2 m connecting hose 1 inch** with C couplings on both sides (included)



After checking the line for completeness and the valves and other facilities for functional capability, the line must be filled with water completely. The **hydrant testing pump HPP**, flow measurement meter **DMT 600** and riser pipe are connected in the process. The static pressure test can be subsequently performed with the **hydrant testing pump HPP**. The pressure difference at specified rate of flow of 600 L/min is determined following the pressure test.



• DMT 600 flow meter in use.



• DMT 600 with WAB 120 and optional hydrant testing pump HPP.



• Measurement set-up at the point of withdrawal.

Included accessories DMT 600

No.	Description
1	2 m connecting hose 1 inch with C couplings on both sides
2	Attachment T-piece with ball valve
3	2 units water pressure monitors WDM4
4	1-channel radio receiver
5	Synchronization cable and data cable
6	2 m pressure sensor line (feed, withdrawal)
7	2 units pressure sensors
8	Connecting hose for initial test 24 bar
9	Emptying hose with manometer and quick action coupling
10	Emptying valve for WAB 120
11	1 battery charger for WAB 120
12	2 battery chargers for WDM4
13	1-channel radio transmitter
14	USB extension cable, USB adapter
15	5 m connecting hose with B couplings
16	Adapter Storz B/C
17	Storage box



Accessories (surcharge)

Art.-No. 187600

Coupling spanner BC



T E C H N I C A L D A T A

DMT 600

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 186780



Operating pressure: 16 bar. **Pressure recording devices:** Electronic, battery-operated. **Test pressure gauge:** 0 - 25 bar. **Water inlet:** Storz fixed C couplings. **Water outlet:** Storz fixed B couplings. **Connecting hose:** B, pressure-resistant, 5 m. **Dimensions:** Height [mm]: 1200, Width [mm]: 600, Depth [mm]: 1010. **Weight:** with accessories [kg]: 133.

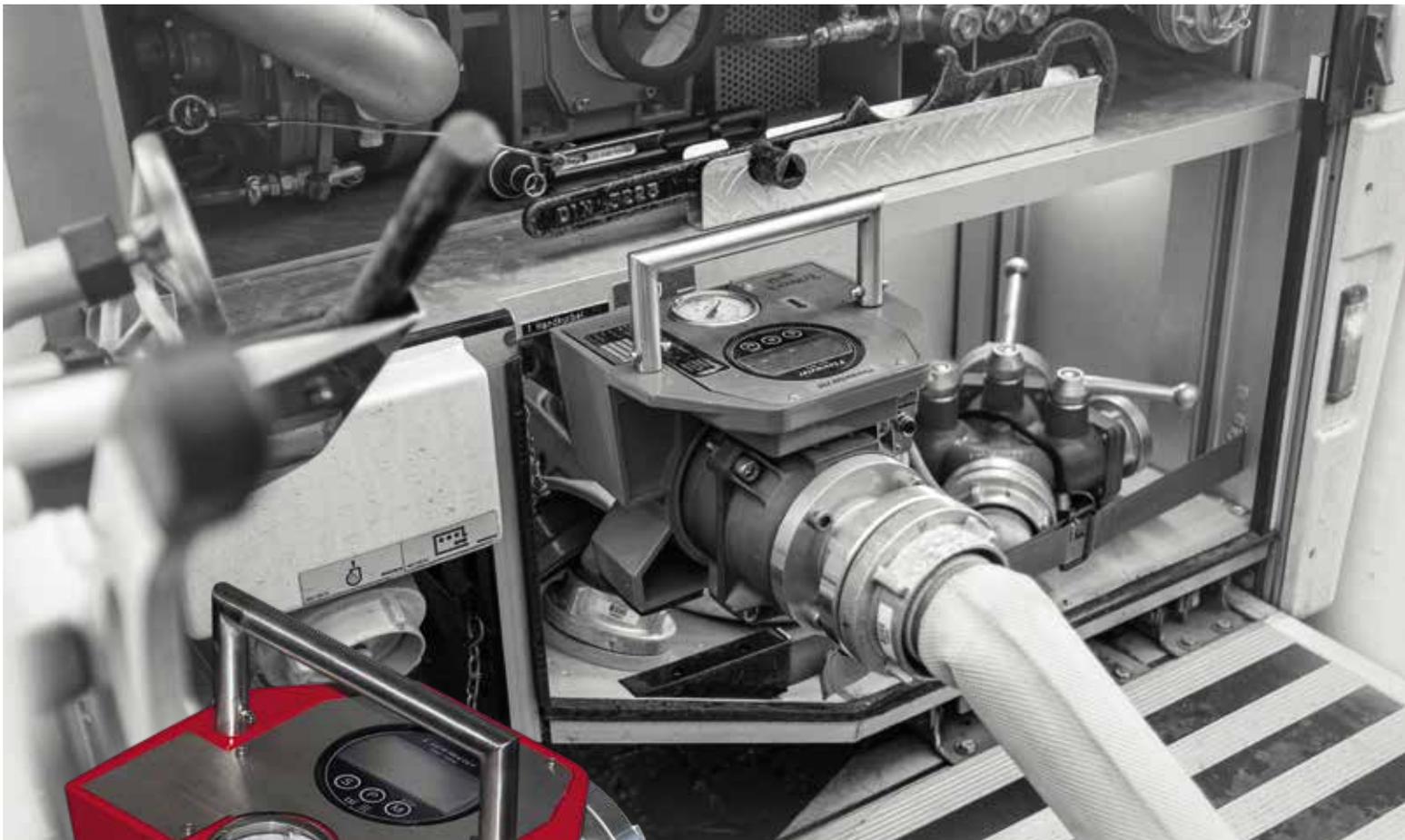
Water collection tank WAB 120

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 187580

Volume: 120 litres, with electrical container emptying. **Pressure recording device:** Electronic, battery-operated. **Test pressure gauge:** 0 - 16 bar. **Dimensions:** Height [mm]: 1300, Width [mm]: 640, Depth [mm]: 760. **Empty weight:** with accessories approx. [kg]: 50.

Subject to technical modifications / 08-2021



Flowmaster ANALOG

Mobile pressure and flow rate measuring devices Flowmaster

STRENGTHS AT A GLANCE

- MANAGEABLE DEVICE FOR MEASURING WATER FLOW RATE AND FLOW PRESSURE AT ALL POINTS OF WITHDRAWAL
- RESETTABLE WATER QUANTITY STORAGE
- QUICK AND EASY TO USE ANYWHERE

• Art.-No. 187216 Flowmaster ANALOG.

Hydrants and pumps in view

The **Flowmaster** measures the pressure and flow rate at any point of water withdrawal. In addition to checking if hydrants or pumps are working properly, the entire water consumption from one point of withdrawal can be registered as well.



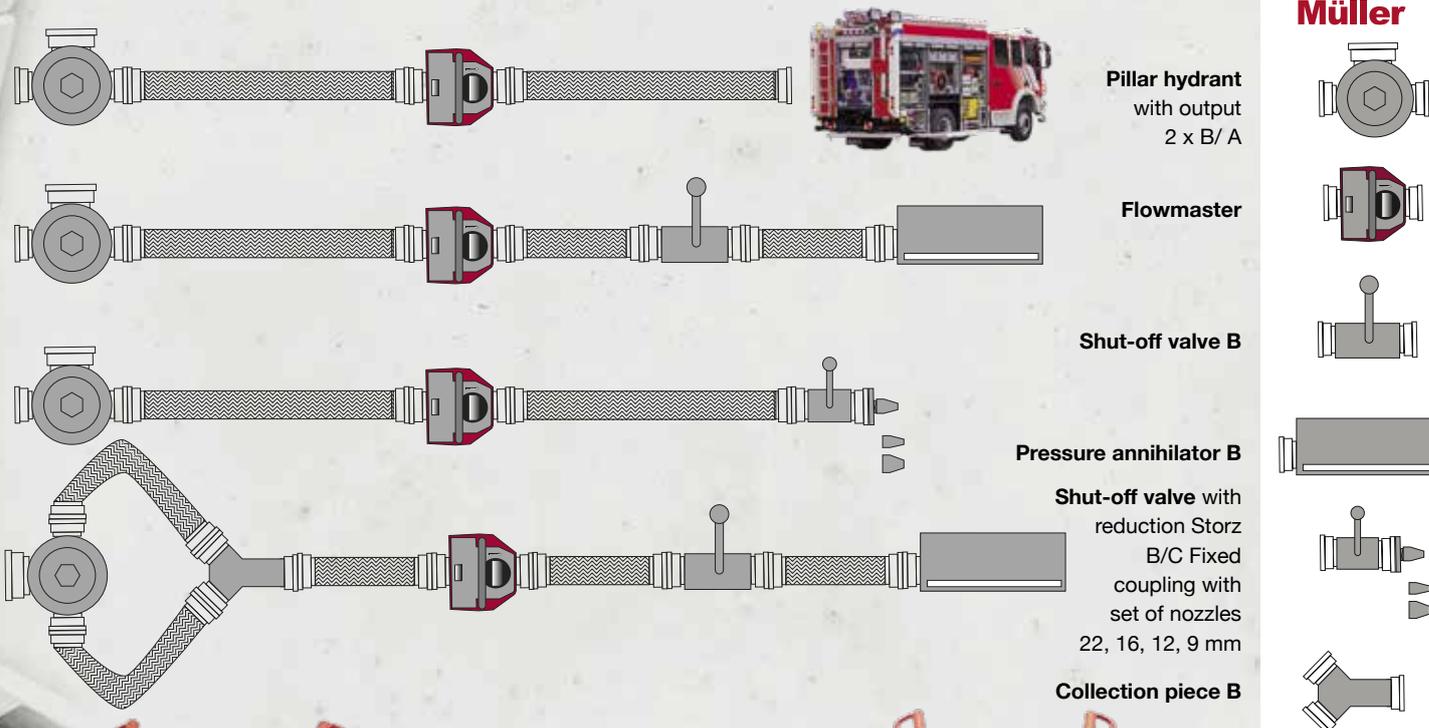
• Flow measurement at pillar hydrant.

Application

The **Flowmaster** is exceedingly robust in application. The sensor for measuring the flow rate does not have any moving parts. The pressure is measured with an analogue Bourdon gauge. A stable and corrosion-resistant aluminium housing with practical carrying grip also provides protection from rough everyday use. To measure the water flow rate, a touch of the button at the digital measuring device allows you to choose between current flow rate or total amount.



Flowmaster connection variations



Pillar hydrant
with output
2 x B/A

Flowmaster

Shut-off valve B

Pressure annihilator B

**Shut-off valve with
reduction Storz
B/C Fixed
coupling with
set of nozzles
22, 16, 12, 9 mm**

Collection piece B

Flowmaster Assistant

Art.-No. 187382

The **Flowmaster Assistant** organizes and arranges the necessary accessories for testing overground and underground hydrants.

Dimensions:

1250 mm high, 670 mm wide,
740 mm deep. Weight: 35 kg.

• Flowmaster Assistant. (Photo shows optional accessories at extra charge).



Accessories (surcharge)

1 Art.-No. 187222

Transport case with interior compartments for Flowmaster and accessory kit. Dimensions: 360 mm high, 555 mm wide, 290 mm deep. Weight: 6 kg

2 Art.-No. 187375

Pressure annihilator B

Art.-No. 187093

Shut-off valve B (not illustrated)

Art.-No. 187223

Data interface. For electronic evaluation of flow measurement, consisting of serial adapter cable and PC software.

3 Art.-No. 187221

Accessory kit for pump testing.

For static pressure test:

Ball valve 2" with fixed Storz B/C coupling

For flow measurement:

1 nozzle Ø 9 mm, 1 nozzle Ø 12 mm

1 nozzle Ø 16 mm, 1 nozzle Ø 22 mm

Flowmaster ANALOG

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 187216



Electric power supply: 2 installed rechargeable batteries, 12 V DC, 2.4 Ah, separate charger included. Working temperature: -10 to +50°C.

Connections: B Storz couplings. **Dimensions:** 210 mm height, 240 mm width, 390 mm depth.

Weight: 13 kg. Housing: Aluminium. **Colour:** Red, RAL 3000 / aluminium. **Flow meter:** Type: Electromagnetic induction. Operating range: 30 - 3 000 L/min. Accuracy: 30 to 750 L/min ± 15 L/min, >750 L/min ± 2 %. Standard functions: Display of current flow rate, display of total rate. LCD display: 4-digit, character size 18 mm, bar display, background illumination. **Pressure gauge:** Type: Bourdon-tube gauge. Operating range: 0 to 25 bar ± 1 %, analogue scale Ø 60 mm. Operating pressure: 0 - 16 bar, maximum pressure: 25 bar.

Subject to technical modifications / 03-2020



• Art.-No. 187370 Flowmaster DIGITAL.

Flowmaster DIGITAL, Flowmaster DIGITAL 2.0

Portable control and monitoring

STRENGTHS AT A GLANCE

- WITH INSTALLED RECHARGEABLE BATTERY FOR MOBILE WORK
- ONLY 13 KILOS TOTAL WEIGHT
- WITHOUT MOVING PARTS IN THE MEASURING TUBE-EXTREMELY ROBUST

The **Flowmaster** is your first choice at all points of water withdrawal whenever you need to precisely check the pressure and flow rate. Its integrated data logger stores up to 360 hours of data, and the digital indicators directly display the accurate measured values.



• Muffle gate valve for all Flowmasters.

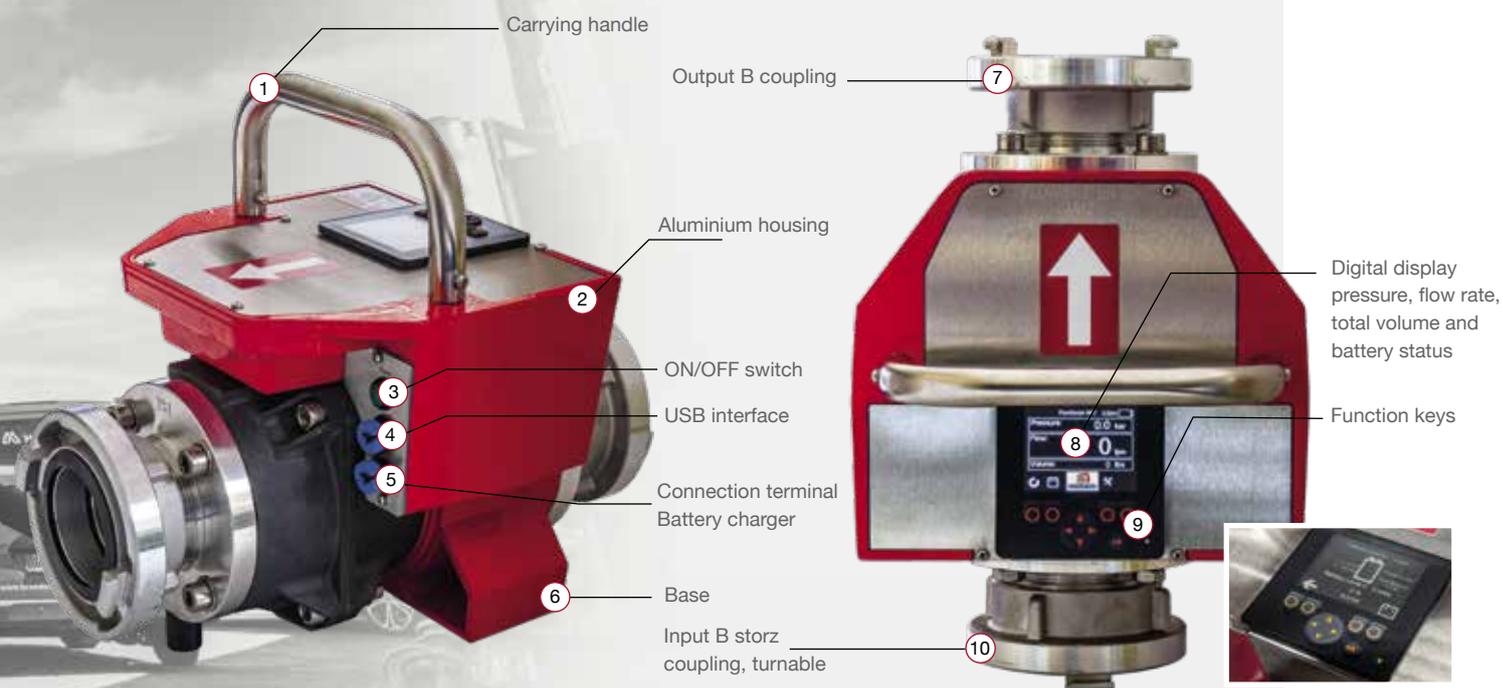
• Art.-No. 187387
Flowmaster DIGITAL 2.0.



We gave the **Flowmaster** a particularly rugged design for rough daily work: The stable measuring tube does without moving parts, the extremely resistant aluminium housing withstands the heftiest of loads whilst being light at the same time.

The rechargeable battery allows the **Flowmaster** to work completely independently for 6 hours, and the integrated data logger with scan rates from 0.1 seconds to 1 minute automatically stores all data to memory.

Flowmaster DIGITAL 2.0



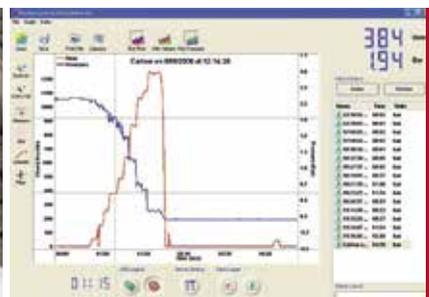
ADDITIONAL ACCESSORIES (SURCHARGE)

1 **Art.-No. 187222**
Transport case
 with interior compartments for Flowmaster and accessory kit.
 Dimensions: 360 mm high, 555 mm wide, 290 mm deep. Weight: 6 kg.

2 **Art.-No. 187375**
Pressure annihilator B

3 **Art.-No. 187221**
Accessory kit for pump testing
For static pressure test:

Ball valve 2" with fixed Storz B/C coupling
For flow measurement:
 1 nozzle Ø 9 mm, 1 nozzle Ø 12 mm,
 1 nozzle Ø 16 mm, 1 nozzle Ø 22 mm.



- Measurement and storage of flow rate and pressure.
- PC display / Report.

Manage and document measured values in an exemplary manner thanks to software and interface

Use the USB cable to read out the data of the **Flowmaster** in next to no time. The included software will help you create descriptive graphics and reports from the numbers. When issuing, you can choose between printing out or transferring your report as bitmap file to Word or Excel.

TECHNICAL DATA

Flowmaster DIGITAL

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 187370



Flowmaster DIGITAL 2.0

(EN ISO 12100-1, EN ISO 12100-2, EN 60204)

Art.-No. 187387



Electric power supply: 2 installed rechargeable batteries, 12 V DC, 2.4 Ah, charger included. Working temperature: -10 to +50°C. **Connections:** B Storz couplings. **Dimensions:** 210 mm height, 240 mm width, 390 mm depth. **Weight:** 13 kg. **Flow meter:** Type: Electromagnetic induction. Operating range: 30 - 3 000 L/min. Accuracy: 30 to 750 L/min ± 15 L/min, >750 L/min ± 2 %. **Additional functions of Flowmaster digital 2.0:** Display of battery charging. Selectable display of flowrate (L/Min, Cbm / h, L/sec) Display with optimized cleanness and function keys Prepared to retrofit a Bluetooth connection. **Standard functions:** Display of current flow rate, display of total amount. LCD display: 4-digit, character size 18 mm, bar display, background illumination. **Electronic pressure sensor.** Operating pressure: 0 - 16 bar ±1%, maximum pressure: 25 bar. LED display: 3-digit, character size 15 mm.

Subject to technical modifications / 07-2021