

# 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".

## LOCKSHIELD VALVES

### ANGLE LOCKSHIELD VALVE, INTERNAL THREAD

**2428**

Isolation & Setting



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	428203	F 3/8"	R 3/8"	1,55	10
1/2	428204	F 1/2"	R 1/2"	2,2	10
3/4	428206	F 3/4"	R 3/4"	4,2	5
1"	428008	F 1"	1"G	8	1

### ANGLE LOCKSHIELD VALVE, INTERNAL THREAD

**2428JT**

Isolation & Setting



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	428203B	F 3/8"	O-ring R 3/8"	1,55	10
1/2	428204B	F 1/2"	O-ring R 1/2"	2,2	10

### ANGLE LOCKSHIELD VALVE, INTERNAL THREAD

**3428**

Isolation, Setting & Memory



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	428303	F 3/8"	R 3/8"	1,55	5
1/2	428304	F 1/2"	R 1/2"	2,2	5
3/4	428306	F 3/4"	R 3/4"	4,2	5

### ANGLE LOCKSHIELD VALVE, INTERNAL THREAD

**4468**

Isolation, Setting, Memory & Drain off



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	427803	F 3/8"	R 3/8"	2	10
1/2	427804	F 1/2"	R 1/2"	2,2	5
3/4	427806	F 3/4"	R 3/4"	2,2	5

### ANGLE LOCKSHIELD VALVE, EXTERNAL THREAD

**2428E**

Isolation & Setting



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	428713	Male M22	R 3/8"	1,55	10
1/2	428704	Male M22	R 1/2"	2,2	10

### ANGLE LOCKSHIELD VALVE, EXTERNAL THREAD

**3428E**

Isolation, Setting & Memory



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
1/2	428804	Male M22	R 1/2"	2,2	10

### ANGLE LOCKSHIELD VALVE, EXTERNAL THREAD, O'RING

#### 2428EJ

Isolation & Setting



Model	ITEM No	Pipe Con- nection	Ra- diator connec- tion	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	428713B	Male M22	o-ring	1,55	10
1/2	428704B	Male M22	o-ring	2,2	10

### ANGLE LOCKSHIELD VALVE, FOR SOLDERED COPPER

#### 2428CU

Isolation & Setting



Model	ITEM No	Pipe Con- nection	Ra- diator connec- tion	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
1/2	428254	CU 15mm	R 1/2	2,2	5

### ANGLE LOCKSHIELD VALVE, FOR SOLDERED COPPER

#### 3428CU

Isolation, Setting & Memory



Model	ITEM No	Pipe Con- nection	Ra- diator connec- tion	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
1/2	428644	CU 14mm	R 1/2	2,2	5

### STRAIGHT LOCKSHIELD VALVE, INTERNAL THREAD

#### 2429

Isolation & Setting



Model	ITEM No	Pipe Con- nection	Ra- diator connec- tion	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	429203	F 3/8"	R 3/8	0,9	10
1/2	429204	F 1/2"	R 1/2	1,8	10
3/4	429206	F 3/4"	R 3/4	3	5
1"	429008	F 1"	1"G	5,5	1

### STRAIGHT LOCKSHIELD VALVE, INTERNAL THREAD, O'RING

#### 2429J

Isolation & Setting



Model	ITEM No	Pipe Con- nection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	429203B	F 3/8"	O-ring R 3/8"	0,9	10
1/2	429204B	F 1/2"	O-ring R 1/2"	1,8	10

### STRAIGHT LOCKSHIELD VALVE, INTERNAL THREAD

#### 3429

Isolation, Setting & Memory



Model	ITEM No	Pipe Con- nection	Ra- diator connec- tion	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	429303	F 3/8"	R 3/8	0,9	10
1/2	429304	F 1/2"	R 1/2	1,8	5
3/4	429306	F 3/4"	R 3/4	3	5

## STRAIGHT LOCKSHIELD VALVE, INTERNAL THREAD

**4469**

Isolation, Setting, Memory & Drain off



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
3/8	427903	F 3/8"	R 3/8	1	10
1/2	427904	F 1/2"	R 1/2	1,8	5
3/4	427906	F 3/4"	R 3/4	2,2	5

## STRAIGHT LOCKSHIELD VALVE, FOR SOLDERED COPPER

**2429CU**

Isolation & Setting



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
15 mm	429254	CU 15mm	R 1/2	1,8	5

## STRAIGHT LOCKSHIELD VALVE, FOR SOLDERED COPPER

**3429CU**

Isolation, Setting & Memory



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
14 mm	429644	CU 14mm	R 1/2	1,8	10

## STRAIGHT LOCKSHIELD VALVE, EXTERNAL THREAD

**2429E**

Isolation & Setting



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
Eurocone	429714	3/4" Euroconus	R 1/2	1,8	10
M22	429704	Male M22	R 1/2	1,8	10

## STRAIGHT LOCKSHIELD VALVE, EXTERNAL THREAD

**3429E**

Isolation, Setting & Memory



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
1/2	429804	Male M22	R 1/2	1,8	10

## STRAIGHT LOCKSHIELD VALVE, EXTERNAL THREAD

**2429EJT**

Isolation & Setting



Model	ITEM No	Pipe Connection	Radiator connection	Kvs (m <sup>3</sup> /h at BP 2k)	Qty
1/2	429704B	Male M22	O-ring R 1/2	1,8	5

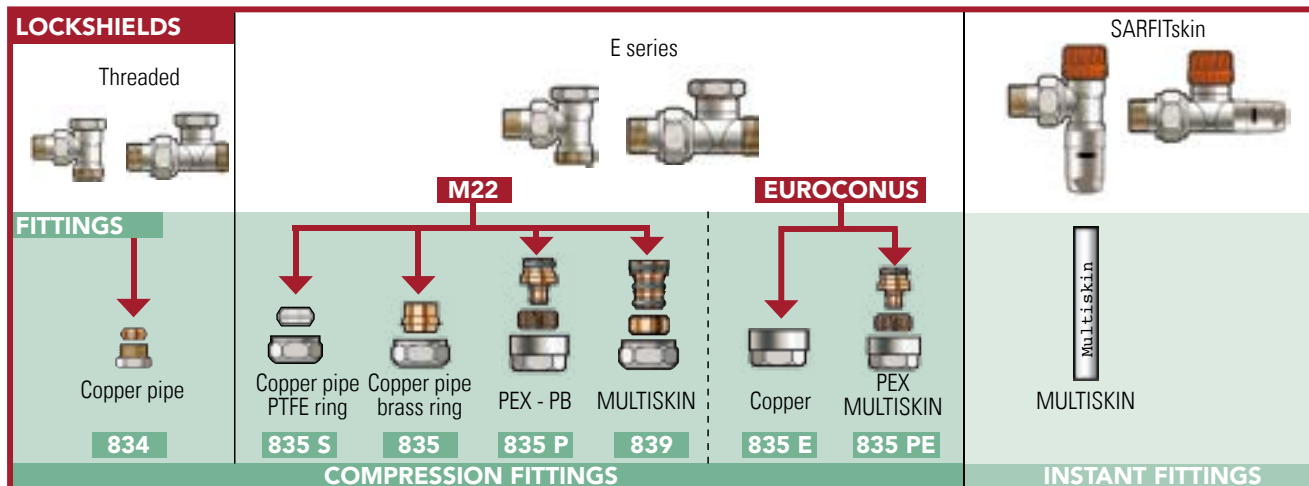


# LOCKSHIELD

## RANGE OVERVIEW

Reference	Shape	Isolation & setting	Drain-off	Memory	Pipe connection	O-ring on radiator union	3/8"	1/2"	3/4"	1"
2428	Angle	x			Female		1.55	2.2	4.2	8
2428E	Angle	x			Male M22		1.55	2.2		
2428JT	Angle	x			Female	x	1.55	2.2		
2428EJT	Angle	x			Male M22	x	1.55	2.2		
2429	Straight	x			Female		0.9	1.8	3	5.5
2429E	Straight	x			Male M22			1.8		
2429E	Straight	x			Euroconus 3/4"			1.8		
2429JT	Straight	x			Female	x	0.9	1.8		
2429EJT	Straight	x			Male M22	x	0.9	1.8		
2438JT	Angle	x			Female	x	1.55	3		
2438EJT	Angle	x			Male M22	x	1.55	3		
2439JT	Straight	x			Female	x		1.8		
2439EJT	Straight	x			Male M22	x	0.9			
2428CU	Angle	x			Cu 15mm			2.2		
2429CU	Straight	x			Cu 15 mm			1.8		
3428	Angle	x		x	Female		1.55	2.2	4.2	
3428E	Angle	x		x	Male M22			2.2		
3429	Straight	x		x	Female		0.9	1.8	3	
3429E	Straight	x		x	Male M22			1.8		
3429E	Straight	x		x	Euroconus 3/4"			1.8		
4468	Angle	x	x	x	Female		2	2.2	2.2	
4469	Straight	x	x	x	Female		1	1.8	2.2	
3428CU	Angle	x		x	Cu 14mm			2.2		
3429CU	Straight	x		x	Cu 14 mm			1.8		
SFS2428	Angle				PushFit 16x2			2.2		
SFS2429	Straight				PushFit 16x2			1.8		
428	Angle	x			Female					8

## INSTALLATION



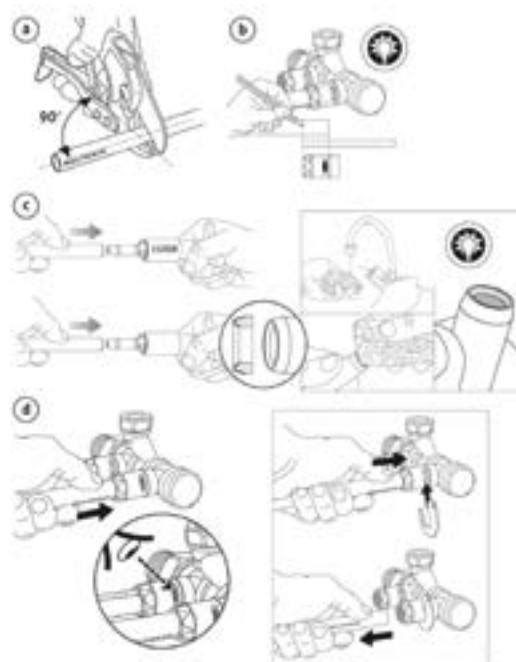
## LOCKSHIELD SARFITSKIN CONNECTION

To check the position of the pipe (mainly wall connection) it is advisable to mark the fitting socket on the tube (b). This can be done by marking the nut. Then calibrate the Comap gauge (article code: 11202B) (c). The pipe can be slid into the connection. It is advisable to moisten the pipe to allow it to fit into place more easily.

When the pipe is visible in the control window, FITSKIN connection is complete (d). No other tools are necessary. The connection can be dismantled without damaging the pipe using the dismantling key (article code: 4698100).

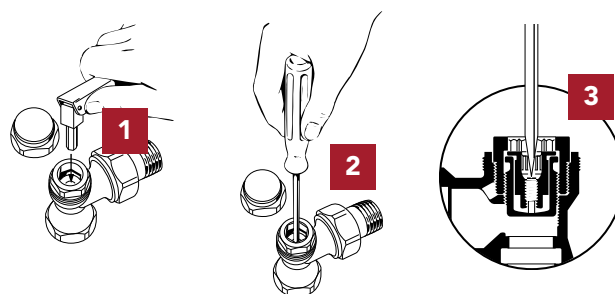
### Warning!!

Only Comap MultiSKIN and FIT pipes with red marks can be connected to the SARFITSKIN Lockshield. The 10-year guarantee is not valid for other pipes connected to the FITSKIN fitting.

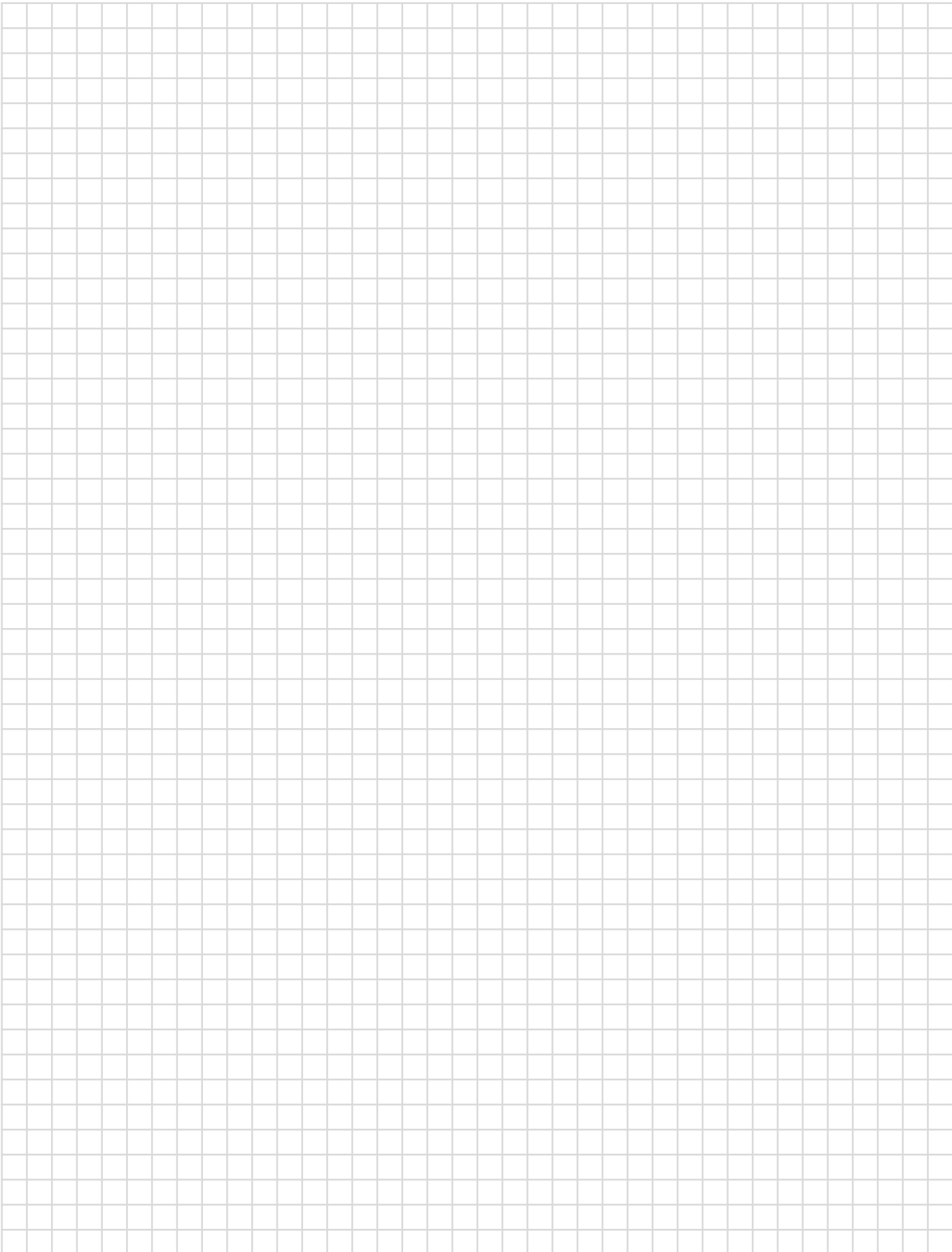


## SETTING

- 1 Remove the plug. Turn the needle clockwise until the stop, using an adapted key (Allen or 334 tool). Then unscrew (anti-clockwise) by the required number of turns (see curves) to achieve the desired Kv-value.
- 2 For memory-equipped devices, a flat screwdriver should be used.
- 3 Screw the memory locking screw to a full stop.

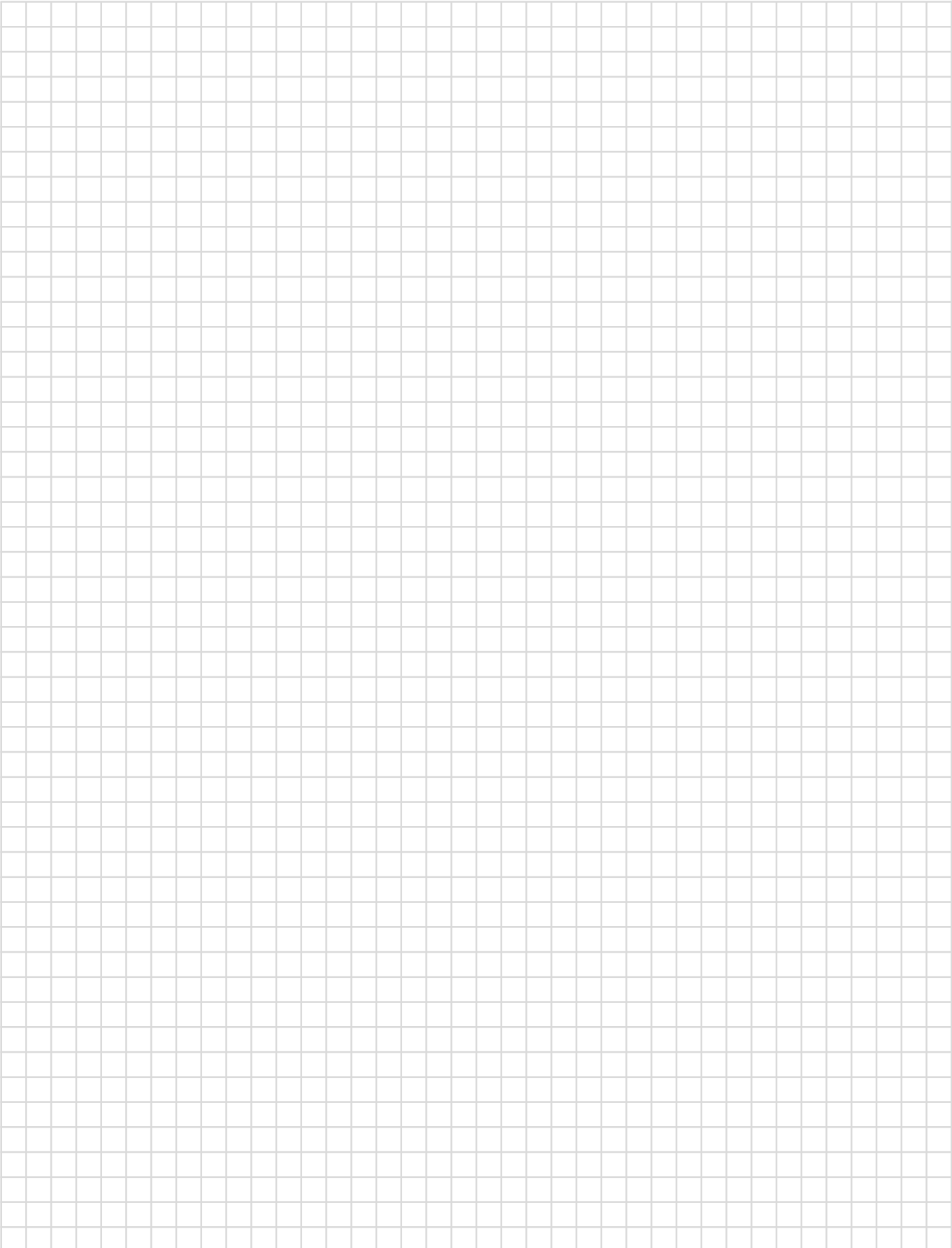


The setting curves can be found in the 'Technical Curves Book'.





# NOTES



# Contact

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