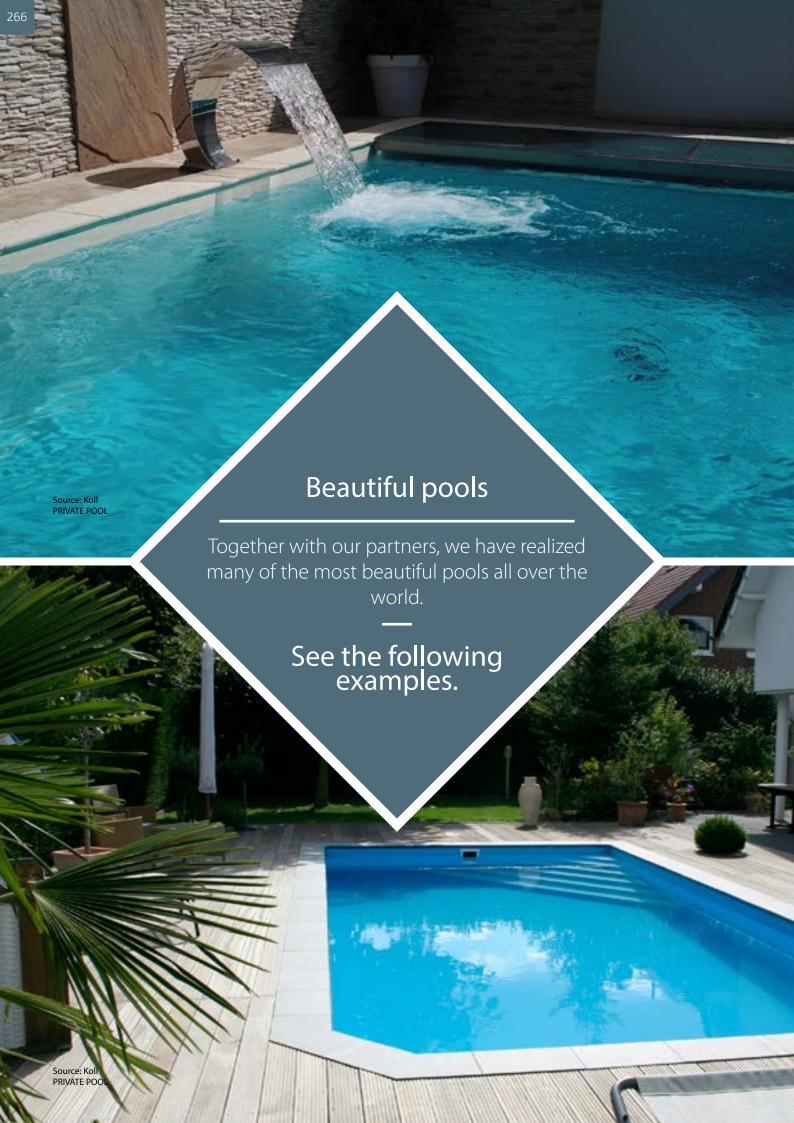


Heating systems

P. 267 Overview

CONTENT

- P. 268 HKR series "Black-Line SI"
- P. **270** HKR series "White-Line S" P. **272** HKS series "classic-line i"
- P. 275 Plate heat exchangers
- P. 276 Pool water heat exchanger HWT
- P. 276 Pool water heat exchanger TWT
- P. 277 Pool water heat exchanger SHWT



OVERVIEW

Heating systems

	BLACK LINE FULL INVERTER	WHITE LINE	CLASSIC LINE I INVERTER
			83
Capacity (kW)*	5 models: 10 to 25	4 models: 9 to 18	6 models: 40 to 100
COP **	4 - 13	6	4 - 13
Compressor	Full inverter	Single-stage	Full inverter
Refrigerant	R410A/ R32	R410/R32	R410/R32
Pool volume (m³)	30 - 90	30 - 60	40 - 100
Operating range (air)	0 to 35 ℃	5 to 35 ℃	5 to 35 ℃
1-phase	✓	✓	✓
3-phase	✓	✓	✓
Strengths	 Plain and simple design 3-season heat pump Branded compressor with inverter control Also suitable for saltwater pools 	Plain and simple design Also suitable for brine swimming pools	High quality stainless steel housing Branded compressor with inverter control Exceptionally quiet Also suitable for brine swimming pools
Page	268	270	272

^{*} Conditions: air 19°c, water 26°c, humidity 80% (Pool covered, thermal cover). Usage period approx. mid-May to mid-September, daily filter pump runtime approx. 10-12 hours. Different environmental conditions may require custom design, your local pool specialist dealer will be happy to assist you.

HKR series "Black-Line SI"







Quiet as a whisper

PRODUCT INFORMATION

- Removable control panel Titanium heat exchanger with 10 year warranty
- White steel sheet housing
- Eco-friendly high-performance refrigerant R410A / R32 Extremely low noise level 28 36 dB(A)

- Modulating operation, resulting in high COP Brand-name compressor with inverter control Auto-defrost system with hot gas defrosting Automatic heating and cooling

- 3-season heat pump
- + Also suitable for brine swimming pools and ponds



Available starting spring 2025

KR series "white-line si" full inverter

Designed as a full inverter heat pump, the machines modulate in various power ranges depending on heat demand. As a result, the "white-line SI inverter" heat pumps achieve a high COP value and pleasantly low noise

The "white-line inverter" product range includes 5 power sizes from 10 to 25 kW. The power-regulated operating mode and standard hot gas defrosting ensure reliable operation down to 0°C outdoor temperature.

The integrated digital control allows combination with other energy sources and enables fully automatic heating and cooling of your pool.

With a standard removable control panel, you can optionally relocate the control unit, allowing you to operate the heat pump from outside your plant room, for example. It is possible to connect multiple "white-line SI" models in a cascade to heat very large pool systems.

Technical data					
Horizontal models HKR SI white line inverter	HKR SI 100/R32	HKR SI 140/R32	HKR SI 170/R32	HKR SI 200/R32	HKR SI 250
Heating capacity A15/W26 °C (kW)	2.3 - 7.0	2.3 - 9.0	3.8 - 12.6	4.6 - 14.5	5.7 - 20.0
Heating capacity A19/W26 °C (kW)	2.2 - 8.0	2.3 - 10.5	3.8 - 14	4.6 - 17.5	5.7 - 21.5
Heating capacity A26/W26 °C (kW)	2.2 - 9.0	2.3 - 12.5	3.8 - 16	4.6 - 19	5.7 - 24.5
Nominal current consumption (A)	7.0	9.21	13.0	17.3	7.9
Voltage supply (V/Hz)		230	/50		400 / 50
COP depending on operating conditions, approx.			> 4-13		
Electrical power consumption (kW)	0.16 - 1.6	0.21 - 2.12	0.3 - 3.0	0.37 - 3.84	1.0 - 4.8
Fuse protection	1 pol. C 13A	1 pol.	C 16A	1 pol. C 20A	3 pol. C 16A
Connections adhesive fitting			D 50 mm		
Sound pressure level at 1/10m Full load/Partial load, approx. dB(A)	50/30 40/20	52/32 42/22	53/33 44/24	56/36 45/25	58/39 46/27
Sound power level 1m Hemisphere full load/partial load, approx. dB(A)	58/38	60/40	61/41	64/44	66/47
Refrigerant R32/GWP 675			R410A/R32		
Compressor		Rolling	piston		Rolling piston/ Scroll
Water flow rate (m³/h)	3.2	4.2	5.3	6.6	8.0
Pressure drop heat exchanger (kPa)	4.0	4.2	5.0	6.0	8.0
Dimensions (LxWxH in mm)		x 380 520	1090 x 440 x 780	1210 x 510 x 880	1166 x 440 x 1280
Weight (kg)	45	46	66	70	113
Pool size with thermal cover* (up to approx. m ³ *)	30	40	50	60	70

^{*} All values are based on an air temperature of +19°C, with pool water at 26°C (pool covered, thermal cover). Usage period approx. mid-May to mid-September, daily filter pump runtime approx. 10-12 hours. Different environmental conditions may requicustom design, your local pool specialist dealer will be happy to assist you. Recommended operating range for the white-line SI is from +5°C to +35°C. Caution: Risk of frost damage to water-carrying parts at sub-zero temperatures.

DELIVERY OF FULL INVERTER HORIZONTAL SERIES INCLUDES

- Unit in stainless steel housing
- 4 rubber adjustable feet
- Winter cover
- PVC connection fittings D 50
- 1x condensate drain plug
- 4x condensate blind plugs
- Operating instructions

PRICES					
Model	Voltage (V)	Heating capacity (kW)	Pool size up to (m ³)	ART. NO.	
HKR SI 100	230	9	30	0970-790-00	C
HKR SI 140	230	12.5	40	<u> </u>	C
HKR SI 170	230	16	50	0970-776-00	C
HKR SI 200	230	19	60	<u> </u>	C
HKR SI 250	400	24.5	70	<u>></u> 0970-792-00	C

All prices plus freight charges, carriage paid for net goods value of 2,500 \in or more

** Discontinued model

ACCESSORIES DESCRIPTION ART. NO. FLOOR BRACKETS (PAIR) 0971-003-00 • Price per pair **CONDENSATE TRAY** 🤴 Z 19033 · Please specify model Delivered without floor bracket or wall mount Unit price WALL MOUNT 600MM (PAIR) 🥦 Z 19002 • Incl. adhesive dowels (without condensate tray) Load-bearing wall required We recommend a condensate tray for wall mounting WALL MOUNT DITTO 900MM 🤴 Z 19003 • Price per pair WIFI CONTROLLER INVERTER Z 19018 Including Y-cable and 5 m extension cableUnit price

HKR series "White-Line S"





PRODUCT INFORMATION

- Removable control panel Titanium heat exchanger with 10 year warranty White steel sheet housing Eco-friendly advanced refrigerant R410A

- Branded compressor Auto-defrost system with hot gas defrosting
- Automatic heating and cooling
 Also suitable for brine swimming pools and ponds



Coming in black

The robust technology integrated into the white steel sheet housing ensures a comfortable extension of the pool season from spring to autumn.

A selection of 5 white line S models from 9 to 20 kW covers all common pool

The integrated digital control allows a fully automatic heating and cooling of your pool. In addition, the optionally available wall-mounted housing makes it possible to relocate controller and heat pump, for example to operate them from your plant room.

The two-part interior of the device houses a corrosion-resistant titanium heat exchanger, a brand-name compressor, and low-noise fans, which, through their optimal interaction, ensure efficient operation.

A standard hot gas defrosting system ensures operation even at somewhat colder outdoor temperatures, as typically encountered in spring and autumn.

Technical data				
Horizontal models HKS i classic inverter	HKR S 100 white-line	HKR S 140 white-line	HKR S 160 white-line	HKR S 200 white-line
Heating capacity A15/W26 °C (kW)	6.5	9.0	9.5	13.0
Heating capacity A19/W26 °C (kW)	8.1	10.5	13.0	16.8
Heating capacity A26/W26 °C (kW)	9.0	12.0	15.0	18.0
Nominal current consumption (A)	7.2	9.6	11.7	4.4
Voltage supply (V/Hz)		230 / 50		400 / 50
COP depending on operating conditions, approx.		>	6	
Electrical power consumption (kW)	1.45	1.98	2.45	2.9
Fuse protection	1 pol.	C 16A	1 pol. C 20A	3 pol. C 16A
Connections adhesive fitting		D 50) mm	
Sound pressure level at 1/10m Free field, approx. db(A)	38/52	39/52	39/54	40/56
Sound power level 1m Hemisphere, approx. dB(A)	6	0	62	64
Refrigerant R410A/GWP 2088/CO2e(t)	0.8 kg/1.67	1.0 kg/2.08	1.1 kg/2.29	1.6 kg/3.34
Compressor		Rolling piston		Rolling piston/Scroll
Water flow rate (m³/h)	3.0	4.5	5.3	6.0
Pressure drop heat exchanger (kPa)	3.2	6.0	10.0	15.0
Dimensions (LxWxH in mm)		952 x 360 x 610		1130 x 460 x 860
Weight (kg)	50	65	75	98
Pool size with thermal cover* (up to approx. m³*)	30	40	50	60

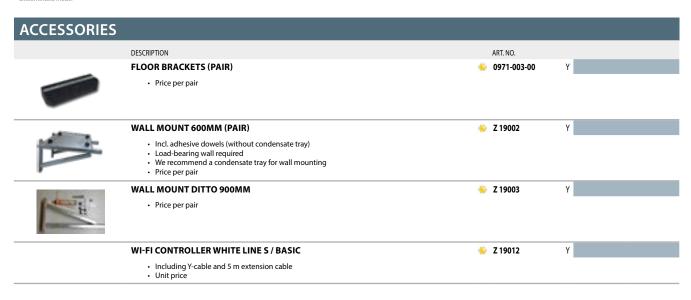
DELIVERY OF FULL INVERTER HORIZONTAL SERIES INCLUDES

- Unit in painted galvanized steel sheet housing, white
- 4 rubber adjustable feet
- Winter cover, PVC
- Connection fittings D 50
- 1x condensate drain plug
- 4x condensate blind plugs
- AP housing, for external mounting
- Control panel
- 5 m cable extension for external control panel

PRICES				
Model	Voltage (V)	Heating capacity (kW)	Pool size up to (m ³)	ART. NO.
HKR S 100 White Line	230	9	30	<u>●</u> 0970-771-00 C
HKR S 140 White Line	230	12	40	№ 0970-772-00 C
HKR S 160 White Line	230	15	50	№ 0970-773-00 C
HKR S 200 White Line	400	18	60	6 0970-774-00 C

All prices plus freight charges, carriage paid for net goods value of 2,500 € or more

^{**} Discontinued model



HKS series "classic-line i"

Quiet as a whisper







PRODUCT INFORMATION

- External control panel available
 Titanium heat exchanger with 10 year warranty
 High quality stainless steel housing
 Sensor and pressure-controlled cooling circuit, effective hot gas defrosting

- Extremely low noise level 22 36 dB(A)

 Modulating operation, resulting in high COP

 Brand-name compressor with full inverter control

 Can even be used at sub-zero temperatures due to large heat exchanger
- Automatic heating and cooling
- 3-season heat pump
- Also suitable for brine swimming pools and ponds

The evolution of the "classic line i" series focused on noise minimization and

This has resulted in one of the most silent heat pumps on the market, which generates a noise emission of only 22-36 dB(A) in partial load operation.

Designed as a 3-season heat pump, the unit modulates in various power ranges depending on the heat demand.

As a result, the "classic-line i" heat pumps achieve a high COP value in partial load operation and pleasantly low noise levels. In the event of any noise concerns during use, "classic-line i" models up to size 180 allow for onsite adjustment of power output and consequently, sound levels, even subsequently.



The "classic line i" product range includes power sizes from 11 to 30 kW. The power-regulated operating mode and a standard hot gas defrosting system, which works pressure and temperature-controlled in contrast to other systems, ensures safe operation even at somewhat colder outdoor

The integrated digital control allows combination with other energy sources and enables fully automatic heating and cooling of your pool. The control unit can also be operated from your plant room using an optionally available

It is possible to connect multiple "white-line i" models in a cascade to heat very large pool systems.

Technical data						
Horizontal models HKR i classic inverter	HKS 110 i	HKS 140 i	HKS 180 i	HKS 180 i	HKS 230 i	HKS 300 i
Heating capacity A10/W26 °C (kW)	2.3 - 8.0	3.8-10.7	4.6 -	14.5	5.7 - 16.0	6.8-20.0
Heating capacity A15/W26 °C (kW)	2.3 -10.0	3.8-12.8	4.6 -	15.5	5.7 - 20.0	6.8-23.5
Heating capacity A19/W26 °C (kW)	2.3 -11.0	3.8-14.0	4.6 -	18.0	5.7 - 23.0	6.8-26.0
Heating capacity A26/W26 °C (kW)	2.3 -12.5	3.8-17.0	4.6 -	20.0	5.7 - 29.0	6.8-28.5
Nominal current consumption (A)	9.5	9.6	17	4.4	7.9	9.5
Voltage supply (8V/Hz)		230 / 50			400 / 50	
COP depending on operating conditions, approx.			> 4	- 13		
Electrical power consumption (kW)	0.21 - 2.12	0.3-3.02	0.37 - 3.94	0.6 - 3.94	1.0-4.0	1.0 - 5.6
Fuse protection	1 pol.	C 16A	1 pol. C 20A		3 pol. C 16A	
Connections adhesive fitting			D 50	mm		
Sound pressure level at 1/10m Free field, approx. db(A)	52 / 32 32 / 22	53 / 33 33 / 24	56 / 36 /		58 / 39 36 / 27	58 / 48 39 / 28
Sound power level 1m Hemisphere (full load/partial load), approx. dB(A)	60/40	60/41	64/	44	66	/47
Refrigerant R410A/GWP 2088/CO2e(t)	0.7 kg/1.45	1.1 kg/2.29	1.2 kg/2.5	1.2 kg/2.5	2.0 kg/1.17	2.95 kg/6.15
Compressor		Rolling piston			Rolling piston/Scrol	
Water flow rate (m³/h)	4.2	5.3	6.	6	8	10
Pressure drop heat exchanger (kPa)	4.2	5	6)	8	11
Dimensions (LxWxH in mm)	1000 x 415 x 770					1166 x 440 x 1280
Weight (kg)	70	86	87	90	113	115
Pool size with thermal cover* (up to approx. m ³ *)	40	50	60	60	80	80-90

^{*} All values are based on an air temperature of +19°C, with pool water at 26°C (pool covered, thermal cover). Usage period approx. mid-May to mid-September, daily filter pump runtime approx. 10-12 hours. Different environmental conditions may requested metalogin, which we will be happy to assist you with. Recommended operating range for the classic-line is from 0°C to +35°C, with technically possible operating limits from -15°C to +35°C. Caution: Risk of frost damage to water-carrying parts at sub-zero temperatures.

DELIVERY OF FULL INVERTER HORIZONTAL SERIES INCLUDES

- Unit in stainless steel housing
- 4 rubber adjustable feet
- Winter cover
- PVC connection fittings D 50
- 1x condensate drain plug
- 4x condensate blind plugs
- Operating instructions

PRICES					
Model	Voltage (V)	Heating capacity (kW)	Pool size up to (m³)	ART. NO.	
HKS 110 i	230	12.5	40	0970-710-00	C
HKS 140 i	230	17	50	<u>©</u> 0970-707-00	C
HKS 180 i	230	20	60	0970-708-00	C
HKS 180 i	400	20	60	<u>©</u> 0970-709-00	C
HKS 230 i	400	29	80	<u>></u> 0970-711-00	C
HKS 300 i	400	28.5	80-90	<u>></u> 0970-713-00	C

All prices plus freight charges, carriage paid for net goods value of 2,500 \in or more

** Discontinued model

ACCESSORIES DESCRIPTION ART. NO. FLOOR BRACKETS (PAIR) 0971-003-00 • Price per pair **CONDENSATE TRAY** 🤴 Z 19033 · Please specify model Delivered without floor bracket or wall mount Unit price WALL MOUNT 600MM (PAIR) Z 19002 • Incl. adhesive dowels (without condensate tray) · Load-bearing wall required We recommend a condensate tray for wall mounting WALL MOUNT DITTO 900MM Z 19003 • Price per pair WIFI CONTROLLER INVERTER 🐞 Z 19018 • Including Y-cable and 5 m extension cable Unit price





Plate heat exchangers





PRODUCT INFORMATION

These plate heat exchangers are intended for heating swimming pool water with hot water. Thanks to the large exchange surface they are perfectly suitable for using low temperature heating systems, such as solar heating systems, geothermal plants, heat pumps and similar alternative and innovative heating systems.

+ Material: stainless steel V4A
+ Version: botted
+ Maximum operating pressure 10 har

- + Maximum operating pressure 10 bar
- Maximum operating temperature 90°C
- + Installation in the bypass to the filter system and before the injection points



	Capacit Heatin		Pump cap	acity (m³/h)	Pressure	loss (bar)	Connectio	on (NW/inch)			
Model	55°C	45°C	Heating	Pool water	Heating	Pool water	Heating	Pool water		ART. NO.	
GPWT 30	32	23	1.6	1.6	0.17	0.18	1 1/4	1 1/4	ŵ	0970-903-00	В
GPWT 50	53	39	2.6	2.8	0.16	0.19	1 1/4	1 1/4	Ė	0970-904-00	В
GPWT 70	74	54	3.2	4.0	0.10	0.16	1 1/4	1 1/4	Ė	0970-901-00	В
GPWT 100	100	70	4.5	4.6	0.21	0.23	1 1/4	1 1/4	1	0970-907-00	В
GPWT 120	120	84	5	6	0.19	0.28	1 1/4	1 1/4	1	0970-908-00	В
GPWT 30 Titanium	32	23	1.6	1.6	0.17	0.18	1 1/4	1 1/4	1	0970-915-00	В
GPWT 50 Titanium	53	39	2.6	2.8	0.16	0.19	1 1/4	1 1/4	1	0970-914-00	В
GPWT 70 Titanium	74	54	3.2	4.0	0.10	0.16	1 1/4	1 1/4	1	0970-912-00	В
GPWT 100 Titanium	100	70	4.5	4.6	0.21	0.23	1 1/4	1 1/4	1	0970-913-00	В
GPWT 120 Titanium	120	84	5	6	0.19	0.28	1 1/4	1 1/4	1	0970-909-00	В

ACCESSORIES



ACCESSORIES HEAT EXCHANGERS HWT AND NWT

Heat-exchanger rubber hose assembly kit for connection

NW 50	#	0970-687-00	D
NW 60		0970-688-00	D



HEAT EXCHANGER ACCESSORIES

1 pair of clamps for heat exchanger

d 125 for wall fastening, for HWT 35 / 65, NWT 18, TWT 35 / 65, SHWT 9 / 18	*	0970-689-00	D
d 160 for wall fastening, for HWT 93 / 122 / 182, NWT 35		0970-690-00	D

1 INFORMATION

PRODUCT

We can offer you other plate heat exchangers in stainless steel or titanium with an output of up to 1200 KW at attractive prices.

Please send your project-related request.

Pool water heat exchanger HWT





PRODUCT INFORMATION

Heat exchanger in stainless steel (V4A), electropolished, for heating the pool water via connection to a central heating system.

Operating pressure: heating side 10 bar, pool water side 3 bar.

Design: housing with welded coil and immersion sleeve for an electronic measurement of the temperature. Internal, build-in diversion of water for an optimal heating of the pool water.



	Capacity in kW Heating flow		Pump cap	Pump capacity (m³/h)		Pressure loss (bar)		Connection (NW/inch)			
Model	90°C	60°C	Heating	Pool water	Heating	Pool water	Heating	Pool water		ART. NO.	
HWT 35	42	24	2	10	0.18	0.10	3/4	50 / 1½	*	0970-674-00	D
HWT 65	76	43	3	12	0.15	0.22	1	50 / 1½	*	0970-675-00	D
HWT 93	105	60	5	15	0.40	0.22	1	63 / 2	1	0970-676-00	D
HWT 122	140	80	2x3	20	0.25	0.60	1	63 / 2	1	0970-677-00	D
HWT 182	209	119	2x5	25	0.30	1.00	1	63 / 2	1	0970-678-00	D

HEATING SYSTEMS

Pool water heat exchanger TWT





PRODUCT INFORMATION

Heat exchanger in TITANIUM, silver finish, for heating the pool water via connection to a central heating system.

Operating pressure: heating side 10 bar, pool water side 3 bar.

Design: housing with welded coil and immersion sleeve for an electronic an optimal heating of the pool water.



	Capacity in kW Heating flow		Pump cap	Pump capacity (m³/h)		Pressure loss (bar) Conr		n (NW/inch)			
Model	90°C	60°C	Heating	Pool water	Heating	Pool water	Heating	Pool water		ART. NO.	
TWT 35	42	24	3	12	0.2	0.10	3/4	11/2	1	0970-681-00	C
TWT 65	76	43	4	15	0.2	0.18	1	1½	1	0970-682-00	C
TWT 93	105	60	6	18	0.4	0.22	1	2	1	0970-683-00	C

Pool water heat exchanger SHWT





PRODUCT INFORMATION

Solar heat exchanger in stainless steel (V4A), electropolished, for heating the pool water via connection to a solar heating system.

Operating pressure:

- + Heating side 10 bar+ Pool water side 3 bar

Design: housing with welded coil and immersion sleeve for an electronic measurement of the temperature. Internal, build-in diversion of water for



	Capacity in kW Heating flow		Pump cap	Pump capacity (m³/h)		Pressure loss (bar)		Connection (NW/inch)			
Model	90°C	60°C	Heating	Pool water	Heating	Pool water	Heating	Pool water		ART. NO.	
SHWT 9	42	10	2x2	10	0.18	0.10	3/4	50 / 1½	1	0970-684-00	D
SHWT 18	42	18	2x2	10	0.22	0.18	1	50 / 1½	1	0970-685-00	D