

# 2014 - 2015 SOLUTIONS GUIDE

For total efficiency



**COMAP**  
SOLUTIONS FOR EFFICIENCY

## OUTLET VALVES

The basic function of the outlet is to connect and isolate the radiator. In the real world of a project, this can prove to be more difficult than expected. Comap provides solutions to facilitate the installer's job.



### APPLICATIONS

**H modules** are used to connect radiators with integrated valves to the circuit. In conjunction with single regulating valves, Comap provides lockshields with accurate Kv setting capability. Setting the **lockshield** is crucial to balance the installation, and ensure the radiator valve works at a good authority. **Distributors** are a fast and elegant way of connecting the radiators to the supply.

### TECHNICAL CHARACTERISTICS

- Maximum working pressure: 10 bar
- Maximum differential pressure: 0.6 bar
- Maximum working temperature: 120°C

### BENEFITS

- Accurate position setting for efficient commissioning.
- H-modules are compact for better integration.
- The lockshield's memory option holds the position even after radiator replacement.
- The distributors provide a neat, professional finish.
- The universal distributor provides an all-in-one solution for 1-pipe or 2-pipe, with isolation and by-pass.
- Multiple connection means to fit installation preferences.

### FEATURES

- 1-pipe or 2-pipe.
- Various connection modes to the radiators (metal/metal, O-ring).
- Multiple connections to the pipe:
  - Male or female thread.
  - Solder copper.
  - Sarfit for multilayer.
- Shapes: angle or straight.
- Sizes: 3/8" to 3/4".

## ACCESSORIES

### NON-SEALABLE CAP FOR LOCKSHIELD

**460N**



Model	ITEM No	Qty
3/4"	560106	1
3/8"-1/2"	560143	1

### NON-SEALABLE CAP

**461N**



Model	ITEM No	Qty
3/8"-1/2"-3/4"	561103	50

### DRAINING ADAPTER

**460C**

for lockshields, distributors & 4 way-valves



ITEM No	Qty
560200	1

## H - MODULES FOR PANEL RADIATORS

### STRAIGHT HYDRAULIC MODULE, ONE-PIPE

**970**

With ball-valve and by pass



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Qty
Male M22	970100-AF	M22	3/4" EUR	50	10

### STRAIGHT HYDRAULIC MODULE, ONE-PIPE

**970A**

With ball-valve and by pass



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Female 3/4"Euroconus	970204-AF	3/4" EUR	3/4" EUR	50	Straight	5

### STRAIGHT HYDRAULIC MODULE, ONE-PIPE

**970E**

With ball-valve and by pass



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Male 3/4"Euroconus	970206-AF	3/4" EUR	3/4" EUR	50	Straight	5

**ANGLE HYDRAULIC MODULE, ONE-PIPE****975**

With ball-valve and by pass



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Qty
Male M22	975100-AF	M22	3/4" EUR	50	10

**ANGLE HYDRAULIC MODULE, ONE-PIPE****975A**

With ball-valve and by pass



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Female 3/4" Euroconus	975204-AF	3/4" EUR	3/4" EUR	50	Angle	5

**ANGLE HYDRAULIC MODULE, ONE-PIPE****975E**

With ball-valve and by pass



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Male 3/4" Euroconus	975206-AF	3/4" EUR	3/4" EUR	50	Angle	5

**ANGLE HYDRAULIC MODULE, TWO-PIPE****965**

With ball-valve



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Male M22	965100-AF	M22	3/4" EUR	50	Angle	10

**STRAIGHT HYDRAULIC MODULE, TWO-PIPE****960**

With ball-valve



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Male M22	960100-AF	M22	3/4" EUR	50	Straight	10

**STRAIGHT HYDRAULIC MODULE, TWO-PIPE****960A**

With ball-valve



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Female 3/4" Euroconus	960204-AF	3/4" EUR	F1/2"-3/4"E	50	Straight	5

**STRAIGHT HYDRAULIC MODULE, TWO-PIPE****960E**

With ball-valve



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
Male 3/4" Euroconus	960206-AF	3/4" EUR	M3/4"-3/4"E	50	Straight	5

**ANGLE HYDRAULIC MODULE, TWO-PIPE****965A**

With ball-valve



Model	ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
Female 3/4" Euroconus	965204-AF	F1/2"-3/4"E	50	Angle	5

## ANGLE HYDRAULIC MODULE, TWO-PIPE

### 965E

With ball-valve



Model	ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
Male 3/4" Euroconus	965206-AF	M3/4"-3/4"E	50	Angle	5

## ELEGANT COVERS FOR H-MODULES

### COVERS



Model	ITEM No	Pipe Connection	Center to center (mm)	Shape	Outlet	Qty
Chrome	F12037COM	-	-	Angle	Left	5
White	F12036COM	-	-	Angle	Left	5
Chrome	F12035COM	-	-	Angle	Right	5
White	F12034COM	-	-	Angle	Right	5
Chrome	F44234COM	10 to 20 mm	50	Flat	-	10
Chrome	F44224COM	10 to 20 mm	50	High	-	10
Chrome	F44032COM	DN15 mm	-	Flat	-	10

## ANGLE HYDRAULIC MODULE, TWO-PIPE

### SFS965

With ball-valve



Model	ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Qty
PUSH FIT connection for multilayer pipe	5965284	16x2	3/4"	50	10

## H - MODULES - ACCESSORIES

### COVER FOR ANGLE HYDRAULIC MODULE

#### COVER A

For 3/4 Euroconus H-Module



Model	ITEM No	Colour	Shape	Qty
Chrome	F10096COM	Chrome	Angle	5
White	F10094COM	White	Angle	5

### COVER FOR STRAIGHT HYDRAULIC MODULE

#### COVER S

For 3/4 Euroconus H-Module



Model	ITEM No	Colour	Shape	Qty
Chrome	F10095COM	Chrome	Straight	5
White	F10093COM	White	Straight	5

## CENTRAL POINT THERMOSTATIC VALVE

### CENTRAL POINT THERMOSTATIC VALVE, M30, FIXED KV

#### VARIOCON

Versatile mounting, right or left, wall or floor supply



ITEM No	Valve connection	Pipe Connection	Radiator connection	Center to center (mm)	Qty
F12020COM	M30x1,5	3/4" Euroconus	F 1/2"	50	1
F12021COM	M30x1,5	3/4" Euroconus	M 3/4"	50	1

## H - MODULES FOR PANEL RADIATORS- SPECIAL

### ADJUSTABLE STRAIGHT HYDRAULIC MODULE, TWO-PIPE

#### DT1

Adjustable height (up to 25mm), Female connection



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10080COM	F1/2"-3/4"E	50	Straight	5

**ADJUSTABLE STRAIGHT HYDRAULIC MODULE, TWO-PIPE****DT2**

Adjustable height (up to 25mm), Male connection



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10084COM	M3/4"-3/4"E	50	Straight	5

**ADJUSTABLE ANGLE HYDRAULIC MODULE, TWO-PIPE****ET1**

Adjustable height (up to 25mm), Female connection



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10082COM	F1/2"-3/4"E	50	Angle	5

**ADJUSTABLE ANGLE HYDRAULIC MODULE, TWO-PIPE****ET2**

Adjustable height (up to 25mm), Male connection



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10086COM	M3/4"-3/4"E	50	Angle	5

**ADJUSTABLE ANGLE HYDRAULIC MODULE, TWO-PIPE****EVT1**

Adjustable height (up to 25mm) and depth (up to 13mm), Female connection



ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
F13443COM	3/4"E-DN12	F1/2"	50	Angle	5
F13444COM	3/4"E-DN15	F1/2"	50	Angle	5

**ADJUSTABLE ANGLE HYDRAULIC MODULE, TWO-PIPE****EVT2**

Adjustable height (up to 25mm) and depth (up to 13mm), Male connection



ITEM No	Pipe Connection	Radiator connection	Center to center (mm)	Shape	Qty
F13463COM	3/4"E-DN12	M3/4"	50	Angle	5
F13464COM	3/4"E-DN15	M3/4"	50	Angle	5

**REVERSED STRAIGHT HYDRAULIC MODULE, TWO-PIPE****D1**

Reversed connections with shut-off



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10076COM	F1/2"-3/2"E	50	Straight	5

**ANGLE HYDRAULIC MODULE, TWO-PIPE****E1**

Reversed connections with shut-off



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10077COM	F1/2"-3/4"E	50	Angle	5

**STRAIGHT HYDRAULIC MODULE, TWO-PIPE****D2**

Reversed connections with shut-off



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10078COM	M3/4"-3/4"E	50	Straight	5

## ANGLE HYDRAULIC MODULE, TWO-PIPE

### E2

Reversed connections with shut-off



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F10079COM	M3/4"-3/4"E	50	Angle	5

## ORIENTABLE HYDRAULIC MODULE, ONE- OR TWO-PIPE

### U2

Versatile mounting, right or left, wall or floor supply



ITEM No	Pipe Connection	Center to center (mm)	Shape	Qty
F10027COM	M3/4"-3/4"E	50	Adjustable	5

## ORIENTABLE HYDRAULIC MODULE, TWO-PIPE

### FE1

Versatile mounting, right or left, wall or floor supply



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F12003COM	F1/2"-3/4"E	50	Adjustable	5

## ORIENTABLE HYDRAULIC MODULE, TWO-PIPE

### FE2

Versatile mounting, right or left, wall or floor supply



ITEM No	Radiator connection	Center to center (mm)	Shape	Qty
F12004COM	M3/4"-3/4"E	50	Adjustable	5

## ORIENTABLE HYDRAULIC MODULE, ONE- OR TWO-PIPE

### U1

Versatile mounting, right or left, wall or floor supply



ITEM No	Pipe Connection	Center to center (mm)	Shape	Qty
F10026COM	F1/2"-3/4"E	50	Adjustable	5



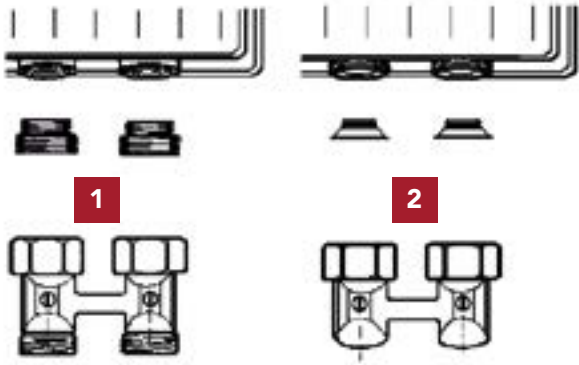
# H-MODULES

## RANGE OVERVIEW

Reference	Shape	1 pipe / 2 pipes	Isolation	Setting	Pipe connection	Nipple (radiator connection)
970	Straight	1 pipe	x	x	M22	9671
970A	Straight	1 pipe	x	x	3/4"EUR	9670
970E	Straight	1 pipe	x	x	3/4"EUR	9671
975	Angle	1 pipe	x	x	M22	9671
975A	Angle	1 pipe	x	x	3/4"EUR	9670
975E	Angle	1 pipe	x	x	3/4"EUR	9671
965	Angle	2 pipes	x		M22	9671
960	Straight	2 pipes	x		M22	9671
960A	Straight	2 pipes	x		3/4"EUR	9670
960E	Straight	2 pipes	x		3/4"EUR	9671
SFS960	Straight	2 pipes	x		16x2	9671
965A	Angle	2 pipes	x		3/4"EUR	9670
965E	Angle	2 pipes	x		3/4"EUR	9671
SFS965	Angle	2 pipes	x		16x2	9671
DT1	Straight	2 pipes	x		3/4"EUR	9670
DT2	Straight	2 pipes	x		3/4"EUR	9671
ET1	Angle	2 pipes	x		3/4"EUR	9670
ET2	Angle	2 pipes	x		3/4"EUR	9671
EVT1	Angle	2 pipes	x		3/4"E-DN12	9670
EVT1	Angle	2 pipes	x		3/4"E-DN15	9670
EVT2	Angle	2 pipes	x		3/4"E-DN12	9671
EVT2	Angle	2 pipes	x		3/4"E-DN15	9671
D1	Straight	2 pipes	x		3/4"EUR	9670
E1	Angle	2 pipes	x		3/4"EUR	9670
D2	Straight	2 pipes	x		3/4"EUR	9671
E2	Angle	2 pipes	x		3/4"EUR	9671
FE1	Adjustable	2 pipes	x		3/4"EUR	9670
FE2	Adjustable	2 pipes	x		3/4"EUR	9671
U1	Adjustable	1 pipe /2 pipes	x		F1/2"-3/4"E	9670
U2	Adjustable	1 pipe /2 pipes	x		M3/4"-3/4"E	9671



## INSTALLATION



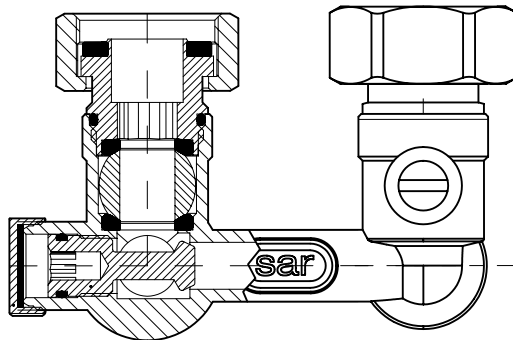
- 1 9670 nipple for F1/2" radiator connection
- 2 9670 nipple for M3/4" radiator connection

The cone or nipple is delivered with 3/4" Euroconus H-modules. Please order them separately for M22 H-modules.

## SETTING ONE-PIPE H-MODULES

### 970AF/975AF

- 1 Unscrew the tap.
- 2 Close the valve completely.
- 3 Open with the required number of turns according to the requested Kv-value. (See table.)

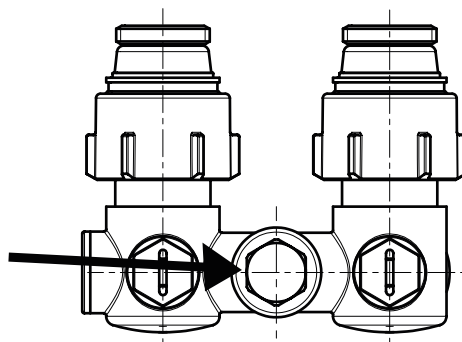


L/min	No. of turns (T)
6.4	1
10.9	1.5
15.5	2
19.6	2.5
23	3
26	3.5
28.6	4
29.5	4.5

Test conducted under 1 bar constant pressure.

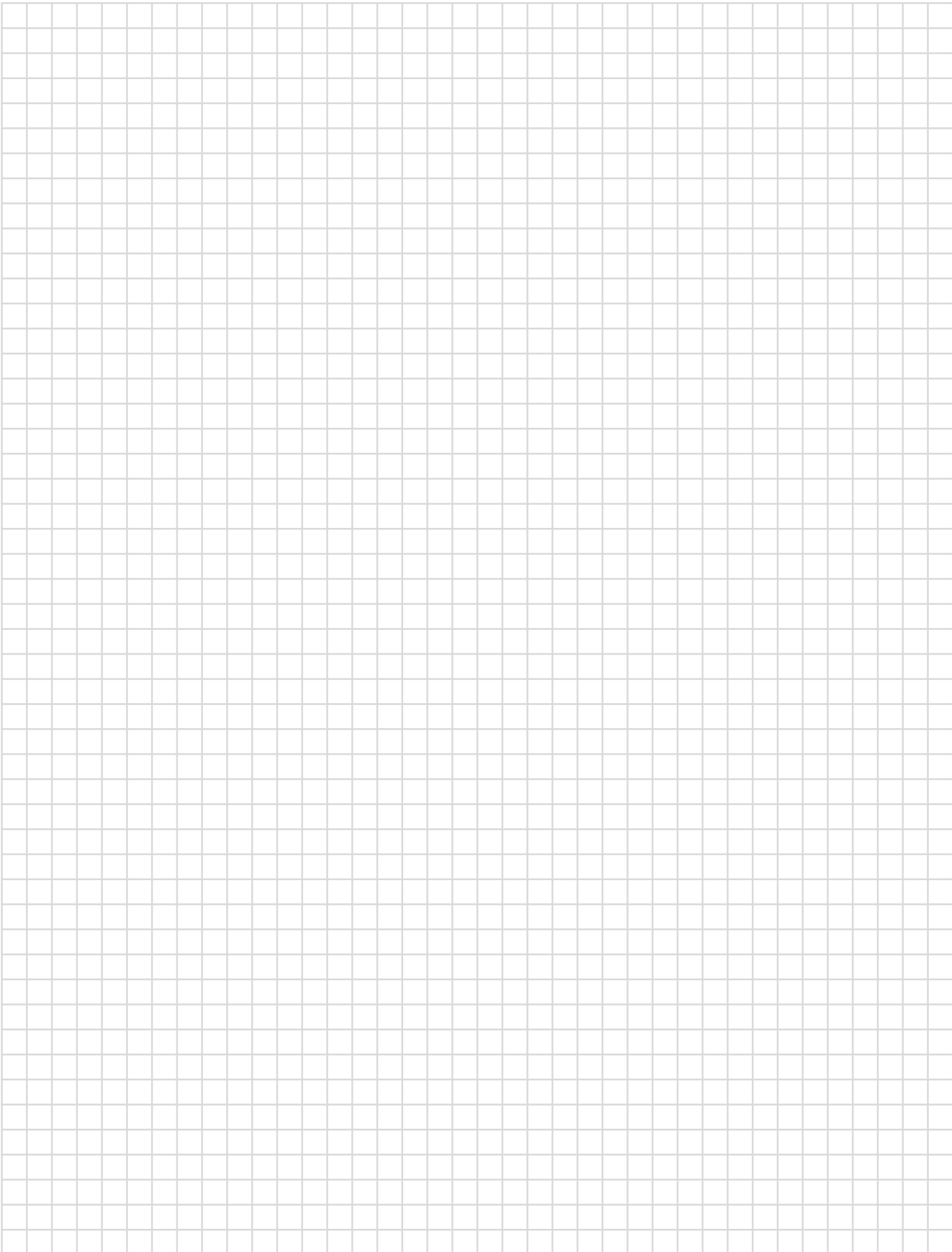
### 970NS/975NS

- 1 Unscrew the tap.
- 2 Close the valve completely.
- 3 Open with the required number of turns according to the requested Kv-value. (See table.)

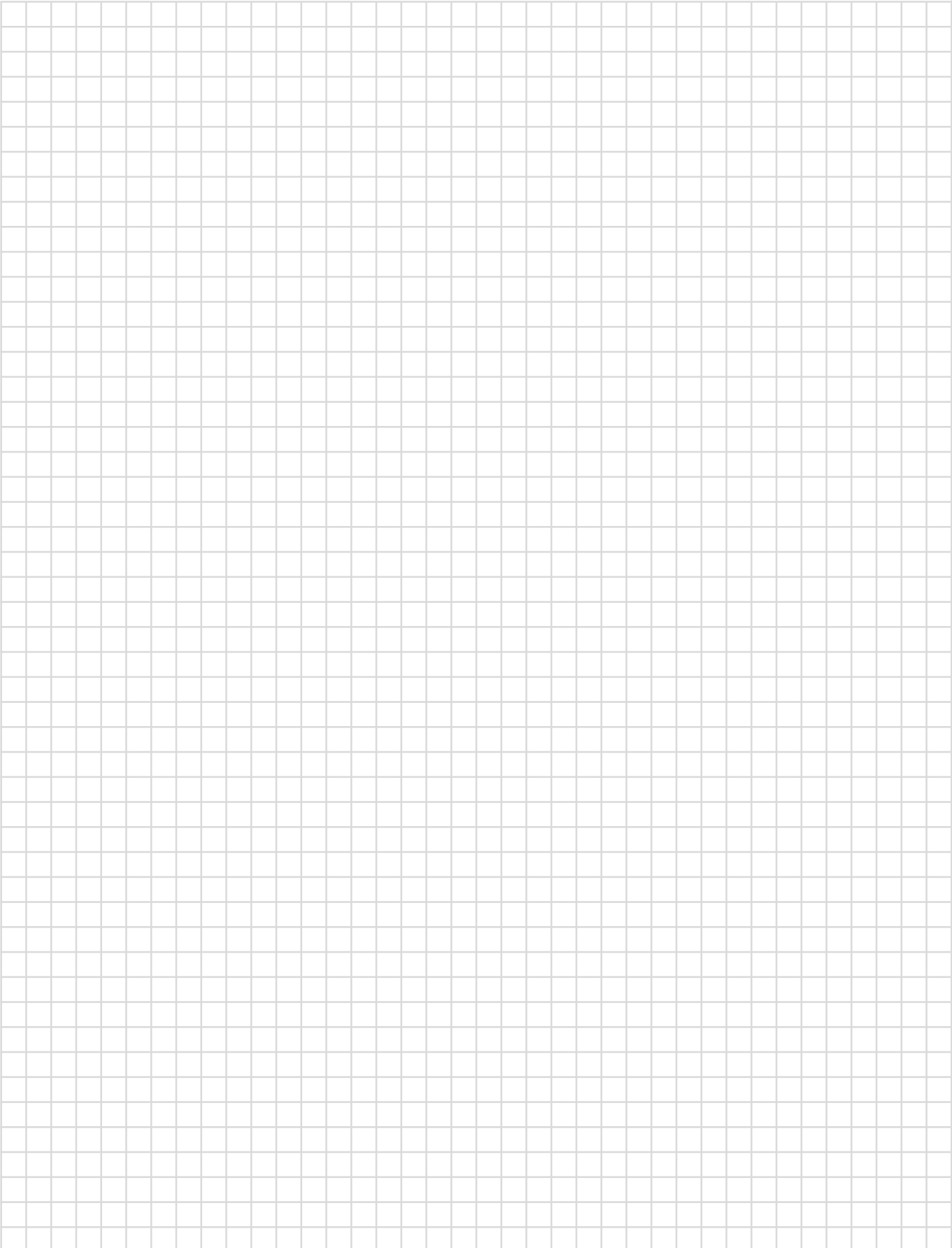


%	Kv
100	0.52
50	1.1
45	1.23
40	1.38
35	1.58
30=kvs	1.83

Test conducted at BP2K.



# NOTES



# Contact

**COMAP GROUP**

16 Avenue Paul Santy - BP 8211  
69355 Lyon cedex 08 - France  
+33 (0)4 78 78 16 00

[www.comap-group.com](http://www.comap-group.com)