

# PRE-QUALIFICATION



**KLUDI**  

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**RAK**

*"We Stand for Water Saving"*



QUALITY  
REFLECTS  
IN EVERY  
DETAILS



**KLUDI**  

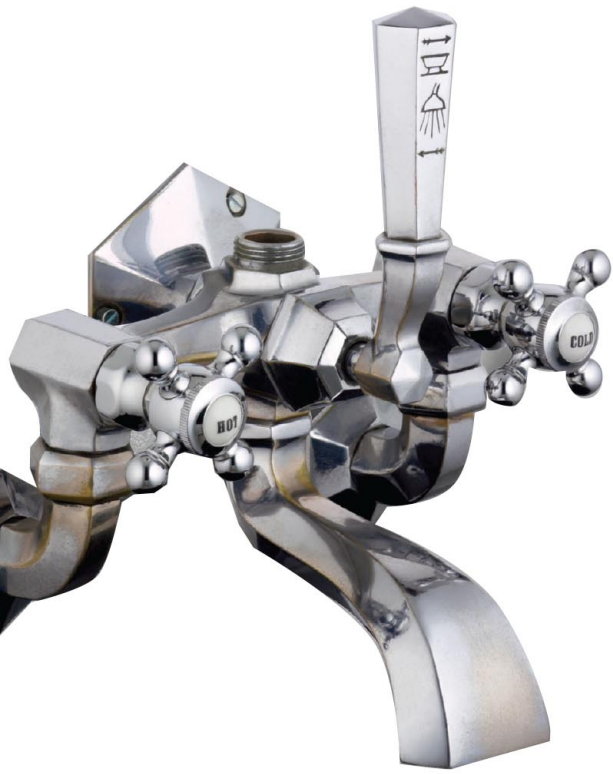
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**RAK**

*"We Stand for Water Saving"*







# 1926

## UPHOLDING THE HERITAGE OF QUALITY SINCE

The humble origins of a successful business conglomerate - KLUDI dates back to 1926, where the concept of quality and sustainable bath fittings for the users' comfort and convenience took shape in a production workshop in Germany. The idea evolved from KLUDI's core mission, to make every household innovative and add value to the lives of people in the community.

KLUDI are the experts in bathroom and kitchen fittings and total bathroom solutions. With over 90 years of experience in the design of fittings, the design experts blend shape and function to create a spectrum of precision-perfect products. KLUDI's exclusive product portfolio of fittings is unique in design and conserves water & energy. Reputed for their aesthetic styles, functionality and sustainable features, KLUDI fittings continue to be a source of inspiration even today.

To cater to the quality-conscious customers in the United Arab Emirates and the Middle East and their requirements for elegant and functional quality fittings, RAK Ceramics, the world's largest ceramic manufacturer in collaboration with KLUDI Germany, the world-leaders in mixers, showers and accessories established KLUDI RAK in the Emirate of Ras Al Khaimah.

Together with KLUDI RAK's 10 years of regional expertise, skilled craftsmen, a manufacturing unit equipped with advanced European technology and backed by KLUDI's 9 decades of expertise in kitchen and bath fittings, KLUDI RAK has all the strengths combined to design and manufacture premium water-efficient products that are durable and consistent in quality.

KLUDI RAK fittings are the preferred product of choice for commercial, industrial and residential sectors across UAE. Moreover are recommended by architects, interior decorators and project planners. KLUDI RAK is thus poised to offer top-notch kitchen and bathroom products to its



# QUALITY REFLECTS IN EVERY DETAIL

Makers of beautifully crafted, high quality kitchen and bathroom products KLUDI RAK is a brand to reckon with. Strategically located in the Emirate of Ras Al Khaimah, KLUDI RAK upholds the brand promise by consistently delivering top-grade products to its loyal customers.

Accredited with various certifications for quality, conformity and promoting sustainability, the state-of-the-art manufacturing plant of KLUDI RAK integrates the latest European technical innovations in its development process, while adhering to sustainable practices by creating energy and water saving products, besides having superior quality raw materials procured from Europe to maintain consistency in the quality of the products at all times; Ultimately, the finest range of bathroom and products are directly supplied from the KLUDI RAK factory across GCC, the Middle East, Africa and Indian subcontinent.



هيئة الإمارات للمواصفات والمقاييس  
Emirates Authority for Standardization and Metrology



وزارة الأشغال العامة  
MINISTRY OF PUBLIC WORKS



مجلس أبوظبي للجودة والمطابقة  
ABU DHABI QUALITY AND CONFORMITY COUNCIL



الهيئة السعودية للمواصفات والمقاييس والجودة  
Saudi Standards, Metrology and Quality Org.



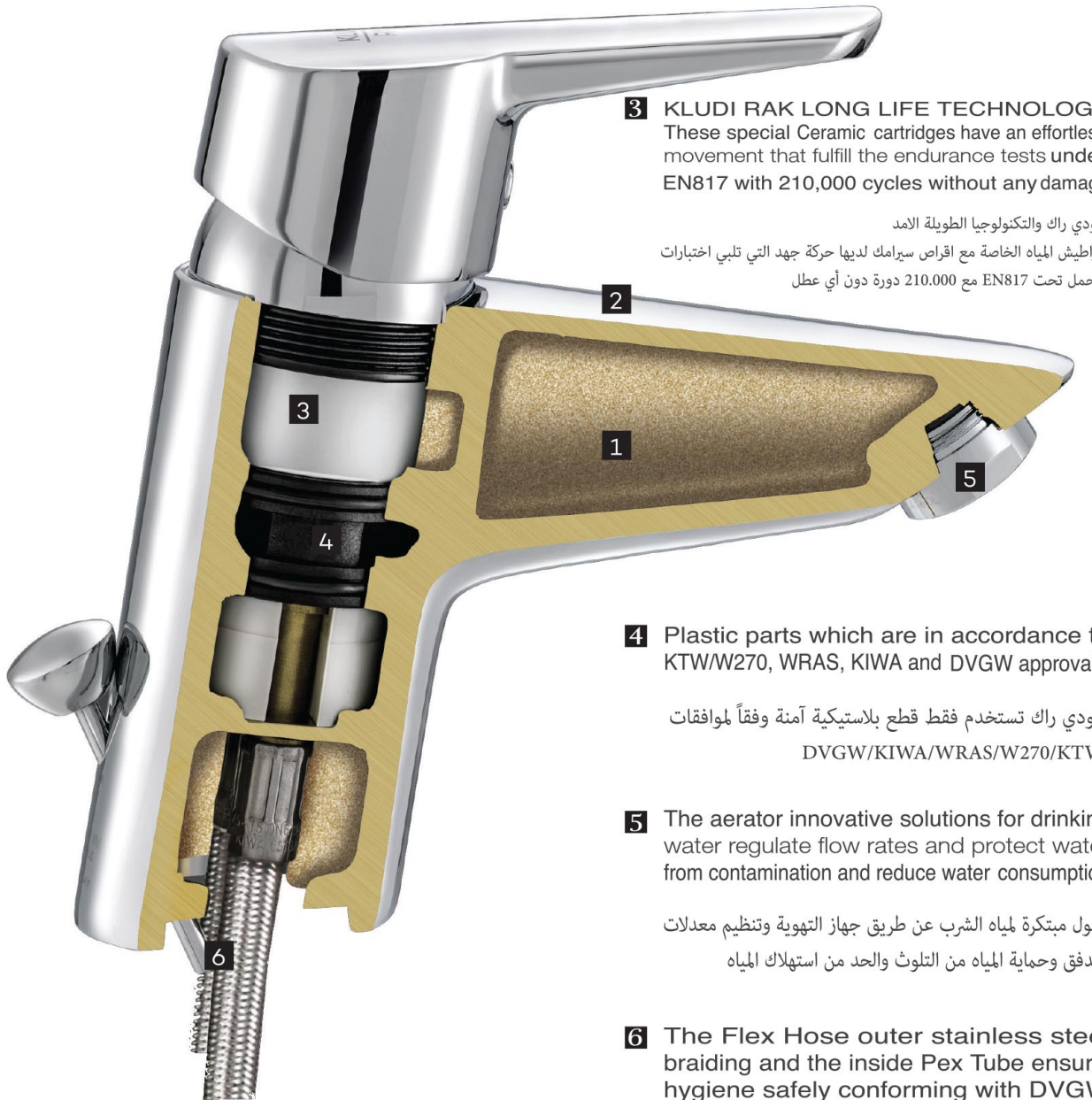


- 1** KLUDI RAK uses Brass as per European Drinking water standard.

كلودي راك تستخدم نحاس تصنع الخلاطات وفقاً لمعايير مياه الشرب الأوروبية

- 2** KLUDI RAK maintains a 3-layer plating thickness of Semi bright Nickel, bright Nickel and Chrome - measuring minimum 12.3 microns

كلودي راك تحافظ على ثلاث طبقات من طلاء النيكل الشبه لامع , واللامع وطبقة من الكروم بهدف الحصول على سماكة 12.3 ميكرون من الطلاء



- 3** KLUDI RAK LONG LIFE TECHNOLOGY These special Ceramic cartridges have an effortless movement that fulfill the endurance tests under EN817 with 210,000 cycles without any damage

كلودي راك والتكنولوجيا الطويلة الامد خراطيش المياه الخاصة مع اقراص سيرامك لديها حركة جهد التي تلبى اختبارات التحمل تحت EN817 مع 210.000 دورة دون أي عطل

- 4** Plastic parts which are in accordance to KTW/W270, WRAS, KIWA and DVGW approvals

كلودي راك تستخدم فقط قطع بلاستيكية آمنة وفقاً لموافقات DVGW/KIWA/WRAS/W270/KTW

- 5** The aerator innovative solutions for drinking water regulate flow rates and protect water from contamination and reduce water consumption

حلول مبتكرة لمياه الشرب عن طريق جهاز التهوية وتنظيم معدلات التدفق وحماية المياه من التلوث والحد من استهلاك المياه

- 6** The Flex Hose outer stainless steel braiding and the inside Pex Tube ensure hygiene safely conforming with DVGW KIWA/ CSTB/WRAS certificates

كلودي راك تستخدم خراطيم مياه مرنة من السانلس استيل مقاومة للصدأ لضمان النظافة بمطابقة DVGW/KIWA/CSTB/WRAS





<b>Betriebsnorm</b> Works-standard	<b>KBN 92</b>	
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### Spezifikation für Messing – entzinkungsbeständig, wasserführend

Specification for brass – dezincification resistant, water-bearing

### Fertigungsverfahren Kokillenguss

Manufacturing method casting

#### 1. Purpose:

In German (European) drinking water installations all used parts and additives have to comply with the generally acknowledged rules of technology, in order to fulfil hygienic requirements and aspects of safety.  
This works-standard ensures that all brass components delivered by Kludi conform to those rules.

#### 2. Norms and regulations:

According to the Drinking Water Ordinance (TrinkwV 2001) only the following materials are allowed and to be used for the above described application

#### 1. Zweck:

In den deutschen (europäischen) Trinkwasser-Installationen dürfen nur Bauteile und Hilfsstoffe eingesetzt werden, die den anerkannten Regeln der Technik entsprechen und damit Hygieneanforderungen und Sicherheitsaspekte gewährleisten.

Diese KBN soll gewährleisten, dass alle Messingwerkstoffe, die Kludi in Verkehr bringt, dieses erfüllen.

#### 2. Normen und Vorschriften:

Gemäß Trinkwasserverordnung (TrinkwV 2001) sind nur folgende Werkstoffe zulässig und für die oben beschriebene Anwendung zu verwenden

CuZn36Pb-C		CC770S	
	Element (element)	min. [%]	max. [%]
Cu	Kupfer (copper)	62,0	64,0
Al	Aluminium (aluminium)	0,5	0,7
Fe	Eisen (iron)	0,00	0,30
Mn	Mangan (manganese)	0,00	0,1
Ni	Nickel (nickel)	0,0	0,2
Pb	Blei (lead)	0,2	1,6
Sn	Zinn (stannous)	0,0	0,3
Zn	Zink (zinc)	Rest	rest
As	Arsen (arsenic)	0,04	0,14

2

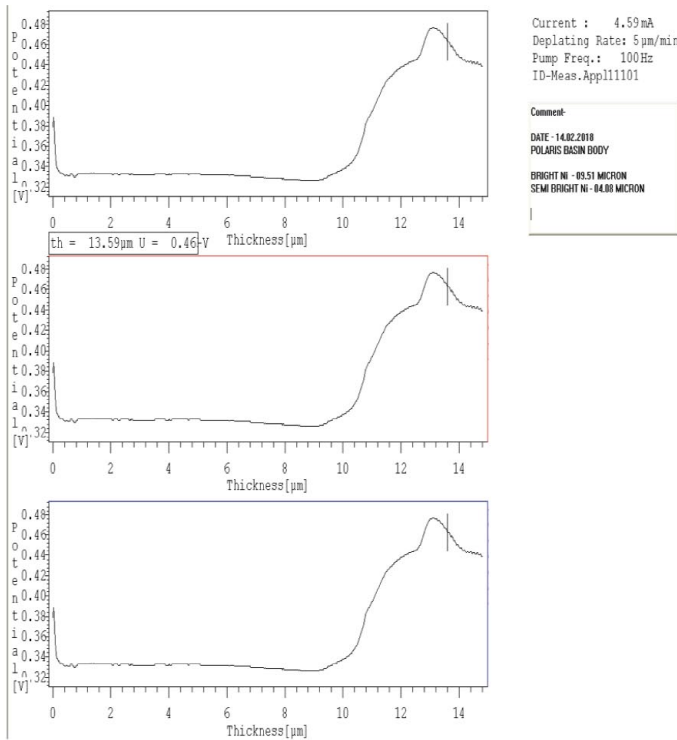
KLUDI RAK maintains a 3-layer plating thickness



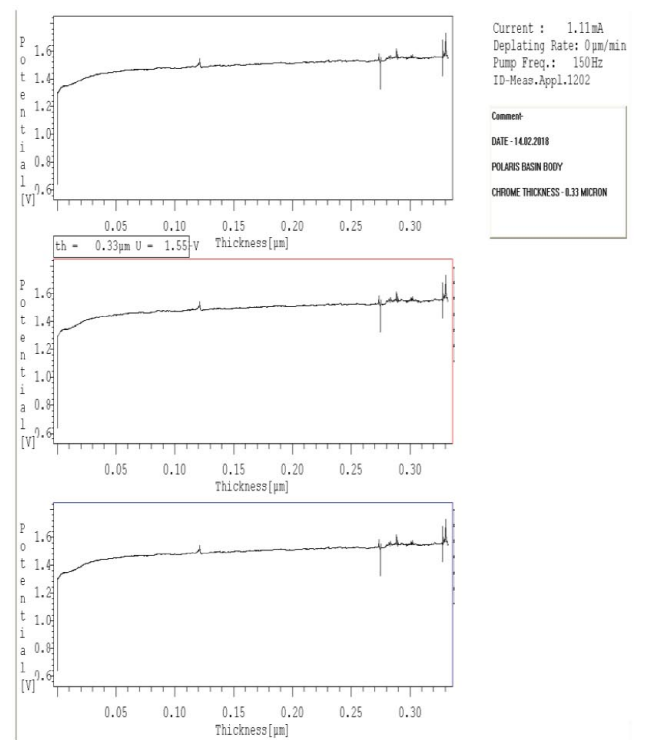
KLUDI RAK Electro plating plant is one of the biggest in the region. The plant is fully automated and computer controlled which enables to maintain a 3-layer plating thickness of Semi bright Nickel, Bright Nickel and Chrome- measuring minimum 12.3 microns



## NICKEL THICKNESS



## CHROME THICKNESS





## TECHNICAL CHARACTERISTICS OF THE CERAMIC DISCS:

Material:  $Al_2O_3$

Surface roughness Ra: **0.2  $\mu m$**

Contact surface area: **50-80%**

## TECHNICAL CHARACTERISTICS OF THE CARTRIDGE:

Opening angle: **25°**

Max. mixing angle: **90°**

Max. temperature: **90°C / 194°F**

Pressure test: pneumatic **6 bar / 87 psi**

hydraulic **35 bar / 500 psi**

Flow rate:

(3 bar / 45 psi, test faucet, EN 817)

**20.1 l/min / 5.3 gpm with resistance "C"**

**26.0 l/min / 6.8 gpm without resistance**

Endurance test:

EN 817 **210,000 cycles**

ASME A112.18.1M **500 000 cycles**

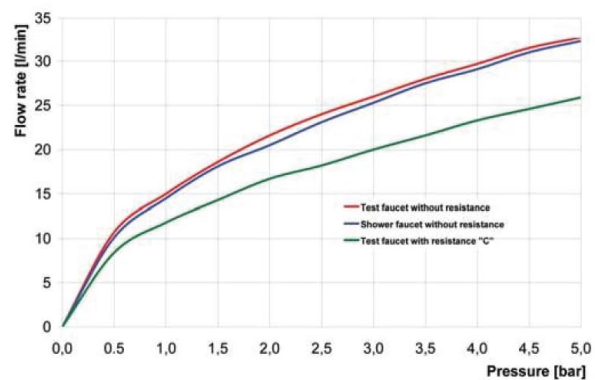


K35



K41

## FLOW RATE CURVES





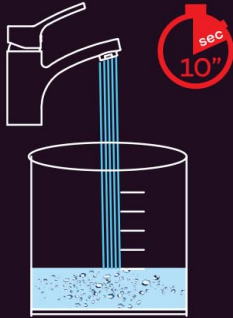


KLUDI RAK uses plastic parts to assemble their mixers accordance to KTW/W270, WRAS, KIWA and DVGW guidelines to drinking water and comply to the hygienic and toxicological requirements.

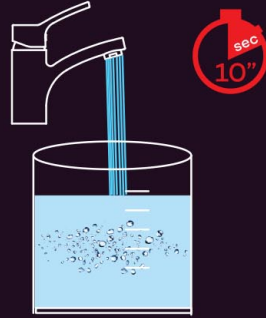




With water saving



Without water saving



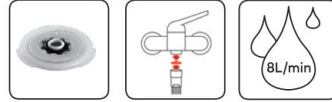
SAVE WATER SAVE EARTH



**KLUDI  
RAK**  
"We Stand for Water Saving"

\* Not suitable for non-pressurised devices. غير مناسب في حال عدم وجود مضخة مياه في المنزل.

1



Washer Regulator 1/2"  
PCW-01

Water saver for Hand Shower,  
over head shower & Shataff -8 L /min.

يمكن توفير المياه بيد الدوش و رأس الدوش والشطاف  
بما يعادل 8 لتر بالدقيقة

2



Spray SLC Aerator  
PCA® STD

Water saver for public area Basin Mixer,  
Sink Mixer & Ablution Tap -1.4 L /min.

يمكن توفير المياه لخلاط الميخنة بالأماكن العامة  
و خلاط المطبخ و خلاط الوضوء بما يعادل 1.4 لتر بالدقيقة

3

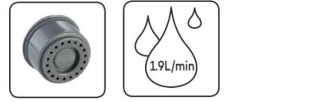


MIKADO Aerator  
PCA® STD

Water saver for public area Basin Mixer,  
Sink Mixer & Ablution Tap -1.4 L /min.

يمكن توفير المياه لخلاط الميخنة بالأماكن العامة  
و خلاط المطبخ و خلاط الوضوء بما يعادل 1.4 لتر بالدقيقة

4



Spray Aerator  
PCA® STD

Water saver for public area Basin Mixer,  
Sink Mixer & Ablution Tap -1.9 L /min.

يمكن توفير المياه لخلاط الميخنة بالأماكن العامة  
و خلاط المطبخ و خلاط الوضوء بما يعادل 1.9 لتر بالدقيقة

5



CASCADE® SLC  
Aerator PCA® STD

Water saver for Basin Mixer,  
Sink Mixer & Ablution Tap -3.8 L /min.

يمكن توفير المياه لخلاط الميخنة و خلاط المطبخ  
و خلاط الوضوء بما يعادل 3.8 لتر بالدقيقة

6



CASCADE® SLC  
Aerator PCA® M24

Water saver for Basin Mixer,  
Sink Mixer & Ablution Tap -3.8 L /min.

يمكن توفير المياه لخلاط الميخنة و خلاط المطبخ  
و خلاط الوضوء بما يعادل 3.8 لتر بالدقيقة

7



CASCADE® SLC  
Aerator PCA® STD

Water saver for Basin Mixer,  
Sink Mixer & Ablution Tap -5.7 L /min.

يمكن توفير المياه لخلاط الميخنة و خلاط المطبخ  
و خلاط الوضوء بما يعادل 5.7 لتر بالدقيقة

8



CASCADE® SLC  
Aerator PCA® M24

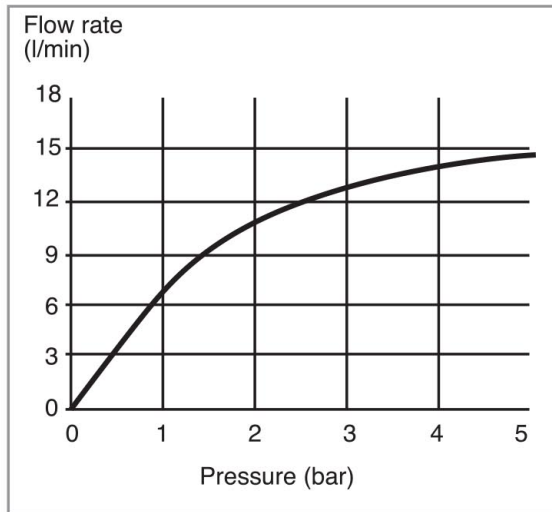
Water saver for Basin Mixer,  
Sink Mixer & Ablution Tap -5.7 L /min.

يمكن توفير المياه لخلاط الميخنة و خلاط المطبخ  
و خلاط الوضوء بما يعادل 5.7 لتر بالدقيقة

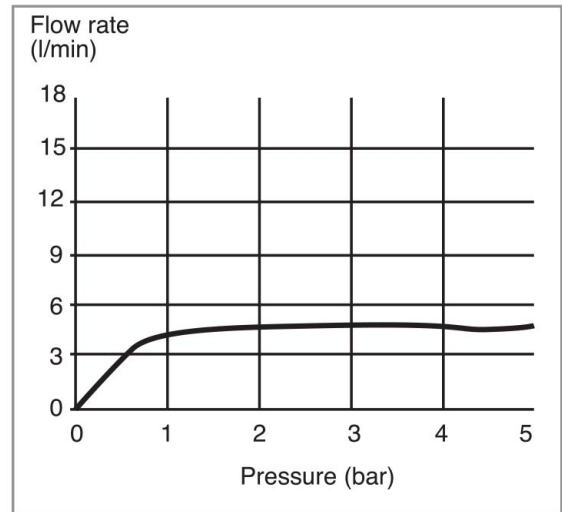
كفاءة استهلاك المياه (Efficiency Label)

Product Type	نوع المنتج	(L/min) دقيقة / لتر (Q <sub>nom</sub> )	معدل التدفق الاسمي (Q <sub>nom</sub> )
Shower Mixer	صنابير ورؤس ( الدش ) و خلاطات الاستحمام	★★★★★	★★★★★
Private Toilet Mixer	صنابير دورات المياه العامة	9.5 ≥ Q <sub>nom</sub> > 8.0	Q <sub>nom</sub> ≤ 8.0
Public Toilet Mixer	صنابير دورات المياه الخاصة	1.9 ≥ Q <sub>nom</sub> > 1.7	Q <sub>nom</sub> ≤ 1.7
Toilet flush Tank	المراحيض بخزان مياه / نظام دفع	6.0 ≥ Q <sub>nom</sub> > 5.0	Q <sub>nom</sub> ≤ 5.0
Urinal flush Tank	مبولة بنظام دفع	6.0 / 4.0 (dual flush) 4.8 (single flush)	4.5 / 3.0 (dual flush) 4.2 (single flush)
Kitchen mixer Tap	صنابير المطبخ	1	0.5 or Waterless
Wash basin Tap	صنابير مقاعد الاغتسال	6.0 ≥ Q <sub>nom</sub> > 5.0	Q <sub>nom</sub> ≤ 5.0
Ablution Mixer	صنابير الرذاذ للوضوء	6.0 ≥ Q <sub>nom</sub> > 5.0	Q <sub>nom</sub> ≤ 5.0

# Graph Comparison A flow Aerator with Water Saving PCA 6 ltr / Min



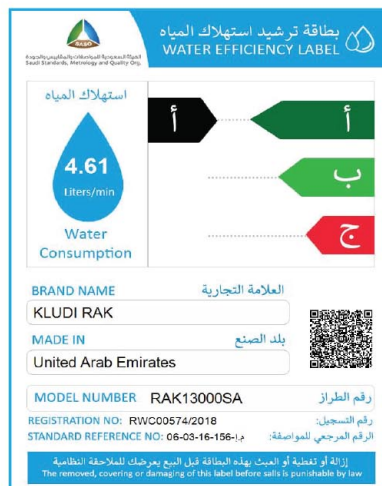
Graph without Water Saving A Flow Aerator



Graph with Water Saving PCA 5 ltr/ Min

Reference Numbers	
RAK10000	DN10-3/8" without water saving
RAK10000-01	DN15-1/2" with water saving
RAK10000-03	DN15-1/2" without water saving
RAK10000-04	DN10-3/8" with water saving

With our water-saving products, you get the ideal water flow rate, which meets the requirements and recommendations from the standardization bodies of the UAE, Saudi Arabia and Egypt.

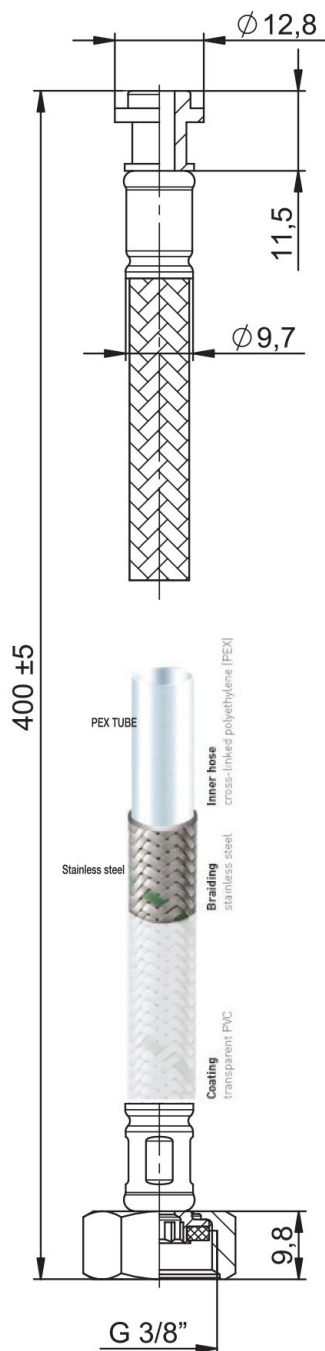




## 6 KLUDI RAK Flex-Hose



KLUDI RAK uses connecting stainless steel braided hoses with a PEX tube inside which is as per drinking water standard.



DN6 hose N braided SST (B0)

(all dimensions are in mm)

APPROVALS: DVGW, CSTBAT, KIWA, WRAS



# KLUDI RAK Guarantees:

- Water saving up to 75%
- German Quality
- 10 Years Warranty
- European spare parts
- Environmentally friendly product
- Efficiency in distribution and in project business
- After sale services
- Awareness of local needs and influences
- Direct dialog with KLUDI RAK team




## *Expertise and Innovation*

Fittings accompany us throughout our daily routines. We come into contact with them all the time in the bathroom and kitchen. This gives rise to certain wishes and expectations for form and function.

KLUDI RAK understands these requirements—and implements them in products that are perfectly finished and that combine timeless design, innovative technology and superior quality materials.

# ADDITIONAL PRODUCT REFERENCE CODES

FOR BASIN/ BIDET/ SINK MIXERS	
RAKXXXXX	3/8" HOSE CONNECTION - FLOW RATE 15 ≤ LTR/MIN
RAKXXXXX-01	1/2" HOSE CONNECTION - FLOW RATE 6 LTR/MIN
RAKXXXXX-03	1/2" HOSE CONNECTION - FLOW RATE 15 ≤ LTR/MIN
RAKXXXXX-04	3/8" HOSE CONNECTION - FLOW RATE 6 LTR/MIN
RAKXXXXX-31	1/2" HOSE CONNECTION - FLOW RATE 1.9 LTR/MIN
RAKXXXXX-32	1/2" HOSE CONNECTION - FLOW RATE 3 LTR/MIN
RAKXXXXX-09	1/2" HOSE CONNECTION - FLOW RATE 3.8 LTR/MIN
RAKXXXXX-33	1/2" HOSE CONNECTION - FLOW RATE 5 LTR/MIN
RAKXXXXX-37	1/2" HOSE CONNECTION - FLOW RATE 0.6 LTR/MIN
FOR SHOWER MIXERS HAND SHOWER & OVERHEAD SHOWER	
RAKXXXXX	FLOW RATE 15 ≥ LTR/MIN
RAKXXXXX-21	FLOW RATE 9 LTR/MIN
RAKXXXXX-22	FLOW RATE 7 LTR/MIN

FOR BATH MIXER	
RAKXXXXX	FLOW RATE 22 ≥ LTR/MIN
RAKXXXXX-86	FLOW RATE 9 LTR/MIN
RAKXXXXX-87	FLOW RATE 8 LTR/MIN
RAKXXXXX-88	FLOW RATE 6 LTR/MIN
COUNTRY CODES	
RAKXXXXXEG	EGYPT STANDARD
RAKXXXXXAD	ADQCC STANDARD
RAKXXXXXSA	SASO STANDARD
AVAILABLE FINISHES	
RAKXXXXX.GD1	GLOSSY GOLD 
RAKXXXXX.RG1	GLOSSY ROSE GOLD 
RAKXXXXX.BK1	GLOSSY BLACK 

## CREATE YOUR PRODUCT CODE

PRODUCT CODE	IMAGE	FINISH	FLOW RATE
RAK16000-09		CHROME	3.8LTR/MIN
RAK16000-33.GD1		GOLD	5 LTR/MIN
RAK16000-31.RG1		ROSE GOLD	1.9 LTR/MIN
RAK16000-09.BK1		BLACK	3.8 LTR/MIN

## CARE INSTRUCTIONS

Dear Customer,

Congratulations on choosing the best bathroom fittings for your needs!

In order to ensure the long life of your Kludi RAK products, please follow the enlisted care and cleaning instructions.

- Clean the surface to prevent accumulation of dirt and lime scale
- For daily cleaning use neutral cleaners and water
- For removing strong lime scale use cleaners with citric acid base
- Use cleaning agents specially developed for fittings
- Cleaning sprays should first be sprayed on a soft cloth and then the cloth should be used to clean the fittings. Do not spray them directly on the surface of the fitting.
- The amount of cleaning agent used should be just sufficient to remove the dirt and lime scale. Do not use excessive quantities. Also, do not let the cleaning agent stay on the surface for longer time than necessary.
- After using the cleaning agent, rinse the fitting with sufficient water to remove it and then polish with a soft cloth.

The chrome plating on the surface of the fitting is a result of a lot of chemical reactions. Strong cleaners and bleach can alter the effects of these reactions and cause significant damage to the surface and void the warranty. In any case do not use any of the following to clean the fittings:

- Abrasive cleaning materials, pads, scourers etc.
- Cleaning agents with volatile acids like hydrochloric or acetic acid
- Scouring powders or abrasive cleaning fluids
- Cleaning agents containing bleach such as Clorox.

Cleaning the fittings after each use helps retain their value!





**RAK3200701**

ABS chrome Shattaf with  
Ceramic Shut-off valve  
Connection 1/2 inch  
Silver hose G1/2 x G 1/2 x 1200mm  
with dirt catching sieve



**RAK3200702**

ABS chrome Shattaf with  
Concealed single lever mixer,  
pre installation kit DN15  
Connection 1/2 inch  
Silver hose G1/2 x G 1/2 x 1200mm  
with wall bracket  
with dirt catching sieve



**RAK3200703**

ABS chrome Shattaf with  
Single lever shattaf mixer DN 15  
ceramic cartridge-K35  
flow class B  
shower outlet G 1/2"  
protected against back flow  
S- unions 1/2 X 3/4 inch  
European standard- EN 817





# KLUDI --- RAK

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