



# 5

# **Testing Devices for Gas and Water Connections**

#### **ROTEST® GW DIGITAL V2.2**

Universal digital leak detector

#### **Product Profile**

#### **APPLICATION AREA**

Testing on gas, water and sewage pipes (using air) according to the prevailing guidelines: DVGW-TRGI G600, TRWI DIN 1988, DIN EN 1610

#### **KEY FEATURES**

- Gas pipe testing in accordance with DVGW-TRGI / Worksheet G600: Testing load 1 bar, pressure testing 150 mbar, 23 mbar (with gas)
- Water pipe testing in accordance with DVGW-TRGI DIN 1988: preliminary test 1 bar, main test 110 mbar
- Sewage pipe testing in accordance with DIN EN 1610: Testing pressures are read according to the pipe diameter
- 4 Special testing is possible with the low pressure sensor up to 250 mbar and high pressure sensor up to 20 bar
- 5 Two ports for logging (PC software included)
- Device automatically recognises various sensors with different pressure ranges
- Wide range of accessories for added functionality at any time

#### **TECHNICAL DATA**

**Initial test** with 1.0 bar test pressure. **Main test** with 150 mbar **Leakage test of gas piping as per** DVGW-TRGI 2008 and water piping based on TRWI

3 Leakage test for sewage pipes as per DIN EN 1610

Enables air test with medium air on dry concrete, moist concrete, clay pipe and using water as medium



Fig. ROTEST® GW DIGITAL V2.2

Robust pressure sensor with pressure range (250 mbar) blue and (20 bar) red, provide reliable information about the prevailing pressure situation in the pipe



up to 250 mbar

DVGW-TRGI / worksheet G600/April 2008 conforming

Gas pipe test

All needed test period and pressures are

included in the software

Intelligent Hardware

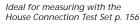
Automatic recognition of the various sensors and pressure ranges

6 Infrared

1 port for logging



All needed test period and pressures are included in the software





Complete with all accessories in practical case





# **Testing Devices for Gas and Water Connections**



Set (No. 6.1286) includes: Individual components 1 - 21 for gas, water and waste water pipes, as well as serviceability, plastic case
Set (No. 6.1285) includes: Individual components 1 - 21 without leakage quantity pump (No. 6.1271) and regulator for gas, water and waste water pipes, plastic case

Model				$\sqrt[4]{\log \Delta}$	No.	
ROTEST® GW DIGITAL V2.2 Set ROTEST® GW DIGITAL V2.2 Set (without leakage quantity pump and adaptor for gas-water)						
Description E1	Γ $\sqrt{g}$	No.	Description	ET $\delta_g \delta$	No.	
Basic model V2.2	270	6.1287	Cut-off valve for water	<b>1</b> 65	6.1267	
Pressure sensor cable 5-pole 2	80	6.1278	Adaptor 1/2"	<b>1</b> 3 50	6.1265	
Low pressure sensor V2.2	40	6.1276	Adaptor 1/8"	<b>1</b> 0	6.1270	
High pressure sensor V2.2	40	6.1277	Adaptor for burner setting	<b>1</b> 5 20	6.1274	
Manual pump	200	6.1268	Mains adaptor	<b>1</b> 0 120	6.1094	
Double bellows 6	115	6.1273	PC Cable 2,7 m	<b>1</b> 05	6.1095	
Connecting hose	195	6.1269	PC Software RoData 2.3	<b>1</b> 8 20	9.2651	
Leakage quantity pump	780	6.1271	Operating manual	<b>19</b> 55	9.2637	
Adaptor for gas	190	6.1263	Padded carrying case	<b>20</b> 1550	6.1272	
Adaptor for water	160	6.1264	Fine pressure regulator	<b>21</b> 50	6.1284	
Cut-off valve for gas	155	6.1266	Thermal printer	<b>2</b> 505	6.1052	
		ACCES	SORIES			
Description	ΔgΔ	No.	Description	$\Delta_{g}\Delta$	No	
Paper roll for thermal printer (4 rolls)	40	6.1043	Gas test plugs, size 0, conical 3/8 - 1/2	." 45	35.1273	
Block battery 9 V Lithium	35	6.1027	Gas test plugs, size 1, conical 1/2 - 1"	80	35.1274	
Rechargeable battery pack	280	6.1206	Gas test plugs, size 2, conical 3/4 - 1 1	/4" 125	35.1275	
Battery pack recharger	500	6.1207	Gas test plugs, size 3, conical 1 1/4 - 2		35.1276	
Adaptor cable USB-RS 232 with installation	CD 100	6.1229	Gas test plugs, size 1, cylindrical 3/4"	60	35.1277	

380 **35.1279** 

6.1282

415

Supply end cap

Y manifold

Gas test plugs, size 2, cylindrical 1"

House connection test set (DIN 1610)

35.1278

6.1350

# **Testing Devices for Gas and Water Connections**

#### ROTEST® GW 150/4

Universal analogue testing device for gas and water connections using air as the medium



#### **Product Profile**

#### **KEY FEATURES**

- 1 Corresponds to the measurement precision requirements of DVGW-TRGI Worksheet G600 April 2008 and other national safety regulations
- Extremely long life
- Constant build-up of pressure
- Designed to serve in real-life situations through quick, exact gas pressure measurements

#### **TECHNICAL DATA**

For initial test (1,0 bar) and main test (150 mbar) of natural gas fittings

Low pressure liquid gas fittings (40 - 60 mbar)

Propane gas fittings (150 mbar)

Drinking water fittings 3,0 bar / 110 mbar according to **DIN 1988 (TRWI)** 

Atmospheric blower burners (0 - 30 mbar)





No. 6 1040

Testing scale 146.5 - 153.5 mbar, zero point at 150 mbar on transparent extending tube element



Transparent tube element with double o-ring seal



Pressure resistant stainless steel tank and ball valve to isolate the



Adjustable scale to set the zero point measurement. Blue liquid , for easier reading





# **Testing Devices for Gas and Water Connections**

#### **Set Components ROTEST® GW 150/4**





Force pump

Spare manometer R 1/4"

Measurement fluid, blue

Double nipple for hose connection



No.

6.1011

6.1012

H9.6591

35.1257

 $\Delta_{\text{kg}}\Delta$ 7.6

400

75

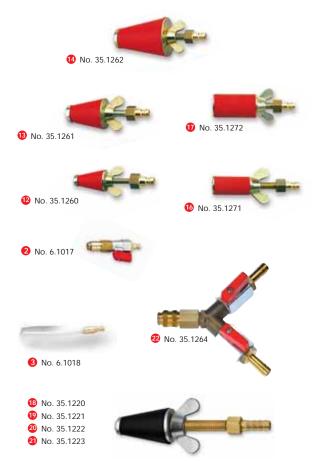
100

100

Scope of delivery: Basic device combinations (No. 6.1040/No. 6.1045), force pump 4 bar (No. 6.1001), stainless steel tank, rubber bellow (No. 6.1014), connecting hose (No. 6.1015), tube element 4 piece (No. 6.1013), (No. H9.6500) plus/minus see description, steel carrying case

Model in combination with the basic device

with gas test plugs and supply end cap	7.6	6.1040
(with No. 35.1260, No. 35.1261, No. 35.12	262,	
No. 35.1271, No. 35.1272, No. 6.1041)		
with 5 gas test plugs, without supply end c	ap 7.3	6.1045
(with No. 35.1260, No. 35.1261, No. 35.12	262,	
No. 35.1271, No. 35.1272, without No. 6.	1041)	
	,	
Description Par	ts-No. $\sqrt[]{a}$	No.
Description		
Connecting hose	<b>1</b> 130	6.1015
Connecting hose Cut-off valve, gas		
9	<b>1</b> 130	6.1015
Cut-off valve, gas	1 130 2 125	6.1015 6.1017
Cut-off valve, gas Adaptor	1 130 2 125 3 10	6.1015 6.1017 6.1018
Cut-off valve, gas Adaptor Rubber bellow	1 130 2 125 3 10 4 55	6.1015 6.1017 6.1018 6.1014



#### Gas Test Plug / Adaptor

Suitable for gas lines up to 1.5 bar

Sultable for g	Suitable for gas lines up to 1.5 bar								
	Steel exterior	Copper exterior	Parts-						
Description	Pipe Ø inch	Pipe Ø mm	No.	$\Delta_g \Delta$	No.				
Conical shape									
Gr. 0	3/8 - 1/2"	12 - 20	12	45	35.1260				
Gr. 1	1/2 - 1"	20 - 30	13	80	35.1261				
Gr. 2	3/4 - 1.1/4"	25 - 40	14	125	35.1262				
Gr. 3	1.1/4 - 2"	35 - 60	Œ	175	35.1263				
Cylindrical sl	hape								
Gr. 1	3/4"	18 - 22	16	60	35.1271				
Gr. 2	1"	28 - 30	1	75	35.1272				
Conical shap	oe								
Gr. 0	3/8 - 1/2"	12 - 20	18	200	35.1220				
Gr. 1	1/2 - 1"	20 - 30	19	300	35.1221				
Gr. 2	3/4 - 1.1/4"	25 - 40	20	300	35.1222				
Gr. 3	1.1/4 - 2"	35 - 60	<b>a</b>	400	35.1223				
Conical shap	oe with 2 ball va	alves							
Gr. 1	1/2 - 1"	20 - 30	22	260	35.1231				
Gr. 2	3/4 - 1.1/4"	25 - 40	23	420	35.1232				
Gr. 3	1.1/4 - 2"	35 - 60	24	700	35.1233				
Conical shap	oe with 1 ball va	alve							
Gr. 0	3/8 - 1/2"	12 - 20	25	200	35.1225				
Gr. 1	1/2 - 1"	20 - 30	26	350	35.1226				
Gr. 2	3/4 - 1.1/4"	25 - 40	27	390	35.1227				
Gr. 3	1.1/4 - 2"	35 - 60	28	600	35.1228				
Adapta	r Cut off	Valva /							
	r Cut-off								
<b>Double</b>	Plug Valv	ve							
	3	_							

With double plug valve - with hose snout Description	Parts-No.	$\sqrt{g}$	No.
Adaptor/cut-off valve with pn. connection Adaptor/double plug with pn. connection	າ <u>29</u>	140	35.1264
	<u>30</u>	290	35.1265

# **Testing Devices for Water Connections**

#### **House Connection Test Set**

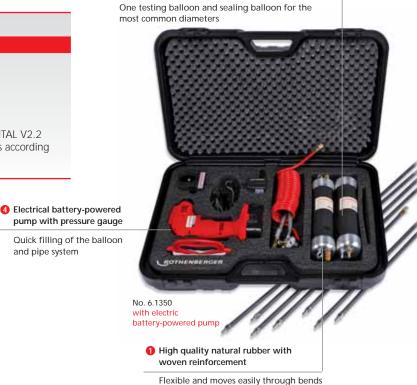
#### Universal leak detector set for underground pipes

Complete system for testing various pipework nominal diameters (only water)

#### **Product Profile**

#### **KEY FEATURES**

- 1 Flexible and moves easily through bends
- 2 One testing balloon and sealing balloon for the most common diameters
- 3 Easy and better "positioning" of the balloon
- 4 Quick filling of the balloon and pipe system
- Logging of the measured data with the GW DIGITAL V2.2 (optional): Verification of the completed readings according **DIN EN 1610**



Testing balloon and sealing balloon DN 75-150

No. 6.1340

and pipe system

Laying of the sewer

Testing balloon and sealing balloon with aluminium cap

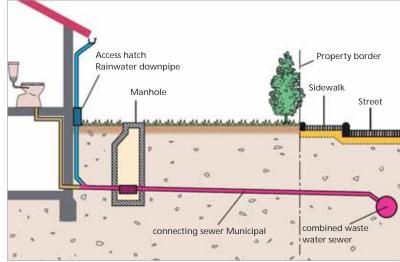
upright pump

"positioning" of the balloor



Transition periods until 2015 open up a new business segment for SHK craftsmen.

The DIN EN 1610 demands leakage testing of sewage pipes with air or water



balloon sizes included in set (or available optionally):



NW 65-100 NW 75-150 NW 90-250









11-part House Connection Test Set (No. 6.1340) with upright pump includes:

sealing balloon NW 75-150 (No. 6.1352), testing balloon NW 75-150 (No. 6.1359), filling hose (No. 6.1365), test valve (No. 6.1365), filling valve (No. 6.1367), slide rod (No. 6.1380), holding rope (No. 6.1368), upright pump with pressure gauge (No. 6.1369), plastic case (No. 6.1370), cover (No. 9.1123), plastic case inlay for upright pump (No. 9.1122)

12-part House Connection Test Set (No. 6.1350) with electric battery-powered pump includes:

Sealing balloon (No. 6.1352), testing balloon NW 75-150 (No. 6.1359), filling hose (No. 6.1365), test valve (No. 6.1366), filling valve (No. 6.1367), slide rod (No. 6.1380), holding rope (No. 6.1368), battery pump with pressure gauge (No. 6.1371), accessories for battery pump (No. 6.1377), adaptor for battery pump (No. 6.1341), plastic case (No. 6.1370), cover (No. 9.1123), case inlay for battery-powered pump (No. 9.1121)

Model	$\sqrt[]{\log \Delta}$		No.
House Connection Test Set with upright pump	7.8	1	6.1340
House Connection Test Set (DIN EN 1610) with electrical battery-powered pump	7.8	1	6.1350

#### **Product Profile**

#### **TECHNICAL DATA**

Hub suction capacity:

Testing and pressure range: 0 - 60 bar, with 1 bar steps

0 - 860 psi, with 20 psi steps 0 - 6 MPa, with 0,1 MPa steps

approx. 45 ml / stroke

Tank capacity: 12 I

Dimensions (L x W x H): 720 x 170 x 260 mm

Weather and cold-resistant tank

For detailed information see

Twin-valve technology

#### **RP 50-S / RP 50-S INOX**

Precision testing pumps in monoblock design 0 - 60 bar, with twin-valve technology



158

#### **Product Profile**

#### **TECHNICAL DATA**

0 - 50 bar, with 1 bar steps Testing and pressure range:

0 - 726 psi, with 20 psi steps 0 - 5 MPa, with 0,1 MPa steps

approx. 45 ml / stroke Hub suction capacity:

Tank capacity: 6.5 I

Dimensions (L x W x H): 700 x 190 x 150 mm

ABS plastic tank

For detailed information see

Twin-valve technology

#### **TP 40-S**

Precision testing pumps with double valve system 0 - 50 bar, with twin-valve technology



159

#### **Product Profile**

#### **TECHNICAL DATA**

Testing and pressure range: 0 - 30 bar, with 1-bar steps

0 - 440 psi with 20 PSI steps

Hub suction capacity: 16 ml / stroke

Tank capacity: 451

Dimensions (L x W x H): 440 x 200 x 240 mm

ABS plastic tank

Single-valve technology

#### **RP 30**

Testing pump for quick compression testing, 0 - 30 bar, with single-valve technology and discharge adjustment



#### For detailed information see 160

#### **Product Profile**

#### **TECHNICAL DATA**

Testing and pressure range: 0 - 25 bar, with 1-bar steps Hub suction capacity: approx. 16 ml / stroke

7 I Tank capacity:

Dimensions (L x W x H): 380 x 215 x 156 mm

For detailed information see

Twin-valve technology

#### **TP 25**

Small testing pump for compression testing, 0 - 25 bar, with twin-valve technology



25 bar



Precision testing pumps in monoblock design 0 - 60 bar, with twin-valve technology

#### **Product Profile**

#### APPLICATION AREA

For quick and exact compression testing and leak testing on pipework systems and containers in sanitary and heating installations, and in boiler and pressure vessel manufacturing. Ideal for filling of solar systems

#### **KEY FEATURES**

- Constant pressure levels and reduction of leak-prone connections with the double valve system (twin valve)
- 1 Eases pressure discharge through the second valve
- 2 Long stroke for quick filling
- Fill and compression testing in one work session, with water or oil
- 4 Ergonomic rubber grip doubles as carrying handle

#### **KEY FEATURES**

- **6** Precise measurement
- 6 5 year rust-free guarantee Duramant coated
- Drag indicator (displays the maximum, preset pressure)

#### **TECHNICAL DATA**

**Testing and pressure range:** 0 - 60 bar, with 1 bar steps

0 - 860 psi, with 20 psi steps 0 - 6 MPa, with 0,1 MPa steps

**Hub suction capacity:** approx. 45 ml / stroke

Tank capacity: 12

**Dimensions (L x W x H):** 720 x 170 x 260 mm

Connection: R 1/2"



Model  $\searrow_{kg} \searrow$   $\bowtie$  No. RP 50-S Testing Pump 8 1 4 6.0200 RP 50-S INOX (stainless steel) Testing Pump 8 1 4 6.0203





		Α	CCESSORIES				
Description	ΔgΔ		No.	Description	ΔgΔ		No.
Extra 16 bar pressure gauge with drag indicator, R 1 Extra 60 bar pressure gauge with drag indicator, R 1			6.1316 6.1315	Replacement piston Maintenance package RP 50-S	120	1	6.1300 6.0201
High pressure hose with 1/4" -1/2" connection	490		6.1125	gg.			

#### **TP 40-S**

Precision testing pump with twin-valve system 0 - 50 bar

#### **Product Profile**

#### **KEY FEATURES**

- 1 Constant pressure levels and reduction of leak-prone connections with the double valve system (twin valve)
- 1 Eases pressure discharge through the second valve
- 2 Easy transport and perfect balance with recessed grip
- 3 Anti-slip valve knobs, no confusion as knobs are clearly marked
- 4 Helps avoid spots from splash water
- **5** Shock and corrosion resistant
- 6 With bar, psi and Pascal scale and drag indicator (display of the maximum, preset pressure)

#### **TECHNICAL DATA**

Testing and pressure range: 0 - 50 bar with 1 bar steps

0 - 726 psi with 20 psi steps 0 - 5 MPa with 0,1 MPa steps

Hub suction capacity: approx. 45 ml / stroke

6,51 Tank capacity:

Dimensions (L x W x H): 700 x 190 x 150 mm

Connection: R 1/2"



8 Ergonomic Design Anti-slip valve knobs, prevents confusion as knobs are clearly marked TP-405 <u>R</u>OTHENBERGER

Safe storage of the pressure hose

> Helps avoid spots from splash water



Shock and corrosion-resistant

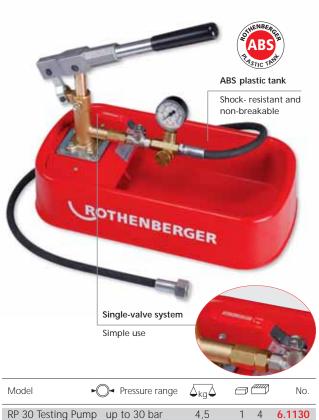
Pressure range  $\triangle_{kg}\triangle$ Model No. TP 40-S Testing Pump up to 50 bar 5.5 6.0220 Maintenance package TP 40-S 6.0221





Perfect balance with the recessed grip (easy transport)





**ACCESSORIES** 

#### **RP 30**

#### Testing pump for quick compression testing, 0 - 30 bar

For leak testing of smaller pipework systems and tanks in sanitary and heating installation

#### **KEY FEATURES**

- Easy to use with the single-valve system
- Better adjustment with the drain valve
- Ideal for confined spaces
- No false readings from any bulging of the hose (steel reinforced test hose)

#### **TECHNICAL DATA**

Testing and pressure range: 0 - 30 bar, with 1-bar steps 0 - 440 psi with 20 PSI steps

Hub suction capacity: 16 ml / stroke

Tank capacity:

Dimensions (L x W x H): 440 x 200 x 240 mm

Connection: R 1/2"







274

374

274

BOTHENBERGER

Small testing pump for compression testing, 0 - 25 bar

#### **KEY FEATURES**

- Constant pressure levels and reduction of leak-prone connections with the double valve system (twin valve)
- Non-slip with the working grip
- Ideal for confined spaces with its compact design
- Weather and cold-resistant tank with Duramant-epoxy -coating (5 year guarantee)

#### TECHNICAL DATA

Testing and pressure range: 0 - 25 bar

approx. 16 ml / stroke Hub suction capacity:

Tank capacity:

Dimensions (L x W x H): 380 x 215 x 156 mm

Connection: R 1/2"



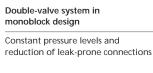


Integrated pressure gauge









Replacement piston

Maintenance package

Test hose

Model	Pressure range	$\Delta_{kg}\Delta$			No.
TP 25 Testing Pump	up to 25 bar	4.6	1	4	6.0250
Maintenance package TF	25		1		6.0251

230 V

# **Electronic Testing Pumps**

#### **RP PRO II**

Self-priming electrical testing pump

#### **Product Profile**

#### **APPLICATION AREA**

Compression testing of pipework systems and containers in sanitary and heating installations, compressed air, steam, and cooling systems, solar systems, hydraulic systems, sprinkler systems and for boiler and pressure vessel manufacture

#### **KEY FEATURES**

- 1 Effective filling of piping or containers
- 2 Compression testing occurs within desired pressure range
- 3 Self-priming liquid supply or from a pressure source possible

#### **TECHNICAL DATA**

Testing and pressure range: 0 - 40 bar with 1 bar steps

0 - 570 psi with 20 psi steps

0 - 0,1 MPa steps

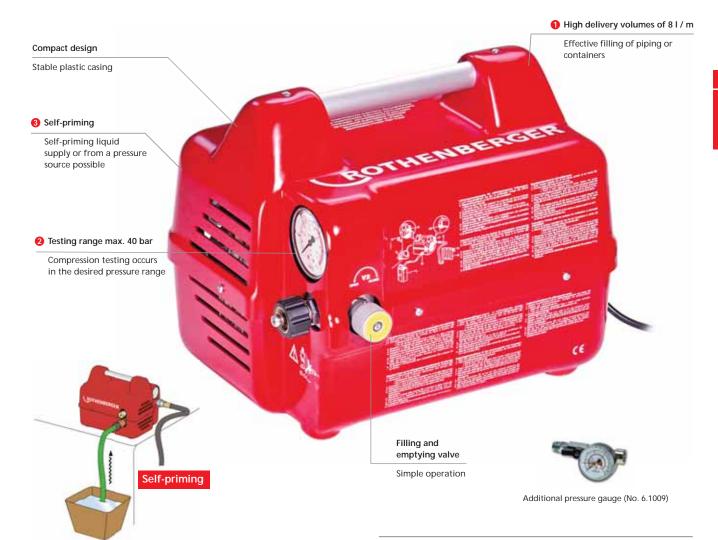
Suction capacity: 8 I / min

Dimensions (L x W x H): 360 x 300 x 295 mm

Connection: R 1/2"

Voltage: 200 - 240 V / 50 HZ and 110 V / 50 - 60 HZ

Power: 1.6 kW



Filling hose with adaptor (No. 6.1001)



High pressure hose with R 1/2" connection, Reduction of measuring errors (No. 6.1002)



Model	$\Delta_{kg}\Delta$	No.					
RP PROII Testing Pump, self-priming (230 V) with power cord, high pressure test hose 2 m	13.4	6.1180					
and 1/2" connections, filling hose RP PROII Testing Pump, self-priming (110 V) with power cord, high pressure test hose 2 m and 1/2" connections, filling hose	13.4	6.1181					
ACCESSORIES							
Filling hose with adaptor	535	6.1001					
Test hose with R 1/2" connection	390	6.1002					
Adaptor for filling hose	35	6.1007					

Finely scalable extra pressure gauge

# **Flushing Compressor**

#### **ROPULS Flushing Compressor**

For flushing of drinking water pipes through pulsed compressed air/water mixture

### Product Profile

#### **KEY FEATURES**

- Ideal for cleansing of floor heating systems
- Compact and sturdy design enables maintenance-friendly, simple operation with the practical carriage
- 1 Clear control panel
- 2 Removal of rust and other deposits
- 3 Clean, fully hygienic cleaning of drinking water pipes
- 4 Completely oil and water-free air supply

#### **TECHNICAL DATA**

Pipe connection: R 1" GK coupling

Max. cable distance: 100 m





#### **TECHNICAL DATA**

Protection class: IP 54 Micro-Filter

Oil separation rate: 99.9%

Particle retention rate: 0.3 µm Compressor Volume flow (suction): 200 l / min

Max. Working pressure: 8 bar (116 PSi)

**Tank capacity:** 10 l **Motor strength:** 1.5 kW

 Mains connection:
 230 V - 50 / 60 Hz

 Dimensions (H x W x D):
 630 x 380 x 340 mm



Simple flushing of pipelines



Cleaning of floor heating



Ideal for cleansing of floor heating systems

Model	$\Delta_{kg}\Delta$	No.
ROPULS Flushing Compressor with hoses	28	6.0100

#### **ROLEAK Aqua**

Acoustic leak detection device for pipeline systems

# TOTAL STREET



#### **Product Profile**

#### **KEY FEATURES**

- The ROLEAK Aqua is designed for the interior zone, it can also be used for leaks in the exterior zone (as a ground microphone)
- 1 Leak detection possible even in the dark
- 2 The ROLEAK Aqua increases flow sound and enables leaks to be pinpointed
- 3 Wireless transmission of the signal to headphones over 20m
- 4 Also for use as a ground microphone
- Optical and acoustic display
- 6 Leak detection possible even in the dark

#### **TECHNICAL DATA**

Leak status:LED displayResolution:0 - 10 noise levels

**Battery requirement:** ROLEAK Aqua: 2 x 1,5 V AA

Battery requirement head phones: 2 x 105 V AAA

Filter: 3 fixed filter adjustments

(low, broadband, high)

**Frequency range:** 0 - 4 kHz **Transmission range:** up to 20 m

Radio frequency: 864 MHz (device and headphones)
Dimensions (L x W x H): 114 mm x 35 mm x 25 mm

**Operating time:** approx. 50 h



ACCESSORIES							
Description	ΔgΔ	No.	Description	ΔgΔ	No.		
Headphones	185	6.6092	Extension bar	50	6.6093		
Magnet adaptor	25	6.6094	Tripod adaptor	100	6.6096		
Pipe adaptor	10	6.6097	Carrying case with inlay	925	6.6095		

Decalcification pump with automatic flow direction and programmable time interval



#### Product Profile

#### **APPLICATION AREA**

Intended for use by strong calcifications and encrustations for systems up to  $300\ I$ 

#### **KEY FEATURES**

- 1 Easy and quick dissolution of lime scale deposits
- Quick filling and emptying
- 3 Faster and more effective decalcifications

#### **TECHNICAL DATA**

Pump strength:40 l / min.Working pressure:1,3 barDelivery height:10 mTank capacity:15 lMotor strength:150 WattMains connection:230 V 50 / 60 Hz



# Flue gas canal Flow inversion Hot water discharge unit Hot water purifier Converter Water discharge ROCAL System

#### **ROCAL Decalcifying Pumps**

#### Reduces energy costs

For quick and effective decalcification of water heaters, boilers heat exchangers, cooling systems and more. Decalcifying chemicals offered optionally for effective decalcification.





#### **ROCAL 20**

Decalcification pump with manual, adjustable flow direction

#### **Product Profile**

#### **APPLICATION AREA**

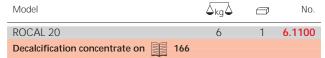
Manual decalcification pump. Intended for normal calcification for systems up to  $300\ \text{I}$ 

#### **TECHNICAL DATA**

Pump strength:40 l / min.Working pressure:1.3 barDelivery height:10 mTank capacity:15 lMotor strength:150 WattMains connection:230 V 50 / 60 Hz



Manual, up to 300l





# <u>5</u>

#### **ROCALPOWER FLUSHER**

Decalcification and filling pump with adjustable flow direction

#### **Product Profile**

#### **APPLICATION AREA**

 For quick filling and emptying of large systems from 300 I up to approx. 1000 I

#### TECHNICAL DATA

Pump strength:50 l / min.Working pressure:2 barDelivery height:20 mTank capacity:24 lMotor strength270 WattMains connection:230 V 50 / 60 Hz





Manual, 300 - 1000l

Model	$\sqrt{\log \Delta}$		No.
ROCALPOWER FLUSHER	11	1	6.1197
Decalcification concentrate on 166			



#### **ROCAL Chemicals**

Decalcification concentrate for copper and steel

#### **Product Profile**

#### **KEY FEATURES**

- Non-foaming
- With corrosion protection
- Increases pump service life

#### **TECHNICAL DATA**

Use: The chemicals change colour with use. Active product is red, used product is yellow-orange

Dilution: 10% to 30% in water

After the decalcification, remnant acid in the pipe system can be removed with ROTHENBERGER neutraliser. The mix ratio is 3% in water.













No. 6.1115

No. 6.1120

No. 6.1110

Model	$\sqrt[4]{\log \Delta}$	8		No.	Model	$\Delta_{kg}\Delta$			No.
Neutraliser powder	1	1	5	6.1115	Decalcifying concentrate	10	1	2	6.1106
Neutraliser powder	10	1	2	6.1120	Decalcifying concentrate	30	1		6.1110
Decalcifying concentrate	5	1	4	6.1105					

#### **ROCLEAN®**

#### Heavy-duty pumps

The ideal sprayer for boiler cleaning, universally applicable for clean, economical and safe work

Set (No. 6.1000X) includes: High-performance pump, individual components 1 - 3



Model	Parts-No.	$\Delta_g \Delta$	No.
ROCLEAN® manual pump complete:		3600	6.1000X
Spray hose, 2 m	0	140	6.0985
Spray pipe, straight, 500 mm	2	100	6.0986
Spray pipe, curved, 500 mm	3	100	6.0987
Spray nozzle		10	6.0990
Spare seal set		10	6.0998

#### **TECHNICAL DATA**

High pressure pump made of plastic and corrosion-proof

Pump piston with O-ring seal

Pressure gauge Ø 35 mm with scale 0 - 3 bar, drain valve

Dimensions (H x Ø):

530 x 210 mm



#### **ROCLEAN® F3X**

#### Boiler cleaner

With corrosion protection for total cleaning and maintenance of furnaces, dissolves non-burnable remains like rust in seconds up to a wall thickness of 1.2 mm with a residence time of 5 min.

Model	Contents	$\sqrt{\log \Delta}$			No.
Canister	5 litre	5.2	1 4	4 6.1	1005

After use, the energy consumption is reduced by approx. 30%

#### Mix ratio of concentrate/water:

1:20 = for normal soiling

1:15 = for strong soiling

1:10 = for very strong soiling





Illuminated sensor head

#### **ROTEST® Electronic 3**

Gas leak detection device For detection of gas in rooms, as well as leaks in pipes with the

methane gas sensor

#### **Product Profile**

#### **TECHNICAL DATA**

Optical battery level display Optical and acoustic display

Standard 9 V square battery

**Processor controlled** 

 $\ensuremath{\text{\textbf{Detects}}}$  all gases with a  $\ensuremath{\text{\textbf{CH}}}_4$  basis (methane, acetone, butane propane and natural gas)

LED display of the gas concentration up to 1 Vol. %

Adjustable measurement sensitivity

Finds leaks easily

Finds leaks easily



Soft case shell Increased protection of the device



Fig. ROTEST® Electronic 3 Set

Model  $\Delta_{kg}\Delta$ No. 1.5 6.6080 ROTEST® Electronic 3 in plastic carrying case

ACCESSORIES							
Description	∆ <sub>g</sub> ∆	No.	Description	ΔgΔ	No.		
Sensor	20	6.6086	Plastic carrying case	250	6.6085		
Sensor cover	10	6.6087	· -				

#### **ROTEST®**

#### Leak detection spray

Ideal for testing of gas lines, also for use in cooling technology. Neutral against the most common gasses and refrigerants, CFC-free, tested by the DVGW





Model	Contents	$\Delta_g \Delta$		No.
ROTEST® leak detection spray	400 ml	470	12	6.5000



DVGW tested Reg.-No. 83.01 e 538

> Highly sensitive foam spray: Quick and certain location of leaks



#### ROFROST TURBO 1.1/4" and 2"

High-Tech pipe freezing system for copper, steel and plastic composite pipes

# (€









#### **Product Profile**

#### **APPLICATION AREA**

Ideal for maintenance, repair and expansion work in sanitary and heating installations; safe and controlled freezing

#### **KEY FEATURES**

- 1 Fully automatic and monitored freezing
- 2 Portable use, optimal for the service industry
- 3 Also for use in confined spaces
- 4 Safe, controlled freezing and monitoring
- 5 High flexibility and uninterrupted operation

#### **KEY FEATURES**

- 6 Reduction inserts in various sizes
- Over head freezing possible
- Environmentally friendly: CFC-free

#### **TECHNICAL DATA**

Ø 10 - 42 mm Rofrost Turbo 1.1/4" Copper pipes:

Ø 10 - 60 mm Rofrost Turbo

Ø 1/2 - 1.3/8" Rofrost Turbo 1.1/4" Rofrost Turbo 1.1/4" Steel pipes Ø 1/4 - 1.1/4" Ø 1/4 -Rofrost Turbo

Plastic pipes, as well as plastic composite pipes

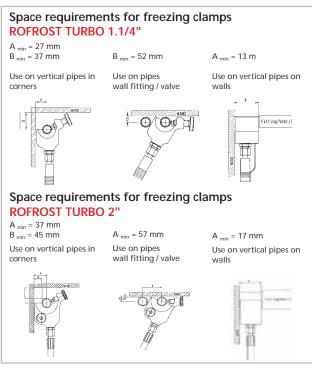






# **Pipe Freezing Systems**







#### **Reduction Inserts**

Reduct	tion inser	ts			ŀ	Rofrost Tur	bo 1.1/4"			Rof	rost Turbo	2"	
Copper	Copper	Steel			6.2200	6.2201	6.2202	6.2220	6.2203	6.2204	6.2205	6.2206	6.2240
mm	inch	inch	No.	Size	230V 50Hz	110V 50Hz	115V 60Hz	230V 50Hz	230V 50Hz	110V 50Hz	115V 60Hz	230V 50Hz	230V 50Hz
10 mm	3/8"	G 1/8	6.2217		•	•	0	0	0	0	0	0	0
12 mm	1/2"		6.2211	II	•	•	•	0	0	0	0	•	0
14/15 mm		G 1/4	6.2212	III	•	•	0	0	0	0	0	•	0
16 mm	5/8"		6.2219	IV	0	0	•	0	0	0	0	0	0
18 mm		G 3/8	6.2213	V	•	•	0	0	0	0	0	•	0
20 mm	1"		6.2224	VI	0	0	•	0	0	0	0	0	0
22 mm	7/8"	G 1/2	6.2214	VII	•	•	•	•	0	0	0	•	0
	1"		6.2226	VIII	0	0	•	0	0	0	0	0	0
28 mm		G 3/4	6.2215	IX	•	•	0	0	0	0	0	0	0
	1.1/8"		6.2227	Х	0	0	•	0	0	0	0	0	0
32 mm	1.1/4"		6.2221	XI	0	0	0	0	0	0	0	0	0
35 mm	1.3/8"	G 1	6.2216	XII	•	•	•	0	0	0	0	0	0
28 mm		G 3/4	6.2231	А					•	•	•	•	0
	1.1/8"		6.2232	В					0	0	0	0	0
32 mm	1.1/4"		6.2233	С					0	0	0	0	0
35 mm	1.3/8"	G 1	6.2234	D					0	•	•	0	0
42 mm		G 1.1/4	6.2235	E					•	•	•	•	•
		G 1.1/2	6.2236	F					•	•	•	•	0
54 mm	2.1/8"		6.2237	G					•	0	0	•	0

Anti-kink, diffusion proof monotube system with plastic capillary pipes guarantees high flexibility and uninterrupted operation



Excellent overall size for working close to walls or on floors



Can also be used with parallel running pipes and in confined



Trouble-free use near walls, only 52 mm contact surface on pipe





# **Pipe Freezing Systems**

#### **ROFROST Reduction Inserts**



No. 6.2211 to 6.2227



#### **ROFROST TURBO 1.1/4"**

Reduction in	serts ►O-	<b>▶</b> ○	<b>-</b> 0-		
Size	Nom. size Cu	Nom. size Cu	Nom. size Fe	$\Delta_g \Delta$	No.
Gr. I	10 mm	3/8"	1/8"	190	6.2217
Gr. II	12 mm	1/2"	-	180	6.2211
Gr. III	14/15 mm	-	1/4"	170	6.2212
Gr. IV	16 mm	5/8"	-	170	6.2219
Gr. V	18 mm	-	3/8"	165	6.2213
Gr. VI	20 mm	3/4"	-	155	6.2224
Gr. VII	22 mm	7/8"	1/2"	145	6.2214
Gr. VIII	-	1"	-	125	6.2226
Gr. IX	28 mm	-	3/4"	110	6.2215
Gr. X	-	1.1/8"	-	90	6.2227
Gr. XI	32 mm	1.1/4"	-	80	6.2221
Gr. XII	35 mm	1.3/8"	1"	65	6.2216

#### **ROFROST Heat Conductive Paste**

Description	Contents	$\sqrt{g}$		No.
ROFROST Heat Conductive Paste	150 ml	130	1	6.2291



#### **ROFROST TURBO 2"**

Reduction ins	erts ►O-	▶○-	<b>-</b> O-		
Size	Nom. size Cu	Nom.size Cu	Nom. size Fe	$\Delta_g \Delta$	No.
Gr. A	28 mm	-	3/4"	190	6.2231
Gr. B	-	1.1/8"	-	180	6.2232
Gr. C	32 mm	1.1/4"	-	170	6.2233
Gr. D	35 mm	1.3/8"	1"	170	6.2234
Gr. E	42 mm	-	1.1/4"	165	6.2235
Gr. F	-	-	1.1/2"	155	6.2236
Gr. G	54 mm	2.1/8"	-	145	6.2237
Expansion s	et 12 - 15 - 18	3 - 22 mm			6.2230

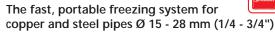
The reduction insert size E, 42 mm serves as an adaptor piece for fitting ROFOST TURBO 1.1/4" reduction inserts size I – size XII



For optimal heat conduction between cold sleeve, reduction insert and pipe surface. Residue free work, physiologically neutral

No. 6.2291

#### **ROFROST Handy**



#### **Product Profile**

#### **KEY FEATURES**

- Pipe freezing system is ideally for quick repairs and small expansion tasks for sanitary, heating and water installations
- Enables the installation of additional service valves
- Exchange of fittings on defective service valves
- Enables the exchange of heating pumps

#### **TECHNICAL DATA**

Ø 15 - 28 mm Copper pipes: Steel pipes: Ø 1/4 - 3/4"

Quick Freeze Spray can be used everywhere and is environmentally friendly. Is also used for medical technology



Model	Parts-No.	$\Delta_g \Delta$	No.
Freezer head 3/4"	6	120	6.4024
Internal hexagonal screwdriver	6	500	6.5046
Foam insert	<b>7</b>	20	6.4026
Plastic carrying case without inlay	<b>(</b> 8	400	3.0898
Inlay for plastic carrying case	9	10	6.2045
ROTHENBERGER fleece cloth	10	10	9.3915

# No emptying of Plastic freezer heads the pipes required Efficient freezing in small spaces Safe, time-saving application

Set (No. 6.4020) includes: Individual components Parts-No. 🚺 - 🔟							
Model	Parts-No.	$\sqrt{g}$	No.				
ROFROST Handy		2400	6.4020				
ACCI	ESSORIES						
Quick Freeze freezing spray	0	500	6.4001				
Freezer head 1/4"	2	70	6.4021				
Freezer head 3/8"	3	80	6.4022				
Freezer head 1/2"	4	80	6.4023				







#### **ROFROST CO2 Freezer Set**

Manual freezing set Ø 10 - 60 mm

#### **Product Profile**

#### **KEY FEATURES**

 For quick, easy and safe freezing using carbon dioxide – CFC free

#### **TECHNICAL DATA**

Copper pipes: Ø 10 mm - 60 mm Ø 1/2 - 2.1/8"

Steel pipes: Ø 1/8 - 2"

Plastic pipes, as well as plastic composite pipes

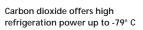


Freezer heads offer constant block clamping of pipe diameter

No breaking of freezing sleeve

19-part set (No. 6.5030) includes: 2 handles with feed valves (No. 6.5032), 2 high pressure hoses (No. 6.5033), 10 pairs of freezer heads (2 for each pipe dimension) (see table page 169), T-piece for bottle connection (No. 6.5034), stopper for one-sided freezing (No. 6.5049), wrench (No. 6.5045), internal hexagonal screwdriver (No. 6.5046), in plastic carrying case (No. 6.5031)

for Copper pipes Ø mm	for Copper pipes Ø inch	for Steel pipes Ø inch	$\sqrt[]{\log \lambda}$	No.
10 - 60	1/2 - 2.1/8"	1/8 - 2"	4.9	6.5030





Safe, time-saving Efficient freezing application in small spaces

Plastic freezer heads

No emptying of pipes required

#### **ROFROST Freezer Heads**

Made of extremely cold-resistant special plastics

Size	for Copper pipes Ø mm	for Copper pipes Ø inch	for Steel pipe Ø inch	es $\sqrt{g}$	No.
1	10 - 12	1/2"	1/8"	60	6.5035
2	14 - 15	-	1/4"	60	6.5036
3	16 - 18	5/8"	3/8"	70	6.5037
4	22	3/4 - 7/8"	1/2"	70	6.5038
5	28	1.1/8"	3/4"	110	6.5039
6	35	1.3/8"	1"	110	6.5040
7	42	1.5/8"	1.1/4"	210	6.5041
8	-	-	1.1/2"	210	6.5042
9	54	2.1/8"	-	250	6.5043
10	60	-	2"	250	6.5044



#### **ROFROST CO2 Spare Parts**



Description	ΔgΔ	No.
Handle with feed valve and bayonet connection	180	6.5032
High pressure refrigerant hose, 2 m	140	6.5033
Refrigerant hose extender set	290	6.5047
(2 x 2 m with 2 connectors)		
T-piece with bottle connections W 21,8 x 1/14	1650	6.5034



Description	ΔgΔ	No.
Stopper for one-sided freezing	10	6.5049
Repair set (nozzle/filter piece) for feed valve	20	6.5048
Wrench 14 x 17 mm	1670	6.5045
Internal hexagonal screwdriver No. 4	500	6.5046
Plastic carrying case	2600	6.5031